March 2014
PRICE GUIDE

AIREFRIG AUSTRALIA

Proudly Australian Owned





Refrigeration & Airconditioning Wholesalers

GENERAL TERMS AND CONDITIONS OF TRADE (08/12)

To the fullest extent legally permissible all dealings between the customer (including all related and/or associated companies and/or other entities, all successors and/or assigns and in its own capacity and as trustee of each and every trust of which it is trustee) [jointly "the Customer"] and Airefrig Australia Pty Ltd ACN 008 761 573 (and/or any related and/or associated companies, trusts and/or other entities and/or any successors and/or assigns) whether trading as "Airefrig Australia" and/or otherwise ["Airefrig**"] relating to any goods and/or services** [the "goods" and/or the "services"] **are subject to the following terms and conditions ["**these Terms**"] unless otherwise expressly agreed in writing:**

1. Payment: a) Payment shall be made by cash, cheque, bank cheque or EFTPOS, without deduction and within thirty (30) days from the end of the month of purchase, or unless otherwise agreed in writing. **b)** The Customer agrees to pay an administration fee of 2.5% (or as otherwise nominated by Airefrig) as the liquidated processing cost on credit card payments and/or on payments made outside the credit period stipulated in each invoice or statement. **c)** Airefrig may off-set any amounts it owes the Customer against any amounts the Customer owes it.

2. Interest: Interest shall be charged on overdue accounts at 1.25% per month.

3. Property: a) The Customer agrees that these Terms constitute a "security agreement" for the purposes of the *Personal Property Securities Act 2009* (Cth) ["PPSA"], that Airefrig has and/or will have a "security interest" in respect of all goods and/or services whether present or after acquired for the purposes of the PPSA and that PPSA Sections 125, 130, 132(3)(d), 132(4), 135 & 157 shall not apply to any such security interest **b)** Property in goods shall not pass until payment in full of all monies owed by the Customer. **c)** Airefrig reserves the right to take possession and dispose of goods as it sees fit at any time until full payment. The Customer grants permission to Airefrig to enter any property where any goods are stored with force if necessary. **d)** Immediately on delivery the Customer accepts liability for the safe custody of goods and indemnifies Airefrig for any related losses. **e)** On sale or disposition of any goods prior to full payment the Customer agrees to deposit all proceeds in a separate bank account and to not mix proceeds with any other monies and shall forthwith account to Airefrig notwithstanding that Airefrig may have granted any credit facility and/or time to pay. **f)** Until payment in full the Customer agrees: (i) to keep all goods unpaid for as fiduciary for Airefrig and store all goods in a manner which shows Airefrig as owner; (ii) to only sell goods in the usual course of its business on the basis that all proceeds are held in trust for Airefrig; and (iii) that sale on terms, for less than cost and/or to a related entity of the Customer shall not be "in the usual course". **g)** Without derogating from any rights of Airefrig as a creditor or under these Terms if goods are used in any construction, fabrication, manufacturing and/or other process ["the Process"] which results in an entitlement of the Customer to receive money from any other person the Customer agrees to hold such part of any monies received by the Customer (or the corresponding book debt owed to the Customer in respect of those monies) as is equivalent to the value of any goods used in the Process as invoiced to the Customer by Airefrig UPON TRUST for Airefrig until payment in full for those goods and all monies owed to Airefrig. **h)** Nothing in this clause is intended to create a charge and this clause shall be read down to the extent necessary to avoid creating any charge. **i)** The Customer agrees a certificate signed by an officer of Airefrig and stating certain facts for the purposes of this clause shall be conclusive evidence of each fact stated. **j)** Airefrig is not obliged to accept the return of goods.

4. Consumer Guarantees & ACL: The Australian Consumer Law in Schedule 2 of the *Competition and Consumer Act 2010* (Cth) ["ACL"] provides consumers with certain consumer guarantees and rights in relation to certain transactions concerning goods and/or services (see www.consumerlaw.gov.au). Any rights the Customer may have under the ACL shall apply notwithstanding any inconsistent provisions in these Terms which shall be read down to the extent necessary to comply with the ACL and which shall otherwise apply to the fullest extent legally permissible.

5. Warranty: a) All goods are sold subject to any applicable manufacturer's warranty, for a period of 12 months; **b)** Airefrig may satisfy any valid warranty claim by replacing or repairing the goods at its election; **c)** any warranty shall run from the date of original purchase and not be extended by any replacement or repair; **d)** the failure of a product during a warranty period does not automatically constitute a warranty claim; **e)** Airefrig Australia Pty Ltd will not be liable for incorrect application or poor work practices installing and commissioning the product; **f)** consequential damages, labour and loss of refrigerant are not covered by warranty; and **g)** all claims will be assessed by Airefrig Australia Pty Ltd or the manufacturer.

6. Limitation of Liability: To the extent permitted by the ACL: **a)** the Customer agrees to limit any claim to the replacement/repair of the goods (or cost thereof) and/or re-supply of services (or cost thereof); **b)** Airefrig shall not be liable for: (i) any claim, loss or expense which is made after 30 days from the date of delivery of goods and/or services – after which there shall be deemed to have been unqualified acceptance; (ii) any consequential loss and/or any special and/or punitive damages through any fault of Airefrig or otherwise; and/or (iii) any claim in any way caused and/or contributed to by the Customer and/or any third party.

7. Cancellations and Returns: The Customer agrees: **a)** not to cancel any order without Airefrig's prior approval; **b)** not to return goods without Airefrig's prior approval, if goods are not in brand new and unused condition with undamaged packaging and/or if 3 weeks or more have passed since delivery; **c)** that Airefrig may take back goods in saleable condition on such terms as Airefrig considers to be reasonable; **d)** to pay Airefrig on request a restocking fee of 15% of the gross invoice value of all returns; **e)** not to return goods without first providing Airefrig an original invoice as proof of purchase; and **f)** not to return any goods which have been custom made, custom processed or custom acquired.

8. Quotations: The Customer agrees that: **a)** quotations must be in writing; **b)** Airefrig shall not be bound by any quotation if an order is not placed within 30 days from the date of quotation; **c)** Airefrig may prior to receipt of any order amend any quotation and notify the Customer accordingly without ramification; **d)** Airefrig shall not be bound by any quotation if it forms the view that the subject matter of the quotation is to form part of a larger transaction or series of transactions with the Customer and if Airefrig also forms the view that those circumstances have substantially and/or materially changed; **e)** the Customer shall pay any additional charges Airefrig levies for holding any goods referred to in any quotation pending placement of an order.

9. Placement of Orders: The Customer agrees that: **a)** if any dispute arises concerning any order (including any question of identity, authority or any phone, fax or computer generated order) the internal records of Airefrig shall be conclusive evidence of what was ordered; **b)** each order placed shall be and be deemed to be a representation by the Customer made at the time that it is solvent and able to pay all of its debts as and when they fall due; **c)** when placing any order the Customer shall inform Airefrig of any facts which might reasonably affect acceptance of the order by Airefrig and/or any grant of credit and any failure to do so by or on behalf of the Customer shall be deemed to create an inequality of bargaining position, be deemed to constitute the taking of an unfair advantage of Airefrig and to be unconscionable, misleading and deceptive.

10. Supply and Delivery: a) Airefrig may supply by installments and/or withhold or cancel supply without ramification where: (i) Airefrig has insufficient goods to fulfill orders; (ii) goods are not available to supply; (iii) the Customer is in breach of these Terms; (iv) Airefrig has any safety concerns; and/or (v) Airefrig considers it appropriate whether because of any minimum invoice policy or otherwise. **b)** The Customer agrees that: (i) Airefrig may elect to arrange delivery at its discretion and without any liability and at the cost and responsibility of the Customer in all things; (ii) the Customer shall be deemed to have accepted delivery and liability for goods on being notified by Airefrig that goods are ready for collection and/or on goods being delivered to a carrier or to the Customer's business premises or nominated site whether attended or not; (iii) a certificate purporting to be signed by an officer of Airefrig confirming delivery shall be conclusive evidence of delivery as shall any signed delivery docket; and (iv) Airefrig shall not be liable for delay, failure or inability to deliver any goods. **c)** The Customer agrees: (i) to pay for so much of any forward order as Airefrig invoices from time to time; (ii) that no delay or failure to fulfill any part of any order shall entitle the Customer to cancel or vary any order or delay or reduce any payment; (iii) to pay Airefrig for any demurrage or other costs and expenses in handling and/or holding any goods once ready for delivery and/or collection; and (iv) Airefrig may supply an excess or deficiency of goods up to 5% of the volume or weight of the amount ordered and the Customer shall pay for the amount so supplied and shall not make any claim against Airefrig for the amount over or under supplied.

11. Purchase Price: a) In the absence of a binding quotation all sales are made at the price nominated by Airefrig at the time of delivery. **b)** All government imposts, levies and duties (including any GST or equivalent) shall be to the Customer's account. **c)** Prices exclude government imposts, levies and duties (including any GST or equivalent).

12. Variations: To be binding any variation or cancellation of these Terms or any order must be approved by Airefrig in writing.

13. Exclusions: To the extent permitted by the ACL: **a)** no dealing between Airefrig and the Customer shall be or be deemed to be a sale by sample; **b)** The Customer shall rely on its own knowledge and expertise in selecting any goods and/or services for any purpose and any advice and/or assistance given by or for Airefrig shall be at the Customer's risk and shall not be or be deemed to be given as expert or adviser nor to have been relied on by the Customer or anyone claiming through the Customer; **c)** all goods are sold subject to all applicable trading terms, warranties and representations of the manufacturer; **d)** Airefrig shall not be responsible nor liable for paying and/or obtaining any necessary judicial, statutory, government and/or utility fees, expenses, orders, approvals, permits and/or licences; **e)** Airefrig shall not be liable for any goods and/or services: (i) made or performed to designs, drawings, specifications and/or procedures etc. and/or with materials which are provided and/or approved (whether fully or in part) by or on behalf of the Customer; (ii) utilised, stored, handled and/or maintained incorrectly or inappropriately; and/or (iii) manufactured and/or supplied by any other party; **f)** the Customer agrees to: (i) check all goods for compliance with all applicable laws, standards and/or guidelines before use, on-sale and/or application; (ii) comply with all applicable laws, standards and/or guidelines and with all recommendations and/or directions made and/or given by Airefrig and/or by any manufacturer; and (iii) act in accordance with good practice at all times.

14. Default: a) On default or breach of any part of these Terms by the Customer the full balance of all unpaid monies shall be deemed by this clause to be immediately due and payable (save to the extent that Airefrig expressly directs otherwise in writing) and Airefrig may *inter alia* terminate any contract, retain all monies paid, cease further deliveries and/or provision of services, recover all lost profits and/or at its discretion take immediate possession of any goods not paid for without prejudice to any other rights and without being liable in any way to any party. **b)** The Customer agrees not to commence or continue or permit to be commenced or continued through it any suit or Airefrig against Airefrig while the Customer is in default under any part of these Terms or in any of its dealings with Airefrig. **c)** The Customer agrees to indemnify Airefrig for all fees and expenses payable to solicitors, mercantile agents and other parties acting on behalf of Airefrig in respect of anything instituted or being considered against the Customer whether for debt, possession of any goods or otherwise (including all legal costs on an indemnity basis). **d)** Airefrig may apply any payment in reduction of fees, interest and/or any principal debt in such order of priority as Airefrig in its discretion deems appropriate. **e)** The Customer irrevocably authorises the payment directly to Airefrig of any debt due to the Customer by any debtor of the Customer in reduction of any amount due to Airefrig under these Terms or otherwise.

15. Indemnity: The Customer fully indemnifies Airefrig against any claim or loss arising from or related in any way to any dealing between Airefrig and the Customer and/or arising under these Terms.

16. Intellectual Property: The Customer agrees that all intellectual property in the creation of any goods and/or services shall be and remain the property of Airefrig notwithstanding any contribution by the Customer.

17. Other Terms and Conditions: No terms and conditions sought to be imposed by the Customer upon Airefrig shall apply.

18. Reconditioned Goods: Airefrig shall not be liable for any reconditioning and/or repair of products made and/or supplied by the Customer and/or by any third party.

19. Customer Restructure: The Customer shall notify Airefrig in writing of any change in its structure or management including any change in director, shareholder and/or management and/or any change in partnership and/or trusteeship within 7 days of each change. Until such notice is received the Customer guarantees the performance of all obligations passing to any third party and fully indemnifies Airefrig against all loss (including legal costs on an indemnity basis).

20. Jurisdiction: The Customer agrees that these Terms and any claim or dispute between Airefrig and the Customer shall be governed by the law applicable in the State nominated by Airefrig and the Customer agrees to submit to the jurisdiction of the appropriate Court nominated by Airefrig in the capital city of that State. If no State is nominated then Western Australia shall be deemed to be the nominated State.

21. Credit Limit: Any credit facility or credit limit is an indication only of the intention of Airefrig at the time. Airefrig may vary or withdraw credit at any time at its discretion and without any liability to the Customer or any other party. Upon breach of any of these Terms, the whole of the monies owing by the Customer shall become immediately due and payable.

22. Waiver: An election by Airefrig not to exercise any of its rights on any breach of these Terms shall not constitute a waiver of any rights relating to any other breach.

23. Notice: The Customer agrees that it shall be deemed to have notice of any change to these Terms immediately any change is adopted by Airefrig and whether or not the Customer has actual notice.

24. Security For Payment: The Customer hereby grants to Airefrig a general lien over all property of the Customer until payment in full of all monies owing to Airefrig.

25. Force Majeure: Airefrig shall not be in default or in breach of any contract with the Customer as a result of *Force Majeure* including any strike or lock-out.

26. Insolvency: The Customer shall be in default of these Terms if it commits an act of insolvency, appoints an insolvency practitioner and/or calls a formal meeting of creditors.

27. Cylinders: The Customer agrees: **a)** all gas cylinders remain the property of Airefrig unless sold (subject to clause 3 above) to the Customer, in which case all liability, responsibility and regulatory requirements lay solely with the Customer; **b)** on request to return cylinders to Airefrig; **c)** to comply with all regulatory requirements in use and ownership of the cylinders; and **d)** to indemnify Airefrig for the full replacement cost of any cylinders not returned or damaged and against any liability arising from misuse or non-compliance with any regulations. **28. Severability:** Any part of these Terms shall be capable of severance without affecting any other part of these Terms.

LOCATIONS

NEW SOUTH WALES

64 Gibson Avenue
Padstow, NSW, 2211
Telephone: (02) 8708 5333
Facsimile: (02) 8708 5334

10 / 4 Avenue of Americas
Newington, NSW, 2127
Telephone: (02) 9648 1414
Facsimile: (02) 9648 1717

5 Bradford Street
Alexandria, NSW, 2015
Telephone: (02) 9308 7777
Facsimile: (02) 9308 7755

WESTERN AUSTRALIA

75 Beechboro Road
Bayswater, WA, 6053
Telephone: (08) 9272 8977
Facsimile: (08) 9370 2868

4 Sleeman Close
O'Connor, WA, 6163
Telephone: (08) 9314 1441
Facsimile: (08) 9337 4192

17 / 8 Baretta Road
Wangara, WA, 6065
Telephone: (08) 9309 9300
Facsimile: (08) 9309 9611

VICTORIA

29 Geddes Street
Mulgrave, Vic, 3170
Telephone: (03) 9561 7200
Facsimile: (03) 9561 7911

10 Wirriga Street
Regency Park, SA, 5010
Telephone: (08) 8345 2201
Facsimile: (08) 8345 2401

QUEENSLAND

127 Gardens Drive
Willawong, Qld, 4110
Telephone: (07) 3272 4844
Facsimile: (07) 3272 4644

29 - 35 Huntington Place
Banyo, Qld, 4014
Telephone: (07) 3267 0888
Facsimile: (07) 3267 0111

SOUTH AUSTRALIA

18 Macquarie Drive
Thomastown, Vic, 3074
Telephone: (03) 9464 3844
Facsimile: (03) 9464 3833

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www.airefrig.com.au

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TECUMSEH HERMETIC CONDENSING UNITS

Tecumseh

Condensing Units

Tecumseh Europe is widely known as a world leader in commercial and domestic refrigeration and air conditioning.

Tecumseh compressors have certificates of conformity such as UL, CE, VDE, NF, CCC, CSA, GOST, SONCAP, IRAM, TIS, SASO…

Tecumseh have been listening and responding to customers for more than 50 years with numerous research & development studies. That's more than half a century of know-how and products which guarantee Tecumseh reliability and performance.

Tecumseh are committed to rating the performance of their products in accordance with the most recent standards such as EN 13215 condensing unit ratings for refrigeration. This standard defines the new capacity rating points for refrigeration in a way which is more useful to refrigeration engineers. In addition, they specify the tolerances which are applicable to the characteristics of each condensing unit

Note: One of the main consequences of the changes to the EN 13215 rating conditions will be variation in published capacities compared to previous figures. The new standard presents the capacity in a way which is closer to reality of the various installations.





TECUMSEH HERMETIC CONDENSING UNITS

R404A (R507) - Low Temperature Condensing Units

Airefrig Part Number	Nom HP	Operating Conditions *EN 13215	Amb. Temp ºC	Based on 20ºC return gas & 3.0 K sub-cooling Evaporating Temperature ºC -40	-35	-30	-25	-20	-15	-10	Comp Type	Fan Motor (IP44)	Unit Amps	Unit Info
		Capacity (w)		143	198	259	329	406	491	584	Displ cm³	RPM	RLA	Weight
AEZT2411ZBR		Amps	32.0	1.08	1.15	1.24	1.36	1.49	1.62	1.79	7.6	1350	2.1	17.4 kg
		Cond. Temp		36.3	37.7	39.5	41.6	44.0	46.6	49.6				
Unit Connections	1/4	Capacity (w)		122	168	222	285	354	430	515	220-240v	Watts	Max.	Receiver
Suction 9.5mm (3/8")		Amps	38.0	1.08	1.15	1.24	1.36	1.49	1.63	1.81	1Ø-50Hz	5	3.8	0.75 L
		Cond. Temp		41.6	43.0	44.8	46.8	49.1	51.7	54.6				
Liquid 6.35mm (1/4")		Capacity (w)		105	145	193	250	313	387	467	CSIR	Blade	LRA	Air Flow
		Amps	46.0	1.09	1.15	1.25	1.36	1.50	1.65	1.82		Dia.	13.3	m³/h
Unit Dimensions Drawing : 1		Cond. Temp		48.7	50.1	51.7	53.7	55.9	58.5	61.3		205mm		340
		Capacity (w)		170	231	299	376	460	552	653	Displ cm³	RPM	RLA	Weight
AEZT2415ZBR		Amps	32.0	1.19	1.26	1.36	1.47	1.59	1.72	1.87	8.1	1350	2.3	18.4 kg
		Cond. Temp		37.3	38.9	40.9	43.1	45.5	48.3	51.3				
Unit Connections	3/8	Capacity (w)		141	194	255	324	399	484	573	220-240v	Watts	Max.	Receiver
Suction 9.5mm (3/8")		Amps	38.0	1.19	1.26	1.36	1.47	1.59	1.73	1.89	1Ø-50Hz	5	3.7	0.75 L
		Cond. Temp		42.6	44.2	46.1	48.3	50.7	53.4	56.3				
Liquid 6.35mm (1/4")		Capacity (w)		122	167	221	284	355	434	520	CSIR	Blade	LRA	Air Flow
		Amps	46.0	1.19	1.26	1.36	1.47	1.60	1.74	1.91		Dia.	14.3	m³/h
Unit Dimensions Drawing : 1		Cond. Temp		49.7	51.3	53.1	55.2	57.5	60.1	63.0		205mm		340
		Capacity (w)		177	258	345	436	533	635	741	Displ cm³	RPM	RLA	Weight
CAET2417ZBR		Amps	32.0	1.49	1.6	1.74	1.91	2.1	2.31	2.55	11.3	1350	2.0	18.4 kg
		Cond. Temp		35.3	37.0	39.1	41.4	44.0	46.9	50.1				
Unit Connections		Capacity (w)		153	227	307	394	488	587	691	220-240v	Watts	Max.	Receiver
Suction 9.5mm (3/8")	4/9	Amps	38.0	1.49	1.6	1.74	1.91	2.1	2.32	2.57	1Ø-50Hz	5	3.6	0.75 L
		Cond. Temp		40.6	42.3	44.3	46.6	49.1	52.0	55.1				
Liquid 6.35mm (1/4")		Capacity (w)		129	192	264	344	432	526	628	CSIR	Blade	LRA	Air Flow
		Amps	46.0	1.49	1.6	1.75	1.92	2.11	2.34	2.59		Dia.	17.3	m³/h
Unit Dimensions Drawing : 1		Cond. Temp		47.8	49.4	51.3	53.5	56.0	58.7	61.8		205mm		410
		Capacity (w)		217	315	419	529	645	767	895	Displ cm³	RPM	RLA	Weight
CAET2420ZBR		Amps	32.0	2.78	2.88	3.01	3.18	3.38	3.62	3.9	12.6	1350	3.2	24.4 kg
		Cond. Temp		34.8	36.2	37.6	39.3	41.1	43.1	45.2				
Unit Connections		Capacity (w)		188	277	374	478	590	709	835	220-240v	Watts	Max.	Receiver
Suction 9.5mm (3/8")	1/2	Amps	38.0	2.79	2.88	3.01	3.18	3.39	3.64	3.93	1Ø-50Hz	22	5.0	0.75 L
		Cond. Temp		40.2	41.4	42.9	44.5	46.2	48.2	50.2				
Liquid 6.35mm (1/4")		Capacity (w)		159	235	322	418	523	637	760	CSIR	Blade	LRA	Air Flow
		Amps	46.0	2.79	2.88	3.02	3.19	3.41	3.67	3.97		Dia.	18.7	m³/h
Unit Dimensions Drawing : 2		Cond. Temp		47.3	48.5	49.9	51.4	53.1	54.9	56.9		250mm		980

*EN13215 condensing unit ratings define the new capacity ratings for refrigeration in a way which is more useful to refrigeration technicians.

TECUMSEH HERMETIC CONDENSING UNITS

R404A (R507) - Low Temperature Condensing Units

Airefrig Part Number	Nom HP	Operating Conditions *EN 13215	Amb. Temp ºC	Based on 20ºC return gas & 3.0 K sub-cooling Evaporating Temperature ºC							Comp Type	Fan Motor	Unit Amps	Unit Info
				-40	-35	-30	-25	-20	-15	-10				
		Capacity (w)		253	359	486	634	804	995	1207	Displ cm³	RPM	RLA	Weight
CAJT2428ZBR		Amps	32.0	3.34	3.46	3.63	3.85	4.11	4.43	4.78	15.2	1300	3.9	33.0 kg
		Cond. Temp		34.5	35.6	36.8	38.2	39.6	41.2	43.0				
Unit Connections		Capacity (w)		208	306	422	557	712	886	1080	220-240v	Watts	Max.	Receiver
Suction 12.7mm (1/2")	7/10	Amps	38.0	3.31	3.45	3.63	3.86	4.13	4.46	4.83	1Ø-50Hz	22	5.7	1.5 L
		Cond. Temp		40.1	41.1	42.2	43.5	44.8	46.4	48.0				
Liquid 6.35mm (1/4")		Capacity (w)		148	235	337	455	590	742	912	CSIR	Blade	LRA	Air Flow
		Amps	46.0	3.28	3.43	3.62	3.87	4.16	4.50	4.88		Dia.	22.0	m³/h
Unit Dimensions Drawing : 6		Cond. Temp		47.5	48.4	49.4	50.5	51.8	53.2	54.7		300mm		1130
		Capacity (w)		306	414	536	671	819	981	1154	Displ cm³	RPM	RLA	Weight
CAET2424ZBR		Amps	32.0	1.73	1.93	2.16	2.42	2.71	3.03	3.37	15.1	1350	2.5	24.9 Kg
		Cond. Temp		35.1	36.1	37.4	38.8	40.4	42.1	44.1				
Unit Connections		Capacity (w)		265	364	478	607	750	906	1077	220-240v	Watts	Max.	Receiver
Suction 9.5mm (3/8")	3/5	Amps	38.0	1.73	1.93	2.16	2.42	2.72	3.04	3.4	1Ø-50Hz	22	5.3	0.75 L
		Cond. Temp		40.4	41.4	42.6	44.0	45.5	47.2	49.1				
Liquid 6.35mm (1/4")		Capacity (w)		223	309	411	530	664	815	980	CSR	Blade	LRA	Air Flow
		Amps	46.0	1.73	1.93	2.16	2.43	2.73	3.06	3.43		Dia.	17.7	m³/h
Unit Dimensions Drawing : 4		Cond. Temp		47.6	48.5	49.6	50.9	52.3	54.0	55.8		300mm		1130
		Capacity (w)		309	442	599	778	977	1194	1426	Displ cm³	RPM	RLA	Weight
CAJT2432ZBR		Amps	32.0	2.11	2.36	2.64	2.97	3.34	3.75	4.2	18.3	1350	3.1	35.0 kg
		Cond. Temp		34.5	35.8	37.3	39.1	41.1	43.3	45.8				
Unit Connections		Capacity (w)		256	377	520	683	864	1061	1271	220-240v	Watts	Max.	Receiver
Suction 12.7mm (1/2")	3/4	Amps	38.0	2.05	2.33	2.64	3.0	3.4	3.84	4.32	1Ø-50Hz	22	6.8	1.5 L
		Cond. Temp		40.2	41.3	42.7	44.3	46.2	48.3	50.6				
Liquid 6.35mm (1/4")		Capacity (w)		186	292	416	557	714	885	1067	CSR	Blade	LRA	Air Flow
		Amps	46.0	1.97	2.28	2.64	3.04	3.48	3.96	4.48		Dia.	22.0	m³/h
Unit Dimensions Drawing : 6		Cond. Temp		47.7	48.7	49.9	51.4	53.0	54.9	57.1		300mm		1130
		Capacity (w)		402	537	696	880	1078	1291	1510	Displ cm³	RPM	RLA	Weight
CAJT2440ZBR		Amps	32.0	1.38	1.64	1.94	2.30	2.69	3.13	3.61	21.0	1350	3.7	37 kg
		Cond. Temp		37.6	40.1	42.8	45.8	48.9	52.2	55.8				
Unit Connections		Capacity (w)		339	466	612	781	963	1159	1362	220-240v	Watts	Max.	Receiver
Suction 12.7mm (1/2")	1.0	Amps	38.0	1.35	1.62	1.94	2.30	2.71	3.15	3.65	1Ø-50Hz	22	6.3	1.5 L
		Cond. Temp		42.7	45.1	47.6	50.3	53.3	56.4	59.8				
Liquid 9.5mm (3/8")		Capacity (w)		260	375	506	654	816	990	1172	CSR	Blade	LRA	Air Flow
		Amps	46.0	1.32	1.60	1.93	2.31	2.73	3.19	3.72		Dia.	28.0	m³/h
Unit Dimensions Drawing : 6		Cond. Temp		49.5	51.6	53.9	56.4	59.2	62.1	65.2		300mm		980

*EN13215 condensing unit ratings define the new capacity ratings for refrigeration in a way which is more useful to refrigeration technicians.

TECUMSEH HERMETIC CONDENSING UNITS

R404A (R507) - Low Temperature Condensing Units

Airefrig Part Number	Nom HP	Operating Conditions *EN 13215	Amb. Temp ºC	Based on 20ºC return gas & 3.0 K sub-cooling Evaporating Temperature ºC -40	-35	-30	-25	-20	-15	-10	Comp Type	Fan Motor (IP44)	Unit Amps	Unit Info
CAJT2446ZBR	1.0	Capacity (w)	32.0	510	700	914	1150	1404	1672	1948	Displ cm³ 26.2	RPM 1350	RLA 4.3	Weight 38.0 kg
		Amps		2.93	3.32	3.76	4.24	4.78	5.36	5.99				
		Cond. Temp		35.4	37.0	38.8	40.8	43.1	45.7	48.4				
Unit Connections		Capacity (w)	38.0	427	601	795	1006	1232	1469	1710	220-240v 1Ø-50Hz	Watts 22	Max. 8.1	Receiver 1.5 L
Suction 12.7mm (1/2")		Amps		2.89	3.31	3.79	4.31	4.88	5.5	6.17				
		Cond. Temp		41.2	42.7	44.5	46.5	48.7	51.1	53.8				
Liquid 9.5mm (3/8")		Capacity (w)	46.0	318	470	637	816	1005	1199	1395	CSR	Blade Dia. 300mm	LRA 30.0	Air Flow m³/h 980
		Amps		2.84	3.31	3.83	4.4	5.02	5.69	6.4				
Unit Dimensions Drawing : 6		Cond. Temp		48.9	50.4	52.1	54.0	56.1	58.5	61.1				
CAJT2464ZBR	1.5	Capacity (w)	32.0	668	907	1184	1495	1840	2212	2608	Displ cm³ 34.5	RPM 1440	RLA 6.1	Weight 45.0 kg
		Amps		4.12	4.62	5.19	5.82	6.52	7.28	8.12				
		Cond. Temp		35.0	36.3	37.9	39.7	41.7	44.0	46.4				
Unit Connections		Capacity (w)	38.0	573	796	1051	1337	1652	1993	2354	220-240v 1Ø-50Hz	Watts 120	Max. 10.5	Receiver 1.5 L
Suction 15.9mm (5/8")		Amps		4.07	4.6	5.21	5.88	6.62	7.42	8.3				
		Cond. Temp		40.6	41.8	43.2	44.9	46.7	48.8	51.1				
Liquid 9.5mm (3/8")		Capacity (w)	46.0	447	648	874	1127	1403	1702	2018	CSR	Blade Dia. 350mm	LRA 40.0	Air Flow m³/h 2250
		Amps		3.99	4.58	5.24	5.96	6.75	7.61	8.54				
Unit Dimensions Drawing : 7		Cond. Temp		48.0	49.1	50.3	51.8	53.4	55.3	57.4				

*EN13215 condensing unit ratings define the new capacity ratings for refrigeration in a way which is more useful to refrigeration technicians.

Prices

Airefrig Part Number	List Price Excl GST
AEZT2411ZBR	
AEZT2415ZBR	
CAET2417ZBR	
CAET2420ZBR	

Airefrig Part Number	List Price Excl GST
CAET2424ZBR	
CAJT2428ZBR	
CAJT2432ZBR	

Airefrig Part Number	List Price Excl GST
CAJT2440ZBR	
CAJT2446ZBR	
CAJT2464ZBR	





TECUMSEH HERMETIC CONDENSING UNITS

R404A (R507) - Medium Temperature Condensing Units

Airefrig Part Number	Nom HP	Operating Conditions *EN 13215	Amb. Temp ºC	Based on 20ºC return gas & 3.0 K sub-cooling Evaporating Temperature ºC							Comp Type	Fan Motor (IP44)	Unit Amps	Unit Info
				-20	-15	-10	-5	0	5	10				
AEZT4425ZHR	1/5	Capacity (w)	32.0	203	266	332	402	474	548	625	Displ cm³ 4.5	RPM 1350	RLA 2.0	Weight 20.4 kg
		Amps		1.51	1.55	1.6	1.67	1.75	1.85	1.96				
		Cond. Temp		38.0	39.3	40.8	42.4	44.1	46.0	48.0				
Unit Connections Suction 9.5mm (3/8”)		Capacity (w)	38.0	187	245	307	372	439	509	581	220-240v 1Ø-50Hz	Watts 5	Max. 2.6	Receiver 0.75 L
		Amps		1.53	1.57	1.64	1.71	1.81	1.92	2.04				
		Cond. Temp		43.1	44.4	45.8	47.3	49.0	50.9	52.8				
Liquid 6.35mm (1/4”)		Capacity (w)	46.0	166	220	277	338	401	467	534	CSIR	Blade Dia. 205mm	LRA 9.3	Air Flow m³/h 410
		Amps		1.54	1.6	1.68	1.77	1.88	2.01	2.15				
Unit Dimensions Drawing : 1		Cond. Temp		50.0	51.2	52.5	54.0	55.6	57.3	59.3				
AEZT4430ZHR	1/4	Capacity (w)	32.0	275	351	434	522	615	714	817	Displ cm³ 5.7	RPM 1350	RLA 2.2	Weight 24.5 kg
		Amps		2.02	2.02	2.03	2.05	2.09	2.13	2.19				
		Cond. Temp		37.5	38.8	40.2	41.8	43.5	45.4	47.4				
Unit Connections Suction 9.5mm (3/8”)		Capacity (w)	38.0	254	325	401	483	571	663	760	220-240v 1Ø-50Hz	Watts 22	Max. 4.0	Receiver 0.75 L
		Amps		2.04	2.05	2.07	2.11	2.15	2.21	2.28				
		Cond. Temp		42.6	43.9	45.2	46.8	48.5	50.3	52.2				
Liquid 6.35mm (1/4”)		Capacity (w)	46.0	228	292	363	440	522	609	700	CSIR	Blade Dia. 250mm	LRA 11.7	Air Flow m³/h 800
		Amps		2.06	2.09	2.13	2.18	2.24	2.32	2.4				
Unit Dimensions Drawing : 2		Cond. Temp		49.5	50.6	51.9	53.4	55.0	56.7	58.6				
AEZT9440ZMHR	1/3	Capacity (w)	32.0	380	482	593	710	834	965	1100	Displ cm³ 7.6	RPM 1350	RLA 2.5	Weight 28.1 kg
		Amps		1.77	1.88	2.0	2.13	2.27	2.42	2.59				
		Cond. Temp		37.1	38.5	40.0	41.6	43.3	45.1	47.0				
Unit Connections Suction 9.5mm (3/8”)		Capacity (w)	38.0	349	445	547	657	774	897	1024	220-240v 1Ø-50Hz	Watts 22	Max. 3.6	Receiver 0.75 L
		Amps		1.79	1.91	2.04	2.19	2.34	2.51	2.69				
		Cond. Temp		42.3	43.6	45.0	46.5	48.2	50.0	51.8				
Liquid 6.35mm (1/4”)		Capacity (w)	46.0	310	399	495	598	707	823	942	CSR	Blade Dia. 250mm	LRA 12.7	Air Flow m³/h 980
		Amps		1.81	1.95	2.1	2.26	2.44	2.63	2.83				
Unit Dimensions Drawing : 5		Cond. Temp		49.1	50.3	51.7	53.2	54.7	56.4	58.2				
CAET9450ZMHR	3/8	Capacity (w)	32.0	486	609	745	892	1052	1222	1401	Displ cm³ 9.4	RPM 1350	RLA 3.1	Weight 28.4 kg
		Amps		2.26	2.38	2.51	2.65	2.8	2.97	3.15				
		Cond. Temp		36.6	37.9	39.3	40.8	42.5	44.2	46.1				
Unit Connections Suction 9.5mm (3/8”)		Capacity (w)	38.0	446	561	688	826	976	1136	1304	220-240v 1Ø-50Hz	Watts 22	Max. 4.5	Receiver 0.75 L
		Amps		2.28	2.41	2.56	2.72	2.9	3.08	3.28				
		Cond. Temp		41.7	42.9	44.3	45.8	47.4	49.1	50.9				
Liquid 6.35mm (1/4”)		Capacity (w)	46.0	395	502	621	751	892	1042	1200	CSR	Blade Dia. 300mm	LRA 13.8	Air Flow m³/h 1130
		Amps		2.3	2.46	2.63	2.82	3.02	3.23	3.45				
Unit Dimensions Drawing : 4		Cond. Temp		48.5	49.7	51.0	52.4	53.9	55.6	57.3				

*EN13215 condensing unit ratings define the new capacity ratings for refrigeration in a way which is more useful to refrigeration technicians.

TECUMSEH HERMETIC CONDENSING UNITS

R404A (R507) - Medium Temperature Condensing Units

Airefrig Part Number	Nom HP	Operating Conditions *EN 13215	Amb. Temp ºC	Based on 20ºC return gas & 3.0 K sub-cooling Evaporating Temperature ºC -20	-15	-10	-5	0	5	10	Comp Type	Fan Motor (IP44)	Unit Amps	Unit Info
		Capacity (w)		739	915	1102	1300	1508	1725	1949	Displ cm³	RPM	RLA	Weight
CAET9470ZMHR		Amps	32.0	3.15	3.35	3.57	3.8	4.06	4.34	4.64	13.3	1350	4.5	29.4 kg
		Cond. Temp		38.3	40.0	41.7	43.6	45.6	47.7	49.9				
Unit Connections		Capacity (w)		680	843	1018	1203	1399	1602	1813	220-240v	Watts	Max.	Receiver
Suction	1/2	Amps	38.0	3.17	3.4	3.64	3.91	4.2	4.5	4.83	1Ø-50Hz	22	6.4	0.75 L
9.5mm (3/8")		Cond. Temp		43.4	45.0	46.7	48.6	50.5	52.5	54.7				
Liquid		Capacity (w)		605	757	921	1095	1278	1469	1666	CSR	Blade	LRA	Air Flow
6.35mm (1/4")		Amps	46.0	3.21	3.47	3.75	4.05	4.37	4.72	5.09		Dia.	20.7	m³/h
Unit Dimensions Drawing : 4		Cond. Temp		50.3	51.8	53.4	55.2	57.0	59.0	61.1		300mm		980
		Capacity (w)		867	1070	1292	1532	1787	2051	2322	Displ cm³	RPM	RLA	Weight
CAJT9480ZMHR		Amps	32.0	3.18	3.46	3.75	4.05	4.35	4.67	4.99	15.2	1350	4.84	43.0 kg
		Cond. Temp		38.1	39.7	41.5	43.4	45.5	47.6	50.0				
Unit Connections	5/8	Capacity (w)		770	959	1164	1382	1611	1848	2090	220-240v	Watts	Max.	Receiver
Suction		Amps	38.0	3.18	3.5	3.82	4.15	4.49	4.84	5.2	1Ø-50Hz	22	7.24	1.5 L
12.7mm (1/2")		Cond. Temp		43.2	44.7	46.4	48.1	50.0	52.1	54.3				
Liquid		Capacity (w)		640	811	992	1182	1378	1580	1785	CSR	Blade	LRA	Air Flow
9.5mm (3/8")		Amps	46.0	3.19	3.55	3.92	4.29	4.67	5.07	5.47		Dia.	23.4	m³/h
Unit Dimensions Drawing : 6		Cond. Temp		50.1	51.4	52.8	54.4	56.1	58.0	60.0		300mm		980
		Capacity (w)		1097	1347	1623	1919	2234	2562	2897	Displ cm³	RPM	RLA	Weight
CAJT9510ZMHR		Amps	32.0	3.78	4.13	4.5	4.88	5.29	5.72	6.16	18.3	1320	5.9	45.0 kg
		Cond. Temp		37.7	39.5	41.5	43.5	45.7	48.0	50.5				
Unit Connections		Capacity (w)		975	1208	1460	1729	2013	2308	2608	220-240v	Watts	Max.	Receiver
Suction	1.0	Amps	38.0	3.82	4.2	4.6	5.02	5.46	5.92	6.4	1Ø-50Hz	25	8.6	1.5 L
15.9mm (5/8")		Cond. Temp		43.2	44.8	46.5	48.4	50.4	52.5	54.7				
Liquid		Capacity (w)		810	1020	1242	1475	1718	1969	2226	CSR	Blade	LRA	Air Flow
9.5mm (3/8")		Amps	46.0	3.86	4.29	4.74	5.21	5.69	6.2	6.73		Dia.	30.8	m³/h
Unit Dimensions Drawing : 7		Cond. Temp		50.4	51.7	53.2	54.8	56.5	58.4	60.4		320mm		1180
		Capacity (w)		1305	1651	2018	2405	2807	3220	3635	Displ cm³	RPM	RLA	Weight
CAJT9513ZMHR		Amps	32.0	4.62	5.03	5.47	5.95	6.47	7.02	7.6	24.2	1440	7.2	47.0 kg
		Cond. Temp		37.5	39.1	40.8	42.6	44.5	46.5	48.6				
Unit Connections		Capacity (w)		1120	1443	1781	2131	2489	2852	3214	220-240v	Watts	Max.	Receiver
Suction	1-1/8	Amps	38.0	4.6	5.06	5.56	6.09	6.66	7.26	7.9	1Ø-50Hz	90	10.9	1.5 L
15.9mm (5/8")		Cond. Temp		43.0	44.5	46.1	47.8	49.6	51.5	53.5				
Liquid		Capacity (w)		874	1168	1465	1766	2067	2366	2658	CSR	Blade	LRA	Air Flow
9.5mm (3/8")		Amps	46.0	4.56	5.1	5.67	6.27	6.92	7.59	8.3		Dia.	35.6	m³/h
Unit Dimensions Drawing : 7		Cond. Temp		50.2	51.6	53.1	54.7	56.4	58.2	60.1		350mm		2250

*EN13215 condensing unit ratings define the new capacity ratings for refrigeration in a way which is more useful to refrigeration technicians.

TECUMSEH HERMETIC CONDENSING UNITS

R404A (R507) - Medium Temperature Condensing Units

Airefrig Part Number	Nom HP	Operating Conditions *EN 13215	Amb. Temp ºC	Based on 20ºC return gas & 3.0 K sub-cooling Evaporating Temperature ºC -20	-15	-10	-5	0	5	10	Comp Type	Fan Motor (IP44)	Unit Amps	Unit Info
CAJT4517ZHR	1-1/4	Capacity (w)	32.0	1472	1857	2272	2711	3168	3634	4100	Displ cm³ 25.95	RPM 1440	RLA 7.8	Weight 51.0 kg
		Amps		5.04	5.52	6.03	6.58	7.15	7.76	8.4				
		Cond. Temp		38.6	40.3	42.0	43.8	45.7	47.7	49.8				
Unit Connections		Capacity (w)	38.0	1275	1639	2022	2420	2828	3236	3638	220-240v 1Ø-50Hz	Watts 90	Max. 11.3	Receiver 2.35 L
Suction 15.9mm (5/8")		Amps		5.07	5.6	6.16	6.75	7.37	8.03	8.72				
		Cond. Temp		43.8	45.4	47.1	48.8	50.7	52.7	54.7				
Liquid 9.5mm (3/8")		Capacity (w)	46.0	1013	1346	1685	2028	2369	2701	3019	CSR	Blade Dia. 350mm	LRA 34.1	Air Flow m³/h 2250
		Amps		5.11	5.7	6.32	6.98	7.67	8.39	9.14				
Unit Dimensions Drawing : 7		Cond. Temp		50.8	52.3	53.8	55.5	57.4	59.3	61.3				
CAJT4519ZHR	1.5	Capacity (w)	32.0	2027	2526	3064	3638	4241	4864	5499	Displ cm³ 34.5	RPM 1440	RLA 10.7	Weight 60.0 kg
		Amps		6.63	7.19	7.82	8.51	9.27	10.1	11.0				
		Cond. Temp		37.2	38.9	40.7	42.6	44.6	46.8	49.1				
Unit Connections		Capacity (w)	38.0	1757	2225	2722	3246	3791	4353	4923	220-240v 1Ø-50Hz	Watts 120	Max. 16.0	Receiver 2.35 L
Suction 15.9mm (5/8")		Amps		6.72	7.34	8.02	8.76	9.57	10.4	11.4				
		Cond. Temp		43.3	44.7	46.3	47.9	49.7	51.7	53.7				
Liquid 9.5mm (3/8")		Capacity (w)	46.0	1393	1818	2259	2715	3184	3665	4153	CSR	Blade Dia. 400mm	LRA 47.0	Air Flow m³/h 3540
		Amps		6.84	7.53	8.28	9.09	9.97	10.9	11.9				
Unit Dimensions Drawing : 9		Cond. Temp		51.4	52.5	53.7	55.1	56.6	58.2	59.9				

*EN13215 condensing unit ratings define the new capacity ratings for refrigeration in a way which is more useful to refrigeration technicians.

Prices

Airefrig Part Number	List Price Excl GST
AEZT4425ZHR	
AEZT4430ZHR	
AEZT9440ZMHR	
CAET9450ZMHR	

Airefrig Part Number	List Price Excl GST
CAET9470ZMHR	
CAJT9480ZMHR	
CAJT9510ZMHR	

Airefrig Part Number	List Price Excl GST
CAJT9513ZMHR	
CAJT4517ZHR	
CAJT4519ZHR	





TECUMSEH HERMETIC CONDENSING UNITS

R404A (R507) - Medium Temperature Condensing Units

HIGH EFFICIENCY CONDENSING UNITS

High Efficiency Compressors & Fan Motors

Airefrig Part Number	Nom HP	Operating Conditions *EN 13215	Amb. Temp ºC	Based on 20ºC return gas & 3.0 K sub-cooling Evaporating Temperature ºC						Comp Type	Fan Motor (IP44)	Unit Amps	Unit Info
				-15	-10	-5	0	5	10				
AETQ4425ZHRFZ	1/8	Capacity (w)	32.0	293	359	432	511	597	687	Displ cm³ 4.24	RPM 1300	RLA 1.73	Weight 18.5 kg
		Amps		1.60	1.61	1.67	1.71	1.73	1.76				
		Cond. Temp		40.6	42.2	44.0	46.0	48.0	50.2				
Unit Connections Suction 9.5mm (3/8”)		Capacity (w)	38.0	262	321	385	455	529	607	220-240v 1Ø-50Hz	Watts 5	Max. 3.0	Receiver 0.75 L
		Amps		1.67	1.70	1.78	1.84	1.89	1.94				
		Cond. Temp		45.9	47.5	49.2	51.1	53.0	55.2				
Liquid 6.35mm (1/4”)		Capacity (w)	46.0	221	271	324	381	441	503	CSIR	Blade Dia. 200mm	LRA 10.8	Air Flow m³/h 410
		Amps		1.74	1.81	1.89	1.96	2.04	2.12				
Unit Dimensions Drawing : 1		Cond. Temp		53.0	54.5	56.1	57.9	59.7	61.7				
AETQ4430ZHRFZ	1/4	Capacity (w)	32.0	361	440	525	616	711	809	Displ cm³ 5.16	RPM 1300	RLA 2.28	Weight 23.5 kg
		Amps		1.88	1.90	2.05	2.10	2.28	2.31				
		Cond. Temp		40.8	42.6	44.5	46.6	48.8	51.1				
Unit Connections Suction 9.5mm (3/8”)		Capacity (w)	38.0	324	395	470	550	632	717	220-240v 1Ø-50Hz	Watts 20	Max. 3.5	Receiver 1.5 L
		Amps		2.15	2.21	2.33	2.41	2.55	2.62				
		Cond. Temp		46.2	47.9	49.8	51.7	53.8	56.0				
Liquid 6.35mm (1/4”)		Capacity (w)	46.0	272	332	395	460	525	592	CSIR	Blade Dia. 250mm	LRA 12.2	Air Flow m³/h 800
		Amps		2.42	2.51	2.61	2.71	2.82	2.92				
Unit Dimensions Drawing : 2		Cond. Temp		53.6	55.1	56.7	58.5	60.4	62.4				
AETQ4440ZHRFZ	1/3	Capacity (w)	32.0	483	584	693	808	929	1053	Displ cm³ 6.69	RPM 1300	RLA 2.87	Weight 23.9 kg
		Amps		2.60	2.63	2.73	2.80	2.87	2.88				
		Cond. Temp		41.6	43.6	45.7	47.9	50.2	52.6				
Unit Connections Suction 9.5mm (3/8”)		Capacity (w)	38.0	431	523	620	723	829	938	220-240v 1Ø-50Hz	Watts 20	Max. 4.3	Receiver 1.5 L
		Amps		2.77	2.84	2.96	3.06	3.17	3.24				
		Cond. Temp		46.9	48.8	50.7	52.7	54.9	57.1				
Liquid 6.35mm (1/4”)		Capacity (w)	46.0	360	440	523	608	696	786	CSIR	Blade Dia. 250mm	LRA 16.3	Air Flow m³/h 980
		Amps		2.93	3.05	3.18	3.32	3.46	3.6				
Unit Dimensions Drawing : 2		Cond. Temp		54.0	55.6	57.4	59.2	61.1	63.2				

*EN13215 condensing unit ratings define the new capacity ratings for refrigeration in a way which is more useful to refrigeration technicians.

TECUMSEH HERMETIC CONDENSING UNITS

R404A (R507) - Medium Temperature Condensing Units

HIGH EFFICIENCY CONDENSING UNITS - cont'd

High Efficiency Compressors & Fan Motors

Airefrig Part Number	Nom HP	Operating Conditions *EN 13215	Amb. Temp ºC	Based on 20ºC return gas & 3.0 K sub-cooling Evaporating Temperature ºC						Comp Type	Fan Motor (IP44)	Unit Amps	Unit Info
				-15	-10	-5	0	5	10				
AETQ4450ZHRFZ	3/8	Capacity (w)	32.0	674	820	981	1154	1340	1535	Displ cm³ 8.85	RPM 1300	RLA 3.39	Weight 25.7 kg
		Amps		3.08	3.10	3.21	3.34	3.39	3.50				
		Cond. Temp		38.9	40.2	41.5	43.1	44.7	46.4				
Unit Connections		Capacity (w)	38.0	604	737	881	1034	1197	1368	220-240v 1Ø-50Hz	Watts 20	Max. 5.7	Receiver 1.5 L
Suction 9.5mm (3/8")		Amps		3.19	3.30	3.45	3.62	3.75	3.91				
		Cond. Temp		44.5	45.7	47.0	48.4	50.0	51.7				
Liquid 6.35mm (1/4")		Capacity (w)	46.0	508	623	745	873	1006	1144	CSIR	Blade Dia. 300mm	LRA 18.8	Air Flow m³/h 1130
		Amps		3.30	3.49	3.69	3.89	4.10	4.31				
Unit Dimensions Drawing : 3		Cond. Temp		51.9	53.0	54.3	55.6	57.1	58.7				
AETQ4460ZHRFZ	1/2	Capacity (w)	32.0	816	972	1142	1325	1520	1724	Displ cm³ 10.33	RPM 1300	RLA 4.21	Weight 25.5 kg
		Amps		3.75	3.90	4.07	4.15	4.21	4.30				
		Cond. Temp		39.8	41.3	43.0	44.7	46.6	48.6				
Unit Connections		Capacity (w)	38.0	732	874	1027	1191	1363	1545	220-240v 1Ø-50Hz	Watts 20	Max. 6.5	Receiver 1.5 L
Suction 9.5mm (3/8")		Amps		3.89	4.07	4.27	4.43	4.58	4.75				
		Cond. Temp		45.5	46.9	48.4	50.0	51.7	53.6				
Liquid 6.35mm (1/4")		Capacity (w)	46.0	616	739	870	1008	1153	1304	CSIR	Blade Dia. 300mm	LRA 20.2	Air Flow m³/h 1130
		Amps		4.02	4.24	4.47	4.71	4.95	5.20				
Unit Dimensions Drawing : 3		Cond. Temp		53.2	54.4	55.7	57.1	58.6	60.2				

*EN13215 condensing unit ratings define the new capacity ratings for refrigeration in a way which is more useful to refrigeration technicians.

Prices

Airefrig Part Number	List Price Excl GST
AETQ4425ZHRFZ	
AETQ4430ZHRFZ	
AETQ4440ZHRFZ	
AETQ4450ZHRFZ	
AETQ4460ZHRFZ	



TECUMSEH HERMETIC CONDENSING UNITS

R134A - Medium Temperature Condensing Units

Airefrig Part Number	Nom HP	Operating Conditions *EN 13215	Amb. Temp ºC	Based on 20ºC return gas & 3.0 K sub-cooling Evaporating Temperature ºC -20	-15	-10	-5	0	5	10	Comp Type	Fan Motor (IP44)	Unit Amps	Unit Info
		Capacity (w)		121	163	210	262	319	380	446	Displ cm³	RPM	RLA	Weight
THBT4415YHR		Amps	32.0	0.87	0.88	0.9	0.93	0.97	1.01	1.07	4.23	1210	1.09	14.5 kg
		Cond. Temp		37.2	38.5	40.0	41.7	43.6	45.7	48.0				
Unit Connections	1/8	Capacity (w)		112	151	194	243	296	354	417	220-240v	Watts	Max.	Receiver
Suction		Amps	38.0	0.87	0.89	0.92	0.96	1.0	1.05	1.11	1Ø-50Hz	5	1.82	0.75 L
6.35mm (1/4")		Cond. Temp		42.3	43.6	45.0	46.7	48.5	50.6	52.8				
Liquid		Capacity (w)		101	136	176	222	272	327	386	CSIR	Blade	LRA	Air Flow
6.35mm (1/4")		Amps	46.0	0.89	0.91	0.95	0.99	1.04	1.81	1.17		Dia.	7.4	m³/h
Unit Dimensions Drawing : 1		Cond. Temp		49.2	50.3	51.7	53.3	55.1	57.0	59.2		205mm		315
		Capacity (w)		143	199	250	306	369	437	511	Displ cm³	RPM	RLA	Weight
THBT4419YHR		Amps	32.0	1.04	1.05	1.07	1.11	1.17	1.23	1.32	5.2	1350	1.33	14.5 kg
		Cond. Temp		37.9	39.5	41.3	43.4	45.8	48.5	51.4				
Unit Connections	1/6	Capacity (w)		131	184	231	284	343	408	477	220-240v	Watts	Max.	Receiver
Suction		Amps	38.0	1.05	1.07	1.09	1.14	1.21	1.28	1.38	1Ø-50Hz	5	1.98	0.75 L
9.5mm (3/8")		Cond. Temp		43.1	44.6	46.3	48.4	50.7	53.3	56.2				
Liquid		Capacity (w)		115	165	210	259	315	376	441	CSIR	Blade	LRA	Air Flow
6.35mm (1/4")		Amps	46.0	1.06	1.09	1.12	1.18	1.26	1.34	1.44		Dia.	8.25	m³/h
Unit Dimensions Drawing : 1		Cond. Temp		49.9	51.3	53.0	55.0	57.3	59.8	62.6		205mm		340
		Capacity (w)		165	222	294	383	459	542	631	Displ cm³	RPM	RLA	Weight
THBT4422YHR		Amps	32.0	1.40	1.45	1.49	1.55	1.65	1.72	1.84	6.1	1350	1.62	12.4 kg
		Cond. Temp		37.8	38.5	41.4	43.5	45.8	48.3	51.0				
Unit Connections	1/5	Capacity (w)		153	201	260	333	403	499	580	220-240v	Watts	Max.	Receiver
Suction		Amps	38.0	1.44	1.47	1.52	1.58	1.67	1.75	1.87	1Ø-50Hz	5	2.45	0.75 L
9.5mm (3/8")		Cond. Temp		43.3	45.0	46.8	48.8	51.1	53.5	56.1				
Liquid		Capacity (w)		136	194	246	303	374	442	513	CSIR	Blade	LRA	Air Flow
6.35mm (1/4")		Amps	46.0	1.46	1.49	1.54	1.60	1.69	1.79	1.92		Dia.	8.55	m³/h
Unit Dimensions Drawing : 1		Cond. Temp		50.8	52.3	54.0	56.0	58.1	60.4	62.9		205mm		340
		Capacity (w)		187	253	328	411	503	603	710	Displ cm³	RPM	RLA	Weight
AEZT4425YHR		Amps	32.0	1.58	1.6	1.64	1.69	1.76	1.84	1.94	7.6	1350	1.9	19.4 kg
		Cond. Temp		37.4	38.9	40.6	42.6	44.8	47.2	49.9				
Unit Connections		Capacity (w)		173	234	304	381	467	561	663	220-240v	Watts	Max.	Receiver
Suction	1/5	Amps	38.0	1.6	1.63	1.67	1.74	1.82	1.91	2.02	1Ø-50Hz	5	2.6	0.75 L
9.5mm (3/8")		Cond. Temp		42.5	44.0	45.6	47.5	49.7	52.1	54.7				
Liquid		Capacity (w)		156	211	275	348	429	517	613	CSIR	Blade	LRA	Air Flow
6.35mm (1/4")		Amps	46.0	1.61	1.66	1.72	1.8	1.89	2.0	2.13		Dia.	9.5	m³/h
Unit Dimensions Drawing : 1		Cond. Temp		49.4	50.7	52.3	54.2	56.2	58.5	61.1		205mm		410
		Capacity (w)		231	323	423	530	646	770	901	Displ cm³	RPM	RLA	Weight
AEZT4430YHR		Amps	32.0	2.31	2.33	2.36	2.42	2.49	2.59	2.7	8.8	1350	2.6	22.4 kg
		Cond. Temp		37.2	38.6	40.3	42.2	44.4	46.8	49.5				
Unit Connections		Capacity (w)		215	299	392	492	601	717	841	220-240v	Watts	Max.	Receiver
Suction	1/4	Amps	38.0	2.33	2.36	2.42	2.49	2.57	2.68	2.81	1Ø-50Hz	22	4.0	0.75 L
9.5mm (3/8")		Cond. Temp		42.3	43.7	45.3	47.2	49.3	51.7	54.3				
Liquid		Capacity (w)		193	270	356	450	552	661	778	CSIR	Blade	LRA	Air Flow
6.35mm (1/4")		Amps	46.0	2.35	2.41	2.48	2.57	2.68	2.81	2.95		Dia.	11.1	m³/h
Unit Dimensions Drawing : 2		Cond. Temp		49.1	50.4	52.0	53.8	55.8	58.1	60.7		250mm		800

TECUMSEH HERMETIC CONDENSING UNITS

R134A - Medium Temperature Condensing Units

Airefrig Part Number	Nom HP	Operating Conditions *EN 13215	Amb. Temp ºC	Based on 20ºC return gas & 3.0 K sub-cooling Evaporating Temperature ºC							Comp Type	Fan Motor (IP44)	Unit Amps	Unit Info
				-20	-15	-10	-5	0	5	10				
CAET4440YHR	3/8	Capacity (w)	32.0	353	445	556	686	835	1002	1188	Displ cm³ 12.0	RPM 1350	RLA 3.1	Weight 22.9 kg
		Amps		2.66	2.69	2.74	2.81	2.9	3.01	3.15				
		Cond. Temp		36.8	39.0	41.2	43.3	45.4	47.5	49.5				
Unit Connections Suction 9.5mm (3/8”)		Capacity (w)	38.0	329	412	515	636	776	934	1109	220-240v 1Ø-50Hz	Watts 22	Max. 4.6	Receiver 0.75 L
		Amps		2.69	2.73	2.8	2.89	2.99	3.12	3.28				
		Cond. Temp		41.9	44.1	46.2	48.3	50.3	52.3	54.3				
Liquid 6.35mm (1/4”)		Capacity (w)	46.0	295	372	468	581	712	861	1027	CSIR	Blade Dia. 250mm	LRA 15.7	Air Flow m³/h 980
		Amps		2.72	2.79	2.88	2.99	3.12	3.27	3.45				
Unit Dimensions Drawing : 2		Cond. Temp		48.8	50.8	52.9	54.9	56.9	58.8	60.7				
CAET4448YHR	1/3	Capacity (w)	32.0	369	521	684	858	1044	1240	1447	Displ cm³ 14.2	RPM 1350	RLA 3.5	Weight 24.6 kg
		Amps		2.88	2.93	3.01	3.12	3.26	3.44	3.64				
		Cond. Temp		37.1	38.2	39.5	41.1	43.0	45.0	47.4				
Unit Connections Suction 9.5mm (3/8”)		Capacity (w)	38.0	343	482	633	796	971	1156	1351	220-240v 1Ø-50Hz	Watts 22	Max. 5.2	Receiver 0.75 L
		Amps		2.9	2.97	3.07	3.21	3.37	3.56	3.79				
		Cond. Temp		42.2	43.3	44.5	46.1	47.9	49.9	52.2				
Liquid 6.35mm (1/4”)		Capacity (w)	46.0	308	435	575	727	891	1066	1251	CSIR	Blade Dia. 300mm	LRA 17.7	Air Flow m³/h 1130
		Amps		2.94	3.03	3.16	3.32	3.51	3.73	3.99				
Unit Dimensions Drawing : 3		Cond. Temp		49.0	50.0	51.2	52.7	54.4	56.4	58.6				
CAET4456YHR	1/2	Capacity (w)	32.0	476	613	769	943	1135	1345	1571	Displ cm³ 16.2	RPM 1350	RLA 4.4	Weight 25.0 kg
		Amps		3.73	3.76	3.83	3.94	4.09	4.28	4.5				
		Cond. Temp		37.4	38.8	40.4	42.2	44.3	46.6	49.1				
Unit Connections Suction 9.5mm (3/8”)		Capacity (w)	38.0	442	568	712	875	1055	1253	1467	220-240v 1Ø-50Hz	Watts 22	Max. 5.6	Receiver 0.75 L
		Amps		3.76	3.82	3.91	4.05	4.22	4.44	4.69				
		Cond. Temp		42.6	43.9	45.4	47.2	49.2	51.4	53.9				
Liquid 6.35mm (1/4”)		Capacity (w)	46.0	397	512	646	798	968	1154	1357	CSIR	Blade Dia. 300mm	LRA 19.7	Air Flow m³/h 1130
		Amps		3.81	3.89	4.02	4.19	4.4	4.65	4.94				
Unit Dimensions Drawing : 3		Cond. Temp		49.4	50.6	52.1	53.8	55.7	57.9	60.3				
CAJT4461YHR	1/2	Capacity (w)	32.0	507	666	851	1064	1304	1569	1857	Displ cm³ 18.3	RPM 1350	RLA 4.6	Weight 32.0 kg
		Amps		3.52	3.64	3.78	3.95	4.15	4.38	4.64				
		Cond. Temp		36.7	38.0	39.6	41.5	43.6	45.9	48.5				
Unit Connections Suction 12.7mm (1/2”)		Capacity (w)	38.0	458	604	774	968	1186	1427	1688	220-240v 1Ø-50Hz	Watts 22	Max. 6.5	Receiver 1.5 L
		Amps		3.5	3.64	3.81	4.01	4.23	4.49	4.77				
		Cond. Temp		42.3	43.5	45.1	46.8	48.8	51.1	53.6				
Liquid 6.35mm (1/4”)		Capacity (w)	46.0	392	523	672	842	1031	1239	1464	CSIR	Blade Dia. 300mm	LRA 19.8	Air Flow m³/h 980
		Amps		3.47	3.65	3.85	4.08	4.34	4.63	4.94				
Unit Dimensions Drawing : 6		Cond. Temp		49.8	50.9	52.3	54.0	55.9	58.0	60.4				

TECUMSEH HERMETIC CONDENSING UNITS

R134A - Medium Temperature Condensing Units

Airefrig Part Number	Nom HP	Operating Conditions *EN 13215	Amb. Temp ºC	Based on 20ºC return gas & 3.0 K sub-cooling Evaporating Temperature ºC -20	-15	-10	-5	0	5	10	Comp Type	Fan Motor (IP44)	Unit Amps	Unit Info
CAJT4476YHR	5/8	Capacity (w)	32.0	552	774	1012	1266	1536	1820	2118	Displ cm³ 21.8	RPM 1350	RLA 5.5	Weight 37.0 kg
		Amps		4.18	4.25	4.37	4.55	4.79	5.08	5.43				
		Cond. Temp		38.1	39.3	40.8	42.7	44.9	47.4	50.3				
Unit Connections		Capacity (w)	38.0	512	716	937	1175	1428	1696	1978	220-240v 1Ø-50Hz	Watts 22	Max. 7.8	Receiver 1.5 L
Suction 12.7mm (1/2")		Amps		4.22	4.31	4.47	4.67	4.94	5.27	5.66				
		Cond. Temp		43.3	44.4	45.8	47.6	49.8	52.3	55.1				
Liquid 9.5mm (3/8")		Capacity (w)	46.0	458	646	850	1072	1310	1563	1830	CSIR	Blade Dia. 300mm	LRA 24.8	Air Flow m³/h 980
		Amps		4.27	4.4	4.59	4.84	5.15	5.52	5.95				
Unit Dimensions Drawing : 6		Cond. Temp		50.1	51.1	52.5	54.3	56.3	58.8	61.5				
CAJT4492YHR	3/4	Capacity (w)	32.0	721	964	1242	1553	1897	2274	2682	Displ cm³ 25.95	RPM 1440	RLA 6.3	Weight 40.0 kg
		Amps		4.89	4.91	4.96	5.05	5.17	5.32	5.51				
		Cond. Temp		36.7	37.9	39.3	40.9	42.6	44.6	46.7				
Unit Connections		Capacity (w)	38.0	671	893	1150	1440	1764	2119	2505	220-240v 1Ø-50Hz	Watts 90	Max. 9.1	Receiver 2.35 L
Suction 12.7mm (1/2")		Amps		4.93	4.98	5.07	5.19	5.34	5.52	5.74				
		Cond. Temp		41.9	43.0	44.3	45.8	47.5	49.4	51.5				
Liquid 9.5mm (3/8")		Capacity (w)	46.0	602	806	1044	1315	1618	1953	2318	CSIR	Blade Dia. 350mm	LRA 29.6	Air Flow m³/h 2200
		Amps		4.99	5.08	5.21	5.37	5.56	5.78	6.04				
Unit Dimensions Drawing : 7		Cond. Temp		48.7	49.8	51.0	52.4	54.1	55.9	57.9				
CAJT4511YHR	1.0	Capacity (w)	32.0	1002	1336	1713	2134	2598	3106	3657	Displ cm³ 32.7	RPM 1440	RLA 5.7	Weight 40.0 kg
		Amps		3.45	3.73	4.07	4.46	4.91	5.42	5.99				
		Cond. Temp		37.1	38.6	40.2	42.0	44.0	46.1	48.4				
Unit Connections		Capacity (w)	38.0	933	1240	1590	1984	2421	2902	3425	220-240v 1Ø-50Hz	Watts 90	Max. 9.6	Receiver 2.35 L
Suction 15.9mm (5/8")		Amps		3.48	3.79	4.15	4.58	5.07	5.62	6.23				
		Cond. Temp		42.3	43.7	45.2	47.0	48.9	51.0	53.2				
Liquid 9.5mm (3/8")		Capacity (w)	46.0	839	1122	1448	1817	2230	2685	3184	CSR	Blade Dia. 350mm	LRA 32.1	Air Flow m³/h 2250
		Amps		3.52	3.86	4.27	4.74	5.28	5.89	6.56				
Unit Dimensions Drawing : 8		Cond. Temp		49.1	50.4	51.9	53.6	55.4	57.4	59.6				

*EN13215 condensing unit ratings define the new capacity ratings for refrigeration in a way which is more useful to refrigeration technicians.

Prices

Airefrig Part Number	List Price Excl GST
THBT4415YHR	
THBT4419YHR	
THBT4422YHR	
AEZT4425YHR	

Airefrig Part Number	List Price Excl GST
AEZT4430YHR	
CAET4440YHR	
CAET4448YHR	
CAET4456YHR	

Airefrig Part Number	List Price Excl GST
CAJT4461YHR	
CAJT4476YHR	
CAJT4492YHR	
CAJT4511YHR	

TECUMSEH HERMETIC CONDENSING UNITS

R134A - Medium Temperature Condensing Units

HIGH EFFICIENCY CONDENSING UNITS

High Efficiency Compressors & Fan Motors

Airefrig Part Number	Nom HP	Operating Conditions *EN 13215	Amb. Temp ºC	Based on 20ºC return gas & 3.0 K sub-cooling Evaporating Temperature ºC						Comp Type	Fan Motor (IP44)	Unit Amps	Unit Info
				-15	-10	-5	0	5	10				
AETQ4430YHRFZ	1/4	Capacity (w)	32.0	324	411	510	622	744	876	Displ cm³ 8.02	RPM 1300	RLA 2.31	Weight 23.2 kg
		Amps		2.14	2.15	2.25	2.26	2.31	2.45				
		Cond. Temp		40.3	41.8	43.6	45.7	48.0	50.6				
Unit Connections Suction 9.5mm (3/8”)		Capacity (w)	38.0	298	379	471	573	686	807	220-240v 1Ø-50Hz	Watts 20	Max. 2.8	Receiver 1.5 L
		Amps		2.28	2.32	2.41	2.47	2.54	2.67				
		Cond. Temp		45.6	47.1	48.8	50.8	53.0	55.6				
Liquid 6.35mm (1/4”)		Capacity (w)	46.0	264	336	418	509	608	715	CSIR	Blade Dia. 250mm	LRA 11.7	Air Flow m³/h 800
		Amps		2.41	2.49	2.57	2.67	2.77	2.88				
Unit Dimensions Drawing : 2		Cond. Temp		52.8	54.1	55.8	57.6	59.8	62.2				
AETQ4440YHRFZ	1/3	Capacity (w)	32.0	435	539	656	786	929	1084	Displ cm³ 10.33	RPM 1300	RLA 2.65	Weight 24.1 kg
		Amps		2.15	2.20	420	2.45	2.65	3.01				
		Cond. Temp		40.7	42.6	2.30	46.9	49.4	52.1				
Unit Connections Suction 9.5mm (3/8”)		Capacity (w)	38.0	400	496	604	724	855	997	220-240v 1Ø-50Hz	Watts 20	Max. 3.4	Receiver 1.5 L
		Amps		2.39	2.47	2.59	2.74	2.94	3.30				
		Cond. Temp		46.6	48.4	50.3	52.5	54.9	57.4				
Liquid 6.35mm (1/4”)		Capacity (w)	46.0	353	439	535	641	757	-	CSIR	Blade Dia. 250mm	LRA 13.7	Air Flow m³/h 980
		Amps		2.63	2.74	2.87	3.03	3.22	-				
Unit Dimensions Drawing : 2		Cond. Temp		54.5	56.1	57.9	59.9	62.1	-				
AETQ4450YHRFZ	2/5	Capacity (w)	32.0	566	709	870	1049	1245	1459	Displ cm³ 13.24	RPM 1300	RLA 3.2	Weight 26.5 kg
		Amps		2.71	2.86	2.93	3.08	3.20	3.36				
		Cond. Temp		39.2	40.4	41.8	43.4	45.3	47.5				
Unit Connections Suction 9.5mm (3/8”)		Capacity (w)	38.0	520	651	798	960	798	1330	220-240v 1Ø-50Hz	Watts 20	Max. 3.8	Receiver 1.5 L
		Amps		2.92	3.06	3.18	3.36	3.54	3.75				
		Cond. Temp		44.9	46.0	47.4	49.0	47.4	53.1				
Liquid 6.35mm (1/4”)		Capacity (w)	46.0	458	574	701	841	994	1158	CSIR	Blade Dia. 300mm	LRA 12.0	Air Flow m³/h 1130
		Amps		3.12	3.26	3.43	3.63	3.87	4.13				
Unit Dimensions Drawing : 3		Cond. Temp		52.5	53.6	54.9	56.5	58.4	60.5				

*EN13215 condensing unit ratings define the new capacity ratings for refrigeration in a way which is more useful to refrigeration technicians.

TECUMSEH HERMETIC CONDENSING UNITS

R134A - Medium Temperature Condensing Units

HIGH EFFICIENCY CONDENSING UNITS - cont'd

High Efficiency Compressors & Fan Motors

Airefrig Part Number	Nom HP	Operating Conditions *EN 13215	Amb. Temp ºC	Based on 20ºC return gas & 3.0 K sub-cooling Evaporating Temperature ºC						Comp Type	Fan Motor (IP44)	Unit Amps	Unit Info
				-15	-10	-5	0	5	10				
AETQ4456YHRFZ	1/2	Capacity (w)	32.0	649	807	985	1182	1398	1634	Displ cm³ 14.51	RPM 1300	RLA 3.7	Weight 26.1 kg
		Amps		3.16	3.25	3.45	3.60	3.70	3.85				
		Cond. Temp		38.7	40.0	41.6	43.3	45.2	47.3				
Unit Connections Suction 9.5mm (3/8")		Capacity (w)	38.0	597	745	909	1091	1289	1504	220-240v 1Ø-50Hz	Watts 20	Max. 8.3	Receiver 1.5 L
		Amps		3.28	3.42	3.63	3.83	4.02	4.26				
		Cond. Temp		44.5	45.9	47.4	49.1	51.0	53.0				
Liquid 6.35mm (1/4") Unit Dimensions Drawing : 3		Capacity (w)	46.0	528	661	808	968	1142	1330	CSIR	Blade Dia. 300mm	LRA 17.6	Air Flow m³/h 1130
		Amps		3.39	3.58	3.80	4.06	4.34	4.66				
		Cond. Temp		52.3	53.6	55.1	56.8	58.7	60.7				
AETQ4460YHRFZ	1/2	Capacity (w)	32.0	670	836	1023	1231	1463	1720	Displ cm³ 15.09	RPM 1300	RLA 3.0	Weight 26.1 kg
		Amps		2.48	2.62	2.78	2.97	3.00	3.42				
		Cond. Temp		38.9	40.4	42.0	43.7	45.4	47.3				
Unit Connections Suction 9.5mm (3/8")		Capacity (w)	38.0	614	770	943	1135	1347	1580	220-240v 1Ø-50Hz	Watts 20	Max. 5.3	Receiver 1.5 L
		Amps		2.54	2.71	2.89	3.11	3.26	3.61				
		Cond. Temp		44.8	46.3	47.8	49.5	51.3	53.2				
Liquid 6.35mm (1/4") Unit Dimensions Drawing : 4		Capacity (w)	46.0	538	680	834	1003	1188	1389	CSR	Blade Dia. 300mm	LRA 22.0	Air Flow m³/h 1400
		Amps		2.59	2.79	3.00	3.25	3.51	3.80				
		Cond. Temp		52.5	54.0	55.7	57.4	59.2	61.1				

*EN13215 condensing unit ratings define the new capacity ratings for refrigeration in a way which is more useful to refrigeration technicians.

Prices

Airefrig Part Number	List Price Excl GST
AETQ4430YHRFZ	
AETQ4440YHRFZ	
AETQ4450YHRFZ	
AETQ4456YHRFZ	
AETQ4460YHRFZ	

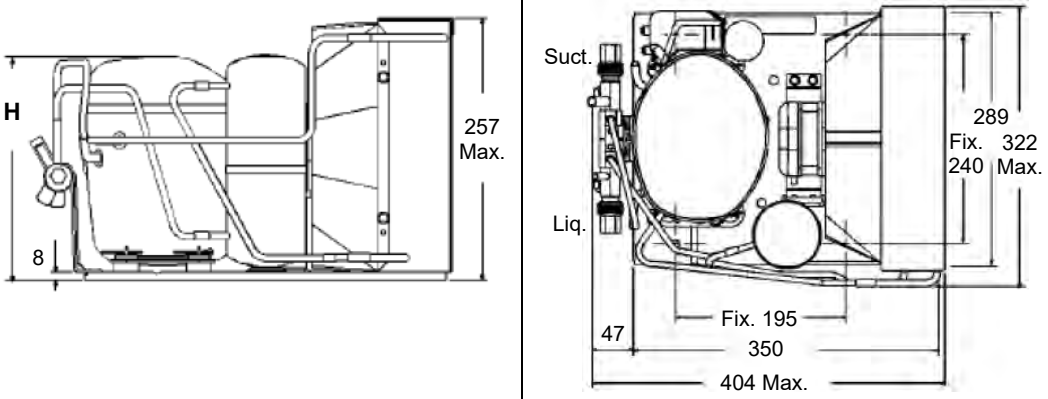


TECUMSEH HERMETIC CONDENSING UNITS

Tecumseh Condensing Unit Dimensions

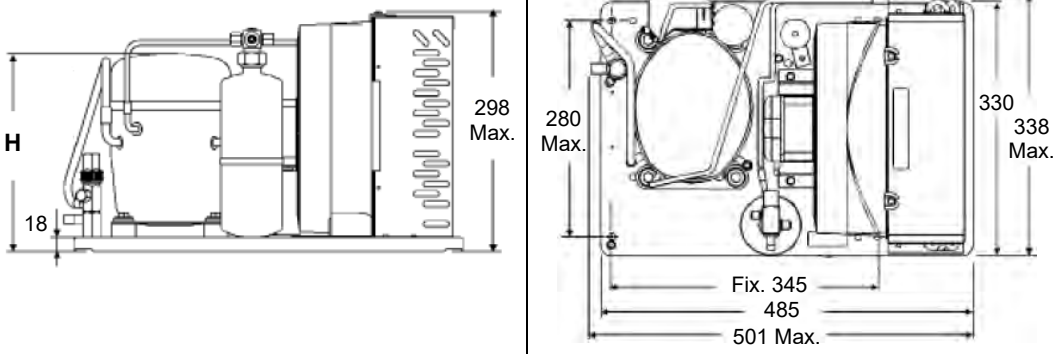
R404A Low Temp	Dim **H**
AEZT2411ZBR	200
AEZT2415ZBR	216
CAET2417ZBR	229
R404A Medium Temp	**Dim H**
AEZT4425ZHR	203
AETQ4425ZHRFZ	232
R134A Medium Temp	**Dim H**
THBT4415YHR	181
THBT4419YHR	176
THBT4422YHR	176
AEZT4425YHR	203

Drawing 1



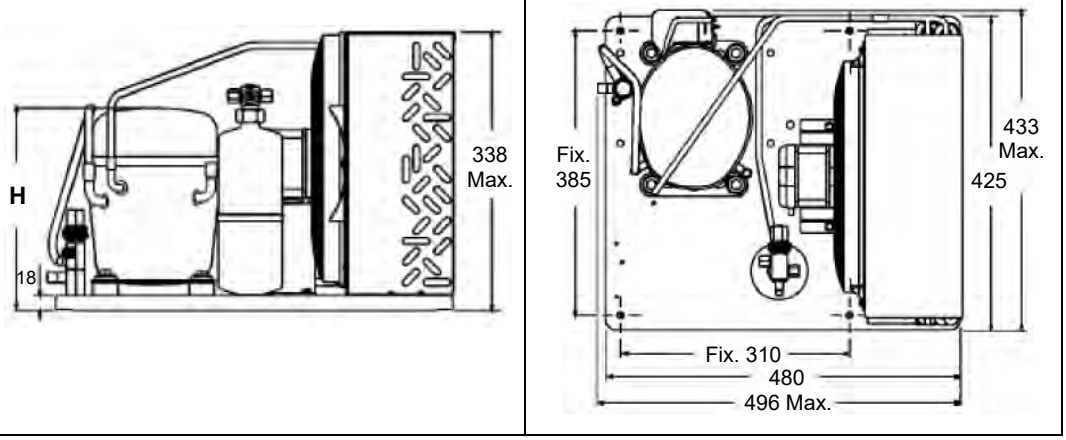
R404A Low Temp	Dim **H**
CAET2420ZBR	246
R404A Medium Temp	**Dim H**
AEZT4430ZHR	213
AETQ4430ZHRFZ	250
AETQ4440ZHRFZ	250
R134A Medium Temp	**Dim H**
AEZT4430YHR	213
AETQ4430YHRFZ	250
CAET4440YHR	233
AETQ4440YHRFZ	250

Drawing 2



R404A Medium Temp	Dim **H**
AETQ4460ZHRFZ	249
AETQ4450ZHRFZ	249
R134A Medium Temp	**Dim H**
CAET4448YHR	246
AETQ4450YHRFZ	249
CAET4456YHR	246
AETQ4456YHRFZ	249

Drawing 3

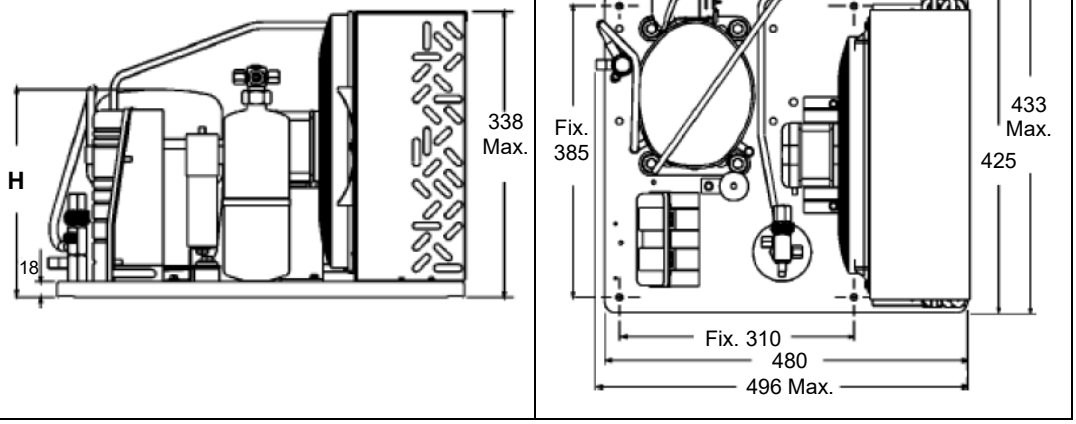


TECUMSEH HERMETIC CONDENSING UNITS

Tecumseh Condensing Unit Dimensions (cont'd)

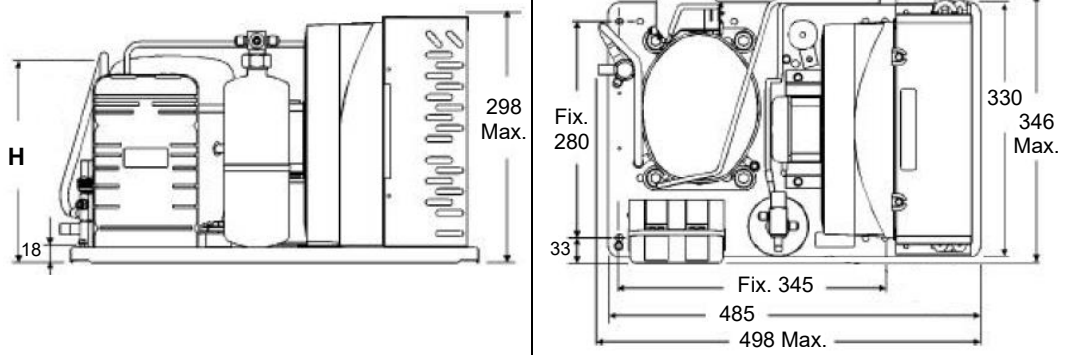
R404A Low Temp	Dim **H**
CAET2424ZBR	246
R404A Medium Temp	**Dim H**
CAET9450ZMHR	246
CAET9470ZMHR	249
R134A Medium Temp	**Dim H**
AETQ4460YHRFZ	249

Drawing 4



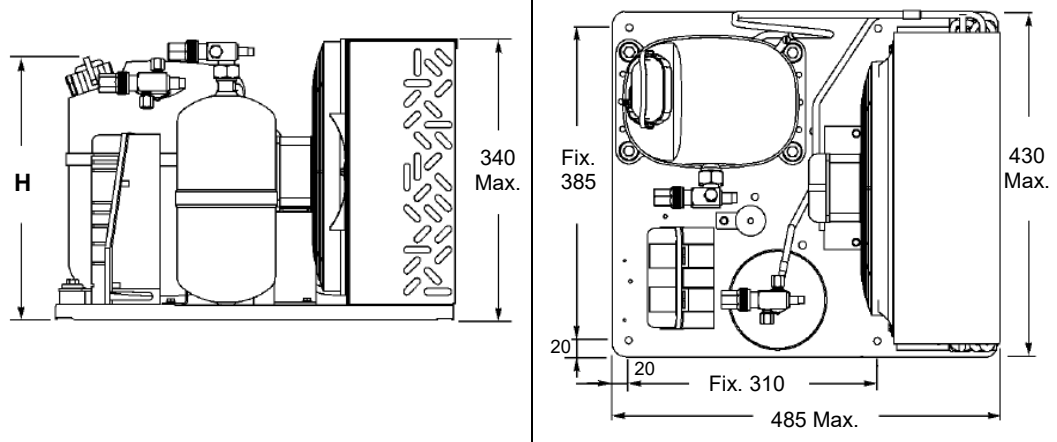
R404A Medium Temp	Dim **H**
AEZT9440ZMHR	233

Drawing 5



R404A Low Temp	Dim **H**
CAJT2428ZBR	299
CAJT2432ZBR	299
CAJT2440ZBR	299
CAJT2446ZBR	310
R404A Medium Temp	**Dim H**
CAJT9480ZMHR	299
R134A Medium Temp	**Dim H**
CAJT4461YHR	286
CAJT4476YHR	286

Drawing 6

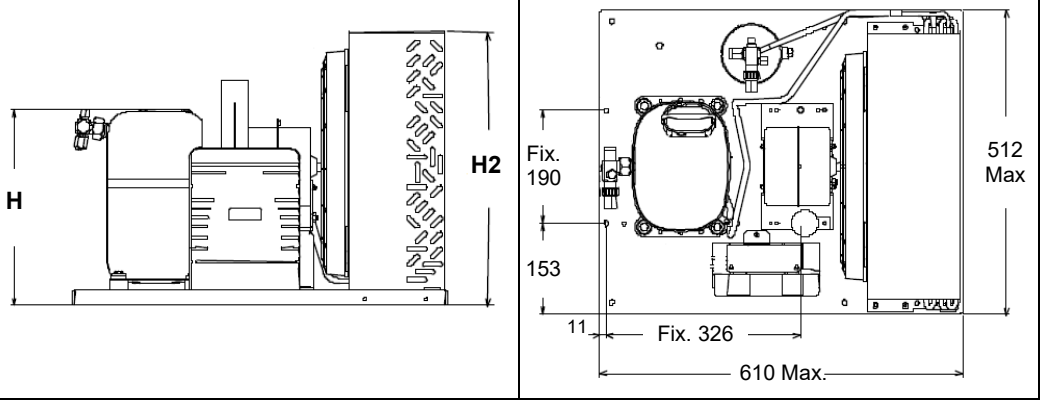


TECUMSEH HERMETIC CONDENSING UNITS

Tecumseh Condensing Unit Dimensions (cont'd)

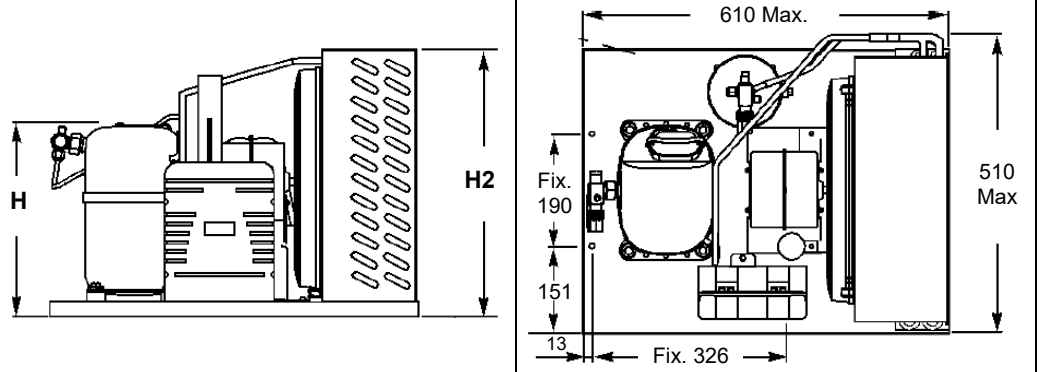
R404A Low Temp	Dim H	Dim H2
CAJT2464ZBR	317	445
R404A Medium Temp	**Dim H**	**Dim H2**
CAJT9510ZMHR	323	392
CAJT9513ZMHR	323	445
CAJT4517ZHR	323	445
R134A Medium Temp	**Dim H**	**Dim H2**
CAJT4492YHR	306	445

Drawing 7



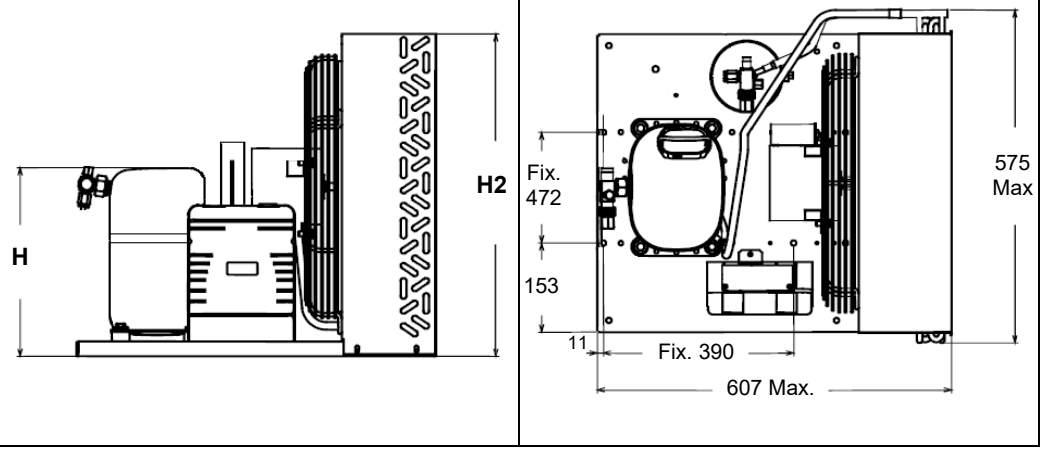
R134A Medium Temp	Dim H	Dim H2
CAJT4511YHR	317	445

Drawing 8



R404A Medium Temp	Dim H	Dim H2
CAJT4519ZHR	323	545

Drawing 9



TECUMSEH HERMETIC CONDENSING UNITS

Tecumseh Condensing Unit Spares

R404A Low Temp	Airefrig Part Number	Condenser Fan Motor	Airefrig Part Number	Condenser Fan Blade
AEZT2411ZBR	7551100	5W / 220-240V	7555097	205mm Diameter
AEZT2415ZBR	7551100	5W / 220-240V	7555097	205mm Diameter
CAET2417ZBR	7551100	5W / 220-240V	7555097	205mm Diameter
CAET2420ZBR	7550163	22W / 220-240V	7668022	250mm Diameter
CAET2424ZBR	7550163	22W / 220-240V	7668023	300mm Diameter
CAJT2428ZBR	7550163	22W / 220-240V	7668023	300mm Diameter
CAJT2432ZBR	7550163	22W / 220-240V	7668023	300mm Diameter
CAJT2440ZBR	7550163	22W / 220-240V	7668023	300mm Diameter
CAJT2446ZBR	7550163	22W / 220-240V	7668023	300mm Diameter
CAJT2464ZBR	7552106	TEM4E-350 Fan / Motor Assembly 220-240V		

R404A Medium Temp	Airefrig Part Number	Condenser Fan Motor	Airefrig Part Number	Condenser Fan Blade
AEZT4425ZHR	7551100	5W / 220-240V	7555097	205mm Diameter
AEZT4430ZHR	7550163	22W / 220-240V	7668022	250mm Diameter
AEZT9440ZMHR	7550163	22W / 220-240V	7668022	250mm Diameter
CAET9450ZMHR	7550163	22W / 220-240V	7668023	300mm Diameter
CAET9460ZMHR	7550163	22W / 220-240V	7668023	300mm Diameter
CAET9470ZMHR	7550163	22W / 220-240V	7668023	300mm Diameter
CAJT9480ZMHR	7550163	22W / 220-240V	7668023	300mm Diameter
CAJT9510ZMHR	7552110	TEM4E-315 Fan / Motor Assembly 220-240V		
CAJT9513ZMHR	7552106	TEM4E-350 Fan / Motor Assembly 220-240V		
CAJT4517ZHR	7552106	TEM4E-350 Fan / Motor Assembly 220-240V		
CAJT4519ZHR	7552103	TEM4E-400 Fan / Motor Assembly 220-240V		

R404A Medium Temp (High Efficiency)	Airefrig Part Number	Condenser Fan Motor (IQ)	Airefrig Part Number	Condenser Fan Blade
AETQ4425ZHRFZ	7552504	5W / 220-240V	7668052	200mm Diameter
AETQ4430ZHRFZ	7552505	20W / 220-240V	7668022	250mm Diameter
AETQ4440ZHRFZ	7552505	20W / 220-240V	7668022	250mm Diameter
AETQ4450ZHRFZ	7552505	20W / 220-240V	7668023	300mm Diameter
AETQ4460ZHRFZ	7552505	20W / 220-240V	7668023	300mm Diameter

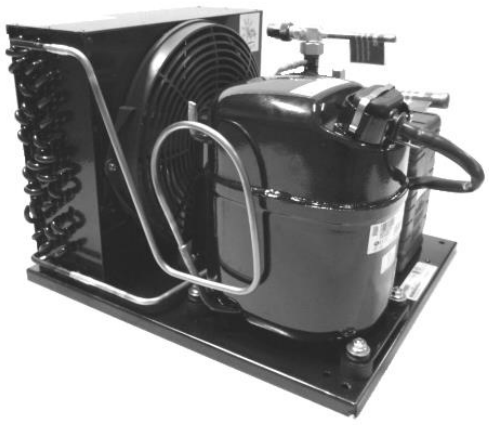
TECUMSEH HERMETIC CONDENSING UNITS

Tecumseh Condensing Unit Spares (cont'd)

R134A Medium Temp	Airefrig Part Number	Condenser Fan Motor	Airefrig Part Number	Condenser Fan Blade
THBT4415YHR	7551100	5W / 220-240V	7555097	205mm Diameter
THBT4419YHR	7551100	5W / 220-240V	7555097	205mm Diameter
THBT4422YHR	7551100	5W / 220-240V	7555097	205mm Diameter
AEZT4425YHR	7551100	5W / 220-240V	7555097	205mm Diameter
AEZT4430YHR	7550163	22W / 220-240V	7668022	250mm Diameter
CAET4440YHR	7550163	22W / 220-240V	7668022	250mm Diameter
CAET4448YHR	7550163	22W / 220-240V	7668023	300mm Diameter
CAET4456YHR	7550163	22W / 220-240V	7668023	300mm Diameter
CAJT4452YHR	7550163	22W / 220-240V	7668023	300mm Diameter
CAJT4461YHR	7550163	22W / 220-240V	7668023	300mm Diameter
CAJT4476YHR	7550163	22W / 220-240V	7668023	300mm Diameter
CAJT4492YHR	7552106	TEM4E-350 Fan / Motor Assembly 220-240V		
CAJT4511YHR	7552106	TEM4E-350 Fan / Motor Assembly 220-240V		

R134A Medium Temp (High Efficiency)	Airefrig Part Number	Condenser Fan Motor (IQ)	Airefrig Part Number	Condenser Fan Blade
AETQ4430YHRFZ	7552505	20W / 220-240V	7668022	250mm Diameter
AETQ4440YHRFZ	7552505	20W / 220-240V	7668022	250mm Diameter
AETQ4450YHRFZ	7552505	20W / 220-240V	7668023	300mm Diameter
AETQ4456YHRFZ	7552505	20W / 220-240V	7668023	300mm Diameter
AETQ4460YHRFZ	7552505	20W / 220-240V	7668023	300mm Diameter





cubigel

(Formerly ACC/Electrolux)

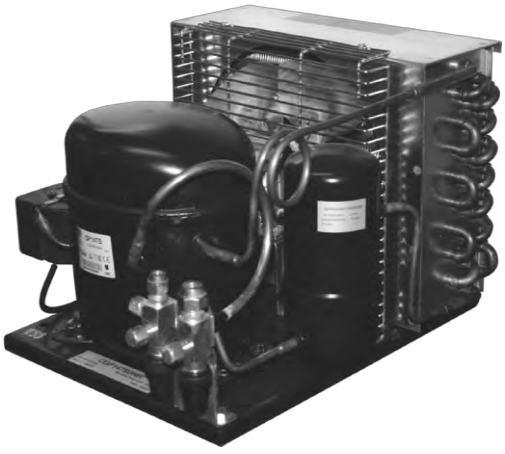
Condensing Units

Cubigel compressors and condensing units are in more than 150 countries around the world.

Last year Cubigel sold over 55 million domestic products and the number of sales in compressors is just as impressive with over 16% of the worlds market share, Cubigel produces over 22 million compressors a year.

Each product has been designed and tested for specific refrigerants and conditions of each country. Obviously conditions for Australia are completely opposite to that of Switzerland or Russia so when one of the eight manufacturing plants placed around the world sends out a product to a particular country, it has been designed to that countries climate and conditions.

The products imported into Australia are manufactured in the Barcelona factory. Condensing units, commercial and domestic compressors range from 2.44cc up to 34cc and are available in a comprehensive range of refrigerants for today's market.





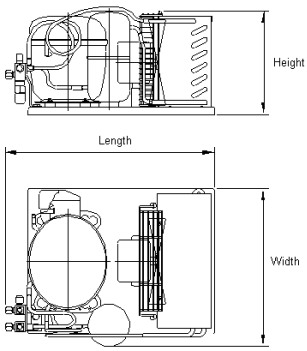
CUBIGEL HERMETIC CONDENSING UNITS

R134a - Medium Temperature Condensing Units

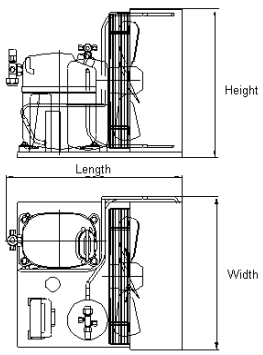
Airefrig Part Number	H/P	Displ cm³	Ambient Temp ºC	Refrigeration Capacity Watts Evaporating Temperature ºC								List Price Excl GST
				-25	-20	-15	-10	-5	0	5	10	
CGL60TB3NR	1/5	5.67	32.0	134	183	239	302	372	448	533	623	
			38.0	124	169	220	278	343	413	491	575	
			43.0	116	159	207	262	322	388	462	540	
CGP14TB3NR	3/8	14.00	32.0	301	399	514	648	800	969	1158	1364	
			38.0	277	368	474	598	738	894	1068	1258	
			43.0	261	346	446	562	694	840	1004	1182	
CGS26TB3N	3/4	25.93	32.0	541	769	1021	1293	1586	1900	2236	2594	
			38.0	499	710	941	1192	1463	1753	2062	2392	
			43.0	469	667	885	1121	1375	1648	1939	2249	
CGS30TB3N	7/8	29.95	32.0	627	880	1170	1498	1862	2265	2705	3182	
			38.0	579	811	1079	1381	1718	2089	2495	2935	
			43.0	544	763	1014	1298	1615	1964	2345	2758	
CGS34TB3N	1.0	34.42	32.0	707	1001	1324	1673	2049	2452	2883	3340	
			38.0	652	923	1221	1543	1890	2262	2659	3081	
			43.0	613	868	1148	1450	1776	2126	2500	2896	
Return Gas Temperature 35ºC												

Dimensions

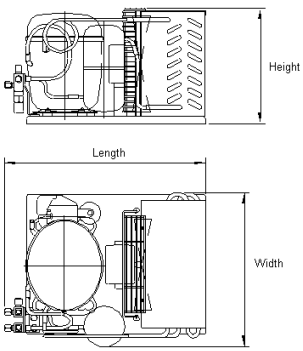
Model	Dimensions mm			Weight Kg	Connections Inches (mm)		Motor			Fan Motor Ass	Drawing Number
	Length	Width	Height		Suction	Liquid	Type	Watts	FLA Amps		
CGL60TB3NR	425	325	235	17.0	3/8 (9.5)	1/4 (6.5)	CSIR	270	1.67	410362	301
CGP14TB3NR	425	350	270	21.5				665	4.02	410406	333
CGS26TB3N	525	425	355	36.0	5/8 (15.8)			1120	6.85	410465	318
CGS30TB3N	545	425	350	39.0			CSR	1170	6.35		
CGS34TB3N								1352	6.95		



Drg. 301



Drg. 318



Drg. 333

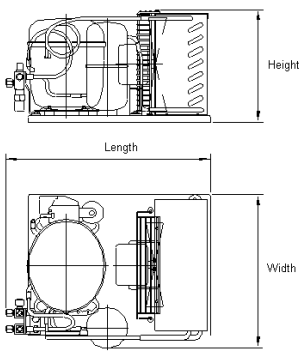
CUBIGEL HERMETIC CONDENSING UNITS

R404A (R507) - Medium Temperature Condensing Units

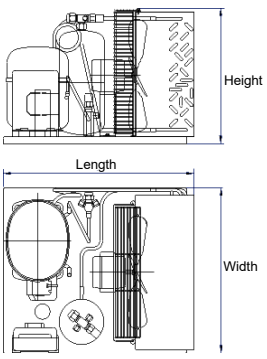
Airefrig Part Number	H/P	Displ cm³	Ambient Temp ºC	Refrigeration Capacity Watts Evaporating Temperature ºC								List Price Excl GST
				-25	-20	-15	-10	-5	0	5	10	
CML40TB3N	1/6	4.04	32	205	253	309	372	440	516	597	687	
			38	189	234	285	343	406	476	551	634	
			43	178	220	268	322	381	447	518	596	
CMP12TB3N	1/2	12.00	32	598	755	926	1113	1317	1537	1772	2023	
			38	552	696	854	1027	1215	1417	1634	1866	
			43	519	655	803	965	1142	1332	1536	1754	
CMP14TB3N	1/2	14.00	32	631	810	1002	1208	1429	1662	1911	2172	
			38	582	747	924	1114	1318	1533	1762	2004	
			43	547	702	869	1047	1239	1441	1657	1883	
CMX16TB3N	5/8	16.03	32	751	973	1198	1428	1661	1899	2140	2385	
			38	708	916	1129	1345	1564	1788	2015	2246	
			43	671	869	1070	1276	1483	1696	1911	2130	
CMX18TB3M	7/8	18.40	32	812	1024	1242	1466	1697	1933	2176	2425	
			38	765	965	1169	1381	1598	1820	2049	2283	
			43	-	-	-	-	-	-	-	-	
CMX21TB3N	1.0	20.72	32	872	1073	1302	1562	1842	2170	2518	2896	
			38	821	1010	1227	1471	1744	2043	2371	2727	
			43	779	958	1163	1395	1654	1879	2249	2587	
Return Gas Temperature 35ºC												

Dimensions

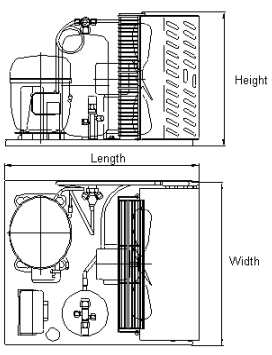
Model	Dimensions mm			Weight Kg	Connections Inches (mm)		Motor			Fan Motor Ass	Drawing Number
	Length	Width	Height		Suction	Liquid	Type	Watts	FLA Amps		
CML40TB3N	425	325	235	14.6	3/8 (9.5)	1/4 (6.5)	CSIR	348	2.03	410362	306
CMP12TB3N	480	425	350	29.8		3/8 (9.5)	CSR	860	4.05	410476	335
CMP14TB3N	500	425	350	29.9				1000	4.86	410478	
CMX16TB3N	495	430	350	30.0				1163	5.77	410476	
CMX18TB3M	500	430	350	33.0				1370	6.95	410476	312
CMX21TB3N	495	455	440	35.0				1384	6.00	410476	332



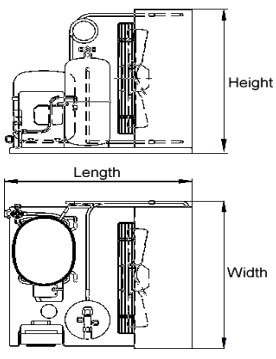
Drg. 306



Drg. 312



Drg. 306



Drg. 332

CUBIGEL HERMETIC CONDENSING UNITS

R404A (R507) - Low Temperature Condensing Units

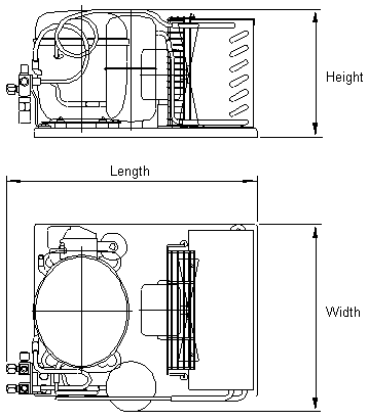
Airefrig Part Number	H/P	Displ cm³	Ambient Temp ºC	Refrigeration Capacity Watts Evaporating Temperature ºC							List Price Excl GST
				-40	-35	-30	-25	-20	-15	-10	
CML45FB3N	1/6	4.60	32	95	127	164	207	256	310	370	
			38	86	114	148	186	230	279	333	
			43	77	103	133	168	207	251	300	
CML60FB3N	1/5	6.00	32	122	163	209	261	319	384	454	
			38	110	147	188	235	287	346	409	
			43	99	132	169	211	258	311	368	
CML80FB3N	1/4	8.10	32	169	221	278	338	404	473	548	
			38	152	199	250	304	364	426	493	
			43	137	179	225	274	327	383	444	
CML90FB3N	1/3	8.85	32	195	249	315	395	487	592	709	
			38	176	224	284	356	438	533	638	
			43	158	202	255	320	394	480	574	
CMP12FB3N	3/8	12.00	32	263	346	443	554	677	815	965	
			38	237	311	399	499	609	734	869	
			43	213	280	359	449	548	660	782	
CMP14FB3N	1/2	14.00	32	264	362	470	588	715	852	999	
			38	238	326	423	529	644	767	899	
			43	214	293	381	476	579	690	809	
CMX18FB3N	5/8	18.40	32	358	490	638	797	969	1154	1351	
			38	337	463	601	751	912	1087	1272	
			43	320	439	570	712	865	1031	1207	
CMX21FB3N	3/4	20.0	32	544	686	840	1003	1178	1364	1560	
			38	510	642	783	940	1106	1282	1463	
			43	486	613	746	895	1051	1211	1389	
CMS26FB3N	3/4	26.16	32	369	968	1003	1313	1619	1921	2218	
			38	332	871	903	1182	1457	1729	1996	
			43	299	784	812	1064	1311	1556	1797	
Return Gas Temperature 32ºC											

CUBIGEL HERMETIC CONDENSING UNITS

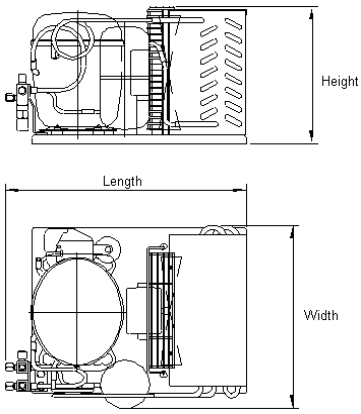
R404A (R507) - Low Temperature Condensing Units

Dimensions

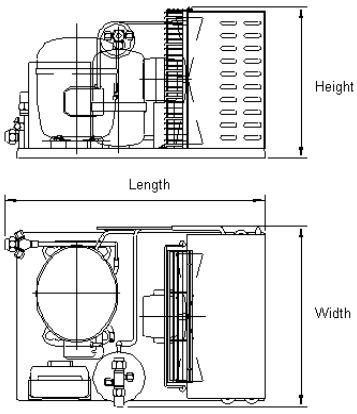
Model	Dimensions mm			Weight Kg	Connections Inches (mm)		Motor			Fan Motor Ass	Drawing Number
	Length	Width	Height		Suction	Liquid	Type	Watts	FLA Amps		
CML45FB3N	425	325	220	14.5	3/8 (9.5)	1/4 (6.5)	CSIR	226	1.58	410351	303
CML60FB3N	425	325	220	16.5				270	1.77		
CML80FB3N	425	325	220	17.2				345	2.21		
CML90FB3N	425	335	245	19.2				358	2.24	410362	308
CMP12FB3N	425	330	245	22.3				470	2.88		
CMP14FB3N	425	330	245	22.3				572	3.38		
CMX18FB3N	510	350	275	28.0		3/8 (9.5)	CSR	718	3.60	410406	326
CMX21FB3N	510	361	303	30.0				807	4.08	413582	331
CMS26FB3N	525	425	355	39.0	1/2 (12.7)			890	4.72	410465	327



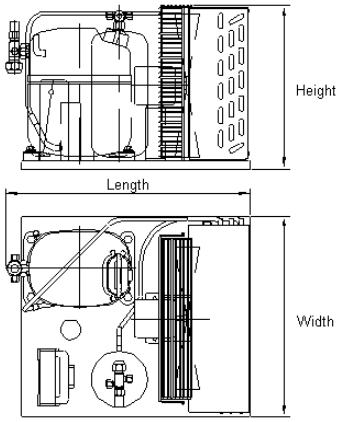
Drg. 303



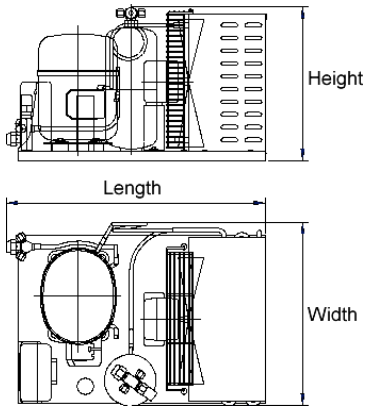
Drg. 308



Drg. 326



Drg. 327



Drg. 331

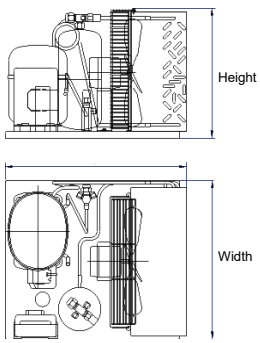
CUBIGEL HERMETIC CONDENSING UNITS

R22 - Medium Temperature Condensing Units

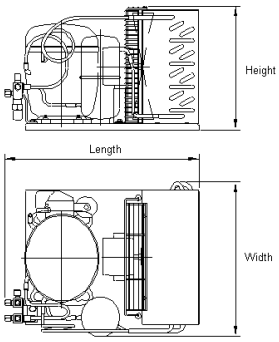
Airefrig Part Number	H/P	Displ cm³	Ambient Temp ºC	Refrigeration Capacity Watts								List Price Excl GST
				Evaporating Temperature ºC								
				-25	-20	-15	-10	-5	0	5	10	
CL40TN3MR	1/6	4.04	32.0	169	214	269	333	407	490	584	686	
			38.0	156	198	248	307	375	452	539	633	
			43.0	-	-	-	-	-	-	-	-	
CMP12TB3N	1/2	12.00	32.0	-	-	843	1024	1235	1463	1683	1922	
			38.0	-	-	777	945	1140	1349	1552	1773	
			43.0	-	-	731	888	1071	1268	1459	1666	
CMX18TB3M	7/8	18.40	32.0	-	-	1130	1348	1591	1840	2067	2303	
			38.0	-	-	1063	1270	1498	1732	1946	2168	
			43.0	-	-	-	-	-	-	-	-	
CMX21TB3N	1.0	20.72	32.0	-	-	1185	1437	1728	2066	2392	2751	
			38.0	-	-	1117	1353	1636	1945	2252	2591	
			43.0	-	-	1059	1283	1551	1789	2137	2458	
Return Gas Temperature 35ºC												

Dimensions

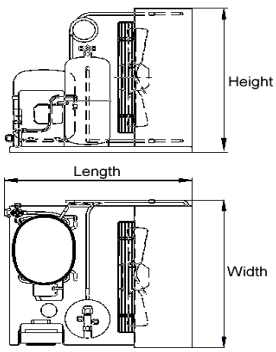
Model	Dimensions mm			Weight Kg	Connections Inches (mm)		Motor Type	Watts	FLA Amps	Fan Motor Ass	Drawing Number
	Length	Width	Height		Suction	Liquid					
CL40TN3MR	425	327	235	21.0	3/8 (9.5)	1/4 (6.5)	CSIR	295	1.79	410362	316
CMP12TB3N	480	425	350	29.8		3/8 (9.5)	CSR	860	4.05	410476	335
CMX18TB3M	500	430	350	33.0				1370	6.95		312
CMX21TB3N	495	455	440	35.0				1384	6.00	410476	332



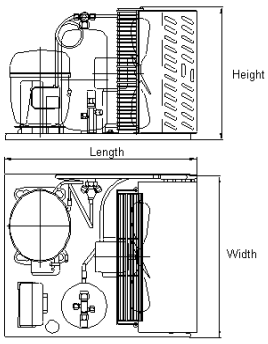
Drg. 312



Drg. 316



Drg. 332



Drg. 335

CUBIGEL SPARES

Fan & Motor Kits

Condensing Unit Model	Fan Motor Kit		Fan Motor		Fan Blade		Mounting Bracket	
	Airefrig Part Number	List Price Excl GST	Airefrig Part Number	List Price Excl GST	Airefrig Part Number	List Price Excl GST	Airefrig Part Number	List Price Excl GST
CGL40TB3NR	410351	Use individual parts breakdown	109222		109211		109174	
CGL45TB3NR								
CGL60TB3NR	410362	Use individual parts breakdown			108673		109185	
CGL80TB3NR								
CGL90TB3NR								
CGP10TB3NR	410406	Use individual parts breakdown	103880		108684		109200	
CGP12TB3NR								
CGP14TB3NR								
CGR18TB3N	410432	Use individual parts breakdown	109502		108695		108220	
CGX18TB3N								
CGR22TB3N	410454	Use individual parts breakdown					109152	
CGX21TB3N								
CGS26TB3N	410465	Use individual parts breakdown	109502		109491		109163	
CGS30TB3N								
CGS34TB3N								
CL40TN3MR	410362	Use individual parts breakdown	109222		108673		109185	
CL45TN3MR								
CL57TN3MR								
CL76TN3MR	410406	Use individual parts breakdown	103880		108684		109200	
CL88TN3MR								
CP12TN3MR	410513	Use individual parts breakdown	109502		108695		108220	
CR18TN3MR	410524						109152	
CS22TN3M	410465	Use individual parts breakdown	109502		109491		109163	
CS26TN3M								
CML40TB3N	410362	Use individual parts breakdown	109222		108673		109185	
CML45TB3N								
CML60TB3N								
CML80TB3N	410406	Use individual parts breakdown	103880		108684		109200	
CML90TB3N								
CMP12TB3N	410476	Use individual parts breakdown	109502		108710		109163	
CMP10TB3N								
CMP14TB3N								
CMX16TB3N								
CMK16TB3N								
CMX18TB3N								
CMR18TB3N								
CMR22TB3N	110541							
CMS26TB3N	110552							
CMS34TB3N								
CML45FB3N	410351	Use individual parts breakdown	109222		109211		109174	
CML60FB3N								
CML80FB3N								
CML90FB3N	410362	Use individual parts breakdown	109222		108673		109185	
CMP12FB3N								
CMP14FB3N								
CMX16FB3N	410476	Use individual parts breakdown	109502		108710		109163	
CMX18FB3N	410406	Use individual parts breakdown	103880		108684		109200	
CMX21TB3N	110541							
CMX21FB3N	410502	Use individual parts breakdown	103880		108684		108220	
CMR18FB3N	410406	Use individual parts breakdown	103880		108684		109200	
CMR22FB3N	410502						108220	
CMS26FB3N	410465	Use individual parts breakdown	109502		109491		109163	
CMS30FB3N								
CMS34FB3N	410468	P.O.A.						

Condensing Units

Danfoss condensing units are available for use with R134a, R404A & R507 refrigerants. Other refrigerant options are available upon request.

The Danfoss Black Star range of units are suitable for light commercial applications such as display counters, small cold rooms and catering appliances etc.

For 75 years Danfoss has gained market leading experience in all aspects of the refrigeration & air conditioning industry and have production facilities around the world capable of turning out 250,000 units each day.

Danfoss employs the very latest in quality control equipment & all manufacturing plants have to apply and adhere to the ISO 9000 and 14001 certifications – international standards that require companies to develop and maintain a quality of environmental management system.





DANFOSS HERMETIC CONDENSING UNITS

R134A – Condensing Units

Airefrig Part Number	Danfoss Code Number	App.	Refrigeration Capacity Watts Evaporating Temperature ºC											Nom HP	Current Consumption (Amps)		List Price Excl GST
			-35	-30	-25	-20	-15	-10	-5	0	+5	+10	+15		-25	+5	
PL35GXN0 *	114G0503	L-HBP	-	-	51	68	87	108	131	156	183	212	-	1/16	0.54	0.63	P.O.A.
PL50FXN0 *	114G0502	LBP	-	-	62	80	100	124	151	180	-	-	-	1/12	1.31	-	P.O.A.
TL3GXT2	114G1705	L-HBP	37	52	69	91	117	147	181	220	263	309	359	1/12	0.88	1.03	P.O.A.
TL4GXT2	114G1706	L-HBP	49	67	89	115	146	182	222	269	320	377	439	1/10	1.03	1.19	P.O.A.
TL5GXT2	114G1608	L-HBP	62	83	108	139	175	217	264	317	374	436	502	1/8	1.16	1.43	
FR6GXT2	114G2715	L-HBP	74	106	142	185	235	294	361	437	522	617	-	1/6	1.07	1.40	P.O.A.
FR7.5GXT2	114G2718	L-HBP	81	114	154	201	257	321	395	478	571	674	-	1/5	1.11	1.61	P.O.A.
FR8.5GXT2	114G2716	L-HBP	103	141	186	240	303	376	458	550	652	762	-	1/4	1.41	1.91	
FR10GXT2	114G2719	L-HBP	108	149	197	254	320	396	483	580	688	805	-	1/4	1.77	2.29	
FR11GXT2	114G3717	L-HBP	89	168	246	327	414	510	616	737	875	-	-	1/3	1.87	2.60	
SC12GXT2	114G3726	L-HBP	136	202	285	381	490	610	741	880	1029	1185	1349	1/3	2.07	2.83	
SC15GXT2	114G4727	H-LBP	-	-	348	463	591	731	882	1045	1220	1405	1603	3/8	2.54	3.39	
SC18GXT2	114G5728	L-HBP	-	-	404	531	673	833	1011	1210	1432	1682	1962	1/2	2.91	3.96	
SC21GXT2	114G5730	L-HBP	-	-	474	622	792	981	1189	1414	1652	1902	2160	5/8	2.64	4.22	

- Capacities based on CECOMAF conditions: Ambient +32ºC, Suction Gas Temperature +32ºC, Temperature of refrigerant @ condenser outlet is subcooled within the condensing limits of the unit.
- Voltage range 198-254V 50Hz
- Units above are fitted with liquid receivers & liquid & suction service valves. (* No receiver or service valves fitted)

R134A Unit Information

Unit Model Number	Connections		Weight	Receiver R134A @90%
	Suction	Liquid		
PL35GXN0	6.0 mm	5.0 mm	7.1 kg	n/a
PL50FXN0	6.0 mm	5.0 mm	7.1 kg	n/a
TL3GXT2	1/4 flare	1/4 flare	11.2 kg	0.75 kg
TL4GXT2	1/4 flare	1/4 flare	12.1 kg	0.75 kg
TL5GXT2	1/4 flare	1/4 flare	13.0 kg	0.75 kg
FR6GXT2	3/8 flare	1/4 flare	16.2 kg	0.75 kg
FR7.5GXT2	3/8 flare	1/4 flare	16.2 kg	0.75 kg

Unit Model Number	Connections		Weight	Receiver R134A @90%
	Suction	Liquid		
FR8.5GXT2	3/8 flare	1/4 flare	16.2 kg	0.75 kg
FR10GXT2	3/8 flare	1/4 flare	16.2 kg	0.75 kg
FR11GXT2	3/8 flare	1/4 flare	18.3 kg	1.04 kg
SC12GXT2	3/8 flare	1/4 flare	20.5 kg	1.04 kg
SC18FXT2	3/8 flare	1/4 flare	19.6 kg	1.04 kg
SC18GXT2	3/8 flare	1/4 flare	21.4 kg	1.04 kg
SC21GXT2	3/8 flare	1/4 flare	22.2 kg	1.04 kg

DANFOSS HERMETIC CONDENSING UNITS

R404A (R507) –Condensing Units

R404A (R507) - Low Temperature

Airefrig Part Number	Danfoss Code Number	App.	Refrigeration Capacity Watts Evaporating Temperature ºC									Nom HP	Current Consumption @ -25C (Amps)	List Price Excl GST
			-45	-40	-35	-30	-25	-20	-15	-10	-5			
TL4CLXT2	114H2706	LBP	64	85	110	141	177	218	265	318	378	1/4	1.24	P.O.A.
FR6CLXT2	114H2726		91	128	171	219	273	332	397	468	542	1/3	1.64	
FR8.5CLXT2	114H3728		130	161	208	268	340	420	508	599	692	1/3	2.17	
SC10CLXT2	114H3730		-	-	216	300	393	496	609	730	860	1/2	2.39	
SC12CLXT2	114H4731		129	220	320	429	547	672	804	943	1088	1/2	3.06	
SC15CLXT2	114H5732		198	292	400	521	654	799	955	1122	1298	5/8	3.45	
SC18CLXT2	114H5733		232	349	475	610	751	899	1052	1212	1379	3/4	3.76	
SC21CLXT2	114H5734		291	405	535	680	840	1014	1202	1407	-	7/8	4.09	
GS34CLXT2	114X1781		450	650	850	1100	1350	1625	1900	2200	-	1.5	7.16	

- Capacities based on CECOMAF conditions: Ambient +32ºC, Suction Gas Temperature +32ºC, Temperature of refrigerant @ condenser outlet is subcooled within the condensing limits of the unit.
- Voltage range 198-254V 50Hz.
- All units above are fitted with liquid receivers, liquid & suction service valves.

R404A (R507) - High/Medium Temperature

Airefrig Part Number	Danfoss Code Number	App.	Refrigeration Capacity Watts Evaporating Temperature ºC							Nom HP	Current Consumption @ +5C (Amps)	List Price Excl GST
			-20	-15	-10	-5	0	+5	+10			
TL4DLXT2	114H2729	HBP	-	265	314	377	450	528	588	1/4	1.73	P.O.A.
FR6DLXT2	114H3727		-	428	511	603	705	812	923	1/3	2.77	
SC10DLXT2	114H5743		-	661	811	977	1159	1351	-	1/2	4.70	
SC12DLXT2	114H5744		-	831	1015	1210	1415	-	-	1/2	5.40	
SC15DLXT2	114H6745		-	961	1167	1395	1641	1901	-	3/4	6.60	
SC18MLXT2	114X2757		1062	1287	1538	1816	2116	2437	-	5/8	6.40	
GS21MLXT2	114X2765		1165	1410	1665	1925	2195	2460	-	7/8	6.36	
GS34MLXT2	114X2881		1900	2350	2800	3250	3725	4200	-	1.5	10.20	

- Capacities based on CECOMAF conditions: Ambient +32ºC, Suction Gas Temperature +32ºC, Temperature of refrigerant @ condenser outlet is subcooled within the condensing limits of the unit.
- Voltage range 198-254V 50Hz.
- All units above are fitted with liquid receivers & liquid & suction service valves.

R404A (R507) Unit Information – Low Temp

Unit Model Number	Connections		Weight	Receiver R404A @90%
	Suction	Liquid		
TL4CLXT2	3/8 flare	1/4 flare	13.2 kg	0.65 kg
FR6CLXT2	3/8 flare	1/4 flare	16.2 kg	0.65 kg
FR8.5CLXT2	3/8 flare	1/4 flare	18.2 kg	0.89 kg
SC10CLXT2	3/8 flare	1/4 flare	21.5 kg	0.89 kg
SC12CLXT2	3/8 flare	1/4 flare	25.1 kg	0.89 kg
SC15CLXT2	3/8 flare	1/4 flare	25.1 kg	0.89 kg
SC18CLXT2	3/8 flare	1/4 flare	26.3 kg	0.89 kg
SC21CLXT2	3/8 flare	1/4 flare	27.1 kg	0.89 kg
GS34CLXT2	5/8ODS	3/8ODS	42.0 kg	1.94 kg

R404A (R507) Unit Information – High/Medium Temp

Unit Model Number	Connections		Weight	Receiver R404A @90%
	Suction	Liquid		
TL4DLXT2	3/8 flare	1/4 flare	13.2 kg	0.65 kg
FR6DLXT2	3/8 flare	1/4 flare	18.2 kg	0.89 kg
SC10DLXT2	3/8 flare	1/4 flare	25.2 kg	0.89 kg
SC12DLXT2	3/8 flare	1/4 flare	25.5 kg	0.89 kg
SC15DLXT2	3/8 flare	1/4 flare	37.5 kg	0.89 kg
SC18MLXT2	3/8 flare	1/4 flare	40.0 kg	0.89 kg
GS21MLXT2	1/2 flare	3/8 flare	36.0 kg	0.89 kg
GS34MLXT2	5/8ODS	3/8ODS	44.0 kg	1.94 kg

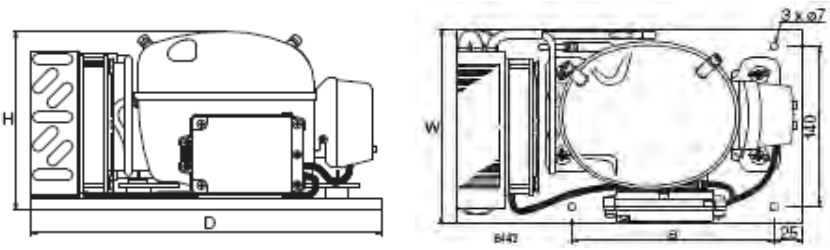
DANFOSS HERMETIC CONDENSING UNITS

Danfoss Unit Dimensions

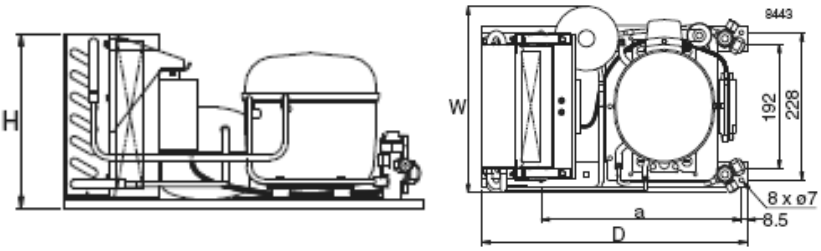
Dimensions (mm) T2 models				
Model No	**H**	**W**	**D**	**a**
R134A Units				
PL35GXN0	152	170	300	175
PL50FXN0	155	170	300	175
TL3GXT2	197	289	410	310
TL4GXT2	197	289	410	310
TL5GXT2	197	289	410	310
FR6GXT2	226	304	432	310
FR7.5GXT2	226	304	432	310
FR8.5GXT2	226	304	432	310
FR10GXT2	226	304	432	310
FR11GXT2	256	321	444	325
SC12GXT2	256	321	444	325
SC15GXT2	296	331	451	325
SC18GXT2	296	331	473	325
SC21GXT2	296	331	513	365
R404A (R507) Low Temperature				
TL4CLXT2	226	304	432	310
FR6CLXT2	226	304	432	310
FR8.5CLXT2	256	321	444	325
SC10CLXT2	256	321	444	325
SC12CLXT2	296	331	451	325
SC15CLXT2	296	331	473	325
SC18CLXT2	296	331	513	365
SC21CLXT2	296	331	513	365
GS34CLXT2	340	430	480	310
R404A (R507) High / Medium Temp				
TL4DLXT2	226	304	432	310
FR6DLXT2	256	321	444	325
SC10DLXT2	296	331	473	325
SC12DLXT2	296	331	473	325
SC15DLXT2	350	442	610	370
SC18MLXT2	350	442	610	370
GS21MLXT2	340	430	480	310
GS34MLXT2	450	500	600	310

Suffix “T2” indicates with receiver & service valves.
Suffix “N0” indicates without receiver & service valves.

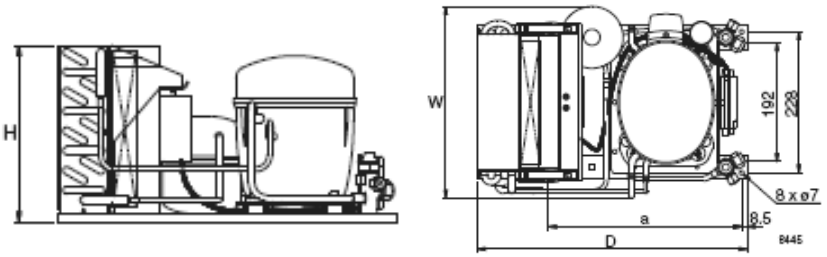
PL Units



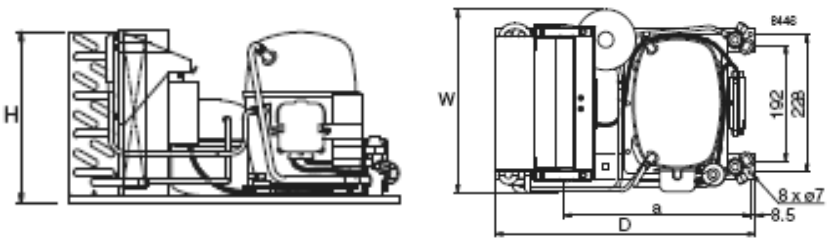
TL Units



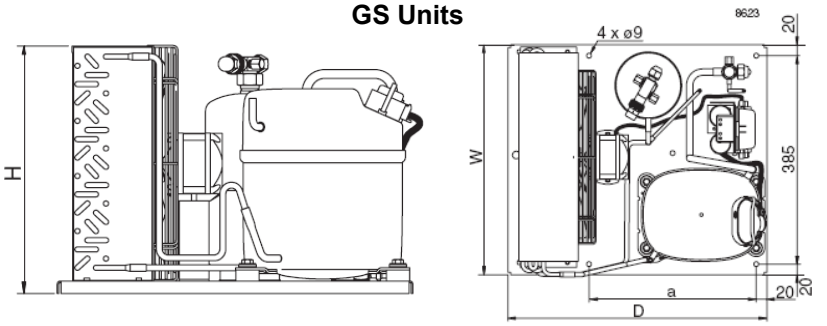
FR Units



SC Units



GS Units



DANFOSS HERMETIC CONDENSING UNITS

Danfoss Unit Spare Parts

R134A Units

Unit Model	Fan Motor Part Number	Motor wattage	List Price Excl GST	Fan Blade Part Number	Blade Diameter	List Price Excl GST
PL35GXN0	118U0214	Motor / fan kit	P.O.A.	118U0214	Motor / fan kit	P.O.A.
PL50FXN0	118U0214	Motor / fan kit	P.O.A.	118U0214	Motor / fan kit	P.O.A.
TL3GXT2	118U0200	5 watts	P.O.A.	1173819	170 mm	P.O.A.
TL4GXT2	118U0200	5 watts	P.O.A.	1173819	170 mm	P.O.A.
TL5GXT2	118U0200	5 watts	P.O.A.	1173819	170 mm	P.O.A.
FR6GXT2	118U0200	5 watts	P.O.A.	1173814	200 mm	P.O.A.
FR7.5GXT2	118U0200	5 watts	P.O.A.	1173814	200 mm	P.O.A.
FR8.5GXT2	118U0200	5 watts	P.O.A.	1173814	200 mm	P.O.A.
FR10GXT2	118U0200	5 watts	P.O.A.	1173814	200 mm	P.O.A.
FR11GXT2	118U0201	11 watts	P.O.A.	118U0600	230 mm	P.O.A.
SC12GXT2	118U0201	11 watts	P.O.A.	118U0600	230 mm	P.O.A.
SC15GXT2	118U0202	16 watts	P.O.A.	118U0601	254 mm	P.O.A.
SC18GXT2	118U0202	16 watts	P.O.A.	118U0601	254 mm	P.O.A.
SC21GXT2	118U0202	16 watts	P.O.A.	118U0601	254 mm	P.O.A.

R404A (R507) Low Temperature

Unit Model	Fan Motor Part Number	Motor wattage	List Price Excl GST	Fan Blade Part Number	Blade Diameter	List Price Excl GST
TL4CLXT2	118U0200	5 watts	P.O.A.	1173814	200 mm	P.O.A.
FR6CLXT2	118U0201	11 watts	P.O.A.	118U0600	230 mm	P.O.A.
FR8.5CLXT2	118U0201	11 watts	P.O.A.	118U0600	230 mm	P.O.A.
SC10CLXT2	118U0202	16 watts	P.O.A.	118U0601	254 mm	P.O.A.
SC12CLXT2	118U0202	16 watts	P.O.A.	118U0601	254 mm	P.O.A.
SC15CLXT2	118U0202	16 watts	P.O.A.	118U0601	254 mm	P.O.A.
SC18CLXT2	118U0202	16 watts	P.O.A.	118U0601	254 mm	P.O.A.
SC21CLXT2	118U0202	16 watts	P.O.A.	118U0601	254 mm	P.O.A.
GS34CLXT2	118U0229	25 watts	P.O.A.	118U0602	300 mm	P.O.A.

R404A (R507) Medium Temperature

Unit Model	Fan Motor Part Number	Motor wattage	List Price Excl GST	Fan Blade Part Number	Blade Diameter	List Price Excl GST
TL4DLXT2	118U0200	5 watts	P.O.A.	1173814	200 mm	P.O.A.
FR6DLXT2	118U0201	11 watts	P.O.A.	118U0600	230 mm	P.O.A.
SC10DLXT2	118U0202	16 watts	P.O.A.	118U0601	254 mm	P.O.A.
SC12DLXT2	118U0202	16 watts	P.O.A.	118U0601	254 mm	P.O.A.
SC15DLXT2	118U0219	20 watts	P.O.A.	118U0601	254 mm	P.O.A.
SC18MLXT2	118U0219	20 watts	P.O.A.	118U0602	300 mm	P.O.A.
GS21MLXT2	118U0229	25 watts	P.O.A.	118U0602	300 mm	P.O.A.
GS34MLXT2	118U0232	105 watts	P.O.A.	Blade & motor included in 118U0232	350 mm	P.O.A.

Enthalpy

Hermetic Flat Base Condensing Units

Standard Fitted Features:

- Copeland CS Compressors with Oil Sight Glass
- Crankcase Heater
- Rotalock Valves
- HP/LP Control
- Gomax Flexible Control Hoses
- Liquid Line Drier & Sight Glass
- Oil Separator (Pre-charged with POE Oil)
- Liquid Receiver
- Galvanised Black Powder Coated Unit Base
- ***Supercoat*** Condenser Treatment (5000 Hour Salt Spray Test)
- ebmpapst Condenser Fans
- Saginomiya Condenser Fan Speed Controller (Not available on CS10100A1 Units)
- 3PH Contactor & Electronic Motor Protection Relay
- Phase Loss & Phase Imbalance Protection
- Pre - Wired Back to Junction Box
- 1.22mm (18G) Interconnecting Copper Pipe Work
- Nitrogen Holding Charge



Options

- Suction Accumulator (Not available on CS10100A1 Units)
- Unit Weather Cover (knockdown form)





ENTHALPY HERMETIC CONDENSING UNITS

R404a (R507) – Hermetic Flat Base Condensing Units

Airefrig Part Number	H/P (Nominal)	Displ cm³/r	Ambient Temp ºC	Refrigeration Capacity Watts Evaporating Temperature ºC						
				-30	-25	-20	-15	-10	-5	0
CS10100A1 (Single Phase)	1.30	38.1	32	-	-	-	2275	2843	3470	4142
			38	-	-	-	1897	2402	2932	3503
			43	-	-	-	1588	2046	2523	3033
CS14260A1 (Single Phase) **CS14260A3** (Three Phase)	2.00	48.6	32	1418	1951	2601	3320	4115	4931	5761
			38	1171	1648	2230	2873	3562	4279	4987
			43	969	1399	1921	2498	3114	3744	4360
CS18260A1 (Single Phase) **CS18260A3** (Three Phase)	2.50	61.4	32	1606	2277	3086	3984	4967	5977	7003
			38	1325	1885	2588	3377	4258	5170	6098
			43	1124	1590	2197	2897	3681	4503	5336
CS20260A4503 (Three Phase)	3.00	74.3	32	1939	2757	3291	4530	5622	6904	8050
			38	1475	2233	2997	3847	4777	5879	6881
			43	1088	1803	2501	3246	4111	5107	5996
CS2736053 (Three Phase)	3.50	92.4	32	2500	3447	4587	5862	7273	8770	10294
			38	2005	2837	3848	4982	6238	7570	8935
			43	1629	2367	3268	4274	5403	6594	7814
CS3336053 (Three Phase)	4.00	106.2	32	3054	4159	5360	6713	8227	9955	11815
			38	2517	3466	4507	5697	7052	8597	10299
			43	2088	2907	3813	4865	6082	7459	9048

Nominal ratings should be used as a guide, based on 18 degree Celsius return vapour and inherent liquid subcooling.
Note: Fan speed controller is set for continuous running @ low speed, select fan OFF option at low speed in low ambient applications to prevent over condensing.

Standard Fitted Features:

- Copeland Compressor with Oil Sight Glass
- Crankcase Heater
- Rotalock Valves
- HP/LP Control
- Gomax Flexible Control Hoses
- Liquid Line Drier & Sight Glass
- Oil Separator (Pre-charged with POE Oil)
- Liquid Receiver
- Galvanised Black Powder Coated Unit Base
- ***Supercoat*** Condenser Treatment (5000 Hour Salt Spray Test)
- ebmpapst Condenser Fan - Single Phase
- Saginomiya Condenser Fan Speed Controller (Not available on CS10100A1 Units)
- 3PH Contactor & Electronic Motor Protection Relay
- Phase Loss & Phase Imbalance Protection
- Pre - Wired Back to Junction Box
- Nitrogen Holding Charge

Options:

- Suction Accumulator (factory fitted) (Not available on CS10100A1 Units)
- Unit Weatherproof Cover (knockdown form)

Unit Prices without Suction Accumulator

Airefrig Part Number	List Price Excl GST
CS10100A1	
CS14260A1	
CS14260A3	
CS18260A1	
CS18260A3	
CS20260A4503	
CS2736053	
CS3336053	

Unit Prices with Suction Accumulator Fitted

Airefrig Part Number	List Price Excl GST
CS14260A1ACC	
CS14260A3ACC	
CS18260A1ACC	
CS18260A3ACC	
CS20260A4503ACC	
CS2736053ACC	
CS3336053ACC	

ENTHALPY HERMETIC CONDENSING UNITS

R134a – Hermetic Flat Base Condensing Units

Airefrig Part Number	H/P (Nominal)	Displ cm³/r	Ambient Temp ºC	Refrigeration Capacity Watts					
				Evaporating Temperature ºC					
				-15	-10	-5	0	+5	+10
CS10100A1 (Single Phase)	1.30	38.1	32	1322	1763	2187	2734	3309	4037
			38	1103	1493	1851	2315	2804	3421
			43	924	1270	1591	2002	2423	2956
CS14260A1 (Single Phase) **CS14260A3** (Three Phase)	2.00	48.6	32	1926	2551	3106	4032	4878	5951
			38	1666	2208	2979	3291	3982	4858
			43	1449	1930	2358	2877	3482	4248
CS18260A1 (Single Phase) **CS18260A3** (Three Phase)	2.50	61.4	32	2310	3078	3765	4622	5592	6822
			38	1958	2639	3257	4024	4869	5941
			43	1680	2282	2836	3521	4261	5198
CS20260A4503 (Three Phase)	3.00	74.3	32	2627	3485	4349	5313	6431	7846
			38	2231	2961	3703	4541	5495	6703
			43	1882	2548	3217	3957	4788	5841
CS2736053 (Three Phase)	3.50	92.4	32	3399	4509	5525	6794	8220	10029
			38	2889	3867	4769	5897	7135	8705
			43	2478	3349	4154	5157	6240	7613
CS3336053 (Three Phase)	4.00	106.2	32	3893	5100	6271	7797	9435	11510
			38	3304	4372	5416	6797	8224	10024
			43	2821	3770	4699	5971	7225	8815

Nominal ratings should be used as a guide, based on 18 degree Celsius return vapour and inherent liquid subcooling.
Fan speed controller will require to be adjusted to suit R134a refrigerant at time of commissioning.
Note: Fan speed controller is set for continuous running @ low speed, select fan OFF option at low speed in low ambient applications to prevent over condensing.

Standard Fitted Features:

- Copeland Compressor with Oil Sight Glass
- Crankcase Heater
- Rotalock Valves
- HP/LP Control
- Gomax Flexible Control Hoses
- Liquid Line Drier & Sight Glass
- Oil Separator (Pre-charged with POE Oil)
- Liquid Receiver
- Galvanised Black Powder Coated Unit Base
- ***Supercoat*** Condenser Treatment (5000 Hour Salt Spray Test)
- ebmpapst Condenser Fan - Single Phase
- Saginomiya Condenser Fan Speed Controller (Not available on CS10100A1 Units)
- 3PH Contactor & Electronic Motor Protection Relay
- Phase Loss & Phase Imbalance Protection
- Pre - Wired Back to Junction Box
- Nitrogen Holding Charge

Options:

- Suction Accumulator (factory fitted) (Not available on CS10100A1 Units)
- Unit Weatherproof Cover (knockdown form)

Unit Prices without Suction Accumulator

Airefrig Part Number	List Price Excl GST
CS10100A1	
CS14260A1	
CS14260A3	
CS18260A1	
CS18260A3	
CS20260A4503	
CS2736053	
CS3336053	

Unit Prices with Suction Accumulator Fitted

Airefrig Part Number	List Price Excl GST
CS14260A1ACC	
CS14260A3ACC	
CS18260A1ACC	
CS18260A3ACC	
CS20260A4503ACC	
CS2736053ACC	
CS3336053ACC	

ENTHALPY HERMETIC CONDENSING UNITS

Hermetic Flat Base Unit Optional Extras

CS Unit Series Optional Extras

Weatherproof Cover Part No	Cover only Weights (kg)	Suit Unit Model	List Price Excl GST
WCAR22	18.0	CS10100A1	
WCAR26	28.0	CS14260A1	
WCAR26	28.0	CS14260A3	
WCAR26	28.0	CS18260A1	
WCAR26	28.0	CS18260A3	
WCAR26	28.0	CS20260A4503	
WCAR36	36.0	CS2736053	
WCAR36	36.0	CS3336053	



Weatherproof Cover
(Knockdown Form)

Hermetic Flat Base Unit Specifications & Dimensions

CS Unit Series R134a, R404a (R507)

Model	Dimensions mm			Weight Kg	Connections Inches		Compressor		Fan Motor		Receiver @ 90% (R404a) KG	Dimension Drawing
	Depth	Width	Height		Suction	Liquid	Voltage	*MCC (Max. Amps)	Voltage	FLA Amps		
CS10100A1	770	600	475	75	3/4”	1/2”	1Phase	14.2	230v 1 Phase 50Hz	0.58	4.29	C
CS14260A1	770	820	675	98				17.5		0.73		A
CS14260A3	770	820	675	98			3Phase	6.6				
CS18260A1	770	820	675	98			1Phase	19.1				
CS18260A3	770	820	675	98			3Phase	6.6				
CS20260A4503	770	820	675	98				7.1		1.55		
CS2736053	850	1075	725	133		5/8”		11.8			8.10	B
CS3336053	850	1075	725	135	7/8”			13.8				

Note: Internal crankcase heaters 240/480/600volts 40 watts.
*MCC = maximum continuous current, RLA = MCC ÷ 1.4 (Copeland advises use RLA for contactor selection)

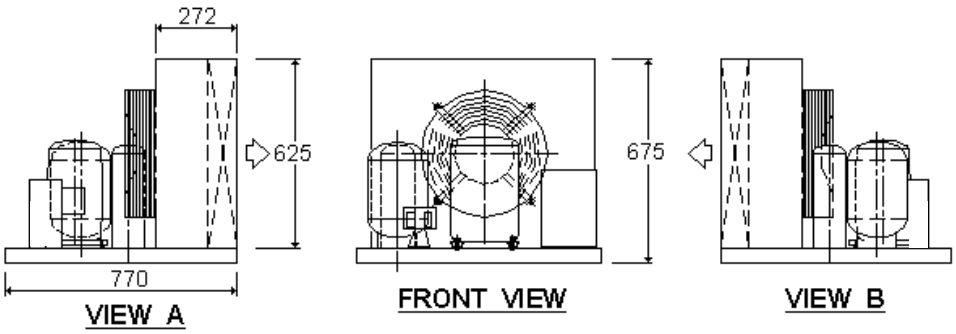


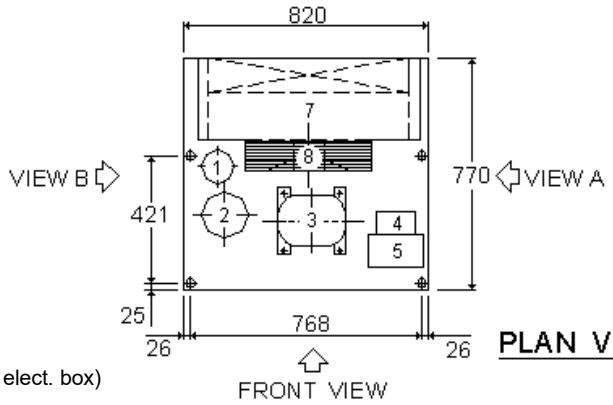


ENTHALPY HERMETIC CONDENSING UNITS

Hermetic Flat Base Units Dimensions

Drawing A

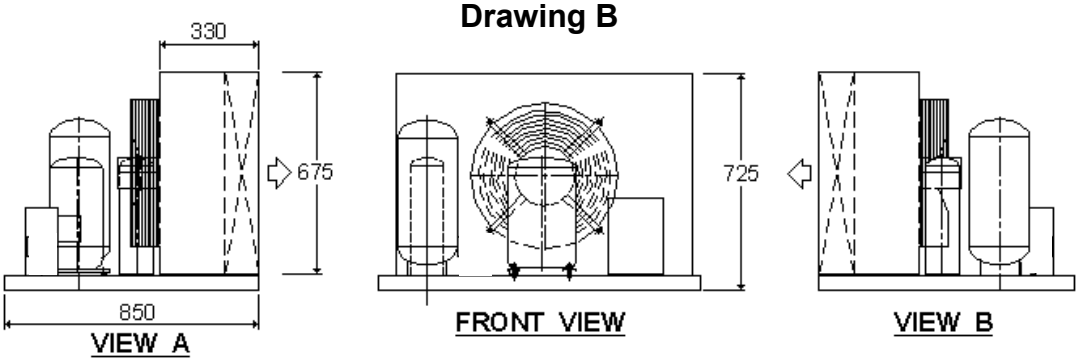


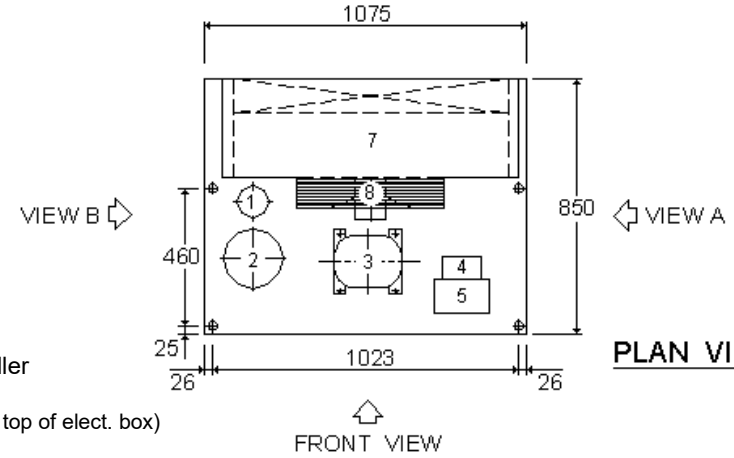


Legend

No	Description
1	Oil Separator
2	Liquid Receiver
3	Compressor
4	Fan Speed Controller
5	Electrical Box
6	HP/LP (mounted on top of elect. box)
7	Condenser
8	Condenser Fan Assy.

Drawing B



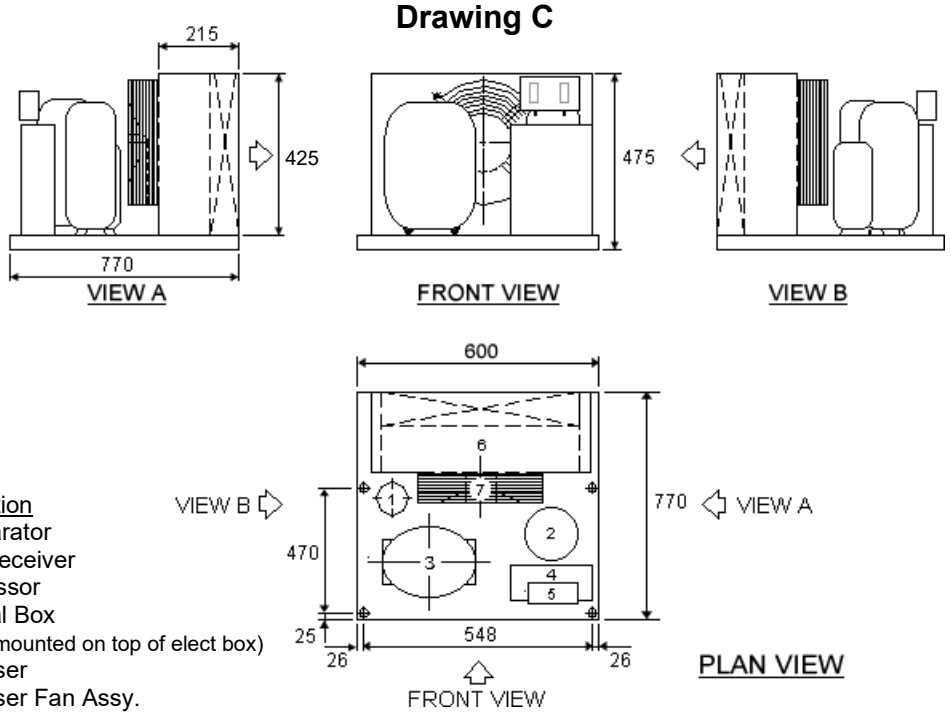


Legend

No	Description
1	Oil Separator
2	Liquid Receiver
3	Compressor
4	Fan Speed Controller
5	Electrical Box
6	HP/LP (mounted on top of elect. box)
7	Condenser
8	Condenser Fan Assy.

Hermetic Flat Base Units Dimensions

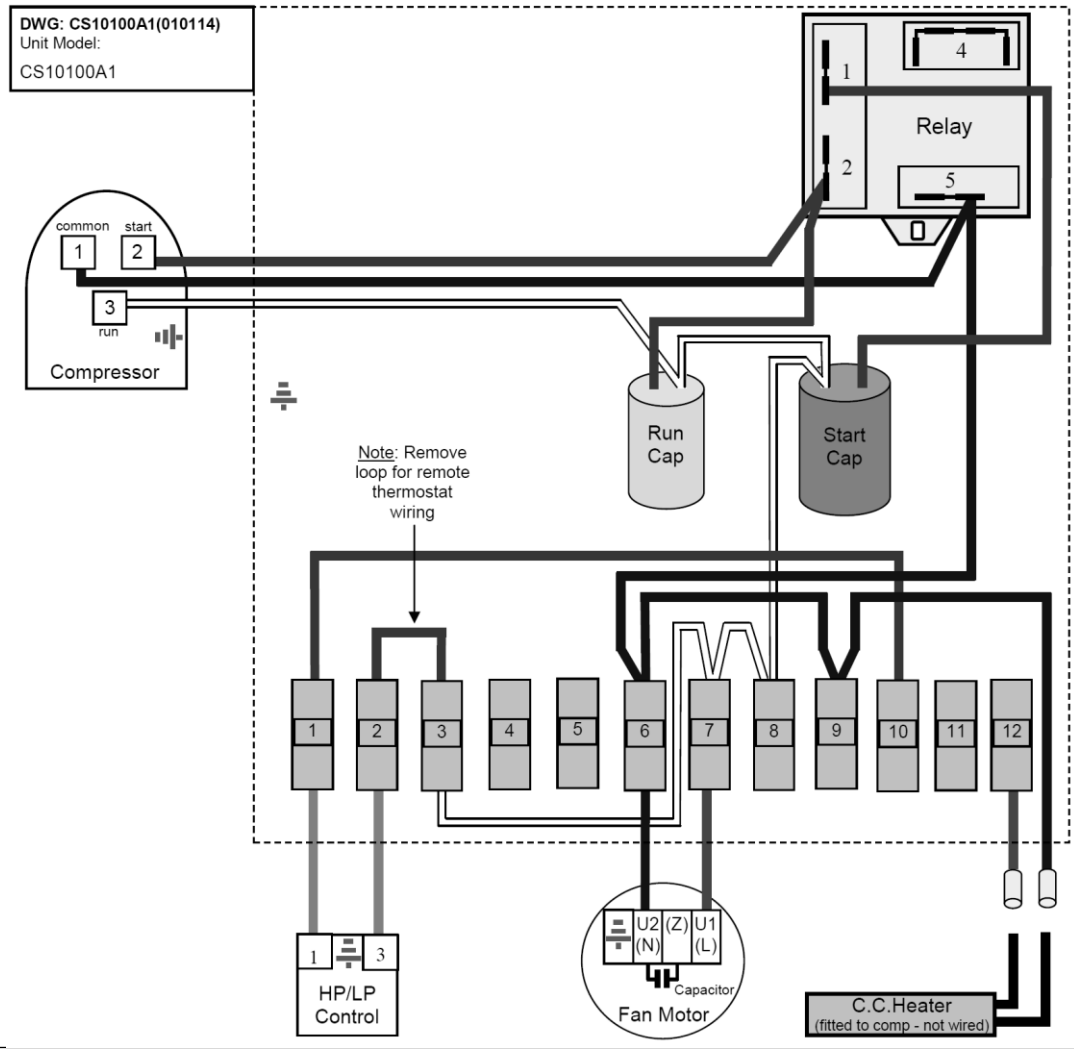
Drawing C



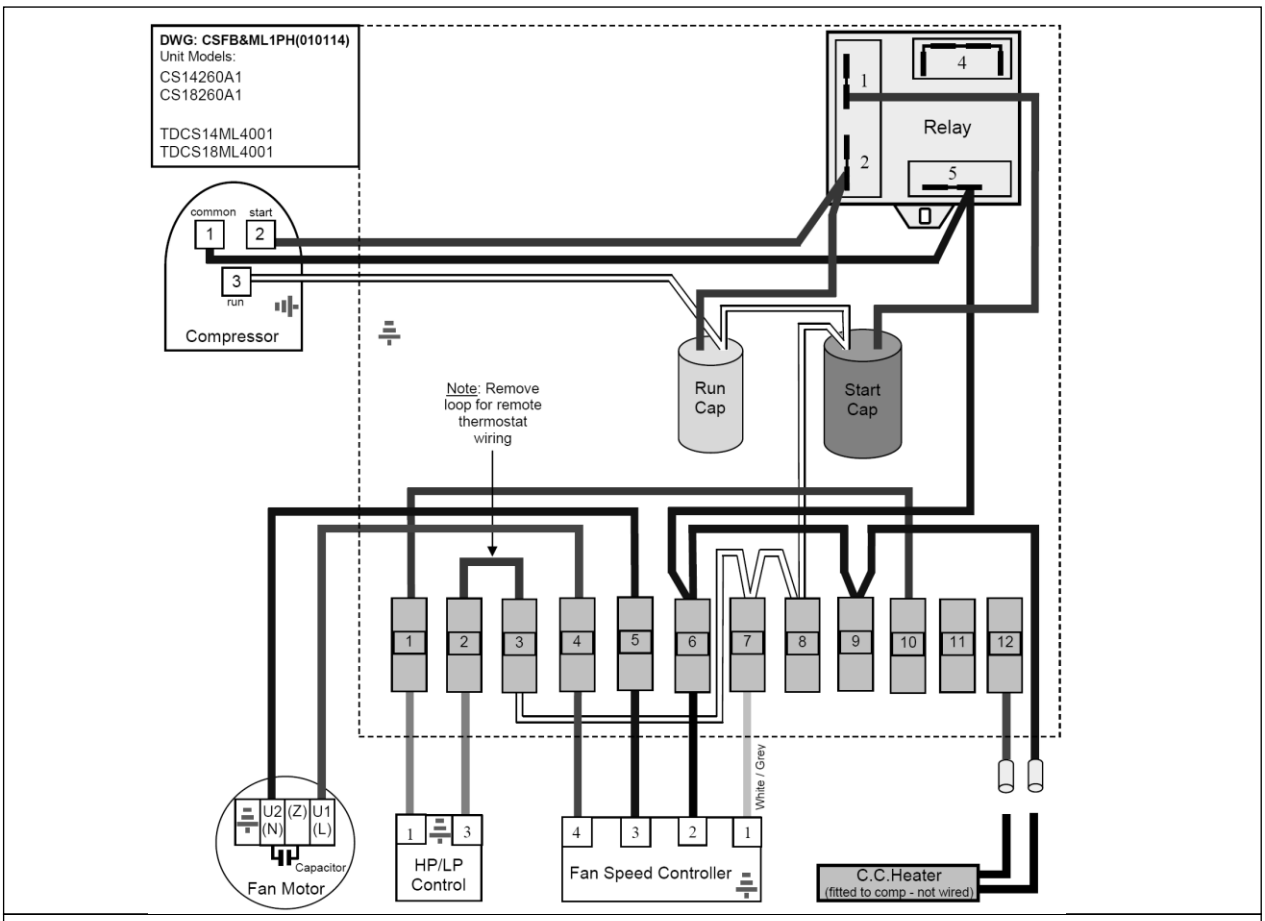
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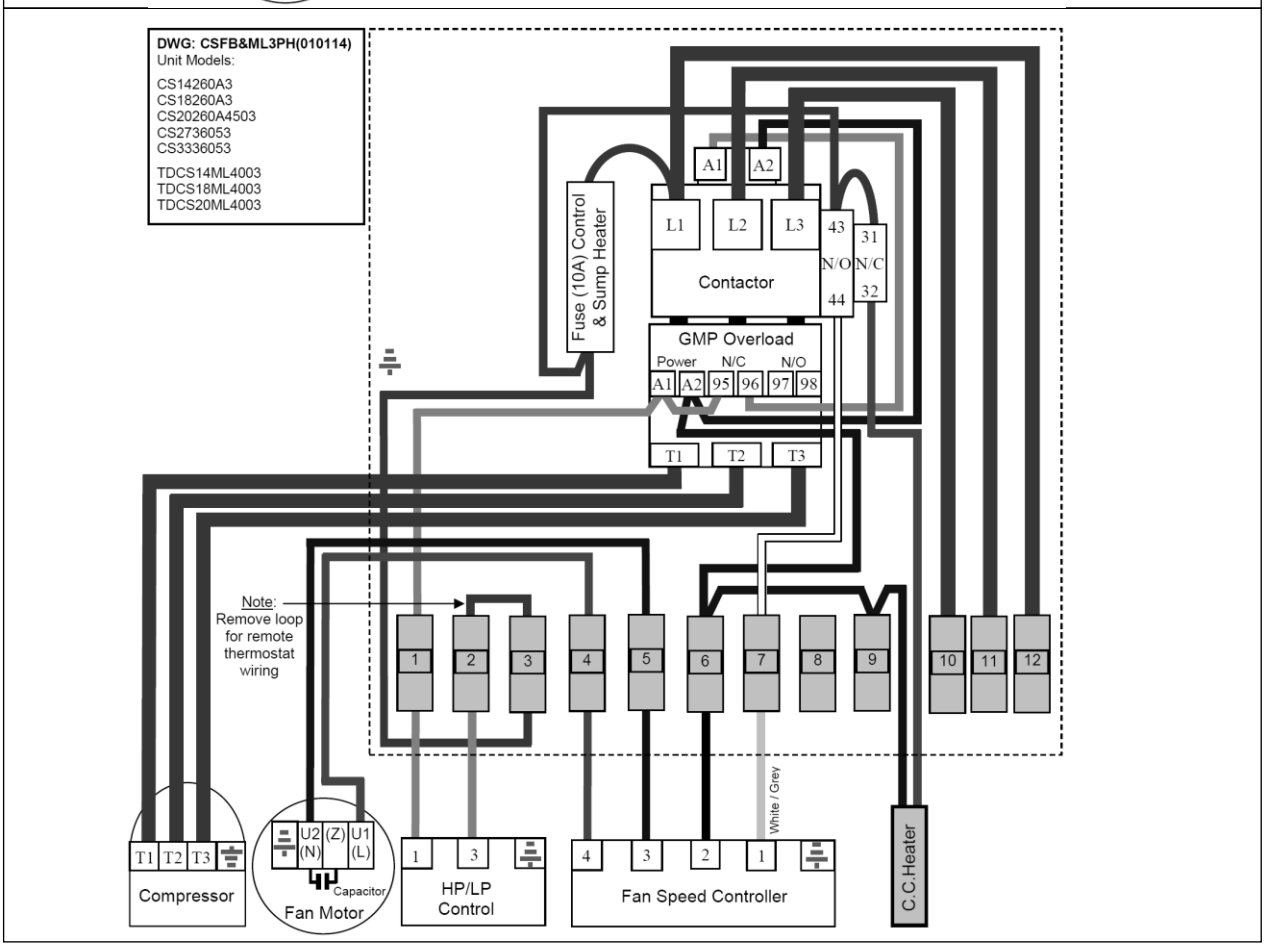
No	Description
1	Oil Separator
2	Liquid Receiver
3	Compressor
4	Electrical Box
5	HP/LP (mounted on top of elect box)
6	Condenser
7	Condenser Fan Assy.

CS10100A1 Wiring Diagram



Hermetic Flat Base Unit Wiring Diagrams





ENTHALPY HERMETIC CONDENSING UNITS

Hermetic Flat Base Units Spare Parts

CS Unit Series R134a, R404a (R507)

Part Description	Model			
	CS10100A1	CS14260A1	CS14260A3	CS18260A1
Compressor	CS10K6EPFJ595	CS14K6EPFJ595	CS14K6ETFD595	CS18K6EPFJ595
Fan Motor	S4E350AP0648	S4E400AP0244	S4E400AP0244	S4E400AP0244
Speed Controller	N/A	RGEZ1N45MF	RGEZ1N45MF	RGEZ1N45MF
HP/LP	DNSD306X	DNSD306X	DNSD306X	DNSD306X
Compressor Contactor	N/A	N/A	MC12B240V	N/A
Thermal Overload Block	N/A	N/A	GMP223P22A	N/A
Control Fuse Holder	N/A	N/A	CMS101	N/A
Fuse	N/A	N/A	10G10	N/A
Oil Separator	NS1004	NS1004L	NS1004L	NS1004L
Liquid Receiver	1300134B	1300134B	1300134B	1300134B
Suction Service Valve	2605122030	2605122030	2605122030	2605122030
Suction Valve Gasket	020002802	020002802	020002802	020002802
Discharge Service Valve	N/A	2605081620	2605081620	2605081620
Discharge Valve Gasket	N/A	020002800	020002800	020002800
Receiver Outlet Valve	2605081620	2605081620	2605081620	2605081620
Receiver Valve Gasket	020002800	020002800	020002800	020002800
Liquid Drier & Sight glass	CSG084S (combo)	CSG084S (combo)	CSG084S (combo)	CSG084S (combo)
Electrical Box	861656	861656	861656	861656

Optional Fitted Item:

Suction Accumulator	N/A	PA5083157C	PA5083157C	PA5083157C

CS Unit Series R134a, R404a (R507) – cont'd

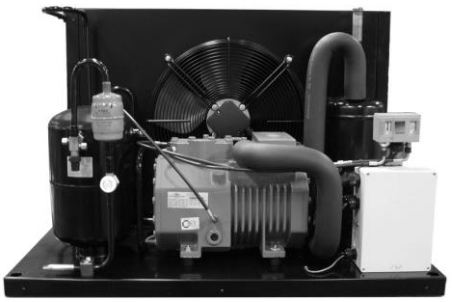
Part Description	Model			
	CS18260A3	CS20260A4503	CS2736053	CS3336053
Compressor	CS18K6ETFD595	CS20K6ETFD595	CS27K6ETFD595	CS33K6ETFD595
Fan Motor	S4E400AP0244	S4E450AU0337	S4E450AU0337	S4E450AU0337
Speed Controller	RGEZ1N45MF	RGEZ1N45MF	RGEZ1N45MF	RGEZ1N45MF
HP/LP	DNSD306X	DNSD306X	DNSD306X	DNSD306X
Compressor Contactor	MC12B240V	MC12B240V	MC12B240V	MC12B240V
Thermal Overload Block	GMP223P22A	GMP223P22A	GMP223P22A	GMP223P22A
Control Fuse Holder	CMS101	CMS101	CMS101	CMS101
Fuse	10G10	10G10	10G10	10G10
Oil Separator	NS1004L	NS1004L	NS1005	NS1005
Liquid Receiver	1300134B	1300134B	1320315A	1320315A
Suction Service Valve	2605122030	2605122030	2605122030	2605142030
Suction Valve Gasket	020002802	020002802	020002802	020002802
Discharge Service Valve	2605081620	2605081620	2605101620	2605101620
Discharge Valve Gasket	020002800	020002800	020002800	020002800
Receiver Outlet Valve	2605081620	2605081620	2605101620	2605101620
Receiver Valve Gasket	020002800	020002800	020002800	020002800
Liquid Drier & Sight glass	CSG084S (combo)	CSG084S (combo)	CSG165S (combo)	CSG165S (combo)
Electrical Box	861656	861656	861656	861656

Optional Fitted Item:

Suction Accumulator	PA5083157C	PA5083157C	PA5083157C	PA5083157C

Enthalpy

Semi Hermetic Flat Base Condensing Units



Standard Features

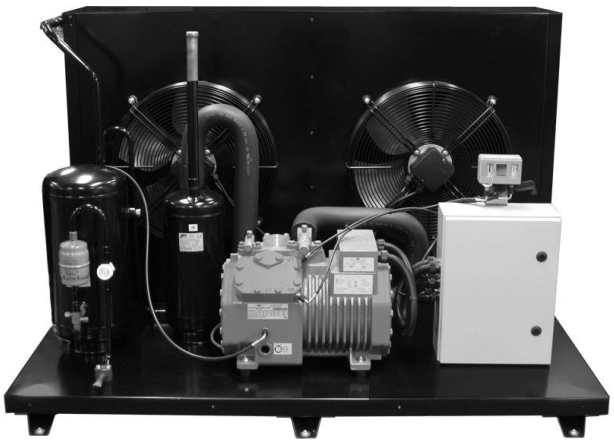
- Bitzer Ecoline Compressor with Oil Sight Glass
- Crankcase Heater
- Service Shut Off Valves
- HP/LP Control
- Gomax Flexible Control Hoses
- Liquid Line Drier & Sight Glass
- Oil Separator (Pre-charged with POE Oil)
- Liquid Receiver
- Galvanised Black Powder Coated Unit Base
- ***Supercoat*** Condenser Treatment (5000 Hour Salt Spray Test)
- Discharge Vibration Eliminator
- ebmpapst Condenser Fans – Single Phase
- Saginomiya Condenser Fan Speed Controller
- 3PH Contactor & Electronic Motor Protection Relay
- Phase Loss & Phase Imbalance Protection
- Pre - Wired Back to Junction Box
- Nitrogen Holding Charge



Options:

- Suction Accumulator (factory fitted)
  (Not available on 2JES07Y1003)
- Unit Weatherproof Cover (knockdown form)





ENTHALPY SEMI-HERMETIC CONDENSING UNITS

R404a (R507) – Semi Hermetic Flat Base Condensing Units

Airefrig Part Number	H/P (Nominal)	Displ m³/h	Ambient Temp ºC	Refrigeration Capacity Watts									
				Evaporating Temperature ºC									
				-40	-35	-30	-25	-20	-15	-10	-5	0	+5
2JES07Y1003	3/4	5.21	32	560	809	1097	1427	1799	2217	2682	3191	3745	4342
			38	452	681	945	1246	1588	1970	2393	2857	3360	3901
			43	367	578	822	1101	1415	1768	2158	2583	3043	-
2GES2Y2603	1.5	7.58	32	954	1318	1740	2224	2775	3395	4088	4855	5697	6613
			38	809	1141	1528	1970	2474	3041	3673	4371	5135	5965
			43	691	999	1356	1765	2229	2752	3334	3975	4674	5430
2FES3Y260453	1.8	9.54	32	1145	1596	2116	2711	3383	4136	4971	5884	6876	7946
			38	966	1377	1852	2394	3004	3686	4440	5263	6155	7111
			43	823	1202	1640	2137	2696	3320	4007	4756	5562	-
2DES3Y3603	3.0	13.4	32	1834	2519	3308	4208	5225	6357	7608	8979	10459	12046
			38	1575	2202	2921	3742	4665	5692	6824	8059	9388	10805
			43	1352	1929	2591	3344	4189	5128	6160	7281	8485	-
2CES4Y5203	4.0	16.2	32	2366	3204	4169	5267	6508	7890	9418	11092	12904	14847
			38	2059	2826	3708	4710	5837	7090	8473	9982	11607	13343
			43	1793	2500	3311	4231	5264	6410	7670	9040	10513	-
4EES6Y8603*	5.5	22.7	32	3196	4270	5548	7043	8767	10729	12931	15375	18057	20960
			38	2816	3795	4958	6317	7881	9658	11647	13848	16253	18846
			43	2495	3393	4460	5705	7136	8757	10567	12565	14739	-
4DES7Y11003*	7.5	26.8	32	3968	5268	6809	8608	10685	13051	15715	18686	21965	25541
			38	3518	4702	6107	7748	9642	11797	14221	16918	19885	23108
			43	3142	4228	5520	7028	8767	10744	12965	15429	18133	-
4CES9Y11003*	9.0	32.5	32	4622	6174	7999	10118	12547	15305	18393	21816	25568	29635
			38	4058	5470	7136	9075	11301	13826	16650	19775	23184	26862
			43	3607	4902	6436	8223	10275	12601	15199	18067	-	-

Nominal ratings should be used as a guide, based on 20 degree Celsius return vapour and inherent liquid subcooling.

Shaded areas require additional cooling &/or return vapour limitations – contact Airefrig Australia for further information.

* 4 Cylinder Compressors are supplied with one head prepared for capacity control – contact Airefrig Australia for further information.

Note: Fan speed controller is set for continuous running @ low speed, select fan OFF option at low speed in low ambient applications to prevent over condensing (do not use this option if unit is operating in the shaded area envelope which requires additional cooling)

Unit Prices without Suction Accumulator

Airefrig Part Number	List Price Excl GST
2JES07Y1003	
2GES2Y2603	
2FES3Y260453	
2DES3Y3603	
2CES4Y5203	
4EES6Y8603	
4DES7Y11003	
4CES9Y11003	

Unit Prices with Suction Accumulator Fitted

Airefrig Part Number	List Price Excl GST
Not available for 2JES07Y1003 unit	N/A
2GES2Y2603ACC	
2FES3Y260453ACC	
2DES3Y3603ACC	
2CES4Y5203ACC	
4EES6Y8603ACC	
4DES7Y11003ACC	
4CES9Y11003ACC	

ENTHALPY SEMI-HERMETIC CONDENSING UNITS

R134a - Semi Hermetic Flat Base Condensing Units

Airefrig Part Number	H/P (Nominal)	Displ m³/h	Ambient Temp ºC	Refrigeration Capacity Watts							
				Evaporating Temperature ºC							
				-25	-20	-15	-10	-5	0	+5	+10
2JES07Y1003	3/4	5.21	32	577	839	1144	1498	1904	2369	2892	3477
			38	500	748	1038	1373	1758	2197	2690	3241
			43	443	680	956	1276	1643	2060	2529	3050
2GES2Y2603	1.5	7.58	32	1142	1527	1976	2497	3096	3780	4556	5429
			38	1031	1395	1819	2311	2876	3521	4252	5073
			43	940	1286	1689	2157	2695	3307	4000	4779
2FES3Y260453	1.8	9.54	32	1427	1906	2465	3109	3846	4684	5625	6671
			38	1267	1714	2236	2837	3526	4307	5184	6160
			43	1141	1563	2054	2621	3269	4005	4830	5747
2DES3Y3603	3.0	13.4	32	2067	2773	3603	4569	5679	6940	8361	9943
			38	1869	2528	3303	4205	5241	6417	7740	9212
			43	1706	2327	3057	3906	4879	5984	7226	8607
2CES4Y5203	4.0	16.2	32	2605	3467	4480	5658	7010	8551	10284	12216
			38	2375	3180	4127	5227	6490	7927	9541	11339
			43	2187	2946	3838	4873	6062	7411	8928	10614
4EES6Y8603*	5.5	22.7	32	3743	4889	6246	7835	9672	11774	14154	16822
			38	3394	4465	5732	7215	8928	10886	13101	15580
			43	3105	4113	5307	6702	8313	10153	12231	14554
4DES7Y11003*	7.5	26.8	32	4188	5548	7182	9116	11376	13982	16955	20306
			38	3794	5061	6581	8381	10482	12904	15661	18767
			43	3461	4649	6077	7766	9736	12006	14588	17491
4CES9Y11003*	9.0	32.5	32	5229	6856	8800	11089	13744	16785	20223	24065
			38	4772	6288	8097	10226	12695	15518	18706	22263
			43	4384	5808	7508	9506	11820	14465	17447	20767

Nominal ratings should be used as a guide, based on 20 degree Celsius return vapour and inherent liquid subcooling

Shaded areas require additional cooling &/or return vapour limitations – contact Airefrig Australia for further information.

* 4 Cylinder Compressors are supplied with one head prepared for capacity control – contact Airefrig Australia for further information.

Fan speed controller will require to be adjusted to suit R134a refrigerant at time of commissioning.

Note: Fan speed controller is set for continuous running @ low speed, select fan OFF option at low speed in low ambient applications to prevent over condensing (do not use this option if unit is operating in the shaded area envelope which requires additional cooling)

Unit Prices without Suction Accumulator

Airefrig Part Number	List Price Excl GST
2JES07Y1003	
2GES2Y2603	
2FES3Y260453	
2DES3Y3603	
2CES4Y5203	
4EES6Y8603	
4DES7Y11003	
4CES9Y11003	

Unit Prices with Suction Accumulator Fitted

Airefrig Part Number	List Price Excl GST
Not available for 2JES07Y1003 unit	N/A
2GES2Y2603ACC	
2FES3Y260453ACC	
2DES3Y3603ACC	
2CES4Y5203ACC	
4EES6Y8603ACC	
4DES7Y11003ACC	
4CES9Y11003ACC	

ENTHALPY SEMI-HERMETIC CONDENSING UNITS

Semi-Hermetic Flat Base Units Optional Extras

Optional Extras – Weatherproof Covers

Weatherproof Cover Part No	Cover only Weights (kg)	Suit Unit Model	List Price Excl GST
WCAR22	18.0	2JES07Y1003	
WCAR26	28.0	2GES2Y2603	
WCAR26	28.0	2FES3Y260453	
WCAR36	36.0	2DES3Y3603	
WCAR36	36.0	2CES4Y5203	
WCAR72	62.0	4EES6Y8603	
WCAR72	62.0	4DES7Y11003	
WCAR72	62.0	4CES9Y11003	



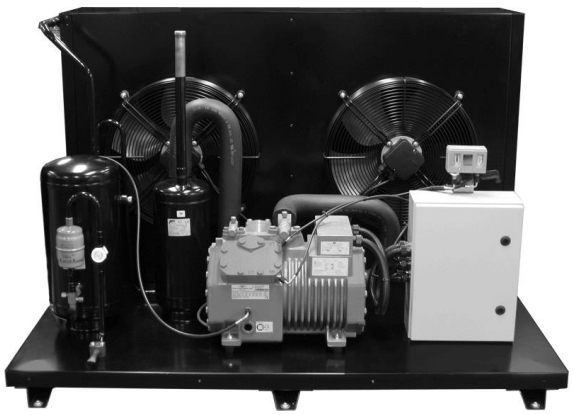
Semi-Hermetic Flat Base Unit Specifications & Dimensions

Semi Hermetic Unit Series R404a (R507), R134a

Model	Dimensions mm			Weight Kg	Connections Inches (mm)		Compressor		Fan Motor(s)		Receiver @ 90% (R404a) KG	Dimension Drawing
	Depth	Width	Height		Suction	Liquid	Voltage	MOC (Max. Amps)	Voltage	FLA Amps		
2JES07Y1003	770	600	475	92	5/8”	1/2”	D.O.L. 380-400V 3Phase 50Hz	3.7	230V 1Phase 50Hz	0.58	4.29	A
2GES2Y2603		820	675	113	5/8”	1/2”		5.0		0.73		B
2FES3Y260453				114	5/8”	1/2”		6.1		1.55		
2DES3Y3603	850	1075	725	175	7/8”	5/8”		8.6		1.55	8.10	C
2CES4Y5203				180	7/8”	5/8”		10.0		3.0		
4EES6Y8603	1100	1480	970	315	1-1/8”	5/8”		13.6		2x 1.55	12.0	D
4DES7Y11003				325	1-1/8”	5/8”		16.5		2x 3.0		
4CES9Y11003				327	1-1/8”	5/8”		20.2		2x 3.0		

Note: Crankcase Heaters are Internal PTC self-regulating 230 volts.
MOC = maximum operating current

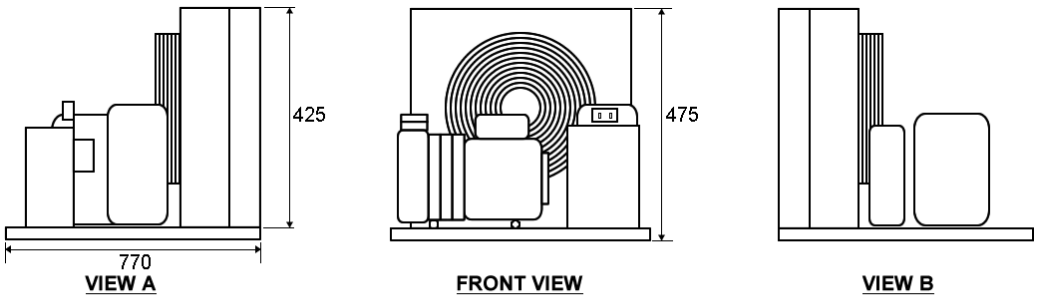




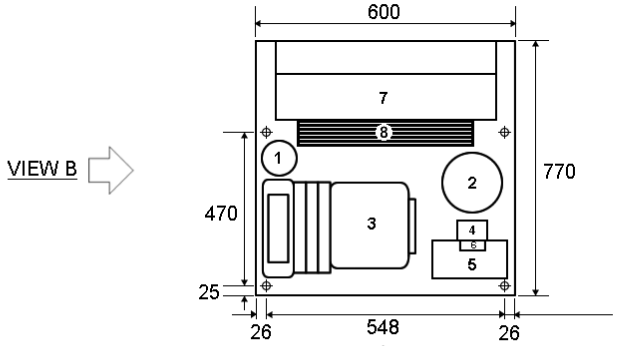
ENTHALPY SEMI-HERMETIC CONDENSING UNITS

Semi-Hermetic Flat Base Unit Dimensions

Drawing A



VIEW A | FRONT VIEW | VIEW B

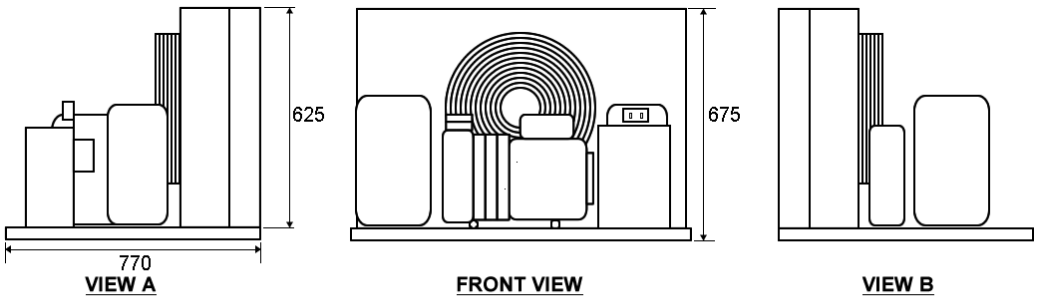


VIEW B | VIEW A | PLAN VIEW | FRONT VIEW

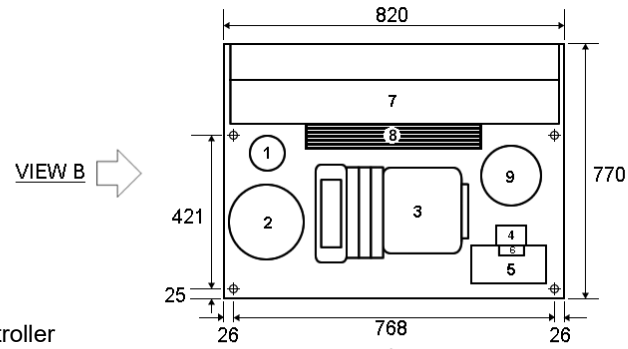
Legend

No	Description
1	Oil Separator
2	Liquid Receiver
3	Compressor
4	Fan Speed Controller
5	Electrical Box
6	HP/LP
7	Condenser
8	Condenser Fan Assembly

Drawing B



VIEW A | FRONT VIEW | VIEW B



VIEW B | VIEW A | PLAN VIEW | FRONT VIEW

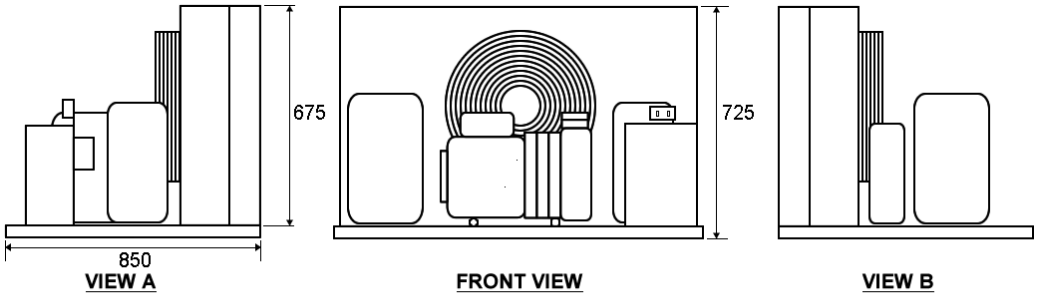
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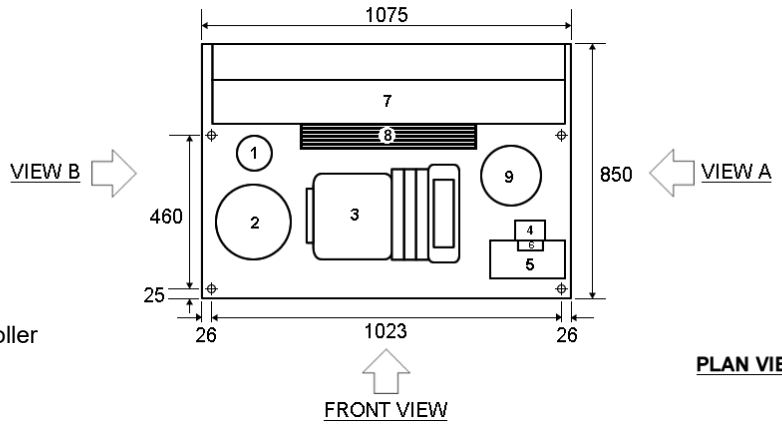
No	Description
1	Oil Separator
2	Liquid Receiver
3	Compressor
4	Fan Speed Controller
5	Electrical Box
6	HP/LP
7	Condenser
8	Condenser Fan Assembly
9	Suction Accumulator (Optional)

ENTHALPY SEMI-HERMETIC CONDENSING UNITS

Semi-Hermetic Flat Base Unit Dimensions (cont'd)

Drawing C

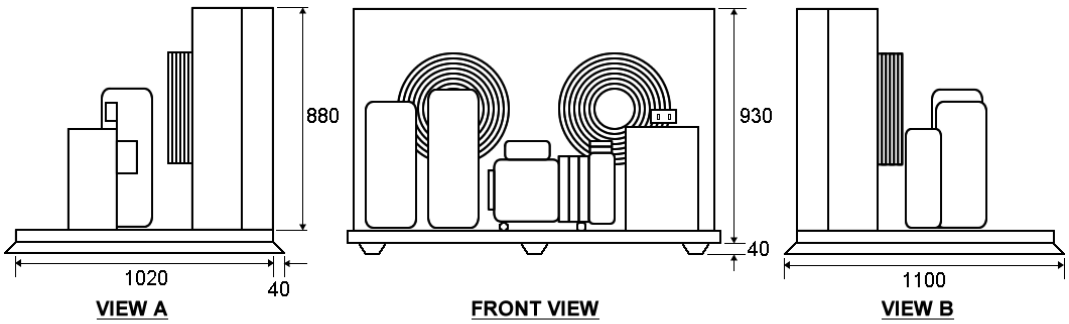


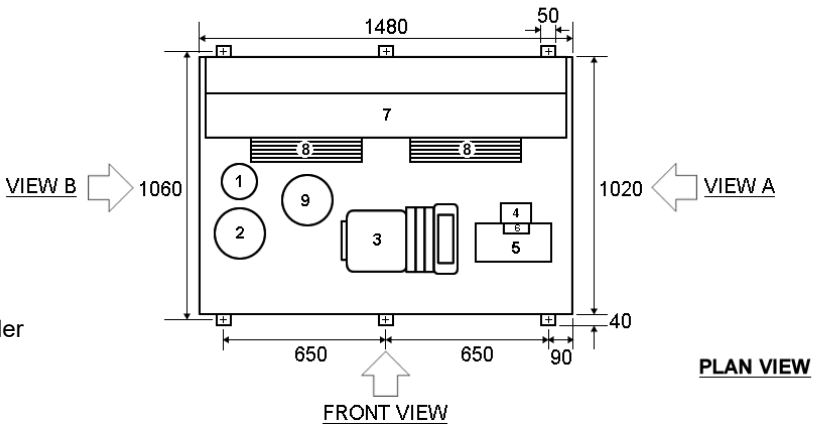


Legend

No	Description
1	Oil Separator
2	Liquid Receiver
3	Compressor
4	Fan Speed Controller
5	Electrical Box
6	HP/LP
7	Condenser
8	Condenser Fan Assembly
9	Suction Accumulator (Optional)

Drawing D



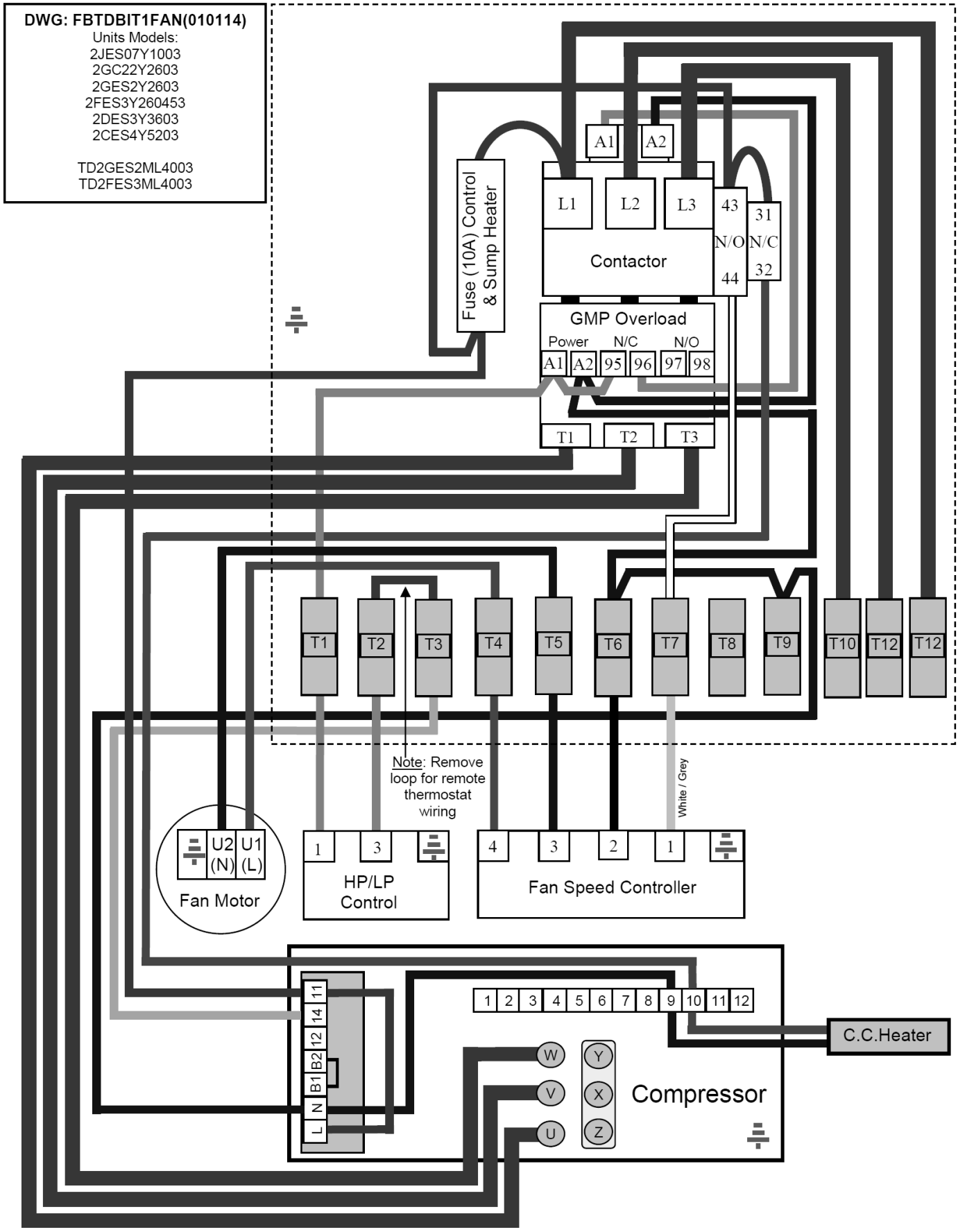


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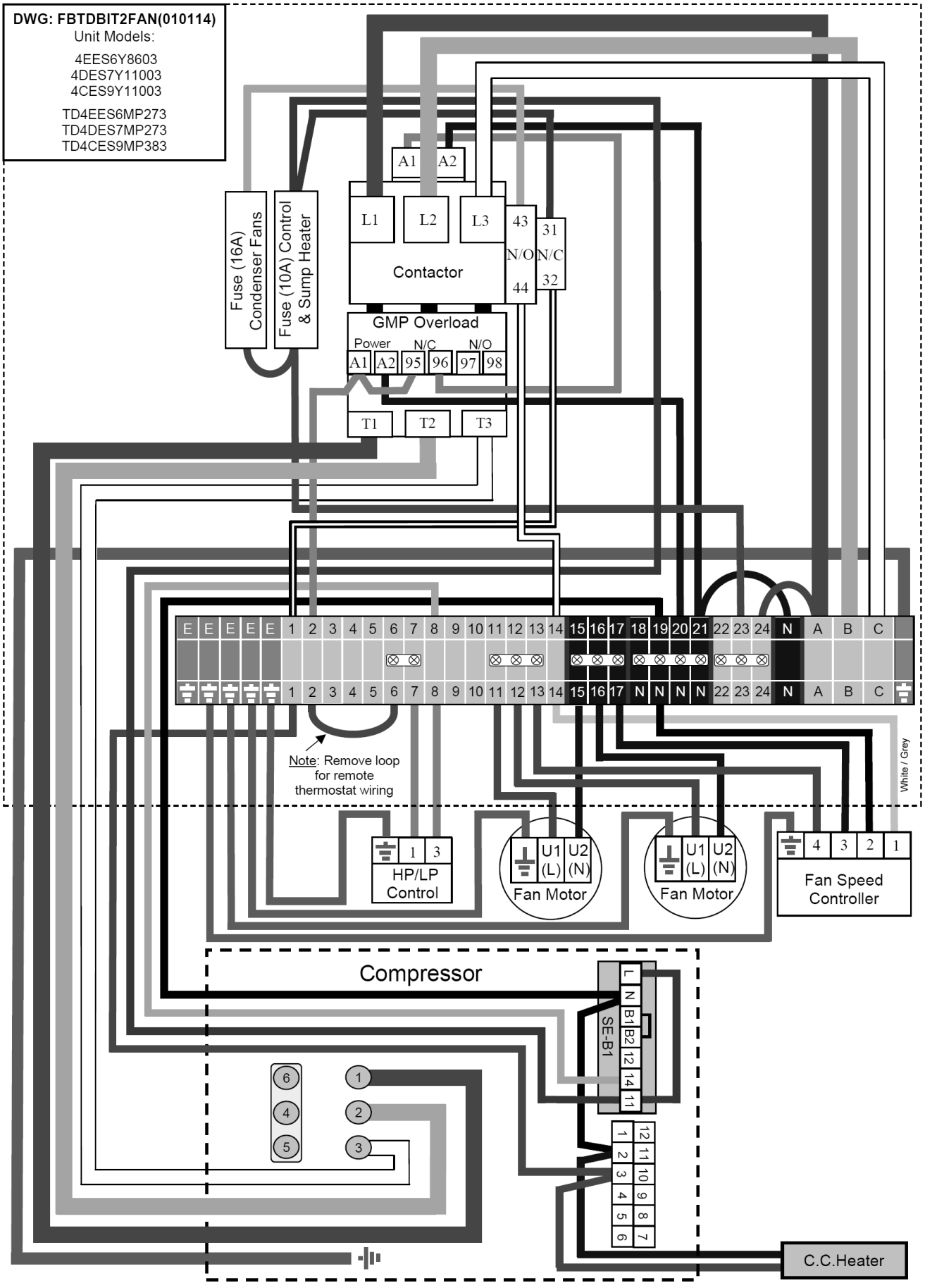
No	Description
1	Oil Separator
2	Liquid Receiver
3	Compressor
4	Fan Speed Controller
5	Electrical Box
6	HP/LP
7	Condenser
8	Condenser Fan Assemblies
9	Suction Accumulator (Optional)

ENTHALPY SEMI-HERMETIC CONDENSING UNITS

Semi-Hermetic Flat Base Unit Wiring Diagrams



Semi-Hermetic Flat Base Unit Wiring Diagrams (cont'd)



ENTHALPY SEMI-HERMETIC CONDENSING UNITS

Semi-Hermetic Flat Base Units Spare Parts

Semi Hermetic Unit Series R404a (R507), R134a

Part Description	Model			
	2JES07Y1003	2GES2Y2603	2FES3Y260453	2DES3Y3603
Compressor - Bitzer	2JES07Y	2GES2Y	2FES3Y	2DES3Y
ebm Fan Motor	S4E350AP0648 (x1)	S4E400AP0244 (x1)	S4E450AU0337 (x1)	S4E450AU0337 (x1)
Speed Controller	RGEZ1N45MF	RGEZ1N45MF	RGEZ1N45MF	RGEZ1N45MF
HP/LP	DNSD306X	DNSD306X	DNSD306X	DNSD306X
Compressor Contactor	MC12B240V	MC12B240V	MC12B240V	MC12B240V
Thermal Overload Block	GMP223P5A	GMP223P22A	GMP223P22A	GMP223P22A
Control/Fan Fuse Holder	CMS101	CMS101	CMS101	CMS101
Fuse	10G10	10G10	10G10	10G10
Oil Separator	NS1004	NS1004L	NS1004L	NS1005
Liquid Receiver	1300134B	1300134B	1300134B	1320315A
Receiver Outlet Valve	2605081620	2605081620	2605081620	2605101620
Receiver Valve Gasket	020002800	020002800	020002800	020002800
Liquid Drier & Sight Glass	CSG084S (combo)	CSG084S (combo)	CSG084S (combo)	CSG165S (combo)
Electrical Box	861656	861656	861656	861656
Optional:				
Suction Accumulator	Not Available	PA5083116C	PA5083116C	PA5083157C

Semi Hermetic Unit Series R404a (R507), R134a – cont'd

Part Description	Model			
	2CES4Y5203	4EES6Y8603	4DES7Y11003	4CES9Y11003
Compressor - Bitzer	2CES4Y	4EES6Y	4DES7Y	4CES9Y
ebm Fan Motor	S4E500AM0301 (x1)	S4E450AU0337 (x2)	S4E500AM0301 (x2)	S4E500AM0301 (x2)
Speed Controller	RGEZ1Q45MF	RGEZ1Q45MF	RGEZ1Q45MF	RGEZ1Q45MF
HP/LP	DNSD306X	DNSD306X	DNSD306X	DNSD306X
Compressor Contactor	MC12B240V	MC22B240V	MC22B240V	MC32A240V
Thermal Overload Block	GMP223P22A	GMP223P22A	GMP223P22A	GMP403P40A
Control Fuse Holder	CMS101	CMS101	CMS101	CMS101
Control Fuse	10G10	10G10	10G10	10G10
Fan Fuse Holder	N/A	CMS101	CMS101	CMS101
Fan Fuse	N/A	10G16	10G16	10G16
Oil Separator	NS1005	NS1007	NS1007	NS1007
Liquid Receiver	1320315A	1320620A	1320620A	1320620A
Receiver Outlet Valve	2605101620	2605101620	2605101620	2605101620
Receiver Valve Gasket	020002800	020002800	020002800	020002800
Liquid Drier & Sight Glass	CSG165S (combo)	CSG165S (combo)	CSG165S (combo)	CSG165S (combo)
Electrical Box	861656	AIR50650	AIR50650	AIR50650
Optional:				
Suction Accumulator	1010853P	1010853P	1010854P	1010854P

Enthalpy

Hermetic TD Series Condensing Units

(Medium Temperature)







Standard Features

- Weatherproof White Powder Coated Unit Casing
- Hermetic Copeland & Maneurop Compressors
- Compressor Oil Sight Glass
- Crankcase Heater
- Service Shut Off Valves
- HP/LP Control
- Gomax Flexible Control Hoses
- Liquid Line Drier & Sight Glass
- Oil Separator (Pre-charged with POE Oil)
- Liquid Receiver
- Top Discharge High Ambient Condenser
- ***Supercoat*** Condenser Treatment
  (5000 Hour Salt Spray Test)
- Space Saving Unit Design
  (Can be installed in a corner or back to back – not ML series)
- ebmpapst Condenser Fans – Single Phase
- Saginomiya Condenser Fan Speed Controller
- 3PH Contactor & Electronic Motor Protection Relay
- Phase Loss & Phase Imbalance Protection
- Dust & Weatherproof Electrical Box
- Pre-Wired Back to Electrical Box
- 1.22mm (18G) Interconnecting Copper Pipe Work
- Pre-Drilled ready to fit ***IPW*** series isolating switch
  (4 x M4 nutspots & 38mm diameter knockout for switch option)





ENTHALPY TD SERIES CONDENSING UNITS

R404a (R507) – TD Hermetic Condensing Units

Airefrig Part Number	H/P (Nominal)	Displ cm³/r	Ambient Temp ºC	Refrigeration Capacity Watts				
				Evaporating Temperature ºC				
				-15	-10	-5	0	+5
TDCS14ML4001 (Single Phase) **TDCS14ML4003** (Three Phase)	2.0	48.6	32	3425	4245	5079	5942	-
			38	2961	3666	4430	5205	-
			43	2576	3216	3868	4564	-
TDCS18ML4001 (Single Phase) **TDCS18ML4003** (Three Phase)	2.5	61.4	32	4087	5116	6138	7181	-
			38	3459	4389	5283	6207	-
			43	2975	3784	4581	5405	-
TDCS20ML4003	3.0	74.3	32	4503	5574	6809	7966	-
			38	3777	4737	5832	6852	-
			43	3222	4083	5081	5995	-
TDCS27MP123	3.5	92.4	32	6067	7513	9057	10616	-
			38	5242	6495	7848	9224	-
			43	4525	5637	6848	8072	-
TDCS33MP123	4.0	106.2	32	6805	8324	10055	11796	-
			38	5768	7127	8676	10204	-
			43	4933	6133	7562	8919	-
TDMTZ72MP273	6.0	120.9	32	9666	11808	14148	16654	19297
			38	8503	10442	12548	14797	17163
			43	7557	9324	11215	13204	15267
TDMTZ100MP383	8.5	171.2	32	12747	15728	18954	22402	26025
			38	11322	13989	16874	19945	23161
			43	10145	12562	15143	17876	20726
TDMTZ125MP383	10.0	215.4	32	15922	19391	23141	27132	31310
			38	14061	17158	20510	24078	27800
			43	12545	15342	18363	21564	24906
TDMTZ144MP383	12.0	241.8	32	18320	22010	25945	30081	34341
			38	16234	19544	23052	26698	30428
			43	14508	17470	20599	23864	27197

Nominal ratings should be used as a guide, based on 20 degree Celsius return vapour and inherent liquid subcooling.
Note: Fan speed controller is set for continuous running @ low speed, select fan OFF option at low speed in low ambient applications to prevent over condensing.

TD Unit Prices

Airefrig Part Number	List Price Excl GST
TDCS14ML4001	
TDCS14ML4003	
TDCS18ML4001	
TDCS18ML4003	

Airefrig Part Number	List Price Excl GST
TDCS20ML4003	
TDCS27MP123	
TDCS33MP123	
TDMTZ72MP273	

Airefrig Part Number	List Price Excl GST
TDMTZ100MP383	
TDMTZ125MP383	
TDMTZ144MP383	

ENTHALPY TD SERIES CONDENSING UNITS

R134a – TD Hermetic Condensing Units

Airefrig Part Number	H/P (Nominal)	Displ cm³/r	Ambient Temp °C	Refrigeration Capacity Watts					
				Evaporating Temperature °C					
				-15	-10	-5	0	+5	+10
TDCS14ML4001 (Single Phase) **TDCS14ML4003** (Three Phase)	2.0	48.6	32	1986	2631	3199	3921	4939	6000
			38	1717	2272	2990	3372	4156	5071
			43	1494	1993	2436	3012	3644	4446
TDCS18ML4001 (Single Phase) **TDCS18ML4003** (Three Phase)	2.5	61.4	32	2370	3171	3866	4739	5734	6996
			38	2006	2721	3453	4292	4956	6147
			43	1725	2346	2986	3767	4416	5366
TDCS20ML4003	3.0	74.3	32	2611	3455	4299	5257	6361	7761
			38	2213	2933	3674	4522	5452	6675
			43	1868	2531	3201	3956	4757	5810
TDCS27MP123	3.5	92.4	32	3426	4458	5608	6969	8725	10914
			38	3043	4005	5034	6290	7898	9874
			43	2705	3618	4558	5712	7151	8957
TDCS33MP123	4.0	106.2	32	3800	4995	6406	8037	9785	11573
			38	3336	4379	5718	7247	8870	10600
			43	2930	3905	5127	6604	8144	9809
TDMTZ72MP273	6.0	120.9	32	5097	6653	8463	10536	12871	15460
			38	4492	5969	7676	9622	11803	14217
			43	3992	5395	7009	8841	10891	13153
TDMTZ100MP383	8.5	171.2	32	6442	8505	10929	13727	16902	20445
			38	5689	7630	9897	12501	15449	18727
			43	5128	6953	9072	11500	14242	17288
TDMTZ125MP383	10.0	215.4	32	8100	10564	13419	16669	20304	24309
			38	7103	9434	12114	15150	18529	22238
			43	6324	8528	11046	13886	17038	20488
TDMTZ144MP383	12.0	241.8	32	10221	13080	16351	20024	24081	28482
			38	9068	11862	14922	18336	22091	26146
			43	8329	10866	13732	16915	20403	24164

Nominal ratings should be used as a guide, based on 20 degree Celsius return vapour and inherent liquid subcooling.
Note: Fan speed controller will require to be adjusted to suit R134a refrigerant at time of commissioning.
Fan speed controller is set for continuous running @ low speed, select fan OFF option at low speed in low ambient applications to prevent over condensing.

TD Unit Prices

Airefrig Part Number	List Price Excl GST
TDCS14ML4001	
TDCS14ML4003	
TDCS18ML4001	
TDCS18ML4003	

Airefrig Part Number	List Price Excl GST
TDCS20ML4003	
TDCS27MP123	
TDCS33MP123	
TDMTZ72MP273	

Airefrig Part Number	List Price Excl GST
TDMTZ100MP383	
TDMTZ125MP383	
TDMTZ144MP383	

ENTHALPY TD SERIES CONDENSING UNITS

TD Hermetic Unit Specifications & Dimensions

Hermetic TD Unit Series R404a (R507), R134a

Unit Model	Connections Inches		Unit Weight Kg	Compressor		Condenser Fan Motor(s)				Receiver @ 90% (R404a) KG	Dimension Drawing
	Suction	Liquid		Voltage	MCC maximum continuous current	Voltage	Diam.	Qty	Amps per Fan		
TDCS14ML4001	3/4"	1/2”	110	1Phase 50Hz	17.5	230V 1Phase 50Hz	400mm	1	0.73	4.29	A
TDCS18ML4001	3/4"	1/2”	110		19.1		400mm	1	0.73	4.29	A
TDCS14ML4003	3/4"	1/2”	110	D.O.L. 380-400V 3Phase 50Hz	6.6		400mm	1	0.73	4.29	A
TDCS18ML4003	3/4"	1/2”	110		6.6		400mm	1	0.73	4.29	A
TDCS20ML4003	3/4"	1/2”	110		7.1		400mm	1	0.73	4.29	A
TDCS27MP123	7/8”	5/8”	150		11.8		450mm	1	1.55	8.1	B
TDCS33MP123	7/8”	5/8”	150		13.8		450mm	1	1.55	8.1	B
TDMTZ72MP273	1-1/8”	5/8”	220		17.0		500mm	2	3.0	12.0	C
TDMTZ100MP383	1-1/8”	5/8”	285		22.0		630mm	2	2.7	12.0	D
TDMTZ125MP383	1-1/8”	5/8”	290		27.0		630mm	2	2.7	12.0	D
TDMTZ144MP383	1-1/8”	5/8”	295		30.0		630mm	2	2.7	12.0	D

Note: Copeland CS Compressor Crankcase Heaters are external wrap 240volts 40 watts.
: Maneurop MTZ Compressor Crankcase Heaters are Internal PTC self-regulating 200-600 volts 35 watts.

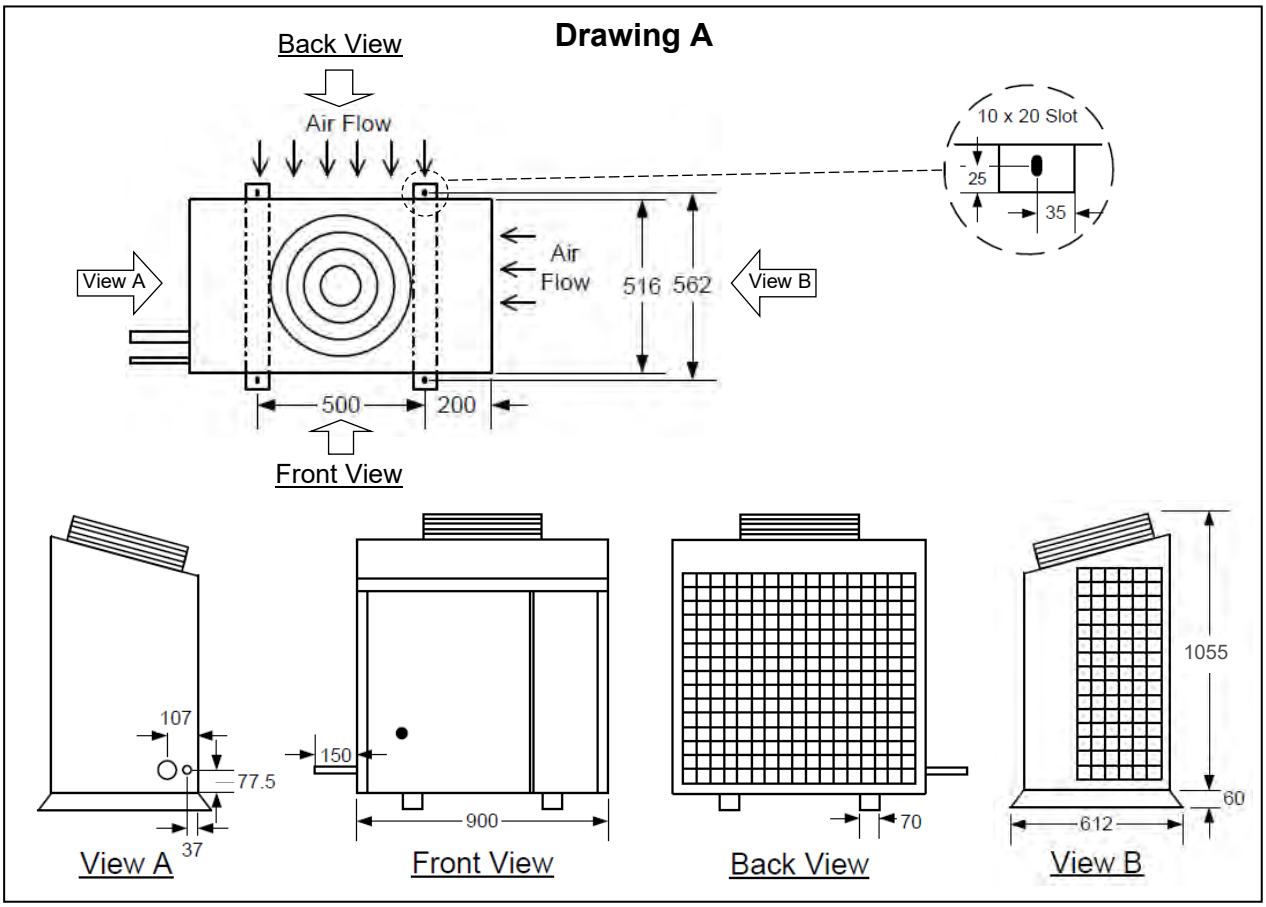




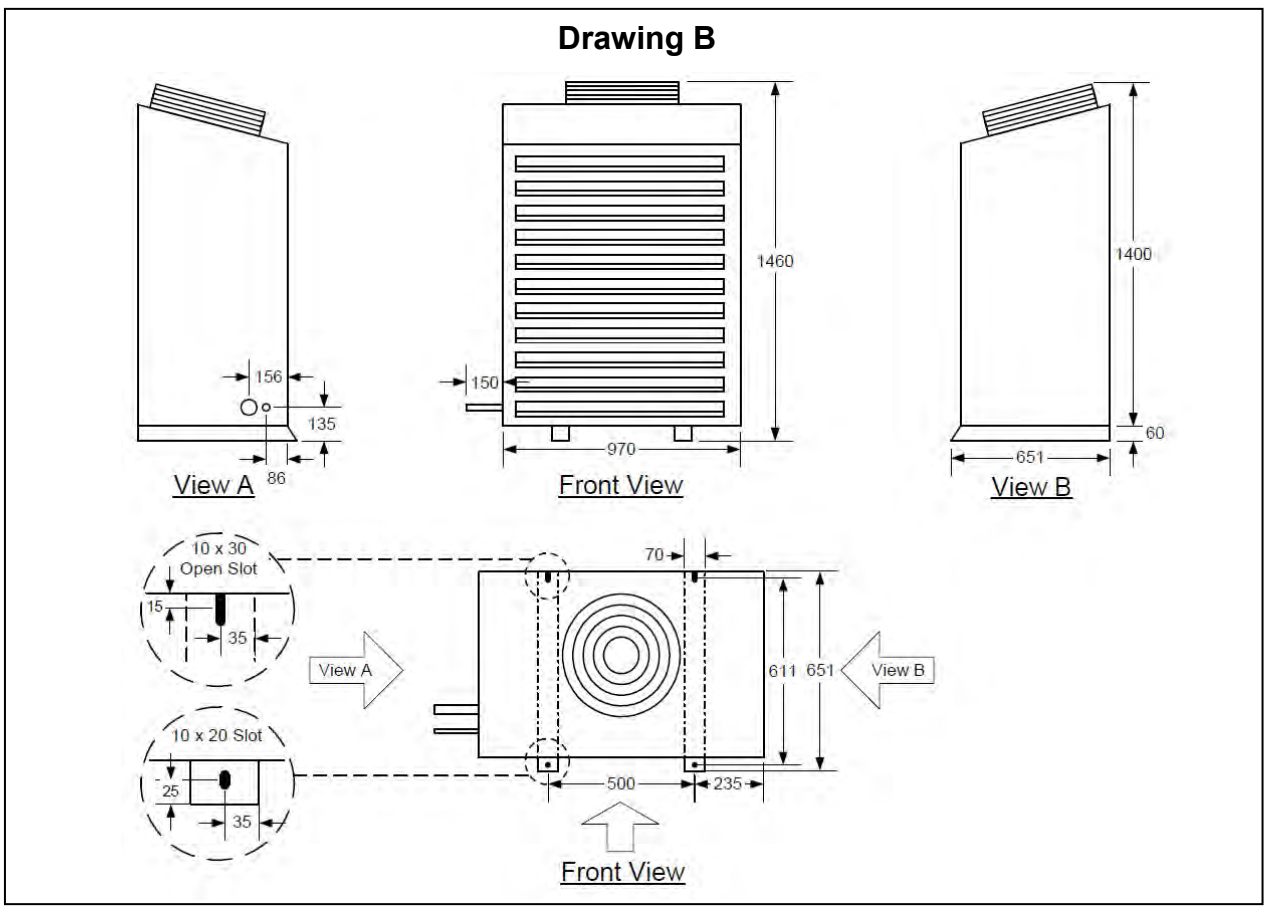



TD Hermetic Unit Dimensions

Drawing A

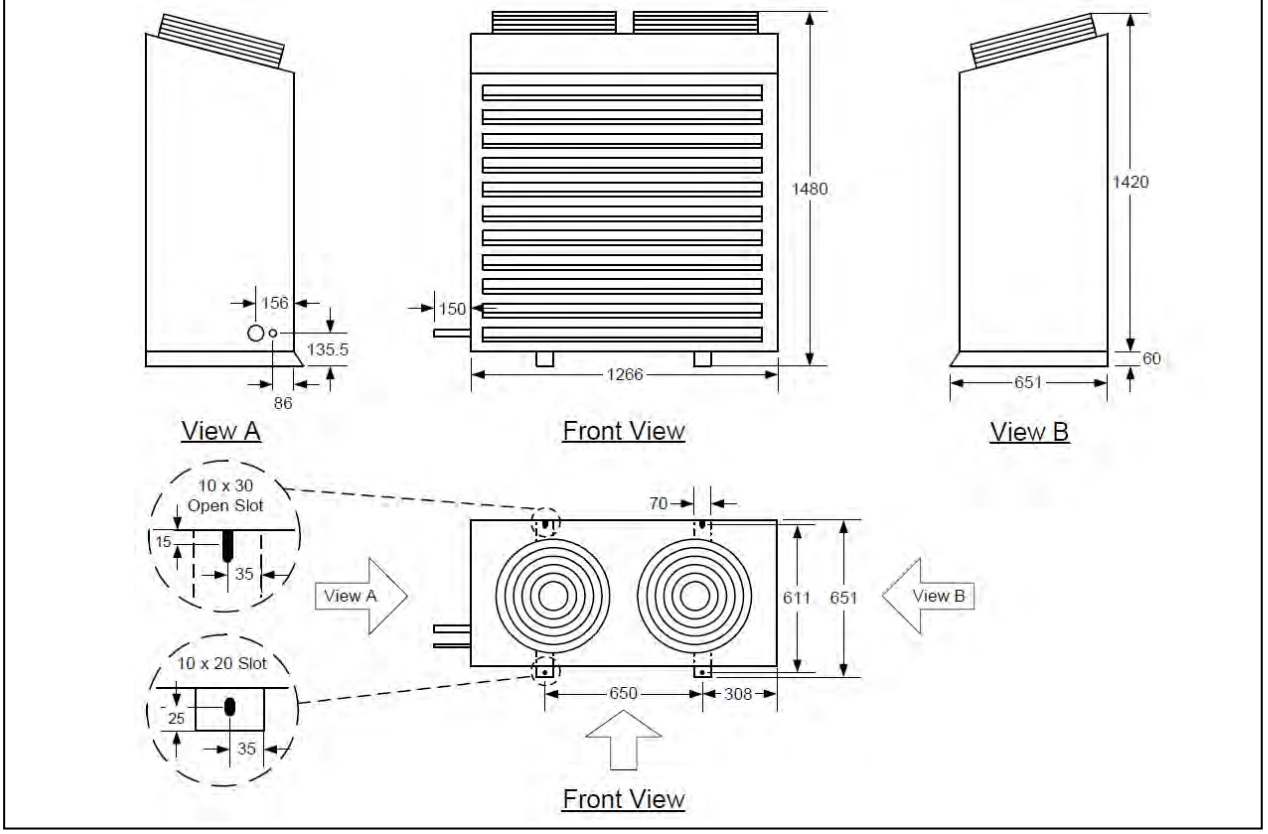


Drawing B

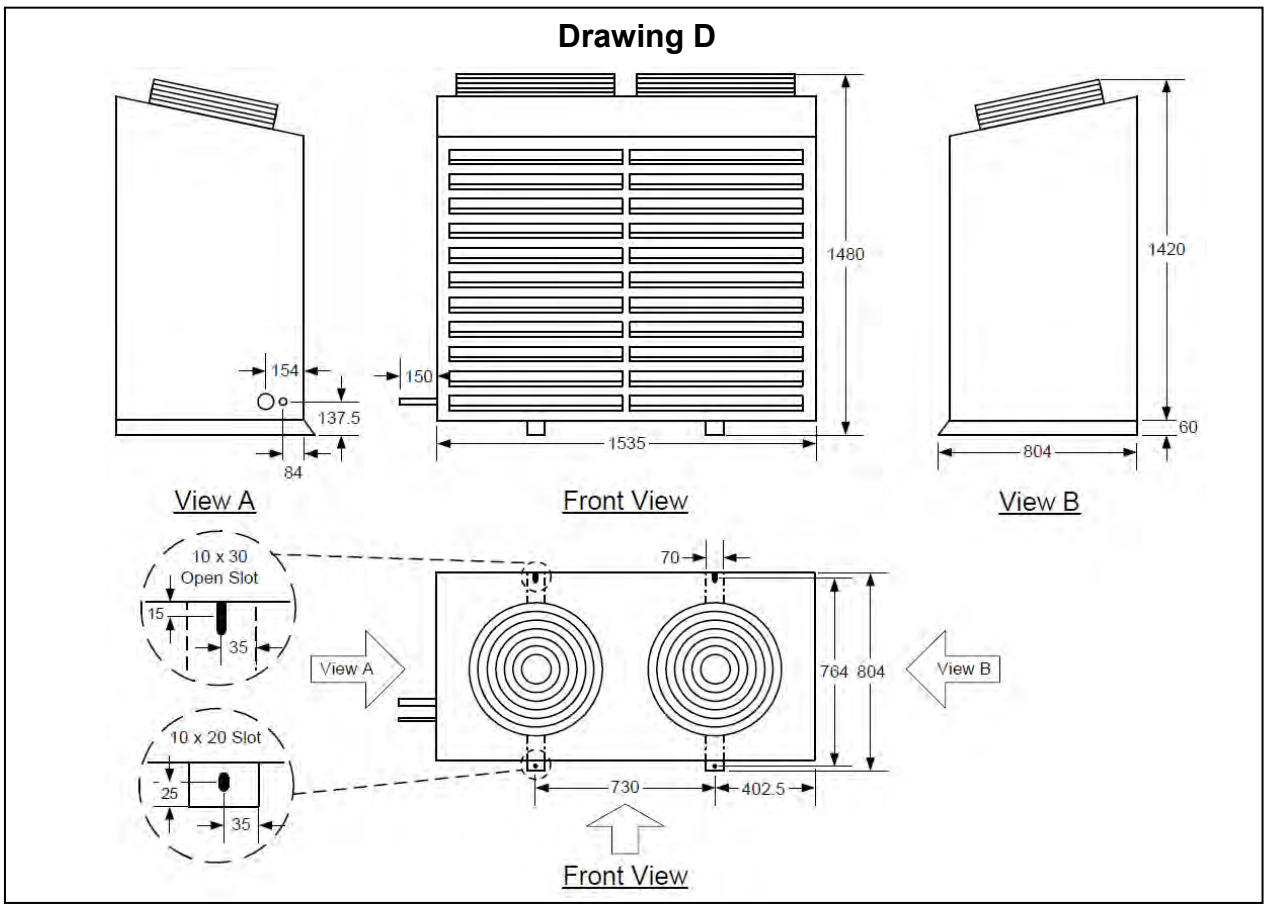


TD Hermetic Unit Dimensions (cont'd)

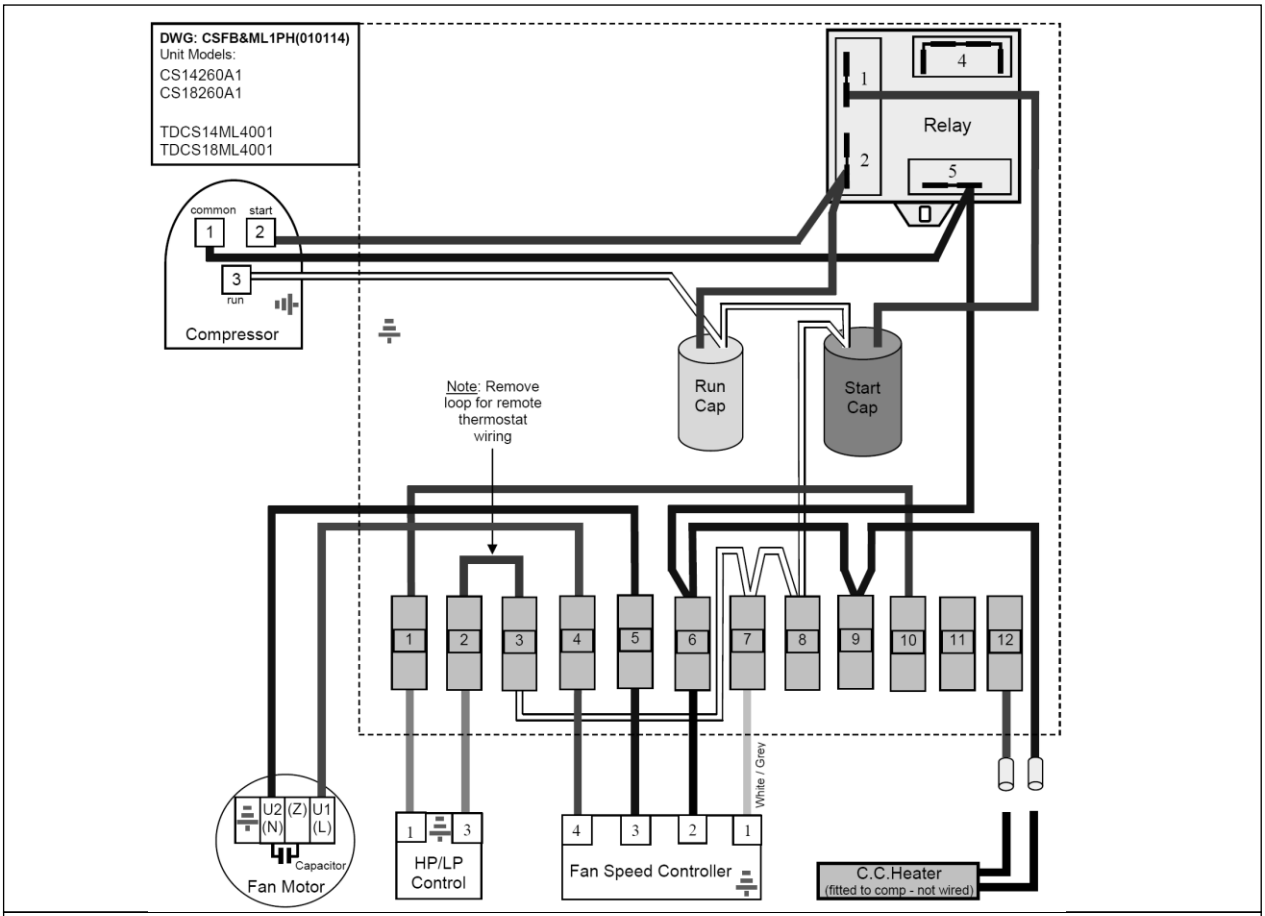
Drawing C

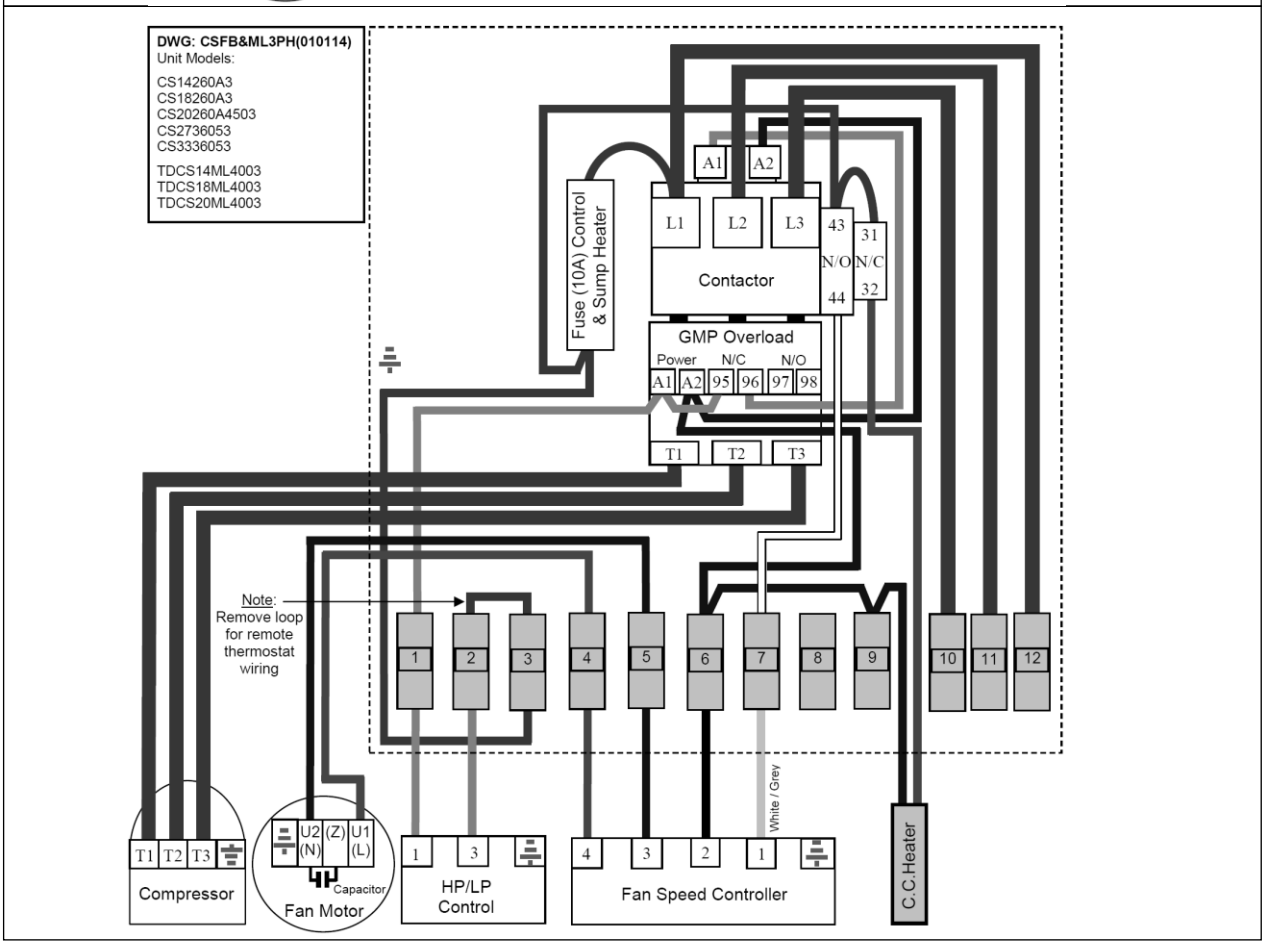


Drawing D

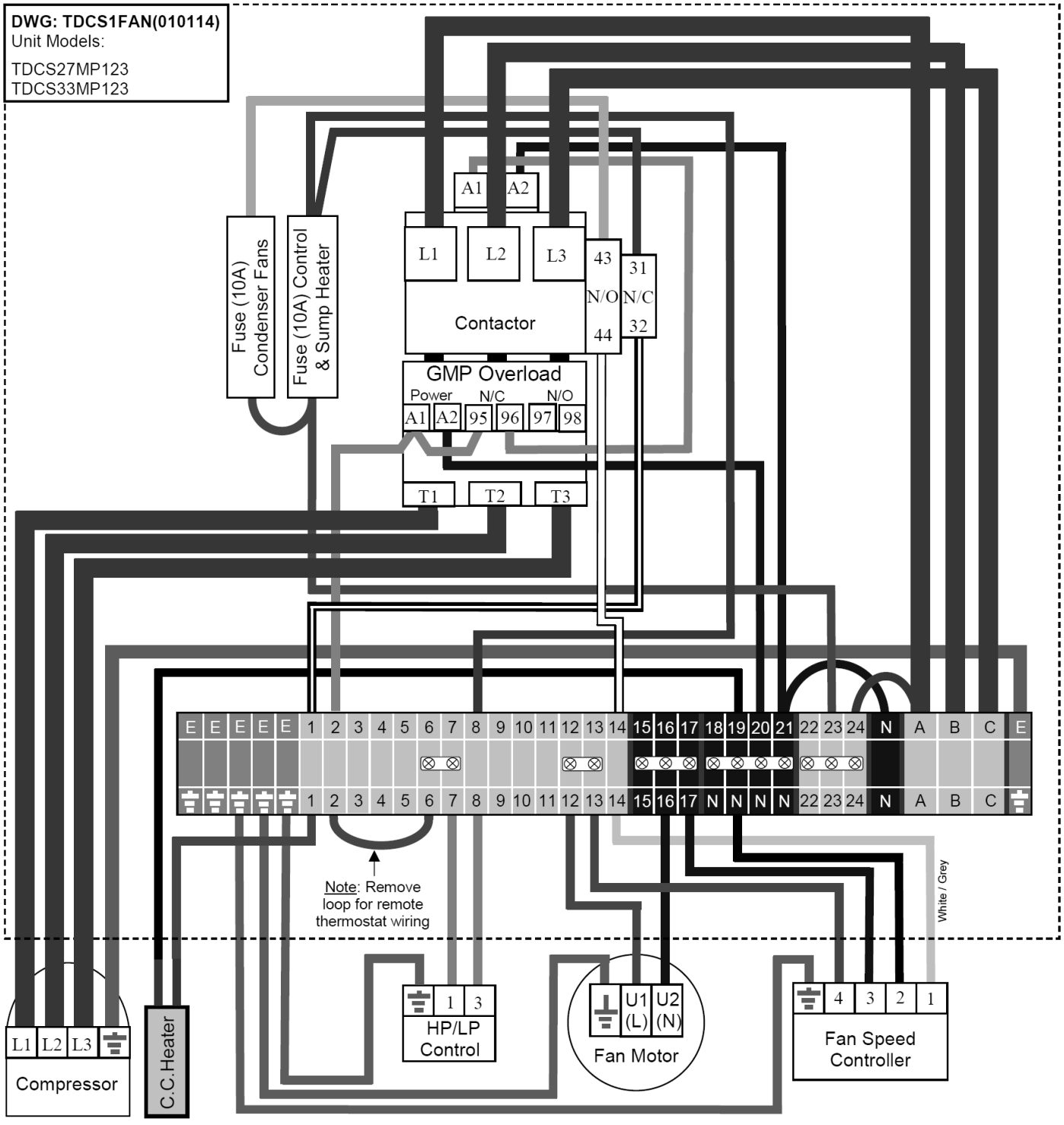


TD Hermetic Unit Wiring Diagrams

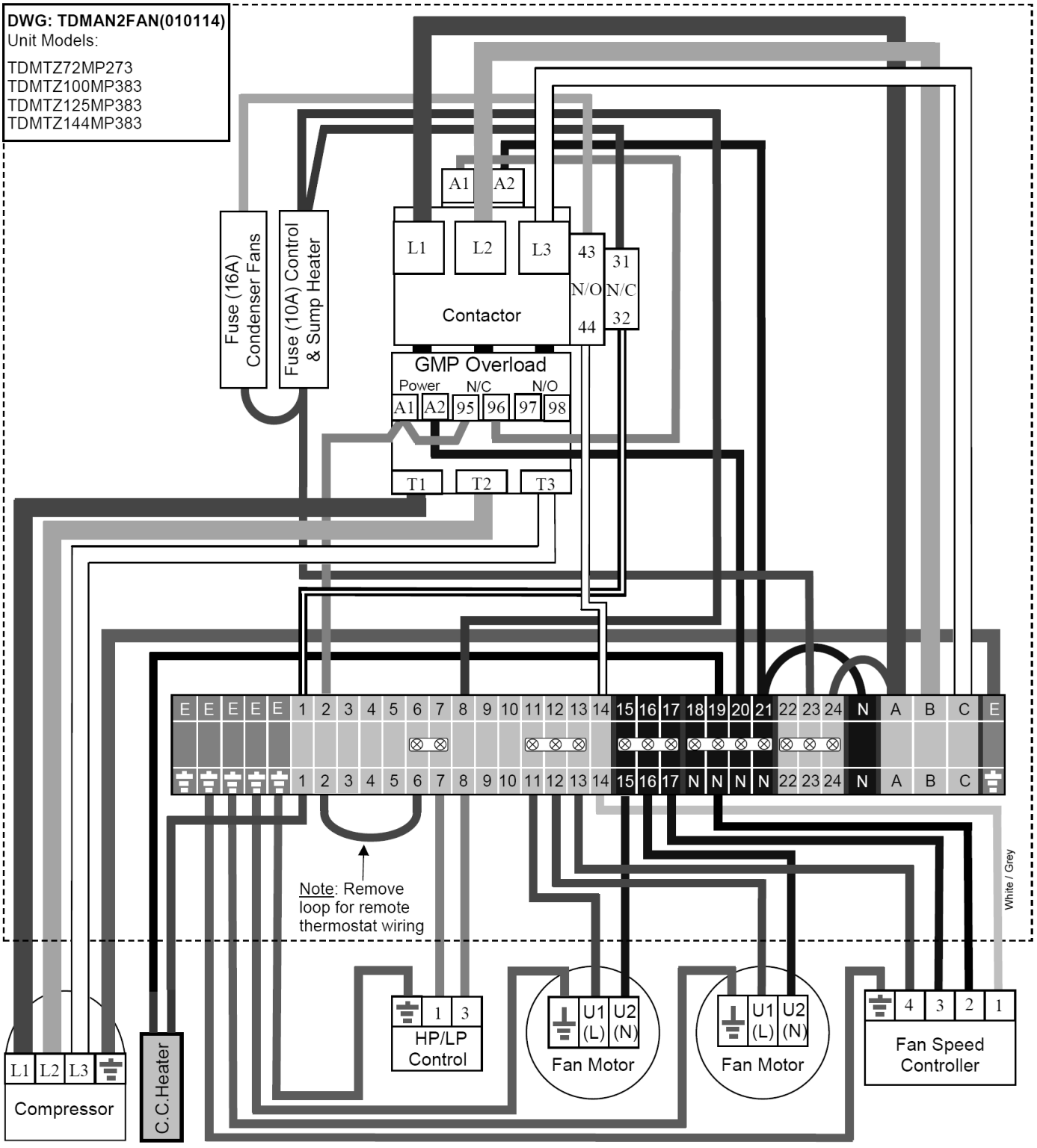




TD Hermetic Unit Wiring Diagrams (cont'd)



TD Hermetic Unit Wiring Diagrams (cont'd)



TD Hermetic Unit Spare Parts

TD Hermetic Unit Series R404a (R507), R134a

Part Description	Model			
	TDCS14ML4001	TDCS14ML4003	TDCS18ML4001	TDCS18ML4003
Compressor - Copeland	CS14K6EPFJ595	CS14K6ETFD595	CS18K6EPFJ595	CS18K6ETFD595
ebm Fan Motor	S4E400AP0244 (x1)	S4E400AP0244 (x1)	S4E400AP0244 (x1)	S4E400AP0244 (x1)
Speed Controller	RGEZ1N45MF	RGEZ1N45MF	RGEZ1N45MF	RGEZ1N45MF
HP/LP	DNSD306X	DNSD306X	DNSD306X	DNSD306X
Compressor Contactor	-	MC12B240V	-	MC12B240V
Thermal Overload Block	-	GMP223P22A	-	GMP223P22A
Control/Fan Fuse Holder	CMS101	CMS101	CMS101	CMS101
Control/Fan Fuse	10G10	10G10	10G10	10G10
Oil Separator	NS1004L	NS1004L	NS1004L	NS1004L
Liquid Receiver	1300134B	1300134B	1300134B	1300134B
Receiver Outlet Valve	2605081620	2605081620	2605081620	2605081620
Receiver Valve Gasket	020002800	020002800	020002800	020002800
Suction Service Valve	2605122030	2605122030	2605122030	2605122030
Suction Valve Gasket	020002802	020002802	020002802	020002802
Discharge Service Valve	2605081620	2605081620	2605081620	2605081620
Discharge Valve Gasket	020002800	020002800	020002800	020002800
Liquid Drier & Sight Glass	CSG084S (combo)	CSG084S (combo)	CSG084S (combo)	CSG084S (combo)
Electrical Box	861656	861656	861656	861656

TD Hermetic Unit Series R404a (R507), R134a

Part Description	Model		
	TDCS20ML4003	TDCS27MP123	TDCS33MP123
Compressor - Copeland	CS20K6ETFD595	CS27K6ETFD595	CS33K6ETFD595
ebm Fan Motor	S4E400AP0244 (x1)	S4E450AU0337 (x1)	S4E450AU0337 (x1)
Speed Controller	RGEZ1N45MF	RGEZ1N45MF	RGEZ1N45MF
HP/LP	DNSD306X	DNSD306X	DNSD306X
Compressor Contactor	MC12B240V	MC12B240V	MC12B240V
Thermal Overload Block	GMP223P22A	GMP223P22A	GMP223P22A
Control/Fan Fuse Holder	CMS101	CMS101	CMS101
Control/Fan Fuse	10G10	10G10	10G10
Oil Separator	NS1004L	NS1005	NS1005
Liquid Receiver	1300134B	1320315A	1320315A
Receiver Outlet Valve	2605081620	2605101620	2605101620
Receiver Valve Gasket	020002800	020002800	020002800
Suction Service Valve	2605122030	2605142030	2605142030
Suction Valve Gasket	020002802	020002802	020002802
Discharge Service Valve	2605081620	2605101620	2605101620
Discharge Valve Gasket	020002800	020002800	020002800
Liquid Drier & Sight Glass	CSG084S (combo)	CSG165S (combo)	CSG165S (combo)
Electrical Box	861656	AIR50650	AIR50650

TD Hermetic Unit Spare Parts

TD Hermetic Unit Series R404a (R507), R134a – cont'd

Part Description	Model			
	TDMTZ72MP273	TDMTZ100MP383	TDMTZ125MP383	TDMTZ144MP383
Compressor - Maneurop	MTZ724VI	MTZ1004VI	MTZ1254VI	MTZ1444VI
ebm Fan Motor	S4E500AM0301 (x2)	S6E630AN0101 (x2)	S6E630AN0101 (x2)	S6E630AN0101 (x2)
Speed Controller	RGEZ1Q45MF	RGEZ1Q45MF	RGEZ1Q45MF	RGEZ1Q45MF
HP/LP	DNSD306X	DNSD306X	DNSD306X	DNSD306X
Compressor Contactor	MC22B240V	MC32A240V	MC32A240V	MC32A240V
Thermal Overload Block	GMP223P22A	GMP403P40A	GMP403P40A	GMP403P40A
Control Fuse Holder	CMS101	CMS101	CMS101	CMS101
Control Fuse	10G10	10G10	10G10	10G10
Fan Fuse Holder	CMS101	CMS101	CMS101	CMS101
Fan Fuse	10G16	10G16	10G16	10G16
Oil Separator	NS1005	NS1007	NS1007	NS1007
Liquid Receiver	1320620A	1320620A	1320620A	1320620A
Receiver Outlet Valve	2605101620	2605101620	2605101620	2605101620
Receiver Valve Gasket	020002800	020002800	020002800	020002800
Suction Service Valve	2605182835	2605182835	2605182835	2605182835
Suction Valve Gasket	020002803	020002803	020002803	020002803
Discharge Service Valve	2605102030	2605102030	2605102030	2605102030
Discharge Valve Gasket	020002802	020002802	020002802	020002802
Liquid Drier & Sight Glass	CSG165S (combo)	C305S & SA15S	C305S & SA15S	C305S & SA15S
Electrical Box	AIR50650	AIR50650	AIR50650	AIR50650








Enthalpy

Semi Hermetic
TD Series Condensing Units
(Medium / Low Temperature)

Standard Features







- Weatherproof White Powder Coated Unit Casing
- Bitzer Ecoline Semi Hermetic Compressors
- Compressor Oil Sight Glass
- Crankcase Heater
- Service Shut Off Valves
- HP/LP Control
- Gomax Flexible Control Hoses
- Liquid Line Drier & Sight Glass
- Oil Separator (Pre-charged with POE Oil)
- Liquid Receiver
- ***Supercoat*** Condenser Treatment (5000 Hour Salt Spray Test)
- Top Discharge High Ambient Condenser
- Space Saving Unit Design (Can be installed in a corner or back to back – not ML series)
- ebmpapst Condenser Fans – Single Phase
- Saginomiya Condenser Fan Speed Controller
- 3PH Contactor & Electronic Motor Protection Relay
- Phase Loss & Phase Imbalance Protection
- Dust & Weatherproof Electrical Box
- Pre-Wired Back to Electrical Box
- 1.22mm (18G) Interconnecting Copper Pipe Work
- Pre-Drilled ready to fit ***IPW*** series isolating switch (4 x M4 nutspots & 38mm diameter knockout for switch option)
- Discharge Vibration Eliminator
- Suction Accumulator





ENTHALPY TD SERIES CONDENSING UNITS

R404a (R507) – TD Semi Hermetic Condensing Units

Airefrig Part Number	H/P (Nom)	Displ m³/h	Amb. Temp ºC	Refrigeration Capacity Watts Evaporating Temperature ºC									
				-40	-35	-30	-25	-20	-15	-10	-5	0	+5
TD2GES2ML4003	1.5	7.58	32	961	1328	1756	2248	2809	3443	4153	4944	5815	6766
			38	815	1151	1543	1992	2505	3085	3733	4453	5245	6108
			43	696	1008	1369	1785	2259	2793	3390	4052	4778	5566
TD2FES3ML4003	1.8	9.54	32	1144	1594	2113	2706	3377	4126	4958	5867	6854	7916
			38	965	1375	1849	2389	2998	3678	4429	5247	6134	7083
			43	822	1201	1637	2133	2691	3312	3996	4741	5542	-
TD2DES3MP123	3.0	13.4	32	1835	2521	3311	4213	5232	6367	7623	8998	10485	12080
			38	1576	2204	2924	3747	4672	5702	6838	8077	9412	10837
			43	1354	1931	2594	3348	4195	5138	6173	7298	8508	-
TD2CES4MP273	4.0	16.2	32	2431	3309	4330	5505	6850	8376	10097	12022	14154	16508
			38	2125	2930	3865	4941	6171	7565	9133	10879	12810	14934
			43	1855	2599	3463	4455	5587	6867	8305	9903	11665	13595
TD4EES6MP273*	5.5	22.7	32	3214	4300	5594	7112	8868	10876	13139	15661	18445	21482
			38	2834	3823	5001	6383	7978	9798	11844	14120	16622	19340
			43	2511	3420	4501	5768	7228	8890	10755	12824	15089	17542
TD4DES7MP273*	7.5	26.8	32	3940	5224	6741	8506	10537	12839	15419	18282	21416	24813
			38	3491	4659	6042	7651	9500	11595	13939	16533	19361	22415
			43	3117	4189	5458	6936	8632	10551	12695	15060	17636	-
TD4CES9MP383*	9.0	35.2	32	4670	6250	8117	10293	12799	15657	18881	22480	26458	30813
			38	4101	5539	7243	9236	11533	14155	17110	20403	24033	27987
			43	3645	4966	6535	8373	10495	12914	15637	18667	21997	-
TD4TES12MP383*	12.0	41.3	32	5471	7425	9730	12408	15478	18953	22828	27102	31753	36749
			38	4734	6505	8600	11040	13842	17011	20542	24427	28640	33144
			43	4142	5762	7684	9926	12501	15412	18652	22205	-	-
TD4PES15MP573*	15.0	48.5	32	5897	8212	10970	14203	17940	22207	27029	32405	38336	44816
			38	4990	7083	9586	12529	15937	19836	24239	29144	34545	40421
			43	4269	6178	8471	11173	14308	17894	21944	26448	31395	-
TD4NES20MP573*	20.0	56.2	32	7549	10219	13376	17054	21277	26072	31437	37371	43857	50855
			38	6558	8976	11845	15194	19048	23422	28312	33711	39589	45904
			43	5764	7974	10605	13682	17222	21241	25727	30668		

Nominal ratings should be used as a guide, based on 20 degree Celsius return vapour and inherent liquid subcooling.
Shaded areas require additional cooling &/or return vapour limitations – contact Airefrig Australia for further information.
* 4 Cylinder Compressors are supplied with one head prepared for capacity control – contact Airefrig Australia for further information.
Note: Fan speed controller is set for continuous running @ low speed, select fan OFF option at low speed in low ambient applications to prevent over condensing (do not use this option if unit is operating in the shaded area envelope which requires additional cooling)

TD Unit Prices

Airefrig Part Number	List Price Excl GST
TD2GES2ML4003	
TD2FES3ML4003	
TD2DES3MP123	
TD2CES4MP273	

Airefrig Part Number	List Price Excl GST
TD4EES6MP273	
TD4DES7MP273	
TD4CES9MP383	

Airefrig Part Number	List Price Excl GST
TD4TES12MP383	
TD4PES15MP573	
TD4NES20MP573	

ENTHALPY TD SERIES CONDENSING UNITS

R134a – TD Semi Hermetic Condensing Units

Airefrig Part Number	H/P (Nom)	Displ m³/h	Amb. Temp ºC	Refrigeration Capacity Watts							
				Evaporating Temperature ºC							
				-25	-20	-15	-10	-5	0	+5	+10
TD2GES2ML4003	1.5	7.58	32	1148	1535	1989	2516	3123	3817	4606	5467
			38	1036	1403	1831	2329	2901	3556	4300	5139
			43	945	1293	1701	2174	2719	3341	4046	4842
TD2FES3ML4003	1.8	9.54	32	1426	1904	2461	3104	3839	4674	5612	6654
			38	1265	1712	2233	2832	3520	4299	5172	6145
			43	1140	1561	2052	2617	3264	3997	4819	5732
TD2DES3MP123	3.0	13.4	32	2068	2775	3606	4573	5685	6949	8373	9959
			38	1870	2530	3306	4209	5246	6425	7751	9228
			43	1707	2328	3060	3909	4885	5992	7237	8622
TD2CES4MP273	4.0	16.2	32	2661	3554	4614	5858	7304	8971	10874	13036
			38	2426	3261	4252	5415	6766	8322	10097	12113
			43	2235	3022	3956	5052	6325	7789	9460	11353
TD4EES6MP273*	5.5	22.7	32	3762	4918	6290	7899	9764	11904	14337	17076
			38	3412	4493	5773	7276	9016	11011	13275	15821
			43	3122	4139	5346	6760	8397	10271	12397	14783
TD4DES7MP273*	7.5	26.8	32	4163	5509	7122	9026	11243	13790	16681	19924
			38	3771	5023	6524	8295	10355	12721	15402	18405
			43	3438	4613	6022	7684	9615	11832	14341	17146
TD4CES9MP383*	9.0	35.2	32	5270	6921	8900	11239	13965	17105	20678	24698
			38	4813	6350	8193	10370	12906	15823	19139	22863
			43	4423	5869	7600	9644	12023	14758	17861	21343
TD4TES12MP383*	12.0	41.3	32	6249	8362	10853	13754	17095	20899	25182	29965
			38	5644	7597	9905	12600	15709	19250	23237	27686
			43	5156	6977	9135	11658	14572	17894	21633	25795
TD4PES15MP573*	15.0	48.5	32	6962	9479	12463	15958	20005	24649	29921	35854
			38	6204	8525	11289	14533	18297	22622	27534	33061
			43	5590	7750	10331	13367	16896	20954	25564	30752
TD4NES20MP573*	20.0	56.2	32	8566	11461	14878	18860	23455	28694	34605	41219
			38	7748	10422	13588	17287	21563	26441	31943	38101
			43	7087	9580	12540	16005	20013	24589	29753	35518

Nominal ratings should be used as a guide, based on 20 degree Celsius return vapour and inherent liquid subcooling

Shaded areas require additional cooling &/or return vapour limitations – contact Airefrig Australia for further information.

* 4 Cylinder Compressors are supplied with one head prepared for capacity control – contact Airefrig Australia for further information.

Note: Fan speed controller will require to be adjusted to suit R134a refrigerant at time of commissioning.
Fan speed controller is set for continuous running @ low speed, select fan OFF option at low speed in low ambient applications to prevent over condensing (do not use this option if unit is operating in the shaded area envelope which requires additional cooling)

TD Unit Prices

Airefrig Part Number	List Price Excl GST
TD2GES2ML4003	
TD2FES3ML4003	
TD2DES3MP123	
TD2CES4MP273	

Airefrig Part Number	List Price Excl GST
TD4EES6MP273	
TD4DES7MP273	
TD4CES9MP383	

Airefrig Part Number	List Price Excl GST
TD4TES12MP383	
TD4PES15MP573	
TD4NES20MP573	

ENTHALPY TD SERIES CONDENSING UNITS

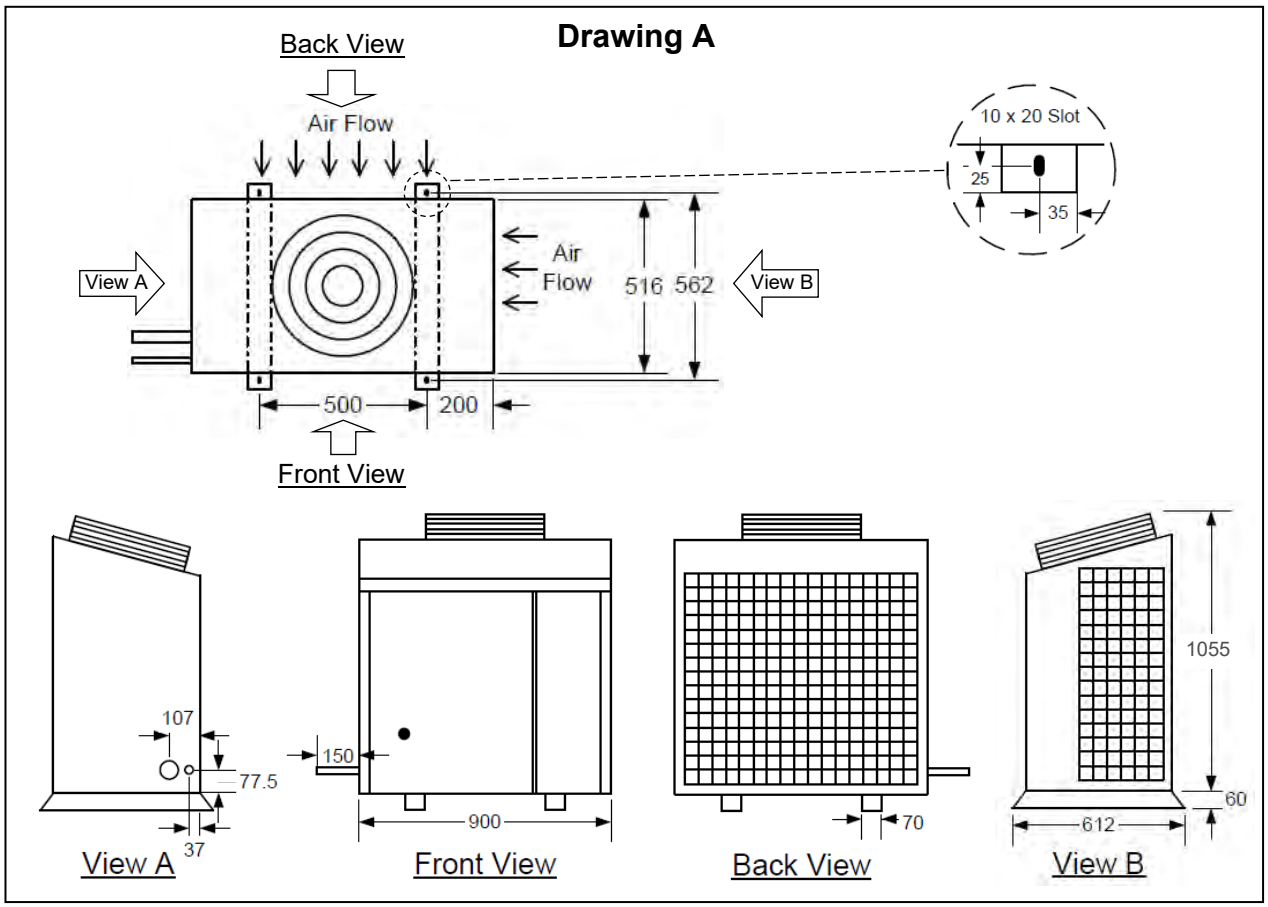
TD Semi Hermetic Unit Specifications & Dimensions

TD Semi Hermetic Unit Series R404a (R507), R134a

Unit Model	Connections Inches		Unit Weight Kg	Compressor		Condenser Fan Motor(s)				Receiver @ 90% (R404a) KG	Dimension Drawing
	Suction	Liquid		Voltage 380/400V 3Phase 50Hz	MOC maximum operating current	Voltage	Diam.	Qty	Amps per Fan		
TD2GES2ML4003	5/8”	1/2”	130	D.O.L.	5.0	230V 1Phase 50Hz	400mm	1	0.73	4.29	A
TD2FES3ML4003	5/8”	1/2”	130		6.1		400mm	1	0.73	4.29	A
TD2DES3MP123	7/8”	5/8”	195		8.6		450mm	1	1.55	8.10	B
TD2CES4MP273	1-1/8”	5/8”	265		10.0		500mm	2	3.0	12.0	C
TD4EES6MP273	1-1/8”	5/8”	280		13.6		500mm	2	3.0	12.0	C
TD4DES7MP273	1-1/8”	5/8”	285		16.5		500mm	2	3.0	12.0	C
TD4CES9MP383	1-1/8”	5/8”	325		20.2		630mm	2	2.7	12.0	D
TD4TES12MP383	1-3/8”	5/8”	385	P.W.S.	25.1		630mm	2	2.7	12.0	D
TD4PES15MP573	1-3/8”	3/4”	500		28.2		630mm	3	2.7	34.0	E
TD4NES20MP573	1-3/8”	3/4”	505		33.2		630mm	3	2.7	34.0	E

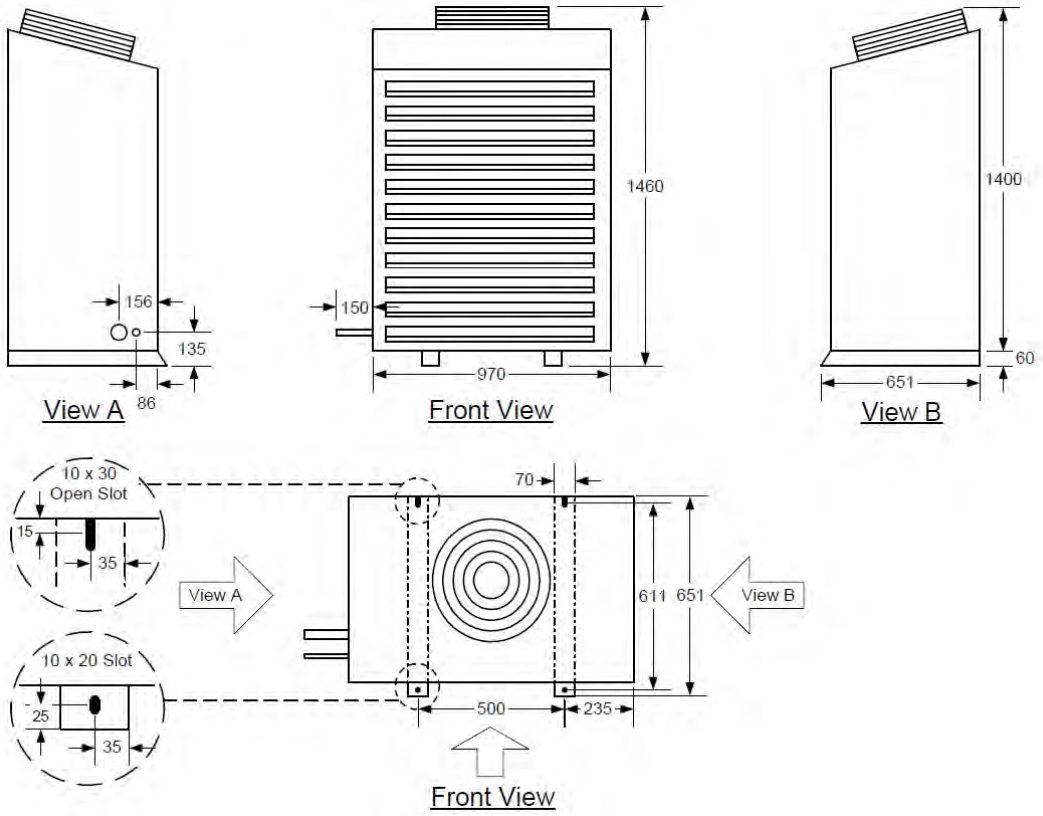
Note: Bitzer Crankcase Heaters are Internal PTC self-regulating 230 volts.

TD Semi Hermetic Unit Dimensions

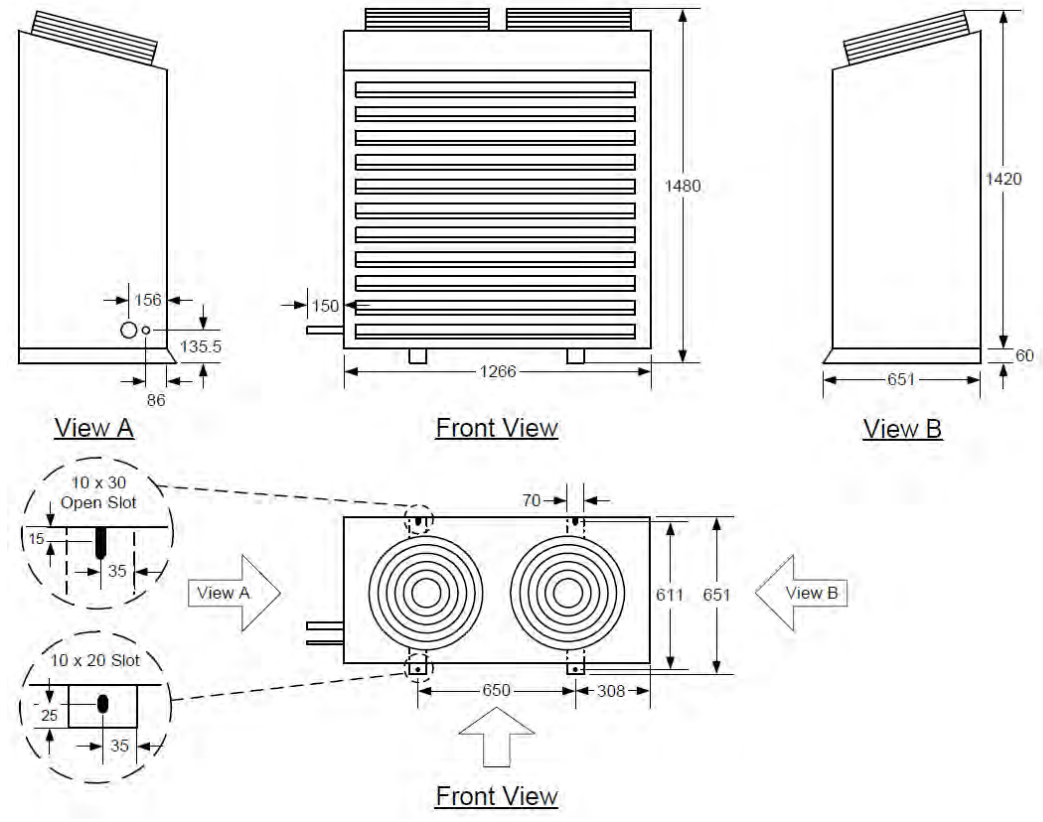


TD Semi Hermetic Unit Dimensions (cont'd)

Drawing B

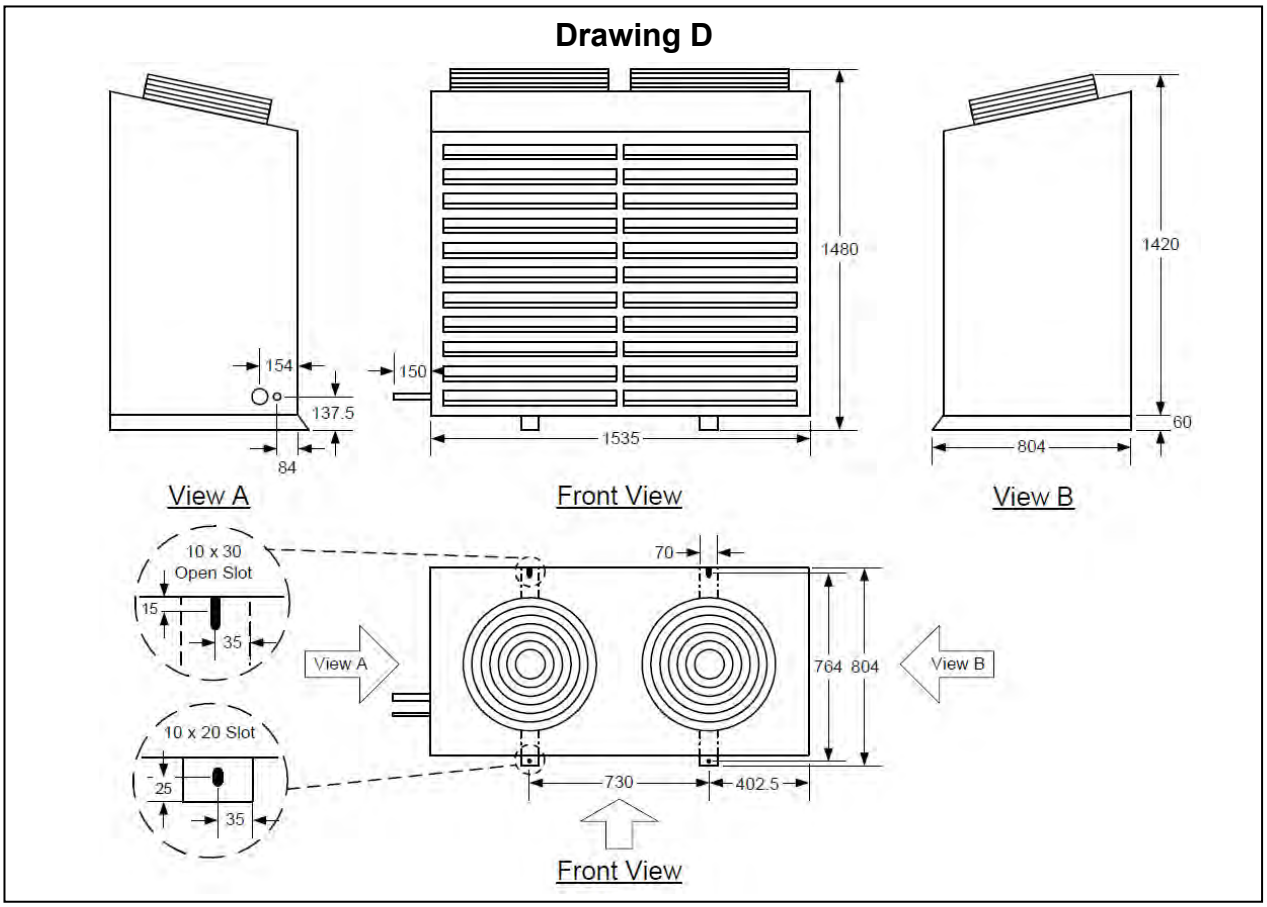


Drawing C

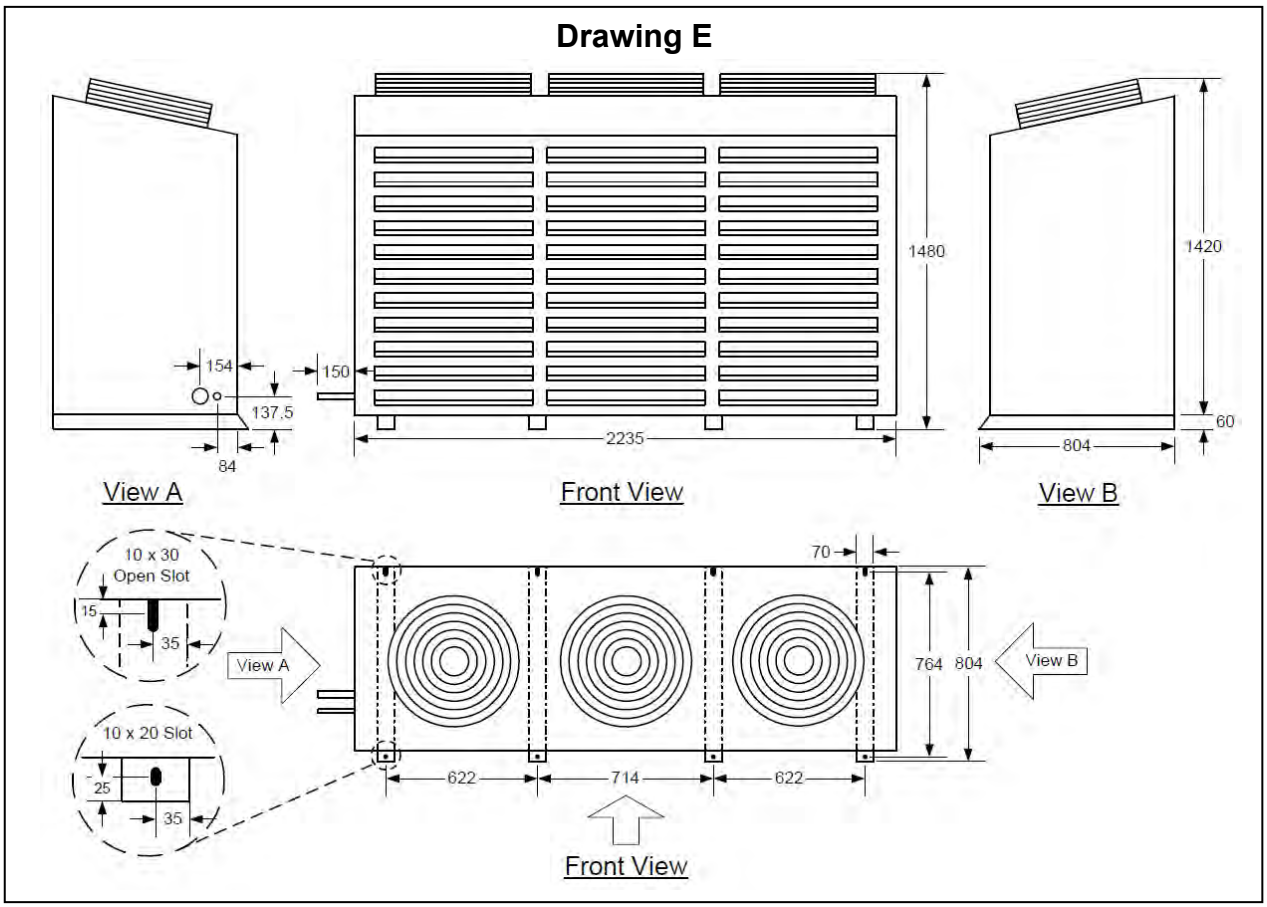


TD Semi Hermetic Unit Dimensions (cont'd)

Drawing D



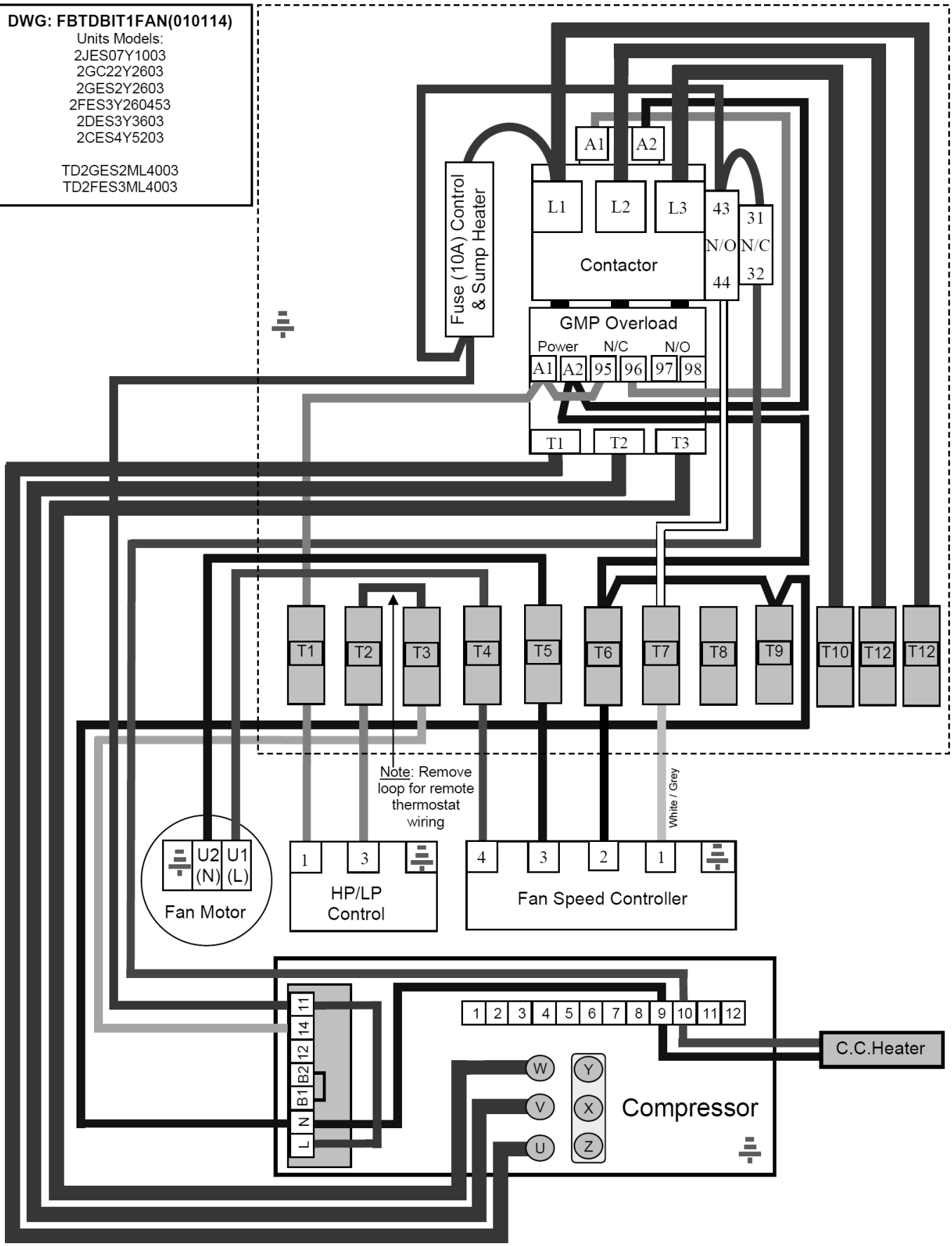
Drawing E



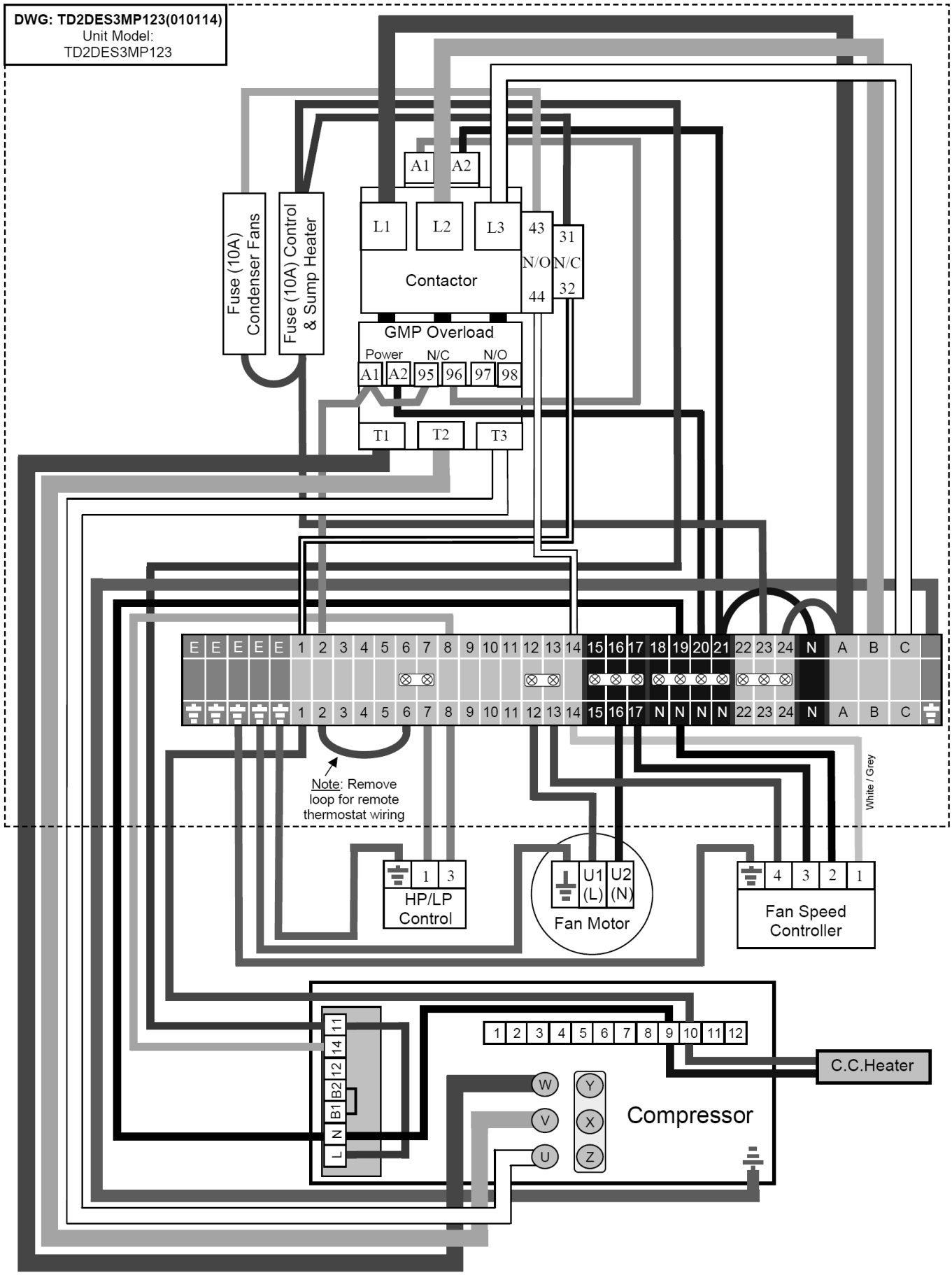
TD Semi Hermetic Unit Wiring Diagrams

DWG: FBTDBIT1FAN(010114)
Units Models:
2JES07Y1003
2GC22Y2603
2GES2Y2603
2FES3Y260453
2DES3Y3603
2CES4Y5203

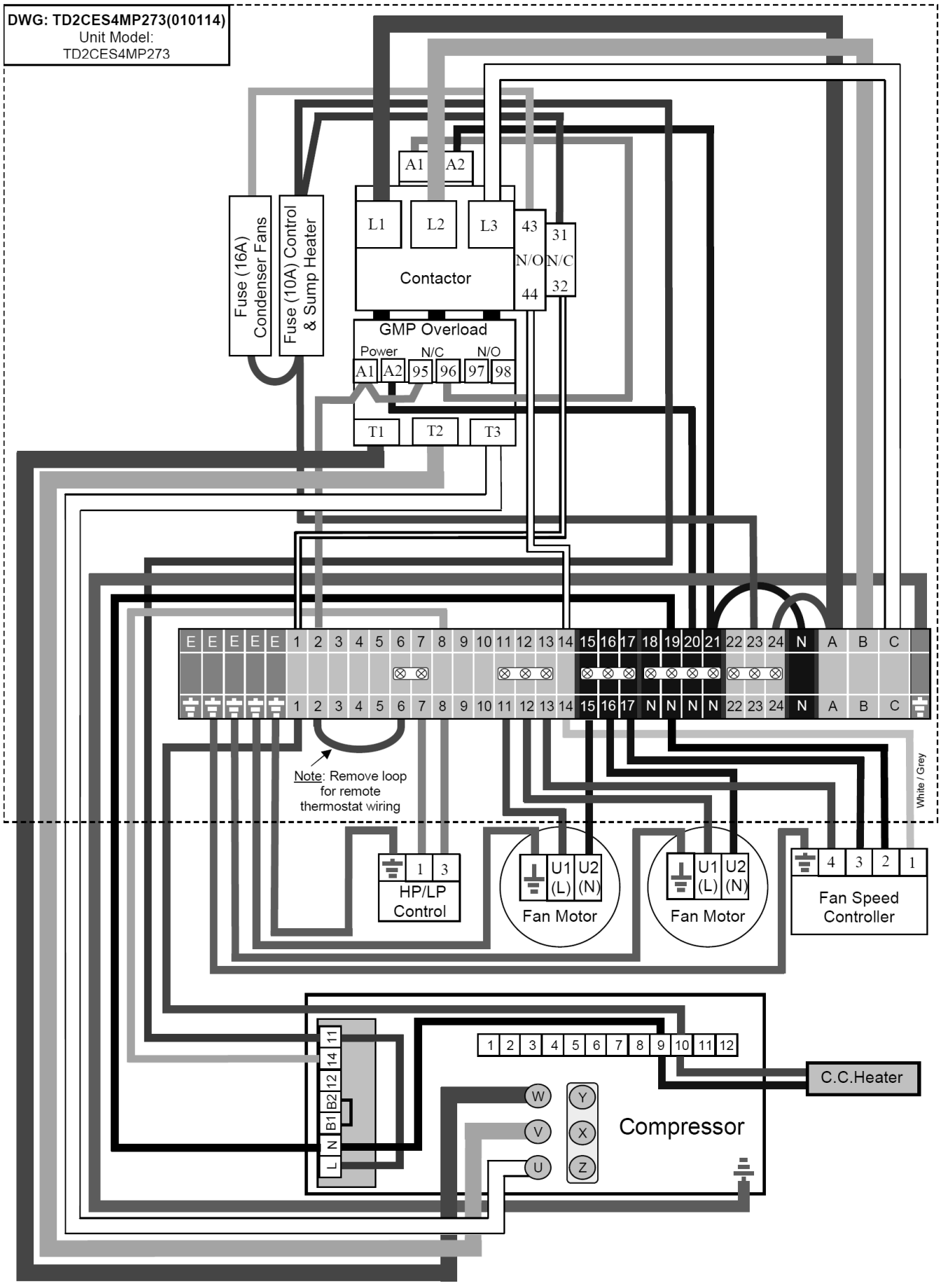
TD2GES2ML4003
TD2FES3ML4003



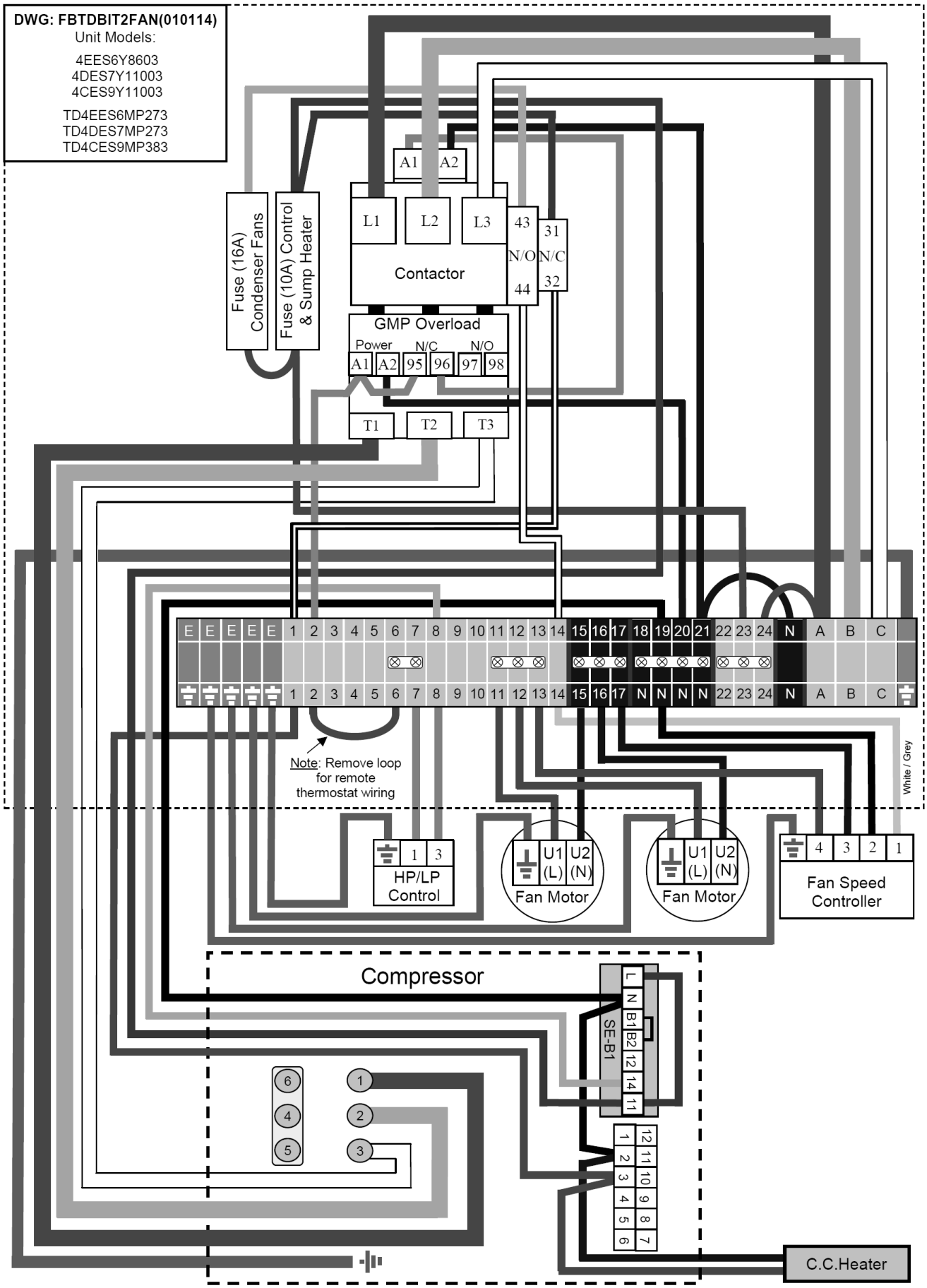
TD Semi Hermetic Unit Wiring Diagrams - cont'd



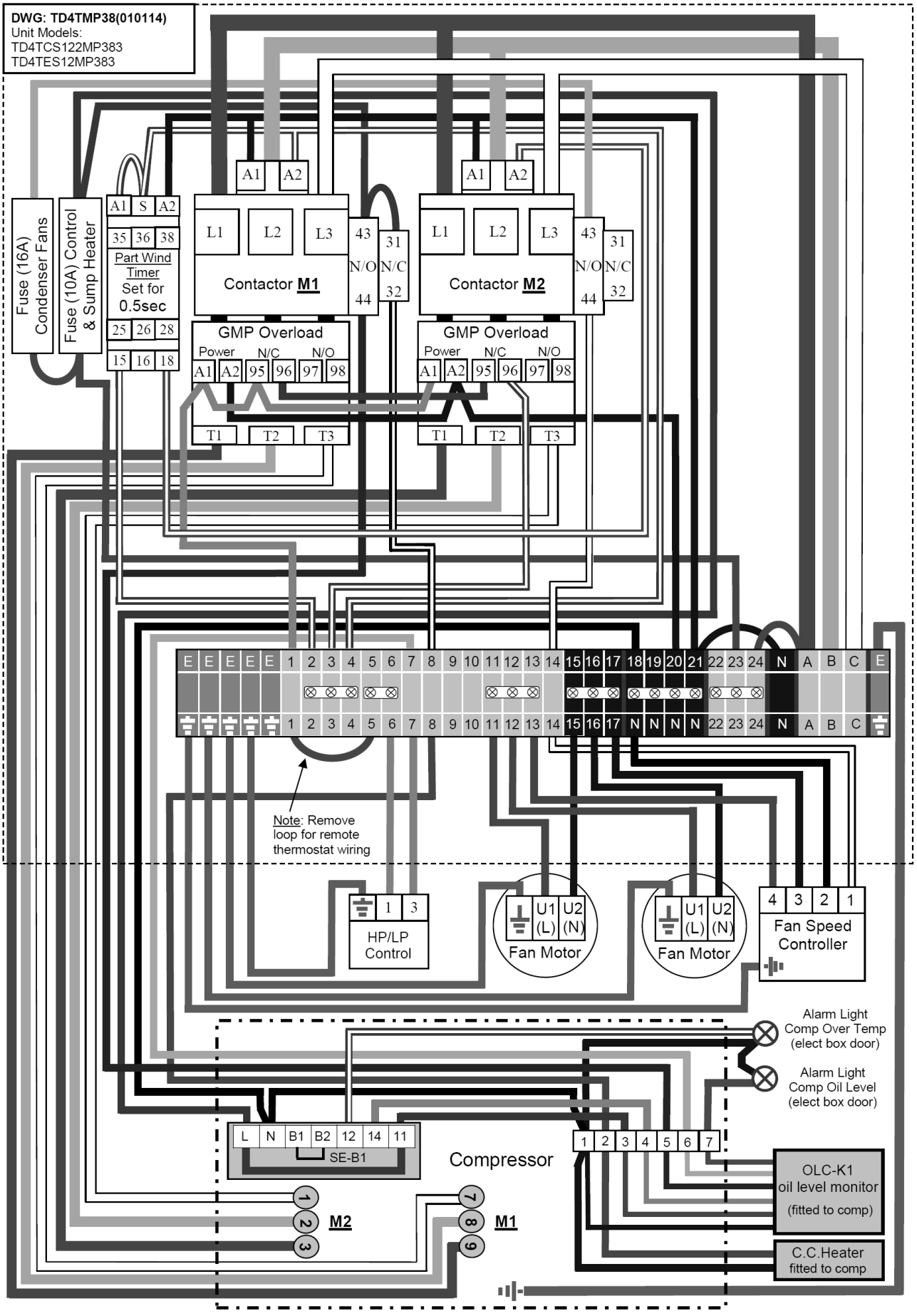
TD Semi Hermetic Unit Wiring Diagrams - cont'd



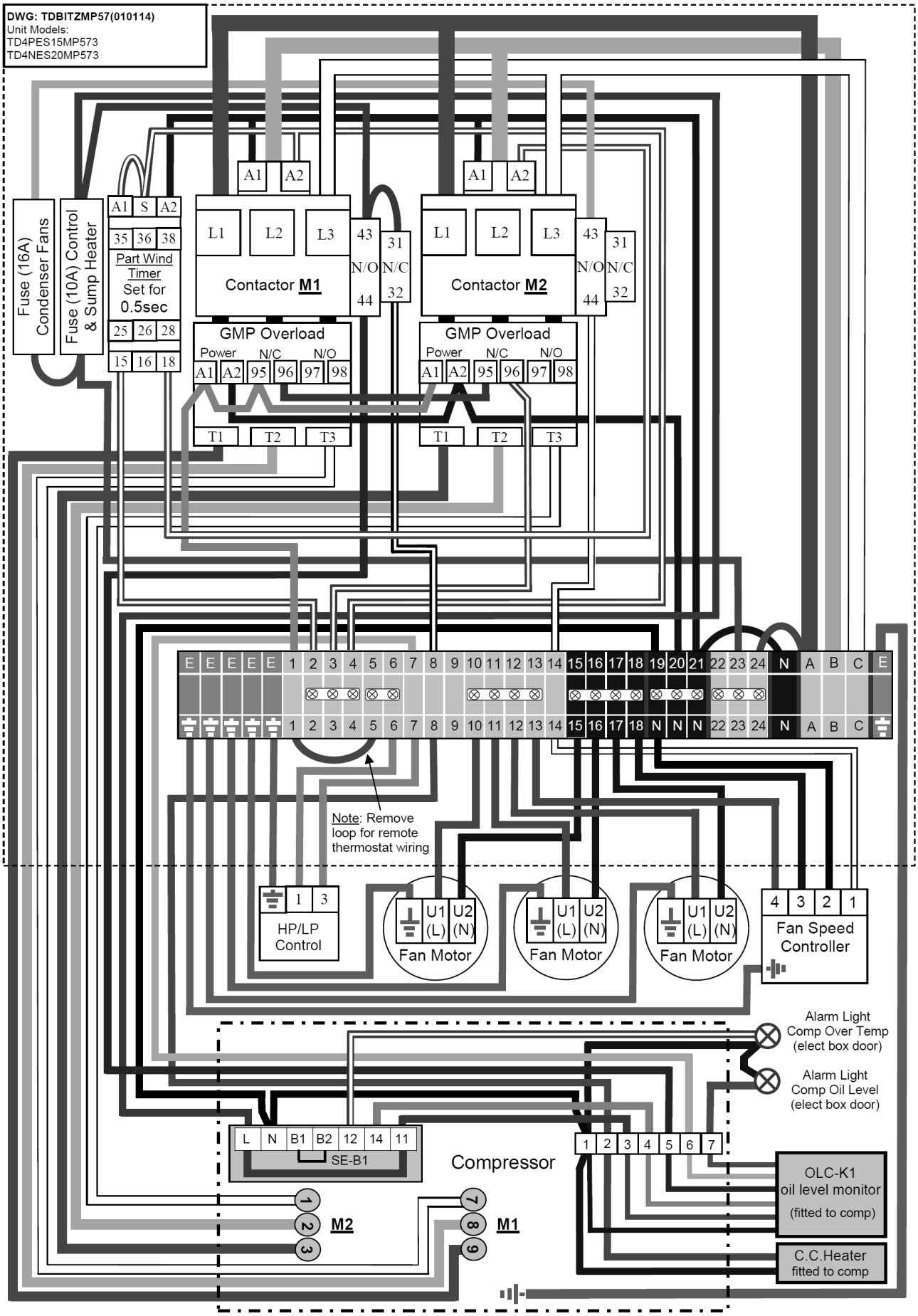
TD Semi Hermetic Unit Wiring Diagrams - cont'd



TD Semi Hermetic Unit Wiring Diagrams - cont'd



TD Semi Hermetic Unit Wiring Diagrams - cont'd



TD Semi Hermetic Unit Spare Parts

TD Semi Hermetic Unit Series R404a (R507), R134a

Part Description	Model		
	TD2GES2ML4003	TD2FES3ML4003	TD2DES3MP123
Compressor - Bitzer	2GES2Y	2FES3Y	2DES3Y
ebm Fan Motor	S4E400AP0244 (x1)	S4E400AP0244 (x1)	S4E450AU0337 (x1)
Speed Controller	RGEZ1N45MF	RGEZ1N45MF	RGEZ1N45MF
HP/LP	DNSD306X	DNSD306X	DNSD306X
Compressor Contactor	MC12B240V	MC12B240V	MC12B240V
Thermal Overload Block	GMP223P22A	GMP223P22A	GMP223P22A
Control Fuse Holder	CMS101	CMS101	CMS101
Control Fuse	10G10	10G10	10G10
Fan Fuse Holder	N/A	N/A	N/A
Fan Fuse	N/A	N/A	N/A
Oil Separator	NS0004L	NS0004L	NS1005
Liquid Receiver	1300134B	1300134B	1320315A
Receiver Outlet Valve	2605081620	2605081620	2605101620
Receiver Valve Gasket	020002800	020002800	020002800
Liquid Drier & Sight Glass	CSG084S (combo)	CSG084S (combo)	CSG165S (combo)
Electrical Box	861656	861656	AIR50650
Suction Accumulator	PA5083116C	PA5083116C	PA5083157C

TD Semi Hermetic Unit Series R404a (R507), R134a – cont'd

Part Description	Model		
	TD2CES4MP273	TD4EES6MP273	TD4DES7MP273
Compressor - Bitzer	2CES4Y	4EES6Y	4DES7Y
ebm Fan Motor	S4E500AM0301 (x2)	S4E500AM0301 (x2)	S4E500AM0301 (x2)
Speed Controller	RGEZ1Q45MF	RGEZ1Q45MF	RGEZ1Q45MF
HP/LP	DNSD306X	DNSD306X	DNSD306X
Compressor Contactor	MC12B240V	MC22B240V	MC22B240V
Thermal Overload Block	GMP223P22A	GMP223P22A	GMP223P22A
Control Fuse Holder	CMS101	CMS101	CMS101
Control Fuse	10G10	10G10	10G10
Fan Fuse Holder	CMS101	CMS101	CMS101
Fan Fuse	10G16	10G16	10G16
Oil Separator	NS1007	NS1007	NS1007
Liquid Receiver	1320620A	1320620A	1320620A
Receiver Outlet Valve	2605101620	2605101620	2605101620
Receiver Valve Gasket	020002800	020002800	020002800
Liquid Drier & Sight Glass	CSG165S (combo)	CSG165S (combo)	CSG165S (combo)
Electrical Box	AIR50650	AIR50650	AIR50650
Suction Accumulator	1010853P	1010853P	1010853P

ENTHALPY TD SERIES CONDENSING UNITS

TD Semi Hermetic Unit Spare Parts

TD Semi Hermetic Unit Series R404a (R507), R134a – cont'd

Part Description	Model			
	TD4CES9MP383	TD4TES12MP383	TD4PES15MP573	TD4NES20MP573
Compressor - Bitzer	4CES9Y	4TES12Y	4PES15Y	4NES20Y
ebm Fan Motor	S6E630AN0101 (x2)	S6E630AN0101 (x2)	S6E630AN0101 (x3)	S6E630AN0101 (x3)
Speed Controller	RGEZ1Q45MF	RGEZ1Q45MF	RGEZ1Q45MF	RGEZ1Q45MF
HP/LP	DNSD306X	DNSD306X	DNSD306X	DNSD306X
Compressor Contactor	MC32A240V	MC22B240V (x2)	MC32A240V (x2)	MC32A240V (x2)
Thermal Overload Block	GMP403P40A	GMP223P22A (x2)	GMP403P40A (x2)	GMP403P40A (x2)
Control Fuse Holder	CMS101	CMS101	CMS101	CMS101
Control Fuse	10G10	10G10	10G10	10G10
Fan Fuse Holder	CMS101	CMS101	CMS101	CMS101
Fan Fuse	10G16	10G16	10G16	10G16
Oil Separator	NS1007	NS1007	NS1011	NS1011
Liquid Receiver	1320620A	1320620A	HHR018	HHR018
Receiver Outlet Valve	2605101620	2605101620	2605122030	2605122030
Receiver Outlet Valve Gasket	020002800	020002800	020002802	020002802
Receiver Inlet Valve	-	-	2605142030	2605142030
Receiver Inlet Valve Gasket	-	-	020002802	020002802
Liquid Drier & Sight Glass	C305S & SA15S	C305S & SA15S	C416S & SA16S	C416S & SA16S
Electrical Box	AIR50650	BM40515G	BM40515G	BM40515G
Suction Accumulator	1010854P	1010854P	1010854P	1010854P
Timer - Part Wind Start	-	CRM93H	CRM93H	CRM93H
Oil Level Monitor - OLC-K1	-	34733403	34733403	34733403





ENTHALPY CONDENSING UNITS

Sound Data

Airefrig Part Number	High Speed dB(A)	Speed Controlled dB(A)
Hermetic - Flat Base Series Units		
CS10100A1	58	no speed controller on this unit
CS14260A1/3	58	53
CS18260A1/3	58	57
CS20260A4503	62	58
CS2736053	64	63
CS3336053	64	62
Semi-Hermetic - Flat Base Series Units		
2JES07Y1003	60	58
2GES2Y2603	63	62
2FES3Y260453	62	58
2DES3Y3603	60	59
2CES4Y5203	62	57
4EES6Y8603	61	54
4DES7Y11003	62	55
4CES9Y11003	63	56
Hermetic - TD Series Units		
TDCS14ML4001/3	61	53
TDCS18ML4001/3	60	53
TDCS20ML4003	61	53
TDCS27MP123	59	57
TDCS33MP123	60	58
TDMTZ72MP273	65	61
TDMTZ100MP383	66	65
TDMTZ125MP383	67	64
TDMTZ144MP383	67	66
Semi-Hermetic - TD Series Units		
TD2GES2ML4003	58	55
TD2FES3ML4003	57	55
TD2DES3MP123	60	57
TD2CES4MP273	60	56
TD4EES6MP273	64	55
TD4DES7MP273	63	58
TD4CES9MP383	61	58
TD4TES12MP383	67	66
TD4PES15MP573	64	61
TD4NES20MP573	63	61

- Sound Power level measurements were performed in accordance with AS1217.5:1985 on each Enthalpy unit model listed above.
- Data above has been calculated to sound pressure @ 3 metres in accordance with AS1217.5:1985
- Speed controlled data is based on an ambient temperature of 25 degree Celsius.

ENTHALPY CONDENSING UNITS

Shipping Dimensions & Weights

Unit Model	Overall Dimensions (mm)			Shipping Weight (KG)
	Depth	Width	Height	
Hermetic - Flat Base Series Units				
CS10100A1	790	620	610	80
CS14260A1/3	810	860	830	105
CS18260A1/3	810	860	830	110
CS20260A4503	810	860	830	110
CS2736053	895	1100	885	140
CS3336053	895	1100	885	145
Semi-Hermetic - Flat Base Series Units				
2JES07Y1003	790	620	610	95
2GES2Y2603	810	860	830	120
2FES3Y260453	810	860	830	120
2DES3Y3603	895	1100	885	190
2CES4Y5203	895	1100	885	195
4EES6Y8603	1100	1600	1120	325
4DES7Y11003	1100	1600	1120	335
4CES9Y11003	1100	1600	1120	335
Hermetic - TD Series Units				
TDCS14ML4001/3	700	1210	1250	180
TDCS18ML4001/3	700	1210	1250	180
TDCS20ML4003	700	1210	1250	180
TDCS27MP123	800	1300	1670	235
TDCS33MP123	800	1300	1670	235
TDMTZ72MP273	800	1600	1670	320
TDMTZ100MP383	1000	1900	1670	400
TDMTZ125MP383	1000	1900	1670	405
TDMTZ144MP383	1000	1900	1670	410
Semi-Hermetic - TD Series Units				
TD2GES2ML4003	700	1210	1250	200
TD2FES3ML4003	700	1210	1250	200
TD2DES3MP123	800	1300	1670	280
TD2CES4MP273	800	1600	1670	365
TD4EES6MP273	800	1600	1670	380
TD4DES7MP273	800	1600	1670	385
TD4CES9MP383	1000	1900	1670	440
TD4TES12MP383	1000	1900	1670	495
TD4PES15MP573	900	2500	1680	650
TD4NES20MP573	900	2500	1680	655

COPELAND SCROLL CONDENSING UNITS

R404a – Scroll Condensing Units

Airefrig Part Number	H/P (Nominal)	Ambient Temp ºC	Refrigeration Capacity Watts						
			Evaporating Temperature ºC						
			-25	-20	-15	-10	-5	0	5
ZXE201	2.0	32	2500	3060	3590	4120	4680	5290	5960
		38	1710	2220	2700	3160	3640	4160	4730
		43	1390	1940	2430	2890	3340	3810	4300
ZXE401	4.0	32	3980	4960	5930	6930	8010	9200	10560
		38	3470	4480	5440	6380	7360	8400	9570
		43	2780	3870	4860	5780	6690	7610	8600
ZXE601	6.0	32	6060	7530	9060	10720	12580	14720	17200
		38	5220	6740	8250	9830	11550	13480	15690
		43	4270	5900	7480	9070	10740	12570	14630
ZXE751	8.0	32	6720	8330	10010	11820	13860	16200	18920
		38	5660	7300	8430	10620	12470	14540	16920
		43	4520	6260	7930	9610	11380	13320	15500

Note: Capacities at 18.3ºC return gas and 0ºC subcooling.

The ZXE series of outdoor refrigeration Scroll condensing units are specifically designed to cater for a wide range of refrigeration applications covering medium to high evaporating temperatures.
They feature low noise levels, advanced electronic protection and numerous accessories fitted as standard items.

Standard Features:

- Copeland Scroll Compressor
- Rotalock Valves
- HP & LP fixed setting switches
- LP adjustable control
- Liquid Line Drier & Sight Glass
- Oil Separator
- Diagnostics Module
- Advanced Electronic Protection
- Liquid Injection Protection
- Phase Rotation, Loss & Imbalance Protection
- Crankcase Heater
- High Ambient Condenser
- Liquid Receiver
- Sickle Blade Condenser Fan(s) - Single Phase
- Condenser Fan Speed Control
- 3 Phase Contactor
- Circuit Breaker/Isolating Switch
- Pre - Wired
- Pre – Charged with POE Oil
- Low Noise Level

Prices

Airefrig Part Number	List Price Excl GST
ZXE200	
ZXE401	
ZXE601	
ZXE751	





COPELAND SCROLL CONDENSING UNITS

R22 – Scroll Condensing Units

Airefrig Part Number	H/P (Nominal)	Ambient Temp ºC	Refrigeration Capacity Watts				
			Evaporating Temperature ºC				
			-15	-10	-5	0	5
ZXE201	2.0	32	2650	3330	4010	4750	5610
		38	2380	3110	3810	4550	5370
		43	1930	2740	3480	4230	5060
ZXE401	4.0	32	5460	6730	8130	9620	11160
		38	4720	6010	7420	8930	10480
		43	4090	5370	6780	8270	9800
ZXE601	6.0	32	7710	9630	11710	13940	16300
		38	6420	8420	10570	12850	15260
		43	-	7150	9400	11780	14260
ZXE751	8.0	32	9450	11640	14120	16960	20210
		38	8830	10850	13250	16080	19420
		43	8180	10000	12290	15090	18490

Note: Capacities at 18.3ºC return gas and 0ºC subcooling.

The ZXE series of outdoor refrigeration Scroll condensing units are specifically designed to cater for a wide range of refrigeration applications covering medium to high evaporating temperatures.
They feature low noise levels, advanced electronic protection and numerous accessories fitted as standard items.

Standard Features:

- Copeland Scroll Compressor
- Rotalock Valves
- HP & LP fixed setting switches
- LP adjustable control
- Liquid Line Drier & Sight Glass
- Oil Separator
- Diagnostics Module
- Advanced Electronic Protection
- Liquid Injection Protection
- Phase Rotation, Loss & Imbalance Protection
- Crankcase Heater
- High Ambient Condenser
- Liquid Receiver
- Sickle Blade Condenser Fan(s) - Single Phase
- Condenser Fan Speed Control
- 3 Phase Contactor
- Circuit Breaker/Isolating Switch
- Pre - Wired
- Pre – Charged with POE Oil
- Low Noise Level

Prices

Airefrig Part Number	List Price Excl GST
ZXE200	
ZXE401	
ZXE601	
ZXE751	



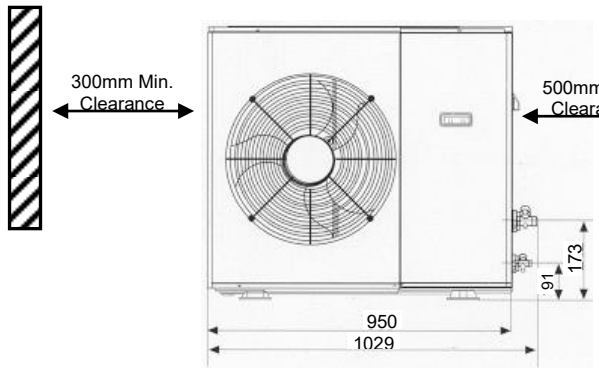


COPELAND SCROLL CONDENSING UNITS

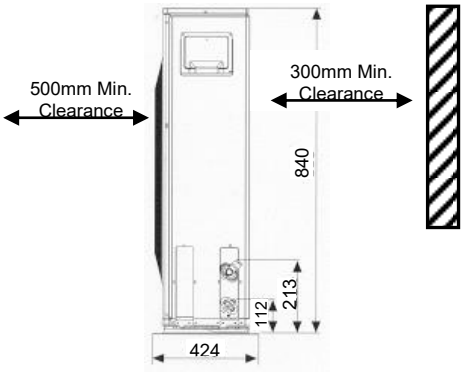
ZXE Series Unit Specifications

ZXE Series Units

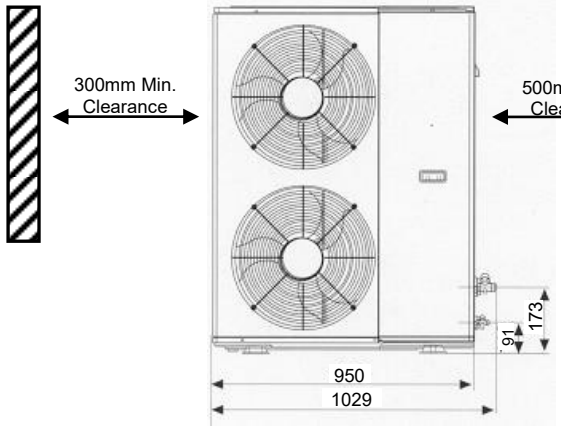
Part Description	Unit Models			
	ZXE200	ZXE401	ZXE601	ZXE751
Nominal Horsepower	2.0HP	4.0HP	6.0HP	8.0HP
Comp. Voltage	380-420/3/50	380-420/3/50	380-420/3/50	380-420/3/50
Comp. Max Run amps	4.3	7.4	11.5	13.2
Comp. Locked Rotor Amps	26.0	49.3	74.0	101.0
Fan Motor Voltage	230/1/50	230/1/50	230/1/50	230/1/50
Fan Motor Total Watts	60	60	120	120
Fan Motor Qty	1	1	2	2
Fan Blade Diameter mm	450	450	450	450
Fan Speed RPM	830	830	830	830
Receiver Cap @ 80% kg	7.6	7.6	7.6	7.6
Oil (use POE 32 for top up)	Mobil EAL Artic 22CC	Mobil EAL Artic 22CC	Mobil EAL Artic 22CC	Mobil EAL Artic 22CC
Oil Charge Litre	1.0	1.85	1.85	1.85
Suction Connection ODF	3/4”	7/8”	7/8”	7/8”
Liquid Connection ODF	1/2”	1/2”	1/2”	1/2”
Weight kg	95	112	121	140



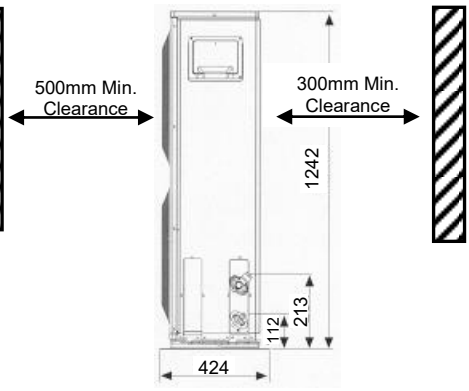
ZXE 201, 301, 401



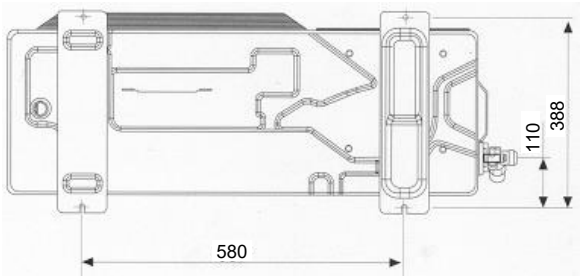
ZXE 201, 301, 401



ZXE 501, 601, 751



ZXE 501, 601, 751



ZXE 201, 301, 401, 501, 601, 751

COPELAND SCROLL CONDENSING UNITS

ZXE Series Unit Spare Parts

Unit Spare Parts

Part Description	Unit Models					
	ZXE201	ZXE301	ZXE401	ZXE501	ZXE601	ZXE751
Compressor Model	ZX15KCETFD524	ZX21KCETFD524	ZX30KCETFD524	ZX38KCETFD524	ZX45KCETFD524	ZX51KCETFD524
Capillary Tube	028837800	028837801	028837802	028837803	028837805	028837805
Elect Expan. Valve (EXV)	010700700			010700700		
EXV Coil	023006300			023006301		
Fan Motor	050693100 or 050030800			050693100 or 050030800		
Fan Blade	083693100 (4 bladed fan)			083693100 (4 bladed fan)		
Diagnostic Module	043006200 - for units with 1 x control PCB 043012500 - for units with 2 x PCB's (control & power)			043006200 - for units with 1 x control PCB 043012500 - for units with 2 x PCB's (control & power)		
Contactor	012024000			012024000		
Fuse	071057400			071057400		
Connector - Fuse Holder	521021800			521021800		
Capacitor	014006500			014006500		
Sensor in Coil	043008200			043008200		
Sensor Ambient	043007100			043007100		
Sensor Mid Coil	043007200			043007200		
Thermistor - Discharge	043011100			043011100		
Crankcase Heater	018008401	018008401	018008400	018008400		
Receiver	077003300			077003300		
HP Switch – Fixed setting	085705000			085705200		
LP Switch – Fixed setting	085705100			085705300		
Cover Handle	005719300			005719300		
Hand Grip	005719301			005719301		
Holder for Sensor	032059200			032059200		
Oil Separator	077002800			077002800		
Circuit Breaker	071064300			071064301		

Units with Single Control PCB (Earlier model units)

E2 Control Board	**Note: Single board option 543005200 no longer available - use 543010302, 543008000, 043012500 & ZXEPCBKIT

Units with 2 x Control PCB's (Later model units)

Main Control Board (large)	543010302	543010302
Power Board (small)	543008000	543008000

**Note: The single E2 control board (543005200) can be replaced by using a Main Control Board (543010302) , Power Board (543008000) , Diagnostic PCB Module (043012500) & ZXEPCBKIT.





COPELAND SCROLL CONDENSING UNITS

ZXE Series Unit Spare Parts

Unit Spare Parts

Part Description	Unit Models					
	ZXE200	ZXE300	ZXE400	ZXE500	ZXE600	ZXE750
Compressor Model	ZX15KCETFD524	ZX21KCETFD524	ZX30KCETFD524	ZX38KCETFD524	ZX45KCETFD524	ZX51KCETFD524
Capillary Tube	028843603	028843602	028843600	028848600	02843601	028843604
Elect Expan. Valve (EXV)	010700700			010700700		
EXV Coil	023100100			023100101		
EXV Strainer	013701700			013701700		
Fan Motor	050693100 / 050030800 (plus ZXEKIT required)			050693100 / 050030800 (plus ZXEKIT required)		
Fan Blade	083693100 (4 blade fan now replaces older 3 blade fan)			083693100 (4 blade fan now replaces older 3 blade fan)		
Fan Motor Mount Bracket	074721900			074722300		
Diagnostic Module	043006200 - for units with 1 x control PCB 043012500 - for units with 2 x PCB's (control & power)			043006200 - for units with 1 x control PCB 043012500 - for units with 2 x PCB's (control & power)		
Contactor	012100300			012100300		
Contactor Block	012100400			012100400		
Block Terminal Big	080011100			080011100		
Block Terminal Small	080010700			080010700		
Fuse	071057400			071057400		
Connector - Fuse Holder	521021800			521021800		
Capacitor	014005000			014005000		
Top Cap Thermistor	043007000			043007000		
Sensor in Coil	043008200			043008200		
Sensor Ambient	043007100			043007100		
Sensor Mid Coil	043007200			043007200		
Crankcase Heater	018005700			018005700		
Receiver	077002400			077002400		
HP Switch – Fixed setting	085704400			085704401		
LP Switch – Fixed setting	085704500			085704501		
Cover Top	005717900			005717900		
Cover - Panel Front Right	005718900			005718901		
Cover - Right	005719100			005719101		
Cover - Back	005719000			005719001		
Cover - Left	005719200			005719201		
Fan Shroud	045023000			045023001		
Fan Guard	024024700			024024700		
Cover Handle	005719300			005719300		
Hand Grip	005719301			005719301		
Holder for Sensor	032059200			032059200		
Oil Separator	077002800			077002800		
Circuit Breaker	071701300			071701300		

Units with Single Control PCB (Earlier model units)

E2 Control Board	**Note: Single board option 543005200 no longer available - use 543010302, 543008000, 043012500 & ZXEPCBKIT

Units with 2 x Control PCB's (Later model units)

Main Control Board (large)	543010302	543010302
Power Board (small)	543008000	543008000

**Note: The single E2 control board (543005200) can be replaced by using a Main Control Board (543010302) , Power Board (543008000) , Diagnostic PCB Module (043012500) & ZXEPCBKIT.

CS Series

Condensing Units

Standard Features:

- Bitzer Octagon Semi hermetic Compressor
- Fully wired Electrical Panel
- Three Phase Isolator
- Condenser with dedicated Sub-Cooling Circuit
- Dual Pressure Control
- Sump Heater
- Liquid Receiver, Drier, Sight Glass & Line Valve
- Electronic Motor Protection Device
- Oil Separator
- Oil Charge BSE32 (B5 on request)
- Powder Coated Weatherproof design



Optional Features:

- Suction Accumulator
- Oil Monitoring Device
- Additional Pressure Controls
- Fan Speed Controller
- Capacity Control Head (4 cyl only)
- Head Cooling Fan
- MP15 Phase fail Protection
- Gold Epoxy Finned Condenser



BITZER CS CONDENSING UNITS

Refrigerant R404A – R507

Airefrig Part Number	Amb Temp ºC	Refrigeration Capacity Watts Evaporating Temperature ºC											List Price Ex GST
		7.5	5	0	-5	-10	-15	-20	-25	-30	-35	-40	
2HC12YCS14P	35				3940	3350	2750	2390	1780	1360	1000	700	P.O.A.
	38				3720	3110	2560	2070	1630	1250	901	620	
	40				3580	2990	2460	1990	1560	1190	860	580	
	43				3370	2810	2300	1850	1450	1090	780	510	
2HC22YCS14P	35	5860	5560	4710	3940	3350	2750	2390	1780	1360			P.O.A.
	38	5650	5250	4500	3810	3350	2750	2390	1780	1360			
	40	5540	5060	4330	3670	3070	2520	2030	1590	1210			
	43			4090	3460	2890	2360	1900	1480	1110			
2GC22YCS14P	35	6520	6120	5330	4650	3760	3190	2600	2070	1600	1190	840	P.O.A.
	38	6210	5780	5000	4260	3590	2970	2430	1940	1500	1130	800	
	40		5580	4820	4100	3450	2860	2330	1860	1440	1070	750	
2GC22YCS26P*	40	6520	6050	5170	4380	3650	3010	Data Available on Request					P.O.A.
	43	6170	5720	4890	4140	3450	2830						
2FC22YCS14P	35				5170	4410	3720	3050	2440	1910	1430	1100	P.O.A.
	38				5000	4250	3550	2930	2360	1850	1400	1010	
	40				4820	4080	3410	2810	2260	1770	1330	950	
	43					3840	3210	2640	2110	1640	1230	870	
2FC32YCS26P	35	8470	7630	6600	5800	4750	3940	3210	2570	2020			P.O.A.
	38	8050	7510	6460	5500	4620	3830	3120	2490	1940			
	40	7760	7230	6230	5300	4450	3680	2990	2390	1850			
2FC32YCS36P*	40	8340	7730	6610	5570	4660	3830	Data Available on Request					P.O.A.
	43	7880	7310	6240	5270	4400	3610						
2EC22YCS26P	35				6610	5590	4680	3820	3070	2400	1810	1300	P.O.A.
	38				6430	5430	4530	3710	2980	2330	1760	1270	
	40				6200	5240	4360	3570	2860	2230	1680	1200	
	43				5860	4950	4120	3370	2680	2080	1560	1100	
2EC32YCS26P	35	9900	9320	8050	6900	5830	4860	3990	3210	2520			P.O.A.
	38	9490	8850	7660	6550	5530	4610	3760	3020	2360			
	43			7380	6320	5330	4440	3620	2900	2260			
2EC32YCS34P*	40	10030	9570	8180	6910	5770	4760	Data Available on Request					P.O.A.
	43	9790	9080	7760	6540	5460	4490						
2DC22YCS26P	35				7610	6460	5440	4450	3590	2830	2150	1570	P.O.A.
	38				7210	6120	5100	4190	3370	2640	2000	1440	
	40				6940	5880	4910	4020	3230	2520	1890	1350	
	43					5540	4620	3780	3020	2340	1750	1230	
2DC32YCS24P	35	11790	10940	9460	8070	6810	5670	4650	3730	2920			P.O.A.
	38	11140	10400	8980	7660	6470	5370	4390	3510	2740			
	40		10030	8660	7380	6210	5170	7210	3360	2610			
2DC32YCS34P*	40	11640	10810	9250	7830	6560	5410	Data Available on Request					P.O.A.
	43	11020	10220	8760	7410	6190	5100						

Performance based on 20ºC Suction Gas Temperature, 5K Liquid Sub Cooling, 50Hz.
* Indicates High Ambient Models.
Shaded areas require additional cooling &/or return vapour limitations – contact Airefrig Australia for further information.

BITZER CS CONDENSING UNITS

Refrigerant R404A – R507 (cont'd)

Airefrig Part Number	Amb Temp ºC	Refrigeration Capacity Watts Evaporating Temperature ºC											List Price Ex GST
		7.5	5	0	-5	-10	-15	-20	-25	-30	-35	-40	
2CC32YCS24P	35				9440	8020	6730	5550	4490	3540	2710	1990	P.O.A.
	38				8940	7610	6380	5250	4240	3300	2540	1840	
	40				8610	7330	6130	5050	4080	3200	2420	1750	
	43					6990	5800	4760	3830	3000	2260	1610	
2CC42YCS34P	35	14780	13760	11850	10120	8530	7100	5810	4670	3660			P.O.A.
	38	14040	13110	11300	9620	8100	6730	5500	4410	3450			
	40	13550	12630	10900	9280	7820	6480	5290	4240	3310			
2CC42YCS434P*	40	14380	13360	11430	9690	8120	6700	Data Available on Request					P.O.A.
	43	13640	12660	10830	9170	7680	6340						
4FC32YCS36P	35				10420	8850	7420	6120	4930	3890	2980	2180	P.O.A.
	38				9880	8390	7030	5770	4650	3660	2780	2010	
	40				9510	8100	6760	5550	4460	3490	2640	1900	
	43					7630	6370	5220	4190	3260	2450	1740	
4FC52YCS34P	35	15940	14870	12840	10960	9270	7720	6320	5090	3990			P.O.A.
	38	15140	14130	12190	10410	8790	7310	5980	4790	3750			
	43		13630	11770	10030	8460	7020	5740	4590	3580			
4FC52YCS434P*	40	15620	14490	12410	10540	8840	7310	Data Available on Request					P.O.A.
	43	14750	13270	11770	9970	8340	6890						
4EC42YCS34P	35				12860	10950	9180	7570	6120	4820	3680	2690	P.O.A.
	38				12190	10360	8690	7140	5750	4520	3430	2480	
	40				11730	9970	8350	6860	5520	4320	3260	2340	
	43					9390	7850	6440	5170	4020	3020	2140	
4EC62YCS434P	35	20400	18990	16360	13960	11770	9780	8000	6420	5020			P.O.A.
	38	19330	18000	15520	13220	11140	9260	7540	6030	4700			
	40	18630	17360	14980	12760	10730	8910	7250	5790	4480			
4EC62YCS54P*	40	19700	18350	15740	13300	11140	9200	Data Available on Request					P.O.A.
	43	18630	17320	14850	12570	10530	8660						
4DC52YCS56P	35				15880	13490	11310	9330	7530	5930	4540	3320	P.O.A.
	38				15030	12770	10690	8800	7090	5570	4230	3070	
	40				14480	12290	10290	8460	6810	5340	4040	2900	
	43					1590	9680	7960	6380	4980	3740	2660	
4DC72YCS54P	35	24600	22900	19730	16790	14110	11690	9540	7610	5930			P.O.A.
	38	23400	21800	18700	15920	13380	11070	9010	7170	5550			
	40	22600	21000	18050	15340	12890	10640	8640	6870	5300			
4DC72YLCS1LS*	40	23800	22100	18890	15980	13350	11000	Data Available on Request					P.O.A.
	43	22600	20900	17860	15120	12620	10370						

Performance based on 20ºC Suction Gas Temperature, 5K Liquid Sub Cooling, 50Hz.

* Indicates High Ambient Models.

Shaded areas require additional cooling &/or return vapour limitations – contact Airefrig Australia for further information.

BITZER CS CONDENSING UNITS

Refrigerant R404A – R507 (Cont'd)

Airefrig Part Number	Amb Temp ºC	Refrigeration Capacity Watts Evaporating Temperature ºC										List Price Ex GST
		7.5	5	0	-5	-10	-15	-20	-25	-30	-35	-40	
4CC62YCS54P	35				15950	16620	13900	11460	9270	7330	5640	4170	P.O.A.
	38				18610	15760	13170	10830	8740	6900	5280	3860	
	40				17970	15190	12690	10410	8390	6600	5030	3660	
	43				16960	14350	11960	9820	7880	6170	4670	3370	
4CC92YCS54P	35		26300	22900	19590	16620	13900	11460	9270	7330			P.O.A.
	38		25000	21700	18610	15760	13170	10830	8740	6900			
	43			21000	17970	15190	12690	10410	8390	6600			
4CC92YLCS1HS*	40	28400	26400	22700	19300	16240	13480	Data Available on Request					P.O.A.
	43	26900	25100	21500	18300	15380	12760						

Performance based on 20ºC Suction Gas Temperature, 5K Liquid Sub Cooling, 50Hz.
* Indicates High Ambient Models.
Shaded areas require additional cooling &/or return vapour limitations – contact Airefrig Australia for further information.

Refrigerant R22

Airefrig Part Number	Amb Temp ºC	Refrigeration Capacity Watts Evaporating Temperature ºC								List Price Ex GST
		10	5	0	-5	-10	-15	-20	-25	-30	
2HC12YCS14P	35				3740	3090	2500	1980	1710	1290	P.O.A.
2HC22YCS14P	35	6140	5270	4480	3750	3100	2500	1980	1710	1290	
2GC22YCS14P	35	6980	6070	5140	4320	3580	2920	2590	2040	1560	
2FC22YCS14P	35				5040	4210	3460	2790	2440	1900	
2FC32YCS26P	35	8760	7520	6390	5360	4450	3630	2910	2530	1760	
2EC22YCS26P	35				6180	5090	4260	3290	2980	2310	
2EC32YCS26P	35	10110	8710	7380	6190	5100	4150	3300	2980	2310	
2DC22YCS26P	35				7140	5910	4810	3830	3320	2580	
2DC32YCS24P	35	12200	10480	8910	7450	6150	4990	3970	3410	2640	
2CC32YCS24P	35				8790	7320	5990	4810	4110	3180	
2CC42YCS34P	35	15370	13140	11160	9440	7760	6330	5040	4270	3290	
4FC32YCS36P	35				10110	8350	6760	5350	4590	3480	
4FC52YCS34P	35	17320	14860	12600	10530	8660	7000	5530	4720	3650	
4EC42YCS34P	35				12430	10300	8400	6670	5760	4490	
4EC62YCS434P	35	21600	18460	15650	13110	10800	8760	7530	5970	4630	
4DC52YCS56P	35				15290	12650	10240	8540	6820	5300	
4DC72YCS54P	35	26500	22700	19220	16070	13230	10720	8890	7060	5480	
4CC62YCS54P	35				18800	15560	12680	10110	7860	5910	
4CC92YCS54P	35	3050	26300	22400	18800	15560	12680	10110	7860	5910	

Performance based on 20ºC Suction Gas Temperature, 5K Liquid Sub Cooling, 50Hz.
Shaded areas require additional cooling &/or return vapour limitations – contact Airefrig Australia for further information.
For 32ºC Ambient, multiply above figures by correction factor: 1.03
For 38ºC Ambient, multiply above figures by correction factor: 0.97

BITZER CS CONDENSING UNITS

Refrigerant R134a

Airefrig Part Number	Amb Temp ºC	Refrigeration Capacity Watts Evaporating Temperature ºC											List Price Ex GST
		12.5	10	7.5	5	0	-5	-10	-15	-20	-25	-30	
2HC12YCS14P	35	Data on Request		4130	3770	3130	2530	2030	1590	1220	920	630	P.O.A.
	38			3980	3630	3000	2440	1950	1520	1160	850	580	
	40			3880	3540	2920	2370	1890	1470	1120	810	540	
	43			3730	3410	2800	2270	1810	1400	1090	790	500	
2GC22YCS14P	35	Data on Request		4720	4320	3580	2930	2350	1870	1440	1070	760	P.O.A.
	38			4560	4170	3460	2830	2280	1800	1380	1020	720	
	40			4450	4070	3380	2760	2220	1750	1340	980	690	
	43			4290	3920	3250	2650	2120	1670	1270	920	640	
2FC22YCS14P	35	Data on Request		5650	5110	4250	3570	2890	1190	1770	1320	940	P.O.A.
	38			5420	4980	4160	3420	2760	2180	1680	1250	880	
	40			5270	4840	4040	3320	2680	2120	1620	1200	830	
	43			5050	4630	3860	3170	2550	2010	1530	1180	790	
2EC22YCS14P	35	Data on Request		6360	5810	4890	3980	3310	2640	2060	1550	1120	P.O.A.
	38			6110	5630	4720	3920	3180	2530	1960	1480	1060	
	40			5960	5480	4600	3800	3090	2450	1900	1420	1010	
	43			5710	5260	4410	3640	2950	2340	1800	1350	950	
2DC22YCS26P	35	Data on Request		7810	7270	6000	4970	4010	3190	2480	1970	1350	P.O.A.
	38			7560	6940	5800	4770	3860	3060	2370	1770	1260	
	40			7370	6760	5650	4640	3750	2970	2280	1700	1210	
	43			7080	6490	5410	4450	3590	2830	2170	1610	1130	
2CC32YCS26P	35	Data on Request		9510	8780	7390	6120	4990	4000	3120	2370	1730	P.O.A.
	38			9150	8440	7100	5880	4790	3820	2970	2250	1620	
	40			8920	8220	6910	5710	4650	3710	2880	2160	1560	
	43			8570	7890	6630	5480	4450	3540	2740	2050	1460	
4FC32YCS36P	35	Data on Request		10800	9830	8200	6730	5430	4290	3300	2450	1720	P.O.A.
	38			10400	9530	7920	6490	5220	4110	3140	2320	1610	
	40			10130	9290	7710	6320	5070	3990	3040	2230	1540	
	43			9730	8920	7410	6050	4850	3800	2890	2100	1440	
4EC42YCS36P	35	Data on Request		13140	11990	10080	8340	6790	5420	4230	3210	2350	P.O.A.
	38			12620	11620	9740	8040	6520	5180	4030	3030	2200	
	40			12280	11310	9480	7810	6330	5020	3880	2910	2090	
	43			11770	10830	9070	7470	6040	4770	3670	2720	1930	
4DC52YCS34P	35	Data on Request		15900	14680	12460	10150	8280	6770	2480	3880	2800	P.O.A.
	38			16300	14090	11810	9750	7920	6300	4890	3660	2610	
	40			14910	13710	11490	9490	7700	6110	4730	3520	2500	
	43			14320	13170	11020	9090	7360	5830	4490	3330	2340	
4CC62YCS434P	35	Data on Request		19530	17970	15050	12440	10120	8080	6300	4770	3480	P.O.A.
	38			18780	17280	14470	11940	9700	7730	6000	4520	3270	
	40			18310	16820	14090	11620	9430	7500	5810	4360	3130	
	43			17570	16150	13530	11140	9030	7150	5530	4130	2930	

Performance based on 20ºC Suction Gas Temperature, 5K Liquid Sub Cooling, 50Hz.

Shaded areas require additional cooling &/or return vapour limitations – contact Airefrig Australia for further information.

BITZER CS CONDENSING UNITS

Compressor Specifications

Compressor Model	Nominal Motor HP / Kw	Max Current Amps	Max Power Consumption KW	Heater Watts 240 / 1 / 50	Compressor Model	Nominal Motor HP / Kw	Max Current Amps	Max Power Consumption KW	Heater Watts 240 / 1 / 50
2HC-1.2	1.0 / 0.7	3.5	2.0	85	2CC-3.2	3.0 / 2.2	8.5	5.0	165
2HC-2.2	1.5 / 1.1	4.3	2.4	85	2CC-4.2	4.0 / 3.0	9.4	5.6	165
2GC-2.2	1.5 / 1.1	4.7	2.7	85	4FC-3.2	3.0 / 2.2	9.2	5.4	165
2FC-2.2	1.5 / 1.1	4.9	2.7	85	4FC-5.2	5.5 / 4.0	10.8	6.2	165
2FC-3.2	1.8 / 1.3	5.8	3.4	85	4EC-4.2	4.0 / 3.0	10.7	6.4	165
2EC-2.2	2.0 / 1.5	5.7	3.3	165	4EC-6.2	5.5 / 4.0	13.2	7.9	165
2EC-3.2	3.0 / 2.2	6.9	4.0	165	4DC-5.2	5.5 / 4.0	13.5	8.0	165
2DC-2.2	2.0 / 1.5	6.9	3.9	165	4DC-7.2	7.5 / 5.5	15.9	9.0	165
2DC-3.2	3.0 / 2.2	7.8	4.5	165	4CC-6.2	7.5 / 5.5	15.9	9.0	165
					4CC-9.2	9.0 / 6.7	20.0	10.5	165

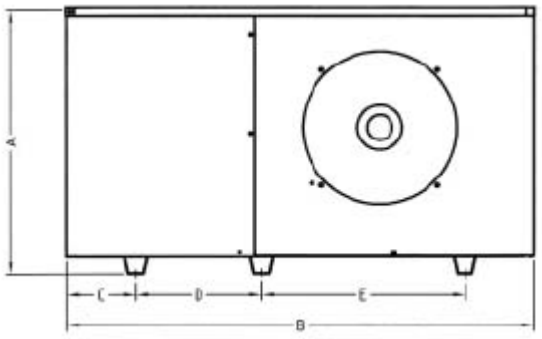
Condenser Specifications

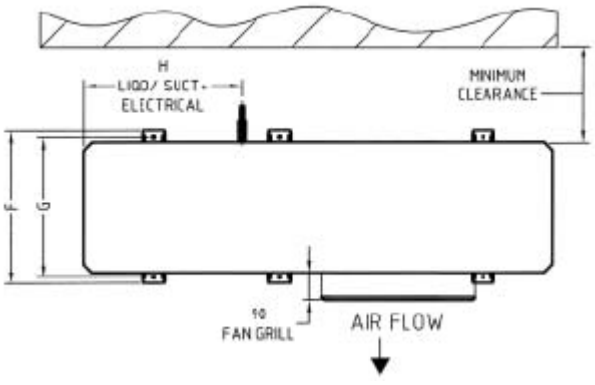
Condenser Model	Fan Voltage	Fan Total Amps	Fan Total KW	Air Flow L/Sec	Number Fans	Liquid Line Size	Suction Line Size	Weight Kg	Receiver Pump Down R404A / R22
CS1-4P	240/1/50	0.60	0.14	760	1 x 350mm	3/8	5/8	104	3.8 / 4.2 Kg
CS2-6P		0.79	0.16	870	1 x 450mm		7/8	127	
CS2-4P		1.10	0.25	1170					
CS3-6P		0.79	0.16	1000		1/2	1 1/8	160	7.0 / 7.8 Kg
CS3-4P		1.10	0.25	1330					
CS4.3-6P		1.58	0.32	2350	2 x 450mm	5/8		178	
CS4.3-4P		2.20	0.49	3100					
CS5-6P		1.58	0.32	2100				182	
CS5-4P		2.20	0.49	2900					

Note: For total unit power consumption, combine Compressor and Condenser values

Dimensions

Model	A	B	C	D	E	F	G	H	Minimum Clearance	Sound Data *dB(A)	
										Speed Controlled	High Speed
CS1 4P	700	1335	180	470	470	482	442	443	150	50.8	56.2
CS2 6P	700	1335	180	470	470	482	442	443	150	52.7	53.7
CS2 4P	700	1335	180	470	470	482	442	443	200	55.6	58.6
CS3 6P	850	1490	220	400	650	482	442	500	150	52.7	53.7
CS3 4P	850	1490	220	400	650	482	442	500	200	55.6	58.6
CS4.3 6P	850	1890	220	400	1050	482	442	500	200	50.0	54.2
CS4.3 4P	850	1890	220	400	1050	482	442	500	250	59.2	62.2
CS5 6P	860	1890	220	400	1050	482	442	500	200	50.0	54.2
CS5 4P	860	1890	220	400	1050	482	442	500	200	59.2	62.2





LCS Series

Condensing Units

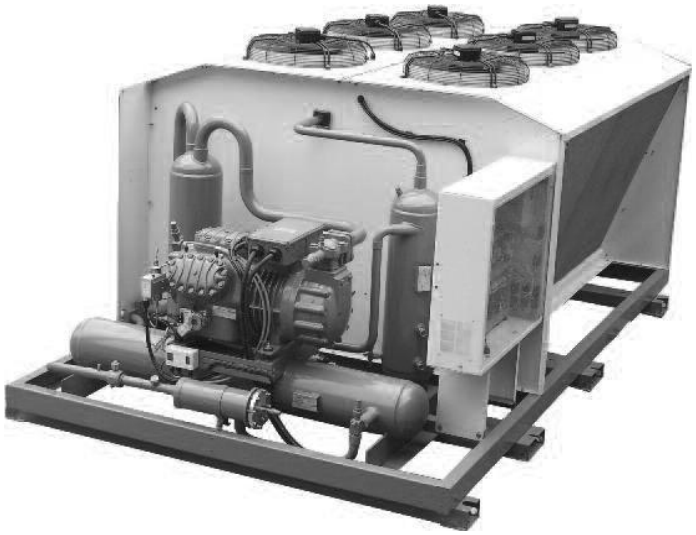
Standard Features:

- Gold Epoxy Finned Condenser
  (Optional for LCS 1&2 / Standard on LCS 3-6)
- Bitzer Semi Hermetic Compressor models from 4DC-7.2 to 6F-50.2
- Integrated Pulsation Mufflers (patented by Bitzer)
- Bitzer factory fitted Electrical Boards
  (up to 30HP DOL standard)
  (up to 30HP P/W option)
  (30HP to 50HP P/W standard)
- Additional “High Ambient Models” added
- Generously sized Condensers
- Sickle blade High performance Condenser fans
- Galvanized Base Frame
- Powder-coated Panels
- Liquid Receiver, Demountable drier shell (std LCS3-6)
- Moisture indicating Sight-Glass
- Dual Pressure Control
- Oil level protection (Optical, or Oil Pressure Switch)
- Electronic Motor Protection monitoring (SE-B1 and SE-B2)
- Capacity Control Head prepared (purchase solenoid assembly separately)
- Oil Charge – BSE 32 (B5 on request)



Optional Features:

- Oil Separators options
  (COS high efficiency, oil reservoir internal float)
- Traxon Oil management
- Up to 30HP Part wind
- Suction Accumulators
- Capacity control assembly
- Head Cooling Fan
- Fan speed controlled Condenser Fans
- Liquid Line Solenoid and or isolating valve
- Microrack Control
- Multiple Compressor options (consult Bitzer)
- Phase monitoring
- Additional pressure controls
- Demountable drier shell
  (Optional for LCS 1&2 / Standard on LCS 3-6)
- Gold Epoxy Finned Condenser
  (Optional for LCS 1&2 / Standard on LCS 3-6)
- Indicator Run and Fault lights



BITZER LCS CONDENSING UNITS

Refrigerant R404A – R507 Performance based on +20ºC suction gas , 5K liquid subcooling @ 50Hz

Airefrig Part Number	Ambient Temp ºC	Refrigeration Capacity (Watts) Evaporating Temperature ºC											List Price Ex GST
		7.5	5	0	-5	-10	-15	-20	-25	-30	-35	-40	
4DC72LCS1LS	40		22100	18890	15980	13350	11000	DATA ON REQUEST OR REFER TO CS UNIT BROCHURE					P.O.A.
	43			17860	15120	12620	10370						
4CC92YLCS1HS	40		26400	22700	19300	16240	13480						P.O.A.
	43			21500	18300	15380	12760						
4VCS62YLCS1LS	35					18140	15110	12370	9910	7750	5860	4230	P.O.A.
	38					16840	14010	11440	9140	7110	5350	3800	
	40					16130	13430	10950	8730	6770	5060	3580	
	43					15210	12630	10230	8140	6290	4660	3260	
4VCS102YLCS1HS	35	32700	29400	25500	22300	18250	15120	12320	9810	7600	5637	3884	P.O.A.
	38	30700	28500	24400	20700	17280	14230	11470	9050	6940	4214	3523	
	40		27500	23500	19900	16630	13640	11000	8660	6600	4941	3289	
	43			22200	18770	15640	12810	10310	8080	6110	1548	2956	
4TCS82YLCS1HS	35					21964	18280	14968	12019	9418	7143	5164	P.O.A.
	38					20788	17273	14116	11306	8825	6650	4751	
	40					20009	16608	13555	10836	8436	6329	4484	
	43					18851	15621	12723	10144	7865	5860	4097	
4TCS122YLCS1HS	35	37549	35038	30272	25857	21807	18123	14804	11839	9209	6889	4843	P.O.A.
	38	35584	33196	28666	24475	20631	17135	13982	11158	8644	6411	4425	
4TCS122YLCS2HS	40		33856	29035	24628	20631	17034	13822	10968	8444	6210	4223	P.O.A.
	43			27384	23214	19434	16034	12994	10288	7883	5741	3817	
4PCS102YLCS2HS	35					25963	21544	17588	14080	10997	8305	5968	P.O.A.
	38					24616	20390	16611	13262	10316	7741	5498	
	40					23725	19628	15967	12723	9869	7372	5129	
	43					22399	18496	15012	11926	9210	6830	4744	
4PCS152YLCS2HS	35	45910	42797	36893	31437	26441	21910	17837	14207	10995	8166	5674	P.O.A.
	38	43512	40550	34938	29756	25014	20713	16846	13393	10328	7614	5204	
4PCS152YLCS3LS	40		41974	35846	30275	25251	20756	16763	13237	10134	7403	4986	P.O.A.
	43			33804	28524	23767	19513	15734	12391	9439	6826	4493	
4NCS122YLCS2HS	35					29274	24365	19952	16020	12550	9511	6866	P.O.A.
	38					27746	23058	18845	15092	11777	8869	6328	
	40					26728	22187	18108	14475	11264	8443	5973	
	43					25205	20882	17005	13553	10499	7811	5448	
4NCS202LCS2HS	35	51489	47995	41385	35294	29727		20145	16096	12502	9319	6497	P.O.A.
	38	48916	45571	39250	33432	28121	24681	18991	15133	11704	8659	5944	
4NCS202LCS3HS	40		48939	41639	35052	29153	23908	19276	15207	11643	8518	5758	P.O.A.
	43			39374	33089	27469	22480	18078	14212	10822	7841	5195	
4J132YLCS3LS	35					34864	28982	23734	19093	15024	11482	8414	P.O.A.
	38					33186	27561	22545	18110	14219	10825	7874	
	40					32074	26621	21760	17463	13690	10394	7520	
	43					30418	25222	20593	16501	12905	9756	6998	
4J222YLCS3HS	35	62677	58235	49908	42325	35477	29345	23898	19095	14885	11205	7986	P.O.A.
	38	59806	55554	47591	40347	33809	27955	22754	18161	14123	10578	7452	
	40		53773	46053	39035	32704	27037	22000	17547	13626	10170	7107	
	43			43755	37077	31058	25671	20881	16641	12893	9572	6604	
4H152YLCS3LS	35					40593	33863	27858	22549	17895	13845	10336	P.O.A.
	38					38638	32194	26448	21368	16911	13024	9644	
	40					37340	31085	25511	20583	16256	12477	9181	
	43					35398	29428	24110	19408	15275	11657	8486	

BITZER LCS CONDENSING UNITS

Refrigerant R404A – R507 (cont'd) Performance based on +20ºC suction gas , 5K liquid subcooling @ 50Hz

Airefrig Part Number	Ambient Temp ºC	Refrigeration Capacity (Watts) Evaporating Temperature ºC											List Price Ex GST
		7.5	5	0	-5	-10	-15	-20	-25	-30	-35	-40	
4H252YLCS3HS	35	69975	65156	56078	47756	40192	33377	27288	21889	17133	12958	9292	P.O.A.
	38	66732	62123	53447	45502	38284	31782	25969	20806	16244	12218	8655	
4H252YLCS4HS	40		62985	53878	45621	38190	31555	25670	20478	15913	11896	8341	P.O.A.
	43			51197	43332	36261	29947	24344	19393	15023	11156	7702	
4G202YLCS4LS	35					45861	38439	31735	25738	20422	15747	11657	P.O.A.
	38					43550	36507	30141	24438	19369	14890	10946	
	40					41991	35203	29065	23561	18660	14316	10473	
	43					39620	33218	27427	22225	17581	13445	9758	
4G302YLCS4HS	35	82188	76488	65770	55968	47080	39093	31974	25678	20144	15295	11043	P.O.A.
	38	78391	2943	62704	53346	44864	37239	30436	24407	19089	14402	10257	
	40		70576	60657	51596	43385	36003	29412	23563	18389	13812	9739	
	43			57581	48699	41163	34146	27875	22296	17341	12929	8967	
6J222YLCS4HS	35					51976	43186	35355	28440	22386	17126	12576	P.O.A.
	38					49572	41141	33632	27003	21195	16138	11750	
	40					49575	39782	32486	26050	20406	15485	11203	
	43					45587	37752	30782	24627	19228	14510	10388	
6J332YLCS4HS	35	91244	84890	72922	61954	51988	43012	34995	27890	21634	16146	11330	P.O.A.
	38	87029	80945	69494	59011	49492	40920	33260	26463	20460	15169	10491	
6J332YLCS5HS	40		81237	69825	58695	49025	40376	32696	25915	19948	14698	10052	P.O.A.
	43			65959	55735	46529	38300	30990	24527	18823	13776	9275	
6H252YLCS5LS	35					59301	49614	40878	33078	26182	20140	14883	P.O.A.
	38					56328	47123	38817	31393	24845	19028	13959	
	40					54342	45459	37443	30271	23906	18291	13351	
	43					51354	42956	35376	28586	22544	17189	12443	
6H352YLCS5HS	35	104997	97757	84119	71619	60260	50029	40891	32792	25660	19402	13906	P.O.A.
	38	100111	93184	80147	68211	57373	47613	38892	31153	24318	18289	12956	
6H352YLCS6HS	40		94482	80796	68390	57231	47272	38443	30661	23824	17813	12497	P.O.A.
	43			76751	64937	54322	44851	36455	29043	22510	16736	11586	
6G302YLCS6LS	35					67816	56607	46541	37589	29700	22802	16805	P.O.A.
	38					64641	53943	44334	35780	28226	21596	15798	
	40					62512	52157	42855	34569	27239	20790	15126	
	43					59290	49451	40612	32729	25739	19563	14102	
6G402YLCS6HS	35	122812	114336	98381	83773	70515	58590	47956	38547	30275	23030	16679	P.O.A.
	38	117090	108993	93761	79827	67186	55815	45665	36666	28724	21725	15535	
	40		105432	90684	77199	64971	53969	44143	35417	27696	20862	14780	
	43			86068	73259	61650	61204	41864	33550	26160	19574	13653	
6F402YLCS6LS	35					81146	67563	55410	44633	35158	26887	19702	P.O.A.
	38					77178	64183	52561	42255	33158	25251	18331	
	40					74547	61941	50672	40678	31878	24166	17421	
	43					70616	58594	47852	38325	29925	22545	16058	
6F502YLCS6HS	35	139107	129870	112377	96239	81489	68135	56155	45498	36083	27800	20513	P.O.A.
	38	132343	123540	106879	91517	77479	64766	53350	43172	34149	26164	19079	
	40		119317	103211	88367	74806	62522	51483	41628	32867	25083	18135	
	43			97704	83640	70796	59158	48689	39320	30956	23478	16839	

Indicates return gas temperature limitations &/or additional cooling, contact Airefrig Australia for further information.

BITZER LCS CONDENSING UNITS

Refrigerant R134A Performance based on +20ºC suction gas , 5K liquid subcooling @ 50Hz

Airefrig Part Number	Ambient Temp ºC	Refrigeration Capacity (Watts) Evaporating Temperature ºC										List Price Ex GST
		12.5	10	7.5	5	0	-5	-10	-15	-20	-25	-30	
4VCS62YLCS1LS	35	Data on Request		22117	20259	16835	13794	11122	8799	6796	5084	3623	P.O.A.
	38			21241	19447	16143	13209	10630	8385	6447	4782	3354	
	40			20656	18905	15680	12818	10302	8110	6214	4582	3175	
	43			19777	18089	14985	12231	9808	7696	5865	4281	2908	
4TCS82YLCS1LS	35	Data on Request		26137	23990	20016	16463	13321	10574	8196	6153	4406	P.O.A.
	38			25087	23017	19184	15759	12729	10077	7775	5789	4080	
	40			24386	22367	18629	15289	12334	9744	7493	5547	3864	
	43			23334	21390	17795	14582	11739	9245	7072	5184	3540	
4PCS102YLCS1LS	35	Data on Request		29549	27168	22735	18742	15185	12050	9315	6948	4907	P.O.A.
	38			28335	26041	21770	17923	14495	11469	8822	6522	4526	
	40			27525	25289	21126	17377	14034	11082	8495	6239	4274	
	43			26310	24160	20160	16558	13344	10502	8004	5818	3899	
4NCS122YLCS1HS	35	Data on Request		34047	31300	26190	21596	17512	13921	10796	8098	5778	P.O.A.
	38			32724	30072	25140	20705	16761	13289	10260	7634	5362	
	40			31838	29250	24436	20109	16258	12866	9902	7325	5086	
	43			30506	28012	23377	19211	15502	12230	9363	6861	4673	
4J132YLCS2LS	35	Data on Request		38926	35752	29829	24493	19756	15615	12052	9033	6510	P.O.A.
	38			37511	34473	28745	23588	19010	15007	115577	8625	6159	
	40			36633	33630	28031	22992	18519	14607	11231	8354	5925	
	43			35278	32377	26970	22107	17791	14013	10746	7951	5575	
4H152YLCS2HS	35	Data on Request		45550	41790	34802	28539	23002	18177	14030	10512	7557	P.O.A.
	38			43963	40317	33546	27482	22124	17455	13440	10026	7146	
	40			42916	39346	32719	26787	21549	16983	13054	9709	6878	
	43			41359	37903	31492	25759	20697	16286	12485	9241	6482	
4G202YLCS2HS	35	Data on Request		50447	46375	38773	31920	25830	20494	15886	11957	8643	P.O.A.
	38			48699	44754	37392	30759	24865	19702	15238	11424	8192	
	40			47543	43682	36480	29994	24232	19183	14814	11076	7898	
	43			45822	42088	35126	28859	23294	18415	14189	10562	7464	
6J222YLCS3LS	35	Data on Request		59660	54715	45525	37287	30007	23671	18241	13656	9834	P.O.A.
	38			57544	52760	43871	35909	28875	22750	17493	13039	9304	
	40			56149	51470	42781	35002	28130	22144	16999	12630	8952	
	43			54075	49554	41164	33656	27024	21244	16266	12022	8424	
6H252YLCS3HS	35	Data on Request		69103	63355	52692	43157	34747	27432	51157	15842	11385	P.O.A.
	38			66697	61123	50790	41558	33420	26342	20266	15109	10765	
	40			65110	59651	49538	40508	32550	25629	19684	14631	10361	
	43			62750	57465	47681	38952	31264	24577	18827	13926	9765	
6G302YLCS3HS	35	Data on Request		76599	70360	58739	48292	39030	30934	23957	18019	13018	P.O.A.
	38			73948	67902	56646	46533	37571	29737	22979	17215	12339	
	40			72196	66279	55266	45377	36614	28953	22340	16690	11896	
	43			69587	63863	53217	43661	35196	27794	21396	15916	11242	
6F402YLCS4LS	35	Data on Request		91567	84090	70185	57713	46679	37054	28771	21733	15810	P.O.A.
	38			88443	81199	67734	55663	44988	35674	27652	20819	15044	
	40			86380	79290	66119	54315	43878	34771	26920	20223	14544	
	43			83312	76454	63721	52317	42236	33436	25841	19344	13805	

Indicates return gas temperature limitations &/or additional cooling, contact Airefrig Australia for further information.

BITZER LCS CONDENSING UNITS

Compressor Specifications

Compressor Model	Nominal Motor HP / Kw	Max Operating Current (Amps)	Max Power Consumption (kW)	Starting Current / Locked Rotor (Amps)	Motor Connection	Motor Version	Compressor Weight (kg)	Capacity Control Steps	Oil Charge Litres	Crankcase Heater
4DC-7.2	7.5 / 5.5	27.5/15.9	9.0	142.8 / 82.4	Ø/Y 220.240Ø / 380..420Y 3/50	1	88.5	50%	2.0	120 watts Self Limiting
4CC-9.2	9 / 6.7	34.5/20	11.6	142.8 / 82.4		1	90.5		2.0	
4VCS-6.2	6 / 4.5	14	8.1	39 / 68	Part Wind 380..420YY/3/50 440..480YY/3/60 Part wind motors are 50/50 split. Tolerance (+/-10%)	2	129		2.6	140 watts Self Limiting
4VCS-10.2	10 / 7.5	21	11.3	59 / 99		1	139		2.6	
4TCS-8.2	8 / 6	17	9.4	49 / 81		2	134		2.6	
4TCS-12.2	12 / 9	24	13.8	69 / 113		1	141		2.6	
4PCS-10.2	10 / 7.5	21	11.7	59 / 99		2	139		2.6	
4PCS-15.2	15 / 11	31	16.3	81 / 132		1	147		2.6	
4NCS-12.2	12 / 9	24	14.1	69 / 113		2	141		2.6	
4NCS-20.2	20 / 15	37	19.5	97 / 158		1	150		2.6	
4J-13.2	13 / 9.75	27	15.7	81 / 132		2	179		4.5	
4J-22.2	22 / 16	39	21.5	97 / 158		1	190		4.5	140 watts
4H-15.2	15 / 11	31	18.1	81 / 132		2	183		4.5	
4H-25.2	25 / 18.5	45	24.9	116 / 193		1	203		4.5	
4G-20.2	20 / 15	37	21.5	97 / 158		2	192		4.5	
4G-30.2	30 / 22	53	30.1	135 / 220		1	206		4.5	
6J-22.2	22 / 16	39	23.5	116 / 193		2	213	33% & 66% options	4.75	
6J-33.2	33 / 24	60	32.2	147 / 262		1	231		4.75	
6H-25.2	25 / 18.5	45	27.2	116 / 193		2	224		4.75	
6H-35.2	35 / 26	61	37.4	147 / 262		1	235		4.75	
6G-30.2	30 / 22	53	31.9	135 / 220		2	228		4.75	
6G-40.2	40 / 30	78	45.1	180 / 323		1	238		4.75	
6F-40.2	40 / 30	78	38.6	180 / 323		2	239		4.75	
6F-50.2	50 / 37	92	53.2	226 / 404		1	241		4.75	

Condenser Specifications

Condenser Model	Fan Motor Connection	Fan Total (Amps)	Fan Total (KW)	Fan Qty	Liquid Line Size	Suction Line Size	Unit Weight (*Note:* for total weight add comp & unit weights)	Receiver Pump Down Capacity R404A / R134A
LCS 1 L/S	Y conn low speed (L/S) **Δ** conn high speed (H/S)	1.88	1.1	2	5/8”	1-1/8”	485	30 / 34 kg
LCS 1 H/S		2.7	1.56	2	5/8”	1-3/8”	485	30 / 34 kg
LCS 2 L/S		1.88	1.1	2	7/8”	1-3/8”	520	30 / 34 kg
LCS 2 H/S		2.7	1.56	2	7/8”	1-5/8”	520	30 / 34 kg
LCS 3 L/S		3.76	2.2	4	1-1/8”	1-5/8”	704	44 / 50 kg
LCS 3 H/S		5.4	3.12	4	1-1/8”	1-5/8”	704	44 / 50 kg
LCS 4 L/S		3.76	2.2	4	1-1/8”	2-1/8”	734	44 / 50 kg
LCS 4 H/S		5.4	3.12	4	1-3/8”	2-1/8”	734	44 / 50 kg
LCS 5 L/S		5.64	3.3	6	1-3/8”	2-1/8”	860	44 / 50 kg
LCS 5 H/S		8.1	4.68	6	1-3/8”	2-1/8”	860	44 / 50 kg
LCS 6 L/S		5.64	3.3	6	1-3/8”	2-1/8”	910	44 / 50 kg
LCS 6 H/S		8.1	4.68	6	1-3/8”	2-1/8”	910	44 / 50 kg

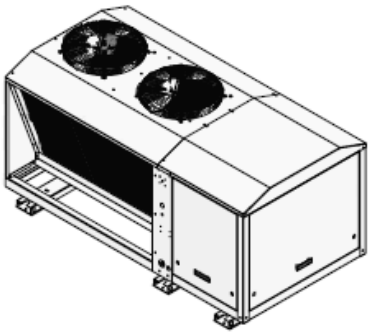
Note: For total unit power consumption, combine Compressor and Condenser values.
For total unit weight add compressor weight to unit.

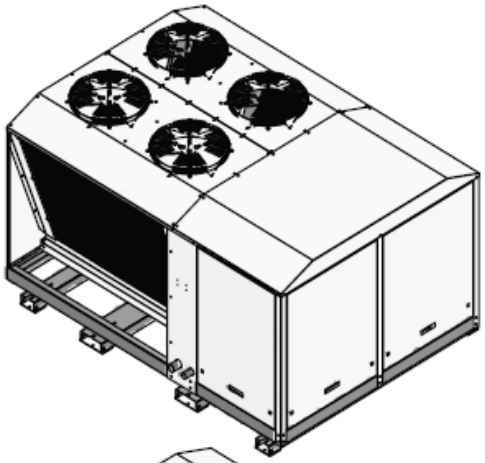
BITZER LCS CONDENSING UNITS

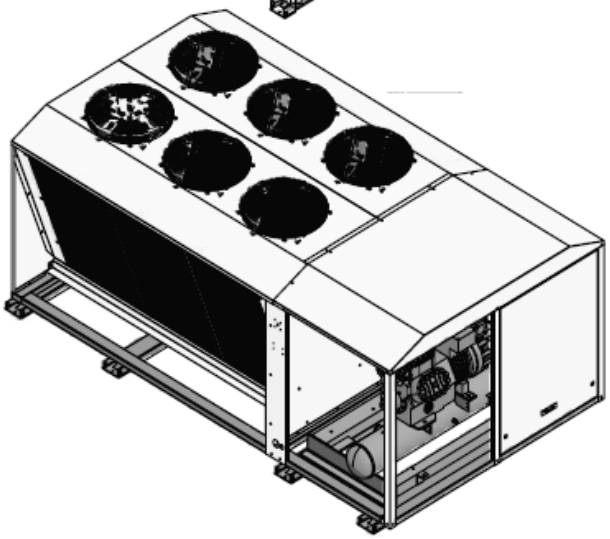
Dimensions

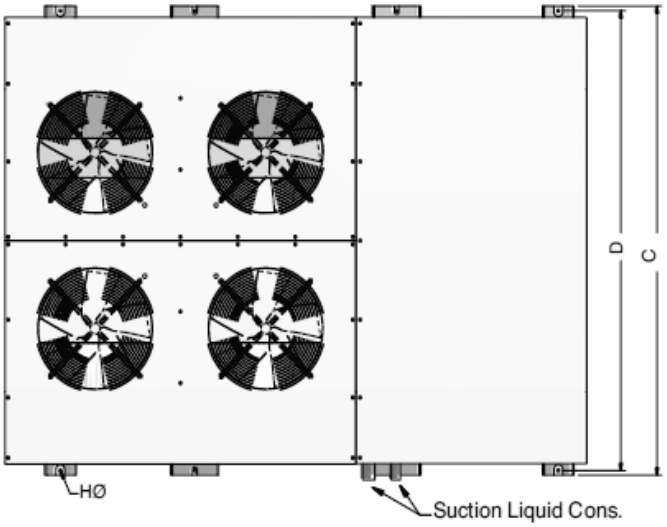
Condenser Model	Dimensions (mm) +/- 2.5mm tolerance								Min. Clearance condenser air on side (mm)	Sound Data *dB(A) 3 metres		
	A	B	C	D	E	F	G	H ∅		Speed Controlled	Low Speed	High Speed
LCS 1 & 2 - L/S & HS	1135	2150	1200	1160	~	1233	550	12	800	63	64	69
LCS 3 & 4 - L/S & HS	1427	2590	1972	1932	685	900	637	12	950	66	67	72
LCS 5 & 6 - L/S & HS	1427	3310	1972	1932	1218	900	637	12	1050	67.8	68.8	74

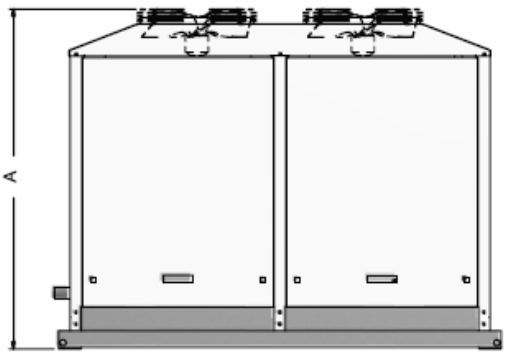
Sound pressure levels dB(A) are calculated with typical 17.5 dB deduction for 3 metre distance.
*Speed control ratings based on operation at 25°C Ambient.

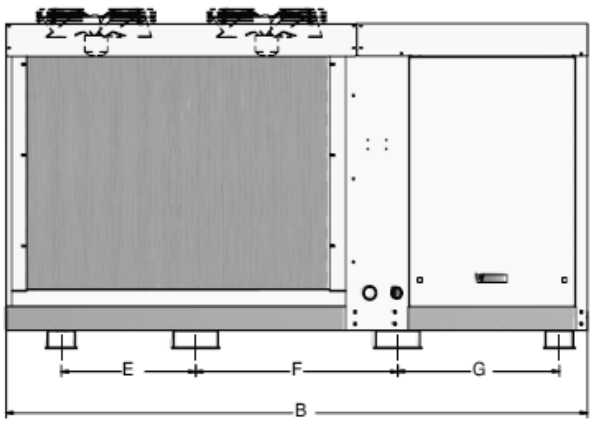












Platinum & Platinum Plus Series
Condensing Units

The new **Platinum Series Outdoor Condensing Units** are now available ranging from 2.0HP - 9.0HP , (Nominal motor power) incorporating the latest **Octagon Compressors.**
Standard power requirement is 415V/3PH/50Hz

Standard Features:

- BITZER Octagon Semi Hermetic Compressor.
- Fully wired Electrical Panel with LODAM LMC
- Internal Float Oil Separator fitted
- Micro Channel Condenser
- Liquid Receiver, Drier and Sight glass
- Dual Pressure Control, Sump Heater
- Electrical Motor Protection monitoring – SE-B1
- Oil Charge - BSE 32 as standard (B5 Oil on request)
- Weatherproof Panels for exposed locations

Optional Features:

- Oil Level Monitoring Device
- Suction Accumulator fitted
- Octagon VariSpeed F1 Series compressors
- Capacity Control Head
  (4 cylinders compressors only)
- Liquid line Solenoid Valve
- MP 15 Phase Failure Control



Electrical Panel Includes:

- Three phase Isolator
- Fan Speed Controller
- LOADAM LMC Electronic Controller
- High resolution Coloured Display
- Suction & Discharge pressure transducers
- Ambient Temperature Sensor
- Storage Temperature Sensor (optional)

Step up to the *Platinum Plus* Technology

Platinum Plus Units include a fully integrated suction gas cooled Inverter Compressor 'Octagon VariSpeed Series' managed by an intelligent micro-processor control module (Lodam LMC by Bitzer) As an extension of the BITZER Octagon Series, the VariSpeed F1 Frequency Inverter compressors offer stable, direct load matching to system requirements through suction housing mounted inverter control from 25 Hz through to 87 Hz. Compared to a standard 50 Hz compressor, an infinite flexibility in capacity control can be offered in a range from 50% to approx 150% of system requirements, delivering perfect load matching and stable storage conditions for a vast range of applications.
The full advantage of this flexibility is realised through the inclusion of BITZER's Micro-processor management system.
The Lodam LMC Module is much more than a compressor control!!
(Refer BITZER Lodam Controller section)

BITZER PLATINUM CONDENSING UNITS

Platinum Series Condensing Units

Refrigerant R134A Performance based on 20ºC Suction Gas Temperature, 3K Liquid Sub Cooling

Airefrig Part Number	Amb Temp ºC	Refrigeration Capacity Watts Evaporating Temperature ºC									List Price Ex GST
		12.5	10	7.5	5	0	-5	-10	-15	-20	
2EC-2.2Y-PT 1- 6P	35	Data on Request		7002	6403	5305	4338	3493	2763	2137	P.O.A.
	38			6733	6154	5095	4161	3346	2642	2037	
	40			6555	5990	4956	4045	3250	2562	1971	
	43			6290	5745	4749	3872	3107	2445	1874	
2DC-2.2Y-PT 1- 6P	35	Data on Request		8163	7472	6203	5080	4095	3242	2509	P.O.A.
	38			7848	7181	5957	4873	3923	3099	2390	
	40			7640	6989	5794	4736	3810	3005	2312	
	43			7331	6703	5552	4534	3642	2867	2198	
2CC-3.2Y-PT 1 6P	35	Data on Request		9998	9178	7662	6310	5117	4075	3173	P.O.A.
	38			9614	8822	7358	6054	4903	3898	3026	
	40			9360	8586	7158	5886	4763	3781	2930	
	43			8981	8236	6860	5635	4555	3610	2788	
4FC-3.2Y-PT 1- 6P	35	Data on Request		10652	9766	8127	6663	5370	4239	3261	P.O.A.
	38			10247	9391	7807	6393	5144	4052	3105	
	40			9980	9143	7595	6215	4996	3929	3003	
	43			9581	8773	7281	5951	4776	3748	2854	
4FC-3.2Y-PT 1- 4P	35	Data on Request		11234	10265	8488	6919	5547	4359	3341	P.O.A.
	38			10811	9873	8155	6639	5314	4166	3181	
	40			10531	9614	7936	6455	5161	4040	3076	
	43			10114	9229	7609	6182	4935	3854	2923	
4EC-4.2Y-PT 1- 6P	35	Data on Request		12982	11950	10025	8288	6741	5380	4198	P.O.A.
	38			12456	11461	9607	7934	6442	5129	3985	
	40			12107	11138	9330	7699	6245	4962	3843	
	43			11589	10657	8919	7351	5951	4715	3632	
4EC-4.2Y-PT 1- 4P	35	Data on Request		13949	12783	10633	8723	7045	5590	4342	P.O.A.
	38			13393	12268	10195	8354	6737	5332	4124	
	40			13024	11927	9906	8110	6533	5161	3979	
	43			12476	11420	9475	7747	6229	4906	3762	
4DC-5.2Y-PT 1- 4P	35	Data on Request		16226	14906	12459	10267	8326	6623	5145	P.O.A.
	38			15602	14327	11964	9849	7975	6332	4903	
	40			15189	13943	11636	9573	7745	6141	4745	
	43			14574	13373	11150	9163	7404	5859	4512	
4CC-6.2Y-PT2 - 6P	35	Data on Request		19433	17867	14959	12351	10037	8009	6248	P.O.A.
	38			18678	17167	14362	11848	9617	7660	5957	
	40			18180	16704	13968	11516	9341	7431	5767	
	43			17438	16017	13384	11025	8933	7093	5487	
4CC-6.2Y-PT2 - 4P	35	Data on Request		20464	18751	15600	12805	10353	8223	6391	P.O.A.
	38			19676	18022	14981	12286	9921	7865	6094	
	40			19154	17540	14573	11944	9636	7630	5899	
	43			18380	16824	13967	11436	9216	7284	5613	

Shaded areas require additional cooling &/or return vapour limitations – contact Airefrig Australia for further information.

BITZER PLATINUM CONDENSING UNITS

Platinum Series Condensing Units

Refrigerant R404A / R507 Performance based on 20ºC Suction Gas Temperature, 3K Liquid Sub Cooling

Airefrig Part Number	Amb Temp ºC	Refrigeration Capacity Watts											List Price Ex GST
		Evaporating Temperature ºC											
		7.5	5	0	-5	-10	-15	-20	-25	-30	-35	-40	
2EC-2.2Y-PT 1- 6P	35				7013	5894	4888	3991	3200	2507	1905	1385	P.O.A.
	38				6654	5586	4626	3771	3016	2355	1779	1279	
	40				6416	5382	4452	3625	2894	2254	1695	1209	
	43				6061	5077	4194	3408	2714	2104	1571	1104	
2EC-3.2Y-PT 1- 6P	35	10521	9783	8398	7135	5993	4969	4058	3254	2548			P.O.A.
	38	9994	9290	7970	6767	5680	4705	3837	3071	2396			
	40	9644	8962	7685	6522	5472	4530	3691	2949	2295			
	43	9120	8472	7259	6156	5161	4269	3474	2768	2144			
2DC-2.2Y-PT 1- 6P	35				7963	6708	5575	4561	3662	2871	2181	1583	P.O.A.
	38				7539	6343	5263	4298	3441	2687	2028	1453	
	40					6101	5057	4123	3295	2565	1926	1367	
	43					5740	4749	3863	3077	2384	1774	1239	
2DC-3.2Y-PT 1- 4P	35	12742	11820	10100	8543	7144	5898	4797	3831	2990			P.O.A.
	38	12105	11225	9583	8099	6767	5581	4532	3611	2806			
	40	11682	10829	9240	7804	6516	5370	4356	3465	2684			
	43	11049	10237	8727	7364	6143	5056	4095	3248	2503			
2CC-3.2Y-PT 1- 4P	35				10148	8534	7082	5787	4644	3643	2773	2022	P.O.A.
	38				9628	8089	6705	5472	4383	3428	2596	1875	
	40				9283	7794	6456	5264	4211	3287	2480	1778	
	43				8768	7354	6084	4954	3954	3076	2307	1634	
2CC-4.2Y-PT 1- 4P	35	14945	13901	11940	10151	8532	7079	5786	4644	3642			P.O.A.
	38	14191	13196	11329	9627	8088	6707	5477	4390	3433			
	40	13691	12728	10923	9279	7794	6461	5274	4223	3295			
	43	12943	12029	10318	8762	7356	6095	4972	3975	3092			
4FC-3.2Y-PT 1- 4P	35				10973	9241	7679	6284	5049	3965	3021	2205	P.O.A.
	38				10406	8754	7265	5935	4758	3724	2821	2036	
	40				10030	8431	6991	5704	4565	3564	2689	1925	
	43				9469	7949	6581	5360	4279	3326	2491	1759	
4FC-5.2Y-PT 1- 4P	35	16180	15062	12959	11036	9291	7720	6318	5076	3984			P.O.A.
	38	15350	14285	12282	10453	8794	7301	5968	4786	3742			
4FC-5.2Y-PT 2- 6P	40	15433	14326	12259	10385	8699	7192	5855	4675	3637			P.O.A.
	43	14588	13535	11573	9796	8199	6772	5506	4385	3397			
4EC-4.2Y-PT 2- 6P	35				13584	11454	9527	7800	6267	4918	3740	2718	P.O.A.
	38				12846	10819	8988	7348	5891	4607	3483	2502	
	40					10400	8633	7050	5643	4403	3314	2362	
	43					9779	8106	6609	5278	4102	3066	2154	
4EC-6.2Y-PT 2- 4P	35	21689	20127	17211	14567	12189	10067	8189	6539	5098			P.O.A.
	38	20582	19091	16311	13793	11532	9515	7729	6157	4780			
	40	19848	18405	15715	13282	11097	9150	7425	5905	4571			
	43	18753	17381	14827	12521	10452	8608	6974	5533	4262			
4DC-5.2Y-PT 2- 6P	35				15999	13551	11323	9312	7514	5922	4523	3302	P.O.A.
	38				15134	12807	10689	8779	7071	5555	4219	3048	
	40					12315	10271	8428	6779	5314	4021	2881	
	43					11584	9651	7908	6348	4959	3727	2636	
4DC-7.2Y-PT 2- 4P	35	24935	23174	19869	16856	14130	11685	9509	7588	5903			P.O.A.
	38	23653	21973	18827	15961	13370	11047	8978	7149	5538			
	40	22800	21176	18135	15368	12868	10625	8628	6860	5299			
	43	21527	19985	17103	14483	12118	9998	8109	6432	4946			
4CC-6.2Y-PT 2- 4P	35				19808	16727	13946	11457	9251	7310	5617	4148	P.O.A.
	38				18791	15851	13201	10831	8728	6877	5258	3846	
	40				18114	15270	12706	10415	8382	6591	5020	3647	
	43				17102	14400	11968	9794	7865	6163	4666	3350	
4CC-9.2Y-PT 2- 4P	35	28675	26751	23119	19780	16733	13976	11503	9301	7353			P.O.A.
	38	27221	25391	21939	18766	15872	13253	10899	8798	6930			
	40	26254	24486	21153	18091	15299	12771	10497	8462	6647			
	43	24805	23130	19975	17080	14440	12048	9892	7956	6219			

Shaded areas require additional cooling &/or return vapour limitations – contact Airefrig Australia for further information.

BITZER PLATINUM PLUS CONDENSING UNITS

Platinum *Plus* Series Condensing Units

Refrigerant R134A Performance based on 20ºC Suction Gas Temperature, 3K Liquid Sub Cooling

Unit Model **4EC-6.FI-PT2-4P** (P.O.A.)	Amb Temp ºC	Refrigeration Capacity Watts Evaporating Temperature ºC								
		12.5	10	7.5	5	0	-5	-10	-15	-20
Inverter Output 25 Hz	35	Data on Request		7407	6738	5529	4479	3578	2811	2165
	38			7123	6477	5308	4296	3425	2684	2058
	40			6934	6303	5162	4174	3324	2600	1988
	43			6652	6044	4944	3991	3173	2474	1882
Inverter Output 50 Hz	35	Data on Request		14844	13552	11193	9124	7327	5783	4469
	38			14265	13018	10742	8745	7011	5520	4248
	40			13881	12663	10442	8494	6802	5346	4102
	43			13308	12135	9995	8120	6490	5085	3883
Inverter Output 75 Hz	35	Data on Request		19799	18122	15041	12314	9928	7862	6093
	38			19018	17400	14428	11799	9497	7503	5791
	40			18499	16920	14022	11458	9212	7265	5590
	43			17725	16205	13416	10948	8787	6909	5290
Inverter Output 87 Hz	35	Data on Request		23255	21328	17767	14596	11803	9371	7278
	38			22326	20468	17036	13981	11288	8941	6916
	40			21710	19897	16552	13573	10947	8656	6675
	43			20791	19047	15830	12965	10438	8231	6316

Refrigerant R134A Performance based on 20ºC Suction Gas Temperature, 3K Liquid Sub Cooling

Unit Model **4CC-6.FI-PT2-4P** (P.O.A.)	Amb Temp ºC	Refrigeration Capacity Watts Evaporating Temperature ºC								
		12.5	10	7.5	5	0	-5	-10	-15	-20
Inverter Output 25 Hz	35	Data on Request		10413	9492	7820	6364	5107	4032	3120
	38			10018	9126	7511	6106	4893	3856	2974
	40			9756	8885	7308	5936	4753	3740	2878
	43			9368	8528	7006	5684	4545	3569	2737
Inverter Output 50 Hz	35	Data on Request		20424	18708	15558	12771	10329	8211	6389
	38			19641	17983	14941	12251	9896	7852	6090
	40			19124	17504	14534	11909	9611	7616	5895
	43			18357	16794	13931	11403	9190	7268	5606
Inverter Output 75 Hz	35	Data on Request		26833	24666	20650	17055	13872	11082	8659
	38			25797	23703	19826	16359	13289	10597	8254
	40			25113	23068	19283	15900	12906	10278	7989
	43			24098	22126	18480	15223	12340	9809	7599
Inverter Output 87 Hz	35	Data on Request		31171	28724	24162	20048	16377	13134	10298
	38			29960	27597	23194	19226	15686	12558	9816
	40			29162	26854	22557	18686	15233	12180	9501
	43			27979	25753	21615	17889	14565	11624	9038

Refrigerant R404A Performance based on 20ºC Suction Gas Temperature, 3K Liquid Sub Cooling

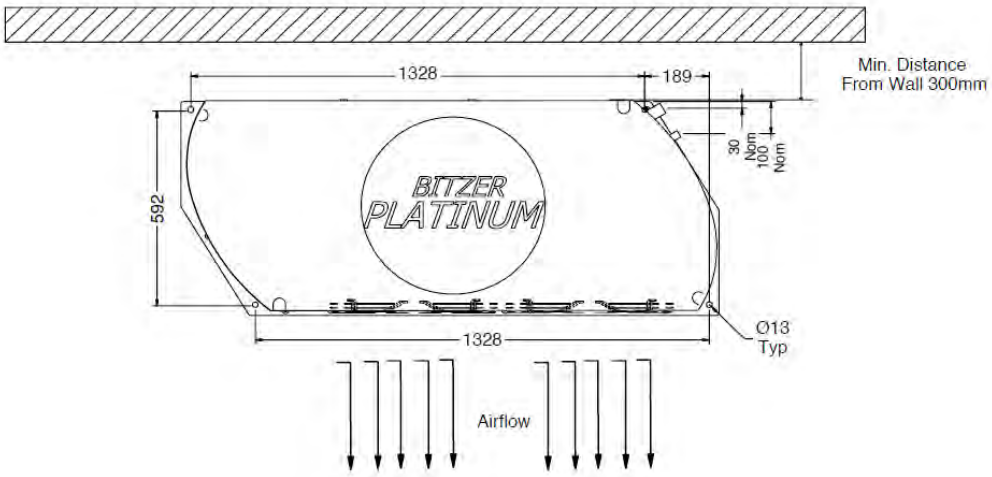
Unit Model **4EC-6.FI-PT2-4P** (P.O.A.)	Amb Temp ºC	Refrigeration Capacity Watts Evaporating Temperature ºC									
		5	0	-5	-10	-15	-20	-25	-30	-35	-40
Inverter Output 25 Hz	35			7394	6127	5017	4051	3215	2494	1874	1337
	38			7009	5801	4744	3823	3027	2338	1743	1224
	40			6755	5586	4563	3673	2903	2236	1657	1150
	43			6378	5267	4296	3451	2719	2084	1530	1040
Inverter Output 50 Hz	35			14523	12145	10030	8163	6525	5095	3846	2754
	38			13757	11491	9478	7701	6141	4774	3577	2522
	40			13252	11060	9114	7397	5888	4564	3400	2369
	43			12502	10422	8576	6947	5514	4253	3139	2143
Inverter Output 75 Hz	35			19087	16069	13355	10933	8784	6889	5220	3747
	38			18067	15195	12614	10310	8264	6455	4854	3431
	40			17394	14619	12126	9900	7922	6170	4614	3223
	43			16396	13765	11403	9294	7417	5748	4258	2915
Inverter Output 87 Hz	35			22163	18749	15655	12873	10387	8176	6214	4468
	38			20967	17720	14779	12135	9769	7659	5778	4092
	40			20178	17042	14203	11649	9363	7320	5492	3845
	43			19007	16036	13349	10930	8762	6818	5068	3478

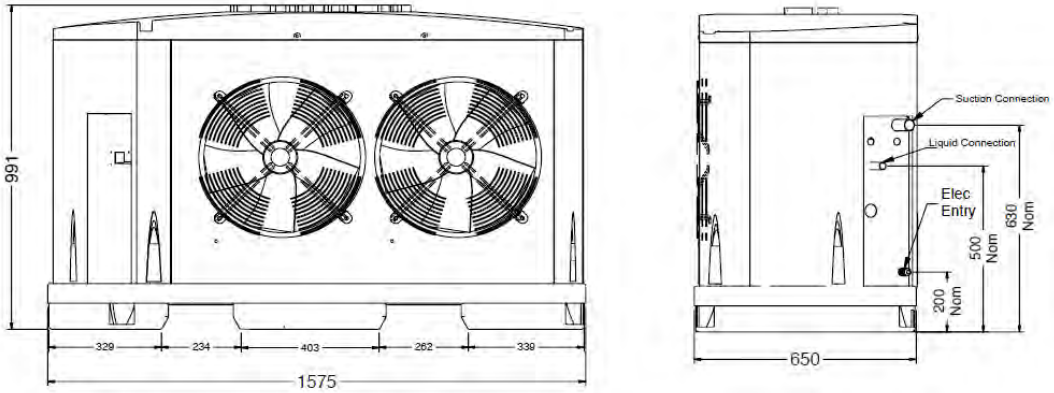
Shaded areas require additional cooling &/or return vapour limitations – contact Airefrig Australia for further information.

BITZER PLATINUM CONDENSING UNITS

Unit Specifications

Unit Model	Unit Maximum Power Consumption (Kw)	Unit Maximum Current (Amps)	Crankcase Heater (Watts)	Unit Weight (Kg)	Condenser Air Flow (L/sec)	Number of Fans / Rated Amps (240volt 50Hz)	Liquid Line Size	Suction Line Size	Fan Sound Pressure Level dB(A) @ 3 metres Full speed / speed controlled (*)	Pump Down Capacity (Litres) R134A/R404A
2EC-2.2Y-PT1-6P	3.45	6.34	120	151	900	1 / 0.64	1/2”	7/8”	53.7/52.7	7.6 / 6.2
2EC-3.2Y-PT1-6P	4.15	7.54	120	154	900	1 / 0.64	1/2”	7/8”	53.7/52.7	7.6 / 6.2
2DC-2.2Y-PT1-6P	4.05	7.54	120	152	900	1 / 0.64	1/2”	7/8”	53.7/52.7	7.6 / 6.2
2DC-3.2Y-PT1-4P	4.85	9.35	120	154	1380	1 / 1.55	1/2”	7/8”	58.6/55.6	7.6 / 6.2
2CC-3.2Y-PT1-6P	5.15	9.14	120	153	900	1 / 0.64	1/2”	7/8”	53.7/52.7	7.6 / 6.2
2CC-3.2Y-PT1-4P	5.35	10.05	120	153	1380	1 / 1.55	1/2”	7/8”	58.6/55.6	7.6 / 6.2
2CC-4.2Y-PT1-4P	5.95	10.95	120	153	1380	1 / 1.55	1/2”	7/8”	58.6/55.6	7.6 / 6.2
4FC-3.2Y-PT1-6P	5.55	10.48	120	165	900	2 / 1.28	5/8”	1-1/8”	53.7/52.7	7.6 / 6.2
4FC-3.2Y-PT1-4P	5.75	10.75	120	165	1380	1 / 1.55	5/8”	1-1/8”	58.6/55.6	7.6 / 6.2
4FC-5.2Y-PT1-4P	6.55	12.35	120	169	1380	1 / 1.55	5/8”	1-1/8”	58.6/55.6	7.6 / 6.2
4FC-5.2Y-PT2-6P	6.49	12.08	120	169	1750	2 / 1.28	5/8”	1-1/8”	54.2/50.0	9.5 / 7.6
4EC-4.2Y-PT2-6P	6.69	11.98	120	167	1750	2 / 1.28	5/8”	1-1/8”	54.2/50.0	9.5 / 7.6
4EC-4.2Y-PT1-6P	6.55	11.34	120	167	900	1 / 0.64	5/8”	1-1/8”	53.7/52.7	9.5 / 7.6
4EC-6.2Y-PT2-4P	8.58	16.30	120	169	2750	2 / 3.1	5/8”	1-1/8”	62.2/59.2	7.6 / 6.2
4DC-5.2Y-PT2-6P	8.29	14.78	120	169	1750	2 / 1.28	5/8”	1-1/8”	54.2/50.0	9.5 / 7.6
4DC-5.2Y-PT1-4P	8.35	15.05	120	169	1380	1 / 1.55	5/8”	1-1/8”	58.6/55.6	7.6 / 6.2
4DC-5.2Y-PT2-6P	8.29	14.78	120	172	1750	2 / 1.28	5/8”	1-1/8”	54.2/50.0	9.5 / 7.6
4DC-7.2Y-PT2-4P	9.68	19.00	120	172	2750	2 / 3.1	5/8”	1-1/8”	62.2/59.2	9.5 / 7.6
4CC-6.2Y-PT2-6P	9.29	17.18	120	174	1750	2 / 1.28	5/8”	1-1/8”	54.2/50.0	9.5 / 7.6
4CC-6.2Y-PT2-4P	9.68	19.00	120	174	2750	2 / 3.1	5/8”	1-1/8”	62.2/59.2	9.5 / 7.6
4CC-9.2Y-PT2-6P	11.89	21.28	120	174	1750	2 / 1.28	5/8”	1-1/8”	54.2/50.0	9.5 / 7.6
4EC-6.F1Y-PT2-4P	8.58	16.30	120	176	2750	2 / 3.1	5/8”	1-1/8”	62.2/59.2	9.5 / 7.6
4CC-6-F1Y-PT2-4P	9.68	19.00	120	176	2750	2 / 3.1	5/8”	1-1/8”	62.2/59.2	9.5 / 7.6





LIS Series

Condensing Units

Standard Features:

- Bitzer Octagon Semi Hermetic Compressor
- Condenser fitted with dedicated Sub-Cooling Circuit
- Liquid Receiver, Drier & Sight Glass
- Discharge Line Vibration Eliminator
- Dual Pressure Control
- Sump Heater (120 watts self limiting)
- Motor Protection Device INT69 VS/V7
- Oil Charge BSE32 (B5 on request)
- Two high performance fan assemblies (3 phase)
- Liquid receiver inlet & outlet service valves



Optional Features:

- Oil Separator
- Suction Accumulator
- Additional Pressure Controls
- Fan Speed Controller – 3 Phase
- Capacity Control Solenoid Assembly
- Fully Wired Electrical Panel DOL Starting
- Fully Wired Electrical Panel Part Winding Start



BITZER LIS CONDENSING UNITS

Refrigerant R404A – R507 Standard Power Requirement, 415V / 3 Ph / 50Hz **Ambient Temperature 35º C**

Airefrig Part Number		Refrigeration Capacity Qo Watts / Consumption Pe KW — Evaporating Temperature ºC											List Price Ex GST
		7.5	5	0	-5	-10	-15	-20	-25	-30	-35	-40	
4VC62YLIS1LS	Q					18140	15110	12370	9910	7750	5860	4230	P.O.A.
	P					7.73	6.9	6.09	5.3	4.52	3.75	2.99	
4VC102YLIS1LS	Q	32700	29400	25500	22300	18250	15120	12320	9810	7600	5660	3980	P.O.A.
	P	9.9	9.7	8.89	8.04	7.38	6.64	5.89	5.13	4.36	3.59	2.81	
4TC82YLIS1LS	Q					21480	17870	14680	11810	9260	7040	5110	P.O.A.
	P					9.51	8.46	7.46	6.5	5.57	4.66	3.77	
4TC122YLIS1HS	Q	37500	35000	30300	25900	21800	18130	14810	11820	9180	6890	4900	P.O.A.
	P	12.53	12.01	11.02	9.85	9.12	8.2	7.28	6.36	5.45	4.54	3.64	
4PC102YLIS1LS	Q					24100	20200	16630	13390	10530	7990	5770	P.O.A.
	P					11.17	9.9	8.68	7.5	6.38	5.31	4.29	
4PC152YLIS2HS	Q	45700	42700	36900	31500	26500	21900	17830	14160	10940	8120	5690	P.O.A.
	P	14.41	13.75	12.54	11.44	10.38	9.36	8.33	7.3	6.24	5.18	4.12	
4NC122YLIS2LS	Q					27900	23400	19250	15320	12160	9270	6720	P.O.A.
	P					13.05	11.54	10.1	8.73	7.43	6.19	5.03	
4NC202YLIS2HS	Q	50900	47600	41200	35300	29800	24700	20100	16030	12400	9220	6470	P.O.A.
	P	17.48	16.68	15.18	13.76	12.39	11.05	9.73	8.44	7.18	5.96	4.79	

Performance based on 20ºC Suction Gas Temperature, 5K Liquid Sub Cooling, 50Hz 35ºC Ambient
For 32ºC Ambient, multiply above figures by correction factor 1.03
For 38ºC Ambient, multiply above figures by correction factor 0.97
Additional cooling / limit suction gas temperature (refer application limits)

Refrigerant R22 Standard Power Requirement, 415V / 3 Ph / 50Hz **Ambient Temperature 35º C**

Airefrig Part Number		Refrigeration Capacity Qo Watts / Consumption Pe KW — Evaporating Temperature ºC											List Price Ex GST
		10	5	0	-5	-10	-15	-20	-25	-30	-35	-40	
4VC62YLIS1LS	Q				21300	17750	14580	11770	9010	7080			P.O.A.
	P				7.4	6.67	5.97	5.3	4.69	4.04			
4VC102YLIS1LS	Q	34600	29800	25300	21300	17720	14490	11630	9100				P.O.A.
	P	9.03	8.37	7.73	7.08	6.44	5.79	5.14	4.49				
4TC82YLIS1LS	Q				25100	21100	17360	14050	11140	8470			P.O.A.
	P				9.2	8.26	7.38	6.55	5.75	5.07			
4TC122YLIS1HS	Q	41200	35500	30300	25500	21200	17400	13990	10990				P.O.A.
	P	11.24	10.38	9.55	8.75	7.94	7.14	6.36	5.57				
4PC102YLIS1LS	Q				28500	23900	19700	15980	12670	9690			P.O.A.
	P				10.91	9.74	8.64	7.61	6.63	5.7			
4PC152YLIS2HS	Q	50100	43100	36600	30800	25500	20800	16660	13020				P.O.A.
	P	12.83	11.81	10.88	9.99	9.07	8.17	7.27	6.36				
4NC122YLIS2LS	Q				34700	29000	23800	19290	15230	12000			P.O.A.
	P				12.4	11.15	9.94	8.79	7.68	6.65			
4NC202YLIS2HS	Q	56200	48600	41400	34900	29000	23700	18970	14830				P.O.A.
	P	16.23	14.83	13.54	12.27	11.04	9.84	8.69	7.57				

Performance based on 20ºC Suction Gas Temperature, 5K Liquid Sub Cooling, 50Hz 35ºC Ambient
For 32ºC Ambient, multiply above figures by correction factor 1.03
For 38ºC Ambient, multiply above figures by correction factor 0.97
Additional cooling required (refer application limits)
NOTE: Please nominate where units are required for HCFC refrigerant – B5 Oil

BITZER LIS CONDENSING UNITS

Refrigerant R134a Standard Power Requirement, 415V / 3 Ph / 50Hz **Ambient Temperature 35º C**

Airefrig Part Number		Refrigeration Capacity Qo Watts / Consumption Pe KW									List Price Ex GST
		Evaporating Temperature ºC									
		7.5	5	0	-5	-10	-15	-20	-25	-30	
4VC62YLIS1LS	Q	24200	20400	16900	13840	11160	8820	6810	5090	3630	P.O.A.
	P	6.03	5.49	4.99	4.51	4.03	3.56	3.10	2.64	2.18	
4TC82YLIS1LS	Q	28500	24100	20100	16530	13360	10600	8200	6150	4420	P.O.A.
	P	7.54	6.88	6.24	5.61	5.01	4.41	3.83	3.27	2.73	
4PC102YLIS1LS	Q	32200	27300	22900	18840	15270	12090	9330	6960	4930	P.O.A.
	P	8.97	8.16	7.38	6.63	5.88	5.14	4.41	3.71	3.04	
4NC122YLIS1HS	Q	37300	31600	26400	21070	17620	13990	10830	8120	5810	P.O.A.
	P	10.61	9.59	8.61	7.68	6.8	5.97	5.17	4.4	3.65	
4J132YLIS2LS	Q	44200	37100	30800	25200	19520	15460	11940	9150	6550	P.O.A.
	P	11.66	10.35	9.19	8.14	7.32	6.37	5.48	4.6	3.78	
4H152YLIS2HS	Q	61100	42000	35000	28700	23100	18240	14070	10520	7540	P.O.A.
	P	13.84	12.18	10.74	9.48	8.35	7.31	6.33	5.38	4.44	

Performance based on 20ºC Suction Gas Temperature, 5K Liquid Sub Cooling, 50Hz 35ºC Ambient
For 32ºC Ambient, multiply above figures by correction factor 1.03
For 38ºC Ambient, multiply above figures by correction factor 0.97
Additional cooling / limit suction gas temperature (refer application limits)

Compressor Specifications

Compressor Model	Nominal Motor HP / Kw	Max Current Amps	Max Power Consumption kW	Starting Current (Locked Rota)	Electrical Supply (Part winding)	Motor Version	Capacity Control Steps	Oil Charge Litres	Heater Watts 240 / 1 / 50
4VC-6.2	6 / 4.5	14	8.1	39 / 68	380..420 YY	2	Optional 50%	2.6	120
4VC-10.2	10 / 7.5	21	11.3	59 / 99	3 Phase 50Hz	1			
4TC-8.2	8 / 6	17	9.4	49 / 81		2			
4TC-12.2	12 / 9	24	13.8	69 / 113		1			
4PC-10.2	10 / 7.5	21	11.7	59 / 99		2			
4PC-15.2	15 / 11	31	16.3	81 /132		1			
4NC-12.2	12 / 9	24	14.1	69/ 113		2			
4NC-20.2	21 / 15	37	19.5	97 / 158		1			
4J-13.2	13 / 9.75	27	15.7	81 / 132		2		4	140
4H-15.2	15 / 11	31	18.1	81 / 132		2		4	140

Condenser Specifications

Condenser Model	Fan Voltage	Fan Total Amps	Fan Total KW	Air Flow L/Sec	Number Fans	Liquid Line Size	Suction Line Size	Weight Kg	Receiver Pump Down R404A / R22
LIS1-LS	415/3/50	1.88	1.10	4900	2 x 500mm	5/8”	1-1/8”	385	30 / 33.5
LIS1-HS	415/3/50	2.7	1.156	5800	2 x 500mm	5/8”	1-3/8”	385	30 / 33.5
LIS2-LS	415/3/50	1.88	1.10	4050	2 x 500mm	7/8”	1-3/8”	410	30 / 33.5
LIS2-HS	415/3/50	2.7	1.56	5200	2 x 500mm	7/8”	1-5/8”	410	30 / 33.5

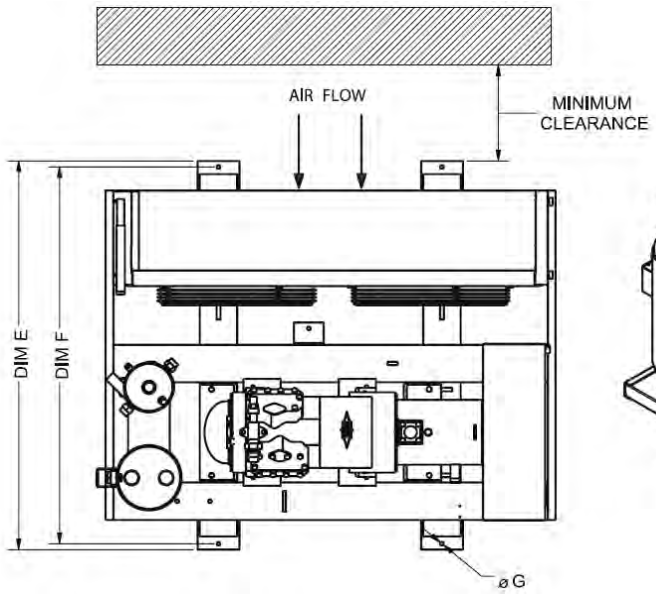
Note: For total unit power consumption, combine Compressor and Condenser values.

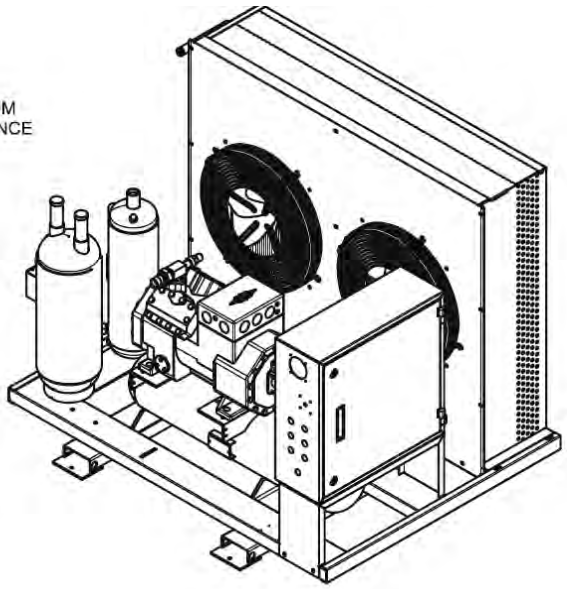
BITZER LIS CONDENSING UNITS

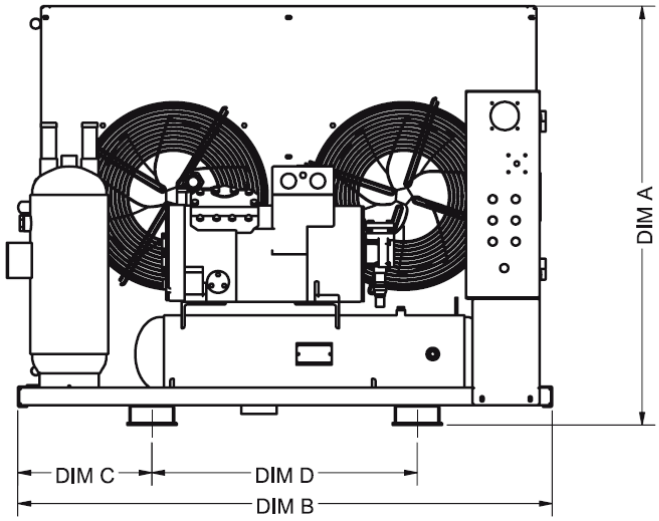
Dimensions

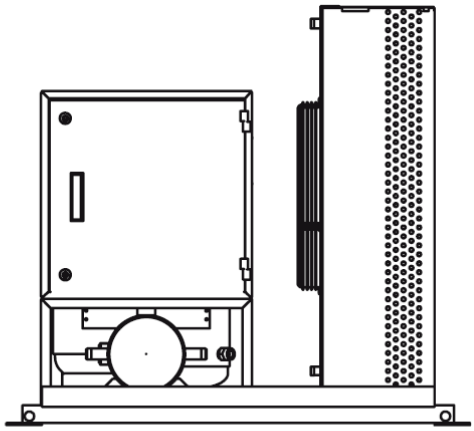
Model	Dimensions mm								Sound Data *(dBA)		
	A	B	C	D	E	F	G ∅	Min Clearance	Speed Controlled	Low Speed	High Speed
LIS1-L/S	1190	1510	378.5	750	1310	1270	12 mm	400 mm	-	65	-
LIS1-H/S									63	-	72
LIS2-L/S									-	65	-
LIS2-H/S									63	-	72

Sound power levels tested in accordance with Australian Standard AS 1217.5 – 1985.
Sound pressure levels dB(A) are calculated with typical 17.5 dB deduction for 3 metre distance.
* Speed control rating based at 25 ºC Ambient







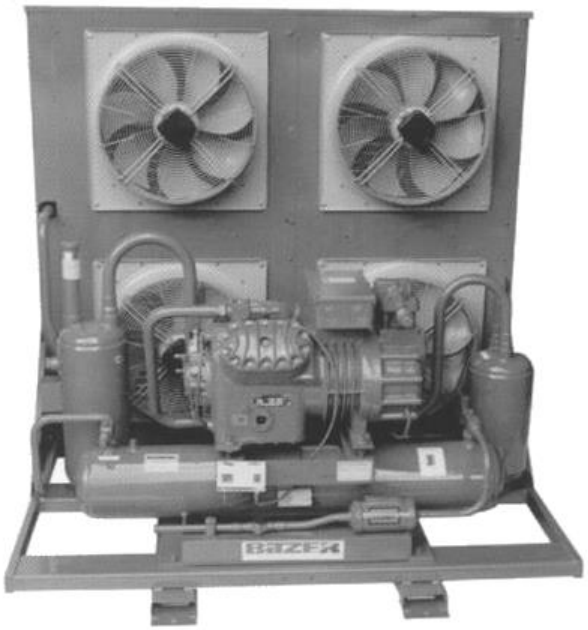


Compact Series

Condensing Units

Standard Features:

- Bitzer Semi Hermetic Compressor
- Motor Thermistor Electronic Controller
- Large volume Horizontal Liquid Receiver
- Air Cooled Condenser
- Three Phase Fan Motors
- Dual Pressure Controls
- Liquid Line Sightglass
- Liquid Line Dryer
- Crankcase Heater
- Oil Safety Control
- Compressor Oil Charge



Optional Features:

- Oil Separator
- External High Side Float
- Suction Accumulator
- Complete Wiring Panel
- Full Enclosure
- Fan Speed Controller
- Additional Pressure Switches

BITZER COMPACT CONDENSING UNITS

Refrigerant R22 **Ambient Temperature 35º C**

Airefrig Part Number		Refrigeration Capacity Qo Watts / Consumption Pe KW — Evaporating Temperature ºC											List Price Ex GST
		10	5	0	-5	-10	-15	-20	-25	-30	-35	-40	
4J132YC5034P	Q				**38827**	**32135**	**26200**	**20985**	**16430**	12390	8965	6082	P.O.A.
	P				**13.99**	**12.62**	**11.22**	**9.81**	**8.42**	7.43	6.26	5.11	
4J222YC5034P	Q	64451	55181	46637	**39150**	**32312**	**26386**	**21060**	**16555**				P.O.A.
	P	16.73	15.51	14.29	**13.11**	**11.92**	**10.69**	**9.45**	**8.17**				
4H152YC5036P	Q				42575	35425	29177	23233	*18255*	*13925*	*10074*	*6809*	P.O.A.
	P				17.19	15.36	13.55	11.77	*10.20*	*8.71*	*7.28*	*5.90*	
4H252YC5034P	Q	72644	62401	52948	**44481**	**36855**	**30185**	**24152**	**18978**				P.O.A.
	P	20.07	18.44	16.96	**15.47**	**14.03**	**12.55**	**11.06**	**9.55**				
4G202YC5034P	Q				50011	41650	34188	27424	*21341*	*16301*	*11831*	*8136*	P.O.A.
	P				19.75	17.64	15.58	13.81	*12.06*	*10.36*	*8.69*	*7.10*	
4G302YC6664P	Q	85609	73229	61869	**51988**	**43021**	**35131**	**28104**	**22168**				P.O.A.
	P	23.3	21.37	19.64	**17.99**	**16.33**	**14.7**	**13.02**	**11.32**				
6J222YC5034P	Q				55263	46116	37743	30345	*23807*	*18117*	*13027*	*8979*	P.O.A.
	P				22.19	19.83	17.46	15.20	*13.18*	*11.27*	*9.42*	*7.63*	
6J332YC6664P	Q	94591	81091	68954	**57713**	**47995**	**39217**	**31273**	**24455**				P.O.A.
	P	25.82	23.74	21.84	**19.98**	**18.12**	**16.21**	**14.29**	**12.33**				

Performance based on 20ºC Suction Gas Temperature, 3K Liquid Sub Cooling, 50Hz 35ºC Ambient
For 32ºC Ambient, multiply above figures by correction factor 1.03
For 38ºC Ambient, multiply above figures by correction factor 0.97
Standard Power Requirement, 415V / 3 Ph / 50Hz
Capacity shown **57713**: Small motor version available & ***23807****: CIC Operation*
NOTE: Please nominate where units are required for HCFC refrigerant – B5 Oil

Refrigerant R404A/R507 **Ambient Temperature 35º C**

Airefrig Part Number		Refrigeration Capacity Qo Watts / Consumption Pe KW — Evaporating Temperature ºC											List Price Ex GST
		10	5	0	-5	-10	-15	-20	-25	-30	-35	-40	
4J132YC5034P	Q					**33250**	**28171**	**23072**	**18583**	**14629**	11157	8185	P.O.A.
	P					**14.87**	**13.26**	**11.79**	**10.31**	**8.86**	7.42	6.01	
4J222YC5034P	Q		54427	46880	39920	**33651**	**27998**	**22929**	**18357**	**14329**			P.O.A.
	P		18.30	16.86	15.41	**14.01**	**12.59**	**11.17**	**9.78**	**8.42**			
4H152YC5036P	Q					36956	31267	25943	21248	16945	13234	9931	P.O.A.
	P					17.7	15.77	13.93	12.15	10.44	8.78	7.14	
4H252YC5034P	Q		60867	52723	45127	**38182**	**31857**	**26126**	**21126**	**16700**			P.O.A.
	P		21.79	19.98	18.19	**16.49**	**14.79**	**13.11**	**11.49**	**9.90**			
4G202YC5034P	Q					43861	36964	30568	24998	19943	15409	11672	P.O.A.
	P					20.32	18.18	16.13	14.14	12.22	10.34	8.47	
4G302YC6664P	Q		72548	62536	53191	**44986**	**37486**	**30698**	**24666**	**19640**			P.O.A.
	P		24.62	22.72	20.85	**18.96**	**17.09**	**15.24**	**13.40**	**11.60**			
6J222YC5034P	Q					47905	40413	33655	27476	21814	16930	12582	P.O.A.
	P					22.80	20.29	17.90	15.58	13.36	11.19	9.06	
6J332YC6664P	Q		79210	68752	58568	**49513**	**41151**	**33838**	**27245**	**21408**			P.O.A.
	P		28.04	25.71	23.46	**21.21**	**19.01**	**16.85**	**14.74**	**12.67**			

Performance based on 20ºC Suction Gas Temperature, 3K Liquid Sub Cooling, 50Hz 35ºC Ambient
For 32ºC Ambient, multiply above figures by correction factor 1.03
For 38ºC Ambient, multiply above figures by correction factor 0.97
Standard Power Requirement, 415V / 3 Ph / 50Hz
Capacity shown **49513**: Small motor version available.

BITZER COMPACT CONDENSING UNITS

Refrigerant R134a **Ambient Temperature 35º C**

Airefrig Part Number		Refrigeration Capacity Qo Watts / Consumption Pe KW										List Price Ex GST
		Evaporating Temperature ºC										
		10	5	0	-5	-10	-15	-20	-25	-30	-35	-40	
4G202YC5036P	Q	53898	45805	38245	31502	25419	20171	15733	11788	8505			P.O.A.
	P	16.63	14.67	12.97	11.46	10.09	8.82	7.61	6.44	5.29			
6J222YC5034P	Q	63402	53593	44593	36652	29510	23270	17839	13476	9496			P.O.A.
	P	17.82	15.77	13.96	12.33	10.85	9.47	8.17	6.91	5.67			

Performance based on 20ºC Suction Gas Temperature, 3K Liquid Sub Cooling, 50Hz 35ºC Ambient
For 32ºC Ambient, multiply above figures by correction factor 1.03
For 38ºC Ambient, multiply above figures by correction factor 0.97
Standard Power Requirement, 415V / 3 Ph / 50Hz

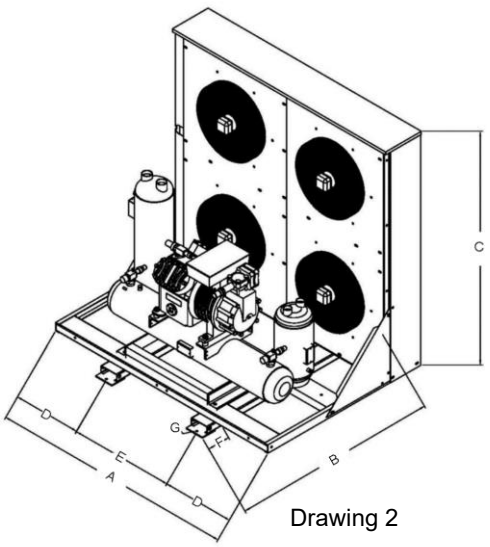
Technical Data

Airefrig Part Number	Compressor Details *				Condenser Details					Receiver
	Nominal Motor HP / KW	Max Current Amps	Electrical Config.	C/Case Heater Watts 240/1/50	Fan No x Dia mm	Fan Motor Voltage	Total Amps	Total Watts	Total Airflow L/S	Pump Down Capacity Kgs R404A / R22
4J132-C5034P	13.0 / 10.0	27	P W	100	4 X 500	415 / 3 / 50	5.40	3120	8150	37 / 42
4J222-C5034P	22.0 / 16.0	39	P W	100	4 X 500	415 / 3 / 50	5.40	3120	8150	37 / 42
4H152-C5036P	15.0 / 11.0	31	P W	100	4 X 500	415 / 3 / 50	2.96	1280	5380	37 / 42
4H252-C5034P	25.0 / 18.5	45	P W	100	4 X 500	415 / 3 / 50	5.40	3120	8150	37 / 42
4G202-C5036P	20.0 / 15.0	37	P W	140	4 X 500	415 / 3 / 50	2.96	1280	5380	37 / 42
4G202-C5034P	20.0 / 15.0	37	P W	140	4 X 500	415 / 3 / 50	5.40	3120	8150	37 / 42
4G302-C6664P	30.0 / 22.0	53	P W	140	4 X 500	415 / 3 / 50	5.40	3120	6760	37 / 42
6J222-C5034P	22.0 / 16.0	39	P W	140	4 X 500	415 / 3 / 50	5.40	3120	8150	37 / 42
6J332-C6664P	33.0 / 24.0	60	P W	140	4 X 500	415 / 3 / 50	5.40	3120	6760	37 / 42

* Based on 380-420 Y/3/50 HZ PW = Part Winding

Dimensions

Airefrig Part Number	Dimensions mm								Connections		Weight
	A	B	C	D	E	F	G	Drg No	Suction	Liquid	Kgs
4J132-C5034P	1665	1400	1650	478	711	80	12	2	1 5/8	7/8	553
4J222-C5034P	1665	1400	1650	478	711	80	12	2	1 5/8	7/8	564
4H152-C5036P	1665	1400	1650	478	711	80	12	2	1 5/8	7/8	537
4H252-C5034P	1665	1400	1650	478	711	80	12	2	2 1/8	7/8	557
4G202-C5036P	1665	1400	1650	478	711	80	12	2	2 1/8	7/8	546
4G202-C5034P	1665	1400	1650	478	711	80	12	2	2 1/8	7/8	546
4G302-C6664P	1665	1400	1650	478	711	80	12	2	2 1/8	7/8	649
6J222-C5034P	1665	1400	1650	478	711	80	12	2	2 1/8	7/8	557
6J332-C6664P	1665	1400	1650	478	711	80	12	2	2 1/8	7/8	656



Drawing 2

Tecumseh Compressors

Tecumseh Europe is widely known as a world leader in commercial and domestic refrigeration and air conditioning.

Tecumseh compressors have certificates of conformity such as UL, CE, VDE, NF, CCC, CSA, GOST, SONCAP, IRAM, TIS, SASO…

Tecumseh have been listening and responding to customers for more than 50 years with numerous research & development studies. That's more than half a century of know-how and products which guarantee Tecumseh reliability and performance.

Tecumseh are committed to rating the performance of their products in accordance with the most recent standards such as EN 12900 compressor rating conditions for refrigeration. This standard defines the new capacity rating points for refrigeration in a way which is more useful to refrigeration engineers. In addition, they specify the tolerances which are applicable to the characteristics of each compressors

Note: One of the main consequences of the changes to the EN 12900 rating conditions will be variation in published capacities compared to previous figures. The new standard presents the capacity in a way which is closer to reality of the various installations.

Compressor Single Phase Motor Types:

PTCSIR
During start-up, the start winding is fed through the P.T.C. which changes the resistance of the P.T.C. with the change in temperature.



Electrical components:
1 x P.T.C.
1 x external overload protector fitted on to the compressor
1 x earth connection

RSIR
During start-up, the start winding is energized through an electromagnetic relay

Electrical components:
1 x electromagnetic relay.
1 x external overload protector fitted on to the compressor
1 x earth connection



CSIR
During start-up, the start winding is energized through an electromagnetic relay and start capacitor.

Electrical components:
1 x electromagnetic relay.
1 x external overload protector fitted on to the compressor
1 x start capacitor
1 x earth connection

CSR
During start-up, the start winding is energized through an electromagnetic relay and start capacitor. A permanent split capacitor is wired between the start winding and run windings



Electrical components:
1 x external overload protector fitted on to the compressor
1 x electrical box containing:
- 1 x electromagnetic potential relay
- 1 x start capacitor fitted with a discharge resistance
- 1 x terminal block
- 1 x earth connection
- 1 x external run capacitor with fixing bracket

TECUMSEH HERMETIC COMPRESSORS

R404A (R507) - Low Temperature Compressors

Airefrig Part Number	Displ cm³	Operating Conditions *EN12900	Cond Temp ºC	Based on 20ºC return gas & 0.0 K sub-cooling Evaporating Temperature ºC -35	-30	-25	-20	-15	-10	Motor Type	Amps	Oil charge	Weight
		Capacity (w)		89.1	119	155	198	249	308	Nom. HP	RLA		
THB2378ZFZ		Input (w)	45.0	140	158	176	195	214	234	1/4	1.20		
(Static Cooling)		Amps		1.22	1.25	1.30	1.35	1.40	1.47				
- Stub Tubes		Capacity (w)		78.2	105	138	177	223	276	220-240v	Max		
- POE Oil	4.2	Input (w)	50.0	142	161	180	200	221	243	1Ø-50Hz	1.87	350mls	7.3 kg
- Mount Kit		Amps		1.22	1.26	1.31	1.36	1.43	1.50				
		Capacity (w)			91.3	120	155	196	244	CSIR	LRA		
		Input (w)	55.0		161	182	204	226	249		9.0		
		Amps			1.26	1.32	1.38	1.44	1.52				
		Capacity (w)		116	153	196	247	306	375	Nom. HP	RLA		
THB2396ZFZ		Input (w)	45.0	157	178	200	223	247	271	1/3	1.44		
(Fan Cooling)		Amps		1.44	1.49	1.54	1.60	1.66	1.73				
- Stub Tubes		Capacity (w)		101	134	172	217	268	328	220-240v	Max		
- POE Oil	5.2	Input (w)	50.0	156	179	203	228	255	282	1Ø-50Hz	2.10	350mls	7.9 kg
- Mount Kit		Amps		1.44	1.49	1.55	1.61	1.68	1.75				
		Capacity (w)			115	148	186	230	282	CSIR	LRA		
		Input (w)	55.0		179	205	233	262	293		10.0		
		Amps			1.49	1.55	1.62	1.70	1.78				
		Capacity (w)		129	183	248	326	418	526	Nom. HP	RLA		
AEZ2411Z		Input (w)	45.0	212	247	286	327	370	416	1/4	2.0		
(Fan Cooling)		Amps		1.91	1.96	2.04	2.15	2.28	2.43				
- Stub Tubes		Capacity (w)		108	158	216	286	369	466	220-240v	Max		
- POE Oil	7.6	Input (w)	50.0	208	245	285	329	376	426	1Ø-50Hz	3.10	250mls	10.2kg
- Mount Kit		Amps		1.90	1.97	2.06	2.17	2.31	2.47				
		Capacity (w)			132	185	247	321	408	CSIR	LRA		
		Input (w)	55.0		241	284	330	381	435		13.0		
		Amps			1.97	2.07	2.19	2.33	2.5				
		Capacity (w)		159	222	298	388	494	617	Nom. HP	RLA		
AEZ2415Z		Input (w)	45.0	229	266	304	342	379	414	3/8	2.20		
(Fan Cooling)		Amps		2.12	2.18	2.26	2.36	2.47	2.60				
- Stub Tubes		Capacity (w)		134	191	260	341	437	550	220-240v	Max		
- POE Oil	8.1	Input (w)	50.0	226	265	305	347	389	430	1Ø-50Hz	3.50	350mls	11.4kg
- Mount Kit		Amps		2.13	2.19	2.28	2.38	2.50	2.64				
		Capacity (w)			161	223	296	382	484	CSIR	LRA		
		Input (w)	55.0		263	306	352	398	443		14.0		
		Amps			2.20	2.30	2.41	2.53	2.68				
		Capacity (w)		159	259	371	494	629	774	Nom. HP	RLA		
CAE2417Z		Input (w)	45.0	260	302	350	407	471	543	1/3	2.70		
(Fan Cooling)		Amps		2.36	2.44	2.55	2.70	2.87	3.08				
- Stub Tubes		Capacity (w)		134	223	324	435	557	689	220-240v	Max		
- POE Oil	11.3	Input (w)	50.0	250	298	353	416	487	565	1Ø-50Hz	3.40	350mls	13.0kg
- Mount Kit		Amps		2.34	2.45	2.58	2.74	2.93	3.15				
		Capacity (w)			189	278	378	486	605	CSIR	LRA		
		Input (w)	55.0		294	356	426	502	587		17.0		
		Capacity (w)			2.46	2.61	2.79	2.99	3.22				

*EN12900 compressor rating conditions defines the new capacity ratings for refrigeration in a way which is more useful to refrigeration techs.

TECUMSEH HERMETIC COMPRESSORS

R404A (R507) - Low Temperature Compressors

Airefrig Part Number	Displ cm³	Operating Conditions *EN12900	Cond Temp ºC	Based on 20ºC return gas & 0.0 K sub-cooling Evaporating Temperature ºC -35	-30	-25	-20	-15	-10	Motor Info	Amps	Oil charge	Weight
		Capacity (w)		260	356	469	599	747	911	Nom. HP	RLA		
CAE2420Z		Input (w)	45.0	383	421	466	517	574	637	1/2	3.10		
(Fan Cooling)		Amps		2.97	3.02	3.12	3.28	3.48	3.74				
- Stub Tubes		Capacity (w)		209	298	403	522	656	805	220-240v	Max		
- POE Oil	12.6	Input (w)	50.0	354	405	461	521	586	656	1Ø-50Hz	4.40	350mls	13.0kg
- Mount Kit		Amps		2.90	3.0	3.14	3.32	3.54	3.81				
		Capacity (w)			243	339	448	568	701	CSIR	LRA		
		Input (w)	55.0		388	455	525	599	675		18.0		
		Amps			2.98	3.15	3.35	3.60	3.88				
		Capacity (w)		271	379	511	670	861	1086	Nom. HP	RLA		
CAE2424Z		Input (w)	45.0	389	447	507	570	637	707	5/8	2.50		
(Fan Cooling)		Amps		4.76	4.34	4.13	4.12	4.31	4.71				
- Stub Tubes		Capacity (w)		232	330	449	593	766	970	220-240v	Max		
- POE Oil	15.1	Input (w)	50.0	385	447	513	581	653	729	1Ø-50Hz	4.70	350mls	13.0kg
- Mount Kit		Amps		4.85	4.40	4.15	4.10	4.26	4.63				
		Capacity (w)			284	391	521	676	861	CSR	LRA		
		Input (w)	55.0		446	517	590	668	751		17.0		
		Amps			4.01	3.73	3.65	3.78	4.11				
		Capacity (w)		258	375	515	684	884	1118	Nom. HP	RLA		
CAJ2428Z		Input (w)	45.0	355	431	514	604	699	797	1/2	3.30		
(Fan Cooling)		Amps		2.91	3.10	3.34	3.61	3.92	4.26				
- Suction Rotalock		Capacity (w)		210	315	443	595	776	989	220-240v	Max		
- Disch Stub Tube	15.2	Input (w)	50.0	338	416	504	600	703	812	1Ø-50Hz	5.10	887mls	21.0kg
- POE Oil		Amps		2.88	3.09	3.34	3.63	3.95	4.31				
- Mount Kit		Capacity (w)			257	370	507	669	861	CSIR	LRA		
		Input (w)	55.0		398	488	589	699	817		22.0		
		Amps			3.07	3.33	3.63	3.97	4.35				
		Capacity (w)		323	470	647	860	1112	1405	Nom. HP	RLA		
CAJ2432Z		Input (w)	45.0	408	485	564	647	735	828	5/8	2.50		
(Fan Cooling)		Amps		1.85	2.18	2.53	2.90	3.28	3.68				
- Suction Rotalock		Capacity (w)		266	398	557	749	976	1243	220-240v	Max		
- Disch Stub Tube	18.3	Input (w)	50.0	396	478	563	653	748	850	1Ø-50Hz	6.30	887mls	21.5kg
- POE Oil		Amps		1.80	2.16	2.54	2.93	3.34	3.77				
- Mount Kit		Capacity (w)			327	469	639	841	1081	CSR	LRA		
		Input (w)	55.0		466	558	654	757	866		21.0		
		Amps			2.13	2.53	2.95	3.38	3.83				
		Capacity (w)		398	567	770	1012	1297	1628	Nom. HP	RLA		
CAJ2440Z		Input (w)	45.0	492	580	671	767	868	974	1.0	3.0		
(Fan Cooling)		Amps		2.20	2.59	3.0	3.42	3.86	4.32				
- Suction Rotalock		Capacity (w)		337	489	673	892	1151	1453	220-240v	Max		
- Disch Stub Tube	21.0	Input (w)	50.0	481	576	675	778	888	1004	1Ø-50Hz	5.70	887mls	21.9kg
- POE Oil		Amps		2.16	2.59	3.03	3.48	3.95	4.44				
		Capacity (w)			415	579	775	1008	1282	CSR	LRA		
		Input (w)	55.0		570	676	787	906	1031		27.0		
		Capacity (w)			2.57	3.04	3.53	4.03	4.54				

*EN12900 compressor rating conditions defines the new capacity ratings for refrigeration in a way which is more useful to refrigeration techs.

TECUMSEH HERMETIC COMPRESSORS

R404A (R507) - Low Temperature Compressors

Airefrig Part Number	Displ cm³	Operating Conditions *EN12900	Cond Temp ºC	Based on 20ºC return gas & 0.0 K sub-cooling Evaporating Temperature ºC -35	-30	-25	-20	-15	-10	Motor Info	Amps	Oil charge	Weight
		Capacity (w)		541	755	1005	1296	1633	2021	Nom. HP	RLA		
CAJ2446Z		Input (w)	45.0	598	709	823	938	1055	1174	3/4	3.80		
(Fan Cooling)		Amps		2.78	3.24	3.73	4.25	4.80	5.38				
- Suction Rotalock		Capacity (w)		457	651	878	1141	1447	1799	220-240v	Max		
- Disch Stub Tube	26.2	Input (w)	50.0	587	708	831	956	1085	1217	1Ø-50Hz	7.90	887mls	23.0kg
- POE Oil		Amps		2.77	3.28	3.81	4.36	4.95	5.56				
- Mount Kit		Capacity (w)			549	751	987	1260	1576	CSR	LRA		
		Input (w)	55.0		703	836	972	1112	1256		29.0		
		Amps			3.31	3.88	4.47	5.10	5.75				
		Capacity (w)		725	989	1303	1673	2106	2609	Nom. HP	RLA		
CAJ2464Z		Input (w)	45.0	841	986	1135	1288	1447	1611	1.5	5.70		
(Fan Cooling)		Amps		4.55	5.11	5.72	6.38	7.08	7.83				
- Suction Rotalock		Capacity (w)		623	862	1146	1482	1876	2334	220-240v	Max		
- Disch Stub Tube	34.5	Input (w)	50.0	833	988	1149	1315	1487	1666	1Ø-50Hz	10.0	887mls	23.7kg
- POE Oil		Amps		4.54	5.15	5.81	6.51	7.27	8.07				
- Mount Kit		Capacity (w)			737	991	1292	1646	2059	CSR	LRA		
		Input (w)	55.0		985	1158	1337	1523	1717		40.0		
		Amps			5.17	5.88	6.64	7.44	8.29				

*EN12900 compressor rating conditions defines the new capacity ratings for refrigeration in a way which is more useful to refrigeration techs.

Prices

Airefrig Part Number	List Price Excl GST
THB2378ZFZ	
THB2396ZFZ	
AEZ2411Z	
AEZ2415Z	

Airefrig Part Number	List Price Excl GST
CAE2417Z	
CAE2420Z	
CAE2424Z	
CAJ2428Z	

Airefrig Part Number	List Price Excl GST
CAJ2432Z	
CAJ2440Z	
CAJ2446Z	
CAJ2464Z	

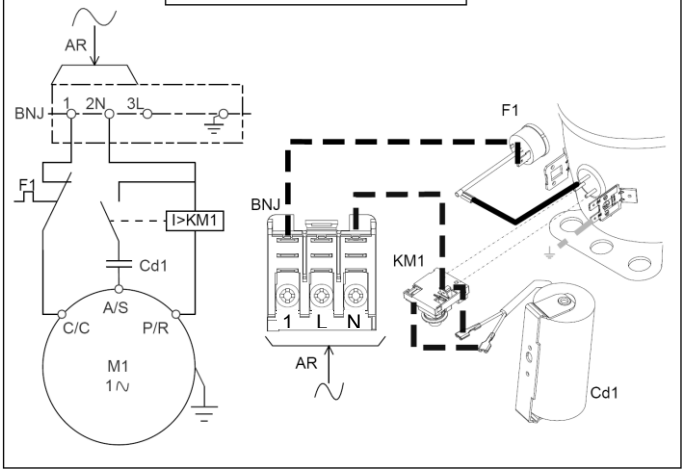


TECUMSEH HERMETIC COMPRESSORS

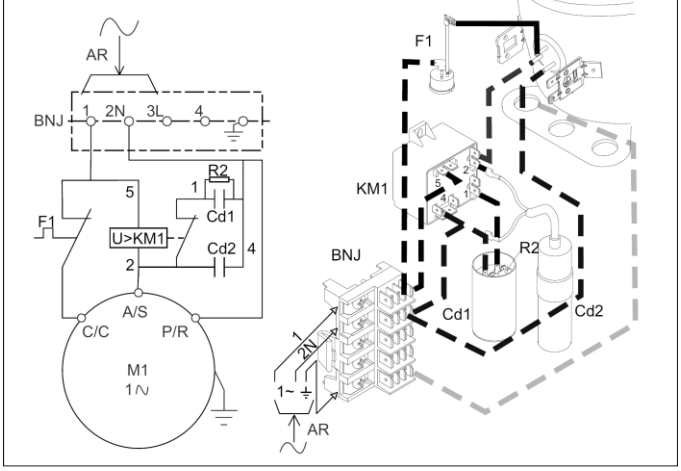
R404A (R507) - Low Temperature Compressors Technical Information

Airefrig Part Number	Electrical Drawing No.	Winding Resistance Ohms @ 20 ºC		Compressor Electrical				Sound Level ISO 3745 / ISO 3743-1
		Main	Auxiliary	Motor Type	Relay Type	Start Capacitor	Run Capacitor	
THB2378ZFZ	1	12.4	24.3	CSIR	Current	72-88uF / 260V	-	41 dBA
THB2396ZFZ	1	10.12	25.9	CSIR	Current	72-88uF / 260V	-	46 dBA
AEZ2411Z	1	6.8	30.2	CSIR	Current	50uF / 260V	-	42 dBA
AEZ2415Z	1	5.3	22.9	CSIR	Current	50uF / 260V	-	48 dBA
CAE2417Z	1	4.5	20.8	CSIR	Current	50uF / 260V	-	54 dBA
CAE2420Z	1	4	19.1	CSIR	Current	64uF / 260V	-	55 dBA
CAE2424Z	2	4.3	10.4	CSR	Potential	64uF / 330V	15uF / 400V	54 dBA
CAJ2428Z	4	3.2	11.1	CSIR	Current	88uF / 330V	-	53 dBA
CAJ2432Z	3	3.2	11.1	CSR	Potential	88uF / 330V	15uF / 400V	56 dBA
CAJ2440Z	3	2.8	11.6	CSR	Potential	88uF / 260V	15uF / 400V	60 dBA
CAJ2446Z	3	2.4	10.3	CSR	Potential	88uF / 330V	15uF / 400V	62 dBA
CAJ2464Z	3	1.6	6.5	CSR	Potential	88uF / 330V	20uF / 400V	63 dBA

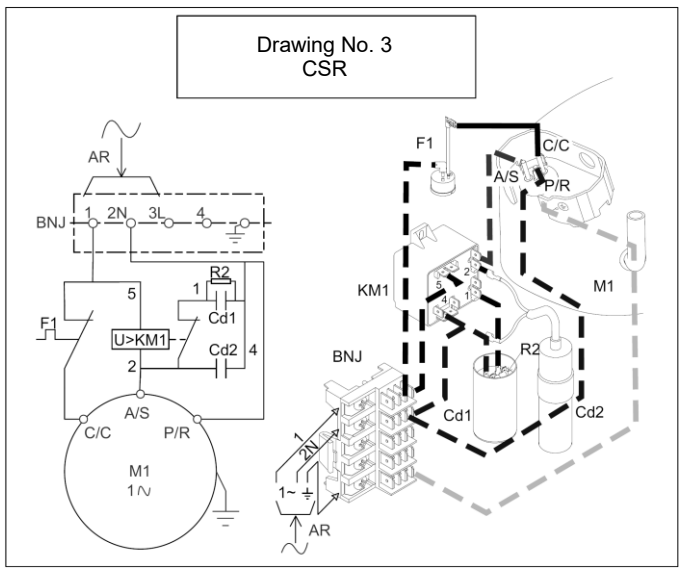
Drawing No.1
CSIR



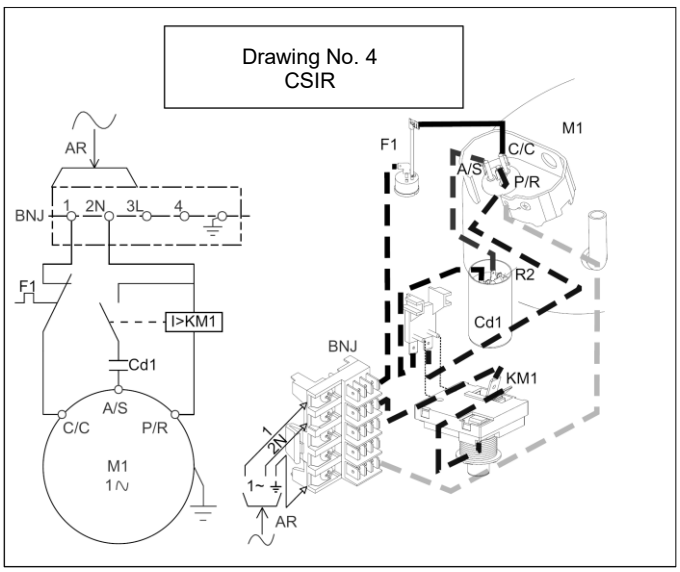
Drawing No. 2
CSR



Drawing No. 3
CSR



Drawing No. 4
CSIR



TECUMSEH HERMETIC COMPRESSORS

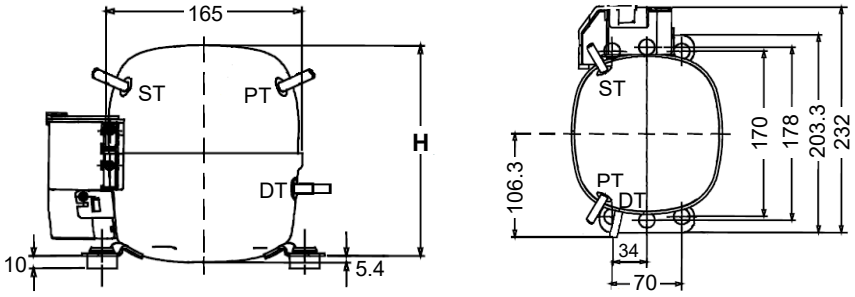
R404A (R507) - Low Temperature Compressors Technical Information

Airefrig Part Number	Dimensions		Compressor Tube Connections			
	Dwg. No	**H** mm	Suction Tube / Valve mm (inch)	Discharge Tube mm (inch)	Process Tube mm (inch)	Oil Cooler Tubes mm (inch)
THB2378ZFZ	1	172.2	Stub Tube 6.35 (1/4")	4.76 (3/16")	6.35 (1/4")	-
THB2396ZFZ	1	172.2	Stub Tube 6.35 (1/4")	4.76 (3/16")	6.35 (1/4")	-
AEZ2411Z	3	186	Stub Tube 6.35 (1/4")	4.76 (3/16")	6.35 (1/4")	-
AEZ2415Z	3	199	Stub Tube 6.35 (1/4")	4.76 (3/16")	6.35 (1/4")	-
CAE2417Z *	4	207	Stub Tube 9.5 (3/8")	6.35 (1/4")	9.5 (3/8")	-
CAE2420Z	4	212	Stub Tube 9.5 (3/8")	6.35 (1/4")	9.5 (3/8")	-
CAE2424Z	4	215	Stub Tube 9.5 (3/8")	6.35 (1/4")	9.5 (3/8")	-
CAJ2428Z	6	271	Rotalock Valve 12.7 (1/2")	6.35 (1/4")	6.35 (1/4")	-
CAJ2432Z	6	271	Rotalock Valve 12.7 (1/2")	7.9 (5/16")	6.35 (1/4")	-
CAJ2440Z	6	271	Rotalock Valve 12.7 (1/2")	7.9 (5/16")	6.35 (1/4")	-
CAJ2446Z	6	282	Rotalock Valve 12.7 (1/2")	7.9 (5/16")	6.35 (1/4")	-
CAJ2464Z	6	282	Rotalock Valve 15.9 (5/8")	9.5 (3/8")	6.35 (1/4")	-

Drawing : 1

Connection Identification:

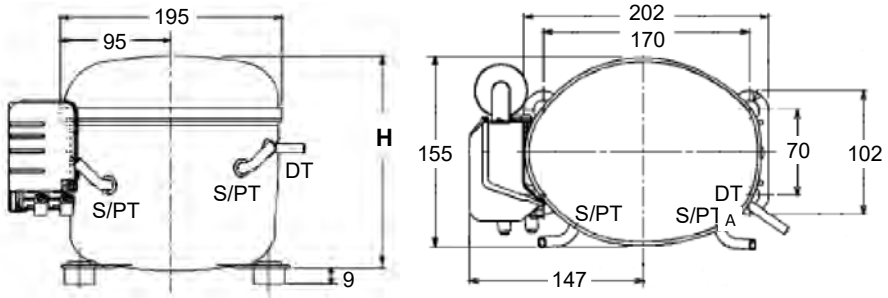
PT = Process (only) Tube
ST = Suction (only) Tube
DT = Discharge Tube



Drawing : 3

Connection Identification:

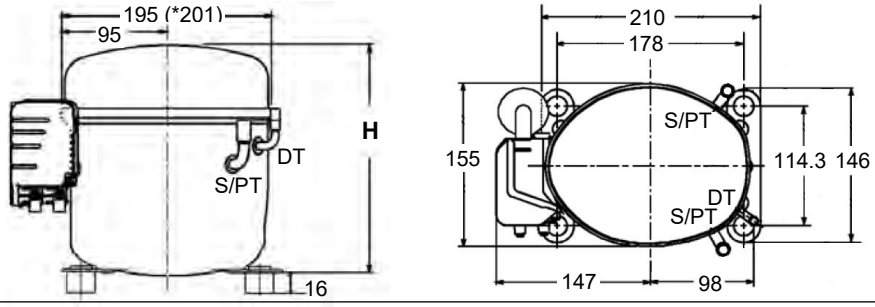
S/PT = Suction / Process Tube
DT = Discharge Tube



Drawing : 4

Connection Identification:

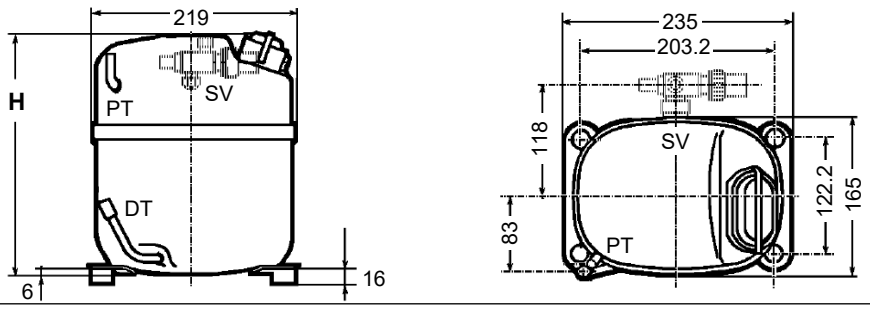
S/PT = Suction / Process Tube
DT = Discharge Tube



Drawing : 6

Connection Identification:

PT = Process Tube
SV = Suction Valve
DT = Discharge Tube



TECUMSEH HERMETIC COMPRESSORS

R404A (R507) - Medium Temperature Compressors

Airefrig Part Number	Displ cm³	Operating Conditions *EN12900	Cond Temp ºC	Based on 20ºC return gas & 0.0 K sub-cooling Evaporating Temperature ºC -20	-15	-10	-5	0	5	10	15	Motor Info	Amps	Oil charge	Weight
		Capacity (w)		200	260	331	413	504	602	704	810	Nom. HP	RLA		
AEZ4425Z		Input (w)	45.0	203	222	241	260	280	300	320	340	1/3	1.90		
(Fan Cooling)		Amps		1.48	1.51	1.56	1.62	1.68	1.75	1.82	1.91				
- Stub Tubes		Capacity (w)		177	230	294	368	449	537	629	723	220-240v	Max		
- POE Oil	4.5	Input (w)	50.0	201	224	247	269	292	315	337	360	1Ø-50Hz	2.40	250mls	9.8kg
- Mount Kit		Amps		1.47	1.53	1.60	1.67	1.74	1.82	1.91	2.0				
		Capacity (w)			200	257	322	394	472	553	635	CSIR	LRA		
		Input (w)	55.0		226	253	279	304	330	355	380		9.0		
		Amps			1.55	1.63	1.72	1.81	1.90	1.99	2.08				
		Capacity (w)		267	343	431	532	644	763	889	1017	Nom. HP	RLA		
AEZ4430Z		Input (w)	45.0	252	276	301	326	351	377	403	429	1/4	2.40		
(Fan Cooling)		Amps		1.93	1.96	2.01	2.07	2.15	2.24	2.34	2.45				
- Stub Tubes		Capacity (w)		236	303	383	474	574	682	794	908	220-240v	Max		
- POE Oil	5.7	Input (w)	50.0	250	279	308	337	367	396	425	454	1Ø-50Hz	3.40	250mls	10.2kg
- Mount Kit		Amps		1.93	1.99	2.06	2.14	2.23	2.33	2.44	2.57				
		Capacity (w)			263	334	415	504	599	698	797	CSIR	LRA		
		Input (w)	55.0		282	315	349	382	415	447	479		11.0		
		Amps			2.01	2.10	2.20	2.31	2.43	2.55	2.68				
		Capacity (w)		378	470	583	716	865	1029	1203	1383	Nom. HP	RLA		
AEZ4440Z		Input (w)	45.0	317	346	376	405	435	466	496	527	1/3	2.80		
(Fan Cooling)		Amps		2.05	2.13	2.23	2.33	2.44	2.56	2.69	2.83				
- Stub Tubes		Capacity (w)		333	415	517	637	772	919	1074	1234	220-240v	Max		
- POE Oil	7.6	Input (w)	50.0	314	350	385	420	454	489	524	558	1Ø-50Hz	3.80	350mls	11.8kg
- Mount Kit		Amps		2.04	2.16	2.28	2.41	2.54	2.67	2.82	2.96				
		Capacity (w)			361	451	558	678	808	945	1084	CSIR	LRA		
		Input (w)	55.0		353	394	434	474	513	551	589		18.0		
		Amps			2.18	2.33	2.48	2.63	2.78	2.94	3.09				
		Capacity (w)		451	568	714	887	1083	1299	1529	1768	Nom. HP	RLA		
CAE9450Z		Input (w)	45.0	364	390	417	447	479	512	548	585	3/8	2.80		
(Fan Cooling)		Amps		1.96	2.05	2.15	2.26	2.38	2.51	2.65	2.79				
- Stub Tubes		Capacity (w)		396	501	634	790	967	1160	1365	1576	220-240v	Max		
- POE Oil	9.4	Input (w)	50.0	360	393	428	463	500	538	577	618	1Ø-50Hz	3.90	350mls	13.0kg
- Mount Kit		Amps		1.95	2.07	2.20	2.33	2.47	2.62	2.77	2.92				
		Capacity (w)		339	434	553	692	849	1020	1200	1383	CSR	LRA		
		Input (w)	55.0	356	397	438	479	521	564	607	651		13.1		
		Amps		1.94	2.10	2.25	2.41	2.56	2.72	2.89	3.05				

*EN12900 compressor rating conditions defines the new capacity ratings for refrigeration in a way which is more useful to refrigeration techs.

TECUMSEH HERMETIC COMPRESSORS

R404A (R507) - Medium Temperature Compressors

Airefrig Part Number	Displ cm³	Operating Conditions *EN12900	Cond Temp ºC	Based on 20ºC return gas & 0.0 K sub-cooling Evaporating Temperature ºC								Motor Info	Amps	Oil charge	Weight
				-20	-15	-10	-5	0	5	10	15				
		Capacity (w)		511	667	846	1052	1288	1559	1866	2215	Nom. HP	RLA		
CAE9460Z		Input (w)	45.0	423	461	499	537	576	616	656	696	1/2	3.40		
(Fan Cooling)		Amps		2.37	2.48	2.61	2.75	2.90	3.07	3.25	3.45				
- Stub Tubes		Capacity (w)		444	585	746	931	1142	1384	1659	1972	220-240v	Max		
- POE Oil	11.3	Input (w)	50.0	419	465	511	557	602	647	692	736	1Ø-50Hz	5.20	350mls	13.6kg
- Mount Kit		Amps		2.36	2.51	2.67	2.84	3.02	3.20	3.40	3.60				
		Capacity (w)		377	504	647	809	995	1207	1450	1726	CSR	LRA		
		Input (w)	55.0	414	469	523	576	628	678	727	776		17.0		
		Amps		2.35	2.54	2.73	2.93	3.13	3.33	3.54	3.76				
		Capacity (w)		626	803	1008	1246	1520	1835	2195	2605	Nom. HP	RLA		
CAE9470Z		Input (w)	45.0	545	586	629	674	720	768	818	869	1/2	4.0		
(Fan Cooling)		Amps		2.74	2.89	3.06	3.24	2.11	3.65	3.88	4.13				
- Stub Tubes		Capacity (w)		549	711	897	1110	1356	1637	1960	2327	220-240v	Max		
- POE Oil	13.3	Input (w)	50.0	539	592	645	698	752	807	862	918	1Ø-50Hz	5.60	350mls	13.7kg
- Mount Kit		Amps		2.74	2.93	3.13	3.34	3.57	3.81	4.06	4.32				
		Capacity (w)		470	618	784	973	1190	1438	1723	2048	CSR	LRA		
		Input (w)	55.0	534	597	660	723	785	846	907	967		20.0		
		Amps		2.73	2.96	3.20	3.45	3.70	3.96	4.23	4.51				
		Capacity (w)		711	920	1159	1434	1752	2117	2535	3013	Nom. HP	RLA		
CAJ9480Z		Input (w)	45.0	565	631	692	750	801	847	887	919	5/8	4.30		
(Fan Cooling)		Amps		2.65	2.96	3.25	3.51	3.75	3.96	4.14	4.29				
- Suction Rotalock		Capacity (w)		615	807	1024	1271	1554	1879	2251	2678	220-240v	Max		
- Disch Stub Tube	15.2	Input (w)	50.0	569	642	712	778	839	894	943	986	1Ø-50Hz	6.70	887mls	22.0kg
- POE Oil		Amps		2.64	3.0	3.33	3.64	3.92	4.17	4.40	4.60				
- Mount Kit		Capacity (w)		519	694	888	1107	1356	1641	1968	2343	CSR	LRA		
		Input (w)	55.0	569	651	729	804	874	939	998	1051		22.6		
		Amps		2.63	3.03	3.41	3.76	4.08	4.38	4.65	4.89				
		Capacity (w)		900	1158	1453	1794	2187	2639	3157	3749	Nom. HP	RLA		
CAJ9510Z		Input (w)	45.0	687	767	844	917	986	1048	1104	1153	1.0	5.30		
(Fan Cooling)		Amps		3.22	3.59	3.95	4.29	4.62	4.93	5.22	5.50				
- Suction Rotalock		Capacity (w)		785	1022	1289	1594	1945	2348	2811	3340	220-240v	Max		
- Disch Stub Tube	18.3	Input (w)	50.0	695	784	870	953	1031	1104	1172	1232	1Ø-50Hz	8.0	887mls	23.0kg
- POE Oil		Amps		3.24	3.66	4.06	4.45	4.82	5.17	5.51	5.83				
- Mount Kit		Capacity (w)		669	884	1123	1394	1702	2056	2462	2929	CSR	LRA		
		Input (w)	55.0	699	797	893	985	1074	1158	1237	1309		30.0		
		Amps		3.26	3.72	4.16	4.59	5.01	5.41	5.79	6.16				

*EN12900 compressor rating conditions defines the new capacity ratings for refrigeration in a way which is more useful to refrigeration techs.

TECUMSEH HERMETIC COMPRESSORS

R404A (R507) - Medium Temperature Compressors

Airefrig Part Number	Displ cm³	Operating Conditions *EN12900	Cond Temp ºC	Based on 20ºC return gas & 0.0 K sub-cooling Evaporating Temperature ºC								Motor Info	Amps	Oil charge	Weight
				-20	-15	-10	-5	0	5	10	15				
		Capacity (w)		1016	1377	1774	2218	2718	3282	3920	4642	Nom. HP	RLA		
CAJ9513Z		Input (w)	45.0	751	873	982	1081	1175	1266	1360	1460	1-1/8	6.50		
(Fan Cooling)		Amps		3.86	4.33	4.79	5.24	5.68	6.12	6.54	6.95				
- Suction Rotalock		Capacity (w)		847	1181	1543	1943	2390	2893	3461	4104	220-240v	Max		
- Disch Stub Tube	24.2	Input (w)	50.0	736	875	1000	1114	1222	1326	1432	1543	1Ø-50Hz	10.20	887mls	23.0kg
- POE Oil		Amps		3.83	4.36	4.89	5.40	5.90	6.39	6.88	7.35				
- Mount Kit		Capacity (w)		682	988	1313	1668	2061	2502	2999	3563	CSR	LRA		
		Input (w)	55.0	716	872	1013	1142	1264	1383	1501	1623		33.5		
		Amps		3.80	4.39	4.97	5.55	6.11	6.67	7.21	7.75				
		Capacity (w)		1192	1604	2062	2574	3150	3798	4527	5346	Nom. HP	RLA		
CAJ4517Z		Input (w)	45.0	938	1068	1185	1291	1390	1483	1573	1663	1-1/4	7.30		
(Fan Cooling)		Amps		4.36	4.86	5.35	5.82	6.28	6.72	7.15	7.56				
- Suction Rotalock		Capacity (w)		1004	1388	1808	2274	2793	3375	4029	4762	220-240v	Max		
- Disch Stub Tube	25.95	Input (w)	50.0	936	1086	1221	1344	1457	1564	1667	1767	1Ø-50Hz	12.7	887mls	24.0kg
- POE Oil		Amps		4.38	4.94	5.49	6.02	6.54	7.04	7.53	8.0				
- Mount Kit		Capacity (w)			1172	1554	1970	2431	2945	3520	4165	CSR	LRA		
		Input (w)	55.0		1094	1249	1390	1521	1643	1760	1873		38.5		
		Amps			5.01	5.62	6.21	6.79	7.35	7.90	8.43				
		Capacity (w)		1619	2129	2699	3342	4069	4896	5833	6896	Nom. HP	RLA		
CAJ4519Z		Input (w)	45.0	1314	1457	1595	1729	1861	1991	2121	2251	1.5	9.90		
(Fan Cooling)		Amps		5.88	6.53	7.18	7.82	8.47	9.11	9.74	10.4				
- Suction Rotalock		Capacity (w)		1394	1866	2386	2966	3619	4360	5200	6152	220-240v	Max		
- Disch Stub Tube	34.5	Input (w)	50.0	1324	1486	1643	1795	1942	2087	2230	2372	1Ø-50Hz	15.2	887mls	24.0kg
- POE Oil		Amps		5.92	6.64	7.37	8.09	8.80	9.52	10.2	10.9				
- Mount Kit		Capacity (w)			1602	2069	2585	3162	3814	4554	5395	CSR	LRA		
		Input (w)	55.0		1504	1682	1854	2020	2182	2341	2499		45.0		
		Amps			6.74	7.54	8.33	9.13	9.92	10.7	11.5				

*EN12900 compressor rating conditions defines the new capacity ratings for refrigeration in a way which is more useful to refrigeration techs.

Prices

Airefrig Part Number	List Price Excl GST
AEZ4425Z	
AEZ4430Z	
AEZ4440Z	
CAE9450Z	

Airefrig Part Number	List Price Excl GST
CAE9460Z	
CAE9470Z	
CAJ9480Z	
CAJ9510Z	

Airefrig Part Number	List Price Excl GST
CAJ9513Z	
CAJ4517Z	
CAJ4519Z	



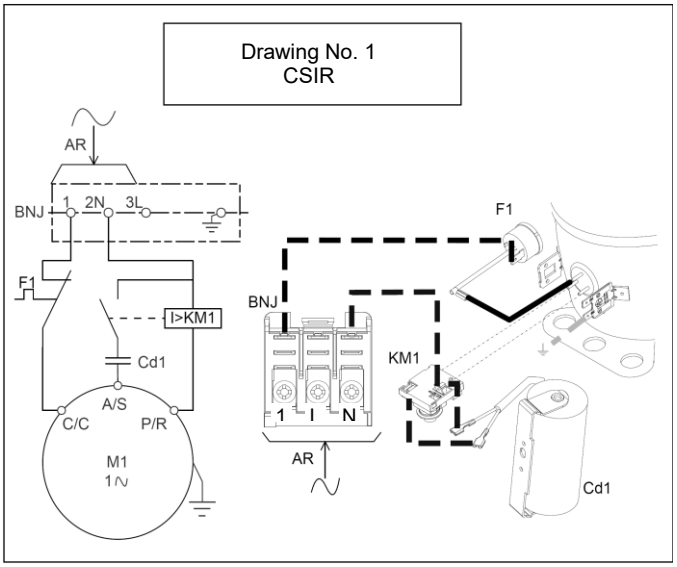


TECUMSEH HERMETIC COMPRESSORS

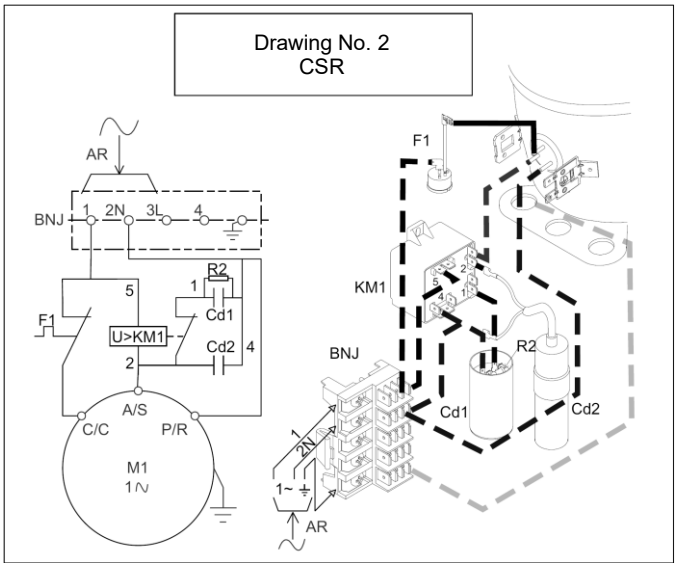
R404A (R507) - Medium Temperature Compressors Technical Information

Airefrig Part Number	Electrical Drawing No.	Winding Resistance Ohms @ 20 ºC		Compressor Electrical				Sound Level ISO 3745 / ISO 3743-1
		Main	Auxiliary	Motor Type	Relay Type	Start Capacitor	Run Capacitor	
AEZ4425Z	1	8.2	34.4	CSIR	Current	50uF / 260V	-	50 dBA
AEZ4430Z	1	6.8	30.2	CSIR	Current	50uF / 260V	-	51 dBA
AEZ4440Z	1	5.3	16.4	CSIR	Current	100uF / 260V	-	55 dBA
CAE9450Z	2	5.5	18.4	CSR	Potential	50uF / 260V	7.5uF / 400V	59 dBA
CAE9460Z	2	4	17.5	CSR	Potential	50uF / 260V	7.5uF / 400V	57 dBA
CAE9470Z	2	3.6	10.6	CSR	Potential	64uF / 330V	15uF / 400V	60 dBA
CAJ9480Z	3	3.33	12.3	CSR	Potential	88uF / 330V	15uF / 400V	64 dBA
CAJ9510Z	3	2.1	8.9	CSR	Potential	100uF / 330V	15uF / 400V	65 dBA
CAJ9513Z	3	2.07	6.89	CSR	Potential	88uF / 260V	15uF / 400V	65 dBA
CAJ4517Z	3	1.7	6.8	CSR	Potential	100uF / 330V	17.5uF / 400V	68 dBA
CAJ4519Z	3	1.3	6.1	CSR	Potential	100uF / 260V	35uF / 400V	67 dBA

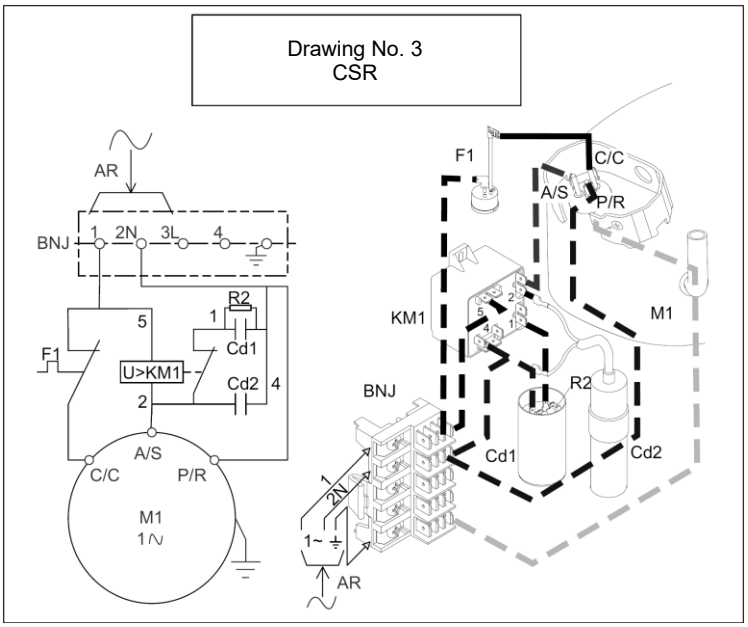
Drawing No. 1
CSIR



Drawing No. 2
CSR



Drawing No. 3
CSR



TECUMSEH HERMETIC COMPRESSORS

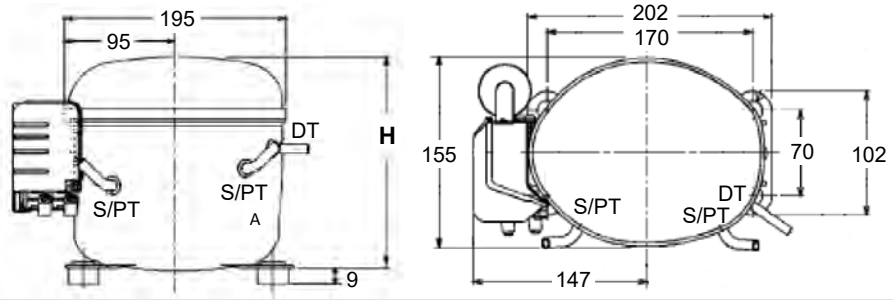
R404A (R507) - Medium Temperature Compressors Technical Information

Airefrig Part Number	Dimensions		Compressor Tube Connections			
	Dwg. No	**H** mm	Suction Tube / Valve mm (inch)	Discharge Tube mm (inch)	Process Tube mm (inch)	Oil Cooler Tubes mm (inch)
AEZ4425Z	3	186	Stub Tube 6.35 (1/4")	4.76 (3/16")	6.35 (1/4")	-
AEZ4430Z	3	186	Stub Tube 6.35 (1/4")	4.76 (3/16")	6.35 (1/4")	-
AEZ4440Z	4	199	Stub Tube 9.5 (3/8")	6.35 (1/4")	9.5 (3/8")	-
CAE9450Z	4	212	Stub Tube 9.5 (3/8")	6.35 (1/4")	9.5 (3/8")	-
CAE9460Z	4	212	Stub Tube 9.5 (3/8")	6.35 (1/4")	9.5 (3/8")	-
CAE9470Z	4	215	Stub Tube 9.5 (3/8")	6.35 (1/4")	9.5 (3/8")	-
CAJ9480Z	6	271	Rotalock Valve 12.7 (1/2")	7.9 (5/16")	6.35 (1/4")	-
CAJ9510Z	6	282	Rotalock Valve 15.9 (5/8")	7.9 (5/16")	6.35 (1/4")	-
CAJ9513Z	6	282	Rotalock Valve 15.9 (5/8")	7.9 (5/16")	6.35 (1/4")	-
CAJ4517Z	6	282	Rotalock Valve 15.9 (5/8")	9.5 (3/8")	6.35 (1/4")	-
CAJ4519Z	6	282	Rotalock Valve 15.9 (5/8")	9.5 (3/8")	6.35 (1/4")	-

Drawing : 3

Connection Identification:

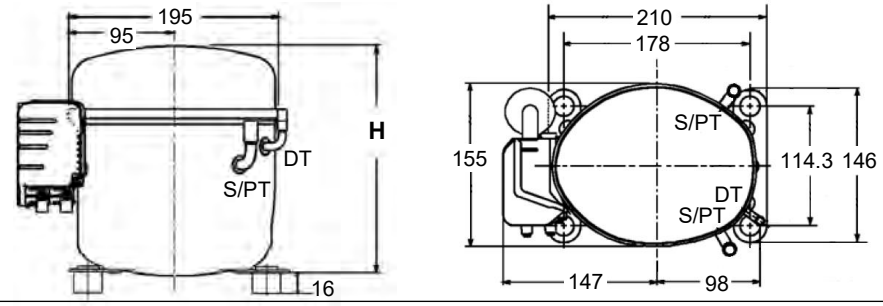
S/PT = Suction / Process Tube
DT = Discharge Tube



Drawing : 4

Connection Identification:

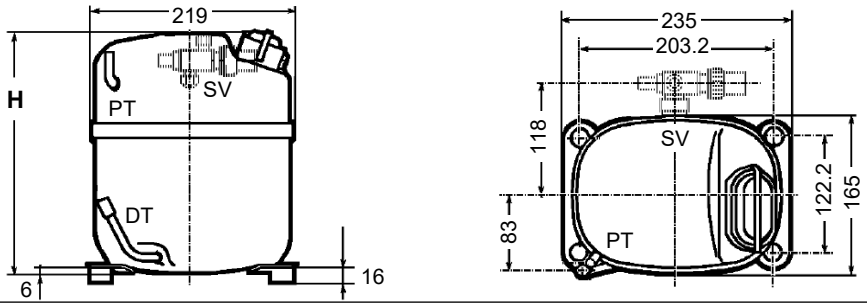
S/PT = Suction / Process Tube
DT = Discharge Tube



Drawing : 6

Connection Identification:

PT = Process Tube
SV = Suction Valve
DT = Discharge Tube



TECUMSEH HERMETIC COMPRESSORS

HIGH EFFICIENCY COMPRESSORS

R404A (R507) - Medium Temperature Compressors

Airefrig Part Number	Displ cm³	Operating Conditions *EN12900	Cond Temp ºC	Based on 20ºC return gas & 0.0 K sub-cooling Evaporating Temperature ºC -20	-15	-10	-5	0	5	10	15	Motor Info	Amps	Oil charge	Weight
		Capacity (w)		198	257	326	407	502	613	741	889	Nom. HP	RLA		
AE4425ZFZ1A		Input (w)	45.0	186	205	221	236	249	258	265	268	1/5	1.80		
		Amps		1.48	1.54	1.59	1.63	1.67	1.70	1.73	1.75				
(Fan Cooling)		Capacity (w)		-	228	290	362	446	545	659	792	220-240v	Max		
- Stub Tubes	4.24	Input (w)	50.0	-	210	229	247	262	274	284	291	1Ø-50Hz	2.80	280mls	9.9kg
- POE Oil		Amps		-	1.55	1.61	1.66	1.71	1.75	1.79	1.82				
- Mount Kit		Capacity (w)		-	199	253	317	391	477	578	694	CSIR	LRA		
		Input (w)	55.0	-	215	237	257	275	290	303	313		10.6		
		Amps		-	1.56	1.63	1.69	1.75	1.80	1.85	1.89				
		Capacity (w)		248	320	404	500	611	740	888	1057	Nom. HP	RLA		
AE4430ZFZ1A		Input (w)	45.0	223	246	266	284	299	311	321	327	1/4	2.10		
		Amps		1.70	1.77	1.84	1.90	1.95	1.99	2.03	2.06				
(Fan Cooling)		Capacity (w)		-	285	361	447	547	661	793	945	220-240v	Max		
- Stub Tubes	5.16	Input (w)	50.0	-	252	276	297	315	331	344	354	1Ø-50Hz	2.90	280mls	10.2kg
- POE Oil		Amps		-	1.79	1.87	1.94	2.00	2.06	2.11	2.15				
- Mount Kit		Capacity (w)		-	248	316	393	480	581	696	829	CSIR	LRA		
		Input (w)	55.0	-	259	285	310	331	351	367	381		11.4		
		Amps		-	1.81	1.90	1.98	2.05	2.12	2.18	2.24				
		Capacity (w)		335	433	546	676	826	1000	1199	1427	Nom. HP	RLA		
AE4440ZFZ1A		Input (w)	45.0	285	314	341	365	386	402	415	422	1/3	2.70		
		Amps		2.18	2.27	2.36	2.44	2.50	2.56	2.61	2.65				
(Fan Cooling)		Capacity (w)		-	383	486	603	737	892	1071	1275	220-240v	Max		
- Stub Tubes	6.69	Input (w)	50.0	-	324	354	382	407	428	445	458	1Ø-50Hz	3.70	280mls	10.5kg
- POE Oil		Amps		-	2.29	2.40	2.49	2.57	2.65	2.71	2.77				
- Mount Kit		Capacity (w)		-	333	425	529	648	784	941	1122	CSIR	LRA		
		Input (w)	55.0	-	333	367	398	427	453	475	493		15.5		
		Amps		-	2.31	2.43	2.54	2.64	2.73	2.81	2.89				
		Capacity (w)		447	576	720	885	1074	1289	1534	1812	Nom. HP	RLA		
		Input (w)	45.0	360	405	445	480	511	537	560	579	1/3	3.40		
AE4450ZFZ1A		Amps		2.48	2.64	2.78	2.91	3.04	3.15	3.25	3.34				
		Capacity (w)		-	510	642	791	959	1151	1369	1617	220-240v	Max		
(Fan Cooling)	8.85	Input (w)	50.0	-	417	463	504	541	573	601	626	1Ø-50Hz	5.10	280mls	10.8kg
- Stub Tubes		Amps		-	2.67	2.84	3.0	3.15	3.28	3.41	3.52				
- POE Oil		Capacity (w)		-	443	563	695	843	1011	1202	1420	CSIR	LRA		
- Mount Kit		Input (w)	55.0	-	427	480	528	571	610	644	675		18.0		
		Amps		-	2.71	2.91	3.09	3.26	3.42	3.57	3.71				

*EN12900 compressor rating conditions defines the new capacity ratings for refrigeration in a way which is more useful to refrigeration techs.

TECUMSEH HERMETIC COMPRESSORS

HIGH EFFICIENCY COMPRESSORS (cont'd)

R404A (R507) - Medium Temperature Compressors

Airefrig Part Number	Displ cm³	Operating Conditions *EN12900	Cond Temp ºC	Based on 20ºC return gas & 0.0 K sub-cooling								Motor Info	Amps	Oil charge	Weight
				Evaporating Temperature ºC											
				-20	-15	-10	-5	0	5	10	15				
		Capacity (w)		570	713	875	1062	1275	1519	1799	2177	Nom. HP	RLA		
AE4460ZFZ1C		Input (w)	45.0	449	486	524	562	600	637	673	707	1/2	4.30		
		Amps		3.15	3.32	3.49	3.64	3.78	3.91	4.02	4.13				
(Fan Cooling)		Capacity (w)		-	636	784	952	1144	1363	1614	1900	220-240v	Max		
- Stub Tubes	10.33	Input (w)	50.0	-	507	548	590	633	675	716	756	1Ø-50Hz	5.90	280mls	11.6kg
- POE Oil		Amps		-	3.37	3.56	3.74	3.90	4.06	4.20	4.33				
- Mount Kit		Capacity (w)		-	558	691	840	1010	1204	1425	1679	CSIR	LRA		
		Input (w)	55.0	-	530	574	620	667	714	761	806		19.4		
		Amps		-	3.42	3.64	3.84	4.03	4.21	4.38	4.54				

*EN12900 compressor rating conditions defines the new capacity ratings for refrigeration in a way which is more useful to refrigeration techs.

Prices

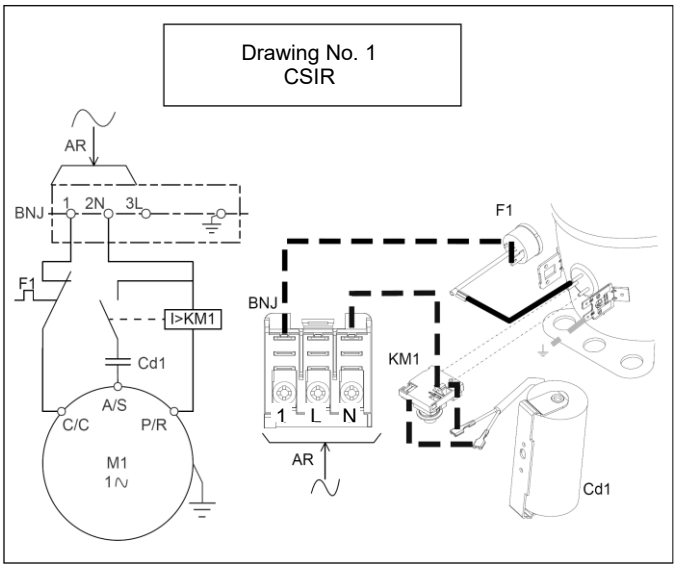
Airefrig Part Number	List Price Excl GST
AE4425ZFZ1A	
AE4430ZFZ1A	

Airefrig Part Number	List Price Excl GST
AE4440ZFZ1A	
AE4450ZFZ1A	

Airefrig Part Number	List Price Excl GST
AE4460ZFZ1C	

R404A (R507) - Medium Temperature Compressors Technical Information

Airefrig Part Number	Electrical Drawing No.	Winding Resistance Ohms @ 20 ºC		Compressor Electrical				Sound Level ISO 3745 / ISO 3743-1
		Main	Auxiliary	Motor Type	Relay Type	Start Capacitor	Run Capacitor	
AE4425ZFZ1A	1	10.5	23.1	CSIR	Current	64uF / 250V	-	60 dBA
AE4430ZFZ1A	1	8.7	22.2	CSIR	Current	64uF / 250V	-	56 dBA
AE4440ZFZ1A	1	7.3	18.7	CSIR	Current	100uF / 250V	-	59 dBA
AE4450ZFZ1A	1	5.9	26.1	CSIR	Current	88uF / 250V	-	64 dBA
AE4460ZFZ1C	1	3.4	19.5	CSIR	Current	64uF / 330V	-	64 dBA



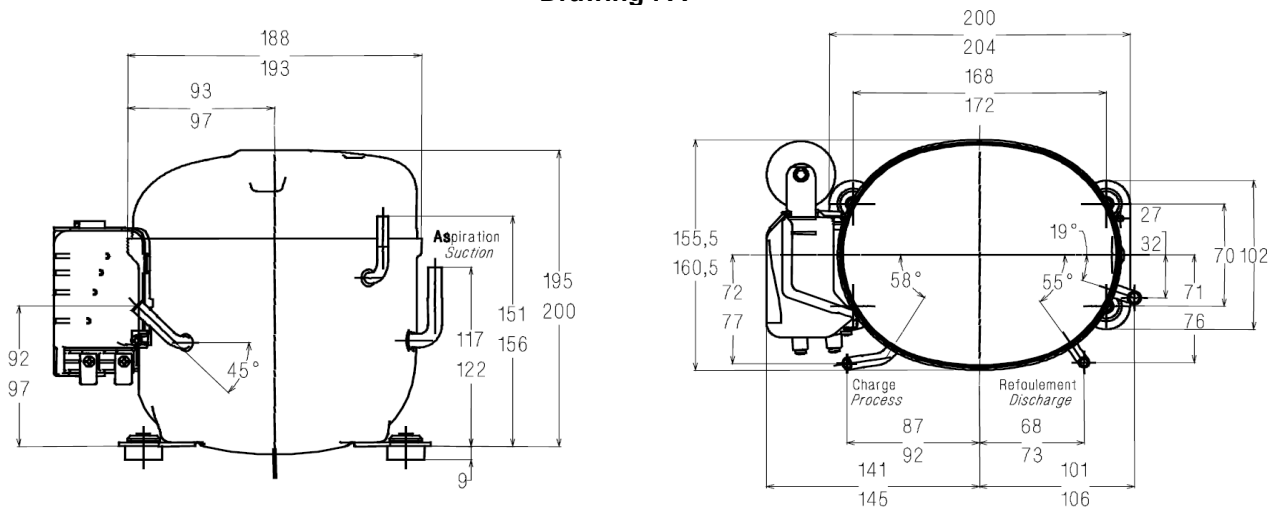


HIGH EFFICIENCY COMPRESSORS (cont'd)

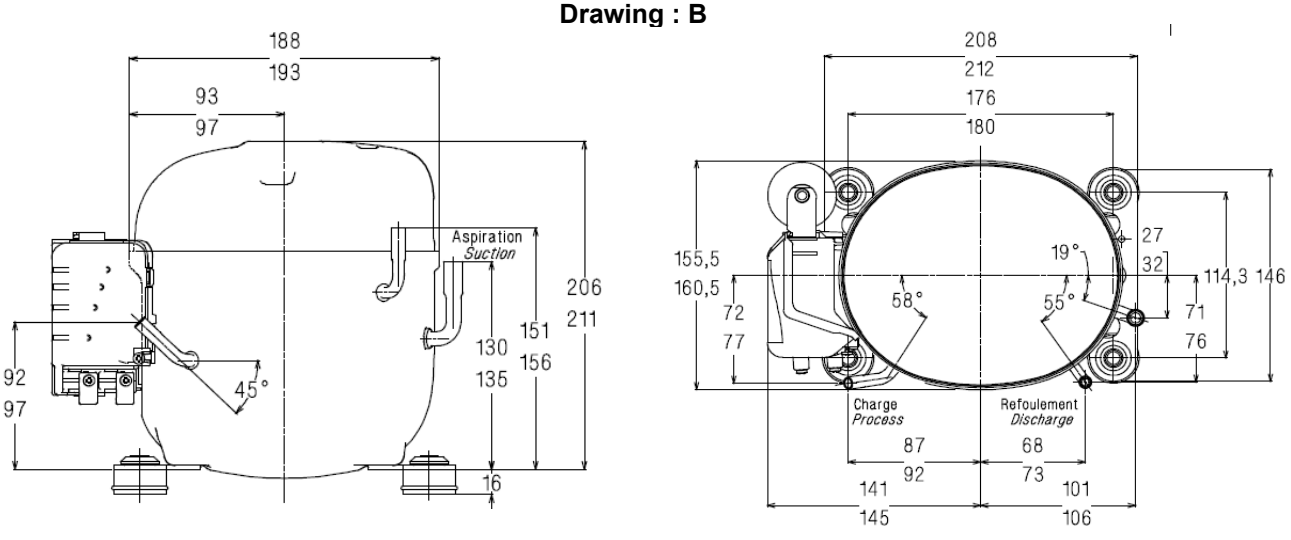
R404A (R507) - Medium Temperature Compressors Technical Information

Airefrig Part Number	Drawing ID	Compressor Tube Connections			
		Suction Tube mm (inch)	Discharge Tube mm (inch)	Process Tube mm (inch)	Oil Cooler Tubes mm (inch)
AE4425ZFZ1A	A	6.35 (1/4")	4.76 (3/16")	6.35 (1/4")	-
AE4430ZFZ1A	A	6.35 (1/4")	4.76 (3/16")	6.35 (1/4")	-
AE4440ZFZ1A	A	9.5 (3/8")	6.35 (1/4")	9.5 (3/8")	-
AE4450ZFZ1A	B	9.5 (3/8")	6.35 (1/4")	9.5 (3/8")	-
AE4460ZFZ1C	B	9.5 (3/8")	6.35 (1/4")	9.5 (3/8")	-

Drawing : A



Drawing : B



TECUMSEH HERMETIC COMPRESSORS

R134A - Low Temperature Compressors

Airefrig Part Number	Displ cm³	Operating Conditions *EN12900	Cond Temp ºC	Based on 32ºC return gas & 0.0 K sub-cooling Evaporating Temperature ºC -35	-30	-25	-20	-15	-10	Motor Info	Amps	Oil charge	Weight
		Capacity (w)		25.9	37.6	52.2	70.5	93.1	121	Nom. HP	RLA		
THB1324YS		Input (w)	45.0	46.4	51.9	58.1	65.0	72.6	80.9	1/10	0.40		
(Static Cooling)		Amps		0.39	0.40	0.42	0.44	0.47	0.49				
- Stub Tubes		Capacity (w)		22.2	33.2	46.9	64	85.2	111	220-240v	Max		
- POE Oil	2.7	Input (w)	50.0	45.9	51.9	58.7	66.4	74.7	83.9	1Ø-50Hz	06.0	200mls	5.5kg
- Mount Kit		Amps		0.39	0.41	0.43	0.45	0.47	0.50				
		Capacity (w)		18.7	29.1	42	58	77.9	103	PTCSIR	LRA		
		Input (w)	55.0	45.5	52.1	59.6	67.9	77.2	87.3		7.0		
		Amps		0.39	0.41	0.43	0.45	0.48	0.51				
		Capacity (w)		41.1	57.8	78.9	104	134	169	Nom. HP	RLA		
THB1335YS		Input (w)	45.0	65.3	72.5	80.8	90	100	112	1/8	0.52		
(Static Cooling)		Amps		0.49	0.49	0.51	.54	0.58	0.63				
- Stub Tubes		Capacity (w)		34.9	50.2	69.8	93.8	122	154	220-240v	Max		
- POE Oil	3.58	Input (w)	50.0	63.1	71.5	80.9	91.1	102	114	1Ø-50Hz	0.80	200mls	5.7kg
- Mount Kit		Amps		0.48	0.50	0.52	0.55	0.60	0.65				
		Capacity (w)		29.1	43.1	61.2	83.5	110	141	PTCSIR	LRA		
		Input (w)	55.0	60.8	70.5	81	92.2	104	117		7.25		
		Amps		0.48	0.50	0.52	0.56	0.61	0.67				
		Capacity (w)		49.7	71.6	97.4	127	161	198	Nom. HP	RLA		
THB1340YS		Input (w)	45.0	70.2	78.4	88.3	99.8	113	128	1/7	0.60		
(Static Cooling)		Amps		0.52	0.54	0.57	0.60	0.65	0.70				
- Stub Tubes		Capacity (w)		42.1	62.2	86.1	114	146	181	220-240v	Max		
- POE Oil	4.23	Input (w)	50.0	67.8	77.4	88.5	101	115	131	1Ø-50Hz	1.0	250mls	6.3kg
- Mount Kit		Amps		0.51	0.54	0.57	0.61	0.66	0.72				
		Capacity (w)		35.1	53.3	75.5	102	131	165	PTCSIR	LRA		
		Input (w)	55.0	65.4	76.3	88.6	102	117	133		9.0		
		Amps		0.51	0.54	0.58	0.62	0.68	0.74				
		Capacity (w)		83.8	124.2	167.1	225.0	285.8	371.9	Nom. HP	RLA		
THG1365YGS (50hz /60Hz comp)		Input (w)	45.0	102.9	120	135.4	151.4	169.8	191.0	1/6	0.93		
		Amps		1.19	1.21	1.24	1.27	1.32	1.38				
(THG1365YS)		Capacity (w)		77.4	116.9	159.1	209.8	275.5	360.5	220-240v	Max		
(50hz comp)	6.1	Input (w)	50.0	102	120	137	154	174	196	1Ø-50Hz	1.3	250mls	6.6kg
(Static Cooling)		Amps		1.19	1.21	1.24	1.27	1.32	1.38				
- Stub Tubes		Capacity (w)		70.1	109.1	150.3	207.7	265.2	348.8	PTCSIR	LRA		
- POE Oil		Input (w)	55.0	100.2	118.0	137.0	156.1	177.2	201.2		10.5		
- Mount Kit		Amps		1.19	1.21	1.24	1.28	1.33	1.40				

*EN12900 compressor rating conditions defines the new capacity ratings for refrigeration in a way which is more useful to refrigeration techs.

TECUMSEH HERMETIC COMPRESSORS

R134A - Low Temperature Compressors

Airefrig Part Number	Displ cm³	Operating Conditions *EN12900	Cond Temp ºC	Based on 32ºC return gas & 0.0 K sub-cooling Evaporating Temperature ºC -35	-30	-25	-20	-15	-10	Motor Info	Amps	Oil charge	Weight
		Capacity (w)		80	120	170	230	299	378	Nom. HP	RLA		
AEZ1365Y		Input (w)	45.0	122	144	170	199	231	267	1/6	1.20		
(Static Cooling)		Amps		1.04	1.08	1.15	1.23	1.33	1.46				
- Stub Tubes		Capacity (w)		67.9	104	151	206	271	346	220-240v	Max		
- POE Oil	8.8	Input (w)	50.0	117	142	170	201	236	273	1Ø-50Hz	2.0	250mls	10.1kg
- Mount Kit		Amps		1.04	1.09	1.16	1.25	1.36	1.50				
		Capacity (w)		56.5	89.6	132	184	245	315	PTCSIR	LRA		
		Input (w)	55.0	113	140	170	203	240	280		10.0		
		Amps		1.03	1.09	1.17	1.27	1.40	1.54				
		Capacity (w)		92.4	124	165	216	278	349	Nom. HP	RLA		
AEZ1370Y		Input (w)	45.0	122	141	163	187	213	242	1/5	1.20		
(Static Cooling)		Amps		1.06	1.10	1.15	1.21	1.29	1.39				
- Stub Tubes		Capacity (w)		78.5	107	146	194	252	319	220-240v	Max		
- POE Oil	8.1	Input (w)	50.0	118	139	163	189	217	247	1Ø-50Hz	2.10	250mls	10.2kg
- Mount Kit		Amps		1.06	1.10	1.16	1.23	1.32	1.43				
		Capacity (w)		65.4	92	128	173	227	291	PTCSIR	LRA		
		Input (w)	55.0	114	137	163	191	221	253		11.0		
		Amps		1.05	1.10	1.17	1.25	1.35	1.47				
		Capacity (w)		106	155	209	268	333	402	Nom. HP	RLA		
AEZ1380Y		Input (w)	45.0	187	203	222	244	269	297	1/4	1.70		
(Oil Cooler)		Amps		1.81	1.81	1.81	1.82	1.84	1.87				
- Stub Tubes		Capacity (w)		89.6	135	185	241	302	368	220-240v	Max		
- POE Oil	9.4	Input (w)	50.0	180	200	223	247	274	304	1Ø-50Hz	2.70	350mls	10.6kg
- Mount Kit		Amps		1.80	1.81	1.83	1.85	1.89	1.93				
		Capacity (w)		74.7	116	162	215	272	336	PTCSIR	LRA		
		Input (w)	55.0	174	198	223	250	279	310		10.0		
		Amps		1.79	1.82	1.85	1.88	1.93	1.99				
		Capacity (w)		106	155	209	269	333	402	Nom. HP	RLA		
AEZ2380Y		Input (w)	45.0	185	200	218	239	264	293	1/5	1.80		
(Fan Cooling)		Amps		1.73	1.73	1.74	1.75	1.78	1.82				
- Stub Tubes		Capacity (w)		89.9	135	185	241	302	368	220-240v	Max		
- POE Oil	9.4	Input (w)	50.0	179	197	218	242	269	300	1Ø-50Hz	2.50	350mls	10.8kg
- Mount Kit		Amps		1.72	1.73	1.75	1.78	1.82	1.87				
		Capacity (w)		74.9	116	162	215	272	336	CSIR	LRA		
		Input (w)	55.0	173	194	218	245	274	306		12.0		
		Amps		1.71	1.74	1.77	1.81	1.86	1.92				

*EN12900 compressor rating conditions defines the new capacity ratings for refrigeration in a way which is more useful to refrigeration techs.

TECUMSEH HERMETIC COMPRESSORS

R134A - Low Temperature Compressors

Airefrig Part Number	Displ cm³	Operating Conditions *EN12900	Cond Temp ºC	Based on 32ºC return gas & 0.0 K sub-cooling Evaporating Temperature ºC -35	-30	-25	-20	-15	-10	Motor Info	Amps	Oil charge	Weight
		Capacity (w)		104	163	237	326	429	547	Nom. HP	RLA		
AE1410Y		Input (w)	45.0	168	194	225	261	301	345	1/3	1.80		
(Oil Cooler)		Amps		1.71	1.73	1.77	1.84	1.94	2.07				
- Stub Tubes		Capacity (w)		88.2	142	210	293	389	501	220-240v	Max		
- POE Oil	12.0	Input (w)	50.0	162	192	226	264	306	353	1Ø-50Hz	2.80	250mls	11.1kg
- Mount Kit		Amps		1.70	1.73	1.79	1.87	1.99	2.13				
		Capacity (w)		73.6	122	184	261	351	456	RSIR	LRA		
		Input (w)	55.0	156	189	226	267	312	361		14.0		
		Amps		1.69	1.73	1.81	1.91	2.04	2.19				
		Capacity (w)		108	187	279	385	505	639	Nom. HP	RLA		
AE1412Y		Input (w)	45.0	182	215	255	302	354	414	3/8	1.80		
(Oil Cooler)		Amps		1.61	1.65	1.74	1.86	2.03	2.25				
- Stub Tubes		Capacity (w)		92.1	162	247	346	459	586	220-240v	Max		
- POE Oil	14.2	Input (w)	50.0	176	213	256	305	361	424	1Ø-50Hz	2.80	250mls	11.2kg
- Mount Kit		Amps		1.61	1.66	1.75	1.90	2.08	2.31				
		Capacity (w)		76.7	139	216	308	414	534	RSIR	LRA		
		Input (w)	55.0	170	210	256	309	368	433		14.0		
		Amps		1.6	1.66	1.77	1.93	2.13	2.38				
		Capacity (w)		109	187	279	385	505	639	Nom. HP	RLA		
CAE2412Y		Input (w)	45.0	184	227	271	315	361	407	3/8	1.90		
(Fan Cooling)		Amps		1.63	1.74	1.87	2.0	2.15	2.31				
- Stub Tubes		Capacity (w)		92.2	162	247	346	459	586	220-240v	Max		
- POE Oil	14.2	Input (w)	50.0	178	224	271	319	368	417	1Ø-50Hz	2.90	250mls	11.2kg
- Mount Kit		Amps		1.62	1.75	1.89	2.04	2.20	2.38				
		Capacity (w)		76.8	139	216	308	414	534	CSIR	LRA		
		Input (w)	55.0	172	221	271	323	374	427		13.0		
		Amps		1.61	1.75	1.90	2.07	2.25	2.45				
		Capacity (w)		139	213	304	416	550	709	Nom. HP	RLA		
CAE2414Y		Input (w)	45.0	232	269	314	366	426	492	1/3	2.10		
(Fan Cooling)		Amps		1.94	2.0	2.1	2.24	2.43	2.65				
- Stub Tubes		Capacity (w)		119	188	273	376	500	648	220-240v	Max		
- POE Oil	16.2	Input (w)	50.0	224	266	315	371	434	504	1Ø-50Hz	3.30	350mls	12.1kg
- Mount Kit		Amps		1.93	2.01	2.12	2.28	2.48	2.73				
		Capacity (w)		100	163	241	335	450	586	CSIR	LRA		
		Input (w)	55.0	216	262	315	375	442	515		17.0		
		Amps		1.92	2.01	2.14	2.32	2.54	2.81				

*EN12900 compressor rating conditions defines the new capacity ratings for refrigeration in a way which is more useful to refrigeration techs.

Prices

Airefrig Part Number	List Price Excl GST
THB1324YS	
THB1335YS	
THB1340YS	
THG1365YGS	

Airefrig Part Number	List Price Excl GST
AEZ1365Y	
AEZ1370Y	
AEZ1380Y	
AEZ2380Y	

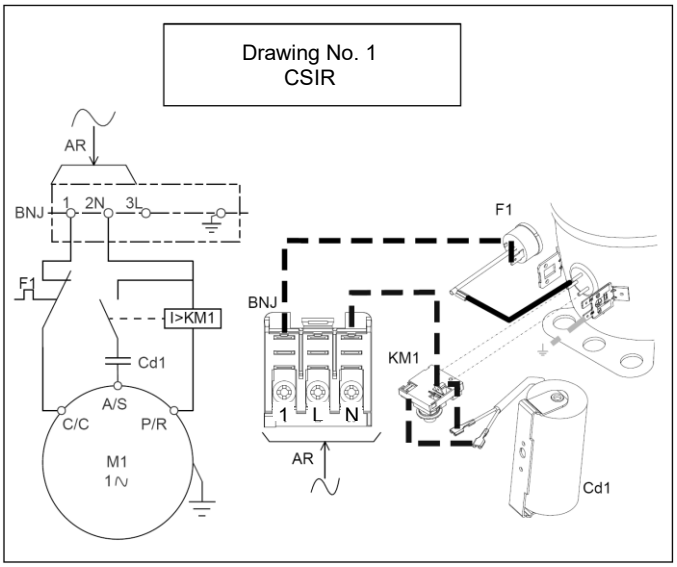
Airefrig Part Number	List Price Excl GST
AE1410Y	
AE1412Y	
CAE2412Y	
CAE2414Y	

TECUMSEH HERMETIC COMPRESSORS

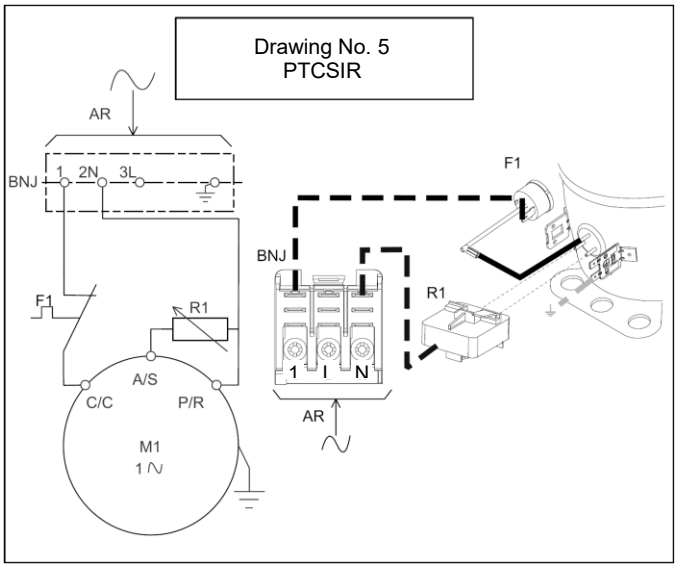
R134A - Low Temperature Compressors Technical Information

Airefrig Part Number	Electrical Drawing No.	Winding Resistance Ohms @ 20 ºC		Compressor Electrical				Sound Level ISO 3745 / ISO 3743-1
		Main	Auxiliary	Motor Type	Relay Type	Start Capacitor	Run Capacitor	
THB1324YS	5	39.5	25.6	PTCSIR	PTC	-	-	37 dBA
THB1335YS	5	30.8	26.9	PTCSIR	PTC	-	-	34 dBA
THB1340YS	5	23.5	20.5	PTCSIR	PTC	-	-	35 dBA
THG1365YGS	5	16.5	21.8	PTCSIR	PTC	-	-	40 dBA
AEZ1365Y	5	9.1	26.7	PTCSIR	PTC	-	-	43 dBA
AEZ1370Y	5	9.1	26.7	PTCSIR	PTC	-	-	40 dBA
AEZ1380Y	5	6.9	27.3	PTCSIR	PTC	-	-	42 dBA
AEZ2380Y	1	6.8	30.2	CSIR	Current	50uF / 260V	-	41 dBA
AE1410Y	6	6.9	40.8	RSIR	Current	-	-	47 dBA
AE1412Y	6	6.9	40.8	RSIR	Current	-	-	50 dBA
CAE2412Y	1	6.8	30.2	CSIR	Current	50uF / 260V	-	50 dBA
CAE2414Y	1	5.4	8.8	CSIR	Current	72uF / 260V	-	50 dBA

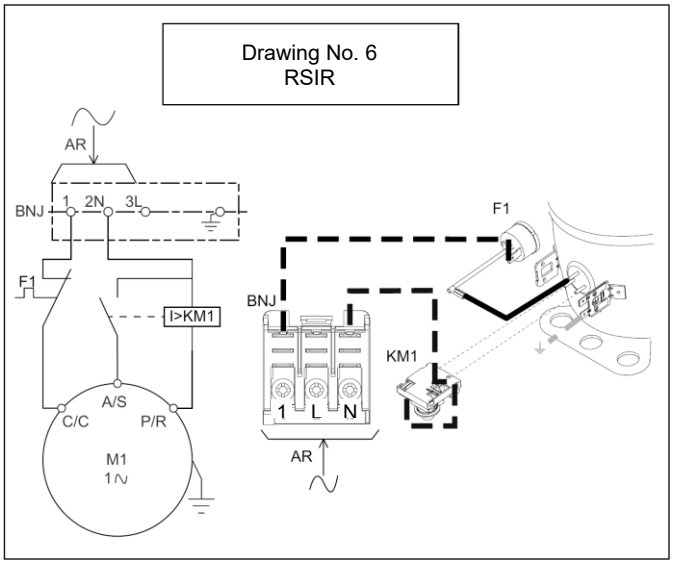
Drawing No. 1
CSIR



Drawing No. 5
PTCSIR



Drawing No. 6
RSIR



TECUMSEH HERMETIC COMPRESSORS

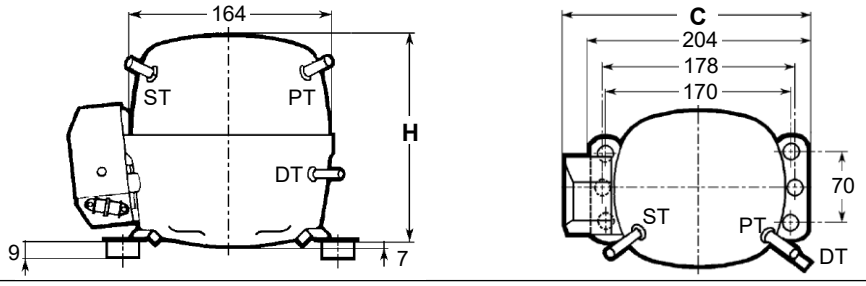
R134A - Low Temperature Compressors Technical Information

Airefrig Part Number	Dimensions						Compressor Tube Connections			
	Dwg. No	C mm	C2 mm	F mm	H mm	M mm	Suction Tube mm (inch)	Discharge Tube mm (inch)	Process Tube mm (inch)	Oil Cooler Tubes mm (inch)
THB1324YS	1	236	-	-	151	-	6.35 (1/4”)	4.76 (3/16”)	6.35 (1/4”)	-
THB1335YS	1	229	-	-	151	-	6.35 (1/4”)	4.76 (3/16”)	6.35 (1/4”)	-
THB1340YS	1	229	-	-	164	-	6.35 (1/4”)	4.76 (3/16”)	6.35 (1/4”)	-
THG1365YGS	1	236	-	-	164	-	6.35 (1/4”)	4.76 (3/16”)	6.35 (1/4”)	-
AEZ1365Y	2	170	70	102	186	9	6.35 (1/4”)	4.76 (3/16”)	6.35 (1/4”)	-
AEZ1370Y	2	170	70	102	186	9	6.35 (1/4”)	4.76 (3/16”)	6.35 (1/4”)	-
AEZ1380Y	2	170	70	102	199	9	6.35 (1/4”)	4.76 (3/16”)	6.35 (1/4”)	4.76 (3/16”)
AEZ2380Y	3	170	70	102	199	9	6.35 (1/4”)	4.76 (3/16”)	6.35 (1/4”)	-
AE1410Y	2	165	101.6	134	199	16	7.9 (5/16”)	6.35 (1/4”)	7.9 (5/16”)	4.76 (3/16”)
AE1412Y	2	165	101.6	134	199	16	7.9 (5/16”)	6.35 (1/4”)	7.9 (5/16”)	4.76 (3/16”)
CAE2412Y	3	165	101.6	134	199	16	7.9 (5/16”)	6.35 (1/4”)	7.9 (5/16”)	-
CAE2414Y	4	-	-	-	212	-	9.5 (3/8”)	6.35 (1/4”)	9.5 (3/8”)	-

Drawing : 1

Connection Identification:

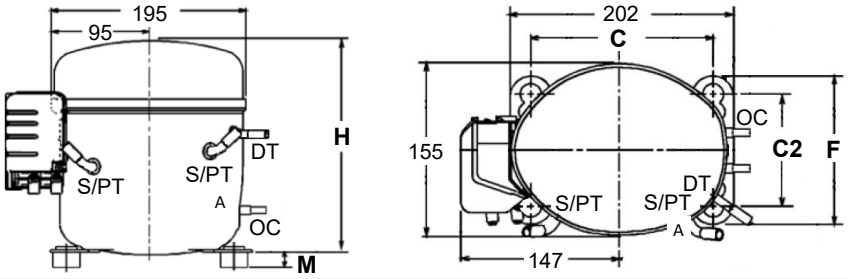
PT = Process (only) Tube
ST = Suction (only) Tube
DT = Discharge Tube



Drawing : 2

Connection Identification:

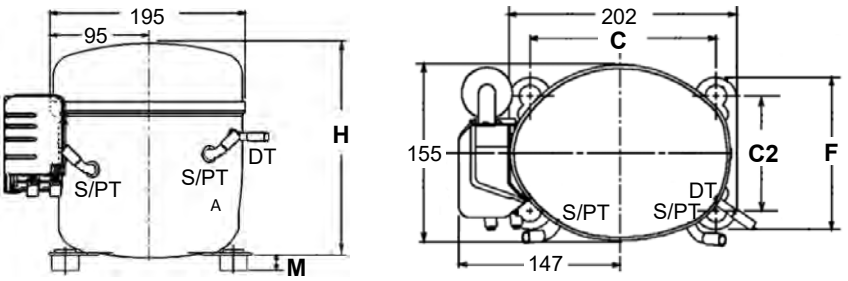
S/PT = Suction / Process Tube
DT = Discharge Tube
OC = Oil Cooler (where applicable)



Drawing : 3

Connection Identification:

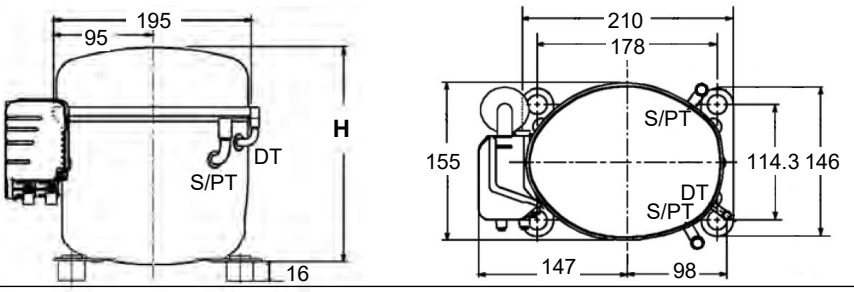
S/PT = Suction / Process Tube
DT = Discharge Tube



Drawing : 4

Connection Identification:

S/PT = Suction / Process Tube
DT = Discharge Tube



TECUMSEH HERMETIC COMPRESSORS

R134A - Medium Temperature Compressors

Airefrig Part Number	Displ cm³	Operating Conditions *EN12900	Cond Temp ºC	Based on 20ºC return gas & 0.0 K sub-cooling Evaporating Temperature ºC -20	-15	-10	-5	0	5	10	15	Motor Info	Amps	Oil charge	Weight
		Capacity (w)		136	161	198	245	302	368	443	524	Nom. HP	RLA		
THB4415YFZ		Input (w)	45.0	107	120	133	145	157	168	179	189	1/8	1.10		
(Static Cooling)		Amps		0.87	0.91	0.94	0.98	1.01	1.05	1.08	1.11				
- Stub Tubes		Capacity (w)		119	143	177	221	274	336	406	482	220-240v	Max		
- POE Oil	4.23	Input (w)	50.0	106	120	134	148	162	175	188	202	1Ø-50Hz	1.60	250mls	6.3kg
- Mount Kit		Amps		0.87	0.91	0.95	0.99	1.03	1.08	1.12	1.16				
		Capacity (w)			124	156	197	247	304	369	439	CSIR	LRA		
		Input (w)	55.0		121	136	151	167	182	198	214		7.0		
		Amps			0.91	0.95	1.0	1.05	1.10	1.16	1.22				
		Capacity (w)		160	194	241	299	368	446	534	629	Nom. HP	RLA		
THB4419YFZ		Input (w)	45.0	127	142	157	172	187	202	217	232	1/6	1.30		
(Static Cooling)		Amps		1.04	1.07	1.10	1.14	1.19	1.24	1.29	1.34				
- Stub Tubes		Capacity (w)		140	172	215	269	334	407	489	578	220-240v	Max		
- POE Oil	5.2	Input (w)	50.0	126	142	159	175	193	210	229	247	1Ø-50Hz	1.76	250mls	7.0kg
- Mount Kit		Amps		1.03	1.07	1.11	1.16	1.21	1.27	1.33	1.40				
		Capacity (w)			149	190	240	300	368	444	527	CSIR	LRA		
		Input (w)	55.0		143	161	179	199	219	241	263		8.0		
		Amps			1.07	1.12	1.17	1.23	1.30	1.38	1.47				
		Capacity (w)		212	253	308	375	454	544	643	750	Nom. HP	RLA		
THB4422YFZ		Input (w)	45.0	156	174	194	213	233	254	275	296	1/5	1.58		
(Fan Cooling)		Amps		1.21	1.26	1.31	1.37	1.43	1.50	1.58	1.66				
- Stub Tubes		Capacity (w)		185	224	275	339	413	496	589	689	220-240v	Max		
- POE Oil	6.1	Input (w)	50.0	155	175	196	218	241	265	290	316	1Ø-50Hz	2.23	250mls	6.6kg
- Mount Kit		Amps		1.21	1.26	1.32	1.38	1.46	1.54	1.64	1.74				
		Capacity (w)			195	243	302	371	449	535	628	CSIR	LRA		
		Input (w)	55.0		176	198	223	248	276	305	335		8.3		
		Amps			1.26	1.33	1.40	1.49	1.58	1.70	1.82				
		Capacity (w)		174	241	323	417	524	642	770	907	Nom. HP	RLA		
AEZ4425Y		Input (w)	45.0	151	179	205	229	251	272	291	308	1/5	1.80		
(Fan Cooling)		Amps		1.26	1.35	1.43	1.51	1.59	1.66	1.74	1.80				
- Stub Tubes		Capacity (w)		152	213	289	377	476	586	706	833	220-240v	Max		
- POE Oil	7.6	Input (w)	50.0	151	180	207	234	259	284	307	328	1Ø-50Hz	2.60	250mls	9.8kg
- Mount Kit		Amps		1.26	1.35	1.44	1.53	1.62	1.71	1.8	1.89				
		Capacity (w)			185	254	336	428	530	641	759	CSIR	LRA		
		Input (w)	55.0		180	210	239	267	295	322	346		9.0		
		Amps			1.35	1.45	1.55	1.65	1.76	1.86	1.97				

*EN12900 compressor rating conditions defines the new capacity ratings for refrigeration in a way which is more useful to refrigeration techs.

TECUMSEH HERMETIC COMPRESSORS

R134A - Medium Temperature Compressors

Airefrig Part Number	Displ cm³	Operating Conditions *EN12900	Cond Temp ºC	Based on 20ºC return gas & 0.0 K sub-cooling Evaporating Temperature ºC								Motor Info	Amps	Oil charge	Weight
				-20	-15	-10	-5	0	5	10	15				
		Capacity (w)		311	403	524	670	842	1035	1249	1481	Nom. HP	RLA		
CAE4440Y		Input (w)	45.0	264	304	342	377	410	441	469	494	3/8	3.0		
(Fan Cooling)		Amps		2.37	2.43	2.50	2.58	2.66	2.76	2.87	2.98				
- Stub Tubes		Capacity (w)		272	357	468	605	764	945	1144	1360	220-240v	Max		
- POE Oil	12.0	Input (w)	50.0	263	305	346	385	423	459	494	527	1Ø-50Hz	4.0	250mls	11.3kg
- Mount Kit		Amps		2.37	2.43	2.51	2.61	2.71	2.84	2.97	3.12				
		Capacity (w)			310	413	539	687	855	1039	1239	CSIR	LRA		
		Input (w)	55.0		306	350	394	436	478	520	560		15.0		
		Amps			2.44	2.53	2.64	2.77	2.91	3.08	3.26				
		Capacity (w)		425	524	659	828	1028	1256	1511	1787	Nom. HP	RLA		
CAE4448Y		Input (w)	45.0	309	355	400	443	484	524	563	599	1/3	3.20		
(Fan Cooling)		Amps		2.39	2.51	2.63	2.76	2.89	3.03	3.18	3.33				
- Stub Tubes		Capacity (w)		372	464	589	747	933	1146	1383	1641	220-240v	Max		
- POE Oil	14.2	Input (w)	50.0	307	356	405	452	500	547	593	639	1Ø-50Hz	4.60	350mls	12.6kg
- Mount Kit		Amps		2.39	2.51	2.65	2.79	2.95	3.12	3.29	3.48				
		Capacity (w)			403	520	666	839	1037	1256	1494	CSIR	LRA		
		Input (w)	55.0		357	409	462	515	569	624	679		17.0		
		Amps			2.51	2.66	2.83	3.01	3.2	3.41	3.64				
		Capacity (w)		479	596	750	940	1162	1414	1694	1996	Nom. HP	RLA		
CAE4456Y		Input (w)	45.0	385	437	486	534	579	622	663	701	1/2	4.10		
(Fan Cooling)		Amps		3.29	3.39	3.50	3.61	3.73	3.86	3.99	4.30				
- Stub Tubes		Capacity (w)		419	527	671	848	1055	1291	1551	1832	220-240v	Max		
- POE Oil	16.2	Input (w)	50.0	384	438	492	545	597	648	699	748	1Ø-50Hz	5.0	350mls	12.7kg
- Mount Kit		Amps		3.28	3.40	3.52	3.66	3.81	3.97	4.14	4.32				
		Capacity (w)			458	592	756	949	1167	1409	1669	CSIR	LRA		
		Input (w)	55.0		440	498	557	616	675	735	794		19.0		
		Amps			3.40	3.54	3.70	3.88	4.07	4.28	4.51				
		Capacity (w)		424	574	756	977	1243	1560	1934	2372	Nom. HP	RLA		
CAJ4461Y		Input (w)	45.0	362	418	472	524	573	620	663	704	1/2	4.0		
(Fan Cooling)		Amps		2.89	3.07	3.25	3.43	3.61	3.78	3.96	4.13				
- Suction Rotalock		Capacity (w)		380	519	686	888	1131	1421	1765	2169	220-240v	Max		
- Disch Stub Tube	18.3	Input (w)	50.0	361	424	484	543	599	653	704	753	1Ø-50Hz	5.90	887mls	20.0kg
- POE Oil		Amps		2.87	3.08	3.29	3.49	3.70	3.90	4.11	4.31				
- Mount Kit		Capacity (w)			464	616	799	1020	1284	1597	1967	CSIR	LRA		
		Input (w)	55.0		426	493	559	622	684	743	800		19.0		
		Amps			3.08	3.32	3.55	3.79	4.02	4.25	4.49				

*EN12900 compressor rating conditions defines the new capacity ratings for refrigeration in a way which is more useful to refrigeration techs.

TECUMSEH HERMETIC COMPRESSORS

R134A - Medium Temperature Compressors

Airefrig Part Number	Displ cm³	Operating Conditions *EN12900	Cond Temp ºC	Based on 20ºC return gas & 0.0 K sub-cooling Evaporating Temperature ºC -20	-15	-10	-5	0	5	10	15	Motor Info	Amps	Oil charge	Weight
		Capacity (w)		450	652	888	1163	1484	1856	2287	2781	Nom. HP	RLA		
CAJ4476Y		Input (w)	45.0	413	488	557	620	679	735	789	843	5/8	4.90		
(Fan Cooling)		Amps		3.63	3.84	4.05	4.27	4.48	4.69	4.89	5.10				
- Suction Rotalock		Capacity (w)		373	564	785	1043	1343	1692	2095	2559	220-240v	Max		
- Disch Stub Tube	21.8	Input (w)	50.0	395	482	561	635	705	770	834	896	1Ø-50Hz	7.20	887mls	20.0kg
- POE Oil		Amps		3.57	3.82	4.07	4.31	4.56	4.80	5.04	5.29				
- Mount Kit		Capacity (w)			476	683	922	1201	1525	1900	2333	CSIR	LRA		
		Input (w)	55.0		469	561	647	728	804	878	950		24.0		
		Amps			3.80	4.08	4.36	4.64	4.92	5.19	5.47				
		Capacity (w)		575	825	1115	1452	1847	2307	2841	3457	Nom. HP	RLA		
CAJ4492Y		Input (w)	45.0	473	564	649	727	800	870	937	1002	3/4	5.60		
(Fan Cooling)		Amps		4.35	4.55	4.76	5.00	5.25	5.53	5.83	6.14				
- Suction Rotalock		Capacity (w)		480	722	996	1313	1681	2108	2603	3174	220-240v	Max		
- Disch Stub Tube	25.95	Input (w)	50.0	455	560	657	748	834	915	993	1068	1Ø-50Hz	8.40	887mls	22.0kg
- POE Oil		Amps		4.32	4.55	4.81	5.08	5.37	5.69	6.02	6.37				
- Mount Kit		Capacity (w)			613	874	1172	1514	1909	2367	2895	CSIR	LRA		
		Input (w)	55.0		546	658	763	862	956	1047	1134		27.5		
		Amps			4.55	4.84	5.15	5.48	5.83	6.20	6.59				
		Capacity (w)		822	1135	1496	1913	2397	2956	3599	4335	Nom. HP	RLA		
CAJ4511Y		Input (w)	45.0	568	672	766	856	943	1033	1128	1233	1.0	5.0		
(Fan Cooling)		Amps		2.62	3.06	3.49	3.92	4.36	4.79	5.22	5.64				
- Suction Rotalock		Capacity (w)		716	1014	1354	1744	2195	2714	3310	3994	220-240v	Max		
- Disch Stub Tube	32.7	Input (w)	50.0	552	672	781	883	982	1081	1184	1294	1Ø-50Hz	8.90	887mls	23.5kg
- POE Oil		Amps		2.58	3.06	3.54	4.02	4.50	4.97	5.45	5.92				
- Mount Kit		Capacity (w)			890	1210	1573	1990	2469	3020	3651	CSR	LRA		
		Input (w)	55.0		665	791	908	1020	1130	1242	1360		30.0		
		Amps			3.05	3.58	4.10	4.63	5.15	5.66	6.18				
		Capacity (w)		887	1214	1591	2028	2533	3118	3791	4562	Nom. HP	RLA		
CAJ4513Y		Input (w)	45.0	646	749	844	935	1026	1120	1220	1331	1.0	5.80		
(Fan Cooling)		Amps		3.64	4.05	4.46	4.87	5.28	5.68	6.08	6.48				
- Suction Rotalock		Capacity (w)		784	1096	1453	1862	2334	2878	3504	4222	220-240v	Max		
- Disch Stub Tube	34.45	Input (w)	50.0	640	758	867	970	1070	1172	1278	1393	1Ø-50Hz	9.90	887mls	22.0kg
- POE Oil		Amps		3.59	4.06	4.52	4.99	5.45	5.91	6.37	6.82				
- Mount Kit		Capacity (w)			976	1313	1696	2135	2639	3219	3883	CSR	LRA		
		Input (w)	55.0		760	884	1000	1112	1224	1338	1459		35.5		
		Amps			4.03	4.55	5.07	5.58	6.10	6.61	7.12				

*EN12900 compressor rating conditions defines the new capacity ratings for refrigeration in a way which is more useful to refrigeration techs.

Prices

Airefrig Part Number	List Price Excl GST
THB4415YFZ	
THB4419YFZ	
THB4422YFZ	
AEZ4425Y	

Airefrig Part Number	List Price Excl GST
CAE4440Y	
CAE4448Y	
CAE4456Y	
CAJ4461Y	

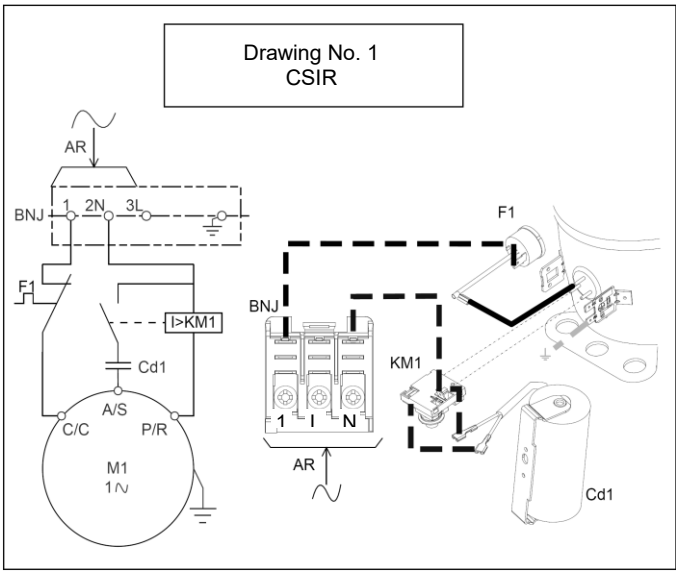
Airefrig Part Number	List Price Excl GST
CAJ4476Y	
CAJ4492Y	
CAJ4511Y	
CAJ4513Y	

TECUMSEH HERMETIC COMPRESSORS

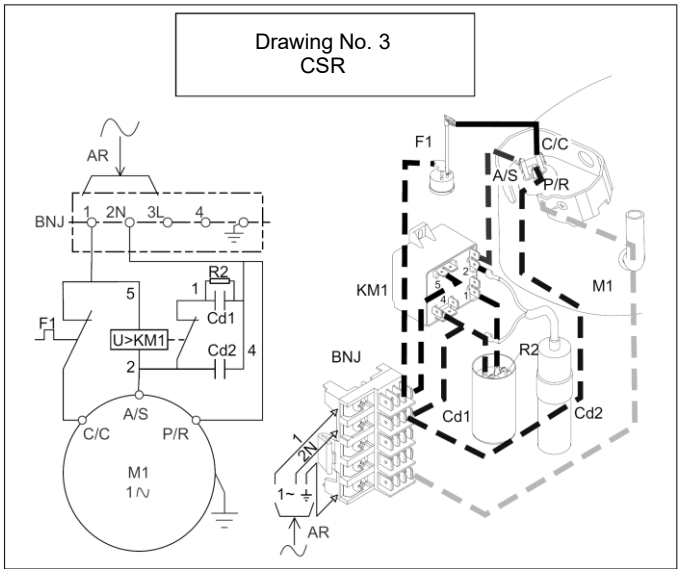
R134A - Medium Temperature Compressors Technical Information

Airefrig Part Number	Electrical Drawing No.	Winding Resistance Ohms @ 20 ºC		Compressor Electrical				Sound Level ISO 3745 / ISO 3743-1
		Main	Auxiliary	Motor Type	Relay Type	Start Capacitor	Run Capacitor	
THB4415YFZ	1	14.7	27.2	CSIR	Current	50uF / 260V	-	39 dBA
THB4419YFZ	1	12.8	23.8	CSIR	Current	50uF / 260V	-	43 dBA
THB4422YFZ	1	11.4	23.5	CSIR	Current	50uF / 260V	-	43 dBA
AEZ4425Y	1	8.2	34.4	CSIR	Current	50uF / 260V	-	48 dBA
CAE4440Y	1	5.0	26.0	CSIR	Current	72uF / 260V	-	55 dBA
CAE4448Y	1	4.8	19.2	CSIR	Current	64uF / 330V	-	55 dBA
CAE4456Y	1	3.7	19.7	CSIR	Current	64uF / 330V	-	56 dBA
CAJ4461Y	4	3.9	20.6	CSIR	Current	64uF / 260V	-	56 dBA
CAJ4476Y	4	3.1	16.0	CSIR	Current	64uF / 330V	-	58 dBA
CAJ4492Y	4	2.1	14.1	CSIR	Current	64uF / 330V	-	59 dBA
CAJ4511Y	3	2.4	10.3	CSR	Potential	88uF / 260V	15uF / 400V	61 dBA
CAJ4513Y	3	2.0	8.8	CSR	Potential	88uF / 330V	15uF / 400V	62 dBA

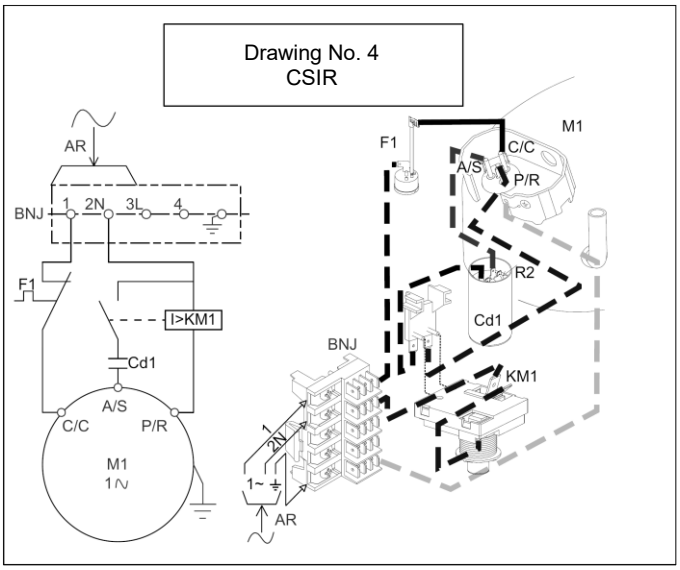
Drawing No. 1
CSIR



Drawing No. 3
CSR



Drawing No. 4
CSIR



TECUMSEH HERMETIC COMPRESSORS

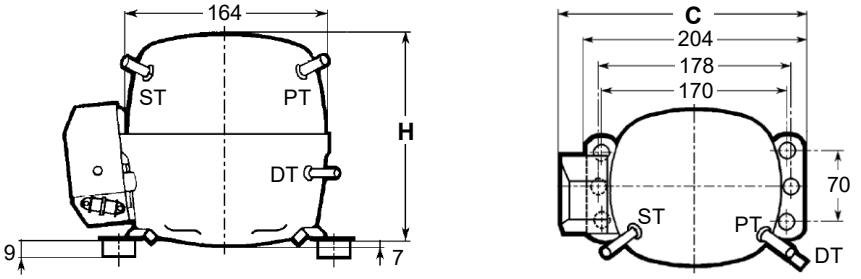
R134A - Medium Temperature Compressors Technical Information

Airefrig Part Number	Dimensions								
	Dwg. No	C mm	C2 mm	F mm	H mm	M mm	Suction Tube / Valve mm (inch)	Discharge Tube mm (inch)	Process Tube mm (inch)
THB4415YFZ	1	-	-	-	164	-	Stub Tube 6.35 (1/4")	4.76 (3/16")	6.35 (1/4")
THB4419YFZ	1	-	-	-	169	-	Stub Tube 6.35 (1/4")	4.76 (3/16")	6.35 (1/4")
THB4422YFZ	1	-	-	-	169	-	Stub Tube 6.35 (1/4")	4.76 (3/16")	6.35 (1/4")
AEZ4425Y	3	170	70	102	186	9	Stub Tube 6.35 (1/4")	4.76 (3/16")	6.35 (1/4")
CAE4440Y	3	176	101.6	134	199	16	Stub Tube 7.9 (5/16")	6.35 (1/4")	7.9 (5/16")
CAE4448Y	4	-	-	-	212	-	Stub Tube 9.5 (3/8")	6.35 (1/4")	9.5 (3/8")
CAE4456Y	4	-	-	-	212	-	Stub Tube 9.5 (3/8")	6.35 (1/4")	9.5 (3/8")
CAJ4461Y	4	-	-	-	258	-	Rotalock Valve 12.7 (1/2")	6.35 (1/4")	6.35 (1/4")
CAJ4476Y	4	-	-	-	258	-	Rotalock Valve 12.7 (1/2")	6.35 (1/4")	6.35 (1/4")
CAJ4492Y	4	-	-	-	271	-	Rotalock Valve 12.7 (1/2")	7.9 (5/16")	6.35 (1/4")
CAJ4511Y	4	-	-	-	282	-	Rotalock Valve 15.9 (5/8")	7.9 (5/16")	6.35 (1/4")
CAJ4513Y	4	-	-	-	282	-	Rotalock Valve 15.9 (5/8")	7.9 (5/16")	6.35 (1/4")

Drawing : 1

Connection Identification:

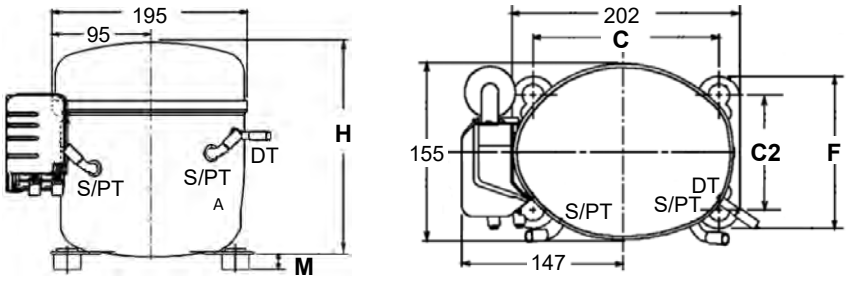
PT = Process (only) Tube
ST = Suction (only) Tube
DT = Discharge Tube



Drawing : 3

Connection Identification:

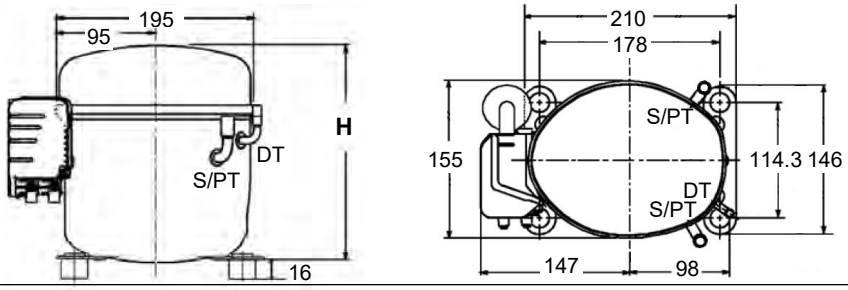
S/PT = Suction / Process Tube
DT = Discharge Tube



Drawing : 4

Connection Identification:

S/PT = Suction / Process Tube
DT = Discharge Tube



TECUMSEH HERMETIC COMPRESSORS

HIGH EFFICIENCY COMPRESSORS

R134A - Medium Temperature Compressors

Airefrig Part Number	Displ cm³	Operating Conditions *EN12900	Cond Temp ºC	Based on 20ºC return gas & 0.0 K sub-cooling								Motor Info	Amps	Oil charge	Weight
				Evaporating Temperature ºC											
				-20	-15	-10	-5	0	5	10	15				
		Capacity (w)		147	214	291	380	482	599	734	887	Nom. HP	RLA		
AE4425YFZ1A		Input (w)	45.0	154	174	192	209	225	240	255	269	1/5	1.65		
		Amps		1.22	1.29	1.35	1.41	1.46	1.52	1.57	1.62				
(Fan Cooling)		Capacity (w)		-	193	265	348	443	552	676	819	220-240v	Max		
- Stub Tubes	6.69	Input (w)	50.0	-	176	197	217	236	254	271	288	1Ø-50Hz	2.40	280mls	9.1kg
- POE Oil		Amps		-	1.29	1.36	1.43	1.50	1.57	1.63	1.70				
- Mount Kit		Capacity (w)		-	171	239	316	404	504	619	750	CSIR	LRA		
		Input (w)	55.0	-	177	202	225	247	268	288	308		10.5		
		Amps		-	1.29	1.38	1.46	1.54	1.62	1.70	1.77				
		Capacity (w)		220	294	382	488	613	760	930	1127	Nom. HP	RLA		
AE4430YFZ1A		Input (w)	45.0	196	217	237	258	277	296	312	325	1/4	2.10		
		Amps		1.74	1.79	1.85	1.90	1.95	2.01	2.06	2.12				
(Fan Cooling)		Capacity (w)		-	270	352	450	566	702	861	1045	220-240v	Max		
- Stub Tubes	8.02	Input (w)	50.0	-	222	244	267	290	312	332	350	1Ø-50Hz	3.10	280mls	9.4kg
- POE Oil		Amps		-	1.80	1.86	1.93	1.99	2.05	2.12	2.18				
- Mount Kit		Capacity (w)		-	246	321	412	518	644	792	963	CSIR	LRA		
		Input (w)	55.0	-	226	251	276	302	327	351	373		12.5		
		Amps		-	1.81	1.88	1.95	2.03	2.10	2.17	2.25				
		Capacity (w)		307	399	508	637	790	968	1176	1417	Nom. HP	RLA		
AE4440YFZ1A		Input (w)	45.0	247	273	302	332	363	393	423	450	1/3	2.50		
		Amps		1.93	2.00	2.07	2.16	2.26	2.37	2.49	2.62				
(Fan Cooling)		Capacity (w)		-	369	471	591	733	899	1093	1317	220-240v	Max		
- Stub Tubes	10.33	Input (w)	50.0	-	281	312	344	378	412	446	478	1Ø-50Hz	3.70	280mls	10.4kg
- POE Oil		Amps		-	2.01	2.09	2.19	2.30	2.42	2.55	2.70				
- Mount Kit		Capacity (w)		-	340	434	545	676	830	1009	1218	CSIR	LRA		
		Input (w)	55.0	-	291	323	358	394	432	470	507		13.2		
		Amps		-	2.04	2.13	2.24	2.36	2.49	2.63	2.78				

*EN12900 compressor rating conditions defines the new capacity ratings for refrigeration in a way which is more useful to refrigeration techs.

TECUMSEH HERMETIC COMPRESSORS

HIGH EFFICIENCY COMPRESSORS (cont'd)

R134A - Medium Temperature Compressors

Airefrig Part Number	Displ cm³	Operating Conditions *EN12900	Cond Temp ºC	Based on 20ºC return gas & 0.0 K sub-cooling Evaporating Temperature ºC								Motor Info	Amps	Oil charge	Weight
				-20	-15	-10	-5	0	5	10	15				
		Capacity (w)		400	526	672	843	1042	1273	1540	1847	Nom. HP	RLA		
AE4450YFZ1C		Input (w)	45.0	288	330	370	408	446	484	525	568	1/3	3.10		
		Amps		2.26	2.39	2.53	2.67	2.82	2.98	3.14	3.31				
(Fan Cooling)		Capacity (w)		-	482	619	779	964	1180	1429	1716	220-240v	Max		
- Stub Tubes	13.24	Input (w)	50.0	-	337	382	426	468	510	554	600	1Ø-50Hz	4.60	280mls	11.7kg
- POE Oil		Amps		-	2.41	2.57	2.73	2.90	3.07	3.25	3.44				
- Mount Kit		Capacity (w)		-	440	567	715	887	1086	1318	1585	CSIR	LRA		
		Input (w)	55.0	-	340	393	442	489	537	584	634		17.8		
		Amps		-	2.43	2.61	2.79	2.98	3.17	3.37	3.57				
		Capacity (w)		441	579	737	921	1133	1380	1664	1990	Nom. HP	RLA		
		Input (w)	45.0	338	382	424	466	508	551	597	646	1/2	3.60		
AE4456YFZ1C		Amps		2.60	2.73	2.87	3.02	3.19	3.36	3.55	3.74				
		Capacity (w)		-	534	682	854	1052	1282	1547	1853	220-240v	Max		
(Fan Cooling)	14.51	Input (w)	50.0	-	394	442	489	535	583	632	684	1Ø-50Hz	8.0	280mls	11.5kg
- Stub Tubes		Amps		-	2.77	2.93	3.10	3.29	3.48	3.69	3.91				
- POE Oil		Capacity (w)		-	490	628	786	970	1183	1429	1713	CSIR	LRA		
- Mount Kit		Input (w)	55.0	-	406	459	511	563	615	669	726		17.0		
		Amps		-	2.80	2.99	3.18	3.39	3.61	3.84	4.08				
		Capacity (w)		449	597	766	958	1181	1437	1732	2070	Nom. HP	RLA		
AE4460YFZ3C		Input (w)	45.0	318	366	409	451	492	534	579	629	1/2	3.0		
		Amps		1.78	1.95	2.13	2.31	2.50	2.70	2.90	3.11				
(Fan Cooling)		Capacity (w)		-	548	707	889	1098	1338	1614	1931	220-240v	Max		
- Stub Tubes	15.09	Input (w)	50.0	-	373	422	468	514	559	607	659	1Ø-50Hz	4.70	280mls	12.2kg
- POE Oil		Amps		-	1.99	2.18	2.39	2.60	2.81	3.03	3.26				
- Mount Kit		Capacity (w)		-	499	649	819	1013	1236	1493	1789	CSR	LRA		
		Input (w)	55.0	-	379	434	486	535	585	637	692		20.7		
		Amps		-	2.02	2.24	2.46	2.69	2.93	3.16	3.41				

*EN12900 compressor rating conditions defines the new capacity ratings for refrigeration in a way which is more useful to refrigeration techs.

Prices

Airefrig Part Number	List Price Excl GST
AE4425YFZ1A	
AE4430YFZ1A	

Airefrig Part Number	List Price Excl GST
AE4440YFZ1A	
AE4450YFZ1C	

Airefrig Part Number	List Price Excl GST
AE4456YFZ1C	
AE4460YFZ3C	

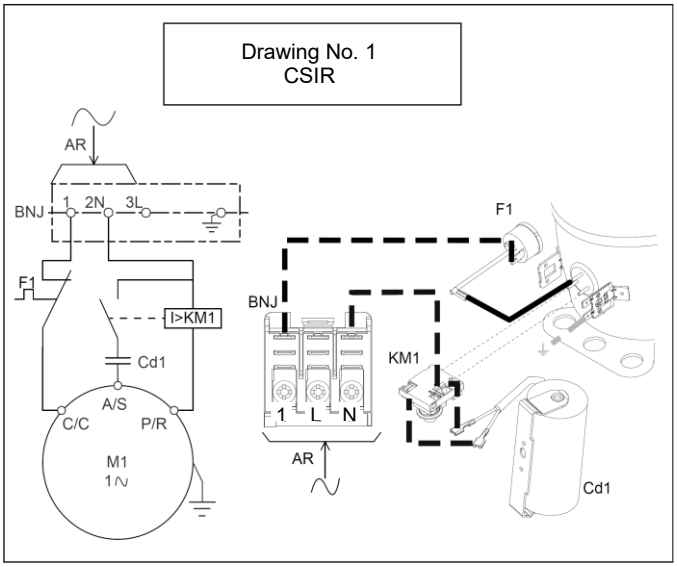
TECUMSEH HERMETIC COMPRESSORS

HIGH EFFICIENCY COMPRESSORS (cont'd)

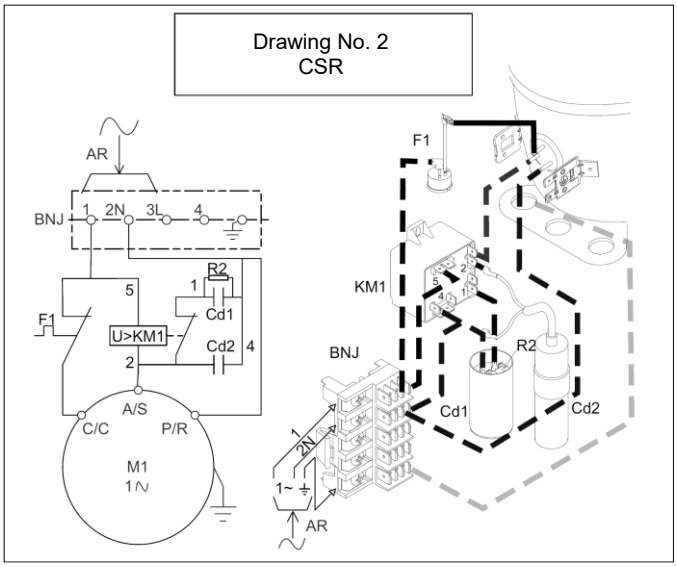
R134A - Medium Temperature Compressors Technical Information

Airefrig Part Number	Electrical Drawing No.	Winding Resistance Ohms @ 20 ºC		Compressor Electrical				Sound Level ISO 3745 / ISO 3743-1
		Main	Auxiliary	Motor Type	Relay Type	Start Capacitor	Run Capacitor	
AE4425YFZ1A	1	12.85	27.56	CSIR	Current	64-77uF / 250V	-	53 dBA
AE4430YFZ1A	1	8.44	52.2	CSIR	Current	50uF / 250V	-	56 dBA
AE4440YFZ1A	1	8.12	18.3	CSIR	Current	88uF / 250V	-	54 dBA
AE4450YFZ1C	1	4.8	17.7	CSIR	Current	88uF / 250V	-	58 dBA
AE4456YFZ1C	1	4.05	21.7	CSIR	Current	64uF / 250V	-	58 dBA
AE4460YFZ3C	2	4.0	20.7	CSR	Potential	88uF / 330V	7.5uF / 400V	61 dBA

Drawing No. 1
CSIR



Drawing No. 2
CSR







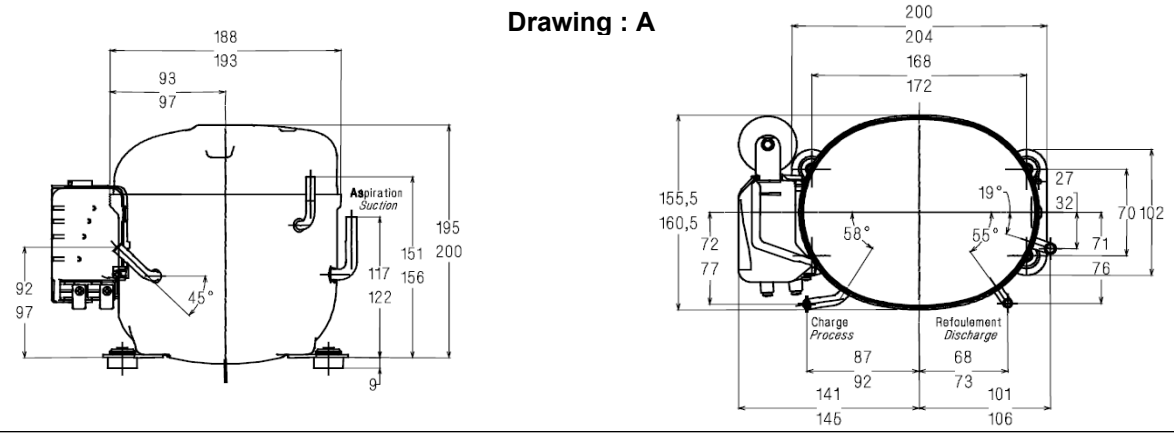
TECUMSEH HERMETIC COMPRESSORS

HIGH EFFICIENCY COMPRESSORS (cont'd)

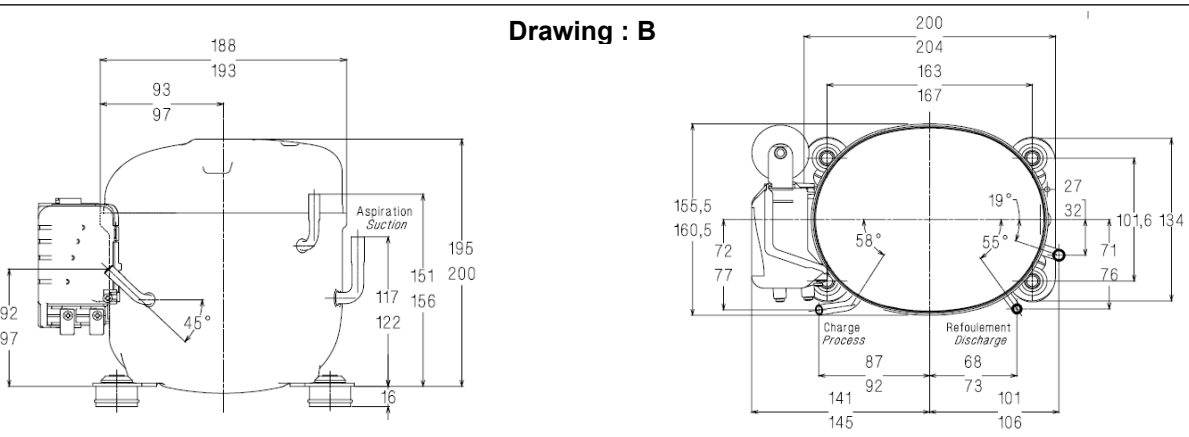
R134A - Medium Temperature Compressors Technical Information

Airefrig Part Number	Drawing ID	Compressor Tube Connections			
		Suction Tube mm (inch)	Discharge Tube mm (inch)	Process Tube mm (inch)	Oil Cooler Tubes mm (inch)
AE4425YFZ1A	A	6.35 (1/4")	4.76 (3/16")	6.35 (1/4")	-
AE4430YFZ1A	A	6.35 (1/4")	4.76 (3/16")	6.35 (1/4")	-
AE4440YFZ1A	B	7.9 (5/16")	6.35 (1/4")	6.35 (1/4")	-
AE4450YFZ1C	C	9.5 (3/8")	6.35 (1/4")	6.35 (1/4")	-
AE4456YFZ1C	C	9.5 (3/8")	6.35 (1/4")	6.35 (1/4")	-
AE4460YFZ3C	C	9.5 (3/8")	6.35 (1/4")	6.35 (1/4")	-

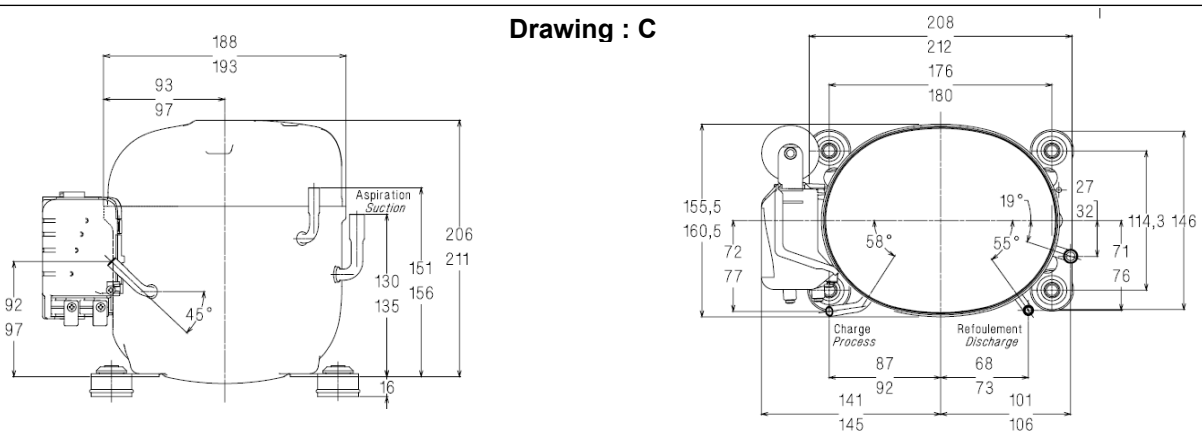
Drawing : A



Drawing : B



Drawing : C



TECUMSEH SPARES

R404A (R507) – Low Temperature Compressor Spares

Compressor Model	Airefrig Part Number	Relay Model Number	Airefrig Part Number	Overload Model Number
THB2378ZFZ	866222	RP3618	859333	T8826
THB2396ZFZ	866299	RP3918	859452	T8010
AEZ2411Z	8662559	MTRP0027-31	8670075	MST59AMK3240
AEZ2415Z	8662563	MTRP49-31	8670444	T0599-A4
CAE2417Z	8662576	MTRP0030-31	8670442	MSP36AMK-3240
CAE2420Z	8662576	MTRP0030-31	8670285	MST28AMK3240
CAE2424Z	8665407	RVA4I3D	8670111	T0319-A4
CAJ2428Z	620208	3ARR18A101B	8690155	MST16APK
CAJ2432Z	8665445	RVA4P3D	8570122	MRA381113253
CAJ2440Z	8665445	RVA4P3D	8570122	MRA381113253
CAJ2446Z	8665443	RVA4O3D	8570462	MST18AIN3253
CAJ2464Z	8665103	RVA6M3D	8570341	MST16AFZ3252

Compressor Model	Airefrig Part Number	Start Capacitor	Airefrig Part Number	Run Capacitor
THB2378ZFZ	8680231	72uF / 260V CAB.XD38	n/a	
THB2396ZFZ	8680231	72uF / 260V CAB.XD38		
AEZ2411Z	8680156	50uF / 260V CAB.XD38		
AEZ2415Z	8680156	50uF / 260V CAB.XD38		
CAE2417Z	8680156	50uF / 260V CAB.XD38		
CAE2420Z	8680157	64uF / 260V CAB.XD38		
CAE2424Z	8680228	64uF / 330V CAB.XD46	8545102	15uF / 400V
CAJ2428Z	8680246	88uF / 330V CAB.XD46	n/a	
CAJ2432Z	8680246	88uF / 330V CAB.XD46	8545102	15uF / 400V
CAJ2440Z	640155	88uF / 260V	8545102	15uF / 400V
CAJ2446Z	8680246	88uF / 330V CAB.XD46	8545102	15uF / 400V
CAJ2464Z	8680246	88uF / 330V CAB.XD46	8685304	20uF / 400V CAB.XD550

TECUMSEH SPARES

R404A (R507) – Medium Temperature Compressor Spares

Compressor Model	Airefrig Part Number	Relay Model Number	Airefrig Part Number	Overload Model Number
AEZ4425Z	8662557	MTRP37-31	8670366	MRP63AMK3240
AEZ4430Z	8662559	MTRP0027-31	8670444	T0599-A4
AEZ4440Z	8662576	MTRP0030-31	8670338	MST28APK3240
AEZ9440Z	8665116	RVA3V3D	8670290	MST58AMN3240
CAE9450Z	8665102	RVA4L3D	8570364	MRP36AMK3252
CAE9460Z	8665103	RVA6M3D	8570320	MSP28APW3228
CAE9470Z	8665102	RVA4L3D	8670244	MST22APK3252
CAJ9480Z	8665407	RVA4I3D	8670346	MST22ALK3240
CAJ9510Z	8665443	RVA4O3D	8570289	MRA381283256
CAJ9513Z	8665407	RVA4I3D	8570344	MST16AHW3253
CAJ4517Z	8665411	RVA4AP3D	8670113	MST004GE / T0861
CAJ4519Z	8665400	RVA4G3D	8672105	GA3SHU0016
High Efficiency Compressors				
AE4425ZFZ1A	8665451	RP4238	8682313	MRA58196-5587
AE4430ZFZ1A	8665452	RP4038	8682314	T14526-23
AE4440ZFZ1A	8665453	RP4538	8682315	T1411-23
AE4450ZFZ1A	8665454	RP4938	8682316	T1419-23
AE4460ZFZ1C	8665455	RP5418	8682317	T8107-23

Compressor Model	Airefrig Part Number	Start Capacitor	Airefrig Part Number	Run Capacitor
AEZ4425Z	8680156	50uF / 260V CAB.XD38	n/a	
AEZ4430Z	8680156	50uF / 260V CAB.XD38		
AEZ4440Z	8680230	100uF / 260V CAB.XD46		
AEZ9440Z	640153	50uF / 260V	8685301	7.5uF / 400V CAB.XD550
CAE9450Z	640153	50uF / 260V	8685301	7.5uF / 400V CAB.XD550
CAE9460Z	640153	50uF / 260V	8685301	7.5uF / 400V CAB.XD550
CAE9470Z	8680228	64uF / 330V CAB.XD46	8545102	15uF / 400V
CAJ9480Z	640151	88uF / 330V	8545102	15uF / 400V
CAJ9510Z	640157	100uF / 330V	8545102	15uF / 400V
CAJ9513Z	640155	88uF / 260V	8545102	15uF / 400V
CAJ4517Z	640157	100uF / 330V	8685303	17.5uF / 400V CAB.XD550
CAJ4519Z	8640244	100uF / 260V	8685307	35uF / 400V CAB.XD410
High Efficiency Compressors				
AE4425ZFZ1A	8680233	64-77uF / 250V	n/a	
AE4430ZFZ1A	8680236	64-77uF / 330V		
AE4440ZFZ1A	8680237	108-130uF / 330V		
AE4450ZFZ1A	8680232	88-108uF / 250V		
AE4460ZFZ1C	8680236	64-77uF / 330V		

TECUMSEH SPARES

R134A – Low Temperature Compressor Spares

Compressor Model	Tecumseh Part Number	Relay Model Number	Tecumseh Part Number	Overload Model Number
THB1324YS	626005	MSDA1	8530335	4TM104MFBY
THB1335YS	626005	MSDA1	8530334	4TM129RFBYY
THG1335YS	8526012	SR273102 / C305C2	8530342	23811Y
THB1340YS	626005	MSDA1	8670239	MRP419HZ3240
THG1340YKS	8526012	SR273102 / C305C2	8530305	4TM181NFBYY-53
THB1350YS	626005	MSDA1	8670239	MRP419HZ3240
THG1365YGS (THG1365YS)	8526012	SR273102 / C305C2	8530350	4TM213PFBYY-53
AEZ1365Y	626005	MSDA1	8670055	MRP304AMN3240
AEZ1370Y	626005	MSDA1	8670055	MRP304AMN3240
AEZ1380Y	626005	MSDA1	8670277	MRA380913240
AEZ2380Y	8662559	MTRP0027-31	8670366	MRP63AMK3240
AE1410Y	8662561	MTRP46-31	8670198	MRP61AMK3240
CAE2410Y	8662559	MTRP0027-31	8670423	T0069A4
AE1412Y	8662561	MTRP46-31	8570275	MSP61AMK3252
CAE2412Y	8662559	MTRP0027-31	8670075	MST59AMK3240
CAE2414Y	8662562	MTRP0029-31	8682305	MRT59AMK3257

Compressor Model	Airefrig Part Number	Start Capacitors	Airefrig Part Number	Run Capacitors
AEZ2380Y	640153	50uF / 260V		
CAE2410Y	640153	50uF / 260V		
CAE2412Y	8680156	50uF / 260V CAB.XD38	n/a	
CAE2414Y	8640245	72uF / 260V		







TECUMSEH SPARES

R134A – Medium Temperature Compressor Spares

Compressor Model	Airefrig Part Number	Relay Model Number	Airefrig Part Number	Overload Model Number
THB4415YFZ	8662573	MTRP0047-31	8670240	MRP390HZ3240
THB4419YFZ	8662572	MTRP0140-31	8570465	T0250A4
THB4422YFZ	8662574	MTRP0046-31	8570465	T0250A4
AEZ4425Y	8662557	MTRP37-31	8570367	T0318B9
AEZ4430Y	8662559	MTRP0027-31	857667	MSP63AMW / T0298
CAE4440Y	8662564	MTRP0012-31	8670442	MSP36AMK-3240
CAE4448Y	8662564	MTRP0012-31	8570572	T0420A4
CAJ4452Y	620210	3ARR18A44B	8570256	MRA341143253
CAE4456Y	8662568	MTRPH56-31	8670342	T0691A4
CAJ4461Y	620210	3ARR18A44B	8570388	T0249C1
CAJ4476Y	620208	3ARR18A101B	8570201	T0155
CAJ4492Y	620207	3ARR18A98B	8570475	T075089
CAJ4511Y	8665031	3ARR3T4AA3	8572050	MRT00AJK3256
CAJ4513Y	8665304	3ARR3T6D3	8570596	T0610K5
High Efficiency Compressors				
AE4425YFZ1A	8665450	RP3638	8682313	T89009-23
AE4430YFZ1A	8665451	RP4238	8682314	T14526-23
AE4440YFZ1A	8665456	RP4838	8682315	T1411-23
AE4450YFZ1C	8665446	RP5038	8682309	T14119-23
AE4456YFZ1C	8665447	MTRP003031	8682310	MSP28APW-5587
AE4460YFZ3C	8665448	RVA4P3C	8682311	T7905-54

Compressor Model	Airefrig Part Number	Start Capacitor	Airefrig Part Number	Run Capacitor
THB4415YFZ	8680156	50uF / 260V CAB.XD38	n/a	
THB4419YFZ	8680156	50uF / 260V CAB.XD38		
THB4422YFZ	8680156	50uF / 260V CAB.XD38		
AEZ4425Y	8680156	50uF / 260V CAB.XD38		
AEZ4430Y	8680156	50uF / 260V CAB.XD38		
CAE4440Y	8640245	72uF / 260V		
CAE4448Y	8680228	64uF / 330V CAB.XD46		
CAJ4452Y	640154	64uF / 260V		
CAE4456Y	8680228	64uF / 330V CAB.XD46		
CAJ4461Y	640154	64uF / 260V		
CAJ4476Y	8680228	64uF / 330V CAB.XD46		
CAJ4492Y	8680228	64uF / 330V CAB.XD46		
CAJ4511Y	640155	88uF / 260V	8545102	15uF / 400V
CAJ4513Y	640151	88uF / 330V	8545102	15uF / 400V
High Efficiency Compressors				
AE4425YFZ1A	8680233	64-77uF / 250V	n/a	
AE4430YFZ1A	8680238	47-56uF / 250V		
AE4440YFZ1A	8680239	88-108uF / 330V		
AE4450YFZ1C	8680232	88-108uF / 250V		
AE4456YFZ1C	8680233	64-77uF / 250V		
AE4460YFZ3C	8680234	72-88uF / 330V	8685310	7.5uF / 400V

cubigel

(Formerly ACC/Electrolux)

Compressors

Cubigel compressors and condensing units are in more than 150 countries around the world.

Cubigel have sold over 55 million domestic products and the number of sales in compressors is just as impressive with over 16% of the world's market share, Cubigel were producing over 22 million compressors a year.

Each product has been designed and tested for specific refrigerants and conditions of each country. Obviously conditions for Australia are completely opposite to that of Switzerland or Russia so when one of the eight manufacturing plants placed around the world sends out a product to a particular country, it has been designed to that countries climate and conditions.

The products imported into Australia are manufactured in the Barcelona factory. Condensing units, commercial and domestic compressors range from 2.44cc up to 34cc and are available in a comprehensive range of refrigerants for today's market.





CUBIGEL HERMETIC COMPRESSORS

R404A (R507) - Low Temperature Commercial Compressors

Airefrig Part Number	H/P	Displ cm³	Cond Temp ºC	Refrigeration Capacity Watts Evaporating Temperature ºC								Cooling	Expansion Device	Motor Type	FLA Amps	List Price Excl GST
				-40	-35	-30	-25	-23.3	-20	-15	-10					
ML60FB	1/5	6.00	45.0	116	160	213	277	301	351	435	529	Fan	Capillary TX	CSIR	2.00	
			50.0	105	146	197	258	281	330	411	503					
			55.0	93	132	180	239	262	308	388	477					
ML80FB	1/4	8.10	45.0	163	217	287	372	404	473	589	721	Fan	Capillary TX	CSIR	2.70	
			50.0	148	202	271	356	388	456	572	704					
			55.0	134	187	256	340	372	440	555	686					
MP10FB	1/3	10.19	45.0	209	301	409	532	577	670	825	994	Fan	Capillary TX	CSIR	3.30	
			50.0	186	272	373	490	533	622	770	933					
			55.0	163	242	337	447	488	573	715	872					
MP14FB	1/2	14.00	45.0	233	351	494	661	724	853	1068	1308	Fan	Capillary TX	CSIR	4.40	
			50.0	198	312	451	615	676	802	1014	1250					
			55.0	163	274	409	568	628	752	960	1192					
MX18FB	5/8	18.39	45.0	314	464	650	871	954	1127	1418	1745	Fan	Capillary TX	CSIR	4.30	
			50.0	273	415	592	804	884	1051	1334	1651					
			55.0	233	365	534	737	814	976	1249	1558					
MX23FB	7/8	23.2	45.0	436	618	844	1112	1213	1423	1777	2175	Fan	Capillary TX	CSR	5.90	
			50.0	393	566	782	1041	1139	1343	1688	2076					
			55.0	349	513	720	969	1064	1262	1598	1977					
MS30FB-V	7/8	29.95	45.0	442	750	1108	1514	1663	1969	2473	3025	Fan	Capillary TX	CSR	7.10	
			50.0	361	654	995	1386	1530	1825	2314	2851					
			55.0	279	557	883	1258	1397	1682	2155	2676					

Legend: V = Rotalock Valve, TX = Thermostatic Expansion Valve, CSIR = Capacitor Start Induction Run, CSR = Capacitor Start and Run

Capacities based on ASHRAE Conditions: ambient 32 deg, subcooled @ 32 deg, superheated @ 32 deg, return vapour 32 deg

CUBIGEL HERMETIC COMPRESSORS

R404A (R507) - Medium Temperature Commercial Compressors

Airefrig Part Number	H/P	Displ cm³	Cond Temp ºC	Refrigeration Capacity Watts Evaporating Temperature ºC									Cooling	Expansion Device	Motor Type	FLA Amps	List Price Excl GST
				-25	-20	-15	-10	-5	0	5	7.2	10					
ML80TB	3/8	7.57	45.0	331	440	566	710	871	1049	1246	1337	1459	Fan	Capillary TX	CSIR	3.19	
			50.0	292	392	506	637	785	951	1135	1221	1336					
			55.0	262	345	446	564	700	853	1024	1105	1213					
ML90TB	3/8	8.85	45.0	407	528	671	837	1026	1237	1471	1582	1728	Fan	Capillary TX	CSIR	3.93	
			50.0	366	474	603	756	931	1129	1350	1454	1593					
			55.0	326	419	536	675	836	1021	1228	1326	1457					
MP14RB	1/2	14.17	45.0	686	886	1115	1375	1665	1985	2336	2499	2716	Fan	Capillary TX	CSR	5.18	
			50.0	611	790	1000	1240	1510	1810	2141	2296	2501					
			55.0	535	695	885	1105	1355	1635	1946	2092	2287					
MX16TB	3/4	16.03	45.0	704	930	1194	1498	1840	2221	2641	2838	3099	Fan	Capillary TX	CSR	5.40	
			50.0	631	831	1070	1348	1664	2020	2414	2599	2846					
			55.0	558	733	946	1198	1489	1818	2187	2361	2594					
MR18TB-T	7/8	18.10	45.0	698	969	1287	1651	2061	2518	3021	3256	3569	Fan	Capillary TX	CSR	6.08	
			50.0	593	838	1128	1465	1848	2278	2753	2977	3275					
			55.0	488	706	969	1279	1635	2038	2486	2698	2981					

Legend: V = Rotalock Valves, TX = Thermostatic Expansion Valve, CSIR = Capacitor Start Induction Run, CSR = Capacitor Start and Run

Capacities based on ASHRAE Conditions: ambient 32 deg, sub-cooling 9 deg, superheated @ 35 deg, return vapour 35 deg

CUBIGEL HERMETIC COMPRESSORS

R134a - Low Temperature Compressors

Airefrig Part Number	H/P	Displ cm³	Cond Temp ºC	Refrigeration Capacity Watts Evaporating Temperature ºC							Cooling	Expansion Device	Motor Type	FLA Amps	List Price Excl GST
				-35	-30	-25	-23.3	-20	-15	-10					
GD36AA	1/12	3.58	45.0	43	62	86	95	114	146	183	Static	Capillary	RSIR	0.70	
			50.0	39	58	81	89	108	139	175					
			55.0	35	53	75	84	102	132	167					
GL45AA	1/8	4.56	45.0	56	81	113	125	151	195	245	Static	Capillary	RSIR	0.87	
			50.0	51	76	107	118	144	187	236					
			55.0	46	70	100	112	136	179	227					
GL80AA	1/5	8.10	45.0	102	144	197	218	262	338	425	Static	Capillary	RSIR	1.45	
			50.0	93	134	187	208	251	327	414					
			55.0	84	125	177	198	241	316	402					
GL80BH	1/5	8.10	45.0	111	150	203	223	267	345	435	Oil	Capillary	RSCR	1.09	
			50.0	103	141	193	213	257	334	423					
			55.0	94	133	183	204	247	323	412					
GL90AA	1/4	9.08	45.0	115	163	220	242	288	366	454	Static	Capillary	RSIR	1.65	
			50.0	108	155	212	233	279	356	443					
			55.0	101	147	203	224	269	346	433					
GL90BH	1/4	9.08	45.0	115	163	220	242	288	366	454	Oil	Capillary	RSCR	1.20	
			50.0	108	155	212	233	279	356	443					
			55.0	101	147	203	224	269	346	433					
GL99BH	1/4	9.93	45.0	126	177	240	263	313	398	494	Oil	Capillary	RSCR	1.28	
			50.0	118	169	230	254	303	387	483					
			55.0	110	160	221	244	293	376	471					
GP16BB	3/8	16.14	45.0	157	252	361	400	483	618	768	Oil	Capillary	RSIR	2.80	
			50.0	145	238	344	383	464	597	744					
			55.0	134	224	328	366	445	576	721					

Legend: TX = Thermostatic Expansion Valve, CSIR = Capacitor Start Induction Run, RSIR = Resistance Start Induction Run, RSCR Resistant Start Capacitor Run

Capacities based on ASHRAE Conditions: ambient 32 deg, subcooled @ 32 deg, superheated @ 32 deg, return vapour 32 deg

CUBIGEL HERMETIC COMPRESSORS

R134a - Medium Temperature Commercial Compressors

Airefrig Part Number	H/P	Displ cm³	Cond Temp ºC	Refrigeration Capacity Watts Evaporating Temperature ºC									Cooling	Expansion Device	Motor Type	FLA Amps	List Price Excl GST
				-25	-20	-15	-10	-5	0	5	7.2	10					
GL45TB	1/6	4.50	45.0	102	138	183	236	297	367	445	482	531	Fan	Capillary TX	CSIR	1.24	
			50.0	93	125	165	214	271	336	410	446	493					
			55.0	84	111	147	192	245	306	376	409	454					
GL60TB	1/5	5.67	45.0	128	172	227	293	369	456	554	601	663	Fan	Capillary TX	CSIR	1.56	
			50.0	116	156	207	269	341	424	517	562	622					
			55.0	105	140	187	244	312	391	481	523	581					
GP12TB	3/8	12.05	45.0	248	354	479	625	791	976	1182	1279	1408	Fan	Capillary TX	CSIR	3.00	
			50.0	217	311	425	560	714	888	1083	1174	1297					
			55.0	186	269	371	494	637	800	983	1070	1186					
GP14TB	3/8	14.00	45.0	271	382	516	674	856	1062	1291	1400	1545	Fan	Capillary TX	CSIR	3.57	
			50.0	240	340	463	610	781	976	1195	1299	1438					
			55.0	209	298	410	547	707	891	1099	1199	1331					
GX23TB	5/8	23.20	45.0	499	678	897	1155	1454	1792	2170	2349	2588	Fan	Capillary TX	CSIR	5.70	
			50.0	452	616	821	1065	1349	1673	2037	2210	2441					
			55.0	405	555	745	975	1244	1554	1904	2070	2293					
GS30TB-T (Stub Tube)	7/8	29.95	45.0	504	770	1103	1503	1970	2504	3106	3392	3775	Fan	Capillary TX	CSR	5.75	
			50.0	426	671	983	1362	1808	2321	2902	3179	3550					
			55.0	349	572	863	1221	1646	2139	2698	2966	3325					

Legend: V = Rotalock Valves, TX = Thermostatic Expansion Valve, CSIR = Capacitor Start Induction Run, CSR = Capacitor Start and Run

Capacities based on ASHRAE Conditions: ambient 32 deg, sub-cooling 9 deg, superheated @ 35 deg, return vapour 35 deg.

CUBIGEL HERMETIC COMPRESSORS

R134a – Medium Temperature High Efficiency Compressors

Airefrig Part Number	H/P	Displ cm³	Cond Temp ºC	Refrigeration Capacity Watts Evaporating Temperature ºC									Cooling	Expansion Device	Motor Type	FLA Amps	List Price Excl GST
				-25	-20	-15	-10	-5	0	5	7.2	10					
GLY60RA	1/5	5.98	45.0	136	186	247	320	405	501	608	659	727	Fan	Capillary TX	CSR	1.21	
			50.0	126	172	228	297	377	468	571	620	686					
			55.0	116	157	209	273	349	436	534	582	645					
GLY80RA	1/5	8.10	45.0	188	251	328	420	527	648	785	849	936	Fan	Capillary TX	CSR	1.64	
			50.0	173	230	301	387	488	603	733	795	877					
			55.0	159	209	275	354	449	558	681	740	819					
GLY90RA	1/4	9.09	45.0	190	254	334	429	540	665	807	873	963	Fan	Capillary TX	CSR	1.84	
			50.0	175	234	308	397	502	622	757	822	908					
			55.0	160	213	281	356	464	578	708	770	853					
GPY12RA	3/8	12.1	45.0	300	402	526	673	842	1033	1248	1349	1484	Fan	Capillary TX	CSR	2.46	
			50.0	275	368	483	621	782	965	1170	1268	1398					
			55.0	250	334	441	570	722	896	1093	1186	1312					
GPY14RA	3/8	14.32	45.0	372	487	628	794	986	1204	1447	1562	1716	Fan	Capillary TX	CSR	2.92	
			50.0	349	454	584	740	922	1129	1362	1473	1621					
			55.0	326	420	540	686	858	1055	1278	1384	1526					
GPY16RA	3/8	16.15	45.0	411	541	709	896	1121	1364	1647	1778	1957	Fan	Capillary TX	CSR	3.06	
			50.0	386	503	658	835	1048	1279	1551	1673	1844					
			55.0	360	465	608	774	972	1195	1455	1571	1735					

Legend: V = Rotalock Valve, TX = Thermostatic Expansion Valve, CSIR = Capacitor Start Induction Run, CSR = Capacitor Start and Run

Capacities based on ASHRAE Conditions: ambient 35 deg, superheated @ 35 deg, return vapour 35 deg

CUBIGEL HERMETIC COMPRESSORS

R22 - Medium Temperature Commercial Compressors

Airefrig Part Number	H/P	Displ cm³	Cond Temp ºC	Refrigeration Capacity Watts Evaporating Temperature ºC									Cooling	Expansion Device	Motor Type	FLA Amps	List Price Excl GST
				-25	-20	-15	-10	-5	0	5	7.2	10					
L40TN	1/6	4.04	45.0	145	194	251	318	394	478	572	616	675	Fan	Capillary TX	CSIR	1.64	
			50.0	134	178	231	293	364	444	533	576	632					
			55.0	122	161	210	267	334	410	495	535	589					
L45TN	1/5	4.50	45.0	155	208	270	343	426	519	623	671	736	Fan	Capillary TX	CSIR	1.74	
			50.0	140	188	246	315	393	481	580	626	688					
			55.0	126	169	223	286	360	443	537	581	641					
P12TN	1/2	12.00	45.0	412	548	715	911	1137	1393	1679	1814	1995	Fan	Capillary TX	CSR	3.35	
			50.0	376	497	647	828	1038	1278	1548	1676	1848					
			55.0	340	445	580	744	939	1163	1417	1539	1701					
X18TN	3/4	18.40	45.0	-	-	1172	1499	1853	2234	2643	2832	3080	Fan	Capillary TX	CSR	6.21	
			50.0	-	-	1069	1371	1701	2059	2444	2623	2857					
			55.0	-	-	965	1244	1550	1884	2245	2413	2634					

Legend: V = Rotalock Valve, TX = Thermostatic Expansion Valve, CSIR = Capacitor Start Induction Run, CSR = Capacitor Start and Run

Capacities based on ASHRAE Conditions: ambient 32 deg, sub-cooling 9 deg, superheated @ 35 deg, return vapour 35 deg





CUBIGEL HERMETIC COMPRESSORS

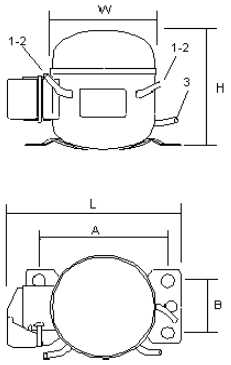
Compressor Dimensions

Refrigerant			Dimensions mm			Foot Print mm		Connections inches			Weight Kg	Oil Charge cm³	Drawing
R22	R134a	R404A						Suct	Charge	Disch			
Models			H	L	W	A	B	1	2	3			
	GD24AA		144	228	140	170	70				5.3	200	D
	GD36AA		154								5.9		
	GL45TB		176	240	162	170 or 165	102 or 70				8.4	300	L
	GL60TB		191								9.5		
	GL80TB										9.5		
	GL45AA		162			170	70				8.3	265	
	GL60AA		170								9.1		
	GL60BH		186								10.2	400	
	GL80AA										9.9	345	
	GL80BH										10.4		
	GL90BH		198								11.1	470	
	GL90AA		186								10.2	345	
	GL99BH		198								11.3	470	
	GL90TB		204			170 or 165	102 or 70	1/4	1/4	3/16	10.8	300	
	GLY60RA		186								9.9		
	GLY80RA										10.4	345	
	GLY90RA		203.5								11.3	400	
		ML40TB	191								9.5	300	
		ML45FB									10.2		
		ML45TB									9.5		
		ML60FB									10.2		
		ML60TB									10.2		
		ML80FB									10.9		
		ML80TB	204								10.0	400	
		ML90FB									11.0		
		ML90TB									11.6	300	
L40TN			191								9.5		
L45TN											9.5	400	
L57TN											9.5	300	
L76TN			204								10.0	470	
L88TN											10.6	400	
	GP10FB		204					5/16	5/16	1/4	11.8		P
	GP12TB		204								11.2	350	
	GP14BB		198								11.5	400	
	GP14CB		204								11.5		
	GP14TB		216								11.5		
	GPY12RA										12.6		L
	GPY14RA		211								12.6		
	GPY16RA										12.8		
	GP16BB		216			170 or 165	102 or 70				12.0	530	P
	GP16CB										12.0		
	GP16TB										13.1	400	
		MP10FB									12.5		
		MP12FB									12.0		
		MP12TB						3/8			13.5		
		MP14FB						5/16			13.9		
		MP14TB									13.5		
		MP12RB	211					3/8			13.5	350	
		MP14RB									13.5	400	
P12TN			216								12.3		

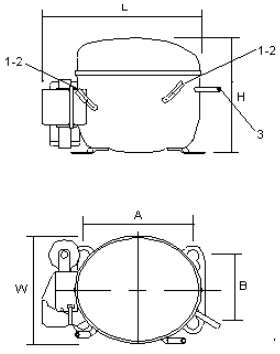
CUBIGEL HERMETIC COMPRESSORS

Compressor Dimensions

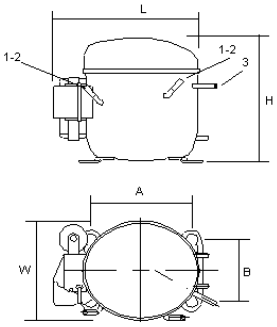
Refrigerant			Dimensions mm			Foot Print mm		Connections inches			Weight Kg	Oil Charge cm³	Drawing
R22	R134a	R404A						Suct	Charge	Disch			
Models			H	L	W	A	B	1	2	3			
X18TN			221	250				3/8	3/8		17.8		
	GX18TB		215					5/16			16.0	500	
	GX21TB		221	267					5/16		17.0		
	GX23TB												
		MX16FB	215								17.5	650	
		MX16TB			174	178	114			1/4	16.8	500	X
		MX18FB	221								17.3	450	
		MX18TB		250				3/8			17.2	500	
		MX21FB									17.5	650	
		MX21TB										500	
		MX23FB		258							16.4	650	
		MR18TB-T	222	281	222	203	122	1/2			22.7	640	R
S22TN-V			265						3/8				
S26TN-V			276										
	GS26TB-V		265										
	GS30TB-V			219	165	203	122	5/8 Flare		5/16	20.0	887	S
	GS34TB-V												
		MS26TB-V	276										
		MS30FB-V											
		MS26FB-V						½ Flare					



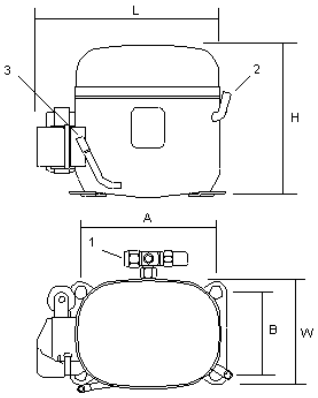
Drg. D



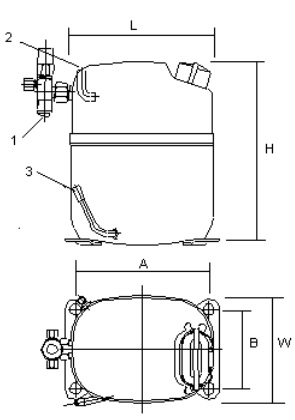
Drg. L



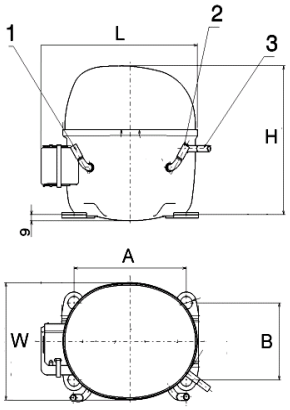
Drg. P



Drg. R



Drg. S



Drg. X

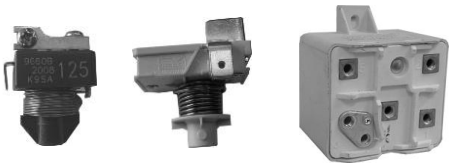
CUBIGEL SPARES

Compressor Relays

Compressor Model	Airefrig Part Number	Relay Model Number (Pre-Connecting Board)	Airefrig Part Number	Relay Model Number (With Connecting Board)
	  			
GD24AA	111591	PTC3003.6	128096	PTC K100 DA
GD30AA	111591	PTC3003.6	128096	PTC K100 DA
GD36AA	111591	PTC3003.6	128096	PTC K100 DA
GL40TB	112486	9660B2008-108	128450	ECC2 2108-8 (BDG 108S)
GL45AA	111591	PTC3003.6	128096	PTC K100 DA
GL45TB	112486	9660B2008-108	128450	ECC2 2108-8 (BDG 108S)
GL60AA	111591	PTC3003.6	128096	PTC K100 DA
GL60BH	111602	PTC3003.7	128096	PTC K100 DA
GL60TB	105534	MTRP 33-27	128472	ECC2 1118-8 (BDG 118S)
GL80AA	111591	PTC3003.6	102240	PTC K100 ZA
GL80BH	111602	PTC3003.7	128096	PTC K100 DA
GL80TB	105523	MTRP38-27	128494	ECC2 1127-8 (BDG 127S)
GL90AA_A	111602	PTC3003.7	128096	PTC K100 DA
GL90BH	111602	PTC3003.7	128096	PTC K100 DA
GL90TB	123535	MTRP 4331	128520	1138-8 (BDG 138S)
GL99BH	111602	PTC3003.7	128096	PTC K100 DA
GLY80RA	-	-	405146	ECC2 1127-8 (BDG 127S) & NTC 15
GLY90RAB	122474	MRTP 4224	128656	ECC2 1135-8 (BDG 135S) & NTC 15
GP10FB	101813	MTRP 4027	-	-
GP10TB	123535	MTRP 4331	-	-
GP12BB	123535	MTRP 4331	405157	ECC2 1138-8 (BDG 138C)
GP12TB	123535	MTRP 4331	128520	ECC2 1138-8 (BDG 138S)
GP14BB	102771	9660A-2008	128332	ECC2 1145-8 (BDG 145C)
	123546	MTRP 4631		
GP14CB	102771	9660A-2008	128332	ECC2 1145-8 (BDG 145C)
	123546	MTRP 4631		
GP14TB	101846	MTRP 48-27	128542	ECC2 1149-8 (BDG 149S)
GP16BB	101846	MTRP 48-27	128343	ECC2 1149-8 (BDG 149C)
GP16CB	101846	MTRP 48-27	128343	ECC2 1149-8 (BDG 149C)
GP16TB	122393	MTRP 51-27	128553	ECC2 1158-8 (BDG 158S)
	102944	MTRP 51-27		
GPY12RAB	125101	MTRP 0029 + NTC15	128671	ECC2 1149-8 (BDG 149S) & NTC 15
GPY14RAB	125101	MTRP 0029 + NTC15	128671	ECC2 1149-8 (BDG 149S) & NTC 15

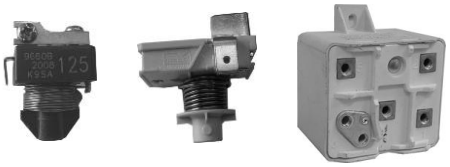
CUBIGEL SPARES

Compressor Relays (cont'd)

Compressor Model	Airefrig Part Number	Relay Model Number (Pre-Connecting Board)	Airefrig Part Number	Relay Model Number (With Connecting Board)
				
GPY16RA	-	-	128693	ECC2 1166-8 (BDG 166S) & NTC 15
GR18TB	101861	MTRP 56-27	-	-
GR22TB	101872	9660A2008-180 / MTRP16-27	-	-
GS26TB	112405	G.E. REF.3ARR18 A 79B	-	-
GS30TB	101883	9004,GE.3ARR3 B 3AV3	-	-
GS34TB	101883	9004,GE.3ARR3 B 3AV3	-	-
GX18TB	123583	MTRP 5731	405180	1170-8 (BDG 170S)
GX21TB	123605	MTRP 0016-3	405181	ECC2 1180-8 (BDG 180S)
GX23TB	123605	MTRP 0016-3	405181	ECC2 1180-8 (BDG 180S)
L40TN	105534	MTRP 33-27	128472	ECC2 1118-8 (BDG 118S)
L57TN	101813	MTRP 4027	128505	ECC2 1131-8 (BDG 131S)
L76TN	123535	MTRP 4331	128520	ECC2 1138-8 (BDG 138S)
L88TN	101846	MTRP 48-27	128542	ECC2 1149-8 (BDG 149S)
LT45TN	101780	9660B2008-125	405171	ECC2 1125-8 (BDG 125S)
MK16FB	101850	MTRP 55-27	-	-
ML40TB	105534	MTRP 33-27	128472	ECC2 1118-8 (BDG 118S)
ML45FB	105534	MTRP 33-27	128472	ECC2 1118-8 (BDG 118S)
ML45TB	105523	MTRP 38-27	128494	ECC2 1127-8 (BDG 127S)
ML60FB	105523	MTRP 38-27	128494	ECC2 1127-8 (BDG 127S)
ML60TB	101813	MTRP 4027	128505	1131-8(BDG 131S)
ML80FB	102771	9660A-2008	405176	ECC2 1145-8 (BDG 145S)
	123546	MTRP 4631		
ML80TB	123535	MTRP 4331	128520	ECC2 1138-8 (BDG 138S)
ML90FB	102771	9660A-2008	405176	ECC2 1145-8 (BDG 145S)
	123546	MTRP 4631		
ML90TB	101846	MTRP 48-27	128542	ECC2 1149-8 (BDG 149S)
MLY90LAB	-	-	405148	ECC2 1145-8 (BDG 145S) & NTC 15
MLY90RA-B	-	-	128671	ECC2 1149-8 (BDG 149S) & NTC 15
MP10FB	122393	MTRP 51-27	-	-
	102944	MTRP 51-27		
MP12FB	101846	MTRP 48-27	128542	ECC2 1149-8 (BDG 149S)
MP12RB	-	-	128682	1158-8 (BDG 158S) NTC15

CUBIGEL SPARES

Compressor Relays (cont'd)

Compressor Model	Airefrig Part Number	Relay Model Number (Pre-Connecting Board)	Airefrig Part Number	Relay Model Number (With Connecting Board)
				
MP12TB	101426	9001,GE.3ARR3 B 3AP3	-	-
MP14FB	122393	MTRP 51-27	128553	ECC2 1158-8 (BDG 158S)
	102944	MTRP 51-27		
MP14RB	-	-	128693	ECC2 1166-8 (BDG 166S) & NTC 15
MP14TB	101426	9001,GE.3ARR3 B 3AP3	-	-
MPT14LAB	-	-	128682	1158-8 (BDG 158S) NTC15
MR18FB	101426	9001,GE.3ARR3 B 3AP3	-	-
MR18TB	101426	9001,GE.3ARR3 B 3AP3	-	-
MR22FB-V	101894	9006,GE.3ARR3 B 10AA3	-	-
MR22TB	101415	9002,GE.3ARR3 B 10AS3	-	-
MS26FB	101894	9006,GE.3ARR3 B 10AA3	-	-
MS26TB	101415	9002,GE.3ARR3 B 10AS3	-	-
MS30FB	101426	9001,GE.3ARR3 B 3AP3	-	-
MS34FB	101883	9004,GE.3ARR3 B 3AV3	-	-
MS34TB	101415	9002,GE.3ARR3 B 10AS3	-	-
MX16FB	123583	MTRP 5731	405180	ECC2 1170-8 (BDG 170S)
MX16TB	101415	9002,GE.3ARR3 B 10AS3	-	-
MX18FB	101426	9001,GE.3ARR3 B 3AP3	-	-
MX18TB	101415	9002,GE.3ARR3 B 10AS3	-	-
MX21FB	101894	9006,GE.3ARR3 B 10AA3	-	-
MX21TB	101415	9002,GE.3ARR3 B 10AS3	-	-
MX23FB	101894	9006,GE.3ARR3 B 10AA3	-	-
NL60FB	-	-	128494	ECC2 1127-8 (BDG 127S)
NLY60LAB	-	-	405146	ECC2 1127-8 (BDG 127S) & NTC 15
NLY90LAB	-	-	405148	ECC2 1145-8 (BDG 145S) & NTC 15
P12TN	101426	9001,GE.3ARR3 B 3AP3	-	-
S19UN	101426	9001,GE.3ARR3 B 3AP3	-	-
S22TN	101426	9001,GE.3ARR3 B 3AP3	-	-
S26TN	101415	9002,GE.3ARR3 B 10AS3	-	-
S34UN	101415	9002,GE.3ARR3 B 10AS3	-	-
X18TN	100633	9005,GE.3ARR3 B 10S3	-	-

CUBIGEL SPARES

Compressor Overloads

Compressor Model	Airefrig Part Number	Overload Model Number (Pre-Connecting Board)	Airefrig Part Number	Overload Model Number (Suit Connecting Board)
				
GD24AA	104285	T0320-24	102310	9-646 ELECTRICA T0320-L6
GD30AA	104296	T0358-24	102282	9-614 ELECTRICA T0358-L6
GD36AA	102222	T0321-24	101912	9-849 BDG AE24FU6
GL40TB	112265	T0068-22	128741	9-503 ELECTRICA T0068-L6
GL45AA	104683	MRP318LZ-3201	129275	9-618 ELECTRICA T0453-L6
GL45TB	112265	T0068-22	128741	9-503 ELECTRICA T0068-L6
GL60AA	106540	4TM265NFBYY-519	129323	9-635 ELECTRICA T0508-L6
GL60BH	106536	4TM205NFBYY-51	-	-
GL60TB	111650	T0069-22	102321	9-906 BDG AE26FHY6
GL80AA	106551	4TM308FBYY-51	129356	9-847 BDG AE15BW6 (T0502-L6)
GL80BH	105906	4TM276NFBYY-51	102306	9-665 ELECTRICA T0730-L6
GL80TB	102196	T0137-22	102320	9-905 BDG AE39FHS6
GL90AA	107004	T0490-24	102293	9-644 ELECTRICA T0490-L6
GL90BH	105906	4TM276NFBYY-51	102393	19-406 SENSATA 4TM 276 NFB YY-94
GL90TB	110611	T0057-22	128936	9-903 BDG AE39FHY6 (T0057-L6)
GL99BH	106551	4TM308FBYY-51	102395	19-409 SENSATA 4TM 308 NFB YY-94
GLY80RA	-	-	102208	9-561 ELECTRICA T0289-L6
GLY90RAB	102196	T0137-22	128870	9-520 ELECTRICA T0137-L6
GP10FB	101813	RELAY MTRP 4027	-	-
GP10TB	103751	T0171-22	-	-
GP12BB	102196	T0137-22	102184	9-526 ELECTRICA T0173-L6
GP12TB	111661	MRT26AMK-3007	128925	9-907 BDG AE39FS6 (T0181-L6)
GP14BB	102196	T0137-22	102184	9-526 ELECTRICA T0173-L6
GP14CB	102196	T0137-22	128870	9-520 ELECTRICA T0137-L6
GP14TB	110622	T0425-22	128984	9-541 ELECTRICA T0425-L6
			129076	9-541 ELECTRICA T0425-L6
GP16BB	112125	T0108-22	102194	9-546 ELECTRICA T0108-L6
GP16CB	102196	T0137-22	128870	9-520 ELECTRICA T0137-L6
GP16TB	110622	T0425-22	128984	9-541 ELECTRICA T0425-L6
			129076	9-541 ELECTRICA T0425-L6
GPY12RAB	-	-	102199	9-552 ELECTRICA T0269-L6
GPY14RAB	-	-	129124	9-556 ELECTRICA T0267-L6
GPY16RA	-	-	129102	9-554 ELECTRICA T0252-L6
GR18TB	111355	T0446-G1	-	-
GR22TB	116071	T0666-22	-	-
GS26TB	110983	MRA38088-3007	101460	6-543 ELECTRICA T0419-30

CUBIGEL SPARES

Compressor Overloads (cont'd)

Compressor Model	Airefrig Part Number	Overload Model Number (Pre-Connecting Board)	Airefrig Part Number	Overload Model Number (Suit Connecting Board)
				
GS30TB	112044	T0535-G2	101460	6-543 ELECTRICA T0419-30
GS34TB	116045	T016130	-	-
GX18TB	110994	T0348-G1	129065	9-550 ELECTRICA T0348-L6
GX21TB	113890	T0535G1	129054	9-549 ELECTRICA T0535-L6
GX23TB	117692	T0260G1	102209	9-562 ELECTRICA T0260-L6
L40TN	111650	T0069-22	129150	9-559 ELECTRICA T0069-L6
L57TN	111635	T0168-22	128925	9-907 BDG AE39FS6 (T0181-L6)
L76TN	111366	T0266-G1	128984	9-541 ELECTRICA T0425-L6
			129076	9-541 ELECTRICA T0425-L6
			129146	9-558 T0266-L6
L88TN	110622	T0425-22	102176	9-514 ELECTRICA T0103-L6
LT45TN	112280	T0322-22	128936	9-903 BDG AE39FHY6 (T0057-L6)
MK16FB	110456	MRA38130-3105	-	-
MK16TB	110294	MRA38132-3215	-	-
ML40TB	101651	MRP304AMN-3007	102168	9-506, ELECTRICA T0071-L6
ML45FB	111646	T0073-22	128774	9-508 ELECTRICA T0073-L6
ML45TB	110611	T0057-22	128936	9-903 BDG AE39FHY6 (T0057-L6)
ML60FB	111650	T0069-22	102321	9-906 BDG AE26FHY6
ML60TB	111635	T0168-22	129161	9-560 ELECTRICA T0168-L6
ML80FB	102196	T0137-22	128870	9-520 ELECTRICA T0137-L6
ML80TB	111661	MRT26AMK-3007	128925	9-907, BDG AE39FS6 (T0181-L6)
ML90FB	103740	T0102-22	102175	9-513 ELECTRICA T0102-L6
ML90TB	110622	T0425-22	128984	9-541 ELECTRICA T0425-L6
			129076	9-541 ELECTRICA T0425-L6
MLY90LAB	-	-	129102	9-554 ELECTRICA T0252-L6
MLY90RA-B	-	-	129102	9-554 ELECTRICA T0252-L6
MP10FB	111366	T0266-G1	-	-
MP12FB	102104	MRP36AMK-3007	128903	9-525 ELECTRICA T0171-L6
MP12RB	-	-	129102	9-554 ELECTRICA T0252-L6
MP12TB	110261	MRA38130-3216	129102	9-554 ELECTRICA T0252-L6
	116093	T0252G2		
MP14FB	110622	T0425-22	128984	9-541 ELECTRICA T0425-L6
			129076	9-541 ELECTRICA T0425-L6
MP14RB	-	-	129065	9-550 ELECTRICA T0348-L6
MP14TB	112055	T0348-G2	129065	9-550 ELECTRICA T0348-L6
MPT14LAB	-	-	129124	9-556 ELECTRICA T0267-L6

CUBIGEL SPARES

Compressor Overloads (cont'd)

Compressor Model	Airefrig Part Number	Overload Model Number (Pre-Connecting Board)	Airefrig Part Number	Overload Model Number (Suit Connecting Board)
				
MR18FB	114542	T0418-30	-	-
MR18TB	116056	T0666-30	-	-
MR22FB-V	112210	T0103-30	-	-
MR22TB-V	111016	T0534G2 6-551	-	-
MS26FB	112210	T0103-30	-	-
MS26TB	111016	T0534G2 6-551	-	-
MS30FB	112033	T0452-30	-	-
MS34FB	101592	MRT00AHK-3216	-	-
	111016	T0534G2 6-551		
	111020	T0257-G2		
MS34TB	118871	GA3LMV8124	-	-
	102314	CRA38008-3045		
	118893	GA3PLS0024		
MX16FB	-	-	102176	9-514 ELECTRICA T0103-L6
MX16TB	119044	T0253-G2	102202	9-555 ELECTRICA T0253-L6
MX18FB	112954	T0268G2	102200	9-553 ELECTRICA T0268-L6
MX18TB	112044	T0535-G2	129054	9-549 ELECTRICA T0535-L6
	111016	T0534G2 6-551		
MX21FB	112055	T0348-G2	129065	9-550 ELECTRICA T0348-L6
MX21TB	-	-	102198	9-551 ELECTRICA T0534-L6
MX23FB	-	-	129054	9-549 ELECTRICA T0535-L6
NL60FB	-	-	129150	9-559 ELECTRICA T0069-L6
NLY60LAB	-	-	129150	9-559, ELECTRICA T0069-L6
NLY90LAB	-	-	129150	9-559 ELECTRICA T0069-L6
P12TN	116060	T0267-G2	129124	9-556 ELECTRICA T0267-L6
R18TN	112044	T0535-G2	-	-
S22TN	111016	T0534G2 6-551	-	-
S26TN	101592	MRT00AHK-3216	-	-
	111016	T0534G2 6-551		
S34UN	118871	GA3LMV8124	-	-
	102314	CRA38008-3045		
S91UN	112033	T0452-30	-	-
X18TN	-	-	102198	9-551 ELECTRICA T0534-L6

CUBIGEL SPARES

Compressor Start Capacitors

Compressor Model	Airefrig Part Number	Start Capacitors (Pre-Connecting Board)	Airefrig Part Number	Start Capacitors (Post Connecting Board)
GL40TB	132646	50MFD 250V	-	-
	123126	50MFD 260V		
GL45TB	132646	50MFD 250V	102660	47-56MFD 330V CABLE & CAP
	123126	50MFD 260V		
GL60TB	132646	50MFD 250V	102660	47-56MFD 330V CABLE & CAP
	123126	50MFD 260V		
GL80TB	132646	50MFD 250V	102661	47-56MFD 330V CABLE & CAP
	123126	50MFD 260V		
GL90TB	132646	50MFD 250V	102661	47-56MFD 330V CABLE & CAP
	123126	50MFD 260V		
GLY80RA	-	-	102661	47-56MFD 330V CABLE & CAP
GLY90RAB	126136	47-56MFD 330V	102661	47-56MFD 330V CABLE & CAP
	121855	47-56MFD 330V		
	132742	50MFD 330V		
GP10FB	132646	50MFD 250V	-	-
	123126	50MFD 260V		
GP10TB	126136	47-56MFD 330V	-	-
	121855	47-56MFD 330V		
	132742	50MFD 330V		
GP12TB	132646	50MFD 250V	102661	47-56MFD 330V CABLE & CAP
	123126	50MFD 260V		
GP14TB	126136	47-56MFD 330V	102661	47-56MFD 330V CABLE & CAP
	121855	47-56MFD 330V		
	132742	50MFD 330V		
GP16TB	108942	72MFD 330V	102665	72-88MFD 330V CABLE & CAP
GPY12RAB	104403	47-56MFD 330V CABLE & CAP	102661	47-56MFD 330V CABLE & CAP
GPY14RAB	108861	64-77MFD 330V	102664	64-77MFD 330V CABLE & CAP
GPY16RA	-	-	102661	47-56MFD 330V CABLE & CAP
GR18TB	108861	64-77MFD 330V	-	-
GR22TB	108942	72MFD 330V	-	-
GS26TB	108861	64-77MFD 330V	100509	64-77MFD 330V REF.205
GS30TB	104613	72-88MFD 330V	100680	72-88MFD 330V REF.216
	123325	72-88MFD 330V		
GS34TB	123340	88-108MFD 330V	100690	88-108MFD 330V REF.215
	126125	88-108MFD 330V		

CUBIGEL SPARES

Compressor Start Capacitors (cont'd)

Compressor Model	Airefrig Part Number	Start Capacitors (Pre-Connecting Board)	Airefrig Part Number	Start Capacitors (Post Connecting Board)
GX18TB	126136	47-56MFD 330V	102664	64-77MFD 330V CABLE & CAP
	121855	47-56MFD 330V		
	132742	50MFD 330V		
GX21TB	108942	72MFD 330V	102665	72-88MFD 330V CABLE & CAP
GX23TB	108942	72MFD 330V	102665	72-88MFD 330V CABLE & CAP
L40TN	132646	50MFD 250V	102660	47-56MFD 330V CABLE & CAP
	123126	50MFD 260V		
L45TN	132646	50MFD 250V	102660	47-56MFD 330V CABLE & CAP
	123126	50MFD 260V		
L57TN	132646	50MFD 250V	102660	47-56MFD 330V CABLE & CAP
	123126	50MFD 260V		
L76TN	108942	72MFD 330V	102661	47-56MFD 330V CABLE & CAP
L88TN	132646	50MFD 250V	102661	47-56MFD 330V CABLE & CAP
	123126	50MFD 260V		
MK16FB	104613	72-88MFD 330V	-	-
	123325	72-88MFD 330V		
ML40TB	126136	47-56MFD 330V	102660	47-56MFD 330V CABLE & CAP
	121855	47-56MFD 330V		
	132742	50MFD 330V		
ML45FB	126136	47-56MFD 330V	102660	47-56MFD 330V CABLE & CAP
	121855	47-56MFD 330V		
	132742	50MFD 330V		
ML45TB	126136	47-56MFD 330V	102660	47-56MFD 330V CABLE & CAP
	121855	47-56MFD 330V		
	132742	50MFD 330V		
ML60FB	132646	50MFD 250V	102660	47-56MFD 330V CABLE & CAP
	123126	50MFD 260V		
ML60TB	126136	47-56MFD 330V	102660	47-56MFD 330V CABLE & CAP
	121855	47-56MFD 330V		
	132742	50MFD 330V		
ML80FB	126136	47-56MFD 330V	102661	47-56MFD 330V CABLE & CAP
	121855	47-56MFD 330V		
	132742	50MFD 330V		
ML80TB	126136	47-56MFD 330V	102661	47-56MFD 330V CABLE & CAP
	121855	47-56MFD 330V		
	132742	50MFD 330V		

CUBIGEL SPARES

Compressor Start Capacitors (cont'd)

Compressor Model	Airefrig Part Number	Start Capacitors (Pre-Connecting Board)	Airefrig Part Number	Start Capacitors (Post Connecting Board)
ML90FB	126136	47-56MFD 330V	102661	47-56MFD 330V CABLE & CAP
	121855	47-56MFD 330V		
	132742	50MFD 330V		
ML90TB	126136	47-56MFD 330V	102661	47-56MFD 330V CABLE & CAP
	121855	47-56MFD 330V		
	132742	50MFD 330V		
MLY90LAB	-	-	102661	47-56MFD 330V CABLE & CAP
MLY90RA-B	-	-	102664	64-77MFD 330V CABLE & CAP
MP10FB	126136	47-56MFD 330V	-	-
	121855	47-56MFD 330V		
	132742	50MFD 330V		
MP12FB	108942	72MFD 330V	102661	47-56MFD 330V CABLE & CAP
MP12RB	-	-	102661	47-56MFD 330V CABLE & CAP
MP12TB	104403	47-56MFD 330V	101728	47-56MFD 330V REF.214
MP14FB	108942	72MFD 330V	102665	72-88MFD 330V CABLE & CAP
MP14RB	-	-	102664	64-77MFD 330V CABLE & CAP
MP14TB	104403	47-56MFD 330V	101728	47-56MFD 330V REF.214
MPT14LAB	-	-	102661	47-56MFD 330V CABLE & CAP
MR18FB	104403	47-56MFD 330V CABLE & CAP	-	-
MR18TB	104403	47-56MFD 330V CABLE & CAP	-	-
MR22FB-V	123340	88-108MFD 330V	-	-
	126125	88-108MFD 330V		
MR22TB	104613	72-88MFD 330V	-	-
	123325	72-88MFD 330V		
MS26FB	123340	88-108MFD 330V	100690	88-108MFD 330V REF.215
	126125	88-108MFD 330V		
MS26TB	123340	88-108MFD 330V	100690	88-108MFD 330V REF.215
	126125	88-108MFD 330V		
MS30FB	123340	88-108MFD 330V	100690	88-108MFD 330V REF.215
	126125	88-108MFD 330V		
MS34FB	123340	88-108MFD 330V	100690	88-108MFD 330V REF.215
	126125	88-108MFD 330V		
MS34TB	123340	88-108MFD 330V	100690	88-108MFD 330V REF.215
	126125	88-108MFD 330V		
MX16FB	108861	64-77MFD 330V	102664	64-77MFD 330V CABLE & CAP

CUBIGEL SPARES

Compressor Start Capacitors (cont'd)

Compressor Model	Airefrig Part Number	Start Capacitors (Pre-Connecting Board)	Airefrig Part Number	Start Capacitors (Post Connecting Board)
MX16TB	110272	64-77MFD 330V	100509	64-77MFD 330V REF.205
MX18FB	104403	47-56MFD 330V CABLE & CAP	101728	47-56MFD 330V REF.214
MX18TB	132716	71MFD 250V	101728	47-56MFD 330V REF.214
MX21FB	104613	72-88MFD 330V	100680	72-88MFD 330V REF.216
	123325	72-88MFD 330V		
MX21TB	104613	72-88MFD 330V	100680	72-88MFD 330V REF.216
	123325	72-88MFD 330V		
MX23FB	-	-	100680	72-88MFD 330V REF.216
NL60FB	-	-	102660	47-56MFD 330V CABLE & CAP
NLY60LAB	-	-	102660	47-56MFD 330V CABLE & CAP
NLY90LAB	-	-	102661	47-56MFD 330V CABLE & CAP
P12TN	104403	47-56MFD 330V CABLE & CAP	101728	47-56MFD 330V REF.214
S19UN	104403	47-56MFD 330V CABLE & CAP	-	-
S22TN	104403	47-56MFD 330V CABLE & CAP	101728	47-56MFD 330V REF.214
S26TN	123340	88-108MFD 330V	100690	88-108MFD 330V REF.215
	126125	88-108MFD 330V		
S34UN	104403	47-56MFD 330V CABLE &C AP	-	-
X18TN	-	-	101728	47-56MFD 330V REF.214

Compressor Run Capacitors

Compressor Model	Airefrig Part Number	Run Capacitors (Pre-Connecting Board)	Airefrig Part Number	Run Capacitors (Post Connecting Board)
GL60BH	109406	3MFD 400V CABLE & CAP	-	-
GL80BH	107251	6MFD 400V CABLE & CAP	102255	6MFD 400V REF.320
GL90BH	107251	6MFD 400V CABLE & CAP	102255	6MFD 400V REF.320
GL99BH	107251	6MFD 400V CABLE & CAP	102255	6MFD 400V REF.320
GL99AL	107251	6MFD 400V CABLE & CAP	-	-
GLY80RA	-	-	102254	5MFD 400V CABLE & CAP
GLY90RAB	121800	5MFD 400V CABLE & CAP	102254	5MFD 400V CABLE & CAP
GPY12RAB	107251	6MFD 400V CABLE & CAP	102255	6MFD 400V REF.320
GPY14RAB	132554	10MFD 420V CABLE & CAP	102655	10MFD 420V REF.326
GPY16RA	132554	10MFD 420V CABLE & CAP	102655	10MFD 420V REF.326
GS30TB	121881	16MFD 400V	102083	16MFD 420V REF.321
	125366	16MFD 400V CABLE & CAP		
GS34TB	125311	16MFD 370V	102083	16MFD 420V REF.321

See next page for more Run Capacitor options

CUBIGEL SPARES

Compressor Run Capacitors (cont'd)

Compressor Model	Airefrig Part Number	Run Capacitors (Pre-Connecting Board)	Airefrig Part Number	Run Capacitors (Post Connecting Board)
MLY90LAB	132554	10MFD 420V CABLE & CAP	102655	10MFD 420V REF.326
MLY90RA-B	132554	10MFD 420V CABLE & CAP	102655	10MFD 420V REF.326
MP12RB	-	-	102654	16MFD 420V REF.321
MP12TB	121881	16MFD 400V	102083	16MFD 420V REF.321
	125366	16MFD 400V CABLE & CAP		
MP14RB	-	-	102654	16MFD 420V REF.321
MP14TB	121881	16MFD 400V	102083	16MFD 420V REF.321
	125366	16MFD 400V CABLE & CAP		
MPT14LAB	132554	10MFD 420V CABLE & CAP	102655	10MFD 420V REF.326
MR18TB	121881	16MFD 400V	125366	16MFD 400V CABLE & CAP
MR22FB-V	125311	16MFD 370V	-	-
MR22TB	125370	20MFD 400V CABLE & CAP	-	-
	114063	20MFD 400V CABLE & CAP		
MS26FB	121881	16MFD 400V	102083	16MFD 420V REF.321
	125366	16MFD 400V CABLE & CAP		
MS26TB	125370	20MFD 400V CABLE & CAP	102084	20MFD 420V CABLE & CAP
	114063	20MFD 400V CABLE & CAP		
MS30FB	125370	20MFD 400V CABLE & CAP	102084	20MFD 420V CABLE & CAP
	114063	20MFD 400V CABLE & CAP		
MS34FB	125370	20MFD 400V CABLE & CAP	102084	20MFD 420V CABLE & CAP
	114063	20MFD 400V CABLE & CAP		
MS34TB	125333	25MFD 400V CABLE & CAP	102085	25MFD 420V REF.310
MX16TB	121881	16MFD 400V	102083	16MFD 420V REF.321
	125366	16MFD 400V CABLE & CAP		
MX18FB	125440	16MFD 420V	102083	16MFD 420V REF.321
MX18TB	125440	16MFD 420V	102083	16MFD 420V REF.321
MX21FB	125440	16MFD 420V	102083	16MFD 420V REF.321
MX21TB	-	-	102084	20MFD 420V CABLE & CAP
MX23FB	-	-	102083	16MFD 420V REF.321
NLY60LAB	-	-	102254	5MFD 400V CABLE & CAP
NLY90LAB	-	-	102655	10MFD 420V REF.326
P12TN	105884	10MFD 370V	102652	10MFD 420V REF.326
S22TN	125311	16 MFD 370V	102083	16MFD 420V REF.321
S26TN	125311	16 MFD 370V	102083	16MFD 420V REF.321
S34UN	101275	25MFD 370V	-	-
X18TN	125311	16 MFD 370V	102083	16MFD 420V REF.321

Compressors

Danfoss compressors have a single-phase AC motor with built in motor protection (winding protector).

Most Danfoss compressors are designed with universal motors that can obtain high (HST) or low starting torque (LST) depending on the type of external electrics that are used.

The Electrical Equipment is classified as “normal tight” (IP20).

Danfoss compressors have been approved in respect of safety by testing authorities in the majority of Western European countries. Actual standards that the compressors have been approved for are specified in individual data sheets plus markings appear on the actual compressor labels.

Danfoss Motor Types:

- **RSIR** : **R**esistant **S**tart **I**nduction **R**un (LST – low start torque)
- **CSIR** : **C**apacitor **S**tart **I**nduction **R**un (HST – high start torque)
- **CSR** : **C**apacitor **S**tart **R**un (HST – high start torque)

RSIR motor types have a PTC start relay suitable for low starting torque (LST).
The PTC relay requires the pressure in the system to be equalised before each start & a standstill period of 5 minutes to cool down before each start.
The PTC relay (LST option) is normally used in well designed refrigeration systems with capillary tube.

CSIR motor types consist of a start relay & start capacitor for high starting torque (HST).
Normally used in systems fitted with expansion valves or capillary tube were pressure equalisation is not obtained during the compressor standstill period.

CSR motor types consist of a start relay, start capacitor & run capacitor for high starting torque (HST).
This starting (HST) option is mandatory for some of the larger Danfoss compressors.



DANFOSS HERMETIC COMPRESSORS

R404A (R507) - Low Temperature Compressors

Airefrig Part Number	H/P	Displ cm³	Cond Temp ºC	Refrigeration Capacity Watts Evaporating Temperature ºC									Cooling	Start Torque	Motor Type	RLA Amps	List Price Excl GST
				-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5					
TL4CL	1/8	3.86	45.0	97	127	164	180	210	266	331	366	407	Fan	HST	CSIR	1.2	P.O.A.
			50.0	85	113	149	165	195	250	317	353	396					
			55.0	-	-	-	-	-	-	-	-	-					
FR6CL	1/6	6.23	45.0	167	218	280	305	354	443	547	604	670	Fan	HST	CSIR	1.63	
			50.0	157	204	262	286	332	416	516	570	634					
			55.0	-	-	-	-	-	-	-	-	-					
FR7.5CL	1/5	6.93	45.0	177	233	302	330	385	482	596	656	726	Fan	HST	CSIR	1.97	P.O.A.
			50.0	163	216	281	308	359	452	560	618	685					
			55.0	-	-	-	-	-	-	-	-	-					
FR8.5CL	1/4	7.95	45.0	193	256	335	367	430	541	668	-	-	Fan	HST	CSIR	2.24	
			50.0	173	234	310	341	400	506	626	-	-					
			55.0	-	-	-	-	-	-	-	-	-					
NL7CLX	1/3	7.27	45.0	229	304	392	428	497	619	760	835	922	Fan	HST	CSIR	1.86	
			50.0	216	288	374	409	477	597	736	810	897					
			55.0	-	-	-	-	-	-	-	-	-					
SC10CL	1/3	10.29	45.0	194	298	421	470	565	733	926	1028	1147	Fan	HST	CSIR	2.41	
			50.0	-	265	386	435	529	695	887	989	1108					
			55.0	-	-	349	397	491	655	847	949	1068					
SC10CLX	1/3	10.29	45.0	191	294	415	463	557	723	913	1014	1132	Fan	HST	CSIR	2.53	P.O.A.
			50.0	-	261	381	429	522	685	875	975	1093					
			55.0	-	-	345	392	484	647	835	936	1054					
SC12CL	3/8	12.87	45.0	273	407	565	628	750	965	1212	1343	1496	Fan	HST	CSIR	3.09	
			50.0	219	352	510	573	694	909	1157	1288	1442					
			55.0	156	289	446	509	630	845	1095	1227	1382					
SC15CL	1/2	15.28	45.0	345	522	710	779	914	1142	1398	1532	1689	Fan	HST	CSIR	3.79	
			50.0	268	464	667	740	883	1120	1382	1518	1677					
			55.0	-	386	609	688	842	1092	1365	1504	1668					
SC18CL	5/8	17.68	45.0	455	625	825	905	1060	1333	1649	1815	2010	Fan	HST	CSR	4.02	
			50.0	412	578	774	852	1003	1271	1580	1744	1936					
			55.0	367	529	720	796	944	1206	1511	1673	1863					
SC21CL	7/8	20.95	45.0	524	712	938	1028	1203	1510	1858	-	-	Fan	HST	CSR	4.25	
			50.0	473	650	868	957	1129	1434	1784	-	-					
			55.0	437	603	813	900	1070	1374	1727	-	-					
GS26CLX	1.0	26.3	45.0	726	998	1318	1446	1693	2129	2631	-	-	Fan	HST	CSR	4.43	
			50.0	662	929	1243	1368	1612	2042	2539	-	-					
			55.0	-	-	-	-	-	-	-	-	-					
GS34CLX	1-1/4	33.8	45.0	1062	1426	1856	2027	2359	2944	3619	3975	4393	Fan	HST	CSR	7.16	
			50.0	992	1355	1782	1953	2284	2869	3547	3905	4326					
			55.0	-	-	-	-	-	-	-	-	-					

RSIR = Resistance Start Induction Run, CSIR = Capacitor Start Induction Run, CSR = Capacitor Start and Run

Capacities based on ASHRAE Conditions: Evap Outlet Temp +32.2.Comp Suction Temp +32.2 Condenser outlet Temp +32.2
Compressors are charged with POE oil (any Vis32cSt).

DANFOSS HERMETIC COMPRESSORS

R404A (R507) - Medium Temperature Compressors

Airefrig Part Number	H/P	Displ cm³	Cond Temp ºC	Refrigeration Capacity Watts Evaporating Temperature ºC									Cooling	Start Torque	Motor Type	RLA Amps	List Price Excl GST
				-20	-15	-10	-6.7	-5	0	5	7.2	10					
TL4DL	1/6	3.86	45.0	194	227	278	309	346	428	521	566	624	Fan	HST	CSIR	1.44	
			50.0	178	210	261	292	328	408	498	542	597					
			55.0	-	-	-	-	-	-	-	-	-					
FR6DL	1/4	6.23	45.0	314	381	466	514	570	691	830	900	988	Fan	HST	CSIR	2.3	
			50.0	300	362	442	487	540	656	790	856	941					
			55.0	-	-	-	-	-	-	-	-	-					
NF7MLX	1/5	7.27	45.0	-	506	628	693	769	930	1113	1205	1321	Fan	HST	CSIR	3.24	
			50.0	-	486	607	670	745	905	1086	1177	1293					
			55.0	-	-	-	-	-	-	-	-	-					
SC10DL	1/2	10.29	45.0	467	605	768	855	958	1179	1435	1563	1727	Fan	HST	CSIR	3.24	
			50.0	-	577	739	825	926	1141	1388	1513	1671					
			55.0	-	-	706	790	889	1098	1337	1457	1609					
SC10MLX	1/2	10.29	45.0	540	681	847	936	1040	1264	1521	-	-	Fan	HST	CSIR	3.89	
			50.0	511	649	811	897	999	1217	1467	-	-					
			55.0	-	611	769	854	953	1164	1408	-	-					
SC12MLX	5/8	12.87	45.0	662	830	1028	1134	1259	1526	1832	-	-	Fan	HST	CSIR	4.38	P.O.A.
			50.0	628	793	986	1090	1211	1470	1768	-	-					
			55.0	-	750	938	1039	1157	1409	1700	-	-					
SC12DL	5/8	12.87	45.0	603	798	1018	1132	1266	1549	1869	2029	2232	Fan	HST	CSIR	4.23	
			50.0	-	764	983	1096	1229	1506	1819	1975	2174					
			55.0	-	-	951	1062	1192	1461	1764	1915	2108					
SC15DL	3/4	15.28	45.0	752	955	1195	1325	1478	1806	2186	2378	2622	Fan	HST	CSR	4.26	
			50.0	-	920	1159	1286	1436	1756	2123	2308	2544					
			55.0	-	-	1116	1242	1389	1700	2055	2234	2461					
SC15MLX	3/4	15.28	45.0	821	1028	1272	1404	1558	1889	2268	-	-	Fan	HST	CSIR	5.15	
			50.0	788	988	1227	1356	1507	1834	2211	-	-					
			55.0	-	948	1179	1306	1454	1776	2150	-	-					
SC18MLX	7/8	17.68	45.0	1009	1254	1542	1697	1879	2268	2714	-	-	Fan	HST	CSR	4.89	P.O.A.
			50.0	978	1216	1499	1652	1831	2217	2662	-	-					
			55.0	-	1175	1450	1600	1776	2158	2602	-	-					
GS21MLX	1.0	21.2	45.0	1127	1433	1796	1992	2222	2718	3290	-	-	Fan	HST	CSR	5.17	
			50.0	-	1371	1721	1911	2134	2616	3174	-	-					
			55.0	-	-	-	-	-	-	-	-	-					
GS26MLX	1-1/4	26.3	45.0	1467	1861	2316	2557	2839	3438	4121	-	-	Fan	HST	CSR	6.8	
			50.0		1791	2238	2474	2751	3341	4015	-	-					
			55.0	-	-	-	-	-	-	-	-	-					
GS34MLX	1-1/2	33.8	45.0	1984	2476	3034	3327	3670	4394	5214	-	-	Fan	HST	CSR	10.2	
			50.0	-	2388	2938	3226	3563	4276	5087	-	-					
			55.0	-	-	-	-	-	-	-	-	-					

RSIR = Resistance Start Induction Run, CSIR = Capacitor Start Induction Run, CSR = Capacitor Start and Run

Capacities based on ASHRAE Conditions: Evap Outlet Temp +35.Comp Suction Temp +35 Condenser outlet Temp +46.1

DANFOSS HERMETIC COMPRESSORS

R134a - Low Temperature Compressors

Airefrig Part Number	H/P	Displ cm³	Cond Temp ºC	Refrigeration Capacity Watts Evaporating Temperature ºC									Cooling	Start Torque	Motor Type	RLA Amps	List Price Excl GST
				-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5					
PL50F	1/12	2.5	45.0	23	38	55	62	76	100	128	-	-	Static	LST	RSIR	0.52	
			50.0	20	35	52	59	73	96	124	-	-					
			55.0	17	32	49	56	69	91	118	-	-					
TL4F	1/8	3.86	45.0	45	63	86	95	113	145	182	-	-	Static	LST	RSIR	0.58	P.O.A.
			50.0	41	58	80	89	107	139	175	-	-					
			55.0	38	54	75	84	101	132	169	-	-					
TL5F	1/6	5.08	45.0	62	85	115	127	151	193	241	-	-	Static	LST	RSIR	0.85	
			50.0	57	79	108	120	143	185	234	-	-					
			55.0	53	74	101	113	136	177	226	-	-					
TLS6F	1/5	5.7	45.0	81	108	144	159	189	243	307	-	-	Static	LST	RSIR	0.92	
			50.0	76	101	136	151	180	234	298	-	-					
			55.0	71	94	128	143	172	226	290	-	-					
NL6F	1/5	6.13	45.0	69	105	148	166	201	263	335	-	-	Static	HST	CSIR	0.91	P.O.A.
			50.0	65	98	140	158	192	254	325	-	-					
			55.0	64	95	136	153	186	247	318	-	-					
NL7F	1/4	7.27	45.0	94	133	183	203	243	313	393	-	-	Static	LST	RSIR	1.07	
			50.0	90	127	174	194	233	302	383	-	-					
			55.0	87	122	168	187	225	293	374	-	-					
NL8F	1/4	7.95	45.0	111	149	196	216	254	326	414	-	-	Static	LST	RSIR	1.10	P.O.A.
			50.0	102	139	185	204	242	312	398	-	-					
			55.0	101	138	184	203	239	308	392	-	-					
NL9F	1/3	8.35	45.0	110	154	207	229	271	346	434	-	-	Static	LST	RSIR	1.16	P.O.A.
			50.0	101	146	200	221	263	339	427	-	-					
			55.0	91	137	191	213	255	331	420	-	-					
NL11F	1/3	11.15	45.0	139	196	267	297	355	461	589	-	-	Fan	LST	RSIR	1.63	P.O.A.
			50.0	131	186	256	285	342	447	573	-	-					
			55.0	126	179	246	275	330	433	559	-	-					
SC15F	1/2	15.28	45.0	164	239	337	378	457	599	763	849	949	Fan	HST	CSIR	2.10	
			50.0	146	217	313	353	431	572	737	823	925					
			55.0	123	191	283	323	400	541	707	795	898					
SC18F	5/8	17.68	45.0	188	275	387	433	523	683	868	964	1077	Fan	HST	CSIR	2.45	
			50.0	169	253	362	408	497	657	843	940	1054					
			55.0	159	238	345	390	478	639	826	924	1040					
SC21F	3/4	20.95	45.0	244	324	436	486	582	760	972	1085	1217	Fan	HST	CSIR	2.87	P.O.A.
			50.0	229	306	417	467	563	743	959	1074	1210					
			55.0	229	303	413	463	559	742	963	1081	1220					

RSIR = Resistance Start Induction Run, CSIR = Capacitor Start Induction Run, CSR = Capacitor Start and Run

Capacities based on ASHRAE Conditions: Evap Outlet Temp +32.2.Comp Suction Temp +32.2 Condenser outlet Temp +32.2

DANFOSS HERMETIC COMPRESSORS

R134a - Medium Temperature Compressors

Airefrig Part Number	H/P	Displ cm³	Cond Temp ºC	Refrigeration Capacity Watts Evaporating Temperature ºC -25	-20	-15	-10	-6.7	-5	0	5	10	Cooling	Start Torque	Motor Type	RLA Amps	List Price Excl GST
PL35G	1/16	2.0	45.0	35	48	64	84	95	107	135	167	204	Fan	HST	CSIR	0.54	P.O.A.
			50.0	33	46	61	80	90	102	129	160	196					
			55.0	31	43	58	76	86	98	124	154	189					
TL3F	1/10	3.13	45.0	60	68	84	112	144	161	182	225	-	Static	LST	RSIR	0.51	P.O.A.
			50.0	55	63	78	105	137	154	175	218	-					
			55.0	52	59	74	101	133	150	171	214	-					
TL3G	1/12	3.13	45.0	56	77	101	131	147	166	207	254	309	Fan	HST	CSIR	0.79	
			50.0	51	71	96	124	140	158	198	244	297					
			55.0	45	65	89	116	131	149	187	232	284					
TL4G	1/10	3.86	45.0	74	99	130	167	187	211	262	321	389	Fan	HST	CSIR	0.95	
			50.0	69	94	124	161	181	204	256	315	383					
			55.0	64	88	118	154	174	197	248	308	377					
TL5G	1/8	5.08	45.0	95	126	163	207	231	259	321	392	474	Fan	HST	CSIR	1.12	
			50.0	91	121	158	201	225	253	313	384	465					
			55.0	87	117	153	196	219	247	306	375	455					
FR6G	1/6	6.23	45.0	114	157	208	268	301	339	421	517	627	Fan	HST	CSIR	1.10	
			50.0	103	147	198	259	291	329	412	507	618					
			55.0	92	136	188	248	281	319	401	497	608					
FR7.5G	1/5	6.93	45.0	127	174	231	297	333	376	469	576	700	Fan	HST	CSIR	1.26	
			50.0	118	165	222	288	324	367	459	567	691					
			55.0	109	156	213	279	315	357	449	556	681					
FR8.5G	1/4	7.95	45.0	158	213	278	356	398	448	555	679	821	Fan	HST	CSIR	1.53	
			50.0	146	200	265	342	384	434	542	666	809					
			55.0	135	187	251	328	370	419	526	651	795					
FR10G	1/4	9.05	45.0	169	227	297	380	426	479	594	729	885	Fan	HST	CSIR	1.89	
			50.0	158	216	285	368	413	465	581	715	871					
			55.0	149	206	274	356	401	453	567	702	858					
FR11G	1/3	11.15	45.0	209	286	372	473	527	591	729	892	-	Fan	HST	CSIR	2.08	
			50.0	197	270	354	453	507	570	709	874	-					
			55.0	187	256	337	434	488	551	691	859	-					
SC10G	5/16	10.29	45.0	166	246	341	452	510	577	717	871	1039	Fan	HST	CSIR	1.80	
			50.0	143	221	316	427	485	554	696	853	1026					
			55.0	124	201	295	406	465	534	680	841	1019					
SC12G	1/3	12.87	45.0	234	324	433	565	636	720	903	1114	1357	Fan	HST	CSIR	2.34	
			50.0	212	300	408	538	609	692	874	1086	1330					
			55.0	192	277	382	510	580	663	844	1056	1302					
SC15G	3/8	15.28	45.0	260	381	517	672	753	849	1052	1286	1554	Fan	HST	CSIR	2.90	
			50.0	225	354	495	652	733	828	1029	1257	1518					
			55.0	180	319	466	625	706	801	998	1222	1475					
SC18G	1/2	17.68	45.0	335	463	613	788	881	991	1225	1492	1796	Fan	HST	CSIR	3.15	
			50.0	314	439	587	761	855	965	1201	1472	1782					
			55.0	311	432	579	752	846	957	1196	1466	1788					
SC21G	5/8	20.95	45.0	419	568	748	962	1076	1209	1490	1806	2158	Fan	HST	CSR	3.20	
			50.0	397	538	714	924	1037	1169	1451	1771	2128					
			55.0	366	498	666	871	983	1114	1396	1717	2079					
SC21MFX	5/8	20.95	45.0	-	620	793	1001	1114	1247	1536	1873	2261	Fan	HST	CSR	3.53	P.O.A.
			50.0	-	602	772	977	1089	1221	1508	1843	2230					
			55.0	-	582	750	952	1063	1193	1477	1810	2197					
GS26MFX	1.0	26.3	45.0	-	-	1005	1285	1436	1614	1997	2441	-	Fan	HST	CSR	3.70	P.O.A.
			50.0	-	-	975	1249	1396	1568	1941	2373	-					
			55.0	-	-	941	1208	1352	1520	1882	2303	-					
GS26GHX	1.0	26.3	45.0	-	-	1035	1314	1468	1648	2044	2510	3053	Fan	HST	CSR	3.84	P.O.A.
			50.0	-	-	999	1272	1422	1598	1984	2439	2972					
			55.0	-	-	964	1230	1376	1547	1924	2368	2889					
GS34MFX	1-1/4	33.8	45.0	-	-	1317	1674	1867	2094	2585	3154	-	Fan	HST	CSR	5.19	
			50.0	-	-	1272	1626	1818	2043	2531	3098	-					
			55.0	-	-	1222	1574	1764	1988	2473	3038	-					

RSIR = Resistance Start Induction Run, CSIR = Capacitor Start Induction Run, CSR = Capacitor Start and Run

Capacities based on ASHRAE Conditions: Evap Outlet Temp +35.Comp Suction Temp +35 Condenser outlet Temp +46.1

DANFOSS HERMETIC COMPRESSORS

R22 - Low Temperature Compressors

Airefrig Part Number	H/P	Displ cm³	Cond Temp ºC	Refrigeration Capacity Watts Evaporating Temperature ºC									Cooling	Start Torque	Motor Type	RLA Amps	List Price Excl GST
				-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5					
SC10C	1/3	10.29	45.0	178	258	356	396	474	614	779	866	968	Fan	HST	CSIR	2.27	P.O.A.
			50.0	157	233	328	367	444	583	746	833	936					
			55.0	-	-	-	-	-	-	-	-	-					
SC12C	3/8	12.87	45.0	230	331	455	505	602	776	979	1087	1214	Fan	HST	CSIR	2.71	P.O.A.
			50.0	211	309	430	479	575	747	950	1058	1184					
			55.0	-	-	-	-	-	-	-	-	-					
SC15CM	1/2	15.28	45.0	293	413	559	618	732	937	1175	1302	1450	Fan	HST	CSIR	3.36	P.O.A.
			50.0	263	380	523	581	695	898	1136	1263	1411					
			55.0	-	-	-	-	-	-	-	-	-					
SC15BM	1/2	15.28	45.0	293	413	559	618	732	937	1175	1302	1450	Fan	HST	CSIR	3.19	P.O.A.
			50.0	263	380	523	581	695	898	1136	1263	1411					
			55.0	-	-	-	-	-	-	-	-	-					
SC18CM	5/8	17.69	45.0	342	481	642	705	826	1040	1285	1414	1566	Fan	HST	CSR	2.87	P.O.A.
			50.0	300	443	607	671	795	1010	1257	1388	1541					
			55.0	-	-	-	-	-	-	-	-	-					
SC18BM	5/8	17.69	45.0	342	481	642	705	826	1040	1285	1414	1566	Fan	HST	CSR	2.70	P.O.A.
			50.0	300	443	607	671	795	1010	1257	1388	1541					
			55.0	-	-	-	-	-	-	-	-	-					

RSIR = Resistance Start Induction Run, CSIR = Capacitor Start Induction Run, CSR = Capacitor Start and Run

Capacities based on ASHRAE Conditions: Evap Outlet Temp +32.2.Comp Suction Temp +32.2 Condenser outlet Temp +32.2

R22 - Medium Temperature Compressors

Airefrig Part Number	H/P	Displ cm³	Cond Temp ºC	Refrigeration Capacity Watts Evaporating Temperature ºC									Cooling	Start Torque	Motor Type	RLA Amps	List Price Excl GST
				-20	-15	-10	-6.7	-5	0	5	7.2	10					
SC10D	3/8	10.29	45.0	-	503	649	730	826	1037	1284	1409	1569	Fan	HST	CSIR	3.15	P.O.A.
			50.0	-	464	604	682	774	976	1213	1334	1488					
			55.0	-	-	-	-	-	-	-	-	-					
SC12D	1/2	12.87	45.0	-	640	838	941	1062	1314	1601	1743	1924	Fan	HST	CSIR	3.67	
			50.0	-	583	783	885	1004	1250	1525	1661	1835					
			55.0	-	-	-	-	-	-	-	-	-					
SC15D	5/8	15.28	45.0	-	780	1026	1153	1301	1610	1958	2130	2350	Fan	HST	CSR	3.69	
			50.0	-	738	976	1098	1241	1538	1872	2038	2249					
			55.0	-	-	-	-	-	-	-	-	-					

RSIR = Resistance Start Induction Run, CSIR = Capacitor Start Induction Run, CSR = Capacitor Start and Run

Capacities based on ASHRAE Conditions: Evap Outlet Temp +35.Comp Suction Temp +35 Condenser outlet Temp +46.1

DANFOSS HERMETIC COMPRESSORS

Compressor Technical Information

Airefrig Part Number	Danfoss Code Number	Comp Type	Motor Type	Oil Charge mls	Comp Weight Kg	Comp Cooling		Ohms Winding Resistance		Tube Connections I.D. mm		
						+32ºC Ambient	+38ºC Ambient	Main	Start	Suct	Process	Disch
R404A Low Temperature												
TL4CL	195B0021	L/MBP	CSIR	280	7.6	Fan 3.0m/s	Fan 3.0m/s	14.8	14.5	6.2	6.2	5.0
FR6CL	195B0031	L/MBP	CSIR	450	10.5	Fan 3.0m/s	Fan 3.0m/s	8.9	12.0	8.2	6.2	6.2
FR7.5CL	195B0398	L/MBP	CSIR	450	10.6	Fan 3.0m/s	Fan 3.0m/s	8.8	12.0	8.2	6.2	6.2
FR8.5CL	195B0038	LBP	CSIR	450	10.6	Fan 3.0m/s	Fan 3.0m/s	7.3	12.0	8.2	6.2	6.2
NL7CLX	195B0443	L/MBP	CSIR	320	10.5	Fan 1.5m/s	Fan 1.5m/s	8.2	14.7	8.2	6.2	6.2
SC10CL	195B0074	L/MBP	CSIR	600	13.1	Fan 3.0m/s	Fan 3.0m/s	6.7	11.8	8.2	6.2	6.2
SC10CLX	195B0151	L/MBP	CSIR	600	13.1	Fan 3.0m/s	Fan 3.0m/s	5.0	13.7	8.2	6.2	6.2
SC12CL	195B0076	L/MBP	CSIR	600	12.5	Fan 3.0m/s	Fan 3.0m/s	5.0	13.7	8.2	6.2	6.2
SC15CL	195B0088	L/MBP	CSIR	600	13.8	Fan 3.0m/s	Fan 3.0m/s	3.7	14.1	10.2	6.2	6.2
SC18CL	195B0066	L/MBP	CSR	600	13.7	Fan 3.0m/s	Fan 3.0m/s	3.7	14.1	10.2	6.2	6.2
SC21CL	195B0070	LBP	CSR	600	14.0	Fan 3.0m/s	Fan 3.0m/s	3.4	14.4	10.2	6.2	6.2
GS26CLX	195B0427	LBP	CSR	900	20.0	Fan 3.0m/s	Fan 3.0m/s	2.9	5.1	12.9	6.5	8.2
GS34CLX	195B0439	LBP	CSR	900	22.2	Fan 3.0m/s	Fan 3.0m/s	1.6	6.7	12.9	6.5	8.2
R404A Medium Temperature												
TL4DL	195B0166	M/HBP	CSIR	280	7.5	Fan 3.0m/s	Fan 3.0m/s	12.0	20.0	6.2	6.2	5.0
FR6DL	195B0032	M/HBP	CSIR	450	10.5	Fan 3.0m/s	Fan 3.0m/s	7.3	12.0	8.2	6.2	6.2
NF7MLX	105F3720	MBP	CSIR	320	10.5	Fan 3.0m/s	Fan 3.0m/s	4.5	12.8	9.7	6.5	6.5
SC10DL	195B0075	M/HBP	CSIR	600	13.1	Fan 3.0m/s	Fan 3.0m/s	5.0	13.7	8.2	6.2	6.2
SC10MLX	195B0345	MBP	CSIR	600	13.1	Fan 3.0m/s	Fan 3.0m/s	4.3	15.3	8.2	6.2	6.2
SC12MLX	195B0323	MBP	CSIR	600	13.9	Fan 3.0m/s	Fan 3.0m/s	3.4	14.4	8.2	6.5	6.5
SC12DL	195B0077	M/HBP	CSIR	600	13.6	Fan 3.0m/s	Fan 3.0m/s	3.7	14.1	10.2	6.2	6.2
SC15DL	195B0089	M/HBP	CSR	600	13.5	Fan 3.0m/s	Fan 3.0m/s	3.5	12.2	10.2	6.2	6.2
SC15MLX	195B0391	MBP	CSIR	600	14.0	Fan 3.0m/s	Fan 3.0m/s	3.3	14.0	10.2	6.2	6.2
SC18MLX	195B0412	MBP	CSR	600	14.0	Fan 3.0m/s	Fan 3.0m/s	3.4	14.4	10.2	6.2	6.2
GS21MLX	195B0436	MBP	CSR	900	19.1	Fan 3.0m/s	Fan 3.0m/s	2.5	6.8	12.9	6.5	8.2
GS26MLX	195B0437	MBP	CSR	900	21.4	Fan 3.0m/s	Fan 3.0m/s	1.7	8.1	16.1	6.5	9.7
GS34MLX	195B0438	MBP	CSR	900	22.3	Fan 3.0m/s	Fan 3.0m/s	1.4	5.8	16.1	6.5	9.7
R134A Low Temperature												
PL50F	195B0117	LBP	RSIR	150	4.3	Static	Static	38.0	20.0	6.2	6.2	5.0
TL4F	195B0215	LBP	RSIR	180	6.7	Static	Static	25.7	16.3	6.2	6.2	5.0
TL5F	195B0009	LBP	RSIR	180	7.5	Static	Static	18.2	15.1	6.2	6.2	5.0
TLS6F	195B0012	LBP	RSIR	180	7.3	Static	Static	16.0	17.0	6.2	6.2	5.0
NL6F	195B0165	LBP	CSIR	320	9.3	Static	Static	16.0	13.6	6.2	6.2	5.0
NL7F	195B0091	LBP	RSIR	320	9.6	Static	Static	13.3	14.1	6.2	6.2	5.0
NL8F	195B0326	LBP	RSIR	320	9.8	Static	Static	10.7	13.0	6.2	6.2	5.0
NL9F	195B0092	LBP	RSIR	320	10.0	Static	Static	10.7	13.0	8.2	6.2	6.2
NL11F	195B0093	LBP	RSIR	320	10.7	Fan 1.5m/s	Fan 1.5m/s	8.2	14.7	8.2	6.2	6.2
SC15F	195B0052	LBP	CSIR	550	12.6	Fan 1.5m/s	Fan 1.5m/s	6.7	11.8	8.2	6.2	6.2
SC18F	195B0057	LBP	CSIR	550	13.1	Fan 1.5m/s	Fan 1.5m/s	5.0	13.7	10.2	6.2	6.2
SC21F	195B0047	LBP	CSIR	550	13.3	Fan 1.5m/s	Fan 1.5m/s	3.7	14.1	10.2	6.2	6.2

Note: Winding resistance are @ +25ºC

DANFOSS HERMETIC COMPRESSORS

Compressor Technical Information

Airefrig Part Number	Danfoss Code Number	Comp Type	Motor Type	Oil Charge mls	Comp Weight Kg	Comp Cooling		Winding Resistance		Tube Connections I.D. mm		
						+32ºC Ambient	+38ºC Ambient	Main	Start	Suct	Process	Disch
R134A Medium Temperature												
PL35G	195B0245	M/HBP	CSIR	150	4.3	Fan 3.0m/s	Fan 3.0m/s	38.0	14.0	6.2	6.2	5.0
TL3F	195B0005	MBP	RSIR	180	6.7	Static	Static	31.5	15.0	6.2	6.2	5.0
TL3G	195B0006	L/HBP	CSIR	280	6.8	Fan 3.0m/s	Fan 3.0m/s	24.3	15.5	6.2	6.2	5.0
TL4G	195B0008	L/HBP	CSIR	280	7.5	Fan 3.0m/s	Fan 3.0m/s	18.2	15.1	6.2	6.2	5.0
TL5G	195B0011	L/HBP	CSIR	280	7.5	Fan 3.0m/s	Fan 3.0m/s	14.5	14.8	6.2	6.2	5.0
FR6G	195B0023	L/HBP	CSIR	450	10.6	Fan 3.0m/s	Fan 3.0m/s	12.6	12.4	8.2	6.2	6.2
FR7.5G	195B0024	L/HBP	CSIR	450	10.6	Fan 3.0m/s	Fan 3.0m/s	10.7	13.0	8.2	6.2	6.2
FR8.5G	195B0026	L/HBP	CSIR	450	10.6	Fan 3.0m/s	Fan 3.0m/s	8.9	12.0	8.2	6.2	6.2
FR10G	195B0027	L/HBP	CSIR	450	10.6	Fan 3.0m/s	Fan 3.0m/s	7.3	12.0	8.2	6.2	6.2
FR11G	195B0028	L/HBP	CSIR	450	10.6	Fan 3.0m/s	Fan 3.0m/s	7.3	12.0	8.2	6.2	6.2
SC10G	195B0043	L/HBP	CSIR	550	12.1	Fan 3.0m/s	Fan 3.0m/s	8.5	14.1	8.2	6.2	6.2
SC12G	195B0050	L/HBP	CSIR	550	12.6	Fan 3.0m/s	Fan 3.0m/s	6.7	11.8	8.2	6.2	6.2
SC15G	195B0053	L/HBP	CSIR	550	13.1	Fan 3.0m/s	Fan 3.0m/s	5.0	13.7	10.2	6.2	6.2
SC18G	195B0059	L/HBP	CSIR	550	13.7	Fan 3.0m/s	Fan 3.0m/s	3.7	14.1	10.2	6.2	6.2
SC21G	195B0048	L/HBP	CSR	550	13.5	Fan 3.0m/s	Fan 3.0m/s	3.5	12.1	10.2	6.2	6.2
SC21MFX	104G8120	MBP	CSR	600	14.0	Fan 3.0m/s	Fan 3.0m/s	3.4	14.4	10.2	6.2	6.2
GS26MFX	107B0700	MBP	CSR	900	19.1	Fan 3.0m/s	Fan 3.0m/s	3.6	3.9	12.9	6.5	8.2
GS26GHX	107B0702	HBP	CSR	900	19.1	Fan 3.0m/s	Fan 3.0m/s	2.5	6.8	12.9	6.5	8.2
GS34MFX	195B0435	MBP	CSR	900	20.0	Fan 3.0m/s	Fan 3.0m/s	2.9	5.1	12.9	6.5	8.2
R22 Low Temperature												
SC10C	195B0072	LBP	CSIR	600	12.6	Fan 3.0m/s	Fan 3.0m/s	6.7	11.8	8.2	6.2	6.2
SC12C	195B0080	LBP	CSIR	600	13.1	Fan 3.0m/s	Fan 3.0m/s	5.0	13.7	8.2	6.2	6.2
SC15CM	195B0087	LBP	CSIR	600	13.5	Fan 3.0m/s	Fan 3.0m/s	3.71	14.1	10.2	6.2	6.2
SC15BM	195B0156	LBP	CSIR	600	13.5	Fan 3.0m/s	Fan 3.0m/s	5.0	13.7	10.2	6.2	6.2
SC18CM	195B0065	LBP	CSR	600	13.5	Fan 3.0m/s	Fan 3.0m/s	3.71	14.1	10.2	6.2	6.2
SC18BM	195B0204	LBP	CSR	600	13.1	Fan 3.0m/s	Fan 3.0m/s	5.0	13.7	10.2	6.2	6.2
R22 Medium Temperature												
SC10D	195B0073	HBP	CSIR	600	13.1	Fan 3.0m/s	Fan 3.0m/s	5.0	13.7	10.2	6.2	6.2
SC12D	195B0082	HBP	CSIR	600	13.1	Fan 3.0m/s	Fan 3.0m/s	4.26	15.25	10.2	6.2	6.2
SC15D	195B0086	HBP	CSR	600	13.5	Fan 3.0m/s	Fan 3.0m/s	3.4	14.4	10.2	6.2	6.2

Note: Winding resistance are @ +25ºC



DANFOSS COMPRESSOR SPARES

Relays and Overloads

Compressor Model	LST Relay (no capacitor)	List Price Excl GST	HST Relay (requires capacitor)	List Price Excl GST	Start Capacitor (required with HST relay option)		List Price Excl GST
R404A Low Temperature							
TL4CL	-	-	117U6000	P.O.A.	117U5014	60uF	
FR6CL	-	-	117U6015		117U5015	80uF	
FR7.5CL	-	-	117U6016		117U5015	80uF	
FR8.5CL	-	-	117U6010		117U5015	80uF	
NL7CLX	103N0011		117U6002		117U5015	80uF	
SC10CL	-	-	117U6003		117U5017	80uF	
SC10CLX	-	-	117U6005		117U5017	80uF	
SC12CL	-	-	117U6005		117U5017	80uF	
SC15CL	-	-	117U6019		117U5017	80uF	
SC18CL	-	-	1177012	CSR Starting Device (Relay & Capacitor assy)			
SC21CL	-	-	1177012	CSR Starting Device (Relay & Capacitor assy)			
GS26CLX	-	-	1177056	CSR Starting Device (Relay & Capacitor assy)			
GS34CLX	-	-	1177056	CSR Starting Device (Relay & Capacitor assy)			
R404A Medium Temperature							
TL4DL	-	-	117U6001		117U5014	60uF	
FR6DL	-	-	117U6010		117U5015	80uF	
NF7MLX	-	-	117U4139		117U5018	125uF	
SC10DL	-	-	117U6005		117U5017	80uF	
SC10MLX	-	-	117U6011		117U5017	80uF	
SC12MLX	-	-	117U6011		117U5017	80uF	
SC12DL	-	-	117U6019		117U5017	80uF	
SC15MLX	-	-	117U6013		117U5012	125uF	P.O.A.
SC15DL	-	-	1177028	CSR Starting Device (Relay & Capacitor assy)			
SC18MLX	-	-	1177012	CSR Starting Device (Relay & Capacitor assy)			
GS21MLX	-	-	1177070	CSR Starting Device (Relay & Capacitor assy)			P.O.A.
GS26MLX	-	-	1177072	CSR Starting Device (Relay & Capacitor assy)			P.O.A.
GS34MLX	-	-	1177056	CSR Starting Device (Relay & Capacitor assy)			
R134A Low Temperature							
PL50F	103N0011		-	-	-	-	-
TL4F	103N0011		117U6009	P.O.A.	117U5014	60uF	
TL5F	103N0011		117U6004	P.O.A.	117U5014	60uF	
TLS6F	103N0011		117U6004	P.O.A.	117U5014	60uF	
NL6F	103N0011		117U6004	P.O.A.	117U5015	80uF	
NL7F	103N0011		117U6000	P.O.A.	117U5015	80uF	
NL8F	103N0011		117U6001		117U5015	80uF	
NL9F	103N0011		117U6001		117U5015	80uF	
NL11F	103N0011		117U6002		117U5015	80uF	
SC15F	103N0002		117U6003		117U5017	80uF	
SC18F	-	-	117U6005		117U5017	80uF	
SC21F	-	-	117U6019		117U5017	80uF	

DANFOSS COMPRESSOR SPARES

Relays and Overloads

Compressor Model	LST Relay (no capacitor)	List Price Excl GST	HST Relay (requires capacitor)	List Price Excl GST	Start Capacitor (required with HST relay option)		List Price Excl GST
R134A Medium Temperature							
PL35G	103N0011		117U6021	P.O.A.	117U5014	60uF	
TL3F	103N0011		117U6007	P.O.A.	117U5014	60uF	
TL3G	103N0011		117U6009	P.O.A.	117U5014	60uF	
TL4G	103N0011		117U6004	P.O.A.	117U5014	60uF	
TL5G	103N0011		117U6000	P.O.A.	117U5014	60uF	
FR6G	103N0011		117U6000	P.O.A.	117U5015	80uF	
FR7.5G	103N0011		117U6001		117U5015	80uF	
FR8.5G	103N0011		117U6015		117U5015	80uF	
FR10G	103N0011		117U6010		117U5015	80uF	
FR11G	103N0011		117U6010		117U5015	80uF	
SC10G	103N0002		117U6002		117U5017	80uF	
SC12G	103N0002		117U6003		117U5017	80uF	
SC15G	-	-	117U6005		117U5017	80uF	
SC18G	-	-	117U6019		117U5017	80uF	
SC21G	-	-	1177028	CSR Starting Device (Relay & Capacitor assy)			
SC21MFX	-	-	1177038	CSR Starting Device (Relay & Capacitor assy)			P.O.A.
GS26MFX	-	-	1177055	CSR Starting Device (Relay & Capacitor assy)			P.O.A.
GS26GHX	-	-	1177070	CSR Starting Device (Relay & Capacitor assy)			P.O.A.
GS34MFX	-	-	1177056	CSR Starting Device (Relay & Capacitor assy)			
R22 Low Temperature							
SC10C	-	-	117U6003		117U5017	80uF	
SC12C	-	-	117U6005		117U5017	80uF	
SC15CM	-	-	117U6019		117U5017	80uF	
SC15BM	-	-	117U6005		117U5017	80uF	
SC18CM	-	-	1177012	CSR Starting Device (Relay & Capacitor assy)			
SC18BM	-	-	1177012	CSR Starting Device (Relay & Capacitor assy)			
R22 Medium Temperature							
SC10D	-	-	117U6005		117U5017	80uF	
SC12D	-	-	117U6011		117U5017	80uF	
SC15D	-	-	1177010	CSR Starting Device (Relay & Capacitor assy)			P.O.A.



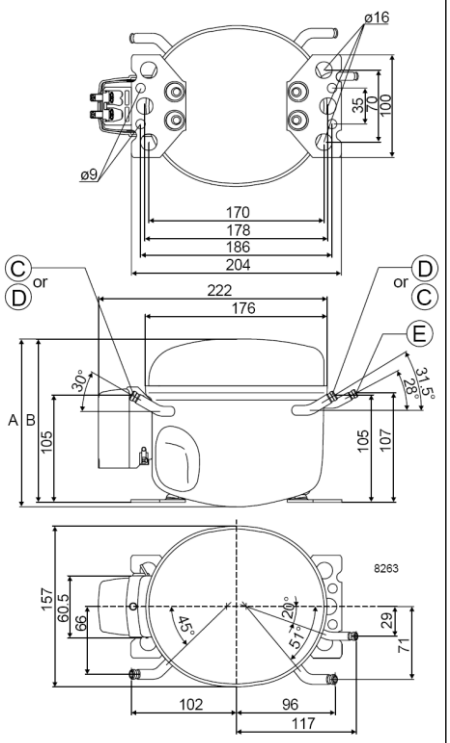
DANFOSS COMPRESSOR DIMENSIONS

R404A LOW TEMPERATURE

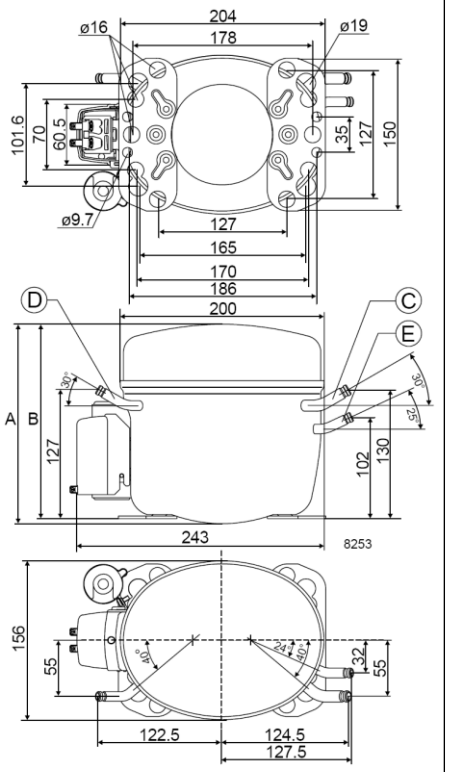
Model No	Drg	A	B	B1	B2
TL4CL	1	173	169	-	-
FR6CL	2	196	191	-	-
FR7.5CL	2	196	191	-	-
FR8.5CL	2	196	191	-	-
NL7CLX	3	203	197	-	-
SC10CL	4	209	203	183	100
SC10CLX	4	209	203	183	100
SC12CL	4	209	203	183	100
SC15CL	4	219	213	193	110
SC18CL	4	219	213	193	110
SC21CL	4	219	213	193	110
GS26CLX	5	259	247	234	234
GS34CLX	5	279	567	254	254

"**C**" indicates Suction connection
"**D**" indicates Process connection
"**E**" indicates Discharge connection

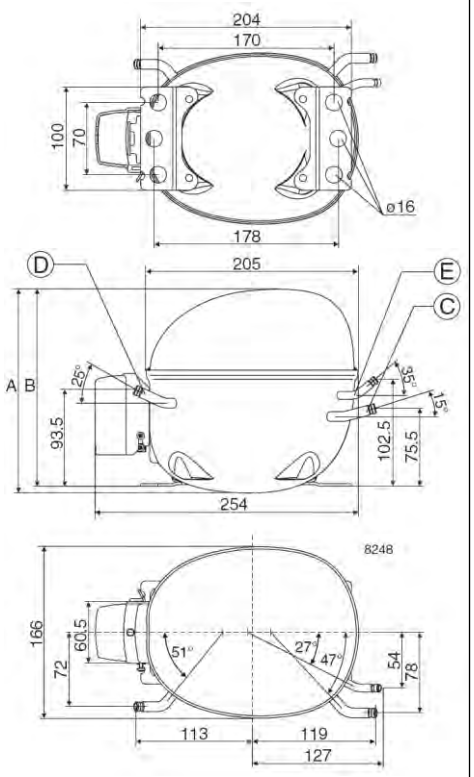
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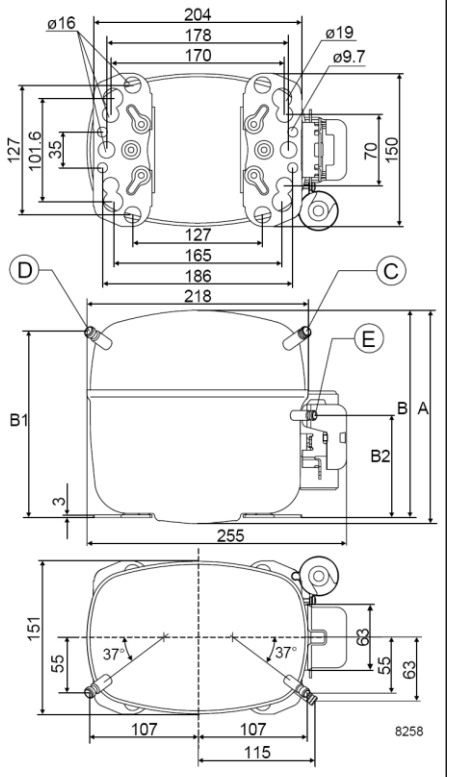
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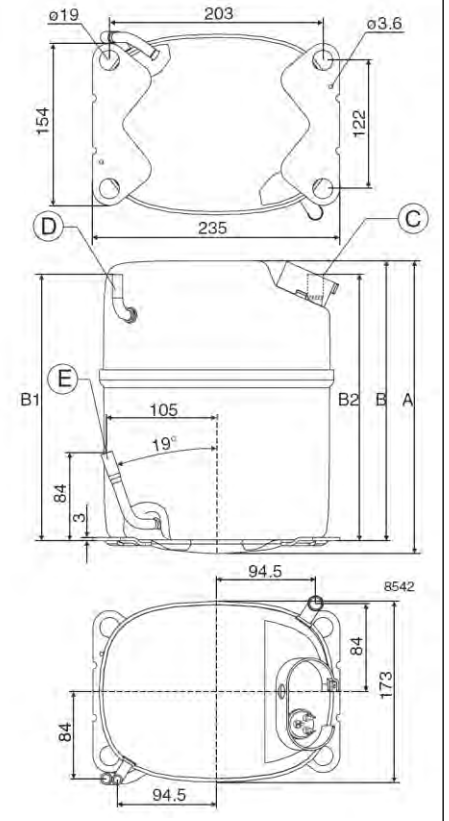
Drawing No 3



Drawing No 4



Drawing No 5



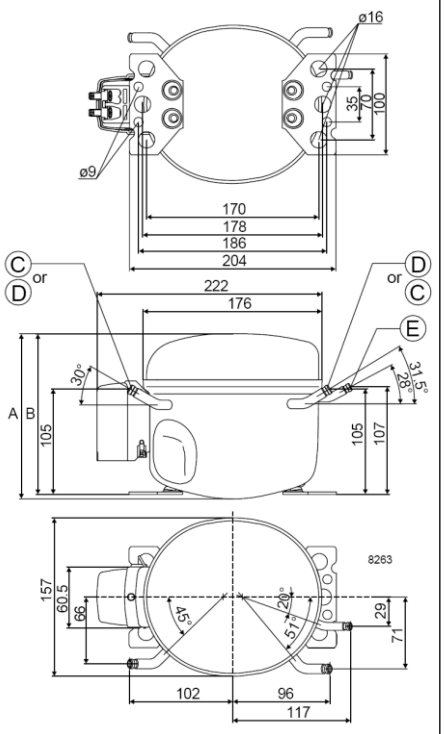
DANFOSS COMPRESSOR DIMENSIONS

R404A MEDIUM TEMPERATURE

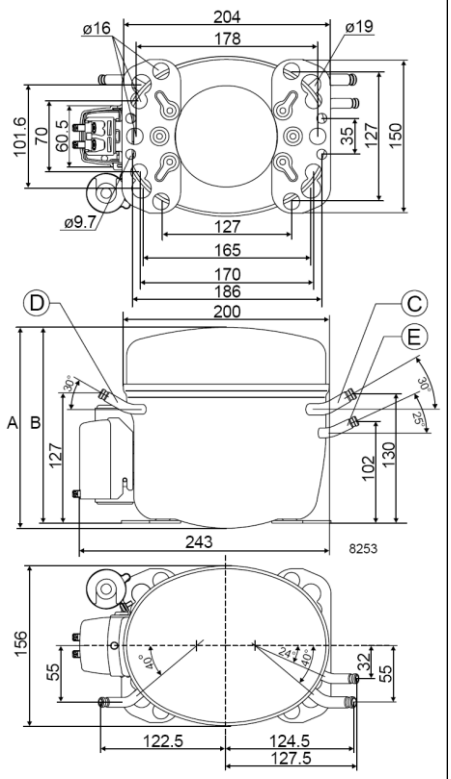
Model No	Drg	A	B	B1	B2
TL4DL	1	173	169	-	-
FR6DL	2	196	191	-	-
NF7MLX	3	203	197	-	-
SC10DL	4	209	203	183	100
SC10MLX	4	209	203	183	90
SC12MLX	4	219	213	193	110
SC12DL	4	219	213	193	110
SC15DL	4	219	213	193	110
SC15MLX	4	219	213	193	110
SC18MLX	4	219	213	193	110
GS21MLX	5	259	247	234	234
GS26MLX	5	279	267	254	254
GS34MLX	5	279	267	254	254

"**C**" indicates Suction connection
"**D**" indicates Process connection
"**E**" indicates Discharge connection

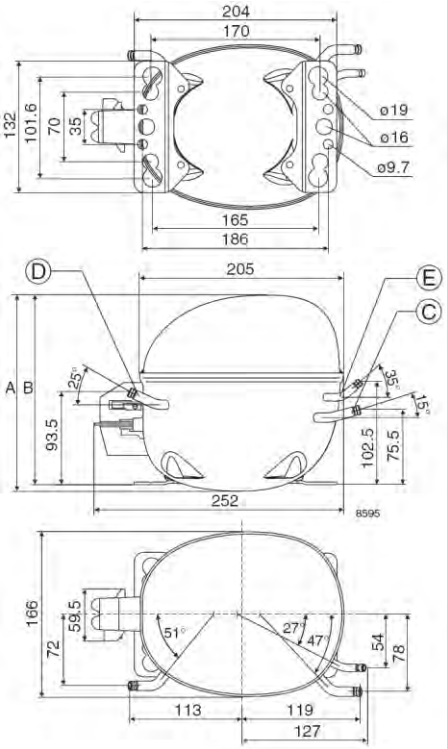
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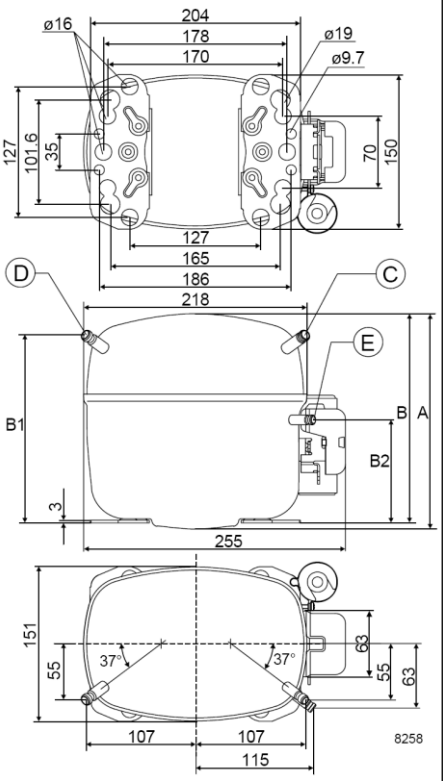
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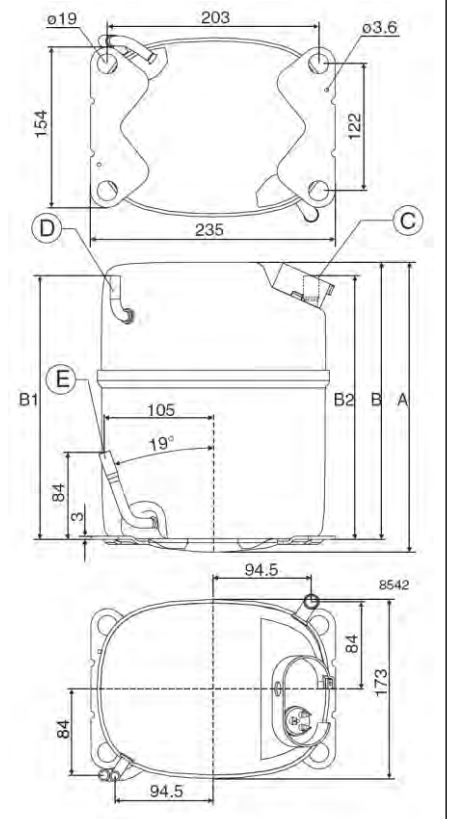
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Drawing No 4



Drawing No 5



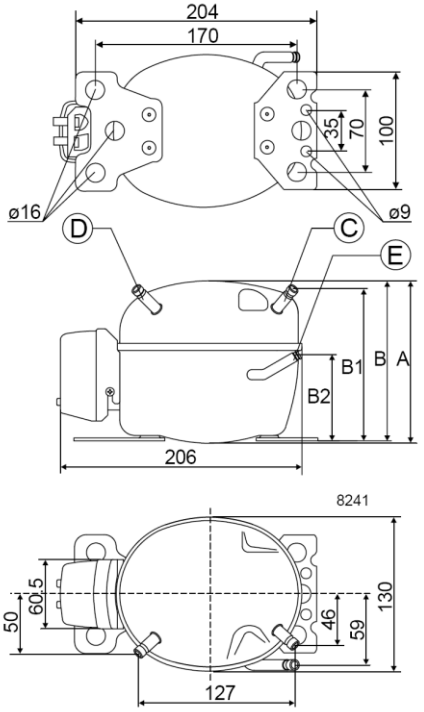
DANFOSS COMPRESSOR DIMENSIONS

R134A LOW TEMPERATURE

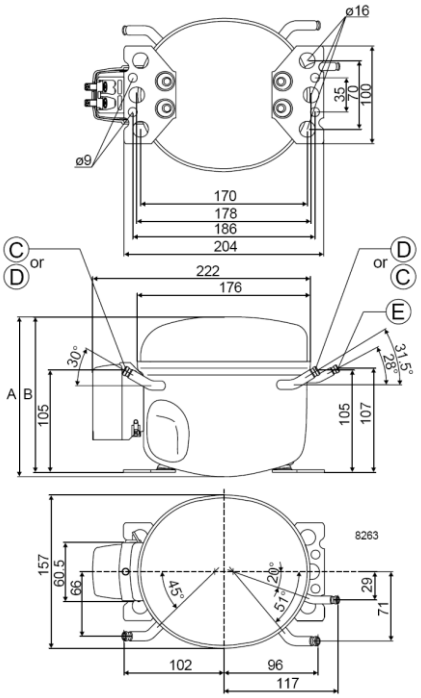
Model No	Drg	A	B	B1	B2
PL50F	1	137	135	128	73
TL4F	2	163	159	-	-
TL5F	2	173	169	-	-
TLS6F	3	173	169	-	-
NL6F	4	188	181	-	-
NL7F	4	190	183	-	-
NL8F	4	197	191	-	-
NL9F	4	197	191	-	-
NL11F	4	203	197	-	-
SC15F	5	209	203	183	100
SC18F	5	209	203	183	100
SC21F	5	219	213	193	110

"**C**" indicates Suction connection
"**D**" indicates Process connection
"**E**" indicates Discharge connection

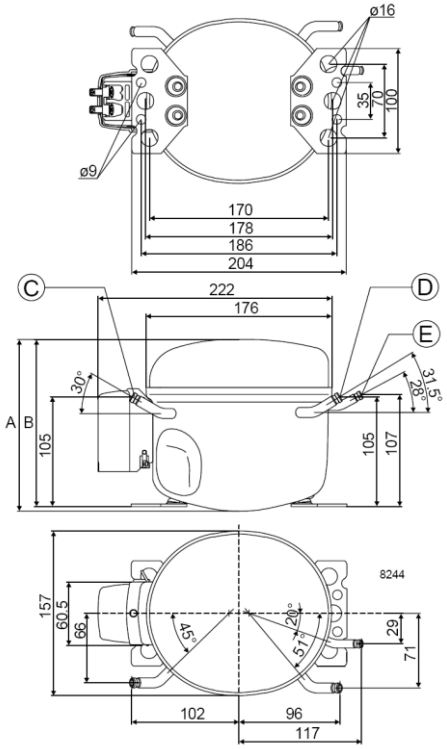
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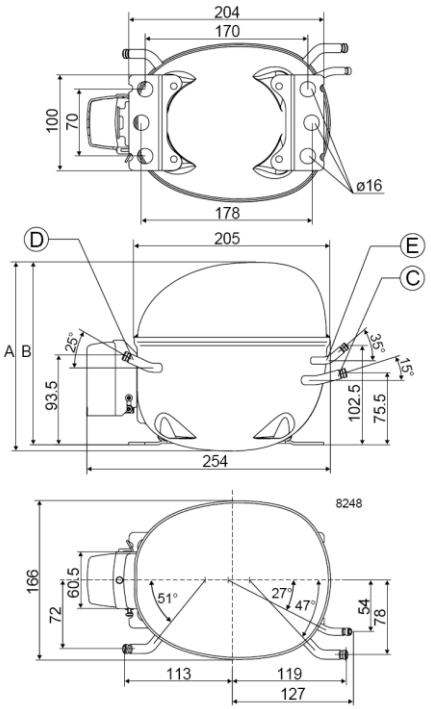
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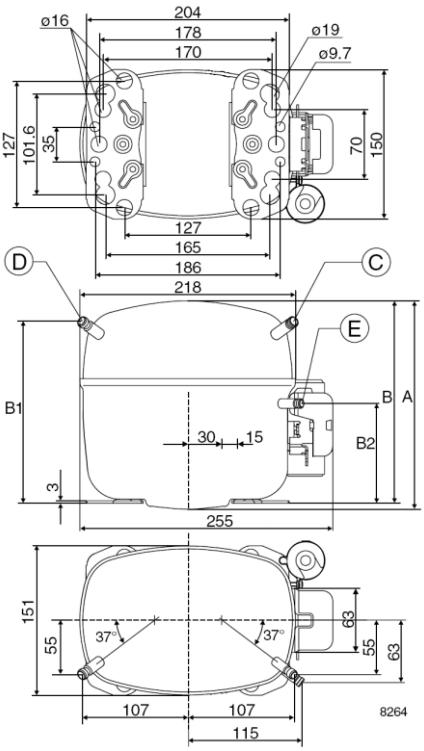
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Drawing No 4



Drawing No 5



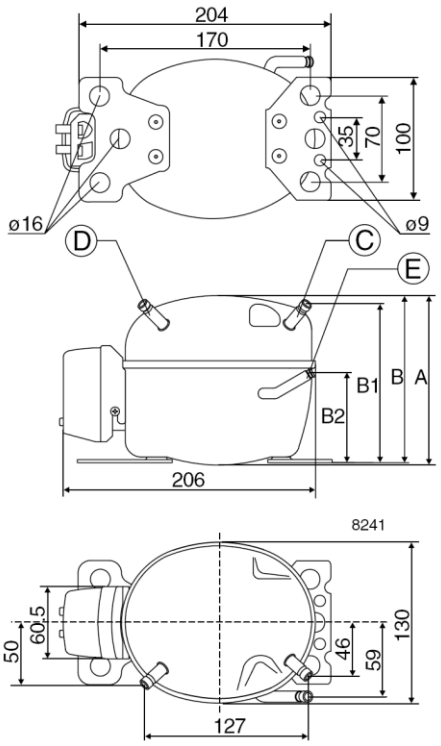
DANFOSS COMPRESSOR DIMENSIONS

R134A MEDIUM TEMPERATURE

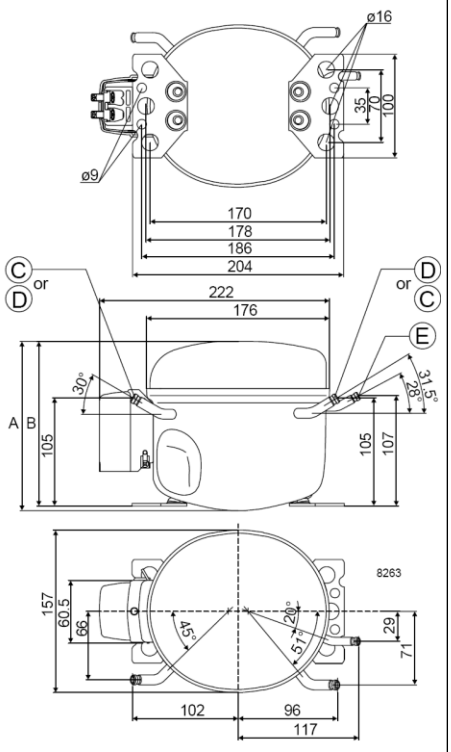
Model No	Drg	A	B	B1	B2
PL35G	1	137	135	128	73
TL3F	2	163	159	-	-
TL3G	2	163	159	-	-
TL4G	2	173	169	-	-
TL5G	2	163	159	-	-
FR6G	3	196	191	-	-
FR7.5G	3	196	191	-	-
FR8.5G	3	196	191	-	-
FR10G	3	196	191	-	-
FR11G	3	196	191	-	-
SC10G	4	199	193	173	90
SC12G	4	209	203	183	100
SC15G	4	209	203	183	100
SC18G	4	219	213	193	110
SC21G	4	219	213	193	110
SC21MFX	4	219	213	193	110
GS26MFX	5	259	247	234	234
GS26GHX	5	259	247	234	234
GS34MFX	5	259	247	234	234

"**C**" indicates Suction connection
"**D**" indicates Process connection
"**E**" indicates Discharge connection

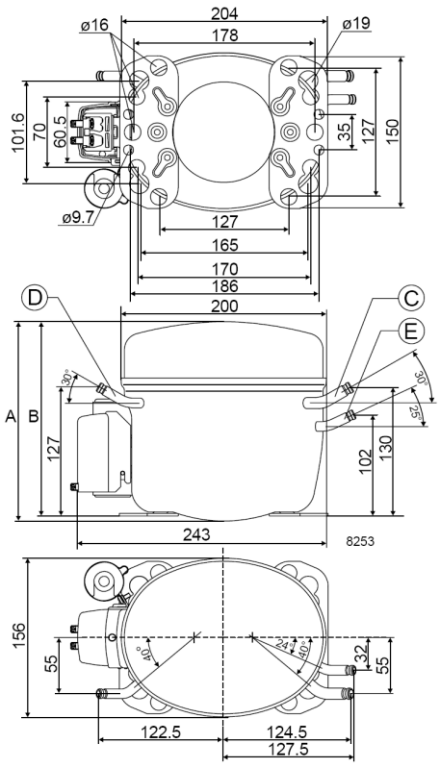
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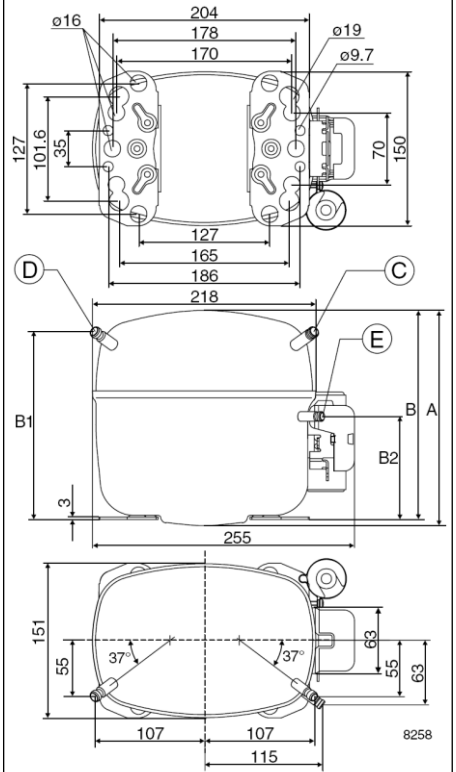
Drawing No 2



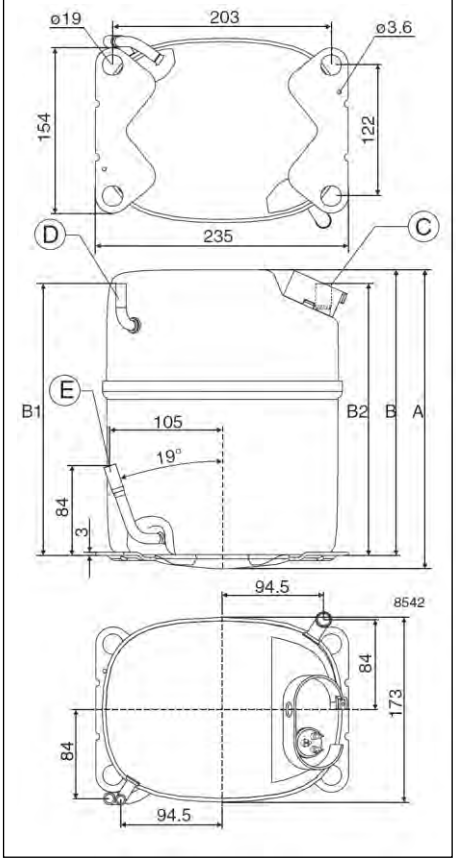
Drawing No 3



Drawing No 4



Drawing No 5



DANFOSS COMPRESSOR DIMENSIONS

R22 LOW & MEDIUM TEMPERATURE

Low Temperature

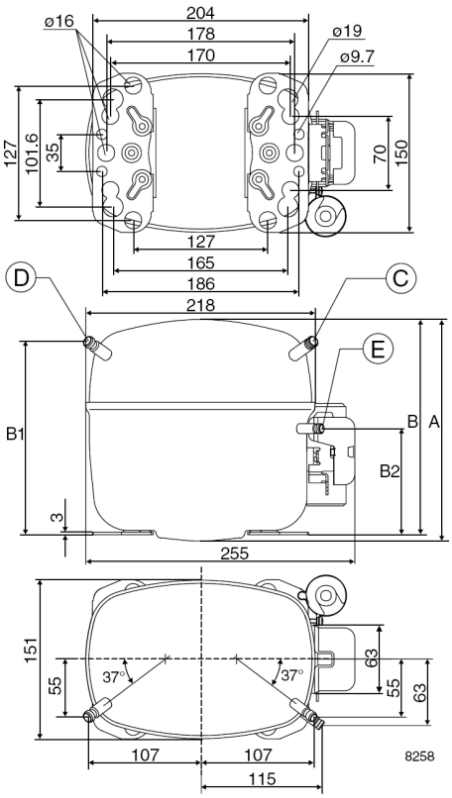
Model No	Drg	A	B	B1	B2
SC10C	1	209	203	188	101
SC12C	1	209	203	188	101
SC15CM	1	219	213	198	111
SC15BM	1	209	203	188	101
SC18CM	1	219	213	198	111
SC18BM	1	209	203	188	101

Medium Temperature

SC10D	1	209	203	188	101
SC12D	1	209	203	188	101
SC15D	1	209	203	188	101

"**C**" indicates Suction connection
"**D**" indicates Process connection
"**E**" indicates Discharge connection

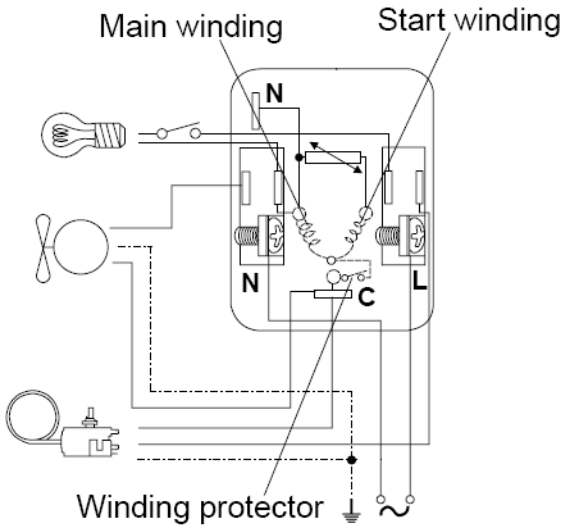
Drawing No 1



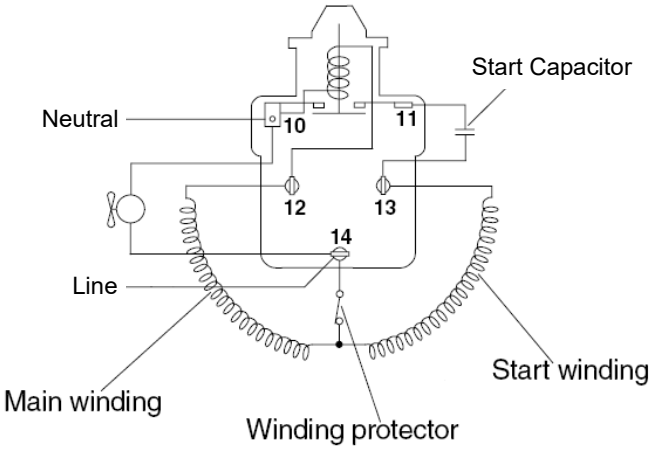


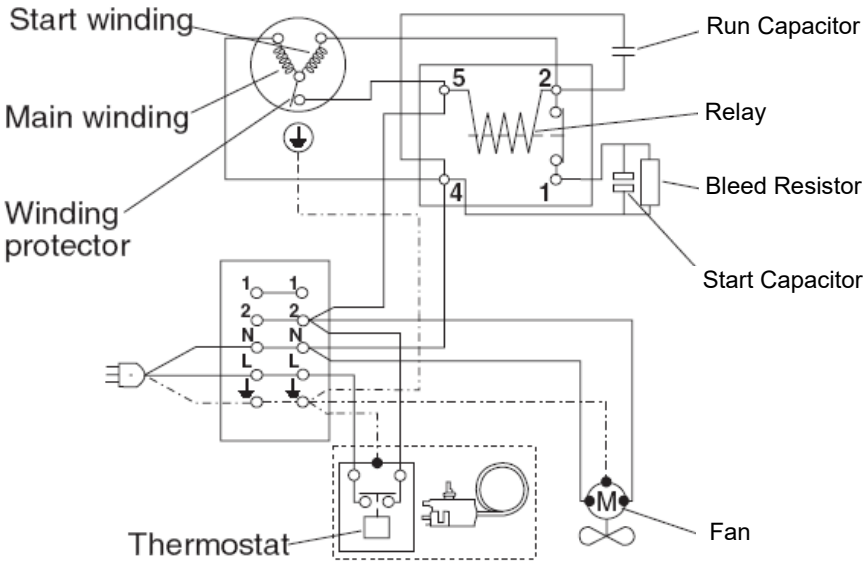
DANFOSS COMPRESSOR WIRING

Typical Danfoss RSIR Wiring Diagram

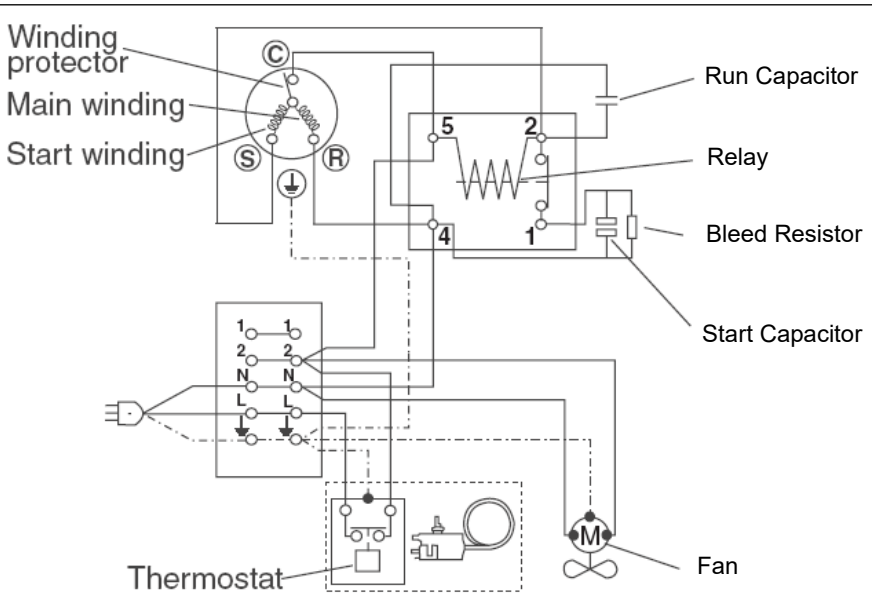


Typical Danfoss CSIR Wiring Diagram





Typical Danfoss CSR Wiring Diagram (A)



Typical Danfoss CSR Wiring Diagram (B)

COPELAND COMPRESSORS

EMERSON™
Climate Technologies

Copeland Corporation was established in 1921 in Detroit City, Michigan State USA.
For more than 80 years it has been endeavouring to bring cutting-edge products to create a healthy environment & safeguard food.

A Brief Timeline of Achievements:

- first household refrigerator in the world in 1921.
- first semi-hermetic compressor in the world in 1941.
- first semi-hermetic compressor with butterfly valve in the world in 1979.
- first scroll compressor with dual compliance in 1987.
- first digital scroll compressor in the world in 1996.
- first commercial large horse power scroll compressor in the world in 2001.
- first electronic-display scroll compressor-condensing unit in the world in 2002.
- first digital scroll heating in the world in 2004.

Today, Emerson Climate Technologies continues to lead the global industry of refrigeration & air conditioning compressors with annual sales of over 2 billion dollars, technical service network spanning 120 countries and the largest R&D centre in the world.

The introduction of the scroll compressor in 1987 has revolutionised the refrigeration industry.
The scroll compressor has several unique advantages:
high energy efficiency ratio - high reliability - low noise level & running cost.

This revolutionary technology is being successfully used around the world with the number of scroll compressors manufactured by Emerson Climate Technologies exceeding the 40-million mark.

Scroll compressors have been successfully used in the air conditioning industry & the future of refrigeration belongs to the scroll compressor.



Copeland®
brand products



COPELAND COMPRESSORS

R404A Reciprocating Compressors

Capacities R404A

Airefrig Part Number		Condensing Temperature ºC	Evaporating Temperature ºC							Displ cm³/r	Motor				Kgs
			-30	-25	-20	-15	-10	-5	0		HP	Type	*Amps	LRA	
CS10K6EPFJ55R **CS10K6EPFJ595** - Rotalock Valve Kit - CSR Electrics & Box - Crankcase Heater - Oil Sight Glass - POE Oil **CS10K6EPFJ58R** - Suction Rotalock - Disch. Stub Tube - CSR Electrics & Box - Crankcase Heater - Oil Sight Glass - POE Oil	W	45.0				1720	2300	2950	3700	38.1	1.30	CSR	MCC 14.2 RLA 10.1	55.0	31
	P					1130	1280	1400	1516						
	A					6.2	6.7	7.2	7.7						
	W	50.0				1395	1915	2500	3150						
	P					1110	1280	1430	1563						
	A					6.1	6.7	7.4	7.9						
	W	55.0				1080	1545	2055	2622						
	P					1070	1270	1440	1590						
	A					5.9	6.7	7.4	8.0						
CS12K6EPFJ55R - Rotalock Valve Kit - CSR Electrics & Box - Crankcase Heater - Oil Sight Glass - POE Oil	W	45.0				1980	2675	3400	4150	44.4	1.80	CSR	MCC 15.2 RLA 10.9	55.0	31
	P					1250	1440	1590	1690						
	A					6.3	7.1	7.8	8.3						
	W	50.0				1650	2270	2950	3617						
	P					1230	1450	1630	1763						
	A					6.3	7.2	8.0	8.7						
	W	55.0				1315	1865	2455	3038						
	P					1200	1440	1650	1817						
	A					6.1	7.1	8.1	8.9						
CS14K6EPFJ595 - Rotalock Valve Kit - CSR Electrics & Box - Crankcase Heater - Oil Sight Glass - POE Oil **CS14K6EPFJ525** **CS14K6EPFJ545** - Stub Tubes - CSR Electrics & Box - Crankcase Heater - POE Oil	W	45.0	924	1360	1930	2590	3350	4150	4983	48.6	2.00	CSR	MCC 14.5 RLA 10.4	58.0	32
	P		912	1110	1320	1530	1720	1890	2040						
	A		5.5	6.4	7.5	8.5	9.5	10.4	11.2						
	W	50.0	758	1115	1620	2205	2865	3600	4350						
	P		870	1080	1300	1530	1740	1930	2097						
	A		5.3	6.3	7.3	8.5	9.6	10.6	11.6						
	W	55.0		870	1305	1815	2385	3000	3667						
	P			1030	1260	1500	1740	1950	2150						
	A			6.0	7.2	8.4	9.6	10.7	11.9						
CS14K6ETFD55R **CS14K6ETFD595** - Rotalock Valve Kit - Crankcase Heater - Oil Sight Glass - POE Oil	W	45.0	924	1360	1930	2590	3350	4150	4983	48.6	2.00	3Ph	MCC 6.6 RLA 4.7	28.0	32
	P		885	1080	1280	1480	1670	1840	1973						
	A		2.2	2.6	3.0	3.5	3.9	4.2	4.5						
	W	50.0	758	1115	1620	2205	2865	3600	4350						
	P		844	1050	1260	1480	1690	1880	2030						
	A		2.1	2.5	3.0	3.4	3.9	4.3	4.6						
	W	55.0		870	1305	1815	2385	3000	3667						
	P			1000	1230	1460	1680	1890	2090						
	A			2.4	2.9	3.4	3.9	4.4	4.7						
CS18K6EPFJ595 - Rotalock Valve Kit - CSR Electrics & Box - Crankcase Heater - Oil Sight Glass - POE Oil **CS18K6EPFJ235** **CS18K6EPFJ525** - Stub Tubes - CSR Electrics & Box - Crankcase Heater - POE Oil	W	45.0	1074	1580	2295	3150	4200	5350	6517	61.4	2.50	CSR	MCC 19.1 RLA 13.6	64.0	32
	P		1110	1360	1620	1890	2150	2370	2570						
	A		6.1	6.9	8.0	9.1	10.3	11.3	12.3						
	W	50.0	880	1295	1895	2655	3550	4600	5683						
	P		1060	1310	1590	1880	2170	2440	2673						
	A		6.1	6.9	7.9	9.1	10.4	11.6	12.8						
	W	55.0		1055	1530	2165	2950	3850	4850						
	P			1250	1550	1860	2170	2480	2763						
	A			6.7	7.7	9.0	10.4	11.8	13.0						

Rating Conditions: 4.4 Deg Return Gas, no Sub-Cooling, 35 Deg Ambient / Supplied with: Internal Motor Protection, Rubber Mounting Kit
*Amps : MCC = maximum continuous current, RLA = MCC ÷ 1.4 (Copeland advises use RLA for contactor selection)

COPELAND COMPRESSORS

R404A Reciprocating Compressors

Capacities R404A

Airefrig Part Number		Condensing Temperature ºC	Evaporating Temperature ºC							Displ cm³/r	Motor				Kgs
			-30	-25	-20	-15	-10	-5	0		HP	Type	*Amps	LRA	
CS18K6ETFD55R **CS18K6ETFD595** - Rotalock Valve Kit - Crankcase Heater - Oil Sight Glass - POE Oil	W	45.0	1074	1580	2295	3150	4200	5350	6517	61.4	2.50	3Ph	MCC 6.6 RLA 4.7	33.0	32
	P		1040	1270	1530	1790	2040	2240	2390						
	A		2.8	3.3	3.8	4.4	4.9	5.3	5.6						
	W	50.0	880	1295	1895	2655	3550	4600	5683						
	P		993	1230	1500	1780	2050	2290	2473						
	A		2.7	3.2	3.8	4.4	4.9	5.5	5.8						
	W	55.0		1055	1530	2165	2950	3850	4850						
	P			1180	1460	1760	2060	2320	2537						
	A			3.1	3.7	4.3	4.9	5.5	6.0						
CS20K6EPFZ545 - Stub Tubes - CSR Electrics & Box - Crankcase Heater - POE Oil	W	45.0	1217	1790	2575	3450	4550	5950	7617	74.3	3.00	CSR	MCC 21.5 RLA 15.4	75.9	33
	P		1100	1420	1750	2090	2400	2690	2923						
	A		6.4	7.6	9.0	10.4	11.8	13.1	14.3						
	W	50.0	921	1355	2070	2870	3850	5050	6550						
	P		985	1330	1690	2060	2420	2750	3050						
	A		5.9	7.2	8.7	10.3	11.9	13.4	14.7						
	W	55.0		935	1590	2295	3150	4250	5500						
	P			1200	1600	2000	2400	2780	3130						
	A			6.7	8.3	10.0	11.8	13.5	15.2						
CS20K6ETFD595 - Rotalock Valve Kit - Crankcase Heater - Oil Sight Glass - POE Oil	W	45.0	1217	1790	2575	3450	4550	5950	7617	74.3	3.00	3Ph	MCC 7.1 RLA 5.1	40	33
	P		1110	1440	1730	2000	2270	2550	2867						
	A		3.4	4.0	4.5	5.1	5.6	6.2	6.90						
	W	50.0	921	1355	2070	2870	3850	5050	6550						
	P		964	1340	1670	1980	2280	2590	2940						
	A		3.2	3.8	4.4	5.0	5.6	6.3	7.0						
	W	55.0		935	1590	2295	3150	4250	5500						
	P			1200	1570	1920	2260	2620	2987						
	A			3.5	4.2	4.9	5.6	6.3	7.1						
CS27K6ETFD595 - Rotalock Valve Kit - Crankcase Heater - Oil Sight Glass - POE Oil	W	45.0	1591	2340	3400	4650	6100	7750	9583	92.4	3.50	3Ph	MCC 11.8 RLA 8.5	41.0	33
	P		1390	1810	2270	2740	3180	3580	3930						
	A		3.3	3.8	4.4	5.0	5.7	6.3	6.8						
	W	50.0	1282	1885	2785	3900	5200	6650	8317						
	P		1290	1730	2210	2710	3200	3660	4077						
	A		3.2	3.7	4.3	5.0	5.7	6.4	7.1						
	W	55.0		1510	2255	3200	4300	5600	7017						
	P			1640	2140	2670	3210	3720	4187						
	A			3.6	4.3	5.0	5.7	6.5	7.2						
CS33K6ETFD595 - Rotalock Valve Kit - Crankcase Heater - Oil Sight Glass - POE Oil	W	45.0	2040	3000	4150	5550	7250	9300	11717	106.2	4.00	3Ph	MCC 13.8 RLA 9.9	45.0	35
	P		1780	2280	2830	3380	3890	4320	4670						
	A		5.1	5.8	6.7	7.6	8.5	9.3	10.0						
	W	50.0	1645	2420	3400	4650	6150	8000	10250						
	P		1630	2180	2770	3360	3930	4430	4863						
	A		4.9	5.7	6.6	7.6	8.6	9.5	10.3						
	W	55.0		1925	2715	3750	5050	6750	8667						
	P			2030	2660	3320	3950	4520	5003						
	A			5.4	6.4	7.5	8.6	9.7	10.5						

Rating Conditions: 4.4 Deg Return Gas, no Sub-Cooling, 35 Deg Ambient / Supplied with: Internal Motor Protection, Rubber Mounting Kit
*Amps : MCC = maximum continuous current, RLA = MCC ÷ 1.4 (Copeland advises use RLA for contactor selection)

Prices

Airefrig Part Number	List Price Excl GST
CS10K6EPFJ55R	
CS10K6EPFJ595	
CS10K6EPFJ58R	
CS12K6EPFJ55R	
CS14K6EPFJ595	
CS14K6EPFJ525	

Airefrig Part Number	List Price Excl GST
CS14K6EPFJ545	
CS14K6ETFD55R	
CS14K6ETFD595	
CS18K6EPFJ595	
CS18K6EPFJ235	
CS18K6EPFJ525	

Airefrig Part Number	List Price Excl GST
CS18K6ETFD55R	
CS18K6ETFD595	
CS20K6EPFZ545	
CS20K6ETFD595	
CS27K6ETFD595	
CS33K6ETFD595	

COPELAND COMPRESSORS

R134a Reciprocating Compressors

Capacities R134a

Airefrig Part Number		Condensing Temperature ºC	Evaporating Temperature ºC							Displ cm³/r	Motor				Kgs
			-15	-10	-5	0	5	10	12.8		HP	Type	*Amps	LRA	
CS10K6EPFJ55R **CS10K6EPFJ595** - Rotalock Valve Kit - CSR Electrics & Box - Crankcase Heater - Oil Sight Glass - POE Oil **CS10K6EPFJ58R** - Suction Rotalock - Disch. Stub Tube - CSR Electrics & Box - Crankcase Heater - Oil Sight Glass - POE Oil	W	45.0	800	1200	1740	2390	3100	3960	4480	38.1	1.30	CSR	MCC 11.2 RLA 8.0	55.0	31
	P		624	722	822	920	995	1044	1070						
	A		4.5	4.7	5.0	5.4	5.6	5.8	5.9						
	W	50.0	650	1010	1510	2120	2790	3570	4040						
	P		593	700	815	930	1022	1089	1125						
	A		4.3	4.7	4.9	5.3	5.7	5.9	6.0						
	W	55.0		840	1300	1850	2460	3190	3630						
	P			679	805	928	1034	1125	1171						
	A			4.5	4.9	5.3	5.7	6.1	6.3						
CS12K6EPFJ55R - Rotalock Valve Kit - CSR Electrics & Box - Crankcase Heater - Oil Sight Glass - POE Oil	W	45.0	980	1450	2050	2790	3600	4620	5240	44.4	1.80	CSR	MCC 15.2 RLA 10.9	55.0	31
	P		707	826	933	1034	1112	1169	1195						
	A		5.8	6.1	6.4	6.7	7.0	7.2	7.3						
	W	50.0	790	1240	1800	2490	3250	4180	4760						
	P		665	800	928	1043	1138	1217	1258						
	A		5.5	6.0	6.4	6.7	7.0	7.3	7.5						
	W	55.0		1020	1550	2180	2880	3750	4270						
	P			757	908	1044	1166	1261	1312						
	A			5.8	6.2	6.7	7.0	7.4	7.7						
CS14K6EPFJ595 - Rotalock Valve Kit - CSR Electrics & Box - Crankcase Heater - Oil Sight Glass - POE Oil **CS14K6EPFJ525** **CS14K6EPFJ545** - Stub Tubes - CSR Electrics & Box - Crankcase Heater - POE Oil	W	45.0	1140	1680	2380	3240	4190	5360	6060	48.6	2.00	CSR	MCC 14.5 RLA 10.4	58.0	32
	P		831	967	1095	1211	1299	1367	1403						
	A		6.9	7.2	7.5	7.9	8.2	8.5	8.6						
	W	50.0	920	1440	2090	2890	3780	4870	5530						
	P		777	930	1084	1222	1334	1431	1483						
	A		6.5	7.0	7.5	7.9	8.2	8.6	8.8						
	W	55.0		1180	1790	2520	3320	4330	4940						
	P			893	1066	1231	1360	1473	1534						
	A			6.8	7.3	7.8	8.3	8.7	9.0						
CS14K6ETFD55R **CS14K6ETFD595** - Rotalock Valve Kit - Crankcase Heater - Oil Sight Glass - POE Oil	W	45.0	1140	1680	2380	3240	4190	5360	6060	48.6	2.00	3Ph	MCC 6.6 RLA 4.7	28.0	32
	P		696	805	933	1060	1156	1226	1258						
	A		2.1	2.2	2.3	2.4	2.4	2.5	2.6						
	W	50.0	920	1440	2090	2890	3780	4870	5530						
	P		675	800	934	1069	1189	1273	1319						
	A		2.0	2.1	2.2	2.4	2.5	2.5	2.6						
	W	55.0		1180	1790	2520	3320	4330	4940						
	P			777	928	1080	1219	1327	1383						
	A			2.1	2.2	2.4	2.4	2.6	2.6						
CS18K6EPFJ595 - Rotalock Valve Kit - CSR Electrics & Box - Crankcase Heater - Oil Sight Glass - POE Oil **CS18K6EPFJ235** **CS18K6EPFJ525** - Stub Tubes - CSR Electrics & Box - Crankcase Heater - POE Oil	W	45.0	1530	2260	3200	4340	5620	7190	8150	61.4	2.50	CSR	MCC 19.1 RLA 13.6	64.0	32
	P		1112	1294	1465	1621	1741	1834	1881						
	A		9.1	9.7	10.2	10.6	11.0	11.3	11.5						
	W	50.0	1230	1930	2810	3870	5070	6530	7420						
	P		1043	1250	1454	1641	1789	1912	1973						
	A		8.8	9.4	10.0	10.6	11.1	11.5	11.8						
	W	55.0		1590	2410	3400	4470	5810	6620						
	P			1198	1428	1640	1822	1978	2059						
	A			9.1	9.8	10.5	11.1	11.8	12.1						

Rating Conditions: 18.3 Deg Return Gas, no Sub-Cooling, 35 Deg Ambient / Supplied with: Internal Motor Protection, Rubber Mounting Kit
*Amps : MCC = maximum continuous current, RLA = MCC ÷ 1.4 (Copeland advises use RLA for contactor selection)

COPELAND COMPRESSORS

R134a Reciprocating Compressors

Capacities R134a

Airefrig Part Number		Condensing Temperature ºC	Evaporating Temperature ºC -15	-10	-5	0	5	10	12.8	Displ cm³/r	Motor HP	Type	*Amps	LRA	Kgs
	W		1530	2260	3200	4340	5620	7190	8160						
CS18K6ETFD55R	P	45.0	1008	1172	1347	1528	1671	1772	1819						
CS18K6ETFD595	A		3.0	3.1	3.3	3.4	3.5	3.6	3.7				MCC 6.6		
- Rotalock Valve Kit	W		1230	1930	2810	3870	5070	6530	7420						
- Crankcase Heater	P	50.0	982	1150	1352	1544	1718	1846	1912	61.4	2.50	3Ph		33.0	32
- Oil Sight Glass	A		3.0	3.1	3.2	3.4	3.5	3.7	3.8				RLA 4.7		
- POE Oil	W			1590	2410	3400	4470	5810	6620						
	P	55.0		1123	1341	1564	1761	1917	1998						
	A			3.1	3.2	3.4	3.6	3.7	3.8						
	W		2010	2730	3730	4930	6170	7510	8290						
	P	45.0	1122	1294	1499	1694	1850	1964	2016						
CS20K6EPFZ545	A		6.2	6.9	7.7	8.4	9.1	9.8	10.0				MCC 19.8		
- Stub Tubes	W		1740	2410	3350	4490	5680	6960	7710						
- CSR Electrics & Box	P	50.0	1084	1281	1498	1723	1904	2045	2117	74.3	3.00	CSR		75.9	33
- Crankcase Heater	A		6.1	6.9	7.7	8.6	9.4	10.2	10.6				RLA 14.1		
- POE Oil	W			2070	2950	4020	5170	6400	7110						
	P	55.0		1241	1491	1741	1955	2129	2220						
	A			6.8	7.7	8.7	9.6	10.5	11.0						
	W		2010	2730	3730	4930	6170	7510	8290						
	P	45.0	1122	1294	1499	1694	1850	1964	2016						
CS20K6ETFD595	A		3.4	3.5	3.7	3.8	4.0	4.1	4.2				MCC 7.1		
- Rotalock Valve Kit	W		1740	2410	3350	4490	5680	6960	7710						
- Crankcase Heater	P	50.0	1084	1281	1498	1723	1904	2045	2117	74.3	3.00	3Ph		40.0	33
- Oil Sight Glass	A		3.4	3.5	3.6	3.8	4.0	4.1	4.2				RLA 5.1		
- POE Oil	W			2070	2950	4020	5170	6400	7110						
	P	55.0		1241	1491	1741	1955	2129	2220						
	A			3.4	3.6	3.8	4.0	4.2	4.2						
	W		2490	3380	4720	6400	8130	9970	11020						
	P	45.0	1351	1613	1912	2203	2424	2541	2588						
CS27K6ETFD595	A		3.3	3.6	7.0	4.3	4.6	4.8	4.9				MCC 10.8		
- Rotalock Valve Kit	W		2230	2970	4170	5730	7420	9200	10230						
- Crankcase Heater	P	50.0	1278	1562	1904	2229	2497	2674	2751	92.4	3.50	3Ph		41.0	33
- Oil Sight Glass	A		3.2	3.5	3.9	4.3	4.7	4.9	5.0				RLA 7.7		
- POE Oil	W			2570	3605	5080	6690	8410	9410						
	P	55.0		1496	1872	2245	2563	2795	2906						
	A			3.4	3.9	4.3	4.8	5.1	5.2						
	W		3050	4140	5650	7460	9360	11390	12570						
	P	45.0	1788	2068	2386	2697	2952	3128	3211						
CS33K6ETFD595	A		6.5	6.7	7.0	7.3	7.5	7.7	7.9				MCC 12.7		
- Rotalock Valve Kit	W		2640	3650	5080	6790	8610	10560	11690						
- Crankcase Heater	P	50.0	1728	2040	2391	2740	3034	3262	3374	106.2	4.00	3Ph		45.0	35
- Oil Sight Glass	A		6.4	6.7	69	7.3	7.6	7.8	8.0				RLA 9.1		
- POE Oil	W			3140	4470	6100	7840	9710	10800						
	P	55.0		1981	2373	2765	3111	3386	3532						
	A			6.5	6.9	7.3	7.6	7.9	8.1						

Rating Conditions: 18.3 Deg Return Gas, no Sub-Cooling, 35 Deg Ambient / Supplied with: Internal Motor Protection, Rubber Mounting Kit
*Amps : MCC = maximum continuous current, RLA = MCC ÷ 1.4 (Copeland advises use RLA for contactor selection)

Prices

Airefrig Part Number	List Price Excl GST
CS10K6EPFJ55R	
CS10K6EPFJ595	
CS10K6EPFJ58R	
CS12K6EPFJ55R	
CS14K6EPFJ595	
CS14K6EPFJ525	

Airefrig Part Number	List Price Excl GST
CS14K6EPFJ545	
CS14K6ETFD55R	
CS14K6ETFD595	
CS18K6EPFJ595	
CS18K6EPFJ235	
CS18K6EPFJ525	

Airefrig Part Number	List Price Excl GST
CS18K6ETFD55R	
CS18K6ETFD595	
CS20K6EPFZ545	
CS20K6ETFD595	
CS27K6ETFD595	
CS33K6ETFD595	

COPELAND COMPRESSORS

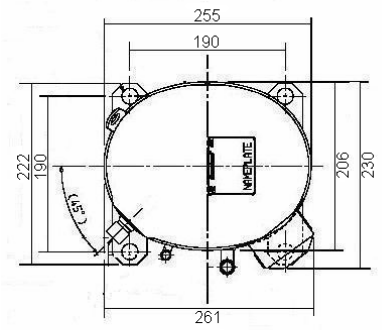
CS Series - Reciprocating Compressors

Dimensions & Specifications

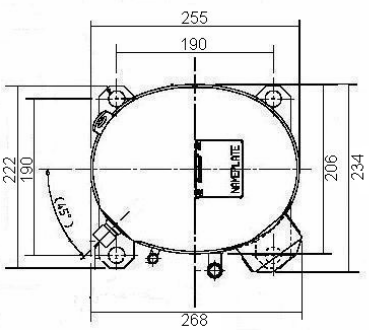
Airefrig Part Number	Height A	Suction B	Discharge C	Oil Recharge (litres)	Capacitors (MFD / Volts)		Crankcase Heater	Wiring Drg No
					Start	Run		
CS10K6EPFJ55R	348	3/4 rotalock	3/8 rotalock	1.27	130-156 / 250V	30MFD / 370V	918003105 40Watt 240/480/600V Insertion	1
CS10K6EPFJ595							018008800 40Watt 240V Wrap Around	
CS10K6EPFJ58R	348	3/4 rotalock	1/2 stub tube	1.27	130-156 / 250V	30MFD / 370V	918003105 40Watt 240/480/600V Insertion	
CS12K6EPFJ55R	348	3/4 rotalock	3/8 rotalock	1.27	130-156 / 250V	30MFD / 370V	918003105 40Watt 240/480/600V Insertion	
CS14K6EPFJ595	348	3/4 rotalock	3/8 rotalock	1.27	145-174 / 220V	35MFD / 370V	018008800 40Watt 240V Wrap Around	
CS14K6EPFJ525 *	348	3/4 stub tube	3/8 stub tube	1.27	145-174 / 220V	35MFD / 370V	918003105 40Watt 240/480/600V Insertion	
CS14K6EPFJ545 *							018008800 40Watt 240V Wrap Around	
CS14K6ETFD55R	348	3/4 rotalock	3/8 rotalock	1.27	-	-	918003105 40Watt 240/480/600V Insertion	3
CS14K6ETFD595							018008800 40Watt 240V Wrap Around	
CS18K6EPFJ595	360	3/8 rotalock	3/8 rotalock	1.27	145-174 / 250V	45MFD / 370V	018008800 40Watt 240V Wrap Around	1
CS18K6EPFJ235 *	360	3/4 stub tube	3/8 stub tube	1.27	145-174 / 250V	45MFD / 370V	018003702 58Watt 240V Wrap Around	
CS18K6EPFJ525 *								
CS18K6ETFD55R	360	3/4 rotalock	3/8 rotalock	1.27	-	-	918003105 40Watt 240/480/600V Insertion	3
CS18K6ETFD595							018008800 40Watt 240V Wrap Around	
CS20K6ETFD595	360	3/4 rotalock	1/2 rotalock	1.27	-	-	018008800 40Watt 240V Wrap Around	
CS20K6EPFZ545 *	360	3/4 stub tube	1/2 stub tube	1.27	216-259 / 330V	40MFD / 370V	018008800 40Watt 240V Wrap Around	1
CS27K6ETFD595	386	3/4 rotalock	1/2 rotalock	1.50	-	-	018008800 40Watt 240V Wrap Around	3
CS33K6ETFD595	386	7/8 rotalock	1/2 rotalock	1.50	-	-	018008800 40Watt 240V Wrap Around	

* Not supplied with Oil Sight Glass.

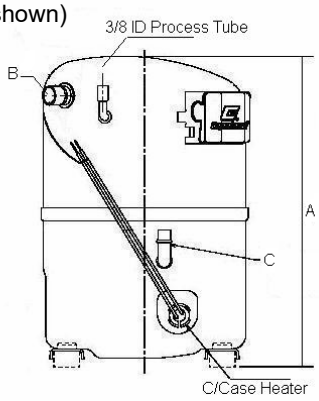
Supplied with: Internal Motor Protection, Rubber Mounting Kit

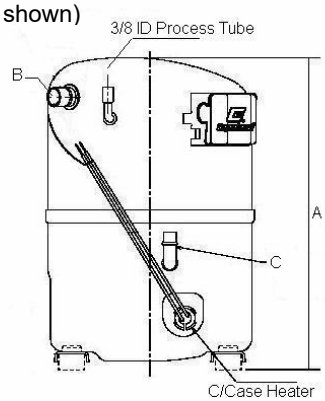


CS10 – CS27
(stub tube model shown)



CS33
(stub tube model shown)





COPELAND COMPRESSORS

R22 Medium Temperature Refrigeration
Reciprocating Compressors

Capacities R22

Airefrig Part Number		Refrigeration Capacity - **W**atts Consumption – **P**ower Current – **A**mps												
		Condensing Temperature ºC						Displ cm³/r	Motor				Kgs
			Evaporating Temperature ºC							HP	Type	*Amps	LRA	
			-10	-5	0	5	10	12.8						
CR18KQPFZ267RM **CR18K6PFJ595** - Rotalock Valve Kit - CSR Electrics & Box - Crankcase Heater - Oil Sight Glass - Mineral Oil	W	45.0	2110	2790	3850	4900	6090	6850	36.4	1.5	CSR	MCC 11.5 RLA 8.2	45.0	28
	P		1029	1146	1276	1372	1434	1455						
	A		5.0	5.6	6.1	6.5	6.9	7.0						
	W	50.0	1820	2460	3460	4460	5620	6330						
	P		1012	1145	1304	1424	1513	1554						
	A		4.9	5.5	6.2	6.7	7.2	7.4						
	W	55.0	1540	2130	3060	4010	5080	5780						
	P		974	1128	1314	1461	1584	1635						
	A		4.8	5.4	6.3	6.9	7.5	7.8						
CR24KQPFT267RM **CR24K6PFJ595** - Rotalock Valve Kit - CSR Electrics & Box - Crankcase Heater - Oil Sight Glass - Mineral Oil	W	45.0	2920	3740	5010	6880	7730	8660	44.2	2.00	CSR	MCC 17.0 RLA 12.1	59.0	29
	P		1439	1564	1704	1850	1891	1923						
	A		7.3	7.7	8.3	8.9	9.0	9.2						
	W	50.0	2600	3380	4580	6360	7190	8080						
	P		1442	1587	1756	1933	1994	2045						
	A		7.3	7.8	8.5	9.3	9.5	9.7						
	W	55.0	2260	2990	4120	5810	6590	7430						
	P		1428	1594	1794	2018	2089	2160						
	A		7.2	7.9	8.7	9.6	9.9	10.2						
CR24KQTFD267RM - Rotalock Valve Kit - Crankcase Heater - Oil Sight Glass - Mineral Oil	W	45.0	2920	3740	5010	6880	7730	8660	44.2	2.00	3Ph	MCC 5.2 RLA 3.7	25.0	28
	P		1200	1370	1520	1650	1750	1780						
	A		2.4	2.7	2.9	3.0	3.2	3.2						
	W	50.0	2600	3380	4580	6360	7190	8080						
	P		1210	1400	1580	1740	1870	1920						
	A		2.4	2.7	2.9	3.1	3.3	3.4						
	W	55.0	2260	2990	4120	5810	6590	7430						
	P		1200	1420	1630	1810	1970	2040						
	A		2.4	2.7	3.0	3.3	3.5	3.6						
CR32K6TFD595 - Rotalock Valve Kit - Crankcase Heater - Oil Sight Glass - Mineral Oil	W	45.0	3800	5100	6600	8300	10250	11100	57.1	2.75	3Ph	MCC 7.1 RLA 5.1	33.0	30
	P		1680	1880	2050	2180	2260	2270						
	A		4.1	4.4	4.6	4.8	5.0	5.0						
	W	50.0	3350	4600	6000	7650	9450	10250						
	P		1690	1920	2130	2300	2420	2450						
	A		4.1	4.4	4.8	5.0	5.2	5.3						
	W	55.0	2900	4050	5400	6950	8700	9450						
	P		1680	1940	2190	2400	2560	2610						
	A		4.1	4.5	4.9	5.2	5.5	5.6						
CR33KQTFD267RM - Rotalock Valve Kit - Crankcase Heater - Oil Sight Glass - Mineral Oil	W	45.0	3830	4890	6600	8390	10180	11330	60.6	2.75	3Ph	MCC 6.6 RLA 4.7	31.6	35
	P		1777	1962	2193	2350	2505	2546						
	A		3.6	3.8	4.1	4.3	4.4	4.5						
	W	50.0	3410	4400	6020	7740	9460	10680						
	P		1774	1981	2249	2444	2638	2710						
	A		3.6	3.8	4.1	4.3	4.5	4.6						
	W	55.0	2860	3890	5380	7025	8670	9740						
	P		1754	1989	2298	2530	2760	2861						
	A		3.6	3.8	4.1	4.4	4.7	4.8						

Rating Conditions: 11.1K Superheat, 8.3K Subcooling, 35 Deg Ambient. / Supplied with: Internal Motor Protection, Rubber Mounting Kit
*Amps : MCC = maximum continuous current, RLA = MCC ÷ 1.4 (Copeland advises use RLA for contactor selection)

COPELAND COMPRESSORS

R22 Medium Temperature Refrigeration
Reciprocating Compressors

Capacities R22

Airefrig Part Number		Refrigeration Capacity - **W**atts Consumption – **P**ower Current – **A**mps											
		Condensing Temperature ºC						Displ cm³/r	Motor				Kgs
			Evaporating Temperature ºC							HP	Type	*Amps	LRA	
			-10	-5	0	5	10	12.8						
CR37KQTFD267RM - Rotalock Valve Kit - Crankcase Heater - Oil Sight Glass - Mineral Oil	W	45.0	4650	5870	7770	9720	11670	12940	66.5	3.00	3Ph	MCC 7.8 RLA 5.6	39.0	29
	P		2047	2255	2497	2672	2848	2920						
	A		4.2	4.3	4.6	4.8	5.0	5.1						
	W	50.0	4240	5390	7180	9065	10950	12150						
	P		2060	2293	2579	2787	2996	3088						
	A		4.1	4.4	4.7	4.9	5.1	5.3						
	W	55.0	3710	4860	6530	8320	10110	11270						
	P		2078	2328	2654	2894	3134	3256						
	A		4.2	4.4	4.8	5.1	5.4	5.5						
CR38K6TFD595 - Rotalock Valve Kit - Crankcase Heater - Oil Sight Glass - Mineral Oil	W	45.0	4650	6150	7850	9750	11950	12850	66.4	3.00	3Ph	MCC 8.2 RLA 5.9	42.0	31
	P		1970	2200	2390	2530	2610	2620						
	A		4.2	4.4	4.7	4.8	4.9	5.0						
	W	50.0	4100	5550	7150	9000	11050	11900						
	P		1980	2270	2500	2680	2800	2840						
	A		4.2	4.5	4.8	5.0	5.2	5.3						
	W	55.0	3550	4950	6500	8250	10150	10950						
	P		1970	2310	2590	2820	2990	3040						
	A		4.2	4.6	4.9	5.2	5.5	5.5						
CR41KQTFD267RM - Rotalock Valve Kit - Crankcase Heater - Oil Sight Glass - Mineral Oil	W	45.0	5240	6600	8710	10910	13110	14580	73.6	3.50	3Ph	MCC 8.3 RLA 5.9	42.0	31
	P		2312	2533	2801	2980	3159	3222						
	A		4.6	4.9	5.1	5.3	5.5	5.6						
	W	50.0	4760	6030	8020	10145	12270	13700						
	P		2336	2595	2904	3130	3354	3446						
	A		4.6	4.9	5.2	5.5	5.7	5.9						
	W	55.0	4150	5430	7280	9305	11330	12690						
	P		2351	2631	2998	3268	3539	3670						
	A		4.5	4.9	5.4	5.7	6.0	6.2						
CR42K6TFD595 - Rotalock Valve Kit - Crankcase Heater - Oil Sight Glass - Mineral Oil	W	45.0	5250	6850	8700	10850	13350	14500	72.1	3.50	3Ph	MCC 8.9 RLA 6.4	42.0	32
	P		2180	2440	2650	2830	2960	3000						
	A		4.6	4.9	5.1	5.4	5.5	5.6						
	W	50.0	4650	6200	7950	10000	12350	13450						
	P		2220	2510	2770	3000	3180	3240						
	A		4.6	5.0	5.3	5.6	5.8	5.9						
	W	55.0	4100	5600	7250	9150	11350	12350						
	P		2230	2570	2870	3140	3380	3460						
	A		4.6	5.0	5.4	5.8	6.1	6.2						

Rating Conditions: 11.1K Superheat, 8.3Kb Subcooling, 35 Deg Ambient. / Supplied with: Internal Motor Protection, Rubber Mounting Kit
*Amps : MCC = maximum continuous current, RLA = MCC ÷ 1.4 (Copeland advises use RLA for contactor selection)

COPELAND COMPRESSORS

R22 Medium Temperature Refrigeration
Reciprocating Compressors

Capacities R22

Airefrig Part Number		Refrigeration Capacity - **W**atts Consumption – **P**ower Current – **A**mps												
		Condensing Temperature ºC						Displ cm³/r	Motor				Kgs
			Evaporating Temperature ºC							HP	Type	*Amps	LRA	
			-10	-5	0	5	10	12.8						
CR47KQTFD267RM **CR47KQTFD595** - Rotalock Valve Kit - Crankcase Heater - Oil Sight Glass - Mineral Oil	W	45.0	6130	7650	10000	12390	14770	16300	81.1	4.00	3Ph	MCC 11.5 RLA 8.2	50.0	35
	P		2764	3014	3289	3442	3596	3627						
	A		5.6	5.9	6.2	6.5	6.7	6.7						
	W	50.0	5600	7040	9250	11560	13870	15330						
	P		2812	3106	3446	3655	3865	3937						
	A		5.6	6.0	6.4	6.7	7.0	7.1						
	W	55.0	4890	6360	8470	10670	12870	14290						
	P		2861	3180	3589	3867	4145	4246						
	A		5.7	6.1	6.6	7.0	7.4	7.5						
CR53KQTFD595 - Rotalock Valve Kit - Crankcase Heater - Oil Sight Glass - Mineral Oil	W	45.0	7060	8730	11270	13880	16490	18210	89.6	4.50	3Ph	MCC 12.7 RLA 9.1	55.0	35
	P		3159	3437	3741	3912	4084	4136						
	A		6.5	6.9	7.2	7.5	7.7	7.8						
	W	50.0	6460	8070	10500	13015	15530	17170						
	P		3216	3546	3912	4144	4376	4458						
	A		6.5	7.0	7.5	7.8	8.1	8.2						
	W	55.0	5730	7340	9650	12040	14430	16000						
	P		3281	3637	4090	4386	4681	4792						
	A		6.5	7.1	7.7	8.1	8.5	8.7						
CRN50500TFD55R **CRNQ0500TFD595** - Rotalock Valve Kit - Crankcase Heater - Oil Sight Glass - Mineral Oil	W	45.0	8370	10220	12970	15915	18860	20890	105.6	5.00	3Ph	MCC 13.5 RLA 9.6	65.0	42
	P		3450	3783	4136	4339	4542	4604						
	A		8.0	8.4	8.9	9.3	9.6	9.7						
	W	50.0	7690	9500	12160	14965	17770	19720						
	P		3487	3878	4317	4512	4888	4990						
	A		8.0	8.6	9.2	9.6	10.0	10.2						
	W	55.0	6890	8680	11250	13930	16610	18430						
	P		3539	3948	4474	4836	5197	5348						
	A		8.0	8.6	9.4	10.0	10.5	10.8						

Rating Conditions: 11.1K Superheat, 8.3Kb Subcooling, 35 Deg Ambient. / Supplied with: Internal Motor Protection, Rubber Mounting Kit
*Amps : MCC = maximum continuous current, RLA = MCC ÷ 1.4 (Copeland advises use RLA for contactor selection)

Prices

Airefrig Part Number	List Price Excl GST
CR18KQPFZ267RM	
CR18K6PFJ595	
CR24KQPFT267RM	
CR24K6PFJ595	
CR24KQTFD267RM	

Airefrig Part Number	List Price Excl GST
CR32K6TFD595	
CR33KQTFD267RM	
CR37KQTFD267RM	
CR38K6TFD595	
CR41KQTFD267RM	

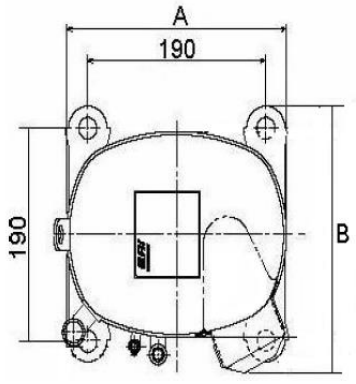
Airefrig Part Number	List Price Excl GST
CR42K6TFD595	
CR47KQTFD595	
CR53KQTFD595	
CRN50500TFD55R	
CRNQ0500TFD595	

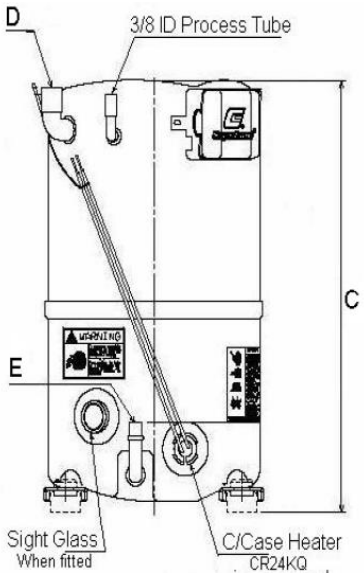
COPELAND COMPRESSORS

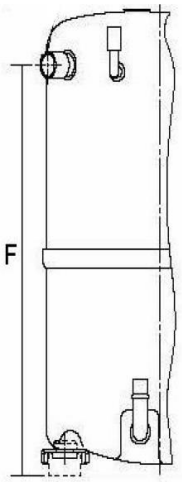
R22 Medium Temperature Refrigeration
Reciprocating Compressors

Airefrig Part Number	A	B	C	F	Suction conn. D	Discharge Conn. E	Oil Charge Litres	Capacitors MFD/Volts		Crankcase Heater (Supplied)	Wiring Drg. No.
								Start	Run		
CR18KQPFZ267RM CR18K6PFJ595	235	235	354	318	5/8 rotalock	3/8 rotalock	1.50	145-174 330V 88-106 330V	25MFD 440V	018003702 CH-213 240V 58W Wrap Around 018008800 40Watt 240V Wrap Around	1
CR24KQPFT267RM CR24K6PFJ595	235	235	348	310	5/8 rotalock	3/8 rotalock	1.27	145-174 250V 108-130 250V	35MFD 440V	018003702 CH-213 240V 58W Wrap Around 018008800 40Watt 240V Wrap Around	1
CR24KQTFD267RM	235	235	348	310	5/8 rotalock	3/8 rotalock	1.27	-	-	018003702 CH-213 240V 58W Wrap Around	3
CR33KQTFD267RM CR32K6TFD595	235	235	360	310	3/4 rotalock	3/8 rotalock	1.12	-	-	918003105 40Watt 240/480/600V Insertion Type 018008800 40Watt 240V Wrap Around	3
CR37KQTFD267RM CR38K6TFD595	235	235	370	320	3/4 rotalock	3/8 rotalock	1.12	-	-	918003105 40Watt 240/480/600V Insertion Type 018008800 40Watt 240V Wrap Around	3
CR41KQTFD267RM CR42K6TFD595	235	235	380	330	3/4 rotalock	3/8 rotalock	1.12	-	-	918003105 40Watt 240/480/600V Insertion Type 018008800 40Watt 240V Wrap Around	3
CR47KQTFD267RM CR47KQTFD595	255	222	385	335	7/8 rotalock	1/2 rotalock	1.27	-	-	918003105 40Watt 240/480/600V Insertion Type 018008800 40Watt 240V Wrap Around	3
CR53KQTFD595	255	222	385	335	7/8 rotalock	1/2 rotalock	1.27	-	-	018008800 40Watt 240V Wrap Around	3
CRN50500TFD55R CRNQ0500TFD595	255	229	420	380	7/8 rotalock	1/2 rotalock	1.95	-	-	918003105 40Watt 240/480/600V Insertion Type 018008804 45Watt 240V Wrap Around	3

Supplied with: Internal Motor Protection, Rubber Mounting Kit







COPELAND COMPRESSORS

R22 Air Conditioning
Reciprocating Compressors

Capacities R22

Airefrig Part Number		Condensing Temperature ºC	Evaporating Temperature ºC						Displ cm³/r	Motor				Kgs
			-10	-5	0	7.2	10	12.8		HP	Type	*Amps	LRA	
			Refrigeration Capacity - **W**atts				Consumption – **P**ower		Current – **A**mps					
CR24KQPFT280BB - Stub Tubes - Crankcase Heater - Mineral Oil - Run Capacitor (PSC)	W	45.0	2920	3740	5010	6880	7730	8660	42.6	2.00	PSC	MCC 17.0 RLA 12.1	46.0	29
	P		1439	1564	1704	1850	1891	1923						
	A		7.3	7.7	8.3	8.9	9.0	9.2						
CR24KQPFT267RM **CR24K6PFJ595** - Rotalock Valve Kit - Crankcase Heater - Oil Sight Glass - CSR Electrics & Box	W	50.0	2600	3380	4580	6360	7190	8080						
	P		1442	1587	1756	1933	1994	2045						
	A		7.3	7.8	8.5	9.3	9.5	9.7						
	W	55.0	2260	2990	4120	5810	6590	7430			CSR			
	P		1428	1594	1794	2018	2089	2160						
	A		7.2	7.9	8.7	9.6	9.9	10.2						
CR24KQTFD267RM - Rotalock Valve Kit - Crankcase Heater - Oil Sight Glass - Mineral Oil	W	45.0	2920	3740	5010	6880	7730	8660	44.2	2.00	3Ph	MCC 5.2 RLA 3.7	25.0	28
	P		1200	1370	1520	1700	1750	1780						
	A		2.4	2.7	2.9	3.1	3.2	3.2						
	W	50.0	2600	3380	4580	6360	7190	8080						
	P		1210	1400	1580	1790	1870	1920						
	A		2.4	2.7	2.9	3.2	3.3	3.4						
	W	55.0	2260	2990	4120	5810	6590	7430						
	P		1200	1420	1630	1880	1970	2040						
	A		2.4	2.7	3.0	3.4	3.5	3.6						
CRD10200TFD561 - Rotalock Valve Kit - Crankcase Heater - Oil Sight Glass - Mineral Oil	W	45.0	2850	3620	4810	6540	7360	8200	42.6	2.00	3Ph	MCC 6.0 RLA 4.3	23.0	28
	P		1512	1598	1710	1839	1881	1923						
	A		3.5	3.5	3.6	3.6	3.7	3.7						
	W	50.0	2590	3310	4450	6100	6880	7710						
	P		1554	1659	1792	1953	2004	2065						
	A		3.4	3.5	3.6	3.8	3.8	3.8						
	W	55.0	2240	2970	4040	5590	6320	7100						
	P		1613	1726	1878	2063	2143	2214						
	A		3.5	3.6	3.7	3.8	3.8	3.9						
CR28KQPFZ280BM - Stub Tubes - Run Capacitor (PSC) - Crankcase Heater - Mineral Oil	W	45.0	3440	4450	5920	7980	8880	9840	49.6	2.33	PSC	MCC 17.0 RLA 12.1	61.0	29
	P		1652	1801	1969	2130	2182	2214						
	A		9.0	9.5	10.1	10.7	10.9	11.1						
	W	50.0	2970	3960	5400	7390	8280	9200						
	P		1646	1823	2027	2239	2301	2352						
	A		8.9	9.5	10.3	11.1	11.3	11.7						
	W	55.0	2470	3460	4880	6790	7640	8540						
	P		1620	1829	2074	2331	2412	2483						
	A		8.7	9.5	10.5	11.5	11.8	12.1						
CR32K6TFD595 - Rotalock Valve Kit - Crankcase Heater - Oil Sight Glass - Mineral Oil	W	45.0	3800	5100	6600	9050	10250	11100	57.1	2.75	3Ph	MCC 7.1 RLA 5.1	33.0	30
	P		1680	1880	2050	2220	2260	2270						
	A		4.1	4.4	4.6	4.9	5.0	5.0						
	W	50.0	3350	4600	6000	8350	9450	10250						
	P		1690	1920	2130	2350	2420	2450						
	A		4.1	4.4	4.8	5.1	5.2	5.3						
	W	55.0	2900	4050	5400	7650	8700	9450						
	P		1680	1940	2190	2470	2560	2610						
	A		4.1	4.5	4.9	5.3	5.5	5.6						

Rating Conditions: 11.1K Superheat, 8.3Kb Subcooling, 35 Deg Ambient. / Supplied with: Internal Motor Protection, Rubber Mounting Kit
*Amps : MCC = maximum continuous current, RLA = MCC ÷ 1.4 (Copeland advises use RLA for contactor selection)

COPELAND COMPRESSORS

R22 Air Conditioning
Reciprocating Compressors

Capacities R22

Airefrig Part Number		Condensing Temperature ºC	Evaporating Temperature ºC						Displ cm³/r	Motor HP	Motor Type	Motor *Amps	Motor LRA	Kgs
			-10	-5	0	7.2	10	12.8						
CR33KQTFD267RM - Rotalock Valve Kit - Crankcase Heater - Oil Sight Glass - Mineral Oil	W	45.0	3830	4890	6600	9080	10180	11330	60.6	2.75	3Ph	MCC 6.6 RLA 4.7	31.6	35
	P		1777	1962	2193	2432	2505	2546						
	A		3.6	3.8	4.1	4.4	4.4	4.5						
	W	50.0	3410	4400	6020	8400	9460	10680						
	P		1774	1981	2249	2546	2638	2710						
	A		3.6	3.8	4.1	4.4	4.5	4.6						
	W	55.0	2860	3890	5380	7650	8670	9740						
	P		1754	1989	2298	2649	2760	2861						
	A		3.6	3.8	4.1	4.5	4.7	4.8						
CR37KQTFD267RM - Rotalock Valve Kit - Crankcase Heater - Oil Sight Glass - Mineral Oil	W	45.0	4650	5870	7770	10490	11670	12940	66.5	3.00	3Ph	MCC 7.8 RLA 5.6	39.0	29
	P		2047	2255	2497	2764	2848	2920						
	A		4.2	4.3	4.6	4.9	5.0	5.1						
	W	50.0	4240	5390	7180	9770	10950	12150						
	P		2060	2293	2579	2883	2996	3088						
	A		4.1	4.4	4.7	5.0	5.1	5.3						
	W	55.0	3710	4860	6530	8980	10110	11270						
	P		2078	2328	2654	3013	3134	3256						
	A		4.2	4.4	4.8	5.2	5.4	5.5						
CR38K6TFD595 - Rotalock Valve Kit - Crankcase Heater - Oil Sight Glass - Mineral Oil	W	45.0	4650	6150	7850	10600	11950	12850	66.4	3.00	3Ph	MCC 8.2 RLA 5.9	42.0	31
	P		1970	2200	2390	2560	2610	2620						
	A		4.2	4.4	4.7	4.9	4.9	5.0						
	W	50.0	4100	5550	7150	9800	11050	11900						
	P		1980	2270	2500	2740	2800	2840						
	A		4.2	4.5	4.8	5.1	5.2	5.3						
	W	55.0	3550	4950	6500	8950	10150	10950						
	P		1970	2310	2590	2900	2990	3040						
	A		4.2	4.6	4.9	5.3	5.5	5.5						
CR41KQTFD267RM - Rotalock Valve Kit - Crankcase Heater - Oil Sight Glass - Mineral Oil	W	45.0	5240	6600	8710	11730	13110	14580	73.7	3.50	3Ph	MCC 8.3 RLA 5.9	42.0	31
	P		2312	2533	2801	3076	3159	3222						
	A		4.6	4.9	5.1	5.4	5.5	5.6						
	W	50.0	4760	6030	8020	10950	12270	13700						
	P		2336	2595	2904	3241	3354	3446						
	A		4.6	4.9	5.2	5.6	5.7	5.9						
	W	55.0	4150	5430	7280	10060	11330	12690						
	P		2351	2631	2998	3407	3539	3670						
	A		4.5	4.9	5.4	5.8	6.0	6.2						
CR42K6TFD595 - Rotalock Valve Kit - Crankcase Heater - Oil Sight Glass - Mineral Oil	W	45.0	5250	6850	8700	11800	13350	14500	72.1	3.50	3Ph	MCC 8.9 RLA 6.4	42.0	32
	P		2180	2440	2650	2890	2960	3000						
	A		4.6	4.9	5.1	5.4	5.5	5.6						
	W	50.0	4650	6200	7950	10900	12350	13450						
	P		2220	2510	2770	3080	3180	3240						
	A		4.6	5.0	5.3	5.7	5.8	5.9						
	W	55.0	4100	5600	7250	10000	11350	12350						
	P		2230	2570	2870	3240	3380	3460						
	A		4.6	5.0	5.4	5.9	6.1	6.2						

Rating Conditions: 11.1K Superheat, 8.3Kb Subcooling, 35 Deg Ambient. / Supplied with: Internal Motor Protection, Rubber Mounting Kit
*Amps : MCC = maximum continuous current, RLA = MCC ÷ 1.4 (Copeland advises use RLA for contactor selection)

COPELAND COMPRESSORS

R22 Air Conditioning
Reciprocating Compressors

Capacities R22

Airefrig Part Number		Refrigeration Capacity - **W**atts Consumption – **P**ower Current – **A**mps											
		Condensing Temperature ºC						Displ cm³/r	Motor				Kgs
			Evaporating Temperature ºC										
			-10	-5	0	7.2	10	12.8		HP	Type	*Amps	LRA	
CR47KQTFD267RM **CR47KQTFD595** - Rotalock Valve Kit - Crankcase Heater - Oil Sight Glass - Mineral Oil	W	45.0	6130	7650	10000	13310	14770	16300	81.2	4.00	3Ph	MCC 11.5 RLA 8.2	50.0	35
	P		2764	3014	3289	3544	3596	3627						
	A		5.6	5.9	6.2	6.5	6.7	6.7						
	W	50.0	5600	7040	9250	12470	13870	15330						
	P		2812	3106	3446	3773	3865	3937						
	A		5.6	6.0	6.4	6.9	7.0	7.1						
	W	55.0	4890	6360	8470	11510	12870	14290						
	P		2861	3180	3589	4014	4145	4246						
	A		5.7	6.1	6.6	7.2	7.4	7.5						
CR53KQTFD595 - Rotalock Valve Kit - Crankcase Heater - Oil Sight Glass - Mineral Oil	W	45.0	7060	8730	11270	14890	16490	18210	89.6	4.50	3Ph	MCC 12.7 RLA 9.1	55.0	35
	P		3159	3437	3741	4012	4084	4136						
	A		6.5	6.9	7.2	7.6	7.7	7.8						
	W	50.0	6460	8070	10500	13960	15530	17170						
	P		3216	3546	3912	4274	4376	4458						
	A		6.5	7.0	7.5	8.0	8.1	8.2						
	W	55.0	5730	7340	9650	12950	14430	16000						
	P		3281	3637	4090	4540	4681	4792						
	A		6.5	7.1	7.7	8.3	8.5	8.7						
CRN50500TFD55R **CRNQ0500TFD595** - Rotalock Valve Kit - Crankcase Heater - Oil Sight Glass - Mineral Oil	W	45.0	8370	10220	12970	16970	18860	20890	105.6	5.00	3Ph	MCC 13.5 RLA 9.6	65.0	42
	P		3450	3783	4136	4458	4542	4604						
	A		8.0	8.4	8.9	9.5	9.6	9.7						
	W	50.0	7690	9500	12160	15990	17770	19720						
	P		3487	3878	4317	4755	4888	4990						
	A		8.0	8.6	9.2	9.8	10.0	10.2						
	W	55.0	6890	8680	11250	14930	16610	18430						
	P		3539	3948	4474	5025	5197	5348						
	A		8.0	8.6	9.4	10.2	10.5	10.8						

Rating Conditions: 11.1K Superheat, 8.3Kb Subcooling, 35 Deg Ambient. / Supplied with: Internal Motor Protection, Rubber Mounting Kit
*Amps : MCC = maximum continuous current, RLA = MCC ÷ 1.4 (Copeland advises use RLA for contactor selection)

Prices

Airefrig Part Number	List Price Excl GST
CR24KQPFT280BB	
CR24KQTFD267RM	
CR24K6PFJ595	
CR24KQPFT267RM	
CRD10200TFD561	
CR28KQPFZ280BM	

Airefrig Part Number	List Price Excl GST
CR32K6TFD595	
CR33KQTFD267RM	
CR37KQTFD267RM	
CR38K6TFD595	
CR41KQTFD267RM	
CR42K6TFD595	

Airefrig Part Number	List Price Excl GST
CR47KQTFD267RM	
CR47KQTFD595	
CR53KQTFD595	
CRN50500TFD55R	
CRNQ0500TFD595	

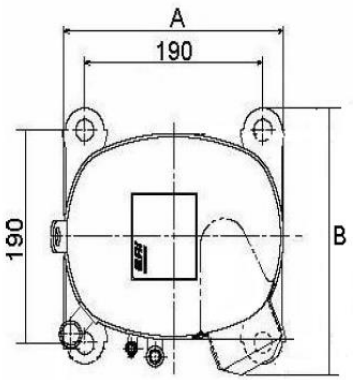
COPELAND COMPRESSORS

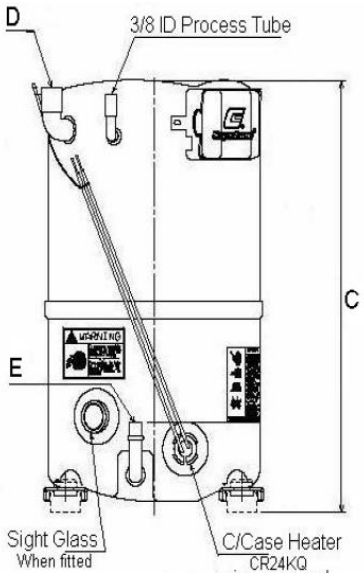
R22 Air Conditioning
Reciprocating Compressors

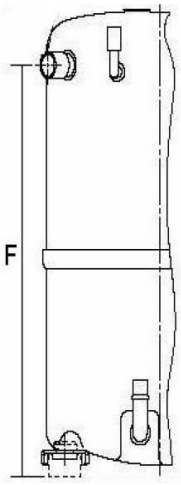
Airefrig Part Number	A	B	C	F	Suction conn. D	Discharge Conn. E	Oil Charge Litres	Run Capacitor MFD/Volts	Crankcase Heater (Supplied)	Wiring Drg. No.
CR24KQPFT280BB *	235	235	350	300	5/8 stub tube	3/8 stub tube	1.27	35MFD 440V	018003702 CH-213 240V 58W Wrap Around	2
CR24KQPFT267RM CR24K6PFJ595	235	235	350	300	5/8 rotalock	3/8 rotalock	1.27	35MFD 440V	018003702 CH-213 240V 58W Wrap Around 018008800 40Watt 240V Wrap Around	2
CR24KQTFD267RM	235	235	348	310	5/8 rotalock	3/8 rotalock	1.27	-	018003702 CH-213 240V 58W Wrap Around	3
CRD10200TFD561	235	235	305	315	5/8 rotalock	3/8 rotalock	1.50	-	018003702 CH-213 240V 58W Wrap Around	4
CR28KQPFZ280BM *	235	235	340	300	5/8 stub tube	3/8 stub tube	1.50	40MFD 440V	018003702 CH-213 240V 58W Wrap Around	2
CR32K6TFD595 CR33KQTFD267RM	235	235	360	310	3/4 rotalock	3/8 rotalock	1.12	-	018008800 40Watt 240V Wrap Around 918003105 40Watt 240/480/600V Insertion Type	3
CR37KQTFD267RM CR38K6TFD595	235	235	370	325	3/4 rotalock	3/8 rotalock	1.12	-	918003105 40Watt 240/480/600V Insertion Type 018008800 40Watt 240V Wrap Around	3
CR41KQTFD267RM CR42K6TFD595	235	235	380	332	3/4 rotalock	3/8 rotalock	1.12	-	918003105 40Watt 240/480/600V Insertion Type 018008800 40Watt 240V Wrap Around	3
CR47KQTFD267RM CR47KQTFD595	255	235	386	345	7/8 rotalock	1/2 rotalock	1.27	-	918003105 40Watt 240/480/600V Insertion Type 018008800 40Watt 240V Wrap Around	3
CR53KQTFD267RM	255	235	386	345	7/8 rotalock	1/2 rotalock	1.27	-	918003105 40Watt 240/480/600V Insertion Type	3
CRN50500TFD55R CRNQ0500TFD595	260	236	420	370	7/8 rotalock	1/2 rotalock	1.95	-	918003105 40Watt 240/480/600V Insertion Type 018008804 45Watt 240V Wrap Around	3

* Compressors not fitted with Oil Sight Glass

Supplied with: Internal Motor Protection, Rubber Mounting Kit







COPELAND COMPRESSORS

R404A (R507) Medium Temperature
ZB Scroll Compressors

Capacities R404A (R507)

Airefrig Part Number		Condensing Temperature ºC	Refrigeration Capacity - **W**atts / Consumption – **P**ower / Current – **A**mps Evaporating Temperature ºC -15	-10	-5	0	5	7.2	Displ cm³/r	Motor HP	Type	*Amps	LRA	Kgs
ZB45KCETFD551 - Rotalock Valve Kit - Crankcase Heater - Oil Sight Glass - POE Oil	W	45.0	8300	10050	12100	14400	17100	18400	98.0	6.0	3Ph	MCC 14.2 RLA 13.1	74.0	40
	P		4760	4750	4730	4700	4660	4640						
	A		9.5	9.5	9.5	9.5	9.4	9.4						
	W	50.0	7500	9100	10950	13100	15500	16700						
	P		5350	5350	5300	5300	5250	5200						
	A		10.3	10.3	10.3	10.3	10.2	10.2						
	W	55.0	6650	8100	9750	11700	13900	14950						
	P		6050	6000	6000	5950	5900	5850						
	A		11.3	11.3	11.2	11.2	11.1	11.1						
ZB58KQETFD551 - Rotalock Valve Kit - Crankcase Heater - Oil Sight Glass - POE Oil	W	45.0	10750	13250	16050	19150	22700	24400	127.1	8.0	3Ph	MCC 23.0 RLA 16.4	95.0	60
	P		6310	6340	6380	6410	6410	6390						
	A		12.1	12.15	12.25	12.3	12.35	12.3						
	W	50.0	9540	11950	14600	17500	20800	22300						
	P		7080	7070	7090	7110	7110	7100						
	A		12.95	13.0	13.1	13.15	13.15	13.15						
	W	55.0	8210	10550	13000	15750	18750	20200						
	P		7950	7910	7910	7910	7900	7880						
	A		14.0	14.0	14.05	14.1	14.1	14.1						
ZB76KQETFD551 - Rotalock Valve Kit - Crankcase Heater - Oil Sight Glass - POE Oil	W	45.0	14650	17750	21300	25400	30000	32300	165.6	10.0	3Ph	MCC 28.0 RLA 20.4	118.0	66
	P		8150	8250	8320	8390	8430	8450						
	A		15.05	15.2	15.3	15.4	15.45	15.5						
	W	50.0	13250	16150	19400	23100	27400	29400						
	P		9040	9140	9220	9290	9340	9350						
	A		16.2	16.35	16.5	16.6	16.65	16.7						
	W	55.0	11800	14450	17400	20800	24600	26500						
	P		10000	10100	10200	10300	10350	10350						
	A		17.5	17.65	17.8	17.95	18.05	18.05						

Rating Conditions: 18.3ºC Return Gas, 0 K Subcooling, 35ºC Ambient / Supplied with: Internal Motor Protection, Rubber Mounting Kit
*Amps : MCC = maximum continuous current, RLA = MCC ÷ 1.4 (Copeland advises use RLA for contactor selection)

Prices

Airefrig Part Number	List Price Excl GST
ZB45KCETFD551	

Airefrig Part Number	List Price Excl GST
ZB58KQETFD551	

Airefrig Part Number	List Price Excl GST
ZB76KQETFD551	

IMPORTANT – WARNING TO BE CLEARLY UNDERSTOOD PRIOR TO RUNNING ANY SCROLL COMPRESSOR:

- It is important that the SCROLL compressor is charged as quickly as possible by way of LIQUID REFRIGERANT INTO THE LIQUID LINE, this is to avoid insufficient volume of suction gas that would be detrimental to the compressor.
- **DO NOT VAPOUR CHARGE THE SYSTEM!**
- It is recommended the required refrigerant charge is bomb charged into the liquid side of the system.
- Topping up the system can be done carefully on the low side with liquid refrigerant through manifold service gauges.
- The **suction service valve** must NOT BE FULLY CLOSED at any time when the compressor is running.

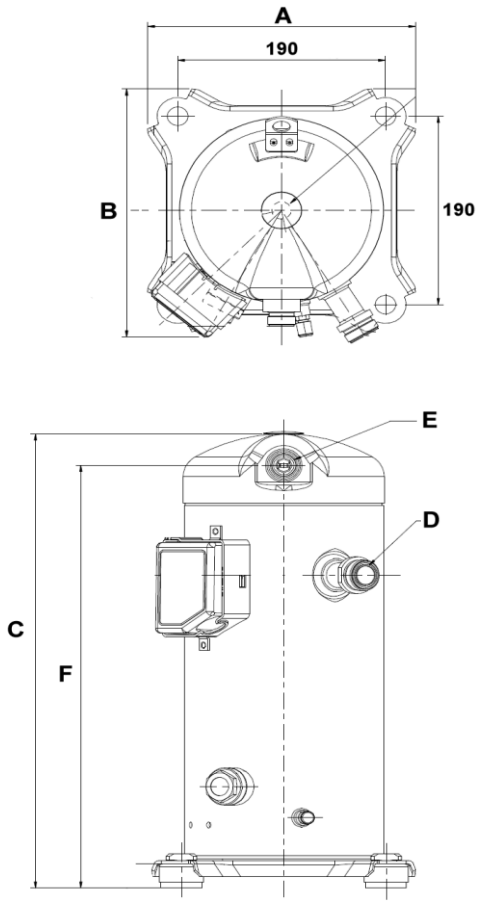
COPELAND COMPRESSORS

R404A (R507) Medium Temperature
ZB Scroll Compressors

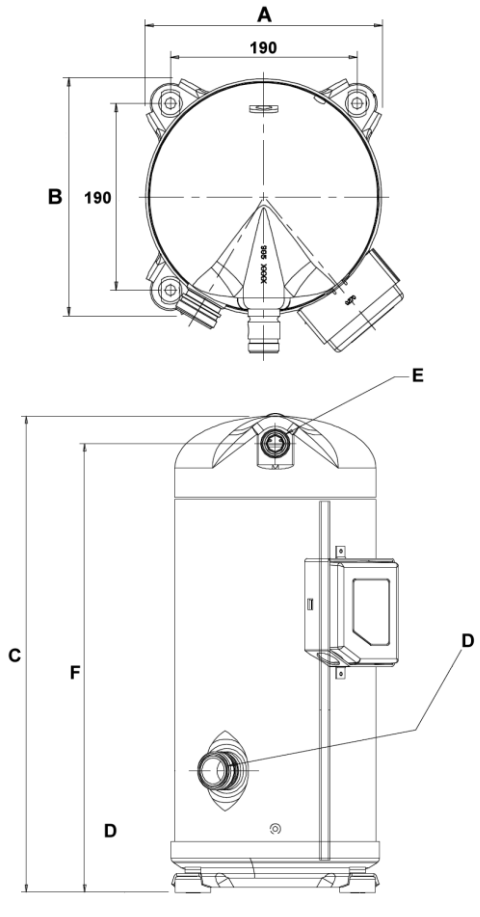
Dimensions & Specifications

Airefrig Part Number	A	B	C	F	Service Valves & Connections		Oil Charge Litres	C/Case Heater Not Supplied
					Suction D	Discharge E		
ZB45KCETFD551	246	251	460	430	2605142030 1-1/4" 12UNF 7/8ODF	2605081620 1" 14UNF 1/2ODF	1.89	018005700 (CH-280) 240V 70W Wrap Around
ZB58KQETFD551	243	243	496	465	2605222835 1-3/4" 12UNF 1-3/8ODF	2605142030 1-1/4" 12UNF 7/8ODF	2.51	018004701 (CH-255) 240V 90W Wrap Around
ZB76KQETFD551	243	243	553	521	2605222835 1-3/4" 12UNF 1-3/8ODF	2605142030 1-1/4" 12UNF 7/8ODF	3.25	018004701 (CH-255) 240V 90W Wrap Around

Supplied with: Internal Motor Protection, Rubber Mounting Kit



ZB45



ZB58 - ZB76

COPELAND COMPRESSORS

R22 Air Conditioning
Scroll Compressors

Capacities R22

Airefrig Part Number		Condensing Temperature ºC	Evaporating Temperature ºC -10	-5	0	7.2	10	12.8	Displ cm³/r	Motor HP	Type	*Amps	LRA	Kgs
	Refrigeration Capacity - **W**atts													
	Consumption – **P**ower													
	Current – **A**mps													
ZR28K3EPFJ522 - Stub Tubes - Run Capacitor (PSC) - POE Oil	W	45.0	3835	4630	5820	7530	8320	9160	39.2	2.33	PSC	MCC 18.0 RLA 12.9	61.0	28
	P		1850	1832	1803	1767	1767	1756						
	A		8.9	8.8	8.7	8.5	8.5	8.5						
	W	50.0	3640	4410	5560	7220	8000	8800						
	P		2060	2037	2007	1973	1953	1953						
	A		9.8	9.7	9.6	9.4	9.3	9.3						
	W	55.0		4122	5240	6840	7590	8380						
	P			2295	2257	2214	2194	2184						
	A			10.9	10.7	10.5	10.4	10.3						
ZR36K3EPFJ522 - Stub Tubes - Run Capacitor (PSC) - POE Oil	W	45.0	4960	5950	7460	9640	10630	11700	49.49	3.0	PSC	MCC 23.0 RLA 16.4	82.0	30
	P		2260	2250	2230	2193	2182	2172						
	A		11.1	11.1	11.0	10.8	10.8	10.7						
	W	50.0	4660	5630	7115	9230	10200	11230						
	P		2515	2500	2480	2444	2434	2423						
	A		12.2	12.1	12.0	12.0	11.9	11.8						
	W	55.0		5245	6690	8750	9680	10690						
	P			2806	2783	2750	2730	2720						
	A			13.5	13.4	13.2	13.1	13.0						
ZR40K3EPFJ522 - Stub Tubes - Run Capacitor (PSC) - POE Oil	W	45.0	5370	6470	8155	10570	11640	12830	54.22	3.33	PSC	MCC 24.0 RLA 17.1	100.0	31
	P		2505	2486	2458	2432	2421	2411						
	A		12.6	12.5	12.4	12.4	12.4	12.3						
	W	50.0	5090	6155	7790	10170	11230	12380						
	P		2812	2781	2743	2699	2689	2679						
	A		13.9	13.8	13.6	13.5	13.4	13.4						
	W	55.0		5745	7340	9650	10695	11795						
	P			3142	3091	3033	3013	2993						
	A			15.3	15.1	14.9	14.8	14.8						
ZR40K3ETFD522 - Stub Tubes - POE Oil	W	45.0	5430	6520	8180	10570	11640	12770	54.22	3.33	3Ph	MCC 9.0 RLA 6.4	46.0	30
	P		2468	2445	2411	2370	2359	2349						
	A		4.7	4.7	4.7	4.7	4.7	4.6						
	W	50.0	5115	6180	7820	10145	11175	12290						
	P		2776	2751	2710	2658	2648	2638						
	A		5.1	5.1	5.0	4.9	4.9	4.9						
	W	55.0		5800	7370	9650	10665	11740						
	P			3111	3061	3003	2993	2972						
	A			5.5	5.4	5.4	5.4	5.4						

Rating Conditions: 11.1K Superheat, 8.3Kb Subcooling, 35 Deg Ambient / Supplied with: Internal Motor Protection, Rubber Mounting Kit
*Amps : MCC = maximum continuous current, RLA = MCC ÷ 1.4 (Copeland advises use RLA for contactor selection)

IMPORTANT – WARNING TO BE CLEARLY UNDERSTOOD PRIOR TO RUNNING ANY SCROLL COMPRESSOR:

- It is important that the SCROLL compressor is charged as quickly as possible by way of LIQUID REFRIGERANT INTO THE LIQUID LINE, this is to avoid insufficient volume of suction gas that would be detrimental to the compressor.
- **DO NOT VAPOUR CHARGE THE SYSTEM!**
- It is recommended the required refrigerant charge is bomb charged into the liquid side of the system.
- Topping up the system can be done carefully on the low side with liquid refrigerant through manifold service gauges.
- The **suction service valve** must NOT BE FULLY CLOSED at any time when the compressor is running.

COPELAND COMPRESSORS

R22 Air Conditioning
Scroll Compressors

Capacities R22

Airefrig Part Number		Condensing Temperature ºC	Evaporating Temperature ºC -10	-5	0	7.2	10	12.8	Displ cm³/r	Motor HP	Type	*Amps	LRA	Kgs
	Refrigeration Capacity - **W**atts													
	Consumption – **P**ower													
	Current – **A**mps													
ZR47K3EPFJ522 - Stub Tubes - Run Capacitor (PSC) - POE Oil	W	45.0	6650	8200	9900	12700	14050	15200	63.32	4.0	PSC	MCC 27.0 RLA 19.3	114.0	32
	P		2780	2770	2770	2800	2820	2850						
	A		14.0	14.0	14.0	14.1	14.2	14.3						
	W	50.0	6250	7700	9350	12050	13350	14500						
	P		3140	3120	3110	3120	3140	3160						
	A		15.4	15.4	15.4	15.4	15.5	15.6						
	W	55.0		7200	8800	11400	12650	13750						
	P			3540	3520	3510	3520	3530						
	A			17.1	17.0	17.0	17.0	17.1						
ZR48K3PFJ522 - Stub Tubes - Run Capacitor (PSC) - Mineral Oil	W	45.0	6910	8155	10060	12830	14070	15390	65.49	4.0	PSC	MCC 27.0 RLA 19.3	114.0	33
	P		2880	2880	2890	2920	2940	2970						
	A		14.8	14.8	14.8	14.9	15.1	15.2						
	W	50.0	6560	7790	9660	12320	13555	14840						
	P		3270	3260	3250	3260	3280	3300						
	A		16.2	16.2	16.1	16.2	16.3	16.4						
	W	55.0		7330	9140	11740	12925	14170						
	P			3710	3690	3680	3690	3700						
	A			17.9	17.8	17.8	17.8	17.9						
ZR48KCETFD522 - Stub Tubes - POE Oil	W	45.0	6910	8155	10060	12830	14070	15390	65.49	4.0	3Ph	MCC 11.0 RLA 7.9	50.0	30
	P		2811	2824	2858	2910	2952	2993						
	A		5.5	5.5	5.5	5.6	5.7	5.7						
	W	50.0	6560	7790	9660	12320	13555	14840						
	P		3185	3183	3198	3241	3272	3303						
	A		5.9	5.9	6.0	6.0	6.0	6.1						
	W	55.0		7330	9140	11740	12925	14170						
	P			3627	3622	3650	3660	3690						
	A			6.6	6.6	6.6	6.6	6.7						
ZR54KCETFD522 - Stub Tubes - POE Oil	W	45.0	7640	9060	11190	14210	15590	17090	75.6	4.50	3Ph	MCC 11.6 RLA 8.3	61.8	36
	P		3180	3211	3250	3284	3305	3315						
	A		6.3	6.3	6.4	6.4	6.5	6.5						
	W	50.0	7240	8640	10710	13670	15020	16450						
	P		3502	3548	3586	3630	3640	3661						
	A		6.7	6.7	6.8	6.9	7.0	7.0						
	W	55.0		8140	10170	13040	14350	15710						
	P			3918	3976	4024	4044	4054						
	A			7.2	7.3	7.4	7.4	7.5						

Rating Conditions: 11.1K Superheat, 8.3Kb Subcooling, 35 Deg Ambient / Supplied with: Internal Motor Protection, Rubber Mounting Kit
*Amps : MCC = maximum continuous current, RLA = MCC ÷ 1.4 (Copeland advises use RLA for contactor selection)

IMPORTANT – WARNING TO BE CLEARLY UNDERSTOOD PRIOR TO RUNNING ANY SCROLL COMPRESSOR:

- It is important that the SCROLL compressor is charged as quickly as possible by way of LIQUID REFRIGERANT INTO THE LIQUID LINE, this is to avoid insufficient volume of suction gas that would be detrimental to the compressor.
- **DO NOT VAPOUR CHARGE THE SYSTEM!**
- It is recommended the required refrigerant charge is bomb charged into the liquid side of the system.
- Topping up the system can be done carefully on the low side with liquid refrigerant through manifold service gauges.
- The **suction service valve** must NOT BE FULLY CLOSED at any time when the compressor is running.

COPELAND COMPRESSORS

R22 Air Conditioning
Scroll Compressors

Capacities R22

Airefrig Part Number		Condensing Temperature ºC	Evaporating Temperature ºC -10	-5	0	7.2	10	12.8	Displ cm³/r	Motor HP	Type	*Amps	LRA	Kgs
			Refrigeration Capacity - **W**atts Consumption – **P**ower Current – **A**mps											
ZR61KCEPFZ522 - Stub Tubes - Run Capacitor (PSC) - POE Oil Optional items for CSR 040000169 relay 014000610 start cap 014004820 run cap	W	45.0	8655	10255	12680	16100	17590	19145	82.59	5.10	PSC	MCC 40.0 RLA 28.6	150.0	41
	P		3842	3515	3578	3721	3814	3939						
	A		17.1	17.2	17.5	18.2	18.5	19.0						
	W	50.0	8225	9770	12145	15500	16965	18485						
	P		3921	3947	3998	4121	4202	4315						
	A		18.9	19.0	19.2	19.7	20.1	20.7						
	W	55.0		9245	11530	14780	16200	17710						
	P			4474	4504	4600	4681	4782						
	A			21.4	21.5	21.9	22.2	22.6						
ZR61KCETFD522 - Stub Tubes - POE Oil	W	45.0	8660	10260	12680	16100	17590	19140	82.59	5.10	3Ph	MCC 14.0 RLA 10.0	65.5	36
	P		3450	3482	3536	3669	3762	3866						
	A		6.8	6.9	6.9	7.2	7.3	7.4						
	W	50.0	8220	9770	12140	15500	16960	18480						
	P		3850	3875	3924	4039	4121	4223						
	A		7.4	7.4	7.4	7.6	7.7	7.9						
	W	55.0		9250	11530	14780	16200	17710						
	P			4363	4390	4479	4550	4641						
	A			8.1	8.1	8.2	8.3	8.5						
ZR68KCEPFJ522 - Stub Tubes - Run Capacitor (PSC) - POE Oil Optional items for CSR 040000169 relay 014000610 start cap 014004820 run cap	W	45.0	9770	11530	14210	18040	19790	21620	96.4	5.75	PSC	MCC 43.0 RLA 30.7	150	44
	P		4136	4141	4167	4240	4282	4344						
	A		20.3	20.3	20.4	20.8	20.9	21.1						
	W	50.0	9280	11000	13620	17370	19060	20860						
	P		4632	4609	4609	4652	4693	4744						
	A		22.3	22.3	22.3	22.5	22.6	22.8						
	W	55.0		10320	12880	16520	18140	19910						
	P			5232	5184	5187	5207	5247						
	A			24.9	24.8	24.8	24.9	25.0						
ZR68KCETFD522 - Stub Tubes - POE Oil	W	45.0	9400	11280	14130	18240	20130	22160	96.4	5.75	3Ph	MCC 14.0 RLA 10.0	67.0	44
	P		4012	4001	4004	4022	4043	4064						
	A		7.4	7.4	7.4	7.5	7.5	7.5						
	W	50.0	8880	10730	13530	17570	19400	21380						
	P		4504	4484	4468	4479	4489	4509						
	A		8.0	8.0	8.0	8.0	8.0	8.1						
	W	55.0		10020	12750	16660	18460	20400						
	P			5037	5012	5015	5015	5035						
	A			8.7	8.7	8.7	8.7	8.7						

Rating Conditions: 11.1K Superheat, 8.3Kb Subcooling, 35 Deg Ambient / Supplied with: Internal Motor Protection, Rubber Mounting Kit
*Amps : MCC = maximum continuous current, RLA = MCC ÷ 1.4 (Copeland advises use RLA for contactor selection)

IMPORTANT – WARNING TO BE CLEARLY UNDERSTOOD PRIOR TO RUNNING ANY SCROLL COMPRESSOR:

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- **DO NOT VAPOUR CHARGE THE SYSTEM!**
- It is recommended the required refrigerant charge is bomb charged into the liquid side of the system.
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- The **suction service valve** must NOT BE FULLY CLOSED at any time when the compressor is running.

COPELAND COMPRESSORS

R22 Air Conditioning
Scroll Compressors

Capacities R22

Airefrig Part Number		Condensing Temperature ºC	Evaporating Temperature ºC -10	-5	0	7.2	10	12.8	Displ cm³/r	Motor HP	Type	*Amps	LRA	Kgs
	Refrigeration Capacity - **W**atts Consumption – **P**ower Current – **A**mps													
ZR72KCETFD522 - Stub Tubes - POE Oil	W	45.0	10040	11990	14940	19170	21090	23120	101.2	6.00	3Ph	MCC 14.0 RLA 10.0	67.0	39
	P		4126	4141	4165	4219	4251	4292						
	A		7.5	7.5	7.5	7.6	7.6	7.7						
	W	50.0	9500	11410	14290	18450	20320	22290						
	P		4627	4634	4647	4683	4703	4734						
ZR72KCETFD523 - Rotalock Valve Kit - POE Oil	A		8.1	8.1	8.1	8.2	8.2	8.2						
	W	55.0		10700	13500	17530	19300	21270						
	P			5227	5227	5237	5257	5278						
	A			8.9	8.9	8.9	8.9	8.9						
ZR81KCETFD522 - Stub Tubes - POE Oil	W	45.0	11050	13240	16590	21260	23290	25400	114.3	6.75	3Ph	MCC 17.0 RLA 12.1	101.0	40
	P		4671	4708	4755	4833	4864	4916						
	A		9.6	9.6	9.7	9.8	9.9	9.9						
ZR81KCETFD523 - Rotalock Valve Kit - POE Oil	W	50.0	10460	12570	15830	20490	22550	24670						
	P		5169	5204	5248	5317	5348	5389						
	A		10.1	10.1	10.2	10.3	10.3	10.4						
ZR81KCTFD523 - Rotalock Valve Kit - Mineral Oil	W	55.0		11770	14900	19480	21500	23620						
	P			5793	5836	5894	5925	5955						
	A			10.8	10.9	11.0	11.1	11.1						
ZR94KCETFD522 - Stub Tubes - POE Oil	W	45.0	13360	15930	19790	25290	27800	30450	131.6	8.00	3Ph	MCC 23.0 RLA 16.4	95.0	59
	P		5602	5604	5620	5685	5737	5809						
	A		10.7	10.7	10.8	10.9	10.9	11.0						
ZR94KCETFD523 - Rotalock Valve Kit - POE Oil	W	50.0	12540	15110	18930	24360	26820	29430						
	P		6237	6224	6222	6258	6299	6350						
	A		11.6	11.6	11.6	11.6	11.7	11.8						
	W	55.0		14010	17780	23130	25530	28110						
	P			6979	6953	6956	6976	7017						
	A			12.5	12.5	12.5	12.5	12.5						
ZR108KCETFD522 - Stub Tubes - POE Oil	W	45.0	15410	18230	22530	28730	31550	34540	152.9	9.00	3Ph	MCC 24.2 RLA 17.3	114.0	64
	P		6365	6404	6464	6579	6641	6724						
	A		12.0	12.0	12.1	12.2	12.3	12.4						
ZR108KCETFD523 - Rotalock Valve Kit - POE Oil	W	50.0	14660	17430	21630	27710	30430	33360						
	P		7030	7055	7099	7178	7229	7290						
	A		12.8	12.8	12.8	12.9	13.0	13.1						
	W	55.0		16400	20490	26370	29040	31880						
	P			7866	7873	7916	7947	7987						
	A			13.9	13.9	13.9	14.0	14.0						
ZR125KCETFD522 - Stub Tubes - POE Oil	W	45.0	17890	21080	25950	32870	35950	39190	171.4	10.00	3Ph	MCC 26.9 RLA 19.2	125.0	64
	P		7400	7457	7524	7639	7691	7774						
	A		13.7	13.7	13.8	14.0	14.0	14.1						
ZR125KCETFD523 - Rotalock Valve Kit - POE Oil	W	50.0	17110	20200	24950	31750	34760	37940						
	P		8165	8216	8275	8354	8405	8456						
	A		14.6	14.6	14.7	14.9	14.9	15.0						
	W	55.0		19080	23680	30310	33270	36370						
	P			9130	9170	9231	9261	9301						
	A			15.9	16.0	16.1	16.1	16.2						

Rating Conditions: 11.1K Superheat, 8.3Kb Subcooling, 35 Deg Ambient / Supplied with: Internal Motor Protection, Rubber Mounting Kit
*Amps : MCC = maximum continuous current, RLA = MCC ÷ 1.4 (Copeland advises use RLA for contactor selection)

COPELAND COMPRESSORS

R22 Air Conditioning
Scroll Compressors

Capacities R22

Airefrig Part Number		Condensing Temperature ºC	Evaporating Temperature ºC -10	-5	0	7.2	10	12.8	Displ cm³/r	Motor HP	Type	*Amps	LRA	Kgs
			Refrigeration Capacity - **W**atts Consumption – **P**ower Current – **A**mps											
ZR144KCETFD522 - Stub Tubes - POE Oil	W	45.0	20500	24230	29850	37800	41280	44910	197.6	12.00	3Ph	MCC 31.0 RLA 22.1	125.0	63
	P		8309	8363	8441	8595	8699	8834						
	A		17.2	17.3	17.4	17.7	17.8	18.1						
ZR144KCETFD523 - Rotalock Valve Kit - POE Oil	W	50.0	19370	22970	28500	36340	39770	43380						
	P		9146	9205	9261	9366	9448	9550						
	A		18.5	18.5	18.6	18.8	18.9	19.1						
	W	55.0		21480	26800	34430	37820	41380						
	P			10194	10244	10313	10363	10444						
	A			20.1	20.2	20.3	20.4	20.5						
ZR160KCETFD523 - Rotalock Valve Kit - POE Oil	W	45.0	21400	26800	33000	42000	46500	50500	209.1	13.00	3Ph	MCC 35.0 RLA 25.0	140.0	65
	P		8900	9000	9150	9350	9400	9400						
	A		17.0	17.1	17.2	17.4	17.5	17.7						
	W	50.0	19200	24800	31000	40000	44500	48000						
	P		10000	10000	10100	10300	10400	10400						
	A		18.5	18.6	18.7	18.8	18.9	19.0						
	W	55.0		22300	28300	37500	42000	45500						
	P			11300	11300	11400	11500	11500						
	A			20.3	20.4	20.5	20.6	20.6						
ZR16M3ETWD961 - Rotalock Valve Kit - Crankcase Heater - Oil Sight Glass - POE Oil	W	45.0	21640	25660	31660	40340	44320	48610	211.9	13.00	3Ph	MCC 38.1 RLA 27.2	167.0	103
	P		9244	9288	9314	9333	9343	9374						
	A		17.0	17.0	16.9	16.9	16.9	17.0						
	W	50.0	20490	24500	30420	38860	42730	46850						
	P		10138	10204	10235	10235	10225	10235						
	A		18.0	18.1	18.0	18.0	18.0	18.0						
	W	55.0		22950	28800	37010	40720	44690						
	P			11263	11326	11324	11313	11303						
	A			19.4	19.4	19.3	19.3	19.3						
ZR190KCETFD523 - Rotalock Valve Kit - POE Oil	W	45.0	25300	31500	39000	50000	55500	60500	249.1	15.00	3PH	MCC 42.0 RLA 30.0	174.0	67
	P		10900	11000	11100	11200	11300	11300						
	A		21.9	22.1	22.2	22.4	22.4	22.5						
	W	50.0	23000	29400	36500	47500	53000	57500						
	P		12100	12200	12300	12400	12500	12500						
	A		23.5	23.7	23.8	24.0	24.0	24.1						
	W	55.0		26700	33500	44500	50000	54500						
	P			13600	13700	13800	13800	13800						
	A			25.5	25.7	25.8	25.9	25.9						
ZR19M3ETWD961 - Rotalock Valve Kit - Crankcase Heater - Oil Sight Glass - POE Oil	W	45.0	26500	31340	38640	49140	53930	59070	250.6	15.00	3Ph	MCC 37.0 RLA 26.4	189.0	119
	P		11084	11123	11133	11151	11172	11203						
	A		20.7	20.8	20.8	20.8	20.9	20.9						
	W	50.0	25300	30100	37270	47510	52120	57080						
	P		12219	12293	12334	12331	12342	12352						
	A		22.0	22.1	22.2	22.2	22.2	22.2						
	W	55.0		28580	35540	45410	49850	54600						
	P			13631	13707	13730	13730	13720						
	A			23.8	23.9	24.0	24.0	24.0						

Rating Conditions: 11.1K Superheat, 8.3Kb Subcooling, 35 Deg Ambient / Supplied with: Internal Motor Protection, Rubber Mounting Kit
*Amps : MCC = maximum continuous current, RLA = MCC ÷ 1.4 (Copeland advises use RLA for contactor selection)

COPELAND COMPRESSORS

R22 Air Conditioning
Scroll Compressors

Capacities R22

Airefrig Part Number		Condensing Temperature ºC	Evaporating Temperature ºC -10	-5	0	7.2	10	12.8	Displ cm³/r	Motor HP	Type	*Amps	LRA	Kgs
	Refrigeration Capacity - **W**atts													
	Consumption – **P**ower													
	Current – **A**mps													
ZR250KCETWD523 - Rotalock Valve Kit - Crankcase Heater - Oil Sight Glass - POE Oil	W	45.0	34500	42000	51000	65000	72000	78000	325.0	20.00	3Ph	MCC 47.0 RLA 33.6	225.0	140
	P		14200	14300	14400	14700	14800	14900						
	A		24.8	25.0	25.2	25.4	25.6	25.7						
	W	50.0	32000	39500	48500	62000	69000	75000						
	P		15800	15900	16000	16200	16300	16300						
	A		26.9	27.1	27.2	27.5	27.6	27.7						
	W	55.0		37000	45500	59000	65500	71500						
	P			17700	17800	17900	18000	18100						
	A			29.5	29.7	29.9	30.0	30.0						
ZR310KCETWD523 - Rotalock Valve Kit - Crankcase Heater - Oil Sight Glass - POE Oil	W	45.0	41000	50000	60000	76500	84500	92000	410.0	25.00	3Ph	MCC 58.0 RLA 41.4	272.0	185
	P		15900	16200	16400	16700	16800	16800						
	A		28.9	29.2	29.5	29.8	30.0	30.1						
	W	50.0	39000	47500	57000	73000	81000	88000						
	P		17700	17900	18100	18400	18500	18600						
	A		31.2	31.5	31.8	32.2	32.3	32.4						
	W	55.0		45000	54000	69500	77500	84000						
	P			19800	20000	20300	20400	20500						
	A			34.1	34.4	34.9	35.0	35.2						
ZR380KCETWD523 - Rotalock Valve Kit - Crankcase Heater - Oil Sight Glass - POE Oil	W	45.0	53500	65500	79000	100000	110500	119000	502.0	30	3Ph	MCC 76.0 RLA 54.3	310	177
	P		20900	21100	21400	22100	22500	22800						
	A		37.2	37.6	38.0	38.9	39.4	39.9						
	W	50.0	50000	61500	75000	96000	105500	114500						
	P		23200	23400	23700	24300	24600	24900						
	A		40.4	40.7	71.1	42.0	42.4	42.9						
	W	55.0		57500	70500	91000	100500	109000						
	P			26000	26300	26800	27100	27400						
	A			44.4	44.7	45.5	45.9	46.3						

Rating Conditions: 11.1K Superheat, 8.3Kb Subcooling, 35 Deg Ambient / Supplied with: Internal Motor Protection, Rubber Mounting Kit
*Amps : MCC = maximum continuous current, RLA = MCC ÷ 1.4 (Copeland advises use RLA for contactor selection)

Prices

Airefrig Part Number	List Price Excl GST
ZR28K3EPFJ522	
ZR36K3EPFJ522	
ZR40K3EPFJ522	
ZR40K3ETFD522	
ZR47K3EPFJ522	
ZR48K3PFJ522	
ZR48KCETFD522	
ZR54KCETFD522	
ZR61KCEPFZ522	P.O.A.
ZR61KCETFD522	
ZR68KCEPFJ522	

Airefrig Part Number	List Price Excl GST
ZR68KCETFD522	
ZR72KCETFD522	
ZR72KCETFD523	
ZR81KCETFD522	
ZR81KCETFD523	
ZR81KCTFD523	
ZR94KCETFD522	
ZR94KCETFD523	
ZR108KCETFD522	
ZR108KCETFD523	
ZR125KCETFD522	

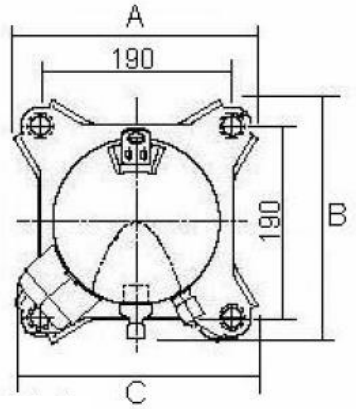
Airefrig Part Number	List Price Excl GST
ZR125KCETFD523	
ZR144KCETFD522	
ZR144KCETFD523	
ZR160KCETFD523	
ZR16M3ETWD961	
ZR190KCETFD523	
ZR19M3ETWD961	
ZR250KCETWD523	
ZR310KCETWD523	
ZR380KCETWD523	

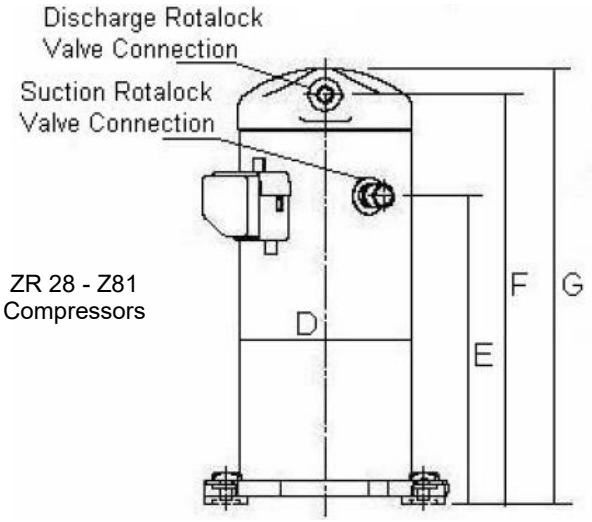
COPELAND COMPRESSORS

R22 Air Conditioning
Scroll Compressors

Dimensions & Specifications

Airefrig Part Number	A	B	C	D	E	F	G	Connections		Oil Charge Litres	Run Capacitor MFD/Volts	Crankcase Heater (wrap around)	Wiring Drg No.
								Suct	Disch				
ZR28K3EPFJ522					264	357	383			1.00	45/370V		
ZR36K3EPFJ522					284	381	406	3/4 stub tube			50/370V		2
ZR40K3EPFJ522											55/370V		
ZR40K3ETFD522	245	236	243	166	296	393	420			1.12	-		4
ZR47K3EPFJ522											60/370V		
ZR48K3PFJ522					313	411	436						2
ZR48KCETFD522									1/2 stub tube	1.24	-	018004701 CH-255 240V 90W	4
ZR54KCETFD522										1.83			
ZR61KCEPFZ522								7/8 stub tube		1.54	50/440V	These C.C.Heaters are Not supplied with compressor	2
ZR61KCETFD522										1.83	-		4
ZR68KCEPFJ522		245				430	458			1.72	50/440V		2
ZR68KCETFD522	241		238	185	317					1.66	-		4
ZR72KCETFD522													
ZR72KCETFD523								7/8 rotalock	1/2 rotalock				
ZR81KCETFD522		249				435	465	7/8 stub tube	3/4 stub tube				
ZR81KCETFD523								7/8 rotalock	3/4 rotalock				





ZR 28 - Z81
Compressors

IMPORTANT – WARNING TO BE CLEARLY UNDERSTOOD PRIOR TO RUNNING ANY SCROLL COMPRESSOR:

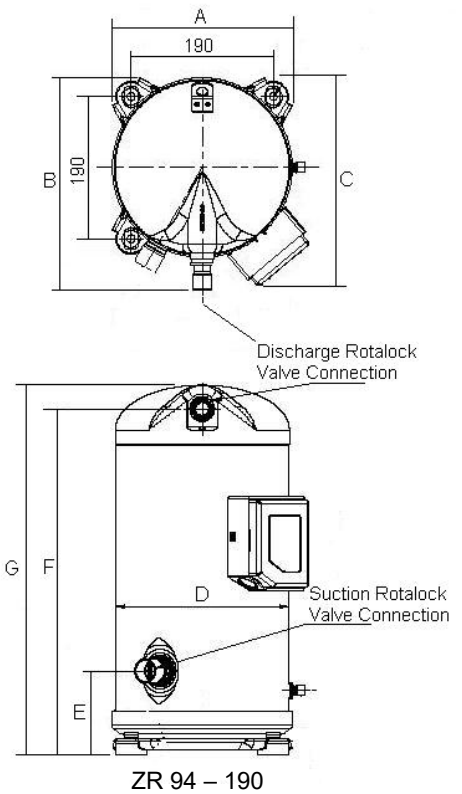
- It is important that the SCROLL compressor is charged as quickly as possible by way of LIQUID REFRIGERANT INTO THE LIQUID LINE, this is to avoid insufficient volume of suction gas that would be detrimental to the compressor.
- **DO NOT VAPOUR CHARGE THE SYSTEM!**
- It is recommended the required refrigerant charge is bomb charged into the liquid side of the system.
- Topping up the system can be done carefully on the low side with liquid refrigerant through manifold service gauges.
- The **suction service valve** must NOT BE FULLY CLOSED at any time when the compressor is running.

COPELAND COMPRESSORS

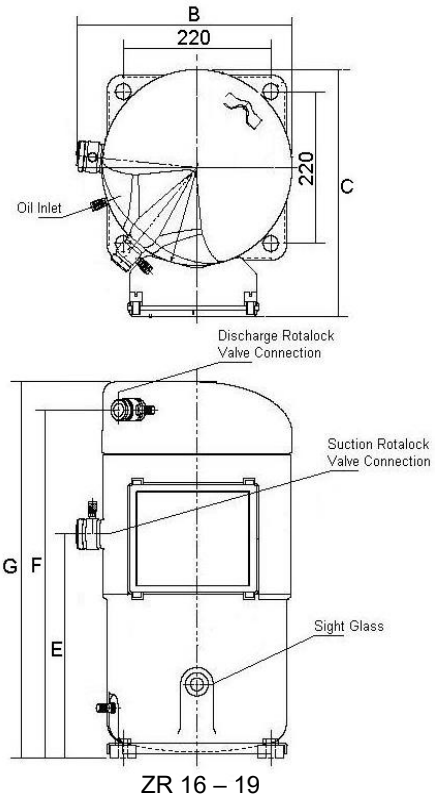
R22 Air Conditioning - Scroll Compressors

Dimensions & Specifications

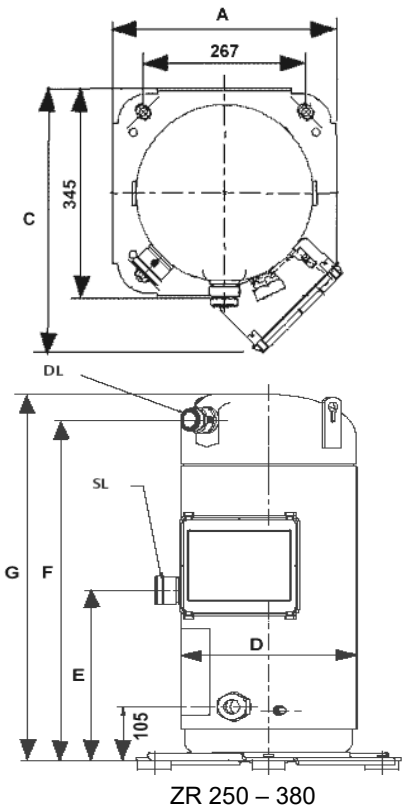
Airefrig Part Number	A	B	C	D	E	F	G	Connections		Oil Charge Litres	Crankcase Heater (wrap around)	Wiring Drg No.
								Suction	Discharge			
ZR94KCETFD522	243	285	279	232	113	463	495	1 1/8 stub tube	3/4 stub tube	2.39	*018004701 CH-255 240V 90W* *These C.C.Heaters are Not supplied with compressor*	4
ZR94KCETFD523								1 1/8 rotalock	3/4 rotalock			
ZR108KCETFD522					141	520	552	1 3/8 stub tube	7/8 stub tube	3.14		
ZR108KCETFD523								1 3/8 rotalock	7/8 rotalock			
ZR125KCETFD522								1 3/8 stub tube	7/8 stub tube			
ZR125KCETFD523								1 3/8 rotalock	7/8 rotalock			
ZR144KCETFD522								1 3/8 stub tube	7/8 stub tube			
ZR144KCETFD523								1 3/8 rotalock	7/8 rotalock			
ZR160KCETFD523					174	553	585					-
ZR190KCETFD523												
ZR16M3ETWD961	-	319	357	283	324	511	551			4.05	018003600 CH-202 240V 70W Supplied with compressor	
ZR19M3ETWD961	-	324				552	598	1 5/8 rotalock	1 1/8 rotalock			
ZR250KCETWD523	386	-	432	289	333	667	716		1 3/8 rotalock	4.67	018005604 240V 120W Supplied with comp	
ZR310KCETWD523	386	-	449	334	375	660				5.91	018006805 240V 150W Supplied with compressor	
ZR380KCETWD523	367	-								6.30		



ZR 94 – 190



ZR 16 – 19



ZR 250 – 380

COPELAND COMPRESSORS

R410A Air Conditioning
Scroll Compressors

Capacities R410A

Airefrig Part Number		Refrigeration Capacity - **W**atts Consumption – **P**ower Current – **A**mps											
		Condensing Temperature ºC	Evaporating Temperature ºC						Displ cm³/r	Motor				Kgs
			-10	-5	0	7.2	10	12		HP	Type	*Amps	LRA	
ZP57K3ETFD522 - Stub Tubes - POE Oil	W	45.0	8200	10100	12200	15700	17400	18600	53.0	4.75	3Ph	MCC 15.0 RLA 10.7	74.0	42
	P		3820	3760	3700	3630	3600	3580						
	A		7.1	7.1	7	6.9	6.9	6.9						
	W	50.0	7500	9350	11400	14700	16300	17500						
	P		4370	4290	4220	4120	4090	4060						
	A		7.8	7.7	7.6	7.5	7.5	7.4						
	W	55.0		10500	13700	15200	16300	8500						
	P			4800	4680	4630	4600	4890						
	A			8.3	8.2	8.1	8.1	8.4						
ZP61KCETFD522 - Stub Tubes - POE Oil	W	45.0	8350	10500	12850	16700	18600	19900	57.0	5.0	3Ph	MCC 15.2 RLA 10.9	64.0	41
	P		4110	4040	3960	3840	3780	3730						
	A		7.3	7.2	7.1	6.9	6.9	6.8						
	W	50.0	7500	9600	11900	15600	17400	18700						
	P		4600	4520	4430	4300	4230	4180						
	A		8.0	7.9	7.8	7.6	7.5	7.5						
	W	55.0		8600	10850	14450	16200	17400						
	P			5050	4970	4820	4750	4700						
	A			8.7	8.6	8.4	8.3	8.2						
ZP67KCETFD522 - Stub Tubes - POE Oil	W	45.0	9450	11650	14200	18200	20100	21500	62.0	5.5	3Ph	MCC 16.5 RLA 11.8	74.0	40
	P		4200	4200	4200	4200	4200	4200						
	A		7.7	7.7	7.7	7.7	7.7	7.7						
	W	50.0	8600	10750	13200	17100	18900	20200						
	P		4710	4710	4710	4700	4700	4710						
	A		8.4	8.4	8.4	8.4	8.4	8.4						
	W	55.0		9800	12150	15800	17600	18800						
	P			5300	5300	5300	5250	5250						
	A			9.2	9.2	9.2	9.2	9.2						
ZP72KCETFD522 - Stub Tubes - POE Oil	W	45.0	10300	12550	15100	19400	21500	22900	66.0	6.0	3Ph	MCC 17.5 RLA 12.5	75.0	40
	P		4520	4530	4540	4550	4550	4560						
	A		8.1	8.1	8.2	8.2	8.2	8.2						
	W	50.0	9550	11650	14100	18100	20100	21500						
	P		5100	5100	5100	5100	5100	5100						
	A		9.0	9.0	9.0	9.0	9.0	9.0						
	W	55.0		10750	13050	16800	18700	20000						
	P			5750	5750	5750	5750	5750						
	A			9.9	9.9	9.9	9.9	10.0						

Rating Conditions: 11.1K Superheat, 8.3Kb Subcooling, 35 Deg Ambient / Supplied with: Internal Motor Protection, Rubber Mounting Kit.
*Amps : MCC = maximum continuous current, RLA = MCC ÷ 1.4 (Copeland advises use RLA for contactor selection)

IMPORTANT – WARNING TO BE CLEARLY UNDERSTOOD PRIOR TO RUNNING ANY SCROLL COMPRESSOR:

- It is important that the SCROLL compressor is charged as quickly as possible by way of LIQUID REFRIGERANT INTO THE LIQUID LINE, this is to avoid insufficient volume of suction gas that would be detrimental to the compressor.
- **DO NOT VAPOUR CHARGE THE SYSTEM!**
- It is recommended the required refrigerant charge is bomb charged into the liquid side of the system.
- Topping up the system can be done carefully on the low side with liquid refrigerant through manifold service gauges.
- The **suction service valve** must NOT BE FULLY CLOSED at any time when the compressor is running.

COPELAND COMPRESSORS

R410A Air Conditioning
Scroll Compressors

Capacities R410A

Airefrig Part Number		Condensing Temperature ºC	Evaporating Temperature ºC -10	-5	0	7.2	10	12	Displ cm³/r	Motor HP	Type	*Amps	LRA	Kgs
	Refrigeration Capacity - **W**atts Consumption – **P**ower Current – **A**mps													
ZP83KCETFD522 - Stub Tubes - POE Oil	W	45.0	9500	11800	14450	21000	22500	24900	76.0	7.0	3Ph	MCC 19.0 RLA 13.6	101.0	40
	P		5050	5050	5100	5150	5150	5200						
	A		9.9	9.9	10.0	10.0	10.1	10.1						
	W	50.0	10900	13400	16300	21100	23400	25100						
	P		5750	5750	5750	5800	5800	5850						
	A		10.8	10.8	10.8	10.9	10.9	11.0						
	W	55.0		12300	15100	18200	21900	23500						
	P			6500	6500	6500	6500	6550						
	A			11.8	11.8	11.8	11.9	11.9						
ZP103KCETFD522 - Stub Tubes - POE Oil	W	45.0	14800	18300	22200	28300	31500	33500	95.0	9.0	3Ph	MCC 26.0 RLA 18.6	111.0	62
	P		6400	6300	6300	6350	6400	6450						
	A		12.6	12.5	12.5	12.5	12.6	12.7						
	W	50.0	13500	16900	20700	26600	29400	31500						
	P		7250	7150	7050	7050	7100	7150						
	A		13.6	13.5	13.4	13.4	13.5	13.5						
	W	55.0		15400	19100	24800	27500	29400						
	P			8100	8000	7900	7950	7950						
	A			14.7	14.6	14.5	14.5	14.6						
ZP120KCETFD522 - Stub Tubes - POE Oil	W	45.0	17350	21400	26000	33400	36900	39400	111.0	10.0	3Ph	MCC 28.0 RLA 20.0	118.0	62
	P		7410	7360	7320	7290	7300	7320						
	A		14.15	14.05	14.0	14.0	14.0	14.0						
	W	50.0	15850	19750	24100	31200	34600	37000						
	P		8390	8320	8260	8190	8180	8180						
	A		15.5	15.4	15.35	15.25	15.25	15.25						
	W	55.0		17950	22100	28900	32100	34400						
	P			9430	9340	9240	9200	9190						
	A			17.0	16.9	16.75	16.7	16.7						
ZP182KCETFD522 - Stub Tubes - POE Oil	W	45.0	26600	32500	39000	49500	54500	58500	164.0	15.0	3Ph	MCC 40.0 RLA 28.6	174.0	67
	P		10800	10900	11000	11100	11200	11200						
	A		22.4	22.5	22.7	22.9	23.0	23.0						
	W	50.0	24700	30000	36500	46500	51500	55000						
	P		12000	12100	12100	12300	12400	12400						
	A		24.1	24.2	24.4	24.5	24.6	24.7						
	W	55.0		27800	33500	43000	47500	51000						
	P			13500	13500	13600	13700	13700						
	A			26.3	26.4	26.5	26.6	26.6						

Rating Conditions: 11.1K Superheat, 8.3Kb Subcooling, 35 Deg Ambient / Supplied with: Internal Motor Protection, Rubber Mounting Kit
*Amps : MCC = maximum continuous current, RLA = MCC ÷ 1.4 (Copeland advises use RLA for contactor selection)

Prices

Airefrig Part Number	List Price Excl GST
ZP57K3ETFD522	
ZP61KCETFD522	
ZP67KCETFD522	

Airefrig Part Number	List Price Excl GST
ZP72KCETFD522	
ZP83KCETFD522	
ZP103KCETFD522	

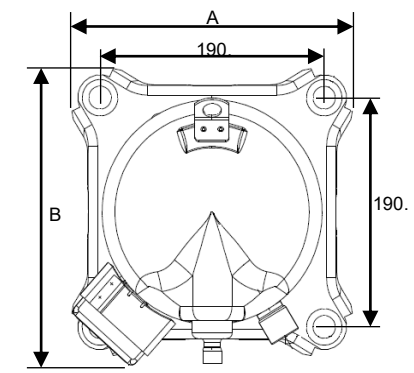
Airefrig Part Number	List Price Excl GST
ZP120KCETFD522	
ZP182KCETFD522	

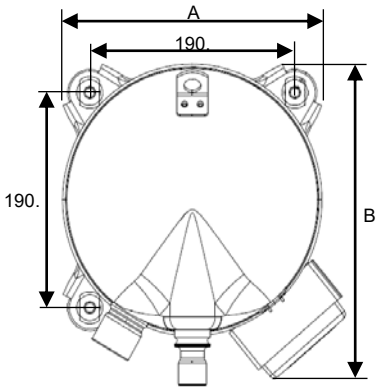
COPELAND COMPRESSORS

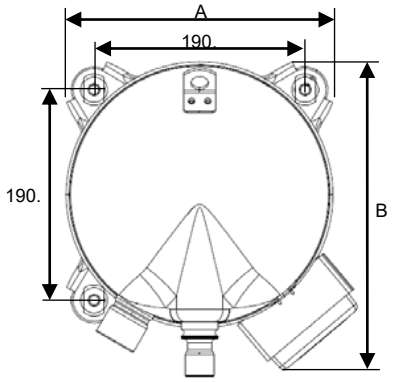
R410A Air Conditioning
Scroll Compressors

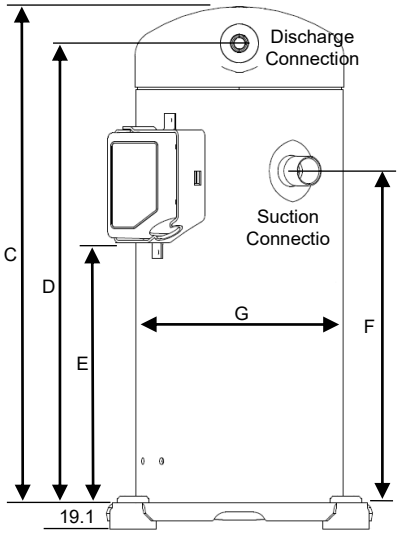
Dimensions & Specifications

Airefrig Part Number	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	Connections		Oil Charge Litres	Crankcase Heater (wrap around)	Wiring Drg No.
								Suct	Disch			
ZP57K3ETFD522	245	250	440 to 446	410	231 to 237	298	186	7/8 stub tube	1/2 stub tube	2.0	*018005700 (CH-280) 240V 70W Not supplied with compressor*	4
ZP61KCETFD522												
ZP67KCETFD522												
ZP72KCETFD522												
ZP83KCETFD522												
ZP103KCETFD522	242	279	533	501	243	122	232	1-3/8 stub tube	7/8 stub tube	3.0	*018004701 (CH-255) 240V 90W Not supplied with compressor*	
ZP120KCETFD522												
ZP182KCETFD522			552	520	261	140						

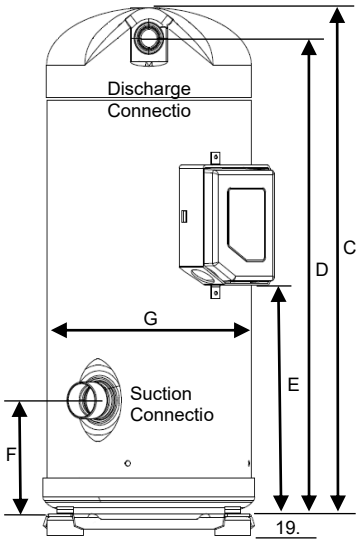




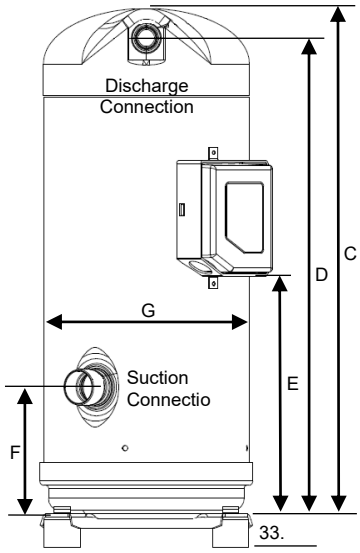




ZP57 to ZP83



ZP103 to



ZP182

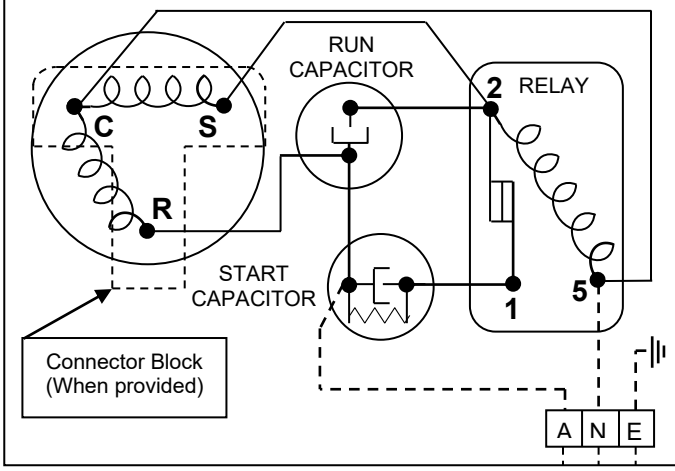
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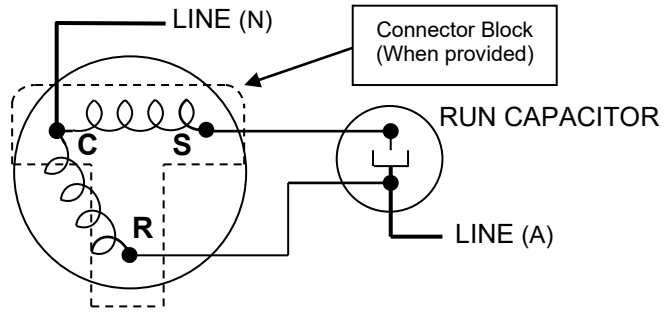
Electrical Details

Airefrig Part Number	Resistance (+/- 7%) OHMS	Drawing Number
CS Series		
CS10K6EPFJ-551 / 55R CS10K6EPFJ-595	Start 3.79 / Run 1.39	1
CS10K6EPFJ-583 / 58R		
CS12K6EPFJ-55R	Start 3.79 / Run 1.39	
CS14K6EPFJ-551 / 55R CS14K6EPFJ-595	Start 2.64 / Run 1.40	
CS14K6EPFJ-523 / 525 CS14K6EPFJ-545		
CS14K6ETFD-551 / 55R CS14K6ETFD-595	Line to Line 6.38	3
CS18K6EPFJ-551 / 55R CS18K6EPFJ-595	Start 2.98 / Run 1.14	1
CS18K6EPFJ-235 / 525		
CS18K6ETFD-551 / 55R CS18K6ETFD-595	Line to Line 4.95	3
CS20K6ETFD-551 / 55R CS20K6ETFD-595	Line to Line 4.11	
CS27K6ETFD-551 / 55R CS27K6ETFD-595	Line to Line 3.96	
CS33K6ETFD-551 / 55R CS33K6ETFD-595	Line to Line 3.41	
CR – BR Series		
CR18KQPFZ-267BM / RM	Start 5.46 / Run 1.68	1
CR18K6PFJ595	Start 3.62 / Run 1.74	
CR24KQPFT-280BB	Start 5.01 / Run 1.24	2
CR24KQPFT-267BM / RM		1
CR24K6PFJ595	Start 2.65 / Run 1.35	
CR24KQTFD-267BM / RM	Line to Line 7.4	3
CR24K6TFD-595	Line to Line 6.39	
CRD10200TFD-561	Line to Line 7.34	4
CREQ0225PFJ-501	Start 3.42 / Run 1.46	2
CR28KQPFZ-280BM	Start 3.84 / Run 1.04	
CR32K6TFD595	Line to Line 4.5	3
CR33KQTFD-267BM / RM	Line to Line 5.05	
CR37KQTFD-267BM / RM	Line to Line 4.25	
CR38K6TFD595	Line to Line 3.78	
CR41KQTFD-267BM / RM	Line to Line 4.06	
CR42K6TFD595	Line to Line 3.45	
CR47KQTFD-267BM / RM CR47KQTFD595	Line to Line 3.22	
CR53KQTFD-267BM / RM CR53KQTFD595	Line to Line 2.77	
CRN50500TFD551 / 55R CRNQ0500TFD595	Line to Line 2.47	
BRE40750TFD-551	Line to Line 1.50	4
BRG20900TFD-551	Line to Line 1.35	
BRH21000TFD-551	Line to Line 1.44	
BRK21200TFD-551	Line to Line 0.98	

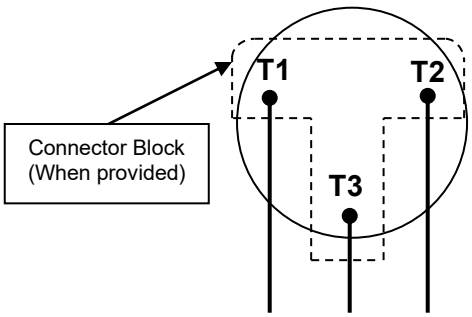
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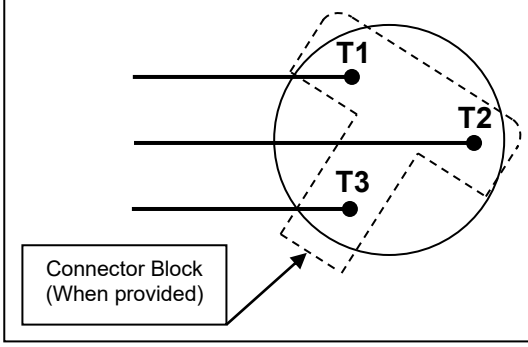
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DRAWING No. 3 (3 Phase)



DRAWING No. 4 (3 Phase)

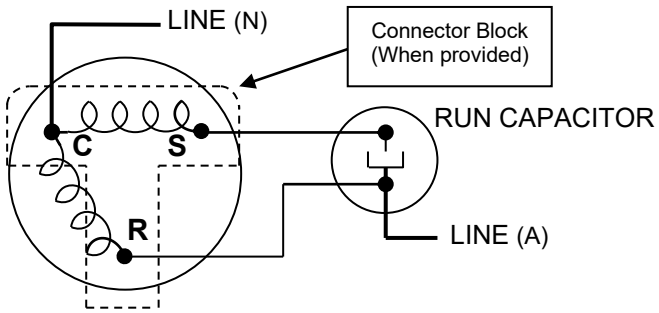


COPELAND COMPRESSORS

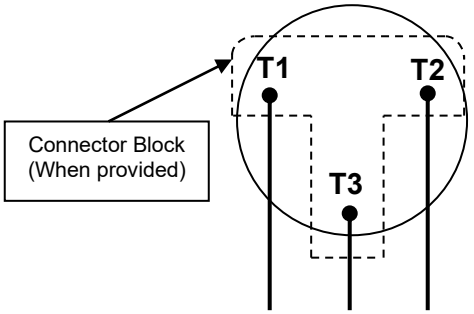
Electrical Details

Airefrig Part Number	Resistance (+/- 7%) OHMS	Drawing Number
ZB Series		
ZB45KCETFD-551	Line to Line 2.27	4
ZB58KQETFD-551	Line to Line 1.799	
ZB76KQETFD-551	Line to Line 1.227	
ZR Series		
ZR28K3EPFJ522	Start 2.23 / Run 1.20	2
ZR36K3EPFJ-522	Start 1.84 / Run 0.89	
ZR40K3EPFJ-522	Start 1.81 / Run 0.75	
ZR40K3ETFD-522	Line to Line 4.03	4
ZR45K3PFJ522 ZR47K3EPFJ-522 ZR48K3PFJ-522	Start 1.67 / Run 0.59	2
ZR48KCETFD-522	Line to Line 3.88	4
ZR54KCETFD-522	Line to Line 2.90	
ZR61KCETFD-522	Line to Line 2.75	
ZR61KCEPFZ-522	Start 1.89 / Run 0.41	2
ZR68KCEPFJ-522	Start 1.88 / Run 0.41	
ZR68KCETFD-522	Line to Line 2.27	4
ZR72KCETFD-522 / 523	Line to Line 2.27	
ZR81KCETFD-522 / 523	Line to Line 1.79	
ZR94KCETFD-523	Line to Line 1.59	
ZR108KCETFD-522 / 523	Line to Line 1.36	
ZR125KCETFD-523	Line to Line 1.23	
ZR144KCETFD-523	Line to Line 1.23	
ZR160KCETFD-523	Line to Line 1.09	
ZR16M3ETWD-551 / 961	Line to Line 0.83	
ZR190KCETFD-523	Line to Line 0.83	
ZR19M3ETWD-551 / 961	Line to Line 0.72	-
ZR250KCETWD-523	Line to Line 0.63	
ZR310KCETWD-523	Line to Line 0.51	
ZR380KCETWD-523	Line to Line 0.35	
ZP Series		
ZP57K3ETFD-522	Line to Line 2.47	4
ZP61KCETFD-522	Line to Line 2.80	
ZP67KCETFD-522	Line to Line 2.47	
ZP72KCETFD-522	Line to Line 2.47	
ZP83KCETFD-522	Line to Line 1.79	
ZP103KCETFD-522	Line to Line 1.36	
ZP120KCETFD-522	Line to Line 1.24	
ZP182KCETFD-522	Line to Line 0.83	

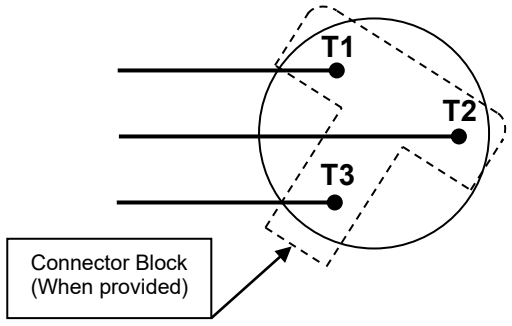
DRAWING No. 2 (PSC)



DRAWING No. 3 (3 Phase)



DRAWING No. 4 (3 Phase)



COPELAND COMPRESSORS

Selection Guide

3 Phase Contactors, Thermal & Electronic Overloads

Airefrig Part Number	3Ph Contactor	3Ph Thermal Overload	3Ph Electronic Overload *includes phase loss & phase imbalance protection*
CR24KQTFD267RM	MC9B240V (AC-3 Rating 9A)	MT323K4 (2.5 - 4.0 amps)	GMP223P5A (1.0 - 5.0 amps)
CRD10200TFD561	MC9B240V (AC-3 Rating 9A)	MT323K4 (2.5 - 4.0 amps)	GMP223P5A (1.0 - 5.0 amps)
CR32K6TFD595	MC9B240V (AC-3 Rating 9A)	MT323K6 (4.0 - 6.0 amps)	GMP223P22A (4.4 - 22.0 amps)
CR33KQTFD267RM	MC9B240V (AC-3 Rating 9A)	MT323K6 (4.0 - 6.0 amps)	GMP223P22A (4.4 - 22.0 amps)
CR37KQTFD267RM	MC9B240V (AC-3 Rating 9A)	MT323K8 (5.0 - 8.0 amps)	GMP223P22A (4.4 - 22.0 amps)
CR38K6TFD595	MC9B240V (AC-3 Rating 9A)	MT323K8 (5.0 - 8.0 amps)	GMP223P22A (4.4 - 22.0 amps)
CR41KQTFD267RM	MC12B240V (AC-3 Rating 12A)	MT323K9 (6.0 - 9.0 amps)	GMP223P22A (4.4 - 22.0 amps)
CR42K6TFD595	MC12B240V (AC-3 Rating 12A)	MT323K9 (6.0 - 9.0 amps)	GMP223P22A (4.4 - 22.0 amps)
CR47KQTFD267RM	MC12B240V (AC-3 Rating 12A)	MT323K10 (7.0 - 10.0 amps)	GMP223P22A (4.4 - 22.0 amps)
CR47KQTFD595	MC12B240V (AC-3 Rating 12A)	MT323K10 (7.0 - 10.0 amps)	GMP223P22A (4.4 - 22.0 amps)
CR53KQTFD595	MC12B240V (AC-3 Rating 12A)	MT323K10 (7.0 - 10.0 amps)	GMP223P22A (4.4 - 22.0 amps)
CRN50500TFD55R	MC12B240V (AC-3 Rating 12A)	MT323K13 (9.0 - 13.0 amps)	GMP223P22A (4.4 - 22.0 amps)
CRNQ0500TFD595	MC12B240V (AC-3 Rating 12A)	MT323K13 (9.0 - 13.0 amps)	GMP223P22A (4.4 - 22.0 amps)
CS14K6ETFD55R	MC9B240V (AC-3 Rating 9A)	MT323K6 (4.0 - 6.0 amps)	GMP223P22A (4.4 - 22.0 amps)
CS14K6ETFD595	MC9B240V (AC-3 Rating 9A)	MT323K6 (4.0 - 6.0 amps)	GMP223P22A (4.4 - 22.0 amps)
CS18K6ETFD55R	MC9B240V (AC-3 Rating 9A)	MT323K8 (5.0 - 8.0 amps)	GMP223P22A (4.4 - 22.0 amps)
CS18K6ETFD595	MC9B240V (AC-3 Rating 9A)	MT323K8 (5.0 - 8.0 amps)	GMP223P22A (4.4 - 22.0 amps)
CS20K6ETFD595	MC9B240V (AC-3 Rating 9A)	MT323K8 (5.0 - 8.0 amps)	GMP223P22A (4.4 - 22.0 amps)
CS27K6ETFD595	MC12B240V (AC-3 Rating 12A)	MT323K9 (6.0 - 9.0 amps)	GMP223P22A (4.4 - 22.0 amps)
CS33K6ETFD595	MC12B240V (AC-3 Rating 12A)	MT323K13 (9.0 - 13.0 amps)	GMP223P22A (4.4 - 22.0 amps)
ZP57K3ETFD522	MC12B240V (AC-3 Rating 12A)	MT323K10 (7.0 - 10.0 amps)	GMP223P22A (4.4 - 22.0 amps)
ZP61KCETFD522	MC12B240V (AC-3 Rating 12A)	MT323K10 (7.0 - 10.0 amps)	GMP223P22A (4.4 - 22.0 amps)
ZP67KCETFD522	MC18B240V (AC-3 Rating 18A)	MT323K13 (9.0 - 13.0 amps)	GMP223P22A (4.4 - 22.0 amps)
ZP72KCETFD522	MC18B240V (AC-3 Rating 18A)	MT323K13 (9.0 - 13.0 amps)	GMP223P22A (4.4 - 22.0 amps)
ZP83KCETFD522	MC18B240V (AC-3 Rating 18A)	MT323K18 (12.0 - 18.0 amps)	GMP223P22A (4.4 - 22.0 amps)
ZP103KCETFD522	MC18B240V (AC-3 Rating 18A)	MT323K18 (12.0 - 18.0 amps)	GMP223P22A (4.4 - 22.0 amps)
ZP120KCETFD522	MC22B240V (AC-3 Rating 22A)	MT323K22 (16.0 - 22.0 amps)	GMP223P22A (4.4 - 22.0 amps)
ZP182KCETFD522	MC32A240V (AC-3 Rating 32A)	MT323K32 (22.0 - 32.0 amps)	GMP403P40A (8.0 - 40.0 amps)

COPELAND COMPRESSORS

Selection Guide
Contactors, Thermal Overloads & Fuses

Airefrig Part Number	3Ph Contactor	3Ph Thermal Overload	3Ph Electronic Overload *includes phase loss & phase imbalance protection*
ZR40K3ETFD522	MC9B240V (AC-3 Rating 9A)	MT323K8 (5.0 - 8.0 amps)	GMP223P22A (4.4 - 22.0 amps)
ZR48KCETFD522	MC12B240V (AC-3 Rating 12A)	MT323K9 (6.0 - 9.0 amps)	GMP223P22A (4.4 - 22.0 amps)
ZR54KCETFD522	MC12B240V (AC-3 Rating 12A)	MT323K9 (6.0 - 9.0 amps)	GMP223P22A (4.4 - 22.0 amps)
ZR61KCETFD522	MC12B240V (AC-3 Rating 12A)	MT323K13 (9.0 - 13.0 amps)	GMP223P22A (4.4 - 22.0 amps)
ZR68KCETFD522	MC12B240V (AC-3 Rating 12A)	MT323K13 (9.0 - 13.0 amps)	GMP223P22A (4.4 - 22.0 amps)
ZR72KCETFD522 / 523	MC12B240V (AC-3 Rating 12A)	MT323K13 (9.0 - 13.0 amps)	GMP223P22A (4.4 - 22.0 amps)
ZR81KCETFD522 / 523	MC18B240V (AC-3 Rating 18A)	MT323K18 (12.0 - 18.0 amps)	GMP223P22A (4.4 - 22.0 amps)
ZR94KCETFD522 / 523	MC18B240V (AC-3 Rating 18A)	MT323K18 (12.0 - 18.0 amps)	GMP223P22A (4.4 - 22.0 amps)
ZR108KCETFD522 / 523	MC22B240V (AC-3 Rating 22A)	MT323K22 (16.0 - 22.0 amps)	GMP223P22A (4.4 - 22.0 amps)
ZR125KCETFD522 / 523	MC32A240V (AC-3 Rating 32A)	MT323K22 (16.0 - 22.0 amps)	GMP403P40A (8.0 - 40.0 amps)
ZR144KCETFD522 / 523	MC32A240V (AC-3 Rating 32A)	MT323K25 (18.0 - 25.0 amps)	GMP403P40A (8.0 - 40.0 amps)
ZR160KCETFD523	MC32A240V (AC-3 Rating 32A)	MT323K25 (18.0 - 25.0 amps)	GMP403P40A (8.0 - 40.0 amps)
ZR16M3ETWD961	MC32A240V (AC-3 Rating 32A)	MT323K25 (18.0 - 25.0 amps)	GMP403P40A (8.0 - 40.0 amps)
ZR190KCETFD523	MC40A240V (AC-3 Rating 40A)	MT323K32 (22.0 - 32.0 amps)	GMP403P40A (8.0 - 40.0 amps)
ZR19M3ETWD961	MC40A240V (AC-3 Rating 40A)	MT323K32 (22.0 - 32.0 amps)	GMP403P40A (8.0 - 40.0 amps)
ZR250KCETWD523	MC50A240V (AC-3 Rating 50A)	MT633K50 (34.0 - 50.0 amps)	-
ZR310KCETWD523	MC50A240V (AC-3 Rating 50A)	MT633K50 (34.0 - 50.0 amps)	-
ZR380KCETWD523	MC65A240V (AC-3 Rating 65A)	MT633K65 (45.0 - 65.0 amps)	-



MC22B240V



MT323K1



GMP223P22A

COPELAND COMPRESSORS

Spare Parts

Airefrig Part Number	Relay	Start Capacitor	Run Capacitor	Crankcase Heater	Suction Service Valve	Discharge Service Valve	Suction Valve Gasket	Discharge Valve Gasket
CS Series								
CS10K6EPFJ551 CS10K6EPFJ55R	040000154 (040-0166-14)	014003602 (014-0061-26) 130-156MFD 250V	014004810 (014-0064-06) 30MFD 370V	918003105 40Watt 240/480/600V Insertion Type	2605122030 1-1/4" 12UNF 3/4ODF	2605061620 1" 14UNF 3/8ODF	020002802	020002800
CS10K6EPFJ595				018008800 40Watt 240V Wrap Around				
CS10K6EPFJ583 CS10K6EPFJ 58R				918003105 40Watt 240/480/600V Insertion Type		Stub Tube		Stub Tube
CS12K6EPFJ551 CS12K6EPFJ 55R						2605061620 1" 14UNF 3/8ODF		020002800
CS14K6EPFJ551 CS14K6EPFJ 55R	040000160 (040-0166-19)	014000851 (014-0061-04) 145-174MFD 220V	014003711 (014-0064-07) 35MFD 370V	918003105 40Watt 240/480/600V Insertion Type				
CS14K6EPFJ595				018008800 40Watt 240V Wrap Around				
CS14K6EPFJ235 CS14K6EPFJ525				018003702 CH-213 240V 58W Wrap Around	Stub Tubes	Stub Tubes	Stub Tubes	Stub Tubes
CS14K6EPFJ545				018008800 40Watt 240V Wrap Around				
CS14K6ETFD551 CS14K6ETFD 55R	-	-	-	918003105 40Watt 240/480/600V Insertion Type	2605122030 1-1/4" 12UNF 3/4ODF	2605061620 1" 14UNF 3/8ODF	020002802	020002800
CS14K6ETFD595				018008800 40Watt 240V Wrap Around				
CS18K6EPFJ551 CS18K6EPFJ55R	040000155 (040-0166-15)	014003604 (014-0061-28) 145-174MFD 250V	014003736 (014-0054-36) 45MFD 370V	918003105 40Watt 240/480/600V Insertion Type				
CS18K6EPFJ 595				018008800 40Watt 240V Wrap Around				
CS18K6EPFJ235 CS18K6EPFJ525				018003702 CH-213 240V 58W Wrap Around	Stub Tubes	Stub Tubes	Stub Tubes	Stub Tubes
CS18K6ETFD551 CS18K6ETFD55R	-	-	-	918003105 40Watt 240/480/600V Insertion Type	2605122030 1-1/4" 12UNF 3/4ODF	2605081620 1" 14UNF 1/2ODF	020002802	020002800
CS18K6ETFD595				018008800 40Watt 240V Wrap Around				
CS20K6ETFD551 CS20K6ETFD55R				918003105 40Watt 240/480/600V Insertion Type				
CS20K6ETFD595				018008800 40Watt 240V Wrap Around				
CS20K6EPFZ235 CS20K6EPFZ525	040000154 (040-0166-14)	014000609 (014-0006-14) 216-259MFD 330V	014003712 (014-0064-08) 40MFD 370V	018003702 CH-213 240V 58W Wrap Around	Stub Tubes	Stub Tubes	Stub Tubes	Stub Tubes
CS20K6EPFZ545				018008800 40Watt 240V Wrap Around				
CS27K6ETFD551 CS27K6ETFD55R	-	-	-	918003105 40Watt 240/480/600V Insertion Type	2605122030 1-1/4" 12UNF 3/4ODF	2605081620 1" 14UNF 1/2ODF	020002802	020002800
CS27K6ETFD595				018008800 40Watt 240V Wrap Around				
CS33K6ETFD551 CS33K6ETFD55R				918003105 40Watt 240/480/600V Insertion Type	2605142030 1-1/4" 12UNF 7/8ODF			
CS33K6ETFD595				018008800 40Watt 240V Wrap Around				

COPELAND COMPRESSORS

Spare Parts (cont'd)

Airefrig Part Number	Relay	Start Capacitor	Run Capacitor	Crankcase Heater	Suction Service Valve	Discharge Service Valve	Suction Valve Gasket	Discharge Valve Gasket
CR – BR Series								
CR18KQPFZ267BM CR18KQPFZ267RM	040000155 (040-0166-15)	014000611 (014-0006-16) 145-174MFD 330V	014004815 (014-0064-11) 25MFD 440V	018003702 CH-213 240V 58W Wrap Around	2605102030 1-1/4" 12UNF 5/8ODF	2605061620 1" 14UNF 3/8ODF	020002802	020002800
CR18K6PFJ595		014006127 88-106MFD 330V		018008800 40Watt 240V Wrap Around				
CRD10200TFD561	-	-	-	018003702 CH-213 240V 58W Wrap Around				
CR24KQPFT280BB- PSC (supplied with run capacitor only)			35MFD 35MFD 440V		Stub Tubes	Stub Tubes	Stub Tubes	Stub Tubes
CR24KQPFT267BM CR24KQPFT267RM	040000155 (040-0166-15)	014003604 (014-0061-28) 145-174MFD 250V			2605102030 1-1/4" 12UNF 5/8ODF	2605061620 1" 14UNF 3/8ODF	020002802	020002800
CR24K6PFJ595		014006121 108-130MFD 250V		018008800 40Watt 240V Wrap Around				
CR24KQTFD267RM CR24KQTFD267RM	-	-	-	018003702 CH-213 240V 58W Wrap Around				
CR28KQPFZ280BM-PSC (supplied with run capacitor only)			40MFD 40MFD 440V		Stub Tubes	Stub Tubes	Stub Tubes	Stub Tubes
CR32K6TFD595			-	018008800 40Watt 240V Wrap Around	2605122030 1-1/4" 12UNF 3/4ODF	2605061620 1" 14UNF 3/8ODF	020002802	020002800
CR33KQTFD267RM CR33KQTFD267RM				918003105 40Watt 240/480/600V Insertion Type				
CR37KQTFD267BM CR37KQTFD267RM								
CR38K6TFD595				018008800 40Watt 240V Wrap Around				
CR41KQTFD267BM CR41KQTFD267RM				918003105 40Watt 240/480/600V Insertion Type				
CR42K6TFD595				018008800 40Watt 240V Wrap Around				
CR47KQTFD267BM CR47KQTFD267RM				918003105 40Watt 240/480/600V Insertion Type	2605142030 1-1/4" 12UNF 7/8ODF	2605081620 1" 14UNF 1/2ODF		
CR47KQTFD595				018008800 40Watt 240V Wrap Around				
CR53KQTFD267BM CR53KQTFD267RM				918003105 40Watt 240/480/600V Insertion Type				
CR53KQTFD595				018008800 40Watt 240V Wrap Around				
CRN50500TFD551 CRN50500TFD55R				918003105 40Watt 240/480/600V Insertion Type				
CRNQ0500TFD595				018008804 45Watt 240V Wrap Around				
BRE40750TFD551				018003600 CH-202 240V 70W Wrap Around	2605182835 1-3/4" 12UNF 1-1/8ODF	2605122030 1-1/4" 12UNF 3/4ODF	020002803	020002802
BRG20900TFD551					2605222835 1-3/4" 12UNF 1-3/8ODF	2605142030 1-1/4" 12UNF 7/8ODF		
BRH21000TFD551								
BRK21200TFD551								

COPELAND COMPRESSORS

Spare Parts (cont'd)

Airefrig Part Number	Relay	Start Capacitor	Run Capacitor	Crankcase Heater	Suction Service Valve	Discharge Service Valve	Suction Valve Gasket	Discharge Valve Gasket
ZR Series								
ZR28K3EPFJ522- PSC (supplied with run capacitor only)	-	-	014003736 (014-0054-36) 45MFD 370V	018005700 CH-280 240V 70W Wrap Around	Stub Tubes	Stub Tubes	Stub Tubes	Stub Tubes
ZR36K3EPFJ522- PSC (supplied with run capacitor only)			014005440 (014-0054-40) 50MFD 370V					
ZR40K3EPFJ522- PSC (supplied with run capacitor only)			014005439 (014-0054-39) 55MFD 370V					
ZR40K3ETFD522			-					
ZR47K3EPFJ522- PSC (supplied with run capacitor only)			014004837 (014-0054-37) 60MFD 370V					
ZR48K3PFJ522- PSC (supplied with run capacitor only)								
ZR48KCETFD522			-					
ZR54KCETFD522								
ZR61KCETFD522								
ZR68KCEPFJ522 - PSC (supplied with run capacitor only)	040000169 (040-0001-69)	014000610 270-324UF 330V	014004820 (014-0054-20) 50MFD 440V					
ZR68KCETFD522	-	-	-					
ZR72KCETFD523 (ZR72KCETFD522 Stub tube)					2605142030 1-1/4" 12UNF 7/8ODF	2605081620 1" 14UNF 1/2ODF	020002802	020002800
ZR81KCETFD523 (ZR81KCETFD522 Stub tube)					2605142030 1-1/4" 12UNF 7/8ODF	2605122030 1-1/4" 12UNF 3/4ODF	020002802	020002802
ZR94KCETFD523 (ZR94KCETFD522 Stub tube)				018004701 CH-255 240V 90W Wrap Around	2605182835 1-3/4" 12UNF 1-1/8ODF		020002803	
ZR108KCETFD523 (ZR108KCETFD522 Stub tube)					2605222835 1-3/4" 12UNF 1-3/8ODF	2605142030 1-1/4" 12UNF 7/8ODF	020002803	020002802
ZR125KCETFD523 (ZR125KCETFD522 Stub tube)								
ZR144KCETFD523 (ZR144KCETFD522 Stub tube)								
ZR160KCETFD523								
ZR190KCETFD523								
ZR16M3ETWD961/551	Protection Module INT69-SCY Airefrig Part No. 8542286			018003600 CH-202 240V 70W Wrap Around				
ZR19M3ETWD961/551					8511928 (suction & discharge service valve kit)			
ZR250KCETWD523	T.B.A.			018005604 CH-291 240V 120W Wrap Around	998510059 (suction & discharge service valve kit)		020094100	020002803
ZR310KCETWD523				018006805 CH-282 240V 150W Wrap Around				
ZR380KCETWD523								

DANFOSS SCROLL COMPRESSORS



Danfoss



Scroll Compressors

Danfoss Performer® Scroll Compressors are 100% gas cooled & fitted with an automatic reset line break protector mounted internally on the motor windings.

The internal protectors respond to over-current, overheating & are designed to interrupt motor current under a variety of fault conditions such as failure to start, running overload & fan failure etc.

If the internal overload protector trips it must cool down to approximately +60 degrees Celsius to reset. (Depending on the ambient temperature this may take up to several hours)

Three Phase Sequence & Reverse Rotation Protection
The compressor will only operate properly with the correct rotation.
If a three phase compressor is wired incorrectly it will run but will have excessive noise, no pressure differential between suction & discharge, plus the suction will become warmer rather than cooler.

The smaller range of Danfoss Performer scroll compressors (up to HLP075) are able to run in reverse rotation safely for up to a 150 hours without damaging the compressor, however phase monitors are still recommended.

The larger range of Danfoss Performer scroll compressors (HLP078 onwards) should never be run in reverse. Danfoss recommends phase rotation protection should always be fitted to prevent these compressors from operating in reverse rotation.

Single Phase Compressors – Reverse Rotation
Brief power interruptions may cause reverse rotation of single phase scroll compressors.
The internal protection will stop the compressor & once cooled down will restart with correct rotation.

Crankcase Heaters are recommended on all stand-alone compressors & split systems. The heater should be energised for a minimum of 12 hours before initial start up (compressor service valves opened) & must remain energised whenever the compressor is off.

External High Pressure Switches are required for HCP094,109,120 scroll compressors as these models are not equipped with internal pressure relief valves.



DANFOSS SCROLL COMPRESSORS

R22 Scroll Compressors

Capacities R22

Airefrig Part Number			Refrigeration Capacity - **W**atts Consumption – **P**ower Current – **A**mps												
			Condensing Temperature ºC							Swept volume cm³/rev	Displ m³/h	Motor			Weight Kgs
			Evaporating Temperature ºC									(Nom.) HP	Type	Max. Amps	
			-15	-10	-5	0	5	7.2	10						
HRP034T5LP6 - Rubber Mount Kit - PVE Oil (320HV) - Stub Tubes - Run Capacitor Note: crankcase heater to be purchased separately	W	45.0	3696	4638	5748	7012	8414	9085	9938	46.2	8.0	2.8	1PH (PSC)	27.0	31.0
	P		2220	2175	2145	2123	2106	2098	2088						
	A		10.71	10.35	10.26	10.25	10.17	10.03	9.86						
	W	50.0	3326	4270	5366	6600	7955	8598	9416						
	P		2467	2394	2344	2311	2291	2284	2276						
	A		11.85	11.29	11.05	10.99	10.93	10.82	10.69						
	W	55.0	-	3837	4933	6149	7470	8091	8882						
	P		-	2652	2575	2523	2490	2483	2473						
	A		-	12.44	12.05	11.90	11.81	11.73	11.63						
HRP034T4LP6 - Rubber Mount Kit - PVE Oil (320HV) - Stub Tubes Note: crankcase heater to be purchased separately	W	45.0	3693	4631	5740	7002	8402	9072	9924	46.2	8.0	2.8	3PH	9.5	31.0
	P		2212	2165	2134	2113	2096	2088	2078						
	A		4.47	4.32	4.28	4.28	4.25	4.19	4.12						
	W	50.0	3341	4285	5383	6620	7980	8625	9447						
	P		2485	2410	2358	2325	2304	2298	2290						
	A		4.95	4.71	4.62	4.59	4.56	4.52	4.46						
	W	55.0	-	3869	4971	6196	7529	8156	8953						
	P		-	2700	2620	2567	2534	2527	2517						
	A		-	5.20	5.03	4.97	4.93	4.89	4.85						
HRP040T5LP6 - Rubber Mount Kit - PVE Oil (320HV) - Stub Tubes - Run Capacitor Note: crankcase heater to be purchased separately	W	45.0	4424	5546	6874	8386	10063	10865	11885	54.4	9.5	3.3	1PH (PSC)	25.0	31.0
	P		2621	2566	2529	2504	2484	2475	2463						
	A		11.68	11.57	11.53	11.52	11.51	11.49	11.47						
	W	50.0	4015	5145	6464	7949	9583	10358	11344						
	P		2941	2852	2792	2752	2728	2721	2711						
	A		12.87	12.69	12.61	12.58	12.57	12.57	12.56						
	W	55.0	-	4660	5984	7459	9064	9819	10780						
	P		-	3192	3098	3035	2996	2987	2976						
	A		-	13.98	13.86	13.81	13.82	13.83	13.84						
HRP040T4LP6 - Rubber Mount Kit - PVE Oil (320HV) - Stub Tubes Note: crankcase heater to be purchased separately	W	45.0	4351	5458	6765	8253	9903	10692	11697	54.4	9.5	3.3	3PH	11.5	31.0
	P		2556	2502	2466	2442	2422	2413	2401						
	A		5.41	5.23	5.18	5.18	5.14	5.07	4.98						
	W	50.0	3929	5041	6334	7790	9390	10149	11116						
	P		2870	2783	2724	2685	2661	2654	2645						
	A		5.99	5.71	5.59	5.56	5.52	5.47	5.40						
	W	55.0	-	4544	5839	7279	8844	9580	10517						
	P		-	3116	3024	2963	2926	2917	2905						
	A		-	6.29	6.09	6.01	5.97	5.93	5.88						
HRP047T5LP6 - Rubber Mount Kit - PVE Oil (320HV) - Stub Tubes - Run Capacitor Note: crankcase heater to be purchased separately	W	45.0	5231	6562	8134	9922	11906	12855	14063	64.1	11.2	4.0	1PH (PSC)	31.2	31.0
	P		3092	3018	2972	2943	2921	2910	2896						
	A		14.12	14.10	14.07	14.05	14.05	14.06	14.08						
	W	50.0	4715	6052	7605	9353	11274	12185	13345						
	P		3599	3480	3401	3353	3325	3317	3306						
	A		15.78	15.72	15.67	15.64	15.64	15.66	15.68						
	W	55.0	-	5447	7001	8727	10603	11485	12607						
	P		-	4039	3916	3836	3790	3779	3766						
	A		-	17.67	17.59	17.54	17.53	17.55	17.58						
HRP047T4LP6 - Rubber Mount Kit - PVE Oil (320HV) - Stub Tubes Note: crankcase heater to be purchased separately	W	45.0	5201	6525	8087	9866	11838	12762	13982	64.1	11.2	4.0	3PH	12.0	31.0
	P		2991	2925	2882	2854	2831	2821	2806						
	A		6.0	5.8	5.7	5.7	5.7	5.6	5.5						
	W	50.0	4693	6022	7568	9307	11218	12108	13279						
	P		3406	3299	3227	3181	3154	3145	3135						
	A		6.6	6.3	6.2	6.1	6.1	6.1	6.0						
	W	55.0	-	5425	6972	8691	10559	11423	12556						
	P		-	3746	3634	3561	3516	3504	3493						
	A		-	6.9	6.7	6.6	6.6	6.6	6.5						

Rating Conditions 11.1k Superheat, 8.3K Subcooling, (Single Phase = 220-240V/1/50Hz , Three Phase = 380-400V/3/50Hz)

DANFOSS SCROLL COMPRESSORS

R22 Scroll Compressors

Capacities R22

Airefrig Part Number		Condensing Temperature ºC	Evaporating Temperature ºC -15	-10	-5	0	5	7.2	10	Swept volume cm³/rev	Displ m³/h	Motor (Nom.) HP	Motor Type	Motor Max. Amps	Weight Kgs
			Refrigeration Capacity - **W**atts					Consumption – **P**ower		Current – **A**mps					
HRP054T4LP6 - Rubber Mount Kit - PVE Oil (320HV) - Stub Tubes	W	45.0	5966	7502	9310	11361	13624	14681	16073	72.8	12.7	4.5	3PH	12.5	37.0
	P		3005	3023	3061	3101	3128	3131	3125						
	A		5.5	5.5	5.6	5.6	5.7	5.7	5.7						
	W	50.0	5381	6932	8728	10740	12939	13958	15296						
	P		3292	3337	3396	3452	3488	3494	3488						
	A		6.0	6.0	6.0	6.0	6.0	6.1	6.1						
Note: crankcase heater to be purchased separately	W	55.0	-	6247	8054	10051	12207	13200	14496						
	P		-	3620	3719	3810	3874	3890	3897						
	A		-	6.5	6.5	6.5	6.5	6.6	6.6						
HRP060T5LP6 - Rubber Mount Kit - PVE Oil (320HV) - Stub Tubes - Run Capacitor	W	45.0	6578	8201	10131	12349	14840	16017	17585	80.9	14.1	5.0	1PH (PSC)	40.0	37.0
	P		3309	3382	3466	3532	3546	3528	3477						
	A		18.6	18.5	18.6	18.8	19.0	19.1	19.2						
	W	50.0	5930	7534	9419	11567	13961	15088	16585						
	P		3656	3779	3903	3996	4026	4010	3960						
	A		20.1	20.0	20.0	20.1	20.3	20.4	20.6						
Note: crankcase heater to be purchased separately	W	55.0	-	6769	8626	10722	13038	14123	15559						
	P		-	4146	4336	4483	4555	4554	4519						
	A		-	21.8	21.7	21.7	21.9	22.0	22.2						
HRP060T4LP6 - Rubber Mount Kit - PVE Oil (320HV) - Stub Tubes	W	45.0	6525	8211	10193	12439	14916	16093	17590	80.9	14.1	5.0	3PH	15.0	37.0
	P		3421	3423	3451	3490	3526	3534	3545						
	A		6.20	6.19	6.18	6.17	6.17	6.17	6.18						
	W	50.0	5886	7591	9563	11769	14176	15309	16752						
	P		3736	3763	3810	3862	3907	3917	3930						
	A		6.93	6.90	6.88	6.86	6.86	6.87	6.88						
Note: crankcase heater to be purchased separately	W	55.0	-	6842	8829	11021	13385	14486	15888						
	P		-	4065	4151	4237	4311	4331	4357						
	A		-	7.76	7.72	7.70	7.70	7.71	7.72						
HLP068T5LP6 - Rubber Mount Kit - PVE Oil (320HV) - Stub Tubes - Run Capacitor	W	45.0	7627	9566	11856	14463	17355	18738	20498	93.1	16.2	5.7	1PH (PSC)	40.0	37.0
	P		4261	4225	4199	4177	4153	4138	4120						
	A		20.20	20.17	20.14	20.11	20.11	20.12	20.14						
	W	50.0	6897	8847	11115	13670	16478	17810	19506						
	P		4796	4732	4688	4658	4637	4628	4617						
	A		22.59	22.49	22.42	22.37	22.37	22.40	22.43						
Note: crankcase heater to be purchased separately	W	55.0	-	7986	10260	12789	15540	16834	18480						
	P		-	5330	5260	5215	5188	5181	5173						
	A		-	25.29	25.16	25.09	25.09	25.12	25.16						
HLP068T4LP6 - Rubber Mount Kit - PVE Oil (320HV) - Stub Tubes	W	45.0	7632	9576	11869	14479	17373	18758	20520	93.1	16.2	5.7	3PH	15.0	37.0
	P		4024	4020	4046	4089	4133	4147	4165						
	A		7.35	7.33	7.32	7.31	7.31	7.31	7.32						
	W	50.0	6884	8834	11102	13654	16458	17788	19481						
	P		4390	4412	4459	4516	4570	4585	4605						
	A		8.21	8.18	8.15	8.14	8.14	8.15	8.16						
Note: crankcase heater to be purchased separately	W	55.0	-	7955	10224	12745	15485	16773	18412						
	P		-	4759	4849	4944	5031	5059	5094						
	A		-	9.20	9.15	9.13	9.12	9.13	9.15						
HLP072T4LC6 - Rubber Mount Kit - PVE Oil (320HV) - Stub Tubes	W	45.0	8023	10083	12509	15263	18307	19758	21604	98.7	17.2	6.0	3PH	15.0	37.0
	P		4230	4231	4264	4312	4356	4367	4382						
	A		7.69	7.68	7.67	7.66	7.66	7.66	7.67						
	W	50.0	7237	9313	11720	14420	17374	18770	20546						
	P		4619	4650	4706	4770	4826	4839	4856						
	A		8.60	8.56	8.53	8.52	8.52	8.53	8.54						
Note: crankcase heater to be purchased separately	W	55.0	-	8391	10809	13484	16380	17734	19457						
	P		-	5022	5125	5231	5322	5348	5382						
	A		-	9.63	9.58	9.55	9.55	9.56	9.58						

Rating Conditions 11.1k Superheat, 8.3K Subcooling, (Single Phase = 220-240V/1/50Hz , Three Phase = 380-400V/3/50Hz)

DANFOSS SCROLL COMPRESSORS

R22 Scroll Compressors

Capacities R22

Airefrig Part Number			Refrigeration Capacity - **W**atts Consumption – **P**ower Current – **A**mps							Swept volume cm³/rev	Displ m³/h	Motor			Weight Kgs
			Condensing Temperature ºC									(Nom) HP	Type	Max. Amps	
			Evaporating Temperature ºC												
			-15	-10	-5	0	5	7.2	10						
HLP075T4LC6 - Rubber Mount Kit - PVE Oil (320HV) - Stub Tubes	W		8225	10310	12777	15588	18705	20195	22092						
	P	45.0	4550	4515	4488	4464	4437	4422	4403						
	A		8.72	8.71	8.69	8.68	8.68	8.68	8.70						
	W		7484	9587	12041	14808	17852	19296	21134						
	P	50.0	5075	5011	4967	4935	4912	4902	4890	102.7	17.9	6.5	3PH	16.0	37.0
	A		9.75	9.71	9.68	9.66	9.66	9.67	9.69						
Note: crankcase heater to be purchased separately	W		-	8703	11172	13925	16923	18333	20129						
	P	55.0	-	5594	5523	5476	5446	5438	5430						
	A		-	10.92	10.87	10.84	10.83	10.84	10.86						
HLP081T4LC6 - Rubber Mount Kit - PVE Oil (320HV) - Stub Tubes	W		9150	11448	14168	17278	20745	22414	24538						
	P	45.0	4658	4683	4739	4800	4842	4842	4841						
	A		9.07	9.05	9.04	9.03	9.03	9.03	9.04						
	W		8251	10542	13218	16245	19593	21193	23229						
	P	50.0	5100	5167	5254	5339	5396	5398	5400	110.9	19.3	7.0	3PH	17.0	37.0
	A		10.14	10.10	10.06	10.04	10.04	10.05	10.07						
Note: crankcase heater to be purchased separately	W		-	9483	12143	15118	18375	19919	21883						
	P	55.0	-	5601	5750	5888	5988	6005	6027						
	A		-	11.35	11.30	11.26	11.26	11.27	11.29						
HCP094T4LC6 - Rubber Mount Kit - PVE Oil (320HV) - Stub Tubes	W		10346	12973	16078	19615	23538	25413	27800						
	P	45.0	5823	5781	5747	5716	5682	5663	5639						
	A		10.79	10.77	10.75	10.74	10.74	10.75	10.76						
	W		9380	12025	15106	18578	22395	24206	26511						
	P	50.0	6455	6379	6324	6284	6253	6241	6225	126.0	21.9	8.0	3PH	21.0	44.0
	A		12.06	12.01	11.97	11.95	11.95	11.96	11.98						
Note: crankcase heater to be purchased separately	W		-	10880	13974	17417	21165	22928	25171						
	P	55.0	-	7077	6989	6929	6891	6881	6869						
	A		-	13.51	13.44	13.40	13.40	13.42	13.44						
HCP109T4LC6 - Rubber Mount Kit - PVE Oil (320HV) - Stub Tubes	W		11942	14971	18554	22636	27162	29326	32081						
	P	45.0	7041	6899	6802	6734	6680	6654	6621						
	A		12.59	12.17	12.06	12.06	11.96	11.80	11.59						
	W		10849	13901	17461	21474	25887	27981	30646						
	P	50.0	7815	7586	7427	7323	7257	7237	7212	148.8	25.9	9.0	3HP	24.0	45.0
	A		13.93	13.27	13.00	12.93	12.85	12.73	12.57						
Note: crankcase heater to be purchased separately	W		-	12601	16179	20165	24506	26548	29147						
	P	55.0	-	8393	8148	7983	7881	7856	7825						
	A		-	14.63	14.17	13.99	13.89	13.79	13.67						
HCP120T4LC6 - Rubber Mount Kit - PVE Oil (320HV) - Stub Tubes	W		13034	16342	20252	24708	29649	32011	35017						
	P	45.0	7455	7409	7368	7327	7283	7259	7228						
	A		13.43	13.41	13.39	13.37	13.37	13.38	13.39						
	W		11839	15171	19056	23436	28253	30538	33446						
	P	50.0	8162	8076	8010	7959	7918	7903	7883	162.4	28.3	10.0	3PH	25.0	45.0
	A		15.01	14.95	14.90	14.87	14.87	14.89	14.91						
Note: crankcase heater to be purchased separately	W		-	13750	17655	22005	26741	28970	31806						
	P	55.0	-	8845	8741	8666	8616	8603	8586						
	A		-	16.81	16.73	16.68	16.68	16.70	16.73						

Rating Conditions 11.1k Superheat, 8.3K Subcooling, (Single Phase = 220-240V/1/50Hz , Three Phase = 380-400V/3/50Hz)

Prices

Airefrig Part Number	List Price Excl GST
HRP034T5LP6	
HRP034T4LP6	
HRP040T5LP6	
HRP040T4LP6	
HRP047T5LP6	
HRP047T4LP6	

Airefrig Part Number	List Price Excl GST
HRP054T4LP6	
HRP060T5LP6	
HRP060T4LP6	
HLP068T5LP6	
HLP068T4LP6	
HLP072T4LC6	

Airefrig Part Number	List Price Excl GST
HLP075T4LC6	
HLP081T4LC6	
HCP094T4LC6	
HCP109T4LC6	
HCP120T4LC6	

DANFOSS SCROLL COMPRESSORS

R407C Scroll Compressors

Capacities R407C

Airefrig Part Number		Refrigeration Capacity - **W**atts Consumption – **P**ower Current – **A**mps												
			Condensing Temperature ºC							Swept volume cm³/rev	Displ m³/h	Motor			Weight Kgs
			Evaporating Temperature ºC									(Nom.) HP	Type	Max. Amps	
			-15	-10	-5	0	5	7.2	10						
HRP034T5LP6 - Rubber Mount Kit - PVE Oil (320HV) - Stub Tubes - Run Capacitor Note: crankcase heater to be purchased separately	W	45.0	3538	4495	5615	6926	8455	9236	10230	46.2	8.0	2.8	1PH (PSC)	27.0	31.0
	P		2272	2251	2234	2214	2184	2164	2138						
	A		10.77	10.69	10.59	10.49	10.36	10.29	10.21						
	W	50.0	3279	4184	5245	6491	7948	8695	9646						
	P		2572	2543	2519	2495	2462	2441	2415						
	A		12.12	12.00	11.88	11.76	11.64	11.58	11.51						
	W	55.0	-	3852	4850	6026	7407	8118	9022						
	P		-	2893	2861	2828	2790	2767	2738						
	A		-	13.58	13.42	13.28	13.16	13.11	13.04						
HRP034T4LP6 - Rubber Mount Kit - PVE Oil (320HV) - Stub Tubes Note: crankcase heater to be purchased separately	W	45.0	3546	4470	5559	6834	8311	9059	10010	46.2	8.0	2.8	3PH	9.5	31.0
	P		2175	2164	2153	2138	2115	2100	2080						
	A		3.45	3.43	3.45	3.47	3.48	3.45	3.42						
	W	50.0	3267	4140	5170	6375	7774	8483	9386						
	P		2459	2447	2437	2424	2404	2391	2374						
	A		3.68	3.65	3.66	3.68	3.69	3.67	3.65						
	W	55.0	-	3791	4762	5899	7221	7892	8745						
	P		-	2768	2758	2748	2732	2721	2707						
	A		-	3.95	3.96	3.99	4.01	4.00	3.99						
HRP040T5LP6 - Rubber Mount Kit - PVE Oil (320HV) - Stub Tubes - Run Capacitor Note: crankcase heater to be purchased separately	W	45.0	4096	5206	6504	8021	9792	10697	11849	54.4	9.5	3.3	1PH (PSC)	25.0	31.0
	P		2615	2590	2571	2548	2514	2491	2461						
	A		12.13	12.04	11.93	11.81	11.67	11.60	11.50						
	W	50.0	3784	4832	6060	7499	9182	10045	11143						
	P		2963	2929	2902	2873	2836	2812	2782						
	A		13.65	13.51	13.38	13.25	13.11	13.05	12.97						
	W	55.0	-	4437	5588	6944	8535	9353	10395						
	P		-	3335	3297	3260	3216	3190	3157						
	A		-	15.29	15.12	14.96	14.82	14.76	14.69						
HRP040T4LP6 - Rubber Mount Kit - PVE Oil (320HV) - Stub Tubes Note: crankcase heater to be purchased separately	W	45.0	4072	5133	6384	7847	9544	10402	11495	54.4	9.5	3.3	3PH	11.5	31.0
	P		2549	2536	2523	2506	2479	2461	2438						
	A		4.52	4.50	4.52	4.56	4.56	4.53	4.49						
	W	50.0	3750	4753	5935	7319	8925	9739	10774						
	P		2881	2867	2854	2839	2816	2801	2781						
	A		4.83	4.79	4.80	4.83	4.84	4.82	4.79						
	W	55.0	-	4350	5465	6770	8286	9056	10035						
	P		-	3240	3229	3217	3199	3186	3170						
	A		-	5.18	5.19	5.24	5.26	5.25	5.24						
HRP047T5LP6 - Rubber Mount Kit - PVE Oil (320HV) - Stub Tubes - Run Capacitor Note: crankcase heater to be purchased separately	W	45.0	4885	6214	7763	9574	11687	12767	14142	64.1	11.2	4.0	1PH (PSC)	31.2	31.0
	P		3044	3014	2991	2965	2925	2898	2863						
	A		14.73	14.62	14.49	14.34	14.17	14.08	13.96						
	W	50.0	4488	5741	7202	8912	10911	11936	13241						
	P		3463	3422	3390	3357	3313	3285	3250						
	A		16.58	16.41	16.25	16.09	15.92	15.85	15.75						
	W	55.0	-	5245	6612	8216	10097	11065	12297						
	P		-	3913	3867	3824	3772	3742	3703						
	A		-	18.57	18.36	18.17	18.00	17.93	17.83						
HRP047T4LP6 - Rubber Mount Kit - PVE Oil (320HV) - Stub Tubes Note: crankcase heater to be purchased separately	W	45.0	4938	6220	7736	9510	11566	12606	13929	64.1	11.2	4.0	3PH	12.0	31.0
	P		2943	2926	2911	2891	2860	2839	2813						
	A		6.82	6.84	6.85	6.83	6.74	6.65	6.54						
	W	50.0	4573	5786	7223	8907	10863	11854	13115						
	P		3359	3340	3325	3307	3281	3263	3240						
	A		7.37	7.39	7.41	7.39	7.30	7.21	7.10						
	W	55.0	-	5322	6681	8276	10131	11073	12271						
	P		-	3811	3797	3782	3761	3746	3728						
	A		-	8.00	8.03	8.01	7.93	7.84	7.73						

Rating Conditions 11.1k Superheat, 8.3K Subcooling, (Single Phase = 220-240V/1/50Hz , Three Phase = 380-400V/3/50Hz)

DANFOSS SCROLL COMPRESSORS

R407C Scroll Compressors

Capacities R407C

Airefrig Part Number			Refrigeration Capacity - **W**atts Consumption – **P**ower Current – **A**mps												
			Condensing Temperature ºC							Swept volume cm³/rev	Displ m³/h	Motor			Weight Kgs
			Evaporating Temperature ºC									(Nom.) HP	Type	Max. Amps	
			-15	-10	-5	0	5	7.2	10						
HRP054T4LP6 - Rubber Mount Kit - PVE Oil (320HV) - Stub Tubes	W	45.0	5586	7034	8748	10757	13088	14267	15767	72.8	12.7	4.5	3PH	12.5	37.0
	P		3286	3262	3246	3238	3241	3247	3254						
	A		4.63	4.61	4.63	4.67	4.67	4.64	4.60						
	W	50.0	5192	6555	8173	10072	12280	13398	14822						
	P		3731	3684	3647	3620	3605	3604	3602						
	A		4.95	4.90	4.92	4.95	4.96	4.93	4.90						
Note: crankcase heater to be purchased separately	W	55.0	-	6056	7574	9360	11440	12497	13843						
	P		-	4152	4098	4056	4027	4021	4013						
	A		-	5.30	5.32	5.36	5.39	5.38	5.36						
HRP060T5LP6 - Rubber Mount Kit - PVE Oil (320HV) - Stub Tubes - Run Capacitor	W	45.0	6120	7774	9711	11978	14623	15974	17693	80.9	14.1	5.0	1PH (PSC)	40.0	37.0
	P		3689	3654	3626	3594	3546	3513	3471						
	A		16.59	16.46	16.32	16.15	15.96	15.85	15.72						
	W	50.0	5674	7239	9075	11230	13752	15044	16689						
	P		4192	4143	4104	4064	4012	3978	3935						
	A		18.67	18.48	18.29	18.12	17.93	17.84	17.73						
Note: crankcase heater to be purchased separately	W	55.0	-	6667	8394	10430	12821	14050	15615						
	P		-	4732	4678	4625	4563	4526	4479						
	A		-	20.91	20.67	20.46	20.26	20.18	20.08						
HRP060T4LP6 - Rubber Mount Kit - PVE Oil (320HV) - Stub Tubes	W	45.0	6182	7780	9673	11894	14473	15778	17440	80.9	14.1	5.0	3PH	15.0	37.0
	P		3610	3576	3551	3538	3541	3551	3563						
	A		6.03	6.00	6.03	6.08	6.08	6.04	5.99						
	W	50.0	5743	7244	9027	11121	13559	14796	16370						
	P		4077	4013	3960	3923	3903	3904	3905						
	A		6.44	6.38	6.40	6.44	6.45	6.42	6.38						
Note: crankcase heater to be purchased separately	W	55.0	-	6689	8357	10321	12613	13779	15263						
	P		-	4495	4418	4358	4319	4313	4305						
	A		-	6.90	6.93	6.98	7.02	7.00	6.98						
HLP068T5LP6 - Rubber Mount Kit - PVE Oil (320HV) - Stub Tubes - Run Capacitor	W	45.0	7129	9062	11321	13962	17044	18619	20624	93.1	16.2	5.7	1PH (PSC)	40.0	37.0
	P		4294	4255	4224	4186	4130	4092	4043						
	A		21.41	21.25	21.06	20.85	20.60	20.47	20.30						
	W	50.0	6584	8409	10545	13049	15979	17480	19391						
	P		4841	4788	4745	4699	4637	4598	4548						
	A		24.10	23.85	23.62	23.39	23.15	23.04	22.90						
Note: crankcase heater to be purchased separately	W	55.0	-	7719	9723	12081	14849	16273	18085						
	P		-	5426	5366	5305	5233	5190	5135						
	A		-	27.00	26.69	26.41	26.16	26.05	25.92						
HLP068T4LP6 - Rubber Mount Kit - PVE Oil (320HV) - Stub Tubes	W	45.0	7362	9202	11398	14000	17058	18560	20619	93.1	16.2	5.7	3PH	15.0	37.0
	P		4437	4383	4342	4321	4325	4337	4362						
	A		7.1	7.1	7.1	7.2	7.2	7.1	7.1						
	W	50.0	6799	8456	10450	12831	15648	17038	18949						
	P		4981	4883	4802	4744	4717	4717	4727						
	A		7.6	7.5	7.5	7.6	7.6	7.6	7.5						
Note: crankcase heater to be purchased separately	W	55.0	-	7760	9536	11678	14237	15507	17261						
	P		-	5432	5312	5220	5163	5151	5147						
	A		-	8.1	8.2	8.2	8.3	8.3	8.2						
HLP072T4LC6 - Rubber Mount Kit - PVE Oil (320HV) - Stub Tubes	W	45.0	7393	9322	11604	14272	17359	18917	20899	98.7	17.2	6.0	3PH	15.0	37.0
	P		4266	4237	4217	4207	4210	4217	4226						
	A		8.19	8.14	8.19	8.25	8.26	8.20	8.13						
	W	50.0	6879	8713	10882	13421	16361	17846	19736						
	P		4847	4788	4742	4708	4688	4686	4684						
	A		8.74	8.66	8.69	8.75	8.76	8.72	8.66						
Note: crankcase heater to be purchased separately	W	55.0	-	8060	10115	12521	15312	16724	18520						
	P		-	5400	5332	5280	5243	5235	5224						
	A		-	9.37	9.40	9.48	9.53	9.51	9.48						

Rating Conditions 11.1k Superheat, 8.3K Subcooling, (Single Phase = 220-240V/1/50Hz , Three Phase = 380-400V/3/50Hz)

DANFOSS SCROLL COMPRESSORS

R407C Scroll Compressors

Capacities R407C

Airefrig Part Number			Refrigeration Capacity - **W**atts Consumption – **P**ower Current – **A**mps							Swept volume cm³/rev	Displ m³/h	Motor			Weight Kgs
			Condensing Temperature ºC									(Nom) HP	Type	Max. Amps	
			Evaporating Temperature ºC												
			-15	-10	-5	0	5	7.2	10						
HLP075T4LC6 - Rubber Mount Kit - PVE Oil (320HV) - Stub Tubes	W	45.0	7990	10062	12514	15384	18711	20393	22534	102.7	17.9	6.5	3PH	16.0	37.0
	P		4216	4198	4174	4138	4081	4044	3998						
	A		6.94	6.95	6.97	6.95	6.85	6.76	6.65						
	W	50.0	7407	9370	11695	14423	17590	19194	21236						
	P		5170	5153	5134	5107	5065	5035	4999						
	A		7.49	7.51	7.53	7.51	7.42	7.32	7.21						
Note: crankcase heater to be purchased separately	W	55.0	-	8627	10828	13413	16420	17946	19890						
	P		-	5704	5690	5669	5635	5610	5580						
	A		-	8.13	8.16	8.15	8.06	7.96	7.85						
HLP081T4LC6 - Rubber Mount Kit - PVE Oil (320HV) - Stub Tubes	W	45.0	8827	11107	13812	16982	20656	22512	24874	110.9	19.3	7.0	3PH	17.0	37.0
	P		5148	5130	5106	5070	5015	4978	4932						
	A		7.98	7.94	7.99	8.05	8.08	8.04	8.00						
	W	50.0	8231	10396	12972	15997	19511	21290	23555						
	P		5675	5658	5638	5609	5561	5529	5489						
	A		8.50	8.44	8.48	8.55	8.60	8.58	8.56						
Note: crankcase heater to be purchased separately	W	55.0	-	9622	12067	14947	18302	20004	22171						
	P		-	6237	6223	6201	6163	6136	6101						
	A		-	9.08	9.14	9.25	9.35	9.36	9.38						
HCP094T4LC6 - Rubber Mount Kit - PVE Oil (320HV) - Stub Tubes	W	45.0	9533	12001	14925	18349	22318	24324	26876	126.0	21.9	8.0	3PH	21.0	44.0
	P		5605	5584	5558	5519	5459	5419	5369						
	A		8.75	8.77	8.79	8.77	8.65	8.54	8.40						
	W	50.0	8856	11197	13974	17233	21017	22934	25373						
	P		6194	6174	6152	6120	6069	6034	5990						
	A		9.45	9.48	9.51	9.48	9.37	9.26	9.11						
Note: crankcase heater to be purchased separately	W	55.0	-	10329	12960	16054	19655	21482	23808						
	P		-	6825	6808	6783	6742	6713	6676						
	A		-	10.26	10.30	10.29	10.17	10.06	9.92						
HCP109T4LC6 - Rubber Mount Kit - PVE Oil (320HV) - Stub Tubes	W	45.0	11102	13981	17387	21375	25998	28335	31310	148.8	25.9	9.0	3HP	24.0	45.0
	P		6845	6829	6800	6752	6677	6629	6567						
	A		10.23	10.26	10.28	10.25	10.11	9.98	9.81						
	W	50.0	10294	13022	16254	20044	24445	26674	29511						
	P		7393	7384	7363	7324	7260	7217	7163						
	A		11.05	11.08	11.11	11.09	10.95	10.81	10.64						
Note: crankcase heater to be purchased separately	W	55.0	-	11991	15050	18643	22823	24945	27645						
	P		-	7968	7958	7930	7878	7841	7795						
	A		-	11.99	12.04	12.02	11.89	11.76	11.59						
HCP120T4LC6 - Rubber Mount Kit - PVE Oil (320HV) - Stub Tubes	W	45.0	12121	15264	18983	23337	28384	30936	34183	162.4	28.3	10.0	3PH	25.0	45.0
	P		7471	7453	7422	7369	7287	7234	7167						
	A		11.14	11.17	11.19	11.16	11.01	10.86	10.68						
	W	50.0	11238	14216	17745	21882	26687	29121	32219						
	P		8066	8056	8033	7991	7921	7874	7815						
	A		12.03	12.07	12.10	12.07	11.92	11.77	11.59						
Note: crankcase heater to be purchased separately	W	55.0	-	13091	16430	20352	24917	27233	30181						
	P		-	8691	8679	8649	8593	8553	8502						
	A		-	13.06	13.11	13.09	12.95	12.80	12.62						

Rating Conditions 11.1k Superheat, 8.3K Subcooling, (Single Phase = 220-240V/1/50Hz , Three Phase = 380-400V/3/50Hz)

Prices

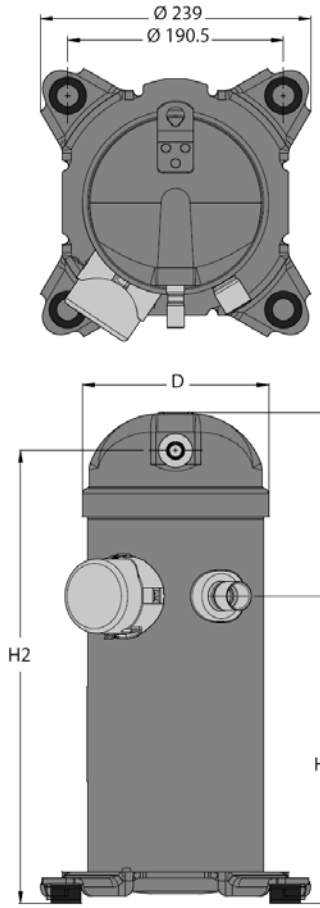
Airefrig Part Number	List Price Excl GST
HRP034T5LP6	
HRP034T4LP6	
HRP040T5LP6	
HRP040T4LP6	
HRP047T5LP6	
HRP047T4LP6	

Airefrig Part Number	List Price Excl GST
HRP054T4LP6	
HRP060T5LP6	
HRP060T4LP6	
HLP068T5LP6	
HLP068T4LP6	
HLP072T4LC6	

Airefrig Part Number	List Price Excl GST
HLP075T4LC6	
HLP081T4LC6	
HCP094T4LC6	
HCP109T4LC6	
HCP120T4LC6	

DANFOSS SCROLL COMPRESSORS

Scroll Compressor Dimensions



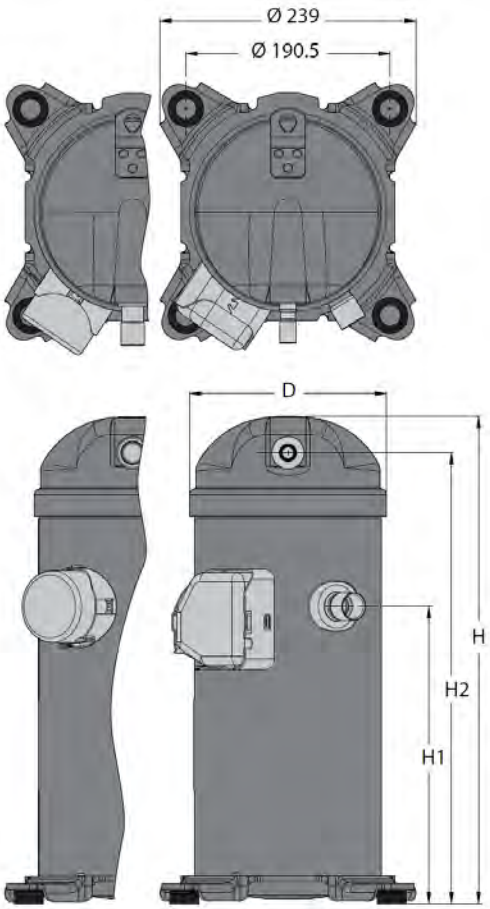
HRP034T_LP6			
D	H	H1	H2
165	413	250	379

HRP040T_LP6			
D	H	H1	H2
165	413	250	379

HRP047T_LP6			
D	H	H1	H2
165	439	275	405

HRP034,40,74 have brazed stub tubes and round electrical boxes with spade terminals.





HRP054T4LP6			
D	H	H1	H2
184	455	280	422

HRP060T_LP6			
D	H	H1	H2
184	455	280	422

HLP068T_LP6			
D	H	H1	H2
184	455	280	422

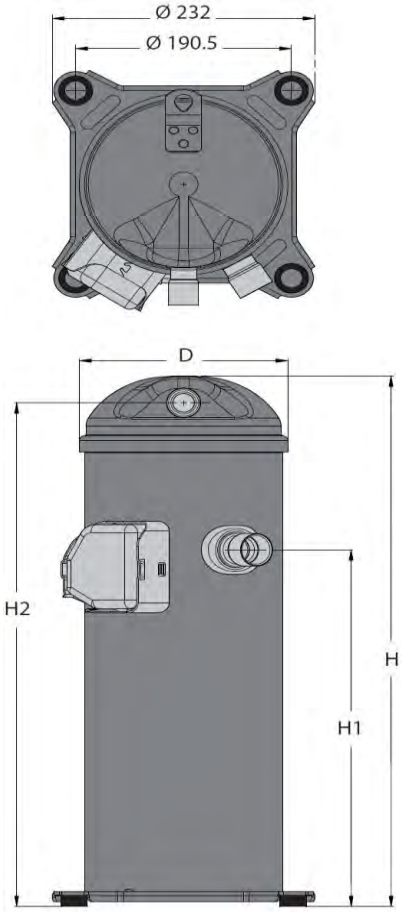
HLP072T4LC6			
D	H	H1	H2
184	455	280	422

HLP075T4LC6			
D	H	H1	H2
184	455	280	422

HLP081T4LC6			
D	H	H1	H2
184	455	280	422

HRP054,60 & HLP068 have brazed stub tubes and round electrical boxes with spade terminals.

HLP072,81 have brazed stub tubes and square electrical boxes with screw terminals.



HCP094T4LC6			
D	H	H1	H2
184	536	369	509

HCP109T4LC6			
D	H	H1	H2
184	545	369	519

HCP120T4LC6			
D	H	H1	H2
184	545	369	519

HCP094,109,120 have brazed stub tubes and square electrical boxes with screw terminals.



DANFOSS SCROLL COMPRESSORS

Scroll Compressors Specifications

Airefrig Part Number	Stub Tube Connections		Run Capacitor (PSC start)	High Start Torque - Option (items not stocked)		Crankcase Heater (Belt Type)	PVE Oil (320HV) charge
	Suction	Discharge		Relay	Start Capacitor		
HRP034T5LP6	3/4" ODF	1/2" ODF	120Z0051 (70uF / 370v)	3ARR3*3AL*	145-175uF / 330v	120Z0055 40watt 230volt	1.0 litre
HRP034T4LP6	3/4" ODF	1/2" ODF	-	-	-		1.0 litre
HRP040T5LP6	3/4" ODF	1/2" ODF	120Z0051 (70uF / 370v)	3ARR3*3AL*	145-175uF / 330v		1.0 litre
HRP040T4LP6	3/4" ODF	1/2" ODF	-	-	-		1.0 litre
HRP047T5LP6	7/8" ODF	1/2" ODF	120Z0050 (60uF / 370v)	3ARR3*3AL*	145-175uF / 330v		1.0 litre
HRP047T4LP6	7/8" ODF	1/2" ODF	-	-	-		1.0 litre
HRP054T4LP6	7/8" ODF	1/2" ODF	-	-	-	120Z0057 50watt 230volt	2.0 litres
HRP060T5LP6	7/8" ODF	1/2" ODF	8173234 (55uF / 440v)	3ARR3*25AS*	88-108uF / 330v		2.0 litres
HRP060T4LP6	7/8" ODF	1/2" ODF	-	-	-		2.0 litres
HLP068T5LP6	7/8" ODF	1/2" ODF	8173234 (55uF / 440v)	3ARR3*25AS*	88-108uF / 330v		2.0 litres
HLP068T4LP6	7/8" ODF	1/2" ODF	-	-	-		2.0 litres
HLP072T4LC6	7/8" ODF	1/2" ODF	-	-	-		2.0 litres
HLP075T4LC6	7/8" ODF	1/2" ODF	-	-	-		2.0 litres
HLP081T4LC6	7/8" ODF	3/4" ODF	-	-	-	120Z0059 70watt 230volt	2.0 litres
HCP094T4LC6	1-1/8" ODF	7/8" ODF	-	-	-		3.0 litres
HCP109T4LC6	1-1/8" ODF	7/8" ODF	-	-	-		3.0 litres
HCP120T4LC6	1-1/8" ODF	7/8" ODF	-	-	-		3.0 litres

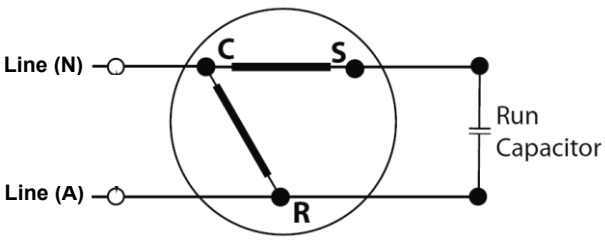
Note: Crankcase heaters are not supplied with compressors & should be purchased separately if required.

Electrical Connections: Danfoss scroll compressors are designed to operate without any assistance if running within the defined nominal voltage. PSC wiring is sufficient (see below)

Single Phase - PSC Wiring

PSC Wiring
The start winding (C-S) of the motor remains in circuit through the permanent (run) capacitor.

This permanent (run) capacitor is connected between the start winding (C-S) and the run winding (C-R).

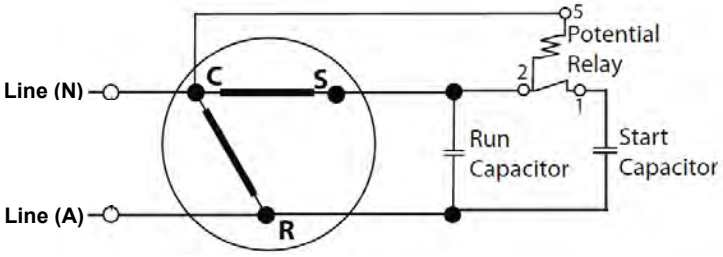


Single Phase - CSR Wiring

CSR Wiring
If start assist is required, in case of operating below nominal voltage, a CSR starting device is required.

During start-up, the start winding (C-S) is energised through an electromagnetic potential relay and a start capacitor.

A permanent (run) capacitor is wired between the start winding (C-S) and the run winding (C-R).



DANFOSS SCROLL COMPRESSORS

Electrical Details
Contactors & Thermal Overloads Options

Airefrig Part Number	Winding Resistance OHMS (+/- 7% @ 25ºC)	Locked Rotor	Maximum Continuous Current	3Ø Contactor	3Ø Thermal Overload	3Ø Electronic Overload *Includes phase loss & imbalance protection*
HRP034T5LP6	Start Winding: 1.509 Main Winding: 0.689	97.0 amps	27.0 amps	-	-	-
HRP034T4LP6	Between 1-2: 4.664 Between 1-3: 4.660 Between 2-3: 3.422	45.0 amps	9.5 amps	MC12B240V (AC-3 Rating 12A)	MT323K10 (7-10A)	GMP223P22A (4.4-22.0amps)
HRP040T5LP6	Start Winding: 1.509 Main Winding: 0.689	97.0 amps	25.0 amps	-	-	-
HRP040T4LP6	Between 1-2: 4.664 Between 1-3: 4.660 Between 2-3: 3.420	45.0 amps	11.5 amps	MC18B240V (AC-3 Rating 18A)	MT323K13 (9-13A)	GMP223P22A (4.4-22.0amps)
HRP047T5LP6	Start Winding: 1.61 Main Winding: 0.66	102.5 amps	31.2 amps	-	-	-
HRP047T4LP6	Between 1-2: 3.873 Between 1-3: 2.850 Between 2-3: 3.870	50.0 amps	12.0 amps	MC18B240V (AC-3 Rating 18A)	MT323K13 (9-13A)	GMP223P22A (4.4-22.0amps)
HRP054T4LP6	Between 1-2: 2.300 Between 1-3: 2.300 Between 2-3: 2.300	62.0 amps	12.5 amps	MC18B240V (AC-3 Rating 18A)	MT323K13 (9-13A)	GMP223P22A (4.4-22.0amps)
HRP060T5LP6	Start Winding: 1.019 Main Winding: 0.39	130.0 amps	40.0 amps	-	-	-
HRP060T4LP6	Between 1-2: 2.316 Between 1-3: 2.330 Between 2-3: 2.360	70.0 amps	15.0 amps	MC18B240V (AC-3 Rating 18A)	MT323K18 (12-18A)	GMP223P22A (4.4-22.0amps)
HLP068T5LP6	Start Winding: 1.019 Main Winding: 0.39	130.0 amps	40.0 amps	-	-	-
HLP068T4LP6	Between 1-2: 1.852 Between 1-3: 1.827 Between 2-3: 1.867	82.0 amps	15.0 amps	MC18B240V (AC-3 Rating 18A)	MT323K18 (12-18A)	GMP223P22A (4.4-22.0amps)
HLP072T4LC6	Between 1-2: 1.852 Between 1-3: 1.827 Between 2-3: 1.867	87.0 amps	15.0 amps	MC18B240V (AC-3 Rating 18A)	MT323K18 (12-18A)	GMP223P22A (4.4-22.0amps)
HLP075T4LC6	Between 1-2: 1.617 Between 1-3: 1.600 Between 2-3: 1.630	100.0 amps	16.0 amps	MC18B240V (AC-3 Rating 18A)	MT323K18 (12-18A)	GMP223P22A (4.4-22.0amps)
HLP081T4LC6	Between 1-2: 2.116 Between 1-3: 2.090 Between 2-3: 2.070	87.0 amps	17.0 amps	MC22B240V (AC-3 Rating 22A)	MT323K22 (16-22A)	GMP223P22A (4.4-22.0amps)
HCP094T4LC6	Between 1-2: 1.480 Between 1-3: 1.480 Between 2-3: 1.480	84.0 amps	21.0 amps	MC32A240V (AC-3 Rating 32A)	MT323K22 (16-22A)	GMP403P40A (8.0-40.0amps)
HCP109T4LC6	Between 1-2: 1.326 Between 1-3: 1.280 Between 2-3: 1.290	110.0 amps	24.0 amps	MC32A240V (AC-3 Rating 32A)	MT323K25 (18-25A)	GMP403P40A (8.0-40.0amps)
HCP120T4LC6	Between 1-2: 1.125 Between 1-3: 1.110 Between 2-3: 1.100	140.0 amps	25.0 amps	MC32A240V (AC-3 Rating 32A)	MT323K25 (18-25A)	GMP403P40A (8.0-40.0amps)



DANFOSS SCROLL COMPRESSORS

Scroll Compressor Cross Reference Guide

Danfoss Model R407C/R22	HP (Nominal)	Phase	Copeland	Bristol	Carlyle	Old Danfoss Model R22
HRP034T5LP6	2.8	1 (PSC)	ZR34K3-PFJ	H20C343ABKA	SCE340AC	HRM032U5LP6
HRP038T5LP6	3.0	1 (PSC)	ZR36K3-PFJ	H20C373ABKA	SCH370AC	HRM038U5LP6
HRP040T5LP6	3.3	1 (PSC)	ZR40K3-PFJ	H20C403ABKA	SCE400AC	HRM042U5LP6
HRP045T5LP6	3.5	1 (PSC)	ZR45K3-PFJ	H20R453ABKA	SRE450AC	HRM045U5LP6
HRP058T5LP6	4.5	1 (PSC)		H20R583ABKA	SRE580AC	HRM058U5LP6
HRP060T5LP6	5.0	1 (PSC)	ZR61KC-PFZ	H20R603ABKA	SRE600AC	HRM060U5LP6
HRP068T5LP6	5.7	1 (PSC)	ZR68KC-PFJ			HLM068U5LP6
HRP038T4LP6	3.0	3	ZR36K3-TFD	H20C373DBEA	SCE370AC	HRM038U4LP6
HRP040T4LP6	3.3	3	ZR40K3-TFD	H20C403DBEA	SCH402AC	HRM040U4LP6
HRP045T4LP6	3.5	3	ZR46KC-TFD	H20R453DBEA	SRH452AC	HRM045U4LP6
HRP047T4LP6	3.8	3	ZR49KC-TFD	H20R483DBEA	SRH482AC	HRM048U4LP6
HRP058T4LP6	4.5	3	ZR57KC-TFD	H20R583DBEA	SRH582AC	HRM058U4LP6
HRP060T4LP6	5.0	3	ZR61KC-TFD	H20R603DBEA	SRH600AC	HRM060U4LP6
HLP068T4LP6	5.7	3	ZR68KC-TFD			HLM068U4LP6
HLP072T4LC6	6.0	3	ZR72KC-TFD	H20R753DBEA		HLM072T4LC6
HLP081T4LC6	7.5	3	ZR81KC-TFD	H20R813DBEA	SRH812AC	HLM081T4LC6
# HCP094T4LC6	8.3	3	# ZR94KC-TFD	H20R943DBEA	SRH942AE	HCM0943DBEA
HCP109T4LC6	9.0	3	ZR108KC-TFD			

Note: may not be direct replacement - check the height dimensions of these models.

(Information supplied by Danfoss Australia)

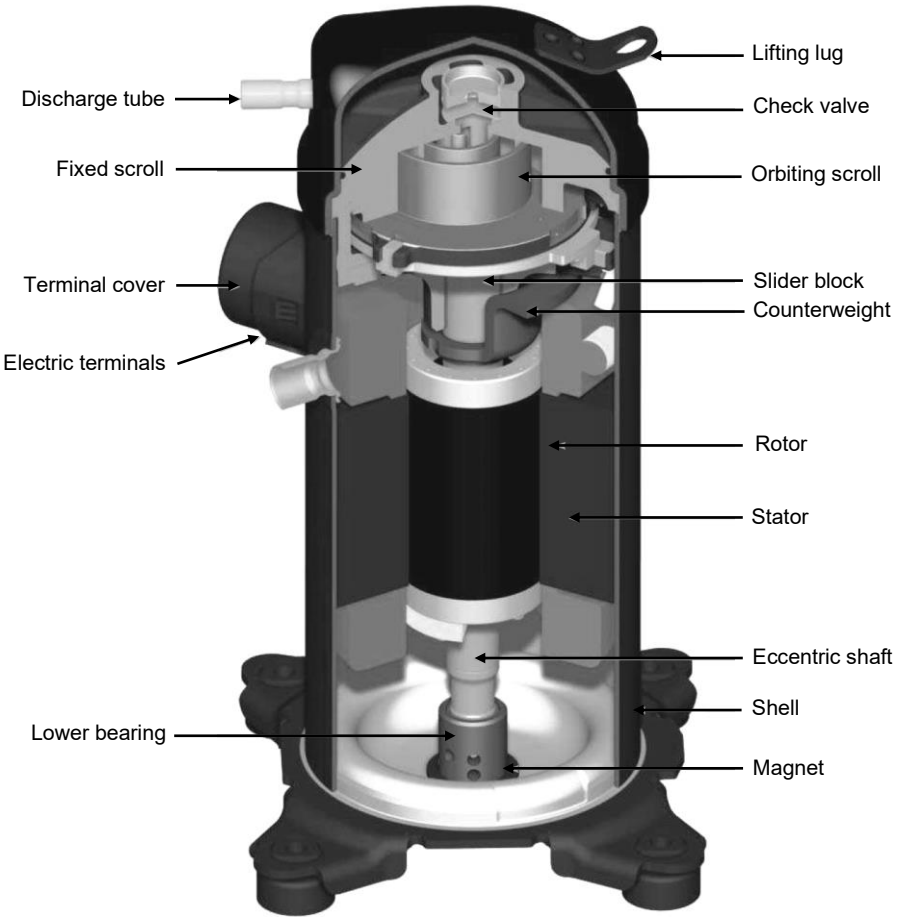
Scroll Compressor Components

The motor stator is rigidly attached to the shell.

The rotor is shrink-fit onto the eccentric shaft.

The shaft is supported by two bearings, one in the crankcase and the second below the motor.





Maneurop®

Scroll Compressors

Maneurop Performer® Scroll Compressors are 100% gas cooled & incorporate internal safety devices such as motor protection, reverse rotation protection & discharge gas check valves. Additional safety devices or system components maybe be required to ensure adequate protection of the compressors.

Models SM / SZ 084 – 090 – 100 – 110 – 120 – 148 – 161 are supplied with internal overload motor protection to prevent excessive current draw, overheating & phase loss or incorrect motor rotation. The cutout current is the MCC value & can be found in data sheets. The protector is located in the star point of the motor & will cut out all three phases when activated & will automatically reset. Although not compulsory it is advisable to fit additional external overload protection for alarm or manual reset.

Models SM / SZ 115 – 125 – 160 – 175 – 185 are supplied with a bi-metalic single pole, single throw thermostat located in the motor windings. If the motor overheats due to low refrigerant flow or improper rotation, the thermostat will open. Because the thermostat is an automatic reset device it must be wired within a lockout safety circuit with a manual reset. It is compulsory to fit an external overload protector to protect against over current & phase loss for SM/SZ 115, 125, 160, 175, 185 compressors.

Models SY / SZ 240 – 300 – 380 are supplied with motor protection module fitted inside the compressor terminal box. The protection module provides protection against overheating, overloading & phase loss or reversal. The motor protector comprises of a control module connected to PTC sensors embedded in the motor windings. Once tripped the module has a 5 minute start delay providing the windings have cooled below the response temperature. The time delay can be cancelled by resetting the mains (L-N disconnected) for approximately 5 seconds (monitoring function is inactive for 20 seconds after shutdown).
The SY/SZ240 to SY/SZ380 compressors have an internal safety relief device that is set to open between the high & low side if the differential pressure between the suction & discharge surpasses 31 to 38 bar.

Crankcase Heaters are recommended on all stand-alone compressors & split systems. The heater should be energised for a minimum of 12 hours before initial start up (compressor service valves opened) & must remain energised whenever the compressor is off.



MANEUROP COMPRESSORS

R22 Scroll Compressors

Capacities R22

Airefrig Part Number			Refrigeration Capacity - **W**atts Consumption – **P**ower Current – **A**mps												
			Condensing Temperature ºC							Swept volume cm³/rev	Displ m³/h	Motor			Weight Kgs
			Evaporating Temperature ºC									HP	Type	Max. Amps	
			-10	-5	0	5	7.2	10	15						
SM0844VI - Rubber Mount Kit - Oil Sight Glass - Mineral Oil - Stub Tubes Note: crankcase heater to be purchased separately	W	45.0	11010	13857	17114	20816	22595	24996	29690	114.5	19.92	7.0	3PH	17.0	64.0
	P		5062	5038	5004	4961	4938	4907	4842						
	A		9.59	9.59	9.55	9.51	9.49	9.45	9.37						
	W	50.0	10176	12945	16115	19718	21450	23790	28363						
	P		5692	5660	5616	5562	5534	5495	5416						
	A		10.31	10.29	10.25	10.20	10.17	10.13	10.03						
	W	55.0	-	11965	15040	18538	20220	22493	26941						
	P		-	6356	6303	6236	6202	6157	6063						
	A		-	11.12	11.07	11.01	10.98	10.92	10.82						
SM0904VI - Rubber Mount Kit - Oil Sight Glass - Mineral Oil - Stub Tubes Note: crankcase heater to be purchased separately	W	45.0	12186	15103	18450	22264	24099	26580	31436	120.5	20.97	7.5	3PH	17.0	65.0
	P		5403	5413	5413	5399	5389	5370	5324						
	A		10.85	10.86	10.86	10.83	10.81	10.78	10.71						
	W	50.0	11432	14240	17462	21135	22905	25297	29983						
	P		6007	6012	6006	5985	5972	5949	5895						
	A		11.57	11.58	11.56	11.53	11.50	11.47	11.38						
	W	55.0	-	13321	16408	19932	21632	23930	28437						
	P		-	6682	6669	6641	6624	6597	6533						
	A		-	12.40	12.38	12.34	12.30	12.26	12.17						
SM1004VI - Rubber Mount Kit - Oil Sight Glass - Mineral Oil - Stub Tubes Note: crankcase heater to be purchased separately	W	45.0	12923	16039	19603	23654	25599	28227	33362	127.2	22.13	8.0	3PH	19.0	65.0
	P		5753	5757	5752	5739	5729	5715	5678						
	A		11.28	11.28	11.27	11.25	11.22	11.20	11.13						
	W	50.0	12133	1128	18557	22455	24328	26860	31809						
	P		6410	6405	6390	6364	6349	6327	6277						
	A		12.09	12.08	12.05	12.00	11.97	11.93	11.84						
	W	55.0	-	14161	17443	21178	22974	25403	30157						
	P		-	7132	7106	7068	7047	7017	6952						
	A		-	13.00	12.95	12.88	12.84	12.79	12.67						
SM1104VI - Rubber Mount Kit - Oil Sight Glass - Mineral Oil - Stub Tubes Note: crankcase heater to be purchased separately	W	45.0	14558	18061	22042	26539	28690	31587	37225	144.2	25.09	9.0	3PH	20.0	73.0
	P		6468	6459	6445	6424	6413	6397	6362						
	A		12.66	12.65	12.63	12.59	12.58	12.54	12.47						
	W	50.0	13656	17028	20861	25191	27263	30056	35492						
	P		7215	7197	7172	7140	7123	7100	7051						
	A		13.55	13.53	13.50	13.45	13.42	13.38	13.30						
	W	55.0	-	15940	19613	23765	25753	28434	33657						
	P		-	8024	7989	7944	7921	7891	7827						
	A		-	14.56	14.51	14.45	14.42	14.36	14.26						
SM1154RI - Rubber Mount Kit - Oil Sight Glass - Mineral Oil - Rotalocks Required Note: service valves & crankcase heater to be purchased separately	W	45.0	15301	18983	23225	28077	30421	33590	39815	155.0	26.97	9.5	3PH	25.0	78.0
	P		6849	6830	6801	6761	6739	6707	6638						
	A		12.76	12.74	12.71	12.66	12.64	12.60	12.54						
	W	50.0	14168	17831	2050	26878	29212	32363	38559						
	P		7698	7664	7618	7559	7528	7484	7392						
	A		13.74	13.70	13.65	13.59	13.56	13.51	13.42						
	W	55.0	-	16504	20700	25500	27823	30957	37120						
	P		-	8608	8543	8464	8423	8366	8250						
	A		-	14.85	14.78	14.69	14.65	14.59	14.48						
SM1204VI - Rubber Mount Kit - Oil Sight Glass - Mineral Oil - Stub Tubes Note: crankcase heater to be purchased separately	W	45.0	16972	21051	25657	30826	33288	36596	43006	166.6	28.99	10.0	3PH	29.0	73.0
	P		7409	7383	7356	7326	7313	7295	7261						
	A		14.49	14.46	14.42	14.38	14.36	14.33	14.26						
	W	50.0	15913	19844	24282	29264	31637	34827	41009						
	P		8274	8240	8202	8162	8143	8118	8070						
	A		15.50	15.47	15.42	15.37	15.35	15.31	15.24						
	W	55.0	-	18584	22841	27622	29901	32965	38908						
	P		-	9201	9153	9100	9075	9042	8980						
	A		-	16.64	16.59	16.53	16.50	16.46	16.38						

Rating Conditions 11.1k Superheat, 8.3K Subcooling, 35 Deg Ambient . (Power requirements: 3PH = 380-400V/3/50Hz)

Note: Service valves & crankcase heaters are not supplied with compressors & should be purchased separately if required.

MANEUROP COMPRESSORS

R22 Scroll Compressors

Capacities R22

Airefrig Part Number			Refrigeration Capacity - **W**atts Consumption – **P**ower Current – **A**mps												
			Condensing Temperature ºC							Swept volume cm³/rev	Displ m³/h	Motor			Weight Kgs
			Evaporating Temperature ºC									HP	Type	Max. Amps	
			-10	-5	0	5	7.2	10	15						
SM1254RI - Rubber Mount Kit - Oil Sight Glass - Mineral Oil - Rotalocks Required Note: service valves & crankcase heater to be purchased separately	W	45.0	16456	20414	24974	30190	32704	36116	42808	166.6	28.99	10.0	3PH	25.0	78.0
	P		7358	7337	7306	7262	7243	7205	7131						
	A		13.71	13.69	13.65	13.61	13.58	13.55	13.47						
	W	50.0	15240	19177	23713	28902	31403	34800	41459						
	P		8270	8233	8184	8120	8092	8039	7940						
	A		14.77	14.73	14.68	14.61	14.57	14.52	14.43						
	W	55.0	-	17753	22263	27424	29910	33290	39915						
	P		-	9246	9177	9091	9055	8986	8861						
	A		-	15.97	15.89	15.80	15.76	15.70	15.57						
SM1484VI - Rubber Mount Kit - Oil Sight Glass - Mineral Oil - Stub Tubes Note: crankcase heater to be purchased separately	W	45.0	20677	25333	30678	36785	39730	43724	51570	199.0	34.60	12.0	3PH	32.0	88.0
	P		8759	8788	8824	8864	8882	8904	8941						
	A		16.54	16.56	16.57	16.57	16.58	16.60	16.66						
	W	50.0	19502	23974	29111	34984	37828	41667	49231						
	P		9766	9780	9804	9835	9850	9870	9905						
	A		17.74	17.78	17.79	17.79	17.80	17.81	17.87						
	W	55.0	-	22566	27481	33109	35840	39522	46794						
	P		-	10902	10910	10927	10938	10952	10981						
	A		-	19.18	19.20	19.20	19.22	19.22	19.28						
SM1604RAI - Rubber Mount Kit - Oil Sight Glass - Mineral Oil - Rotalocks Required Note: service valves & crankcase heater to be purchased separately	W	45.0	22108	27260	33142	39815	43021	47341	55779	216.6	37.69	13.0	3PH	29.0	90.0
	P		9412	9491	9572	9654	9692	9737	9819						
	A		16.90	16.99	17.08	17.16	17.20	17.24	17.31						
	W	50.0	20774	25764	31461	37927	41036	45222	53408						
	P		10396	10469	10544	10620	10655	10695	10770						
	A		18.21	18.30	18.38	18.46	18.50	18.54	18.60						
	W	55.0	-	24075	29572	35816	38822	42866	50782						
	P		-	11572	11641	11709	11741	11776	11842						
	A		-	19.79	19.87	19.95	19.98	20.02	20.09						
SM1614VAI - Rubber Mount Kit - Oil Sight Glass - Mineral Oil - Stub Tubes Note: **crankcase heater to be purchased separately**	W	45.0	22363	27400	33183	39791	42980	47302	55795	216.6	37.69	13.0	3PH	32.0	88.0
	P		9397	9428	9466	9510	9529	9554	9596						
	A		17.75	17.77	17.78	17.79	17.79	17.81	17.87						
	W	50.0	21092	25931	31489	37846	40916	45079	53267						
	P		10480	10493	10518	10551	10567	10589	10628						
	A		19.04	19.08	19.09	19.09	19.10	19.12	19.17						
	W	55.0	-	24403	29722	35813	38757	42753	50622						
	P		-	11699	11706	11724	11734	11750	11782						
	A		-	20.58	20.60	20.61	20.62	20.63	20.68						
SM1754RI - Rubber Mount Kit - Oil Sight Glass - Mineral Oil - Rotalocks Required Note: service valves & crankcase heater to be purchased separately	W	45.0	23885	29380	35664	42803	46232	50864	59913	233.0	40.54	14.0	3PH	35.0	100.0
	P		10079	10156	10228	10293	10316	10348	10392						
	A		19.25	19.34	19.42	19.49	19.51	19.53	19.54						
	W	50.0	22531	27817	33863	40736	44038	48500	57223						
	P		11164	11243	11317	11385	11407	11443	11490						
	A		20.53	20.63	20.72	20.80	20.82	20.85	20.88						
	W	55.0	-	26173	31962	38548	41714	45996	54374						
	P		-	12446	12523	12593	12616	12655	12705						
	A		-	22.09	22.19	22.28	22.31	22.34	22.39						
SM1854RI - Rubber Mount Kit - Oil Sight Glass - Mineral Oil - Rotalocks Required Note: service valves & crankcase heater to be purchased separately	W	45.0	25877	31829	38637	46371	50086	55103	64906	249.9	43.48	15.0	3PH	35.0	100.0
	P		11014	11099	11177	11248	11274	11308	11356						
	A		21.05	21.14	21.22	21.29	21.31	21.34	21.37						
	W	50.0	24409	30136	36686	44131	47708	52542	61992						
	P		12198	12285	12366	12440	12467	12503	12554						
	A		22.45	22.55	22.65	22.72	22.75	22.79	22.83						
	W	55.0	-	28354	34625	41760	45190	49829	58904						
	P		-	13598	13682	13759	13787	13826	13881						
	A		-	24.15	24.25	24.35	24.38	24.42	24.48						

Rating Conditions 11.1k Superheat, 8.3K Subcooling, 35 Deg Ambient . (Power requirements: 3PH = 380-400V/3/50Hz)
Note: Service valves & crankcase heaters are not supplied with compressors & should be purchased separately if required.

MANEUROP COMPRESSORS

R22 Scroll Compressors

Capacities R22

Airefrig Part Number			Refrigeration Capacity - **W**atts Consumption – **P**ower Current – **A**mps												
			Condensing Temperature ºC							Swept volume cm³/rev	Displ m³/h	Motor			Weight Kgs
			Evaporating Temperature ºC									HP	Type	Max. Amps	
			-10	-5	0	5	7.2	10	15						
SY2404MBI - Rubber Mount Kit - Oil Sight Glass - POE Oil - Rotalocks Required Note: service valves & crankcase heater to be purchased separately	W	45.0	35154	43046	52126	62508	67517	74308	87639	347.8	60.5	20.0	3PH	50.0	150.0
	P		14480	14678	14903	15162	15289	15464	15818						
	A		26.12	26.36	26.64	27.00	27.19	27.47	28.08						
	W	50.0	33198	40746	49437	59387	64206	70710	83522						
	P		15952	16156	16381	16634	16757	16926	17264						
	A		27.96	28.20	28.48	28.85	29.03	29.33	29.95						
	W	55.0	-	38365	46648	56146	60758	66976	79251						
	P		-	17819	18043	18290	18409	18570	18891						
	A		-	30.36	30.62	30.98	31.16	31.45	32.07						
SY3004MBI - Rubber Mount Kit - Oil Sight Glass - POE Oil - Rotalocks Required Note: service valves & crankcase heater to be purchased separately	W	45.0	44566	54697	66499	80145	86775	95805	113650	437.5	76.1	25.0	3PH	69.0	157.0
	P		17809	18149	18569	19072	19321	19661	20340						
	A		33.04	33.38	33.81	34.38	34.69	35.15	36.17						
	W	50.0	42038	51676	62925	75957	82318	90945	108059						
	P		19627	19950	20355	20845	21088	21423	22092						
	A		35.25	35.63	36.06	36.61	36.90	37.33	38.28						
	W	55.0	-	48563	59233	71627	77694	85918	102279						
	P		-	21984	22372	22846	23083	23411	24069						
	A		-	38.24	38.69	39.22	39.49	39.90	40.79						
SY3804CBI - Rubber Mount Kit - Oil Sight Glass - POE Oil - Stub Tubes Note: crankcase heater to be purchased separately	W	45.0	54907	66826	80572	96329	103944	114281	134615	531.2	92.4	30.0	3PH	79.0	158.0
	P		21732	22063	22444	22881	23092	23380	23948						
	A		37.62	38.01	38.43	38.98	39.27	39.70	40.67						
	W	50.0	51888	63320	76518	91669	99023	108958	128570						
	P		23969	24267	24619	25028	25229	25503	26049						
	A		40.47	40.87	41.33	41.90	42.20	42.65	43.66						
	W	55.0	-	59691	72309	86823	93884	103416	122277						
	P		-	26762	27076	27452	27638	27895	28412						
	A		-	44.16	44.61	45.16	45.46	45.91	46.91						

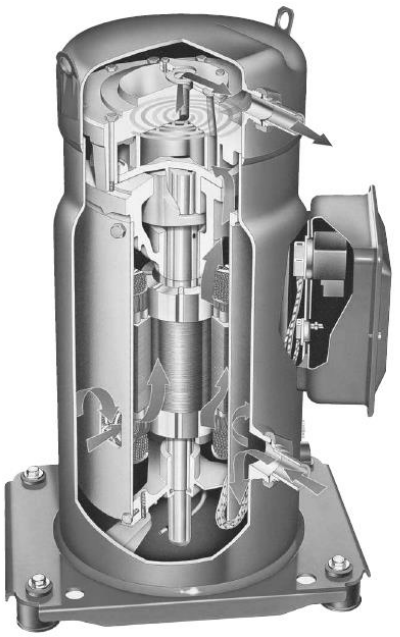
Rating Conditions 11.1k Superheat, 8.3K Subcooling, 35 Deg Ambient . (Power requirements: 3PH = 380-400V/3/50Hz)

Note: Service valves & crankcase heaters are not supplied with compressors & should be purchased separately if required.

Prices

Airefrig Part Number	List Price Excl GST
SM0844VI	P.O.A.
SM0904VI	P.O.A.
SM1004VI	
SM1104VI	
SM1154RI	
SM1204VI	
SM1254RI	
SM1484VI	P.O.A.

Airefrig Part Number	List Price Excl GST
SM1604RAI	
SM1614VAI	
SM1754RI	
SM1854RI	
SY2404MBI	P.O.A.
SY3004MBI	P.O.A.
SY3804CBI	P.O.A.



MANEUROP COMPRESSORS

R407C Scroll Compressors

Capacities R407C

Airefrig Part Number		Refrigeration Capacity - **W**atts Consumption – **P**ower Current – **A**mps												
			Condensing Temperature ºC							Swept volume cm³/rev	Displ m³/h	Motor			Weight Kgs
			Evaporating Temperature ºC									HP	Type	Max. Amps	
			-10	-5	0	5	7.2	10	15						
SZ0844VI - Rubber Mount Kit - Oil Sight Glass - POE Oil - Stub Tubes Note: crankcase heater to be purchased separately	W	45.0	10433	13161	16363	20090	21909	24390	29313	114.5	19.92	7.0	3PH	17.0	64.0
	P		4922	4957	4980	4987	4985	4977	4946						
	A		9.70	9.74	9.76	9.76	9.75	9.72	9.65						
	W	50.0	9688	12269	15305	18843	20572	22933	27624						
	P		5480	5521	5550	5565	5567	5563	5541						
	A		10.34	10.40	10.43	10.44	10.44	10.42	10.37						
	W	55.0	-	11321	14175	17510	19143	21375	25819						
	P		-	6150	6187	6210	6216	6217	6205						
	A		-	11.17	11.22	11.25	11.25	11.25	11.21						
SZ0904VI - Rubber Mount Kit - Oil Sight Glass - POE Oil - Stub Tubes Note: crankcase heater to be purchased separately	W	45.0	11041	13918	17289	21207	23116	25721	30882	120.5	20.97	7.5	3PH	17.0	65.0
	P		5180	5212	5231	5234	5229	5217	5179						
	A		10.23	10.27	10.28	10.27	10.25	10.23	10.14						
	W	50.0	10250	12974	16171	19891	21707	24185	29104						
	P		5777	5814	5838	5846	5844	5836	5804						
	A		10.92	10.97	11.00	11.00	10.99	10.97	10.90						
	W	55.0	-	11971	14978	18485	20200	22544	27204						
	P		-	6488	6517	6531	6532	6528	6504						
	A		-	11.80	11.84	11.86	11.85	11.84	11.79						
SZ1004VI - Rubber Mount Kit - Oil Sight Glass - POE Oil - Stub Tubes Note: crankcase heater to be purchased separately	W	45.0	11724	14766	18325	22455	24466	27207	32634	127.2	22.13	8.0	3PH	19.0	65.0
	P		5506	5534	5549	5546	5539	5522	5475						
	A		10.89	10.93	10.94	10.92	10.90	10.86	10.77						
	W	50.0	10882	13763	17139	21061	22974	25582	30745						
	P		6152	6183	6201	6201	6196	6182	6139						
	A		11.64	11.69	11.71	11.70	11.68	11.66	11.57						
	W	55.0	-	12697	15873	19571	21379	23845	28746						
	P		-	6912	6933	6938	6935	6923	6885						
	A		-	12.58	12.61	12.62	12.60	12.59	12.51						
SZ1104VI - Rubber Mount Kit - Oil Sight Glass - POE Oil - Stub Tubes Note: crankcase heater to be purchased separately	W	45.0	13446	16909	20946	25616	27885	30974	37078	144.2	25.09	9.0	3PH	20.0	73.0
	P		6267	6287	6290	6273	6259	6233	6165						
	A		12.43	12.46	12.46	12.42	12.39	12.34	12.21						
	W	50.0	12477	15761	19592	24029	26188	29128	34947						
	P		7029	7048	7050	7031	7016	6989	6918						
	A		13.32	13.36	13.36	13.32	13.30	13.25	13.12						
	W	55.0	-	14541	18149	22335	24374	27157	32672						
	P		-	7908	7909	7888	7872	7844	7771						
	A		-	14.41	14.42	14.39	14.36	14.31	14.19						
SZ1154RI - Rubber Mount Kit - Oil Sight Glass - POE Oil - Rotalocks Required Note: service valves & crankcase heater to be purchased separately	W	45.0	14680	18498	22926	28020	30489	33840	40442	155.0	26.97	9.5	3PH	25.0	78.0
	P		6836	6840	6829	6803	6781	6758	6691						
	A		12.26	12.27	12.26	12.22	12.20	12.16	12.07						
	W	50.0	13564	17198	21413	26269	28624	31822	38131						
	P		7705	7704	7690	7658	7633	7607	7534						
	A		13.43	13.43	13.41	13.37	13.34	13.30	13.20						
	W	55.0	-	15782	19768	24366	26599	29635	35632						
	P		-	8701	8682	8645	8615	8588	8509						
	A		-	14.80	14.77	14.72	14.69	14.65	14.54						
SZ1204VI - Rubber Mount Kit - Oil Sight Glass - POE Oil - Stub Tubes Note: crankcase heater to be purchased separately	W	45.0	15760	19767	24412	29773	32380	35930	42961	166.6	28.99	10.0	3PH	29.0	73.0
	P		7276	7297	7285	7241	7210	7161	7043						
	A		14.47	14.50	14.48	14.42	14.37	14.30	14.11						
	W	50.0	14597	18408	22822	27918	30397	33775	40473						
	P		8155	8185	8179	8137	8106	8056	7933						
	A		15.54	15.57	15.55	15.48	15.44	15.36	15.16						
	W	55.0	-	16968	21135	25950	28294	31492	37842						
	P		-	9178	9184	9151	9123	9075	8954						
	A		-	16.82	16.81	16.74	16.69	16.61	16.41						

Rating Conditions 11.1k Superheat, 8.3K Subcooling, 35 Deg Ambient . (Power requirements: 3PH = 380-400V/3/50Hz)

Note: Service valves & crankcase heaters are not supplied with compressors & should be purchased separately if required.

MANEUROP COMPRESSORS

R407C Scroll Compressors

Capacities R407C

Airefrig Part Number		Refrigeration Capacity - **W**atts Consumption – **P**ower Current – **A**mps												
		Condensing Temperature ºC							Swept volume cm³/rev	Displ m³/h	Motor			Weight Kgs
		Evaporating Temperature ºC									HP	Type	Max. Amps	
		-10	-5	0	5	7.2	10	15						
SZ1254RI - Rubber Mount Kit - Oil Sight Glass - POE Oil - Rotalocks Required Note: service valves & crankcase heater to be purchased separately	W	15614	19677	24387	29808	32433	35999	43024	166.6	28.99	10.0	3PH	25.0	78.0
	P 45.0	7201	7204	7193	7165	7149	7118	7047						
	A	13.33	13.33	13.32	13.28	13.26	13.22	13.12						
	W	14427	18294	22780	27946	30450	33855	40567						
	P 50.0	8114	8114	8098	8065	8047	8012	7934						
	A	14.59	14.59	14.57	14.53	14.50	14.45	14.34						
	W	-	16790	21031	25923	28298	31529	37910						
	P 55.0	-	9162	9142	9103	9084	9043	8959						
	A	-	16.08	16.06	16.00	15.97	15.92	15.80						
SZ1484VI - Rubber Mount Kit - Oil Sight Glass - POE Oil - Stub Tubes Note: crankcase heater to be purchased separately	W	19339	24144	29751	36258	39432	43763	52364	199.0	34.60	12.0	3PH	32.0	88.0
	P 45.0	8797	8831	8854	8871	8878	8887	8906						
	A	16.32	16.36	16.39	16.40	16.40	16.40	16.40						
	W	18085	22645	27967	34150	37169	41292	49491						
	P 50.0	9870	9904	9924	9935	9938	9941	9947						
	A	17.62	17.68	17.71	17.71	17.71	17.70	17.68						
	W	-	21091	26113	31956	34812	38719	46502						
	P 55.0	-	11124	11142	11147	11147	11144	11137						
	A	-	19.22	19.26	19.26	19.26	19.25	19.21						
SZ1604RI - Rubber Mount Kit - Oil Sight Glass - POE Oil - Rotalocks Required Note: service valves & crankcase heater to be purchased separately	W	21269	26579	32781	39982	43496	48292	57816	216.6	37.69	13.0	3PH	29.0	90.0
	P 45.0	9366	9439	9489	9518	9525	9528	9522						
	A	17.07	17.14	17.18	17.21	17.22	17.22	17.22						
	W	19863	24893	30774	37615	40957	45525	54610						
	P 50.0	10466	10549	10608	10644	10653	10660	10658						
	A	18.41	18.50	18.56	18.60	18.63	18.64	18.66						
	W	-	23115	28644	35094	38252	42573	51191						
	P 55.0	-	11800	11866	11910	11922	11931	11933						
	A	-	20.09	20.15	20.21	20.24	20.26	20.30						
SZ1614VI - Rubber Mount Kit - Oil Sight Glass - POE Oil - Stub Tubes Note: crankcase heater to be purchased separately	W	20912	26109	32176	39224	42663	47360	56691	216.6	37.69	13.0	3PH	32.0	88.0
	P 45.0	9466	9500	9524	9545	9555	9569	9603						
	A	17.57	17.61	17.64	17.65	17.65	17.65	17.65						
	W	19559	24492	30252	36950	40221	44692	53590						
	P 50.0	10625	10659	10680	10694	10700	10709	10729						
	A	18.97	19.03	19.06	19.06	19.07	19.05	19.03						
	W	-	22881	28248	34578	37676	41913	50360						
	P 55.0	-	11974	11993	12001	12004	12007	12015						
	A	-	20.69	20.73	20.74	20.74	20.72	20.68						
SZ1754RI - Rubber Mount Kit - Oil Sight Glass - POE Oil - Rotalocks Required Note: service valves & crankcase heater to be purchased separately	W	22178	27769	34263	41749	45380	50314	60044	233.0	40.54	14.0	3PH	35.0	100.0
	P 45.0	10102	10166	10215	10246	10253	10255	10237						
	A	19.07	19.17	19.24	19.29	19.30	19.30	19.27						
	W	20623	25927	32093	39207	42661	47358	56632						
	P 50.0	11302	11370	11424	11460	11469	11474	11462						
	A	20.58	20.68	20.77	20.83	20.84	20.85	20.83						
	W	-	23959	29767	36481	39746	44189	52978						
	P 55.0	-	12728	12786	12828	12840	12848	12843						
	A	-	22.46	22.56	22.63	22.65	22.66	22.66						
SZ1854RI - Rubber Mount Kit - Oil Sight Glass - POE Oil - Rotalocks Required Note: service valves & crankcase heater to be purchased separately	W	23829	29837	36815	44858	48759	54061	64516	249.9	43.48	15.0	3PH	35.0	100.0
	P 45.0	10863	10932	10985	11019	11026	11028	11009						
	A	20.50	20.61	20.69	20.74	20.75	20.75	20.71						
	W	22159	27858	34483	42127	45838	50885	60850						
	P 50.0	12153	12226	12284	12322	12333	12338	12326						
	A	22.12	22.24	22.33	22.39	22.41	12.41	22.39						
	W	-	25744	31984	39198	42705	47480	56924						
	P 55.0	-	13684	13747	13792	13805	13814	13809						
	A	-	24.15	24.25	24.33	24.35	24.36	24.36						

Rating Conditions 11.1k Superheat, 8.3K Subcooling, 35 Deg Ambient . (Power requirements: 3PH = 380-400V/3/50Hz)
Note: Service valves & crankcase heaters are not supplied with compressors & should be purchased separately if required.

MANEUROP COMPRESSORS

R407C Scroll Compressors

Capacities R407C

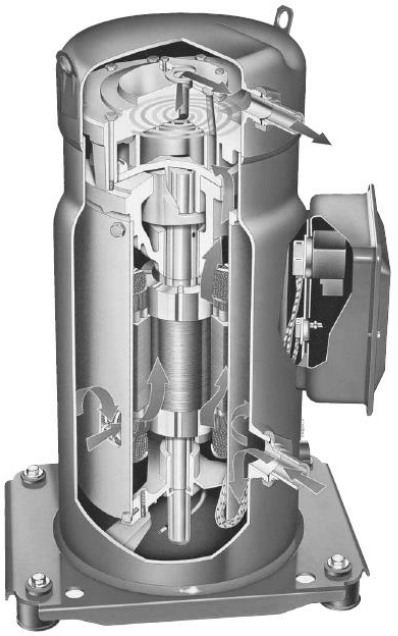
Airefrig Part Number			Refrigeration Capacity - **W**atts Consumption – **P**ower Current – **A**mps												
			Condensing Temperature ºC							Swept volume cm³/rev	Displ m³/h	Motor			Weight Kgs
			Evaporating Temperature ºC									HP	Type	Max. Amps	
			-10	-5	0	5	7.2	10	15						
SZ2404AMBI - Rubber Mount Kit - Oil Sight Glass - POE Oil - Rotalocks Required Note: service valves & crankcase heater to be purchased separately	W	45.0	32346	40509	50042	61115	66513	73899	88564	347.8	60.5	20.0	3PH	50.0	150.0
	P		14587	14761	14954	15157	15246	15357	15543						
	A		26.05	26.33	26.56	26.77	26.87	27.00	27.27						
	W	50.0	30210	37949	46990	57503	62639	69660	83632						
	P		16188	16370	16580	16806	16909	17037	17.262						
	A		28.06	28.37	28.63	28.87	28.99	29.12	29.41						
	W	55.0	28019	35309	43831	53759	58622	65264	78519						
	P		18013	18203	18428	18676	18792	18937	19200						
	A		30.38	30.75	31.07	31.35	31.49	31.65	31.98						
SZ3004MBI - Rubber Mount Kit - Oil Sight Glass - POE Oil - Rotalocks Required Note: service valves & crankcase heater to be purchased separately	W	45.0	40759	50408	61673	74753	81134	89844	107142	437.5	76.1	25.0	3PH	69.0	157.0
	P		17555	17863	18163	18463	18594	18768	19086						
	A		31.98	32.32	32.64	32.97	33.18	33.36	33.84						
	W	50.0	38330	47510	58247	70736	76838	85177	101766						
	P		19504	19870	20222	20566	20714	20908	21254						
	A		34.33	34.73	35.12	35.52	35.78	35.98	36.54						
	W	55.0	35740	44388	54531	66367	72163	80095	95915						
	P		21634	22061	22466	22857	23022	23238	23616						
	A		36.99	37.46	37.91	38.38	38.68	38.91	39.54						
SZ3804CBI - Rubber Mount Kit - Oil Sight Glass - POE Oil - Stub Tubes Note: crankcase heater to be purchased separately	W	45.0	50534	62466	76366	92461	100296	110977	132142	531.2	92.4	30.0	3PH	79.0	158.0
	P		21634	21995	22322	22636	22775	22959	23312						
	A		36.95	37.49	38.00	38.47	38.65	38.87	39.18						
	W	50.0	47377	58718	71932	87248	94711	104893	125095						
	P		23979	24381	24735	25062	25203	25384	25723						
	A		39.99	40.60	41.15	41.62	41.78	41.98	42.23						
	W	55.0	44055	54766	67256	81754	88830	98492	117697						
	P		26591	27045	27437	27787	27934	28118	28452						
	A		43.47	44.18	44.78	45.28	45.45	45.64	45.85						

Rating Conditions 11.1k Superheat, 8.3K Subcooling, 35 Deg Ambient . (Power requirements: 3PH = 380-400V/3/50Hz)
Note: Service valves & crankcase heaters are not supplied with compressors & should be purchased separately if required.

Prices

Airefrig Part Number	List Price Excl GST
SZ0844VI	P.O.A.
SZ0904VI	P.O.A.
SZ1004VI	P.O.A.
SZ1104VI	
SZ1154RI	
SZ1204VI	
SZ1254RI	P.O.A.
SZ1484VI	P.O.A.

Airefrig Part Number	List Price Excl GST
SZ1604RI	P.O.A.
SZ1614V1I	P.O.A.
SZ1754RI	P.O.A.
SZ1854RI	
SZ240A4MBI	
SZ3004MBI	P.O.A.
SZ3804CBI	P.O.A.



MANEUROP COMPRESSORS

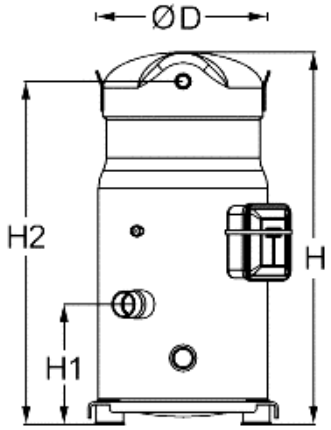
Scroll Compressors Specifications & Dimensions

Airefrig Part Number	Suction Connections				Discharge Connections				Crankcase Heater (Belt Type)	* Oil charge Litres
	Type	ODF	Valve No.	Gasket No.	Type	ODF	Valve No.	Gasket No.		
SM / SZ 0844VI	Stub Tube	1-1/8"	-	-	Stub Tube	3/4"	-	-	7773107 230 volts 65 watts	3.3
SM / SZ 0904VI	Stub Tube	1-1/8"	-	-	Stub Tube	3/4"	-	-		3.3
SM / SZ 1004VI	Stub Tube	1-1/8"	-	-	Stub Tube	3/4"	-	-		3.3
SM / SZ 1104VI	Stub Tube	1-3/8"	-	-	Stub Tube	7/8"	-	-		3.3
SM / SZ 1154RI	Rotalock 1-3/4 12UNF	1-1/8"	17016703	020002803	Rotalock 1-1/4 12UNF	3/4"	2605122030	020002802		3.8
SM / SZ 1204VI	Stub Tube	1-3/8"	-	-	Stub Tube	7/8"	-	-		3.3
SM / SZ 1254RI	Rotalock 1-3/4 12UNF	1-1/8"	17016703	020002803	Rotalock 1-1/4 12UNF	3/4"	2605122030	020002802		3.8
SM / SZ 1484VI	Stub Tube	1-3/8"	-	-	Stub Tube	7/8"	-	-		3.6
SM / SZ 1604RI	Rotalock 2-1/4 12UNF	1-3/8"	V08	020094100	Rotalock 1-3/4 12UNF	7/8"	V07	020002803		4.0
SM / SZ 1614VI	Stub Tube	1-3/8"	-	-	Stub Tube	7/8"	-	-		3.6
SM / SZ 1754RI	Rotalock 2-1/4 12UNF	1-3/8"	V08	020094100	Rotalock 1-3/4 12UNF	7/8"	V07	020002803	7773008 240 volts 75 watts	6.2
SM / SZ 1854RI	Rotalock 2-1/4 12UNF	1-3/8"	V08	020094100	Rotalock 1-3/4 12UNF	7/8"	V07	020002803		6.2
SY / SZ 2404MBI	Rotalock 2-1/4 12UNF	1-3/8"	V08	020094100	Rotalock 1-3/4 12UNF	7/8"	V07	020002803	7773122 230 volts 130 watts	8.0
SY / SZ 3004MBI	Rotalock 2-1/4 12UNF	1-3/8"	V08	020094100	Rotalock 1-3/4 12UNF	7/8"	V07	020002803		8.0
SY / SZ 3804CBI	Stub Tube	2-1/8"	-	-	Stub Tube	1-3/8"	-	-		8.4

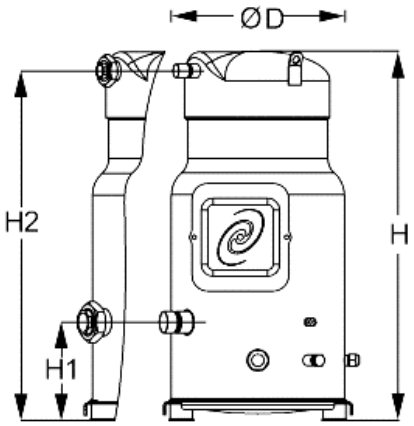
* Note: SM compressor: 160P mineral oil SZ compressor: 160SZ P.O.E. oil SY compressor: 320SZ P.O.E. oil

Scroll Compressor Dimensions

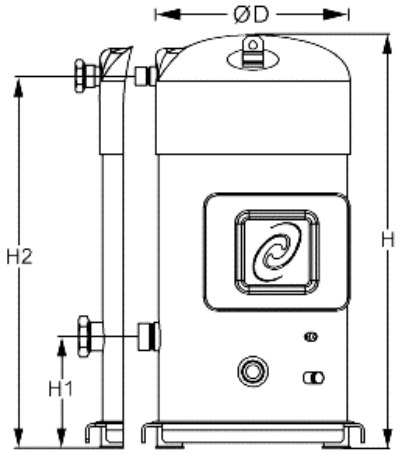
Model	D	H	H1	H2
SM/SZ 084	254	508	142	465
SM/SZ 090	254	508	142	465
SM/SZ 100	254	508	142	465
SM/SZ 110	254	558	179	515
SM/SZ 120	254	558	179	515
SM/SZ 148	266	591	180	556
SM/SZ 161	266	591	180	556



Model	D	H	H1	H2
SM/SZ 115	254	586	180	538
SM/SZ 125	254	586	180	538
SM/SZ 160	266	631	180	596
SM/SZ 175	316	678	180	641
SM/SZ 185	316	678	180	641



Model	D	H	H1	H2
SZ/SY 240	344	729	196	656
SZ/SY 300	344	740	196	667
SZ/SY 380	344	770	203	695



MANEUROP COMPRESSORS

Electrical Details
Contactors & Thermal Overloads Options

Airefrig Part Number	Resistance OHMS (+/- 7% @ 25ºC)	Locked Rotor	Maximum Continuous Current	3Ø Contactor	3Ø Thermal Overload	3Ø Electronic Overload *Includes phase loss & imbalance protection*
SM/SZ 084	Line to Line 1.74	86.0 amps	17.0 amps	MC18B240V (AC-3 Rating 18A)	MT323K18 (12-18 amps)	GMP223P22A (4.4-22.0amps)
SM/SZ 090	Line to Line 1.48	98.0amps	17.0 amps	MC18B240V (AC-3 Rating 18A)	MT323K18 (12-18 amps)	GMP223P22A (4.4-22.0amps)
SM/SZ 100	Line to Line 1.48	98.0 amps	19.0 amps	MC22B240V (AC-3 Rating 22A)	MT323K22 (16-22 amps)	GMP223P22A (4.4-22.0amps)
SM/SZ 110	Line to Line 1.05	130.0 amps	22.0 amps	MC32A240V (AC-3 Rating 32A)	MT323K25 (18-25 amps)	GMP403P40A (8.0-40.0amps)
SM/SZ 115	Line to Line 1.16	120.0 amps	25.0 amps	MC32A240V (AC-3 Rating 32A)	MT323K25 (18-25 amps)	GMP403P40A (8.0-40.0amps)
SM/SZ 120	Line to Line 1.05	130.0 amps	29.0 amps	MC32A240V (AC-3 Rating 32A)	MT323K32 (22-32 amps)	GMP403P40A (8.0-40.0amps)
SM/SZ 125	Line to Line 1.16	120.0 amps	25.0 amps	MC32A240V (AC-3 Rating 32A)	MT323K25 (18-25 amps)	GMP403P40A (8.0-40.0amps)
SM/SZ 148	Line to Line 0.94	145.0 amps	32.0 amps	MC40A240V (AC-3 Rating 40A)	MT323K32 (22-32 amps)	GMP403P40A (8.0-40.0amps)
SM/SZ 160	Line to Line 0.94	155.0 amps	29.0 amps	MC32A240V (AC-3 Rating 32A)	MT323K32 (22-32 amps)	GMP403P40A (8.0-40.0amps)
SM/SZ 161	Line to Line 0.94	145.0 amps	32.0 amps	MC40A240V (AC-3 Rating 40A)	MT323K32 (22-32 amps)	GMP403P40A (8.0-40.0amps)
SM/SZ 175	Line to Line 0.94	155.0 amps	35.0 amps	MC40A240V (AC-3 Rating 40A)	MT323K40 (28-40 amps)	GMP403P40A (8.0-40.0amps)
SM/SZ 185	Line to Line 0.77	175.0 amps	35.0 amps	MC40A240V (AC-3 Rating 40A)	MT323K40 (28-40 amps)	GMP403P40A (8.0-40.0amps)
SZ/SY 240	Line to Line 0.616	215.0 amps	50.0 amps	MC65A240V (AC-3 Rating 65A)	MT633K65 (45-65 amps)	-
SZ/SY 300	Line to Line 0.516	270.0 amps	69.0 amps	MC75A240V (AC-3 Rating 75A)	MT953K75 (54-75 amps)	-
SZ/SY 380	Line to Line 0.456	320.0 amps	79.0 amps	MC85A240V (AC-3 Rating 85A)	MT953K85 (63-85 amps)	-



Maneurop®

Reciprocating Compressors

Maneurop Reciprocating Compressors

MTZ Compressors – Medium Temperature
The maximum allowable superheat is approximately 30K & maximum discharge gas temperature of +130ºC.
Higher superheat values maybe allowable if the discharge gas temperature is kept below +130ºC.
Note: Optimum suction gas superheat is 8K or lower if liquid flood back to the compressor can be prevented.

NTZ Compressors – Low Temperature
These compressors can be operated at a return gas temperature of 20ºC even at low evaporating temperatures.
The maximum allowable superheat is approximately 30K & maximum discharge gas temperature of +135ºC.
(maximum allowable discharge line temp measured with a temperature probe on the compressor discharge connection is +115ºC)
Note: Optimum suction gas superheat is 8K or lower if liquid flood back to the compressor can be prevented.
(NTZ compressors do replace the LTZ range)

MTZ & NTZ compressor motors are designed to be 100% suction gas cooled, this means that no additional compressor cooling is required which allows for the option of applying acoustic jackets to obtain lower sound levels without the risk of overheating the compressor.

MTZ & NTZ single phase compressors are protected by a temperature/current sensing bimetallic protector which senses the main & start winding currents & the winding temperature (may take several hours to reset if tripped).

MTZ & NTZ three phase compressors are protected by an internal motor protector, connected to the neutral point of the star connected stator windings, the protector cuts out all 3-phases simultaneously (may take several hours to reset if tripped).



MANEUROP COMPRESSORS

MTZ R404A Medium Temp Reciprocating Compressors

Capacities R404A

Airefrig Part Number		Condensing Temperature ºC	Evaporating Temperature ºC -20	-15	-10	-5	0	5	10	Displ cm³/r	Motor HP	Type	MCC	LRA	Kgs
			Refrigeration Capacity - **W**atts Consumption – **P**ower Current – **A**mps												
MTZ185VI	W		1178	1623	2146	2753	3450	4237	5117						
- Rubber Mount Kit	P	45.0	964	1089	1204	1306	1394	1468	1526						
- Oil Sight Glass	A		6.01	6.36	6.69	6.98	7.25	7.49	7.69						
- POE Oil	W			1423	1888	2428	3047	3748	4531						
- Electrics for CSR (supplied loose)	P	50.0		1114	1240	1355	1459	1549	1625	30.23	1.5	CSR	10.0	40.0	21.0
	A			6.46	6.81	7.14	7.44	7.72	7.97						
Note: service valves &	W			1226	1632	2104	2645	3258	3942						
crankcase heater to be	P	55.0		1139	1275	1403	1520	1625	1718						
purchased separately	A			6.53	6.92	7.30	7.67	8.01	8.34						
MTZ184VI	W		1178	1623	2146	2753	3450	4237	5117						
- Rubber Mount Kits	P	45.0	964	1089	1204	1306	1394	1468	1526						
- Oil Sight Glass	A		2.46	2.60	2.74	2.86	2.97	3.06	3.14						
- POE Oil	W			1423	1888	2428	3047	3748	4531						
	P	50.0		1114	1240	1355	1459	1549	1625	30.23	1.5	3PH	5.0	20.0	21.0
Note: service valves &	A			2.64	2.79	2.92	3.04	3.16	3.26						
crankcase heater to be	W			1226	1632	2104	2645	3258	3942						
purchased separately	P	55.0		1139	1275	1403	1520	1625	1718						
	A			2.67	2.83	2.99	3.14	3.28	3.41						
MTZ225VI	W		1690	2270	2955	3754	4671	5708	6866						
- Rubber Mount Kit	P	45.0	1185	1337	1478	1606	1720	1819	1900						
- Oil Sight Glass	A		6.84	7.26	7.67	8.05	8.40	8.70	8.95						
- POE Oil	W			1970	2584	3302	4127	5062	6106						
- Electrics for CSR (supplied loose)	P	50.0		1370	1532	1683	1821	1945	2054	38.12	1.75	CSR	15.0	41.0	21.0
	A			7.38	7.86	8.32	8.75	9.14	9.48						
Note: service valves &	W			1675	2212	2844	3573	4401	5327						
crankcase heater to be	P	55.0		1389	1573	1748	1912	2063	2201						
purchased separately	A			7.42	8.00	8.57	9.11	9.62	10.08						
MTZ224VI	W		1690	2270	2955	3754	4671	5708	6866						
- Rubber Mount Kits	P	45.0	1185	1337	1478	1606	1720	1819	1900						
- Oil Sight Glass	A		2.73	2.90	3.06	3.21	3.35	3.47	3.57						
- POE Oil	W			1970	2584	3302	4127	5062	6106						
	P	50.0		1370	1532	1683	1821	1945	2054	38.12	1.75	3PH	6.0	16.0	21.0
Note: service valves &	A			2.94	3.13	3.32	3.49	3.65	3.78						
crankcase heater to be	W			1675	2212	2844	3573	4401	5327						
purchased separately	P	55.0		1389	1573	1748	1912	2063	2201						
	A			2.96	3.19	3.42	3.64	3.84	4.02						
MTZ285VI	W		2213	2981	3861	4862	5989	7245	8632						
- Rubber Mount Kits	P	45.0	1524	1745	1950	2137	2302	2443	2557						
- Oil Sight Glass	A		9.65	10.37	11.07	11.74	12.33	12.83	13.19						
- POE Oil	W			2594	3396	4306	5330	6471	7728						
- Electrics for CSR (supplied loose)	P	50.0		1787	2019	2232	2426	2598	2743	48.06	2.0	CSR	20.0	51.0	23.0
	A			10.54	11.35	12.13	12.84	13.45	13.94						
Note: service valves &	W			2221	2940	3756	4672	5692	6814						
crankcase heater to be	P	55.0		1812	2071	2314	2539	2742	2922						
purchased separately	A			10.57	11.54	12.47	13.35	14.13	14.79						
MTZ284VI	W		2213	2981	3861	4862	5989	7245	8632						
- Rubber Mount Kits	P	45.0	1524	1745	1950	2137	2302	2443	2557						
- Oil Sight Glass	A		3.52	3.78	4.04	4.28	4.50	4.68	4.81						
- POE Oil	W			2594	3396	4306	5330	6471	7728						
	P	50.0		1787	2019	2232	2426	2598	2743	48.06	2.0	3PH	7.5	23.0	23.0
Note: service valves &	A			3.84	4.14	4.42	4.68	4.91	5.09						
crankcase heater to be	W			2221	2940	3756	4672	5692	6814						
purchased separately	P	55.0		1812	2071	2314	2539	2742	2922						
	A			3.86	4.21	4.55	4.87	5.15	5.39						

Rating Conditions: 20 Deg Return Gas, no Sub-Cooling (Standard power requirements: 1PH = 230V/1/50Hz & 3PH = 380-400V/3/50Hz)
Note: Service valves & crankcase heaters are not supplied with compressors & should be purchased separately if required.

MANEUROP COMPRESSORS

MTZ R404A Medium Temp Reciprocating Compressors

Capacities R404A

Airefrig Part Number		Refrigeration Capacity - **W**atts Consumption – **P**ower Current – **A**mps												
			Condensing Temperature ºC							Displ cm³/r	Motor				Kgs
			Evaporating Temperature ºC								HP	Type	MCC	LRA	
			-20	-15	-10	-5	0	5	10						
MTZ325VI	W		2677	3516	4482	5582	6822	8208	9739						
- Rubber Mount Kit	P	45.0	1698	1933	2153	2356	2542	2708	2854						
- Oil Sight Glass	A		10.12	11.00	11.86	12.67	13.39	13.98	14.39						
- POE Oil	W			3080	3955	4952	6076	7330	8715						
- Electrics for CSR (supplied loose)	P	50.0		1980	2229	2464	2682	2882	3063	54.86	2.5	CSR	20.0	70.0	24.0
	A			11.20	12.20	13.12	14.02	14.77	15.35						
Note: service valves &	W			2639	3417	4303	5303	6419	7649						
crankcase heater to be	P	55.0		2000	2281	2549	2802	3038	3256						
purchased separately	A			11.25	12.42	13.55	14.62	15.57	16.37						
MTZ324VI	W		2677	3516	4482	5582	6822	8208	9739						
- Rubber Mount Kits	P	45.0	1698	1933	2153	2356	2542	2708	2854						
- Oil Sight Glass	A		3.62	3.93	4.24	4.53	4.79	5.00	5.15						
- POE Oil	W			3080	3955	4952	6076	7330	8715						
Note: service valves &	P	50.0		1980	2229	2464	2682	2882	3063	54.86	2.5	3PH	8.0	25.0	24.0
crankcase heater to be	A			4.01	4.36	4.70	5.02	5.28	5.49						
purchased separately	W			2639	3417	4303	5303	6419	7649						
	P	55.0		2000	2281	2549	2802	3038	3256						
	A			4.03	4.44	4.85	5.23	5.57	5.86						
MTZ365VI	W		3217	4169	5252	6474	7842	9361	11033						
- Rubber Mount Kit	P	45.0	2052	2317	2567	2797	3004	3184	3333						
- Oil Sight Glass	A		13.08	14.19	15.28	16.31	17.21	17.94	18.43						
- POE Oil	W			3697	4678	5780	7010	8373	9868						
- Electrics for CSR (supplied loose)	P	50.0		2393	2677	2942	3187	3407	3598	60.47	3.0	CSR	22.0	60.0	25.0
	A			14.54	15.79	16.97	18.03	18.92	19.58						
Note: service valves &	W			3200	4075	5053	6141	7342	8656						
crankcase heater to be	P	55.0		2435	2753	3057	3341	3602	3837						
purchased separately	A			14.77	16.21	17.60	18.88	19.99	20.88						
MTZ364VI	W		3217	4169	5252	6474	7842	9361	11033						
- Rubber Mount Kits	P	45.0	2052	2317	2567	2797	3004	3184	3333						
- Oil Sight Glass	A		4.24	4.60	4.95	5.29	5.58	5.81	5.97						
- POE Oil	W			3697	4678	5780	7010	8373	9868						
Note: service valves &	P	50.0		2393	2677	2942	3187	3407	3598	60.47	3.0	3PH	9.0	30.0	25.0
crankcase heater to be	A			4.71	5.12	5.50	5.84	6.13	6.34						
purchased separately	W			3200	4075	5053	6141	7342	8656						
	P	55.0		2435	2753	3057	3341	3602	3837						
	A			4.79	5.25	5.70	6.12	6.48	6.76						
MTZ404VI	W		3774	4817	5994	7314	8784	10411	12195						
- Rubber Mount Kits	P	45.0	2363	2665	2946	3204	3441	3654	3844						
- Oil Sight Glass	A		5.08	5.48	5.87	6.25	6.59	6.91	7.18						
- POE Oil	W			4300	5368	6560	7885	9346	10944						
Note: service valves &	P	50.0		2767	3083	3375	3644	3890	4112	67.89	3.5	3PH	10.0	38.0	26.0
crankcase heater to be	A			5.62	6.06	6.49	6.89	7.27	7.61						
purchased separately	W			3743	4695	5752	6922	8209	9612						
	P	55.0		2854	3211	3545	3856	4142	4404						
	A			5.75	6.26	6.76	7.23	7.68	8.09						
MTZ454VI	W		3366	4467	5791	7357	9184	11284	13663						
- Rubber Mount Kits	P	45.0	2570	2865	3146	3404	3631	3818	3954						
- Oil Sight Glass	A		5.77	6.07	6.36	6.64	6.90	7.13	7.32						
- POE Oil	W			3856	5037	6438	8075	9959	12096						
Note: service valves &	P	50.0		2938	3253	3551	3823	4060	4251	76.22	3.75	3PH	9.5	48.5	37.0
crankcase heater to be	A			6.14	6.48	6.81	7.12	7.41	7.67						
purchased separately	W			3315	4314	5511	6921	8553	10409						
	P	55.0		2963	3319	3663	3986	4279	4533						
	A			6.17	6.56	6.94	7.32	7.69	8.03						

Rating Conditions: 20 Deg Return Gas, no Sub-Cooling (Standard power requirements: 1PH = 230V/1/50Hz & 3PH = 380-400V/3/50Hz)
Note: Service valves & crankcase heaters are not supplied with compressors & should be purchased separately if required.

MANEUROP COMPRESSORS

MTZ R404A Medium Temp Reciprocating Compressors

Capacities R404A

Airefrig Part Number			Refrigeration Capacity - **W**atts Consumption – **P**ower Current – **A**mps Condensing Temperature ºC Evaporating Temperature ºC							Displ cm³/r	Motor				Kgs
			-20	-15	-10	-5	0	5	10		HP	Type	MCC	LRA	
MTZ514VI - Rubber Mount Kits - Oil Sight Glass - POE Oil Note: service valves & crankcase heater to be purchased separately	W	45.0	4107	5386	6914	8713	10801	13192	15893	85.64	4.0	3PH	11.5	48.5	37.0
	P		2934	3273	3594	3888	4143	4349	4495						
	A		5.74	6.14	6.52	6.88	7.20	7.47	7.69						
	W	50.0		4664	6027	7635	9504	11647	14069						
	P			3358	3720	4061	4369	4634	4845						
	A			6.24	6.68	7.10	7.50	7.85	8.15						
	W	55.0		4018	5171	6544	8152	10005	12104						
	P			3390	3800	4195	4564	4896	5181						
	A			6.28	6.79	7.29	7.77	8.21	8.62						
MTZ574VI - Rubber Mount Kits - Oil Sight Glass - POE Oil Note: service valves & crankcase heater to be purchased separately	W	45.0	4594	6114	7853	9829	12054	14533	17272	96.13	4.5	3PH	12.0	64.0	39.0
	P		3204	3608	3993	4345	4651	4898	5073						
	A		6.09	6.58	7.06	7.51	7.91	8.25	8.52						
	W	50.0		5345	6915	8693	10691	12914	15363						
	P			3721	4149	4551	4913	5224	5469						
	A			6.74	7.28	7.80	8.28	8.71	9.07						
	W	55.0		4607	5961	7496	9222	11145	13263						
	P			3794	4273	4733	5161	5543	5868						
	A			6.84	7.45	8.05	8.62	9.15	9.62						
MTZ654VI - Rubber Mount Kits - Oil Sight Glass - POE Oil Note: service valves & crankcase heater to be purchased separately	W	45.0	5495	7169	9121	11332	13816	16579	19624	107.7	5.5	3PH	14.0	64.0	39.0
	P		3638	4099	4522	4926	5288	5596	5836						
	A		7.19	7.74	8.29	8.81	9.29	9.73	10.09						
	W	50.0		6308	8075	10071	12306	14788	17516						
	P			4216	4695	5151	5573	5947	6260						
	A			7.90	8.51	9.10	9.66	10.19	10.65						
	W	55.0		5444	6976	8706	10646	12800	15165						
	P			4280	4812	5330	5819	6268	6664						
	A			8.02	8.70	9.38	10.04	10.66	11.24						
MTZ724VI - Rubber Mount Kits - Oil Sight Glass - POE Oil Note: service valves & crankcase heater to be purchased separately	W	45.0	6251	8126	10273	12713	15459	18521	21902	120.9	6.0	3PH	17.0	80.0	41.0
	P		3998	4493	4979	5443	5875	6261	6590						
	A		7.31	7.97	8.63	9.37	9.87	10.42	10.90						
	W	50.0		7131	9078	11282	13758	16514	19549						
	P			4618	5151	5671	6165	6621	7027						
	A			8.14	8.87	9.59	10.29	10.94	11.54						
	W	55.0		6172	7861	9776	11928	14324	16961						
	P			4713	5303	5887	6452	6987	7480						
	A			8.28	9.09	9.91	10.72	11.49	12.23						
MTZ814VI - Rubber Mount Kits - Oil Sight Glass - POE Oil Note: service valves & crankcase heater to be purchased separately	W	45.0	7189	9362	11806	14535	17562	20891	24523	135.7	6.5	3PH	19.0	80.0	41.0
	P		4707	5271	5829	6366	6870	7328	7727						
	A		8.61	9.37	10.12	1.86	11.57	12.23	12.83						
	W	50.0		8223	10450	12925	15659	18656	21913						
	P			5423	6031	6626	7197	7729	8210						
	A			9.56	10.39	11.22	12.03	12.81	13.53						
	W	55.0		7105	9054	11215	13598	16205	19031						
	P			5528	6196	6859	7505	8121	8693						
	A			9.74	10.67	11.60	12.53	13.44	14.30						
MTZ1004VI - Rubber Mount Kits - Oil Sight Glass - POE Oil Note: service valves & crankcase heater to be purchased separately	W	45.0	8299	10870	13805	17137	20889	25078	29709	171.2	8.5	3PH	22.0	90.0	60.0
	P		5487	6142	6725	7235	7671	8032	8318						
	A		10.76	11.50	12.19	12.82	13.36	13.81	14.14						
	W	50.0		9640	12298	15293	18651	22387	26505						
	P			6340	7015	7614	8137	8583	8951						
	A			11.72	12.53	13.27	13.94	14.50	14.96						
	W	55.0		8301	10689	13353	16319	19603	23206						
	P			6394	7174	7877	8501	9045	9510						
	A			11.78	12.73	13.62	14.43	15.14	15.73						

Rating Conditions: 20 Deg Return Gas, no Sub-Cooling (Standard power requirements: 1PH = 230V/1/50Hz & 3PH = 380-400V/3/50Hz)
Note: Service valves & crankcase heaters are not supplied with compressors & should be purchased separately if required.

MANEUROP COMPRESSORS

MTZ R404A Medium Temp Reciprocating Compressors

Capacities R404A

Airefrig Part Number		Condensing Temperature ºC	Evaporating Temperature ºC							Displ cm³/r	Motor				Kgs
			-20	-15	-10	-5	0	5	10		HP	Type	MCC	LRA	
	Refrigeration Capacity - **W**atts														
	Consumption – **P**ower														
	Current – **A**mps														
MTZ1254VI - Rubber Mount Kits - Oil Sight Glass - POE Oil	W	45.0	10861	14020	17710	21962	26801	32241	38284	215.4	10.0	3PH	27.0	105.0	64.0
	P		6843	7648	8415	9136	9804	10411	10951						
	A		11.68	12.74	13.78	14.77	15.68	16.48	17.14						
Note: service valves & crankcase heater to be purchased separately	W	50.0		12381	15693	19518	23877	28780	34227						
	P			7887	8747	9570	10348	11073	11740						
	A			13.05	14.22	15.35	16.42	17.40	18.25						
	W	55.0		10815	13737	17121	20987	25339	30169						
	P			8073	9023	9942	10825	11664	12451						
	A			13.27	14.59	15.88	17.12	18.29	19.35						
MTZ1444VI - Rubber Mount Kits - Oil Sight Glass - POE Oil	W	45.0	13063	16669	20813	25533	30857	36800	43370	241.8	12.0	3PH	30.0	115.0	67.0
	P		7968	8877	9746	10565	11327	12024	12649						
	A		13.95	15.13	16.27	17.36	18.34	19.19	19.86						
Note: service valves & crankcase heater to be purchased separately	W	50.0		14797	18540	22802	27609	32974	38896						
	P			9146	10122	11057	11944	12774	13540						
	A			15.47	16.76	18.01	19.17	20.21	21.09						
	W	55.0		12890	16204	19980	24241	28996	34237						
	P			9323	10404	11452	12460	13421	14327						
	A			15.66	17.13	18.56	19.93	21.18	22.30						
MTZ1604VI - Rubber Mount Kits - Oil Sight Glass - POE Oil	W	45.0	14372	18320	22851	28004	33811	40289	47447	271.5	13.5	3PH	36.0	140.0	69.0
	P		9009	10046	11046	12020	12982	13943	14916						
	A		15.56	16.91	18.25	19.57	20.85	22.07	23.22						
Note: service valves & crankcase heater to be purchased separately	W	50.0		16315	20419	25084	30339	36199	42663						
	P			10363	11475	12563	13640	14717	15806						
	A			17.32	18.81	20.28	21.72	23.10	24.42						
	W	55.0		14266	17914	22060	26731	31937	37671						
	P			10608	11833	13036	14229	15423	16630						
	A			17.65	19.32	20.98	22.60	24.17	25.68						

Rating Conditions: 20 Deg Return Gas, no Sub-Cooling (Standard power requirements: 1PH = 230V/1/50Hz & 3PH = 380-400V/3/50Hz)
Note: Service valves & crankcase heaters are not supplied with compressors & should be purchased separately if required.

Prices

Airefrig Part Number	List Price Excl GST
MTZ185VI	P.O.A.
MTZ184VI	
MTZ225VI	
MTZ224VI	
MTZ285VI	
MTZ284VI	
MTZ325VI	

Airefrig Part Number	List Price Excl GST
MTZ324VI	
MTZ365VI	
MTZ364VI	
MTZ404VI	
MTZ454VI	
MTZ514VI	
MTZ574VI	

Airefrig Part Number	List Price Excl GST
MTZ654VI	
MTZ724VI	
MTZ814VI	
MTZ1004VI	
MTZ1254VI	
MTZ1444VI	
MTZ1604VI	

Accessories

Airefrig Part Number	Description	List Price Excl GST
120Z0459	Crankcase Heater Internal PTC 35watts voltage range of 200volts to 600volts	
7701022	CSR Electrical Start Kit: MTZ18-28 & NTZ48-68 (1x Relay, 1x Start Cap, 2x Run Caps)	
7701023	CSR Electrical Start Kit: MTZ32 & MTZ36 (1x Relay, 1x Start Cap, 2x Run Caps)	

MANEUROP COMPRESSORS

MTZ R134A Medium Temp Reciprocating Compressors

Capacities R134A

Airefrig Part Number			Refrigeration Capacity - **W**atts Consumption – **P**ower Current – **A**mps												
			Condensing Temperature ºC							Displ cm³/r	Motor				Kgs
			Evaporating Temperature ºC								HP	Type	MCC	LRA	
			-15	-10	-5	0	5	10	15						
MTZ185VI	W		765	1128	1553	2047	2616	3264	3997						
- Rubber Mount Kit	P	45.0	613	688	758	820	870	907	927						
- Oil Sight Glass	A		4.60	4.70	4.80	4.90	5.10	5.20	5.40						
- POE Oil	W		665	996	1382	1831	2349	2940	3609						
- Electrics for CSR (supplied loose)	P	50.0	617	701	781	855	919	971	1008	30.23	1.5	CSR	10.0	40.0	21.0
	A		4.60	4.72	4.86	5.01	5.18	5.36	5.55						
Note: service valves &	W		585	878	1222	1623	2086	2617	3220						
crankcase heater to be	P	55.0	613	706	798	885	964	1032	1086						
purchased separately	A		4.60	4.70	4.90	5.10	5.30	5.50	5.70						
MTZ184VI	W		765	1128	1553	2047	2616	3264	3997						
- Rubber Mount Kits	P	45.0	613	688	758	820	870	907	927						
- Oil Sight Glass	A		1.90	1.90	2.00	2.00	2.10	2.10	2.20						
- POE Oil	W		665	996	1382	1831	2349	2940	3609						
	P	50.0	617	701	781	855	919	971	1008	30.23	1.5	3PH	5.0	20.0	21.0
Note: service valves &	A		1.88	1.93	1.99	2.05	2.12	2.19	2.27						
crankcase heater to be	W		585	878	1222	1623	2086	2617	3220						
purchased separately	P	55.0	613	706	798	885	964	1032	1086						
	A		1.90	1.90	2.00	2.10	2.20	2.20	2.30						
MTZ225VI	W		1034	1480	2012	2641	3376	4226	5196						
- Rubber Mount Kit	P	45.0	718	815	906	989	1058	1112	1146						
- Oil Sight Glass	A		5.20	5.40	5.60	5.80	5.90	6.10	6.30						
- POE Oil	W		913	1319	1806	2382	3056	3837	4732						
- Electrics for CSR (supplied loose)	P	50.0	725	831	933	1029	1113	1183	1235	38.12	1.75	CSR	15.0	41.0	21.0
	A		5.25	5.45	5.66	5.86	6.07	6.27	6.47						
Note: service valves &	W		811	1174	1610	2128	2738	3447	4262						
crankcase heater to be	P	55.0	724	840	955	1064	1164	1251	1322						
purchased separately	A		5.30	5.50	5.70	6.00	6.20	6.40	6.70						
MTZ224VI	W		1034	1480	2012	2641	3376	4225	5196						
- Rubber Mount Kits	P	45.0	718	815	906	989	1058	1112	1146						
- Oil Sight Glass	A		2.10	2.20	2.20	2.30	2.40	2.40	2.50						
- POE Oil	W		913	1319	1806	2382	3056	3837	4732						
	P	50.0	725	831	933	1029	1113	1183	1235	38.12	1.75	3PH	6.0	16.0	21.0
Note: service valves &	A		2.10	2.18	2.26	2.34	2.42	2.50	2.58						
crankcase heater to be	W		811	1174	1610	2128	2738	3447	4262						
purchased separately	P	55.0	724	840	955	1064	1164	1251	1322						
	A		2.10	2.20	2.30	2.40	2.50	2.60	2.70						
MTZ285VI	W		1359	1858	2481	3244	4160	5245	6510						
- Rubber Mount Kits	P	45.0	911	1020	1129	1235	1335	1428	1510						
- Oil Sight Glass	A		7.50	7.80	8.00	8.20	8.50	8.70	9.00						
- POE Oil	W		1243	1695	2261	2959	3801	4802	5974						
- Electrics for CSR (supplied loose)	P	50.0	935	1054	1174	1294	1410	1520	1622	48.06	2.0	CSR	20.0	51.0	23.0
	A		7.56	7.82	8.10	8.40	8.70	9.02	9.34						
Note: service valves &	W		1150	1548	2052	2678	3442	4354	5427						
crankcase heater to be	P	55.0	951	1081	1215	1350	1483	1612	1734						
purchased separately	A		7.60	7.90	8.20	8.50	8.90	9.30	9.70						
MTZ284VI	W		1359	1858	2481	3244	4160	5245	6510						
- Rubber Mount Kits	P	45.0	911	1020	1129	1235	1335	1428	1510						
- Oil Sight Glass	A		2.70	2.80	2.90	3.00	3.10	3.20	3.30						
- POE Oil	W		1243	1695	2261	2959	3801	4802	5974						
	P	50.0	935	1054	1174	1294	1410	1520	1622	48.06	2.0	3PH	7.5	23.0	23.0
Note: service valves &	A		2.76	2.85	2.96	3.06	3.18	3.29	3.41						
crankcase heater to be	W		1150	1548	2052	2678	3442	4354	5427						
purchased separately	P	55.0	951	1081	1215	1350	1483	1612	1734						
	A		2.80	2.90	3.00	3.10	3.20	3.40	3.50						

Rating Conditions: 20 Deg Return Gas, no Sub-Cooling (Standard power requirements: 1PH = 230V/1/50Hz & 3PH = 380-400V/3/50Hz)
Note: Service valves & crankcase heaters are not supplied with compressors & should be purchased separately if required.

MANEUROP COMPRESSORS

MTZ R134A Medium Temp Reciprocating Compressors

Capacities R134A

Airefrig Part Number		Condensing Temperature ºC	Evaporating Temperature ºC							Displ cm³/r	Motor				Kgs
			-15	-10	-5	0	5	10	15		HP	Type	MCC	LRA	
MTZ325VI	W		1571	2182	2928	3827	4894	6144	7590						
- Rubber Mount Kit	P	45.0	1088	1248	1400	1540	1661	1758	1825						
- Oil Sight Glass	A		8.90	9.30	9.70	10.0	10.4	10.6	10.8						
- POE Oil	W		1408	1967	2654	3483	4471	5631	6976						
- Electrics for CSR	P	50.0	1102	1274	1442	1599	1740	1859	1951	54.86	2.5	CSR	20.0	70.0	24.0
(supplied loose)	A		8.95	9.39	9.82	10.23	10.61	10.95	11.24						
Note: service valves &	W		1264	1767	2387	3141	4044	5109	6347						
crankcase heater to be	P	55.0	1105	1292	1476	1652	1815	1958	2077						
purchased separately	A		9.00	9.40	9.90	10.4	10.9	11.3	11.6						
MTZ324VI	W		1571	2182	2928	3827	4894	6144	7590						
- Rubber Mount Kits	P	45.0	1088	1248	1400	1540	1661	1758	1825						
- Oil Sight Glass	A		3.20	3.30	3.50	3.60	3.70	3.80	3.90						
- POE Oil	W		1408	1967	2654	3483	4471	5631	6976						
	P	50.0	1102	1274	1442	1599	1740	1859	1951	54.86	2.5	3PH	8.0	25.0	24.0
Note: service valves &	A		3.20	3.36	3.51	3.66	3.80	3.92	4.02						
crankcase heater to be	W		1264	1767	2387	3141	4044	5109	6347						
purchased separately	P	55.0	1105	1292	1476	1652	1815	1958	2077						
	A		3.20	3.40	3.50	3.70	3.90	4.00	4.20						
MTZ365VI	W		2255	2959	3788	4755	5873	7152	8602						
- Rubber Mount Kit	P	45.0	1295	1450	1600	1740	1865	1969	2047						
- Oil Sight Glass	A		9.80	10.30	10.70	11.20	11.60	12.00	12.30						
- POE Oil	W		2061	2718	3492	4395	5439	6634	7990						
- Electrics for CSR	P	50.0	1329	1499	1666	186	1973	2102	2209	60.47	3.0	CSR	22.0	60.0	25.0
(supplied loose)	A		9.90	10.40	10.90	11.50	12.00	12.50	12.90						
Note: service valves &	W		1871	2476	3189	4023	4988	6094	7352						
crankcase heater to be	P	55.0	1352	1538	1724	1906	2077	2233	2369						
purchased separately	A		10.00	10.50	11.20	11.80	12.40	13.00	13.60						
MTZ364VI	W		2255	2959	3788	4755	5873	7152	8602						
- Rubber Mount Kits	P	45.0	1295	1450	1600	1740	1865	1969	2047						
- Oil Sight Glass	A		3.20	3.30	3.50	3.60	3.80	3.90	4.00						
- POE Oil	W		2061	2718	3492	4395	5439	6634	7990						
	P	50.0	1329	1499	1666	1826	1973	2102	2209	60.47	3.0	3PH	9.0	30.0	25.0
Note: service valves &	A		3.20	3.37	3.55	3.72	3.88	4.04	4.18						
crankcase heater to be	W		1871	2476	3189	4023	4988	6094	7352						
purchased separately	P	55.0	1352	1538	1724	1906	2077	2233	2369						
	A		3.20	3.40	3.60	3.80	4.00	4.20	4.40						
MTZ404VI	W		2692	3411	4232	5161	6206	7373	8670						
- Rubber Mount Kits	P	45.0	1465	1610	1752	1887	2010	2118	2205						
- Oil Sight Glass	A		3.60	3.80	4.00	4.20	4.40	4.50	4.70						
- POE Oil	W		2488	3171	3946	4823	5808	6907	8126						
	P	50.0	1520	1681	1842	1998	2145	2280	2398	67.89	3.5	3PH	10.0	38.0	26.0
Note: service valves &	A		3.68	3.90	4.12	4.35	4.58	4.80	5.02						
crankcase heater to be	W		2272	2914	3641	4462	5383	6410	7547						
purchased separately	P	55.0	1564	1742	1923	2103	2276	2440	2590						
	A		3.70	4.00	4.20	4.50	4.80	5.10	5.40						
MTZ454VI	W		2277	3127	4161	5402	6870	8584	10562						
- Rubber Mount Kits	P	45.0	1619	1796	1965	2118	2249	2353	2423						
- Oil Sight Glass	A		4.90	5.10	5.20	5.30	5.40	5.50	5.60						
- POE Oil	W		2033	2807	3752	4889	6240	7821	9651						
	P	50.0	1637	1831	2021	2198	2357	2492	2595	76.22	3.75	3PH	9.5	48.5	37.0
Note: service valves &	A		4.94	5.08	5.22	5.37	5.51	5.65	5.78						
crankcase heater to be	W		1837	2525	3371	4396	5621	7062	8735						
purchased separately	P	55.0	1640	1854	2066	2270	2459	2627	2766						
	A		4.90	5.10	5.20	5.40	5.60	5.80	5.90						

Rating Conditions: 20 Deg Return Gas, no Sub-Cooling (Standard power requirements: 1PH = 230V/1/50Hz & 3PH = 380-400V/3/50Hz)
Note: Service valves & crankcase heaters are not supplied with compressors & should be purchased separately if required.

MANEUROP COMPRESSORS

MTZ R134A Medium Temp Reciprocating Compressors

Capacities R134A

Airefrig Part Number			Refrigeration Capacity - **W**atts Consumption – **P**ower Current – **A**mps												
			Condensing Temperature ºC							Displ cm³/r	Motor				Kgs
			Evaporating Temperature ºC								HP	Type	MCC	LRA	
			-15	-10	-5	0	5	10	15						
MTZ514VI	W		2643	3649	4863	6311	8014	9993	12268						
- Rubber Mount Kits	P	45.0	1794	2007	2210	2397	2560	2692	2785						
- Oil Sight Glass	A		4.60	4.80	4.90	5.10	5.20	5.40	5.50						
- POE Oil	W		2354	3280	4398	5735	7311	9146	11260						
	P	50.0	1810	2044	2272	2487	2683	2851	2984	85.64	4.0	3PH	11.5	48.5	37.0
Note: service valves &	A		4.61	4.79	4.97	5.15	5.33	5.49	5.65						
crankcase heater to be	W		2110	2944	3957	5173	6613	8297	10241						
purchased separately	P	55.0	1810	2067	2322	2569	2799	3006	3182						
	A		4.60	4.80	5.00	5.20	5.40	5.60	5.80						
MTZ574VI	W		2946	4085	5449	7066	8960	11152	13663						
- Rubber Mount Kits	P	45.0	1950	2198	2437	2657	2852	3012	3130						
- Oil Sight Glass	A		4.70	4.90	5.10	5.30	5.50	5.70	5.80						
- POE Oil	W		2610	3666	4932	6434	8196	10239	12581						
	P	50.0	1965	2237	2504	2758	2989	3191	3355	96.13	4.5	3PH	12.0	64.0	39.0
Note: service valves &	A		4.70	4.93	5.16	5.39	5.61	5.82	6.01						
crankcase heater to be	W		2319	3281	4438	5816	7437	9321	11487						
purchased separately	P	55.0	1962	2261	2559	2848	3120	3366	3579						
	A		4.70	4.90	5.20	5.50	5.70	6.00	6.20						
MTZ654VI	W		3334	4641	6198	8034	10175	12645	15466						
- Rubber Mount Kits	P	45.0	2143	2433	2712	2972	3203	3396	3542						
- Oil Sight Glass	A		5.40	5.70	6.00	6.20	6.50	6.70	6.90						
- POE Oil	W		2947	4166	5619	7334	9335	11646	14287						
	P	50.0	2156	2473	2785	3083	3357	3598	3797	107.7	5.5	3PH	14.0	64.0	39.0
Note: service valves &	A		5.38	5.71	6.03	6.35	6.66	6.95	7.20						
crankcase heater to be	W		2602	3723	5061	6643	8495	10637	13089						
purchased separately	P	55.0	2149	2497	2845	3183	3504	3796	4051						
	A		5.40	5.70	6.10	6.50	6.80	7.20	7.50						
MTZ724VI	W		4017	5514	7274	9327	11697	14408	17481						
- Rubber Mount Kits	P	45.0	2338	2668	2992	3299	3580	3827	4029						
- Oil Sight Glass	A		5.20	5.60	5.90	6.30	6.60	7.00	7.30						
- POE Oil	W		3509	4920	6577	8508	10737	13287	16178						
	P	50.0	2288	2659	3030	3393	3737	4055	4335	120.9	6.0	3PH	17.0	80.0	41.0
Note: service valves &	A		5.23	5.61	6.00	6.41	6.83	7.24	7.64						
crankcase heater to be	W		3015	4329	5873	7672	9751	12132	14831						
purchased separately	P	55.0	2171	2588	3012	3436	3848	4241	4605						
	A		5.20	5.60	6.10	6.50	7.00	7.50	8.00						
MTZ814VI	W		4879	6538	8482	10742	13343	16312	19670						
- Rubber Mount Kits	P	45.0	2761	3112	3463	3804	4127	4425	4688						
- Oil Sight Glass	A		6.20	6.60	7.00	7.40	7.80	8.20	8.50						
- POE Oil	W		4363	5922	7746	9865	12605	15090	18239						
	P	50.0	2794	3174	3558	3939	4307	4655	4973	135.7	6.5	3PH	19.0	80.0	41.0
Note: service valves &	A		6.26	6.69	7.13	7.58	8.03	8.47	8.90						
crankcase heater to be	W		3859	5306	6999	8966	11234	13823	16755						
purchased separately	P	55.0	2805	3217	3639	4063	4479	4881	5258						
	A		6.30	6.70	7.20	7.70	8.30	8.80	9.30						
MTZ1004VI	W		5126	7060	9373	12107	15302	18994	23218						
- Rubber Mount Kits	P	45.0	3248	3645	4018	4351	4630	4838	4960						
- Oil Sight Glass	A		8.30	8.70	9.00	9.30	9.60	9.80	10.00						
- POE Oil	W		4611	6398	8536	11067	14030	17461	21389						
	P	50.0	3306	3744	4165	4554	4895	5173	5374	171.2	8.5	3PH	22.0	90.0	60.0
Note: service valves &	A		8.34	8.74	9.12	9.49	9.84	10.10	10.40						
crankcase heater to be	W		4178	5799	7743	10054	12769	15921	19539						
purchased separately	P	55.0	3335	3818	4291	4741	5150	5504	5787						
	A		8.30	8.80	9.20	9.70	10.10	10.50	10.90						

Rating Conditions: 20 Deg Return Gas, no Sub-Cooling (Standard power requirements: 1PH = 230V/1/50Hz & 3PH = 380-400V/3/50Hz)

Note: Service valves & crankcase heaters are not supplied with compressors & should be purchased separately if required.

MANEUROP COMPRESSORS

MTZ R134A Medium Temp Reciprocating Compressors

Capacities R134A

Airefrig Part Number			Refrigeration Capacity - **W**atts Consumption – **P**ower Current – **A**mps Condensing Temperature ºC Evaporating Temperature ºC							Displ cm³/r	Motor				Kgs
			-15	-10	-5	0	5	10	15		HP	Type	MCC	LRA	
MTZ1254VI - Rubber Mount Kits - Oil Sight Glass - POE Oil Note: service valves & crankcase heater to be purchased separately	W	45.0	6459	8876	11725	15055	18907	23319	28329	215.4	10.0	3PH	27.0	105.0	64.0
	P		3626	4174	4693	5164	5568	5885	6094						
	A		7.80	8.30	8.90	9.40	9.90	10.30	10.60						
	W	50.0	5686	7943	10602	13709	17305	21426	26108						
	P		3627	4227	4809	5353	5840	6249	5660						
	A		7.80	8.40	9.00	9.70	10.20	10.80	11.20						
	W	55.0	4975	7053	9502	12367	15689	19503	23840						
	P		3580	4240	4891	5515	6090	6598	7017						
	A		7.70	8.40	9.20	9.90	10.60	11.20	11.80						
MTZ1444VI - Rubber Mount Kits - Oil Sight Glass - POE Oil Note: service valves & crankcase heater to be purchased separately	W	45.0	8669	11524	14871	18760	23236	28343	34119	241.8	12.0	3PH	30.0	115.0	67.0
	P		4854	5404	5943	6456	6925	7336	7673						
	A		10.50	11.00	11.60	12.20	12.70	13.20	13.70						
	W	50.0	7817	10488	13614	17246	21427	26199	31597						
	P		4977	5572	6163	6736	7274	7762	8183						
	A		10.56	11.19	11.83	12.47	13.11	13.72	14.30						
	W	55.0	7016	9480	12364	15717	19583	24001	29002						
	P		5069	5713	6363	7001	7613	8183	8695						
	A		10.60	11.30	12.00	12.80	13.50	14.20	14.90						
MTZ1604VI - Rubber Mount Kits - Oil Sight Glass - POE Oil Note: service valves & crankcase heater to be purchased separately	W	45.0	9651	12727	16363	20621	25554	31213	37645	271.5	13.5	3PH	36.0	140.0	69.0
	P		5230	5836	6449	7057	7646	8206	8722						
	A		10.70	11.40	12.10	12.80	13.50	14.20	14.90						
	W	50.0	8788	11637	15003	18947	23521	28775	34751						
	P		5366	6011	6669	7329	7978	8604	9194						
	A		10.84	11.56	12.31	13.10	13.90	14.73	15.56						
	W	55.0	7975	10567	13637	17241	21433	26258	31758						
	P		5482	6169	6878	7595	8308	9005	9673						
	A		11.00	11.70	12.60	13.40	14.30	15.30	16.20						

Rating Conditions: 20 Deg Return Gas, no Sub-Cooling (Standard power requirements: 1PH = 230V/1/50Hz & 3PH = 380-400V/3/50Hz)
Note: Service valves & crankcase heaters are not supplied with compressors & should be purchased separately if required.

Prices

Airefrig Part Number	List Price Excl GST
MTZ185VI	P.O.A.
MTZ184VI	
MTZ225VI	
MTZ224VI	
MTZ285VI	
MTZ284VI	
MTZ325VI	

Airefrig Part Number	List Price Excl GST
MTZ324VI	
MTZ365VI	
MTZ364VI	
MTZ404VI	
MTZ454VI	
MTZ514VI	
MTZ574VI	

Airefrig Part Number	List Price Excl GST
MTZ654VI	
MTZ724VI	
MTZ814VI	
MTZ1004VI	
MTZ1254VI	
MTZ1444VI	
MTZ1604VI	

Accessories

Airefrig Part Number	Description	List Price Excl GST
120Z0459	Crankcase Heater Internal PTC 35watts voltage range of 200volts to 600volts	
7701022	CSR Electrical Start Kit: MTZ18-28 & NTZ48-68 (1x Relay, 1x Start Cap, 2x Run Caps)	
7701023	CSR Electrical Start Kit: MTZ32 & MTZ36 (1x Relay, 1x Start Cap, 2x Run Caps)	

MANEUROP COMPRESSORS

MTZ R22 Medium Temp Reciprocating Compressors

Capacities R22

Airefrig Part Number			Refrigeration Capacity - **W**atts Consumption – **P**ower Current – **A**mps							Displ cm³/r	Motor				Kgs
			Condensing Temperature ºC												
			Evaporating Temperature ºC								HP	Type	MCC	LRA	
			-10	-5	0	5	7.2	10	15						
MTZ185VI	W		1758	2348	3059	3903	4339	4893	6039						
- Rubber Mount Kit	P	45.0	995	1099	1189	1261	1283	1311	1334						
- Oil Sight Glass	A		5.55	5.78	6.00	6.18	6.24	6.32	6.40						
- POE Oil	W			2124	2783	3568	3974	4491	5564						
- Electrics for CSR (supplied loose)	P	50.0		1150	1253	1340	1369	1406	1446	30.23	1.5	CSR	10.0	40.0	21.0
	A			5.90	6.15	6.38	6.46	6.57	6.70						
Note: service valves &	W			1889	2485	3201	3574	4049	5039						
crankcase heater to be	P	55.0		1195	1313	1416	1453	1499	1559						
purchased separately	A			6.02	6.32	6.60	6.71	6.85	7.05						
MTZ184VI	W		1758	2348	3059	3903	4339	4893	6039						
- Rubber Mount Kits	P	45.0	995	1099	1189	1261	1283	1311	1334						
- Oil Sight Glass	A		2.27	2.37	2.45	2.53	2.56	2.59	2.62						
- POE Oil	W		1581	2124	2783	3568	3974	4491	5564						
	P	50.0	1034	1150	1253	1340	1369	1406	1446	30.23	1.5	3PH	5.0	20.0	21.0
Note: service valves &	A		2.31	2.41	2.52	2.61	2.65	2.69	2.74						
crankcase heater to be	W		1401	1889	2485	3201	3574	4049	5039						
purchased separately	P	55.0	1065	1195	1313	1416	1453	1499	1559						
	A		2.34	2.46	2.59	2.70	2.74	2.80	2.88						
MTZ225VI	W		2590	3402	4328	5377	5896	6557	7878						
- Rubber Mount Kit	P	45.0	1280	1430	1559	1660	1689	1727	1754						
- Oil Sight Glass	A		6.39	6.81	7.20	7.53	7.64	7.77	7.90						
- POE Oil	W			3080	3956	4949	5440	6066	7316						
- Electrics for CSR (supplied loose)	P	50.0		1489	1636	1758	1798	1848	1900	38.12	1.75	CSR	15.0	41.0	21.0
	A			6.97	7.43	7.84	7.99	8.17	8.39						
Note: service valves &	W			2735	3551	4477	4936	5521	6690						
crankcase heater to be	P	55.0		1525	1694	1840	1891	1955	2035						
purchased separately	A			7.11	7.64	8.14	8.32	8.56	8.89						
MTZ224VI	W		2590	3402	4328	5377	5896	6557	7878						
- Rubber Mount Kits	P	45.0	1280	1430	1559	1660	1689	1727	1754						
- Oil Sight Glass	A		2.55	2.72	2.87	3.00	3.04	3.10	3.15						
- POE Oil	W		2312	3080	3956	4949	5440	6066	7316						
	P	50.0	1322	1489	1636	1758	1798	1848	1900	38.12	1.75	3PH	6.0	16.0	21.0
Note: service valves &	A		2.59	2.78	2.97	3.13	3.19	3.26	3.35						
crankcase heater to be	W		2019	2735	3551	4477	4936	5521	6690						
purchased separately	P	55.0	1339	1525	1694	1840	1891	1955	2035						
	A		2.62	2.84	3.05	3.25	3.32	3.42	3.55						
MTZ285VI	W		3872	4883	6010	7259	7866	8639	10155						
- Rubber Mount Kits	P	45.0	1807	1972	2106	2201	2222	2249	2242						
- Oil Sight Glass	A		9.84	10.38	10.84	11.20	11.29	11.40	11.41						
- POE Oil	W			4517	5595	6789	7368	8105	9550						
- Electrics for CSR (supplied loose)	P	50.0		2060	2226	2357	2395	2444	2479	48.06	2.0	CSR	20.0	51.0	23.0
	A			10.67	11.26	11.75	11.90	12.10	12.28						
Note: service valves &	W			4105	5123	6251	6797	7493	8856						
crankcase heater to be	P	55.0		2133	2335	2506	2564	2637	2720						
purchased separately	A			10.96	11.69	12.34	12.58	12.88	13.25						
MTZ284VI	W		3872	4883	6010	7259	7866	8639	10155						
- Rubber Mount Kits	P	45.0	1807	1972	2106	2201	2222	2249	2242						
- Oil Sight Glass	A		3.59	3.79	3.96	4.09	4.12	4.16	4.16						
- POE Oil	W		3549	4517	5595	6789	7368	8105	9550						
	P	50.0	1866	2060	2226	2357	2395	2444	2479	48.06	2.0	3PH	7.5	23.0	23.0
Note: service valves &	A		3.66	3.89	4.11	4.29	4.34	4.41	4.48						
crankcase heater to be	W		3189	4105	5123	6251	6797	7493	8856						
purchased separately	P	55.0	1906	2133	2335	2506	2564	2637	2720						
	A		3.72	4.00	4.27	4.50	4.59	4.70	4.84						

Rating Conditions: 20 Deg Return Gas, no Sub-Cooling (Standard power requirements: 1PH = 230V/1/50Hz & 3PH = 380-400V/3/50Hz)
Note: Service valves & crankcase heaters are not supplied with compressors & should be purchased separately if required.

MANEUROP COMPRESSORS

MTZ R22 Medium Temp Reciprocating Compressors

Capacities R22

Airefrig Part Number			Refrigeration Capacity - **W**atts Consumption – **P**ower Current – **A**mps											
			Condensing Temperature ºC							Displ cm³/r	Motor				Kgs
			Evaporating Temperature ºC								HP	Type	MCC	LRA	
			-10	-5	0	5	7.2	10	15						
MTZ325VI	W		4114	5229	6498	7934	8644	9548	11351						
- Rubber Mount Kit	P	45.0	2109	2302	2469	2602	2642	2693	2735						
- Oil Sight Glass	A		10.42	11.13	11.78	12.33	12.50	12.72	12.92						
- POE Oil	W			4818	6022	7384	8058	8915	10626						
- Electrics for CSR (supplied loose)	P	50.0		2402	2599	2765	2821	2892	2973	54.86	2.5	CSR	20.0	70.0	24.0
	A			11.50	12.28	12.97	13.21	13.52	13.90						
Note: service valves & crankcase heater to be purchased separately	W			4420	5546	6821	7452	8255	9859						
	P	55.0		2493	2722	2925	2998	3092	3217						
	A			11.89	12.82	13.67	13.99	14.40	14.98						
MTZ324VI	W		4114	5229	6498	7934	8644	9548	11351						
- Rubber Mount Kits	P	45.0	2109	2302	2469	2602	2642	2693	2735						
- Oil Sight Glass	A		3.73	3.98	4.22	4.41	4.47	4.55	4.62						
- POE Oil	W		3760	4818	6022	7384	8058	8915	10626						
	P	50.0	2183	2402	2599	2765	2821	2892	2973	54.86	2.5	3PH	8.0	25.0	24.0
Note: service valves & crankcase heater to be purchased separately	A		3.82	4.12	4.39	4.64	4.73	4.84	4.97						
	W		3433	4420	5546	6821	7452	8255	9859						
	P	55.0	2243	2493	2722	2925	2998	3092	3217						
	A		3.91	4.25	4.59	4.89	5.00	5.15	5.36						
MTZ365VI	W		4991	6239	7618	9135	9867	10798	12611						
- Rubber Mount Kit	P	45.0	2347	2559	2754	2924	2986	3065	3169						
- Oil Sight Glass	A		13.27	14.14	14.98	15.74	16.03	16.40	16.91						
- POE Oil	W			5772	7094	8547	9246	10135	11866						
- Electrics for CSR (supplied loose)	P	50.0		2686	2908	3110	3187	3285	3426	60.47	3.0	CSR	22.0	60.0	25.0
	A			14.66	15.64	16.56	16.93	17.39	18.09						
Note: service valves & crankcase heater to be purchased separately	W			5257	6510	7884	8545	9387	11022						
	P	55.0		2807	3062	3299	3393	3512	3694						
	A			15.23	16.37	17.48	17.94	18.52	19.44						
MTZ364VI	W		4991	6239	7618	9135	9867	10798	12611						
- Rubber Mount Kits	P	45.0	2347	2559	2754	2924	2986	3065	3169						
- Oil Sight Glass	A		4.30	4.58	4.85	5.10	5.19	5.31	5.48						
- POE Oil	W		4574	5772	7094	8547	9246	10135	11866						
	P	50.0	2449	2686	2908	3110	3187	3285	3426	60.47	3.0	3PH	9.0	30.0	25.0
Note: service valves & crankcase heater to be purchased separately	A		4.43	4.75	5.07	5.37	5.49	5.64	5.86						
	W		4120	5257	6510	7884	8545	9387	11022						
	P	55.0	2542	2807	3062	3299	3393	3512	3694						
	A		4.56	4.93	5.31	5.67	5.82	6.00	6.30						
MTZ404VI	W		5422	6812	8348	10038	10852	11888	13907						
- Rubber Mount Kits	P	45.0	2662	2921	3141	3309	3356	3415	3446						
- Oil Sight Glass	A		4.85	5.18	5.47	5.70	5.77	5.86	5.92						
- POE Oil	W		4991	6352	7854	9504	10298	11308	13272						
	P	50.0	2789	3084	3344	3557	3625	3711	3797	67.89	3.5	3PH	10.0	38.0	26.0
Note: service valves & crankcase heater to be purchased separately	A		5.00	5.38	5.73	6.04	6.14	6.27	6.40						
	W		4534	5858	7316	8915	9683	10660	12558						
	P	55.0	2871	3207	3512	3775	3867	3985	4129						
	A		5.12	5.56	5.98	6.36	6.50	6.68	6.91						
MTZ454VI	W		5512	7016	8792	10868	11924	13267	16015						
- Rubber Mount Kits	P	45.0	2709	2965	3177	3333	3373	3423	3432						
- Oil Sight Glass	A		6.02	6.29	6.53	6.71	6.76	6.83	6.86						
- POE Oil	W		5076	6483	8149	10101	11095	12361	14954						
	P	50.0	2843	3135	3388	3590	3652	3730	3794	76.22	3.75	3PH	9.5	48.5	37.0
Note: service valves & crankcase heater to be purchased separately	A		6.16	6.47	6.76	7.00	7.08	7.18	7.28						
	W		4631	5920	7456	9262	10186	11361	13777						
	P	55.0	2923	3257	3557	3810	3896	4005	4130						
	A		6.26	6.63	6.97	7.28	7.39	7.54	7.71						

Rating Conditions: 20 Deg Return Gas, no Sub-Cooling (Standard power requirements: 1PH = 230V/1/50Hz & 3PH = 380-400V/3/50Hz)
Note: Service valves & crankcase heaters are not supplied with compressors & should be purchased separately if required.

MANEUROP COMPRESSORS

MTZ R22 Medium Temp Reciprocating Compressors

Capacities R22

Airefrig Part Number			Refrigeration Capacity - **W**atts Consumption – **P**ower Current – **A**mps Condensing Temperature ºC Evaporating Temperature ºC							Displ cm³/r	Motor				Kgs
			-10	-5	0	5	7.2	10	15		HP	Type	MCC	LRA	
MTZ514VI - Rubber Mount Kits - Oil Sight Glass - POE Oil Note: service valves & crankcase heater to be purchased separately	W	45.0	6043	7722	9716	12057	13252	14772	17892	85.64	4.0	3PH	11.5	48.5	37.0
	P		2938	3243	3526	3778	3871	3989	4153						
	A		5.22	5.78	6.39	7.01	7.27	7.60	8.12						
	W	50.0	5516	7106	9000	11225	12363	13812	16786						
	P		3079	3410	3721	4004	4112	4250	4451						
	A		5.46	6.11	6.83	7.57	7.89	8.30	8.98						
	W	55.0	4958	6441	8214	10304	11376	12740	15546						
	P		3182	3541	3884	4202	4327	4487	4729						
	A		5.66	6.42	7.26	8.14	8.53	9.02	9.87						
MTZ574VI - Rubber Mount Kits - Oil Sight Glass - POE Oil Note: service valves & crankcase heater to be purchased separately	W	45.0	7098	9006	11163	13586	14778	16294	19303	96.13	4.5	3PH	12.0	64.0	39.0
	P		3424	3771	4059	4273	4328	4397	4414						
	A		6.19	7.03	7.80	8.38	8.44	8.52	8.66						
	W	50.0	6523	8329	10370	12663	13790	15225	18070						
	P		3589	3989	4337	4617	4703	4813	4910						
	A		6.62	7.60	8.52	9.26	9.45	9.70	9.73						
	W	55.0	5920	7603	9506	11645	12697	14036	16694						
	P		3712	4173	4589	4944	5066	5222	5407						
	A		6.90	8.03	9.10	10.00	10.27	10.61	10.82						
MTZ654VI - Rubber Mount Kits - Oil Sight Glass - POE Oil Note: service valves & crankcase heater to be purchased separately	W	45.0	7963	10136	12638	15496	16922	18737	22387	107.7	5.5	3PH	14.0	64.0	39.0
	P		3871	4265	4610	4892	4982	5096	5207						
	A		7.05	7.55	8.02	8.42	8.56	8.73	8.91						
	W	50.0	7346	9393	11751	14448	15794	17508	20956						
	P		4059	4499	4896	5235	5352	5502	5682						
	A		7.28	7.85	8.40	8.89	9.07	9.30	9.59						
	W	55.0	6788	8681	10867	13372	14626	16221	19436						
	P		4178	4670	5126	5529	5677	5866	6122						
	A		7.45	8.11	8.75	9.35	9.58	9.87	10.29						
MTZ724VI - Rubber Mount Kits - Oil Sight Glass - POE Oil Note: service valves & crankcase heater to be purchased separately	W	45.0	8888	11220	13864	16843	18311	20179	23895	120.9	6.0	3PH	17.0	80.0	41.0
	P		4296	4700	5085	5443	5585	5765	6041						
	A		7.60	8.16	8.71	9.24	9.46	9.73	10.15						
	W	50.0	8241	10428	12908	15703	17080	18833	22321						
	P		4536	4971	5391	5789	5950	6154	6476						
	A		7.91	8.53	9.15	9.74	9.99	10.30	10.80						
	W	55.0	7688	9699	11982	14560	15832	17452	20678						
	P		4810	5280	5741	6182	6363	6594	6968						
	A		8.32	9.00	9.69	10.36	10.64	11.00	11.59						
MTZ814VI - Rubber Mount Kits - Oil Sight Glass - POE Oil Note: service valves & crankcase heater to be purchased separately	W	45.0	10133	12794	15808	19203	20875	23004	27236	135.7	6.5	3PH	19.0	80.0	41.0
	P		4848	5305	5743	6152	6314	6520	6839						
	A		8.26	8.89	9.51	10.11	10.36	10.67	11.17						
	W	50.0	9390	11890	14723	17912	19484	21484	25461						
	P		5124	5615	6091	6542	6724	6956	7324						
	A		8.62	9.31	10.00	10.67	10.96	11.32	11.92						
	W	55.0	8736	11040	13653	16601	18056	19907	23592						
	P		5438	5967	6485	6981	7186	7446	7869						
	A		9.08	9.84	10.61	11.38	11.71	12.12	12.83						
MTZ1004VI - Rubber Mount Kits - Oil Sight Glass - POE Oil Note: service valves & crankcase heater to be purchased separately	W	45.0	11828	15113	18926	23314	25517	28321	33992	171.2	8.5	3PH	22.0	90.0	60.0
	P		5781	6263	6659	6944	7008	7090	7095						
	A		11.82	12.39	12.88	13.25	13.34	13.46	13.47						
	W	50.0	10687	13772	17357	21489	23566	26209	31560						
	P		5982	6539	7019	7398	7510	7652	7759						
	A		12.05	12.71	13.31	13.81	13.96	14.16	14.33						
	W	55.0	9734	12574	15887	19715	21645	24101	29083						
	P		6164	6808	7384	7868	8031	8238	8469						
	A		12.29	13.08	13.81	14.46	14.68	14.97	15.32						

Rating Conditions: 20 Deg Return Gas, no Sub-Cooling (Standard power requirements: 1PH = 230V/1/50Hz & 3PH = 380-400V/3/50Hz)
Note: Service valves & crankcase heaters are not supplied with compressors & should be purchased separately if required.

MANEUROP COMPRESSORS

MTZ R22 Medium Temp Reciprocating Compressors

Capacities R22

Airefrig Part Number			Refrigeration Capacity - **W**atts Consumption – **P**ower Current – **A**mps												
			Condensing Temperature ºC							Displ cm³/r	Motor				Kgs
			Evaporating Temperature ºC								HP	Type	MCC	LRA	
			-10	-5	0	5	7.2	10	15						
MTZ1254VI	W		15882	20032	24835	30348	33110	36625	43720						
- Rubber Mount Kits	P	45.0	7521	8158	8734	9225	9395	9612	9872						
- Oil Sight Glass	A		12.27	13.25	14.17	14.99	15.28	15.64	16.10						
- POE Oil	W		14551	18427	22919	28083	30673	33970	40631						
Note: service valves &	P	50.0	7868	8590	9259	9856	10077	10358	10744	215.4	10.0	3PH	27.0	105.0	64.0
crankcase heater to be	A		12.78	13.91	15.00	16.00	16.38	16.86	17.54						
purchased separately	W		13253	16798	20921	25676	28068	31113	37279						
	P	55.0	8120	8938	9715	10429	10706	11059	11584						
	A		13.21	14.51	15.80	17.00	17.48	18.10	19.03						
MTZ1444VI	W		17982	22679	28141	34439	37606	41636	49799						
- Rubber Mount Kits	P	45.0	8436	9148	9791	10342	10534	10779	11077						
- Oil Sight Glass	A		17.04	18.10	19.10	20.01	20.35	20.78	21.39						
- POE Oil	W		16419	20790	25883	31766	34729	38501	46150						
Note: service valves &	P	50.0	8821	9627	10377	11047	11296	11614	12054	241.8	12.0	3PH	30.0	115.0	67.0
crankcase heater to be	A		17.58	18.80	20.00	21.14	21.59	22.16	23.05						
purchased separately	W		14904	18882	23538	28937	31666	35140	42203						
	P	55.0	9099	10014	10885	11688	12001	12400	12997						
	A		18.05	19.49	20.93	22.33	22.91	23.65	24.86						
MTZ1604VI	W		19968	25146	31173	38127	41626	46080	55104						
- Rubber Mount Kits	P	45.0	9460	10254	10974	11592	11808	12084	12424						
- Oil Sight Glass	A		16.80	17.82	18.78	19.64	19.95	20.34	20.86						
- POE Oil	W		18301	23138	28778	35296	38581	42762	51244						
Note: service valves &	P	50.0	9885	10786	11626	12378	12659	13017	13518	271.5	13.5	3PH	36.0	140.0	69.0
crankcase heater to be	A		17.32	18.50	19.64	20.70	21.11	21.63	22.39						
purchased separately	W		16650	21074	26255	32264	35302	39168	47032						
	P	55.0	10195	11219	12195	13097	13450	13900	14577						
	A		17.76	19.13	20.48	21.77	22.29	22.95	23.99						

Rating Conditions: 20 Deg Return Gas, no Sub-Cooling (Standard power requirements: 1PH = 230V/1/50Hz & 3PH = 380-400V/3/50Hz)
Note: Service valves & crankcase heaters are not supplied with compressors & should be purchased separately if required.

Prices

Airefrig Part Number	List Price Excl GST
MTZ185VI	P.O.A.
MTZ184VI	
MTZ225VI	
MTZ224VI	
MTZ285VI	
MTZ284VI	
MTZ325VI	

Airefrig Part Number	List Price Excl GST
MTZ324VI	
MTZ365VI	
MTZ364VI	
MTZ404VI	
MTZ454VI	
MTZ514VI	
MTZ574VI	

Airefrig Part Number	List Price Excl GST
MTZ654VI	
MTZ724VI	
MTZ814VI	
MTZ1004VI	
MTZ1254VI	
MTZ1444VI	
MTZ1604VI	

Accessories

Airefrig Part Number	Description	List Price Excl GST
120Z0459	Crankcase Heater Internal PTC 35watts voltage range of 200volts to 600volts	
7701022	CSR Electrical Start Kit: MTZ18-28 & NTZ48-68 (1x Relay, 1x Start Cap, 2x Run Caps)	
7701023	CSR Electrical Start Kit: MTZ32 & MTZ36 (1x Relay, 1x Start Cap, 2x Run Caps)	

MANEUROP COMPRESSORS

R404A Low Temp Reciprocating Compressors

Capacities R404A

Airefrig Part Number		Condensing Temperature ºC	Evaporating Temperature ºC							Displ cm³/r	Motor				Kgs
			-40	-35	-30	-25	-20	-15	-10		HP	Type	MCC	LRA	
			Refrigeration Capacity - **W**atts			Consumption – **P**ower					Current – **A**mps				
NTZ0485LR1	W		463	801	1206	1688	2254	2912	3671						
- Rubber Mount Kits	P	45.0	750	958	1158	1354	1549	1748	1953						
- Oil Sight Glass	A		3.70	4.30	5.10	5.90	6.80	7.70	8.70						
- POE Oil	W		328	637	1005	1441	1952	2548	3235						
- Electrics for CSR (supplied loose)	P	50.0	713	933	1146	1357	1568	1785	2009	48.0	2.5	CSR	11.0	37.0	21.0
Note: service valves & crankcase heater to be purchased separately	A		3.66	4.26	5.01	5.88	6.84	7.85	8.90						
	W			476	805	1193	1649	2180	2794						
	P	55.0		901	1127	1351	1578	1810	2052						
Replaces LTZ022 1Ø	A			4.20	5.00	5.90	6.90	8.00	9.10						
	W		515	847	1239	1700	2236	2856	3567						
NTZ048A4LR1	P	45.0	588	835	1087	1336	1574	1794	1986						
- Rubber Mount Kits	A		1.80	2.10	2.30	2.60	2.90	3.20	3.40						
- Oil Sight Glass	W		396	699	1054	1469	1950	2507	3145						
- POE Oil	P	50.0	528	789	1058	1328	1592	1842	2069	48.0	2.5	3PH	4.8	16.0	21.0
Note: service valves & crankcase heater to be purchased separately	A		1.78	2.01	2.28	2.58	2.90	3.23	3.56						
	W			553	870	1238	1664	2157	2723						
	P	55.0		727	1012	1302	1591	1869	2129						
Replaces LTZ022 3Ø	A			2.00	2.20	2.60	2.90	3.30	3.70						
NTZ0685LR1	W		1145	1576	2098	2726	3475	4362	5402						
- Rubber Mount Kits	P	45.0	1514	1677	1885	2133	2418	2736	3083						
- Oil Sight Glass	A		9.20	9.50	10.00	10.90	12.00	13.40	15.00						
- POE Oil	W		1001	1394	1863	2423	3091	3881	4809						
- Electrics for CSR (supplied loose)	P	50.0	1555	1721	1936	2199	2504	2849	3227	68.0	3.5	CSR	17.0	53.0	23.0
Note: service valves & crankcase heater to be purchased separately	A		9.58	9.74	10.27	11.15	12.36	13.90	15.73						
	W			1208	1626	2121	2708	3403	4221						
	P	55.0		1767	1990	2266	2591	2960	3370						
Replaces LTZ028 1Ø	A			10.00	10.50	11.40	12.70	14.40	16.40						
NTZ068A4LR1A	W		1054	1538	2111	2785	3572	4485	5536						
- Rubber Mount Kits	P	45.0	1278	1543	1812	2090	2378	2678	2993						
- Oil Sight Glass	A		3.00	3.40	3.80	4.10	4.50	4.90	5.40						
- POE Oil	W		900	1342	1860	2468	3177	4001	4951						
Note: service valves & crankcase heater to be purchased separately	P	50.0	1276	1564	1858	2161	2475	2802	3145	68.0	3.5	3PH	8.4	25.0	23.0
	A		2.90	3.36	3.79	4.22	4.66	5.12	5.62						
	W			1158	1624	2167	2801	3537	4388						
	P	55.0		1580	1900	2230	2572	2928	3301						
Replaces LTZ028 3Ø	A			3.30	3.80	4.30	4.80	5.30	5.90						
NTZ096A4LR1A	W		1104	1686	2431	3364	4512	5899	7551						
- Rubber Mount Kits	P	45.0	1289	1673	2089	2531	2994	3475	3968						
- Oil Sight Glass	A		2.80	3.20	3.80	4.40	5.00	5.70	6.40						
- POE Oil	W		853	1369	2035	2878	3923	5196	6723						
Note: service valves & crankcase heater to be purchased separately	P	50.0	1198	1594	2033	2511	3024	3566	4133	96.0	5.0	3PH	10.1	32.0	35.0
	A		2.74	3.16	3.70	4.35	5.07	5.84	6.64						
	W			1058	1640	2387	3323	4476	5871						
	P	55.0		1498	1954	2462	3016	3613	4248						
Replaces LTZ040 3Ø	A			3.10	3.60	4.30	5.10	5.90	6.80						

Rating Conditions: 20 Deg Return Gas, no Sub-Cooling. (Standard power requirements: 1PH = 230V/1/50Hz & 3PH = 380-400V/3/50Hz)

Shaded areas have return vapour limitations and should not exceed 10k superheat.

Note: Service valves & crankcase heaters are not supplied with compressors & should be purchased separately if required.

MANEUROP COMPRESSORS

R404A Low Temp Reciprocating Compressors

Capacities R404A

Airefrig Part Number			Refrigeration Capacity - **W**atts Consumption – **P**ower Current – **A**mps												
			Condensing Temperature ºC							Displ cm³/r	Motor				Kgs
			Evaporating Temperature ºC								HP	Type	MCC	LRA	
			-40	-35	-30	-25	-20	-15	-10						
NTZ1084LR1	W		1360	2109	3008	4079	5342	6819	8529						
- Rubber Mount Kits	P	45.0	1574	2033	2491	2947	3399	3846	4287						
- Oil Sight Glass	A		4.20	4.50	5.00	5.50	6.10	6.80	7.40						
- POE Oil	W		1065	1751	2569	3537	4678	6012	7559						
	P	50.0	1460	1957	2457	2959	3460	3959	4456	108.0	5.5	3PH	12.1	45.0	35.0
Note: service valves & crankcase heater to be purchased separately	A		4.25	4.55	4.99	5.54	6.19	6.91	7.66						
	W			1395	2129	2994	4011	5200	6582						
	P	55.0		1850	2393	2941	3492	4045	4598						
Replaces LTZ044 3Ø	A			4.50	5.00	5.50	6.20	7.00	7.90						
NTZ136A4LR1A	W		1912	2807	3892	5197	6748	8575	10706						
- Rubber Mount Kits	P	45.0	2268	2862	3468	4079	4687	5285	5866						
- Oil Sight Glass	A		5.30	6.00	6.80	7.60	8.40	9.20	10.10						
- POE Oil	W		1574	2390	3377	4564	5977	7646	9599						
	P	50.0	2209	2825	3467	4126	4796	5470	6140	136.0	7.0	3PH	14.3	51.0	35.0
Note: service valves & crankcase heater to be purchased separately	A		5.11	5.91	6.76	7.65	8.56	9.50	10.45						
	W			1979	2865	3931	5204	6713	8486						
	P	55.0		2800	3471	4173	4899	5642	6395						
Replaces LTZ050 3Ø	A			5.70	6.70	7.70	8.70	9.70	10.80						
NTZ2154LR1	W		2724	4209	5966	8031	10439	13224	16420						
- Rubber Mount Kits	P	45.0	3167	4076	5009	5944	6856	7722	8518						
- Oil Sight Glass	A		6.20	7.50	8.70	9.80	11.00	12.20	13.60						
- POE Oil	W		2060	3443	5054	6959	9181	11757	14720						
	P	50.0	2954	3929	4950	5991	7030	8043	9006	215.0	10.0	3PH	22.3	74.0	62.0
Note: service valves & crankcase heater to be purchased separately	A		5.73	7.25	8.66	10.00	11.31	12.63	14.01						
	W			2637	4108	5838	7862	10214	12929						
	P	55.0		3705	4806	5948	7107	8260	9384						
Replaces LTZ088 3Ø	A			6.90	8.50	10.10	11.50	13.00	14.50						
NTZ271A4LR1A	W		4222	6118	8380	11054	14190	17835	22039						
- Rubber Mount Kits	P	45.0	4607	5660	6728	7809	8899	9997	11100						
- Oil Sight Glass	A		8.50	9.70	11.20	12.70	14.30	15.90	17.40						
- POE Oil	W		3516	5251	7312	9744	12598	15921	19761						
	P	50.0	4512	5647	6802	7975	9164	10365	11577	271.0	13.0	3PH	27.0	96.0	64.0
Note: service valves & crankcase heater to be purchased separately	A		8.43	9.76	11.27	12.92	14.65	16.43	18.20						
	W			4365	6213	8392	10952	13941	17406						
	P	55.0		5576	6822	8092	9382	10691	12015						
Replaces LTZ0100 3Ø	A			9.70	11.30	13.10	15.00	16.90	18.90						

Rating Conditions: 20 Deg Return Gas, no Sub-Cooling. (Standard power requirements: 1PH = 230V/1/50Hz & 3PH = 380-400V/3/50Hz)

Shaded areas have return vapour limitations and should not exceed 10k superheat.

Note: Service valves & crankcase heaters are not supplied with compressors & should be purchased separately if required.

Prices

Airefrig Part Number	List Price Excl GST
NTZ0485LR1	
NTZ048A4LR1	
NTZ0685LR1	

Airefrig Part Number	List Price Excl GST
NTZ068A4LR1A	
NTZ096A4LR1A	
NTZ1084LR1	

Airefrig Part Number	List Price Excl GST
NTZ136A4LR1A	
NTZ2154LR1	
NTZ271A4LR1A	

Accessories

Airefrig Part Number	Description	List Price Excl GST
120Z0459	Crankcase Heater Internal PTC 35watts voltage range of 200volts to 600volts	
7701022	CSR Electrical Start Kit: MTZ18-28 & NTZ48-68 (1x Relay, 1x Start Cap, 2x Run Caps)	
7701023	CSR Electrical Start Kit: MTZ32 & MTZ36 (1x Relay, 1x Start Cap, 2x Run Caps)	

MANEUROP COMPRESSORS

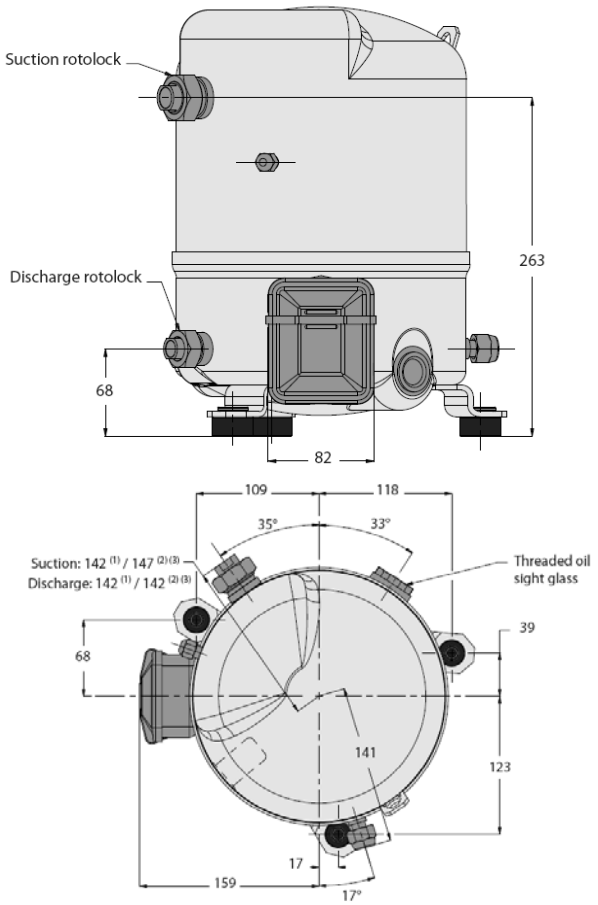
MTZ & NTZ (1 Cylinder) Reciprocating Compressors

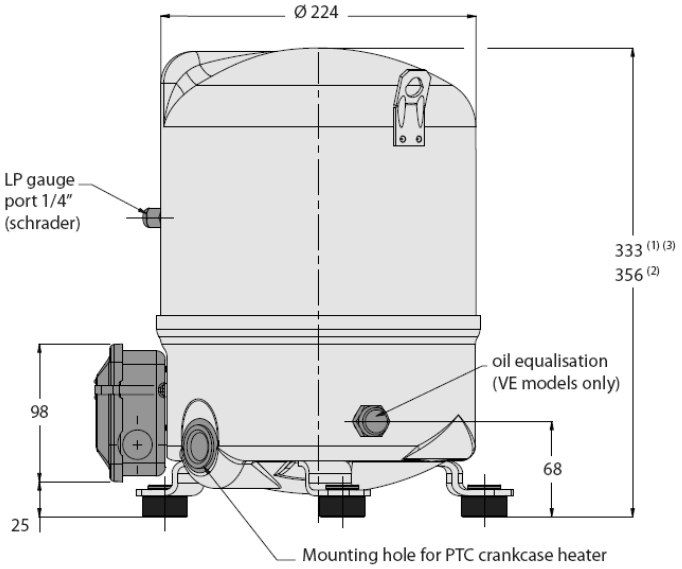
Dimensions & Specifications

Airefrig Part Number	Suction Service Valve	Suction Service Gasket	Discharge Service Valve	Discharge Service Gasket	CSR Electrical Start kit (relay & capacitors)	Crankcase Heater	Oil charge Litres
MTZ185VI	15702303 1"-14UNF x 1/2" ODF	020002800	15702903 1"-14UNF x 3/8" OD	020002800	7701022	120Z0459 PTC Internal heater 200-600 volts 35 watts	0.95
MTZ184VI					n/a		
MTZ225VI					7701022		
MTZ224VI					n/a		
MTZ285VI					7701022		
MTZ284VI					n/a		
MTZ325VI	17610903 1 1/4"-12UNF x 5/8" ODF	020002802	15702303 1"-14UNF x 1/2" ODF	020002800	7701023		
MTZ324VI					n/a		
MTZ365VI					7701023		
MTZ364VI					n/a		
MTZ404VI					n/a		

NTZ0485LR1	17610903 1 1/4"-12UNF x 5/8" ODF	020002802	15702303 1"-14UNF x 1/2" ODF	020002800	7701022	120Z0459 PTC Internal heater 200-600 volts 35 watts	0.95
NTZ048A4LR1					n/a		
NTZ0685LR1					7701022		
NTZ068A4LR1A					n/a		

Note: 2x run capacitors are supplied in 7701022 & 7701023 kits & must be wired in parallel for all CSR & PSC applications unless wired for a trickle circuit. Trickle circuit option provides crankcase heating by feeding a small current to the auxiliary winding & run capacitor eliminating the need for a crankcase heater (Trickle circuit suitable for MTZ18-22 & NTZ48-68, all other 1 phase compressors require a PTC crankcase heater)





(1) MTZ18-4/5 , MTZ22-4/5 , MTZ28-4/5
(2) MTZ32-4/5 , MTZ36-4/5 , MTZ40-4
(3) NTZ48-4/5 , NTZ68-4/5

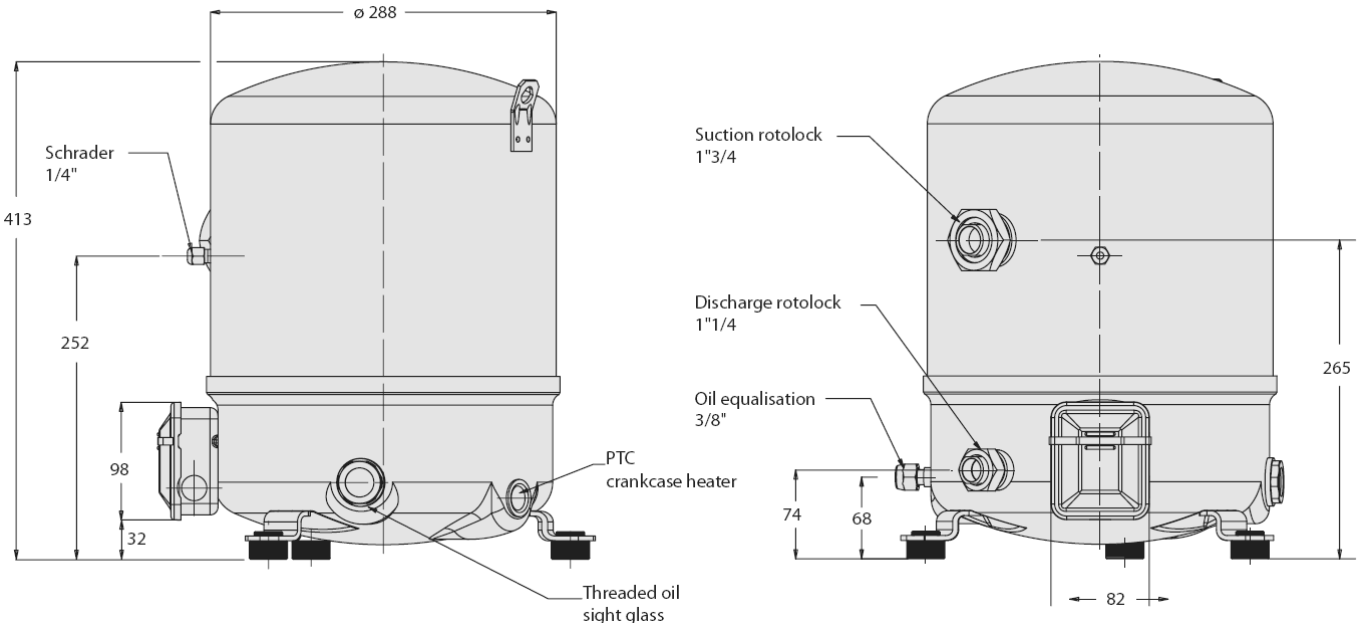
MANEUROP COMPRESSORS

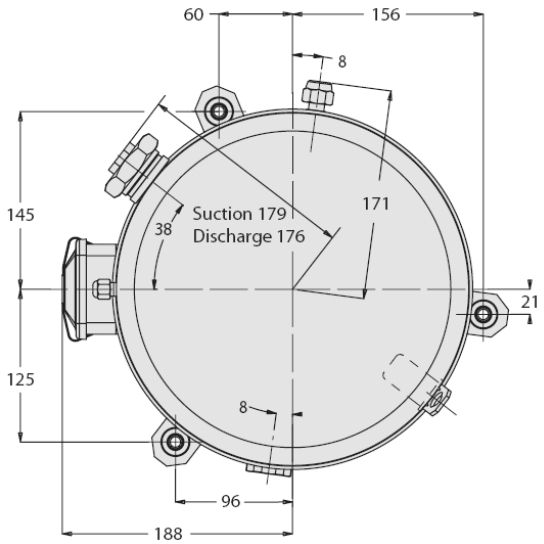
MTZ & NTZ (2 Cylinder) Reciprocating Compressors

Dimensions & Specifications

Airefrig Part Number	Suction Service Valve	Suction Service Gasket	Discharge Service Valve	Discharge Service Gasket	CSR Electrical Start kit (relay & capacitors)	Crankcase Heater	Oil charge Litres
MTZ454VI	17013803 1 3/4"-12UNF x 1 1/8" ODF	020002803	16003903 1 1/4"-12UNF x 3/4"ODF	020002802	n/a	120Z0459 PTC Internal heater 200-600 volts 35 watts	1.8
MTZ514VI							
MTZ574VI							
MTZ654VI							
MTZ724VI							
MTZ814VI							

NTZ096A4LR1A	17013803 1 3/4"-12UNF x 1 1/8" ODF	020002803	16003903 1 1/4"-12UNF x 3/4"ODF	020002802	n/a	120Z0459 PTC Internal heater 200-600 volts 35 watts	1.8
NTZ1084LR1							
NTZ136A4LR1A							





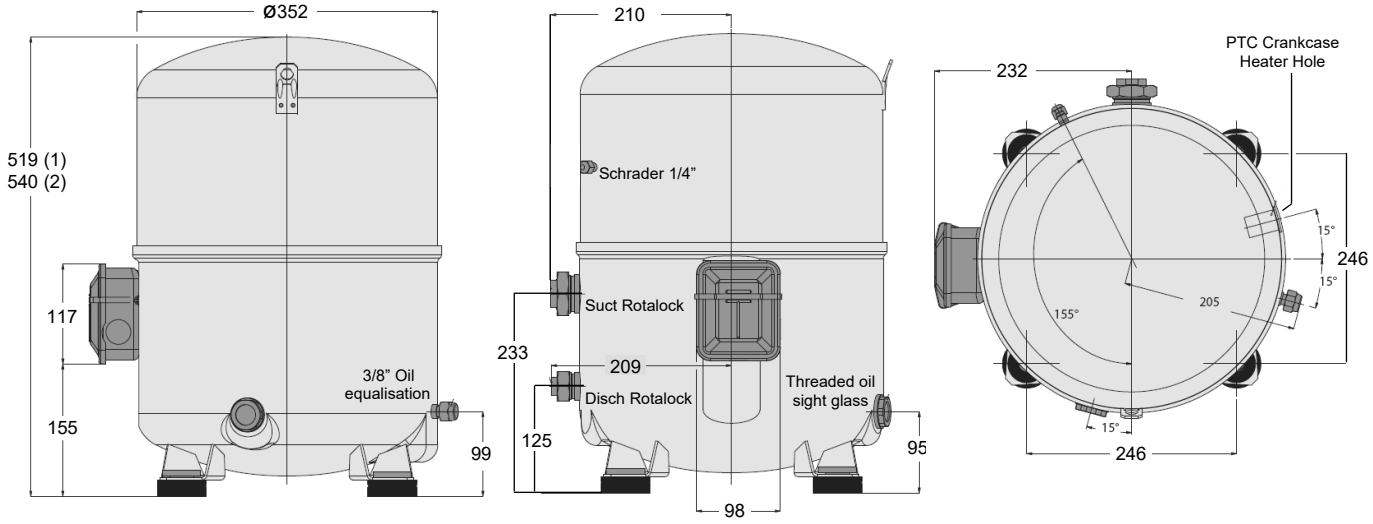
MANEUROP COMPRESSORS

MTZ & NTZ (4 Cylinder) Reciprocating Compressors

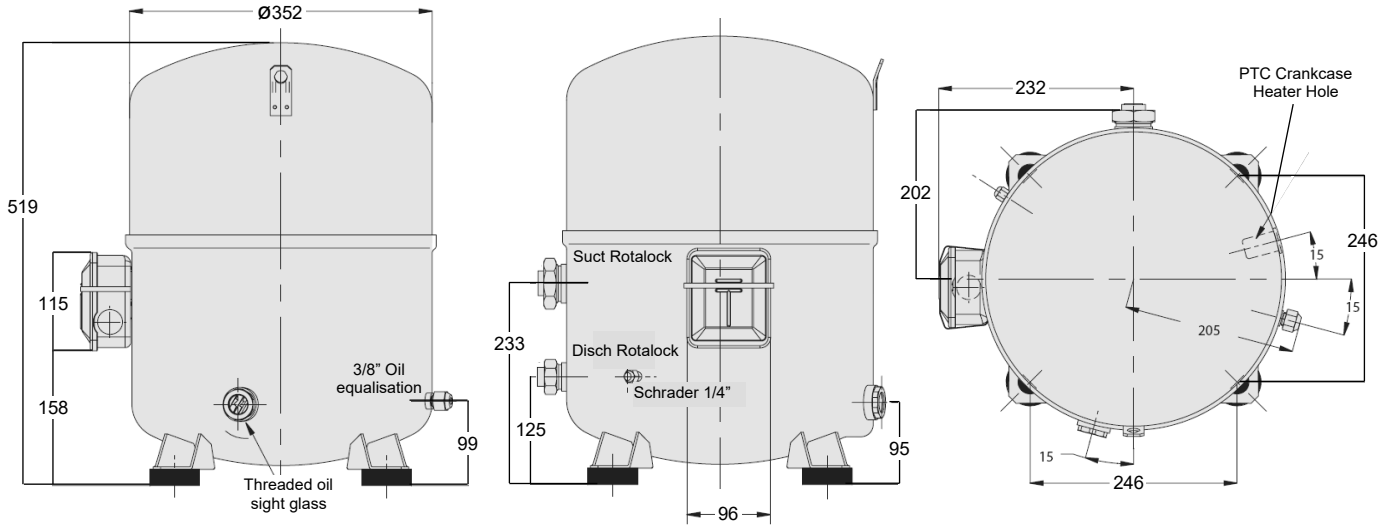
Dimensions & Specifications

Airefrig Part Number	Suction Service Valve	Suction Service Gasket	Discharge Service Valve	Discharge Service Gasket	CSR Electrical Start kit (relay & capacitors)	Crankcase Heater	Oil charge Litres
MTZ1004VI	17013803 1 3/4"-12UNF x 1 1/8" ODF	020002803	16003903 1 1/4"-12UNF x 3/4"ODF	020002802	n/a	120Z0459 PTC Internal heater 200-600 volts 35 watts	3.9
MTZ1254VI							
MTZ1444VI							
MTZ1604VI							

NTZ2154LR1 NTZ271A4LR1A	17013803 1 3/4"-12UNF x 1 1/8" ODF	020002803	16003903 1 1/4"-12UNF x 3/4"ODF	020002802	n/a	120Z0459 PTC Internal heater	3.9



(1) MTZ1004VI , MTZ1254VI
(2) MTZ1444VI , MTZ1604VI



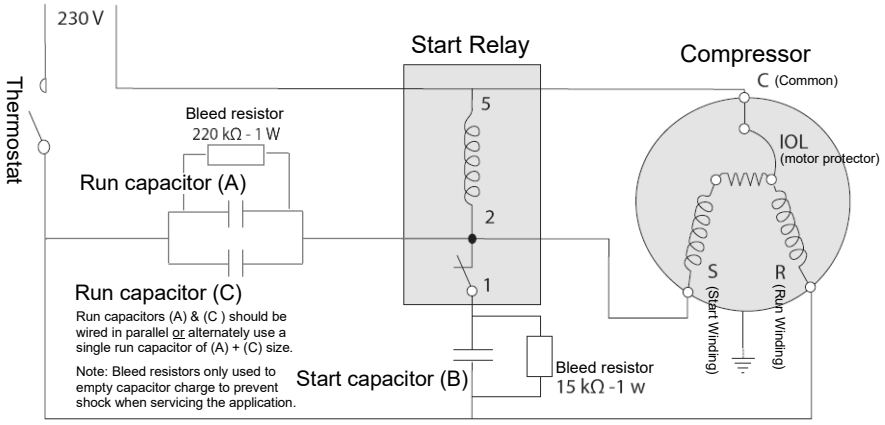
NTZ2154LR1 , NTZ271A4LR1A

MANEUROP COMPRESSORS

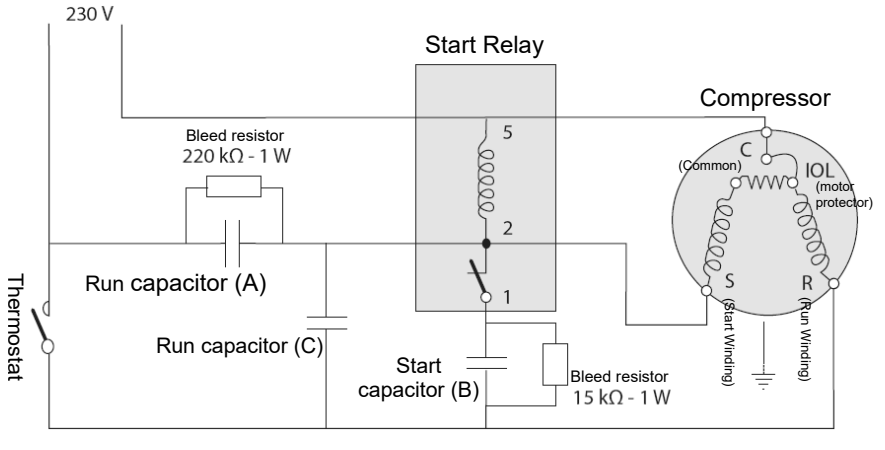
Electrical Details & Single Phase Wiring Diagrams

Airefrig Part Number	Resistance OHMS (+/- 7% @ 20ºC)
MTZ Series	
MTZ185VI	Start 4.70/ Run 1.80
MTZ184VI	Line to Line 10.24
MTZ225VI	Start 4.74/ Run 1.78
MTZ224VI	Line to Line 10.24
MTZ285VI	Start 3.24 / Run 1.16
MTZ284VI	Line to Line 7.11
MTZ325VI	Start 4.30/ Run 0.90
MTZ324VI	Line to Line 6.15
MTZ365VI	Start 4.35 / Run 0.89
MTZ364VI	Line to Line 5.57
MTZ404VI	Line to Line 4.56
MTZ454VI	Line to Line 3.22
MTZ514VI	Line to Line 3.60
MTZ574VI	Line to Line 2.39
MTZ654VI	Line to Line 2.39
MTZ724VI	Line to Line 1.90
MTZ814VI	Line to Line 1.90
MTZ1004VI	Line to Line 1.85
MTZ1254VI	Line to Line 1.57
MTZ1444VI	Line to Line 1.19
MTZ1604VI	Line to Line 1.10
NTZ Series	
NTZ0485LR1	Start 3.95 / Run 1.62
NTZ048A4LR1	Line to Line 11.55
NTZ0685LR1	Start 3.19 / Run 1.05
NTZ068A4LR1A	Line to Line 7.11
NTZ096A4LR1A	Line to Line 5.03
NTZ1084LR1	Line to Line 4.00
NTZ136A4LR1A	Line to Line 3.80
NTZ2154LR1	Line to Line 2.23
NTZ271A4LR1A	Line to Line 1.61

Single Phase CSR Wiring – without trickle circuit (commonly used)



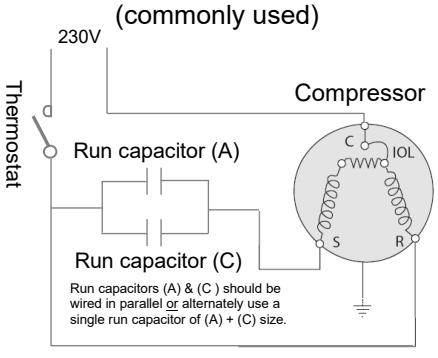
Single Phase CSR Wiring – with trickle circuit (rarely used)



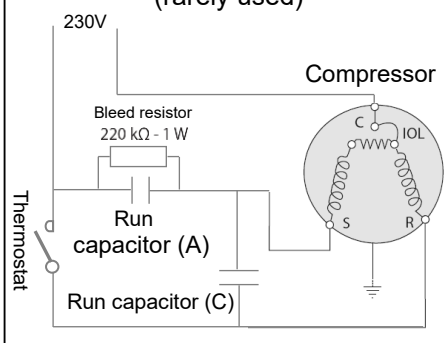
Single Phase PSC Wiring

(Low start torque option - system must be equalised before starting)

Without trickle circuit
(commonly used)



With trickle circuit
(rarely used)



CSR Electrical Start Kits

7701022	Supplied With: 1 x Relay 3ARR3J4A4 , 2 x 440v Run capacitors (A)20uf & (C)10uf , 1 x 330v Start capacitor (B)98uf
7701023	Supplied With: 1 x Relay 3ARR3J4A4 , 2 x 440v Run capacitors (A)25uf & (C)10uf , 1 x 330v Start capacitor (B)140uf

Note: 2x run capacitors are supplied in 7701022 & 7701023 kits & must be wired in parallel for all CSR & PSC applications unless wired for a trickle circuit. Trickle circuit option provides crankcase heating by feeding a small current to the auxiliary winding & run capacitor eliminating the need for a crankcase heater (Trickle circuit suitable for MTZ18-22 & NTZ48-68, all other 1 phase compressors require a PTC crankcase heater)

MANEUROP COMPRESSORS

MTZ & NTZ Selection Guide
Contactors & Thermal Overloads

Airefrig Part Number	MCC (maximum continuous current)	3Ø Contactor	3Ø Thermal Overload	3Ø Electronic Overload *Includes phase loss & imbalance protection*
MTZ185VI (1PH)	10.0 amps	-	-	-
MTZ184VI	5.0 amps	MC9B240V (AC-3 Rating 9A)	MT323K6 (4-6amps)	GMP223P5A (1.0-5.0 amps)
MTZ225VI (1PH)	15.0 amps	-	-	-
MTZ224VI	6.0 amps	MC9B240V (AC-3 Rating 9A)	MT323K6 (4-6 amps)	GMP223P5A (1.0-5.0 amps)
MTZ285VI (1PH)	20.0 amps	-	-	-
MTZ284VI	7.5 amps	MC9B240V (AC-3 Rating 9A)	MT323K9 (6-9 amps)	GMP223P22A (4.4-22.0 amps)
MTZ325VI (1PH)	20.0 amps	-	-	-
MTZ324VI	8.0 amps	MC9B240V (AC-3 Rating 9A)	MT323K9 (6-9 amps)	GMP223P22A (4.4-22.0 amps)
MTZ365VI (1PH)	22.0 amps	-	-	-
MTZ364VI	9.0 amps	MC12B240V (AC-3 Rating 12A)	MT323K10 (7-10 amps)	GMP223P22A (4.4-22.0 amps)
MTZ404VI	10.0 amps	MC12B240V (AC-3 Rating 12A)	MT323K13 (9-13 amps)	GMP223P22A (4.4-22.0 amps)
MTZ454VI	9.5 amps	MC12B240V (AC-3 Rating 12A)	MT323K10 (7-10 amps)	GMP223P22A (4.4-22.0 amps)
MTZ514VI	11.5 amps	MC18B240V (AC-3 Rating 18A)	MT323K13 (9-13 amps)	GMP223P22A (4.4-22.0 amps)
MTZ574VI	12.0 amps	MC18B240V (AC-3 Rating 18A)	MT323K13 (9-13 amps)	GMP223P22A (4.4-22.0 amps)
MTZ654VI	14.0 amps	MC18B240V (AC-3 Rating 18A)	MT323K18 (12-18 amps)	GMP223P22A (4.4-22.0 amps)
MTZ724VI	17.0 amps	MC18B240V (AC-3 Rating 18A)	MT323K18 (12-18 amps)	GMP223P22A (4.4-22.0 amps)
MTZ814VI	19.0 amps	MC22B240V (AC-3 Rating 22A)	MT323K22 (16-22 amps)	GMP223P22A (4.4-22.0 amps)
MTZ1004VI	22.0 amps	MC32A240V (AC-3 Rating 32A)	MT323K25 (18-25 amps)	GMP403P40A (8.0-40.0 amps)
MTZ1254VI	27.0 amps	MC32A240V (AC-3 Rating 32A)	MT323K32 (22-32 amps)	GMP403P40A (8.0-40.0 amps)
MTZ1444VI	30.0 amps	MC40A240V (AC-3 Rating 40A)	MT323K32 (22-32 amps)	GMP403P40A (8.0-40.0 amps)
MTZ1604VI	36.0 amps	MC40A240V (AC-3 Rating 40A)	MT323K40 (28-40 amps)	GMP403P40A (8.0-40.0 amps)

NTZ0485LR1 (1PH)	11.0 amps	-	-	-
NTZ048A4LR1	4.8 amps	MC9B240V (AC-3 Rating 9A)	MT323K6 (4-6 amps)	GMP223P5A (1.0-5.0 amps)
NTZ0685LR1 (1PH)	17.0 amps	-	-	-
NTZ068A4LR1A	8.4 amps	MC12B240V (AC-3 Rating 12A)	MT323K10 (7-10 amps)	GMP223P22A (4.4-22.0 amps)
NTZ096A4LR1A	10.1 amps	MC12B240V (AC-3 Rating 12A)	MT323K13 (9-13 amps)	GMP223P22A (4.4-22.0 amps)
NTZ1084LR1	12.1 amps	MC18B240V (AC-3 Rating 18A)	MT323K13 (9-13 amps)	GMP223P22A (4.4-22.0 amps)
NTZ136A4LR1A	14.3 amps	MC18B240V (AC-3 Rating 18A)	MT323K18 (12-18 amps)	GMP223P22A (4.4-22.0 amps)
NTZ2154LR1	22.3 amps	MC32A240V (AC-3 Rating 32A)	MT323K25 (18-25 amps)	GMP403P40A (8.0-40.0 amps)
NTZ271A4LR1A	27.0 amps	MC32A240V (AC-3 Rating 32A)	MT323K32 (22-32 amps)	GMP403P40A (8.0-40.0 amps)

MANEUROP COMPRESSORS

Cross References

Medium Temperature Compressors

POE oil	Mineral oil	POE oil	Mineral oil
MTZ18-5VI	MT18-5VI		
MTZ18-4VI	MT18-4VI		
MTZ22-5VI	MT22-5VI		
MTZ22-4VI	MT22-4VI		
MTZ28-5VI	MT28-5VI		
MTZ28-4VI	MT28-4VI		
MTZ32-5VI	MT32-5VI		
MTZ32-4VI	MT32-4VI		
MTZ36-5VI	MT36-5VI		
MTZ36-4VI	MT36-4VI		
MTZ40-4VI	MT40-4VI		
MTZ45-4VI	MT45-4VI	MTZ44-4VI	MT44-4VI
MTZ51-4VI	MT51-4VI	MTZ50-4VI	MT50-4VI
MTZ57-4VI	MT57-4VI	MTZ56-4VI	MT56-4VI
MTZ65-4VI	MT65-4VI	MTZ64-4VI	MT64-4VI
MTZ73-4VI	MT73-4VI	MTZ72-4VI	MT72-4VI
MTZ81-4VI	MT81-4VI	MTZ80-4VI	MT80-4VI
MTZ100-4VI	MT100-4VI		
MTZ125-4VI	MT125-4VI		
MTZ144-4VI	MT144-4VI		
MTZ160-4VI	MT160-4VI		

Low Temperature Compressors

POE oil	POE oil
NTZ0485LR1	LTZ022-5VI
NTZ048A4LR1	LTZ022-4VI
NTZ0685LR1	LTZ028-5VI
NTZ068A4LR1A	LTZ028-4VI
NTZ096A4LR1A	LTZ040-4VI
NTZ1084LR1	LTZ044-4VI
NTZ136A4LR1A	LTZ050-4VI
NTZ2154LR1	LTZ088-4VI
NTZ271A4LR1A	LTZ0100-4VI



Semi Hermetic Compressors

The new BITZER ECOLINE series offers highly efficient all-purpose compressors which meet the challenging demands of modern refrigeration systems

The ECOLINE series has now been extended to all models and the optimisation package has been developed further for universal use with different refrigerants – at the same time extending the operating ranges.

The refrigerants include: R134a, R404A, R407A, R407C, R407F, R507A, R22, R290 and R1270.

The compressors are already designed for operation with "Low-GWP" HFO refrigerants and HFO-/HFC blends.

The coefficient of performance (COP) of the new ECOLINE models has been improved by an average of 6% up to a maximum of 12% compared with preceding series.

This is not achieved with a single component, but by optimising the valve plates, reducing flow losses and discharge gas pulsation as well as specially adapted highly efficient motors with broad band characteristics.

Each ECOLINE is compatible with its predecessor compressor.
These predecessor compressors can be substituted without the need for modifying the system.

Whereas many of the major internal components have been redesigned, the outer shape has remained virtually unchanged: the same outer dimensions, unchanged mounting points, valve and sensor positions, connections for oil and gas equalisation, as well as for oil level regulators.

Motor version 2 covers the classic refrigeration applications – medium and low temperature refrigeration – with one single product. In many cases it can thus replace a predecessor compressor with motor version 1.

For supermarket applications with R134a, a version with specially adapted motor is available for the ECOLINE models CE4, BE5 and BE6 – motor version 3 – in addition to motor version 2.

Motor version 3 has been specially designed for the pressure levels of R134a and focuses on applications in the medium temperature refrigeration range in modern systems.

For compressors with motor version 3, the standard motor can be operated with a frequency inverter up to 70 Hz (for mains voltage 400V/3/50Hz).

❑ **Extended application range**
- R134a up to tc = 85°C
- R404A and R507A up to tc = 62°C

❑ **Energy efficient**

high cooling capacity and minimum energy requirement:
- highly efficient working valves
- minimum clearance volume
- efficient, large-volume motor
- reduced flow losses at low condensing temperatures

❑ **Wear resistant drive gear**
- surface hardened eccentric shaft and crankshaft
- low friction bearings and aluminium pistons
- hard chrome plated piston rings

❑ **Quiet with low vibration**
- optimized mass balance
- low discharge gas pulsations due to special cylinder Head design

❑ **Minimum space requirement**
- very compact design

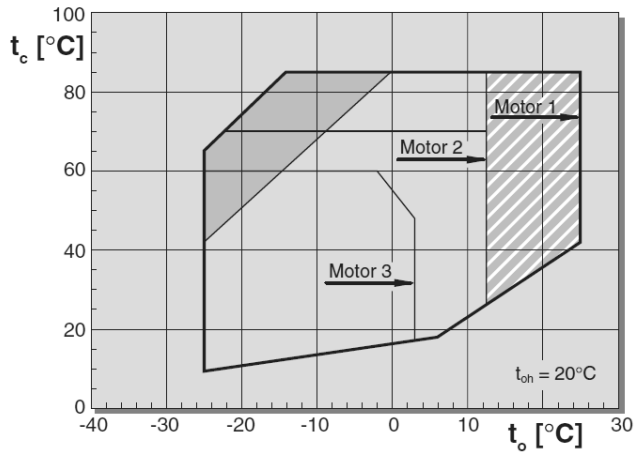
❑ **Robust**
- solid valve plate design
- valves made of impact resistant spring steel
- wear resistant drive gear

❑ **Efficient capacity control**
- cylinder shut-off or VSD capacity control possible
- cylinder shut-off possible from 18 m3/h displacement (50 Hz) on
  – 4 cylinder compressor: 50%
  – 6 cylinder compressor: 66% / 33%
  – 8 cylinder compressor: 75% / 50%
- Fast cycling cylinder shut-off, e.g. 4 cylinder compressor on both cylinder heads: 100% to approx. 10%
- tandem compressors from 22,7 m3/h to 303 m3/h (50 Hz)
- approved parallel operation
- VSD capacity control from 25 to 70 Hz – subject to conditions

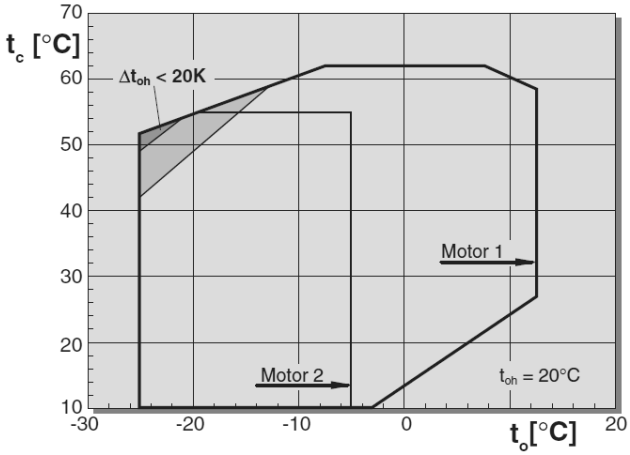
Compressor Application Limits

(relating to 20 ºC suction gas temperature)

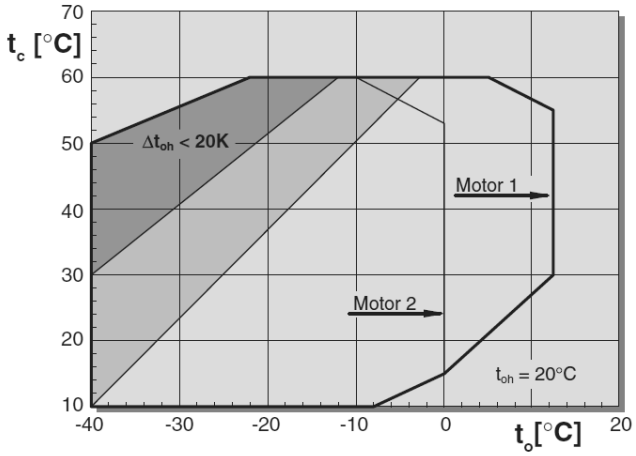
R134a ①, ②



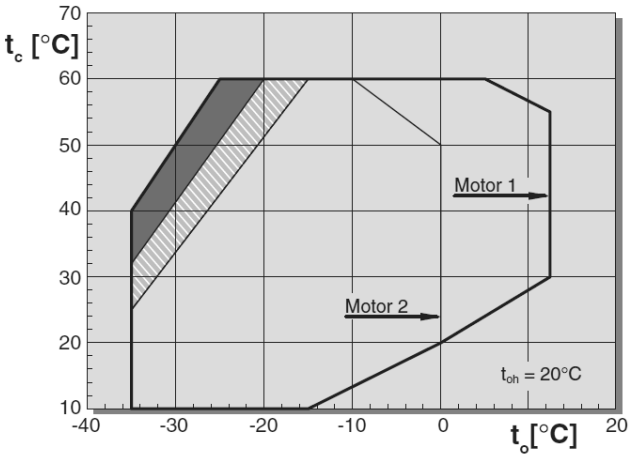
R407C ①, ②, ③



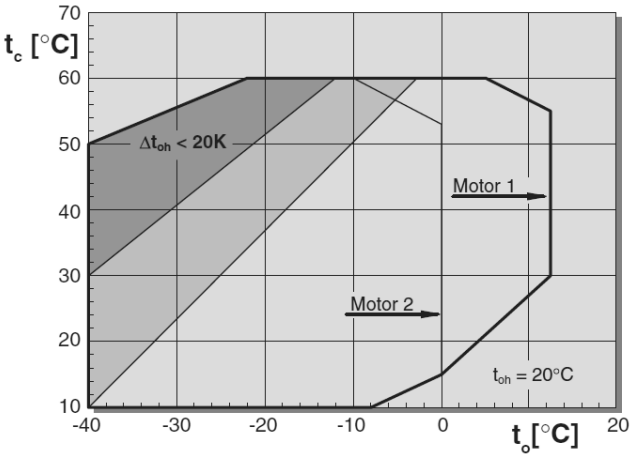
R407A 2KES-05Y .. 4CES-9Y ③



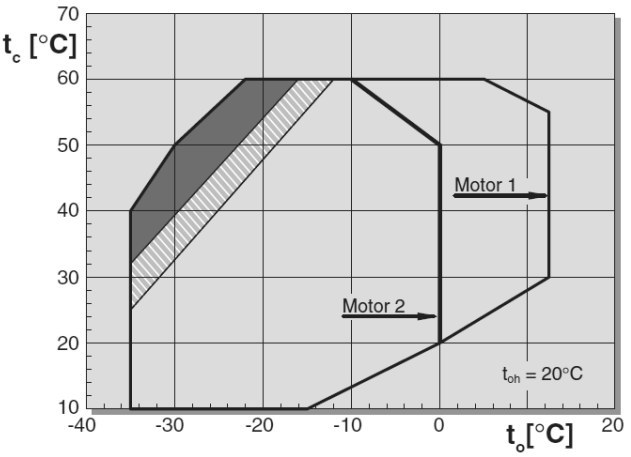
R407A 4VES-7Y .. 6FE-50Y ③, ④



R407F 2KES-05Y .. 4CES-9Y ③



R407F 4VES-7Y .. 6FE-50Y ③, ④



① 8GE-50Y .. 8FE-70Y:
minimum evaporating temperature -20°C

② For R134a and t_c >70°C oil BSE55 has to be used (instead of BSE32)

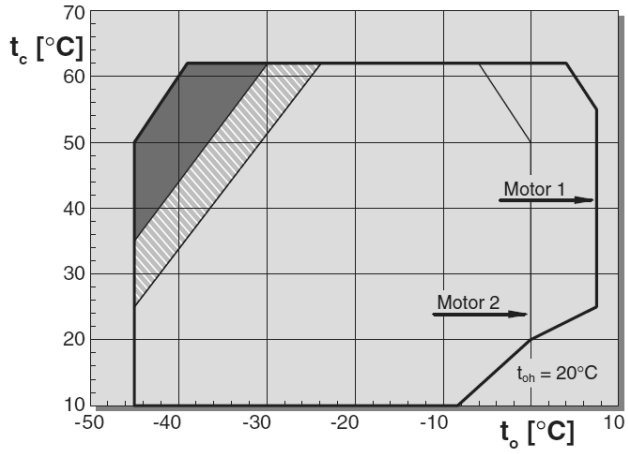
③ Evaporating and condensing temperatures are based on dew point conditions (saturated vapour)

④ Lower evaporating temperatures are possible with CiC® operation.
Selection upon request.

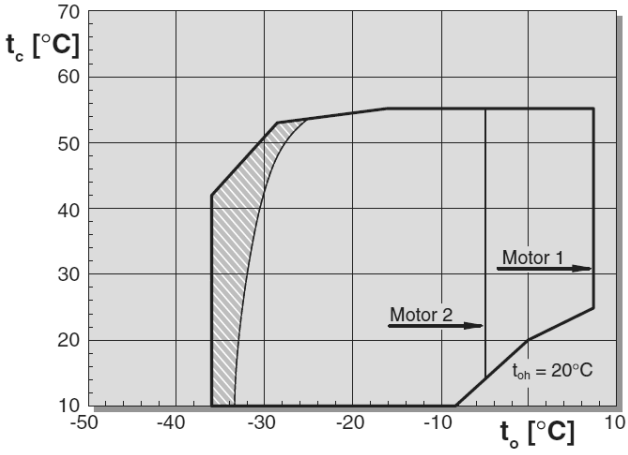
Compressor Application Limits – cont'd

(relating to 20 ºC suction gas temperature)

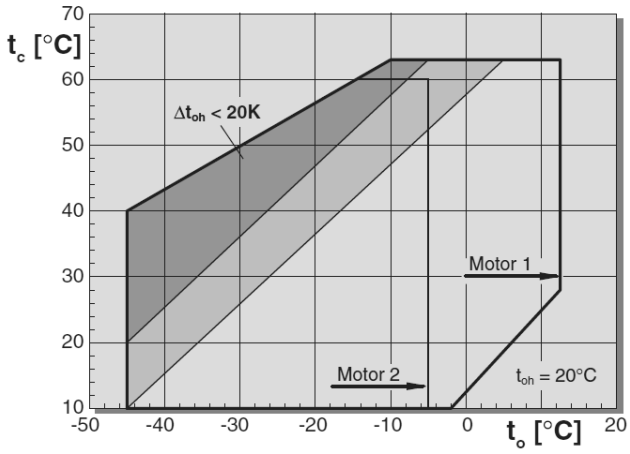
R404A ■ R507A 2KES-05Y .. 6FE-50Y

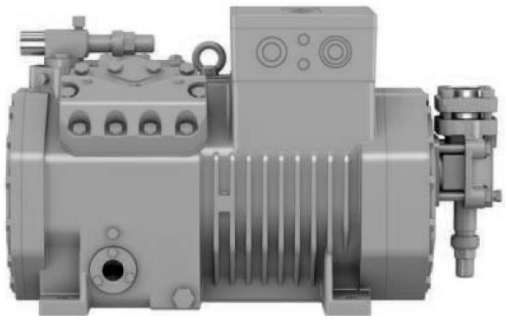


R404A ■ R507A 8GE-50Y .. 8FE-70Y ①



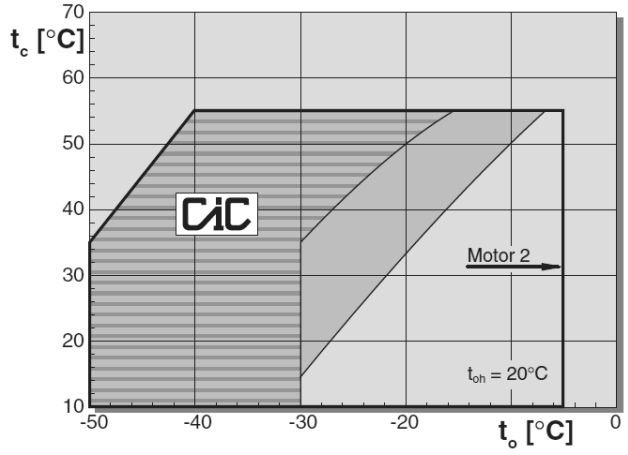
R22 2KES-05 .. 4CES-9



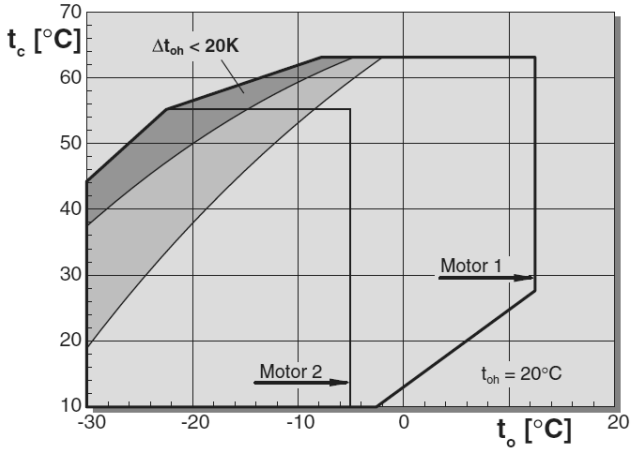


R22 4VES-7 .. 6FE-40

mit / with / avec CIC®



R22 4VES-7 .. 8FE-70 ①



t_o	Evaporating temperature (°C)
t_{oh}	Suction gas temperature (°C)
Δt_{oh}	Suction gas superheat (K)
t_c	Condensing temperature (°C)

- Additional cooling or max. 0°C suction gas temperature
- Additional cooling
- Additional cooling + limited suction gas temperature according to <20 K suction gas superheat
- Additional cooling or limited suction gas temperature according to <20 K suction gas superheat
- Suction gas superheat >10 K
- Additional fan + CIC®

BITZER ECOLINE COMPRESSORS

R134A (Motor Options 1 & 2) Semi Hermetic Compressors

Capacities R134A

Airefrig Part Number	Comp & Motor Version			Refrigeration Capacity – **W**atts / Consumption – **P**ower (Kw)							
				Condensing Temperature ºC							
				Evaporating Temperature ºC							
				+15	+10	+5	0	-5	-10	-15	-20
2KES-05Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE1 Motor Type 1	**W**	40.0		2770	2250	1810	1420	1090	815	580
		P			0.68	0.64	0.59	0.55	0.50	0.45	0.39
		W	50.0		2420	1960	1570	1220	930	685	470
		P			0.78	0.72	0.67	0.61	0.55	0.49	0.41
		W	60.0		2090	1690	1350	1050	790	570	385
		P			0.87	0.81	0.74	0.67	0.60	0.51	0.42
2JES-07Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE1 Motor Type 1	**W**	40.0		3540	2880	2310	1820	1400	1040	740
		P			0.86	0.82	0.77	0.72	0.66	0.59	0.51
		W	50.0		3100	2510	2000	1570	1190	875	605
		P			0.98	0.93	0.87	0.80	0.72	0.64	0.53
		W	60.0		2690	2170	1730	1340	1020	735	495
		P			1.10	1.04	0.96	0.88	0.79	0.68	0.56
2HES-1Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE1 Motor Type 2	**W**	40.0		4650	3820	3100	2490	1960	1520	1140
		P			1.02	0.99	0.94	0.89	0.83	0.76	0.68
		W	50.0		4080	3330	2690	2150	1680	1280	940
		P			1.18	1.13	1.07	0.99	0.91	0.81	0.70
		W	60.0		3510	2850	2290	1810	1390	1040	740
		P			1.35	1.27	1.18	1.08	0.97	0.84	0.71
2HES-2Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE1 Motor Type 2	**W**	60.0	4240	3490	2850	2290	1810	1390	1040	740
		P		1.39	1.33	1.25	1.17	1.08	0.97	0.86	0.73
		W	70.0	3560	2920	2370	1890	1480	1120	820	560
		P		1.57	1.48	1.38	1.27	1.15	1.02	0.87	0.71
		W	80.0	2850	2340	1890	1500	1160	860	610	
		P		1.75	1.63	1.51	1.37	1.22	1.05	0.88	
2GES-2Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE1 Motor Type 1	**W**	40.0		5400	4450	3630	2930	2320	1810	1370
		P			1.19	1.15	1.11	1.05	0.98	0.90	0.81
		W	50.0		4760	3910	3180	2550	2010	1540	1150
		P			1.38	1.32	1.24	1.16	1.06	0.95	0.84
		W	60.0		4120	3370	2730	2170	1690	1280	935
		P			1.56	1.47	1.36	1.25	1.12	0.99	0.84
2FES-2Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE1 Motor Type 2	**W**	40.0		6850	5640	4590	3690	2920	2270	1720
		P			1.43	1.38	1.32	1.24	1.15	1.04	0.92
		W	50.0		5880	4820	3910	3130	2450	1880	1400
		P			1.69	1.60	1.49	1.38	1.25	1.11	0.96
		W	60.0		4960	4060	3270	2600	2020	1530	1110
		P			1.90	1.78	1.64	1.49	1.33	1.15	0.97
2FES-3Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE1 Motor Type 1	**W**	60.0	6000	4960	4060	3280	2610	2030	1540	1120
		P		2.12	1.99	1.86	1.72	1.57	1.41	1.24	1.06
		W	70.0	4970	4110	3350	2690	2130	1640	1230	875
		P		2.35	2.20	2.03	1.85	1.66	1.47	1.27	1.06
		W	80.0	3960	3270	2660	2130	1670	1280	940	
		P		2.58	2.39	2.18	1.96	1.74	1.51	1.27	

Rating Conditions: 50Hz , 20 Deg Return Gas, no Sub-Cooling. Shaded areas require additional cooling &/or return vapour limitations.

BITZER ECOLINE COMPRESSORS

R134A (Motor Options 1 & 2) Semi Hermetic Compressors – cont'd

Capacities R134A

Airefrig Part Number	Comp & Motor Version			Refrigeration Capacity – **W**atts / Consumption – **P**ower (Kw)							
				Condensing Temperature ºC							
				Evaporating Temperature ºC							
				+15	+10	+5	0	-5	-10	-15	-20
2EES-2Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE2 Motor Type 2	**W**	40.0		8600	7040	5700	4560	3580	2760	2070
		P			1.78	1.70	1.60	1.48	1.34	1.20	1.04
		W	50.0		7440	6070	4900	3890	3040	2320	1710
		P			2.09	1.95	1.79	1.62	1.44	1.25	1.07
		W	60.0		6290	5110	4100	3230	2500	1880	1350
		P			2.34	2.14	1.93	1.71	1.48	1.27	1.06
2EES-3Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE2 Motor Type 1	**W**	60.0	7650	6290	5110	4100	3230	2500	1880	1350
		P		2.51	2.33	2.14	1.94	1.73	1.51	1.30	1.10
		W	70.0	6260	5120	4140	3290	2560	1950	1420	990
		P		2.74	2.50	2.26	2.01	1.76	1.51	1.27	1.04
		W	80.0	4840	3940	3150	2470	1890	1390	975	
		P		2.89	2.60	2.31	2.02	1.73	1.45	1.19	
2DES-2Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE2 Motor Type 2	**W**	40.0		10420	8390	6800	5450	4300	3320	2510
		P			2.15	2.06	1.93	1.79	1.62	1.45	1.27
		W	50.0		8870	7260	5870	4680	3670	2810	2090
		P			2.54	2.37	2.17	1.97	1.75	1.53	1.31
		W	60.0		7530	6130	4940	3910	3040	2300	1680
		P			2.86	2.61	2.35	2.09	1.82	1.56	1.32
2DES-3Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE2 Motor Type 1	**W**	60.0	9140	7530	6130	4940	3910	3040	2300	1680
		P		3.01	2.80	2.57	2.32	2.07	1.82	1.57	1.33
		W	70.0	7510	6160	4990	3990	3130	2390	1770	1250
		P		3.31	3.06	2.73	2.43	2.13	1.84	1.55	1.29
		W	80.0	5830	4760	3820	3020	2320	1730	1230	
		P		3.52	3.17	2.82	2.46	2.12	1.79	1.47	
2CES-3Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE2 Motor Type 2	**W**	40.0		12530	10290	8370	6720	5320	4140	3150
		P			2.60	2.50	2.36	2.19	1.99	1.79	1.58
		W	50.0		10900	8940	7250	5810	4580	3540	2670
		P			3.08	2.88	2.66	2.42	2.17	1.91	1.66
		W	60.0		9290	7600	6150	4900	3840	2940	2180
		P			3.49	3.20	2.90	2.59	2.28	1.98	1.69
2CES-4Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE2 Motor Type 1	**W**	60.0	11250	9290	7600	6150	4900	3840	2940	2180
		P		3.69	3.44	3.17	2.88	2.58	2.28	1.99	1.70
		W	70.0	9290	7650	6240	5010	3960	3060	2310	1670
		P		4.08	3.74	3.40	3.04	2.69	2.34	2.00	1.69
		W	80.0	7250	5950	4820	3830	2980	2260	1650	
		P		4.37	3.96	3.54	3.12	2.72	2.33	1.96	
4FES-3Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE3 Motor Type 2	**W**	40.0		13590	11040	8880	7060	5520	4240	3190
		P			2.78	2.65	2.48	2.28	2.06	1.83	1.60
		W	50.0		11650	9440	7560	5970	4630	3510	2590
		P			3.24	3.01	2.75	2.48	2.19	1.90	1.62
		W	60.0		9730	7840	6240	4880	3730	2780	1990
		P			3.60	3.28	2.94	2.60	2.25	1.90	1.57

Rating Conditions: 50Hz , 20 Deg Return Gas, no Sub-Cooling. Shaded areas require additional cooling &/or return vapour limitations.
Note: All 4 cylinder models supplied with one cylinder head prepared for capacity control (standard feature)

BITZER ECOLINE COMPRESSORS

R134A (Motor Options 1 & 2) Semi Hermetic Compressors – cont'd

Capacities R134A

Airefrig Part Number	Comp & Motor Version			Refrigeration Capacity – **W**atts / Consumption – **P**ower (Kw)							
				Condensing Temperature ºC							
				Evaporating Temperature ºC							
				+15	+10	+5	0	-5	-10	-15	-20
4FES-5Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE3 Motor Type 1	**W**	60.0	11910	9730	7850	6250	4890	3740	2790	2000
		P		3.83	3.55	3.25	2.93	2.60	2.26	1.92	1.60
		W	70.0	9620	7820	6270	4950	3820	2860	2070	1410
		P		4.15	3.79	3.41	3.01	2.62	2.22	1.83	1.47
		W	80.0	7340	5930	4720	3660	2760	2000	1360	
		P		4.35	3.91	3.45	2.99	2.53	2.08	1.65	
4EES-4Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE3 Motor Type 2	**W**	40.0		17030	14000	11410	9190	7320	5730	4410
		P			3.52	3.36	3.16	2.93	2.67	2.40	2.12
		W	50.0		14760	12110	9830	7890	6240	4850	3690
		P			4.18	3.90	3.59	3.26	2.91	2.56	2.22
		W	60.0		12500	10230	8280	6610	5190	3980	2980
		P			4.75	4.35	3.93	3.51	3.08	2.67	2.27
4EES-6Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE3 Motor Type 1	**W**	60.0	15130	12500	10230	8280	6610	5190	3980	2980
		P		5.02	4.67	4.30	3.90	3.50	3.09	2.69	2.31
		W	70.0	12450	10270	8380	6750	5340	4150	3130	2280
		P		5.57	5.11	4.63	4.15	3.66	3.19	2.73	2.30
		W	80.0	9760	8040	6540	5230	4100	3130	2300	
		P		6.02	5.45	4.88	4.31	3.75	3.21	2.70	
4DES-5Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE3 Motor Type 2	**W**	40.0		20500	16690	13470	10750	8460	6550	4980
		P			4.16	3.96	3.71	3.42	3.11	2.77	2.43
		W	50.0		17650	14360	11550	9180	7180	5510	4130
		P			4.88	4.54	4.17	3.77	3.35	2.93	2.51
		W	60.0		14830	12030	9630	7600	5890	4450	3270
		P			5.47	5.00	4.50	4.00	3.49	2.99	2.51
4DES-7Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE3 Motor Type 1	**W**	60.0	18090	14830	12030	9640	7610	5890	4460	3280
		P		5.79	5.38	4.94	4.47	3.98	3.49	3.01	2.54
		W	70.0	14720	12040	9730	7740	6050	4610	3410	2420
		P		6.34	5.80	5.24	4.66	4.08	3.51	2.96	2.43
		W	80.0	11350	9250	7420	5850	4490	3340	2370	
		P		6.72	6.07	5.40	4.72	4.05	3.40	2.78	
4CES-6Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE3 Motor Type 2	**W**	40.0		25050	20450	16560	13260	10490	8170	6250
		P			5.05	4.82	4.54	4.20	3.83	3.44	3.04
		W	50.0		21700	17690	14290	11400	8970	6950	5270
		P			5.94	5.55	5.12	4.65	4.16	3.67	3.19
		W	60.0		18320	14920	12010	9540	7450	5710	4260
		P			6.69	6.14	5.57	4.98	4.38	3.80	3.24
4CES-9Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE3 Motor Type 1	**W**	60.0	22300	18320	14920	12010	9540	7450	5710	4260
		P		7.20	6.69	6.14	5.57	4.98	4.38	3.80	3.24
		W	70.0	18240	14980	12160	9750	7680	5930	4470	3250
		P		7.95	7.29	6.59	5.88	5.18	4.49	3.82	3.19
		W	80.0	14170	11620	9390	7470	5820	4410	3220	
		P		8.53	7.71	6.88	6.05	5.24	4.45	3.71	

Rating Conditions: 50Hz , 20 Deg Return Gas, no Sub-Cooling. Shaded areas require additional cooling &/or return vapour limitations.
Note: All 4 cylinder models supplied with one cylinder head prepared for capacity control (standard feature)

BITZER ECOLINE COMPRESSORS

R134A (Motor Options 1 & 2) Semi Hermetic Compressors – cont'd

Capacities R134A

Airefrig Part Number	Comp & Motor Version		Refrigeration Capacity – **W**atts / Consumption – **P**ower (Kw)	Condensing Temperature ºC / Evaporating Temperature ºC +15	+10	+5	0	-5	-10	-15	-20
4VES-7Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Part Wind Start - Terminal Box IP65	Comp Series CE4 Motor Type 2	**W**	40.0		26950	22000	17720	14090	11020	8440	6290
		P			5.15	4.97	4.68	4.29	3.85	3.38	2.90
		W	50.0		22950	18680	15000	11850	9160	6880	4960
		P			6.04	5.65	5.17	4.64	4.09	3.53	3.01
		W	60.0		19060	15480	12380	9690	7380	5400	3700
		P			6.77	6.18	5.54	4.88	4.22	3.57	2.97
4VES-10Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Part Wind Start - Terminal Box IP65	Comp Series CE4 Motor Type 1	**W**	60.0	23300	19010	15330	12200	9550	7340	5500	3990
		P		7.07	6.60	6.06	5.47	4.83	4.19	3.56	2.95
		W	70.0	18940	15360	12300	9700	7510	5670	4160	2930
		P		7.75	7.11	6.42	5.70	4.96	4.24	3.55	2.92
		W	80.0	14450	11620	9200	7150	5420	3980	2810	
		P		8.26	7.47	6.65	5.82	5.00	4.22	3.50	
4TES-9Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Part Wind Start - Terminal Box IP65	Comp Series CE4 Motor Type 2	**W**	40.0		32350	26450	21400	17080	13420	10340	7760
		P			6.20	5.98	5.64	5.19	4.68	4.13	3.56
		W	50.0		27700	22600	18210	14450	11240	8510	6210
		P			7.29	6.82	6.27	5.65	5.00	4.35	3.72
		W	60.0		23100	18840	15140	11930	9160	6780	4740
		P			8.20	7.51	6.77	5.99	5.21	4.45	3.74
4TES-12Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Part Wind Start - Terminal Box IP65	Comp Series CE4 Motor Type 1	**W**	60.0	28200	23050	18660	14920	11760	9100	6900	5090
		P		8.80	8.20	7.51	6.77	5.99	5.21	4.45	3.74
		W	70.0	23000	18750	15090	11980	9360	7160	5350	3870
		P		9.79	8.98	8.10	7.18	6.23	5.29	4.39	3.55
		W	80.0	17690	14320	11420	8960	6890	5160	3750	
		P		10.65	9.69	864	7.53	6.39	5.25	4.14	
4PES-12Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Part Wind Start - Terminal Box IP65	Comp Series CE4 Motor Type 2	**W**	40.0		37450	30500	24500	19450	15170	11570	8570
		P			7.03	6.75	6.34	5.82	5.23	4.59	3.94
		W	50.0		31800	25800	20700	16280	12530	9360	6700
		P			8.18	7.63	6.98	6.26	5.50	4.73	3.96
		W	60.0		26300	21300	16970	13240	10020	7260	4910
		P			9.10	8.29	7.43	6.52	5.60	4.68	3.79
4PES-15Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Part Wind Start - Terminal Box IP65	Comp Series CE4 Motor Type 1	**W**	60.0	32250	26250	21100	16740	13050	9960	7400	5310
		P		9.88	9.20	8.40	7.53	6.62	5.70	4.80	3.96
		W	70.0	26100	21100	16830	13210	10160	7610	5520	3810
		P		10.81	9.85	8.83	7.76	6.69	5.64	4.66	3.76
		W	80.0	19800	15860	12490	9630	7230	5240	3620	
		P		11.40	10.20	8.97	7.74	6.53	5.38	4.34	
4NES-14Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Part Wind Start - Terminal Box IP65	Comp Series CE4 Motor Type 2	**W**	40.0		43850	35800	28900	23000	18050	13860	10370
		P			8.33	7.99	7.51	6.92	6.24	5.51	4.76
		W	50.0		37400	30500	24500	19410	15050	11350	8240
		P			9.72	9.08	8.33	7.50	6.62	5.71	4.82
		W	60.0		31150	25350	20300	15960	12200	8970	6210
		P			10.89	9.96	8.94	7.88	6.80	5.73	4.69

Rating Conditions: 50Hz , 20 Deg Return Gas, no Sub-Cooling. Shaded areas require additional cooling &/or return vapour limitations.
Note: All 4 cylinder models supplied with one cylinder head prepared for capacity control (standard feature)

BITZER ECOLINE COMPRESSORS

R134A (Motor Options 1 & 2) Semi Hermetic Compressors – cont'd

Capacities R134A

Airefrig Part Number	Comp & Motor Version			Refrigeration Capacity – **W**atts / Consumption – **P**ower (Kw)							
				Condensing Temperature ºC							
				Evaporating Temperature ºC							
				+15	+10	+5	0	-5	-10	-15	-20
4NES-20Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Part Wind Start - Terminal Box IP65	Comp Series CE4 Motor Type 1	**W**	60.0	38400	31450	25450	20400	16070	12460	9450	6980
		P		11.84	11.05	10.13	9.13	8.08	7.02	6.00	5.04
		W	70.0	31400	25600	20600	16390	12810	9820	7350	5330
		P		13.03	11.92	10.73	9.49	8.25	7.04	5.91	4.88
		W	80.0	24150	19570	15630	12280	9450	7100	5170	
		P		13.84	12.43	10.99	9.54	8.13	6.79	5.57	
4JE-15Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series BE5 Motor Type 2	**W**	40.0		48650	40050	32650	26300	20850	16230	12330
		P			9.30	8.98	8.52	7.94	7.28	6.56	5.81
		W	50.0		42250	34700	28200	22600	17800	13720	10260
		P			10.94	10.34	9.62	8.80	7.93	7.03	6.13
		W	60.0		35950	29400	23800	18920	14750	11200	8180
		P			12.35	11.47	10.50	9.47	8.39	7.30	6.23
4JE-22Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series BE5 Motor Type 1	**W**	60.0	42750	35250	28700	23100	18280	14150	10630	7670
		P		12.90	12.14	11.25	10.25	9.18	8.06	6.93	5.80
		W	70.0	35050	28750	23300	18550	14470	10970	7990	5480
		P		14.25	13.18	12.00	10.74	9.42	8.08	6.74	5.43
		W	80.0	27150	22100	17710	13890	10580	7740	5320	
		P		15.18	13.81	12.34	10.80	9.24	7.66	6.11	
4HE-18Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series BE5 Motor Type 2	**W**	40.0		57400	47250	38550	31100	24750	19390	14870
		P			11.20	10.74	10.12	9.38	8.56	7.68	6.77
		W	50.0		49800	40950	33300	26800	21250	16530	12570
		P			13.12	12.33	11.42	10.41	9.34	8.25	7.16
		W	60.0		42200	34600	28100	22500	17690	13630	10220
		P			14.77	13.67	12.47	11.21	9.91	8.61	7.35
4HE-25Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series BE5 Motor Type 1	**W**	60.0	50700	41900	34300	27700	22050	17170	13030	9250
		P		15.31	14.39	13.35	12.20	10.98	9.71	8.41	7.11
		W	70.0	41600	34350	28000	22500	17680	13550	10000	6980
		P		16.96	15.71	14.36	12.93	11.44	9.91	8.37	6.82
		W	80.0	32500	26700	21650	17200	13290	9890	6930	
		P		18.29	16.71	15.06	13.34	11.57	9.77	7.95	
4GE-23Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series BE5 Motor Type 2	**W**	40.0		65100	53500	43600	35150	27900	21800	16640
		P			13.25	12.56	11.73	10.77	9.73	8.63	7.50
		W	50.0		56200	46000	37250	29800	23450	18110	13640
		P			15.37	14.31	13.13	11.86	10.52	9.16	7.81
		W	60.0		47000	38250	30750	24400	18980	14450	10690
		P			17.11	15.70	14.20	12.63	11.03	9.43	7.86
4GE-30Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series BE5 Motor Type 1	**W**	60.0	59100	48900	40100	32450	25850	20200	15350	11250
		P		17.91	16.76	15.49	14.13	12.70	11.21	9.68	8.14
		W	70.0	48500	40150	32800	26450	20900	16070	11910	8320
		P		19.88	18.33	16.70	15.00	13.25	11.46	9.65	7.83
		W	80.0	37800	31250	25500	20400	15880	11910	8690	
		P		21.63	19.66	17.65	15.61	13.53	11.42	9.31	

Rating Conditions: 50Hz , 20 Deg Return Gas, no Sub-Cooling. Shaded areas require additional cooling &/or return vapour limitations.
Note: All 4 cylinder models supplied with one cylinder head prepared for capacity control (standard feature)

BITZER ECOLINE COMPRESSORS

R134A (Motor Options 1 & 2) Semi Hermetic Compressors – cont'd

Capacities R134A

Airefrig Part Number	Comp & Motor Version			Refrigeration Capacity – **W**atts / Consumption – **P**ower (Kw)							
				Condensing Temperature ºC							
				Evaporating Temperature ºC							
				+15	+10	+5	0	-5	-10	-15	-20
4FE-28Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series BE5 Motor Type 2	**W**	40.0		79200	65200	53300	43100	34450	27200	21100
		P			16.66	15.80	14.74	13.54	12.23	10.88	9.53
		W	50.0		69300	57000	46500	37550	29900	23500	18130
		P			19.43	18.07	16.56	14.95	13.29	11.63	10.01
		W	60.0		59300	48750	39700	31900	25300	19760	15110
		P			21.81	19.99	18.06	16.08	14.09	12.15	10.31
4FE-35Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series BE5 Motor Type 1	**W**	60.0	70300	58100	47600	38550	30800	24200	18670	14040
		P		22.82	21.16	19.35	17.44	15.47	13.49	11.56	9.72
		W	70.0	58000	47850	39100	31500	25000	19480	14800	10880
		P		25.10	22.97	20.73	18.44	16.14	13.87	11.70	9.66
		W	80.0	45500	37500	30500	24450	19210	14740	10940	
		P		26.89	24.33	21.70	19.06	16.46	13.94	11.56	
6JE-25Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series BE6 Motor Type 2	**W**	40.0		72500	59400	48200	38650	30550	23700	18020
		P			14.27	13.64	12.81	11.82	10.70	9.50	8.24
		W	50.0		62700	51200	4140	33000	25850	19840	14830
		P			16.66	15.56	14.30	12.92	11.45	9.94	8.42
		W	60.0		52800	42950	34500	27300	21150	15990	11680
		P			18.57	17.03	15.37	13.63	11.84	10.04	8.28
6JE-33Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series BE6 Motor Type 1	**W**	60.0	65500	53800	43600	34900	27500	21200	15960	11590
		P		19.68	18.38	16.91	15.30	13.61	11.87	10.13	8.42
		W	70.0	53700	43850	35300	28000	21800	16550	12160	8520
		P		21.80	19.99	18.06	16.04	13.99	11.94	9.94	8.02
		W	80.0	41700	33900	27100	21300	16310	12120	8630	
		P		23.44	21.14	18.78	16.38	13.99	11.65	9.41	
6HE-28Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series BE6 Motor Type 2	**W**	40.0		85100	69800	56800	45700	36300	28350	21700
		P			16.80	16.08	15.12	13.98	12.70	11.31	9.87
		W	50.0		73800	60500	49050	39300	31000	24000	18130
		P			19.76	18.48	17.02	15.42	13.72	11.98	10.23
		W	60.0		62500	51100	41200	32800	25650	19630	14590
		P			22.21	20.41	18.47	16.44	14.37	12.31	10.29
6HE-35Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series BE6 Motor Type 1	**W**	60.0	75400	62000	50400	40500	32050	24850	18790	13740
		P		23.32	21.73	19.95	18.02	15.99	13.92	11.86	9.86
		W	70.0	61800	50600	41000	32650	25550	19530	14470	10260
		P		25.79	23.62	21.31	18.92	16.49	14.07	11.72	9.47
		W	80.0	48050	39200	31500	24900	19220	14430	10410	
		P		27.69	24.96	22.16	19.33	16.53	13.80	11.18	
6GE-34Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series BE6 Motor Type 2	**W**	40.0		97100	79900	65100	52500	41800	32800	25300
		P			20.01	18.97	17.72	16.32	14.78	13.16	11.50
		W	50.0		84100	69100	56200	45200	35850	27950	21350
		P			23.32	21.71	19.93	18.04	16.05	14.03	12.01
		W	60.0		71100	58300	47400	38000	29950	23150	17410
		P			25.98	23.86	21.60	19.26	16.88	14.50	12.18

Rating Conditions: 50Hz , 20 Deg Return Gas, no Sub-Cooling. Shaded areas require additional cooling &/or return vapour limitations.
Note: All 4 & 6 cylinder models supplied with one cylinder head prepared for capacity control (standard feature)

BITZER ECOLINE COMPRESSORS

R134A (Motor Options 1 & 2) Semi Hermetic Compressors – cont'd

Capacities R134A

Airefrig Part Number	Comp & Motor Version			Refrigeration Capacity – **W**atts / Consumption – **P**ower (Kw)							
				Condensing Temperature ºC							
				Evaporating Temperature ºC							
				+15	+10	+5	0	-5	-10	-15	-20
6GE-40Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series BE6 Motor Type 1	**W**	60.0	87300	72200	59100	47900	38300	30100	23150	17340
		P		27.61	25.84	23.85	21.69	19.42	17.11	14.80	12.56
		W	70.0	72100	59500	48600	39200	31100	24200	18420	13550
		P		30.50	28.15	25.63	23.00	20.32	17.64	15.03	12.54
		W	80.0	56400	46500	37850	30400	23950	18480	13860	
		P		32.80	29.91	26.90	23.84	20.78	17.78	14.90	
6FE-44Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series BE6 Motor Type 2	**W**	40.0		116700	96100	78400	63300	50600	39800	30800
		P			24.10	22.92	21.50	19.88	18.12	16.25	14.32
		W	50.0		101300	83300	67900	54700	43500	34050	26100
		P			27.97	26.15	24.13	21.97	19.69	17.36	15.02
		W	60.0		85800	70600	57400	46150	36550	28350	21500
		P			31.11	28.72	26.17	23.50	20.77	18.04	15.35
6FE-50Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series BE6 Motor Type 1	**W**	60.0	101500	83900	6880	55700	44500	34900	26800	19980
		P		32.26	30.19	27.90	25.45	22.88	20.24	17.58	14.95
		W	70.0	82500	68300	55900	45100	35800	27850	21050	15300
		P		34.83	32.27	29.50	26.60	23.60	20.57	17.57	14.64
		W	80.0	63400	52400	42800	34350	27000	20700	15200	
		P		36.60	33.60	30.41	27.09	23.71	20.33	17.03	
8GE-60Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series CE8 Motor Type 1	**W**	60.0	118600	98000	80100	64600	51200	39650	29750	21350
		P		40.67	37.80	34.46	30.85	27.19	23.69	20.56	18.00
		W	70.0	97800	80600	65600	52500	41150	31350	22900	15680
		P		44.40	40.61	36.47	32.21	28.12	24.43	21.41	19.31
		W	80.0	76600	63000	51000	40500	31300	23350	16450	
		P		47.52	42.94	38.13	33.42	29..13	25.57	23.06	
8FE-70Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series CE8 Motor Type 1	**W**	60.0	138100	114400	93800	75800	60300	46800	35150	25100
		P		47.40	44.28	40.52	36.37	32.10	27.97	24.23	21.15
		W	70.0	113300	93600	76400	61300	48200	36700	26750	18090
		P		51.51	47.34	42.64	37.75	32.97	28.62	25.02	22.48
		W	80.0	88200	72700	59000	46850	36200	26850	18650	
		P		54.59	49.50	44.07	38.68	33.71	29.55	26.57	

Rating Conditions: 50Hz , 20 Deg Return Gas, no Sub-Cooling. Shaded areas require additional cooling &/or return vapour limitations.
Note: All 6 cylinder models supplied with one cylinder head prepared for capacity control (8 cylinder models 2x heads prepared)

BITZER ECOLINE COMPRESSORS

R134A Semi Hermetic Compressors
Specialised - Motor Option 3

(Optimised for R134A medium temp applications with enhanced application limits)

Capacities R134A

Airefrig Part Number		Refrigeration Capacity – **W**atts / Consumption – **P**ower (Kw)	Condensing Temperature ºC				
			Evaporating Temperature ºC				
			0	-5	-10	-15	-20
4VES-6Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Part Wind Start - Terminal Box IP65	**W**	30.0	20400	16310	12850	9950	7550
	P		4.03	3.83	3.52	3.15	2.73
	W	40.0	17720	14090	11020	8440	6290
	P		4.68	4.29	3.85	3.38	2.90
	W	50.0	15000	11850	9160	6880	4960
	P		5.17	4.64	4.08	3.53	3.01
4TES-8Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Part Wind Start - Terminal Box IP65	**W**	30.0	24500	19660	15550	12100	9230
	P		4.83	4.59	4.24	3.82	3.34
	W	40.0	21400	17080	13420	10340	7760
	P		5.64	5.19	4.68	4.13	3.56
	W	50.0	18210	14450	11240	8510	6210
	P		6.27	5.65	5.00	4.35	3.72
4PES-10Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Part Wind Start - Terminal Box IP65	**W**	30.0	28300	22600	17750	13710	10360
	P		5.49	5.20	4.79	4.31	3.77
	W	40.0	24500	19450	15170	11570	8570
	P		6.34	5.82	5.23	4.59	3.94
	W	50.0	20700	16280	12530	9360	6700
	P		6.98	6.26	5.50	4.73	3.96
4NES-12Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Part Wind Start - Terminal Box IP65	**W**	30.0	33250	26600	21000	16330	12430
	P		6.48	6.14	5.68	5.14	4.55
	W	40.0	28950	23100	18100	13910	10420
	P		7.52	6.93	6.26	5.53	4.78
	W	50.0	24600	19470	15110	11410	8290
	P		8.35	7.53	6.64	5.74	4.85
4JE-13Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	**W**	30.0	37300	30200	24100	18920	14560
	P		7.36	7.01	6.54	5.98	5.36
	W	40.0	32800	26400	21000	16370	12470
	P		8.66	8.06	7.36	6.60	5.81
	W	50.0	28350	22750	17950	13880	10430
	P		9.82	8.97	8.05	7.09	6.13
4HE-15Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	**W**	30.0	43800	35450	28350	22300	17220
	P		8.68	8.21	7.63	6.95	6.23
	W	40.0	38550	31100	24750	19390	14870
	P		10.22	9.46	8.61	7.71	6.78
	W	50.0	33300	26800	21250	16530	12570
	P		11.56	10.52	9.42	8.29	7.18

Airefrig Part Number		Refrigeration Capacity – **W**atts / Consumption – **P**ower (Kw)	Condensing Temperature ºC				
			Evaporating Temperature ºC				
			0	-5	-10	-15	-20
4GE-20Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	**W**	30.0	50500	41050	32900	26000	20200
	P		10.31	9.70	8.97	8.15	7.27
	W	40.0	44850	36350	29100	22900	17720
	P		12.14	11.19	10.15	9.05	7.92
	W	50.0	38700	31200	24800	19400	14870
	P		13.69	12.42	11.09	9.73	8.38
4FE-25Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	**W**	30.0	60000	48550	38900	30800	24000
	P		12.71	11.93	11.01	9.99	8.92
	W	40.0	53300	43100	34450	27200	21100
	P		14.91	13.67	12.34	10.96	9.59
	W	50.0	46500	37550	29900	23500	18130
	P		16.79	15.13	13.43	11.72	10.08
6JE-22Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	**W**	30.0	55500	44700	35600	27900	21500
	P		10.87	10.39	9.70	8.86	7.90
	W	40.0	48820	39200	31000	24050	18280
	P		12.88	11.93	10.84	9.63	8.37
	W	50.0	42100	33500	26250	20150	15050
	P		14.51	13.13	11.65	10.11	8.58
6HE-25Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Terminal Box IP65	**W**	30.0	64500	52000	41500	32650	25250
	P		12.91	12.25	11.40	10.39	9.28
	W	40.0	56800	45700	36300	28350	21700
	P		15.30	14.13	12.81	11.40	9.93
	W	50.0	49050	39300	31000	24000	18130
	P		17.27	15.61	13.87	12.08	10.29
6GE-30Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	**W**	30.0	74900	60700	48700	38600	30150
	P		15.21	14.37	13.37	12.23	11.01
	W	40.0	66300	53700	43000	33950	26400
	P		18.07	16.70	15.20	13.62	11.99
	W	50.0	57600	46600	37200	29250	22600
	P		20.47	18.61	16.67	14.69	12.71
6FE-40Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	**W**	30.0	88800	71800	57500	45450	35400
	P		18.27	17.27	16.08	14.73	13.27
	W	40.0	78400	63300	50600	39800	30800
	P		21.50	19.88	18.12	16.25	14.32
	W	50.0	67900	54700	43500	34050	26100
	P		24.13	21.97	19.69	17.36	15.02

Rating Conditions: 50Hz , 20 Deg Return Gas, no Sub-Cooling.

Note: All 4 cylinder models supplied with one cylinder head prepared for capacity control (standard feature)

BITZER ECOLINE COMPRESSORS

R404A (Motor Options 1 & 2) Semi Hermetic Compressors

Capacities R404A (R507)

Airefrig Part Number	Comp & Motor Version			Refrigeration Capacity – **W**atts / Consumption – **P**ower (Kw)									
				Condensing Temperature ºC									
				Evaporating Temperature ºC									
				+5	0	-5	-10	-15	-20	-25	-30	-35	-40
2KES-05Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE1 Motor Type 1	**W**	30	4290	3570	2940	2390	1920	1510	1160	865	610	395
		P		0,81	0,80	0.78	0.75	0.72	0.68	0.63	0.57	0.50	0.42
		W	40	3520	2920	2390	1940	1540	1200	900	650	435	255
		P		0.96	0.93	0.89	0.84	0.79	0.72	0.65	0.57	0.47	0.36
		W	50	2810	2320	1890	1520	1190	910	670	460	285	140
		P		1.11	1.05	0.99	0.92	0.84	0.76	0.66	0.55	0.43	0.30
2JES-07Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE1 Motor Type 1	**W**	30	5670	4730	3920	3210	2600	2070	1620	1230	900	625
		P		1.08	1.07	1.05	1.02	0.97	0.91	0.84	0.76	0.66	0.56
		W	40	4740	3950	3250	2650	2130	1680	1290	960	675	440
		P		1.31	1.27	1.21	1.14	1.06	0.98	0.87	0.76	0.64	0.51
		W	50	3850	3190	2620	2120	1680	1300	980	700	465	265
		P		1.53	1.45	1.36	1.26	1.14	1.02	0.89	0.75	0.60	0.44
2HES-1Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE1 Motor Type 2	**W**	30		5920	4910	4040	3280	2630	2070	1590	1180	840
		P			1.45	1.38	1.31	1.23	1.14	1.04	0.93	0.82	0.69
		W	40		4950	4090	3340	2690	2130	1650	1240	890	595
		P			1.7	1.59	1.47	1.35	1.21	1.08	0.94	0.79	0.64
		W	50		4000	3290	2670	2130	1660	1250	905	615	365
		P			1.92	1.76	1.6	1.43	1.26	1.09	0.91	0.73	0.55
2HES-2Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE1 Motor Type 2	**W**	30	7200	6020	5000	4110	3340	2680	2110	1620	1210	855
		P		1.42	1.4	1.37	1.32	1.25	1.16	1.06	0.95	0.83	0.7
		W	40	6060	5060	4190	3420	2760	2190	1700	1270	910	610
		P		1.7	1.64	1.56	1.47	1.36	1.23	1.1	0.96	0.8	0.64
		W	50	4940	4110	3380	2740	2190	1700	1290	935	630	375
		P		1.96	1.85	1.73	1.59	1.44	1.28	1.11	0.93	0.75	0.56
2GES-2Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE1 Motor Type 1	**W**	30	8230	6890	5730	4720	3850	3090	2450	1890	1420	1030
		P		1.67	1.65	1.6	1.53	1.45	1.34	1.23	1.1	0.96	0.81
		W	40	6910	5780	4790	3930	3190	2540	1990	1520	1110	775
		P		2	1.93	1.83	1.72	1.59	1.45	1.3	1.13	0.96	0.79
		W	50	5650	4710	3890	3180	2560	2020	1560	1160	825	540
		P		2.33	2.2	2.05	1.9	1.72	1.54	1.35	1.16	0.96	0.76
2FES-2Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE1 Motor Type 2	**W**	30		8690	7220	5940	4830	3870	3050	2350	1750	1250
		P			2.02	1.98	1.91	1.8	1.67	1.51	1.35	1.17	0.98
		W	40		7190	5960	4880	3950	3150	2450	1860	1360	930
		P			2.37	2.27	2.13	1.97	1.79	1.6	1.39	1.18	0.97
		W	50		5770	4770	3900	3140	2480	1910	1420	1000	650
		P			2.72	2.55	2.36	2.15	1.92	1.68	1.44	1.2	0.97
2FES-3Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE1 Motor Type 1	**W**	30	10320	8640	7170	5900	4800	3850	3030	2330	1740	1250
		P		2.03	2	1.95	1.86	1.76	1.63	1.49	1.34	1.17	1
		W	40	8560	7160	5930	4860	3940	3130	2440	1850	1350	930
		P		2.46	2.37	2.25	2.1	1.94	1.77	1.58	1.38	1.17	0.96
		W	50	6890	5760	4760	3890	3130	2470	1900	1410	995	645
		P		2.88	2.72	2.53	2.33	2.11	1.88	1.64	1.4	1.15	0.91

Rating Conditions: 50Hz , 20 Deg Return Gas, no Sub-Cooling. Shaded areas require additional cooling &/or return vapour limitations.
Note: All 4 cylinder models supplied with one cylinder head prepared for capacity control (standard feature)

BITZER ECOLINE COMPRESSORS

R404A (Motor Options 1 & 2) Semi Hermetic Compressors – cont'd

Capacities R404A (R507)

Airefrig Part Number	Comp & Motor Version			Refrigeration Capacity – **W**atts / Consumption – **P**ower (Kw)									
				Condensing Temperature ºC									
				Evaporating Temperature ºC									
				+5	0	-5	-10	-15	-20	-25	-30	-35	-40
2EES-2Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE2 Motor Type 2	**W**	30		10920	9070	7470	6080	4890	3860	2980	2230	1600
		P			2.37	2.28	2.16	2.01	1.85	1.67	1.47	1.27	1.07
		W	40		9250	7670	6300	5100	4070	3180	2420	1770	1220
		P			2.81	2.64	2.45	2.23	2.01	1.77	1.53	1.28	1.04
		W	50		7490	6180	5040	4050	3190	2450	1820	1280	830
		P			3.16	2.91	2.65	2.37	2.09	1.8	1.51	1.23	0.95
2EES-3Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE2 Motor Type 1	**W**	30	13040	10920	9070	7470	6080	4890	3860	2980	2230	1600
		P		2.4	2.36	2.27	2.16	2.02	1.87	1.69	1.5	1.31	1.11
		W	40	11070	9250	7670	6300	5100	4070	3180	2420	1770	1220
		P		2.89	2.76	2.61	2.43	2.23	2.02	1.79	1.55	1.32	1.08
		W	50	8980	7490	6180	5040	4050	3190	2450	1820	1280	830
		P		3.27	3.08	2.86	2.62	2.36	2.09	1.82	1.54	1.26	0.99
2DES-2Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE2 Motor Type 2	**W**	30		12990	10810	8910	7270	5860	4640	3590	2710	1960
		P			2.87	2.76	2.62	2.45	2.25	2.03	1.8	1.55	1.31
		W	40		11040	9170	7540	6120	4900	3850	2940	2180	1530
		P			3.42	3.22	2.98	2.73	2.46	2.17	1.88	1.59	1.3
		W	50		8960	7420	6070	4890	3870	2990	2240	1600	1070
		P			3.87	3.57	3.25	2.92	2.58	2.23	1.88	1.55	1.22
2DES-3Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE2 Motor Type 1	**W**	30	15500	12990	10810	8910	7270	5860	4640	3590	2710	1960
		P		2.87	2.81	2.71	2.58	2.41	2.22	2.01	1.79	1.56	1.33
		W	40	13180	11040	9170	7540	6120	4900	3850	2940	2180	1530
		P		3.47	3.32	3.13	2.92	2.68	2.42	2.15	1.87	1.59	1.31
		W	50	10720	8960	7420	6070	4890	3870	2990	2240	1600	1070
		P		3.97	3.73	3.46	3.17	2.86	2.53	2.21	1.88	1.55	1.24
2CES-3Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE2 Motor Type 2	**W**	30		15890	13250	10950	8960	7250	5770	4500	3420	2500
		P			3.47	3.35	3.19	2.98	2.75	2.5	2.23	1.94	1.66
		W	40		13550	11280	9310	7590	6110	4830	3730	2790	2000
		P			4.15	3.92	3.65	3.35	3.03	2.7	2.36	2.02	1.69
		W	50		11060	9180	7540	6120	4880	3810	2890	2110	1450
		P			4.73	4.38	4.01	3.62	3.22	2.81	2.41	2.01	1.64
2CES-4Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE2 Motor Type 1	**W**	30	18920	15890	13250	10950	8960	7250	5770	4500	3420	2500
		P		3.49	3.42	3.31	3.15	2.96	2.74	2.49	2.23	1.95	1.68
		W	40	16150	13550	11280	9310	7590	6110	4830	3730	2790	2000
		P		4.24	4.06	3.84	3.59	3.31	3	2.68	2.35	2.02	1.7
		W	50	13190	11060	9180	7540	6120	4880	3810	2890	2110	1450
		P		4.86	4.58	4.27	3.92	3.56	3.18	2.79	2.4	2.02	1.65
4FES-3Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE3 Motor Type 2	**W**	30		17510	14460	11840	9610	7700	6100	4750	3640	2720
		P			3.71	3.61	3.45	3.25	3.01	2.74	2.44	2.14	1.84
		W	40		14840	12260	10040	8140	6520	5140	3990	3030	2250
		P			4.44	4.23	3.96	3.66	3.33	2.97	2.61	2.24	1.89
		W	50		12030	9940	8140	6580	5250	4120	3170	2380	1730
		P			5.03	4.71	4.35	3.96	3.54	3.11	2.68	2.26	1.85

Rating Conditions: 50Hz , 20 Deg Return Gas, no Sub-Cooling. Shaded areas require additional cooling &/or return vapour limitations.
Note: All 4 cylinder models supplied with one cylinder head prepared for capacity control (standard feature)

BITZER ECOLINE COMPRESSORS

R404A (Motor Options 1 & 2) Semi Hermetic Compressors – cont'd

Capacities R404A (R507)

Airefrig Part Number	Comp & Motor Version			Refrigeration Capacity – **W**atts / Consumption – **P**ower (Kw) Condensing Temperature ºC / Evaporating Temperature ºC									
				+5	0	-5	-10	-15	-20	-25	-30	-35	-40
4FES-5Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE3 Motor Type 1	**W**	30	21050	17510	14460	11840	9610	7710	6100	4750	3640	2720
		P		3.69	3.66	3.56	3.41	3.22	2.99	2.73	2.45	2.16	1.86
		W	40	17810	14830	12260	10040	8140	6510	5140	3990	3030	2240
		P		4.48	4.34	4.14	3.89	3.61	3.29	2.96	2.61	2.26	1.91
		W	50	14400	12010	9940	8130	6580	5250	4130	3180	2380	1730
		P		5.12	4.88	4.58	4.25	3.88	3.49	3.09	2.68	2.27	1.87
4EES-4Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE3 Motor Type 2	**W**	30		22100	18300	15010	12200	9790	7760	6050	4630	3460
		P			4.75	4.61	4.4	4.12	3.8	3.43	3.05	2.65	2.26
		W	40		18810	15550	12740	10330	8270	6520	5060	3830	2830
		P			5.71	5.42	5.06	4.65	4.2	3.73	3.25	2.77	2.31
		W	50		15360	12690	10380	8390	6690	5240	4020	3010	2170
		P			6.52	6.07	5.58	5.05	4.49	3.92	3.35	2.8	2.27
4EES-6Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE3 Motor Type 1	**W**	30	26400	22000	18160	14880	12060	9660	7630	5930	4510	3340
		P		4.7	4.65	4.51	4.3	4.04	3.72	3.38	3	2.62	2.23
		W	40	22400	18650	15390	12590	10180	8120	6380	4920	3700	2700
		P		5.72	5.52	5.24	4.9	4.51	4.08	3.63	3.17	2.71	2.25
		W	50	18240	15170	12510	10200	8220	6520	5080	3870	2870	2040
		P		6.57	6.22	5.81	5.35	4.85	4.32	3.78	3.23	2.69	2.18
4DES-5Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE3 Motor Type 2	**W**	30		26200	21750	17860	14540	11700	9280	7250	5550	4140
		P			5.64	5.47	5.22	4.89	4.51	4.08	3.63	3.16	2.7
		W	40		22400	18530	15190	12320	9870	7790	6030	4580	3370
		P			6.74	6.4	5.97	5.49	4.97	4.42	3.86	3.3	2.76
		W	50		18440	15220	12440	10040	8000	6260	4800	3600	2600
		P			7.69	7.17	6.59	5.96	5.31	4.65	3.99	3.35	2.74
4DES-7Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE3 Motor Type 1	**W**	30	31450	26250	21750	17870	14540	11700	9280	7250	5550	4140
		P		5.6	5.54	5.39	5.15	4.84	4.47	4.06	3.63	3.18	2.73
		W	40	26900	22400	18540	15190	12320	9870	7790	6040	4580	3370
		P		6.81	6.57	6.25	5.85	5.4	4.91	4.39	3.85	3.31	2.79
		W	50	22150	18430	15220	12440	10040	8000	6260	4810	3600	2600
		P		7.83	7.43	6.96	6.42	5.84	5.23	4.61	3.98	3.36	2.77
4CES-6Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE3 Motor Type 2	**W**	30		31750	26300	21650	17610	14160	11220	8730	6650	4930
		P			6.82	6.61	6.29	5.88	5.4	4.87	4.31	3.74	3.17
		W	40		27150	22400	18350	14850	11850	9310	7180	5400	3930
		P			8.1	7.66	7.14	6.54	5.9	5.22	4.54	3.86	3.21
		W	50		22500	18520	15080	12120	9610	7480	5690	4220	3010
		P			9.19	8.55	7.83	7.07	6.27	5.47	4.67	3.9	3.17
4CES-9Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE3 Motor Type 1	**W**	30	38000	31750	26300	21650	17610	14160	11220	8730	6650	4930
		P		6.91	6.82	6.61	6.29	5.88	5.4	4.87	4.31	3.74	3.17
		W	40	32600	27150	22400	18350	14850	11850	9310	7180	5400	3930
		P		8.42	8.1	7.66	7.14	6.54	5.9	5.22	4.54	3.86	3.21
		W	50	27100	22500	18520	15080	12120	9610	7480	5690	4220	3010
		P		9.75	9.19	8.55	7.83	7.07	6.27	5.47	4.67	3.9	3.17

Rating Conditions: 50Hz , 20 Deg Return Gas, no Sub-Cooling. Shaded areas require additional cooling &/or return vapour limitations.
Note: All 4 cylinder models supplied with one cylinder head prepared for capacity control (standard feature)

BITZER ECOLINE COMPRESSORS

R404A (Motor Options 1 & 2) Semi Hermetic Compressors – cont'd

Capacities R404A (R507)

Airefrig Part Number	Comp & Motor Version			Refrigeration Capacity – **W**atts / Consumption – **P**ower (Kw)									
				Condensing Temperature ºC									
				Evaporating Temperature ºC									
				+5	0	-5	-10	-15	-20	-25	-30	-35	-40
4VES-7Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Part Wind Start - Terminal Box IP65	Comp Series CE4 Motor Type 2	**W**	30		34100	28150	23000	18590	14820	11600	8890	6630	4750
		P			7.15	6.92	6.55	6.07	5.52	4.91	4.27	3.64	3.04
		W	40		28800	23650	19180	15360	12110	9350	7040	5130	3560
		P			8.58	8.04	7.39	6.68	5.91	5.13	4.35	3.6	2.91
		W	50		23550	19180	15430	12210	9480	7190	5280	3710	2440
		P			9.77	8.92	8.02	7.08	6.12	5.18	4.28	3.43	2.67
4VES-10Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Part Wind Start - Terminal Box IP65	Comp Series CE4 Motor Type 1	**W**	30	41050	34150	28150	23000	18590	14810	11600	8890	6630	4760
		P		6.97	6.92	6.71	6.38	5.94	5.42	4.85	4.25	3.65	3.07
		W	40	34800	28800	23650	19180	15350	12100	9350	7040	5140	3580
		P		8.54	8.2	7.72	7.15	6.5	5.79	5.06	4.33	3.62	2.95
		W	50	28600	23550	19180	15420	12200	9480	7190	5280	3720	2470
		P		9.84	9.22	8.5	7.7	6.86	5.98	5.11	4.26	3.45	2.73
4TES-9Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Part Wind Start - Terminal Box IP65	Comp Series CE4 Motor Type 2	**W**	30		40850	33800	27700	22450	17970	14150	10930	8230	6000
		P			8.6	8.32	7.89	7.34	6.69	5.98	5.24	4.5	3.79
		W	40		34700	28600	23300	18750	14870	11580	8820	6520	4630
		P			10.32	9.7	8.96	8.13	7.24	6.33	5.42	4.54	3.72
		W	50		28500	23300	18860	15040	11780	9030	6740	4840	3300
		P			11.75	10.8	9.77	8.69	7.58	6.49	5.42	4.43	3.52
4TES-12Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Part Wind Start - Terminal Box IP65	Comp Series CE4 Motor Type 1	**W**	30	49200	40950	33850	27700	22450	17930	14100	10870	8180	5950
		P		8.52	8.43	8.16	7.74	7.2	6.57	5.88	5.17	4.45	3.76
		W	40	41800	34700	28550	23200	18670	14780	11500	8750	6470	4600
		P		10.43	10	9.42	8.73	7.94	7.09	6.21	5.34	4.49	3.71
		W	50	34450	28500	23300	18810	14990	11730	9000	6720	4850	3330
		P		12.07	11.32	10.45	9.5	8.48	7.44	6.4	5.39	4.45	3.6
4PES-12Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Part Wind Start - Terminal Box IP65	Comp Series CE4 Motor Type 2	**W**	30		47250	38900	31750	25600	20350	15900	12160	9050	6500
		P			9.72	9.36	8.84	8.18	7.43	6.61	5.75	4.89	4.05
		W	40		40000	32800	26550	21200	16680	12860	9660	7020	4870
		P			11.51	10.78	9.93	8.97	7.95	6.9	5.84	4.81	3.83
		W	50		32550	26500	21250	16790	13010	9830	7200	5040	3300
		P			12.92	11.84	10.67	9.43	8.17	6.9	5.66	4.49	3.41
4PES-15Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Part Wind Start - Terminal Box IP65	Comp Series CE4 Motor Type 1	**W**	30	57000	47300	38950	31700	25550	20300	15800	12050	8930	6370
		P		9.9	9.72	9.35	8.82	8.15	7.39	6.56	5.69	4.83	4.0
		W	40	48200	39800	32600	26400	21050	16520	12710	9520	6890	4760
		P		11.96	11.4	10.67	9.82	8.87	7.86	6.82	5.78	4.77	3.83
		W	50	39450	32400	26350	21150	16680	12920	9760	7140	5000	3280
		P		13.69	12.78	11.73	10.58	9.38	8.14	6.91	5.71	4.58	3.55
4NES-14Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Part Wind Start - Terminal Box IP65	Comp Series CE4 Motor Type 2	**W**	30		55400	45700	37400	30250	24150	18980	14650	11050	8090
		P			11.59	11.15	10.54	9.78	8.91	7.97	6.98	5.98	5.0
		W	40		47200	38800	31550	25400	20100	15640	11910	8820	6290
		P			13.74	12.91	11.93	10.84	9.67	8.45	7.23	6.03	4.88
		W	50		38550	31550	25500	20350	15950	12240	9140	6580	4510
		P			15.46	14.25	12.93	11.53	10.08	8.61	7.17	5.79	4.49

Rating Conditions: 50Hz , 20 Deg Return Gas, no Sub-Cooling. Shaded areas require additional cooling &/or return vapour limitations.
Note: All 4 cylinder models supplied with one cylinder head prepared for capacity control (standard feature)

BITZER ECOLINE COMPRESSORS

R404A (Motor Options 1 & 2) Semi Hermetic Compressors – cont'd

Capacities R404A (R507)

Airefrig Part Number	Comp & Motor Version			Refrigeration Capacity – **W**atts / Consumption – **P**ower (Kw)									
				Condensing Temperature ºC									
				Evaporating Temperature ºC									
				+5	0	-5	-10	-15	-20	-25	-30	-35	-40
4NES-20Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Part Wind Start - Terminal Box IP65	Comp Series CE4 Motor Type 1	**W**	30	67000	55700	46000	37600	30400	24300	19080	14710	11080	8100
		P		11.68	11.45	11.0	10.38	9.62	8.76	7.83	6.86	5.9	4.99
		W	40	56900	47200	38800	31550	25400	20100	15660	11940	8860	6350
		P		14.06	13.42	12.6	11.64	10.58	9.45	8.29	7.14	6.03	5.0
		W	50	46800	38700	31700	25650	20450	16070	12380	9310	6780	4740
		P		16.19	15.16	13.99	12.72	11.39	10.03	8.67	7.36	6.13	5.02
4JE-15Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series BE5 Motor Type 2	**W**	30		62400	51900	42850	34950	28200	22400	17440	13250	9730
		P			13.05	12.56	11.91	11.12	10.22	9.24	8.21	7.15	6.1
		W	40		53400	44300	36400	29550	23650	18600	14300	10680	7650
		P			15.41	14.5	13.46	12.31	11.1	9.84	8.56	7.29	6.06
		W	50		44200	36500	29850	24050	19080	14810	11200	8160	5640
		P			17.4	16.1	14.69	13.22	11.71	10.18	8.67	7.21	5.82
4JE-22Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series BE5 Motor Type 1	**W**	30	73700	61600	51100	42050	34200	27450	21650	16740	12580	9090
		P		13.02	12.72	12.23	11.57	10.79	9.89	8.91	7.88	6.83	5.77
		W	40	63000	52500	43400	35500	28700	22800	17780	13520	9920	6930
		P		15.71	14.96	14.05	13.02	11.88	10.67	9.42	8.14	6.87	5.62
		W	50	51900	43200	35500	28850	23100	18150	13930	10350	7350	4860
		P		18	16.83	15.53	14.13	12.67	11.16	9.64	8.13	6.66	5.24
4HE-18Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series BE5 Motor Type 2	**W**	30		72700	60500	50000	40900	33050	26300	20600	15750	11680
		P			15.66	15.02	14.2	13.22	12.12	10.94	9.71	8.45	7.21
		W	40		62200	51700	42600	34700	27900	22050	17080	12890	9390
		P			18.5	17.36	16.08	14.69	13.23	11.72	10.2	8.71	7.28
		W	50		51400	42650	35000	28350	22600	17720	13570	10070	7160
		P			20.93	19.32	17.61	15.84	14.03	12.22	10.44	8.74	7.14
4HE-25Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series BE5 Motor Type 1	**W**	30	86000	72100	59900	49400	40300	32500	25750	20050	15230	11180
		P		15.55	15.15	14.55	13.76	12.83	11.78	10.64	9.44	8.22	7
		W	40	73600	61500	51000	41900	34000	27200	21400	16470	12310	8830
		P		18.63	17.74	16.68	15.47	14.16	12.76	11.32	9.85	8.4	6.99
		W	50	60700	50700	41900	34250	27600	21900	17040	12910	9440	6560
		P		21.22	19.88	18.41	16.82	15.15	13.44	11.71	10	8.34	6.76
4GE-23Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series BE5 Motor Type 2	**W**	30		83800	69900	57800	47350	38350	30650	24100	18540	13880
		P			18.72	17.88	16.84	15.63	14.3	12.88	11.41	9.93	8.48
		W	40		71800	59800	49350	40300	32550	25900	20200	15420	11430
		P			22.15	20.71	19.13	17.44	15.68	13.88	12.09	10.34	8.68
		W	50		59300	49300	40600	33050	26550	21000	16290	12320	9010
		P			25.11	23.12	21.03	18.88	16.72	14.58	12.5	10.52	8.68
4GE-30Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series BE5 Motor Type 1	**W**	30	98700	82700	68800	56800	46350	37400	29700	23150	17640	13020
		P		18.19	17.66	16.9	15.94	14.83	13.6	12.27	10.88	9.47	8.06
		W	40	84400	70600	58600	48200	39200	31400	24800	19160	14410	10450
		P		21.62	20.56	19.3	17.89	16.37	14.75	13.09	11.4	9.74	8.13
		W	50	69400	57900	48000	39300	31800	25350	19820	15140	11210	7950
		P		24.47	22.94	21.24	19.42	17.52	15.56	13.59	11.64	9.75	7.96

Rating Conditions: 50Hz , 20 Deg Return Gas, no Sub-Cooling. Shaded areas require additional cooling &/or return vapour limitations.
Note: All 4 cylinder models supplied with one cylinder head prepared for capacity control (standard feature)

BITZER ECOLINE COMPRESSORS

R404A (Motor Options 1 & 2) Semi Hermetic Compressors – cont'd

Capacities R404A (R507)

Airefrig Part Number	Comp & Motor Version			Refrigeration Capacity – **W**atts / Consumption – **P**ower (Kw) Condensing Temperature ºC / Evaporating Temperature ºC									
				+5	0	-5	-10	-15	-20	-25	-30	-35	-40
4FE-28Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series BE5 Motor Type 2	**W**	30		99400	83000	68800	56400	45800	36700	28950	22350	16830
		P			22.31	21.42	20.27	18.88	17.32	15.63	13.86	12.07	10.28
		W	40		85000	71000	58800	48200	39000	31100	24350	18590	13720
		P			26.16	24.66	22.93	21.01	18.96	16.82	14.65	12.49	10.38
		W	50		70100	58600	48500	39650	32000	25350	19630	14710	10520
		P			29.47	27.37	25.09	22.66	20.14	17.57	15.02	12.51	10.11
4FE-35Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series BE5 Motor Type 1	**W**	30	117900	99000	82600	68300	56000	45400	36300	28550	22000	16460
		P		22.43	21.87	21	19.85	18.49	16.95	15.28	13.53	11.76	10
		W	40	100500	84500	70500	58300	47700	38550	30650	23900	18160	13310
		P		26.81	25.61	24.13	22.42	20.53	18.51	16.4	14.25	12.12	10.04
		W	50	82600	69500	58000	47900	39100	31500	24850	19140	14240	10070
		P		30.62	28.79	26.73	24.48	22.09	19.6	17.07	14.55	12.08	9.7
6JE-25Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series BE6 Motor Type 2	**W**	30		92400	76900	63500	51900	41850	33250	25950	19790	14610
		P			19.14	18.51	17.59	16.43	15.09	13.6	12.02	10.39	8.77
		W	40		79400	65900	54100	43900	35150	27700	21300	15970	11510
		P			22.59	21.37	19.9	18.24	16.43	14.52	12.56	10.61	8.7
		W	50		66100	54600	44550	35900	28450	22100	16750	12260	8540
		P			25.49	23.72	21.74	19.6	17.36	15.06	12.75	10.48	8.31
6JE-33Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series BE6 Motor Type 1	**W**	30	108800	91000	75500	62100	50500	40500	32000	24700	18590	13450
		P		18.93	18.63	18	17.1	15.96	14.64	13.18	11.63	10.02	8.41
		W	40	93300	77800	64200	52500	42400	33650	26200	19910	14610	10200
		P		22.73	21.82	20.62	19.19	17.56	15.8	13.93	12	10.06	8.16
		W	50	77400	64300	52800	42800	34200	26800	20500	15210	10780	7130
		P		25.92	24.43	22.71	20.78	18.7	16.51	14.25	11.97	9.72	7.53
6HE-28Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series BE6 Motor Type 2	**W**	30		106700	88900	73400	60100	48600	38750	30350	23300	17320
		P			22.95	22.07	20.89	19.46	17.83	16.07	14.21	12.33	10.46
		W	40		91300	75900	62600	51000	41000	32450	25150	19020	13880
		P			27.01	25.45	23.65	21.64	19.49	17.25	14.97	12.71	10.51
		W	50		75700	62800	51500	41750	33300	26100	19970	14800	10490
		P			30.56	28.35	25.94	23.38	20.72	18.01	15.32	12.69	10.18
6HE-35Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series BE6 Motor Type 1	**W**	30	126200	105700	88000	72500	59200	47750	37900	29550	22500	16560
		P		22.85	22.36	21.53	20.42	19.06	17.52	15.84	14.06	12.25	10.44
		W	40	108000	90300	74900	61500	50000	40050	31500	24250	18140	13030
		P		27.31	26.15	24.71	23.02	21.14	19.12	16.99	14.81	12.63	10.49
		W	50	89300	74500	61600	50400	40650	32250	25100	18970	13840	9570
		P		31.19	29.42	27.39	25.16	22.78	20.28	17.72	15.14	12.59	10.11
6GE-34Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series BE6 Motor Type 2	**W**	30		122900	102700	85200	70000	57000	45750	36200	28100	21300
		P			27.68	26.5	25.02	23.29	21.37	19.33	17.21	15.07	12.98
		W	40		105200	87900	72900	59800	48550	38900	30600	23600	17660
		P			32.62	30.69	28.5	26.13	23.63	21.05	18.46	15.91	13.46
		W	50		87200	72800	60300	49400	39950	31800	24850	18920	13930
		P			37.24	34.53	31.64	28.61	25.52	22.4	19.33	16.35	13.54

Rating Conditions: 50Hz , 20 Deg Return Gas, no Sub-Cooling. Shaded areas require additional cooling &/or return vapour limitations.
Note: All 4 & 6 cylinder models supplied with one cylinder head prepared for capacity control (standard feature)

BITZER ECOLINE COMPRESSORS

R404A (Motor Options 1 & 2) Semi Hermetic Compressors – cont'd

Capacities R404A (R507)

Airefrig Part Number	Comp & Motor Version			Refrigeration Capacity – **W**atts / Consumption – **P**ower (Kw)									
				Condensing Temperature ºC									
				Evaporating Temperature ºC									
				+5	0	-5	-10	-15	-20	-25	-30	-35	-40
6GE-40Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series BE6 Motor Type 1	**W**	30	143700	120400	100300	82800	67700	54700	43550	34050	26000	19280
		P		27.04	26.29	25.2	23.84	22.23	20.45	18.52	16.51	14.45	12.41
		W	40	122200	102400	85200	70200	57200	46000	36400	28200	21250	15410
		P		31.85	30.41	28.69	26.72	24.56	22.26	19.86	17.41	14.96	12.55
		W	50	100400	84100	69900	57400	46550	37200	29100	22200	16390	11490
		P		36.13	34.05	31.71	29.16	26.45	23.63	20.74	17.84	14.96	12.17
6FE-44Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series BE6 Motor Type 2	**W**	30		148100	123600	102400	84100	68300	54700	43100	33300	25050
		P			33.45	32.18	30.52	28.52	26.27	23.83	21.26	18.65	16.05
		W	40		126600	105700	87500	71800	58100	46350	36250	27700	20450
		P			38.97	36.82	34.34	31.59	28.63	25.55	22.4	19.26	16.19
		W	50		104400	87200	72200	59100	47650	37750	29250	21900	15660
		P			43.7	40.71	37.44	33.95	30.33	26.63	22.93	19.3	15.8
6FE-50Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series BE6 Motor Type 1	**W**	30	174500	146400	122000	100800	82500	66700	53200	41650	31900	23700
		P		33.41	32.59	31.3	29.63	27.63	25.38	22.93	20.37	17.74	15.14
		W	40	148500	124600	103800	85700	69900	56300	44600	34600	26100	18880
		P		39.56	37.8	35.65	33.16	30.41	27.46	24.38	21.23	18.08	15
		W	50	121700	102200	85100	70100	57100	45700	35850	27400	20150	13970
		P		44.8	42.15	39.16	35.9	32.43	28.82	25.13	21.42	17.77	14.24
8GE-60Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series CE8 Motor Type 1	**W**	30	205200	172300	143800	118900	97300	78500	62300	48350		
		P		42.3	41.33	39.63	37.31	34.48	31.28	27.82	24.22		
		W	40	173100	145400	121200	100000	81500	65400	51300	39150		
		P		50	47.66	44.69	41.23	37.39	33.32	29.15	25.01		
		W	50	140300	117900	98200	80900	65600	52200	40450	30100		
		P		55.79	52.38	48.43	44.06	39.41	34.6	29.75	24.99		
8FE-70Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series CE8 Motor Type 1	**W**	30	242800	204000	170100	140700	115100	93000	73800	57300		
		P		51.61	50.43	48.35	45.52	42.07	38.17	33.95	29.55		
		W	40	204900	172100	143500	118400	96500	77400	60800	46400		
		P		61	58.15	54.53	50.3	45.62	40.65	35.56	30.51		
		W	50	166100	139600	116300	95700	77700	61800	47900	35650		
		P		68.07	63.91	59.09	53.76	48.09	42.21	36.3	30.49		

Rating Conditions: 50Hz , 20 Deg Return Gas, no Sub-Cooling. Shaded areas require additional cooling &/or return vapour limitations.
Note: All 6 cylinder models supplied with one cylinder head prepared for capacity control (8 cylinder models 2x heads prepared)

BITZER COMPRESSORS

Reciprocating Semi Hermetic Compressors

CE1, CE2 & CE3 Octagon Series

Airefrig Part Number	Comp Series	Motor Version	Displ m³/Hr	No of cylinders	Capacity Control	Oil Charge dm³ (litres)	Weight (Kg)	Disch. Valve	Suct. Valve	Max Op Amps	C.C.H.	List Price Excl GST
2KES05Y	CE1	1	4.06	2	-	1.0	43.0	1/2	5/8	2.8	0 - 60 watt 230 volt PTC Self Regulating Crankcase Heater	
2JES07Y		1	5.21	2	-	1.0	43.0	1/2	5/8	3.7		
2HES1Y		2	6.51	2	-	1.0	44.0	1/2	5/8	3.8		
2HES2Y		1	6.51	2	-	1.0	45.0	1/2	5/8	4.5		
2GES2Y		1	7.58	2	-	1.0	45.0	1/2	5/8	5.0		
2FES2Y		2	9.54	2	-	1.0	45.0	1/2	5/8	5.3		
2FES3Y		1	9.54	2	-	1.0	47.0	1/2	5/8	6.1		
2EES2Y	CE2	2	11.4	2	-	1.5	68.0	5/8	7/8	6.0	0-120 watt 230 volt PTC Self Regulating Crankcase Heater	
2EES3Y		1	11.4	2	-	1.5	71.0	5/8	7/8	7.5		
2DES2Y		2	13.4	2	-	1.5	68.0	5/8	7/8	7.5		
2DES3Y		1	13.4	2	-	1.5	71.0	5/8	7/8	8.6		
2CES3Y		2	16.2	2	-	1.5	70.0	5/8	7/8	9.1		
2CES4Y		1	16.2	2	-	1.5	70.0	5/8	7/8	10.		
4FES3Y	CE3	2	18.1	4	50%	2.0	82.0	5/8	7/8	9.5	0-120 watt 230 volt PTC Self Regulating Crankcase Heater	
4FES5Y		1	18.1	4	50%	2.0	86.0	5/8	7/8	10.8		
4EES4Y		2	22.7	4	50%	2.0	84.0	5/8	1-1/8	12.2		
4EES6Y		1	22.7	4	50%	2.0	86.0	5/8	1-1/8	13.6		
4DES5Y		2	26.8	4	50%	2.0	86.0	7/8	1-1/8	14.5		
4DES7Y		1	26.8	4	50%	2.0	89.0	7/8	1-1/8	16.5		
4CES6Y		2	32.5	4	50%	2.0	91.0	7/8	1-1/8	17.7		
4CES9Y		1	32.5	4	50%	2.0	91.0	7/8	1-1/8	20.2		

Extent of Compressor Delivery:

- Compressor oil sight glass
- Oil Charge: BSE-32 Ester Oil
- Compressor service valves
- 4 x vibration dampers
- Terminal box enclosure : IP65
- Crankcase Heater supplied as standard
- 4 cylinder models have one head prepared for capacity control (purchase solenoid valve assembly 34760001)
- Built in thermistor motor temperature sensors including electronic control unit
- Integrated Vericool system option (Option to change from suction gas cooling to direct suction with external air cooling)



Power Supply:

- Motor connections: (DOL) Direct on line
- Voltage: 380-420Y/3/50 (compressor data based on 400volt)

Accessories

Airefrig Part Number	Description	List Price Excl GST
34701901	Motor protection device SE-B1 (replacement for INT69VS7-11 part # 34701301)	
34702303	Discharge Gas temperature control device (sensor)	
34302101	Additional cooling fan to suit 2 cylinder (CE1 series compressors)	
34302112	Additional cooling fan to suit 2 cylinder (CE2 series compressors)	
34302119	Additional cooling fan to suit 4 cylinder (CE3 series compressors)	
34760001	Solenoid Valve assembly for capacity control (includes valve, coil & gasket)	
34330902	Solenoid coil (ONLY) – suit capacity control solenoid valve (240v 50Hz)	P.O.A.

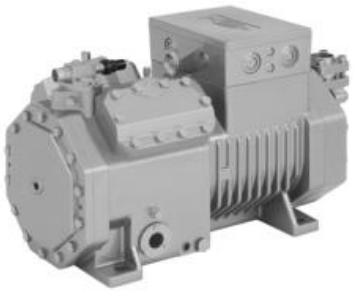
BITZER COMPRESSORS

Reciprocating Semi Hermetic Compressors

CE4 Octagon Dynamic Disc Centrifugal Lubrication

Airefrig Part Number	Comp Series	Motor Version	Displ m³/Hr	No of cylinders	Capacity Control	Oil Charge dm³ (litres)	Weight (Kg)	Disch. Valve	Suct. Valve	Max Op Amps	C.C.H.	List Price Excl GST
4VES6Y	CE4	3 small motor	34.7	4	50%	2.6	129.0	7/8	1-1/8	9.4	0-140 watt 230 volt PTC Self Regulating Crankcase Heater	
4VES7Y		2	34.7	4	50%	2.6	129.0	7/8	1-1/8	16.6		
4VES10Y		1	34.7	4	50%	2.6	139.0	7/8	1-1/8	19.9		
4TES8Y		3 small motor	41.3	4	50%	2.6	134.0	1-1/8	1-3/8	11.4		
4TES9Y		2	41.3	4	50%	2.6	134.0	1-1/8	1-3/8	19.9		
4TES12Y		1	41.3	4	50%	2.6	141.0	1-1/8	1-3/8	25.1		
4PES10Y		3 small motor	48.5	4	50%	2.6	139.0	1-1/8	1-3/8	12.9		
4PES12Y		2	48.5	4	50%	2.6	139.0	1-1/8	1-3/8	22.7		
4PES15Y		1	48.5	4	50%	2.6	147.0	1-1/8	1-5/8	28.2		
4NES12Y		3 small motor	56.2	4	50%	2.6	141.0	1-1/8	1-3/8	14.9		
4NES14Y		2	56.2	4	50%	2.6	141.0	1-1/8	1-3/8	26.6		
4NES20Y		1	56.2	4	50%	2.6	150.0	1-1/8	1-5/8	33.2		

Extent of Compressor Delivery:
- Compressor oil sight glass
- Oil Charge: BSE-32 Ester Oil
- Compressor service valves
- 4 x vibration damper
- Terminal box enclosure : IP65
- Crankcase Heater supplied as standard
- Built in thermistor motor temperature sensors including electronic control unit
- Compressors have one head prepared for capacity control (purchase solenoid valve assembly)



Power Supply:
- Motor connections: (PWS) Part Winding Start – winding partition 50% / 50% (select motor contactors @ approx 60% of the maximum operating current)
- Voltage: 380-420YY/3/50 (compressor data based on 400volt)

Accessories

Airefrig Part Number	Description	List Price Excl GST
34733403	OLC-K1 Electronic oil monitoring control (suit CE4 series)	
34701901	Motor protection device SE-B1 (replacement for INT69VS7-11 part # 34701301)	
34702303	Discharge Gas temperature control device (sensor)	
34302113	Additional cooling fan to suit CE4 series (4VES – 4NES compressors)	
34760001	Solenoid Valve assembly for capacity control 4VES-4NES (includes valve, coil & gasket)	
34330902	Solenoid coil (ONLY) – suit capacity control solenoid valve (240v 50Hz)	P.O.A.

OLC-K1 Electronic oil monitoring control:
The OLC-K1 is an optical oil level control specifically designed for use with the Dynamic Disc centrifugal lubrication system.
The control directly mounted at the oil reservoir (inside the compressor housing) which supplies oil to the main shaft & bearings.
This system provides superior oil monitoring directly at the point where it is most needed.
The OLC-K1 is considered a recommended requirement for the CE4 series compressors on single compressor applications.

BITZER COMPRESSORS

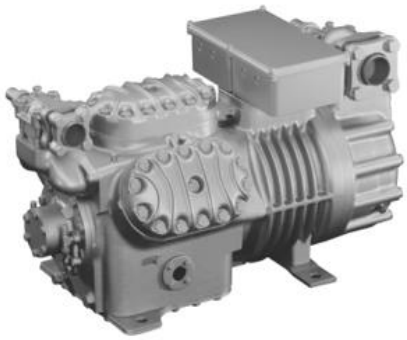
Reciprocating Semi Hermetic Compressors

BE5 & BE6 Second Generation Compressors

Airefrig Part Number	Comp Series	Motor Version	Displ m³/Hr	No of cylinders	Capacity Control	Oil Charge dm³ (litres)	Weight (Kg)	Disch. Valve	Suct. Valve	Max Op Amps	C.C.H.	List Price Excl GST
4JE13Y	BE5	3 small motor	63.5	4	50%	4.0	179.0	1-1/8	1-5/8	18.8	140 watt 230 volt Crankcase Heater	
4JE15Y		2	63.5	4	50%	4.0	190.0	1-1/8	1-5/8	30.8		
4JE22Y		1	63.5	4	50%	4.0	190.0	1-1/8	1-5/8	37.2		
4HE15Y		3 small motor	73.7	4	50%	4.0	183.0	1-1/8	1-5/8	21.4		
4HE18Y		2	73.7	4	50%	4.0	190.0	1-1/8	1-5/8	36.7		
4HE25Y		1	73.7	4	50%	4.5	194.0	1-1/8	2-1/8	44.0		
4GE20Y		3 small motor	84.6	4	50%	4.5	192.0	1-1/8	2-1/8	24.6		
4GE23Y		2	84.6	4	50%	4.5	192.0	1-1/8	2-1/8	43.9		
4GE30Y		1	84.6	4	50%	4.5	206.0	1-1/8	2-1/8	51.2		
4FE25Y		3 small motor	101.8	4	50%	4.5	196.0	1-1/8	2-1/8	30.5		
4FE28Y		2	101.8	4	50%	4.5	207.0	1-1/8	2-1/8	52.8		
4FE35Y		1	101.8	4	50%	4.5	207.0	1-1/8	2-1/8	62.1		
6JE22Y	BE6	3 small motor	95.3	6	33/66%	4.75	213.0	1-3/8	2-1/8	26.6	140 watt 230 volt Crankcase Heater	
6JE25Y		2	95.3	6	33/66%	4.75	228.0	1-3/8	2-1/8	46.4		
6JE33Y		1	95.3	6	33/66%	4.75	231.0	1-3/8	2-1/8	53.2		
6HE25Y		3 small motor	110.5	6	33/66%	4.75	224.0	1-3/8	2-1/8	31.3		
6HE28Y		2	110.5	6	33/66%	4.75	228.0	1-3/8	2-1/8	53.2		
6HE35Y		1	110.5	6	33/66%	4.75	235.0	1-3/8	2-1/8	64.4		
6GE30Y		3 small motor	126.8	6	33/66%	4.75	228.0	1-3/8	2-1/8	38.0		
6GE34Y		2	126.8	6	33/66%	4.75	228.0	1-3/8	2-1/8	65.5		
6GE40Y		1	126.8	6	33/66%	4.75	238.0	1-3/8	2-1/8	73.9		
6FE40Y		3 small motor	151.6	6	33/66%	4.75	238.0	1-5/8	2-1/8	48.5		
6FE44Y		2	151.6	6	33/66%	4.75	241.0	1-5/8	2-1/8	83.2		
6FE50Y		1	151.6	6	33/66%	4.75	241.0	1-5/8	2-1/8	96.2		

Extent of Compressor Delivery:

- Compressor oil sight glass
- Oil Charge: BSE-32 Ester Oil
- Compressor service valves
- 4 x vibration dampers
- Built in thermistor motor temperature sensors including electronic control unit
- Terminal box enclosure : IP54
- Crankcase Heater supplied as standard
- Oil pressure safety switch. (oil pump fitted as standard)
- Compressors have one head prepared for capacity control (purchase solenoid valve assembly)



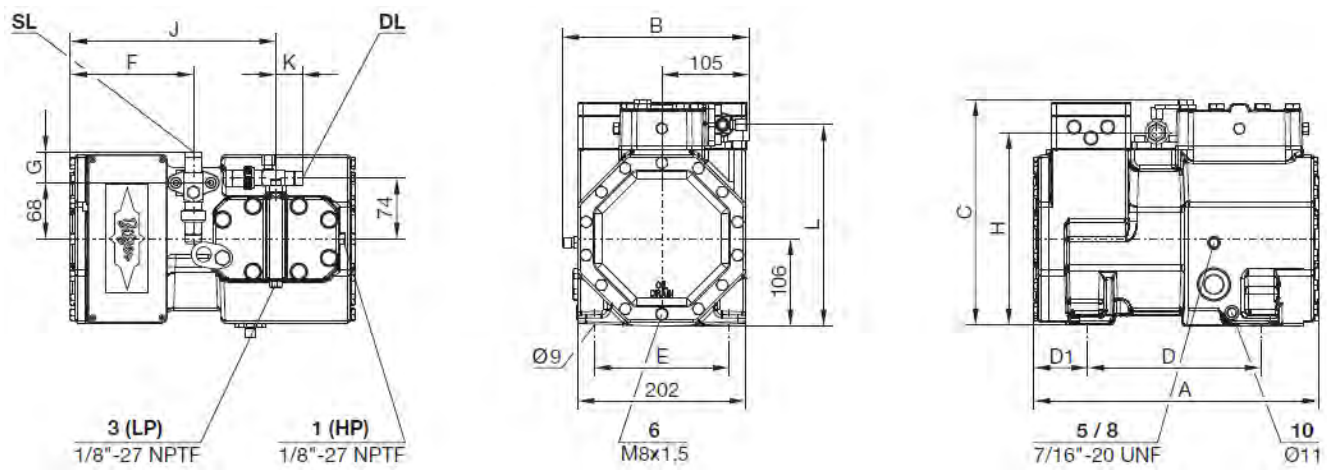
Power Supply:

- Motor connections: (PWS) Part Winding Start – winding partition 50% / 50% (select motor contactors @ approx 60% of the maximum operating current)
- Voltage: 380-420YY/3/50 (compressor data based on 400volt)

Accessories

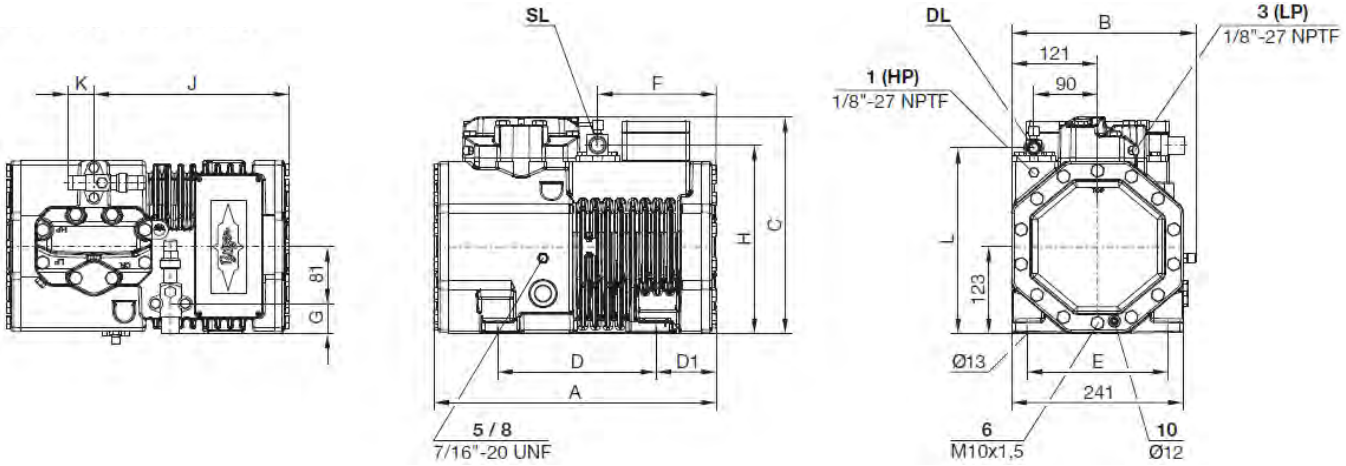
Airefrig Part Number	Description	List Price Excl GST
34702801	Motor protection device SE-B2 4V-6F (replacement for INT69VS part # 347024/27-01)	
34702303	Discharge Gas temperature control device (sensor)	
34302104	Additional cooling fan to suit B5 series (4JE – 4FE compressors)	
34302105	Additional cooling fan to suit B6 series (6JE – 6FE compressors)	
34760003	Solenoid Valve assembly for capacity control 4JE-6FE (includes valve, coil & gasket)	
34330902	Solenoid coil (ONLY) – suit capacity control solenoid valve (240v 50Hz)	P.O.A.
60B0168	Danfoss oil pressure switch MP54 (replacement part)	

Dimensional Details



Compressor Model	Comp Series	A mm	B mm	C mm	D mm	D1 mm	E mm	F mm	G mm	H mm	J mm	K mm	L mm
2KES05Y	CE1	343	220	273	208	65	162	148	37	242	247	32	232
2JES07Y		343	220	273	208	65	162	148	37	242	247	32	232
2HES1Y		343	220	273	208	65	162	148	37	242	247	32	232
2HES2Y		343	220	273	208	65	162	148	37	242	247	32	232
2GES2Y		343	220	273	208	65	162	148	37	242	247	32	232
2FES2Y		343	220	273	208	65	162	148	37	242	247	32	232
2FES3Y		343	220	273	208	65	162	148	37	242	247	32	232

Note: legend for connections on last page of Bitzer compressor information.



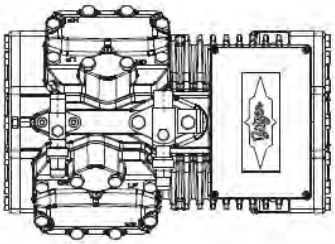
Compressor Model	Comp Series	A mm	B mm	C mm	D mm	D1 mm	E mm	F mm	G mm	H mm	J mm	K mm	L mm
2EES2Y	CE2	398	259	307	223	85	198	167	42	266	275	37	262
2EES3Y		398	259	307	223	85	198	167	42	266	275	37	262
2DES2Y		398	259	307	223	85	198	167	42	266	275	37	262
2DES3Y		398	259	307	223	85	198	167	42	266	275	37	262
2CES3Y		398	259	307	223	85	198	167	42	266	275	37	262
2CES4Y		398	259	307	223	85	198	167	42	266	275	37	262

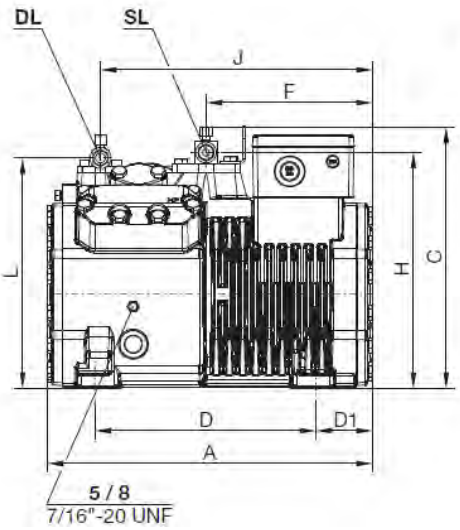
Note: legend for connections on last page of Bitzer compressor information.

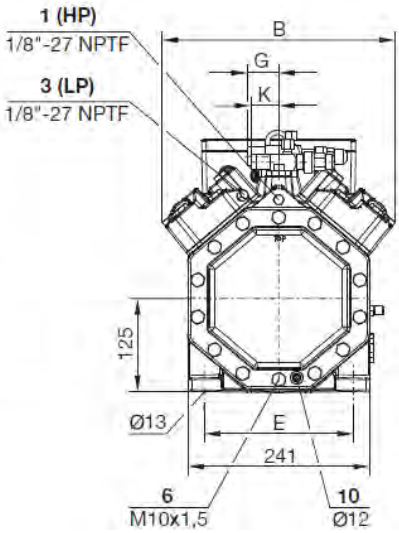
BITZER COMPRESSORS

Dimensional Details

4FES-3(Y) .. 4CES-9(Y)

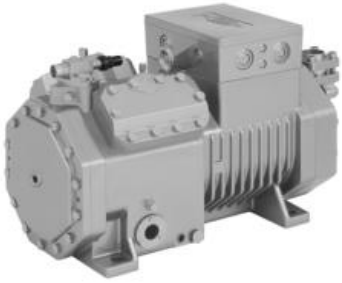






Compressor Model	Comp Series	A mm	B mm	C mm	D mm	D1 mm	E mm	F mm	G mm	H mm	J mm	K mm	L mm
4FES3Y	CE3	432	309	347	293	75	198	221	42	313	361	37	306
4FES5Y		432	309	347	293	75	198	221	42	313	361	37	306
4EES4Y		432	309	352	293	75	198	221	56	316	361	37	306
4EES6Y		432	309	352	293	75	198	221	56	316	361	37	306
4DES5Y		432	309	352	293	75	198	221	56	316	361	42	310
4DES7Y		457	309	352	293	101	198	246	56	316	386	42	310
4CES6Y		457	309	352	293	101	198	246	56	316	386	42	310
4CES9Y		457	309	352	293	101	198	246	56	316	386	42	310

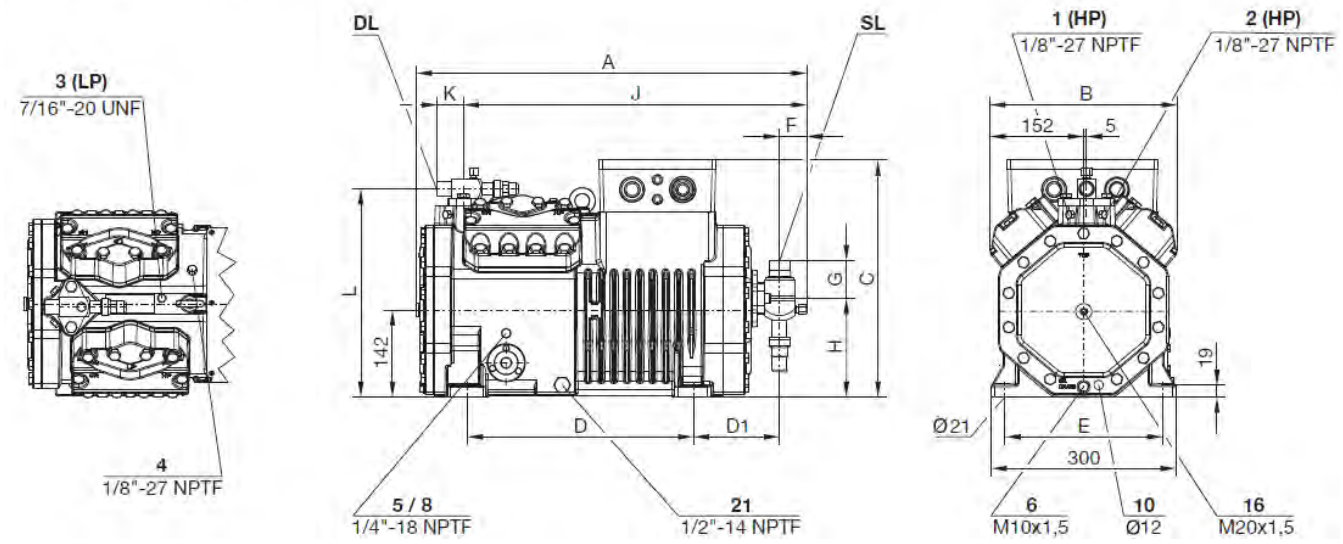
Note: legend for connections on last page of Bitzer compressor information.



BITZER COMPRESSORS

Dimensional Details

4VES-6Y .. 4NES-20(Y)

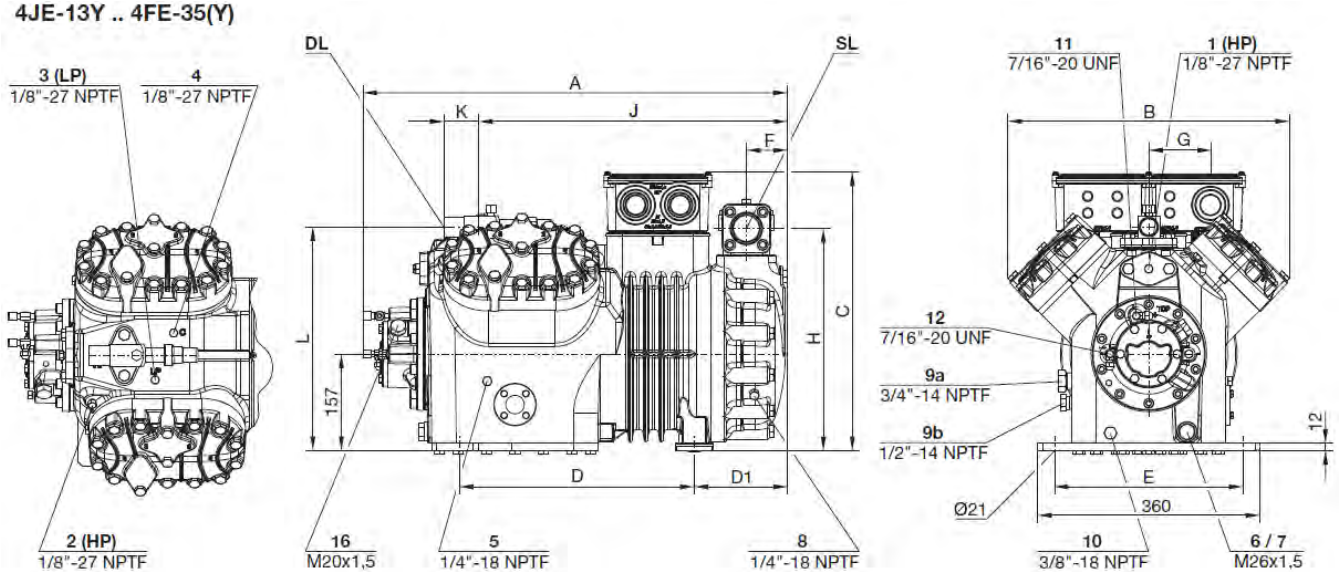


Compressor Model	Comp Series	A mm	B mm	C mm	D mm	D1 mm	E mm	F mm	G mm	H mm	J mm	K mm	L mm
4VES6Y	CE4	633	303	385	367	140	256	44	61	161	558	42	338
4VES7Y		633	303	385	367	140	256	44	61	161	558	42	338
4VES10Y		633	303	385	367	140	256	44	61	161	558	42	338
4TES8Y		633	303	385	367	140	256	44	64	161	557	56	342
4TES9Y		633	303	385	367	140	256	44	64	161	557	56	342
4TES12Y		633	303	385	367	140	256	44	64	161	557	56	342
4PES10Y		633	303	385	367	140	256	44	64	161	557	56	342
4PES12Y		633	303	385	367	140	256	44	64	161	557	56	342
4PES15Y		658	303	385	367	162	256	48	110	173	582	56	342
4NES12Y		633	303	385	367	140	256	44	64	161	557	56	342
4NES14Y		633	303	385	367	140	256	44	64	161	557	56	342
4NES20Y		658	303	385	367	162	256	48	110	173	582	56	342

Note: legend for connections on last page of Bitzer compressor information.

Dimensional Details

4JE-13Y .. 4FE-35(Y)

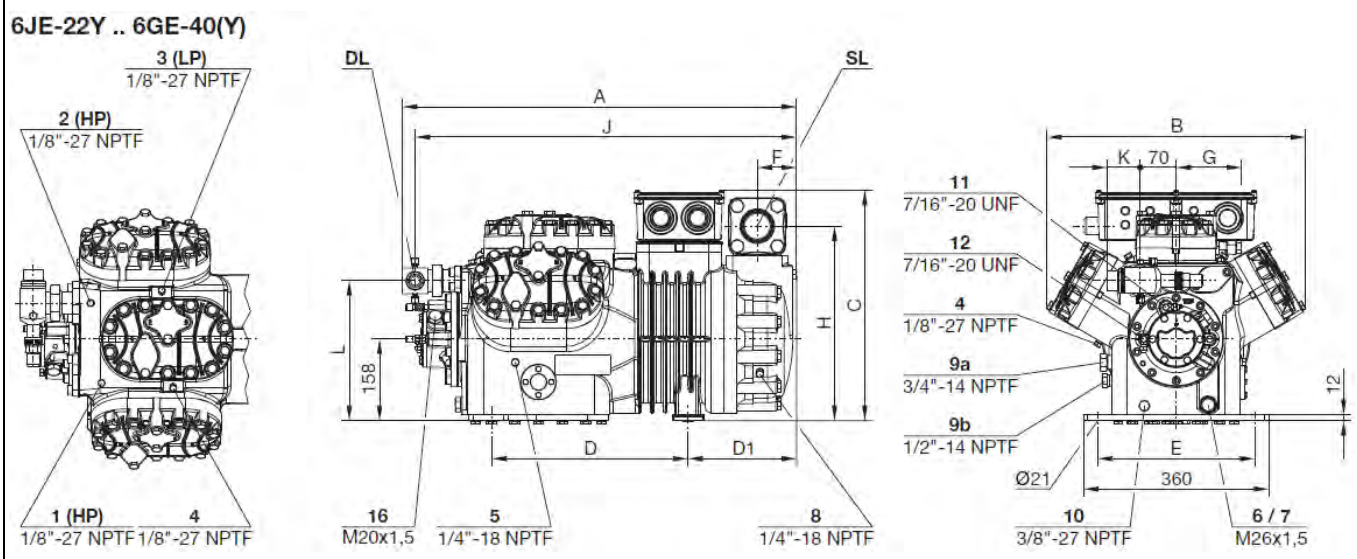


Compressor Model	Comp Series	A mm	B mm	C mm	D mm	D1 mm	E mm	F mm	G mm	H mm	J mm	K mm	L mm
4JE13Y	BE5	688	456	452	381	151	305	66	110	361	501	56	362
4JE15Y		688	456	452	381	151	305	66	110	361	501	56	362
4JE22Y		688	456	452	381	151	305	66	110	361	501	56	362
4HE15Y		688	456	452	381	151	305	66	110	361	501	56	362
4HE18Y		688	456	452	381	151	305	66	110	361	501	56	362
4HE25Y		737	456	452	381	200	305	87	127	377	549	56	362
4GE20Y		706	456	452	381	169	305	76	127	377	519	56	362
4GE23Y		706	456	452	381	169	305	76	127	377	519	56	362
4GE30Y		737	456	452	381	200	305	87	127	377	549	56	362
4FE25Y		737	456	452	381	200	305	87	127	377	549	56	362
4FE28Y		737	456	452	381	200	305	87	127	377	549	56	362
4FE35Y		737	456	452	381	200	305	87	127	377	549	56	362

Note: legend for connections on last page of Bitzer compressor information.

BITZER COMPRESSORS

Dimensional Details



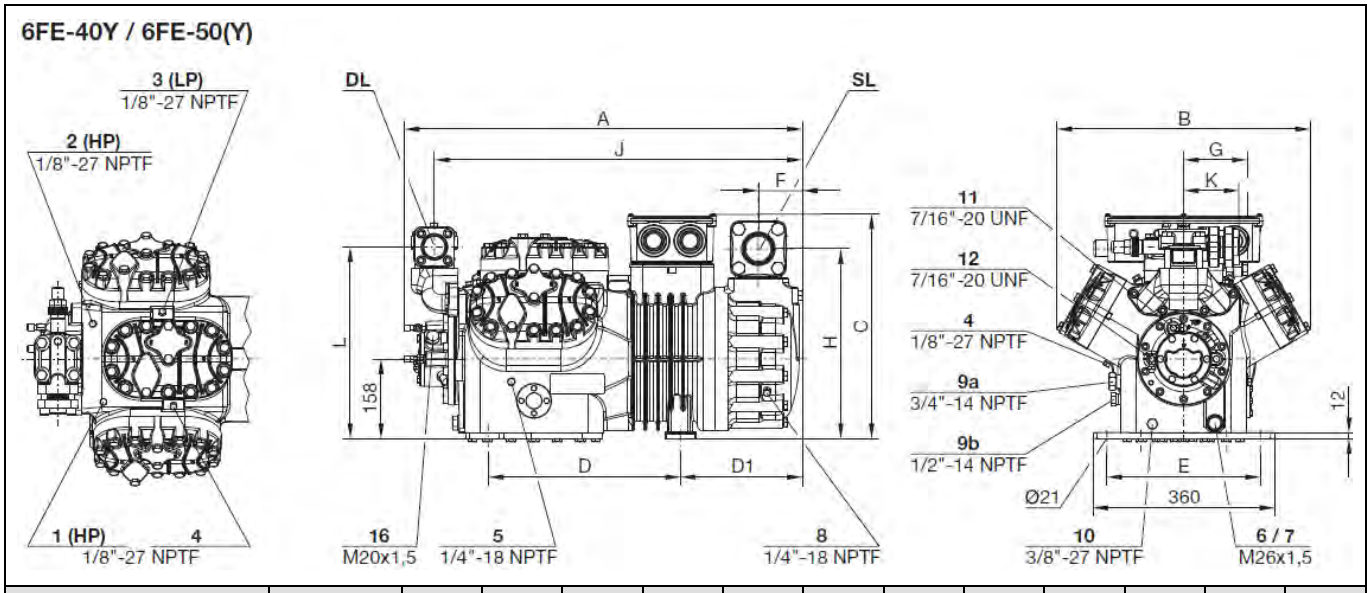
Compressor Model	Comp Series	A mm	B mm	C mm	D mm	D1 mm	E mm	F mm	G mm	H mm	J mm	K mm	L mm
6JE22Y	BE6	766	503	447	381	211	305	76	127	377	740	64	271
6JE25Y		766	503	447	381	211	305	76	127	377	740	64	271
6JE33Y		797	503	447	381	242	305	87	127	377	771	64	271
6HE25Y		766	503	447	381	211	305	76	127	377	740	64	271
6HE28Y		766	503	447	381	211	305	76	127	377	740	64	271
6HE35Y		797	503	447	381	242	305	87	127	377	771	64	271
6GE30Y		766	503	447	381	211	305	76	127	377	740	64	271
6GE34Y		766	503	447	381	211	305	76	127	377	740	64	271
6GE40Y		797	503	447	381	242	305	87	127	377	771	64	271

Note: legend for connections on last page of Bitzer compressor information.



BITZER COMPRESSORS

Dimensional Details

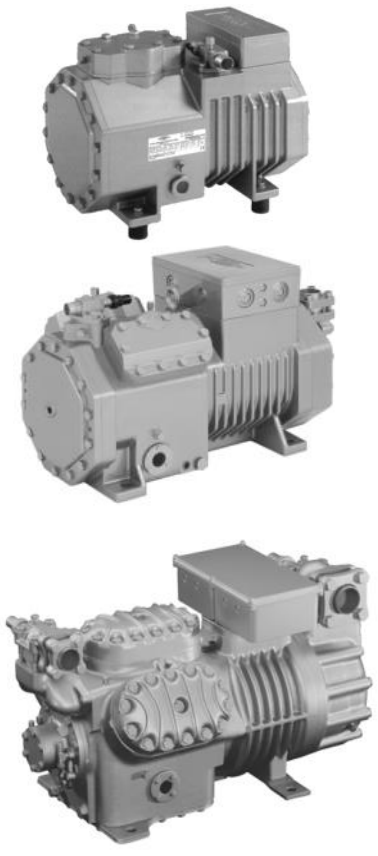


Compressor Model	Comp Series	A mm	B mm	C mm	D mm	D1 mm	E mm	F mm	G mm	H mm	J mm	K mm	L mm
6FE40Y	BE6	790	503	447	381	242	305	87	127	377	729	111	381
6FE44Y		790	503	447	381	242	305	87	127	377	729	111	381
6FE50Y		790	503	447	381	242	305	87	127	377	729	111	381

Note: legend for connections are listed below.

Legend for Connection Positions

No.	Connection Positions
1	High pressure connection (HP)
2	Discharge gas temperature sensor (HP) or CIC sensor
3	Low pressure connection (LP)
4	CIC System: spray nozzle (LP)
5	Oil fill plug
6	Oil drain
7	Oil filter (magnetic screw)
8	Oil return (oil separator)
9a	Gas equalisation (parallel operation)
9b	Oil equalisation (parallel operation)
10	Crankcase heater
11	Oil pressure connection +
12	Oil pressure connection -
16	Connection for oil monitoring (oil sensor or differential oil pressure switch “Delta-P”)
21	Connection for oil service valve

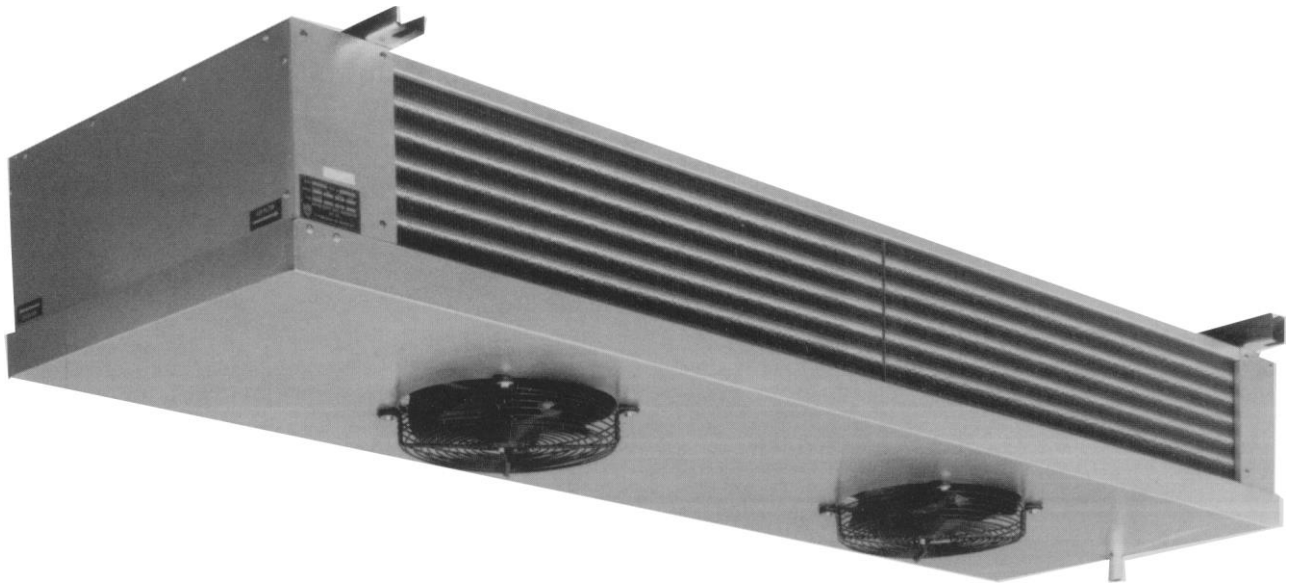


MEDIUM TEMP LOW PROFILE EVAPORATORS

LB – ELB Series

Standard Features:

- Low air velocity, even temperature and high humidity created by this unit makes it ideal for meat coolers, cutting and packaging, fresh fruit and vegetable rooms, florists, bakeries and other sensitive storage applications
- Available in air defrost (LB series) or electric defrost (ELB series)
- Stucco embossed aluminium case with slotted hangers and tx valve mounting within case.
- Double inner drain pan eliminates sweating
- Hinged bottom drain pan, with removable hinge pin for ease of service, enables installation only 110mm above meat rails
- Fitted refrigerant distributors (all models)
- Nine models 3677 to 16,580 watts at 10.0 KTD



BUFFALO TRIDENT EVAPORATORS

MEDIUM TEMPERATURE LOW PROFILE EVAPORATORS

LB - Air Defrost Room Temperature Range 2°C to 16°C

ELB - Electric Defrost Room Temperature Range -4°C to 2°C

Fins Series 5 **Based on 0°C Saturated Suction Temperature**

Model		☼LB50	☼LB 60	☼LB 80	☼LB 90	☼LB 120	☼LB 140	☼LB 170	☼LB 190	☼LB 270
R22	Watts @ 10KTD	3677	4037	5842	6614	7732	10309	10996	11769	16580
	Watts @ 1KTD	368	404	584	661	773	1031	1100	1177	1658
R404a	Watts @ 10KTD	3530	3876	5608	6349	7423	9897	10556	11298	15917
	Watts @ 1KTD	353	388	561	635	742	990	1056	1130	1592
R134a	Watts @ 10KTD	3493	3835	5550	6283	7345	9794	10446	11181	15751
	Watts @ 1KTD	349	384	555	628	735	979	1045	1118	1575

Specifications

Litre / Second			443	448	842	870	892	1315	1329	1340	1798
Metre / Second			1.06	0.92	1.51	1.25	0.98	1.18	1.06	0.96	0.88
No of 300mm Fans			1	1	2	2	2	3	3	3	4
Fan Motors	Total AMPS		0.32	0.32	0.64	0.64	0.64	0.96	0.96	0.96	1.28
Defrost Heater (ELB Only)	Total Watts		2400	1500	2400	3000	3600	4200	4800	5400	6000
Suction		mm	15.9	15.9	28.6	28.6	28.6	28.6	28.6	32.0	32.0
Liquid		mm	6.4	6.4	9.5	9.5	9.5	9.5	9.5	12.8	12.8
T.X.V. Con O.D. **		mm	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	* 12.8
Ext. Equaliser Con. O.D.		mm	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
Dimensions mm		A	-	-	-	-	-	-	-	-	1676
		B	952	1104	1258	1563	2018	2476	2781	3085	3390
		C	1194	1346	1500	1805	2260	2718	3023	3327	3633
		D	324	324	324	324	324	324	324	324	400
Weight		Kg	41	47	52	63	87	95	105	116	161

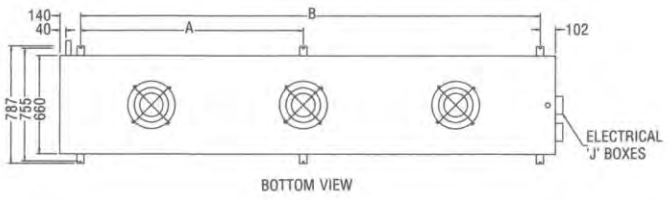
☼ Prefix Model: (no prefix) – Air Defrost E – Electric Defrost

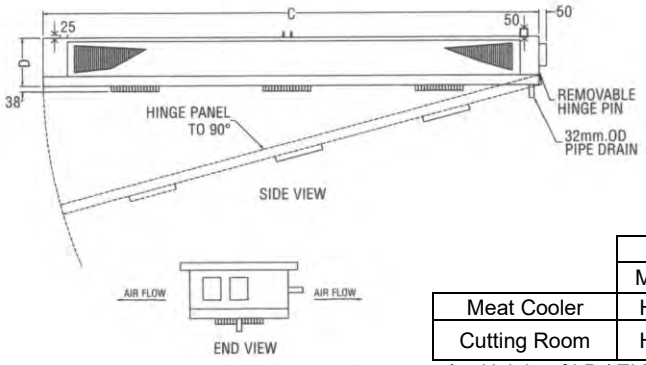
* LB270 TXV connection 28.6 OD. ELB 12.8 OD

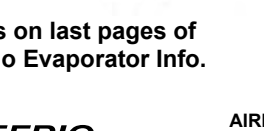
** Distributors are selected on basis: ELB's – R22, 6 KTD, -4°C SST; LB's – R22, 10 KTD, 0°C SST
Any variation to these conditions must be stated at time of order.

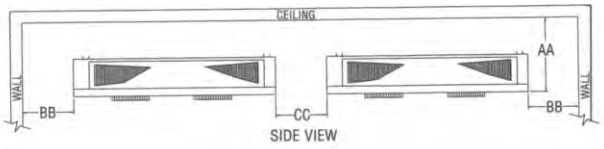
Suction Temp	-10	-5	-4	0	5
Capacity Multiplier	0.90	0.95	0.97	1.0	1.06

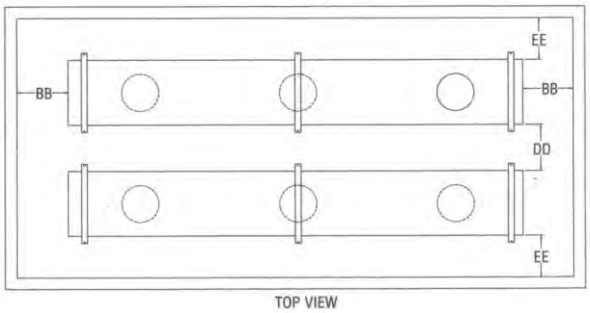
Refrigerant	R22	R407B	R407C	R507A
Capacity Multiplier	1.0	0.92	0.88	0.94











	AA		BB		CC		DD		EE	
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
Meat Cooler	H^	N/A	300^^	2200	300^^	2200	1900	6000	450	2750
Cutting Room	H^	N/A	300^^	3000	300^^	3000	1900	9000	1900	4500

^ Height of LB / ELB Cooler

^^ For Access to TX Valve and / or Service Connection

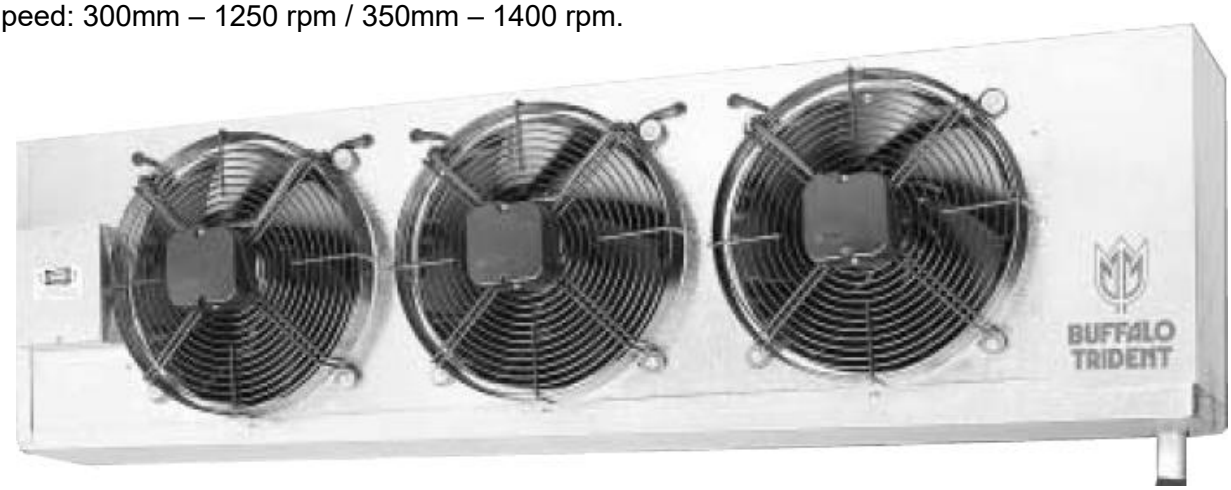
Note: Prices on last pages of Buffalo Evaporator Info.

MEDIUM & LOW TEMP EVAPORATORS

BR – BRME – BRLW – BRLE – BRLH Series

Standard Features:

- Internal Ripple Finned Tube for higher heat transfer performance and better oil return.
- Absolute Flush Mounting – All Aluminium Case. – Stainless Steel Fastenings.
- Hinged Access Door both ends – Easily removable where installed close to adjacent wall.
- Hinged fully reversible Drip Tray (BR, BRLE & BRME only)
- Circuited for multiple refrigerants.
- Interchangeable orifice plate in distributor for optimum performance.
- Low energy sickle blade fan motors with inbuilt thermal protection. Two sizes available for optimum performance, compactness, and air throw.
- Compact high efficiency heat exchanger.
- Double annealed defrost elements fitted to coil block for improved heat dissipation (BRLE & BRME only)
- Factory fitted defrost termination, fan delay, and heater safety thermostats (BRLE & BRME only)
- Electrical components pre-wired to common connection box. (BRLE & BRME only)
- 4 defrost types: Air / Electric / Hot Gas / Water.
- Fan Speed: 300mm – 1250 rpm / 350mm – 1400 rpm.



Optional Features:

- Copper Fins.
- Electro-Tinning.
- Stainless Steel Case.
- Other Fin Sizes 4,5,7,8.
- Special Circuitry – Brines, Hot/Cold Water.
- Special Application Designs.
- Hazardous Location Motors (eg Flameproof).
- Low/High Temp Grease Fitted to Motors.
- Factory Fitted TX Valves on multiple orders.
- Multiple Circuits.
- Air Straightening Grille.

BUFFALO TRIDENT EVAPORATORS

MEDIUM TEMPERATURE EVAPORATORS

BR - BRME - 300 & 350mm Fan Models

BR - Air Defrost BRME - Assisted Electric Defrost

300mm Fans - Fins Series 6 (236 Fins/m) Based on -4°C Saturated Suction Temperature

Model		BR☼16	BR☼19	BR☼21	BR☼27	BR☼32	BR☼37	BR☼42	BR☼49	BR☼56	BR☼60	BR☼63	BR☼75	BR☼84
R22	Watts @ 6KTD	1622	1867	2102	2725	3243	3735	4203	4865	5602	6018	6305	7469	8407
	Watts @ 1KTD	270	311	350	454	541	622	701	811	934	1003	1051	1245	1401
R404A	Watts @ 6KTD	1719	1979	2228	2889	3438	3959	4456	5157	5938	6379	6683	7917	8911
	Watts @ 1KTD	286	330	371	481	573	660	743	859	990	1063	1114	1320	1485
R134a	Watts @ 6KTD	1511	1740	1959	2540	3023	3481	3918	4534	5221	5609	5876	6961	7835
	Watts @ 1KTD	252	290	326	423	504	580	653	756	870	935	979	1160	1306
Air Flow	L/Sec	427	402	354	406	854	804	708	1281	1206	1125	1062	1608	1416
	CFM	905	852	750	860	1809	1703	1500	2714	2555	2383	2250	3407	3000
Air Throw Metres (*)		8.6 (11.8)	8.4 (11.7)	7.9 (10.5)	8.4 (11.7)	10.5 (13.7)	10.3 (13.6)	9.8 (13.1)	12.5 (16.4)	12.3 (16.3)	12.0 (15.9)	11.7 (15.5)	14.0 (18.2)	13.4 (17.4)
No. 300mm Fans		1	1	1	1	2	2	2	3	3	3	3	4	4
Fan Motors	Total Watts	73	73	73	73	146	146	146	219	219	219	219	292	292
	** Total Amps	0.32	0.32	0.32	0.32	0.64	0.64	0.64	0.96	0.96	0.96	0.96	1.28	1.28
Motor Heat per 24hrs (Watts)		1752	1752	1752	1752	3504	3504	3504	5256	5256	5256	5256	7008	7008
Defrost Heaters (BRME)	Total Watts	910	910	910	1320	1660	1660	1660	2250	2250	2250	2250	3000	3000
	Total Amps	3.8	3.8	3.8	5.5	6.9	6.9	6.9	9.4	9.4	9.4	9.4	12.5	12.5

Note – Please specify refrigerant when ordering. ** Based on Manufacturers Data (Free Air Tests)

350mm Fans - Fins Series 6 (236 Fins/m) Based on -4°C Saturated Suction Temperature

Model		BR☼62	BR☼66	BR☼71	BR☼93	BR☼98	BR☼106	BR☼123	BR☼131	BR☼141	BR☼154	BR☼164	BR☼177
R22	Watts @ 6KTD	6174	6560	7074	9261	9839	10610	12348	13119	14147	15435	16399	17684
	Watts @ 1KTD	1029	1093	1179	1544	1640	1768	2058	2187	2358	2573	2733	2947
R404A	Watts @ 6KTD	6544	6953	7498	9817	10430	11247	13089	13906	14996	16361	17383	18745
	Watts @ 1KTD	1091	1159	1250	1636	1738	1875	2181	2318	2499	2727	2897	3124
R134a	Watts @ 6KTD	5754	6114	6593	8631	9170	9889	11508	12227	13185	14385	15284	16482
	Watts @ 1KTD	959	1019	1099	1439	1528	1648	1918	2038	2198	2398	2547	2747
Air Flow	L/Sec	1554	1458	1422	2331	2187	2133	3108	2916	2844	3885	3645	3555
	CFM	3292	3089	3013	4939	4633	4519	6585	6178	6025	8231	7722	7532
Air Throw Metres (*)		17.2 (21.5)	16.9 (21.0)	16.5 (21.6)	18.7 (23.3)	18.4 (23.0)	17.9 (22.3)	21.0 (26.0)	20.8 (25.7)	20.2 (25.0)	22.6 (27.5)	21.7 (26.4)	20.6 (25.1)
No. 350mm Fans		2	2	2	3	3	3	4	4	4	5	5	5
Fan Motors	Total Watts	260	260	260	390	390	390	520	520	520	650	650	650
	** Total Amps	1.16	1.16	1.16	1.74	1.74	1.74	2.32	2.32	2.32	2.90	2.90	2.90
Motor Heat per 24hrs (Watts)		6240	6240	6240	9360	9360	9360	12480	12480	12480	15600	15600	15600
Defrost Heaters (BRME)	Total Watts	2335	2335	2335	3440	3440	3440	4570	4570	4570	5700	5700	5700
	Total Amps	9.7	9.7	9.7	14.3	14.3	14.3	19.0	19.0	19.0	23.8	23.8	23.8

Air throw based on C.R.M.A. guidelines. Distance at which horizontal air velocity falls below 0.5m/s measured at 0.5, 0.75 and 1.0 metres from ceiling, average reading to equal 0.5 m/s. Temperatures corrected for +2°C room.

(*) Air throw of units fitted with air straightening grilles.

DT1 = Air On Temp – Saturated Suction Temperature.

Fin Series	4	5	6	7	8
Capacity Multiplier	0.82	0.91	1.00	1.06	1.12

Capacity Correction Factors

Suction Temp °C	-10	-8	-6	-4	-2	0	+2	+4	+6
Capacity Multiplier	0.87	0.90	0.95	1.00	1.045	1.17	1.23	1.28	1.35

Refrigerant	R22	R407B	R407C	R507
Capacity Multiplier	1.0	0.92	0.98	1.07

Note: Prices on last pages of Buffalo Evaporator Information.

BUFFALO TRIDENT EVAPORATORS

MEDIUM TEMPERATURE EVAPORATORS
BR - BRME - 300 & 350mm Fan Models
Dimensions

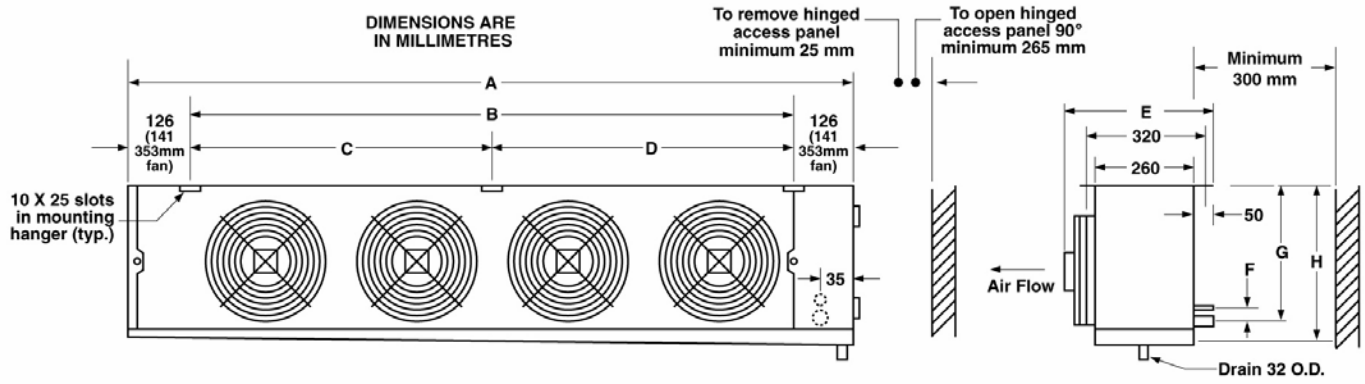
300mm Fans - Fins Series 6 (236 Fins/m) — Based on -4°C Saturated Suction Temperature

Model			BR☼16	BR☼19	BR☼21	BR☼27	BR☼32	BR☼37	BR☼42	BR☼49	BR☼56	BR☼60	BR☼63	BR☼75	BR☼84
Suction Connection		mm	12.70	12.70	12.70	12.70	12.70	12.70	12.70	15.80	15.80	15.80	15.80	22.20	22.20
Liquid Connection		mm	6.35	6.35	6.35	6.35	6.35	6.35	6.35	9.50	9.50	9.50	9.50	12.70	12.70
TX Valve	Inlet	mm	6.35	6.35	6.35	6.35	6.35	6.35	6.35	9.50	9.50	9.50	9.50	12.70	12.70
	Outlet	mm	12.70	12.70	12.70	12.70	12.70	12.70	12.70	12.70	12.70	12.70	12.70	12.70	12.70
Ext. Equaliser		mm	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35
Operating Charge		R22	0.38	0.50	0.75	1.08	0.75	1.00	1.50	1.13	1.50	1.86	2.25	2.00	3.00
Dimensions		mm A	676	676	676	845	1057	1057	1057	1438	1438	1438	1438	1819	1819
		B	425	425	425	594	806	806	806	1187	1187	1187	1187	1568	1568
		E	425	425	425	425	425	425	425	425	425	425	425	425	425
		F	40	40	40	40	40	40	40	40	40	40	40	40	40
		G	345	345	345	345	345	345	345	345	345	345	345	340	340
		H	415	415	415	415	415	415	415	415	415	415	415	415	415
Weight Unpacked		Kg	13.40	14.50	16.70	19.65	21.00	23.10	27.20	28.70	31.80	34.80	37.90	40.80	48.80

350mm Fans - Fins Series 6 (236 Fins/m) — Based on -4°C Saturated Suction Temperature

Model			BR☼62	BR☼66	BR☼71	BR☼93	BR☼98	BR☼106	BR☼123	BR☼131	BR☼141	BR☼154	BR☼164	BR☼177
Suction Connection		mm	15.80	15.80	15.80	28.50	28.50	28.50	28.50	28.50	28.50	28.50	28.50	28.50
Liquid Connection		mm	9.50	9.50	9.50	12.70	12.70	12.70	12.70	12.70	12.70	12.70	12.70	12.70
TX Valve	Inlet	mm	9.50	9.50	9.50	12.70	12.70	12.70	12.70	12.70	12.70	12.70	12.70	12.70
	Outlet	mm	12.70	12.70	12.70	12.70	12.70	12.70	15.80	15.80	15.80	15.80	15.80	15.80
Ext. Equaliser		mm	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35
Operating Charge		R22	1.84	2.29	2.77	2.76	3.44	4.16	3.68	4.58	5.54	4.60	5.73	6.93
Dimensions		mm A	1544	1544	1544	2154	2154	2154	2764	2764	2764	3373	3373	3373
		B	1263	1263	1263	1873	1873	1873	2483	2483	2483	3092	3092	3092
		C	-	-	-	-	-	-	1263	1263	1263	1873	1873	1873
		D	-	-	-	-	-	-	1219	1219	1219	1219	1219	1219
		E	425	425	425	425	425	425	425	425	425	425	425	425
		F	40	40	40	60	60	60	60	60	60	60	60	60
		G	345	345	345	335	335	335	335	335	335	335	335	335
		H	492	492	492	492	492	492	492	492	492	492	492	492
Weight Unpacked		Kg	36.5	40.30	44.30	51.80	57.60	63.30	67.50	75.10	82.70	79.10	87.00	95.60

BR - Air Defrost BRME - Assisted Electric Defrost



Note: Prices on last pages of Buffalo Evaporator Information.

BUFFALO TRIDENT EVAPORATORS

LOW TEMPERATURE EVAPORATORS

BRLE- BRLW - BRLH - 300 & 350mm Fan Models

BRLE - Electric Defrost BRLW - Water Defrost BRLH - Hot Gas Defrost

300mm Fans - Fins Series 6 (236 Fins/m) Based on -24°C Saturated Suction Temperature

Model		BR☼12	BR☼13	BR☼15	BR☼19	BR☼23	BR☼27	BR☼30	BR☼35	BR☼40	BR☼43	BR☼45	BR☼53	BR☼60
R22	Watts @ 6KTD	1154	1337	1495	1933	2308	2673	2990	3462	4010	4280	4485	5346	5980
	Watts @ 1KTD	192	223	249	322	385	446	498	577	668	713	747	891	997
R404A	Watts @ 6KTD	1223	1417	1585	2049	2446	2833	3169	3669	4250	4537	4754	5667	6338
	Watts @ 1KTD	204	236	264	341	408	472	528	612	708	756	792	944	1056
R507	Watts @ 6KTD	1246	1443	1614	2087	2492	2887	3229	3739	4330	4623	4843	5774	6458
	Watts @ 1KTD	208	241	269	348	415	481	538	623	722	770	807	962	1076
Air Flow	L/Sec	418	394	347	412	836	788	694	1254	1182	1101	1041	1576	1388
	CFM	886	835	735	873	1771	1669	1470	2657	2504	2333	2206	3339	2941
Air Throw Metres (*)		7.4	7.2	6.8	7.2	9.1	8.9	8.4	10.8	10.6	10.3	10.1	12.1	11.6
No. 300mm Fans		1	1	1	1	2	2	2	3	3	3	3	4	4
Fan Motors	Total Watts	73	73	73	73	146	146	146	219	219	219	219	292	292
	**Total Amps	0.32	0.32	0.32	0.32	0.64	0.64	0.64	0.96	0.96	0.96	0.96	1.28	1.28
Motor Heat per 24hrs (Watts)		1752	1752	1752	1752	3504	3504	3504	5356	5256	5256	5256	7008	7008
**240V Defrost Heaters	Total Watts	1360	1360	1360	1970	2560	2560	2560	3600	3600	3600	3600	4800	4800
	Total Amps	5.7	5.7	5.7	8.2	10.7	10.7	10.7	15.0	15.0	15.0	15.0	20.0	20.0

Note – Please specify refrigerant when ordering. ** Based on Manufacturers Data (Free Air Tests)

350mm Fans - Fins Series 6 (236 Fins/m) Based on -24°C Saturated Suction Temperature

Model		BR☼44	BR☼47	BR☼51	BR☼66	BR☼70	BR☼76	BR☼88	BR☼94	BR☼101	BR☼110	BR☼117	BR☼127
R22	Watts @ 6KTD	4420	4697	5064	6630	7046	7597	8840	9394	10129	11050	11743	12661
	Watts @ 1KTD	737	783	844	1105	1174	1266	1473	1566	1688	1842	1957	2110
R404A	Watts @ 6KTD	4685	4979	5368	7027	7468	8052	9370	9958	10737	11712	12447	13421
	Watts @ 1KTD	781	830	895	1171	1245	1342	1562	1660	1789	1952	2075	2237
R507	Watts @ 6KTD	4773	5073	5470	7160	7609	8204	9547	10146	10939	11933	12682	13674
	Watts @ 1KTD	796	845	912	1193	1268	1367	1591	1691	1823	1989	2114	2279
Air Flow	L/Sec	1522	1428	1393	2283	2142	2090	3044	2856	2786	3805	3570	3483
	CFM	3225	3025	2951	4837	4538	4427	6449	6051	5903	8061	7564	7378
Air Throw Metres (*)		14.8	14.6	14.2	16.1	15.9	15.5	18.1	18.0	17.4	19.5	18.7	17.8
No. 350mm Fans		2	2	2	3	3	3	4	4	4	5	5	5
Fan Motors	Total Watts	260	260	260	390	390	390	520	520	520	650	650	650
	**Total Amps	1.16	1.16	1.16	1.74	1.74	1.74	2.32	2.32	2.32	2.90	2.90	2.90
Motor Heat per 24hrs (Watts)		6240	6240	6240	9360	9360	9360	12480	12480	12480	15600	15600	15600
**240V Defrost Heaters	Total Watts	3710	3710	3710	5440	5440	5440	7220	7220	7220	9000	9000	9000
	Total Amps	15.5	15.5	15.5	22.7	22.7	22.7	30.1	30.1	30.1	37.5	37.5	37.5

Air throw based on C.R.M.A. guidelines. Distance at which horizontal air velocity falls below 0.5m/s measured at 0.5, 0.75 and 1.0 metres from ceiling, average reading to equal 0.5 m/s. Temperatures corrected for +2°C room.

(*) Air throw of units fitted with air straightening grilles. ** Not applicable to BRLH or BRLW

DT1 = Air On Temp – Saturated Suction Temperature.

Fin Series	4	5	6
Capacity Multiplier	0.82	0.91	1.00

Capacity Correction Factors

Suction Temp °C	-40	-35	-30	-25	-24	-20	-15	-10	-5
Capacity Multiplier	0.5	0.71	085	0.98	1.0	1.06	1.14	1.23	1.35

Note: Prices on last pages of Buffalo Evaporator Information.

BUFFALO TRIDENT EVAPORATORS

LOW TEMPERATURE EVAPORATORS

BRLE- BRLW - BRLH - 300 & 350mm Fan Models

Dimensions

300mm Fans - Fins Series 6 (236 Fins/m) — Based on -24°C Saturated Suction Temperature

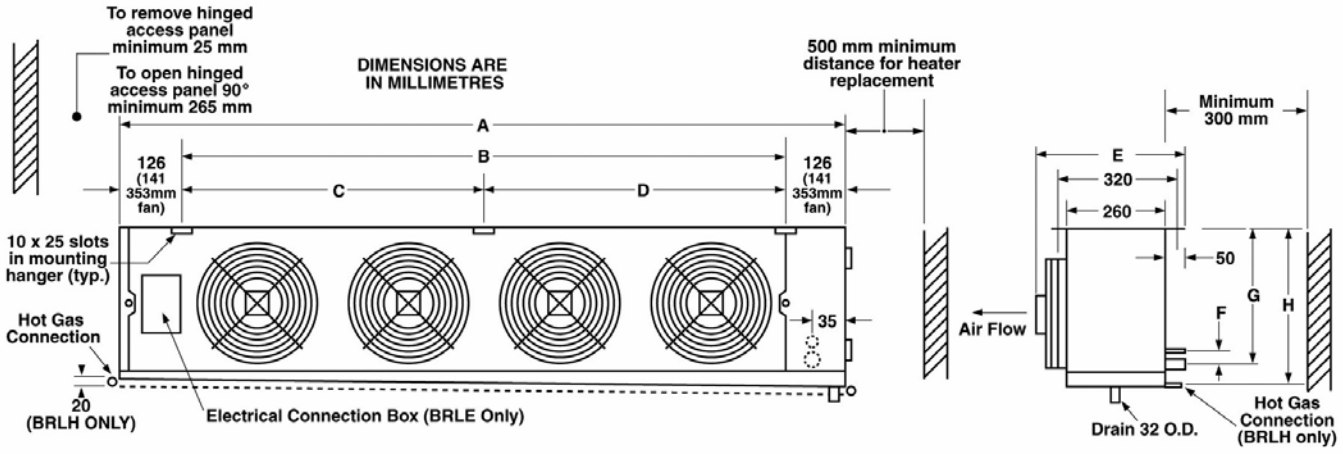
Model			BR☼12	BR☼13	BR☼15	BR☼19	BR☼23	BR☼27	BR☼30	BR☼35	BR☼40	BR☼43	BR☼45	BR☼53	BR☼60
Suction Connection		mm	12.70	12.70	12.70	12.70	12.70	12.70	12.70	15.80	15.80	15.80	15.80	22.20	22.20
Liquid Connection		mm	6.35	6.35	6.35	6.35	6.35	6.35	6.35	9.50	9.50	9.50	9.50	9.50	9.50
TX Valve	Inlet	mm	6.35	6.35	6.35	6.35	6.35	6.35	6.35	9.50	9.50	9.50	9.50	9.50	9.50
	Outlet	mm	12.70	12.70	12.70	12.70	12.70	12.70	12.70	12.70	12.70	12.70	12.70	12.70	12.70
Ext. Equaliser		mm	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35
Operating Charge		R22	0.26	0.36	0.53	0.77	0.52	0.71	1.06	0.78	1.07	1.32	1.59	1.42	2.12
Dimensions		A	676	676	676	845	1057	1057	1057	1438	1438	1438	1438	1819	1819
		B	425	425	425	594	806	806	806	1187	1187	1187	1187	1568	1568
		E	425	425	425	425	425	425	425	425	425	425	425	425	425
	mm	F	40	40	40	40	40	40	40	40	40	40	40	40	40
		**G	345	345	345	345	345	345	345	345	345	345	345	340	340
		**H	415	415	415	415	415	415	415	415	415	415	415	415	415
Weight Unpacked		Kg	13.90	15.00	17.20	20.33	21.80	23.90	28.10	29.90	33.00	36.00	39.00	42.20	50.30

** Only applicable to BRLE & BRLH Note all hot gas connections are 22.2mm

350mm Fans - Fins Series 6 (236 Fins/m) — Based on -24°C Saturated Suction Temperature

Model			BR☼44	BR☼47	BR☼51	BR☼66	BR☼70	BR☼76	BR☼88	BR☼94	BR☼101	BR☼110	BR☼117	BR☼127
Suction Connection		mm	15.80	15.80	15.80	28.50	28.50	28.50	28.50	28.50	28.50	28.50	28.50	28.50
Liquid Connection		mm	9.50	9.50	9.50	12.70	12.70	12.70	12.70	12.70	12.70	12.70	12.70	12.70
TX Valve	Inlet	mm	9.50	9.50	9.50	12.70	12.70	12.70	12.70	12.70	12.70	12.70	12.70	12.70
	Outlet	mm	12.70	12.70	12.70	12.70	12.70	12.70	15.80	15.80	15.80	15.80	15.80	15.80
Ext. Equaliser		mm	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35
Operating Charge		R22	1.31	1.63	1.97	1.97	2.45	2.96	2.62	3.26	3.94	3.28	4.08	4.93
Dimensions		A	1544	1544	1544	2154	2154	2154	2764	2764	2764	3373	3373	3373
		B	1263	1263	1263	1873	1873	1873	2483	2483	2483	3092	3092	3092
		C	-	-	-	-	-	-	1263	1263	1263	1873	1873	1873
		D	-	-	-	-	-	-	1219	1219	1219	1219	1219	1219
	mm	E	425	425	425	425	425	425	425	425	425	425	425	425
		F	40	40	40	60	60	60	60	60	60	60	60	60
		**G	345	345	345	335	335	335	335	335	335	335	335	335
		**H	492	492	492	492	492	492	492	492	492	492	492	492
Weight Unpacked		Kg	37.80	41.60	45.60	53.50	59.30	65.10	69.80	77.30	84.90	81.30	89.80	98.30

** Only applicable to BRLE & BRLH Note all hot gas connections are 22.2mm



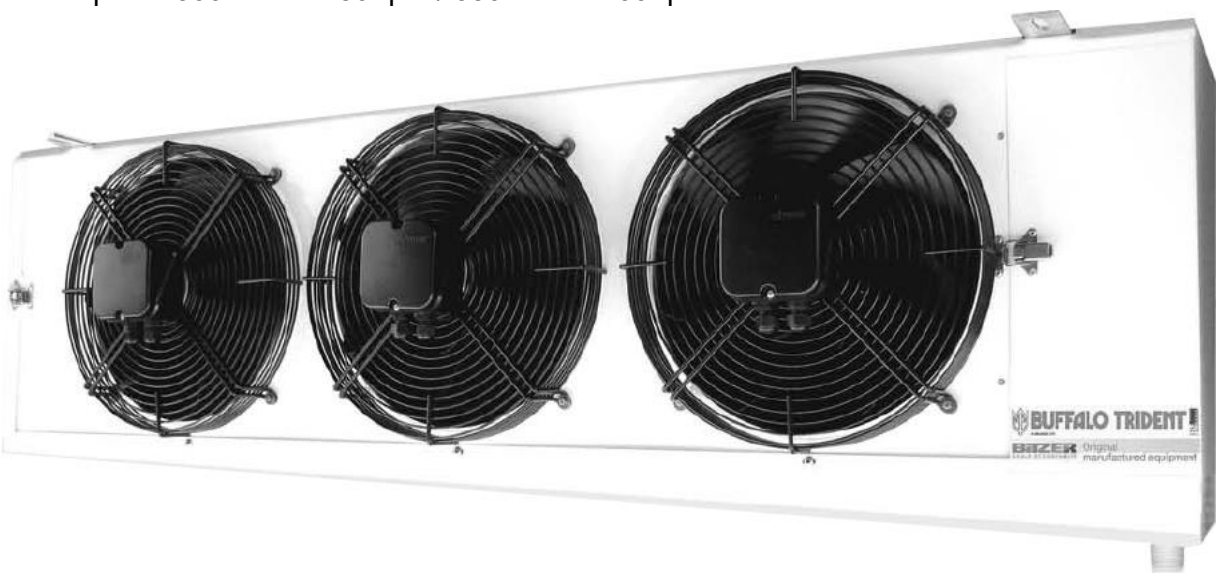
Note: Prices on last pages of Buffalo Evaporator Information.

MEDIUM & LOW TEMP EVAPORATORS

PS Series

Standard Features:

- Absolute Flush Mounting – White Powder Coated Panels – Stainless Steel Fastenings.
- Internal Ripple Finned Tube for higher heat transfer performance and better oil return.
- Hinged Access Door both ends – Easily removable where installed close to adjacent wall.
- Electrical components pre-wired to common IP66-rated connection box. (PS*LE only)
- Circuitry & distributor system with venturi-effect technology for optimum performance.
- Circuited for multiple refrigerants.
- Hinged fully reversible Drip Tray. (PS* & PS*LE only)
- Double annealed defrost elements fitted to coil block. (PS*LE only)
- Heater safety thermostat. (PS*LE only)
- 4 defrost types: Air / Electric / Hot Gas / Water.
- Fan Speed: 300mm – 1250 rpm / 350mm – 1400 rpm.



Optional Features:

- Epoxy Coated Fins (Not available with electric defrost).
- Air Straightening Guides (PS2 – 350mm fans only).
- Factory Fitted Defrost Termination & Fan Delay Thermostat.
- Other Fin Series: 4 , 5 , 7 , 8 FPI.
- Factory Fitted TX Valves on multiple orders.
- Special Application Drawings.

BUFFALO TRIDENT EVAPORATORS

MEDIUM TEMPERATURE EVAPORATORS
PS - 300 & 350mm Fan Models

300mm Fans - Fins Series 6 (236 Fins/m) — Based on -4°C Saturated Suction Temperature

Model		PS1M019	PS1M030	PS1M036	PS1M042	PS1M050	PS1M061	PS1M063	PS1M077	PS1M084	PS1M095	PS1M102	PS1M128
R22	Watts @ 6KTD	1066	1714	2047	2356	2858	3452	3591	4362	4784	5383	5751	7247
	Watts @ 1KTD	178	286	341	393	476	575	599	727	797	897	959	1208
R404A	Watts @ 6KTD	1130	1816	2170	2497	3029	3659	3806	4623	5070	5705	6095	7681
	Watts @ 1KTD	188	303	362	416	505	610	634	770	845	951	1016	1280
R134a	Watts @ 6KTD	977	1571	1877	2160	2620	3165	3292	3999	4385	4935	5272	6644
	Watts @ 1KTD	163	262	313	360	437	527	549	666	731	822	879	1107
Air Flow	L/Sec	427	354	406	854	804	708	1281	1206	1125	1062	1608	1416
	CFM	905	750	860	1810	1704	1500	2715	2556	2384	2250	3408	3001
Air Throw Metres (*)		8.6	7.9	8.4	10.5	10.3	9.8	12.5	12.3	12	11.7	14	13.4
No. 300mm Fans		1	1	1	2	2	2	3	3	3	3	4	4
Fan Motors	Total Watts	73	73	73	146	146	146	219	219	219	219	292	292
	** Total Amps	0.3	0.3	0.3	0.6	0.6	0.6	1.0	1.0	1.0	1.0	1.3	1.3
Motor Heat per 24hrs (Watts)		1752	1752	1752	3504	3504	3504	5256	5256	5256	5256	7008	7008

Note – Please specify refrigerant when ordering.

** Based on Manufacturers Data (Free Air Tests)

350mm Fans - Fins Series 6 (236 Fins/m) — Based on -4°C Saturated Suction Temperature

Model		PS2M 108	PS2M 117	PS2M 141	PS2M 162	PS2M 177	PS2M 187	PS2M 217	PS2M 246	PS2M 276	PS2M 309
R22	Watts @ 6KTD	6104	6602	7997	9146	10013	10603	12294	13916	15615	17474
	Watts @ 1KTD	1017	1100	1333	1524	1669	1767	2049	2319	2603	2912
R404A	Watts @ 6KTD	6469	6997	8475	9693	10612	11238	13029	14749	16549	18519
	Watts @ 1KTD	1078	1166	1412	1615	1769	1873	2172	2458	2758	3087
R134a	Watts @ 6KTD	5596	6052	7331	8384	9179	9721	11270	12758	14315	16019
	Watts @ 1KTD	933	1009	1222	1397	1530	1620	1878	2126	2386	2670
Air Flow	L/Sec	1458	1422	2331	2187	2133	3108	2916	2844	3645	3555
	CFM	3090	3013	4940	4634	4520	6586	6179	6027	7724	7533
Air Throw Metres (*)		16.9	16.5	18.7	18.4	17.9	21.0	20.8	20.2	21.7	20.6
No. 350m Fans		2	2	3	3	3	4	4	4	5	5
Fan Motors	Total Watts	260	260	390	390	390	520	520	520	650	650
	** Total Amps	1.2	1.2	1.7	1.7	1.7	2.3	2.3	2.3	2.9	2.9
Motor Heat per 24hrs (Watts)		6240	6240	9360	9360	9360	12480	12480	12480	15600	15600

Note – Please specify refrigerant when ordering.

(*) Air throw of units fitted with air straightening grilles.

** Based on Manufacturers Data (Free Air Tests)

DT1 = Air On Temp – Saturated Suction Temperature.

Fin Series	4	5	6	7	8
Capacity Multiplier	0.82	0.91	1.00	1.06	1.12

Capacity Correction Factors

Suction Temp °C	-10	-8	-6	-4	-2	0	+2	+4	+6
Capacity Multiplier	0.87	0.90	0.95	1.00	1.045	1.17	1.23	1.28	1.35

Refrigerant	R22	R407B	R407C	R507
Capacity Multiplier	1.0	0.92	0.98	1.07

Note: Prices on last pages of Buffalo Evaporator Information.

BUFFALO TRIDENT EVAPORATORS

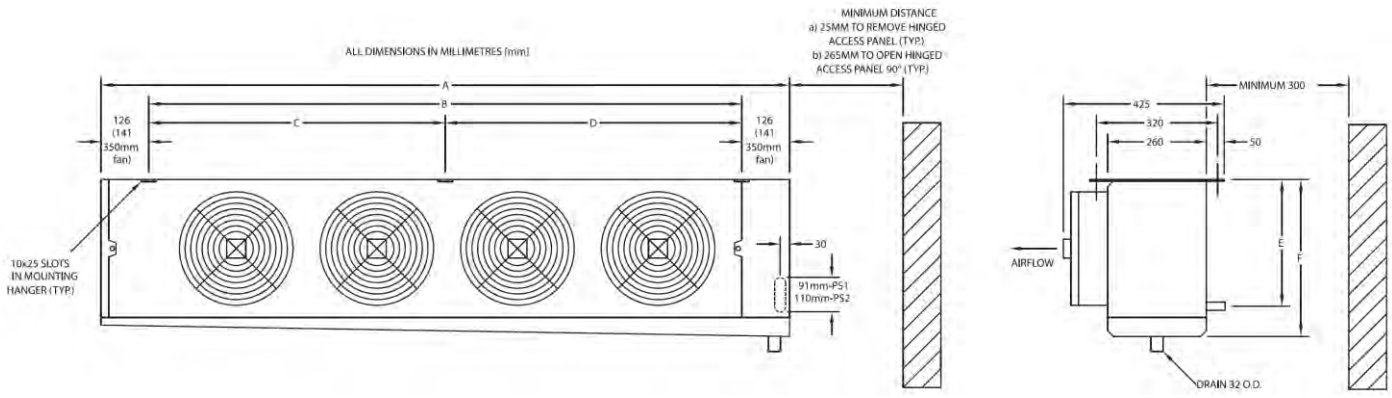
MEDIUM TEMPERATURE EVAPORATORS
PS - 300 & 350mm Fan Models
Dimensions

300mm Fans - Fins Series 6 (236 Fins/m) — Based on -4°C Saturated Suction Temperature

Model		PS1M019	PS1M030	PS1M036	PS1M042	PS1M050	PS1M061	PS1M063	PS1M077	PS1M084	PS1M095	PS1M102	PS1M128
Suction Connection	mm	12.7	12.7	12.7	12.7	12.7	12.7	15.9	15.9	15.9	15.9	22.2	22.2
Liquid Connection	mm	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9
Ext. Equaliser	mm	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
Operating Charge	R22	0.3	0.6	0.8	0.6	0.8	1.2	0.9	1.2	1.4	1.7	1.6	2.3
Dimensions	mm A	676	676	845	1057	1057	1057	1438	1438	1438	1438	1819	1819
	B	425	425	594	806	806	806	1187	1187	1187	1187	1568	1568
	C	-	-	-	-	-	-	-	-	-	-	-	-
	D	-	-	-	-	-	-	-	-	-	-	-	-
	E	345	345	345	345	345	345	345	345	345	345	340	340
	F	425	425	425	425	425	425	425	425	425	425	425	425
Weight Unpacked	Kg	15	18	20	23	24	28	31	33	36	39	42	50
Weight Packed	Kg	21	24	26	30	31	35	39	41	44	47	51	59

350mm Fans - Fins Series 6 (236 Fins/m) — Based on -4°C Saturated Suction Temperature

Model		PS2M 108	PS2M 117	PS2M 141	PS2M 162	PS2M 177	PS2M 187	PS2M 217	PS2M 246	PS2M 276	PS2M 309
Suction Connection	mm	15.9	15.9	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.5
Liquid Connection	mm	15.9	15.9	15.9	15.9	15.9	22.2	22.2	22.2	22.2	22.2
Ext. Equaliser	mm	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
Operating Charge	R22	1.7	2.0	2.1	2.7	3.0	2.8	3.5	4.4	4.8	5.9
Dimensions	mm A	1544	1544	2154	2154	2154	2764	2764	2764	3373	3373
	B	1263	1263	1873	1873	1873	2483	2483	2483	3092	3092
	C	-	-	-	-	-	1263	1263	1263	1873	1873
	D	-	-	-	-	-	1219	1219	1219	1219	1219
	E	345	345	335	335	335	335	335	335	335	335
	F	502	502	502	502	502	502	502	502	502	502
Weight Unpacked	Kg	41	45	54	60	63	70	77	84	91	99
Weight Packed	Kg	49	53	64	70	73	102	109	116	131	140



Note: Prices on last pages of Buffalo Evaporator Information.

BUFFALO TRIDENT EVAPORATORS

LOW TEMPERATURE EVAPORATORS

PS - 300 & 350mm Fan Models

PSLE - Electric Defrost PSLW - Water Defrost PSLH - Hot Gas Defrost

300mm Fans - Fins Series 6 (236 Fins/m) Based on -24°C Saturated Suction Temperature

Model		PS1L* 016	PS1L* 025	PS1L* 033	PS1L* 041	PS1L* 051	PS1L* 056	PS1L* 069	PS1L* 075	PS1L* 083	PS1L* 099
R22	Watts @ 6KTD	926	1402	1879	2303	2875	3169	3897	4229	4703	5617
	Watts @ 1KTD	154	234	313	384	479	528	649	705	784	936
R404A	Watts @ 6KTD	981	1486	1991	2441	3047	3358	4130	4482	4984	5952
	Watts @ 1KTD	163	248	332	407	508	560	688	747	831	992
R507	Watts @ 6KTD	999	1513	2027	2485	3102	3419	4204	4562	5074	6060
	Watts @ 1KTD	166	252	338	414	517	570	701	760	846	1010
Air Flow	L/Sec	418	347	836	788	694	1182	1101	1041	1576	1388
	CFM	886	735	1772	1670	1471	2505	2333	2206	3340	2941
Air Throw Metres (*)		8.6	7.9	10.5	10.3	9.8	12.5	12.3	12.0	11.7	14.0
No. 300mm Fans		1	1	2	2	2	3	3	3	4	4
Fan Motors	Total Watts	73	73	146	146	146	219	219	219	292	292
	**Total Amps	0.3	0.3	0.6	0.6	0.6	1.0	1.0	1.0	1.3	1.3
Motor Heat per 24hrs (Watts)		1752	1752	3504	3504	3504	5256	5256	5256	7008	7008
**240V Defrost Heaters	Total Watts	1060	1060	1960	1960	1960	2700	2700	2700	3580	3580
	Total Amps	4.4	4.4	8.2	8.2	8.2	11.3	11.3	11.3	14.9	14.9

Note – Please specify refrigerant when ordering. ** Based on Manufacturers Data (Free Air Tests)

350m Fans - Fins Series 6 (236 Fins/m) Based on -24°C Saturated Suction Temperature

Model		PS2L* 086	PS2L* 100	PS2L* 105	PS2L* 123	PS2L* 136	PS2L* 158	PS2L* 168	PS2L* 191	PS2L* 203	PS2L* 233
R22	Watts @ 6KTD	4860	5664	5944	6992	7678	8928	9510	10822	11499	13175
	Watts @ 1KTD	810	944	991	1165	1280	1488	1585	1804	1917	2196
R404A	Watts @ 6KTD	5151	6003	6300	7410	8138	9462	10079	11469	12187	13963
	Watts @ 1KTD	858	1001	1050	1235	1356	1577	1680	1912	2031	2327
R507	Watts @ 6KTD	5244	6111	6413	7543	8284	9632	10260	11676	12406	14214
	Watts @ 1KTD	874	1019	1069	1257	1381	1605	1710	1946	2068	2369
Air Flow	L/Sec	1428	1393	2283	2142	2090	3044	2856	2786	3570	3483
	CFM	3026	2952	4838	4539	4429	6451	6052	5904	7565	7381
Air Throw Metres (*)		16.9	16.5	18.7	18.4	17.9	21	20.8	20.2	21.7	20.6
No. 350m Fans		2	2	3	3	3	4	4	4	5	5
Fan Motors	Total Watts	260	260	390	390	390	520	520	520	650	650
	**Total Amps	1.2	1.2	1.7	1.7	1.7	2.3	2.3	2.3	2.9	2.9
Motor Heat per 24hrs (Watts)		6240	6240	9360	9360	9360	12480	12480	12480	15600	15600
**240V Defrost Heaters	Total Watts	2880	2880	4300	4300	4300	5720	5720	5720	7160	7160
	Total Amps	12.0	12.0	17.9	17.9	17.9	23.8	23.8	23.8	29.8	29.8

Note – Please specify refrigerant when ordering.

(*) Air throw of units fitted with air straightening grilles.

** Based on Manufacturers Data (Free Air Tests)

DT1 = Air On Temp – Saturated Suction Temperature.

Fin Series	4	5	6
Capacity Multiplier	0.82	0.91	1.00

Capacity Correction Factors

Suction Temp °C	-40	-35	-30	-25	-24	-20	-15	-10	-5
Capacity Multiplier	0.50	0.71	0.85	0.98	1.00	1.06	1.14	1.23	1.35

Note: Prices on last pages of Buffalo Evaporator Information.

BUFFALO TRIDENT EVAPORATORS

LOW TEMPERATURE EVAPORATORS

PSLE- PSLW - PSLH - 300 & 350mm Fan Models

Dimensions

300mm Fans - Fins Series 6 (236 Fins/m) — Based on -24°C Saturated Suction Temperature

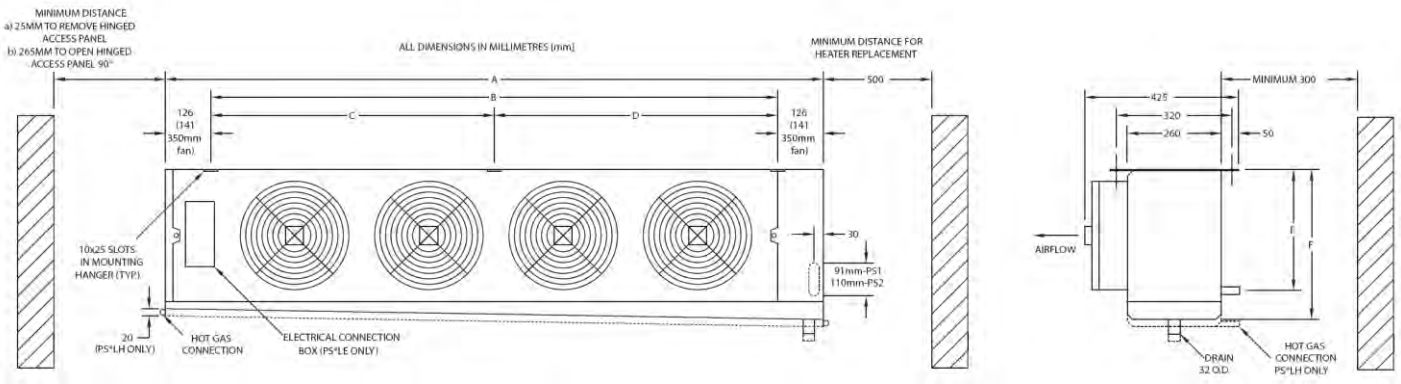
Model	PS1L* 016	PS1L* 025	PS1L* 033	PS1L* 041	PS1L* 051	PS1L* 056	PS1L* 069	PS1L* 075	PS1L* 083	PS1L* 099
Suction Connection mm	12.7	12.7	12.7	12.7	12.7	15.9	15.9	15.9	22.2	22.2
Liquid Connection mm	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9
Ext. Equaliser mm	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
Operating Charge R22	0.2	0.4	0.4	0.6	0.8	0.8	1.0	1.2	1.1	1.6
Dimensions mm A	676	676	1057	1057	1057	1438	1438	1438	1819	1819
Dimensions mm B	425	425	806	806	806	1187	1187	1187	1568	1568
Dimensions mm C	345	345	345	345	345	345	345	345	340	340
Dimensions mm D	425	425	425	425	425	425	425	425	425	425
Dimensions mm **E	345	345	345	345	345	345	345	345	340	340
Dimensions mm **F	425	425	425	425	425	425	425	425	425	425
Weight Unpacked Kg	15	18	24	25	29	35	38	40	44	52
Weight Packed Kg	21	24	31	33	36	43	46	48	53	62

** Only applicable to PS-LE & PS-LH Note all hot gas connections are 22.2mm

350mm Fans - Fins Series 6 (236 Fins/m) — Based on -24°C Saturated Suction Temperature

Model	PS2L*086	PS2L* 100	PS2L* 105	PS2L* 123	PS2L* 136	PS2L* 158	PS2L* 168	PS2L* 191	PS2L* 203	PS2L* 233
Suction Connection mm	15.9	15.9	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.5
Liquid Connection mm	15.9	15.9	15.9	15.9	15.9	22.2	22.2	22.2	22.2	22.2
Ext. Equaliser mm	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
Operating Charge R22	1.3	1.5	1.5	2.0	2.2	2.0	1.6	3.3	3.6	4.4
Dimensions mm A	1544	1544	2154	2154	2154	2764	2764	2764	3373	3373
Dimensions mm B	1263	1263	1873	1873	1873	2483	2483	2483	3092	3092
Dimensions mm C	-	-	-	-	-	1263	1263	1263	1873	1873
Dimensions mm D	-	-	-	-	-	1219	1219	1219	1219	1219
Dimensions mm ** E	345	345	335	335	335	335	335	335	335	335
Dimensions mm ** F	502	502	502	502	502	502	502	502	502	502
Weight Unpacked Kg	43	46	56	62	66	73	80	87	94	102
Weight Packed Kg	51	55	66	72	76	105	112	119	135	143

** Only applicable to PS-LE & PS-LH Note all hot gas connections are 22.2mm

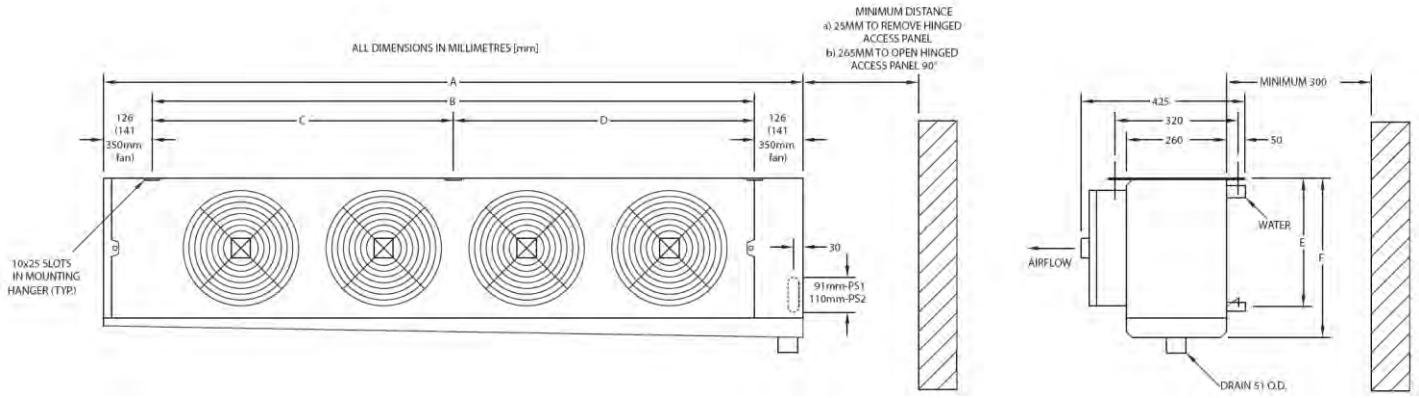


Note: Prices on last pages of Buffalo Evaporator Information.

BUFFALO TRIDENT EVAPORATORS

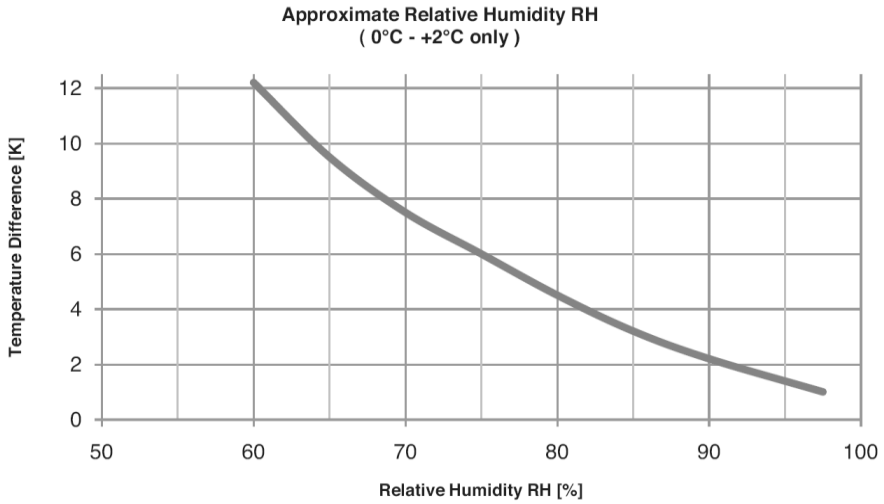
LOW TEMPERATURE EVAPORATORS
PSLW - 300 & 350mm Fan Models
Water Defrost Models

Model		300 mm			350 mm		
		PS1LW 016 - 051	PS1LW 056 - 075	PS1LW 083 - 099	PS2LW 086 - 136	PS2LW 105 - 136	PS2LW 058 - 233
Dimensions mm	E	422	422	417	422	412	412
	F	540	540	540	617	617	617
Defrost Water Connection	mm	1 x 32	1 x 32	1 x 32	1 x 32	1 x 32	2 x 32
Drain Connection	mm	51	51	51	51	51	51
Maximum Defrost Water	L/S*	0.9	1.8	1.8	1.8	1.8	3.6



Relative Humidity Selection

The relative humidity of an air-water mixture is defined as the ratio of the partial pressure of water vapour in the mixture to the saturated vapour pressure of water at a given temperature. As the air volume and capacity ratio will vary from model to model in any range, the relative humidity graph reading can only be regarded as an approximate value. The operating humidity of a room (once product is down to the desired room temperature) can be predicted quite accurately (within 5%) by applying the following abbreviated formula to a proposed evaporator which has specific capacity and air flow listed in the specification tables.

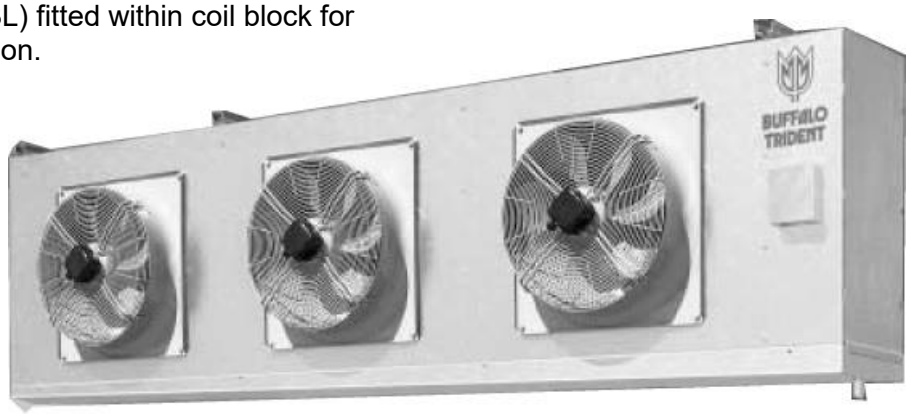


MEDIUM & LOW TEMP EVAPORATORS

EBBL - WBBL - HBBL - BBM Series

Standard Features:

- 4 Defrosts – Air, Electric, Water, Hot Gas.
- Internal Ripple Finned Tube for higher heat transfer performance and better oil return.
- Hinged Access Doors both ends – easily removable where coil installed close to adjacent wall.
- Hinged, fully reversible Drip Tray (BBM, EBBL, and WBBL only).
- All fans statically and dynamically balanced, aerodynamically constructed for economical and quiet operation.
- Sickle Blade, Dual Speed 3 Phase Motors – 1340/1000 RPM.
- Stucco embossed aluminium case.
- Defrost Elements (EBBL) fitted within coil block for improved heat dissipation.



Optional Features:

- Copper Fins.
- Electro-Tinning.
- Stainless Steel Case.
- Single Phase Motors.
- Other Fin Series – 3, 4, 6.
- Special Circuitry – Brines, Hot/Cold Water.
- Special Application Designs.
- Hazardous Location Motors (eg. Flameproof).
- Low/High Temp Grease fitted to motors.
- Multiple Circuits.

BUFFALO TRIDENT EVAPORATORS

MEDIUM TEMPERATURE EVAPORATORS
BBM Series – Heavy Duty - 500mm Fan Models

Fins Series 5 (197 Fins/m) — Based on -4°C Saturated Suction Temperature

Model		BBM081	BBM106	BBM139	BBM162	BBM184	BBM211	BBM244	BBM275	BBM317	BBM359	BBM412
R22						High Speed						
	Watts @ 6KTD	8124	10554	13908	16249	18361	21108	24373	27541	31661	35856	41208
	Watts @ 1KTD	1354	1759	2318	2708	3060	3518	4062	4590	5277	5976	6868
						Low Speed						
	Watts @ 6KTD	6093	7915	10431	12187	13771	15831	18280	20656	23746	26892	30906
	Watts @ 1KTD	1016	1319	1738	2031	2295	2638	3047	3443	3958	4482	5151
R404A						High Speed						
	Watts @ 6KTD	8612	11187	14742	17224	19462	22374	25836	29194	33561	38007	43681
	Watts @ 1KTD	1435	1864	2457	2871	3244	3729	4306	4866	5593	6335	7280
						Low Speed						
	Watts @ 6KTD	6459	8390	11057	12918	14597	16780	19377	21895	25171	28505	32761
	Watts @ 1KTD	1076	1398	1843	2153	2433	2797	3229	3649	4195	4751	5460
R134a						High Speed						
	Watts @ 6KTD	7572	9836	12962	15144	17112	19672	22716	25668	29508	33418	38406
	Watts @ 1KTD	1262	1639	2160	2524	2852	3279	3786	4278	4918	5570	6401
						Low Speed						
	Watts @ 6KTD	5679	7377	9722	11358	12834	14754	17037	19251	22131	25063	28805
	Watts @ 1KTD	947	1230	1620	1893	2139	2459	2840	3209	3689	4177	4801

Specifications

Air Flow L/S	High Speed	2388	2180	2454	4776	4628	4360	7164	6942	6540	9044	8456
	Low Speed	1589	1450	1631	3178	3080	2900	4767	4620	4350	6019	5618
Air Flow CFM	High Speed	5059	4619	5199	10119	9805	9237	15178	14708	13856	19161	17915
	Low Speed	3367	3072	3456	6733	6525	6144	10100	9788	9216	12752	11903
** Air Throw Metres	High Speed	21	21	22	23	23	23	25	25	25	26	26
	Low Speed	17	17	18	19	19	19	21	21	21	22	22
No of 500mm Fans		1	1	1	2	2	2	3	3	3	4	4
Fan Motors						High Speed						
	Total Watts	780	780	780	1560	1560	1560	2340	2340	2340	3120	3120
	*Total AMPS	1.35	1.35	1.35	2.70	2.70	2.70	4.05	4.05	4.05	5.40	5.40
						Low Speed						
	Total Watts	550	550	550	1100	1100	1100	1650	1650	1650	2200	2200
	*Total AMPS	0.94	0.94	0.94	1.88	1.88	1.88	2.82	2.82	2.82	3.76	3.76
						Single Phase						
	Total Watts	770	770	770	1540	1540	1540	2310	2310	2310	3080	3080
	*Total AMPS	3.4	3.4	3.4	6.8	6.8	6.8	10.2	10.2	10.2	13.6	13.6
# Sound Pressure dB(A)	High Speed	61	61	61	64	64	64	66	66	66	67	67
	Low Speed	55	55	55	58	58	58	60	60	60	61	61

** Air throws based on CRMA guidelines. Distance at which horizontal air velocity falls below 0.5 m/s measured at 0.5, 0.75 and 1.0 metres from ceiling, average reading to equal 0.5 m/s. Temperature corrected for +2°C room

Sound Pressure Levels calculated at 3 metres.

* Based on Manufacturers Data.

Note: Prices on last pages of Buffalo Evaporator Information.

BUFFALO TRIDENT EVAPORATORS

MEDIUM TEMPERATURE EVAPORATORS
BBM Series – Heavy Duty - 500mm Fan Models
Dimensions

Model		BBM081	BBM106	BBM139	BBM162	BBM184	BBM211	BBM244	BBM275	BBM317	BBM359	BBM412
Suction Connects mm		28.5	28.5	34.9	34.9	34.9	41.2	41.2	41.2	54.0	54.0	54.0
TX Valve Connects mm		12.7	12.7	15.9	15.9	22.2	22.2	22.2	22.2	28.5	28.5	28.5
External Equaliser mm		6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35
Opp. Ref. Charge R22		1.2	2.6	4.0	2.0	3.2	5.0	3.4	4.5	7.2	5.7	8.9
Dimensions mm	A	1260	1260	1610	2210	2210	3160	3160	3160	3160	3310	3310
	B	986	986	1336	1936	1936	1936	2886	2886	2886	3036	3036
	C	-	-	-	-	-	-	950	950	950	1500	1500
	D	-	-	-	-	-	-	1936	1936	1936	1536	1536
	E	646	646	646	646	646	646	646	646	646	646	646
	F	78	78	75	75	75	60	60	60	98	98	98
	G	723	723	846	720	720	716	716	716	710	837	837
	H	903	903	1030	903	903	903	903	903	903	1030	1030
	I	78	78	75	75	75	60	60	60	143	143	143
Weight - Unpacked Kg		62	90	109	110	124	151	159	180	220	227	277

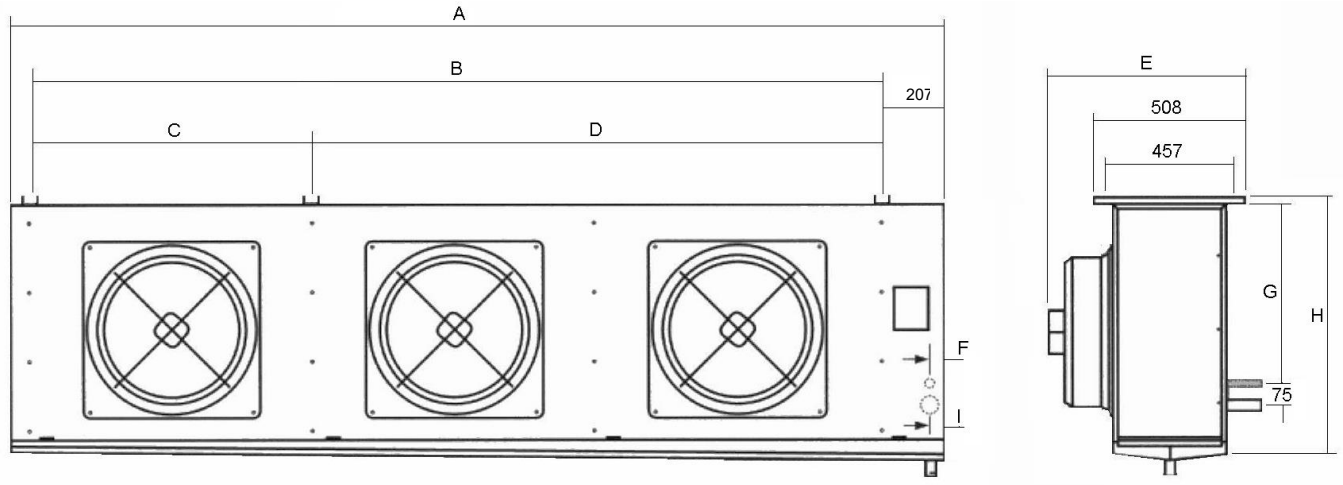
Capacity Correction Factors

Suction Temp	-10	-8	-6	-4	-2	0	2	4	6
Capacity Multiplier	0.87	0.90	0.95	1.00	1.045	1.17	1.23	1.28	1.35

Refrigerant	R22	R407B	R407C	R507
Capacity Multiplier	1.0	0.92	0.98	1.07

Other Fin Series	3	4	5	6
Capacity Multiplier	0.8	0.9	1	1.1

For the purpose of correct circuiting and distributor selection, please advise.
Refrigerant, SST, KTD and Fin Series.



Note: Prices on last pages of Buffalo Evaporator Information.

BUFFALO TRIDENT EVAPORATORS

LOW TEMPERATURE EVAPORATORS

EBBL - WBBL - HBBL - 500mm Fan Models

EBBL - Electric Defrost WBBL - Water Defrost HBBL - Hot Gas Defrost

Fins Series 5 (197 Fins/m) **Based on -24°C Saturated Suction Temperature**

	Model ☼	BBL066	BBL085	BBL110	BBL131	BBL148	BBL170	BBL197	BBL222	BBL255	BBL281	BBL323
R22	High Speed											
	Watts @ 6KTD	6552	8502	11106	13103	14795	17004	19655	22193	25506	28104	32280
	Watts @ 1KTD	1092	1417	1851	2184	2466	2834	3276	3699	4251	4684	5380
	Low Speed											
	Watts @ 6KTD	4914	6376	8329	9827	11096	12753	14741	16644	19129	21078	24210
	Watts @ 1KTD	819	1063	1388	1638	1849	2125	2457	2774	3188	3513	4035
R404A	High Speed											
	Watts @ 6KTD	6945	9012	11772	13889	15683	18024	20834	23524	27036	29790	34216
	Watts @ 1KTD	1157	1502	1962	2315	2614	3004	3472	3921	4506	4965	5703
	Low Speed											
	Watts @ 6KTD	5209	6759	8829	10417	11762	13518	15626	17643	20277	22343	25662
	Watts @ 1KTD	868	1127	1471	1736	1960	2253	2604	2941	3380	3724	4277
R507	High Speed											
	Watts @ 6KTD	7076	9182	1194	14151	15979	18364	21227	23968	27546	30352	34862
	Watts @ 1KTD	1179	1530	1999	2359	2663	3061	3538	3995	4591	5059	5810
	Low Speed											
	Watts @ 6KTD	5307	6887	8996	10614	11984	13773	15920	17976	20660	22764	26146
	Watts @ 1KTD	884	1148	1499	1769	1997	2296	2653	2996	3443	3794	4358

Specifications

Air Flow L/S	High Speed	2409	2213	2471	4818	4680	4426	7227	7020	6639	8872	8600
	Low Speed	1645	1542	1643	3209	3220	3084	4935	4830	4326	6096	5716
Air Flow CFM	High Speed	5104	4689	5235	10208	9915	9377	15311	14873	14066	18797	18220
	Low Speed	3485	3267	3481	6970	6822	6534	10456	10233	9801	12915	12110
** Air Throw Metres	High Speed	19	19	20	21	21	21	23	23	23	24	24
	Low Speed	15	15	16	17	17	17	19	19	19	20	20
No of 500mm Fans		1	1	1	2	2	2	3	3	3	4	4
Fan Motors	High Speed											
	Total Watts	780	780	780	1560	1560	1560	2340	2340	2340	3120	3120
	*Total AMPS	1.35	1.35	1.35	2.70	2.70	2.70	4.05	4.05	4.05	5.40	5.40
	Low Speed											
	Total Watts	550	550	550	1100	1100	1100	1650	1650	1650	2200	2200
	*Total AMPS	0.94	0.94	0.94	1.88	1.88	1.88	2.82	2.82	2.82	3.76	3.76
	Single Phase											
	Total Watts	770	770	770	1540	1540	1540	2310	2310	2310	3080	3080
	*Total AMPS	3.4	3.4	3.4	6.8	6.8	6.8	10.2	10.2	10.2	13.6	13.6
Defrost Heaters	Total Watts	6000	6000	8200	12000	12000	12000	18000	18000	18000	19000	19000
	Total Amps	25.0	25.0	34.2	50.0	50.0	50.0	75.0	75.0	75.0	79.17	79.17
# Sound Pressure dB(A)	High Speed	61	61	61	64	64	64	66	66	66	67	67
	Low Speed	55	55	55	58	58	58	60	60	60	61	61

** Air throws based on CRMA guidelines. Distance at which horizontal air velocity falls below 0.5 m/s measured at 0.5, 0.75 and 1.0 metres from ceiling, average reading to equal 0.5 m/s. Temperature corrected for -18°C room

☼ Prefix Model E - Electric Defrost W - Water Defrost H - Hot Gas Defrost

\# Sound Pressure Levels calculated at 3 metres

* Based on Manufacturers Data. .

Note: Prices on last pages of Buffalo Evaporator Information.

BUFFALO TRIDENT EVAPORATORS

LOW TEMPERATURE EVAPORATORS
EBBL - WBBL - HBBL - 500mm Fan Models
Dimensions

Model ☼			BBL066	BBL085	BBL110	BBL131	BBL148	BBL170	BBL197	BBL222	BBL255	BBL281	BBL323
Suction Connect		mm	28.5	34.9	34.9	41.2	41.2	41.2	41.2	54.0	54.0	54.0	54.0
TX Valve Connect		mm	12.70	15.90	22.20	22.20	22.20	28.50	28.50	28.50	28.50	34.90	34.90
External Equaliser		mm	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35
Opp. Ref. Charge		R22	1.30	2.70	4.30	2.40	3.40	5.10	3.60	5.00	7.80	6.30	9.70
Drain Size	Elect & H/G	mm	32	32	32	32	32	32	32	32	32	32	32
	Water	mm	60.3	60.3	60.3	60.3	60.3	60.3	80.0	80.0	80.0	80.0	80.0
Water Flow Req'd		L/S	0.39	0.78	1.07	0.78	1.04	1.56	1.17	1.56	2.34	1.68	2.52
Water Connection		mm	1 x 32	1 x 32	1 x 32	2 x 32	2 x 32	2 x 32	2 x 32	3 x 32	3 x 32	4 x 32	4 x 32
Hot Gas Connect		mm	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2
Dimensions Electric Defrost And Hot Gas Defrost	A		1260	1260	1610	2210	2210	2210	3160	3160	3160	3310	3310
	B		986	986	1336	1936	1936	1936	2886	2886	2886	3036	3036
	C		-	-	-	-	-	-	950	950	950	1500	1500
	D		-	-	-	-	-	-	1936	1936	1936	1536	1536
	E		646	646	646	646	646	646	646	646	646	646	646
	F		78	75	75	60	60	60	60	98	98	98	98
	G		723	720	846	716	716	716	716	710	710	837	837
	H		903	903	1030	903	903	903	903	903	903	1030	1030
	I		78	75	75	60	60	60	60	143	143	143	143
Water Defrost	G		763	760	886	756	756	756	756	750	750	877	877
	H		943	943	1070	943	943	943	943	943	943	1070	1070
Weight Elec & Gas		Kg	66	94	113	116	131	158	169	189	230	236	287
Weight Water Def			64	92	111	113	127	155	164	185	225	232	282

☼ Prefix Model E - Electric Defrost W - Water Defrost H - Hot Gas Defrost

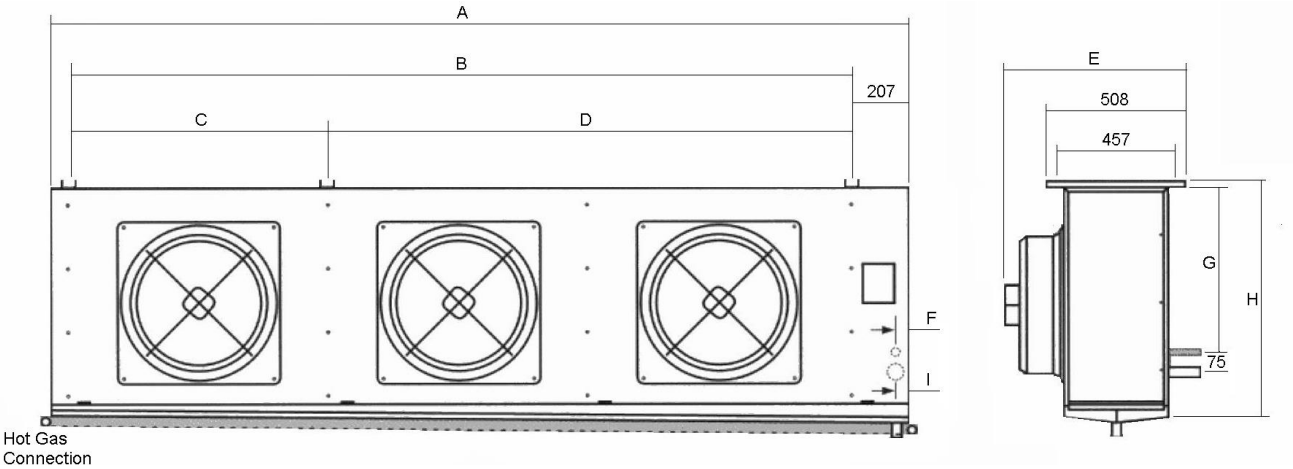
Capacity Correction Factors

Suction Temp	-40	-35	-30	-25	-24	-20	-25	-10	-5
Capacity Multiplier	0.5	0.71	0.85	0.98	1	1.06	1.14	1.23	1.35

Refrigerant	R22	R407B	R134a
Capacity Multiplier	1.0	0.92	0.98

Other Fin Series	3	4	5	6
Capacity Multiplier	0.8	0.9	1	1.1

For the purpose of correct circuiting and distributor selection, please advise
Refrigerant, SST, KTD and Fin Series.



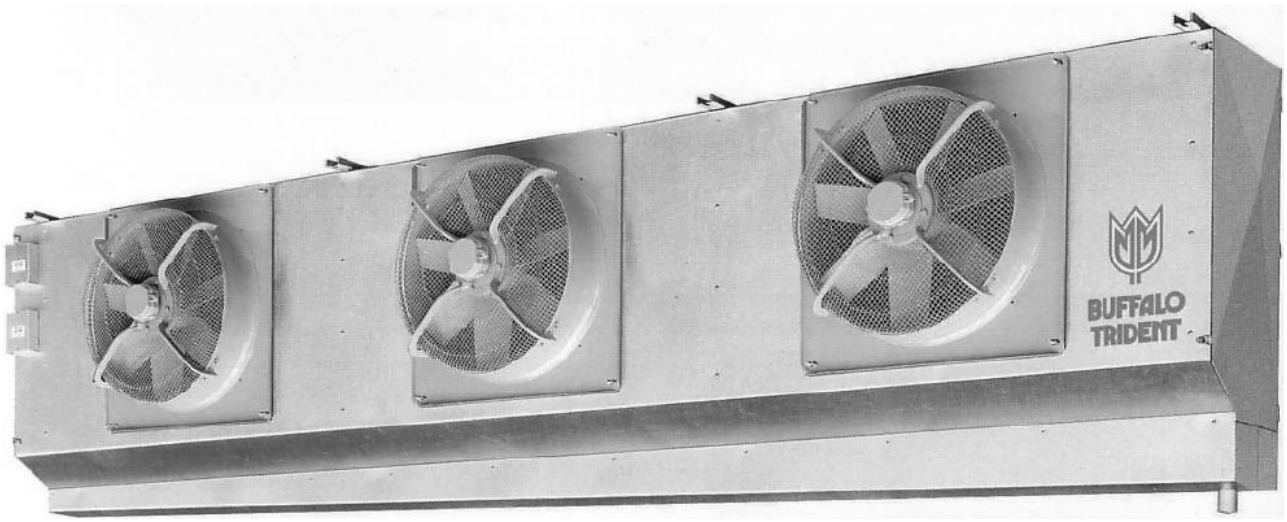
Note: Prices on last pages of Buffalo Evaporator Information.

MEDIUM TEMP EVAPORATORS

PC – PCE – PCW Series

Standard Features:

- High Air Flow for quick product pull down
- Assisted electric defrost for sub zero room temps
- Internal Rippled Finned Tube for increased heat transfer
- Motors and Heaters pre-wired to Junction Box
- Hinged access door at both ends of Coil
- Reversible Drip Tray



BUFFALO TRIDENT EVAPORATORS

MEDIUM TEMPERATURE EVAPORATORS

PC - PCE - PCW - 630mm Fan Models

PC – Air Defrost PCE – Electric Defrost PCW – Water Defrost

Fins Series 5 (197 Fins/m) **Based on -4°C Saturated Suction Temperature**

Model		PC214☼	PC428☼	PC642☼
R22			High Speed	
	Watts @ 6KTD	21420	42840	64260
	Watts @ 1KTD	3570	7140	10710
			Low Speed	
	Watts @ 6KTD	17879	35759	53638
	Watts @ 1KTD	2979	5959	8939
R404A			High Speed	
	Watts @ 6KTD	22704	45408	68118
	Watts @ 1KTD	3784	7568	11353
			Low Speed	
	Watts @ 6KTD	18948	37896	56850
	Watts @ 1KTD	3158	6316	9475
R507			High Speed	
	Watts @ 6KTD	19968	39930	59892
	Watts @ 1KTD	3328	6655	9982
			Low Speed	
	Watts @ 6KTD	16662	33324	49992
	Watts @ 1KTD	2777	5554	8332

Specifications

Air Flow L/S	High Speed	4583	9166	13749
	Low Speed	3416	6832	10249
Air Flow CFM	High Speed	9710	19421	29132
	Low Speed	7238	14476	21716
* Air Throw Metres	High Speed	26	28	29
	Low Speed	23	25	26
No of 630mm Fans		1	2	3
Fan Motors			High Speed	
	Total Watts	1900	3800	5700
	Total AMPS	3.20	6.40	9.60
			Low Speed	
	Total Watts	1200	2400	3600
	Total AMPS	1.95	3.90	5.85
# Defrost Heaters	Total Watts	5800	11600	17400
	Total Amps	24.16	48.33	72.50

* Air throws based on CRMA guidelines.
\# Available as Air Defrost Option. (Less Heaters)
☼ Prefix Model: (no prefix) – Air Defrost E – Electric Defrost W – Water Defrost

Capacity Correction Factors

Suction Temp	-10	-8	-6	-4	-2	0	2	4
Capacity Multiplier	0.87	0.90	0.95	1.00	1.045	1.17	1.23	1.28

Other Fin Series	3	4	5	6
Capacity Multiplier	0.78	0.89	1.00	1.06

For the purpose of correct circuiting and distributor selection, please advise
Refrigerant, SST, KTD and Fin Series

Note: Prices on last pages of Buffalo Evaporator Information.

BUFFALO TRIDENT EVAPORATORS

MEDIUM TEMPERATURE EVAPORATORS

PC - PCE - PCW - 630mm Fan Models

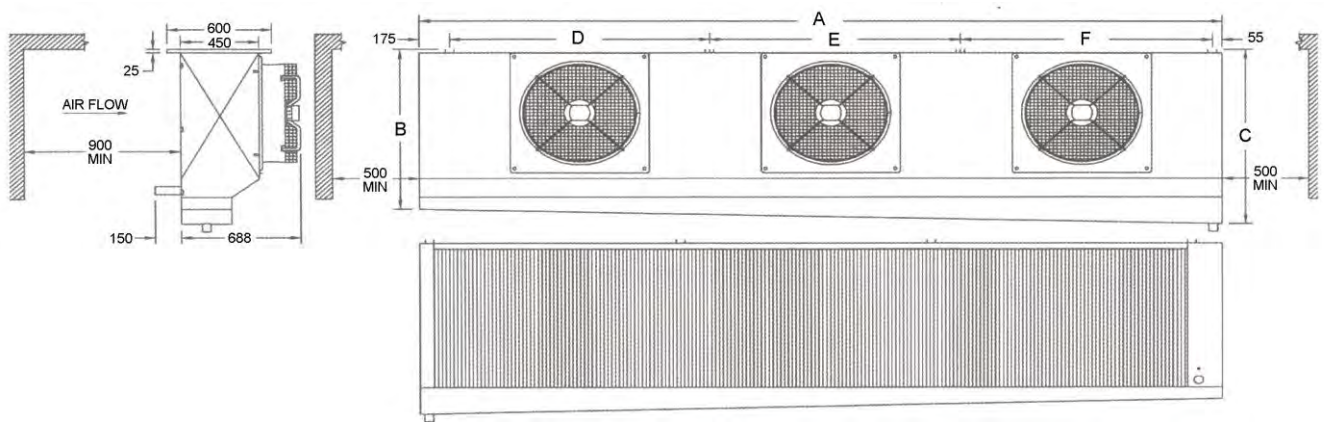
Dimensions

Model			PC214☼	PC428☼	PC642☼
Suction Connect		mm	35	41	54
TX Valve Connect		mm	22	28	35
External Equaliser		mm	6.35	6.35	6.35
Opp. Ref. Charge		R22	4.85 Kg	9.45 Kg	14.17 Kg
Drain Size		mm	51	51	51
Dimensions mm		A	1738	3188	4638
		B	1073	1073	1073
		C	1110	1141	1173
		D	1500	1500	1500
		E	-	1450	1450
		F	-	-	1450
Weight		Kg	165	300	456

☼ Prefix Model: (no prefix) – Air Defrost E – Electric Defrost

Dimensions – Water Defrost Option

Model			PC214W	PC428W	PC642W
Suction Connect		mm	35	41	54
TX Valve Connect		mm	22	28	35
External Equaliser		mm	6.35	6.35	6.35
Opp. Ref. Charge		R22	4.85 Kg	9.45 Kg	14.17 Kg
Drain Size		mm	60	80	80
Water Flow Required		l/s	1.19	2.38	3.56
Water Connections		mm	1 x 32	2 x 32	3 x 32
Dimensions mm		A	1738	3188	4638
		B	1133	1133	1133
		C	1170	1201	1233
		D	1500	1500	1500
		E	-	1450	1450
		F	-	-	1450
Weight		Kg	168	304	461



Note: Prices on last pages of Buffalo Evaporator Information.

BLAST FREEZER / CHILLER EVAPORATORS

AKK – HKK – WKK Series

Standard Features:

- Six Modules – each with Nine Coil Options.
- Individually circuited for each application.
- Available in 3, 4, 5, or 6 fins per inch, 8, 6, 5, or 4 mm fin spacing.
- Air, water and hot gas defrost models.
- Operating range –50°C to +10°C.
- Fan motors prewired to common terminal box.
- Low weight construction with aluminium casing.
- Can be floor or ceiling mounted using the universal top or bottom support legs.
- Simple direct lifting or ceiling mounting.
- Steel support sections hot dipped galvanised.
- Adjustable pitch axial flow fans – constant air flow.
- Fans available for free discharge or 125 Pa external pressure using upgraded motors.



BUFFALO TRIDENT EVAPORATORS

BLAST FREEZER / CHILLER EVAPORATORS

Based on -25°C Saturated Suction Temperature

Model	Coil		kW @ 6° KTD				Air Flow Total l/sec	No. of Fans	Fan Motor Data (per motor)				Approx. Operating Charge @ 25°C DX (R22)
	Rows Deep	Fin Series (F.P.I)							Free Air Discharge		125Pa External Resistance		
			R22	R507	R404A	R507B			kW	F.L.C.*	kW	F.L.C.*	
KK12	6	6	13.310	12.937	12.778	12.711	3963	1	1.5	3.25	2.2	4.52	5.4
	6	5	11.784	11.454	11.313	11.254							
	6	4	10.521	10.226	10.1	10.048							
	6	3	9.153	8.897	8.787	8.741							
	8	5	15.032	14.611	14.431	14.356			2.2	4.52			6.8
	8	4	13.421	13.045	12.884	12.817							
	8	3	11.676	11.349	11.209	11.151							
	10	4	15.132	14.708	14.527	14.451							8.6
	10	3	13.164	12.795	12.637	12.572							
KK14	6	6	15.761	15.32	15.131	15.052	4623	1	2.2	4.52	3.0	6.2	5.9
	6	5	13.986	13.594	13.427	13.357							
	6	4	12.459	12.110	11.961	11.898							
	6	3	10.84	10.536	10.406	10.352							
	8	5	17.801	17.303	17.089	17.000							8.2
	8	4	15.893	15.448	15.257	15.178							
	8	3	13.827	13.440	13.274	13.205							
	10	4	17.919	17.417	17.202	17.113							10.0
	10	3	15.589	15.153	14.965	14.887							
KK24	6	6	26.620	25.875	25.555	25.422	7924	2	1.5	3.25	2.2	4.52	10.0
	6	5	23.568	22.908	22.625	22.507							
	6	4	21.043	20.454	20.201	20.096							
	6	3	18.307	17.794	17.575	17.483							
	8	5	30.064	29.222	28.861	28.711			2.2	4.52			13.2
	8	4	26.849	26.097	25.775	25.641							
	8	3	23.353	22.699	22.419	22.302							
	10	4	30.263	29.416	29.052	28.901							16.8
	10	3	26.329	25.592	25.276	25.144							
KK28	6	6	31.524	30.641	30.263	30.105	9245	2	2.2	4.52	3.0	6.2	11.8
	6	5	27.910	27.129	26.794	26.654							
	6	4	24.919	24.221	23.922	23.798							
	6	3	21.680	21.073	20.813	20.704							
	8	5	35.602	34.605	34.178	34.000							15.4
	8	4	31.788	30.898	30.516	30.358							
	8	3	27.655	26.881	26.549	26.411							
	10	4	35.838	34.835	34.404	34.225							19.0
	10	3	31.179	30.306	29.932	29.776							
KK36	6	6	39.930	38.812	38.333	38.133	11886	3	1.5	3.25	2.2	4.52	14.5
	6	5	35.353	34.363	33.939	33.762							
	6	4	31.565	30.681	30.302	30.145							
	6	3	27.461	26.692	26.363	26.225							
	8	5	45.097	43.834	43.293	43.068			2.2	4.52			19.5
	8	4	40.265	39.138	38.654	38.453							
	8	3	35.030	34.049	33.629	33.454							
	10	4	45.395	44.124	43.579	43.352							24.5
	10	3	39.494	38.388	37.914	37.717							
KK42	6	6	47.286	45.962	45.395	45.158	13867	3	2.2	4.52	3.0	6.2	17.2
	6	5	41.865	40.693	40.19	39.981							
	6	4	37.379	36.332	35.884	35.697							
	6	3	32.520	31.609	31.219	31.057							
	8	5	53.404	51.909	51.268	51.001							22.7
	8	4	47.682	46.347	45.775	45.536							
	8	3	41.483	40.321	39.824	39.616							
	10	4	53.758	52.253	51.608	51.339							28.6
	10	3	46.769	45.459	44.898	44.664							

Capacity Correction Factors

Suction Temp	-40	-40	-35	-30	-25	-20	-15	-10	-5	0	5	10
Capacity Multiplier	0.82	0.92	0.94	0.97	1.00	1.03	1.06	1.09	1.12	1.15	1.18	1.21

Note: Prices on last pages of Buffalo Evaporator Information.

BUFFALO TRIDENT EVAPORATORS

BLAST FREEZER / CHILLER EVAPORATORS

HKK & AKK Models – Hot Gas Defrost

Model	Drain Size Ø mm	Refrigerant Connections						Approximate Dry Weight (kg)		
		6 Row		8 Row		10 Row				
		Suct.	HGas	Suct.	HGas	Suct.	HGas	6 Row	8 Row	10 Row
HKK12	32	1 5/8	1 1/8	1 5/8	1 1/8	1 5/8	1 1/8	148	168	188
HKK14	32	1 5/8	1 1/8	1 5/8	1 1/8	2 1/8	1 1/8	158	182	205
HKK24	32	2 1/8	1 3/8	2 1/8	1 3/8	2 1/8	1 3/8	286	326	366
HKK28	32	2 1/8	1 3/8	2 1/8	1 3/8	2 1/8	1 3/8	306	353	399
HKK36	51	2 1/8	1 5/8	2 5/8	1 5/8	2 5/8	1 5/8	424	484	544
HKK42	51	2 5/8	1 5/8	2 5/8	1 5/8	2 5/8	1 5/8	454	526	594

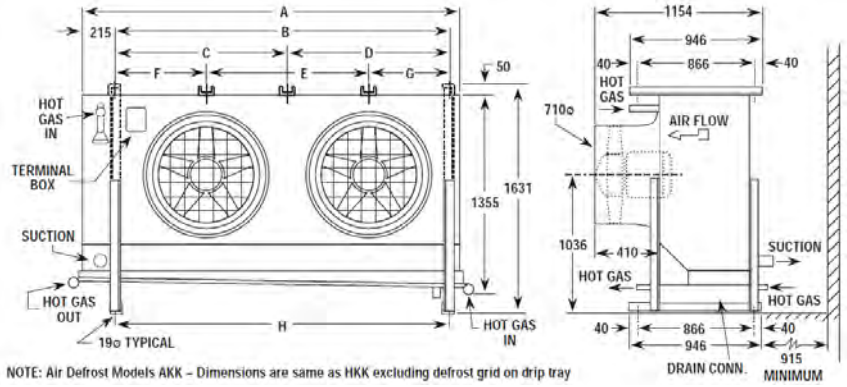
WKK Models – Water Defrost

Model	Drain Size Ø mm	Defrost Water Conn. Ø mm	Refrigerant Connections						Approximate Dry Weight (kg)		
			6 Row		8 Row		10 Row				
			Suct.	HGas	Suct.	HGas	Suct.	HGas	6 Row	8 Row	10 Row
WKK12	60.3	32	1 5/8	1 1/8	1 5/8	1 1/8	1 5/8	1 1/8	148	168	188
WKK14	60.3	32	1 5/8	1 1/8	1 5/8	1 1/8	2 1/8	1 1/8	158	182	205
WKK24	80	2 x 32	2 1/8	1 3/8	2 1/8	1 3/8	2 1/8	1 3/8	286	326	366
WKK28	80	2 x 32	2 1/8	1 3/8	2 1/8	1 3/8	2 1/8	1 3/8	306	353	399
WKK36	100	3 x 32	2 1/8	1 5/8	2 5/8	1 5/8	2 5/8	1 5/8	424	484	544
WKK42	100	3 x 32	2 5/8	1 5/8	2 5/8	1 5/8	2 5/8	1 5/8	454	526	594

Dimensions

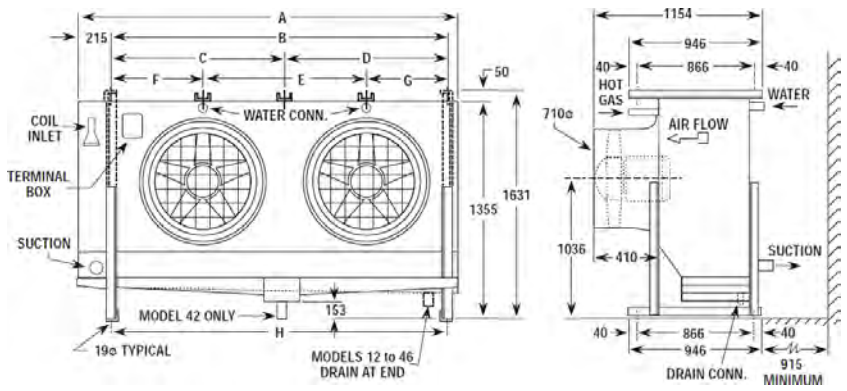
Model	Dimensions (mm)							
	All Models		2 Fan Models		3 Fan Models			All Models
	A	B	C	D	E	F	G	H
HKK12	1325	1050	–	–	–	–	–	1040
HKK14	1500	1228	–	–	–	–	–	1218
HKK24	2285	2015	1045	970	–	–	–	2005
HKK28	2645	2371	1223	1148	–	–	–	2356
HKK36	3255	2980	–	–	965	1045	970	2970
HKK42	3785	3514	–	–	1143	1223	1148	3504

HKK Models – Hot Gas Defrost
AKK Models – Air Defrost



NOTE: Air Defrost Models AKK – Dimensions are same as HKK excluding defrost grid on drip tray

WKK Models – Water Defrost



Note: Prices on last pages of Buffalo Information.

BUFFALO TRIDENT EVAPORATORS

BLAST FREEZER / CHILLER EVAPORATORS

Application Notes:

Full Load Current
F.L.C.* is motor current as marked on motor rating plate and is at standard air conditions of 20°C. 1.2 kg/m3, not operating temperature.

Power requirements vary directly as the air density ratio and/or absolute temperature ratio.

$$Amps_2 = Amps_1 \times \frac{(P_2)}{(P_1)} \quad OR \quad Amps_2 \times Amps_1 \times \frac{(273 + T_1)}{(273 + T_2)}$$

Defrost Water Requirement
Models 12 and 14 – 0.681 l/sec
Models 24 and 28 – 1.361 l/sec
Models 36 and 42 – 2.043 l/sec

Air Throw (Free Discharge)
Air throw is a function of many factors. Larger fans, more per cooler, several coolers grouped closely, air discharge close to a ceiling; all improve the chance of air reaching the far end of a store.

Just as important, however, is the store geometry, aisle layout and product loading.

Generally speaking, long air throws require significant separation between the leaving and returning air streams. This allows each to play its part in rotating the whole of the store air. Tall stores with longitudinal aisles and coolers discharging at high level, present no problems.

On low ceiling stores the coolers should be positioned for the leaving and return air streams to be separated in the horizontal plane.

Most difficult are "tunnel" shaped rooms which can reduce the potential air throw by a very high proportion. This may require special arrangements such as ducting, false ceiling or "socks". All will require some degree of external pressure at the fans.

KK Models	Approx. Air Throw
12 – 14	13 to 19 metres
24 – 28	18 to 27 metres
36 - 42	24 to 36 metres

Selection:

Capacities of models that overlap, permit a more flexible and economical selection, where the "LATENT L0AD" is low.
The following Table is a guide to selection of Fin Spacing.

Fin Spacing	Application	Latent Load
4 mm (6 FPI)	Air Defrost – Light Duty Storage	Light
5 mm (5 FPI)	Air Defrost – Normal Duty Storage / Freezing	Normal
6 mm (4 FPI)	Heavy Duty Storage – Packaged Freezing	High
8 mm (3 FPI)	Extra Heavy Duty Storage – Blast Freezing	Heavy

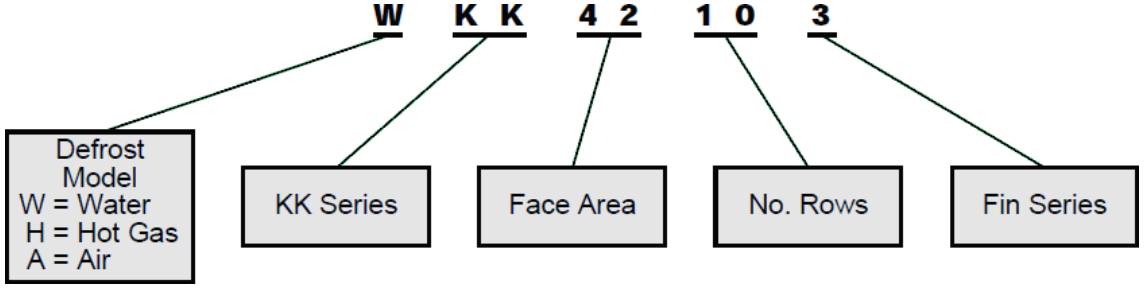
Example:

Requirements
Blast Freezer –29°C, Load (incl. fan motors) 37.0 kW, S.S.T. –35°C(6 KTD), Required external resistance 120 Pa, Water Defrost.

Selection
Correction for –35°C = 0.94 ($\frac{1}{R}$ = 1.0638)
= 37 kW x 1.0638 = 39.36 kW
Read directly from Capacity Table
= WKK36103 at 39.9 kW fitted with 3 x 2.2 kW fan motors.
New Current Draw of Fan Motor (at –35°C)

$$Amps = 4.52 \times \frac{(273 + 20)}{(273 + -35)} = 5.56 \text{ Amps per motor}$$

Model Nomenclature:



BUFFALO TRIDENT EVAPORATORS

Evaporator Prices

BR Series

Airefrig Part Number	List Price Excl GST
BR16	P.O.A.
BR19	P.O.A.
BR21	P.O.A.
BR27	P.O.A.
BR32	P.O.A.
BR37	P.O.A.
BR42	P.O.A.
BR49	P.O.A.
BR56	P.O.A.
BR60	P.O.A.
BR62	P.O.A.
BR63	P.O.A.
BR66	P.O.A.
BR71	P.O.A.
BR75	P.O.A.
BR84	P.O.A.
BR93	P.O.A.
BR98	P.O.A.
BR106	P.O.A.
BR123	P.O.A.
BR131	P.O.A.
BR141	P.O.A.
BR154	P.O.A.
BR164	P.O.A.
BR177	P.O.A.

BRME Series

Airefrig Part Number	List Price Excl GST
BRME16	P.O.A.
BRME19	P.O.A.
BRME21	P.O.A.
BRME27	P.O.A.
BRME32	P.O.A.
BRME37	P.O.A.
BRME42	P.O.A.
BRME49	P.O.A.
BRME56	P.O.A.
BRME60	P.O.A.
BRME62	P.O.A.
BRME63	P.O.A.
BRME66	P.O.A.
BRME71	P.O.A.
BRME75	P.O.A.
BRME84	P.O.A.
BRME93	P.O.A.
BRME98	P.O.A.
BRME106	P.O.A.
BRME123	P.O.A.
BRME131	P.O.A.
BRME141	P.O.A.
BRME154	P.O.A.
BRME164	P.O.A.
BRME177	P.O.A.

BRLE, W, H Series

Airefrig Part Number	List Price Excl GST
BRL☼12	P.O.A.
BRL☼13	P.O.A.
BRL☼15	P.O.A.
BRL☼19	P.O.A.
BRL☼23	P.O.A.
BRL☼27	P.O.A.
BRL☼30	P.O.A.
BRL☼35	P.O.A.
BRL☼40	P.O.A.
BRL☼43	P.O.A.
BRL☼44	P.O.A.
BRL☼45	P.O.A.
BRL☼47	P.O.A.
BRL☼51	P.O.A.
BRL☼53	P.O.A.
BRL☼60	P.O.A.
BRL☼66	P.O.A.
BRL☼70	P.O.A.
BRL☼76	P.O.A.
BRL☼88	P.O.A.
BRL☼94	P.O.A.
BRL☼101	P.O.A.
BRL☼110	P.O.A.
BRL☼117	P.O.A.
BRL☼127	P.O.A.

BUFFALO TRIDENT EVAPORATORS

Evaporator Prices

PS_M Series

Airefrig Part Number	List Price Excl GST
PS1M019	
PS1M030	
PS1M036	
PS1M042	
PS1M050	
PS1M061	
PS1M063	
PS1M077	
PS1M084	
PS1M095	
PS1M102	
PS1M128	
PS2M108	
PS2M117	
PS2M141	
PS2M162	
PS2M177	
PS2M187	
PS2M217	
PS2M246	
PS2M276	
PS2M309	

PS_LE Series

Airefrig Part Number	List Price Excl GST
PS1LE016	
PS1LE025	
PS1LE033	
PS1LE041	
PS1LE051	
PS1LE056	
PS1LE069	
PS1LE075	
PS1LE083	
PS1LE099	
PS2LE086	
PS2LE100	
PS2LE105	
PS2LE123	
PS2LE136	
PS2LE158	
PS2LE168	
PS2LE191	
PS2LE203	
PS2LE233	

PS_LW, H Series

Airefrig Part Number	List Price Excl GST
PS1L*016	
PS1L*025	
PS1L*033	
PS1L*041	
PS1L*051	
PS1L*056	
PS1L*069	
PS1L*075	
PS1L*083	
PS1L*099	
PS2L*086	
PS2L*100	
PS2L*105	
PS2L*123	
PS2L*136	
PS2L*158	
PS2L*168	
PS2L*191	
PS2L*203	
PS2L*233	

BUFFALO TRIDENT EVAPORATORS

Evaporator Prices

PC, PCE & PCW Series

Airefrig Part Number	List Price Excl GST
PC214	P.O.A.
PC428	P.O.A.
PC642	P.O.A.
PC214E	P.O.A.
PC428E	P.O.A.
PC642E	P.O.A.
PC214W	P.O.A.
PC428W	P.O.A.
PC642W	P.O.A.

LB Series

Airefrig Part Number	List Price Excl GST
LB50	P.O.A.
LB60	P.O.A.
LB80	P.O.A.
LB90	P.O.A.
LB120	P.O.A.
LB140	P.O.A.
LB170	P.O.A.
LB190	P.O.A.
LB270	P.O.A.

ELB Series

Airefrig Part Number	List Price Excl GST
ELB50	P.O.A.
ELB60	P.O.A.
ELB80	P.O.A.
ELB90	P.O.A.
ELB120	P.O.A.
ELB140	P.O.A.
ELB170	P.O.A.
ELB190	P.O.A.
ELB270	P.O.A.

BBM Series

Airefrig Part Number	List Price Excl GST
BBM081	
BBM106	
BBM139	
BBM162	
BBM184	
BBM211	
BBM244	
BBM275	
BBM317	
BBM359	
BBM412	

EBBL Series

Airefrig Part Number	List Price Excl GST
EBBL066	
EBBL085	
EBBL110	
EBBL131	
EBBL148	
EBBL170	
EBBL197	
EBBL222	
EBBL255	
EBBL281	
EBBL323	

WBBL Series

Airefrig Part Number	List Price Excl GST
WBBL066	P.O.A.
WBBL085	P.O.A.
WBBL110	P.O.A.
WBBL131	P.O.A.
WBBL148	P.O.A.
WBBL170	P.O.A.
WBBL197	P.O.A.
WBBL222	P.O.A.
WBBL255	P.O.A.
WBBL281	P.O.A.
WBBL323	P.O.A.

AKK Series

Airefrig Part Number	List Price Excl GST
AKK12	P.O.A
AKK14	P.O.A
AKK24	P.O.A
AKK28	P.O.A
AKK36	P.O.A
AKK42	P.O.A

HKK Series

Airefrig Part Number	List Price Excl GST
HKK12	P.O.A
HKK14	P.O.A
HKK24	P.O.A
HKK28	P.O.A
HKK36	P.O.A
HKK42	P.O.A

WKK Series

Airefrig Part Number	List Price Excl GST
WKK12	P.O.A
WKK14	P.O.A
WKK24	P.O.A
WKK28	P.O.A
WKK36	P.O.A
WKK42	P.O.A

REMOTE AIR COOLED CONDENSERS

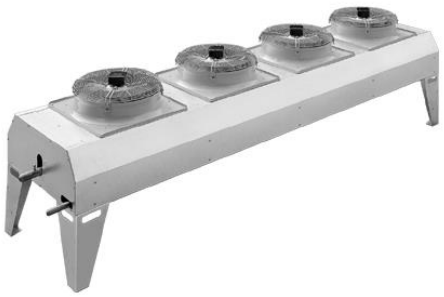
RC-C Series & DV/DH Series

RC Series Standard Features:

- Passivated fins.
- Sickle blade fans.
- All fans statically and dynamically balanced, aerodynamically constructed for economical and quiet operation.
- Dual speed motors on 3-phase – 1340/1000 R.P.M. (4 Pole) – 900/640 R.P.M. (6 Pole)
- Stucco embossed aluminium case.
- Stainless steel fixings.
- Staggered copper tube with rippled aluminium fins drawn to cover tube. Fins waved & rippled for maximum heat transfer.
- Internal ripple finned copper tube.
- Common condenser for both vertical and horizontal air flows

RC Series Optional Features:

- Single phase (single speed only).
- Copper fins.
- Electro-tinning.
- Multiple circuits.
- Stainless steel case.
- Special applications on request.
- Hazardous location motors (eg flameproof).



DV Series Standard Features:

- Dual Refrigerant Circuits.
- All fans statically and dynamically balanced, aerodynamically constructed for economical and quiet operation.
- Sickle Blade Fans.
- Dual speed motors standard on 3 Phase
- Motors wired to a junction box (High Speed).
- 12.7mm diameter copper tube expanded into ripple aluminium coil blocks (472 Fins/m).
- Internal ripple finned copper tube.
- 1.6mm Marine Grade (5251) aluminium casing.
- Positive air seal between all fans.

DV Series Optional Features:

- Epoxy coated or copper fins.
- Single or multiple circuits.
- Galvanised or stainless steel case.
- Separate sub-cooling circuits.
- Hazardous location motors (eg flameproof).



BUFFALO TRIDENT CONDENSERS

AIR COOLED CONDENSERS

RC-C Series 4 Pole

R22

High Speed (Connection in Delta △ - RC19C to RC115C)											
TD/K	RC09C	RC12C	RC13C	RC18C	RC23C	RC25C	RC19C	RC24C	RC28C	RC30C	RC34C
1	606	777	881	1163	1481	1684	1221	1579	1809	2006	2287
5	3030	3885	4405	5817	7403	8421	6106	7896	9046	10028	11435
10	6059	7770	8810	11634	14805	16842	12212	15792	18092	20055	22869
15	9089	11655	13215	17451	22208	25263	18318	23688	27138	30083	34304
20	12118	15540	17620	23268	29610	33684	24424	31584	36184	40110	45738

High Speed (Connection in Delta △ - RC19C to RC115C)										
TD/K	RC37C	RC47C	RC54C	RC62C	RC74C	RC82C	RC93C	RC100C	RC109C	RC115C
1	2503	3158	3627	4158	4912	5428	6237	6691	7237	7652
5	12514	15792	18134	20790	24560	27138	31185	33453	36183	38262
10	25027	31584	36267	41580	49119	54275	62370	66906	72366	76524
15	37541	47376	54401	62370	73679	81413	93555	100359	108549	114786
20	50054	63168	72534	83160	98238	108550	124740	133812	144732	153408

Low Speed (Connection in Star λ - RC19C to RC115C)															
TD/K	RC19C	RC24C	RC28C	RC30C	RC34C	RC37C	RC47C	RC54C	RC62C	RC74C	RC82C	RC93C	RC100C	RC109C	RC115C
1	975	1207	1324	1520	1624	1808	2414	5784	3086	3548	3971	4628	4759	5294	5441
5	4874	6035	6618	7602	8121	9039	12069	13920	15428	17738	19854	23142	23797	26472	27203
10	9747	12069	13235	15204	16241	18077	24138	27839	30876	35476	39708	46284	47593	52944	54406
15	14621	18104	19853	22806	24362	27116	36207	41759	46284	53214	59562	69426	71390	79416	81609
20	19494	24138	26470	30408	32482	36154	48276	55678	61712	70952	79416	92568	95186	105888	108812

R404A

High Speed (Connection in Delta △ - RC19C to RC115C)											
TD/K	RC09C	RC12C	RC13C	RC18C	RC23C	RC25C	RC19C	RC24C	RC28C	RC30C	RC34C
1	636	816	925	1222	1555	1768	1282	1658	1900	2106	2401
5	3181	4079	4625	6108	7773	8842	6411	8291	9498	10529	12006
10	6362	8159	9251	12216	15545	17684	12823	16582	18997	21058	24012
15	9543	12238	13876	18324	23318	26526	19234	24872	28495	31587	36019
20	12724	16317	18501	24431	31091	35368	25645	33163	37993	42116	48025

High Speed (Connection in Delta △ - RC19C to RC115C)										
TD/K	RC37C	RC47C	RC54C	RC62C	RC74C	RC82C	RC93C	RC100C	RC109C	RC115C
1	2628	3316	3808	4366	5157	5699	6549	7025	7598	8035
5	13139	16582	19040	21830	25787	28494	32744	35126	37992	40175
10	26278	33163	38080	43659	51575	56989	65489	70251	75984	80350
15	39418	49745	57121	65489	77362	85483	98233	105377	113976	120525
20	52557	66326	76161	87318	103150	113978	130977	140503	151969	160700

Low Speed (Connection in Star λ - RC19C to RC115C)															
TD/K	RC19C	RC24C	RC28C	RC30C	RC34C	RC37C	RC47C	RC54C	RC62C	RC74C	RC82C	RC93C	RC100C	RC109C	RC115C
1	1023	1267	1390	1596	1705	1898	2534	2923	3240	3725	4169	4860	4997	5559	5713
5	5117	6336	6948	7982	8527	9490	12672	14615	16199	18625	20847	24299	24986	27796	28563
10	10234	12672	13897	15964	17053	18981	25345	29231	32399	37250	41693	48598	49973	55591	57126
15	15352	19009	20845	23946	25580	28471	38017	43846	48598	55875	62540	72897	74959	83387	85689
20	20469	25345	27794	31928	34106	37962	50690	58462	64798	74500	83387	97196	99945	111182	114253

Note: Prices on last page of Buffalo Condenser Information.

BUFFALO TRIDENT CONDENSERS

AIR COOLED CONDENSERS

RC-C Series 4 Pole

R407C

High Speed (Connection in Delta △ - RC19C to RC115C)											
TD/K	RC09C	RC12C	RC13C	RC18C	RC23C	RC25C	RC19C	RC24C	RC28C	RC30C	RC34C
1	588	754	855	1128	1436	1634	1185	1532	1755	1945	2218
5	2939	3768	4273	5642	7180	8168	5923	7659	8775	9727	11091
10	5877	7537	8546	11285	14361	16337	11846	15318	17549	19453	22183
15	8816	11305	12819	16927	21541	24505	17768	22977	26324	29180	33274
20	11754	15074	17091	22570	28722	32673	23691	30636	35098	38907	44366

High Speed (Connection in Delta △- RC19C to RC115C)										
TD/K	RC37C	RC47C	RC54C	RC62C	RC74C	RC82C	RC93C	RC100C	RC109C	RC115C
1	2428	3064	3518	4033	4765	5265	6050	6490	7020	7423
5	12138	15318	17589	20166	23823	26323	30249	32449	35098	37114
10	24276	30636	35179	40333	47645	52647	60499	64899	70195	74228
15	36414	45955	52768	60499	71468	78970	90748	97348	105293	111342
20	48552	61273	70358	80665	95291	105294	120998	129798	140390	148457

Low Speed (Connection in Star λ - RC19C to RC115C)															
TD/K	RC19C	RC24C	RC28C	RC30C	RC34C	RC37C	RC47C	RC54C	RC62C	RC74C	RC82C	RC93C	RC100C	RC109C	RC115C
1	945	1171	1284	1475	1575	1753	2341	2700	2993	3441	3852	4490	4617	5136	5277
5	4727	5853	6419	7374	7877	8767	11707	13502	14965	17206	19258	22448	23083	25678	26387
10	9455	11707	12838	14748	15754	17535	23414	27004	29930	34412	38517	44895	46165	51356	52774
15	14182	17560	19257	22122	23631	26302	35121	40506	44895	51618	57775	67343	69248	77034	79161
20	18909	23414	25676	29496	31508	35069	46828	54008	59861	68823	77034	89791	92330	102711	105548

R134a

High Speed (Connection in Delta △ - RC19C to RC115C)											
TD/K	RC09C	RC12C	RC13C	RC18C	RC23C	RC25C	RC19C	RC24C	RC28C	RC30C	RC34C
1	582	746	846	1117	1421	1617	1172	1516	1737	1925	2195
5	2908	3730	4229	5584	7106	8084	5862	7580	8684	9626	10977
10	5917	7459	8458	11169	14213	16168	11724	15160	17368	19253	21954
15	8725	11189	12686	16753	21319	24252	17585	22740	26052	28879	32931
20	11633	14918	16915	22337	28426	32337	23447	30321	34737	38506	43908

High Speed (Connection in Delta △ - RC19C to RC115C)										
TD/K	RC37C	RC47C	RC54C	RC62C	RC74C	RC82C	RC93C	RC100C	RC109C	RC115C
1	2403	3032	3482	3992	4715	5210	5988	6423	6947	7346
5	12013	15160	17408	19958	23577	26052	29938	32115	34736	36732
10	24026	30321	34816	39917	47154	52104	59875	64230	69471	73463
15	36039	45481	52224	59875	70731	78156	89813	96345	104207	110195
20	48052	60641	69633	79834	94308	104208	119750	128460	138943	146926

Low Speed (Connection in Star λ - RC19C to RC115C)															
TD/K	RC19C	RC24C	RC28C	RC30C	RC34C	RC37C	RC47C	RC54C	RC62C	RC74C	RC82C	RC93C	RC100C	RC109C	RC115C
1	936	1159	1271	1460	1559	1735	2317	2673	2962	3406	3812	4443	4569	5083	5223
5	4679	5793	6353	7298	7796	8677	11586	13363	14811	17028	19060	22216	22845	25413	26115
10	9357	11586	12706	14596	15591	17354	23172	26725	29622	34057	38120	44433	45689	50826	52230
15	14036	17379	19058	21894	23387	26031	34759	40088	44433	51085	57180	66649	68534	76239	78345
20	18714	23172	25411	29192	31183	34708	46345	53451	59244	68114	76239	88865	91379	101652	104460

Note: Prices on last page of Buffalo Condenser Information.

BUFFALO TRIDENT CONDENSERS

AIR COOLED CONDENSERS

RC-C Series 4 Pole

Technical Data

Model		RC19	RC24	RC28	RC30	RC34	RC37	RC47	RC54	RC62	RC74	RC82	RC93	RC100	RC109	RC115
Air Flow High	L/sec	2163	2007	1870	2306	2215	2130	4014	4374	4150	4260	5610	6225	5919	7480	6996
Air Flow Low	L/sec	1418	1305	1204	1519	1454	1394	2610	2870	2710	2788	3612	4065	3840	4816	4460
No of Motors	500mm	1	1	1	1	1	1	2	2	2	2	3	3	3	4	4
Motor Power	High Speed															
Total Watts	3 Phase	780	780	780	780	780	780	1560	1560	1560	1560	2340	2340	2340	3120	3120
Total Amps	*3 Phase	1.35	1.35	1.35	1.35	1.35	1.35	2.70	2.70	2.70	2.70	4.05	4.05	4.05	5.40	5.40
Motor Power	Low Speed															
Total Watts	3 Phase	550	550	550	550	550	550	1100	1100	1100	1100	1650	1650	1650	2200	2200
Total Amps	*3 Phase	0.94	0.94	0.94	0.94	0.94	0.94	1.88	1.88	1.88	1.88	2.82	2.82	2.82	3.76	3.76
Motor Power																
Total Watts	1 Phase	770	770	770	770	770	770	1540	1540	1540	1540	2310	2310	2310	3080	3080
Total Amps	*1 Phase	3.4	3.4	3.4	3.4	3.4	3.4	6.8	6.8	6.8	6.8	10.2	10.2	10.2	13.6	13.6

* Based on Manufacturers Nominal Data

Technical Data

Model		RC09	RC12	RC13	RC18	RC23	RC25
Air Flow High	L/sec	788	764	741	1550	1494	1441
No of Motors	350mm	1	1	1	2	2	2
Motor Power							
Total Watts	1 Phase	130	130	130	260	260	260
Total Amps	*1 Phase	0.58	0.58	0.58	1.16	1.16	1.16

* Based on Manufacturers Nominal Data

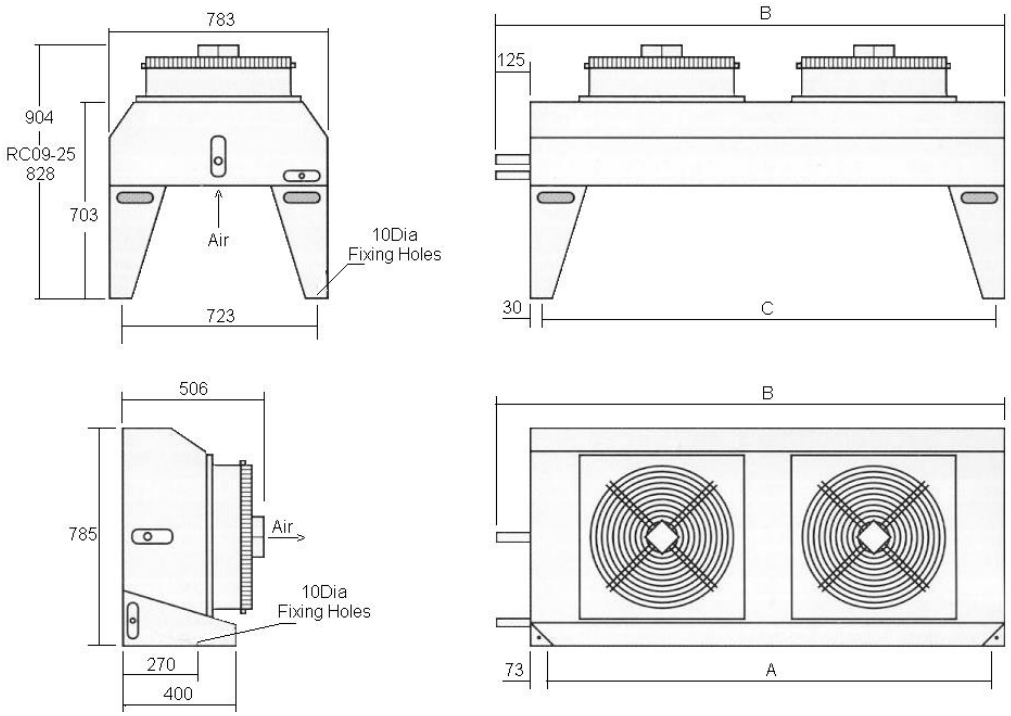


Note: Prices on last page of Buffalo Condenser Information.

BUFFALO TRIDENT CONDENSERS

AIR COOLED CONDENSERS

RC-C Series 4 Pole



Dimensions

Model		RC09	RC12	RC13	RC18	RC23	RC25
No. of Rows		2	3	4	2	3	4
Tubes High/Wide		30	30	30	30	30	30
Inlet Connections	mm	19.05	22.2	22.2	25.4	25.4	25.4
Outlet Connections	mm	15.8	15.8	15.8	22.2	22.2	22.2
*Charge R22	Kg	0.41	0.60	0.78	0.74	1.07	1.39
**Pump Down Cap'ty	Kg	2.15	3.22	4.29	3.86	5.79	7.72
Weight Unpacked	Kg	32	37	42	46	55	64
Dimensions mm	A	664	664	664	1152	1152	1152
	B	930	930	930	1418	1418	1418
	C	742	742	742	1230	1230	1230

Dimensions

Model		RC19	RC24	RC28	RC30	RC34	RC37	RC47	RC54	RC62	RC74	RC82	RC93	RC100	RC109	RC115
No. of Rows		2	3	4	3	4	5	3	3	4	5	4	4	5	4	5
Tubes High/Wide		24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
Inlet Connections	mm	25.4	28.5	28.5	28.5	28.5	28.5	34.9	34.9	41.3	41.3	41.3	41.3	41.3	41.3	41.3
Outlet Connections	mm	22.2	25.4	25.4	25.4	25.4	25.4	25.4	25.4	28.5	28.5	28.5	28.5	28.5	28.5	28.5
*Charge R22	Kg	0.73	10.7	1.38	1.58	2.06	2.54	2.13	2.66	3.45	5.08	4.14	5.18	6.35	5.52	6.77
**Pump Down Cap'ty	Kg	3.83	5.75	7.67	8.54	11.50	14.38	11.50	14.38	19.17	28.75	23.01	28.75	35.94	30.67	38.34
Weight Unpacked	Kg	50	55	60	64	72	80	93	108	121	149	157	175	195	207	228
Dimensions mm	A	816	816	816	1197	1197	1197	1578	1959	1959	2340	2340	2911	2911	3102	3102
	B	1082	1082	1082	1463	1463	1463	1844	2225	2225	2606	2606	3177	3177	3368	3368
	C	894	894	894	1275	1275	1275	1656	2037	2037	2418	2418	2989	2989	3180	3180

* Based on-4°C SST, +25°C Suction Gas Temperature, 40°C Condensing and 2°C Subcoiling

** Pump down capacity based on 80% of total volume - R22

Note: Prices on last page of Buffalo Condenser Information.

BUFFALO TRIDENT CONDENSERS

AIR COOLED CONDENSERS
DV - DH Series B

Condenser Capacity - Total Heat Rejection - Kilowatts

R22	High Speed Connection in Delta △					
	Model DV/DH					
TD/K	110B	121B	137B	165B	192B	220B
1	9.107	10.061	11.383	13.660	15.936	18.213
5	45.533	50.307	56.916	68.299	79.682	91.065
10	91.065	100.614	113.833	136.599	159.365	182.131
15	136.598	150.920	170.749	204.898	239.047	273.196
20	182.131	201.227	227.666	273.197	318.364	364.262

R22	Low Speed Connection in Star λ					
	Model DV/DH					
TD/K	110B	121B	137B	165B	192B	220B
1	6.485	7.400	8.106	9.728	11.349	12.970
5	32.426	37.002	40.532	48.638	56.745	64.849
10	64.851	74.005	81.064	97.276	113.489	129.698
15	97.277	111.007	121.595	145.914	170.234	194.546
20	129.703	148.010	162.127	194.553	226.978	259.395

R404A	High Speed Connection in Delta △					
	Model DV/DH					
TD/K	110B	121B	137B	165B	192B	220B
1	9.562	10.564	11.952	14.343	16.733	19.124
5	47.809	52.822	59.762	71.714	83.666	95.619
10	95.619	105.644	119.525	143.428	167.333	191.237
15	143.428	158.466	179.287	215.143	250.999	286.856
20	191.237	211.289	239.049	286.857	334.666	382.475

R404A	Low Speed Connection in Star λ					
	Model DV/DH					
TD/K	110B	121B	137B	165B	192B	220B
1	6.809	7.771	8.512	10.214	11.916	13.618
5	34.047	38.853	42.558	51.070	59.582	68.091
10	68.094	77.705	85.117	102.140	119.163	136.182
15	102.141	116.558	127.675	153.210	178.745	204.274
20	136.188	155.410	170.234	204.280	238.327	272.365

R407C	High Speed Connection in Delta △					
	Model DV/DH					
TD/K	110B	121B	137B	165B	192B	220B
1	8.833	9.760	11.042	13.250	15.458	17.667
5	44.167	48.798	55.209	66.250	77.292	88.334
10	88.334	97.595	110.418	132.501	154.584	176.667
15	132.500	146.393	165.627	198.751	231.876	265.001
20	176.667	195.190	220.836	265.001	309.168	353.334

R407C	Low Speed Connection in Star λ					
	Model DV/DH					
TD/K	110B	121B	137B	165B	192B	220B
1	6.292	7.178	7.863	9.436	11.008	12.581
5	31.453	35.892	39.316	47.179	55.042	62.903
10	62.906	71.785	78.632	94.358	110.084	125.807
15	94.359	107.677	117.948	141.537	165.127	188.710
20	125.812	143.570	157.263	188.716	220.169	251.613

R134a	High Speed Connection in Delta △					
	Model DV/DH					
TD/K	110B	121B	137B	165B	192B	220B
1	8.742	9.659	10.928	13.113	15.299	17.485
5	43.711	48.295	54.640	65.567	76.495	87.423
10	87.423	96.589	109.280	131.135	152.990	174.846
15	131.134	144.884	163.919	196.702	229.485	262.269
20	174.846	193.178	218.559	262.269	305.980	349.691

R134a	Low Speed Connection in Star λ					
	Model DV/DH					
TD/K	110B	121B	137B	165B	192B	220B
1	6.226	7.104	7.782	9.339	10.895	12.451
5	31.129	35.522	38.911	46.693	54.475	62.255
10	62.257	71.045	77.821	93.385	108.949	124.510
15	93.386	106.567	116.732	140.078	163.424	186.765
20	124.515	142.090	155.642	186.770	217.899	249.019

Capacity Correction Factors

Refrigerant	R22	R507	R407B
Capacity Multiplier	1.0	1.045	0.975

Note: Prices on last page of Buffalo Condenser Information.

BUFFALO TRIDENT CONDENSERS

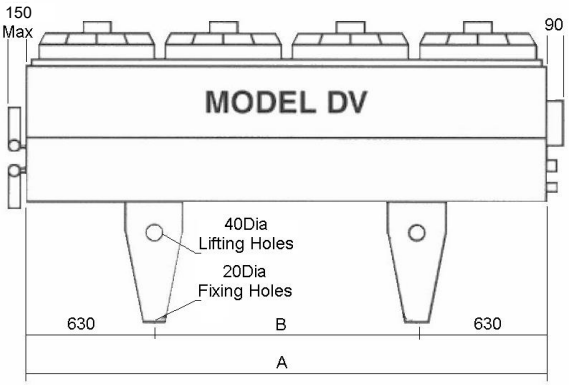
AIR COOLED CONDENSERS
DV & DH Series B

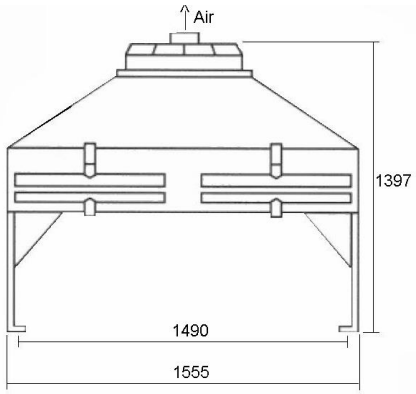
Technical Data

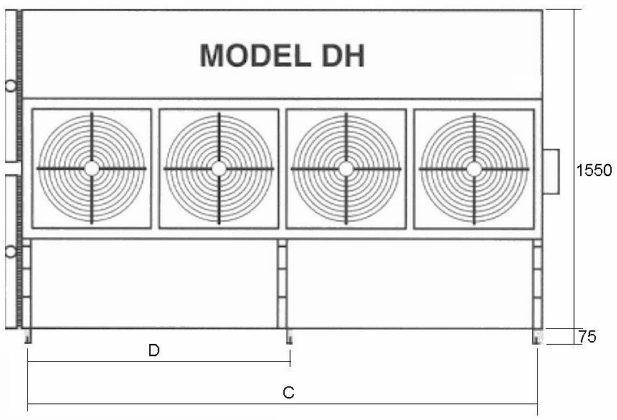
Model		110B	121B	137B	165B	192B	220B
Air Flow High	L/sec	9031	11710	11289	13547	15804	18062
Air Flow Low	L/sec	5939	7720	7424	8909	10393	11878
No of Motors / Fans	500mm	4	5	5	6	7	8
Motor Power	High Speed						
Total Watts	3 Phase	3120	3900	3900	4680	5460	6240
Total Amps	*3 Phase	5.40	6.75	6.75	8.10	9.45	10.80
Motor Power	Low Speed						
Total Watts	3 Phase	2200	2750	2750	3300	3850	4400
Total Amps	*3 Phase	3.76	4.70	4.70	5.64	6.58	7.52

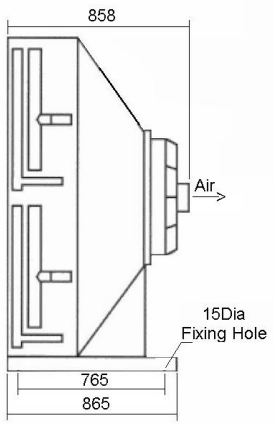
Physical Data

No of Rows		4	3	4	4	4	4
Tubes High/Wide		48	48	48	48	48	48
Inlet Connections	mm	41	41	54	54	54	54
Outlet Connections	mm	32	32	32	32	35	41
Operating Charge R22	Kg	9.84	9.41	12.23	14.61	17.00	19.36
Pump Down Capacity	Kg	52.88	49.21	65.67	78.50	91.34	104.02
Unpacked Weight	Kg	318	364	397	477	557	636
Dimensions	mm A	2440	3048	3048	3658	4267	4877
	B	1180	1788	1788	2398	3007	3617
	C	2408	3016	3016	3626	4235	4845
	D	-	-	-	1829	2439	2439









Note: Prices on last page of Buffalo Condenser Information.

BUFFALO TRIDENT CONDENSERS

Condenser Prices

RC Series

Airefrig Part Number	List Price Excl GST
RC09C	
RC12C	
RC13C	
RC18C	
RC19C	
RC23C	
RC24C	
RC25C	
RC28C	
RC30C	
RC34C	
RC37C	
RC47C	
RC54C	
RC62C	
RC74C	
RC82C	
RC93C	
RC100C	
RC109C	
RC115C	

DV & DH Series

Airefrig Part Number	List Price Excl GST
DV110B	P.O.A.
DV121B	P.O.A.
DV137B	P.O.A.
DV165B	P.O.A.
DV192B	P.O.A.
DV220B	P.O.A.
DH110B	P.O.A.
DH121B	P.O.A.
DH137B	P.O.A.
DH165B	P.O.A.
DH192B	P.O.A.
DH220B	P.O.A.





LU-VE EVAPORATOR SPARE PARTS

SH – SHF – SHA Evaporators

Evaporator Model		Fan Motor Part Number	List Price Excl GST	Fan Part Number	List Price Excl GST	Grille Part Number	List Price Excl GST	Coil Heater Part Number	Qty	List Price Excl GST
SHP	6N & E	233248002	P.O.A.	234055002	P.O.A.	23411001 C/W Casing	P.O.A.	233239051	1	P.O.A.
	9N & E									
SHS	8N & E	233322001	P.O.A	234026010	P.O.A	234114001	P.O.A.	233377001	1	P.O.A.
	12N & E									
	13N & E							233377002	1	
	15N & E									
	18N & E							233377003	1	
	22N & E									
	26N & E							089001341	1	
	32N & E									
SHA	30N–160N	233299001	P.O.A.	234092001	P.O.A	234089001	P.O.A.			
	21E							089001317	1	P.O.A.
	27E							089001322	1	
	41E							089001318	1	
	53E							089001319	1	
	79E							089001320	1	
	106E							089001321	1	

S2HC – S3HC Evaporators

Evaporator Model		Motor & Fan Part Number	List Price Excl GST	Grille Part Number	List Price Excl GST	Pan Heater Part Number	List Price Excl GST	Coil Heater Part Number	Qty	List Price Excl GST
S2HC	25N & E	Motor M4Q045DA0575B01 Fan 234092001	P.O.A.	234089001	P.O.A.	233305001	P.O.A.	233300001	2	P.O.A.
	36N & E									
	49N & E					233305002		233300002	2	
	71N & E									
	107N & E					233305003		233300003	2	
	142N & E					233305004		233300004	2	
S3HC	73N & E	233407002 For Models Post February 2002 233298001 For Models Pre February 2002	P.O.A.	234090001	P.O.A.	233305005	P.O.A.	233301001	2	P.O.A.
	106N & E								3	
	133N & E					233305002		233301005	3	
	145N & E					233305003		233301002	2	
	215N & E								3	
	272N & E					233305006		233301003	3	
	323N & E									
	362N & E					233305007		233301004	3	
	430N & E									

LU-VE EVAPORATOR SPARE PARTS

SHDN – SHDS Evaporators

Evaporator Model		Fan Motor Part Number	List Price Excl GST	Grille Part Number	List Price Excl GST	Pan Heater Part Number	List Price Excl GST	Coil Heater Part Number	Qty	List Price Excl GST
SHDN	57N & E	233223001	P.O.A.	234059001	P.O.A.	-	-	233329001	2	P.O.A.
	85N & E									
	126N & E							233329004	2	
	169N & E							233329002	2	
	253N & E							233329003	2	
	338N & E							233329005	2	
	423N & E							233329006	2	
SHDS	52N & E	233223002	P.O.A.	234059001	P.O.A.	-	-	233329001	2	P.O.A.
	74N & E									
	114N & E							233329004	2	
	146N & E							233329002	2	
	221N & E							233329003	2	
	294N & E							233329005	2	
	368N & E							233329006	2	

NHC Evaporators

Evaporator Model		Fan Motor Part Number	List Price Excl GST	Grille Part Number	List Price Excl GST	Pan Heater Part Number	List Price Excl GST	Coil Heater Part Number	Qty	List Price Excl GST
NHC	28N & E	089001310 Motor & Fan	P.O.A.	234087001	P.O.A.	EB1	P.O.A.	ES1		P.O.A.
	36N & E									
	42N & E									
	65N & E									
	84N & E					EB3		ES3		
	126N & E					EB5				
	138N & E					EB3				
	159N & E					EB5				
	260N & E					EB14		ES14		
	300N & E									
	325N & E					EB15		ES15		
	375N & E									
	450N & E					EB16		ES16		

LU-VE CONDENSERS - STVF

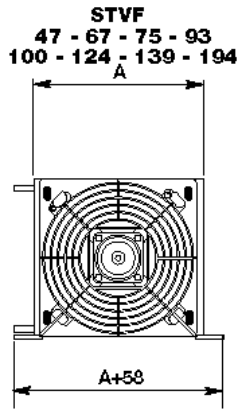
SERIES STVF
Air Cooled Tubeless Condensers

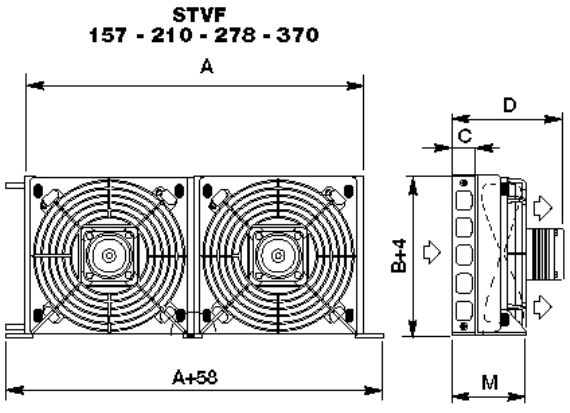
MODEL			STVF47	STVF75	STVF157	STVF370	STVF546
Capacity (watts)	R22	1 KTD 10 KTD	30.0 300	48.1 481	101.0 1010	238.0 2380	353.0 3530
	R404A	1 KTD 10 KTD	31.3 313	49.6 496	104.1 1041	245.4 2454	364.0 3640
	R134a	1 KTD 10 KTD	29.5 295	46.8 468	103.0 1030	242.7 2427	343.9 3439

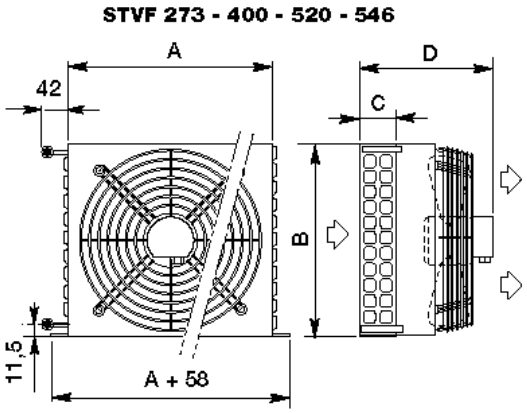
Air Quantity	L/S m^3/h	71 255	62 220	123 440	319 1140	501 1800
Fan Size	mm	170	170	170	254	275
Fan Motor	Quantity	1	1	2	2	2
230V/1/50Hz	Amps	0.18	0.18	0.36	0.64	0.88
Weight	Kg	2.1	3.0	5.5	10.9	15.7
Inlet & Outlet	mm	8	8	8	8	15.5
Dimensions	A mm	185	185	395	575	675
	B mm	184	184	184	274	304
	C mm	30	60	60	60	60
	D mm	141	171	171	182	215

Prices

Airefrig Part Number	Description	List Price Excl GST
STVF47	Air Cooled Tubeless Condenser c/w 1 x 170mm Fan 230v	
STVF75	Air Cooled Tubeless Condenser c/w 1 x 170mm Fan 230v	
STVF157	Air Cooled Tubeless Condenser c/w 2 x 170mm Fan 230v	
STVF370	Air Cooled Tubeless Condenser c/w 2 x 254mm Fan 230v	
STVF546	Air Cooled Tubeless Condenser c/w 2 x 275mm Fan 230v	







LU-VE CONDENSER SPARE PARTS

STVF – SHVN – SHVDN Condensers

Series	Condenser Model	Fan Motor Part Number	List Price Excl GST	Fan Part Number	List Price Excl GST	Grille Part Number	List Price Excl GST
STVF	47	233212004	P.O.A.	234026006	P.O.A.	245048010	P.O.A.
	67			234026001		245048011	
	75			234026006		245048010	
	93			234026010		245048012	
	100			234026001		245048011	
	124	233212005		234026005		245048013	
	139	233212004		234026010		245048012	
	157			234026006		245048010	
	194	233212005		234026005		245048013	
	210	233212004		234026001		245048011	
	273	233252001		234066003		245035001	
	278	233212004		234066003		245048012	
	370	233212005		234026005			
	400	245061002		Complete Motor Fan & Grille Assembly			
	520	245061001					
	546	233252001		23406603	P.O.A.	240147001	P.O.A.

SHVN – SHVDN

Series	Condenser Model	Fan Motor Part Number	List Price Excl GST	Horiz. Kit Part Number	List Price Excl GST	Condenser Model	Fan Motor Part Number	List Price Excl GST	Horiz. Kit Part Number	List Price Excl GST
SHVN	350mm Dia Fan 7/7-40/8	245063001	P.O.A.	089001305	P.O.A.	38/1 40/9-81/6	245063001	P.O.A.	089001306	P.O.A.
	500mm Dia Fan 24-165	245072001		089001138		800mm Dia Fan 65-760	245081001			
SHVDN	800mm Dia Fan 284-1127	245081001								

Integrated Control Solutions & Energy Savings

CAREL - a world leader in the Refrigeration and Air Conditioning sectors

CAREL offers the international market standard and custom regulation solutions for Refrigeration and Air Conditioning for the control of temperature & humidity as well as plant management using monitoring, supervisory and telemaintenance systems.

The company was founded in 1973, in the province of Padova, 30km from Venice, in the heart of the Italian north-east, the country's most industrially developed region.

CAREL's high level of technology is demonstrated by many firsts: CAREL was not only the first Italian company to have designed and produced a microprocessor-based control for precision air conditioners, but also the first company in the sector to have used SMD technology and automatic testing procedures (ATE) on 100% of its production.



CAREL ELECTRONIC CONTROLLERS

REFRIGERATION CONTROLS

IR33 Panel Mount (Infrared)

Airefrig Part Number	IR33S0LR00	IR33S0ER00	IR33C0LR00	IR33C0LB00	IR33C0HR00	IR33C0HB00
Controller Type	Thermostat (off cycle defrost)		Thermostat (full defrost management)			
Temperature Range	-50°C to +90°C using standard NTC probe or 0°C to +150°C using high range NTC probe					
Power Supply	12 - 24 Vac/dc	230 Vac	12 - 24 Vac/dc	12 - 24 Vac/dc	115 - 240 Vac	115 - 240 Vac
Defrost Type	Time/Time	Time/Time	Time/Time Time/Temp	Time/Time Time/Temp	Time/Time Time/Temp	Time/Time Time/Temp
Real Time Clock	-	-	-	✓	-	✓
Comp / Control Relay	12 Amp (res.)	8 Amp (res.)	12 Amp (res.)	12 Amp (res.)	12 Amp (res.)	12 Amp (res.)
Evap Fan Relay	-	-	8 Amp (res.)	8 Amp (res.)	8 Amp (res.)	8 Amp (res.)
Alarm / Auxiliary Relay	-	-	8 Amp (res.)	8 Amp (res.)	8 Amp (res.)	8 Amp (res.)
Defrost Relay	-	-	8 Amp (res.)	8 Amp (res.)	8 Amp (res.)	8 Amp (res.)
Control Probe – NTC (Purchase separately)	1	1	1	1	1	1
Probe 2 – NTC (Purchase separately)	1*	1*	1*	1*	1*	1*
Digital Inputs (**can program to be NTC)	2**	1**	2**	2**	2**	2**
Signal Buzzer	✓	✓	✓	✓	✓	✓
Remote Display Option (Purchase separately)	-	-	✓	✓	✓	✓
HACCP Feature	-	-	-	✓	-	✓
Serial Connection RS485 (Purchase separately)	Optional	Optional	Optional	Optional	Optional	Optional
Decimal Point	Between –19.9 to +19.9ºC	Between –19.9 to +19.9ºC	Between –19.9 to +19.9ºC	Between –19.9 to +19.9ºC	Between –19.9 to +19.9ºC	Between –19.9 to +19.9ºC
Key Programmable Opt. (Key Purchase separately)	✓	✓	✓	✓	✓	✓

* Can be configured to be evaporator (defrost termination), condenser, product or anti-freeze probe.

** Digital inputs can be programmed to be NTC sensors for second evaporator defrost management or condenser fan management with a pre-clean alarm option.

IR32 to IR33 Direct Replacements
IR32S0LBR0 ⇨ IR33S0LR00
IR32S0HBR0 ⇨ IR33S0ER00
IR32C0LBR0 ⇨ IR33C0LR00



Controller Pricing

Airefrig Part Number	IR33S0LR00	IR33S0ER00	IR33C0LR00	IR33C0LB00	IR33C0HR00	IR33C0HB00
List Price - Ex GST						

Accessories

Airefrig Part Number	Description	List Price Ex GST
IROPZKEY00	Programming Key for IR33, DN33, MasterCella2	
IROPZ48500	Serial Card IR33	
IRTRRES000	Remote Control infrared IR33	
IROPZDSP00	Remote Display Interface IR33	
IR00XGD000	Remote Display for IR33	
PSTCON05B0	5m Connector for remote display	

Airefrig Part Number	Description	List Price Ex GST
861771	Mount Box for IR33 110x110x90	
861772	Mount Box for IR33 130x130x99	
RE30	Relay Single Pole 30 Amp 240V	
TRA12VDE00	Transformer 240V to 12 V 3VA	
TRA2400000	Transformer 240V to 24 V 3VA	
NTC_____	Sensor NTC (select suitable opt.)	P.O.A.

CAREL ELECTRONIC CONTROLLERS

REFRIGERATION CONTROLS

IR33 Thermometers - Panel Mount (Infrared)

Airefrig Part Number	IR33M00N00	IR33M0ER00
Controller Type	Thermometer	
Temp Range (using NTC probe)	-50ºC to +90ºC with standard probe or 0ºC to +150ºC with high range probe	
Power Supply	12 Vac	240 Vac
Defrost Type	-	-
Real Time Clock	-	-
Comp/Control Relay	-	-
Evap Fan Relay	-	-
Defrost Relay	-	-
Auxiliary 1 Relay	-	-
Light / Aux 2 Rel	-	-
Probe 1 – NTC (Purchase separately)	1	1
Probe 2 – NTC (Purchase separately)	1	1
Digital Inputs	1	1
Signal Buzzer	✓	✓
Remote Display Option (Purchase separately)	-	-
HACCP Feature	-	-
Serial Connection RS485 (Purchase separately)	Optional	Optional
Decimal Point	Between –19.9 to +19.9ºC	
Key Programmable Opt (Purchase separately)	✓	✓

DN33 Din Rail Mount (Infrared^)

DN33S0EN00	DN33S0HA00	DN33C0LR00^	DN33C0HR00^	DN33H0HB00^
Thermostat (off cycle defrost)		Thermostat (full defrost management)		
-50ºC to +90ºC with standard probe or 0ºC to +150ºC with high range probe				
240 Vac	240 Vac	12-24 Vac/dc	240 Vac	240 Vac
Time/Time (at positive temp)		Time/Time Time/Temp		
-	-	-	-	✓
10 Amp (res.)	2HP (10A)	10 Amp (res.)	2HP (10A)	2HP (10A)
-	-	8 Amp (res.)	8 Amp (res.)	8 Amp (res.)
-	-	10 Amp (res.)	10 Amp (res.)	10 Amp (res.)
-	8 Amp (res.)	8 Amp (res.)	8 Amp (res.)	8 Amp (res.)
-	-	-	-	8 Amp (res.)
1	1	1	1	1
1*	1*	1*	1*	1*
3**	3**	3**	3**	3**
✓	✓	✓	✓	✓
-	-	✓	✓	✓
-	-	-	-	✓
Optional	Optional	Optional	Optional	Optional
Between –19.9 to +19.9ºC				
✓	✓	✓	✓	✓

Controller Pricing

Airefrig Part Number	IR33M00N00	IR33M0ER00
List Price Ex GST		

Controller Pricing

DN33S0EN00	DN33S0HA00	DN33C0LR00	DN33C0HR00	DN33H0HB00



* Can be configured to be evaporator (defrost termination), condenser, product or anti-freeze probe.
** Digital inputs can be programmed to be NTC sensors for second evaporator defrost management or condenser fan management with a pre-clean alarm option.



IR33 Panel Mount - Accessories

Airefrig Part Number	Description	List Price Ex GST
IROPZ48500	IR33 Serial Card	
IROPZKEY00	Programming Key	
IRTRRES000	Remote Control infrared	
TRA12VDE00	Transformer 240V to 12 V 3VA	
NTC_____	Sensor NTC (select suitable opt.)	P.O.A.

DN33 Din Rail Mount - Accessories

Airefrig Part Number	Description	List Price Ex GST
IROPZSER30	DN33 Serial/Remote Display Card	
IR00XGD000	Remote Display for DN33	
PSTCON05B0	5m Connector for remote display	
IROPZKEY00	Programming Key	
IRTRRES000	Remote Control infrared	
TRA12VDE00	Transformer 240V to 12V 3VA	
TRA2400000	Transformer 240V to 24V 3VA	
NTC_____	Sensor NTC (select suitable opt.)	P.O.A.

CAREL ELECTRONIC CONTROLLERS

REFRIGERATION CONTROLS

powercompact

Airefrig Part Number	PB00H0HB10
Controller Type	Thermostat
Temperature Range (using standard NTC probe)	-50 ºC to +90ºC or 0 ºC to +150ºC
Power Supply	115-230 Vac
Depth	64 mm
Defrost type	Time / Time Time / Temp
Real Time Clock	✓
Comp / Control Relay	2HP (10A)
Evap Fan Relay	8Amp (res.)
Defrost Relay	12Amp (res.)
Aux 1 Relay	8Amp (res.)
Aux 2 Relay	8Amp (res.)
Probe 1 – NTC (Purchase separately) Refer manual for function	1
Probe 2 – NTC (Purchase separately) Refer manual for function	1
Digital Inputs	2
Signal Buzzer	✓
Remote display opt	✓
HACCP	✓
Serial Connection RS485 (Purchase separately)	Optional
Decimal Point	-19.9 to +19.9
Key programming opt	✓

powercompact small

PB00S0SA50	PB00C0SN50
Thermostat	Thermostat
-50 ºC to +90ºC with standard probe or 0 ºC to +150ºC with high range NTC probe	
115-230 Vac	115-230 Vac
40 mm	40 mm
Time / Time (Off cycle)	Time / Time Time / Temp
-	-
12Amp (res.)	12Amp (res.)
-	5Amp (res.)
-	8Amp (res.)
8Amp (res.)	5Amp (res.)
-	-
1	1
1	1
2	2
✓	✓
✓	✓
-	-
Optional	Optional
-19.9 to +19.9	-19.9 to +19.9
✓	✓

powercompact small / wide

PB00S0SAFA	PB00C0SNFA
Thermostat	Thermostat
-50 ºC to +90ºC with standard probe or 0 ºC to +150ºC with high range NTC probe	
115-230 Vac	115-230 Vac
40 mm	40 mm
Time / Time (Off cycle)	Time / Time Time / Temp
-	-
12Amp (res.)	12Amp (res.)
-	5Amp (res.)
-	8Amp (res.)
8Amp (res.)	5Amp (res.)
-	-
1	1
1	1
2	2
✓	✓
✓	✓
-	-
Optional	Optional
-19.9 to +19.9	-19.9 to +19.9
✓	✓

Controller Pricing

Airefrig Part Number	PB00H0HB10
List Price - Ex GST	

PB00S0SA50	PB00C0SN50

PB00S0SAFA	PB00C0SNFA
	P.O.A.

Note: The powercompact small / wide has a blue display.







Accessories for powercompact

Airefrig Part Number	Description	List Price Ex GST
IROPZKEY00	Programming Key	
PBOPZCTR00	Large transparent cover	P.O.A.
IROPZ48500	Powercompact Serial Card	
NTC_____	Sensor NTC (various opts.)	P.O.A.

Accessories for powercompact small / wide

Airefrig Part Number	Description	List Price Ex GST
IROPZKEY00	Programming Key	
PBOPZFAC00EA	Stainless Steel Face (each)	
IROPZ48500	Powercompact Serial Card	
NTC_____	Sensor NTC (various opts.)	P.O.A.

CAREL ELECTRONIC CONTROLLERS

REFRIGERATION CONTROLS

MasterCella2 (Infrared) - Wall or Panel Mount

Airefrig Part Number	MD33A5ER00	MD33D5EB00
Controller Type	Thermostat (off cycle defrost)	Thermostat (full defrost management)
Temperature Range (using NTC probe)	-50ºC to +90ºC with standard probe or 0ºC to +150ºC with high range probe	
Power Supply	230 Vac	230 Vac
Defrost Type	Time/Time	Time/Time Time/Temp
Real Time Clock	-	✓
Comp / Control Relay	30 Amp (res.)	30 Amp (res.)
Evaporator Fan Relay	-	8 Amp (res.)
Defrost Relay	-	16 Amp (res.)
Auxiliary 1 Relay	8 Amp (res.)	8 Amp (res.)
Light / Auxiliary 2 Relay	2 HP	2 HP
Control Probe – NTC (Purchase separately)	1	1
Probe 2 – NTC (Purchase separately)	1*	1*
Digital Inputs (**can program to be NTC)	3**	3**
Signal Buzzer	✓	✓
Remote Display Option (Purchase separately)	✓	✓
HACCP Feature	-	✓
Serial Connection RS485 (Purchase separately)	Optional	Optional
Decimal Point	Between –19.9 to +19.9ºC	Between –19.9 to +19.9ºC
Key Programmable Opt. (Purchase separately)	✓	✓

* Can be configured to be evaporator (defrost termination), condenser, product or anti-freeze probe.

** Digital inputs can be programmed to be NTC sensors for second evaporator defrost management or condenser fan management with a pre-clean alarm option.

Controller Pricing

Airefrig Part Number	MD33A5ER00	MD33D5EB00
List Price - Ex GST		

MasterCella2 (Infrared) - Accessories

Airefrig Part Number	Description	List Price Ex GST
IROPZSEM30	MD33 Serial/ Remote Disp. Card	
IR00XGD000	Remote Display for IR33	
PSTCON1000	10m Connector for remote display	P.O.A.
IROPZKEY00	Programming Key	
IRTRRES000	Remote Control Infrared	
NTC_____	Sensor NTC (select suitable opt.)	P.O.A.

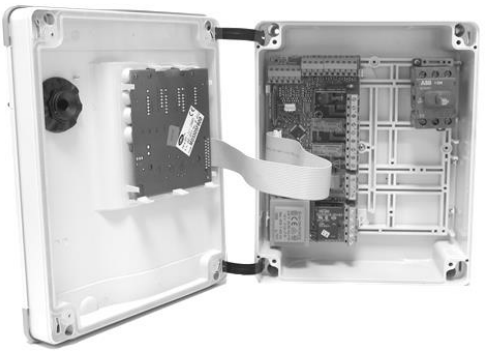


MasterCella2

MasterCella2's flexibility gives a powerful solution for the control of refrigerated rooms and cabinets.

It is based on the IR33 platform range of refrigeration controllers that results in identical programming and the use of common accessories.

- Large space inside dedicated to wiring, relays or other auxiliary devices.
- Cable connection either from top or bottom.
- Buzzer on all models.
- Can be wall or panel mounted.
- Infrared enabled for use with a remote control.
- High efficiency green LED display with icons.
- Keypad locks for individual functions or buttons.
- Pump down management.
- The auxiliary relay can be configured as a second compressor.
- The auxiliary relay can be configured as light.
- Neutral zone management.
- Smart defrost with different operating modes.
- Condenser probe management.
- 2nd evaporator defrosts management.
- Door switch management.
- HACCP feature.



CAREL ELECTRONIC CONTROLLERS

REFRIGERATION CONTROLS

MasterCella Split

Airefrig Part Number	MTST00V100 (Control Panel)	MTSB000010 (Relay Board)
Controller Type	Thermostat (full defrost management)	
Temperature Range (using standard NTC probe)	-50 to +90°C	
Power Supply	24Vac (4 VA)	230 Vac
Defrost Type	Time/Time Time/Temp	
Real Time Clock	✓	
Comp / Control Relay	16 Amp res. (SPST) 2HP	
Evap Fan Relay	10 Amp res. (SPST)	
Auxiliary 1 / Light Relay	16 Amp res. (SPST)	
Auxiliary 2 Relay	10 Amp res. (SPST)	
Defrost Relay	16 Amp res. (SPST)	
Alarm Relay	10 Amp res. (SPDT)	
Control Probe – NTC (Purchase separately)	1	
Defrost Probe – NTC (Purchase separately)	1	
Product Probe – NTC (Purchase separately)	1	
Digital Inputs	2	
Buzzer	✓	
HACCP Feature	✓	
Serial Connection RS485 (Purchase separately)	Optional	
Decimal Point	Between –19.9 to +19.9°C	
Key Programmable Opt. (Key Purchase separately)	✓	

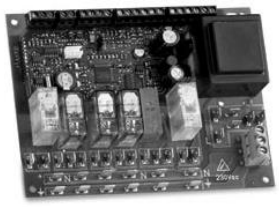
Controller Pricing

Airefrig Part Number	MTST00V100 (Control Panel)	MTSB000010 (Relay Board)
List Price Ex - GST		

MasterCella Split - Accessories

Airefrig Part Number	Description	List Price Ex GST
FCSER00000	MasterCella Split - Serial Card	P.O.A.
MTSTKIT000	MasterCella Split - Panel Mount Kit	P.O.A.
PSOPZKEY00	M/Cella Split - Programming Key	
TRA0060000	Transformer 240V to 12/24V 4VA	
NTC_____	Sensor NTC (select suitable opt.)	P.O.A.





MasterCella *split*

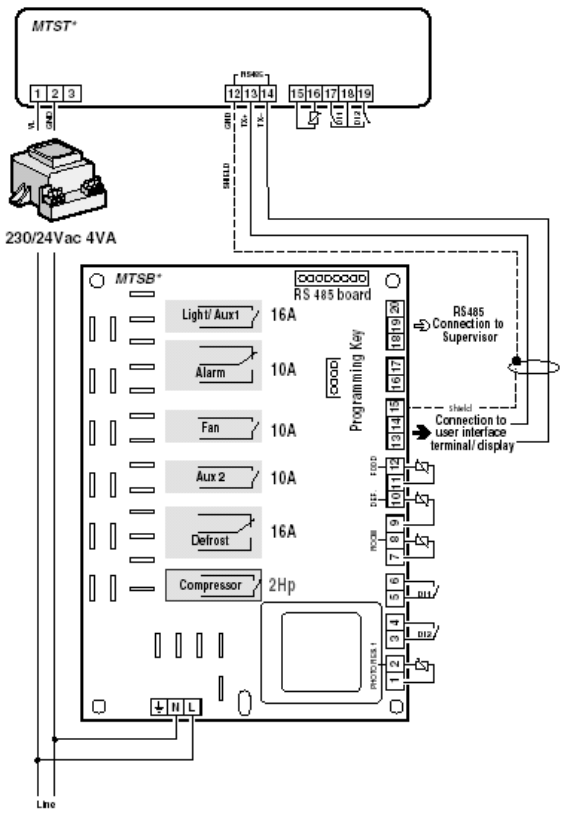
MasterCella *split*: the simple and complete solution for the control of freezer and coolrooms with remote condensing units.

The display control panel can be mounted on the coolroom where the temperature can be seen and the light switch option can be utilized.

RS485 1 pair twisted and shielded cable is required to connect the relay board (MTSB000010) and control panel (MTST00V100) up to a maximum length of 100 metres.

MasterCella Split can be configured using the keypad or alternatively using an electronic programming key.

MasterCella Split has a real time clock that allows defrost cycles to be programmed for set times and also features HACCP. It has six relays for complete control of the compressor (up to 2HP), lights, evaporator fans, defrost heaters, auxiliary outputs and alarms. The relay outputs can be configured either for power switching contacts (230vac) or voltage free contacts.



CAREL ELECTRONIC CONTROLLERS

REFRIGERATION CONTROLS

PJEZ Panel Mount (easy series – replace PJ32)			**PJEZ Compact**	**PJEZ Light switch**	**PJEZ Milk vat**
Airefrig Part Number	PJEZS0H000	PJEZC00000	PJEZSNH0E0	PJS2X0H000	PJS1Y0V000
Controller Type	Thermostat (off cycle defrost)	Thermostat (full defrost management)	Thermostat (off cycle defrost)	Thermostat (off cycle defrost)	Thermostat
Temperature Range	-50 to +90°C	-50 to +90°C	-50 to +90°C	-50 to +90°C	-50 to +90°C
Power Supply	230 Vac	230 Vac	230 Vac	230 Vac	230 Vac
Defrost Type	Time/Time	Time/Time Time/Temp	Time/Time	Time/Time	No defrost
Real Time Clock	-	-	-	-	-
Comp / Control Relay	2HP (10A)	8 Amp res.	2HP (10A)	2HP (10A)	12 Amp res.
Evap Fan Relay	-	8 Amp res.	-	-	-
Defrost Relay	-	8 Amp res.	-	-	-
Auxiliary Relay	-	-	-	Light: 8 A res	Stirrer: 8 A res
Control Probe – NTC (Purchase separately)	1	1	1	1	1
Defrost Probe – NTC (Purchase separately)	1	1	1	-	-
Product Probe – NTC (Purchase separately)	1	1	-	1	1
Digital Inputs	1	1	-	1	-
Signal Buzzer	✓	✓	-	✓	✓
Serial Connection RS485 (Purchase separately)	Optional	Optional	-	Optional	Optional
Decimal Point	-19.9 to +19.9	-19.9 to +19.9	-19.9 to +19.9	-19.9 to +19.9	-19.9 to +19.9
Key* Programmable Opt. (Key Purchase separately)	✓	✓	-	✓	✓
Plug-in Terminals	✓	✓	Fixed screw	✓	Fixed screw
Front Panel Mounting	✓	✓	✓	✓	✓

* Program Key (battery powered) allows the controllers to be programmed without having to be connected to a power source.

Controller Pricing

Airefrig Part Number	PJEZS0H000	PJEZC00000	PJEZSNH0E0	PJS2X0H000	PJS1Y0V000
List Price - Ex GST					

Accessories for PJEZ easy

Airefrig Part Number	Description	List Price Ex GST
IROPZKEY00	Programming key	
IROPZ485S0	easy serial card	P.O.A.
NTC_____	Sensor NTC (select suitable opt.)	P.O.A.



PJEZ Controller



PJEZ Compact Controller



RS485 serial card



Programming key

CAREL ELECTRONIC CONTROLLERS

REFRIGERATION CONTROLS

MX30 – MPXPRO Step 3 Modular Controllers for Supermarket Case Control

Airefrig Part Number	MX30M21HO0	MX30M25HO0
Controller Type	Master (Can be configured as a Slave)	
Temperature Range	-50 to +150°C	-50 to +150°C
Power Supply	230 Vac	230 Vac
Defrost Type	Time/Time Time/Temp	Time/Time Time/Temp
Control Relay (R1)	8 Amp res.	8 Amp res.
Aux3 (Light - R2)	2HP	2HP
Defrost Relay (R3)	16 Amp res.	16 Amp res.
Aux1(Evap Fan - R4)	8 Amp res.	8 Amp res.
Aux2 (Alarm - R5)	8 Amp res.	8 Amp res.
Analogue inputs*	3 to 7	3 to 7
Probe inputs type	NTC, PTC, Pt1000	
Pressure inputs type	Ratiometric (0-5V), 4-20mA, 0-10V	
Digital inputs*	1 to 5	1 to 5
E2V driver	-	✓
PWM valve driver	-	-
0-10V output	-	✓
PWM output (fan/heater)	2	2
Signal Buzzer	✓	✓
Key Programmable Opt. (Key Purchase separately)	✓	✓
Plug-in Terminals	✓	✓
Remote display option	✓	✓

* Some inputs can be set as analogue or digital input.

A **MPXPRO** controller is mounted in each cabinet, with up to 4 slaves managed by one master. The master co-ordinates defrost synchronisation, alarm management & connection to the remote supervisory system if in use.



Controller Pricing

Airefrig Part Number	MX30M21HO0	MX30M25HO0
List Price - Ex GST	P.O.A.	

Accessories

Airefrig Part Number	Description	List Price Ex GST
IR00UGC300	Terminal (green LED, full optional, IR, commissioning)	
IRTRMPX000	MPXPRO Remote control	P.O.A.
MXOPZKEYA0	Programming Key for MPXPRO	P.O.A.
PRECONFGMPXPRO	Pre-configuration of MPXPRO	P.O.A.

Airefrig Part Number	Description	List Price Ex GST
TRADRBE240	Transformer for DIN 230Vac / 24Vac 20A with fuse carrier	
TRA00BE240	Transformer for PANEL 230Vac / 24Vac 20A with fuse carrier	
NTC_____	Sensor NTC (select suitable opt.)	P.O.A.
SPKT____R0	Sensor ratiometric (0-5V)	P.O.A.

CAREL ELECTRONIC CONTROLLERS

UNIVERSAL TEMPERATURE CONTROLS

IR33*7 Panel Mount (Infrared) Universal Thermostats – Replace IR32 Universal for Temperature

Airefrig Part Number	IR33V7**20	IR33W7**20	IR33Z7**20	IR33D7LR20 ^	IR33A7LR20 ^	IR33E7LR20
Controller Type	1 stage T/stat	2 stage T/stat	4 stage T/stat	1 stage T/stat PWM	4 stage T/stat PWM	2 stage T/stat 2 analogue out
Power Supply	** LR = 12-24 Vac/dc HR = 230Vac			12-24 Vac/dc		
Relay 1	8 Amp res.	8 Amp res.	8 Amp res.	10Vdc for SSR^	10Vdc for SSR^	8 Amp res.
Relay 2	-	8 Amp res.	8 Amp res.	-	10Vdc for SSR^	10Vdc
Relay 3	-	-	8 Amp res.	-	10Vdc for SSR^	8 Amp res.
Relay 4	-	-	8 Amp res.	-	10Vdc for SSR^	10Vdc
Control Probe (Purchase separately)	Standard NTC (-50 to +90°C)	High range NTC (-40 to +150°C)		PTC (-50 to +150°C)	Pt1000 (-50 to +150°C)	
2nd Probe (Purchase separately) Refer manual for function						
Digital Inputs	2	2	2	2	2	2
Signal Buzzer	✓	✓	✓	✓	✓	✓
Serial Connection RS485 (Purchase separately)	Optional	Optional	Optional	Optional	Optional	Optional
Key Programmable Opt. (Purchase separately)	✓	✓	✓	✓	✓	✓
Decimal Point	✓	✓	✓	✓	✓	✓

Note: The IR33*7 universal temperature controllers can be configured for a lot of different applications. Programming is made easy by 9 selectable operating modes eg: direct (cooling), reverse (heating), dead zone (heating and cooling), alarm, PWM…

^ The basic characteristics of these controllers is the possibility to control the commonly used solid state relays or alternatively the optional Carel CONVONOFF0 & CONV0/10A0 modules. Each output can be connected to a different CONV___ module to operate mixed configurations (relay, 0 to 10Vdc, 4 to 20mA, solid state relay) as well as the ability to use the outputs (up to 4) with PWM (pulse width modulation). These controls offer a range of different applications such as control of ovens, modulating valves, control of ON/OFF actuators or for alarm outputs.

Controller Pricing

Airefrig Part Number	Power Supply Options	List Price Ex GST
IR33V7LR20	12-24 Vac/dc	
IR33V7HR20	230Vac	
IR33W7LR20	12-24 Vac/dc	
IR33W7HR20	230Vac	
IR33Z7LR20	12-24 Vac/dc	
IR33Z7HR20	230Vac	
IR33D7LR20 ^	12-24 Vac/dc	
IR33A7LR20 ^	12-24 Vac/dc	
IR33E7LR20	12-24 Vac/dc	P.O.A.



Accessories for IR33 Universal

Airefrig Part Number	Description	List Price Ex GST
IROPZKEY00	Programming Key	
IROPZ48500	IR33 Serial Card	
IRTRUES000	Remote Control Infrared	P.O.A.
TRA12VDE00	Transformer 240V to 12 V 3VA	
TRA2400000	Transformer 240V to 24 V 3VA	

Airefrig Part Number	Description	List Price Ex GST
861771	Mount Box for IR32/33 110x110x90	
861772	Mount Box for IR32/33 130x130x99	
RE30	Relay Single Pole 30 Amp 240V	
PTC0150000	Sensor PTC 1.5m cable	
NTC_____	Sensor NTC (select suitable opt.)	P.O.A.

CAREL ELECTRONIC CONTROLLERS

UNIVERSAL TEMPERATURE CONTROLS

DN33*7 Din Rail Mount (Infrared) Universal Thermostats – Replace IRDR universal for Temperature

Airefrig Part Number	DN33V7**20	DN33W7**20	DN33Z7**20	DN33E7LR20
Controller Type	1 stage T/stat	2 stage T/stat	4 stage T/stat	2 stage T/stat 2 analogue out
Power Supply	** LR = 12-24 Vac/dc HR = 230Vac			
Relay 1	8 Amp res.	8 Amp res.	8 Amp res.	8 Amp res.
Relay 2	-	8 Amp res.	8 Amp res.	10Vdc
Relay 3	-	-	8 Amp res.	8 Amp res.
Relay 4	-	-	8 Amp res.	10Vdc
Control Probe (Purchase separately)	Standard NTC, High range NTC, PTC, Pt1000			
2nd Probe (Purchase separately) Refer manual for function				
Digital Inputs	2	2	2	2
Signal Buzzer	✓	✓	✓	✓
Serial Connection RS485 (Purchase separately)	Optional	Optional	Optional	Optional
Decimal Point	✓	✓	✓	✓
Key Programmable Opt. (Purchase separately)	✓	✓	✓	✓

Note: Programming is made easy by 9 selectable operating modes eg: direct, reverse, dead zone, alarm, PWM…

Controller Pricing

Airefrig Part Number	Power Supply Options	List Price Ex GST
DN33V7LR20	12-24 Vac/dc	
DN33V7HR20	230Vac	
DN33W7LR20	12-24 Vac/dc	
DN33W7HR20	230Vac	
DN33Z7LR20	12-24 Vac/dc	
DN33Z7HR20	230Vac	
DN33E7LR20	12-24 Vac/dc	P.O.A.



DN33 controllers

Accessories for DN33 Universal

Airefrig Part Number	Description	List Price Ex GST
IROPZKEY00	Programming Key	
IROPZSER30	DN33 Serial Card	
IRTRUES000	Remote Control Infrared	P.O.A.
RE30	Relay Single Pole 30 Amp 240V	
PTC0150000	Sensor PTC 1.5m cable	
NTC_____	Sensor NTC (select suitable opt.)	P.O.A.

CAREL ELECTRONIC CONTROLLERS

UNIVERSAL TEMPERATURE CONTROLS

IR33*9 Panel Mount (Infrared) Universal Thermostats – Replace IR32 Universal for Temperature / Humidity / Pressure

Airefrig Part Number	IR33V9**20	IR33W9**20	IR33Z9**20	IR33D9MR20 ^	IR33A9MR00 ^	IR33E9MR20
Controller Type	1 stage T/stat	2 stage T/stat	4 stage T/stat	1 stage T/stat PWM	4 stage T/stat PWM	2 stage T/stat 2 analogue out
Power Supply	** MR = 24 Vac/dc HR = 230Vac			24 Vac/dc		
Relay 1	8 Amp res.	8 Amp res.	8 Amp res.	10Vdc for SSR^	10Vdc for SSR^	8 Amp res.
Relay 2	-	8 Amp res.	8 Amp res.	-	10Vdc for SSR^	10Vdc
Relay 3	-	-	8 Amp res.	-	10Vdc for SSR^	8 Amp res.
Relay 4	-	-	8 Amp res.	-	10Vdc for SSR^	10Vdc
Control Probe (Purchase separately)	Standard NTC (-50 to +110°C), High range NTC (-10 to +150°C), PTC (-50 to +150°C) Pt1000, Pt100, TCJ/K, 0-1V, -0,5-1,3V, 0-10V, 0-5V Ratiometric, 0-20mA, 4-20mA					
2nd Probe (Purchase separately) Refer manual for function						
Digital Inputs	2	2	2	2	2	2
Signal Buzzer	✓	✓	✓	✓	✓	✓
Serial Connection RS485 (Purchase separately)	Optional	Optional	Optional	Optional	Optional	Optional
Key Programmable Opt. (Purchase separately)	✓	✓	✓	✓	✓	✓
Decimal Point	✓	✓	✓	✓	✓	✓

Note: The IR33*9 universal controllers can be configured for a lot of different applications. Programming is made easy by 9 selectable operating modes eg: direct, reverse, dead zone, alarm, PWM…

^ The basic characteristics of these controllers is the possibility to control the commonly used solid state relays or alternatively the optional Carel CONVONOFF0 & CONV0/10A0 modules. Each output can be connected to a different CONV___ module to operate mixed configurations (relay, 0 to 10Vdc, 4 to 20mA, solid state relay) as well as the ability to use the outputs (up to 4) with PWM (pulse width modulation). These controls offer a range of different applications such as control of ovens, modulating valves, control of ON/OFF actuators or for alarm outputs.

Controller Pricing

Airefrig Part Number	Power Supply Options	List Price Ex GST
IR33V9MR20	24 Vac/dc	
IR33V9HR20	230Vac	
IR33W9MR20	24 Vac/dc	
IR33W9HR20	230Vac	
IR33Z9MR20	24 Vac/dc	
IR33Z9HR20	230Vac	
IR33D9MR20 ^	24 Vac/dc	P.O.A.
IR33A9MR20 ^	24 Vac/dc	
IR33E9MR20	24 Vac/dc	



Accessories for IR33 Universal

Airefrig Part Number	Description	List Price Ex GST
IROPZKEY00	Programming Key	
IROPZ48500	IR33 Serial Card	
IRTRUES000	Remote Control Infrared	P.O.A.
TRA12VDE00	Transformer 240V to 12 V 3VA	
TRA2400000	Transformer 240V to 24 V 3VA	

Airefrig Part Number	Description	List Price Ex GST
861771	Mount Box for IR32/33 110x110x90	
861772	Mount Box for IR32/33 130x130x99	
RE30	Relay Single Pole 30 Amp 240V	
PTC0150000	Sensor PTC 1.5m cable	
NTC_____	Sensor NTC (select suitable opt.)	P.O.A.

CAREL ELECTRONIC CONTROLLERS

UNIVERSAL TEMPERATURE CONTROLS

DN33*9 Din Rail Mount (Infrared) Universal Thermostats – Replace IRDR universal for Temperature/Humidity/Pressure

Airefrig Part Number	DN33V9**20	DN33W9**20	DN33Z9**20	DN33E9MR20
Controller Type	1 stage T/stat	2 stage T/stat	4 stage T/stat	2 stage T/stat 2 analogue out
Power Supply	** MR = 24 Vac/dc HR = 230Vac			
Relay 1	8 Amp res.	8 Amp res.	8 Amp res.	8 Amp res.
Relay 2	-	8 Amp res.	8 Amp res.	10Vdc
Relay 3	-	-	8 Amp res.	8 Amp res.
Relay 4	-	-	8 Amp res.	10Vdc
Control Probe (Purchase separately)	Standard NTC (-50 to +110°C), High range NTC (-10 to +150°C), PTC (-50 to +150°C) Pt1000, Pt100, TCJ/K, 0-1V, -0,5-1,3V, 0-10V, 0-5V Ratiometric, 0-20mA, 4-20mA			
2nd Probe (Purchase separately) Refer manual for function				
Digital Inputs	2	2	2	2
Signal Buzzer	✓	✓	✓	✓
Serial Connection RS485 (Purchase separately)	Optional	Optional	Optional	Optional
Decimal Point	✓	✓	✓	✓
Key Programmable Opt. (Purchase separately)	✓	✓	✓	✓

Note: Programming is made easy by 9 selectable operating modes eg: direct, reverse, dead zone, alarm, PWM…

Controller Pricing

Airefrig Part Number	Power Supply Options	List Price Ex GST
DN33V9MR20	24 Vac/dc	
DN33V9HR20	230Vac	P.O.A.
DN33W9MR20	24 Vac/dc	
DN33W9HR20	230Vac	
DN33Z9MR20	24 Vac/dc	
DN33Z9HR20	230Vac	
DN33E9MR20	24 Vac/dc	



Accessories for DN33 Universal

Airefrig Part Number	Description	List Price Ex GST
IROPZKEY00	Programming Key	
IROPZSER30	DN33 Serial Card	
IRTRUES000	Remote Control Infrared	P.O.A.
RE30	Relay Single Pole 30 Amp 240V	
PTC0150000	Sensor PTC 1.5m cable	
NTC_____	Sensor NTC (select suitable opt.)	P.O.A.

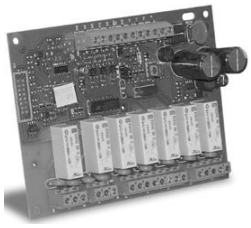
CAREL ELECTRONIC CONTROLLERS

CONFIGURABLE AIR CONDITIONING CONTROLLER

aria HVAC Configurable Controller

Airefrig Part Number	TAT0000CW0 (Control Panel)	TABASE7000 (Relay Board)
Controller Operation	Parameter **H1** setting dictates what type of control the aria will be. **(see tables below)**	
Temperature Range (using standard NTC probe)	0 to +50°C	
Power Supply	Powered from Relay Board - by 2 wires	24Vac (12VA)
Type of Mounting	Wall Mount	Surface mount (in electrical panel)
Relays	-	7
Internal Sensor in Control Panel	1 x internal sensor (*or remote option)	-
Probe 1 – NTC (Purchase separately)	*1 x sensor (for remote option)	-
Probe 3 – NTC (Purchase separately)	-	De-ice control on outdoor unit
De-Ice	Temp initiate & temp terminate with a min time between cycles	
Multi function relay options (Parameter H2)	-	1 = Alarm 2 = Outdoor Fan 4= Heat/cool indication
Digital Inputs (3)	- For fault - Remote ON/OFF - Heat/Cool selection	
Time Settings (4)	- Off - Day - Night - Unoccupied	
Indoor Fan Control	Auto or Continuous (change by entering into control)	
7 Day Time Clock	✓	
Decimal Point Resolution	0.5°C	
Serial Connection RS485 (Purchase separately)	-	✓ (refer manual)
Key Program Opt. (Key Purchase separately)	✓	
Max Distance Between Control Panel & Relay Board	150 metres	





aria HVAC Controller

Installation is simplified as only a 2 wire cable is needed to connect ***aria*** terminal (located in the room) to its power board, which is located at the air conditioner or fan coil. The three digital inputs on the power board can be configured for a series of functions including: cooling/heating selection, remote ON/OFF, alarm control (generic, filter, low pressure, fan overload, etc).

An additional analogue input can be used for automatic defrost control, energy saving or set point compensation. Parameters can be password protected to prevent non authorised access.

Controller Pricing

Airefrig Part Number	TAT0000CW0 (Control Panel)	TABASE7000 (Relay Board)
List Price Ex - GST		

aria HVAC Programmable Controller - Accessories

Airefrig Part Number	Description	List Price Ex GST
TRA00BE240	Transformer 240 to 24Vac 20VA	
TAKEY00000	Programming Key	P.O.A.
DPWT011000	NTC Room Sensor (wall mount)	
DPDT011000	NTC Duct Sensor	
NTC_____	Sensor NTC (select suitable opt.)	P.O.A.

aria "H1" Parameter Setting Examples

H1 Parameter Setting Mode Examples	Description	Relay 7 SPST	Relay 6 SPST	Relay 5 SPST	Relay 4 SPST	Relay 3 SPST	Relay 2 SPST	Relay 1 SPST
3	3 stage heating only (with economy cycle)	Economy Open	Economy Close	Heat 1	Heat 2	Indoor Fan	Heat 4	Multi Function
4	2 stage cooling only (with economy cycle)	Economy Open	Economy Close	Cool 1	Cool 2	Indoor Fan	Multi Function	Alarm
11	1 comp heat pump (with economy cycle)	Economy Open	Economy Close	Comp	Indoor Fan	Auxiliary Heat	Reversing Valve	Multi Function
12	2 comp heat pump (with 1 stage aux heat)	Comp 1	Comp 2	Indoor Fan	Auxiliary Heat	Multi Function	Reversing Valve	Alarm
14	1 comp heat pump (with 3 speed fan)	Comp 1	Auxiliary Heat	Fan speed 1	Fan speed 2	Fan speed 3	Reversing Valve	Multi Function

(Note: There are another 14 options for the **H1** parameter)

CAREL ELECTRONIC CONTROLLERS

CONFIGURABLE AIR CONDITIONING CONTROLLER

clima is the CAREL proposal for the management of simple air-conditioning and heating systems. The 0 to 10V output can also be connected for the modulating control of the CAREL “compactSteam” humidifier in residential and light commercial applications.

clima comes with a built in temperature or temperature/humidity sensor, one multifunction digital input, up to two relays + one 0 to 10V proportional output for 11 different control modes, including zone control for radiant underfloor installations.
In addition, an outside temperature sensor can be connected for automatic compensation of the temperature and humidity set points.
The Real Time Clock manages a daily time band, and the optional RS485 serial interface completes the product, making it a technologically advanced solution.

clima HVAC Configurable Controller

Airefrig Part Number	ADCA000100	ADCA000210	ADCD000100	ADCF000210
Controller Type	Classic Thermostat	Advanced Thermostat	Classic Humidistat	Advanced Thermostat / Humidistat
Temperature Range	10 ºC to 40ºC	10 ºC to 40ºC	-	10 ºC to 40º
Humidity Range	-	-	10 %rH to 70 %rH	10 %rH to 70 %rH
Power Supply	24 Vac (1VA)			
Relays	1	2	1	2
Analogue output	1	1	1	1
Real Time Clock	-	✓	-	✓
Digital Input	1: heat / cool selection, 2: Remote ON / OFF, 3: Day / Night selection, 4: Alarm from homeSteam			
Decimal point resolution	0.1 ºC	0.1 ºC	1 %rH	0.1 ºC / 1 %rH
Serial Connection RS485 (Purchase separately)	Optional	Optional	Optional	Optional
Key programming option	✓	✓	✓	✓

General specifications:
Dimension: 135 x 86 x 36 mm.
Type of mounting: wall mount.
Internal sensor in control panel (temperature (NTC) and humidity).
Analogue input for external sensor.



Airefrig Part Number	ADCA000100	ADCA000210	ADCD000100	ADCF000210
List Price Ex GST	P.O.A.	P.O.A.	P.O.A.	

CAREL ELECTRONIC CONTROLLERS

PHASE SEQUENCE CONTROLLERS

RSF Phase Sequence Controller

Airefrig Part Number	RSF077D000
Power Supply	220 Vac
Changeover contact output relay	240 Vac - 8A
Response Time	80 ms
Consumption	0.8 VA
Dimensions	2 DIN modules (87 x 60 x 36 mm)
Index of protection	IP40
Mounting	DIN rail

Controller pricing

Airefrig Part Number	RSF077D000
List Price - Ex GST	

This electronic device measures the correct sequence and presence of phases L1, L2, L3 at input. It is fitted with an output relay with changeover contacts.



ANTI SWEAT HEATER CONTROL

ACC is a microprocessor controller that is used to prevent the formation of condensate on cold surfaces, such as display case windows, measuring the dewpoint and consequently heating the cold surface so as to maintain the temperature above the dewpoint. Heating is performed by controlling the voltage applied to door heaters, using phase control integrated into the device.

ACC Anti-sweat Heater Control

Airefrig Part Number	ACC0082100
Power Supply	230 Vac
Analogue Outputs	1 ph control, 0 to 230Vac single-ph, 8A
Analogue Inputs	1 x 0 to 10V, 2 x NTC
Digital Inputs	1
Serial Outputs	1 standard RS485
Dimensions	140 x 135 x 90 mm
Index of protection	IP43

Controller Pricing

Airefrig Part Number	ACC0082100
List Price - Ex GST	

The controller has the following characteristics:

- Dewpoint calculation
- Manual offset setting
- Programmable digital input (alarm or enabling signal)
- Master / Slave function
- Serial interface for connection to supervisory systems or local network



Accessories for ACC

Airefrig Part Number	Description	List Price Ex GST
NTC060WG00	Glass temperature probe -50 to +105 °C	
DPWC115000	Wall mount temperature and humidity probe 0 to 50°C (NTC) & 10 to 90 %rH (0-10V) (replaces ASWC115000)	

FLOOD DETECTION MODULE

The FLOS* flood detector is an electronic device complete with sensor probe designed to detect the presence of water and consequently signal the alarm. The device is typically installed inside the electrical panel, while the probe should be located in the zone being controlled.

FLO Flood Detection Devices

Airefrig Part Number	Description	List Price Ex GST
FLOE000010	Flood controller 24V DIN rail mount	
FLOR000000	Flood sensor tape (Roll of 25m)	
FLOS000000	Flood sensor	



TRAPPED PERSONNEL ALARM KIT

ColdWatch

The trapped personnel alarm kit is a safety system to be fitted in cool rooms & freezer rooms. It allows personnel trapped inside the cold room to call for help by pressing an emergency button and thus activating the audible signal-warning light on the control panel outside.

The system consists of a control unit, a backup battery and an emergency button with light.

The main features are:
- Visual and audible alarm outside the cold room.
- Permanently lit emergency button inside the cold room.
- Backup battery in the event of blackouts.
- Designed in compliance with Australian Building codes board.

Specifications

- Main power supply: 230 Vac 50 Hz
- Operating autonomy:
  With 230 Vac power connected: unlimited
  With fully charged battery: 10h
- Battery: 12 Vdc
- Battery life: 10h
- Visual signal: Flashing red LED
- Sound emitted: 90 dB at 3 m
- Emergency button inside cold room: Red LED, 12Vdc – 25 to 40°C IP67
- Module on outside of cold room: - 10 to 40°C IP43
- Auxiliary relay: 250 Vac 8 Amp AC1 (contact closed with alarm active)

Airefrig Part Number	Description	List Price Ex GST
CM00006236	ColdWatch Person Trapped Alarm	
KTCWPSENGL	ColdWatch push button spare kit	



CAREL ELECTRONIC CONTROLLERS

pRACK CONTROLLERS

pRACK - Rack Controller Kits

Airefrig Part Number	Description	Configuration	Relays	Controller Mounting	List Price Ex GST
PRK100X3D0	XXS board kit with on board display	Maximum software configuration (actual will depend on the number of relay outputs etc of the controller see I/O schedule table below) Note: not all sensor inputs are used by the software. Compressors: 12 Unloaders per compressor: 3 Condenser Fans: 16 Sensor inputs for – suction pressure, discharge pressure, refrigerant leak detection sensor, power current transducer. Analogue outputs for control of VSD for compressor and or condenser fans.	7	Din Rail	P.O.A.
PRK100X3DK	XXS board kit with remote PGD display		7		P.O.A.
PRK100S3D0	Small board kit with on board display		8		P.O.A.
PRK100L3B0	Large board kit with on board display		14 + 4 SSR		P.O.A.
PRK100L3DK	Large board kit with remote PGD display		18		P.O.A.

The above controllers are preloaded with the Carel standard pRack control software.
Note: The maximum configuration of the rack software (also depends on the actual hardware configuration of the controller) is Compressors: 12, Unloaders: 3 per compressor, Condenser Fans: 16, Alarm: 1.
2 x 240/24V transformers are required, VA rating depends on how many PCO's are connected.
These transformers cannot power other devices.



pRack inputs / outputs schedule

Controller	Analogue Inputs	Digital Inputs	Digital (relay) Outputs	Analogue Outputs
XXS	2+6*	2	7	1+1 PWM
Small	3+2*	8	8	4
Large	6+4*	14+4(230V)	18 or 14+4SSR	6

*Can also be used as digital input

CAREL ELECTRONIC CONTROLLERS

FAN SPEED CONTROLLER

FCS - Power Board Slave 230V Single Phase

Airefrig Part Number	FCSM042300	FCSM082300	FCSM122300
Power Supply	230V	230V	230V
Control Signal	0 to 10Vdc		
Index of protection	IP00 (open board)		
Rated current	4A	8A	12A
Peak current	4 x r.current	3 x r.current	3 x r.current



FCS 1 ph

Controller pricing

Airefrig Part Number	FCSM042300	FCSM082300	FCSM122300
List Price - Ex GST	P.O.A.		

FCS - Power Board Slave 415V Three Phase

Airefrig Part Number	FCS3064000	FCS3124000	FCS3204000	FCS3404010
Power Supply	415V	415V	415V	415V
Control Signal	0 to 10Vdc or PWM for			
Index of protection	IP55	IP55	IP55	IP20
Rated current	6A	12A	20A	40A
Peak current	3 x r.current	3 x r.current	3 x r.current	3 x r.current



FCS 3 ph IP55

Controller pricing

Airefrig Part Number	FCS3064000	FCS3124000	FCS3204000	FCS3404010
List Price - Ex GST		P.O.A.		



FCS 3 ph IP20

FCP Stand Alone Electronic Fan Speed Controller

Airefrig Part Number	Description	List Price Ex GST
FCPM00A01K	Stand Alone Electronic Fan Speed Controller 8A, 230V kit with pressure sensor 0 to 34 Bar.	



CAREL ELECTRONIC EXPANSION VALVES & DRIVERS

E2V Electronic Expansion Valves

Airefrig Part Number	Description	List Price Ex GST
E2V05BSF00	EEV with 12mm copper connections - size 05	
E2V09BSF00	EEV with 12mm copper connections - size 09	
E2V11BSF00	EEV with 12mm copper connections - size 11	
E2V14BSF00	EEV with 12mm copper connections - size 14	
E2V18BSF00	EEV with 12mm copper connections - size 18	
E2V24BSF00	EEV with 12mm copper connections - size 24	
E2V30BSF00	EEV with 16mm copper connections - size 30	P.O.A.
E2V35BSM00	EEV with 16mm copper connections - size 35	



E3V Electronic Expansion Valves

Airefrig Part Number	Description	List Price Ex GST
E3V45ASR00	EEV with 18-22mm copper connections - size 45	
E3V55ASR00	EEV with 18-22mm copper connections - size 55	
E3V65ASS00	EEV with 22-28mm copper connections - size 65	



E4V Electronic Expansion Valves

Airefrig Part Number	Description	List Price Ex GST
E4V85AST00	EEV with 22-35mm copper connections - size 85	
E4V95AST00	EEV with 22-35mm copper connections - size 95	



E5V Electronic Expansion Valves

Airefrig Part Number	Description	List Price Ex GST
E5VA5AST00	EEV with 35mm copper connections - size 150	P.O.A.

E6V Electronic Expansion Valves

Airefrig Part Number	Description	List Price Ex GST
E6VB2ASV00	EEV with 42mm copper connections - size 200	



E7V Electronic Expansion Valves

Airefrig Part Number	Description	List Price Ex GST
E7VC1ASZ00	EEV with 54mm copper connections - size 310	P.O.A.

Accessories for Electronic Expansion Valves

Airefrig Part Number	Description	List Price Ex GST
E2VCAB0300	Electrical connector for E*V with 3m cable IP67	P.O.A.
E2VCABS600	Elec. connector for E*V with 6m cable shielded IP67	
EEVMAG0000	Tool for manual driving of EEV stepper valve	P.O.A.
E2VSTA0000	E2V Type "A" spare coil	P.O.A.
E2VSTA0200	E2V Type "B" spare coil	
E3VSTA0000	E3V spare coil	P.O.A.
E4VSTA0000	E4V spare coil	
E5VSTA0000	E5V spare coil	P.O.A.
E6VSTA0000	E6V spare coil	P.O.A.
E7VSTA0000	E7Vspare coil	P.O.A.

CAREL ELECTRONIC EXPANSION VALVES & DRIVERS

EVD Evolution Electronic Expansion Valve Drivers

Airefrig Part Number	Description	List Price Ex GST
EVD0000E20	Driver for EEV (RS485) - universal valve types	
EVD0000E50	Driver for EEV (RS485) - CAREL valve types	
EVD0000T40	Twin Driver for EEV (pLAN) - CAREL valve types	P.O.A.
EVD0000T50	Twin Driver for EEV (RS485) - CAREL valve types	
EVDIS00EN0	Display for EVD Evolution	

EVD Evolution Kits

Airefrig Part Number	Description	List Price Ex GST
EVD00N3E2K	EVD Evo Driver Kit - Universal valves including Carel	
EVD00N3E5K	EVD Evo Driver Kit - Carel Valves Only	

Kits include driver (without display), ratiometric pressure sensor and cable, valve cable and temp sensor.

EVD Evolution Power Solutions Panels

Airefrig Part Number	Description	List Price Ex GST
EDVPN01007	Pre wired panel without Ultracap - Carel Valves Only	
EDVPN01008	Pre wired panel with Ultracap - Carel Valves Only	

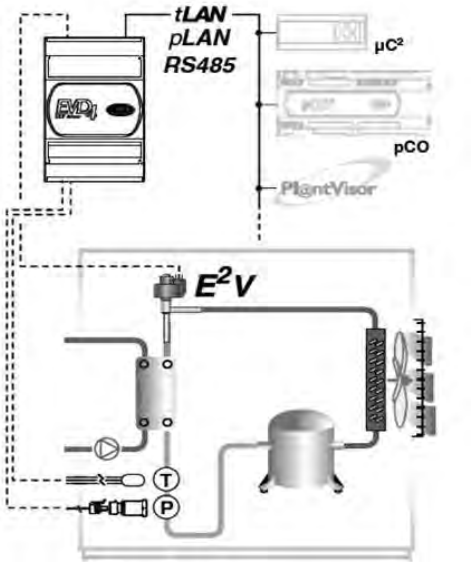
Kits include driver (without display), ratiometric pressure sensor and cable, valve cable and temp sensor, already prewired with transformer and circuit breaker in an insulated mounting box.

Accessories for Electronic Expansion Valves Drivers

Airefrig Part Number	Description	List Price Ex GST
EVDCAB0500	EVD4 cable with connections, 5m	P.O.A.
EVD0000UC0	Ultracap module for EVD Evolution	
CVSTDUTTL0	Converter TTL - USB for EVD4 (com. with PC)	
CVSTD0TTL0	Converter TTL - 232 for EVD4	P.O.A.
EVDCNV00E0	Converter tLan – USB for EVD Evolution	P.O.A.
NTC_____	NTC sensor (Select suitable option)	P.O.A.
SPKT0013R0	Ratiometric pressure sensor -1 to 9.3 bar	
SPKC_____	Connector for SPKT	P.O.A.
TRADRBE240	Din rail mount 240/24Vac 20VA transformer	

Pre-configuration of the drivers is available if required.





CAREL REFRIGERANT DETECTION SENSORS

DPWL Refrigerant Gas Leak Detector

For the detection of CFC, HFC and CO^2 refrigerant gases, CAREL proposes a new range of sensors designed to satisfy all requirements in the fields of industrial refrigeration and air conditioning (supermarkets, shopping centres, other public spaces) on units that require continuous control and monitoring, notifying the system status in order to limit the problems caused by gas leaks.

The sensors are calibrated to measure the most commonly used gases (R22, R134a, R404a, R407c, R410a and CO^2). When leaks above a certain concentration are detected, the sensor sends a signal to the controller or supervisor it is connected to.

The main features are:

- Available with built in or remote sensor.
- RS485 Modbus connection fitted.
- 24Vac digital relay fitted.
- Analogue outputs available: 0-5V, 1-5V, 0-10V, 2-10V and 4-20mA.
- Local alarm with audible buzzer and red LED light
- CO^2 sensor is infrared

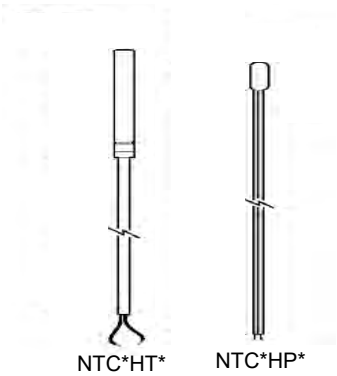
Airefrig Part Number	Description	List Price Ex GST
DPWLA07000	R22 sensor (built in), 0-1000ppm	
DPWLB07000	R134A sensor (built in), 0-1000ppm	P.O.A.
DPWLC07000	R404A sensor (built in), 0-1000ppm	
DPWLD07000	R407C sensor (built in), 0-1000ppm	P.O.A.
DPWLE07000	R410A sensor (built in), 0-1000ppm	
DPWL417000	CO^2 sensor (built in), 0-10000ppm	
DPWLA27000	R22 sensor (remote 5m), 0-1000ppm	P.O.A.
DPWLB27000	R134A sensor (remote 5m), 0-1000ppm	P.O.A.
DPWLC27000	R404A sensor (remote 5m), 0-1000ppm	P.O.A.
DPWLD27000	R407C sensor (remote 5m), 0-1000ppm	P.O.A.
DPWLE27000	R410A sensor (remote 5m), 0-1000ppm	P.O.A.
DPWL427000	CO^2 sensor (remote 5m), 0-10000ppm	P.O.A.



CAREL SENSORS & ACCESSORIES

Temperature Sensors

Airefrig Part Number	Description	Temperature Range	Length Metres	List Price Ex GST
NTC015HP03	Sensor NTC Plastic	-50 to +50°C	1.5	
NTC030HP03			3.0	
NTC015HT00	Sensor NTC High Temp Plastic (check controller suitability)	0 to +150°C	1.5	
NTC030HT00			3.0	
NTC015WH03	Sensor NTC Waterproof	-50 to +90°C	1.5	
NTC030WH03			3.0	
NTC060WH03			6.0	P.O.A.
NTC030HF03	Sensor NTC Pl. strap-on	-50 to +90°C	3.0	
NTC060WG00	Sensor NTC for ACC	-50 to 105°C	6.0	
NTC060PS00	Product Simulation probe		6.0	
NTCINF0600	Sensor NTC Insertion S/Steel		6.0 (150mm probe)	
DPWT011000	Sensor NTC Wall Mount	0 to 50 °C	-	
PTC0150000	Sensor PTC (not waterproof)	-50 to 130 °C	1.5	
PT100000A1	Sensor PT100 for IR32_1_000	-70 to 250 °C	3.0	
PT100000A2	Sensor PT100 for IR32_1_000	0 to 600 °C	3.0	P.O.A.




DPWT

Note: Do not directly immerse sensors into liquids – use a pocket if immersion is required.

Humidity Sensors

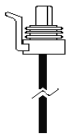
Airefrig Part Number	Description	Range	Output	List Price Ex GST
DPPC110000	Industrial Humidity / Temperature Sensor Wall Mt (replace ASPC110000 and ASPC230000)	-20 to 70 ºC 10 - 90%rH	2 * 4-20mA	
DPPC210000		-20 to 70 ºC 0 - 100%rH	2 * 4-20mA	
DPWC111000	Commercial Humidity sensor (replaces ASCW111000)	-50 to 90 ºC 0 - 100%rH	NTC 4-20mA	



Pressure Transmitters

Airefrig Part Number	Description	Range	Output	Connections	List Price Ex GST
SPKT0021C3	Pressure Transmitter (requires Packard connector SPKC)	-0.5-7 bar	4-20mA	1/4 Female flare + depressor	
SPKT0011C3		0-10 bar			
SPKT0031C3		0-30 bar			
SPKT00B1C3		0-45 bar			
SPKT00D8C0		0-150 bar		Male con	
SPKT0053R0	Pressure Transmitter (requires Packard connector SPKC)	-1-4.2 bar	0-5V	1/4 Female flare + depressor	P.O.A.
SPKT0013R3		-1-9.3 bar			
SPKT0033R3		0-34.5 bar			
SPKT00B6R3		0-45 bar			
SPKC002313	Packard Connector for SPKT/W 2m cable IP65				
SPKC005313	Packard Connector for SPKT/W 5m cable IP65				


Pressure Transmitter


Packard Connector

Sensor Pockets

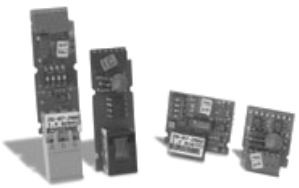
Airefrig Part Number	Description	List Price Ex GST
NTCSOBS003	Brass Pocket 8*60mm 1/4 Gas for NTC/PTC sensors	
NTCSOSS003	Stainless Steel Pocket 1/4 Gas for NTC/PTC sensors	



CAREL SENSORS & ACCESSORIES

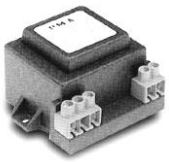
Serial Cards

Airefrig Part Number	Description	List Price Ex GST
IR32SER00E	Serial Card RS485 to suit IR32	P.O.A.
IROPZ48500	Serial Card RS485 to suit IR33, powercompact & PJ easy	
IROPZSER30	Serial Card RS485 to suit DN33	
IROPZSEM30	Serial Card RS485 to suit MasterCella2 (MD33)	
IRDRSER00E	Serial Card RS485 to suit IRDR (requires TC0NN6000 & S90C0NN00)	
MTCSER0000	Serial Card RS485 to suit MasterCella Compact	
FCSER00000	Serial Card RS485 to suit MasterCella Split & FCM	P.O.A.
PJOPZ48500	Serial Module RS485 - Din Rail Mount to suit PJ32	
PCOS004850	Serial Card RS485 to suit pCOXS, pCO1 & pCO3	
MX3OP48500	Serial Card to suit MPXPRO Step 3	P.O.A.



Transformers

Airefrig Part Number	Description	List Price Ex GST
TRA12VDE00	Transformer 240V to 12 Vac 3VA	
TRA2400000	Transformer 240V to 24 Vac 3VA	
TRADR4W024	Din Rail Mount Transformer 240V to 24 Vac 4VA	
TRA0060000	Transformer 240V to 12/24 Vac 5VA	
TRADRBE240	Transformer 240V to 24 Vac 20VA DIN with fuse holder	
TRA00BE240	Transformer 240V to 24 Vac 20VA surface with fuse holder	
TX40	Transformer 240V to 24 Vac 40VA	
TX60	Transformer 240V to 24 Vac 60VA	
TX100	Transformer 240V to 24 Vac 100VA	
TX150	Transformer 240V to 24 Vac 150VA	P.O.A.
TX300	Transformer 240V to 24 Vac 300VA	P.O.A.



Accessories

Airefrig Part Number	Description	List Price Ex GST
861771	Mounting Box for IR32/33 110 x 110 x 90	
861772	Mounting Box for IR32/33 130 x 130 x 99	
RE30	Relay Single Pole 30 Amp 240V	
TCONN60000	Serial “T” connector (use with IRDR)	
S90CONN001	Auxiliary board connector (use for IRDRSER – TCONN)	
IRTRRES000	Remote Control Infrared for IR33 Refrigeration	
IRTRUES000	Remote Control Infrared for IR33 Universal	P.O.A.
IRTRMPX000	Remote Control Infrared for MPXPRO	P.O.A.
MCHSMLCONM	Pair of female connectors (1 per) eg. µRack etc.	
MCHSMLCAB0	Kit of 24 x 1m cables & crimp connector (1 per) µRack etc.	
PJOPZKEY00	Programming Key - PJ (Plug In)	
MXOPZKEYA0	Programming Key - MPXPRO	P.O.A.
PSOPZKEY00	Programming Key - MasterCella Split, Power Split	
IROPZKEY00	Programming Key - MD33, DN33, IR33, Pcompact, easy	
MTSTKIT000	MasterCella Split - Panel Mount Kit	P.O.A.







CAREL HUMIDIFIER

HUMIDISK HUMIDIFIER

humiDisk10/65 is an air humidifier based on the principle of atomising water through centrifugal force. This humidifier can be connected to mains water. humiDisk65 is supplied with an electrical anti-freeze heater. This allows the humiDisk65 to operate at temperature down to -2 °C.
humiDisk10 does not have an electrical anti-freeze heater. The humiDisk10 can work at temperature >= 1 °C.
When turned off (humidistat) the water contained in the humiDisk10/65 runs down into the tank and primes the drain siphon, which empties the small tank.

humiDisk is suitable for applications such as:

- Coolrooms and fresh product storage where lack of humidity leads to loss of weight and product deterioration.
- Printing facilities, where the correct level of humidity must be maintained in order to avoid variations in paper sizes.
- Textile industries, where humidity maintenance is an important factor in production processes etc…

The humiDisk10/65 are controlled by an ON/OFF signal from a humidistat. The humidistat is not part of the humiDisk10/65, it is additional.

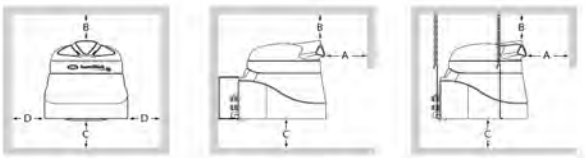
How Does It Work?

- The motor spins the cone at high speed.
- The cone sucks water into the atomiser disc.
- The disk throws the water to the impact frame where it is atomised into billions of very small droplets.
- The fan then blows the air out of the mist diffuser humidifying the required area.

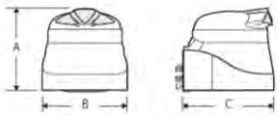


Airefrig Part Number	humiDisk65 UC0650D100	humiDisk10 UC0100D000
Operating Conditions	-2ºC to +35ºC & 0 to 90% RH non-condensing	+1ºC to +35ºC & 0 to 90% RH non-condensing
Nominal Water Atomising Capacity	6.5 L/h	1.0 L/h
Humidification Capacity	1.1 to 6.5 L/h	1.0 L/h
Power Supply	230 VAC	230 VAC
Water Temperature Limits	+1ºC to +50ºC	+1ºC to +50ºC
Water Inlet Pressure	100 to 1000 kPa	100 to 1000 kPa
Airflow	280 m³/h	80 m³/h
Total Hardness	Max. 30 ºFH (300ppm CaC03)	Max. 30 ºFH (300ppm CaC03)
Conductivity	100 to 1200 µS/cm	100 to 1200 µS/cm
Water Tank Volume	0.055 litres	0.055 litres
Weight (dry)	17.6 kg	4.3 kg

Distance (m)	A	B	C	D
HumiDisk10	≥2	≥ 0.5	≥ 1.5	≥ 0.5
HumiDisk65	≥3	≥ 1	≥ 1.5	≥ 0.5

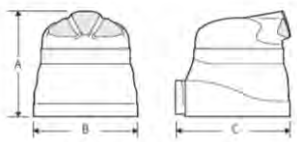


HumiDisk10



A	312 mm
B	302 mm
C	390 mm
Weight	4.3 Kg

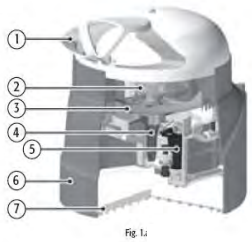
HumiDisk65



A	565 mm
B	505 mm
C	610 mm
Weight	17.6 Kg

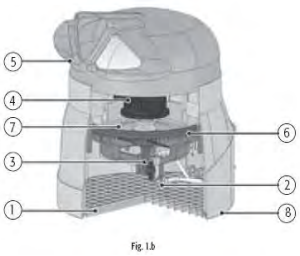
humiDisk10

1.	Mist Diffuser
2.	Motor
3.	Atomiser Disc
4.	Cone & Fan
5.	Drain Siphon
6.	Main Body
7.	Air Filter



humiDisk65

1.	Air filter
2.	Drain Siphon
3.	Cone & Fan
4.	Motor
5.	Mist Diffuser
6.	Impact Frame
7.	Atomiser Disc
8.	Main Body



Airefrig Part Number	Description	List Price Ex GST
UC0650D100	Centrifugal Humidifier 6.5 L/h humiDisk65 with antifreeze heater kit included	
UC0100D000	Centrifugal Humidifier 1.0 L/h humiDisk10	P.O.A
UC10KSSP00	Wall mounted bracket for humiDisk10	
FWH3415000	Water supply hose, 1.5m, 3/4" connection for humiDisk10	
UCKTS00000	Water drain hose for humiDisk10	

NOTE: humiDisk65 is supplied with Bracket, supply hose & drain hose

PLANTWATCHPRO SUPERVISORY SYSTEM

PlantWatchPRO: The solution for the monitoring and the remote management of small-medium sized installations.

PlantWatchPRO, by CAREL is a PC-free logging and alarm management solution ideal for small to medium sized refrigeration and air conditioning systems where the management and control requirements are the same as in large installations. It is compact and features a large colour graphic display with touch screen function, internal modem, 3 relays for signalling alarms, built-in buzzer and LAN connection.

PlantWatchPRO can manage controllers connected to the RS485 serial line, either using the Modbus® / CAREL communication protocol.

PlantWatchPRO is designed for installers, managers of stores/supermarkets and OEMs.

PlantWatchPRO not only logs important data such as temperatures for HACCP compliance but can also send fax, SMS and e-mail messages in the event of alarms or abnormal operation of the plant.
Remote access can be achieved through dial up, GSM modem or via LAN connection.

Other functions include: scheduler (for scheduled defrost, scheduled on/off of controllers…), user configuration, alarm and event and defrost management, the ability to load and export data (alarms, events and various reports in Excel format) to "USB key, and import new customised instruments or applications, all in a simple, user friendly menu structure. A proximity sensor switches on the display when the user approaches the product, avoiding the need to open the protection cover.

Overview :

- Stand alone device (without need for a computer).
- Records and manages all alarms.
- Records the main set values.
- Can transfer the logged values to a service centre, via modem.
- Can send notification of alarms via fax, SMS, email & generate automatic printed reports.
- Touch screen display and keypad.
- Data can be downloaded to USB memory stick.
- Can show graphs on the display.
- "Guardian" function for better system reliability.
- Its main use is for the supervision of small to medium sized plants.



Note: **PlantWatchPRO** records the values measured by the controllers it is connected to, it is not a stand-alone data logger and is not fitted with its own probes.

Note: We recommend the use of the Belden 8760 cable (1 twisted pair, 18 AWG screened cable with drain wire) for the connection of the RS485 network.

The preconfiguration of the PlantWatchPRO is available if required to make the system even easier to install. Complete a simple form and CAREL will pre-configure your PlantWatchPRO as required.

PlantWatchPRO

Airefrig Part Number	Description	List Price Ex GST
PWPROM0000	PlantWatchPRO 230V with internal modem	

Accessories for PlantWatchPRO

Airefrig Part Number	Description	List Price Ex GST
MODEMGSM	GSM modem for PlantWatchPRO (incl. antenna and DB15 to RJ45 cable)	
PRECONFGPWATCH	Pre configuration of PlantWatchPRO	P.O.A.
IOM0023000	Input / Output Module for RS485 line 230V	
IOM0002400	Input / Output Module for RS485 line 24V	

PLANTVISORPRO2 SUPERVISORY SYSTEM

PlantVisorPRO2 is a web-server based monitoring and telemaintenance software program that features flexibility of use and easy access to information and alarm management functions.

It is designed for both small installations and large systems such as supermarkets (refrigeration & air conditioning units), cold stores, processing rooms, seasoning rooms, the wine industry etc.

PlantVisorPRO2 features an intuitive, effective and pleasant navigation interface, with advanced characteristics: relational database, user profiling and access control, XML protocol for exchanging data between applications, Modbus®, TCP/IP connectivity, web interface.

Monitoring and energy saving management functions, HACCP reports, alarms management, local and remote connectivity, activity scheduling and controls for instruments or groups of instruments define and complete the features of **PlantVisorPRO2.**

Overview :

- Centralised management of field devices on the PC for parameters display and modification.
- Records and manages all alarms by scheduling the actions to be performed (send fax, SMS, email, activate a relay, call a remote PC…) according to the time band.
- Sampling and recording of the any variable and any active alarm for display or printing.
- Different levels of access to protect access to data.
- Produces detailed and complete graphs, with the possibility to show multiple analogue (temperature) or digital (operating status) values at the same time.
- Allows for connection of up to 200 Carel controllers (per serial line) in a RS485 serial network.
- Manages internal modem for sending faxes, SMS and for remote access using Internet Explorer.
- PlantVisorPRO local can be accessed over LAN / WAN / Internet (subject to security settings in firewall) using Internet Explorer.
- "GuardianPRO" function for better system reliability (double check of the alarms and probe variations).
- Integrated plug-ins for floating suction management, energy consumption analysis and parameter control.





Note: We recommend the use of the Belden 8760 cable (1 twisted pair, 18 AWG screened cable with drain wire) for the connection of the RS485 network.

The preconfiguration of the PlantVisorPRO is available if required to make the system even easier to install. Complete a simple form and CAREL will pre-configure your PlantVisorPRO as required. For a better customization of the system, the creation of floor plan is available as well.

PlantVisorPRO2

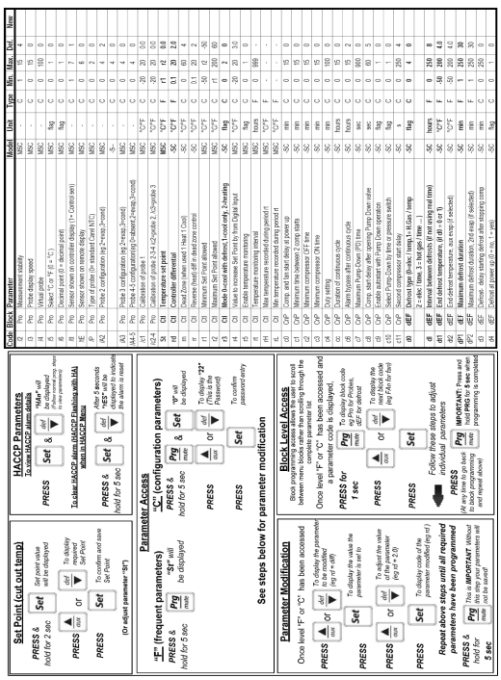
Airefrig Part Number	Description	List Price Ex GST
PP2STGSXE0	PlantVisorPRO2 Box Embedded	
PP2STGSTE0	PlantVisorPRO2 Touch - All in one with touch screen Embedded	P.O.A.

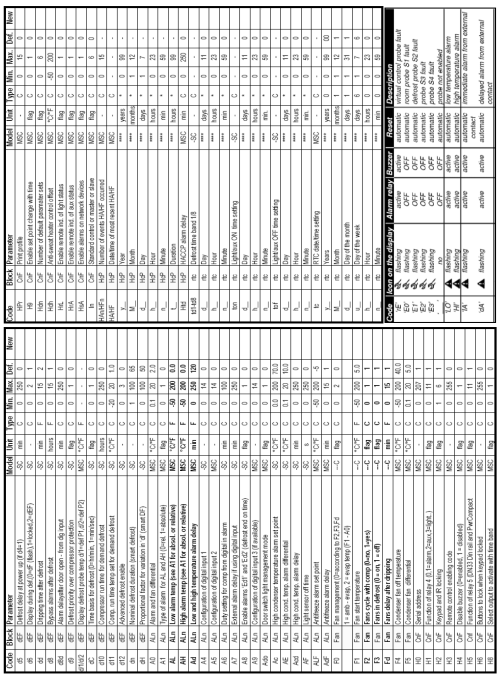
Accessories for PlantVisorPRO2

Airefrig Part Number	Description	List Price Ex GST
PRECONFGPVISOR	Pre configuration of PlantVisorPRO	
PCACCESSPK	PC Accessory pack - Keyboard, mouse and 19" LCD monitor	
PVUPS00000	Uninterruptible power supply with surge & battery backup protection	P.O.A.
IOM0023000	Input / Output Module for RS485 line 230V	
IOM0002400	Input / Output Module for RS485 line 24V	

CAREL

Commonly Used Programming Sheets





CAREL PROGRAMMING SHEETS

IR33 / DN33 / MD33 (MasterCella2) - REFRIGERATION PARAMETER SUMMARY

Code	Block	Parameter	Model	Unit	Type	Min.	Max.	Def.	New
r2	Pro	Measurement stability	MSC	-	C	1	15	4	
r3	Pro	Probe display speed	MSC	-	C	0	15	0	
H4	Pro	Virtual probe	MSC	-	C	0	180	0	
r5	Pro	Select °C or °F (0 = °C)	MSC	flag	C	0	1	0	
r6	Pro	Decimal point (0 = decimal point)	MSC	flag	C	0	1	0	
r8	Pro	Sensor shown on controller display (1= Control sen)	MSC	-	C	1	7	1	
hE	Pro	Sensor shown on remote display	MSC	-	C	0	6	0	
/P	Pro	Type of probe (0= standard Carel NTC)	MSC	-	C	0	2	0	
/A2	Pro	Probe 2 configuration (eg 2=evap,3=cond)	MSC	-	C	0	4	2	
			-S-	-	C	0	4	0	
/A3	Pro	Probe 3 configuration (eg 2=evap,3=cond)	MSC	-	C	0	4	0	
/A4-5	Pro	Probe 4-5 configuration (eg 0=absent,2=evap,3=cond)	MSC	-	C	0	4	0	
/c1	Pro	Calibration of probe 1	MSC	°C/°F	C	-20	20	0.0	
/c2-4	Pro	Calibration of probe 2-3-4 /c2=probe 2, /c3=probe 3	MSC	°C/°F	C	-20	20	0.0	
St	Ctl	Temperature set point	MSC	°C/°F	F	r1	r2	0.0	
rd	Ctl	Controller differential	-SC	°C/°F	F	0.1	20	2.0	
rn	Ctl	Dead Zone (when used 1 Heat 1 Cool)	-SC	°C/°F	C	0	60	4	
rr	Ctl	Reverse (heat) diff in dead zone control	-SC	°C/°F	C	0.1	20	2	
r1	Ctl	Minimum Set Point allowed	MSC	°C/°F	C	-50	r2	-50	
r2	Ctl	Maximum Set Point allowed	MSC	°C/°F	C	r1	200	60	
r3	Ctl	**Mode 0=cool with defrost, 1=cool only, 2=heating**	-SC	flag	C	0	2	0	
r4	Ctl	Value to increase Set Point by from Digital Input	MSC	°C/°F	C	-20	20	3.0	
r5	Ctl	Enable temperature monitoring	MSC	flag	C	0	1	0	
rt	Ctl	Temperature monitoring interval	MSC	hours	F	0	999	-	
rH	Ctl	Max temperature recorded during period rt	MSC	°C/°F	F	-	-	-	
rL	Ctl	Min temperature recorded during period rt	MSC	°C/°F	F	-	-	-	
c0	CnP	Comp. and fan start delay at power up	-SC	min	C	0	15	0	
c1	CnP	Minimum time between 2 comp starts	-SC	min	C	0	15	0	
c2	CnP	Minimum compressor OFF time	-SC	min	C	0	15	0	
c3	CnP	Minimum compressor ON time	-SC	min	C	0	15	0	
c4	CnP	Duty setting	-SC	min	C	0	100	0	
cc	CnP	Duration of continuous cycle	-SC	hours	C	0	15	0	
c6	CnP	Alarm bypass after continuous cycle	-SC	hours	C	0	15	2	
c7	CnP	Maximum Pump-Down (PD) time	-SC	sec	C	0	900	0	
c8	CnP	Comp. start delay after opening Pump Down valve	-SC	sec	C	0	60	5	
c9	CnP	Enable autostart with Pump Down operation	-SC	flag	C	0	1	0	
c10	CnP	Select Pump-Down by time or pressure switch	-SC	flag	C	0	1	0	
c11	CnP	Second compressor start delay	-SC	s	C	0	250	4	
d0	dEF	Defrost type (0=elec / temp,1= H.Gas / temp	-SC	flag	C	0	4	0	
		2 = elec / time, 3 = hot gas / time ...)							
di	dEF	Interval between defrosts (if not using real time)	-SC	hours	F	0	250	8	
d1	dEF	End defrost temperature, (if d0 = 0 or 1)	-SC	°C/°F	F	-50	200	4.0	
d2	dEF	End defrost temperature, aux evap (if selected)	-SC	°C/°F	F	-50	200	4.0	
dP1	dEF	Maximum defrost duration	-SC	min	F	1	250	30	
dP2	dEF	Maximum defrost duration, 2nd evap (if selected)	-SC	min	F	1	250	30	
d3	dEF	Defrost- delay starting defrost after stopping comp	-SC	min	C	0	250	0	
d4	dEF	Defrost at power up (0 = no, 1 = yes)	-SC	flag	C	0	1	0	

CAREL PROGRAMMING SHEETS

IR33 / DN33 / MD33 (MasterCella2) - REFRIGERATION OPERATING PARAMETERS

Code	Block	Parameter	Model	Unit	Type	Min.	Max.	Def.	New
d5	dEF	Defrost delay at power up (if d4=1)	-SC	min	C	0	250	0	
d6	dEF	Display during def.(0=dF (flash),1=locked,2=dEF)	-SC	-	C	0	2	1	
dd	dEF	Dripping time after defrost	-SC	min	F	0	15	2	
d8	dEF	Bypass alarms after defrost	-SC	hours	F	0	15	1	
d8d	dEF	Alarm delayafter door open - from dig input	-SC	min	C	0	250	0	
d9	dEF	Defrost priority over compressor protection	-SC	flag	C	0	1	0	
d1/d/2	dEF	Display defrost probe temp d/1=def P1,d/2=def P2)	MSC	°C/°F	F	-	-	-	
dC	dEF	Time basis for defrost (0=hr/min, 1=min/sec)	-SC	flag	C	0	1	0	
d10	dEF	Compressor run time for demand defrost	-SC	hours	C	0	250	0	
d11	dEF	Comp. run time temp set for demand defrost	-SC	°C/°F	C	-20	20	1.0	
d12	dEF	Advanced defrost enable	-SC	-	C	0	3	0	
dn	dEF	Nominal defrost duration (smart defrost)	-SC	-	C	1	100	65	
dH	dEF	Proportional factor for variation in 'dI' (smart DF)	-SC	-	C	0	100	50	
A0	ALn	Alarm and fan differential	MSC	°C/°F	C	0.1	20	2.0	
A1	ALn	Type of alarm for AL and AH (0=rel. 1=absolute)	MSC	flag	C	0	1	0	
AL	**ALn**	**Low alarm temp (see A1 for absol. or relative)**	**MSC**	**°C/°F**	**F**	**-50**	**200**	**0.0**	
AH	**ALn**	**High alarm temp (see A1 for absol. or relative)**	**MSC**	**°C/°F**	**F**	**-50**	**200**	**0.0**	
Ad	**ALn**	**Low and high temperature alarm delay**	**MSC**	**min**	**F**	**0**	**250**	**120**	
A4	ALn	Configuration of digital input 1	-SC	-	C	0	14	0	
A5	ALn	Configuration of digital input 2	MSC	-	C	0	14	0	
A6	ALn	Duty setting for comp from digital in alarm	-SC	min	C	0	100	0	
A7	ALn	External alarm delay if using digital input	-SC	min	C	0	250	0	
A8	ALn	Enable alarms 'Ed1' and 'Ed2' (defrost end on time)	-SC	flag	C	0	1	0	
A9	ALn	Configuration of digital input 3 (if available)	MSC	-	C	0	14	0	
Ado	ALn	Door switch light management mode	MSC	flag	C	0	1	0	
Ac	ALn	High condenser temperature alarm set point	-SC	°C/°F	C	0.0	200	70.0	
AE	ALn	High cond. temp. alarm differential	-SC	°C/°F	C	0.1	20	10.0	
Acd	ALn	High cond. temp. alarm delay	-SC	min	C	0	250	0	
AF	ALn	Light sensor off time	-SC	s	C	0	250	0	
ALF	ALn	Antifreeze alarm set point	MSC	°C/°F	C	-50	200	-5	
AdF	ALn	Antifreeze alarm delay	MSC	min	C	0	15	1	
F0	Fan	Fan management (0=according to F2,F3,Fd	--C	flag	C	0	2	0	
		1 = amb - evap, 2 = evap temp (F1 - A0)							
F1	Fan	Fan start temperature	--C	°C/°F	F	-50	200	5.0	
F2	**Fan**	**Fans cycle with comp (0=no, 1=yes)**	**--C**	**flag**	**C**	**0**	**1**	**1**	
F3	**Fan**	**Fans in defrost (0 = on, 1 = off)**	**--C**	**flag**	**C**	**0**	**1**	**1**	
Fd	**Fan**	**Fans delay after dripping**	**--C**	**min**	**F**	**0**	**15**	**1**	
F4	Fan	Condenser fan off temperature	MSC	°C/°F	C	-50	200	40.0	
F5	Fan	Condenser fan differential	MSC	°C/°F	C	0.1	20	5.0	
H0	CnF	Serial address	MSC	-	C	0	207	1	
H1	CnF	Function of relay 4 (0,1=alarm,2=aux,3=light..)	MSC	flag	C	0	11	1	
H2	CnF	Keypad and IR locking	MSC	flag	C	1	6	1	
H3	CnF	Remote control enabling code	MSC	-	C	0	255	0	
H4	CnF	Disable buzzer (0=enabled, 1 = disabled)	MSC	flag	C	0	1	0	
H5	CnF	Function of relay 5 (DN33 Din rail and PwrCompact	MSC	flag	C	0	11	1	
H6	CnF	Buttons to lock when keypad locked	MSC	-	C	0	255	0	
H8	CnF	Select output to activate with time band	MSC	flag	C	0	1	0	

Code	Block	Parameter	Model	Unit	Type	Min.	Max.	Def.	New
HPr	CnF	Print profile	MSC	-	C	0	15	0	
H9	CnF	Enable set point change with time	MSC	flag	C	0	1	0	
Hdn	CnF	Number of default paramater sets	MSC	flag	C	0	6	0	
Hdh	CnF	Anti-sweat heater control offset	MSC	°C/°F	C	-50	200	0	
HrL	CnF	Enable remote ind. of light status	MSC	flag	C	0	1	0	
HrA	CnF	Enable remote ind. of aux status	MSC	flag	C	0	1	0	
HsA	CnF	Enable alarms on network devices	MSC	flag	C	0	1	0	
In	CnF	Standard control or master or slave	MSC	flag	C	0	6	0	
HAn/HFn	HdP	Number of events HA/HF occurred	MSC	-	C	0	15	-	
HA/HF	HdP	Date/time of most recent HA/HF	MSC	-	C	-	-	-	
y__	HdP	Year	****	years	*	0	99	-	
M__	HdP	Month	****	months	*	1	12	-	
d__	HdP	Day	****	days	*	1	7	-	
h__	HdP	Hour	****	hours	*	0	23	-	
n__	HdP	Minute	****	min	*	0	59	-	
t__	HdP	Duration	****	hours	*	0	99	-	
Htd	HdP	HACCP alarm delay	MSC	min	C	0	250	0	
td1-td8	rtc	Defrost time band 1/8	-SC	-	C	-	-	-	
d__	rtc	Day	****	days	*	0	11	0	
h__	rtc	Hour	****	hours	*	0	23	0	
n__	rtc	Minute	****	min	*	0	59	0	
ton	rtc	Light/aux ON time setting	-SC	-	C	-	-	-	
d__	rtc	Day	****	days	*	0	11	0	
h__	rtc	Hour	****	hours	*	0	23	0	
n__	rtc	Minute	****	min.	*	0	59	0	
tof	rtc	Light/aux OFF time setting	-SC	-	C	-	-	-	
d__	rtc	Day	****	days	*	0	11	0	
h__	rtc	Hour	****	hours	*	0	23	0	
n__	rtc	Minute	****	min.	*	0	59	0	
d__	rtc	Day of the month	****	days	1	1	31	1	
u__	rtc	Day of the week	****	days	6	1	7	6	
h__	rtc	Hour	****	hours	0	0	23	0	
n__	rtc	Minute	****	min	0	0	59	0	

Code	Icon on the display	Alarm relay	Buzzer	Reset	Description
'rE'	*flashing*	*active*	*active*	*automatic*	*virtual control probe fault*
'E0'	*flashing*	*OFF*	*OFF*	*automatic*	*room probe S1 fault*
'E1'	*flashing*	*OFF*	*OFF*	*automatic*	*defrost probe S2 fault*
'E2'	*flashing*	*OFF*	*OFF*	*automatic*	*probe S3 fault*
'E3'	*flashing*	*OFF*	*OFF*	*automatic*	*probe S4 fault*
' '	*no*	*OFF*	*OFF*	*automatic*	*probe not enabled*
'LO'	*flashing*	*active*	*active*	*automatic*	*low temperature alarm*
'HI'	*flashing*	*active*	*active*	*automatic*	*high temperature alarm*
'iA'	*flashing*	*active*	*active*	*automatic contact*	*immediate alarm from external*
'dA'	*flashing*	*active*	*active*	*automatic*	*delayed alarm from external contact*

CAREL PROGRAMMING SHEETS

IR32C LOW TEMP REFRIGERATION PARAMETER SUMMARY

	PROBE PARAMETERS	TYPE	MIN	MAX	UNIT	DEF
/0	Type of probe (0 = NTC, 1 = PTC) DO NOT CHANGE	C	0	1	-	0
/C	Calibration	F	-20	+20	°C/°F	0.0
/2	Measurement stability	C	1	15	-	4
/3	Probe reading speed	C	1	15	-	8
/4	Virtual probe	C	0	100		0
/5	°C/°F (0 = °C, 1 = °F)	C	0	1	flag	0
/6	Decimal point (0 = yes, 1 = no)	C	0	1	flag	0

	CONTROL PARAMETERS	TYPE	MIN	MAX	UNIT	DEF
rd	Control differential	F	0.1	+19.9	°C/°F	2
r1	Minimum set point allowed	C	-40	r2	°C/°F	-40
r2	Maximum set point allowed	C	r1	+199	°C/°F	90
r3*	Enable defrost end on time alarm (Ed)	C	0	1	flag	0
r4*	Value to increased set point by when A4 (digital input) = 7	C	0	+20	°C/°F	3.0
r5*	Enable min and max temperature logging (0=no, 1=yes)	C	0	1	flag	0
rt*	Interval of min and max temperature logging.	F	0	199	hours	
rH*	Max temperature monitored during period rt	F	-50	+90	°C/°F	-
rL*	Min temperature monitored during period rt	F	-50	+90	°C/°F	-

	COMPRESSOR PARAMETERS	TYPE	MIN	MAX	UNIT	DEF
c0	Compressor start-up delay after power up	C	0	15	min	0
c1	Minimum interval between two compressor starts	C	0	15	min	0
c2	Minimum compressor off-time	C	0	15	min	0
c3	Minimum compressor on-time	C	0	15	min	0
c4	Duty setting (compressor safety, 0 = OFF, 100 = ON)	C	0	100	min	0
cc	Duration of continuous cycle	C	0	15	hrs	4
C6	Alarm cut-out delay after continuous cycle	C	0	15	hrs	2

	DEFROST PARAMETERS	TYPE	MIN	MAX	UNIT	DEF
d0	Defrost (0=electric,1=hot gas,2*=water/electric by time 3*=hot gas by time)	C	0	3	flag	0
dI	Interval between defrost	F	0	199	hrs	8
dt	Defrost terminate temperature	F	-40	+199	°C/°F	4
dP	Max duration of defrost (time protection) if d0=0,1 or defrost time if d0=2,3	F	1	199	min	30
d4	Defrost on power up (0 = no, 1 = yes)	C	0	1	flag	0
d5	Defrost delay after unit power up or multifunction input	C	0	199	min	0
d6	Display override during defrost (0 = no, 1 = yes)	C	0	1	flag	1
dd	Dripping (drain) time	F	0	15	min	2
d8	Duration of alarm cut-out after defrost and/or opening door	F	0	15	hrs	1
d9	Defrost has priority over compressor protection (0 = no, 1 = yes)	C	0	1	flag	0
d/	Defrost probe reading	F	-	-	°C/°F	-
dC	Time basis (0 = hours/minutes, 1 = minutes/seconds)	C	0	1	flag	0

	ALARM PARAMETERS	TYPE	MIN	MAX	UNIT	DEF
A0	Alarm and fan differential	C	0.1	+20	°C/°F	0.2
AL	Low temperature alarm (deviation from set point)	F	0	+199	°C/°F	0
AH	High temperature alarm (deviation from set point)	F	0	+199	°C/°F	0
Ad	Temperature alarm delay	C	0	199	min	120
A4	Multifunction input one configuration IR32S, Y and C IR32M	C	0	7	-	0
A5	Multifunction input two configuration (IR32_E only)	C	0	7	-	0
A6	Duty setting for external alarm (0 = OFF, 100 = ON)	C	0	100	min	0
A7	External alarm delay (A4 = 2, Multifunction input)	C	0	199	min	0

	FAN PARAMETERS	TYPE	MIN	MAX	UNIT	DEF
F0	Management of fans. 0= according to F2,F3 and Fd, 1= Fan regulator (difference between ambient and evap temp, 2*= Fan regulator (evap temp)	C	0	2	flag	0
F1	Fan turn-off temperature if F0=1 Fans are on when evap temp < (ambient temp - F1 - A0) if F0=2 Fans are on if evap temp < (set point +F1-A0)	F	0	+20	°C/°F	5
F2	Cycle fans with compressor (0 = no, 1 = yes)	C	0	1	flag	1
F3	Stop fans during defrost (0 = no, 1 = yes)	C	0	1	flag	1
Fd	Fan delay (after dripping time)	F	0	15	min	3

	OTHER SETTING	TYPE	MIN	MAX	UNIT	DEF
H0	Address within network	C	0	15	-	0
H1	Mulitfunction output (0 = Auxillary, 1 = Alarm n.c., 2= Alarm n.o.)	C	0	1	flag	1
H2	Access Locking (Keypad and or IR remote)	C	0	3	-	1
H3	Code to permit remote programming	C	0	199	-	0
H4	Disable alarm buzzer 1= Yes 0= No (IR32_E only)	C	0	1	Flag	0

* Only on controllers with serial number >100,000

CAREL PROGRAMMING SHEETS

IR32C LOW TEMP REFRIGERATION PROGRAMMING INSTRUCTIONS

Set Point



PRESS “SEL” & HOLD For 1 Second

“SET POINT” Value will be displayed



PRESS ARROW “UP” or “DOWN” to set the desired value. **



PRESS “SEL” to confirm the value

Frequent (F) Parameters



PRESS & HOLD “PRG” for approx 5 seconds

“/C” will be displayed



A) PRESS “ARROW UP” & “DOWN” to select the parameter to be changed.
eg rd = differential



B) PRESS “SEL”

The Value Set for this parameter will be displayed



C) PRESS ARROW “UP” & “DOWN” to set the desired value.**



D) PRESS “SEL” to confirm the value

REPEAT A-D Until all desired parameter have been set.



PRESS “PRG” To Confirm all Changes
(This is very important)

All Parameters



PRESS & HOLD “PRG” & “SEL” for approx 5 seconds

“00” will be displayed



PRESS “ARROW UP” to enter the password value “22”



PRESS “SEL” to confirm

“/C” will be displayed



A) PRESS “ARROW UP” & “DOWN” to select the code the of parameter to be changed.
eg rd = differential



B) PRESS “SEL”

The Value Set for this parameter will be displayed



C) PRESS “ARROW UP” & “DOWN” to set the desired value.



D) PRESS “SEL” to confirm the value

REPEAT A-D Until all desired parameters have been set.



PRESS “PRG” To Confirm all Changes
(This is very important)

Please Note

Please read these instructions in conjunction with the parameter list.
It is recommended that the controllers be programmed before connecting or activating the plant to be controlled (eg compressors)
** If the controller is keypad locked the value will not change. See parameter H2

CAREL PROGRAMMING SHEETS

PJ32C REFRIGERATION PARAMETER SUMMARY

	PROBE PARAMETERS	TYPE	MIN	MAX	UNIT	DEF
/C	Calibration	F	-127	+127	°C/°F	0.0
/2	Measurement stability	C	1	15	-	4
/4	Probe to be displayed (0= control probe, 1 = food probe (second probe))	C	0	100		0
/5	°C/°F (0 = °C, 1 = °F)	C	0	1	flag	0

	CONTROL PARAMETERS	TYPE	MIN	MAX	UNIT	DEF
rd	Control differential (0 = 0.5 deg C differential)	F	0	+19	°C/°F	2
r1	Minimum set point allowed	C	-50	r2	°C/°F	-50
r2	Maximum set point allowed	C	r1	+127	°C/°F	60
r3	Enable defrost end on time alarm (Ed)	C	0	1	flag	0
r4	Value to change set point by when A4 (digital input) = 4	C	-20	+20	°C/°F	3

	COMPRESSOR PARAMETERS	TYPE	MIN	MAX	UNIT	DEF
c0	Compressor start-up delay after power up	C	0	15	min	0
c1	Minimum interval between two compressor starts	C	0	15	min	0
c2	Minimum compressor off-time	C	0	15	min	0
c3	Minimum compressor on-time	C	0	15	min	0
c4	Duty setting (compressor safety, 0 = OFF, 100 = ON)	C	0	100	min	0
cc	Duration of continuous cycle	C	0	15	hrs	4
c6	Alarm cut-out delay after continuous cycle	C	0	15	hrs	2

	DEFROST PARAMETERS	TYPE	MIN	MAX	UNIT	DEF
d0	Defrost (0=electric,1=hot gas,2*=water/electric by time 3*=hot gas by time)	C	0	3	flag	0
dI	Interval between defrost	F	0	199	hrs	8
dt	Defrost terminate temperature	F	-50	+127	°C/°F	4
dP	Max duration of defrost (time protection) if d0=0,1 or defrost time if d0=2,3	F	1	199	min	30
d4	Defrost on power up (0 = no, 1 = yes)	C	0	1	flag	0
d5	Defrost delay after unit power up or multifunction input	C	0	199	min	0
d6	Display override during defrost (0 = no, 1 = yes)	C	0	1	flag	1
dd	Dripping (drain) time	F	0	15	min	2
d8	Duration of alarm cut-out after defrost and/or opening door	F	0	15	hrs	1
d9	Defrost has priority over compressor protection (0 = no, 1 = yes)	C	0	1	flag	0
d/	Defrost probe reading	F	-	-	°C/°F	-
dC	Time basis (0 = hours/minutes, 1 = minutes/seconds) only for dI, dP	C	0	1	flag	0

	ALARM PARAMETERS	TYPE	MIN	MAX	UNIT	DEF
A0	Alarm and fan differential (0 = 0.5 deg diff)	C	0	+19	°C/°F	0
AL	Low temperature alarm (deviation from set point)	F	0	+127	°C/°F	0
AH	High temperature alarm (deviation from set point)	F	0	+127	°C/°F	0
Ad	Temperature alarm delay	C	0	199	min	0
A7	External alarm delay (A4 = 2, Multifunction input)	C	0	199	min	0

	FAN PARAMETERS	TYPE	MIN	MAX	UNIT	DEF
F0	Management of fans. 0= according to F2,F3 and Fd, 1= Fan regulator (evap temp) F1 = set point	C	0	1	flag	0
F1	Set point for fans	F	-50	+127	°C/°F	5
F2	Cycle fans with compressor (0 = no, 1 = yes)	C	0	1	flag	1
F3	Stop fans during defrost (0 = no, 1 = yes)	C	0	1	flag	1
Fd	Fan delay (after dripping time)	F	0	15	min	1

	OTHER SETTING	TYPE	MIN	MAX	UNIT	DEF
H0	Address within network	C	0	199	-	1
H1	Alarm relay mode (0 = Alarm On relay energised, 1 = Alarm on relay de-energised.) Different for PJ32S	C	0	1	flag	1
H2	Access Locking (0 = Keypad disabled)	C	0	1	flag	1
H5	Identification code for programming key (set by supervisor)	C	-99	99	-	-

CAREL PROGRAMMING SHEETS

PJ32C REFRIGERATION PROGRAMMING INSTRUCTIONS

Set Point



PRESS “SET” & HOLD For 1 Second

“SET POINT” Value will be displayed



PRESS ARROW “UP” & “DOWN”
to set the desired value. **



PRESS “SET” to confirm the value

Frequent (F) Parameters



PRESS & HOLD “SET” for approx 5 seconds

“PS ” will be displayed



A) PRESS “ARROW UP” & “DOWN”
to select the parameter to be changed. eg rd = differential



B) PRESS “SET”

The Value Set for this parameter will be displayed



C) PRESS ARROW “UP” & “DOWN” to set the desired value.**



D) PRESS “SET” to confirm the value

REPEAT A-D Until all desired parameters have been set.



PRESS & HOLD “SET” until temp is displayed (approx 5 seconds) to confirm all changes (This is very important)

All Parameters



PRESS & HOLD “SET” for approx 5 seconds

“PS” will be displayed



PRESS “SET“ then “ARROW UP” to
until the password value “22” is displayed



PRESS “SET” to confirm

“PS” will be displayed



A) PRESS “ARROW UP” & “DOWN” to select the code the parameter to be changed.
eg rd = differential



B) PRESS “SET”

The Value Set for this parameter will be displayed



C) PRESS “ARROW UP” & “DOWN” to set the desired value.



D) PRESS “SET” to confirm the value

REPEAT A-D Until all desired parameters have been set.



PRESS & HOLD “SET” until temp is displayed (approx 5 seconds) to confirm all changes

Please Note

Please read these instructions in conjunction with the parameter list.
It is recommended that the controllers be programmed before connecting or activating the plant to be controlled (eg compressors)
** If the controller is keypad locked the value will not change. See parameter H3

CAREL PROGRAMMING SHEETS

PJ32 UNIVERSAL PARAMETER SUMMARY

	PROBE PARAMETERS	TYPE	MIN	MAX	UNIT	DEF
/2	Measurement stability	C	1	15	-	6
/4	Probe to be displayed (0= sensor 1, 1 = sensor 2	F	0	1	-	0
/5	°C/°F (0 = °C, 1 = °F)	C	0	1	-	0
/6	Display temperature of sensor 2	F	-	-	°C/°F	-
/C	Calibration (tenths of degree without decimal pt) i.e. 2=+0.2 °C offset	F	-127	+127	°C/°F	0.0

	DIFFERENTIAL PARAMETERS	TYPE	MIN	MAX	UNIT	DEF
P1	Controller 1 differential (0 = 0.5 °C)	F	0	+19	°C/°F	3
P2	Controller 2 differential (0 = 0.5 °C)	F	0	+19	°C/°F	3

	CONTROL PARAMETERS	TYPE	MIN	MAX	UNIT	DEF
r1	Controller 1 mode (0 = Direct / 1 = Reverse)	C	0	1	-	0
r2	Controller 2 mode (0 = Direct / 1 = Reverse)	C	0	1	-	0
r3	Minimum set point allowed	C	-50	r4	°C/°F	-50
r4	Maximum set point allowed	C	r3	+150	°C/°F	60
r5	Controller 2 sensor (0 = sensor 1, 1 = sensor 2)	C	0	1	-	0

	CONTROL TIMINGS	TYPE	MIN	MAX	UNIT	DEF
c0	Delay on output energisation at power up	C	0	199	sec	0
c1	Minimum on time for control outputs	C	0	15	min	0
c2	Minimum off time for control outputs	C	0	15	min	0
c3	Interlock outputs (0=no, 1 = yes)	C	0	1	-	0
c4	Minimum time between activation of two different outputs	C	0	199	sec	0

	ALARM PARAMETERS	TYPE	MIN	MAX	UNIT	DEF
A0	Alarm differential (0 = 0.5 deg diff)	C	0	+19	°C/°F	0
AL	Low temperature alarm (absolute value)	F	-50	AH	°C/°F	-50
AH	High temperature alarm (absolute value)	F	AL	+150	°C/°F	150
At	Temperature alarm delay	C	0	199	min	0
Ad	External alarm delay (when digital input is used)	C	0	15	min	0

	DIGITAL INPUT PARAMETERS	TYPE	MIN	MAX	UNIT	DEF
dI	Digital input operating mode 0 = not used, 1 = Alarm (wired normally closed. Open = Alarm) 2 = change set point	C	0	1	flag	0

	OTHER PARAMETERS	TYPE	MIN	MAX	UNIT	DEF
H0	DO NOT CHANGE	C	0	199	-	1
H1	Alarm output status (0 = relay energised with no alarm)	C	0	1	-	0
H2	Output 2 mode (only for 2 relay models) (0 = alarm, 1 = control)	C	0	1	-	1
H3	Disable keypad (0 = disabled)	C	0	1	-	1
H4	Disable buzzer (model specific)	C	0	1	-	0
H5	Identification code for programming key	C	-99	99	-	-

CAREL PROGRAMMING SHEETS

PJ32 UNIVERSAL PROGRAMMING INSTRUCTIONS

Set Point



PRESS “SET” & HOLD For 1 Second

“SET POINT” Value will be displayed



PRESS ARROW “UP” & “DOWN” to set the desired value. **



PRESS “SET” to confirm the value

Frequent (F) Parameters



PRESS & HOLD “SET” for approx 5 seconds

“PS ” will be displayed



A) PRESS “ARROW UP” & “DOWN” to select the parameter to be changed.
eg rd = differential



B) PRESS “SET”

The Value Set for this parameter will be displayed



C) PRESS ARROW “UP” & “DOWN” to set the desired value.**



D) PRESS “SET” to confirm the value

REPEAT A-D Until all desired parameters have been set.



PRESS & HOLD “SET” until temp is displayed (approx 5 seconds) to confirm all changes
(This is very important)

All Parameters



PRESS & HOLD “SET” for approx 5 seconds

“PS” will be displayed



PRESS “SET“ then “ARROW UP” to until the password value “22” is displayed



PRESS “SET” to confirm

“PS” will be displayed



A) PRESS “ARROW UP” & “DOWN” to select the code the parameter to be changed.
eg rd = differential



B) PRESS “SET”

The Value Set for this parameter will be displayed



C) PRESS “ARROW UP” & “DOWN” to set the desired value.



D) PRESS “SEL” to confirm the value

REPEAT A-D Until all desired parameters have been set.



PRESS & HOLD “SET” until temp is displayed (approx 5 seconds) to confirm all changes

Please Note

Please read these instructions in conjunction with the parameter list.
It is recommended that the controllers be programmed before connecting or activating the plant to be controlled (eg compressors)
** If the controller is keypad locked the value will not change. See parameter H3

CAREL PROGRAMMING SHEETS

IR32 UNIVERSAL SERIES IR32 / IRDR V, W, Z, A, D PROGRAMMING INSTRUCTIONS

	CONTROL PARAMETERS	CODE	MIN	MAX	UNIT	DEF
C0	Operating Mode (ie heating, cooling, heat pump etc) C0=**1** All outputs direct logic eg cooling C0=**2** All outputs reverse logic eg heating (default) C0=**3** 1/2 outputs direct 1/2 reverse eg 2 Heat / 2 Cool C0=**5** Alarm Mode,C0=**4,6 - 9** Refer operating instructions	22	1	9		2
P1	Differential 1 (When C0= 1,2,3,4,5,6,7,8,9)	22	0.1	99.9		2
P2	Differential 2 (only when C0= 3,4,5,6,7,8,9 or C33=1)	22	0.1	99.9		2
P3	Dead band (only when C0= 3,4, or 5)	22	0	99.9		2
C4	Compensation Coefficient. (NTC models) Refer manual	77	-2.0	2.0		0.5
C5	Control Action **0**= Proportional **1**= Proportional + Integral	77	0	1		0
C6	Delay between stages starting	77	0	999	sec.	5
C7	Minimum time between starts of the same output	77	0	15	min	0
C8	Minimum off time for each output	77	0	15	min	0
C9	Minimum on time for each output	77	0	15	min	0
C10	Status of the outputs with probe alarm **0**=All OFF, **1**= All ON, **2**= Cool on Heat off, **3**=Cool off heat on	77	0	3		0
C11	Rotation **0**=No rotation,**1** =Stand rotation (all comps), **2**= 2+2 Rotation (2 comps 2 valves-energise valve to increase capacity), **3**=2+2 Rotation (2 comps 2 valves-energise valve to reduce capacity),**4** = only rotate output 3 & 4, **5** = only rotate outputs 1&2, **6** = rotate as pairs (1&2) & (3&4), **7** =rotate outputs 2,3 & 4 (not 1)	77	0	7		0
C12	PWM Cycle time	77	0.2	999	sec	20
C13	Type of sensor -depends on probe input type,refer manual	77	0	1		0
P14	Probe Calibration (offset)	22	-99	+99.9		0
C15	Minimum scaling on analogue inputs (to match sensor)	77	-99	C16		0
C16	Maximum scaling on analogue inputs (to match sensor)	77	C15	999		100
C17	Sensor response	77	1	14		5
C18	Temperature measurement units **0**= deg C, **1**= deg F	77	0	1		0
C19	Second NTC sensor (only on NTC models) **0**= display only of 2nd probe (press arrow down), **1**= Differenial Mode (P1-P2), **2**,**3**,**4**= Compensation (refer user guide)	77	0	4		0
C21	Set Point 1 min value (range locking)	77	-99	C22		
C22	Set Point 1 max value (range locking)	77	C21	999		
C23	Set Point 2 min value (range lock),(only when C0=6,7,8,9)	77	-99	C24		
C24	Set Point 2 max value (range lock),(only when C0=6,7,8,9)	77	C23	999		
P25	Low alarm (absolute value)	22	-99	P26		
P26	High alarm (absolute value)	22	P25	999		
P27	Alarm differential	22	0.1	99.9		2.0
P28	Alarm time delay	22	0	120	min	60
C29	Digital input 1 config, **0**=not used, **1**=Immediate external alarm auto reset, **2**=Immediate external alarm manual reset, **3**=Delayed external alarm(P28), **4**=remote on/off	77	0	4		0
C30	Digital input 2 conf (only IRDR models)settings as per C29	77	0	4		0
C31	Status of outputs with digital input alarm. As per C10	77	0	3		0
C32	Serial address (when connected to network)	77	1	16		1
C33	Do not change- Refer user guide (relates also to C34-C49)	77	0	1		0
C50	Keypad / IR remote locking. **0**= KEYPAD - locked set point and P parameters, IR REMOTE- locked C enabled Set point and P parameters ,**1**= KEYPAD-unlocked,REMOTE-locked C enabled Set point and P parameters, **2**=KEYPAD-locked set point and P parameters, REMOTE-locked,**3**=KEYPAD-unlocked, REMOTE-locked, **4**= KEYPAD and REMOTE unlocked.	77	0	4		4
C51	Code for IR remote - use when more than one controller is close	77	0	120		0

CAREL PROGRAMMING SHEETS

IR32 UNIVERSAL SERIES IR32 / IRDR V, W, Z, A, D PROGRAMMING INSTRUCTIONS

Set Point(s)



PRESS “SEL” & HOLD For 1 Second
“ST1” will be displayed

On releasing the button “SET POINT 1” value will be displayed



PRESS ARROW “UP” or “DOWN” to set the desired value. **



PRESS “SEL” to confirm the value

If there is only 1 set point then the controller will then display the measured variable (eg room temperature).

If the Controller has been programmed for more than 1 set point (see C0) then “ST2” will be displayed.



PRESS ARROW “UP” or “DOWN” to set the desired value for set point 2



PRESS “SEL” to confirm the value

Please Note

Please read these instructions in conjunction with the parameter list.
It is recommended that the controllers be programmed before connecting or activating the plant to be controlled (eg compressors)

** If the controller is keypad locked the value will not change. See parameter C50

Common Parameters (P & C0)



PRESS & HOLD “PRG” & “SEL” for approx 5 seconds

“0” will be displayed



PRESS “ARROW UP” to enter the password value “22”



PRESS “SEL” to confirm

“C0” will be displayed



A) PRESS “ARROW UP” or “DOWN” to select the code for the parameter to be changed.
eg P1 = differential



B) PRESS “SEL”

The Value Set for this parameter will be displayed



C) PRESS “ARROW UP” or “DOWN” to set the desired value.



D) PRESS “SEL” to confirm the value

REPEAT A-D Until all desired parameters have been set.



PRESS “PRG” To Confirm all Changes (This is very Important)

All Parameters



As above but enter password “77”

CAREL PROGRAMMING SHEETS

PJEZ EASY SERIES PROGRAMMING INSTRUCTIONS

Code	Parameter	Unit	Type	Min.	Max.	Def.	New
/2	Probe measurement stability	-	C	1	15	4	
/4	Select display probe	-	F	1	3	1	
/5	Select °C or °F (0 = °C)	-	C	0	1	0	
/6	Decimal point (0 = enabled, 1 = disabled)	-	C	0	1	0	
/C1	Calibration of probe 1	°C/°F	F	-127	+127	0	
/C2	Calibration of probe 2	°C/°F	F	-127	+127	0	
/C3	Calibration of probe 3	°C/°F	F	-127	+127	0	
St	Temperature set point	°C/°F	S	r1	r2	4	
rd	Controller differential	°C/°F	F	0	19	2	
r1	Minimum Set Point allowed	°C/°F	C	-50	r2	-50	
r2	Maximum Set Point allowed	°C/°F	C	r1	+150	90	
r3	Mode 0=cool with defrost,1=cool only, 2=heating	flag	C	0	2	0	
r4	Value to increase Set Point by from Digital Input	°C/°F	C	0	20	3	
c0	Comp. and fan start delay at power up	min	C	0	100	0	
c1	Minimum time between 2 comp starts	min	C	0	100	0	
c2	Minimum compressor OFF time	min	C	0	100	0	
c3	Minimum compressor ON time	min	C	0	100	0	
c4	Duty setting	min	C	0	100	0	
cc	Duration of continuous cycle	hours	C	0	15	4	
c6	Alarm bypass after continuous cycle	hours	C	0	15	2	
d0	Defrost type (0=elec / temp,1= H.Gas / temp	-	C	0	4	0	
	2 = elec / time, 3 = hot gas / time ...)						
dI	Interval between defrosts (if not using real time)	hours	F	0	199	8	
dt	End defrost temperature, (if d0 = 0 or 1)	°C/°F	F	-50	127	4	
dP	Maximum defrost duration	min	F	1	199	30	
d4	Defrost at power up (0 = no, 1 = yes)	-	C	0	1	0	
d5	Defrost delay at power up (if d4=1)	min	C	0	199	0	
d6	Display during def (0=dF (flash),1=locked)	-	C	0	1	1	
dd	Dripping time after defrost	min	F	0	15	2	
d8	Bypass alarms after defrost	hours	F	0	15	1	
d8d	Alarm delayafter door open - from dig input	hours	C	0	250	0	
d9	Defrost priority over compressor protection	-	C	0	1	0	
dy	Display defrost probe temp d/1=def P1, d/2=def P2)	°C/°F	F	-	-	-	
dC	Time basis for defrost (0=hr/min, 1=min/sec)	-	C	0	1	0	
A0	Alarm and fan differential	°C/°F	C	-20	20	0	
AL	Low alarm temp (if A0=<0 absolute, if A0>0 relative)	°C/°F	F	-50	150	-50	
AH	High alarm temp (if A0=<0 absolute, if A0>0 relative)	°C/°F	F	-50	150	150	
Ad	Low and high temperature alarm delay	min	C	0	199	0	
A4	Configuration of digital input 1	-	C	0	11	0	
A7	External alarm delay if using digital input	min	C	0	199	0	
A8	Enable alarms 'Ed1' and 'Ed2' (defrost end on time)	flag	C	0	1	0	
Ac	High condenser temperature alarm set point	°C/°F	C	-50	150	70	

Code	Parameter	Unit	Type	Min.	Max.	Def.	New
AE	High cond. temp. alarm differential	°C/°F	C	0,1	20	5	
Acd	High cond. temp. alarm delay	min	C	0	250	0	
F0	Enable evaporator fan control	flag	C	0	1	0	
F1	Evaporator fan control set point	°C/°F	F	-50	127	5	
F2	Fans cycle with comp (0=no, 1=yes)	flag	C	0	1	1	
F3	Fans in defrost (0 = on, 1 = off)	flag	C	0	1	1	
Fd	Fans delay after dripping	min	F	0	15	1	
H0	Serial address	-	C	0	207	1	
H1	AUX output configuration	flag	C	0	3	0	
H2	Enable keypad (0=enabled, 1 = disabled)	flag	C	0	1	1	
H4	Disable buzzer (0=enabled, 1 = disabled)	flag	C	0	1	0	
H5	ID code (read-only)	flag	F	0	31	-	
EZY	Select set of default parameters	-	C	0	4	0	

EZY parameter

PJEZ (S, X)	EZY = 1: normal temperature, no defrost
	EZY = 2: normal temperature with timed defrost
	EZY = 3: normal temperature, heating output
	EZY = 4: normal temperature, defrost controlled by temperature (d0 = 4)
PJEZ (C, Y)	EZY = 1: low temperature with hot gas defrost
	EZY = 2: low temperature with automatic night-time set point variation via digital input
	EZY = 3: low temperature with management of alarm via digital input
	EZY = 4: low temperature, defrost controlled by temperature (d0 = 4)

ALARM TABLE

Alarm code	Buzzer & alarm relay	LED	Description	Parameters involved
E0	active	ON	probe 1 error (control)	-
E1	not active	ON	probe 2 error (defrost)	[d0 = 0/1/4] [F0 = 1]
E2	not active	ON	probe 3 error (cond)	[A4 = 10]
IA	active	ON	external alarm	[A4 = 1] [+A7]
dOR	active	ON	open door alarm	[A4 = 7/8] [+A7]
LO	active	ON	low temperature alarm	[AL] [Ad]
HI	active	ON	high temperature alarm	[AH] [Ad]
EE	not active	ON	unit parameter error	-
EF	not active	ON	operating parameter error	-
Ed	not active	ON	defrost ended by timeout	[dP] [dt] [d4] [A8]
dF	not active	OFF	defrost running	[d6 = 0]
cht	not active	ON	dirty condenser pre-alarm	[A4 = 10]
CHt	active	ON	dirty condenser alarm	[A4 = 10]
EtC	not active	ON	clock alarm	if bands active

CAREL PROGRAMMING SHEETS

PJEZ EASY SERIES PROGRAMMING INSTRUCTIONS



CAREL

PJEZ easy controller

Set Point

PRESS & HOLD "SET" for 1 Second
"SET POINT" Value will be displayed

PRESS ARROW "UP" or "DOWN"
to set the desired value. **

PRESS "SET" to confirm the value

Frequent (F) Parameters

PRESS & HOLD "SET" for
approx 5 seconds

"PS" will be displayed

A) PRESS "ARROW UP" or "DOWN"
to select the parameter to be changed.
eg rd = differential

B) PRESS "SET"

The Value Set for this parameter will
be displayed

C) PRESS ARROW "UP" or
"DOWN" to set the desired value.**

D) PRESS "SET"
to confirm the value

REPEAT A-D Until all desired
parameters have been set.

PRESS & HOLD "SET" until temp is
displayed (approx 5 seconds)
to confirm all changes

All Parameters

PRESS & HOLD "SET"
for approx 5 seconds

"PS" will be displayed

PRESS "SET" then "ARROW UP" till
the password value "22" is displayed

PRESS "SET" to confirm

"PS" will be displayed

A) PRESS "ARROW UP" or "DOWN" to
select the code the of parameter to be
changed. eg rd = differential

B) PRESS "SET"
The Value Set for this parameter will be
displayed

C) PRESS "ARROW UP" or "DOWN"
to set the desired value.

D) PRESS "SET"
to confirm the value

REPEAT A-D Until all desired
parameters have been set.

PRESS & HOLD "SET" until temp is
displayed (approx 5 seconds)
to confirm all changes

Please Note

Please read these instructions in conjunction with the parameter list.
It is recommended that the controllers be programmed before connecting or activating the plant to be controlled (eg compressors)
** If the controller is keypad locked the value will not change. See parameter H2.



CAREL

IR33 Universal Series

Set Point

PRESS & HOLD "SET" for 1 second **"St1"** will be displayed.

On releasing the button the current value of Set point 1 will be displayed.

PRESS ARROW "UP" or "DOWN" to set the desired value for set point 1.**

PRESS "SET" to confirm the value.

If there is only 1 set point then the controller will then display the current value of the measured variable (eg room temperature).

If the controller has been programmed for more than 1 set point (see c0), then "St2" will be displayed.

PRESS ARROW "UP" or "DOWN" to set the desired value for set point 2.

PRESS "SET" to confirm the value.

Please note

Please read these instructions in conjunction with the parameter list.
It is recommended that the controllers be programmed before connecting or activating the plant to be controlled (eg. Compressors…).

** If the controller keypad is locked, the value will note change. See parameter c50.

Literature available

Installation manual: +030220801
Technical leaflets: +050003085 (DN33)
+050003086 (IRDR to DN33)
+050003090 (IR33)
+050003095 (IR32 to IR33)

Frequent parameters (P)

PRESS & HOLD "PRG" for approx 5 seconds.

The first frequent parameter P1 will be displayed.

A) PRESS ARROW "UP" or "DOWN" until reaching the parameter to be modified.

B) PRESS "SET" to display the associated value.

C) PRESS ARROW "UP" or "DOWN" to increase or decrease the value.

D) PRESS "SET" to temporarily save the value.

Repeat the operations A to D to set other parameters.

E) **PRESS & HOLD "PRG"** for 5 seconds to permanently save the new values.

All parameters

PRESS & HOLD "PRG" & "SET" for approx 5 seconds until the displays shows 0.

PRESS ARROW "UP" or "DOWN" to enter the password value "77".

Repeat the operations A to E to set other parameters and save.

Version 2.0 - 17/12/2010

CAREL **IR33 Universal Summary of operating parameters**

Code	Parameter	Unit	Type	Min.	Max.	Def.	New
St1	Set point 1	°C/°F	F	c21	c22	20	
St2	Set point 2	°C/°F	F	c23	c24	40	
c0	Operating mode (ie heating, cooling, alarm…)	-	C	0	9	2	
	1 = all outputs direct (cooling), 2 = all outputs reverse (heating),						
	3 = 1/2 outputs direct 1/2 reverse (cooling and heating),						
	4 = pulse with modulation, 5 = alarm mode, 6 = direct / reverse						
	from digital input 1, 7 = direct with set point change from digital						
	input 1, 8 = reverse with set point change from digital input 1,						
	9 = direct / reverse with 2 set points						
P1	Differential 1	°C/°F	F	0.1	99.9	2.0	
P2	Differential 2	°C/°F	F	0.1	99.9	2.0	
P3	Dead zone differential	°C/°F	F	0	99.9	2.0	
c4	Compensation coefficient (validity mode 1 or 2)	-	C	-2	2	0.5	
c5	Type of control (0 = P, 1 = PI)	-	C	0	1	0	
c6	Delay between stage starting	s	C	0	255	5	
c7	Minimum time between activation of the same output	min	C	0	15	0	
d1	Min. time between deactivation of 2 different outputs	s	C	0	255	0	
c8	Minimum off time for each output	min	C	0	15	0	
c9	Minimum on time for each output	min	C	0	15	0	
c10	Status of control outputs with probe alarm (0 = All off,1 = All on,	-	C	0	3	0	
	2 = Cool on heat off, 3 = Cool off heat on)						
c11	Output rotation	-	C	0	7	0	
c12	PWM cycle time	s	C	0.2	999	20	
c13	Type of probe (note: for IR33*7 models, options 0 to 3 only)	-	C	0	16	0	
	0 = NTC, 1 = NTC high temp, 2 = PTC, 3 = Pt1000, Pt1000 high						
	temp, 5 = Pt100, 6 = Pt100 high temp, 7 = T/couple J, 8 = T/couple						
	J high temp, 9 = T/couple K, 10 = T/couple K high temp, 11 = 0-1						
	Vdc, 12 = -0.5-13Vdc, 13 = 0-10Vdc, 14 = 0-5Vdc ratiometric,						
	15 = 0-20mA, 16 = 4-20mA						
P14	Calibration of probe 1	°C/°F	F	-99	99.9	0	
P15	Calibration of probe 2	°C/°F	F	-99	99.9	0	
c15	Minimum value for probe 1 with current / voltage signal	-	C	-199	c16	0	
c16	Maximum value for probe 1 with current / voltage signal	-	C	c15	800	100	
d15	Minimum value for probe 2 with current / voltage signal	-	C	-199	d16	0	
d16	Maximum value for probe 2 with current / voltage signal	-	C	d15	800	100	
c17	Sensor response (probe disturbance filter)	-	C	1	15	4	
c18	Temperature measurement units (0 = °C, 1 = °F)	-	C	0	1	0	
c19	Operation of probe 2	-	C	0	11	0	
	0 = not enabled, 1 = differential mode, 2 = cooling compensation,						
	3 = heating compensation, 4 = compensation always active,						
	5 = logic on absolute set point, 6 = logic on differential set point,						
	7 = 2 circuits, 8 = control on higher p. value, 9 = control on lower						
	p. value, 10 = control by B2, 11 = auto h/c changeover from B2						
c21	Minimum value of set point 1	°C/°F	C	-199	c22	-50	
c22	Maximum value of set point 1	°C/°F	C	c21	800	110	
c23	Minimum value of set point 2	°C/°F	C	-199	c24	-50	
c24	Maximum value of set point 2	°C/°F	C	c23	800	110	

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Code	Parameter	Unit	Type	Min.	Max.	Def.	New
P25	Low temperature alarm threshold on probe 1	°C/°F	F	-199	P26	-50	
P26	High temperature alarm threshold on probe 1	°C/°F	F	P25	800	150	
P27	Alarm differential on probe 1	°C/°F	F	0	99.9	2	
P28	Alarm time delay on probe 1	min	F	0	250	120	
P29	Alarm type on probe 1 (0 = relative, 1 = absolute)	-	F	0	1	1	
P30	Low temperature alarm threshold on probe 2	°C/°F	F	-199	P31	-50	
P31	High temperature alarm threshold on probe 2	°C/°F	F	P30	800	150	
P32	Alarm differential on probe 2	°C/°F	F	0	99.9	2	
P33	Alarm time delay on probe 2	min	F	0	250	120	
P34	Alarm type on probe 2 (0 = relative, 1 = absolute)	-	F	0	1	1	
c29	Digital input 1 configuration	-	C	0	12	0	
	0 = not used, 1 = ext al auto reset circuit 1, 2 = ext al man reset						
	circuit 1, 3 = delayed ext al man reset circuit 1, 4 = ON/OFF,						
	5 = start/stop cycle from button, 6 = override outputs circuit 1,						
	7 = E17 signal delayed, 8 = E17 signal, 9 = ext al auto reset						
	circuit 2, 10 = ext al man reset circuit 2, 11 = delayed ext al man						
	reset circuit 2, 12 = override outputs circuit 2						
c30	Digital input 2 configuration (setting as per c29)	-	C	0	12	0	
c31	Status of control outputs with alarm from DI (0 = All off, 1 = All on,	-	C	0	3	0	
	2 = Heat off others unchanged, 3 = Cool off others unchanged)						
c32	Serial connection address	-	C	0	207	1	
c33	Special operation mode (! DO NOT CHANGE - please refer to	-	C	0	1	0	
	manual for special operation)						
c50	Lock keypad and remote control	-	C	0	2	1	
	0 = keypad disabled remote control enabled, 1 = everything						
	enabled, 2 = everything disabled						
c51	Code for enabling the remote control (0 = no code required)	-	C	0	255	0	
c52	Display (0 = probe 1, 1 = probe 2, 2 = DI 1, 3 = DI 2)	-	C	0	3	0	
	4 = setpoint 1, 5 = setpoint 2, = 6 = probe 1 alternating w probe 2)						
c53	Enable buzzer (0 = enabled, 1 = disabled)	-	C	0	1	0	
c56	Delay at start-up	s	C	0	255	0	
c57	Soft start circuit 1	min/°C	C	0	99	0	
d57	Soft start circuit 2	min/°C	C	0	99	0	
c62	ti_PID1 (integral factor)	s	C	0	999	600	
c63	td_PID1 (derivative factor)	s	C	0	999	0	
d62	ti_PID2 (integral factor)	s	C	0	999	600	
d63	td_PID2 (derivative factor)	s	C	0	999	0	
c64	Auto-tuning (0 = disabled, 1 = enabled)	-	C	0	1	0	
c66	Start enabling interval (note: For IR33*7 Enabling direct threshold)	°C/°F	C	-199	800	-50	
c67	End enabling interval (note: For IR33*7 Enabling reverse threshold)	°C/°F	C	-199	800	150	
c68	Enable cut off operation (0 = enabled, 1 = disabled)	-	C	0	1	0	
P70	Enable operating cycle	-	F	0	3	0	
	0 = disabled, 1 = keypad, 2 = digital input, 3 = real time clock						
P71	Operating cycle: duration of step 1	min	F	0	200	0	
P72	Operating cycle: temperature set point step 1	°C/°F	F	-199	800	0	
P73	Operating cycle: duration of step 2	min	F	0	200	0	
P74	Operating cycle: temperature set point step 2	°C/°F	F	-199	800	0	

Code	Parameter	Unit	Type	Min.	Max.	Def.	New
P75	Operating cycle: duration of step 3	min	F	0	200	0	
P76	Operating cycle: temperature set point step 3	°C/°F	F	-199	800	0	
P77	Operating cycle: duration of step 4	min	F	0	200	0	
P78	Operating cycle: temperature set point step 4	°C/°F	F	-199	800	0	
P79	Operating cycle: duration of step 5	min	F	0	200	0	
P80	Operating cycle: temperature set point step 5	°C/°F	F	-199	800	0	
ton	Switch device ON time setting (Press Set)	-	C	-	-	-	
d	Day	day		0	11	0	
h	Hour	h		0	23	0	
m	Minute	min		0	59	0	
tof	Switch device OFF time setting (Press Set)	-	C	-	-	-	
d	Day	day		0	11	1	
h	Hour	h		0	23	0	
m	Minute	min		0	59	0	
tc	Real Time Clock date/time setting (Press Set)	-	C	-	-	-	
y	Year	year		0	99	0	
M	Month	month		1	12	1	
d	Day of the month	day		1	31	1	
u	Day of the week	day		1	7	1	
h	Hour	hours		0	23	0	
m	Minute	min		0	59	0	

Alarm table

Code	Description	Buzzer	Reset
E01	Probe B1 fault	OFF	Automatic
E02	Probe B2 fault	OFF	Automatic
E03	Digital contact open (immediate alarm)	ON	Automatic
E03	Digital contact open (delayed alarm)	ON	Automatic
E03	Digital contact open (immediate alarm with manual reset)	ON	Manual
E04	High temperature alarm probe 1	ON	Automatic
E05	Low temperature alarm probe 1	ON	Automatic
E06	Real time clock fault	OFF	Automatic / Manual
E07	EEPROM error, unit parameters	OFF	Automatic
E08	EEPROM error, operating parameters	OFF	Automatic
E09	Acquisition error. Reached max time in calculation of PID parameters	ON	Manual
E10	Calculation error. PID gain null	ON	Manual
E11	Calculation error. PID gain negative	ON	Manual
E12	Calculation error. Integral and deriv. time negative	ON	Manual
E13	Acquisition error. Reached max continuous time in calculation of gain	ON	Manual
E14	Error when starting. Situation not suitable	ON	Manual
E15	High temperature alarm probe 2	ON	Automatic
E16	Low temperature alarm probe 2	ON	Automatic
E17	Digital contact open (immediate or delayed alarm, signal only)	OFF	Automatic
E18	Digital contact open (immediate alarm or delayed with reset on circuit 2)	ON	Automatic / Manual
E19	Probe reading error (For IR33*9 only)	OFF	Automatic

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CAREL

MPXPRO Series

Set Point

PRESS & HOLD "SET" for 1 second **"St1"** will be displayed.

On releasing the button the current value of Set point 1 will be displayed.

PRESS ARROW "UP" or "DOWN" to set the desired value for set point 1.**

PRESS "SET" to confirm the value.

Please note

Please read these instructions in conjunction with the parameter list and the installation manual.

It is recommended that the controllers be programmed before connecting or activating the plant to be controlled (eg. Compressors…).

** If the controller keypad is locked, the value will not change. See parameter H2.

Literature available

Installation manual:

+030220186

Technical leaflets:

+050001175 MPXPRO wiring & network connections

+050001185 MPXPRO start-up guide

+050001190 MPXPRO functions, parameters & alarms

Frequent parameters (F)

PRESS & HOLD "PRG" for approx 5 seconds. The first frequent parameter P1 will be displayed.

A) PRESS ARROW "UP" or "DOWN" until reaching the parameter to be modified.

B) PRESS "SET" to display the associated value.

C) PRESS ARROW "UP" or "DOWN" to increase or decrease the value.

D) PRESS "SET" to temporarily save the value.

Repeat the operations A to D to set other parameters.

E) **PRESS & HOLD "PRG"** for 5 seconds to permanently save the new values.

Configuration parameters (C)

PRESS & HOLD "PRG" & "SET" for approx 5 seconds until the displays shows 0.

PRESS ARROW "UP" or "DOWN" to enter the password value "22".

Repeat the operations A to E to set other parameters and save.

Advanced parameters (A)

PRESS & HOLD "PRG" & "SET" for approx 5 seconds until the displays shows 0.

PRESS ARROW "UP" or "DOWN" to enter the password value "33".

Repeat the operations A to E to set other parameters and save.

Version 1.0 - 10/09/2010

CAREL

MPXPRO Summary of operating parameters

Code	Block	Parameter	Unit	Type	Min.	Max.	Def.	New
/2	Pro	Analogue probe measurement stability	-	A	1	15	4	
/4	Pro	Virtual probe composition (0=outlet probe Sm/100=inlet probe Sr)	%	C	0	100	0	
/5	Pro	Temperature unit of measure (0=°C / 1=°F)	-	A	0	1	0	
/6	Pro	Display decimal point (0=enabled / 1=disabled)	-	A	0	1	0	
/t	Pro	display signals/alarms on remote disp. (0=enabled / 1=disabled)	-	A	0	1	0	
/t1	Pro	Display on user terminal	-	C	0	14	12	
/t2	Pro	Display on remote display	-	A	0	14	12	
/to	Pro	Configure remote terminal / remote display	-	A	0	3	3	
/P1	Pro	Type of probe group 1 (S1, S2, S3)	-	A	0	3	0	
/P2	Pro	Type of probe group 2 (S4, S5)	-	A	0	3	0	
/P3	Pro	Type of probe group 3 (S6)	-	A	0	4	0	
/P4	Pro	Type of probe group 4 (S7)	-	A	0	6	0	
/P5	Pro	Type of probe group 5:serial probes (S8 to S11)	-	A	0	15	0	
/FA	Pro	Assign outlet temperature probe (Sm)	-	C	0	11	1	
/Fb	Pro	Assign defrost temperature probe (Sd)	-	C	0	11	2	
/Fc	Pro	Assign intake temperature probe (Sr)	-	C	0	11	3	
/Fd	Pro	Assign superheated gas temperature probe (tGS)	-	A	0	11	0	
/FE	Pro	Assign saturated evaporation pressure/temperature probe (Peu/tEu)	-	A	0	11	0	
/FF	Pro	Assign defrost temperature probe 2 (Sd2)	-	A	0	11	0	
/FG	Pro	Assign auxiliary temperature probe 1 (Saux1)	-	A	0	11	0	
/FH	Pro	Assign auxiliary temperature probe 2 (Saux2)	-	A	0	11	0	
/FI	Pro	Assign ambient temperature probe (SA)	-	A	0	11	0	
/FL	Pro	Assign ambient humidity probe (SU)	-	A	0	11	0	
/FM	Pro	Assign glass temperature probe (Svt)	-	A	0	11	0	
/Fn	Pro	Assign dewpoint value (SdP) to a serial probe	-	A	0	4	0	
/c1	Pro	Probe 1 calibration	°C/°F	F	-20	20	0	
/c2	Pro	Probe 2 calibration	°C/°F	F	-20	20	0	
/c3	Pro	Probe 3 calibration	°C/°F	F	-20	20	0	
/c4	Pro	Probe 4 calibration	°C/°F	A	-20	20	0	
/c5	Pro	Probe 5 calibration	°C/°F	A	-20	20	0	
/c6	Pro	Probe 6 calibration		A	-20	20	0	
/c7	Pro	Probe 7 calibration		A	-20	20	0	
/U6	Pro	Maximum value of probe 6	bar/rH%	A	/L6	100	9.3	
/L6	Pro	Minimum value of probe 6	bar/rH%	A	-100	/U6	-1	
/U7	Pro	Maximum value of probe 7	bar/rH%	A	/L7	100	9.3	
/L7	Pro	Minimum value of probe 7	bar/rH%	A	-100	/U7	-1	
OFF	Ctl	On/OFF control (0=ON / 1=OFF)	-	A	0	1	0	
St	Ctl	Set point	°C/°F	F	r1	r2	50	
St2	Ctl	Intake probe set point with "double thermostat"	°C/°F	A	r1	r2	50	
rd	Ctl	Set point differetial for St	°C/°F	F	0.1	20	2	
rd2	Ctl	Set point differetial for St2 with "double thermostat" (0 = disabled)	°C/°F	A	0	20	0	
r1	Ctl	Minimum set point	°C/°F	A	-50	r2	-50	
r2	Ctl	Maximum set point	°C/°F	A	r1	50	50	
r3	Ctl	End defrost signal by timeout (0=disabled / 1=enabled)	-	A	0	1	0	
r4	Ctl	Automatic night-time set point variation	°C/°F	C	-50	50	0	
r5	Ctl	Maximum and minimum temperature monitoring probe	-	A	0	10	0	
rt	Ctl	Duration of the current max and min monitoring session	hour	A	0	999	-	

CAREL

MPXPRO Summary of operating parameters page 2

Code	Block	Parameter	Unit	Type	Min.	Max.	Def.	New
rH	Ctl	Maximum temperature acquired in the session	°C/°F	A	-	-	-	
rL	Ctl	Minimum temperature acquired in the session	°C/°F	A	-	-	-	
r6	Ctl	Probe for night-time control (0=virtual probe / 1=intake probe)	-	C	0	1	0	
ro	Ctl	Control offset with probe error	°C/°F	A	0	20	0	
r7	Ctl	Master solenoid valve configuration (0 = local / 1=network valve)	-	C	0	1	0	
c0	Cmp	Delay enable compressor and evaporator fans on power up	min	A	0	240	0	
c1	Cmp	Minimum time between successive starts	min	A	0	15	0	
c2	Cmp	Minimum OFF time	min	A	0	15	0	
c3	Cmp	Minimum ON time	min	A	0	15	0	
c4	Cmp	ON time for duty setting operation (Toff=15 minutes fixed)	min	A	0	100	0	
cc	Cmp	Running time in continuous cycle	hour	A	0	15	1	
c6	Cmp	Low temperatuer alarm bypass time after continuous cycle	min	A	0	240	60	
c7	Cmp	Defrost priority over continuous cycle (0=no / 1=yes)	-	A	0	1	0	
d0	dEF	Type of defrost (elec 0=temp, 2=time / hot gas 1=temp, 3=time)	-	C	0	6	0	
d2	dEF	End defrost synchronised by master (0=no / 1=synchronised)	-	A	0	1	0	
dI	dEF	Maximum interval between consecutive defrosts	hour	C	0	240	8	
dt1	dEF	End defrost temperature (read by Sd)	°C/°F	F	-50	50	8	
dt2	dEF	End defrost temperature (read by Sd2)	°C/°F	A	-50	50	8	
dP1	dEF	Maximum defrost duration	min	F	1	240	45	
dP2	dEF	Maximum secondary evaporator defrost duration	min	A	1	240	45	
d4	dEF	Defrost on power-up (0=disabled / 1=enabled)	-	A	0	1	0	
d5	dEF	Defrost delay on power-up (if d4=1) (0=delay disabled)	min	A	0	240	0	
d6	dEF	Display on terminals during defrost	-	C	0	2	1	
dd	dEF	Dripping time after defrost (fans off) (0=no dripping)	min	A	0	15	2	
d7	dEF	Skip defrost (0=disabled / 1=enabled)	-	A	0	1	0	
d8	dEF	Bypass high temperature alarm time after defrost and door open	min	C	1	240	30	
d9	dEF	Defrost priority over compressor protection times (0=no / 1=yes)	-	A	0	1	1	
Sd1	dEF	Defrost probe reading	°C/°F	F	-	-	-	
Sd2	dEF	Secondary evaporator defrost probe reading	°C/°F	A	-	-	-	
dC	dEF	Tima base for defrost (0=hours/minutes / 1=minutes/seconds)	-	A	0	1	0	
d10	dEF	Defrost time in "running time" mode (0=function disabled)	min	A	0	240	0	
d11	dEF	Defrost temperature threshold in "running time" mode	°C/°F	A	-50	50	-30	
d12	dEF	Pressure probe alarm management during defrost	-	A	0	3	0	
dS1	dEF	Compressor off time in "sequential stop" defrost mode	min	A	0	45	0	
dS2	dEF	Compressor operating time in "sequential stop" defrost mode	min	A	0	240	120	
ddt	dEF	Additional end defrost temperature delta in "power defrost" mode	°C/°F	A	-20	20	0	
ddP	dEF	Additional maximum defrost time delta in "power defrost" mode	min	A	0	60	0	
dn	dEF	Nominal "skip defrost" duration	%	A	0	100	75	
d1S	dEF	Number of daily defrosts (td1)	-	C	0	14	0	
d2S	dEF	Number of daily defrosts (td2)	-	C	0	14	0	
dH1	dEF	Pump down phase duration (0=pump down disabled)	s	A	0	999	0	
dHG	dEF	Type of multiplexed hot gas defrost	-	A	0	1	0	
AA	Alm	Assign probe for high (AH) and low (AL) temperature alarms	-	F	1	14	1	
AA2	Alm	Assign probe for high (AH2) and low (AL2) temperature alarms	-	A	1	14	1	
A0	Alm	High and low temperature alarm reset differential	°C/°F	F	0.1	20	2	
A1	Alm	Alarm thresholds (AL, AH) type (0=relative to St / 1=absolute)	-	F	0	1	0	
A2	Alm	Alarm thresholds (AL2, AH2) type (0=relative to St2 / 1=absolute)	-	A	0	1	0	

Code	Block	Parameter	Unit	Type	Min.	Max.	Def.	New
AL	Alm	Low temperature alarm threshold	°C/°F	F	-50	50	4	
AH	Alm	High temperature alarm threshold	°C/°F	F	-50	50	10	
AL2	Alm	Low temperature alarm 2 threshold	°C/°F	A	-50	50	0	
AH2	Alm	High temperature alarm 2 threshold	°C/°F	A	-50	50	0	
Ad	Alm	Delay time for high and low temperature alarms	min	F	0	240	120	
A4	Alm	Configuration of digital input DI1 on S4	-	C	0	9	0	
A5	Alm	Configuration of digital input DI2 on S5	-	C	0	9	0	
A6	Alm	Configuration of solenoid/compressor control during ext alarm	min	A	0	100	0	
A7	Alm	Delay time for delayed external alarm	min	C	0	240	0	
A8	Alm	Configuration of function of virtual digital input	-	A	0	8	0	
A9	Alm	Select digital input propagated from master to slaves	-	A	0	5	0	
A10	Alm	Configuration of digital input DI3 on S6	-	C	0	9	0	
A11	Alm	Configuration of digital input DI4 on S7	-	C	0	9	0	
A12	Alm	Configuration of digital input DI5	-	C	0	8	0	
Ar	Alm	Signal alarms from slave to master (0=not enabled / 1=enabled)	-	A	0	1	1	
A13	Alm	Hot gas safety procedure for slave offline	-	A	0	1	0	
F0	Fan	Evaporator fan management (0=always on / 1&2 see manual)	-	C	0	2	0	
F1	Fan	Evaporator fan activation threshold (only if F0=1 or 2)	°C/°F	F	-50	50	-5	
F2	Fan	Evaporator fans with compressor off (0 =see F0 / 1= always off)	-	C	0	1	1	
F3	Fan	Evaporator fans during defrost (0=on / 1=off)	-	C	0	1	1	
Fd	Fan	Post dripping time after defrost (fans off with control active)	min	C	0	15	1	
Frd	Fan	Fan activation differential (inclluding variable speed)	°C/°F	F	0.1	20	2	
F5	Fan	Evaporator fan cut-off temperature (hysteresis 1°C)	°C/°F	F	F1	50	50	
F6	Fan	Maximum evaporator fan speed	%	A	F7	100	100	
F7	Fan	Minimum evaporator fan speed	%	A	0	F6	0	
F8	Fan	Evaporator fan peak time (0=function disabled)	s	A	0	240	0	
F9	Fan	Select fan control with output PWM1/2 (0=pulse / 1=duration)	-	A	0	1	1	
F10	Fan	Evaporator fan forcing time at maximum speed	s	A	0	240	0	
	Eud	Electronic expansion valve parameters - See manual						
In	CnF	Type of unit (0=slave / 1=master)	-	C	0	1	0	
Sn	CnF	Number of slaves in the local network (0=no slave)	-	C	0	5	0	
H0	CnF	Serial or master slave network address	-	C	0	199	199	
H1	CnF	Configuration of output AUX1	-	C	0	11	8	
H2	CnF	Disable keypad and remote control functions (1=all enabled)	-	A	0	5	1	
H3	CnF	Remote control enabling code (0=no code)	-	A	0	255	0	
H4	CnF	Terminal buzzer (if present) (0=enabled / 1=disabled)	-	A	0	1	0	
H5	CnF	Configuration of output AUX2	-	C	0	11	8	
H6	CnF	Terminal keypad lock configuration	-	A	0	15	0	
H7	CnF	Configuration of output AUX3	-	C	0	11	8	
H8	CnF	Output switched with time bands (0=light / 1=aux)	-	C	0	1	0	
H9	CnF	Select function associated with the "aux" button (0=light / 1=aux)	-	C	0	1	0	
H10	CnF	Configure compressor digital output logic (0=direct /1=reverse)	-	A	0	1	0	
H11	CnF	Configure evaporator fan digital output logic (0=direct /1=reverse)	-	F	1	14	1	
	CnF	rHx parameters for anti-sweat function parameters - See manual						
	Hst	Alarm log parameters - See manual						
	HcP	HACCP alarms parameters - see manual						
	rtc	Real Time clock parameters - See manual						

AIREFRIG AUSTRALIA PTY LTD
RECOMMENDED LIST PRICES
A.B.N. 95 008 761 573

ALL PRICES ARE EXCLUSIVE OF GST
SUBJECT TO CHANGE WITHOUT NOTICE
EFFECTIVE MARCH 2014

FILTER DRIERS - SPORLAN

SPORLAN®

Catch-All® THE PERFECT FILTER-DRIER 22, 134a, 404A, 407C, 410A, 507

The universal acceptance of the **Catch-All® Filter-Drier** is due to its unique moulded porous core, consisting of a blend of highly effective desiccants. The quality features built into it assure years of service on any refrigeration system.

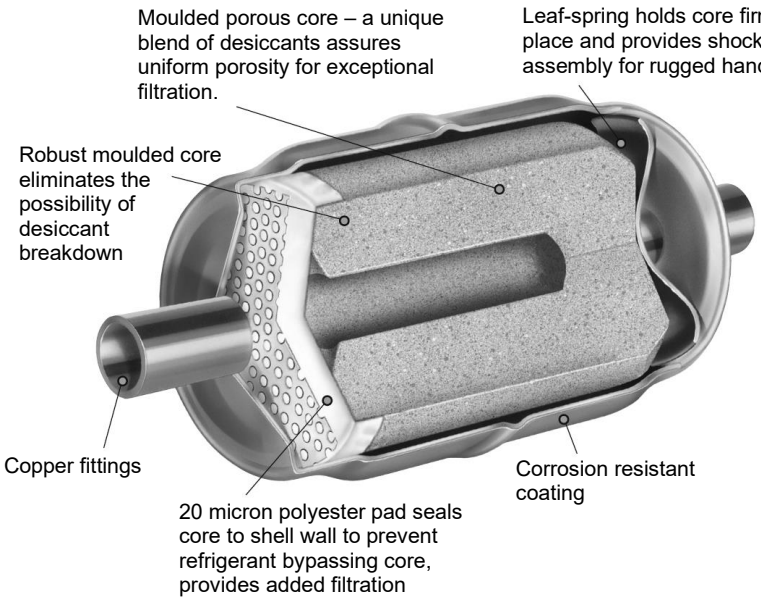
MOISTURE
The **Catch-All Filter-Drier** removes moisture from the refrigerant by adsorbing and retaining it deep within the desiccant granules. The blend of desiccants used in the **Catch-All Filter-Drier** are specially formulated for exceptional water removal.

FOREIGN MATTER
The **Catch-All Filter-Drier** will filter out scale, solder particles, carbon, sludge, dirt or any other foreign matter with negligible pressure drop. Fine particles that would go through an ordinary strainer are removed down to a minimum size in one pass filtration. The large filtering area of the **Catch-All Filter-Drier** core permits it to collect a large amount of dirt without plug up.

ACID
The **Catch-All Filter-Drier** is unexcelled in acid removal ability. The hydrochloric, hydrofluoric, and various organic acids are adsorbed and held by the desiccant in a manner similar to the adsorption of moisture. Tests have demonstrated that the **Catch-All Filter-Drier** has superior acid removal ability when compared to competitive driers. This ability, along with its excellent ability to clean up the oil, is responsible for the excellent field performance in cleaning up severely contaminated systems.

OIL SLUDGE AND VARNISH
Even the best refrigeration oils break down to produce varnish, sludge and organic acids. Only the **Catch-All Filter-Drier** is capable of removing these products of oil decomposition.

SPECIAL APPLICATIONS
A special “HH” core **Catch-All Filter-Drier** is available to remove wax which frequently causes difficulty on low temperature refrigeration systems.



FILTER DRIERS - SPORLAN

Liquid Line Filter Driers

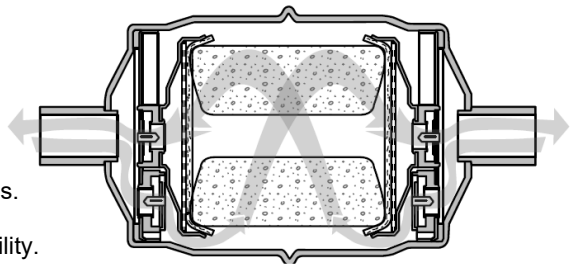
Airefrig Part Number	Connection Type & Size	Desiccant Volume cm³	**Water Capacity - Grams					Selection Recommends KW					Overall Length mm	Dia mm	List Price Excl GST
			R22 60PPM	R134A 50PPM	R404A & R507 50PPM	R407C 50PPM	R410A 50PPM	Refrigeration			Air Cond.				
			25°C & 50°C	25°C & 50°C	25°C & 50°C	25°C & 50°C	25°C & 50°C	R134a	R22	R404A & R507	R134a	R22, 407C R410A			
C032	1/4MF	49	3.1 & 2.5	3.4 & 2.4	3.6 & 2.9	2.6 & 0.9	1.4 & 1.0	0.88	0.88	0.88	1.8	1.76	106	44	
C032F	1/4MF/FF												97		
C032S	1/4ODS												106		
C033	3/8MF												119		
C033S	3/8ODS												99		
C052	1/4MF	82	7.3 & 6.0	7.9 & 5.7	8.5 & 6.9	6.2 & 2.0	3.2 & 2.4	1.17	1.17	1.17	2.64 thru 3.52	2.64 thru 3.52	121	62	
C052S	1/4ODS												106		
C053	3/8MF												132		
C053S	3/8ODS												109		
C082	1/4MF	147	12.0 & 9.8	13.1 & 9.4	14.0 & 11.4	10.1 & 3.3	5.2 & 3.9	1.76 thru 5.28	1.76 thru 5.28	1.76 thru 5.28	2.64 thru 7.03	3.52 thru 7.03	143	67	
C082S	1/4ODS												130		
C083	3/8MF												154		
C083S	3/8ODS												133		
C084	1/2MF												160		
C084S	1/2ODS												138		
C162	1/4MF	262	17.3 & 14.9	19.8 & 14.3	21.2 & 17.3	15.4 & 5.0	7.9 & 6.0	3.52 thru 7.03	5.28 thru 10.6	2.64 thru 7.03	3.52 thru 17.6	5.28 thru 17.6	159	76	
C163	3/8MF												171		
C163S	3/8ODS												149		
C164	1/2MF												176		
C164S	1/2ODS												152		
C165	5/8MF												184		
C165S	5/8ODS												160		
C303	3/8MF	492	34.8 & 28.4	37.8 & 27.3	40.5 & 32.9	29.3 & 9.5	15.1 & 11.4	10.6 thru 17.6	10.6 thru 17.6	7.03 thru 17.6	10.6 thru 26.4	14.1 thru 35.2	246	76	
C303S	3/8ODS												226		
C304	1/2MF												251		
C304S	1/2ODS												229		
C305	5/8MF												259		
C305S	5/8ODS												235		
C306	3/4MF												259		
C306S	3/4ODS												245		
C414	1/2MF	672	46.8 & 35.7	50.9 & 36.7	54.4 & 44.3	39.4 & 12.7	20.4 & 15.3	17.6 thru 35.2	17.6 thru 42.2	17.6 thru 35.2	17.6 thru 42.2	26.4 thru 52.8	252	89	
C415	5/8MF												260		
C415S	5/8ODS												237		
C416	3/4MF												260		
C416S	3/4ODS												249		
C417S	7/8ODS												249		

** 20 Drops = 1 gram = 1cc. (Ratings at ARI standard conditions)

FILTER DRIERS - SPORLAN

Reversible Heat Pump Driers

Design Benefits



Short overall length for easy installation.

Drier operates in either flow direction with low pressure drop.

Proven metal check valves used in construction – nosynthetic materials.

The Sporlan dependable moulded core used for maximum filtration ability.

When the flow direction reverses, dirt already collected remains in the filter-drier.

Carefully engineered blend of desiccants for maximum water capacity & acid removal ability.

The HPC-160-HH Series also has the HH style core with activated charcoal which offers maximum ability to remove oleoresin and other reactive chemical constituents in the lubricant.

Same rugged construction as used in the Catch-All®.

Heat Pump Driers – Reversible (New Installations)

Airefrig Part Number	Connection Type & Size	Desiccant Volume cm³	**Water Capacity - Grams						Selection Recommend KW	Overall Length mm	Dia. mm	List Price Excl GST
			R22 at 60PPM		R407C at 50PPM		R410A at 50PPM					
			24°C	52°C	24°C	52°C	24°C	52°C				
HPC103	3/8MF	164	10.8	8.8	9.1	3.0	4.7	3.5	3.5 thru 17.5	171	76	
HPC103S	3/8ODS									149		
HPC104	1/2MF									176		
HPC104S	1/2ODS									152		
HPC105S	5/8ODS									152		

** 20 Drops = 1 gram = 1cc. (Ratings at ARI standard conditions)

Heat Pump Driers – Reversible (For Clean-up after Burnout)

Airefrig Part Number	Connection Type & Size	Desiccant Volume cm³	**Water Capacity - Grams						Selection Recommend KW	Overall Length mm	Dia. mm	List Price Excl GST
			R22 at 60PPM		R407C at 50PPM		R410A at 50PPM					
			24°C	52°C	24°C	52°C	24°C	52°C				
HPC163HH	3/8MF	229	4.7	4.1	4.5	4.4	3.5	5.0	3.5 thru 17.5	198	76	
HPC163SHH	3/8ODS									176		
HPC164HH	1/2MF									202		
HPC164SHH	1/2ODS									180		
HPC165HH	5/8MF									210		
HPC165SHH	5/8ODS									187		
HPC307SHH	7/8 ODS	492	8.4	6.0	8.1	4.4	6.2	5.5	14 thru 42	280		

** 20 Drops = 1 gram = 1cc. (Ratings at ARI standard conditions)
HH Signifies suitable for Burn Out Applications

FILTER DRIERS - SPORLAN

Suction Line Filter Driers
(Clean Up after Burn Out and New Systems)

The flow capacities are rated at the maximum recommended pressure drop for permanent installation.

To ensure the suction line filter-drier has ample contaminant removal ability, selection must be based on flow capacity and the amount of desiccant required for system clean-up.

The suction line filter-drier must be large enough to adequately remove acid, moisture and solid contaminants without causing nuisance plug-ups.

Standard Suction Line Driers – Not Reversible

Airefrig Part Number	Connection Type & Size	Desiccant Volume cm³	R22			R134A			R404A			R410	Overall Length mm	Diameter mm	List Price Excl GST
			Evaporator Temperature °C												
			+5°C	-5°C	-15°C	+5°C	-5°C	-15°C	-5°C	-15°C	-30°C	+5°C			
			Pressure Drop (bar)												
			0.21	0.14	0.10	0.14	0.10	0.07	0.14	0.10	0.07	0.21			
C084STHH	1/2 ODS	147	7.4	4.6	3.2	4.9	3.2	2.1	4.6	2.8	1.8	9.5	138	76	
C164STHH	1/2 ODS	262	9.5	6.0	3.9	6.0	3.9	2.5	5.6	3.5	2.1	12.7	152		
C165STHH	5/8 ODS		11.3	7.0	4.6	7.0	4.6	2.8	6.7	4.2	2.5	14.8	176		
C166STHH	3/4 ODS		14.1	8.8	5.6	9.1	6.0	3.5	8.4	5.6	3.2	18.3	184		
C305STHH	5/8 ODS	492	12.0	7.4	4.9	7.7	4.9	2.8	7.0	4.6	2.8	15.5	235		
C307STHH	7/8 ODS		18.6	11.6	7.7	12.0	7.7	4.6	11.3	7.0	4.2	24.6	248		
C419STHH	1 1/8 ODS	672	21.8	13.7	8.8	14.1	9.1	5.6	13.0	8.4	5.3	28.1		89	
C4311STHH	1 3/8 ODS	787	39.0	24.3	16.2	25.0	16.2	9.9	23.6	15.1	9.1	50.7	278	121	
C4313STHH	1 5/8 ODS		42.9	26.7	17.6	27.4	17.9	10.9	25.7	16.5	10.2	55.9			

Compact Suction Line Driers – Not Reversible

C144STTHH	1/2ODS	229	7.4	4.6	3.2	4.6	2.8	1.8	3.2	2.1	1.1	9.5	105	112	
C145STTHH	5/8ODS		12.0	7.7	4.9	7.4	4.6	2.8	5.6	3.5	2.1	16.2	111		
C146STTHH	3/4ODS		16.9	10.6	7.0	10.2	6.3	3.9	7.4	4.9	3.2	21.8	123		
C147STTHH	7/8ODS		18.6	11.6	7.7	11.3	7.4	4.6	8.5	5.6	3.2	23.9	126		
C149STTHH	1 1/8ODS		24.6	15.5	10.2	14.8	9.5	5.6	11.3	7.4	4.2	31.7	125		

T Signifies fitted with 1 Access Valve / TT Signifies fitted with 2 Access Valves / HH Signifies suitable for Burn Out Applications



Standard Body Type



Compact Body Type

SUCTION FILTERS - SPORLAN



Suction Filter - Sealed Type



Design Benefits

- **Protects the compressor from dirt**
- **Relief device opens if the filter plugs**
- **Suitable for use with all brazing alloys**
- **Maximum corrosion resistance**
- **Full flow design for low pressure drop**
- **Complete line of sizes**

Sporlan offers an exclusive concept in Suction Filter design – a filter with an optional relief feature. When flow is in **one direction,** the bypass relief feature is active.

If the pressure drop across the element becomes excessive the bypass relief will open slightly to maintain sufficient gas flow and assure proper cooling of the hermetic motor.

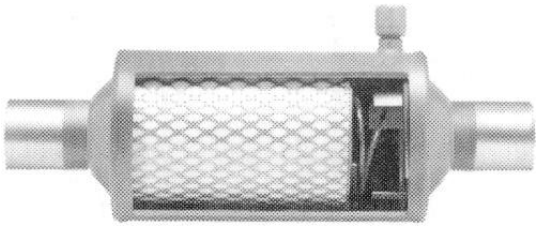
When the Suction Filter is installed with flow in the **opposite direction,** the bypass relief feature is inactive and will never open regardless of the increase in pressure drop.

The "-T" in the type number indicates these models are equipped with an access valve to permit pressure drop readings.

The access valve will be operational provided the Suction Filters are installed with the bypass feature inactive.

Airefrig Part Number	Connection Type & Size	Filter Area cm^2	Flow Capacity in KW Evaporator Temperature									Nominal System HP		Overall Length mm	Diameter mm	List Price Excl GST
			+5°C			+5°C			-20°C		-30°C					
			Pressure Drop - bar													
			0.20	0.14	0.20	0.14	0.10	0.14	0.07	0.10	0.07					
			Refrigerant									R22 407C	404A 507 134A			
			22	134A	407C	22	134A	404A, 507	134A	404A, 507	404A, 507					
Bi- directional Flow – With Bypass Relief Feature																
SF283F	3/8 FL	181	7.4	4.2	7.0	4.6	2.8	4.2	1.8	2.8	1.8	1.0	1/2	223	76	
SF285T	5/8 ODS		22.5	14.1	21.8	14.1	9.5	13.7	6.0	9.5	6.0	4.0	1-1/2	212		
SF285FT	5/8 FL		22.5	14.1	21.8	14.1	9.5	13.7	6.0	9.5	6.0	4.0	1-1/2	223		
SF286T	3/4 ODS		30.2	17.9	28.5	17.6	12.0	17.9	7.4	12.0	7.4	5.0	1-1/2	223		
SF287T	7/8 ODS		39.0	24.6	39.7	25.3	16.2	24.6	9.8	16.2	10.2	7-1/2	3.0	227		
SF289T	1 1/8 ODS		52.1	32.4	51.3	33.1	21.1	32.4	13.0	21.5	13.4	7-1/2	5.0	242		
SF489T	1 1/8 ODS	310	56.3	34.8	55.2	35.2	22.9	34.5	13.7	22.9	14.4	10.0	5.0	315		
SF4811T	1 3/8 ODS		64.7	39.4	63.3	40.1	25.7	39.4	15.5	26.0	16.2	12.0	5.0	333		
Single Flow – Without Bypass Relief Feature																
SF115F	5/8 FL	71	13.0	8.1	13.0	8.4	5.3	8.1	3.2	5.3	3.2	2	1	141	51	

Suffix T signifies with Access Valve

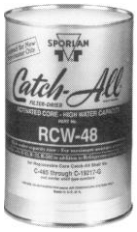


DRIER CORES - SPORLAN

Replaceable Drier Cores & Pleated Elements

Airefrig Part Number	Description – Application	List Price Excl GST
RC4864	**Activated Core** The standard core suitable for most installations for liquid or suction line.	
RC4864HH	**Activated Charcoal Core** This core should be used for wax removal on low temperature systems, and for clean up after burn-out on all types of systems	
RCW48	**High Water Capacity Core** This core should be used on system that a ruptured condenser or that have been exposed to the atmosphere, or for some reason are expected to have a high amount of water in the system. Designed especially for polyolester oils.	
RPE48BD	**Pleated Filter Element** This should be installed in the suction line to obtain the lowest possible pressure drop. In cleaning up a system after a motor burn out, cores should be used first. Then after the system is thoroughly clean, then the felt element can be installed.	





DRIER SHELLS - ENTHALPY

Enthalpy Drier Shells

Airefrig Part Number	Cores	Connection Sizes Inches	Desiccant Volume cm^3	Filter Surface Area cm^2	List Price Ex GST
NFDS485	1	5/8”	786	413	
NFDS487	1	7/8”			
NFDS489	1	1 1/8”			
NFDS4811	1	1 3/8”			
NFDS4813	1	1 5/8”			
NFDS4817	1	2 1/8”			
NFDS967	2	7/8”	1572	826	
NFDS969	2	1 1/8”			
NFDS9611	2	1 3/8”			
NFDS9613	2	1 5/8”			
NFDS9617	2	2 1/8”			
NFDS1449	3	1 1/8”	2358	1239	
NFDS14411	3	1 3/8”			
NFDS14413	3	1 5/8”			
NFDS14417	3	2 1/8”			
NFDS19211	4	1 3/8”	3144	1652	
NFDS19213	4	1 5/8”			
NFDS19217	4	2 1/8”			
NRC081852	Gasket Kit to suit NFDS drier shells				

Note: The NFDS Enthalpy drier shells have a maximum working pressure of 500psi.



OIL FILTERS - SPORLAN

Sporlan *OF* Series Oil Filters

Virtually eliminates the need for oil changes due to suspended particulate in circulation.

Unsurpassed filtering efficiency:
- **99% removal of 3 micron sized particles**
- **98% removal of 2 micron sized particles**

Element utilizes a pleated design for maximum surface area.
Unsurpassed filtration capacities.

High flow capacities with low pressure drop.

Filter element utilizes an O-ring seal.

Inert microglass filter material ensures lubricant compatibility.

Dimensions allow for easy replacement of current filter.



With the use of POE oils system chemistry changed, unlike mineral and alkylbenzene oils POE oil has solvent-like tendencies.
POE oil has the ability to suspend and recirculate small, solid contaminants left from system installation or retrofit.
POE oil samples taken from actual systems have shown the oil to suspend and recirculate a high concentration of 2-20 micron sized particles, with the largest percentage between 2-10 microns.
Although some particles are smaller than bearing tolerances, studies have shown bearing life can still be affected.
Bearing wear depends upon the size, hardness, and concentration of particles in circulation.
To effectively remove these small particles, Sporlan developed a new type of oil filter.
The **OF Series Oil Filters** are designed to be 99% efficient in removing 3 micron sized particles and yet have sufficient flow capacity at a low pressure drop, the unsurpassed filtration ability of the oil filters will assure clean POE, mineral or alkylbenzene oil is returned to the compressors.
Clean oil ensures proper operation of the oil level control and minimizes compressor wear.

Sporlan *OF* Oil Filters

Airefrig Part Number	Description	Filtering Area	Overall Length	Shell Diameter	List Price Excl GST
OF303	Sealed Model 3/8 Flare	2097 cm^2	246mm	76mm	
ROF413	Replaceable Oil Filter Shell		206mm	89mm	
OFE1	Element with Gasket – suit ROF413				
A1751	Mounting Bracket – suit ROF413				

OIL LEVEL SYSTEM - SPORLAN

Sporlan Oil Level System – Externally Adjustable

Airefrig Part Number	Description	List Price Excl GST
OL60XH	Oil Level Control c/w Equaliser Fitting (Max △ P 6.2 bar)	
OCV10	Oil Diff Check Valve 10 Psi	P.O.A.
OCV20	Oil Diff Check Valve 20 Psi	
POR2	Oil Reservoir 6 Litre	


OCV


OL60X

OIL LEVEL SYSTEM - TRAXON

TraxOil

TraxOil TR3 is an electronic Oil Management system that replaces the oil level sight glass at the compressor crankcase. A mechanical level detector (float) recognises the oil level in the crankcase and transmits this information to the control logic. An integrated solenoid valve switches oil flow. If there is not enough oil flow the system will initiate an alarm.

The TR3 allows visual oil level inspection through the sight glass. The ideal oil level for most compressors is in the centre line of the sight glass. Three indicator LEDs are showing the actual status of the Oil Management system. When the green LED is on, the oil level is optimised. The yellow LED indicates that the solenoid valve is switched on for oil refill. The red LED signals an oil level below the minimum level and activates the alarm relay. Various models are available to suit most compressors.

Major features of the new model:
Digital processor
Hermetic leakproof and dustproof housing
CE approved, EMC emissions
Waterproof cables, no wiring at TraxOil
No orifice restrictor
New coil & tube with internal solenoid seat
Easy mounting under low space conditions



SPECIFICATIONS	
Voltage:	24VAC 50/60Hz ± 10%
Amps:	0.7
Weight:	800 – 950grams depending on adaptor fitted
Maximum working pressure:	31 bar
Leakage test pressure	35 bar
Solenoid MOPD:	21 bar
Alarm switch:	SPDT
Alarm contact rating:	3A / 240 VAC
Medium temperature:	-20° to +80° C
Medium compatibility	HFC, HCFC (not suitable for flammable refrigerants or ammonia)
Ambient temp (Housing):	-20° to +50° C
Time delay filling: (Yellow)	10 sec
Time delay alarm: (Red)	20 sec
Protection class: (DIN43650)	IP65
Oil supply fitting:	7/16” –20 UNF male
Sensing method:	Patented miniature "Float and Hall Sensor"

TraxOil Model #	Compressor Make	Compressor Model
TR3201 (3 or4 hole flange style adaptor)	Bock	HA, HG (except HG/HA 12/22/34 see TR3203), O series, HAX (newer models with provision for sightglass on the side)
	Carrier(Carlyle)	06E
	Copeland	D2, D3, D4, D6, D9, 4CC, 6CC
	Dorin	KP, K Series (except those listed under TR3203 below) H2, H3, H4, H5500-H2200
	Frascold	Series A, B D, F, S, V OR Z
	Bitzer	2N, 2T, 4G, 4H, 4J, 4N, 4P, 4T, 4NC, 4PC, 4TC, 4VC, 6F, 6G, 6H, 6J, 8FC, 8GC (see note at TR3221)
	Prestcold	P2, P3, P4, P6
TR3202 (3/4” 14 NPT thread)	Bitzer	ZL & ZM
	Copeland	ZF, ZS, ZB15-56, ZB75,ZB92,ZB11, ZBD30, ZBD45, ZFD18
TR3203 (1-1/8” 18UNEF thread)	Bitzer	2CC, 2DC, 2EC, 2FC, 2GC, 2HC, 2JC, 2KC, 4CC, 4DC, 4EC, 4FC
	Bock	HA12/22/34, HG12/22/34 (sight glass on side)
	Dorin	H1 series, K100CC/CS, K150CC/CS, K180CC/CS, K200CC K230CS, K235CC, K240SB, K40CC, K50CS, K75CC/CS
	L'Unite Hermetique	TAH, TAG, TFHP
	Maneurop	LT, MT, SM, SZ, MFZ
TR3204 (1-1/8” 12 UNF thread)	Copeland	DK & DL
	Prestcold	DL & PL
TR3205 (long flange style)	Bock	HA, HAX & HG with no provision for sight glass on side, F3, F4, F5, F6, F14, F16, AM series, O4
TR3207 (3 hole flange adaptor)	Copeland	D8D, D8S (except for sightglass location on LHS (DT, SJ, SK) see TR3213)
	Prestcold	P8
	Terry	VS
TR3210 (1-1/2” 18UNEF thread)	Sanyo	
	Carrier(Carlyle)	5F20, 5F40, 5F60, all 5H, 06D (some models)
TR3212 (1-3/4” 12 UNF female)	Copeland	ZR90 TO ZR19M, ZR250-380, ZRT180K-760K, ZRU280K-560K ZRY480K-1140K, ZB220, ZP235/295/385/386
TR3213 (3 hole)	Copeland	D8SJ, D8SK, D8DT with sightglass location on RHS being used
TR3214 (1-1/4” 12 UNF female)	Copeland	ZB58, ZB66, ZB76, ZB114, ZP90/154/182, ZR94/160/190 (Jan 2007 onwards), ZP103/120/137, ZR108/125/144 Serial # 07C702015W on
TR3215	Copeland	ZB440
TR3221 (3or4 hole flange style)	Bitzer	4V6.2-4N20.2 (Pre Sept 1998 & before SN 5490000) and 4J13.2-6F50.2 (Pre Nov 1997 & before SN 531001)

OIL LEVEL MONITORING

TRAXON - OILWATCH

Electronic oil level monitoring system with alarm function and compressor shut down

Features

- IP 65 rating due to molded housing and new electrical connection with molded cable Assemblies
- 3 Zone Level Control by using precise Hall-sensor measurement, not prone to errors by foaming or light like optical sensors
- CE marking under Low Voltage and EMC Directive
- SPDT output contact for compressor shut down or alarming, rating 230VAC / 3A
- Easy installation by sight-glass replacement and front side mounting without nuts
- Self contained unit with oil level sensor
- Alarm, status and 3 zone indication by LED's
- Supply 24V AC, 50/60Hz
- Adapters suitable for various types of compressors
- Recommended by leading compressor manufacturers



Technical data	
Voltage	24VAC 50/60Hz +10% / 15% 0.05A
Weight	500 – 600grams
Maximum working pressure	43 bar
Maximum test pressure	35 bar
Burst pressure	175 bar
Medium temperature	-20° to +80° C
Ambient temp	-20° to +50° C
Protection class	IP65
Orientation	Horizontal ±1 degree
Normal Level	40-60% of sight glass height
Time delay alarm	20 sec
Alarm contact	Max 3A 230VAC SPDT dry contact
Applied standards	EN378, EN61010 & EN61326

OILWATCH - Oil Level Monitoring System

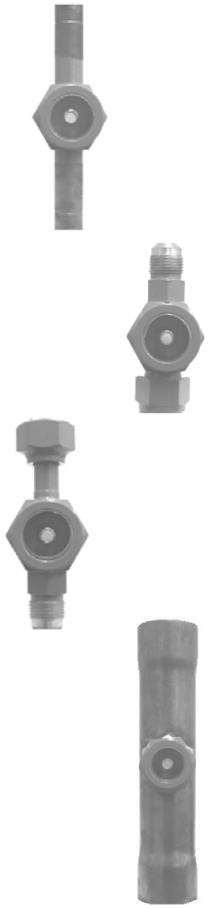
Airefrig Part Number	Description	List Price Ex GST
OW3001	OILWATCH Electronic Oil Level Monitoring System - with alarm & system shutdown. (Suit Bitzer compressors: 4VC,4TC,4PC,4NC,4J,4H,4G,6J,6H,6G,6F,8GC,8FC & 2T,2N,4N,4P,4T)	
OW3203	OILWATCH Electronic Oil Level Monitoring System - with alarm & system shutdown. (Suit Bitzer compressors: 2KC,4CC,2JC,2HC,2GC,2FC,2EC,2DC,2CC,4FC,4EC,4DC,4CC	
TFR001	Traxoil Transformer 240VAC/24VAC 30VA	P.O.A.

Note: OW3203 suitable for use on most Enthalpy semi-hermetic units fitted with Bitzer compressors.
(Oilwatch systems are available for various other compressor makes & models – contact Airefrig for further information)

LIQUID MOISTURE INDICATORS

Sporlan Liquid & Moisture Indicators

Airefrig Part Number	Connections	List Price Excl GST
SA12	1/4 Male Flare	
SA12FM	1/4 Male Flare – Female Flare	
SA12S	1/4 Solder	
SA13	3/8 Male Flare	
SA13FM	3/8 Male Flare – Female Flare	
SA13S	3/8 Solder	
SA13U	3/8 Male Flare - 3/8 Swivel	
SA14	1/2 Male Flare	
SA14FM	1/2 Male Flare – Female Flare	
SA14S	1/2 Solder	
SA14U	1/2 Male Flare – 1/2 Swivel	
SA15	5/8 Male Flare	
SA15S	5/8 Solder	
SA15U	5/8 Male Flare – 5/8 Swivel	
SA16	3/4 Male Flare	
SA16S	3/4 Solder	
SA17S	7/8 Solder	
SA19S	1 1/8 Solder	
SA211	1 3/8 Solder	
SA213	1 5/8 Solder	
AC20	Replacement Glass suit SA211, SA213 & SA217	



Essen Liquid & Moisture Indicators

Airefrig Part Number	Connections	List Price Excl GST
ESM6	1/4 Solder	
ESM10	3/8 Solder	
ESM12	1/2 Solder	
ESM16	5/8 Solder	
ESM18	3/4 Solder	
ESM22	7/8 Solder	
ESM28	1 1/8 Solder	



Heldon Double Port Sight Glasses

Airefrig Part Number	Connections	List Price Excl GST
6751818	Double Port Sight Glass 11/8	P.O.A.
6752222	Double Port Sight Glass 13/8	
6752626	Double Port Sight Glass 15/8	
6753434	Double Port Sight Glass 21/8	



ROTALOCK VALVES

Rotalock Valves

Airefrig Part Number	Connections		Gauge Connect	By-Pass	List Price Excl GST
100191	3/4" 16UNF	1/2" Flare	Top	-	
15702903	1" 14UNF	3/8" ODF	Right	Left	
2605081620	1" 14UNF	1/2" ODF	Right	Left	
105405	1" 14UNF	5/8" Flare	Top	-	
15311903	1" 14UNF	5/8" ODF	Right	Left	
2605122030	1-1/4" 12UNF	3/4" ODF	Right	Left	
17610903	1-1/4" 12UNF	5/8" ODF	Right	Left	
16002103	1-1/4" 12UNF	7/8" ODF	Left	-	
16003703	1-1/4" 12UNF	7/8" ODF	Right	Left	
2605182030	1-1/4" 12UNF	1-1/8" ODF	Right	Left	
17013803	1-3/4" 12UNF	1-1/8" ODF	Right	-	
17016703	1-3/4" 12UNF	1-1/8" ODF	Right	Left	
17013903	1-3/4" 12UNF	1-3/8" ODF	Right	-	



Rotalock Steel Welding Spuds (ID Solder x Male Rotalock)

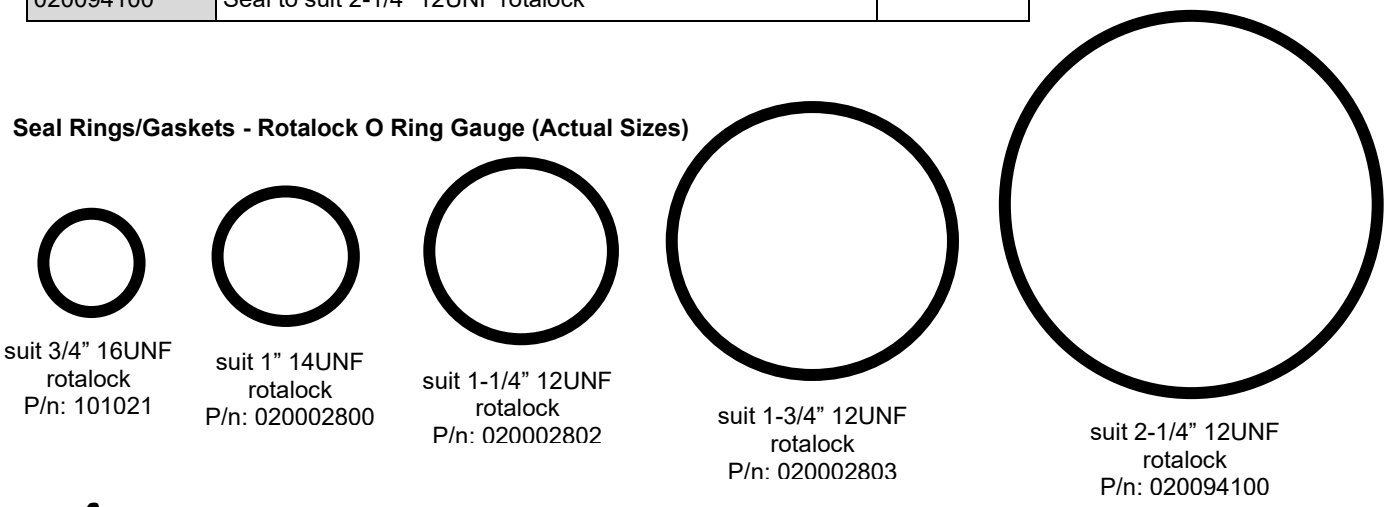
Airefrig Part Number	Description		List Price Excl GST
96526XX12S	Rotalock Welding Spud	5/16"ID x 3/4" 16UNF rotalock	
96526XX16S	Rotalock Welding Spud	1/2"ID x 1" 14UNF rotalock	
96526XX20S	Rotalock Welding Spud	3/4"ID x 1-1/4" 12UNF rotalock	
96526XX28S	Rotalock Welding Spud	1-1/4"ID x 1-3/4" 12UNF rotalock	
96526XX36S	Rotalock Welding Spud	1-5/8"ID x 2-1/4" 12UNF rotalock	



Seal Rings/Gaskets – Rotalock O Rings

Airefrig Part Number	Description	List Price Excl GST
101021	Seal to suit 3/4" 16UNF rotalock	
020002800	Seal to suit 1" 14UNF rotalock	
020002802	Seal to suit 1-1/4" 12UNF rotalock	
020002803	Seal to suit 1-3/4" 12UNF rotalock	
020094100	Seal to suit 2-1/4" 12UNF rotalock	

Seal Rings/Gaskets - Rotalock O Ring Gauge (Actual Sizes)



suit 3/4" 16UNF rotalock P/n: 101021

suit 1" 14UNF rotalock P/n: 020002800

suit 1-1/4" 12UNF rotalock P/n: 020002802

suit 1-3/4" 12UNF rotalock P/n: 020002803

suit 2-1/4" 12UNF rotalock P/n: 020094100

BALL VALVES - ESSEN

Essen Ball Valves – With 1/4" Male Flare (1/4"SAE) Access Port Connection

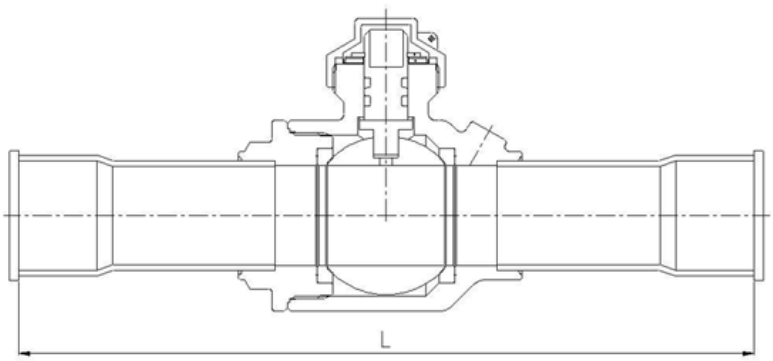
Airefrig Part Number	Connection Size Solder	Port Size (inch)	Dimensions mm			Maximum Working Pressure	List Price Excl GST
			L	H	C		
RBV06C	1/4	1/2	165	55	16	700 PSI R410A compatible	
RBV10C	3/8	1/2	165	55	16		
RBV12C	1/2	1/2	165	55	16		
RBV16C	5/8	1/2	165	55	16		
RBV18C	3/4	3/4	184	67	21		
RBV22C	7/8	3/4	184	67	21		
RBV28C	1 1/8	1	216	76	25.5		
RBV35C	1 3/8	1 1/4	235	94	31		
RBV42C	1 5/8	1 1/2	254	109	39		
RBV54C	2 1/8	2	289	134	47.5		

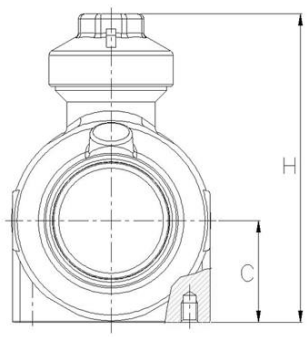
Essen Ball Valves – With 1/2" 20UNF Male (R410A) Access Port Connection

Airefrig Part Number	Connection Size Solder	Port Size (inch)	Dimensions mm			Maximum Working Pressure	List Price Excl GST
			L	H	C		
RBV06CA	1/4	1/2	165	55	16	700 PSI R410A compatible	
RBV10CA	3/8	1/2	165	55	16		
RBV12CA	1/2	1/2	165	55	16		
RBV16CA	5/8	1/2	165	55	16		
RBV18CA	3/4	3/4	184	67	21		
RBV22CA	7/8	3/4	184	67	21		
RBV28CA	1 1/8	1	216	76	25.5		
RBV35CA	1 3/8	1 1/4	235	94	31		

Essen Ball Valves – Without Access Port Connection

Airefrig Part Number	Connection Size Solder	Port Size (inch)	Dimensions mm			Maximum Working Pressure	List Price Excl GST
			L	H	C		
RBV06	1/4	1/2	165	55	16	700 PSI R410A compatible	
RBV10	3/8	1/2	165	55	16		
RBV12	1/2	1/2	165	55	16		
RBV16	5/8	1/2	165	55	16		
RBV18	3/4	3/4	184	67	21		
RBV22	7/8	3/4	184	67	21		
RBV28	1 1/8	1	216	76	25.5		
RBV35	1 3/8	1 1/4	235	94	31		
RBV42	1 5/8	1 1/2	254	109	39		
RBV54	2 1/8	2	289	134	47.5		





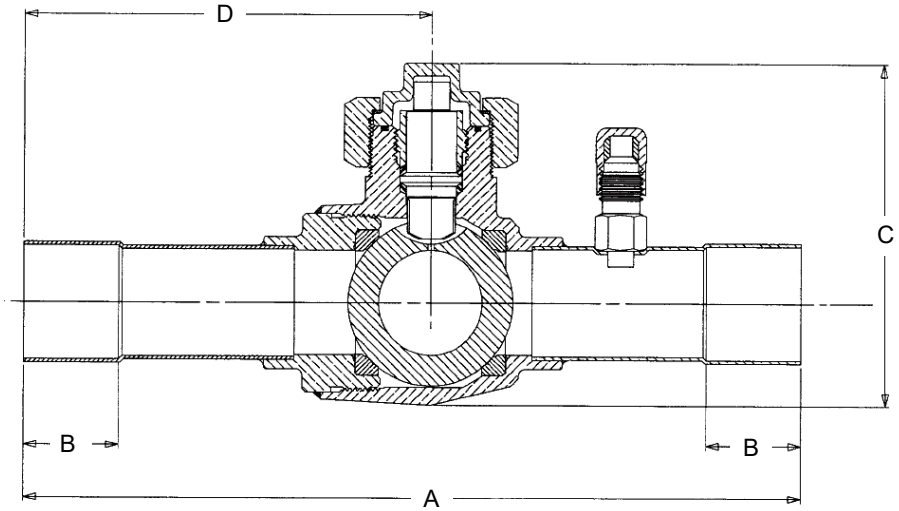
BALL VALVES - SUPERIOR

Superior Ball Valves – With 1/4" Male Flare (1/4"SAE) Access Port Connection

Airefrig Part Number	Connection Size Solder	Dimensions mm					Maximum Working Pressure	List Price Excl GST
		A	B	C	D	Max Width		
586WAS10ST	5/8	165.1	12.7	59.9	87.4	35.1	700 PSI R410A Compatible	
595WAS25ST	2 5/8	328.2	38.1	158.8	165.6	118.1		

Superior Ball Valves - Without Access Port Connection

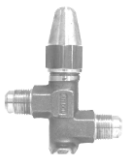
Airefrig Part Number	Connection Size Solder	Dimensions mm					Maximum Working Pressure	List Price Excl GST
		A	B	C	D	Max Width		
586WA10ST	5/8	165.1	12.7	59.9	87.4	35.1	700 PSI R410A compatible	
587WA12ST	3/4	166.6	16.0	68.3	87.9	47.8		
587WA14ST	7/8	166.6	19.1	68.3	87.9	47.8		
592WA13ST	1 3/8	225.6	25.4	105.4	114.0	81.0		
593WA15ST	1 5/8	231.9	27.7	105.4	117.3	81.0		
595WA25ST	2 5/8	328.2	38.1	158.8	165.6	118.1		



LINE VALVES

Packed Capped Line Valve – Male Flare

Airefrig Part Number	Size	List Price Ex GST
H190	1/4 MF	
H191	3/8 MF	
H192	1/2 MF	
H193	5/8 MF	



Packed Capped Line Valve – Solder

Airefrig Part Number	Size	List Price Ex GST
H195	1/4 ODS	
H196	3/8 ODS	
H197	1/2 ODS	
H198	5/8 ODS	
H199	3/4 ODS	

Diaphragm Line Valve – Male Flare

9G0101	1/4 MF (BML6)	
9G0127	3/8 MF (BML10)	
9G0141	1/2 MF (BML12)	
ILV10	5/8 MF	
ILV12	3/4 MF	



Diaphragm Line Valve – Solder

ILV04S	1/4 ODS	
ILV06S	3/8 ODS	
ILV08S	1/2 ODS	
ILV10S	5/8 ODS	
ILV12S	3/4 ODS	

CHECK VALVES - ESSEN

Essen Magnetic Check Valves

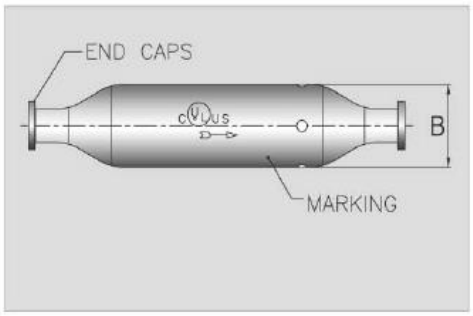
Airefrig Part Number	Connection Inches	Max. Working Pressure		Opening Pressure		Strainer Mesh Size	Leak Rate (CIM)	List Price Ex GST
		(PSIG)	(Kpa)	(PSIG)	(Kpa)			
EIC4	1/4" ODF	800	5515	0.08	0.55	Built in 30mesh stainless steel strainer	0.015	
EIC6	3/8 ODF	800	5515	0.08	0.55		0.015	
EIC8	1/2 ODF	640	4412	0.22	1.51		0.034	
EIC10	5/8 ODF	640	4412	0.22	1.51		0.034	
EIC12	3/4 ODF	560	3861	0.24	1.65		0.074	
EIC14	7/8 ODF	560	3861	0.24	1.65		0.074	
EIC18	1 1/8 ODF	400	2757	0.43	2.96		0.122	
EIC22	1 3/8 ODF	440	3033	0.64	4.41		0.172	
EIC26	1 5/8 ODF	420	2895	0.71	4.89		0.272	
EIC42	2 5/8 ODF	380	2620	1.44	9.92		0.512	

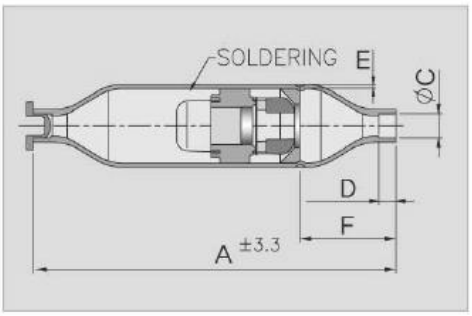


Essen Magnetic Check Valves Dimensions

Airefrig Part Number	Connection Inches (C)	Dimensions (mm)				
		A	B	D (min.)	E	F
EIC4	1/4" ODF	101.6	22.22	4.8	1.14	32.8
EIC6	3/8 ODF	101.6	22.22	10.2	1.14	32.8
EIC8	1/2 ODF	127.0	28.7	7.9	1.37	43.6
EIC10	5/8 ODF	127.0	28.7	12.7	1.37	43.6
EIC12	3/4 ODF	177.8	41.2	16.0	1.24	59.4
EIC14	7/8 ODF	177.8	41.2	19.0	1.24	59.4
EIC18	1 1/8 ODF	212.9	53.9	23.9	1.78	75.3
EIC22	1 3/8 ODF	238.3	66.6	26.4	2.03	79.5
EIC26	1 5/8 ODF	266.7	79.3	27.1	2.29	89.6
EIC42	2 5/8 ODF	330.2	105.7	38.1	3.29	109.8







CHECK VALVES - SAGINOMIYA

Saginomiya Check Valves

Airefrig Part Number	Port Size mm	Connection Inches	Maximum Pressure	Liquid Temperature	List Price Ex GST
BCV302DY	3.0	1/4"	4150 KPa 600 PSI	-30 to 120C	
BCV603DY	5.5	3/8"			
BCV804DY	8.0	1/2"			
BCV1005DY	10.0	5/8"			
BCV1306DY	12.5	3/4"			



BCV

CHECK VALVES - SUPERIOR

Superior Check Valves

Airefrig Part Number	Size Solder	Body Type	Weight	List Price Excl GST
802B4ST	1/4	Brass Body & Copper Tails		
802B6ST	3/8			
802B8ST	1/2			
803B10ST	5/8			
805C14S	7/8	Brass Body & no Copper Tails	1.13 kg	
806C11S	1 1/8		1.13 kg	
807C13S	1 3/8		2.27 kg	
808C15S	1 5/8		2.27 kg	
809C21S	2 1/8		5.78 kg	
P802X111D	Replacement spring to suit 802 to 804 series check valves			
P805A11	Replacement spring to suit 805 to 806 series check valves			
P807A11	Replacement spring to suit 807 to 808 series check valves			
P809A11	Replacement spring to suit 809 series check valves			
P290C14	Gasket to suit 805 to 806 series check valves			
P292C14	Gasket to suit 807 to 808 series check valves			
P294C14	Gasket to suit 809 series check valves			



803B10ST



Note: All Superior valves are R410a compatible. (M.W.P: 700 PSI)

RELIEF VALVES & BURSTING DISCS

Superior Relief Valves & Bursting Discs

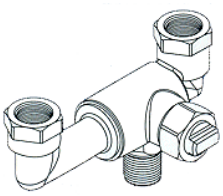
Airefrig Part Number	Inlet M-NPT	Outlet Male Flare	Pressure Setting		List Price Excl GST
			PSIG	KPa	
3012A150	1/4	3/8	150	1034	
3016A350	3/8	1/2	350	2400	
3016A400			400	2760	
3016A425			425	2930	
3016A450			450	3100	
3020A350	1/2	5/8	350	2400	
3020A400			400	2760	
3020A425			425	2930	
3020A435			435	3000	
3020A450			450	3100	
5526400	Rupture Disc 1/2 MPT x 1/2 FNPT		400	2760	
5526450			450	3105	
G15	Pressure Gauge 1/8" Male NPT				
3155WD	Change Over Manifold - Inlet 1/2" MPT- Outlet(s) 1/2" FPT				
2100808	Brass Union 1/2" NPT Female x 1/2" BSP Male				
2100606	Brass Union 3/8" NPT Female x 3/8" BSP Male				



3020A Series Pressure Relief Valves



Rupture Disk



Change Over Manifold

Note: All Superior valves are R410a compatible. (M.W.P: 700 PSI)

SOLENOID VALVES - SPORLAN

Sporlan Normally Closed Solenoids – Less Coils

Airefrig Part Number	Connections	Coil Type	Port Size mm	Liquid Line Nom KW			List Price Excl GST
				R134a	R22	R404A	
A3F1	1/4" Male Flare	MKC1E	2.6	4.2	5.6	3.5	
E3S120	1/4" Solder		3.8	4.2	5.6	3.5	
B6F1	3/8" Male Flare		4.8	13.4	17.2	11.2	
E3S130	3/8" Solder		3.8	4.2	5.6	3.5	
E9S230		MKC2E	7.1	21.8	28.5	19.0	
B10F2	1/2" Male Flare		7.9	29.9	39.0	25.3	
E6S140	1/2" Solder	MKC1E	4.8	13.4	17.2	11.2	
E9S240		MKC2E	7.1	21.8	28.5	19.0	
E10S250	5/8" Solder		7.9	29.9	39.0	25.3	
E19S270	7/8" Solder		15.1	65.0	85.0	54.8	
E25S290	1 1/8" Solder		19.8	110.0	145.5	94.1	
E35S1110	1 3/8" Solder	MKC1E	25.4	154.2	204.0	130.7	
180	1/4" Flare	MKC2E	Three Way Pilot Control Valve				





Sporlan Normally Closed Manual Lift Solenoid Valves – Less Coils

Airefrig Part Number	Connections	Coil Type	Port Size mm	Liquid Line Nom KW			List Price Excl GST
				R134a	R22	R404A	
ME10S250	5/8" Solder	MKC2E	7.9	29.9	39.0	25.3	
ME19S270	7/8" Solder		15.1	65.0	85.0	54.8	
ME25S290	1 1/8" Solder		19.8	110.0	145.5	94.1	
ME35S1110	1 3/8" Solder	MKC1E	25.4	154.2	204.0	130.7	
ME42S2130	1 5/8" Solder	MKC2E	33.3	343.0	451.0	298	



Sporlan Normally Closed Solenoids – Less Coils (R410A & Subcritical CO2)

Airefrig Part Number	Connections	Coil Type	Port Size mm	Liquid Nom Capacity KW R410A Pressure Drop - bar					List Price Excl GST
				0.07	0.1	0.2	0.3	0.4	
E6S130HP	3/8" Solder	MKC1E	4.8	9.63	11.5	16.1	19.7	22.7	
E9S240HP	1/2" Solder	MKC2E	7.1	15.7	18.7	26.4	32.3	37.2	
E14S250HP	5/8" Solder		11.0	39.5	36.4	51.4	62.9	72.6	

Sporlan Normally Open Solenoids – Less Coils

Airefrig Part Number	Connections	Coil Type	Port Size mm	Liquid Line Nom KW			List Price Excl GST
				R134a	R22	R404A	
OE9S240	1/2" Solder	OMKC2	7.1	21.8	28.6	18.9	
OE10S250	5/8" Solder		7.9	30.0	39.3	26.0	
OB19S2	7/8" Solder		15.1	65.0	85.0	54.8	P.O.A.

Sporlan Solenoid Coils

Airefrig Part Number	Voltage	Hertz	List Price Excl GST
MKC1E240AC	220-240 Volt AC	50 Hz	
MKC1E24AC	24 Volt AC	50/60 Hz	
MKC1E24DC	24 Volt DC	DC	
MKC1E12DC	12 Volt DC		
MKC1E120AC	120 Volt AC	50/60 Hz	
MKC2E240AC	220-240 Volt AC	50 Hz	
MKC2E24AC	24 Volt AC	50/60 Hz	
MKC2E24DC	24 Volt DC	DC	
MKC2E12DC	12 Volt DC		
MKC2E120AC	120 Volt AC	50/60 Hz	
MKC3E240AC	220-240 Volt AC	50 Hz	P.O.A.
OMKC2	208-240 Volt AC	50/60 Hz	
OMKC2E24AC	24 Volt AC		
DINCONNECTOR	Hirschmann connector	(IP65)	



SOLENOID VALVES - DANFOSS

Danfoss Normally Closed Solenoid Valves – Less Coils

Airefrig Part Number	Body Type	Connections (extended copper tails)	Maximum Working Pressure	List Price Excl GST
32F1206	EVR3	1/4" ODS	507 psig	
32F1212	EVR6	3/8" ODS		
32F1217	EVR10	1/2" ODS		
32F1228	EVR15	5/8" ODS	464 psig	
32F1225	EVR15	7/8" ODS		

Normally closed valves
Refrigerants: CFC, HCFC, HFC
Temperature of medium: –40 - +105°C (10 W / 12 W coil)
Min. opening differential pressure, EVR 2-3: 0.0 bar, EVR 6-22: 0.05 bar, EVR 25-32: 0.20 bar

Danfoss Solenoid Valves Coils

Airefrig Part Number	Description	List Price Ex GST
18F6702	Coil 10watt 240Volt AC 50Hz IP67 Terminal Box	
18F6707	Coil 10watt 24Volt AC 50Hz IP67 Terminal Box	
18F6856	Coil 20watt 12DC IP67 Terminal Box	

Note: Other valves & coils are available upon request.

Body Type	Rated Nominal Capacity (kw)											
	Liquid				Suction Vapour				Hot Gas			
	R22	R134A	R404A	R407C	R22	R134A	R404A	R407C	R22	R134A	R404A	R407C
EVR3	5.40	5.00	3.80	5.08	-	-	-	-	2.50	2.00	2.00	2.43
EVR6	16.10	14.80	11.20	15.13	1.80	1.30	1.60	1.66	7.40	5.90	6.00	7.18
EVR10	38.20	35.30	26.70	35.91	4.30	3.10	3.90	3.96	17.50	13.90	14.30	16.98
EVR15	52.30	48.30	36.50	49.16	5.90	4.20	5.30	5.43	24.00	19.00	19.60	23.28

Rated liquid & suction vapour capacity is based on
Evaporating temperature = -10°C
Liquid temperature ahead of valve = +25°C
Pressure drop in valve = 0.15 bar

Rated hot gas capacity is based on:
Condensing temperature = +40°C
Pressure drop in valve = 0.8 bar
Hot gas temperature = +65°C
& subcooling of refrigerant = 4K



SOLENOID VALVES - SAGINOMIYA

Saginomiya RPV series solenoid valves

- Suitable for R410A (max press: 4.3MPa / M.O.P.D: 3.6MPa)
- DIN coil plug (IP65 when DIN connector used)
- Low power consumption (6W @ 50Hz)
- Available in Solder & Flare connections





DIN connector

Saginomiya *Flare* Solenoid Valves - RPV Series

Airefrig Part Number	Port Size (mm)	Cv Value	*Nominal Capacity (KW)			Flare Conn.	O.P.D (kpa)		Max Working Pressure	Ambient Temp Range	Fluid Temp	List Price Ex GST
			R410a	R134a	R22		Min	Max				
RPV602BYFABEN	6	0.60	9.0	8.9	9.5	1/4 Flare	0 kpa	3600 kpa	4300 kpa	-30°C to +50°C	-40°C to +125°C	
RPV603BYFABEN		0.90	13.0	13.0	14.0	3/8 Flare						
RPV1004BYFABEN	10	2.4	36.0	36.0	38.0	1/2 Flare	5 kpa					
RPV1205BYFABEN	12	3.6	54.0	53.0	57.0	5/8 Flare						

*Nominal capacities are based on ΔP= 0.015 MPa, condensing temp =38°C & evaporating temp = 5°C
All valves supplied with 240 Volt AC 50/60Hz coils & DIN connector (IP65)
(*Note*: flare nuts need to be purchased separately)

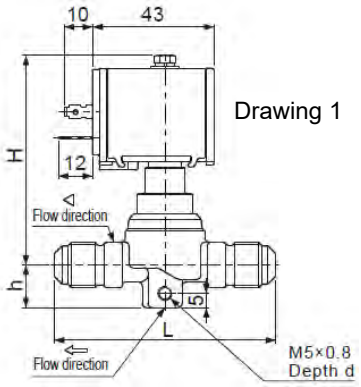
Saginomiya *Solder* Solenoid Valves - RPV Series

Airefrig Part Number	Port Size (mm)	Cv Value	*Nominal Capacity (KW)			Solder Conn.	O.P.D (kpa)		Max Working Pressure	Ambient Temp Range	Fluid Temp	List Price Ex GST
			R410a	R134a	R22		Min	Max				
RPV602DYFABEN	6	0.60	9.0	8.9	9.5	1/4 ODF	0 kpa	3600 kpa	4300 kpa	-30°C to +50°C	-40°C to +125°C	
RPV603DYFABEN		0.90	13.0	13.0	14.0	3/8 ODF						
RPV1004DYFABEN	10	2.4	36.0	36.0	38.0	1/2 ODF	5 kpa					
RPV1205DYFABEN	12	3.6	54.0	53.0	57.0	5/8 ODF						
RPV1606DYFABEN	16	5.6	84.0	83.0	89.0	3/4 ODF						

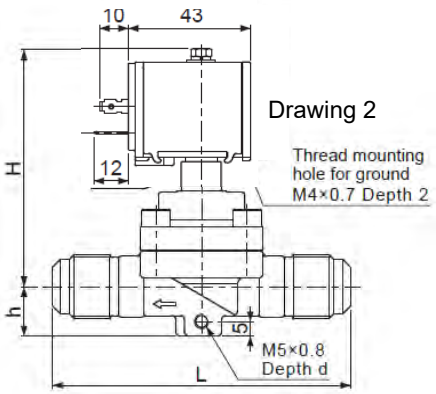
*Nominal capacities are based on ΔP= 0.015 MPa, condensing temp =38°C & evaporating temp = 5°C
All valves supplied with 240 Volt AC 50/60Hz coils & DIN connector (IP65)

Replacement Coil & DIN connector

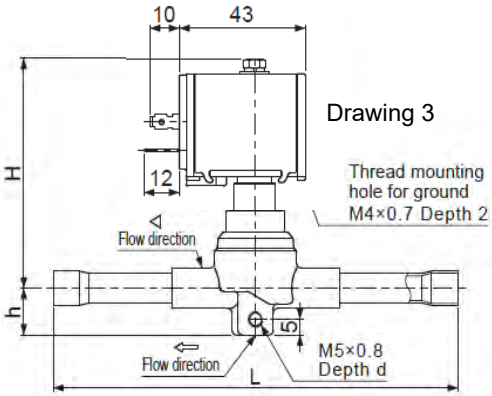
RPVMODJ2055A1	Coil 240 volt 50Hz DIN type for RPV valve (suits Hirschman DIN Connector)	P.O.A.
RPVPV01952	Socket for DIN Coil (Hirschman DIN Connector) IP65	



Drawing 1



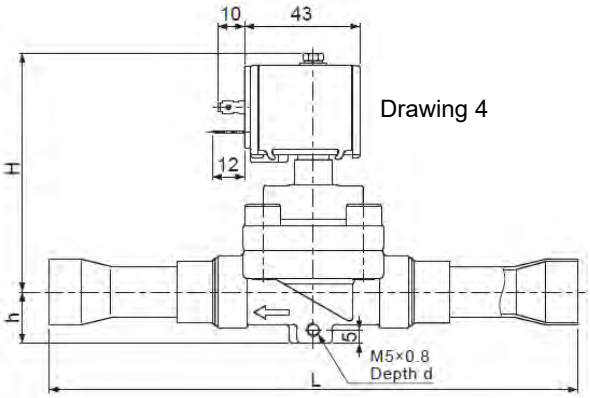
Drawing 2



Drawing 3

Airefrig Part Number	Weight (kg)	Drawing No.	Dimensions (mm)			
			L	H	h	d
RPV602BYFABEN	0.4	1	71	74	15	12
RPV603BYFABEN	0.4		78	74	15	12
RPV1004BYFABEN	0.6	2	96	77	15.5	17
RPV1205BYFABEN	0.7		104	82	17	20
RPV602DYFABEN	0.4	3	140	74	15	12
RPV603DYFABEN	0.4		138	74	15	12
RPV1004DYFABEN	0.6	4	158	77	15.5	17
RPV1205DYFABEN	0.7		171	82	17	20
RPV1606DYFABEN	1.1		196	89	19	24

(Weight excludes flare nuts)



Drawing 4

SOLENOID VALVES - SAGINOMIYA

Saginomiya Solenoid Valves

Airefrig Part Number	Nom Capacity KW		Connection	O.P.D KPa		Max Working Pressure	Fluid Temp °C	Ambient Temp °C	List Price Ex GST
	R134a	R22		Min	Max				
TEV1920D	-	-	1/4 ODF	0	1700	3300	-30 to 110	-20 to 50	
SEV502BXFQ75 *	7.4	8.1	1/4 Flare		2450	2940 KPa	-40 to 125	-30 to 50	
SEV603BXFQ100 *	11.6	12.7	3/8 Flare						
SEV1004BXFQ52 *	25.7	27.4	1/2 Flare	7					
SEV1205BXFQ22 *	42.6	45.7	5/8 Flare						
SEV502DXFQ76 *	7.7	8.4	1/4 ODF	0					
SEV603DXFQ101 *	12.3	13.3	3/8 ODF						
SEV1004DXFQ53 *	29.2	31.3	1/2 ODF	7					
SEV1205DXFQ23	51.3	54.9	5/8 ODF						
SEV1506DXFQ22	77.7	83.3	3/4 ODF						
SEV7A01037	Replacement SEV Coil 240Volt AC 50/60Hz								
SEVEV06295	Coil only 12Volt DC suit SEV Solenoid valves								
SEVEV06296	Coil only 24Volt DC suit SEV Solenoid valves								



TEV1920D



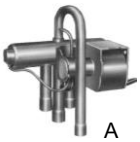
SEV-D

All valves supplied with 240 Volt AC 50/60Hz coils & Flare Nuts (if applicable) * Supplied with Mounting Brackets

REVERSING VALVES - SAGINOMIYA

Saginomiya Reversing Valves

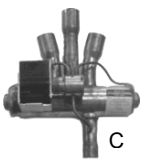
Airefrig Part Number	Port mm	Disch ins	Suct ins	Max OPD KPa	Min OPD KPa	Nominal Capacity		Refrigerants		Body Type	List Price Ex GST
						KW	Tons	R22 / R407C	R410a		
STF0101G	8.0	5/16	3/8	2450	300	5.64	1.60	Yes	Yes	A	P.O.A.
STF0202G	11.1	3/8	1/2			9.14	2.60	Yes	Yes	A	
STF0301G	11.5	1/2	5/8			11.04	3.14	Yes	Yes	C	
STF0306Z	11.5	1/2	3/4			11.04	3.14	Yes	No	C	
STF0310Z	11.5	1/2	3/4			11.04	3.14	Yes	No	C	
STF0408G	15.5	1/2	3/4			20.75	5.90	Yes	Yes	B	
STF0409G	15.5	1/2	7/8			20.75	5.90	Yes	Yes	B	
STF0409G24V	15.5	1/2	7/8			20.75	5.90	Yes	Yes	B	
STF0712G	20.0	3/4	7/8			34.46	9.8	Yes	Yes	B	
STF0720G	20.0	7/8	1-1/8			34.46	9.8	Yes	Yes	B	
STF2017G	24.0	1-1/8	1-3/8	3100	300	74.00	21.04	Yes	Yes	B	



A



B



C

All Valves are supplied with 240-volt AC 50/60 Hz Coil. (Except STF0409G24V supplied with 24-volt coil)

Saginomiya Reversing Valve Coils

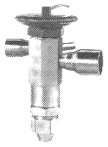
Airefrig Part Number	Description	List Price Ex GST
CHV01AB500B1	Replacement Coil 24Volt AC 50/60Hz 600mm Lead suit STF/CHV valves	
CHV01AJ503E1	Replacement Coil 240Volt AC 50/60Hz 600mm Lead suit STF/CHV valves	

THERMOSTATIC EXPANSION VALVES

Sporlan - R22

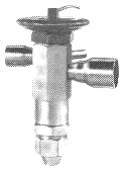
S - Series

Airefrig Part Number	Connections Solder	Nominal Capacity KW	Charges Available	Element No	Equaliser Connections Solder	List Price Excl GST
SVE2----	1/2 x 5/8	7.0	C CP100	83	1/4	P.O.A.
SVE3----		10.5				
SVE4----	1/2 x 7/8	14.1				
SVE5----		17.6				
SVE8----	5/8 x 7/8	28.1				
SVE10----		35.2				
SVE15----	5/8 x 7/8	52.8				



P - Series

Airefrig Part Number	Connections Solder	Nominal Capacity KW	Charges Available	Element No	Equaliser Connections Flare	List Price Excl GST
PVE11----	5/8 x 7/8	38.7	C CP100	33	1/4	
PVE16----	7/8 x 1 1/8	56.3				
PVE20----	7/8 x 1 3/8	70.3				



H - Series

Airefrig Part Number	Connections Solder	Nominal Capacity KW	Charges Available	Element No	Equaliser Connections Flare	List Price Excl GST
HVE7----	5/8 x 7/8	24.6	C CP100	33	1/4	
HVE11----		38.7				P.O.A.
HVE16----	7/8 x 1 1/8	56.3				
HVE20----		70.3				

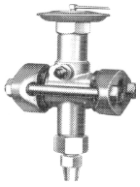
M - Series

Airefrig Part Number	Connections Solder	Nominal Capacity KW	Charges Available	Element No	Equaliser Connections Flare	List Price Excl GST
MVE21----	7/8 x 1 1/8	73.9	C CP100	63	1/4	
MVE26----		91.4				
MVE34----		119.6				
MVE42----	1 1/8 x 1 1/8	147.2				



V - Series

Airefrig Part Number	Connections Solder	Nominal Capacity KW	Charges Available	Element No	Equaliser Connections Flare	List Price Excl GST
VVE52----	1 3/8 x 1 3/8	182.9	C CP100	63	1/4	
VVE70----		246.2				
VVE100----		351.7				



Available R22 Thermostatic Charges (note: 'P' indicates M.O.P.)

Air Conditioning	Commercial Refrigeration 10C to -25C	Low Temperature Refrigeration -20C to -40C
CP100 , GA	C	Z , ZP40 , X

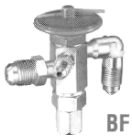
Selection of Power Elements 2nd last page of Sporlan TEV Valves

THERMOSTATIC EXPANSION VALVES

Sporlan R22 - Balanced Port

BF – Series - Balanced Port

Airefrig Part Number	Connections Flare	Nominal Capacity KW	Charges Available	Element No	Equaliser Connections Solder	List Price Excl GST
BFVEAAA----	3/8 x 1/2	0.44 – 1.17	C CZ ZP40	43	1/4	
BFVEAA----		1.76 – 2.34				
BFVEA----		2.64 – 5.28				
BFVEB----		6.15 - 10.60				
BFVEC----		11.40 - 19.30				



SBF – Series - Balanced Port

Airefrig Part Number	Connections Solder	Nominal Capacity KW	Charges Available	Element No	Equaliser Connections Solder	List Price Excl GST
SBFVEAAA----	3/8 x 1/2	0.44 – 1.17	C Z ZP40	43	1/4	P.O.A.
SBFVEAA----		1.76 – 2.34				P.O.A.
SBFVEA----		2.64 – 5.28				P.O.A.
SBFVEB----		6.15 - 10.60				P.O.A.



O - Series - Balanced Port

Airefrig Part Number	Connections Solder	Nominal Capacity KW	Charges Available	Element No	Equaliser Connections Solder	List Price Excl GST
OVE15----	7/8 x 1 1/8	52.8	C ZP40	83	1/4	
OVE20----	7/8 x 1 3/8	70.3				P.O.A.
OVE30----	1 1/8 x 1 3/8	105.5				
OVE40----		140.7		33		
OVE55----		193.4				
OVE70----		246.2				



Available R22 Thermostatic Charges (note: 'P' indicates M.O.P.)

Air Conditioning	Commercial Refrigeration 10C to -25C	Low Temperature Refrigeration -20C to -40C
CP100 , GA	C	Z , ZP40 , X

Selection of Power Elements 2nd last page of Sporlan TEV Valves

Sporlan R22 Bi-Directional Expansion Valves

RC - Series - Compact & Adjustable with Internal Check Valve for Air Conditioning & Heat Pump Systems

Airefrig Part Number	Connections Solder	Nominal Capacity KW	Replacement Element	Capillary Length	Equaliser Connections Solder	List Price Excl GST
RCVE3GA	3/8 x 1/2	10.5	KT43VGA30	760mm	1/4	
RCVE4GA	1/2 x 1/2	14.1				
RCVE5GA	1/2 x 1/2	17.6				

BBI - Series Compact Balanced Port

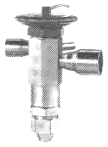
Airefrig Part Number	Connections Solder	Nominal Capacity KW	Replacement Element	Capillary Length	Equaliser Connections Solder	List Price Excl GST
BBIVE5VGABP20	1/2 x 1/2	17.6	KT43VCP100	760mm	1/4	

THERMOSTATIC EXPANSION VALVES

SPORLAN R134a

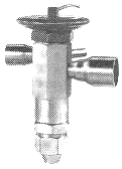
S - Series

Airefrig Part Number	Connections Solder	Nominal Capacity KW	Charges Available	Element No	Equaliser Connections Solder	List Price Excl GST
SJE2----	1/2 x 5/8	7.0	C CP60	83	1/4	
SJE3----	1/2 x 7/8	10.5				
SJE5----	5/8 x 7/8	17.6				
SJE6----		28.1				
SJE10----	7/8 x 1 1/8	35.2				



P - Series

Airefrig Part Number	Connections Solder	Nominal Capacity KW	Charges Available	Element No	Equaliser Connections Solder	List Price Excl GST
PJE5----	5/8 x 7/8	17.6	C CP60	33	1/4	P.O.A.
PJE8----	7/8 x 1 1/8	28.1				P.O.A.
PJE12----	7/8 x 1 3/8	42.2				



H - Series

Airefrig Part Number	Connections Solder	Nominal Capacity KW	Charges Available	Element No	Equaliser Connections Flare	List Price Excl GST
HJE11/2----	1/2 x 5/8	5.3	C CP60	33	1/4	P.O.A.
HJE3----	5/8 x 7/8	10.6				P.O.A.
HJE4----		14.1				P.O.A.
HJE5----		17.6				P.O.A.
HJE8----		28.1				P.O.A.
HJE12----	7/8 x 1 1/8	42.2				P.O.A.



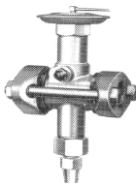
M - Series

Airefrig Part Number	Connections Solder	Nominal Capacity KW	Charges Available	Element No	Equaliser Connections Flare	List Price Excl GST
MJE13----	7/8 x 1 1/8	45.7	C CP60	63	1/4	P.O.A.
MJE15----		52.8				P.O.A.
MJE20----		70.3				P.O.A.
MJE25----	1 1/8 x 1 1/8	87.9				P.O.A.



V - Series

Airefrig Part Number	Connections Solder	Nominal Capacity KW	Charges Available	Element No	Equaliser Connections Flare	List Price Excl GST
VJE35----	1 3/8 x 1 3/8	123.01	C CP60	63	1/4	P.O.A
VJE45----		158.3				P.O.A
VJE55----		193.4				P.O.A



Available R134a Thermostatic Charges (note: 'P' indicates M.O.P.)

Air Conditioning	Commercial Refrigeration 10C to -25C
CP60	C

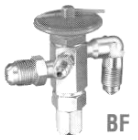
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THERMOSTATIC EXPANSION VALVES

SPORLAN R134a – Balanced Port

BF – Series - Balanced Port

Airefrig Part Number	Connections Flare	Nominal Capacity KW	Charges Available	Element No	Equaliser Connections Solder	List Price Excl GST
BFJEAAA----	3/8 x 1/2	0.44 – 0.70	C	43	1/4	P.O.A.
BFJEAA----		0.88 – 1.17			1/4	P.O.A.
BFJEA----		1.76 – 3.52			1/4	P.O.A.
BFJEB----		4.40 – 6.15			1/4	P.O.A.
BFJEC----		7.03 – 10.06			1/4	P.O.A.



SBF – Series - Balanced Port

Airefrig Part Number	Connections Solder	Nominal Capacity KW	Charges Available	Element No	Equaliser Connections Solder	List Price Excl GST
SBFJEAAA----	3/8 x 1/2	0.44 – 0.70	C	43	1/4	P.O.A.
SBFJEAA----		0.88 – 1.17			1/4	
SBFJEA----		1.76 – 3.52			1/4	P.O.A.
SBFJEB----		4.40 – 6.15			1/4	
SBFJEC----		7.03 – 10.06			1/4	



O - Series - Balanced Port

Airefrig Part Number	Connections Solder	Nominal Capacity KW	Charges Available	Element No	Equaliser Connections Solder	List Price Excl GST
OJE9----	7/8 x 1 1/8	31.6	C	83	1/4	P.O.A.
OJE12----	7/8 x 1 3/8	42.2				P.O.A.
OJE16----	1 1/8 x 1 3/8	56.3				
OJE23----		80.9		33		
OJE32----		112.5				P.O.A.
OJE40----		140.7				



Available R134a Thermostatic Charges (note: 'P' indicates M.O.P.)

Air Conditioning	Commercial Refrigeration 10C to -25C
CP60	C

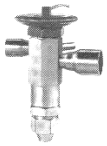
Selection of Power Elements 2nd last page of Sporlan TEV Valves

THERMOSTATIC EXPANSION VALVES

Sporlan R404A

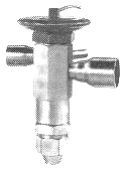
S - Series

Airefrig Part Number	Connections Solder	Nominal Capacity KW	Charges Available	Element No	Equaliser Connections Solder	List Price Excl GST
SSE2----	1/2 x 5/8	7.0	C Z ZP	83	1/4	
SSE3----	1/2 x 7/8	10.6				
SSE4----		14.1				
SSE6----	5/8 x 7/8	21.1				
SSE7----		24.6				
SSE10----	7/8 x 11/8	35.2				



P - Series

Airefrig Part Number	Connections Solder	Nominal Capacity KW	Charges Available	Element No	Equaliser Connections Flare	List Price Excl GST
PSE61/2----	5/8 x 7/8	22.9	C Z ZP	33	1/4	P.O.A
PSE9----	7/8 x 1 1/8	31.7				P.O.A
PSE12----		42.2				P.O.A



H - Series

Airefrig Part Number	Connections Solder	Nominal Capacity KW	Charges Available	Element No	Equaliser Connections Flare	List Price Excl GST
HSE11/2----	1/2 x 5/8	5.3	C Z ZP	33	1/4	P.O.A
HSE3----	5/8 x 7/8	10.5				P.O.A
HSE4----		14.1				P.O.A
HSE61/2----		22.9				P.O.A
HSE9----		31.7				P.O.A
HSE12----	7/8 x 1 1/8	42.2				P.O.A



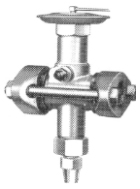
M - Series

Airefrig Part Number	Connections Solder	Nominal Capacity KW	Charges Available	Element No	Equaliser Connections Flare	List Price Excl GST
MSE15----	7/8 x 1 1/8	52.8	C Z ZP	63	1/4	P.O.A
MSE20----		70.3				P.O.A
MSE25----		87.9				P.O.A
MSE30----	1 1/8 x 1 1/8	105.4				P.O.A



V - Series

Airefrig Part Number	Connections Solder	Nominal Capacity KW	Charges Available	Element No	Equaliser Connections Flare	List Price Excl GST
VSE38----	1 3/8 x 1 3/8	133.6	C Z ZP	63	1/4	P.O.A
VSE50----		175.85				P.O.A
VSE70----		246.2				P.O.A



Available R404a Thermostatic Charges (note: 'P' indicates M.O.P.)

Commercial Refrigeration 10C to -25C	Low Temperature Refrigeration -20C to -40C
C	Z , ZP

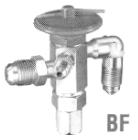
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THERMOSTATIC EXPANSION VALVES

Sporlan R404A – Balanced Port

BF – Series - Balanced Port

Airefrig Part Number	Connections Flare	Nominal Capacity KW	Charges Available	Element No	Equaliser Connections Solder	List Price Excl GST
BFSEAAA----	3/8 x 1/2	0.44 – 0.70	C Z ZP	43	1/4	
BFSEAA----		0.88 – 1.17			1/4	
BFSEA----		1.76 – 3.52			1/4	
BFSEB----		4.40 – 6.15			1/4	
BFSEC----		7.03 – 10.06			1/4	P.O.A.



SBF – Series - Balanced Port

Airefrig Part Number	Connections Solder	Nominal Capacity KW	Charges Available	Element No	Equaliser Connections Solder	List Price Excl GST
SBFSEAAA----	3/8 x 1/2	0.44 – 0.70	C Z ZP	43	1/4	
SBFSEAA----		0.88 – 1.17			1/4	
SBFSEA----		1.76 – 3.52			1/4	
SBFSEB----		4.40 – 6.15			1/4	
SBFSEC----		7.03 – 10.06			1/4	



O - Series - Balanced Port

Airefrig Part Number	Connections Solder	Nominal Capacity KW	Charges Available	Element No	Equaliser Connections Solder	List Price Excl GST
OSE9----	7/8 x 1 1/8	31.6	C Z ZP	83	1/4	
OSE12----	7/8 x 1 3/8	42.2				
OSE21----	1 1/8 x 1 3/8	73.8				
OSE30----		105.5		33		
OSE35----		123.0				
OSE45----		158.2				



EBS - Series - Balanced Port

Airefrig Part Number	Connections Solder	Nominal Capacity KW	Charges Available	Element No	Equaliser Connections Solder	List Price Excl GST
EBSSE6----	5/8 x 7/8	21.1	C Z ZP	83	1/4	
EBSSE75----	5/8 x 7/8					
EBSSE10----	7/8 x 1 1/8	35.2				
EBSSE13----	7/8 x 1 3/8					

Available R404a Thermostatic Charges (note: 'P' indicates M.O.P.)

Commercial Refrigeration 10C to -25C	Low Temperature Refrigeration -20C to -40C
C	Z , ZP

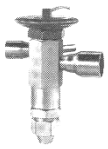
Selection of Power Elements 2nd last page of Sporlan TEV Valves

THERMOSTATIC EXPANSION VALVES

Sporlan R507

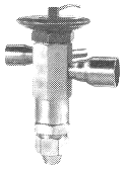
S - Series

Airefrig Part Number	Connections Solder	Nominal Capacity KW	Charges Available	Element No	Equaliser Connections Solder	List Price Excl GST
SPE2----	1/2 x 5/8	7.0	C Z ZP	83	1/4	
SPE3----	1/2 x 7/8	10.6				
SPE4----		14.1				
SPE6----	5/8 x 7/8	21.1				
SPE7----		24.6				
SPE10----	7/8 x 11/8	35.2				



P - Series

Airefrig Part Number	Connections Solder	Nominal Capacity KW	Charges Available	Element No	Equaliser Connections Flare	List Price Excl GST
PPE61/2----	5/8 x 7/8	22.9	C Z ZP	33	1/4	P.O.A
PPE9----	7/8 x 1 1/8	31.7				P.O.A
PPE12----		42.2				P.O.A



H - Series

Airefrig Part Number	Connections Solder	Nominal Capacity KW	Charges Available	Element No	Equaliser Connections Flare	List Price Excl GST
HPE11/2----	1/2 x 5/8	5.3	C Z ZP	33	1/4	P.O.A
HPE3----	5/8 x 7/8	10.5				P.O.A
HPE4----		14.1				P.O.A
HPE61/2----		22.9				P.O.A
HPE9----		31.7				P.O.A
HPE12----	7/8 x 1 1/8	42.2				P.O.A



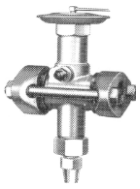
M - Series

Airefrig Part Number	Connections Solder	Nominal Capacity KW	Charges Available	Element No	Equaliser Connections Flare	List Price Excl GST
MPE15----	7/8 x 1 1/8	52.8	C Z ZP	63	1/4	P.O.A
MPE20----		70.3				P.O.A
MPE25----		87.9				P.O.A
MPE30----	1 1/8 x 1 1/8	105.4				P.O.A



V - Series

Airefrig Part Number	Connections Solder	Nominal Capacity KW	Charges Available	Element No	Equaliser Connections Flare	List Price Excl GST
VPE38----	1 3/8 x 1 3/8	133.6	C Z ZP	63	1/4	P.O.A
VPE50----		175.85				P.O.A
VPE70----		246.2				P.O.A



Available R507 Thermostatic Charges (note: 'P' indicates M.O.P.)

Commercial Refrigeration 10C to -25C	Low Temperature Refrigeration -20C to -40C
C	Z , ZP

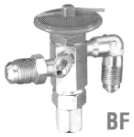
Selection of Power Elements 2nd last page of Sporlan TEV Valves

THERMOSTATIC EXPANSION VALVES

Sporlan R507 – Balanced Port

BF – Series - Balanced Port

Airefrig Part Number	Connections Flare	Nominal Capacity KW	Charges Available	Element No	Equaliser Connections Solder	List Price Excl GST
BFPEAAA----	3/8 x 1/2	0.44 – 0.70	C Z ZP	43	1/4	P.O.A
BFPEAA----		0.88 – 1.17			1/4	P.O.A
BFPEA----		1.76 – 3.52			1/4	P.O.A
BFPEB----		4.40 – 6.15			1/4	P.O.A
BFPEC----		7.03 – 10.06			1/4	P.O.A



SBF – Series - Balanced Port

Airefrig Part Number	Connections Solder	Nominal Capacity KW	Charges Available	Element No	Equaliser Connections Solder	List Price Excl GST
SBFPEAAA----	3/8 x 1/2	0.44 – 0.70	C Z ZP	43	1/4	P.O.A.
SBFPEAA----		0.88 – 1.17			1/4	
SBFPEA----		1.76 – 3.52			1/4	
SBFPEB----		4.40 – 6.15			1/4	
SBFPEC----		7.03 – 10.06			1/4	



O - Series - Balanced Port

Airefrig Part Number	Connections Solder	Nominal Capacity KW	Charges Available	Element No	Equaliser Connections Solder	List Price Excl GST
OPE6----	7/8 x 1 1/8	21.1	C Z ZP	83	1/4	
OPE9----		31.6				
OPE12----	7/8 x 1 3/8	42.2				P.O.A.
OPE21----	1 1/8 x 1 3/8	73.8				
OPE30----		105.4		33		
OPE35----		123.0				
OPE45----		158.2				



Available R507 Thermostatic Charges (note: 'P' indicates M.O.P.)

Commercial Refrigeration 10C to -25C	Low Temperature Refrigeration -20C to -40C
C	Z , ZP

Selection of Power Elements 2nd last page of Sporlan TEV Valves

THERMOSTATIC EXPANSION VALVES

Sporlan Q Series
Interchangeable Cartridge

Valve Bodies

Airefrig Part Number	Description	List Price Excl GST
QSAE	Internally Equalised – 3/8 Flare & 1/2 Flare	
QESAE	Externally Equalised – 3/8 Flare, 1/2 Flare & 1/4 Flare Ext Equal	
EQODF	90 Deg Tube Inlet Internally Equalised – 3/8 ODF & 1/2 ODF	
EQEODF	90 Deg Tube Inlet Externally Equalised – 3/8 ODF, 1/2 ODF & 1/4 ODF Ext Equal	
SQODF	90 Deg Forged Inlet Internally Equalised – 3/8 ODF & 1/2 ODF	
SQEODF	90 Deg Forged Inlet Externally Equalised – 3/8 ODF, 1/2 ODF & 1/4 ODF Ext Equal	





Power Elements

Airefrig Part Number	Description	List Price Excl GST
KT43-----	Selection of Power Elements on Next Page	P.O.A.



Valve Cartridge

Airefrig Part Number	Description	List Price Excl GST
Q0	Q Cartridge – 0 Red	
Q1	Q Cartridge – 1 Yellow	
Q2	Q Cartridge – 2 Green	
Q3	Q Cartridge – 3 Blue	
Q4	Q Cartridge – 4 Pink	
Q5	Q Cartridge – 5 Black	
Q6	Q Cartridge – 6 White	
184000	Cartridge service kit Complete – Q Valve	
CASEQVALVE	Q Valve Carry Case	



Q Valve Nominal Capacities

Cartridge		Nominal Capacity KW		
Number	Colour	R134a	R22	R404A
Q0	Red	0.6	1.2	0.6
Q1	Yellow	0.9	2.6	0.9
Q2	Green	1.8	3.5	1.8
Q3	Blue	3.5	5.3	3.5
Q4	Pink	5.3	8.8	5.3
Q5	Black	7.0	12.3	7.0
Q6	White	8.8	16.8	10.5

Selection of Power Elements 2nd last page of Sporlan TEV Valves

The brass body ***Q*** valve is externally adjustable and available with either flare or solder connections.
It is designed for small refrigeration systems such as refrigerated cases, cool rooms and freezers.
The type ***Q*** valve is of the replaceable cartridge style where by the valve orifice can be selected to match the system capacity and installed in the valve body.

Oil for Lubricating Q & BQ Valves

Airefrig Part Number	Description	List Price Excl GST
OB1	Lubricating Oil for Q & BQ valves 125 mls	
M098	Lubricating Oil in plastic bottle with telescopic spout (118mls)	

THERMOSTATIC EXPANSION VALVES

Sporlan BQ Series Balanced Port
Interchangeable Cartridge

Valve Bodies

Airefrig Part Number	Description	List Price Excl GST
BQSAE	Internally Equalised – 3/8 Flare & 1/2 Flare	
BQESAE	Externally Equalised – 3/8 Flare, 1/2 Flare & 1/4 Flare Ext Equal.	
EBQODS	90° Tube Inlet Internally Equalised – 3/8 ODF & 1/2 ODF	
EBQEODS	90° Tube Inlet Ext Equal. – 3/8 ODF, 1/2 ODF & 1/4 ODF Ext Equal	
SBQODS	90° Deg Forged Inlet Internally Equalised – 3/8 ODF & 1/2 ODF	
SBQEODS	90° Forged Inlet Ext Equal. – 3/8 ODF, 1/2 ODF & 1/4 ODF Ext Equal	



Power Elements

Airefrig Part Number	Description	List Price Excl GST
KT43----	Selection of Power Elements on Bottom of Page	P.O.A.



Valve Cartridge

Airefrig Part Number	Description	List Price Excl GST
QAAA	Q Cartridge – QAAA Red	
QAA	Q Cartridge – QAA Yellow	
QA	Q Cartridge – QA Blue	
QB	Q Cartridge – QB Pink	
QC	Q Cartridge – QC White	





BQ Valve Nominal Capacities

Cartridge		Nominal Capacity KW		
Number	Colour	R134a	R22	R404A
QAAA	Red	0.4 to 0.7	0.4 to 1.2	0.4 to 0.7
QAA	Yellow	0.9 to 1.2	1.7 to 2.3	0.9 to 1.2
QA	Blue	1.7 to 3.5	2.6 to 5.3	1.7 to 3.5
QB	Pink	4.4 to 6.1	6.1 to 10.5	4.4 to 7.0
QC	White	7.0 to 10.5	11.4 to 19.3	7.9 to 10.5

KT43 Element Wrench

Airefrig Part Number	Description	List Price Excl GST
180390	KT43 Element Wrench	

Recommended Thermostatic Charges
(Power Elements)

Airefrig Part Number	Air Conditioning		Commercial Refrigeration 10C to -25C					Low Temperature Refrigeration -20C to -40C				List Price Excl GST
	R22	R134a	R22	R134a	R404A	R507	R717	R22	R404A	R507	R717	
KT23----							AC AL				AZ AL	P.O.A.
KT33----		JCP60	VC	JC	SC	PC		VZP40	SZ SZP	PZ PZP		P.O.A.
KT43----	VGA		VC	JC	SC	PC		VCZ VZP40	SZ SZP	PZ PZP		P.O.A.
KT63----	VCP100	JCP60	VC	JC	SC	PC			SZ SZP	PZ PZP		P.O.A.
KT83----	VCP100	JCP60	VC	JC	SC	PC		VZ VZP40	SZ SZP	PZ PZP		P.O.A.
KT83----								VX				P.O.A.



THERMOSTATIC EXPANSION VALVES

Sporlan R717 – Ammonia

D - Ammonia

Airefrig Part Number	Connections	Nominal Capacity KW	Capillary Length	Equaliser Connections Solder	External Strainer Kit	List Price Excl GST
DA1	1/2 FPT	3.5	10 Ft (3.0 Metres)	-	-	P.O.A.
DA1L10FT	1/2 Socket Weld			-	Yes	
DAE1	1/2 FPT			1/8 FPT	-	
DAE1L10FT	1/2 Socket Weld			1/8 FPT	Yes	
DA1-15	1/2 Socket Weld		15 Ft (4.5 Metres)	-	-	
DAE1-15	1/2 Socket Weld			1/8 FPT	-	
DA2	1/2 FPT	7.0	10 Ft (3.0 Metres)	-	-	
DA2L10FT	1/2 Socket Weld			-	Yes	
DAE2	1/2 FPT			1/8 FPT	-	
DAE2L10FT	1/2 Socket Weld			1/8 FPT	Yes	
DA2-15	1/2 Socket Weld		15 Ft (4.5 Metres)	-	-	
DAE2-15	1/2 Socket Weld			1/8 FPT	-	
DA5	1/2 FPT	17.6	10 Ft (3.0 Metres)	-	-	
DA5L10FT	1/2 Socket Weld			-	Yes	
DAE5	1/2 FPT			1/8 FPT	-	
DAE5L10FT	1/2 Socket Weld			1/8 FPT	Yes	
DA5-15	1/2 Socket Weld		15 Ft (4.5 Metres)	-	-	
DAE5-15	1/2 Socket Weld			1/8 FPT	-	
DA10	1/2 FPT	35.2	10 Ft (3.0 Metres)	-	-	
DA10L10FT	1/2 Socket Weld			-	Yes	
DAE10	1/2 FPT			1/8 FPT	-	
DAE10L10FT	1/2 Socket Weld			1/8 FPT	Yes	
DA10-15	1/2 Socket Weld		15 Ft (4.5 Metres)	-	-	
DAE10-15	1/2 Socket Weld			1/8 FPT	-	
DA15	1/2 FPT	52.8	10 Ft (3.0 Metres)	-	-	
DAE15	1/2 FPT			1/8 FPT	-	
DAE15L10FT	1/2 Socket Weld			1/8 FPT	Yes	
DA15-15	1/2 Socket Weld		15 Ft (4.5 Metres)	-	-	
DAE15-15	1/2 Socket Weld			1/8 FPT	-	
XD074	Inlet Strainer 1/2" FPT					

Selection of Power Elements on Previous Page.

Valve Repair Kits

Valve Series	Valve Size R717	Airefrig Part Number	List Price Excl GST
D	1	KP100010	P.O.A.
	2	KP100010	P.O.A.
	5	KP100050	
	10	KP100100	
	15	KP100100	

Kits contain Seat, Pin & Carrier, Pushrods, Seal Cap Gasket & Pushrod Gauge



ELECTRIC EXPANSION VALVES

Sporlan Electric Expansion Valves

Features

- Step motor operated for precise control
- High resolution drive assembly - 0.02 mm per step
- Tight seating
- Corrosion resistant materials used throughout
- Field proven reliability
- Low power consumption - 4 watts
- Unique built-in Sight Glass – indicates valve operation, moisture levels & refrigerant quality (SEHI only)
- Compatibility tested with most CFC, HCFC, and HFC refrigerants and oils
- Self lubricating materials used for long life
- High linear force output

SEI Series

Airefrig Part Number	Connection Type	Body Type	*Nominal Capacity (Ton)	Cable Length	List Price Excl GST
SEI0510S	3/8 x 1/2 ODF	Angled	0.5	10 ft	
SEI3510S	3/8 x 1/2 ODF	Straight	3.5	10 ft	
SEI610S	1/2 x 5/8 ODF	Straight	6.0	10 ft	
SEI8510S	1/2 x 5/8 ODF	Straight	8.5	10 ft	
SEI1110S	1/2 x 5/8 ODF	Angled	11.0	10 ft	
SEI1140S	5/8 x 5/8 ODF	Angled	11.0	40 ft	
SEI3010S	7/8 x 1-1/8 ODF	Straight	30.0	10 ft	
SEI5010S	1-1/8 x 1-3/8 ODF	Straight	50.0	10 ft	

*Nominal capacity based on R22, 38°C liquid temp, 6 bar press drop, 5°C evap temp & full stroke.



SER Series

Airefrig Part Number	Connection Type	Body Type	*Nominal Capacity (Ton)	Cable Length	List Price Excl GST
SERAA10S	3/8 x 1/2 ODF	Angled	0.56	10 ft	
SERA10S	3/8 x 1/2 ODF	Angled	1.22	10 ft	
SERB10S	3/8 x 1/2 ODF	Angled	2.5	10 ft	
SERC10S	3/8 x 1/2 ODF	Angled	6.8	10 ft	
SERD10S	3/8 x 1/2 ODF	Straight	13.8	10 ft	

*Nominal capacity based on R22, 38°C liquid temp, 6 bar press drop, 5°C evap temp & full stroke.



SHE Series

Airefrig Part Number	Connection Type	Body Type	*Nominal Capacity (Ton)	Cable Length	List Price Excl GST
SEH10010S11X13	1-3/8 x 1-5/8 ODF	Straight	100.0	10 ft	

*Nominal capacity based on R22, 38°C liquid temp, 6 bar press drop, 5°C evap temp & full stroke.



Danfoss T2/TE2 TX Valves

Danfoss T2/TE2 TX Valves - (Flare/Flare connections)

Airefrig Part Number	Valve Type	Refrigerant	Temp Range (N)	Connections			List Price Ex GST
				Inlet	Outlet	Ext. Equaliser	
68Z3400	TS2	R404A (R507)	-40 to +10°C	3/8 flare	1/2 flare	-	
68Z3403	TES2			3/8 flare	1/2 flare	1/4 flare	
68Z3346	TN2	R134A		3/8 flare	1/2 flare	-	
68Z3348	TEN2			3/8 flare	1/2 flare	1/4 flare	
68Z3206	TX2	R22		3/8 flare	1/2 flare	-	
68Z3209	TEX2			3/8 flare	1/2 flare	1/4 flare	
68Z3517	TEZ2 (with MOP+15°C)	R407C		3/8 flare	1/2 flare	1/4 flare	P.O.A.

Capillary length: 1.5mt / more variations of these TX valve are available on request.

Danfoss T2/TE2 TX Valves - (Flare/Solder connections)

Airefrig Part Number	Valve Type	Refrigerant	Temp Range (N)	Connections			List Price Ex GST
				Inlet	Outlet	Ext. Equaliser	
68Z3414	TS2	R404A (R507)	-40 to +10°C	3/8 flare	1/2" ODS	-	
68Z3415	TES2			3/8 flare	1/2" ODS	1/4 ODS	
68Z3383	TN2	R134A		3/8 flare	1/2" ODS	-	
68Z3385	TEN2			3/8 flare	1/2" ODS	1/4 ODS	
68Z3281	TX2	R22		3/8 flare	1/2" ODS	-	
68Z3284	TEX2			3/8 flare	1/2" ODS	1/4 ODS	
68Z3446	TEZ2	R407C		3/8 flare	1/2 flare	1/4 flare	P.O.A.

Capillary length: 1.5mt / more variations of these TX valve are available on request.

Danfoss TX Valve Orifice – T2/TE2

Airefrig Part Number	Orifice Number	Nominal Capacity in KW (Range N: -40 to +10°C)				List Price Ex GST
		R134A	R404A (R507)	R407C	R22	
682002	0X	0.68	0.64	0.92	0.90	
682003	00	1.2	1.3	1.8	1.8	
682010	01	2.1	2.6	3.5	3.5	
682015	02	2.5	3.7	4.8	4.7	
682006	03	4.3	6.3	8.1	8.0	
682007	04	6.4	9.9	12.4	12.1	
682008	05	8.4	13.0	16.5	16.7	
682009	06	10.1	15.5	19.7	19.7	

Nominal capacity based on: Evap temp = +4.4°C, Cond temp = +38°C, Refrig temp ahead of valve = +37°C



THERMOSTATIC EXPANSION VALVES

Danfoss TUA/TUAE TX Valves

Danfoss TUA/TUAE TX Valves - (Solder connections)

Airefrig Part Number	Valve Type	Refrigerant	Temp Range (N)	Connections			List Price Ex GST
				Inlet	Outlet	Ext. Equaliser	
68U2285	TUA	R404A R507	-40 to +10°C	3/8 ODS	1/2 ODS	-	
68U2287	TUAE			3/8 ODS	1/2 ODS	1/4 ODS	
68U2205	TUA	R134A		3/8 ODS	1/2 ODS	-	
68U2207	TUAE			3/8 ODS	1/2 ODS	1/4 ODS	
68U2235	TUA	R22		3/8 ODS	1/2 ODS	-	
68U2237	TUAE			3/8 ODS	1/2 ODS	1/4 ODS	
68U2325	TUA	R407C		3/8 ODS	1/2 ODS	-	
68U2327	TUAE			3/8 ODS	1/2 ODS	1/4 ODS	
68U1714	TUAE	R410A		3/8 ODS	1/2 ODS	1/4 ODS	P.O.A.

Capillary length: 1.5mt / more variations of these TX valve are available on request.

Danfoss TX Valve Orifice – TUA/TUAE

Airefrig Part Number	Orifice Number	Nominal Capacity in KW (Range N: -40 to +10°C)					List Price Ex GST
		R134A	R404A/R507	R407C	R22	R410A	
68U1030	0	0.42	0.48	0.66	0.63	0.99	
68U1031	1	0.61	0.71	0.94	0.92	1.3	
68U1032	2	0.72	0.87	1.1	1.1	1.7	
68U1033	3	0.94	1.1	1.5	1.4	2.1	
68U1034	4	1.6	2.0	2.5	2.5	4.1	
68U1035	5	2.1	2.7	3.4	3.4	5.3	
68U1036	6	3.4	4.2	5.3	5.3	8.5	
68U1037	7	4.4	5.6	7.0	7.0	11.2	
68U1038	8	6.5	8.0	10.2	10.1	15.8	
68U1039	9	9.0	11.3	14.0	14.1	23.1	

Nominal capacity based on: Evap temp = +4.4°C, Cond temp = +38°C, Refrig temp ahead of valve = +37°C



THERMOSTATIC EXPANSION VALVES

Parker Bi-Flow TX Valves

Refrigerant R22 / R407C

Airefrig Part Number	Parker Code	Refrigerant	Nominal Capacity Tons	Connection Solder	Equaliser Connection	List Price Ex GST
HAE3VX100B20	040606-01	R22 / R407C	1.5 – 3.0	1/2" x 1/2"	1/4" (20% Bleed)	
HAE5VX100B20	040524-16	R22 / R407C	3.5 – 5.0	1/2" x 1/2"	1/4" (20% Bleed)	
HAE8VX100B20	040524-17	R22 / R407C	6.0 – 8.0	5/8" x 5/8"	1/4" (20% Bleed)	
HAE10VX100B20	040524-13	R22 / R407C	8.0 – 10.0	5/8" x 7/8"	1/4" (20% Bleed)	

Refrigerant R410A

Airefrig Part Number	Parker Code	Refrigerant	Nominal Capacity Tons	Connection Solder	Equaliser Connection	List Price Ex GST
HAE3KX200	040679-01	R410A	1.5 – 3.0	3/8" x 1/2"	1/4"	
HAE5KX200	040680-01	R410A	3.5 – 5.0	1/2" x 5/8"	1/4"	
HAE7.5KX200	040681-01	R410A	5.5 – 7.5	1/2" x 5/8"	1/4"	
HAE10KX200	040682-01	R410A	8.0 – 10.0	5/8" x 7/8"	1/4"	



THERMOSTATIC EXPANSION VALVES

Sporlan Level Master Liquid Level Controls

Complete Valve

Airefrig Part Number	Connections Solder	Nominal Capacity KW	List Price Excl GST
R22			
LMCPVE7	5/8 x 7/8	24.6	P.O.A.
LMCPVE11	5/8 x 7/8	38.7	P.O.A.
LMCPVE16	7/8 x 1 1/8	56.3	P.O.A.
LMCPVE20	7/8 x 1 3/8	70.3	P.O.A.
R404A			
LMCPSE4	5/8 x 7/8	14.1	P.O.A.
LMCPSE6.5	5/8 x 7/8	22.8	P.O.A.
LMCPSE9	7/8 x 1 1/8	31.6	P.O.A.
LMCPSE12	7/8 x 1 3/8	42.2	P.O.A.

Replacement Elements

Airefrig Part Number	List Price Excl GST
R22	
LMC33VL	
R404A	
LMC33RL	

Valve Repair Kits

Valve Series	Numbers Valves				Airefrig Part Number	List Price Excl GST
	R22	R134a	R404A	R507		
S	2	11/2	11/2	11/2	KP020015	P.O.A.
	3	2	2	2	KP020020	
	4	21/2	3	3	KP020025	
	5	3	4	4	KP020030	
	8	5	6	6	KP020050	
	10	6	7	7	KP020060	
P	11	5	61/2	61/2	KP120050	
	16	8	9	9	KP120080	
	20	12	12	12	KP120120	
H	21/2	11/2	11/2	11/2	KP130015	
	51/2	3			KP130030	
	7	4	4	4	KP130040	P.O.A.
	11	5	61/2	61/2	KP130050	
	16	8	9	9	KP130080	
	20	12	12	12	KP130120	
O	10	6	6	6	KP190060	
	15	9	9	9	KP190090	
	20	12	12	12	KP190120	
	30	16	21	21	KP190160	
	40	23	30	30	KP200230	
	55	32	35	35	KP200320	
	70	40	45	45	KP200400	P.O.A.
M	8	5	6	6	KP080050	P.O.A.
	12	71/2	9	9	KP080075	P.O.A.
	18	11	13	13	KP080110	P.O.A.
	21	13	15	15	KP080130	
	26	15	20	20	KP080150	
	34	20	25	25	KP080200	
	42	25	30	30	KP080250	
V	52	35	38	38	KP160350	
	70	45	50	50	KP160450	P.O.A.
	100	55	70	70	KP160450	P.O.A.
	135	80	100	100	KP170800	
	180	110	130	130	KP170800	
W	135	80	100	100	KP170800	
	180	110	130	130	KP180800	P.O.A.

Kits contain Seat, Pin & Carrier, Pushrods,
Seal Cap Gasket & Pushrod Gauge

ELECTRIC EVAPORATOR CONTROL VALVES

Sporlan Electric Evaporator Control Valves

CDS Series

Airefrig Part Number	Valve Type	Connections	Cable Length	List Price Excl GST
CDS758	CDS7	5/8 ODF Straight	10 ft	
CDS978FO	CDS9	7/8 ODF Straight		
CDS9118FO		1 1/8 ODF Straight		
CDS17138	CDS17	1 3/8 ODF Straight		
CDS17138FO				P.O.A.

Note: Valves with suffix "FO" are supplied "Fully Open" prior to 1st power up.



Features

- Step motor operated for precise control
- High resolution drive assembly
- Tight seating valve for suction applications
- Corrosion resistant materials used throughout
- Field proven reliability
- Low power consumption
- Balanced port design
- Compatibility tested with most CFC, HCFC and HFC refrigerants and oils
- Self lubricating materials used for long life
- High linear force output

Selection Example

Refrigerant: R-407C
Condensing Temperature: 43°C
Liquid Temperature: 15°C
Evaporator Temperature: -5°C
Evaporator Capacity: 21 KW

To select a valve for the system conditions listed above, look at the capacity tables below. The leftmost set of columns lists the capacities for the valves when used on R-407C systems.
To apply a valve with a minimum pressure drop, the 0.03 BAR column should be used. Note that for an evaporator of -5°C, a CDS-16 with a capacity of 20.7 KW would be required for this application. A more economical approach would be to use the CDS-9 with a capacity of 22.3 KW at 0.1 BAR pressure drop, if the higher pressure drop can be tolerated.

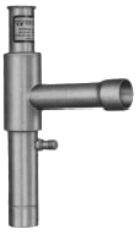
Suction Capacity - KW

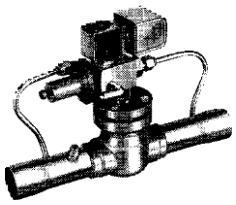
Valve Type	Evap Temp (°C)	R407C Pressure Drop Across Valve (BAR)						R410A Pressure Drop Across Valve (BAR)						R404A (R507) Pressure Drop Across Valve (BAR)						R134A Pressure Drop Across Valve (BAR)					
		0.03	0.06	0.1	0.2	0.4	0.7	0.03	0.06	0.1	0.2	0.4	0.7	0.03	0.06	0.1	0.2	0.4	0.7	0.03	0.06	0.1	0.2	0.4	0.7
CDS-7	5	8.71	12.3	15.7	21.9	30.1	38.0	11.3	15.9	20.5	28.7	40.0	51.6	8.34	11.8	15.1	21.2	29.3	37.4	7.09	9.95	12.7	17.6	23.7	29.0
	0	7.89	11.1	14.2	19.8	27.0	33.7	10.3	14.6	18.7	26.3	36.5	46.9	7.59	10.7	13.7	19.2	26.4	33.6	6.39	8.97	11.4	15.7	21.0	25.2
	-5	7.13	10.0	12.8	17.7	24.0	29.6	9.45	13.3	17.1	23.9	33.1	42.4	6.88	9.69	12.4	17.3	23.8	30.0	5.74	8.04	10.2	14.0	18.4	21.5
	-10	6.41	9.0	11.5	15.8	21.2	25.7	8.61	12.1	15.6	21.7	29.9	38.0	6.22	8.75	11.2	15.6	21.2	26.5	5.14	7.18	9.12	12.4	15.9	18.1
	-15	5.74	8.04	10.3	14.0	18.6	22.0	7.81	11.0	14.1	19.6	26.9	33.8	5.59	7.86	10.1	13.9	18.8	23.2	4.58	6.37	8.06	10.8	13.6	14.7
	-20	5.11	7.15	9.09	12.4	16.1	18.4	7.05	9.91	12.7	17.6	24.0	29.8	5.01	7.03	8.99	12.4	16.6	20.1	4.05	5.62	7.08	9.36	11.4	11.8
	-25	4.53	6.32	8.01	10.8	13.7	15.0	6.33	8.9	11.4	15.7	21.2	25.9	4.47	6.26	7.98	10.9	14.5	17.1	3.57	4.93	6.16	7.99	9.28	9.3
	-30	4.00	5.55	6.99	9.28	11.4	11.9	5.66	7.94	10.1	13.9	18.5	22.1	3.96	5.54	7.04	9.57	12.4	14.3	3.12	4.28	5.3	6.7	7.29	7.29
CDS-9	5	15.1	21.3	27.4	38.3	53.1	68.0	19.5	27.5	35.5	49.9	69.8	90.9	14.4	20.4	26.2	36.8	51.3	66.4	12.3	17.3	22.2	30.9	42.2	53.1
	0	13.7	19.3	24.8	34.6	47.7	60.8	17.9	25.3	32.5	45.7	63.8	82.8	13.1	18.5	23.9	33.4	46.5	59.9	11.1	15.6	20.0	27.7	37.7	46.8
	-5	12.4	17.4	22.3	31.1	42.7	54.0	16.4	23.1	29.7	41.7	58.1	75.1	11.9	16.8	21.6	30.3	41.9	53.7	9.97	14.0	17.9	24.7	33.3	40.8
	-10	11.1	15.6	20.0	27.9	38.0	47.5	14.9	21.0	27.0	37.9	52.7	67.8	10.8	15.2	19.5	27.2	37.6	47.9	8.92	12.5	16.0	22.0	29.2	35.1
	-15	9.96	14.0	17.9	24.8	33.5	41.3	13.5	19.1	24.5	34.3	47.4	60.7	9.7	13.7	17.5	24.4	33.5	42.4	7.95	11.1	14.2	19.3	25.4	29.6
	-20	8.88	12.5	15.9	21.9	29.3	35.4	12.2	17.2	22.1	30.8	42.5	53.9	8.69	12.2	15.7	21.8	29.7	37.1	7.05	9.84	12.5	16.9	21.7	24.4
	-25	7.88	11.0	14.1	19.2	25.3	29.9	11.0	15.5	19.8	27.6	37.8	47.5	7.75	10.9	13.9	19.3	26.1	32.2	6.22	8.65	10.9	14.6	18.3	19.4
	-30	6.95	9.71	12.3	16.7	21.6	24.5	9.82	13.8	17.7	24.5	33.3	41.3	6.88	9.65	12.3	17.0	22.7	27.5	5.45	7.55	9.48	12.5	15.0	15.2
CDS-16	5	25.3	35.6	45.7	63.6	87.0	109	32.7	46.2	59.4	83.3	116	149	24.2	34.2	43.9	61.4	84.8	108	20.6	28.9	36.9	50.9	68.3	83.0
	0	22.9	32.2	41.3	57.3	77.9	96.9	30.0	42.3	54.4	76.2	106	136	22.0	31.1	39.9	55.6	76.5	97.0	18.6	26.0	33.2	45.5	60.4	71.9
	-5	20.7	29.1	37.2	51.4	69.3	84.9	27.4	38.7	49.7	69.5	96.0	122	20.0	28.1	36.1	50.2	68.7	86.4	16.7	23.3	29.7	40.4	52.8	61.2
	-10	18.6	26.1	33.3	45.8	61.1	73.5	25.0	35.2	45.2	63.0	86.6	110	18.1	25.4	32.5	45.1	61.4	76.3	14.9	20.8	26.4	35.7	45.7	51.0
	-15	16.7	23.3	29.7	40.6	53.4	62.6	22.7	31.9	40.9	56.9	77.7	97.4	16.3	22.8	29.2	40.4	54.4	66.7	13.3	18.5	23.3	31.2	38.8	41.2
	-20	14.9	20.7	26.3	35.7	46.0	52.1	20.5	28.8	36.9	51.1	69.2	85.6	14.6	20.4	26.1	35.9	47.8	57.5	11.8	16.3	20.5	26.9	32.3	33.0
	-25	13.2	18.3	23.2	31.1	39.0	42.0	18.4	25.8	33.0	45.5	61.0	74.2	13.0	18.2	23.1	31.6	41.6	48.8	10.3	14.3	17.8	22.9	26.1	26.1
	-30	11.6	16.1	20.2	26.7	32.4	33.2	16.4	23.0	29.4	40.2	53.3	63.2	11.5	16.1	20.4	27.7	35.7	40.5	9.05	12.4	15.3	19.1	20.4	20.4
CDS-17	5	27.4	38.6	49.6	69.4	96.0	123	35.4	50.0	64.4	90.5	127	164	26.2	37.0	47.6	66.8	93.0	120	22.3	31.4	40.2	55.9	76.3	95.4
	0	24.8	35.0	44.9	62.7	86.3	110	32.5	45.8	59.0	82.9	116	150	23.9	33.6	43.3	60.6	84.2	108	20.1	28.3	36.2	50.1	67.9	83.9
	-5	22.4	31.6	40.5	56.4	77.2	97.1	29.7	41.9	53.9	75.6	105	136	21.6	30.5	39.2	54.8	75.8	96.9	18.1	25.4	32.5	44.7	60.0	72.9
	-10	20.2	28.4	36.3	50.4	68.5	85.2	27.1	38.1	49.1	68.7	95.3	122	19.6	27.5	35.4	49.4	68.0	86.3	16.2	22.7	28.9	39.7	52.5	62.0
	-15	18.1	25.4	32.5	44.8	60.4	73.9	24.5	34.6	44.4	62.1	85.8	109	17.6	24.8	31.8	44.2	60.6	76.2	14.4	20.2	25.7	34.9	45.5	52.4
	-20	16.1	22.6	28.8	39.6	52.7	63.2	22.2	31.2	40.1	55.9	76.8	97.1	15.8	22.2	28.4	39.4	53.6	66.7	12.8	17.8	22.6	30.4	38.8	42.8
	-25	14.3	20.0	25.5	34.7	45.5	52.9	19.9	28.0	35.9	50.0	68.2	85.3	14.1	19.8	25.3	34.9	47.0	57.6	11.3	15.7	19.7	26.3	32.4	33.9
	-30	12.6	17.6	22.3	30.1	38.6	43.1	17.8	25.0	32.0	44.4	60.0	74.0	12.5	17.5	22.3	30.7	40.9	49.0	9.87	13.7	17.1	22.3	26.4	26.6

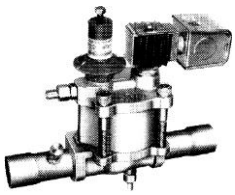
EVAPORATOR PRESSURE REGULATORS

Sporlan Evaporator Pressure Regulating Valves

Airefrig Part Number	Connection Inches	Maximum Test Pressure	Adjustment Range		List Price Excl GST
ORIT612MF	1/2” Flare	300 psig	30 to 100 psig		
ORIT612ODS	1/2” Solder	300 psig	30 to 100 psig		
ORIT658MF	5/8” Flare	300 psig	30 to 100 psig		P.O.A.
ORIT605058ODS	5/8” Solder	300 psig	0 to 50 psig		
X106ORIT658OD	5/8” Solder	400 psig	30 to 100 psig		
ORIT605078ODS	7/8” Solder	300 psig	0 to 50 psig		
X106ORIT678OD	7/8” Solder	400 psig	30 to 100 psig		
ORIT1078ODS	7/8” Solder	200 psig	30 to 100 psig		
ORIT10050118ODS	11/8” Solder	200 psig	0 to 50 psig		
X106ORIT10118OD	11/8” Solder	400 psig	30 to 100 psig		
ORIT10050138ODS	13/8” Solder	200 psig	0 to 50 psig		
X106ORIT10138OD	13/8” Solder	400 psig	30 to 100 psig		
SORIT12	1 1/8” Solder	450 psig	0 to 100 psig	Less Coil (Requires MKC1E)	
SORIT15	1 3/8” Solder				
SORIT20	1 5/8” Solder				
SORITPI313S	1 5/8 Solder	400 psig			
SORITPI413S	1 5/8 Solder				P.O.A.
SORITPI517S	2 1/8 Solder				







Danfoss Evaporator Pressure Regulating Valves

Airefrig Part Number	Model Number	Connection Inches	Maximum Test Pressure	Adjustment Range	List Price Excl GST
34L0023	KVP12	1/2” Solder	406 psig	0 to 79 psig	
34L0029	KVP15	5/8” Solder	406 psig	0 to 79 psig	
34L0025	KVP22	7/8” Solder	406 psig	0 to 79 psig	
34L0026	KVP28	1 1/8” Solder	371 psig	0 to 79 psig	
34L0032	KVP35	1 3/8” Solder	371 psig	0 to 79 psig	

Factory Setting: 29 psig Maximum Working Pressure: 203 psig



CRANKCASE PRESSURE REGULATORS

Sporlan Crankcase Pressure Regulating Valves

Airefrig Part Number	Connection Sizes Inches	Maximum Test Pressure	Adjustment Range	List Price Excl GST
CRO606012MF	1/2” Flare	300 psig	0 to 60 psig	
CRO606012ODS	1/2” Solder			
CRO606058MF	5/8” Flare			
CRO606058ODS	5/8” Solder			
CROT606058ODS	5/8” Solder			
CROT606078ODS	7/8” Solder			
CROT10060118ODS	11/8” Solder	200 psig		
CROT10060138ODS	13/8” Solder			
CROT63011012ODS	1/2” Solder	300 psig	30 to 110 psig	
CROT63011058ODS	5/8” Solder			
CROT63011078ODS	7/8” Solder			
CROT630110118OD	1 1/8” Solder			

T indicates access valve on Inlet connection



Danfoss Crankcase Pressure Regulating Valves

Airefrig Part Number	Model Number	Connection Inches	Maximum Test Pressure	Adjustment Range	List Price Excl GST
34L0043	KVL12	1/2” Solder	319 psig	3 to 87 psig	
34L0049	KVL15	5/8” Solder	319 psig	3 to 87 psig	
34L0045	KVL22	7/8” Solder	319 psig	3 to 87 psig	
34L0046	KVL28	1 1/8” Solder	371 psig	3 to 87 psig	
34L0052	KVL35	1 3/8” Solder	371 psig	3 to 87 psig	

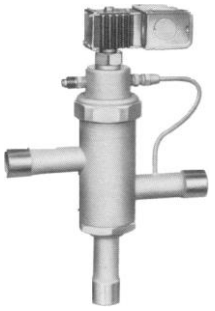
Factory Setting: 29 psig Maximum Working Pressure: 203 psig



THREE WAY HEAT RECLAIM VALVES

Sporlan Three Way Heat Reclaim Valves – Less Coil

Airefrig Part Number	Connection Sizes Inches	Port Size Inches	Options	Coil	List Price Excl GST
8D7B	7/8”	3/4”	Heat Reclaim	MKC1E *	
8D9B	1 1/8”	3/4”			
12D11B	1 3/8”	1 1/4”			
12D13B	1 5/8”	1 1/4”			
16D17B*	2 1/8”	2 1/8”			
12D11BCV	1 3/8”	1 1/4”	Heat Reclaim with Integral Check Valve		
12D13BCV	1 5/8”	1 1/4”			
12D11BSC	1 3/8”	1 1/4”	Split Cond.		
12D13BSC	1 5/8”	1 1/4”			
16D17BSC*	2 1/8”	2 1/8”			
MKC1E240AC	Solenoid Coil 208 - 240 Volts AC 50 - 60 Hz				
MKC2E240AC					



Legend CV- Heat Reclaim with Integral Check Valve.
SC- Split Condenser.

* Note: 16D models with date codes prior to 12-03 will require MKC2E coils. (Due to slightly larger pilot assy)
Spare Parts & pilot kits will also be different for 16D valves with date codes prior to 12-03.

DISCHARGE BYPASS VALVES

Sporlan Discharge Bypass Valves – Adjustable Spring Models

Airefrig Part Number	Connection Inches	Port Size Inches	Range psig	List Price Excl GST
ADRIE114ODF	3/8” Solder	1/4”	0 to 100	P.O.A.
ADRSE238	3/8” Solder	1/4”	0 to 80	
ADRSE212	1/2” Solder	1/4”		
ADRPE312	1/2” Solder	3/8”		
ADRPE358	5/8” Solder	3/8”		
ADRHE678	7/8” Solder	3/4”		



Pilot Operated - Less Coil

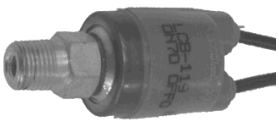
SHGB8	1 1/8” Solder	.43“	0 to 100	P.O.A.
SHGBE8	1 1/8” Solder	.43“		P.O.A.
SHGB15	1 3/8” Solder	1.0”	0 to 75	P.O.A.
SHGBE15	1 3/8” Solder	1.0”		P.O.A.



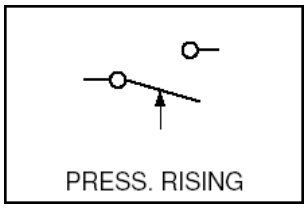
PRESSURE CONTROLS - SAGINOMIYA

Saginomiya CB Encapsulated Pressure Switches

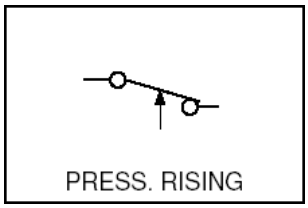
Airefrig Part Number	Operating Pressure KPa		PSI		Maximum Pressure	Reset	Connect	Valve Depressor Pin	Amps / 250V AC		List Price Ex GST
	Off	On	Off	On	KPa/PSI				Full Load	Starting	
LCBMA32	0 ± 30	70 ± 40	0 ± 4	10 ± 6	1500/217	Auto	1/8 MNPT	No	1~4	1~16	
LCBPA100	175 ± 50	400 ± 50	25 ± 7	58 ± 7	1500/217	Auto	1/4 FF	Yes	1~4	1~16	
LCBPA104	69 ± 34	220 ± 34	10 ± 5	32 ± 5	1470/213	Auto	1/4 FF	Yes	1~4	1~16	
LCBPA133	175 ± 50	345 ± 50	25 ± 7	50 ± 7	1470/213	Auto	1/4 FF	Yes	1~4	1~16	
ACBPA59	1241 ± 137	1654 ± 103	180 ± 20	240 ± 15	3240/470	Auto	1/4 FF	Yes	1~4	1~16	
ACBPB115M	2827 ± 96	2100	410 ± 14	305	3300/479	Manual	1/4 FF	Yes	1~4	1~16	
ACBPB119	2760 ± 96	2070 ± 144	400 ± 14	300 ± 21	3240/470	Auto	1/4 FF	Yes	1~4	1~16	
ACBPB123	2930 ± 96	2070 ± 144	425 ± 14	300 ± 21	3240/470	Auto	1/4 FF	Yes	1~4	1~16	
ACBPB149	4502 ± 206	3447 ± 206	653 ± 30	500 ± 30	4895/710	Auto	1/4 FF	Yes	1~4	1~16	
ACBPB175M	2100 ± 100	1500	305 ± 15	218	3300/479	Manual	1/4 FF	Yes	1~4	1~16	
ACBPC45M	2413 ± 144	1758	350 ± 21	255	3240/470	Manual	1/4 FF	Yes	1~4	1~16	
ACBPC54M	2620 ± 200	2000	380 ± 29	290	3300/478	Manual	1/4 FF	Yes	1~4	1~16	



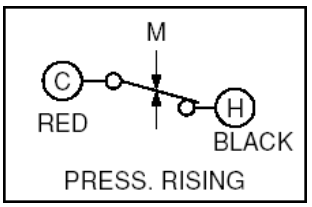




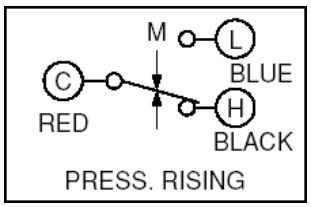
LCBMA32, LCBPA100
LCBPA104, ACBPA59
LCBPA133



ACBPB119
ACBPB123, ACBPB149



ACBP115M



ACBPB175M
ACBPC45M, ACBPC54M

↓ M: Manual Reset.

PRESSURE CONTROLS - SAGINOMIYA

Saginomiya Single Function Low Pressure Controls

Airefrig Part Number	Range KPa		Differential KPa		Factory Setting KPa		Reset	Pressure Connections	Contact Function Diagram	List Price Ex GST
	Min	Max	Min	Max	Off	On				
SNSC106X	-60	600	60	400	200	300	Auto	1/4 Male Flare	1	
SNSC106XQ	-60	600	60	400	200	300	Auto	Capillary 1000 mm	1	
SNSC106XM2 (manual reset)	-60	600	trips on manual reset when pressure drops		200	Manual		1/4 Male Flare	2	
SNSAK02	Upper Lid for SNS & BNS Controls									
SNSCOVER	Replacement Front Cover for SNS Controls									

Controls are complete with Mounting Brackets and Flare Nuts

Saginomiya Single Function High Pressure Controls

Airefrig Part Number	Range KPa		Differential KPa		Factory Setting KPa		Reset	Pressure Connections	Contact Function Diagram	List Price Ex GST
	Min	Max	Min	Max	Off	On				
SNSC130X	500	3000	300	1000	2000	2500	Auto	1/4 Male Flare	1	
HNSC130XM1 (manual reset)	800	3000	trips on manual reset when pressure rises		200	Manual		1/4 Male Flare	4	
HNSC130X	800	3000	Fixed Approx 400		2000	1600	Auto	1/4 Male Flare	3	

Controls are complete with Mounting Brackets

Saginomiya Condenser Fan Control

Airefrig Part Number	Range KPa		Differential KPa	Factory Setting KPa		Pressure Connections	Contact Function Diagram	List Price Ex GST
	Min	Max		Off	On			
FNSC130X	500	3000	120 Approx Fixed	2380	2500	1/4 Male Flare	1	

Controls are complete with Mounting Brackets and Flare Nuts

Saginomiya Single Function – Reverse Acting Pressure Control (Manual Reset)

Airefrig Part Number	Range KPa		Differential KPa		Factory Setting KPa		Reset	Pressure Connections	Contact Function Diagram	List Price Ex GST
	Min	Max	Min	Max	Off	On				
SNSC130XM2 (manual reset)	500	3000	trips on manual reset when pressure drops		2000	Manual		1/4 Male Flare	2	

Controls are complete with Mounting Brackets

Saginomiya Single Function Pressure Control – Often used for Air Drier Applications

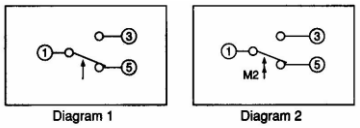
Airefrig Part Number	Range KPa		Differential KPa		Factory Setting KPa		Reset	Pressure Connections	Contact Function Diagram	List Price Ex GST
	Min	Max	Min	Max	Off	On				
SNSC110X	100	1000	100	300	400	600	Auto	1/4 Male Flare	1	

Contact Functions

	Diagram 1 & 2	Diagram 3 & 4
1	Common Terminal	Common Terminal
3	Close on Increase	Open on Increase
5	Close on Decrease	Open on Decrease

Electrical Ratings

Ratings 250 Volt AC	
Max Current	12 Amps
Locked Rotor	72 Amps





SNS
FNS



HNS

↑: Operating direction on pressure increase at High Pressure Side.

M1 ↓, M2 ↑: Operating direction on manual reset.

PRESSURE CONTROLS - SAGINOMIYA

Saginomiya Dual Pressure Controls

Airefrig Part Number	Press Side	Range KPa		Differential KPa		Factory Setting KPa		Reset	Pressure Connections	Contact Function Diagram	List Price Ex GST
		Min	Max	Min	Max	Off	On				
DNSD306X	Low	-60	600	60	400	200	300	Auto	1/4 Male Flare	1	
	High	800	3000	400 Approx Fixed		2000	1600				
DNSD306XM	Low	-60	600	60	400	200	300	Auto	1/4 Male Flare	2	
	High	800	3000	Auto on rise & manual reset		2000	Manual				
DNSD306XQ	Low	-60	600	60	400	200	300	Auto	Capillary 1000 mm	1	
	High	800	3000	400 Approx Fixed		2000	1600				
DNSD306XMQ	Low	-60	600	60	400	200	300	Auto	Capillary 1000 mm	2	
	High	800	3000	Auto on rise & manual reset		2000	Manual				
DNSD606XMQ	Low	-60	600	60	400	200	300	Auto	Capillary 1000 mm	5	
	High	800	3000	Auto on rise & manual reset		2000	Manual				
DNSD606XMM	Low	-60	600	Auto on fall & manual reset		200	Manual		1/4 Male Flare	6	
	High	800	3000	Auto on rise & manual reset		2000					
DNSAK01	Upper Lid for DNS Controls										
DNSCOVER	Replacement Front Cover for DNS Controls										

Controls are complete with Mounting Brackets and Flare Nuts

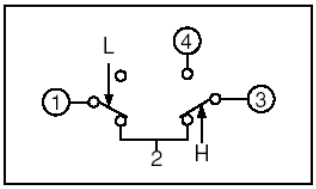


Diagram 1

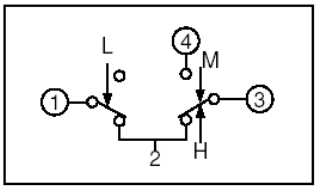


Diagram 2

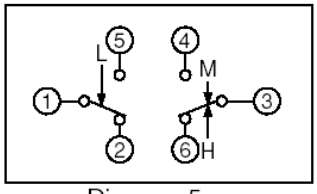


Diagram 5

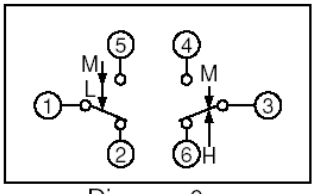


Diagram 6

↓ L: Operating direction on pressure increase at Low Pressure Side.
↑ H: Operating direction on pressure increase at High Pressure Side.
↓ M: Operating direction on Manual Reset.



PRESSURE CONTROLS - RANCO

Ranco Low Pressure SPDT

Airefrig Part Number	Range KPa (PSI)	Differential KPa (PSI)	Connection	Reset	List Price Excl GST
0168705	-30 to 700 (9" to 100)	60 Fixed	1/4 Flare	Manual	

Ranco High Pressure SPDT

Airefrig Part Number	Range KPa (PSI)	Differential KPa (PSI)	Connection	Reset	List Price Excl GST
0168751	700 to 3000 (100 to 435)	320 Fixed (45 Fixed)	1/4 Flare	Manual	



PRESSURE CONTROLS

Penn P77 Series Single Pressure

Penn Low Pressure Non Corrosive Refrigerants

Airefrig Part Number	Range KPa (PSI)	Differential KPa (PSI)	Connection	Reset	List Price Excl GST
P77AAA9300	-50 to 700 (15" to 102)	50 to 300 (7.3 to 44)	1/4 Flare	Automatic	

Penn High Pressure Non Corrosive Refrigerants

Airefrig Part Number	Range KPa (PSI)	Differential KPa (PSI)	Connection	Reset	List Price Excl GST
P77AAA9350	300 to 3000 (44 to 435)	300 to 1200 (44 to 174)	1/4 Flare	Automatic	
P77BEA9350				Manual	



Penn Fan Cycling Control For Air Cooled Condensers, Non Corrosive refrigerants

Airefrig Part Number	Range KPa (PSI)	Differential KPa (PSI)	Connection	Reset	List Price Excl GST
P77AAA9351	350 to 2100 (51 to 305)	210 to 550 (26 to 80)	1/4 Flare	Automatic	

Penn P78 Series Dual Pressure

Penn Dual Pressure Controls for Non Corrosive Refrigerants

Airefrig Part Number	Low Pressure		High Pressure		List Price Excl GST
	Range KPa (PSI)	Differential KPa (PSI)	Range KPa (PSI)	Differential KPa (PSI)	
P78LCA9300	-50 to 700 (15" to 102)	50 to 300 (7.3 to 44)	300 to 3000 (44 to 435)	300 Fixed (44Fixed)	
P78MCA9300				Manual Reset	
P78PGA9300		Manual Reset			



Penn Dual Pressure Controls for Ammonia and Non Corrosive Refrigerants

Airefrig Part Number	Low Pressure		High Pressure		List Price Excl GST
	Range KPa (PSI)	Differential KPa (PSI)	Range KPa (PSI)	Differential KPa (PSI)	
P78LCA9700	-50 to 700 (15" to 102)	50 to 300 (7.3 to 44)	300 to 3000 (44 to 435)	300 Fixed (44Fixed)	
P78MCA9700				Manual Reset	



Penn Dual Fan Cycling Control for Air Cooled Condensers, Non Corrosive Refrigerants

Airefrig Part Number	Low Pressure		High Pressure		List Price Excl GST
	Range KPa (PSI)	Differential KPa (PSI)	Range KPa (PSI)	Differential KPa (PSI)	
P78ALA9351	350 to 2100 (51 to 305)	180Fixed (26 Fixed)	350 to 2100 (51 to 305)	180Fixed (26 Fixed)	



Accessories

Airefrig Part Number	Description	List Price Excl GST
316961	Angle Bracket	
481291	Flat Bracket	
11500404	Capillary tube assembly (900mm long) with 1/4" flare nuts	



TEMPERATURE CONTROLS - SAGIMOMIYA

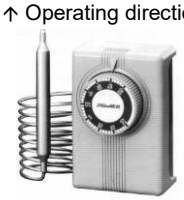
Saginomiya Commercial Thermostats

Airefrig Part Number	Range °C	Differential Min	Differential Max	Bulb Size mm	Contact Function Diagram	Bulb Temp Limit °C	Capillary Length mm	List Price Ex GST
BNSC1030XL2	-30 to 30	1.9	5.8	12.7 X 100		60	2000	
BLSC1020XL2	-20 to 20	Approx 2 Fixed		9.5 x 100				
LWSC1030AGL2	-35 to 30	2	7					

↑ Operating direction on temperature increase.

Electrical Ratings

250 Volt AC	BNSC	BLSC	LWSC
Max Current	12.0 Amps	4.5 Amps	8.0 Amps
Locked Rotor	72.0 Amps	37.0 Amps	48.0 Amps



BLS

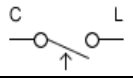


LWS



BNS

Saginomiya Refrigerator Thermostat

Airefrig Part Number	Cold On	Cold Off	Warm On	Diff	Contact Function Diagram	Capillary Length mm	Bulb Size mm	List Price Ex GST
YTBY118	3.5	1.0	13.0	2.5		600 x 2.0	100 x 8 .0	

(Supplied with knob & scale plate)

↑ Operating direction on temperature increase.

Electrical Ratings

250 Volt AC	YTBY118
Inductive - Full Load	20.0 Amps
Inductive - Locked Rotor	80.0 Amps



YTBY118

TEMPERATURE CONTROLS - PENN

Penn A19 Remote Bulb, Single Stage, General Purpose, Adjustable Differential

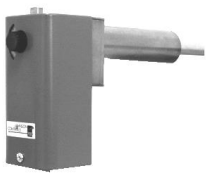
Airefrig Part Number	Adjustment Range	Differential Range	Switch Action	Capillary Length M	Electrical Rating 240V	List Price Excl GST
A19ABC27	38 to 116c	3 to 13	SPDT	2.4	6 Amp	
A19ABC41	-34 to 38c	2 to 7			8 Amp	
A19ADB26	38 to 116c	Manual Lock out High	SPST	1.8	6 Amp	

Penn A25 Manual Reset Limit Control, Single Stage, Lock out High, Flange Duct Mounting IP30

Airefrig Part Number	Adjustment Range	Differential Range	Switch Action	Capillary Length M	Electrical Rating 240V	List Price Excl GST
A25CN4	-4 to 102c	Lock out High	SPDT	N/A	8 Amp	

Penn A28 Two Stage Remote Bulb, Adjustable Inter stage IP30

Airefrig Part Number	Adjustment Range	Differential Ea Stage	Differential Between Stages	Electrical Rating 240V	List Price Excl GST
A28AA65	-34 to 38c	1.5 Fixed	1 to 4	8 Amp	



Penn A28 Two Stage Coiled Bulb

Airefrig Part Number	Adjustment Range	Differential Ea Stage	Differential Between Stages	Electrical Rating 240V	List Price Excl GST
A28AA74	-1 to 43	1.9 Fixed	1.7 Fixed	8 Amp	



Penn Differential Air Pressure Switch

Airefrig Part Number	Maximum Over Press	Range in. WC (kPa)	Sensitivity at Min. Set Point in. WC (kPa)	Setpoint	List Price Excl GST
P32AC2	6.895 kPa	0.05 to 5 (0.012 to 1.24 kPa)	0.04 (0.01)	Adjustable	

TEMPERATURE CONTROLS

Ranco Commercial Thermostats

Airefrig Part Number	Adjustment Range	Differential Range	Switch Action	Capillary & Bulb	List Price Excl GST
018100	None Ice Bank Control	Phase change at 0°C	SPST	1.83 Metre Special	



Tesonic Domestic & Service Thermostats

Airefrig Part Number	Application	Cold		Warm		Defrost Temp °C	Capillary Length mm	List Price Ex GST
		Out °C	In °C	Out °C	In °C			
RC1	Compressor Refrigerator	-23	-14.5		+2		1200	
RF3	Freezer	-34		-16.5	-12		2000	
VS5	Freezer Standard Signal	-34		-16.5	-12		2000	
VR6	Freezer Reverse Signal	-34		-16.5	-12		2000	
RB7	Bottle Cooler	-3	+3		12.5		1200	
RT9	Two Temp Refrigerator	-26		-11		3.5 Cut In	1200	

Danfoss Domestic & Service Thermostats

Airefrig Part Number	Application	Cold		Warm		Defrost Temp °C	Capillary Length mm	List Price Ex GST
		Out °C	In °C	Out °C	In °C			
77B3372 *	Display/Bottle Cabinets with Cyclic Defrost	-10.1	Constant +5 cut in	-2.9	Constant +5 cut in	c/w: knob & front plate	1000	
77B6138SP	Display/Bottle Cabinets with Cyclic Defrost	-12	Constant +5 cut in	-5.2	Constant +5 cut in		1000	
77B0490 **	Water Cooler	Fixed Settings, Non-adjustable (ON:+12 OFF:+8) (Minimum sensor length of 75mm to be mounted to evap.)					560	
77B7001	(No1) Refrigerator	-25	-13.5	-5.5	+2		1300	
77B7002	(No2) Refrigerator Push Button Defrost	-22	-12	-7.5	0	6	1300	
77B7003	(No3) Refrigerator Automatic Defrost	-27.5	+3.5	-11	+3.5		1600	
77B7004	(No4) Absorption Refrigerator	-11	-5.5	-1	+3.5		1500	
77B7005	(No5) Freezer Without Signal	-32.5	-21	-15	-7.8		2300	
77B7006	(No6) Freezer With Active Signal	-34.5	-24	-17	-10		2300	P.O.A.
77B7007	(No7) Freezer With Passive Signal	-34.5	-24	-17	-10		2300	
77B7008	(No8) Bottle / Liquid Coolers	-8.5	-1	+6	+11.5		2000	

77B3372 * replaces Saginomiya DTBX193 thermostat.
77B0490 ** replaces Saginomiya ATBY1196 thermostat.

THERMOSTATS – KLIXON / DERWENT TYPE

Klixons / Derwent Thermostats

Airefrig Part Number	Description	List Price Ex GST
5300001	3 wire fan delay & defrost termination 25amp c/w with bracket for flat surface mounting. (Red, Black & Brown Wires: Length 730 mm) @ +13°C Brown - Red wires CLOSE & Black to Red wires OPEN @ +2°C Brown - Red wires OPEN & Black to Red wires CLOSE	
5300002	2 wire heater safety 25amp c/w with bracket for flat surface mounting. (Red & white Wires: Length 730 mm) +24°C Open & +19°C Closed	
53000004	2 wire fan delay 25amp c/w with bracket for 5/8" pipe mounting. (Light Blue Wires: Length 800 mm) +5°C Open & -5°C Closed	
R7624500	2 wire fan delay 25amp c/w with bracket for 5/8" pipe mounting. (Black Wires: Length 4000 mm) +15°C Open & 0°C Closed	
R7624700	2 wire fan delay 25amp c/w with bracket for 5/8" pipe mounting. (Orange Wires: Length 3000 mm) -15°C Open & -5°C Closed	
R7625000	2 wire fan delay 25amp c/w with bracket for 5/8" pipe mounting. (Black Wires: Length 3000 mm) -10°C Open & -5°C Closed	





5300002



Note: Open & close temperatures can be plus/minus 3.5°C

HONEYWELL

Honeywell Sub Bases

Airefrig Part Number	Description	List Price Ex GST
Q6060C3127	T6060B Sub Base; Heat-Off-Cool, Fan Cont-Auto; Zoning	
Q6060D3108	T6042D Sub Base, On-Off; 1Comp Heat Pump or 2 Stage	
Q6060E3168	T6042E Sub Base, Heat Pump, Switch; Heat-Off-Cool; Man-Off-Auto	
Q674E1049	T874A-D Sub Base, System Off-Heat-Auto-Cool, Fan Auto-On	



Honeywell Thermostats

Airefrig Part Number	Description	List Price Ex GST
T6376B1004	Room Thermostat, Heat Pump, Heat-Off-Cool, Fan; Auto-On	
T6377B1011	Room Thermostat, Heat Pump, Heat-Off-Cool, Fan; 3 Speed	P.O.A.
TG510A1001	Thermostat Guard, Medium, Clear Cover, Clear Plastic Ring Base	
TG511A1000	Thermostat Guard, Clear Cover, Clear Ring Base, Opaque Wall Plate	

DAMPER ACTUATORS

Honeywell Damper Actuators

Airefrig Part Number	Description	List Price Ex GST
M447B1005	Damper Actuator, 230V, Drive Open-Spring Return, Torque 0.34 N.m	
M447C1004	Damper Actuator, 230V, Drive Open-Spring Return, Torque 0.5 N.m	



OIL FAILURE CONTROLS - DANFOSS

Danfoss Oil Failure Controls

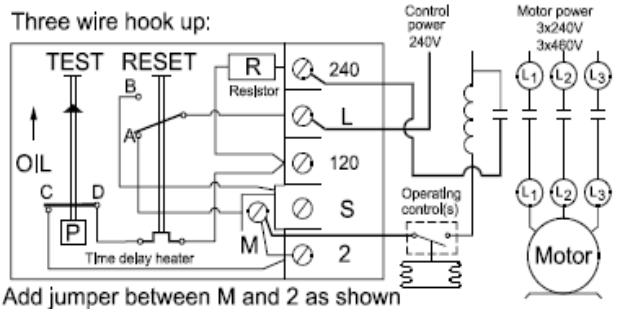
Airefrig Part Number	Range KPa		Differential KPa		Reset	Time Delay	Pressure Connections	Timer Voltage	Timer Circuit	List Price Ex GST
	Min	Max	Min	Max						
60B0168 (MP54)	-100	1200	65 fixed		manual	90 sec	1/4 Male Flare	115/230V AC/DC	SPDT	
60B0172 (MP55)	-100	1200	30	450						

R717 (Ammonia)

60B0176 (MP55A)	-100	1200	30	450	manual	90 sec	G 3/8 A Pipe Thread	115/230V AC/DC	SPDT	P.O.A.

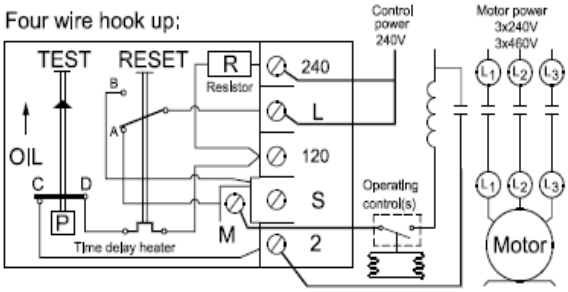
Contact Ratings: AC15 = 2A, 250V DC13=0.2A, 250V

Three wire hook up:



Add jumper between M and 2 as shown

Four wire hook up:





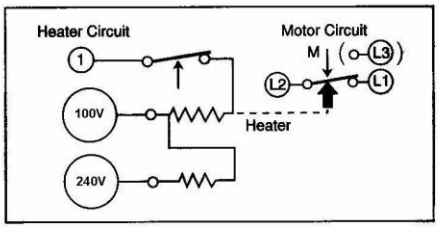
OIL FAILURE CONTROLS - SAGINOMIYA

Saginomiya Oil Failure Controls

Airefrig Part Number	Range KPa		Differential KPa		Reset	Time Delay	Pressure Connections	Timer Voltage	Timer Circuit	List Price Ex GST
	Min	Max	Min	Max						
ONSC106XQ35	50	350	50 fixed		Manual	90 sec	1/4 Male Flare	120/240v AC	With Alarm Contact SPDT	
ONSC106XQ36	50	350	50 fixed			120 sec				

Controls are complete with Mounting Brackets and Flare Nuts
Electrical Ratings: 250volt AC Max Current: 3.0amps Locked Rotor: 10.0amps

ONS Contact Functions

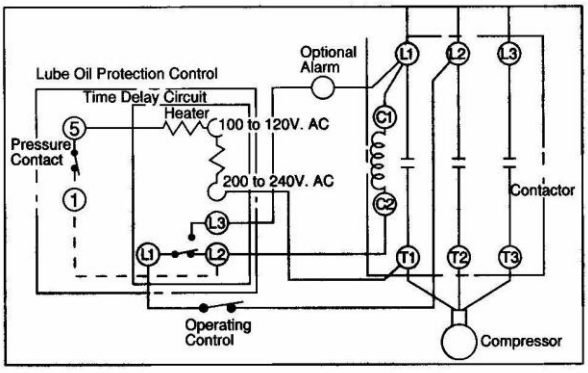


↑ : Operating direction of pressure increase
⬆ : Operating direction of timer when energized
M↓ : Operating direction of manual reset
(L3: Alarm Contact provided with a lead wire approx. ϕ3.5×100mm with a soldered terminal.)

1	Heater Circuit	Common Terminal
100		100V Power Supply Terminal
240		240V Power Supply Terminal
L1	Motor Circuit	Open on Decrease of Pressure Difference
L2		Main Contact
L3		Alarm Contact

110/220V. AC, 120/240V. AC etc. available

ONS Wiring Example





DEFROST CONTROLLERS - SAGINOMIYA

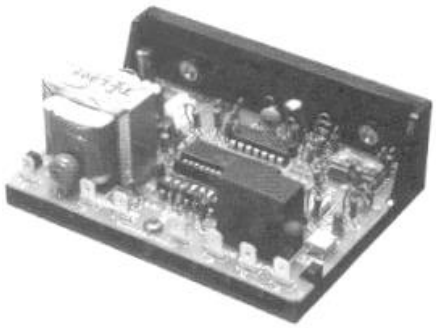
Electronic (De-Ice)

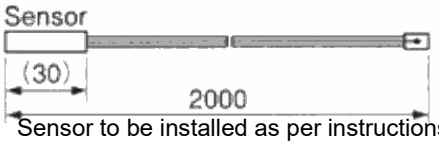
Airefrig Part Number	Operation Temp °C		Capillary Sensor mm		Contacts (250 Volts)		Max Temp C	Time Cycle Minutes	Time Safe	List Price Ex GST
	Start	Term	Bulb	Length	COM-NO	COM-NC				
DDEKBA1519RQ	-5	10	30 x 8	2000	5 amps	3 amps	60	30-180*	10-80**	
DDEKDA1532RQ	-5	10	25 x 4.2	2000	20 amps	15 amps	60	30-180*	10-80**	
DDEAA11RQ	Din Rail Adaptor (supplied with DDEKBA1519RQ & DDEKDA1532RQ)									

*** DDE Dip Switch Settings**

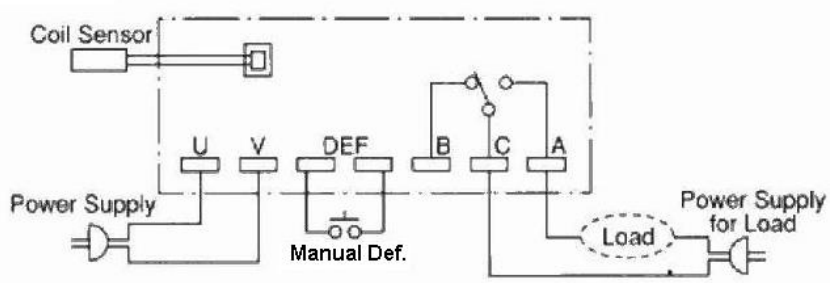
Dip Switch Number			(Time Cycle) Defrost Mask time (Mins) *	Dip Switch Number			Time Safe (Mins) **
1	2	3		4	5	6	
Off	Off	Off	30	Off	Off	Off	10
On	Off	Off	40	On	Off	Off	15
Off	On	Off	50	Off	On	Off	20
On	On	Off	60	On	On	Off	30
Off	Off	On	90	Off	Off	On	40
On	Off	On	120	On	Off	On	50
Off	On	On	150	Off	On	On	60
On	On	On	180	On	On	On	80

Resetting of Dip Switches shall be done only when the power is OFF.
When power is left on set values do not change even after resetting power.





Sensor to be installed as per instructions.



In case of forced defrost, make instantaneous short circuit between DEF terminals.
Continuous short circuit is prohibited

FAN SPEED CONTROLLERS - SAGINOMIYA

Saginomiya Fan Speed Controllers

Airefrig Part Number	*1 F.V.S Setting kPa			*2 EPB kpa	Refrig	Electrical AC 50Hz	Amps	Ambient Temp °C	Pressure Connections	List Price Ex GST
	Factory Set	Adj Range								
		Min	Max							
RGEZ1N45	1900	800	2800	400 Fixed Fixed @ 600kpa from 01.12.09	R22 R404A R407C	230 1PH	0.2 to 4.0	-20 to 55	Capillary 900 mm	
RGEZ1N45MF									1/4 Male Flare	
RGEZ1Q45							0.2 to 8.0		Capillary 900 mm	
RGEZ1Q45MF									1/4 Male Flare	
RGEX3R47	1600					415 3PH	0.2 to 5.0	-15 to 50	Capillary 900 mm	
RGEZ1Q67	3200	1600	3900	800	R410A	230 1PH	0.2 to 8.0	-20 to 55	Capillary 900 mm	
RGEX3R67						415 3PH	0.2 to 5.0	-15 to 50	Capillary 900 mm	
XGE4MC7	1900	1000	2500	600	R22,404A 407C	230 1PH	0.2 to 3.0	-20 to 55	1/4 F/M Flare + Dep.	
XGE6MC7	2800	2200	3900	700	R410A	230 1PH	0.2 to 3.0	-20 to 55	1/4 F/M Flare + Dep.	

***1** F.V.S: (FULL VOLTAGE SET POINT)
The pressure at which the control delivers 95% output effective voltage R.M.S. (V%)

***2** E.P.B.: (EFFECTIVE PROPORTIONAL BAND)
Pressure width where effective voltage corresponds to the minimum speed or causes cut off operation.

Min. Speed: Fan motor will be kept running at the specific value (V%) when pressure band increase more than E.P.B.

Cut Off: Fan motor will be stopped when pressure decrease to the specific values (V%) for R.M.S.

General Description:

- Suitable for controlling the condenser fan speed on refrigeration & air conditioning units.
- Keeps condensing pressures stable & constant throughout the year.
- Two selectable low speed operations are available:
  1) Keep fan motor running at lowest speed
  2) Turn fan motor off
- RGE enclosures are IP54 rated
- XGE enclosures are IP65 rated
- Maximum working pressure : 4.7Mpa
- Control Method: Phase control



XGE6MC7



RGEZ1N45

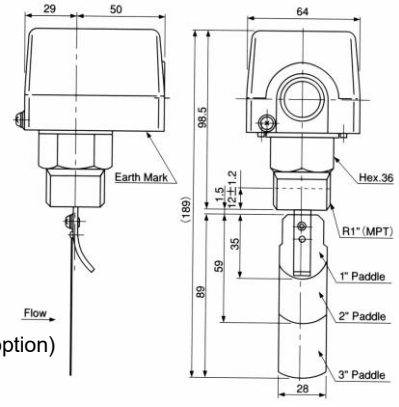
FLOW SWITCH - SAGINOMIYA

Saginomiya Flow Switches

Airefrig Part Number	Application	Connection Size	Paddle Sizes	Maximum Pressure kPa	Electrical Contacts	Allowable Fluid Temp °C	List Price Ex GST
FQSW30G	Drip Proof Enclosure	1" MPT	1" to 3"	980	SPDT	5 to 80	
FQSU60G	General	1" MPT	1" to 6"	980	SPDT	5 to 80	

Note: FQSU60G flow switch is supplied standard with an unfitted 6" paddle.

Specifications				
Part Number	Pipe Size	Paddle Qty	Min. Range	Max. Range
FQSW30G	80A	3B	100 L/min	225 L/min
FQSU60G	150A	3B	150 L/min	1700 L/min



FQSU60G
(less 6" paddle option)

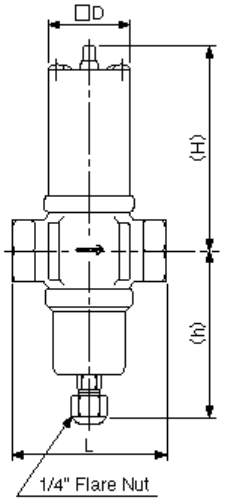
WATER REGULATING VALVES - SAGINOMIYA

Saginomiya Pressure Actuated 2 Way Water Regulating Valves

Airefrig Part Number	Valve Body Material	Connections		Pressure Range KPa	Max Working Pressure	Max Bellows Pressure	Max Water Temp	Max Water Pressure	Factory Setting	List Price Ex GST
		Size	Style							
AWR1203GLW	Bronze	3/8"	FPT	590 to 1760 KPa	1960 KPa	2350 KPa	60 °C	980 KPa	740 KPa	P.O.A.
AWR1504GLW		1/2"								
AWR2006GLW		3/4"								
AWR2510GLW		1"								
AWR3212GLW		1 1/4"								
AWR4014FLW	Cast Iron	1 1/2"	Flange							P.O.A.
AWR5020FLWH		2"		1080 to 1760						
AWR6524FLWH		2 1/2"								P.O.A.

Type AWR two way pressure actuated water-regulating valves, open on pressure increase.
Pressure connection is 1/4" flare.
Body Material: Bronze for water and brine, Cast Iron for water only.
Flange connection valves are supplied with JIS 10K, round companion flanges, bolts and nuts.
For use with Fluorinated Refrigerants.

Airefrig Part Number	Dimensions mm				Approx change in pressure setting for each full turn of adjusting screw.
	L	H	h	□ D	
AWR1203GLW	55	91	72	40	100Kpa
AWR1504GLW	70	100	83	42	
AWR2006GLW	80	104	87	42	
AWR2510GLW	90	116	97	59	75Kpa
AWR3212GLW	100	121	102	59	
AWR4014FLW	148	125	105	59	
AWR5020FLWH	173	180	155	89	90Kpa
AWR6524FLWH	179	180	155	89	

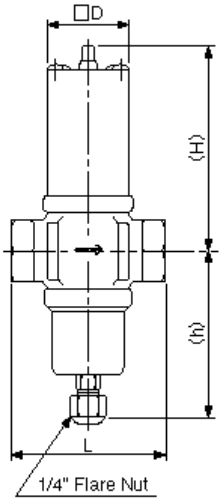


Saginomiya R410A Pressure Actuated 2 Way Water Regulating Valves

Airefrig Part Number	Valve Body Material	Connections		Pressure Range KPa	Max Working Pressure	Max Bellows Pressure	Max Water Temp	Max Water Pressure	Factory Setting	List Price Ex GST
		Size	Style							
VWR1203G	Bronze	3/8"	FPT	1500 to 2900 KPa	4200 KPa	4200 KPa	60°C	1000 KPa	2400 KPa	
VWR1504G		1/2"								
VWR2006G		3/4"								

Type VWR two way pressure actuated water-regulating valves, open on pressure increase.
Pressure connection is 1/4" flare.
Body Material: Bronze for water and brine.
For use with R410A Refrigerant.

Airefrig Part Number	Dimensions mm				Approx change in pressure setting for each full turn of adjusting screw.
	L	H	h	□ D	
VWR1203G	55	91	72	40	200 Kpa
VWR1504G	70	100	83	42	
VWR2006G	80	104	87	42	



TIME CLOCKS

Paragon Commercial Refrigeration Timers

Airefrig Part Number	Description	List Price Excl GST
63221	Time Initiated, Fan Delay, Drain, Pump Down	
804521	Time Initiated, Time Terminated	
814521	Time Initiated, Time Temperature Terminated	
824521	Time Initiated, Pressure Terminated	



Paragon Domestic Timers

Airefrig Part Number	Defrosts 24Hrs	Frequency Hours	Defrost Time Minutes	List Price Excl GST
A140021	4	6	21	
A76921	4	6	21	P.O.A.
D76921	3	8	30	
F76921	4	6	28	
L76921	2	12	21	



769 series

Commercial Timers

Airefrig Part Number	Description	List Price Excl GST
THE64BA7	Mechanical 24 Hour 240 Volt 16 Amp	
THE64CA7	Mechanical 24 Hour 7 Day 240 Volt 16 Amp	P.O.A.



THE64BA7

Frigoflash Defrost Timers (time / time)

Airefrig Part Number	Description	List Price Excl GST
FT240	Mechanical 24Hr 230V SPDT 10(2)A Defrost 5-110 minutes	
FT862	Electronic Defrost Pulse Timer, 230V 16A(R) 2 channel with key function, programming of pulses, 1-30sec (includes key)	



FT240



FT862

KELVINATOR & TERRY SHAFT SEALS

Kelvinator Shaft Seals & Cover Plates

Airefrig Part Number	Description	List Price Excl GST
FA116	Shaft Seal to suit Kelvinator H42 Compressor (5/8”)	P.O.A.
FA130	Shaft Seal to suit Kelvinator 42 Compressor (3/4”)	
FA117	Shaft Seal to suit Kelvinator K62 Compressor (7/8”)	
FA118	Shaft Seal to suit Kelvinator Y72 Compressor (1 3/16”)	
FA131	Shaft Seal to suit Kelvinator 72 Compressor (1 1/4”)	
FA119	Shaft Seal to suit Kelvinator T82 Compressor (1 3/8”)	
FA112	Seal Plate to suit Kelvinator H & H42 Compressor	
FA128	Seal Plate to suit Kelvinator 42 Compressor	
FA113	Seal Plate to suit Kelvinator K & K62 Compressor	
FA114	Seal Plate to suit Kelvinator Y & Y72 Compressor	
FA129	Seal Plate to suit Kelvinator 72 Compressor	
FA115	Seal Plate to suit Kelvinator T & T82 Compressor	
17095	Shaft Seal to suit Terry PJS-RAS Compressor (1 1/4")	
17094	Shaft Seal to suit Terry VS Compressor (1 3/8")	

GOMAX CAPILLARY HOSE

Refrigeration & Air Conditioning Thermoplastic 078 Capillary Hose



GOMAX®



The excellent chemical capability of the thermoplastic material used in the production of the inner tube ensures Gomax hoses are compatible with all HCFC, HFC, CO^2 and hydrocarbon refrigerants.
The external cover is manufactured with materials resistant to abrasion and unfavourable environmental conditions.

Min Burst Pressure: 300 bar
Max Working Pressure: 120 bar
Temperature Range: -45°C to +130°C

Hose Size	Diameter		Min Burst Pressure		Max Working Pressure		Min Bending Radius
	Inside	Outside					
	mm	mm	psi	bar	psi	bar	mm
0780C (2 mm)	2.2	6.1	4347	300	869	60	10
0789C (4 mm)	4.1	8.4	4347	300	869	60	25
0786BC (6 mm)	6.1	10.9	4347	300	869	60	35

Pre-Made Capillary Hose Assemblies

Airefrig Part Number	Size	Description		List Price Ex GST
0780C600EL	2mm	600mm	1/4"F/Flare 90° x 1/4"F/Flare 90°	
0780C600ST			1/4"F/Flare ST x 1/4"F/Flare ST	
0780C600STEL			1/4"F/Flare ST x 1/4"F/Flare 90°	
0780C1000EL		1000mm	1/4"F/Flare 90° x 1/4"F/Flare 90°	
0780C1000ST			1/4"F/Flare ST x 1/4"F/Flare ST	
0780C1000STEL			1/4"F/Flare ST x 1/4"F/Flare 90°	
0789C600EL	4mm	600mm	1/4"F/Flare 90° x 1/4"F/Flare 90°	
0789C600ST			1/4"F/Flare ST x 1/4"F/Flare ST	
0789C600STEL			1/4"F/Flare ST x 1/4"F/Flare 90°	
0789C1000EL		1000mm	1/4"F/Flare 90° x 1/4"F/Flare 90°	
0789C1000ST			1/4"F/Flare ST x 1/4"F/Flare ST	
0789C1000STEL			1/4"F/Flare ST x 1/4"F/Flare 90°	
0786BC600EL	6mm	600mm	3/8"F/Flare 90° x 3/8"F/Flare 90°	
0786BC600ST			3/8"F/Flare ST x 3/8"F/Flare ST	
0786BC600STEL			3/8"F/Flare ST x 3/8"F/Flare 90°	

Note: Non standard lengths made to order.

GOMAX CAPILLARY HOSE

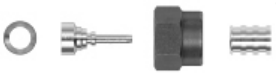
Hose

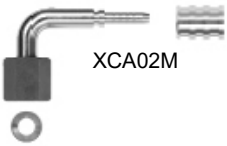
Airefrig Part Number	Size	Description	List Price Ex GST
0780C	2mm	Gomax Capillary Hose 2mm x 50 metre Roll	
0780CMET		Gomax Capillary Hose 2mm x per metre (min of 2 metres)	
0789C	4mm	Gomax Capillary Hose 4mm x 50 metre Roll	
0789CMET		Gomax Capillary Hose 4mm x per metre (min of 2 metres)	
0786BC	6mm	Gomax Capillary Hose 6mm x 50 metre Roll	
0786BCMET		Gomax Capillary Hose 6mm x per metre (min of 2 metres)	



Fittings – Sold Individually

Airefrig Part Number	Size	Description	List Price Ex GST
XBA02C *	2mm	Straight Connector x 1/4 F/Flare	
XBB02C *		Straight Connector x 1/4 F/Flare with Core Depressor	
XCA02C *		90° Connector x 1/4 F/Flare	
XPB0C2 *		Tee Connector x 1/4 F/Flare on Branch	
WPB0C1*		Tee Connector 2mm Tube	
XBA02M *	4mm	Straight Connector x 1/4 F/Flare	
XCA02M *		90° Connector x 1/4 F/Flare	
WBA04M		Straight Connector 3/8 F/Flare	
WCA04M		90° Connector x 3/8 F/Flare	
WPB0M1		Tee Connector 4mm Tube	
WTD2Z1 *	2&4	Schrader Depressor (Removable) - suit 2 & 4mm fittings	
WBA02N	6mm	Straight Connector x 1/4 F/Flare	
WBA04N		Straight Connector 3/8 F/Flare	
WCA02N		90° Connector x 1/4 F/Flare	
WCA04N		90° Connector x 3/8 F/Flare	


WBA04N


XCA02M


WTD2Z1


XPB0C2


WPB0C1

Fittings – Sold in Packs of 10

KBA02C *	2mm	Straight Connector x 1/4 F/Flare (Pack of 10)	
KBB02C *		Straight Connector x 1/4 F/Flare + Core Depressor (PK10)	
KCA02C *		90° Connector x 1/4 F/Flare (Pack of 10)	
KPB0C2 *		Tee Connector x 1/4 F/Flare on Branch (Pack of 10)	
KPB0C1 *		Tee Connector 2mm Tube (Pack of 10)	
KBA02M*	4mm	Straight Connector x 1/4 F/Flare (Pack of 10)	
KCA02M*		90° Connector x 1/4 F/Flare (Pack of 10)	
KBA04M		Straight Connector 3/8 F/Flare (Pack of 10)	
KPB0M1		Tee Connector 4mm Tube (Pack of 10)	

* 2mm Fittings are **Brass** - Suitable for all refrigerants excluding Ammonia R717
4mm Fittings are **Steel** - Suitable for all refrigerants.

Accessories

Airefrig Part Number	Description	List Price Ex GST
RXA007	Crimping Pliers Hand Operated suit 2mm Hose	
RXA005A	Crimping Pliers Hydraulic Operated suit 4mm & 6mm Hose	
RXA008	Crimping Machine Hydraulic c/w foot pedal suit 2,4 & 6mm Hose	
RXA004	Capillary Hose Cutter	
RXB004	Replacement Cutter Blade for RXA004	
MR043	Partitioned Carry Case for 2mm Hose & Fittings	


RXA008


RXA007


RXA005A


RXA004


MR043

GOMAX INFINITY HOSE

Refrigeration & Air Conditioning Thermoplastic Hoses & Fittings

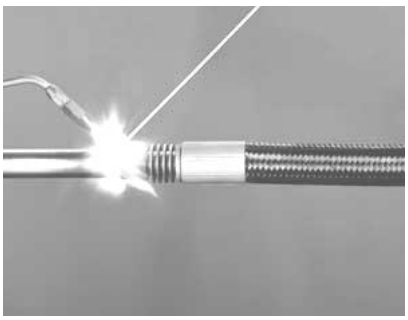


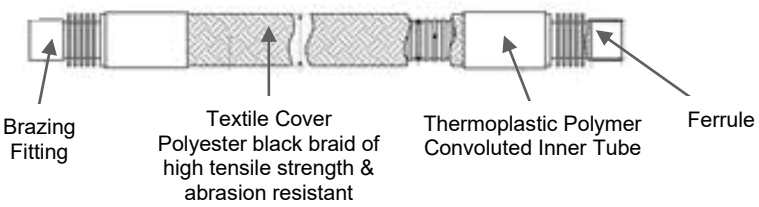
The excellent chemical capability of the thermoplastic material used in the production of the convoluted inner tube ensures INFINITY hoses are compatible with all HCFC, HFC and hydrocarbon refrigerants.
The polyester fibre used for the reinforcement layers guarantees high resistance to stress under pressure.
The external cover is manufactured with materials resistant to abrasion and unfavourable environmental conditions.

Maximum Pressure: 42 bar
Minimum Bursting Pressure: 210 bar
Temperature Range: -45°C to +130°C

Connections of INFINITY hoses
Type of connection: Brazing with heat ground plate radiator (Patent pending)
Material used: Drawn steel
Superficial treatment: White electrolytic galvanizing
Junction procedure to be used for installation: Strong brazing
Weld material for installation: Silver-based alloy with low point of fusion

Airefrig Part Number	Description		List Price Ex GST
	Length	Connections	
CAR050	500 mm	1/2" ODS	
CAR060	600 mm	1/2" ODS	P.O.A.
CAR100	1000 mm	1/2" ODS	
CAR150	1500 mm	1/2" ODS	
CAS050	500 mm	5/8" ODS	P.O.A.
CAS100	1000 mm	5/8" ODS	
CAS150	1500 mm	5/8" ODS	
CAT050	500 mm	3/4" ODS	
CAT060	600 mm	3/4" ODS	P.O.A.
CAT100	1000 mm	3/4" ODS	
CAT150	1500 mm	3/4" ODS	
CAU050	500 mm	7/8" ODS	
CAU100	1000 mm	7/8" ODS	
CAU150	1500 mm	7/8" ODS	
CAV050	500 mm	1-1/8” ODS	
CAV100	1000 mm	1-1/8” ODS	
CAV150	1500 mm	1-1/8” ODS	





Latent

Pipe Duct & Accessories - Wall & Roof Brackets





Latent - Duct & Accessories

- Latent duct and accessories are made of rigid P.V.C which offers a never changing aspect. The duct and accessories are fade-proof, U.V resistant and fireproof.
- Thanks to the advantage of P.V.C and its linear structure, they are very harmonious with any type of construction or building offering an outstanding quality finish.
- The easy to install ducts have a bottom and upper section. The bottom is first fixed to the wall. Then you fix the pipe, wiring and bind them with the Tie Clip (that slides along the inside rail). Finally cover them with the snap on upper section.
- All accessories that are two part are supplied with stainless steel screws to prevent rusting and unsightly stains.
- Mounting blocks will support upto 240Kg. Each mount is supplied with 2 x bolts, nuts & washers. End caps and galvanised tie down setting plates are available to suit.







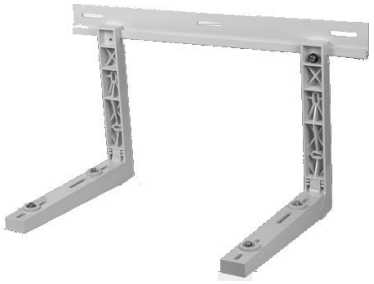


Latent - Wall & Roof Brackets

- Wall & roof adjustable brackets are made from galvanised powder coated steel.
- Mount pads are made from E.P.D.M. which is an outstanding ultraviolet & weather resistant material.
- Three wall bracket sizes:
  - 60 Kg
  - 80 Kg
  - 150 Kg
- Composite Corrosion Free Wall Bracket
  - 80 Kg
- Roof brackets are adjustable from 3 to 30 degrees and have a load rating of 80 Kg.







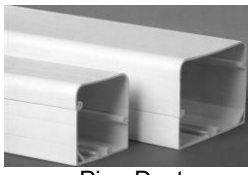




LATENT DUCTS & ACCESSORIES

Pipe Ducts

Airefrig Part Number	Description	Dimensions mm	List Price Excl GST
D70	70 Pipe Duct	70 x 65 x 2000	
D105	105 Pipe Duct	105 x 75 x 2000	
D150	150 Pipe Duct	150 x 80 x 2000	



Pipe Duct

Pipe Duct F ittings

Airefrig Part Number	Description	Dimensions mm	List Price Excl GST
EIN70	Elbow in Corner	95 x 95 x 70	
EIN105		110 x 110 x 105	
EIN150		125 x 125 x 150	
EB70	Elbow Bend	95 x 95 x 70	
EB105		110 x 110 x 105	
EB150		125 x 125 x 150	
FB70	Flat Bend 90 Deg	115 x 115 x 70	
FB105		150 x 150 x 105	
FB150		165 x 165 x 150	
FB70ADJUST	Flat Bend Adjustable	Adjustable between 45 to 90 Deg	
FB105ADJUST			
FB7045	Flat Bend 45 Deg	92 x 145 x 70	
FB10545		92 x 170 x 105	
FB15045		80 x 187 x 150	
DE70	Duct End	120 x 70 x 45	
DE105		120 x 105 x 50	
DE150		150 X 150 X 53	
DC70	Duct Cap	70 x 65 x 2	
DC105		105 x 75 x 2	
CP70	Connection Piece	75 X 70 X 60	
CP105		110 x 80 x 60	
CP150		155 x 90 x 60	
RJ70105	Reducer Joint	105 x 80 x 70	
RJ105150		150 X 85 X 105	
TJ105	Tee Joint	105 x 105 x 200	
TJ150		150 X 150 X 245	
WC70	Wall Cover	110 x 180 x 70	
WC105		145 x 190 x 105	
WC150		235 x 150 x 150	
FJ70	Flexible Joint	500 x 65 x 65	
FJ105		500 x 100 x 100	
WR70	Wall Rosette	115 x 110 x 70	
WR105		150 x 120 x 105	
WR150		195 x 125 x 150	
FR70	Flat Rosette	115 x 90 x 70	
FR105		150 x 100 x 105	
FR150		195 x 105 x 150	
TCLIP	Tie Clip		

Elbow in Corner

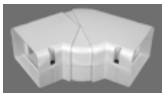




Elbow Bend

Flat Bend 90 Deg

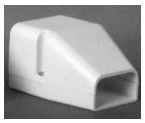




Flat Bend Adjustable

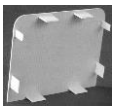
Flat Bend 45 Deg

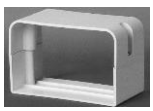




Duct End

Duct Cap





Connection Piece

Reducer Joint

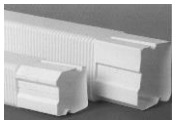




Tee Joint

Wall Cover





Flexible Joint

Wall Rosette





Flat Rosette

LATENT DUCTS & ACCESSORIES

Mountblocs

Airefrig Part Number	Description	Dimensions mm	List Price Excl GST
EXW38	White Mountbloc Supports 240Kg each (2 Mounts Per Set)	105 x 95 x 350	
EXBW38		105 x 95 x 450	
EXWA38		105 x 95 x 1000	
INJW181	White End Caps suit Mountblocs (4 Caps Per Set)		
A12	Anchor Set suit Mountblocs (4 Anchors Per Set)		
AEROSTAND075	Machinery Mount (4 Stands Per Set) Max Load 50Kg per stand	100 x 50 x 75	



EXW38



INJW181



AEROSTAND075

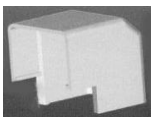


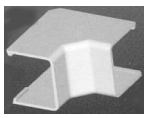
A12

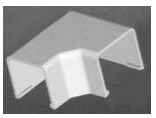
Drain Pipe Duct & Fittings

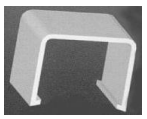
Airefrig Part Number	Description	Dimensions mm	List Price Excl GST
DPD	Drain Pipe Duct	32 x 30 x 2000	
DPCI	Drain Pipe In Corner	35 x 32 x 57	
DPCO	Drain Pipe Corner Out	35 x 32 x 47	
DPFE	Drain Pipe Flat Elbow	35 x 32 x 65	
DPC	Drain Pipe Connector	35 x 32 x 30	
DPWC	Drain Pipe Wall Cover	35 x 32 x 63	
DP96ROLL	Drain Pipe (50mtr Roll)	16, 18 & 20mm connections	
DP96MTR	Drain Pipe (per metre option)	16, 18 & 20mm connections	
CCY	"Y" Piece Connector	16 x 18 x 20	

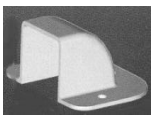












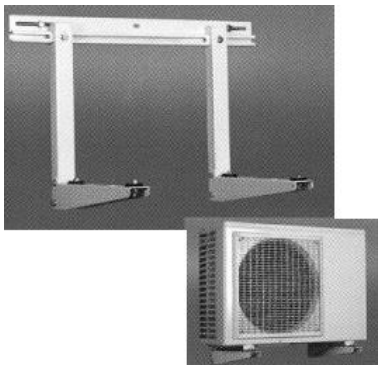


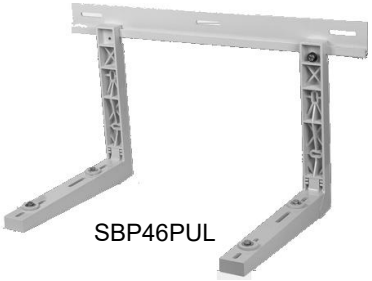


Wall & Roof Brackets

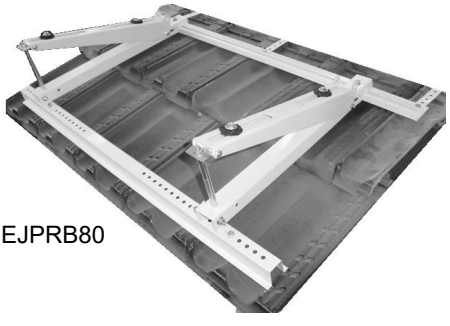
Airefrig Part Number	Description	Maximum Load Kg	Dimensions (L x D x H) mm	List Price Excl GST
EJP60	Adjustable Wall Bracket	60	700 x 380 x 450	
EJP80		80	1050 x 490 x 590	
ME150		150	750(H) x 650(D)	
SBP46PUL	Composite Wall Bracket	80	790 x 460 x 410	
EJPRB80	Adjustable Roof Bracket	80	1050 x 590 x 350	

Roof Bracket, adjustable angle 3 to 30 degrees.





SBP46PUL



EJPRB80

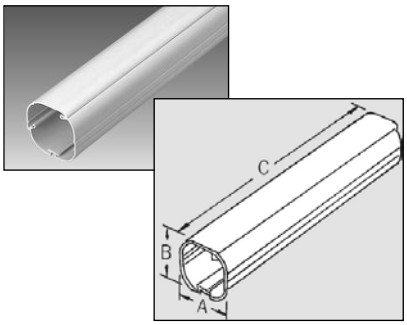
Pipe Duct & Accessories

INOAC - Duct & Accessories

- Inoac's duct and large range of accessories will save contractors time due to ease of installation plus ensures a perfect & professional finish.
- Inoac duct and accessories are made of rigid P.V.C which offers a never changing aspect. The duct and accessories are fade-proof and U.V resistant.
- Thanks to the advantage of P.V.C and its linear structure, they are very harmonious with any type of construction or building offering an outstanding quality finish.
- The easy to install ducts have a bottom and upper section - the bottom is first fixed to the wall. Then fit the pipe, wiring and bind them with the duct saddle tie clips & finally cover them with the snap on upper section.
- All accessories that are two part are supplied with stainless steel screws to prevent rusting and unsightly stains.

Pipe Duct (Ivory)

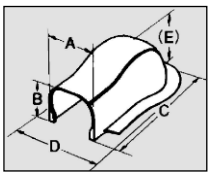
Airefrig Part Number	Description	Duct Size	Dimensions (mm)					Pcs/ box	List Price Excl GST
			A	B	C	D	E		
CD75	Pipe Duct	75	75.5	64	2000	-	-	5	
CD100		100	100	70	2000	-	-	5	
CD140		140	140	80	2000	-	-	5	



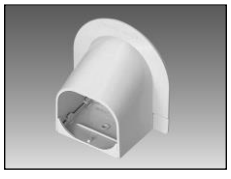
Accessories (Ivory)

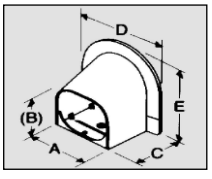
Airefrig Part Number	Description	Duct Size	Dimensions (mm)					Pcs/ box	List Price Excl GST
			A	B	C	D	E		
NY75	Wall Cover	75	84	67	210	130	83	40	
NY100		100	106	70	230	141	93	20	
NY140		140	146	80	285	182	102	5	



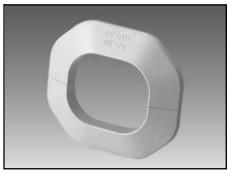


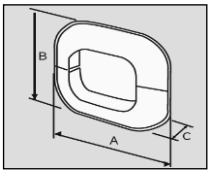
NA75	Corner Cap	75	84	70	66	124	124	20	
NA100		100	109	76	66	149	140	20	
NA140		140	148	86	66	189	155	10	





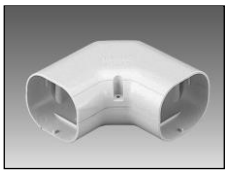
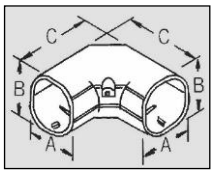
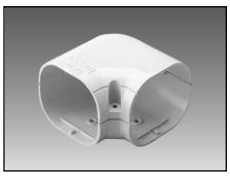
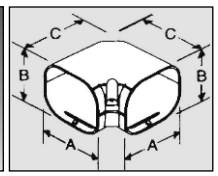
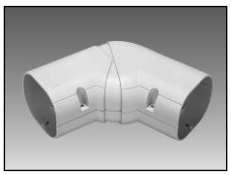
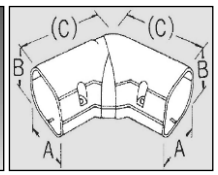
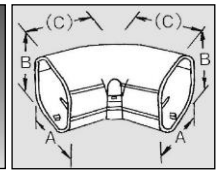
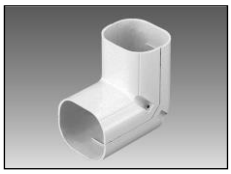
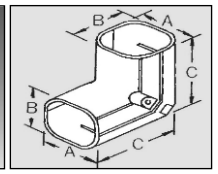
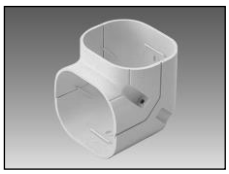
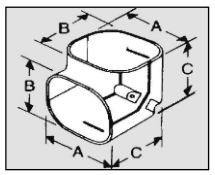
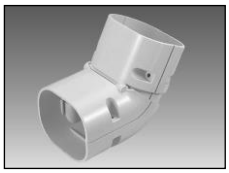
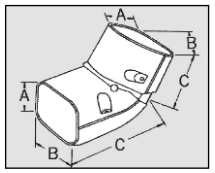
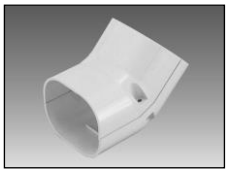
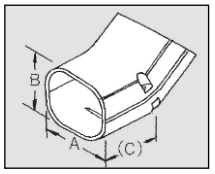
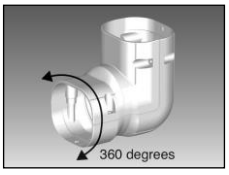
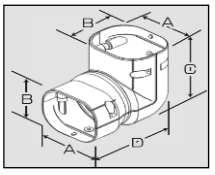
NK75	Wall Cap	75	126	114	16	-	-	80	
NK100		100	175	145	16	-	-	40	
NK140		140	220	180	16	-	-	20	





INOAC DUCTS & ACCESSORIES

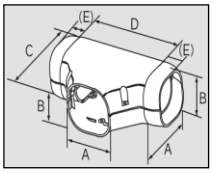
Accessories (Ivory) cont'd

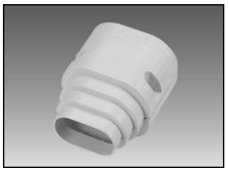
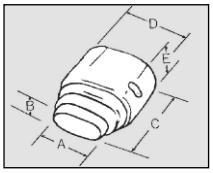
Airefrig Part Number	Description	Duct Size	Dimensions (mm)					Pcs/ box	List Price Excl GST		
			A	B	C	D	E				
NE75	Elbow 90° (Horizontal)	75	82	69	141	-	-	40			
NE100		100	107	75	161	-	-	20			
NE140		140	146	85	200	-	-	5			
NH75	Mini Elbow 90° (Horizontal)	75	82	69	100	-	-	40			
NH100		100	107	75	125	-	-	20			
NH140		140	146	85	165	-	-	5			
NX75	Elbow 45° to 90° Adjustable (Horizontal)	75	82	69	153	-	-	40			
NX100		100	107	75	193.5	-	-	20			
NX140		140	146	85	248	-	-	5			
NM75	Elbow 45° (Horizontal)	75	82	69	74	-	-	40			
NM100		100	107	75	84	-	-	20			
NM140		140	146	85	106	-	-	5			
NC75	Elbow 90° (Vertical)	75	82	69	124	-	-	40			
NC100		100	107	75	135	-	-	20			
NC140		140	146	85	149	-	-	5			
NL75	Mini Elbow 90° (Vertical)	75	82	69	83	-	-	10			
NL100		100	107	75	90	-	-	5			
NL140		140	146	85	100	-	-	5			
NZ75	Elbow 45° to 90° Adjustable (Vertical)	75	82	69	122	-	-	40			
NZ100		100	105	73	117	-	-	5			
NZ140		140	146	87	150	-	-	5			
NU75	Elbow 45° (Vertical)	75	82	69	72	-	-	40			
NU100		100	107	75	83	-	-	20			
NU140		140	146	85	93	-	-	10			
NCX75	Elbow twists 360° (For Vertical or Horizontal use)	75	80	68	114	-	-	10			
NCX100		100	107	75	135	-	-	20			
NCX140		140	146	87	190	-	-	5			

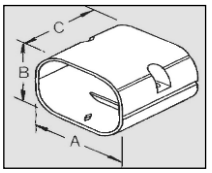
INOAC DUCTS & ACCESSORIES

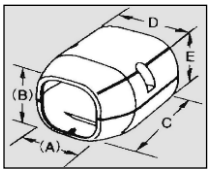
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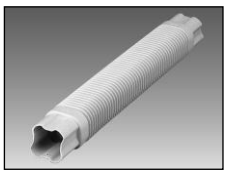
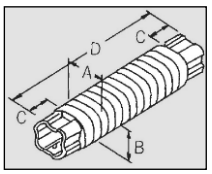
Airefrig Part Number	Description	Duct Size	Dimensions (mm)					Pcs/ box	List Price Excl GST
			A	B	C	D	E		
NT75	T-Joint	75	82	69	121	160	25	10	
NT100	c/w 2 x reducers 100 to 75 (NT100)	100	107	75	161	210	35	5	
NT140	c/w 2 x reducers 100 to 75 (NT140)	140	146	85	200	254	35	5	
NR75	Duct End Socket	75	53	30	99	82	69	40	
NR100		100	53	30	115	107	75	20	
NR140		140	53	30	143	146	85	10	
NS75	Duct Connector Socket	75	82	69	80	-	-	40	
NS100		100	107	75	80	-	-	20	
NS140		140	146	85	80	-	-	10	
NJ75100	Duct Reducer Socket	75 to 100	86	72	80	107	75	40	
NJ100140		100 to 140	115	78	80	146	85	40	
NF75	Flexible Joint (made from Polyethylene)	75	76	64	60	550	-	10	
NF75M		75	76	64	60	1000	-	10	
NF100		100	101	70	75	800	-	10	
NF140		140	140	80	80	1000	-	5	
NQF75	Twisted & Flexible Elbow	75	76	6	1000	8	-	5	
NQF100		100	101	6	1000	10	-	5	
NQ75	Twisted Elbow Socket	75	82	69	90	85.5	-	10	
NQ100		100	107	75	102	94	-	5	
NQJ75	Twisted Elbow Joint	75	88	54	-	-	-	10	
NQJ100		100	113	63	-	-	-	5	
NVS	Duct Saddle Clip & Tie	75	250mm (long) nylon tie					500	
NVL		100 & 140	360mm (long) nylon tie					500	

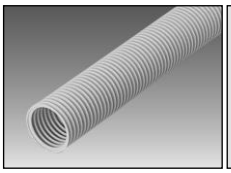
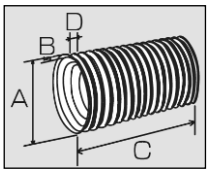



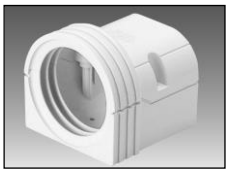
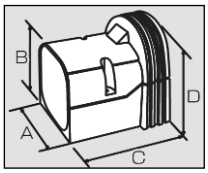



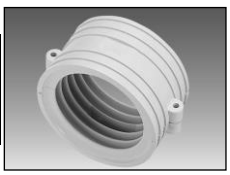
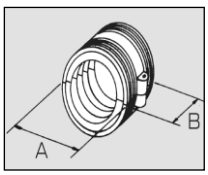





INOAC DUCTS & ACCESSORIES

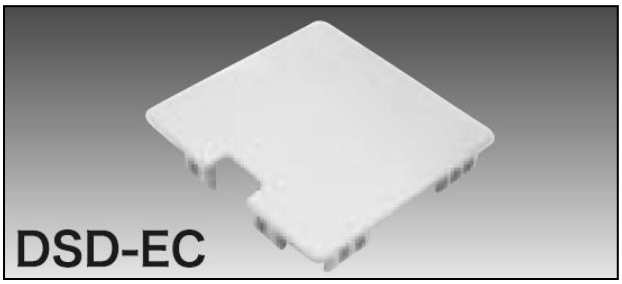
Accessories (cont'd)

Airefrig Part Number	Description	Colour	Maximum Load	Weight	Dimensions (mm)			Pieces per Box	List Price Excl GST
					Height	Width	Length		
DSD400N	Base Rock Stand (PVC resin)	Ivory	120kg (at +50°C)	670 grams	82	83	400	30	
DSD1000N				1675 grams	82	83	1000	10	



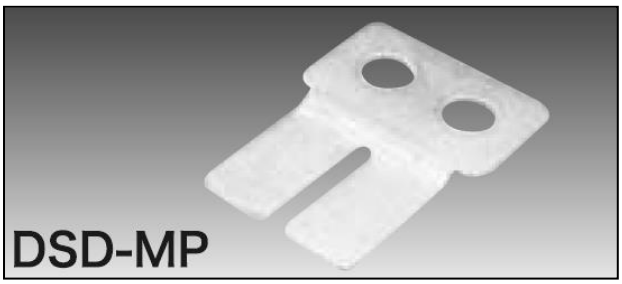
Accessories (cont'd)

Airefrig Part Number	Description	Colour	Pieces per Box	List Price Excl GST
DSDEC	End Cap to suit the Base Rock Stands	Ivory	-	



Accessories (cont'd)

Airefrig Part Number	Description	Pieces per Box	List Price Excl GST
DSDMP	Metal Fixing Plate to suit the Base Rock Stands	-	

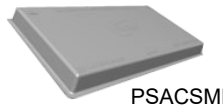


POLYSLAB BASES

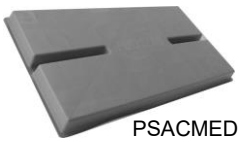
Polyslab Bases

Airefrig Part Number	Description	Dimensions mm	List Price Excl GST
PSACSML	For small air conditioning units, camping equipment , pool & irrigation pumps etc	640 x 340 x 51 (weighs 2.1kg)	
PSACMED	Built to suit 95% of 2.5kw to 15kw domestic & light commercial split air conditioning units	885 x 465 x 51 (weighs 2.4kg)	

Note: PSACSML & PSACMED have a load capacity of 120kg each



PSACSML



PSACMED

TWIN TUBE - LATENT

Pre - Insulated Copper Tube

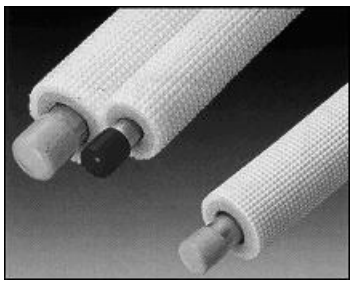
Airefrig Part Number	Copper Tube Dimensions (**R410A** Compatible)		Insulation Thickness	Metres per Roll	List Price Ex GST
	Imperial	Metric			
2320	1/4 3/8	6.35 x 0.8 9.52 x 0.8	10 mm 10 mm	20 metre roll	
2420	1/4 1/2	6.35 x 0.8 12.70 x 0.8	10 mm 10 mm	20 metre roll	
2520	1/4 5/8	6.35 x 0.8 15.80 x 1.0	10 mm 10 mm	20 metre roll	
3520	3/8 5/8	9.52 x 0.8 15.80 x 1.0	10 mm 10 mm	20 metre roll	
3620H	3/8 3/4	9.52 x 0.8 19.05 x 1.2	10 mm 10 mm	20 metre roll	

Suitable for R410A



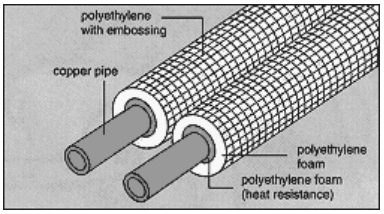
Twin Tube is manufactured using High Quality Seamless Copper Tube suitable for use with new generation refrigerants in the Air Conditioning and Refrigeration fields.

Twin Tube insulation is manufactured from cross-linked, closed cell polyethylene film. The exterior embossed polyethylene film is stronger and more resistant to abrasion than traditional materials, enabling ease to pass through tight spaces without being torn.



Save time and money.
Install pipework in less time with pre-insulated annealed copper Twin Tube in sizes from 1/4" (6.35mm) to 3/4" (19.1mm), see above

The 20 metre Twin Tube coils are packed in cardboard cartons for easy of transport and handling.



Continuous 20 metre Twin Tube coil lengths eliminates the need to seal insulation joints, apply glue or tape saving time and money.

The Twin Tube pre-insulated tubes are glued together and can be easily split by hand if required.

TWIN TUBE – FIRE RATED

Fire Rated Insulated Pair Coil

13mm Insulation

Airefrig Part Number	Copper Tube Dimensions (**R410A** Compatible)		Fire Rated Insulation (Wall Thickness)	Metres per Roll	List Price Ex GST
	Imperial	Metric			
SHC1438FRPC	1/4 3/8	6.35 x 0.81 9.52 x 0.81	13 mm 13 mm	15 metre Roll	
SHC1412FRPC	1/4 1/2	6.35 x 0.81 12.7 x 0.81	13 mm 13 mm	15 metre Roll	
SHC1458FRPC	1/4 5/8	6.35 x 0.81 15.88 x 1.02	13 mm 13 mm	15 metre Roll	
SHC3858FRPC	3/8 5/8	9.52 x 0.81 15.88 x 1.02	13 mm 13 mm	15 metre Roll	
SHC3834FRPC	3/8 3/4	9.52 x 0.81 19.05 x 1.14	13 mm 13 mm	15 metre Roll	

19mm Insulation

Airefrig Part Number	Copper Tube Dimensions (**R410A** Compatible)		Fire Rated Insulation (Wall Thickness)	Metres per Roll	List Price Ex GST
	Imperial	Metric			
SHC1438FR19	1/4 3/8	6.35 x 0.81 9.52 x 0.81	19 mm 19 mm	15 metre Roll	
SHC1412FR19	1/4 1/2	6.35 x 0.81 12.7 x 0.81	19 mm 19 mm	15 metre Roll	
SHC1458FR19	1/4 5/8	6.35 x 0.81 15.88 x 1.02	19 mm 19 mm	15 metre Roll	
SHC3858FR19	3/8 5/8	9.52 x 0.81 15.88 x 1.02	19 mm 19 mm	15 metre Roll	

Fire Rated Pair Coil Features & Benefits:

- ✓ Australian Building Code Compliant
- ✓ R410A Rated all sizes
- ✓ Prevents damaged due to condensation
- ✓ Superior thermal properties Vs standard pair coil
- ✓ Available in 13mm & 19mm wall to cover all applications



Insulation Properties:

Material	Highly flexible paired tubular closed cell elastomeric nitrile foam rubber (13 & 19mm)
Thermal Conductivity	0.036W/m.K
Temperature Range Max. surface temperature Min. surface temperature	 +105°C - 50°C
Water Vapour Permeability	u > 4,500
Water Absorption	0.0029g/ 100cm^2
Mildew Resistance	No Fungal Growth
Acoustic Insulation	Effective to 30dbA



Fire Performance

Ignitability Index:	**0**
Spread of Flame:	**0**
Heat Evolved Index:	**0**
Smoke Developed Index:	**6**

Tested in accordance with the requirements of AZ/NZS 1530.3:1999. Exceeds the fire safety specifications C1.10 of the Building Code of Australia for all building classes.

R – Value Pair Coil:

1) 1/4" x 3/8" x 13mm Insulation – R0.6 x R0.6 x 13mm Insulation
2) 1/4" x 1/2" x 13mm Insulation – R0.6 x R0.6 x 13mm Insulation
3) 3/8" x 5/8" x 13mm Insulation – R0.6 x R0.6 x 13mm Insulation

1) 1/4" x 3/8" x 19mm Insulation – R1.0 x R1.0 x 19mm Insulation
2) 1/4" x 1/2" x 19mm Insulation – R1.0 x R1.0 x 19mm Insulation
3) 3/8" x 5/8" x 19mm Insulation – R1.0 x R0.9 x 19mm Insulation

AEROFLEX

AEROFLEX®

Closed Cell Elastomeric Thermal Insulation
(made from E.P.D.M. - Ethylene Propylene Diene Monomer)

Aeroflex Tube and Sheet Insulation is a flexible, closed cell and lightweight elastomeric material designed for insulating cooling and heating lines. The closed cell structure of Aeroflex provides many advantages over most rigid insulations for cooling and heating lines such as:

- Moisture & vapour resistance without using additional vapour barriers.
- Stable thermal conductivity (K. value) during service due to its dense surface skins and closed cell characteristics.
- Flexible which makes installation work easy and neat.
- Outstanding ultraviolet and weather resistance.



Aeroflex prevents heat gain and condensation problems on chilled water and refrigerant pipelines and also prevents heat loss from hot water plumbing, liquid and dual temperature piping. It is also an ideal insulation for frost control on cold water plumbing.

Aeroflex Tube Insulation

Aeroflex Closed Cell Tube Insulation is easily installed to pipe or tubing. The factory-applied coating of talcum powder on the thick and smooth inner skin helps facilitate and speed up pre-assembly lines. When applied to existing lines, tubing should be slit length-wise and snapped into place. Slitting can be done on the job easily with razors, blades, knives or shears. Cut edges and joints can be sealed with Aeroseal Adhesive (neoprene base contact cement)

Aeroflex Standard Sheet

The standard sheet is available in sizes of 0.91m x 1.2m with the wall thickness from 6mm upto 25mm. It prevents heat loss and condensation on large pipelines, tanks, chillers, air ducts and other irregular shaped vessels.

Aeroflex Continuous Sheet Roll

Aeroflex sheet insulations are also available in continuous roll form. Continuous sheet rolls are available from 10mm to 50mm thickness at 1 metre wide and 3 to 30 metres long. All insulation sheets are made from the same materials as Aeroflex tubing.

Temperature Range

Aeroflex tubes and sheet insulate and prevent condensation when used in operating temperatures down to –57 ºC and insulate against heat loss upto 125 ºC. The thermal efficiency and water vapour permeability of Aeroflex will not be affected within these recommended operating temperature ranges.

Moisture Resistance

The Closed Cell Structure protects against moisture and eliminates the need for a vapour barrier in most applications. However, under severe conditions of high humidity (90% RH and above), high temperature (32 ºC and above) and low ventilation such as underground piping, “Aerocoat” (Acrylic Emulsion Paint) is recommended for use as an additional vapour barrier coating.



Thermal Efficiency

Aeroflex Insulation is made from high quality synthetic elastomers, has low density and a closed cell structure. The products, therefore have a stable low K Factor of 0.034 – 0.040 (-20 to +40 ºC mean temperature) which can save energy consumption on any heating and cooling lines.

AEROFLEX

Fire Rating

Aeroflex to Australian Standard AS1530.3 - 1999
Ignitability Index - 0 (range 0 – 20)
Spread of Flame Index - 0 (range 0 – 10)
Heat Evolved Index - 0 (range 0 – 10)
Smoke Developed Index - 3 (range 0 – 10)
To be read in conjunction with the Building Code of Australia.

Anti Vibration and Resonance

The high elasticity of Aeroflex insulation minimizes the vibrations and resonance of chilled water and hot water pipelines during operation.

Neat Appearance

The flexibility and smooth surface of Aeroflex offers a neat-finished appearance even at joints, tees and elbows. No decorative or protective coating is required for either indoor or outdoor installations.

Flexibility and Space Saving

The flexibility of Aeroflex enables quick and easy installation on bent or irregular piping. Due to its low and stable thermal conductivity, Aeroflex requires a thinner wall than other rigid insulations. Therefore, less space is needed for Aeroflex.

Other Advantages

Aeroflex can be safely handled without causing skin irritations or health hazard. It has superior resistance to fungus growth, vermin or rodent attack and other chemicals such as acids or alkalis. This makes Aeroflex ideal for protecting piping from corrosion caused by atmospheric agents and industrial ambience. Aeroflex is cured through a special vulcanisation process that will prevent any corrosion to metals. This means stainless & copper pipes will not become discoloured or brittle.

Specifications

Average Physical Properties *		Aeroflex Insulation					Test Method **
Cell Structure		Closed Cell					-
Density (gm/cm^3)		0.06 - 0.10 ***					ASTM D 1667
Thermal Conductivity	Temp (°C)	-20	0	24	32	40	ASTM C 177 JIS A 1412 – 1989 DIN 52613
	K Value (W/m.K)	0.034	0.035	0.038	0.039	0.040	
Service Temperature Limit ****		-57 °C to 125 °C					
Water Vapour Permeability (Kg/m.s.Pa)		0.15 perm – in. (0.22 x 10^{-12})					ASTM C 355, E 96 *****
		$\mu \geq 4{,}000$					DIN 52615
Water Absorption (% by Weight)		3					ASTM D 1056
Ozone Resistance		Excellent					ASTM D 1171, D 1149
Thermal Stability (% shrinkage)	7 days 93 °C	5					ASTM C 534
	7 days 104 °C	6					
Flammability and Smoke Density ******		Self-extinguishing					ASTM D 635
		Class V 0					UL – 94
		Class 5.3					EMPA *******
		Non-Flammable					JIS K 6911
Weather and Ultraviolet Resistance		Good					-
Copper Corrosion		Negligible					-
Odour		Negligible					-
Flexibility		Excellent					-
Elongation		Excellent					-

Note: * The physical properties of Aeroflex Closed Cell Insulation represent typical average values obtained in accordance with accepted test methods.

** Also tested by other standards: DIN, JIS, SISIR and others.

*** For thicknesses ranging from 25mm and above, density 0.05 – 0.08 gm/cm^3.

**** At –57 °C Aeroflex Closed Cell Insulation becomes harder and as temperature drops below –57 °C it becomes increasingly brittle. However this hardening characteristic does not affect thermal efficiency and water vapour permeability. On the heating cycle, Aeroflex Closed Cell Insulation will withstand temperatures up to 125 °C. For butt joint and seams contacted with Aeroseal Adhesive, the limited temperature is up to 100 °C.

***** Water vapour permeability of Aeroflex insulation is tested according to ASTM E 96 procedure E-Desiccant method at 37.8 °C.

****** Aeroflex Closed Cell Insulation is made of specially compounded elastomeric materials for self-extinguishing. The flammability of this insulation has been tested by exposing samples of 6" x 2" x ½" thickness to the procedures of ASTM D 635 test method entitled "Flammability of Plastics and Cellular Plastics". During this test, the sample is positioned horizontally. And for the procedure of UL – 94 the sample size of ½" x ½" x 5" is positioned vertically. This test method is not intended as a criterion of fire hazard. It can be of considerable value in comparing flammability to different materials.

******* EMPA: Swiss Federal Laboratories for Materials Testing and Research.

AEROFLEX

Accessories

Aeroseal

Aeroseal is a Modified Neoprene Contact Adhesive specially formulated for bonding Aeroflex Insulation Materials firmly together. Also ideal for use with other materials such as Metal (painted or unpainted), Cork Board, Polyurethane Foam, Rigid PVC Sheet, Formica, Melamine Board or Rubber Sheet. The high water vapour resistance and good weathering resistance of Aeroseal can prevent water or moisture from penetrating the joints. Aeroseal forms a strong, firm and permanent bond between the applied materials providing long lasting service.



Aerotape

Aerotape is a flexible and self-adhesive insulation foam tape, which is made from the same elastomeric material as Aeroflex Closed Cell Insulation. Ideal for wrapping hot or cold piping and fittings. Energy efficient and very easy to use. Excellent for preventing condensation problems. Designed specially for retarding heat loss in hot piping and preventing heat gain or frost formation on cold, chilled water piping or refrigeration lines. Adheres firmly to all metals. No problem of delamination. Aerotape is specially coated with primer on the non-adhesive side for a long service life.



Airtape

Airtape Insulation Cork Tape is specially designed for all types of climates. It insulates cold pipes for all kinds of air conditioners used in cars and homes, freezers and refrigerators. Helps stop condensation problems. Ideal for retarding heat gained in cold pipes and preventing heat loss in hot pipes. Airtape Insulation Tape is an effective sound dampening material and can also be used for gasketing purposes. Airtape Insulation Tape sticks to all kinds of dry metals. It seals tightly without drying. It is flexible and will not shrink or melt within the service temperature of –29 ºC to 93 ºC.



Aerocoat

Aerocoat is a water-based paint formulated with selected pure acrylic emulsion mixed with other special chemicals. Excellent for coating onto Aeroflex insulation surfaces giving greater protection against ultraviolet rays or other adverse weather conditions. Available in shades of white, blue, green, yellow, red and black. Aerocoat can also be painted onto pipe insulation surfaces for easy identification of the different pipe functions.



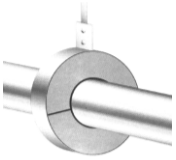
Protape

Protape is an EPDM-based self-adhesive tape, specially made for adhering the joints of Aeroflex tubes and sheets. Protape provides extra holding strength to the joints and serves as a vapour barrier to prevent atmospheric moisture to penetrate the seams. It is flexible, easy to wrap or patch tightly to the insulation surface.



Aerofix

Aerofix is a polymeric rigid foam Pipe Hanger with a foam tape inner lining, that absorbs vibration of operating pipes. The outer covering consists of a special rubber tape that seals the hanger completely after installation to prevent moisture penetration. Its strong closed cell structure is ideal for insulating hangers especially for cooling pipes to prevent condensation and save energy.



Aerostand

Aerostand is made from natural rubber blended with EPDM synthetic rubber and is a load support specifically designed for air-conditioning units. This stand possesses both high compressive strength and good weathering resistance. It is very effective in reducing vibration and noise levels. Aerostand can withstand loads of upto 50kgs per piece.



Aerostand Specifications
Tensile Strength : Minimum 6.5 MPa
Elongation : Minimum 250%
Hardness : 70 ± 5 Shore A
Compression Strength @ 10% Deflection : Minimum 0.75 N/mm^2
Maximum Compression Strength : Minimum 5.0 N/mm^2
Tear Strength : Minimum 15 kgf/cm

AEROFLEX

Closed Cell Pipe Insulation

6mm & 9mm Wall

Airefrig Part Number	Wall mm	ID mm	Lengths per Carton	List Price Ex GST
M06006	6	6	180	
M06008		8	160	
M06010		10	140	
M06013		13	110	
M06016		16	80	
M06019		19	70	
M06022		22	70	
M06025		25	60	P.O.A.
M06028		28	50	P.O.A.
M09006	9	6	132	
M09010		10	110	
M09013		13	84	
M09016		16	70	
M09019		19	60	
M09022		22	54	
M09025		25	44	
M09028		28	36	
M09032		32	34	
M09035		35	32	
M09038		38	30	
M09042		42	28	
M09045		45	24	
M09048		48	20	
M09051		51	18	
M09054		54	18	
M09060		60	16	
M09064		64	16	
M09067		67	14	
M09073		73	10	P.O.A.
M09076		76	10	
M09080		80	10	
M09083		83	10	

13mm Wall

Airefrig Part Number	Wall mm	ID mm	Lengths per Carton	List Price Ex GST
M13006	13	6	80	
M13010		10	70	
M13013		13	60	
M13016		16	50	
M13019		19	40	
M13022		22	32	
M13025		25	30	
M13028		28	28	
M13032		32	24	
M13035		35	20	
M13038		38	18	
M13042		42	18	
M13045		45	18	
M13048		48	16	
M13051		51	14	
M13054		54	14	
M13060		60	12	
M13064		64	10	
M13067		67	10	
M13073		73	10	
M13076		76	8	
M13080		80	8	
M13083		83	8	
M13090		90	8	
M13092		92	8	
M13098		98	6	
M13102		102	6	
M13105		105	6	
M13115		115	6	
M13127		127	4	
M13130		130	4	
M13140		140	4	

19mm Wall

Airefrig Part Number	Wall mm	ID mm	Lengths per Carton	List Price Ex GST
M19006	19	6	32	
M19010		10	32	
M19013		13	32	
M19016		16	28	
M19019		19	24	
M19022		22	20	
M19025		25	18	
M19028		28	18	
M19032		32	18	
M19035		35	16	
M19038		38	12	
M19042		42	12	
M19045		45	10	
M19048		48	8	
M19051		51	8	
M19054		54	8	
M19060		60	8	
M19064		64	8	
M19067		67	8	
M19073		73	6	
M19076		76	6	
M19080		80	6	
M19083		83	6	
M19090		90	6	
M19092		92	6	
M19098		98	4	
M19102		102	4	
M19105		105	4	
M19115		115	4	
M19127		127	4	
M19130		130	4	
M19140		140	4	

Fire Rating: Aeroflex Insulation is tested to Australian Standards 1530.3 - 1999
Ignitability: 0 Spread of Flame: 0 Heat Evolved: 0 Smoke Developed: 3

AEROFLEX

Closed Cell Pipe Insulation

25mm Wall

Airefrig Part Number	Wall mm	ID mm	Lengths per Carton	List Price Ex GST
M25006	25	6	24	
M25010		10	20	
M25013		13	18	
M25016		16	18	
M25019		19	18	
M25022		22	16	
M25025		25	12	
M25028		28	12	
M25032		32	12	
M25035		35	10	
M25038		38	10	
M25042		42	8	
M25045		45	8	
M25048		48	8	
M25051		51	8	
M25054		54	8	
M25060		60	6	
M25064		64	6	
M25067		67	6	
M25073		73	6	
M25076		76	6	
M25080		80	6	
M25083		83	6	
M25086		86	4	
M25090		90	4	
M25092		92	4	
M25098		98	4	
M25102		102	4	
M25105		105	4	
M25115		115	4	
M25127		127	4	
M25130		130	2	
M25140		140	2	
M25152		152	2	

32mm Wall

Airefrig Part Number	Wall mm	ID mm	Lengths per Carton	List Price Ex GST
M32010	32	10	14	
M32013		13	14	
M32016		16	14	
M32019		19	14	
M32022		22	12	
M32025		25	10	
M32028		28	8	
M32032		32	8	
M32035		35	8	
M32038		38	8	
M32042		42	8	
M32051		51	6	
M32054		54	6	
M32060		60	4	
M32064		64	4	
M32067		67	4	
M32073		73	4	
M32076		76	4	
M32080		80	4	
M32083		83	4	
M32090		90	4	
M32092		92	4	
M32098		98	2	
M32102		102	2	
M32105		105	2	
M32115		115	2	
M32127		127	2	
M32130		130	2	
M32140		140	2	
M32165		165	2	

38mm Wall

Airefrig Part Number	Wall mm	ID mm	Lengths per Carton	List Price Ex GST
M38010	38	10	8	
M38013		13	8	
M38016		16	8	
M38019		19	8	
M38022		22	8	
M38025		25	8	
M38028		28	8	
M38032		32	8	
M38035		35	6	
M38038		38	6	
M38042		42	6	
M38045		45	6	
M38048		48	6	
M38051		51	4	
M38054		54	4	
M38060		60	4	
M38064		64	4	
M38067		67	4	
M38073		73	3	
M38076		76	3	
M38080		80	3	
M38083		83	3	
M38090		90	3	
M38092		92	3	
M38098		98	3	
M38102		102	2	
M38105		105	2	
M38115		115	2	
M38127		127	2	
M38130		130	2	
M38140		140	2	
M38165		165	2	

Fire Rating: Aeroflex Insulation is tested to Australian Standards 1530.3 - 1999
Ignitability: 0 Spread of Flame: 0 Heat Evolved: 0 Smoke Developed: 3

AEROFLEX

Closed Cell Pipe Insulation

50mm Wall

Airefrig Part Number	Wall mm	ID mm	Lengths per Carton	List Price Ex GST
M50022	50	22	4	
M50025		25	4	
M50028		28	4	
M50032		32	4	
M50035		35	4	
M50038		38	4	
M50042		42	4	
M50045		45	4	
M50048		48	3	
M50051		51	3	
M50054		54	3	
M50060		60	3	
M50064		64	3	
M50067		67	3	
M50073		73	2	
M50076		76	2	
M50080		80	2	
M50083		83	2	
M50090		90	2	
M50092		92	2	
M50098		98	2	
M50102		102	2	
M50105		105	2	
M50115		115	2	
M50127		127	2	
M50130		130	2	
M50140		140	2	
M50153		153	2	
M50165		165	1	

63mm Wall

Airefrig Part Number	Wall mm	ID mm	Lengths per Carton	List Price Ex GST
M63016	63	16	3	
M63019		19	3	
M63022		22	3	
M63025		25	3	
M63028		28	3	
M63032		32	3	
M63035		35	3	
M63038		38	3	
M63042		42	2	
M63045		45	2	
M63048		48	2	
M63051		51	2	
M63054		54	2	
M63057		57	2	
M63060		60	2	
M63063		63	2	
M63067		67	2	

75mm Wall

Airefrig Part Number	Wall mm	ID mm	Lengths per Carton	List Price Ex GST
M75016	75	16	2	
M75019		19	2	
M75022		22	2	
M75025		25	2	
M75028		28	2	
M75032		32	2	
M75035		35	2	
M75038		38	2	
M75042		42	2	
M75045		45	2	
M75048		48	2	
M75051		51	2	
M75054		54	2	
M75057		57	2	
M75060		60	2	
M75063		63	2	
M75067		67	2	

Fire Rating

Aeroflex Insulation is tested to
Australian Standards 1530.3 - 1999

Ignitability: 0

Spread of Flame: 0

Heat Evolved: 0

Smoke Developed: 3



Dimension Tolerances

ID Size	Wall 6mm	Wall 9mm	Wall 13mm	Wall 19mm	Wall 25mm	Wall 32mm	Wall 38mm	Wall 50mm
9 to 28 mm	6 ± 1 mm	9.6 ± 1 mm	12.6 ± 1 mm	19 ± 1 mm	25 ± 1 mm	32 ± 2 mm	38 ± 2 mm	38 ± 2 mm
32 to 83 mm	-	10.6 ± 1 mm	13.6 ± 1 mm	20 ± 1 mm	26 ± 1 mm	33 ± 2 mm	39 ± 2 mm	39 ± 2 mm
90 to 140 mm	-	11.5 ± 1 mm	14.5 ± 1 mm	21 ± 1 mm	27 ± 1 mm	34 ± 2 mm	40 ± 2 mm	40 ± 2 mm

AEROFLEX

Aeroflex®-HT
High Temperature Pipe Insulation

Closed Cell Elastomeric Thermal Insulation for Solar, Heating & Sanitary Applications

Aeroflex®-HT is an EPDM-base (Ethylene Propylene Diene Monomer Synthetic Rubber) closed cell light weight elastomeric thermal insulation designed for solar & heating applications with service temperatures up to +150°C.

Aeroflex®-HT has a low thermal conductivity value, low smoke and flammability, which is self-extinguished &does not melt when burnt, plus excellent UV & weather resistance properties, which are suitable for outdoor applications.

Aeroflex®-HT:

- Independently Certified to ***BCA 2011***
  (Requiring Compliance with ***AS/NZ 4859.1***)
- Wall Thickness meets R values per ***AS/NZ3500.4:2003***
- Maximum Service temperature of +150°C
- Decomposition Temperature of +250°C
- Special High Temperature Adhesive
  (available in 200 gram & 700 gram tins)



Aeroflex®-HT Specifications

Physical Properties	Aeroflex®-HT							Test Method
Cell Structure	Closed cell							-
Density	40-60 Kg/M^3							ASTM D1667
Thermal Conductivity	Temp	0°C	10°C	20°C	30°C	40°C	50°C	DIN 52613
(W/m.K)	K	0.0369	0.0376	0.0382	0.0388	0.0392	0.0400	
Service Temperature	Up to +150°C							-
Water Absorption	Max. 10% by weight							ASTM D1056
Flammability	Self-Extinguishing							ASTM D635
UV Weather Resistance	Excellent							-

Aeroflex®-HT

Airefrig Part Number	Description				List Price Excl GST
	Wall Thickness	ID	Metres Per Length	Lengths Per Box	
HT09010	9 mm	10 mm	2 metre lengths	110	
HT13013	13 mm	13 mm		60	
HT13019	13 mm	19 mm		40	
HT13035	13 mm	35 mm		20	
HT19013	19 mm	13 mm		32	
HT19019	19 mm	19 mm		24	
HT25013	25 mm	13 mm		20	

Note: Other sizes available on request, please check with your local Airefrig Australia branch for availability & delivery dates.

Aeroflex®-HT High Temp Adhesive

Airefrig Part Number	Description	List Price Excl GST
AA2MTFHT	Aeroseal HT (+150 °C) Adhesive & Brush 200 grm (Toluene Free)	
AA7MTFHT	Aeroseal HT (+150 °C) Adhesive & Brush 700 grm (Toluene Free)	

AEROFLEX

Closed Cell Sheet Insulation

Insulation Sheet

Airefrig Part Number	Sheet Size (length x width x thickness)	Sheets per Carton	List Price Excl GST
P5802	1200mm x 910mm x 6mm	24	
P5803	1200mm x 910mm x 9mm	16	
P5804	1200mm x 910mm x 13mm	12	
P5806	1200mm x 910mm x 20mm	8	
P5808	1200mm x 910mm x 25mm	6	



Insulation Rolls

Airefrig Part Number	Thickness	Roll Sizes (Metres)	List Price Excl GST
MSR10	10 mm	1 x 15	
MSR13	13 mm	1 x 11	
MSR20	20 mm	1 x 7	
MSR25	25 mm	1 x 5	
MSR32	32 mm	1 x 4	
MSR50	50 mm	1 x 2	



Tapes – Paints – Anti-Vibration

Tapes

Airefrig Part Number	Description	List Price Excl GST
AEROTAPE	Aerotape Foam Tape 50mm x 9.0 Metres	
AIRTAPE	Everseal Cork Tape 50mm x 9.0 Metres	
PROTAPE25MM	Tape 25mm x 0.6mm x 25 Metres	
PROTAPE50MM	Tape 50mm x 0.6mm x 25 Metres	
ALUTAPE63	Foil Tape 63mm x 45 Metres	
ALUTAPE75	Foil Tape 75mm x 45 Metres	
VAPASTOP	Aluminium Reinforced Tape 72mm x 50 Metres	





Adhesive and Paints

Airefrig Part Number	Description		List Price Excl GST
AA2M	Aeroseal Adhesive & Brush	200 grm	
AA7M	Aeroseal Adhesive	700 grm	
AA2MTFHT	Aeroseal HT (+150 °C) Adhesive & Brush	200 grm (Toluene Free)	
AA7MTFHT	Aeroseal HT (+150 °C) Adhesive & Brush	700 grm (Toluene Free)	
AEROCOAT4L	Aerocoat Plastic Paint Black	3.8 Litre	
AEROCOATBLK	Aerocoat Plastic Paint Black	950 mls	
AEROCOATBLU	Aerocoat Plastic Paint Blue	950 mls	
AEROCOATGRN	Aerocoat Plastic Paint Green	950 mls	P.O.A.
AEROCOATRED	Aerocoat Plastic Paint Red	950 mls	
AEROCOATWHT	Aerocoat Plastic Paint White	950 mls	
AEROCOATYEL	Aerocoat Plastic Paint Yellow	950 mls	P.O.A.





AEROFLEX

Aeroflex Anti-Vibration

Aeroflex Anti-Vibration

Airefrig Part Number	Description	List Price Excl GST
AEROPAD10	Anti-Vibration Pad 1000mm (L) x 100mm (W) x 10mm (Thick)	
AEROPAD15	Anti-Vibration Pad 1000mm (L) x 100mm (W) x 15mm (Thick)	
AEROSTAND075	Machinery Mount 75mm High Max Load 50Kg per stand (set of 4)	
TDRAMS201520	Stud Mount 20x15x20mm M8 (set of 4)	





TDRAMS201520



AEROSTAND075

CELFLEX

Celflex® Lengths & Continuous Insulation

Celflex ® Continuous Tube is specially designed for long pipe runs on split -type air conditioning systems. Installation will be quicker & easier using continuous tube.

Features:

- Closed Cell Structure
- Low Thermal Conductivity
- Low Water Absorption
- Low Vapour Permeability
- Tough Surface For Easy & Fast Installation
- Cost Saving Through Fewer Cuts & Joins

Fire Rating

Celflex to Australian Standard AS1530.3 - 1999
Ignitability Index - 17 (range 0 – 20)
Spread of Flame Index - 9 (range 0 – 10)
Heat Evolved Index - 8 (range 0 – 10)
Smoke Developed Index - 8 (range 0 – 10)
Read in conjunction with the Building Code of Australia

Celflex - 2 metre Lengths

Airefrig Part Number	Description			List Price Excl GST
	Wall mm	ID mm	Length Metres	
CF09006	9	6	2 Metres	
CF09010		10		
CF09013		13		
CF09016		16		
CF09019		19		
CF09022		22		
CF09025		25		
CF09028		28		
CF13006	13	6		
CF13010		10		
CF13013		13		
CF13016		16		
CF13019		19		
CF13022		22		
CF13025		25		
CF13028		28		

Celflex - Continuous Roll

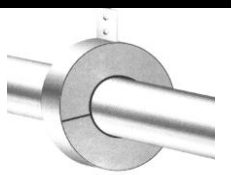
Airefrig Part Number	Description			List Price Excl GST
	Wall mm	ID mm	Length Metres	
C09006	9	6	76	
C09010		10	63	
C09013		13	47	
C09016		16	40	
C09019		19	33	



AEROFLEX




Aerofix Pipe Hanger Blocks

13mm Wall

Airefrig Part Number	Wall mm	ID mm	Quantity per Carton	List Price Ex GST
FX13010	13	10	768	
FX13013		13	768	
FX13016		16	588	
FX13019		19	588	
FX13022		22	360	
FX13025		25	360	
FX13028		28	300	
FX13032		32	264	
FX13035		35	264	
FX13038		38	264	
FX13042		42	204	
FX13045		45	192	
FX13048		48	192	
FX13051		51	144	
FX13054		54	144	
FX13057		57	132	
FX13060		60	108	
FX13064		64	72	
FX13067		67	72	
FX13073		73	72	
FX13076		76	72	

19mm Wall

Airefrig Part Number	Wall mm	ID mm	Quantity per Carton	List Price Ex GST
FX19010	19	10	360	
FX19013		13	360	
FX19016		16	300	
FX19019		19	276	
FX19022		22	276	
FX19025		25	204	
FX19028		28	204	
FX19032		32	192	
FX19035		35	192	
FX19038		38	192	
FX19042		42	132	
FX19045		45	132	
FX19048		48	108	
FX19051		51	108	
FX19054		54	108	
FX19057		57	108	
FX19060		60	108	
FX19064		64	72	
FX19067		67	60	
FX19073		73	56	
FX19076		76	56	

25mm Wall

Airefrig Part Number	Wall mm	ID mm	Quantity per Carton	List Price Ex GST
FX25010	25	10	264	
FX25013		13	264	
FX25016		16	204	
FX25019		19	192	
FX25022		22	192	
FX25025		25	192	
FX25028		28	144	
FX25032		32	132	
FX25035		35	132	
FX25038		38	108	
FX25042		42	108	
FX25045		45	108	
FX25048		48	108	
FX25051		51	108	
FX25054		54	90	
FX25057		57	90	
FX25060		60	84	
FX25064		64	56	
FX25067		67	44	
FX25073		73	44	
FX25076		76	44	
FX25102		102	32	

32mm Wall

Airefrig Part Number	Wall mm	ID mm	Quantity per Carton	List Price Ex GST
FX32010	32	10	144	
FX32013		13	144	
FX32016		16	144	
FX32019		19	144	
FX32022		22	108	
FX32025		25	108	
FX32027		27	108	
FX32028		28	108	
FX32032		32	108	
FX32035		35	108	
FX32038		38	108	
FX32042		42	84	
FX32045		45	84	
FX32048		48	72	
FX32051		51	72	
FX32054		54	72	
FX32057		57	60	
FX32060		60	60	
FX32064		64	40	
FX32067		67	32	
FX32073		73	32	
FX32076		76	32	
FX32080		80	32	

38mm Wall

Airefrig Part Number	Wall mm	ID mm	Quantity per Carton	List Price Ex GST
FX38022	38	22	108	
FX38025		25	108	
FX38028		28	84	
FX38032		32	72	
FX38035		35	72	
FX38038		38	72	
FX38042		42	72	
FX38045		45	60	
FX38048		48	60	
FX38051		51	48	
FX38054		54	48	
FX38057		57	48	P.O.A.
FX38060		60	48	
FX38064		64	32	
FX38067		67	48	
FX38073		73	32	P.O.A.
FX38076		76	28	
FX38080		80	28	P.O.A.
FX38083		83	24	P.O.A.
FX38090		90	24	P.O.A.
FX38102		102	16	
FX38105		105	16	P.O.A.
FX38115		115	12	

25mm Wall

Airefrig Part Number	Wall mm	ID mm	Quantity per Carton	List Price Ex GST
FX50038	50	38	48	P.O.A.
FX50042		42	48	P.O.A.
FX50051		51	48	P.O.A.
FX50054		54	48	P.O.A.
FX50057		57	48	P.O.A.
FX50060		60	36	P.O.A.
FX50064		64	24	P.O.A.
FX50067		67	24	P.O.A.
FX50073		73	24	P.O.A.
FX50076		76	24	P.O.A.
FX50080		80	16	P.O.A.
FX50083		83	16	P.O.A.
FX50090		90	16	P.O.A.
FX50098		98	12	P.O.A.
FX50102		102	12	P.O.A.
FX50105		105	12	P.O.A.
FX50109		109	12	P.O.A.
FX50115		115	9	P.O.A.
FX50125		125	9	P.O.A.
FX50127		127	9	P.O.A.
FX50130		130	9	P.O.A.
FX50140		140	6	P.O.A.
FX50165		165	6	P.O.A.

STRUT CLIPS AND CHANNEL

Strut Clips and Channel

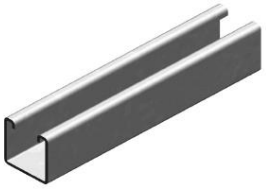
Strut Clips – Zinc Plated (includes nut & bolt)

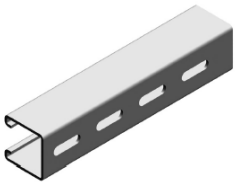
Airefrig Part Number	Outside Pipe ∅ (mm)	Pack Quantity	List Price Per Pack Excl GST
J2025PKT	9.5	10 pairs of clips per packet supplied with nuts & bolts	
J2026PKT	12.7		
J2027PKT	15.9		
J2029PKT	22.2		
J2030PKT	25.4		
J2033PKT	34.9		
J2034PKT	38.1		
J2035PKT	41.3		
J2037PKT	48.0		
J2038PKT	50.8		
J2039PKT	54.0		
J2040PKT	56.0		
J1117PKT	60.0		
J2042PKT	64.0		
J2043PKT	66.7		
J2044PKT	70.0		
J1118PKT	73.0		
J2046PKT	76.2		
J2047PKT	79.4		

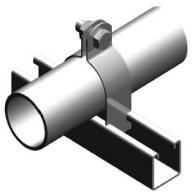
Airefrig Part Number	Outside Pipe ∅ (mm)	Pack Quantity	List Price Per Pack Excl GST
J2048PKT	83.0	10 pairs of clips per packet supplied with nuts & bolts	
J2049PKT	86.0		
J1119PKT	88.9		
J2051PKT	92.0		
J2052PKT	95.0		
J2053PKT	98.0		
J2055PKT	105.0		
J2056PKT	108.0		
J2057PKT	110.0		
J1121PKT	115.0		
J2059PKT	117.0		
J2060PKT	121.0		
J2062PKT	127.0		
J2064PKT	133.0		
J2068PKT	146.0		
J2070PKT	152.0		
J207062PKT	160.0		
J207070PKT	178.0		
J207080PKT	203.0		

Strut Channel – Galvanised

Airefrig Part Number	Description (W x H x L)	List Price Ex GST
B1000	Channel Galvanised 41mm x 41mm x 6000mm	
B1000HI	Channel Slotted Galvanised 41mm x 41mm x 6000mm	
B3300	Channel Galvanised 41mm x 21mm x 6000mm	
B3300SH	Channel Slotted Galvanised 41mm x 21mm x 6000mm	







HANGER CLIPS

Metal Hanger Clips – for use on 8mm or 10mm Threaded Rods

Airefrig Part Number	Description	Pack Quantity	List Price per Pack - Excl GST
BBJ3	Metal Hangers suit (approx) 1/2" liquid & 7/8" suction insulated lines	10	
BBJ4	Metal Hangers suit (approx) 5/8" liquid & 1-1/8" suction insulated lines	10	

Maximum load 25kg (all sizes) , Finished in zinc plated & colour passivated, minimum thickness 8 microns.







RAPID PIPE CLIPS

RAPID POSITIONING CLIP

Material Properties

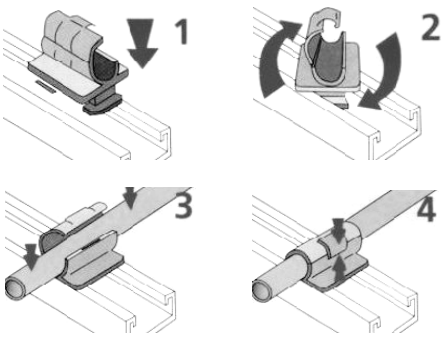
- All Rapid Pipe Clips are manufactured from a composite polyamide alloy that has the tensile strength of nylon, but with superior impact strength especially at lower temperatures.
- Temperature range –40ºC to +140ºC.
- More rigid than standard P6 polyamide.
- Less than 4% deformation under stresses of up to 40Mpa. (Mega Pascals)
- High resistance to mechanical stress creep.
- Withstands all known solvents, hydrolysis, battery acids and salt solutions.
- Low moisture sensitivity.
- Stable electrical and vibrational properties.
- Very good seal to water, gases and solvents.
- Less “yellowing” at high temperatures than other polyamides, good resistance to UV light.
- Melting point +220ºC – UL94 (Underwriters’ Laboratory) rating of HB.
- Under normal installation – no flame spread and toxic emissions insignificant.

Rapid Pipe Clip

The Rapid Pipe Clip is made from a composite polyamide alloy combining strength with light weight, the clip is easy and fast to install. This one piece single hand fixing requires no mechanical aids, completely sealing the pipe work or cable. The RPC is designed to fit all pre-formed channels of a profile width of 41mm with an inturned channel lip of 10mm width or 7mm depth. It will not tighten down on pipe work therefore eliminating possible cracks or fractures.

- Quick and easy to install.
- One piece - single handed fixing.
- Fits most rails and channels.
- Non mechanical tightening.
- Completely seals the pipe work.
- Made in black composite nylon.

Airefrig Part Number	Clip Inside Diameter		Pack Quantity	List Price Per Pack Excl GST
	mm	Inches		
RPC38PKT	10	3/8	10	
RPC12PKT	12	1/2	10	
RPC58PKT	15	5/8	10	
RPC34PKT	20	3/4	10	
RPC78PKT	22	7/8	10	
RPC118PKT	28	1 1/8	10	
RPC138PKT	35	1 3/8	10	
RPC158PKT	42	1 5/8	10	



RAPID PIPE CLIPS

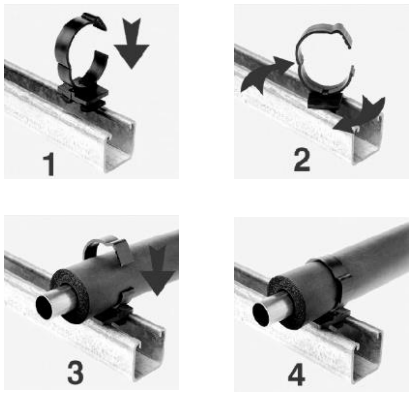
RAPID POSITIONING CLIP

Insul Pipe Clip

The InsulClip has been developed by Rapid Positioning Clips Ltd., to combine the advantages of the proven RPC channel foot and the versatile collar that allows the installation of pipe work with imperial or metric outside diameters.

The great advantage is the InsulClip allows an unbroken vapour barrier seal, eliminating the problem of sweating on metal fittings. The clip is ideal for the installation of VRV systems allowing the barrier seal to run the length of the pipe work without breaks in insulation material. The clip secures both the pipe and insulation.

Airefrig Part Number	Clip Inside Diameter		Pack Quantity	List Price Per Pack Excl GST
	mm	Inches		
IC0015PKT	15	5/8	10	
IC0020PKT	20	3/4	10	
IC0022PKT	22	7/8	10	
IC0025PKT	25	1	10	
IC0028PKT	28	1 1/8	10	
IC0032PKT	32	1 1/4	10	
IC0035PKT	35	1 3/8	10	
IC0040PKT	40	1 1/2	10	
IC0042PKT	42	1 5/8	10	
IC0050PKT	50	2	10	
IC0054PKT	54	2 1/8	10	

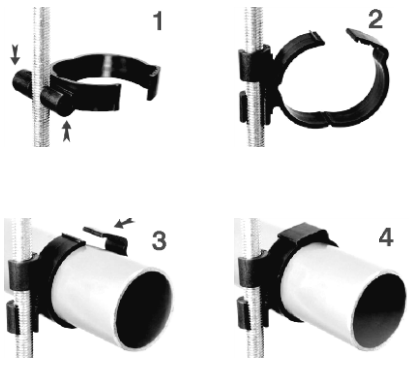


Studding (Threaded Rod) **- Pipe Clip**

The Studding Pipe Clip is a unique one-piece design manufactured from a composite Polyamide Alloy combining strength with light weight. It will overcome the problems of using cable ties for piping, electrical, optical and network cabling. The studding pipe clip is extremely quick and simple to use, fitting effortlessly on conventional 8mm and 10mm (European standard) and 3/8" (US Standard) studding.

The solid connection can be adjusted up and down by simply rotating the clip that uses the stud thread as if it were a nut. The studding clip is a major advance in efficiency for the installation of air conditioning, refrigeration, plumbing pipe work, electrical conduit as well as network and optical cabling.

Airefrig Part Number	Clip Inside Diameter		Fits Stud Dia mm	Pack Quantity	List Price Per Pack Excl GST
	mm	Inches			
SC1015PKT	15	5/8	10	10	
SC1020PKT	20	3/4	10	10	
SC1022PKT	22	7/8	10	10	
SC1025PKT	25	1	10	10	
SC1028PKT	28	1 1/8	10	10	
SC1032PKT	32	1 1/4	10	10	
SC1035PKT	35	1 3/8	10	10	
SC1040PKT	40	1 1/2	10	10	
SC1042PKT	42	1 5/8	10	10	
SC1050PKT	50	2	10	10	
SC1054PKT	54	2 1/8	10	10	



Beta Clamp

- The Beta Clamps are suitable for clamping pipes, hoses and electric cables. These are a sensible and easy way of securing piping and hoses in all types of installations.
- The main features of Beta Clamp are its shock-absorption, vibration dampening and noise reducing properties.
- Beta Clamps have a practical and economical design, which make for quick, easy pipe installation and layout.
- Using weldable plates, it's easy to anchor the clamps to machinery and steelwork.
- Fast, safe and economic installation.
- Upper and lower clamp halves are identical.
- Ribs in clamp bore are designed to absorb shock and vibration.
- High sound absorption is guaranteed.
- Clamp Body: Standard-Polypropylene (Green Color) -30°C to +90°C
- Steel Lower and upper plates.
- Steel Screw Bolts.



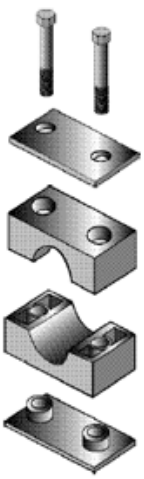
Beta Clamps

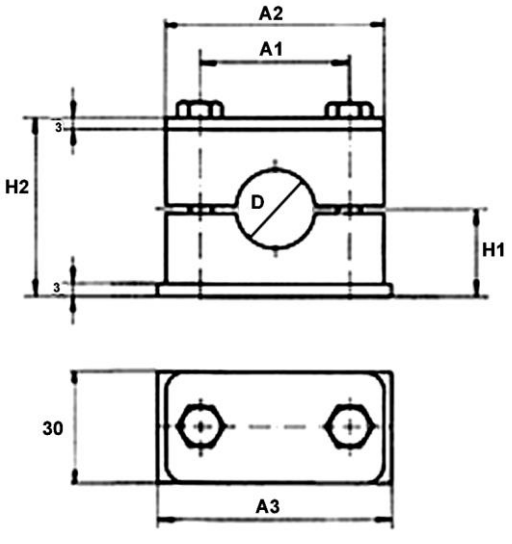
Airefrig Part Number	SIZE	A1	A2	A3	H1	H2	HEXBOLT	List Price Per Clamp Excl GST
		mm						
S1004S	1/4"	20	34	34	16	32	1/4"-20 x 1-1/4"	
S1006S	3/8"	20	34	34	16	32	1/4"-20 x 1-1/4"	
S2008S	1/2"	26	40	42	19.5	39	1/4"-20 x 1-3/8"	
S2010S	5/8"	26	40	42	19.5	39	1/4"-20 x 1-3/8"	
S3012S	3/4"	33	50	52	20.5	41	1/4"-20 x 1-1/2"	
S3015S	7/8"	33	50	52	20.5	41	1/4"-20 x 1-1/2"	
S3016S	1"	33	50	52	20.5	41	1/4"-20 x 1-1/2"	
S4018S	1 1/8"	40	58	60	24	48	1/4"-20 x 1-3/4"	
S5020S	1 1/4"	52	70	72	32	64	1/4"-20 x 2-1/2"	

Stauff Clamps

SP5350PPDPAS	1 3/8″	52	71	71	28	64	M6 x 60mm	
SP5420PPDPAS	1 5/8″	52	71	71	28	64	M6 x 60mm	
SP7550PPDPAS	2 1/8″	94	118	118	51	102	M6 x 100mm	
SP7650PPDPAS	2 5/8″	94	118	118	51	102	M6 x 100mm	



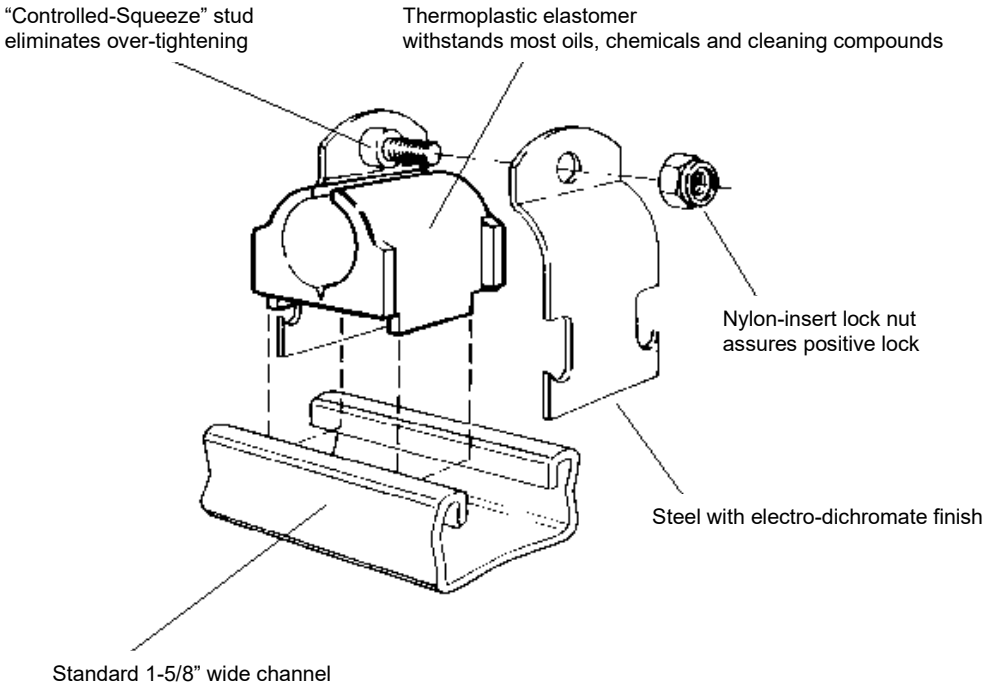




Cush-A-Clamp ®

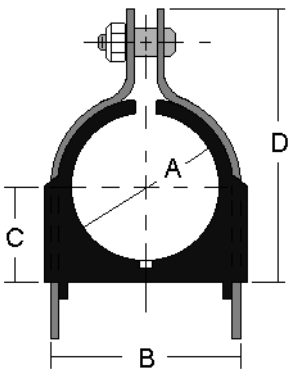
CUSH-A-CLAMP® channel mounted clamping systems are ideal for multiple pipe runs, while absorbing shock and vibration, reducing unwanted noise and preventing galvanic corrosion.

Manufactured from a thermoplastic elastomer, it's built tough to withstand the effects of most oils, chemicals and industrial cleaning compounds, in temperatures from -45°C to 135°C. A patented "Living Hinge" allows the cushion to be spread apart for quick, easy installation. Interlock edges and channel locator legs insure that the cushion remains in place.



Cush-A-Clamp

Airefrig Part Number	Copper Tube OD Dim. "A"	Dimension "B" (mm)	Dimension "C" (mm)	Dimension "D" (mm)	Pack Quantity	List Price Per Pack Excl GST
004T008PKT	1/4"	15.7	6.9	24.9	10	
006T010PKT	3/8"	20. 8	8.4	28.7	10	
008T012PKT	1/2"	23.9	10.2	34.0	10	
010T014PKT	5/8"	26.9	11.7	39.1	10	
012T016PKT	3/4"	30.5	13.2	42.7	10	
014T018PKT	7/8"	33.3	14.7	46.2	10	
016T020PKT	1"	36.6	16.5	49.5	10	
018T022PKT	1 1/8"	39.9	17.8	52.8	10	
020T024PKT	1 1/4"	43.2	19.6	56.1	10	
022T026PKT	1 3/8"	46.2	21.1	59.4	10	
024N028PKT	1 1/2"	49.5	22.9	62.7	5	
026N030PKT	1 5/8"	52.6	24.4	66.0	5	
028N032PKT	1 3/4"	55.9	25.9	69.3	5	
030N034PKT	1 7/8"	58.9	27.7	72.6	5	
032N036PKT	2"	62.2	29.2	77.2	5	
034N040PKT	2 1/8"	65.3	32.3	82.0	5	
042N048PKT	2 5/8"	77.9	38.8	99.5	5	



Cush-A-Claw™

Cush-A-Claw™ is a unique one-piece patented pipe clip system designed for quick, simple and easy installation.

The Cush-A-Claw™ is a channel mounted clamping system molded from rust free TPE (thermoplastic elastomer) material that grabs easily on to pipe or hose and holds it in place.

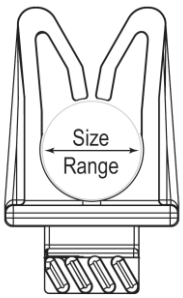
Features

- Quick, simple and easy snap-in installation of tube, pipe and hose
- Sure grip strut base easily rotates into strut
- Will not rust and is non-conducting
- Saves time and money
- Temperature range: -45°C to 135°C
- Suitable for indoor and outdoor use
- Six sizes of tube
- Designed for light duty loads and applications
- Prevents galvanic corrosion of dissimilar metals
- An excellent alternative to steel, stainless steel or galvanised clamps.



Cush-A-Claw

Airefrig Part Number	Size Range Tube O.D.		Pack Quantity	List Price Per Pack Excl GST
	mm	Inches		
CL06PKT	9.5	3/8	10	
CL08PKT	12.7	1/2	10	
CL10PKT	15.9	5/8	10	
CL12PKT	19.1	3/4	10	
CL14PKT	22.2	7/8	10	
CL18PKT	28.6	1 1/8	10	





Cush-A-Grip™

Cush-A-Grip

Airefrig Part Number	Copper Tube OD Size	Pipe Size	Diameter (mm)	Pack Quantity	List Price Per Pack Excl GST
CG10PKT	1/4" 3/8" 1/2"	1/4"	6 - 14	10	
CG20PKT	5/8" 3/4" 7/8"	3/8" 1/2"	15 – 22	10	
CG30PKT	7/8" 1" 1-1/8"	3/4"	22 – 28	10	
CG40PKT	1" 1-1/8" 1-1/4"	3/4" 1"	26 – 32	10	

Multi-size adjustment capability allows four clamp sizes to fit fifteen sizes of tube and pipe

Features:

- Fits ten sizes of copper tube
- Fits five sizes of pipe
- Diameters from 1/4" to 1-1/4"
- Metric sizes from 6 to 32mm

Advantages:

- Reduces inventory
- Fewer parts needed on the job
- Simplifies take-offs and requirements on projects using both tube and pipe sizes

Benefits:

- Lowers overall inventory costs
- Always have the right clamp on hand when you need it
- Job costing made easier and more accurate

Complete with stainless steel bolt and captured nylon lock nut

Features:

- Hex slotted machine screw
- Captured nylon lock nut

Advantages:

- Industry standard hardware
- Easy installation

Benefits:

- Works with screw or nut driver
- Resists vibration

Made from high-strength temperature-adverse, UV resistant, nylon reinforced TPI material

Features:

- Non conducting
- Corrosion resistant

Advantages:

- Pull out and slip loads rival that of steel
- Permissible outdoors
- Temp Range: +190°C to –40°C
- No galvanic reaction
- Will not rust

Benefits:

- Use in place of steel clamps with steel tube
- Covers a wide range of applications and maintains thermal barrier
- For use on copper tube
- Use in place of stainless, aluminium, PCV or hot dipped galvanised clamps





COPPER TUBE

Refrigeration Quality Hard Drawn Copper Tube

Airefrig Part Number	Outside Diameter Inches	Gauge	Outside Diameter mm	Wall Thickness mm	Suitable For R410A	Length	List Price Excl GST
14HDR21G	1/4	21	6.4	0.81	Y	6 Metre Length	P.O.A.
38HDR21G	3/8	21	9.5	0.81	Y		
12HDR21G	1/2	21	12.7	0.81	Y		
58HDR	5/8	20	15.9	0.91	N		
58HDR19G		19		1.02	Y		
34HDR	3/4	20	19.1	0.91	N		
34HDR19G		-		1.14	Y		
78HDR	7/8	20	22.2	0.91	N		
78HDR18G		18		1.22	N		
78HDR17G		17		1.40	Y		
10HDR	1	20	25.4	0.91	N		
10HDR18G		18		1.22	N		
10HDR16G		16		1.63	Y		
118HDR	1 1/8	20	28.6	0.91	N		
118HDR18G		18		1.22	N		
118HDR16G		16		1.63	N		
118HDR15G		15		1.83	Y		
114HDR	1 1/4	20	31.8	0.91	N		
114HDR18G		18		1.22	N		
114HDR14G		14		2.03	Y		
138HDR	1 3/8	20	34.9	0.91	N		
138HDR18G		18		1.22	N		
138HDR16G		16		1.63	N		
138HDR14G		14		2.03	Y		
112HDR	1 1/2	20	38.1	0.91	N		
112HDR18G		18		1.22	N		
158HDR	1 5/8	20	41.3	0.91	N		
158HDR18G		18		1.22	N		
158HDR16G		16		1.63	N		
158HDR10G		10		2.41	Y		
20HDR	2	20	50.8	0.91	N		
20HDR18G		18		1.22	N		
218HDR	2 1/8	20	54.0	0.91	N		
218HDR18G		18		1.22	N		
218HDR16G		16		1.63	N		
258HDR18G	2 5/8	18	66.7	1.22	N		
258HDR16G		16		1.63	N		
30HDR16G	3	16	76.2	1.63	N		
318HDR14G	3 1/8	14	79.4	2.03	N		
40HDR16G	4	16	101.6	1.63	N		



Refrigeration Quality Soft Annealed Copper Tube

Airefrig Part Number	Outside Diameter Inches	Gauge	Outside Diameter mm	Wall Thickness mm	Suitable For R410A	Length	List Price Excl GST
316ACR	3/16	20	4.8	0.91	Y	30 Metre Coils	P.O.A.
14ACR21G	1/4	21	6.4	0.81	Y		
516ACR21G	5/16	21	7.9	0.81	Y		
38ACR21G	3/8	21	9.5	0.81	Y	18 Metre Coils	
38ACR18G	3/8	18	9.5	1.22	Y		
12ACR21G	1/2	21	12.7	0.81	Y		
58ACR	5/8	20	15.9	0.91	N		
58ACR19G		19	15.9	1.02	Y		
34ACR	3/4	20	19.1	0.91	N		
34ACR19G		-	19.1	1.14	Y		
78ACR	7/8	20	22.2	0.91	N		



COPPER TUBE

Capillary Tube Kits

Airefrig Part Number	Inside Diameter Inches	Inside Diameter mm	Length mm	List Price Excl GST
SP1	0.026	0.66	3660	
SP2	0.031	0.80		
SP3	0.035	0.90		
SP4	0.043	1.10	4270	
SP45	0.047	1.20		
SP5	0.051	1.30		
SP6	0.055	1.40	3660	
SP65	0.059	1.50		
SP7	0.064	1.62	3050	
SP8	0.067	1.78	3660	
SP9	0.075	1.90	2750	
SP10	0.080	2.04	3050	
SP11	0.088	2.24	3660	



Capillary Tube

Airefrig Part Number	Inside Diameter Inches	Inside Diameter Mm	Length	List Price Excl GST
CAP066A30	.026	0.66	30 Mtr Roll	
CAP070A30	.028	0.70		
CAP080A30	.031	0.80		
CAP090A30	.035	0.90		
CAP100A30	.039	1.00		
CAP110A30	.043	1.10		
CAP120A30	.047	1.20		
CAP130A30	.051	1.30		
CAP137A30	.054	1.37		
CAP150A30	.059	1.50		
CAP162A30	.064	1.62		
CAP178A30	.070	1.78		P.O.A.
CAP182A30	.072	1.82		
CAP204A30	.080	2.04		
CAP224A30	.088	2.20		
CAP080A100	.031	0.80	100 Mtr Roll	P.O.A.
CAP090A100	.035	0.90		
CAP110A100	.039	1.00		P.O.A.
CAP120A100	.047	1.20		P.O.A.
CAP130A100	.051	1.30		P.O.A.
CAP162A100	.064	1.62		P.O.A.



COPPER FITTINGS

Copper Elbows 90° Female – Female (Long Radius)

Airefrig Part Number	Size Inches	R410A Compatible	List Price Excl GST
CE0690FFL410	3/8	Yes	
CE0890FFL410	1/2	Yes	
CE1090FFL410	5/8	Yes	
CE1290FFL410	3/4	Yes	
CE1490FFL410	7/8	Yes	
CE1690FFL	1	-	
CE1690FFL410	1	Yes	
CE1890FFL	1 1/8	-	
CE1890FFL410	1 1/8	Yes	
CE2090FFL	1 1/4	-	
CE2090FFL410	1 1/4	Yes	
CE2290FFL	1 3/8	-	
CE2290FFL410	1 3/8	Yes	
CE2490FFL	1 1/2	-	
CE2690FFL	1 5/8	-	
CE2690FFL410	1-5/8	Yes	
CE3290FFL	2	-	
CE3490FFL	2 1/8	-	
CE4090FFL	2 1/2	-	
CE4290FFL	2 5/8	-	
CE4890FFL	3	-	
CE5090FFL	3 1/8	-	
CE6490FFL	4	-	



COPPER FITTINGS

Copper Elbows 90° Female – Female (Short Radius)

Airefrig Part Number	Size Inches	R410A Compatible	List Price Excl GST
CE0490FFS410	1/4	Yes	
CE0590FFS410	5/16	Yes	
CE0890FFS410	1/2	Yes	
CE1090FFS410	5/8	Yes	
CE1290FFS	3/4	-	
CE1290FFS410	3/4	Yes	
CE1490FFS	7/8	-	
CE1490FFS410	7/8	Yes	
CE1690FFS	1	-	
CE1690FFS410	1	Yes	
CE1890FFS	1 1/8	-	
CE2090FFS	1 1/4	-	
CE2290FFS	1 3/8	-	
CE2490FFS	1 1/2	-	
CE2690FFS	1 5/8	-	
CE3290FFS	2	-	
CE3490FFS	2 1/8	-	
CE4290FFS	2 5/8	-	
CE4890FFS	3	-	
CE1208FFS	3/4 x 1/2 Reducing	-	



Copper Elbows 90° Female – Male (Long Radius)

Airefrig Part Number	Size Inches	R410A Compatible	List Price Excl GST
CE0690FML410	3/8	Yes	
CE0890FML410	1/2	Yes	
CE1090FML410	5/8	Yes	
CE1290FML	3/4	-	
CE1290FML410	3/4	Yes	
CE1490FML410	7/8	Yes	
CE1690FML410	1	Yes	
CE1890FML	1 1/8	-	
CE2090FML	1 1/4	-	
CE2290FML	1 3/8	-	
CE2690FML	1 5/8	-	
CE3490FML	2 1/8	-	
CE4290FML	2 5/8	-	



COPPER FITTINGS

Copper Elbows 45° Female – Female (Short Radius)

Airefrig Part Number	Size Inches	R410A Compatible	List Price Excl GST
CE1445FFS410	7/8	Yes	P.O.A.
CE1845FFS	1 1/8	-	
CE1845FFS410	1 1/8	Yes	
CE2245FFS	1 3/8	-	
CE2645FFS	1 5/8	-	
CE3245FFS	2	-	
CE3445FFS	2 1/8	-	
CE4245FFS	2 5/8	-	
CE4845FFS	3	-	



Copper Elbows 45° Female – Female (Long Radius)

Airefrig Part Number	Size Inches	R410A Compatible	List Price Excl GST
CE0645FFL410	3/8	Yes	
CE0845FFL410	1/2	Yes	
CE1045FFL410	5/8	Yes	
CE1245FFL410	3/4	Yes	
CE1245FFL	3/4	-	
CE1445FFL410	7/8	Yes	
CE1645FFL	1	-	
CE1645FFL410	1	Yes	
CE2045FFL	1 1/4	-	
CE2245FFL410	1 3/8	Yes	
CE2445FFL	1 1/2	-	
CE2645FFL410	1 5/8	Yes	
CE4245FFL	2 5/8	-	



Copper P Traps

Airefrig Part Number	Size Inches	R410A Compatible	List Price Excl GST
CPT10410	5/8	Yes	
CPT12410	3/4	Yes	
CPT14410	7/8	Yes	
CPT18410	1 1/8	Yes	
CPT22	1 3/8	-	
CPT26	1 5/8	-	
CPT34	2 1/8	-	



COPPER FITTINGS

Copper Unions - Female (ID) x Female (ID)

Airefrig Part Number	Size Inches	R410A Compatible	List Price Excl GST
CU0303FF410	3/16	Yes (& CO^2)	
CU0404FF410	1/4	Yes	
CU0505FF410	5/16	Yes (& CO^2)	
CU0606FF410	3/8	Yes	
CU0808FF410	1/2	Yes	
CU1010FF410	5/8	Yes	
CU1212FF410	3/4	Yes	
CU1414FF410	7/8	Yes	
CU1616FF410	1	Yes	
CU1818FF410	1 1/8	Yes	
CU2020FF	1 1/4	-	
CU2222FF	1 3/8	-	
CU2222FF410	1 3/8	Yes	
CU2424FF	1 1/2	-	
CU2626FF	1 5/8	-	
CU2626FF410	1 5/8	Yes	
CU2828FF	1 3/4	-	
CU3232FF	2	-	
CU3434FF	2 1/8	-	
CU4242FF	2 5/8	-	
CU4848FF	3	-	
CU5050FF	3 1/8	-	



Copper Reducing Unions - Female (ID) x Female (ID)

Airefrig Part Number	Size Inches	R410A Compatible	List Price Excl GST
CR0604FF410	3/8 ID x 1/4 ID	Yes	
CR0804FF410	1/2 ID x 1/4 ID	Yes	
CR0806FF410	1/2 ID x 3/8 ID	Yes	
CR1006FF410	5/8 ID x 3/8 ID	Yes	
CR1008FF410	5/8 ID x 1/2 ID	Yes	
CR1206FF410	3/4 ID x 3/8 ID	Yes	
CR1208FF410	3/4 ID x 1/2 ID	Yes	
CR1210FF410	3/4 ID x 5/8 ID	Yes	
CR1408FF	7/8 ID x 1/2 ID	-	
CR1408FF410	7/8 ID x 1/2 ID	Yes	
CR1410FF410	7/8 ID x 5/8 ID	Yes	
CR1412FF	7/8 ID x 3/4 ID	-	
CR1412FF410	7/8 ID x 3/4 ID	Yes	
CR1608FF410	1 ID x 1/2 ID	Yes	
CR1612FF410	1 ID x 3/4 ID	Yes	



COPPER FITTINGS

CONTINUED: Copper Reducing Unions - Female (ID) x Female (ID)

Airefrig Part Number	Size Inches	R410A Compatible	List Price Excl GST
CR1808FF	1 1/8 ID x 1/2 ID	-	
CR1810FF	1 1/8 ID x 5/8 ID	-	
CR1810FF410	1 1/8 ID x 5/8 ID	Yes	
CR1812FF	1 1/8 ID x 3/4 ID	-	
CR1812FF410	1 1/8 ID x 3/4 ID	Yes	
CR1814FF	1 1/8 ID x 7/8 ID	-	
CR1814FF410	1 1/8 ID x 7/8 ID	Yes	
CR1816FF	1 1/8 ID x 1 ID	-	
CR1816FF410	1 1/8 ID x 1 ID	Yes	
CR2016FF	1 1/4 ID x 1 ID	-	
CR2210FF	1 3/8 ID x 5/8 ID	-	
CR2212FF	1 3/8 ID x 3/4 ID	-	
CR2214FF	1 3/8 ID x 7/8 ID	-	
CR2218FF	1 3/8 ID x 1 1/8 ID	-	
CR2218FF410	1 3/8 ID x 1 1/8 ID	Yes	
CR2226FF	1 3/4 ID x 1 5/8 ID	-	
CR2416FF	1 1/2 ID x 1 ID	-	
CR2420FF	1 1/2 ID x 1 1/4 ID	-	
CR2614FF	1 5/8 ID x 7/8 ID	-	
CR2618FF	1 5/8 ID x 1 1/8 ID	-	
CR2622FF	1 5/8 ID x 1 3/8 ID	-	
CR2622FF410	1 5/8 ID x 1 3/8 ID	Yes	
CR2624FF	1 5/8 ID x 1 1/2 ID	-	
CR2818FF	1 3/4 ID x 1 1/8 ID	-	
CR3418FF	2 1/8 ID x 1 1/8 ID	-	
CR3422FF	2 1/8 ID x 1 3/8 ID	-	
CR3426FF	2 1/8 ID x 1 5/8 ID	-	
CR4218FF	2 5/8 ID x 1 1/8 ID	-	
CR4222FF	2 5/8 ID x 1 3/8 ID	-	
CR4226FF	2 5/8 ID x 1 5/8 ID	-	
CR4234FF	2 5/8 ID x 2 1/8 ID	-	
CR4834FF	3 ID x 2 1/8 ID	-	
CR4842FF	3 ID x 2 5/8 ID	-	
CR5034FF	3 1/8 ID x 2 1/8 ID	-	
CR6442FF	4 ID x 2 5/8 ID	-	
CR6448FF	4 ID x 3 ID	-	



COPPER FITTINGS

Copper Reducing Unions - Male (OD) x Female (ID)

Airefrig Part Number	Size Inches	R410A Compatible	List Price Excl GST
CR0806MF410	1/2 OD x 3/8 ID	Yes	
CR1006MF410	5/8 OD x 3/8 ID	Yes	
CR1008MF410	5/8 OD x 1/2 ID	Yes	
CR1208MF410	3/4 OD x 1/2 ID	Yes	
CR1210MF410	3/4 OD x 5/8 ID	Yes	
CR1408MF410	7/8 OD x 1/2 ID	Yes	
CR1410MF410	7/8 OD x 5/8 ID	Yes	
CR1412MF410	7/8 OD x 3/4 ID	Yes	
CR1808MF	1 1/8 OD x 1/2 ID	-	
CR1810MF	1 1/8 OD x 5/8 ID	-	
CR1810MF410	1 1/8 OD x 5/8 ID	Yes	
CR1812MF	1 1/8 OD x 3/4 ID	-	
CR1812MF410	1 1/8 OD x 3/4 ID	Yes	
CR1814MF	1 1/8 OD x 7/8 ID	-	
CR1814MF410	1 1/8 OD x 7/8 ID	Yes	
CR2210MF	1 3/8 OD x 5/8 ID	-	
CR2214MF	1 3/8 OD x 7/8 ID	-	
CR2214MF410	1 3/8 OD x 7/8 ID	Yes	
CR2218MF	1 3/8 OD x 1 1/8 ID	-	
CR2218MF410	1 3/8 OD x 1 1/8 ID	Yes	
CR2614MF	1 5/8 OD x 7/8 ID	-	
CR2618MF	1 5/8 OD x 1 1/8 ID	-	
CR2622MF	1 5/8 OD x 1 3/8 ID	-	
CR3418MF	2 1/8 OD x 1 1/8 ID	-	
CR3422MF	2 1/8 OD x 1 3/8 ID	-	
CR3426MF	2 1/8 OD x 1 5/8 ID	-	
CR4226MF	2 5/8 OD x 1 5/8 ID	-	
CR4234MF	2 5/8 OD x 2 1/8 ID	-	
CR4834MF	3 OD x 2 1/8 ID	-	
CR4842MF	3 OD x 2 5/8 ID	-	
CR5034MF	3 1/8 OD x 2 1/8 ID	-	
CR5048MF	3 1/8 OD x 3 ID	-	



COPPER FITTINGS

Copper Tees

Airefrig Part Number	Size Inches	R410A Compatible	List Price Excl GST
CT040404410	1/4	Yes	
CT050505410	5/16	Yes	
CT060606410	3/8	Yes	
CT080808410	1/2	Yes	
CT101010410	5/8	Yes	
CT121212410	3/4	Yes	
CT141414	7/8	-	
CT141414410	7/8	Yes	
CT161616410	1	Yes	
CT181818410	1 1/8	Yes	
CT202020	1 1/4	-	
CT222222	1 3/8	-	
CT242424	1 1/2	-	
CT262626	1 5/8	-	
CT323232	2	-	
CT343434	2 1/8	-	
CT424242	2 5/8	-	
CT484848	3	-	
CT646464	4	-	



Copper Reducing Tees - Line x Line x Branch

Airefrig Part Number	Size Inches (Line x Line x Branch)	R410A Compatible	List Price Excl GST
CT050504410	5/16 x 5/16 x 1/4	-	
CT060604410	3/8 x 3/8 x 1/4	Yes	
CT080804410	1/2 x 1/2 x 1/4	Yes	
CT080806410	1/2 x 1/2 x 3/8	Yes	
CT101006410	5/8 x 5/8 x 3/8	Yes	
CT101008410	5/8 x 5/8 x 1/2	Yes	
CT121206410	3/4 x 3/4 x 3/8	Yes	
CT121208410	3/4 x 3/4 x 1/2	Yes	
CT121210410	3/4 x 3/4 x 5/8	Yes	
CT161612410	1 x 1 x 3/4	Yes	



COPPER FITTINGS

Copper Stop Ends

Airefrig Part Number	Size Inches	R410A Compatible	List Price Excl GST
CSE06410	3/8	Yes (& CO^2)	
CSE08410	1/2	Yes (& CO^2)	
CSE10410	5/8	Yes (& CO^2)	
CSE12410	3/4	Yes	
CSE14410	7/8	Yes	
CSE16410	1	Yes	
CSE18410	1 1/8	Yes	
CSE20410	1 1/4	Yes	
CSE22410	1 3/8	Yes	
CSE24410	1 1/2	Yes	
CSE26410	1 5/8	Yes	
CSE34	2 1/8	-	
CSE42	2 5/8	-	
CSE48	3	-	
CSE56	3 1/2	-	
CSE64	4	-	
CSE80	5	-	
CSE96	6	-	



Copper Flare Bonnets

Airefrig Part Number	Size Inches	R410A Compatible	List Price Excl GST
CFB04410	1/4	Yes	
CFB05410	5/16	Yes	
CFB06410	3/8	Yes	
CFB08410	1/2	Yes	
CFB10410	5/8	Yes	
CFB12410	3/4	Yes	



Copper Flare Washers

Airefrig Part Number	Size Inches	R410A Compatible	List Price Excl GST
CFW04	1/4	n/a	
CFW05410	5/16	n/a	
CFW06	3/8	n/a	
CFW08	1/2	n/a	
CFW10	5/8	n/a	
CFW12	3/4	n/a	



COPPER FITTINGS

Copper Y Pieces

Airefrig Part Number	Size Inches	R410A Compatible	List Price Excl GST
CYP080606410	1/2 x 3/8 x 3/8	-	
CYP080808410	1/2 x 1/2 x 1/2	-	
CYP100808410	5/8 x 1/2 x 1/2	Yes	
CYP101010410	5/8 x 5/8 x 5/8	Yes	
CYP120808	3/4 x 1/2 x1/2	-	
CYP121010	3/4 x 5/8 x 5/8	-	
CYP141414	7/8 x 7/8 x 7/8	-	
CYP161212	1 x 3/4 x 3/4	-	
CYP181414	1 1/8 x 7/8 x 7/8	-	
CYP181818	1 1/8 x 1 1/8 x 1 1/8	-	P.O.A.



Copper Pipe Clips

Airefrig Part Number	Size Inches	R410A Compatible	List Price Excl GST
CPC04	1/4	n/a	
CPC05	5/16	n/a	
CPC06	3/8	n/a	
CPC08	1/2	n/a	
CPC10	5/8	n/a	
CPC12	3/4	n/a	
CPC14	7/8	n/a	
CPC16	1	n/a	
CPC18	1 1/8	n/a	
CPC20	1 1/4	n/a	
CPC22	1 3/8	n/a	
CPC24	1 1/2	n/a	
CPC26	1 5/8	n/a	
CPC28	1 3/4	n/a	
CPC32	2	n/a	
CPC34	2 1/8	n/a	
CPC40	2 1/2	n/a	



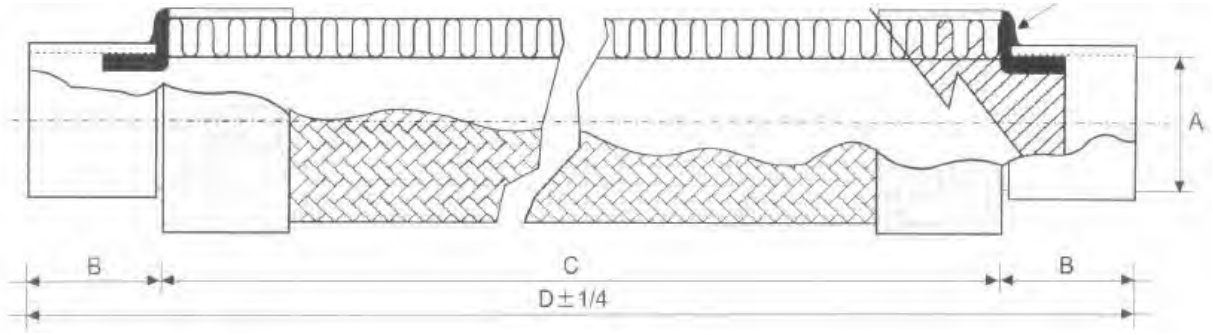
VIBRATION ELIMINATOR

Enthalpy Vibration Eliminators

Airefrig Part Number	Connection Size (Inches)	A (I.D.) (Inches)	Dimensions (mm)			Max. working pressure (PSI)	List Price Excl GST
			B	C	D		
NF1	3/8	3/8	20	180	220	500	
NF2	1/2	1/2	22	185	230	500	
NF3	5/8	5/8	24	205	250	500	
NF4	3/4	3/4	32	205	270	500	
NF5	7/8	7/8	37	230	305	500	
NF6	1 1/8	1 1/8	45	240	330	500	
NF7	1 3/8	1 3/8	51	290	395	500	
NF8	1 5/8	1 5/8	57	216	430	500	
NF9	2 1/8	2 1/8	70	385	525	390	
NF10	2 5/8	2 5/8	79	460	620	340	
NF11	3 1/8	3 1/8	88	510	685	300	
NF12	3 5/8	3 5/8	105	610	820	175*	
NF13	4 1/8	4 1/8	113	610	835	175*	



*Approved for low side (suction) use only.

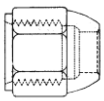


Packless Vibration Eliminators

Airefrig Part Number	Connection Size (Inches)	A (I.D.) (Inches)	Dimensions (mm)			Max. working pressure (PSI)	List Price Excl GST
			B	C	D		
VAF3	3/8	3/8	15	180	210	500	
VAF9	1 1/8	1 1/8	35	260	330	500	
VAF11	1 5/8	1 5/8	60	310	430	400	
VAF12	2 1/8	2 1/8	70	370	510	390	

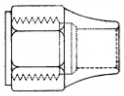
BRASS FITTINGS (R410a)

R410a Short Barrel Flare Nuts

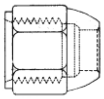
Airefrig Part Number	Size	List Price Excl GST		Airefrig Part Number	Size	List Price Excl GST
5010404410A	1/4			5010808410A	1/2	
5010504410A	5/16fl x 1/4 tube			5011010410A	5/8	
5010606410A	3/8			5011212410A	3/4	

BRASS FITTINGS

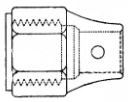
Flare Nuts – Plain

Airefrig Part Number	Size	List Price Excl GST		Airefrig Part Number	Size	List Price Excl GST
H800	1/4			H804	1/2	
H801	5/16			H805	5/8	
H802	3/8			H806	3/4	

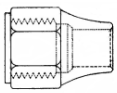
Flare Nuts – Short Barrel

Airefrig Part Number	Size	List Price Excl GST		Airefrig Part Number	Size	List Price Excl GST
5010404410A	1/4			5010808410A	1/2	
H851	5/16			H855	5/8	
H852	3/8			H856	3/4	

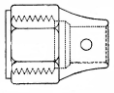
Flare Nuts – Frost Proof

Airefrig Part Number	Size	List Price Excl GST		Airefrig Part Number	Size	List Price Excl GST
H900	1/4			H905	5/8	
H902	3/8			H906	3/4	
H904	1/2					

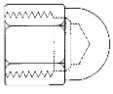
Flare Nuts – Plain Reducing

Airefrig Part Number	Size	List Price Excl GST		Airefrig Part Number	Size	List Price Excl GST
H1001	3/8 x 1/4			H1003	5/8 x 1/2	
H1002	1/2 x 3/8					

Flare Nuts - Frost Proof Reducing

Airefrig Part Number	Size	List Price Excl GST		Airefrig Part Number	Size	List Price Excl GST
H1101	3/8 x 1/4			H1103	5/8 x 1/2	
H1102	1/2 x 3/8			H1104	3/4 x 5/8	

Seal Caps – Flare

Airefrig Part Number	Size	List Price Excl GST		Airefrig Part Number	Size	List Price Excl GST
H2900	1/4			H2903	5/8	
H2901	3/8			H2904	3/4	
H2902	1/2			AVC4	1/4 Flare Cap	(10 pack)

BRASS FITTINGS

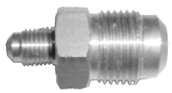
Swivel Connectors

Airefrig Part Number	Size	List Price Excl GST		Airefrig Part Number	Size	List Price Excl GST
H1180	1/4			H1183	5/8	
H1181	3/8			H1184	3/4	
H1182	1/2					

Unions - Double Flare

Airefrig Part Number	Size	List Price Excl GST		Airefrig Part Number	Size	List Price Excl GST
H1200	1/4			H1204	1/2	
H1201	5/16			H1205	5/8	
H1202	3/8			H1206	3/4	

Unions – Double Flare – Reducing

Airefrig Part Number	Size	List Price Excl GST		Airefrig Part Number	Size	List Price Excl GST
H1301	3/8 x 1/4			H1305	5/8 x 3/8	
H1302	1/2 x 1/4			H1306	5/8 x 1/2	
H1303	1/2 x 3/8			H1307	3/4 x 1/2	
H1304	5/8 x 1/4			H1308	3/4 x 5/8	P.O.A.

Union – Male Flare to Female Flare

Airefrig Part Number	Size	List Price Excl GST		Airefrig Part Number	Size	List Price Excl GST
H1619	1/4 x 1/4			H1605	1/2 x 3/8	
H1604	1/4 x 3/8			H1624	1/2 x 1/2	
H1607	1/4 x 1/2			H1612	1/2 x 5/8	
H1610	1/4 x 5/8			H1617	1/2 x 3/4	
H1600	3/8 x 1/4			H1615	5/8 x 3/8	
H1608	3/8 x 1/2			H1609	5/8 x 1/2	
H1611	3/8 x 5/8			H1613	3/4 x 5/8	
H1601	1/2 x 1/4					

Unions – Male Flare to Male BSP Taper

Airefrig Part Number	Size	List Price Excl GST		Airefrig Part Number	Size	List Price Excl GST
H1500	1/4 X 1/8			H1511	1/2 x 1/4	
H1500A	1/4 X 1/8 LT			H1512	1/2 x 3/8	
H1501	1/4 x 1/4			H1513	1/2 x 1/2	
H1502	1/4 x 3/8			H1514	1/2 x 3/4	
H1503	1/4 x 1/2			H1516	5/8 x 3/8	
H1506	3/8 x 1/8			H1517	5/8 x 1/2	
H1507	3/8 x 1/4			H1519	3/4 x 1/2	
H1508	3/8 x 3/8			H1520	3/4 x 3/4	
H1509	3/8 x 1/2			H1531	3/4 x 1	

BRASS FITTINGS

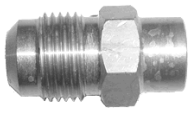
Unions - Male Flare to Female BSP

Airefrig Part Number	Size	List Price Excl GST		Airefrig Part Number	Size	List Price Excl GST
H1400	1/4 x 1/8			H1419	1/2 x 1/4	
H1401	1/4 x 1/4			H1412	1/2 x 3/8	P.O.A.
H1402	1/4 x 3/8			H1415	1/2 x 1/2	
H1406	3/8 x 1/4			H1411	5/8 x 1/2	
H1407	3/8 x 3/8	P.O.A.		H1409	5/8 x 3/4	P.O.A.
H1408	3/8 x 1/2					

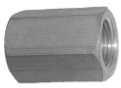
Unions - Male Flare to Female FNPT

Airefrig Part Number	Size	List Price Excl GST		Airefrig Part Number	Size	List Price Excl GST
H1400NPT	1/4 x 1/8			2070604	3/8 x 1/4	

Union - Male Flare to Solder

Airefrig Part Number	Size	List Price Excl GST		Airefrig Part Number	Size	List Price Excl GST
H1700	1/4 x 1/4			H1704	1/2 x 1/2	
H1701	1/4 x 3/8			H1705	1/2 x 5/8	
H1702	3/8 x 3/8			H1714	5/8 x 1/2	
H1703	3/8 x 1/2			H1706	5/8 x 5/8	
H1713	3/8 x 3/4			H1707	5/8 x 3/4	
H1715	1/2 x 3/8			H1708	3/4 x 3/4	

Unions - Female Flare to Female Flare

Airefrig Part Number	Size	List Price Excl GST		Airefrig Part Number	Size	List Price Excl GST
H1762	3/8 x 3/8			H1761	1/2 x 1/2	

Seal Plugs – Flare

Airefrig Part Number	Size	List Price Excl GST		Airefrig Part Number	Size	List Price Excl GST
H2800	1/4			H2803	5/8	
H2801	3/8			H2804	3/4	
H2802	1/2					

Pipe Plugs – BSP

Airefrig Part Number	Size	List Price Excl GST		Airefrig Part Number	Size	List Price Excl GST
H3100	1/8			H3103	1/2	
H3101	1/4			H3104	3/4	
H3102	3/8					

Bush – Male BSP to Female BSP

Airefrig Part Number	Size	List Price Excl GST		Airefrig Part Number	Size	List Price Excl GST
H1751	1/4 x 1/8			H1754	1/2 x 3/8	
H1756	1/2 x 1/8			H17604	3/4 x 3/8	
H1757	1/2 x 1/4			H1750	3/4 x 1/2	

BRASS FITTINGS

Union – Male Flare to Male NPT

Airefrig Part Number	Size	List Price Excl GST		Airefrig Part Number	Size	List Price Excl GST
H150012	1/4 x 1/8			H150812	3/8 x 3/8	
H150212	1/4 x 3/8					

Elbow – Double Male Flare

Airefrig Part Number	Size	List Price Excl GST		Airefrig Part Number	Size	List Price Excl GST
H1800	1/4			H1804	5/8	
H1802	3/8			H1805	3/4	
H1803	1/2					

Elbow – Double Male Flare – Reducing

Airefrig Part Number	Size	List Price Excl GST		Airefrig Part Number	Size	List Price Excl GST
H1900	3/8 x 1/4			H1906	5/8 x 3/8	
H1901	1/2 x 1/4			H1904	3/4 x 5/8	
H1902	1/2 x 3/8					

Elbow – Male Flare to Female Flare

Airefrig Part Number	Size	List Price Excl GST		Airefrig Part Number	Size	List Price Excl GST
H2120	1/4 x 1/4			H2121	1/2 x 1/2	P.O.A.
H2124	3/8 x 3/8					

Elbow – Male Flare to Male BSP

Airefrig Part Number	Size	List Price Excl GST		Airefrig Part Number	Size	List Price Excl GST
H2000	1/4 x 1/8			H2008	3/8 x 1/2	
H2001	1/4 x 1/4			H2010	1/2 x 3/8	P.O.A.
H2002	1/4 x 3/8			H2011	1/2 x 1/2	
H2006	3/8 x 1/4			H2012	5/8 x 1/2	
H2007	3/8 x 3/8			H2015	3/4 x 3/4	

BRASS FITTINGS

Tee – Male Flare

Airefrig Part Number	Size	List Price Excl GST		Airefrig Part Number	Size	List Price Excl GST
H2200	1/4			H2204	1/2	
H2201	5/16			H2205	5/8	
H2202	3/8			H2206	3/4	

Tee – Male Flare x Male Flare x Male BSP

Airefrig Part Number	Size	List Price Excl GST		Airefrig Part Number	Size	List Price Excl GST
H2700	1/4 x 1/4 x 1/8			H2701	1/4 x 1/4 x 1/4	

Tee – Male Flare x Male Flare x Female Flare

Airefrig Part Number	Size	List Price Excl GST		Airefrig Part Number	Size	List Price Excl GST
H2440	1/4 x 1/4 x 1/4					

Cylinder Adaptors & Fittings

Airefrig Part Number	Size	List Price Excl GST		Airefrig Part Number	Size	List Price Excl GST
40618	Cyl Adap Gasket 3/4			200812	3/4 FBSP x 1/2 MF	
AD41	3/4 FBSP x 1/4 MF			AD81	3/4 FBSP x 1/2ACME	
H1461	3/4 FBSP x 3/8 MF			AD71	3/4 FBSP x 1/2UNF	

Acme Fittings

Airefrig Part Number	Size	List Price Ex GST		Airefrig Part Number	Size	List Price Ex GST
H15422	1/4 FF x 1/2 M/ACME			AD81	3/4 FBSP x 1/2ACME	
H15435	1/4 MF x 1/2 F/ACME			2720804	1/4 MF x 1/2 M/ACME	P.O.A.

Union – MBSP to MBSP

Airefrig Part Number	Size	List Price Excl GST		Airefrig Part Number	Size	List Price Excl GST
H1734	1/8 x 1/8			H1738	1/4 x 1/8	
H1735	1/4 x 1/4			H17413	3/8 x 1/4	
H1731	3/8 x 3/8			H1740-3	1/2 x 3/8	
H1732	1/2 x 1/2			H1737	1/2 x 3/4	
H1736	3/4 x 3/4					

OIL SEPARATORS

Airefrig Part Number	Connections (solder)	O/A Height	Diameter	Refrig Capacity (R404A)		List Price Excl GST
				-40 C SST	+4 C SST	
NS1004S	1/2”	197 mm	102 mm	2.6 Kw	4.4 Kw	
NS1004	1/2”	260 mm		5.7 Kw	7.4 Kw	
NS1004L	1/2”	362 mm		7.0 Kw	13.6 Kw	
NS1005	5/8”	362 mm		15.2 Kw	19.7 Kw	
NS1007	7/8”	450 mm		22.8 Kw	29.5 Kw	
NS1009	1 1/8”	535 mm		30.4 Kw	39.3 Kw	
NS1011	1 3/8”	540 mm		38.0 Kw	49.2 Kw	
866000	Mounting bracket for condensing unit bases to suit pressure vessels					





866000

Oil separators listed have internal oil floats and need to be pre-charged with 355mls of oil prior to fitting.
Oil return outlet connection: 1/4” male flare fitting. (NOTE: Larger oil separators available on request)

LIQUID RECEIVERS

Airefrig Part Number	Connections Inches		Dimensions		Max holding Capacity @ 90% R22	List Price Excl GST
	Inlet	Outlet	Diameter	Height		
3310064014	1/4” ODS	**Rotalock-Top	100 mm	200 mm	1.20 kg	
3310064724	3/8” ODS	**Rotalock-Side	120 mm	249 mm	2.20 kg	
RTV512VTR	3/8” ODS	**Rotalock-Top	125 mm	305 mm	3.0 kg	
IVR104	1/2” Flare	1/2” Flare	152 mm	349 mm	4.30 Kg	
IVR105	5/8” Flare	5/8” Flare	178 mm	432 mm	6.00 Kg	
1300134B	1/2” ODS	* Rotalock fit.	155 mm	346 mm	4.90 Kg	
1320315A	5/8” ODS	* Rotalock fit.	220 mm	397 mm	9.20 Kg	
1320620A	5/8” ODS	* Rotalock fit.	220 mm	483 mm	13.00 Kg	

3310064014



3310064724



IVR104
& IVR105

* 1"-14UNF Rotalock adaptor only – service valve not included.
* *3/4"-16UNF Rotalock adaptor only – service valve not included.
NOTE: Larger liquid receivers available on request.

SUCTION ACCUMULATORS

Airefrig Part Number	Connections (solder)	Dimensions		Evap Temp °C	Capacity KW R22 & R404A		Max Holding Capacity R22/R404A	List Price Excl GST
		Diameter	Overall Height		KW @ 7kpa	Min. KW		
PA3060104	1/2”	76 mm	263 mm	+4.4	7.03	1.23	0.99Kg	
				-29	4.68	0.74		
PA406595C	5/8”	102 mm	244 mm	+4.4	10.4	1.23	1.70 Kg	
				-29	6.96	0.74		
PA5083116C	3/4”	127 mm	288 mm	+4.4	13.5	2.0	3.10 Kg	
				-29	9.0	1.23		
PA5083157C	7/8”	127 mm	390 mm	+4.4	21.8	1.9	4.40 Kg	
				-29	14.5	1.9		
PA6125189C	1 1/8”	152 mm	457 mm	+4.4	30.9	10.6	7.40 Kg	
				-29	15.1	2.81		
1010853P	1 1/8”	168 mm	400 mm				8.00 Kg	
PA61252211C	1 3/8”	152 mm	579 mm	+4.4	38.7	10.6	9.90 Kg	
				-29	19.0	2.81		
1010854P	1 3/8”	168 mm	535 mm				10.00 Kg	
PA61252213C	1 5/8”	152 mm	579 mm	+4.4	tba	10.6	9.90 Kg	
				-29	tba	2.81		



NOTE: Larger suction accumulators available on request.

PVC PIPE & FITTINGS

PVC Pressure Pipe

Airefrig Part Number	Description	Size mm	UOM	List Price Ex GST
15XCE	PVC Pipe	15	3.9 Metres	
20XCE		20		
25XCE		25		
1100184	PVC Pipe	15	6 Metres	P.O.A.
1100249		20		P.O.A.
1100485		25		P.O.A.



PVC Fittings

1165001	Tee Piece	15	Ea	
1165027		20	Ea	
1165043		25	Ea	



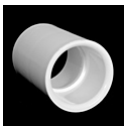
1162540	Elbow 90 Deg	15	Ea	
1162582		20	Ea	
1162647		25	Ea	



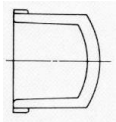
1162281	Elbow 45 Deg	15	Ea	
1162304		20	Ea	
1162320		25	Ea	



1161722	Union	15	Ea	
1161748		20	Ea	
1161764		25	Ea	



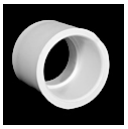
1161463	Cap	15	Ea	P.O.A.
1161489		20	Ea	
1161502		25	Ea	



2109020015	Reducer	15 - 20	Ea	
2109025020		20 - 25	Ea	
1162079		20 – 40	Ea	P.O.A.

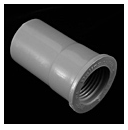


2110020015	Reducing Bush	15 -20	Ea	
2110025015		15 - 25	Ea	
2110025020		20 - 25	Ea	



1164649	Socket	20 x 3/4” F BSP	Ea	
1164704		25 x 1” F BSP	Ea	
1164039		15 x 1/2" M BSP	Ea	P.O.A.
1164063		20 x 3/4" M BSP	Ea	
1164102		25 x 1” M BSP	Ea	
2111015		15 x F 1/2" NPT - Grey	Ea	
2111025		25 x F 1” NPT - Grey	Ea	P.O.A.





PVC PIPE & FITTINGS

Saddles

Airefrig Part Number	Description	Size mm	UOM	List Price Ex GST
1991028	Saddle	15	Ea	
1991044		20	Ea	
1991060		25	Ea	



Barrel Union

Airefrig Part Number	Description	Size mm	UOM	List Price Ex GST
1167663	Barrel Union	20	Ea	
1167671		25	Ea	



P Trap

Airefrig Part Number	Description	Size mm	UOM	List Price Ex GST
EZ113	P Trap	20	Ea	
EZT406	Flexible brush for EZ113 P Trap		Ea	



40mm Drain Pipe & Fittings

Airefrig Part Number	Description	Size mm	UOM	List Price Ex GST
1253587	Junction 85 Deg	40	Ea	
1253561	Junction 45 Deg		Ea	
1252387	Bend 45 Deg		Ea	



Solvents

Airefrig Part Number	Description	Size mm	UOM	List Price Ex GST
1990129	Solvent	500 ML	Ea	
1990323	Primer		Ea	



Clear Vinyl Tube

Airefrig Part Number	Description	Size mm	UOM	List Price Ex GST
PVC3MMROLL	Clear Vinyl Tube	3 ID	30 Metre Roll	P.O.A.
PVC4MMROLL		4 ID		P.O.A.
3220207		6 ID	Metre	
3220257		8 ID		
3220304		10 ID		



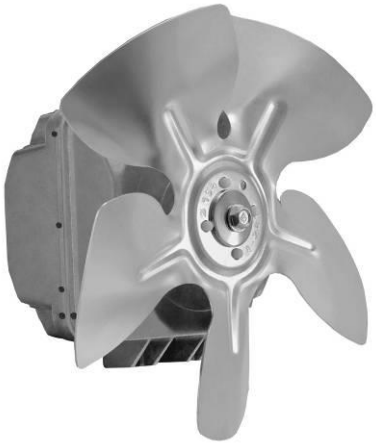
ebm-papst FAN MOTORS

ebm-papst is the world's leading manufacturer of fans and motors and is a pioneer and pacesetter for ultra-efficient EC technology.

ACi4420HHR



- Drop in replacement for 120mm square shaded pole compact fans
- 13% more airflow than existing models
- 77% less input power than existing models
- Double the life time in comparison to existing AC models



iQ3612 / iQ3620

- Drop in replacement for typical refrigeration shaded pole motors
- Input power savings of 65-90% across the range
- High level of protection against moisture entry
- iQ3612 and iQ3620 replace existing 5W – 25W motors

Energy Saving Motors (ESM)



- Diameters 200mm, 230mm and 250mm readily available
- 2-speed programmable or reverse on demand models
- Hand-held programming device available



EC Axial Fans

- Fixed 2-speed or 0-10V speed control versions available.
- High efficiency motors with axial impellers in standard diameters (300mm, 350mm, 500mm, 630mm, 800mm)
- Simple control systems available for 0-10V speed control
  Potentiometer
  Temperature sensors
  Head pressure sensors
- Match existing guard grille and mounting plate dimension

ebm-papst FAN MOTORS

AC Voltage Compact Axial Motor Assembly

Airefrig Part Number	Case Style	A	B	C	D	Air Flow	Volts	Air Vol m^3/hr	RPM	Input watts	dB(A) @ 1m	Min Air Temp	Max Air Temp	List Price Excl. GST
8556N	Y	80	38	72	3	V	230	50	2800	12.0	31	-40°C	+90°C	
3656	Y	92	38	83	4	V	230	75	2700	12.0	37	-40°C	+75°C	
3956	Y	92	25	83	4	V	230	59	2650	11.0	35	-40°C	+80°C	
ACI4420HHR	Y	119	38	105	6	V	195 to 265	180	3350	4.4	42	-20°C	+75°C	
4606Z855	Y	119	38	105	6	V	115	180	3100	18.0	45	-40°C	+85°C	P.O.A.
4656N	Y	119	38	105	6	A	230	160	2650	19.0	47	-40°C	+85°C	P.O.A.
4656Z	Y	119	38	105	6	V	230	160	2650	19.0	40	-40°C	+75°C	P.O.A.
9956	Y	119	25	105	4	V	230	117	2450	14.0	37	-40°C	+70°C	
5958	Y	127	38	113	7	V	230	180	2750	18.0	44	-30°C	+60°C	
W2S130AA0363	X	150	55	162	6	V	230	325	2800	45	49	-25°C	+50°C	
W2S142BB0101	Z	150	38	162	4	V	230	330	2800	25	52	-25°C	+55°C	P.O.A.
W2E200HH3801	Y	225	80	240	5	V	230	925	2550	64	59	-25°C	+60°C	P.O.A.

DC Voltage Compact Axial Motor Assembly

Airefrig Part Number	Case Style	A	B	C	D	Air Flow	Volts	Air Vol m^3/hr	RPM	Input watts	dB(A) @ 1m	Min Air Temp	Max Air Temp	List Price Excl GST
8314	Y	80	32	72	4	V	24 DC	54	3300	2.7	36	-20°C	+75°C	
4314	Y	119	32	105	4	V	24 DC	170	2800	5.0	45	-20°C	+75°C	
4184NX	Y	119	38	105	4	V	24 DC	180	3200	4.5	49	-30°C	+75°C	
6224N	Z	173	51	162	4	V	24 DC	410	3400	18.0	55	-20°C	+72°C	P.O.A.
7214N	X	150	55	162	4	V	24 DC	360	3050	12.0	53	-25°C	+72°C	P.O.A.

Compact Axial Motor Assembly Accessories

Airefrig Part Number	Description	List Price Excl GST
LZ126	1000mm fly lead to suit ACi4420HHR, 4650Z, 4656N, 4656Z, 5958, 9956 compact fans	
LZ232	92 x 92mm plastic finger guard to suit series 3000 compact fans	P.O.A.
LZ305	119 x 119mm plastic finger guard to suit series 4000 and 9000 compact fans	
LZ3014	119 x 119mm steel finger guard to suit series 4000 and 9000 compact fans	P.O.A.



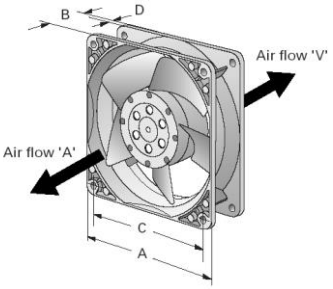
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ebm-papst FAN MOTORS

iQ motors 230V – High Efficiency

Airefrig Part Number	Watt Output	Maximum Size Fan Blade	Universal Mounts	Rotation	List Price Excl. GST
IQ3612	5-16	Ø 254mm x 28°	Bolts 2 @ 25mm Crs Bolts 2 @ 18mm Crs & Rear Threaded Holes 4 Holes @ 67.0 pcd 3 Holes @ 71.4 pcd	ACW	
IQ3620	16-34	Ø 300mm x 22°		ACW	
Q motors 230V					
M4Q045BD0138 *	5	Ø 200mm x 28°		ACW	
M4Q045CA0375B01	10	Ø 254mm x 22°		ACW	
M4Q045CF0175B01	16	Ø 254mm x 28°		ACW	
M4Q045DA0575B01	23	Ø 300mm x 22°		ACW	
M4Q045EF0175B01	34	Ø 300mm x 34°		ACW	



M4Q045CA0172LYA	7	L/Temp c/w short lead & 3 pin plug - supermarkets	ACW	
M4Q045CA0172XX	7	L/Temp - moisture resist, long lead - supermarkets	ACW	
M4Q045EA1115	24	Twin Hub Mount Shafts & 4 Mount Brackets	ACW	



M4Q045EA1115

* Note: not available with Bolts 2 @ 18mm Crs.

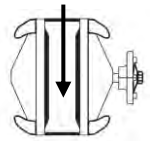
Fan Blades - Pressed Aluminium 4 Point Hub

Airefrig Part Number	List Price Excl.GST
"V flow" Fan Blade	
7380123634	P.O.A.
7380223634	
7380323634	
7380423634	
7380523634	
7380623634	
7380723634	
7380823634	
7380923634	
7381023634	
7381123634	
7381223634	
7381323634	
7381423634	
7381523634	
7381623634	
7381723634	
7381823634	

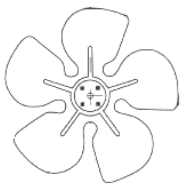
Airefrig Part Number	List Price Excl.GST
"A flow" Fan Blade	
7376123634	P.O.A.
7376223634	
7376323634	
7376423634	
7376523634	
7376623634	
7376723634	
7376823634	
7376923634	
7377023634	
7377123634	
7377223634	
7377323634	
7377423634	
7377523634	
7377623634	
7377723634	
7377823634	

Fan Blade Info		Suit Q & IQ Fan Motors							
Dia. (mm)	Pitch	IQ3612 5-16 watt	IQ3620 16-34 watt	5 watt	7 watt	10 watt	16 watt	23 watt	34 watt
154	22°	✓		✓					
154	28°	✓		✓					
154	34°	✓		✓					
172	22°	✓		✓					
172	28°	✓		✓					
172	34°	✓		✓					
200	22°	✓		✓	✓				
200	28°	✓			✓				
200	34°	✓			✓				
230	22°	✓			✓	✓			
230	28°	✓				✓			
230	34°	✓				✓			
254	22°	✓	✓			✓	✓		
254	28°	✓	✓				✓		
254	34°		✓						
300	22°		✓					✓	✓
300	28°							✓	✓
300	34°								✓

ACW Motor Direction

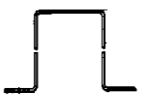


V ← Airflow → A



Mounting Brackets & Wall Rings

Airefrig Part Number	Description		List Price Excl. GST
7188124053	Mount Bracket	154mm Max Diameter Fan Blade	
7188224053		172mm Max Diameter Fan Blade	
7188324053		200mm Max Diameter Fan Blade	P.O.A.
7188424053		254mm Max Diameter Fan Blade	P.O.A.
5116624037	Wall ring to suit 'Q' Motors	'V' Flow Ø 300mm 22 Deg (Max fan)	P.O.A.
5117424037		'A' Flow Ø 230mm 28 Deg (Max fan)	
5254224037		'V' Flow Ø 154mm 34 Deg (Max fan)	P.O.A.
5254424037		'V' Flow Ø 200mm 34 Deg (Max fan)	
5254624037		'V' Flow Ø 254mm 28 Deg (Max fan)	





ebm-papst FAN MOTORS

Energy Saving Motor (ESM) Axial Fans

Airefrig Part Number	*Notes	Dia. mm	Air Flow	Volts V	Phase	Speed Step	RPM	Air Volume m³/hr	Input Watts	Amps	List Price Excl GST
W1G200EC9110	a & b	200	V	230	1	High	2100	750	31	0.24	
						Low	1500	525	16	0.13	
W1G200EC9145	a	200	V	230	1	High	2100	750	31	0.24	
						Low	1500	525	16	0.13	
W1G200EC9107	c	200	V/A	230	1	Forward	2200	760	30	0.24	
						Reverse	2200	330	23	0.17	
W1G230EB9105	b, c & d	230	V/A	230	1	Forward	1600	1030	30	0.24	
						Reverse	1300	340	11	0.09	
W1G250BB1701	b	230	V	230	1	High	1700	1065	32	0.24	P.O.A.
						Low	1200	765	17	0.14	

***Notes:**

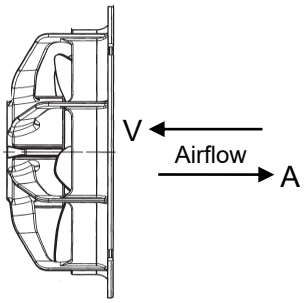
a) High and low speeds are programmable using CBC000AF0801 programming unit
b) Fan ring is truncated
c) Fan can operate in forward and reverse direction at single speed
d) Lead not included



Truncated fan ring



Standard fan ring



ESM Fan Programmer

Airefrig Part Number	Description	List Price Ex GST
CBC000AF0801	Handheld Programmer for ESM 2 Speed Fans	

Handheld Programming Unit

For energy-saving motors (ESM)

- Makes quick work of programming the two ESM selectable operating speeds.
- Eliminates the need for a personal computer, software, power adapter and 2nd cable.
- User Friendly navigation menu.
- Good for production line or field service use.
- Automatic shut-off function for an extended battery life.
- Mini-USB connector for uploading software upgrades.
- Batteries, programming cable and operating manual included.



ebm-papst FAN MOTORS

Axial Fan Motor Assembly

Airefrig Part Number	Dia. mm	Air Flow	Volts	Phase	Air Volume m³/hr	RPM	Input Watts	Amps	Cap µ /F	List Price Excl GST
A2E200AI3801	200	A	230	1	915	2600	64	0.30	1.5	
A2E200AK3801	200	V	230	1	1060	2670	60	0.30	1.5	P.O.A.
A2E250AE6502	250	A	230	1	1610	2550	115	0.51	4.0	
A2E250AL0601	250	V	230	1	1820	2450	115	0.51	3.0	
A4S250AH0201	250	V	230	1	1000	1390	69	0.53	-	
A4E300AB0322	300	V	230	1	1510	1250	75	0.32	1.5	
A4E300AA0341	300	V	230	1	1690	1350	95	0.44	2.0	
A4E350AA1032	350	V	230	1	2940	1400	130	0.55	4.0	
A6E450AN0811	450	V	230	1	4415	900	145	0.64	4.0	
A6E450AQ0511	450	V	230	1	4400	830	170	0.78	4.0	



NOTE: More options available on request

Grille Axial Fan Assembly

Airefrig Part Number	Dia. mm	Air Flow	Volts	Phase	Air Volume m³/hr	RPM	Input Watts	Amps	Cap µ/F	List Price Excl GST
S4E300AB0343	300	A	230	1	1610	1250	75	0.32	1.5	
S4E300AR2638	300	V	230	1	1935	1380	70	0.32	2.0	
S3G300AK1358 *	300	V	200-240	1	1975	1360	60	0.53	-	P.O.A.
S4E300AS7244	300	V	230	1	1800	1320	72	0.32	2.0	
S4E350AN0248	350	V	230	1	3305	1340	165	0.73	4.0	
S4E350AN0260	350	V	230	1	3305	1340	165	0.73	4.0	
S4E400AP0244	400	V	230	1	4235	1430	160	0.73	6.0	
S4E450AU0337	450	V	230	1	5700	1300	350	1.55	8.0	
S3G500AM5623 *	500	V	200-277	1	9055	1420	750	3.40	-	
S4E500AM0301	500	V	230	1	8950	1300	680	3.00	12.0	
S6E630AN0101	630	V	230	1	11020	860	600	2.62	14.0	

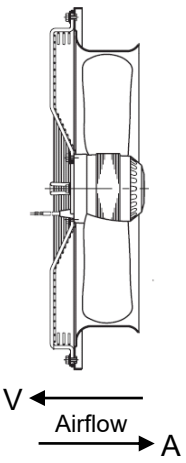


NOTE: More options available on request

* ebm-papst HyBlade axial fan with speed controllable, high efficiency EC motor

Axial Fans - Round and Square Plate

Airefrig Part Number	Dia. mm	Air Flow	Volts	Phase	Air Volume m³/hr	Speed (RPM)	Input Watts	Amps	Cap µ/F	List Price Excl GST
Round Plate										
W2E200CI3801	200	A	230	1	915	2600	64	0.30	1.5	P.O.A.
W2E200CH3801	200	V	230	1	1060	2670	60	0.30	1.5	P.O.A.
W2E250CE6502	250	A	230	1	1610	2550	115	0.51	4.0	P.O.A.
W2E250CL0601	250	V	230	1	1820	2450	115	0.51	3.0	
W2E300CC4702	300	A	230	1	2440	2650	140	0.62	5.0	
W4E300CB0323	300	A	230	1	1510	1250	75	0.32	1.5	P.O.A.
Square Plate										
W2E200DI3801	200	A	230	1	915	2600	64	0.30	1.5	P.O.A.
W2E200DH3801	200	V	230	1	1060	2670	60	0.30	1.5	P.O.A.
W2E250DE6502	250	A	230	1	1610	2550	115	0.51	4.0	P.O.A.
W2E300DC4702	300	A	230	1	2440	2650	140	0.62	5.0	P.O.A.
W4E300CB0323	300	A	230	1	1510	1250	75	0.32	1.5	P.O.A.

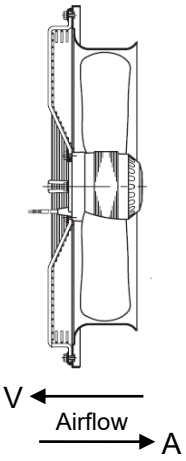


NOTE: See next page for more square plate options re models available on request

ebm-papst FAN MOTORS

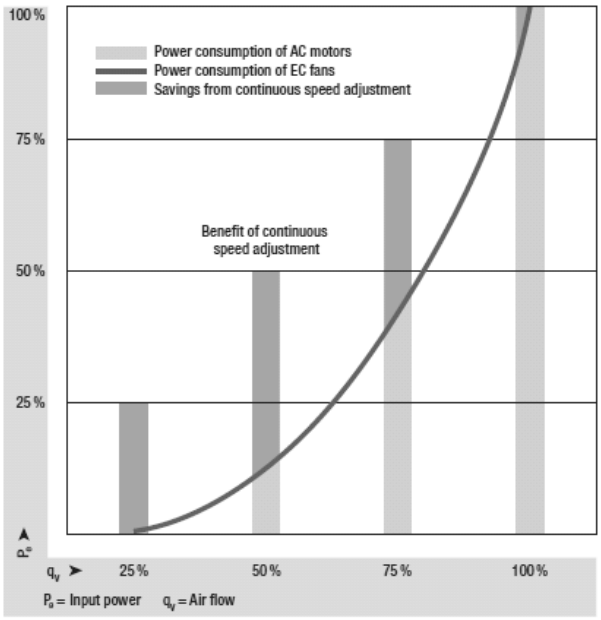
Square Plate Axial Fan Assembly (cont'd)

Airefrig Part Number	Dia. mm	Air Flow	Phase	Volts / Wiring		Air Volume m³/hr	Speed (RPM)	Input Watts	Amps	List Price Excl GST
W3G500GN3307 *	500	V	3	380-480		10390	1600	980	1.60	P.O.A.
W4D500GJ0311	500	V	3	400	Δ	9030	1340	710	1.40	P.O.A.
					Y	7670	1060	480	0.80	
W3G630GU2301 *	630	V	3	380-480		21190	1510	3200	5.00	P.O.A.
W4D630GD0101	630	V	3	400	Δ	19890	1320	2630	4.78	P.O.A.
					Y	16680	1050	1750	2.95	
W3G800GU2501 *	800	V	3	380-480		26600	1020	2560	3.90	
W3G800GV0101 *	800	V	3	380-480		27930	1090	2980	4.50	
W6D800GD0101	800	V	3	400	Δ	24110	880	1940	3.90	
					Y	20430	670	1210	2.23	
W8D800GD0101	800	V	3	400	Δ	18240	660	990	2.37	
					Y	15300	485	580	1.21	

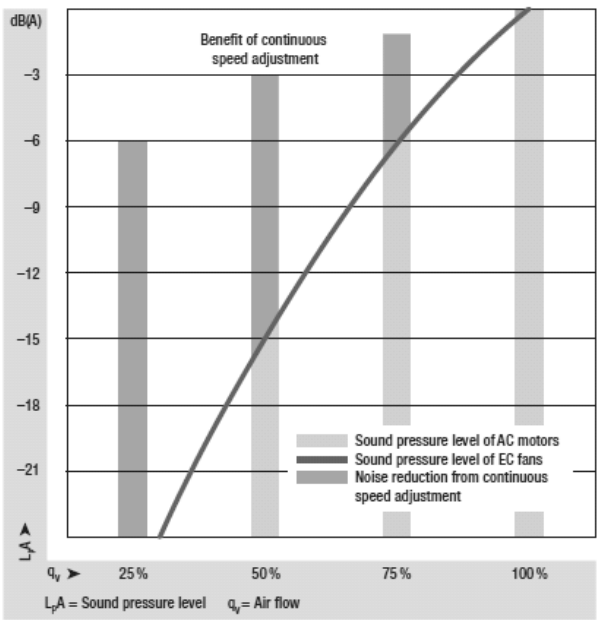


NOTE: More options available on request
* ebm-papst HyBlade axial fan with speed controllable, high efficiency EC motor

ebm-papst EC technology (EC = electronically commutated) is an environmentally sound and, in the long run, more cost-effective alternative to AC technology. ebm-papst EC fans and motors give you high performance, silent speed control and long life expectancy in a product which is the same size as the old, power hungry AC products it replaces.



Low energy consumption: The bars show the power input of fans that are activated incrementally if needed. The air performance is reduced by 50% if 50% of the fans are shut off. The line shows the power input with continuous speed adjustment. If all fans are reduced to 50% of their maximum speeds, the power is reduced by 87.5%



Lower noise: While shutting off half of the fans (one-half of the air flow) decreases the noise level by only about 3dB(A). When reducing the speed of all fans to 50% of the maximum speed, the noise is reduced by 15dB(A).

ebm-papst FAN MOTORS

Backward Curved Radial Fan Assembly

Airefrig Part Number	Dia. mm	Volts	Phase	Air Volume m³/hr	Speed (RPM)	Input Watts	Amps	Cap u/F	List Price Excl GST
R2S133AE1705	133	230	1	280	2780	36	0.25	-	
R2E180CB2809	180	230	1	440	2550	60	0.27	1.5	
R3G190RC0503 *	190	200-240	1	765	3200	83	0.75	-	
R2E190AO2637	190	230	1	570	2450	60	0.36	2.0	
R3G220RC0503 *	220	200-240	1	1000	2580	85	0.70	-	P.O.A.
R2E220AA40G7	220	230	1	865	2600	85	0.38	3.0	
R2E225AT5105	225	230	1	850	2650	105	0.46	3.0	
R2E225BD9209	225	230	1	1200	2650	135	0.60	4.0	
R2E250RA5001	250	230	1	1425	2500	210	0.93	5.0	
R2E280AE5205	280	230	1	2110	2700	225	1.00	7.0	


'R'

NOTE: More options available on request
* ebm-papst RadiCal backward curved fan with speed controllable, high efficiency EC motor

Forward Curved Radial Fan Assembly

Airefrig Part Number	Dia. mm	Volts	Phase	Air Volume m³/hr	Speed (RPM)	Input Watts	Amps	Cap u/F	List Price Excl GST
G2E120CR2603	120	230	1	275	2200	83	0.37	2.0	
G2E140A12801	140	230	1	485	2400	160	0.70	4.0	
G2E160AY4701	160	230	1	600	2100	240	1.05	6.0	



Forward Curved Radial Fan Assembly

Airefrig Part Number	Case Style	Volts	Phase	Air Volume m³/hr	Speed (RPM)	Input Watts	Amps	Cap u/F	List Price Excl GST
D2E133DM4701	C	230	1	810	1150	190	0.84	3.0	
D2E133AM8398	B	230	1	600	1500	185	0.81	3.0	
D2E146AP4722	C	230	1	970	2050	300	1.31	8.0	
D3G146HQ1334 *	A	200-240	1	1080	2400	230	1.80	-	P.O.A.
D2E146HT6701	A	230	1	1060	1850	355	1.55	8.0	
D2E146HS9704	A	230	1	760	1350	195	0.86	5.0	
2195841040	Connector Lead required for D2E fan assemblies 650mm Long								


Case A


Case B


Case C

* ebm-papst forward curved fan with speed controllable, high efficiency EC motor

Oven Fan

Airefrig Part Number	Dia. mm	Volts	Phase	Air Volume m³/hr	Speed (RPM)	Input Watts	Amps	Max Temp	List Price Excl GST
R2K150AC0325	152	230	1	200	2000	32	0.27	80° C	



ZIEHL-ABEGG FAN MOTORS

fans and drives

ZIEHL-ABEGG

AC Backward Curve Radial Fan Assembly

Airefrig Part Number	Fan Diameter (mm)	Voltage (V)	Phase	Air Volume (m^3/hr)	Speed (RPM)	Power Input (watts)	Current (amps)	Capacitor (u/F)	Noise Level (dBA@1M)	Max. Air Temp (C)	List Price Excl GST
RH31M4EK2C1R	310	230	1	1840	1300	170	0.9	4	65	50	
RH31M6EK2A1R	310	230	1	1280	900	80	0.39	2	58	60	P.O.A.
RH31MVDK2C1R	310	400	3	1830	1330	130	0.27	-	66	70	
RH35M4EK4C1R	350	230	1	2850	1370	310	1.35	6	69	65	P.O.A.
RH35MVDK4A1R	350	400	3	2850	1310	270	0.47	-	70	60	
RH40M4EK4F1R	400	230	1	4100	1360	520	2.2	10	70	40	
RH40MSDK4A1R	400	400	3	2700	900	160	0.36	-	61	60	
RH40MVDK4C1R	400	400	3	4100	1340	460	0.85	-	70	40	
RH45M6EK4F1R	450	230	1	3750	840	240	1.05	8	66	60	
RH45MSDK4C1R	450	400	3	4000	880	250	0.60	-	67	60	
RH45MVDK4F1R	450	400	3	5600	1230	690	1.3	-	76	40	
RH50MSDK4F1R	500	400	3	5250	870	400	0.89	-	56	45	
RH50MVDK6F1R	500	400	3	8200	1320	1220	2.2	-	76	45	
RH56M6EK6F1R	560	230	1	7500	810	670	3	14	70	50	
RH56MSDK4FIR	560	400	3	7550	830	610	1.05	-	71	40	
RH56MVDK6K1R	560	400	3	10200	1230	1800	3.4	-	79	40	
RH63MSDK6K1R	630	400	3	10000	850	1000	2.0	-	73	50	
RH63MVDK7Q1R	630	400	3	15200	1350	3800	6.2	-	85	40	

NOTE: More options available on request



'RH'

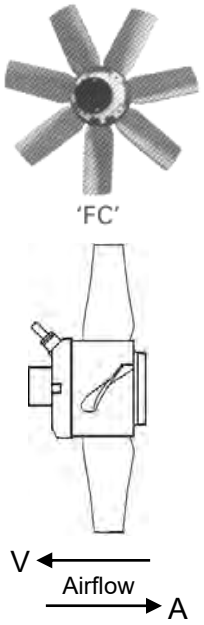


'RH'

ZIEHL-ABEGG FAN MOTORS

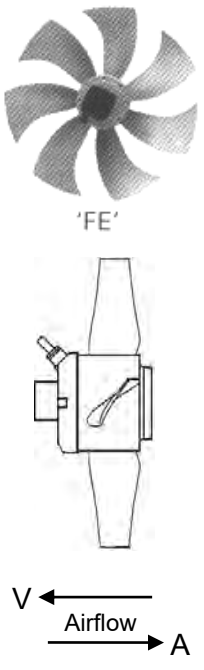
AC Axial FC (Bare) Fan Only

Airefrig Part Number	Fan Diameter (mm)	Air Flow Direction	Voltage (V)	Phase	Air Volume (m^3/hr)	Speed (RPM)	Power Input (watts)	Current (amps)	Capacitor (u/F)	Noise Level (dBA@1M)	Max. Air Temp (C)	Colour	List Price Excl GST
FC035VDA2CA7	350	A	400	3	3500	1320	150	0.31	-	68	70		
FC0404EA2FA7	400	A	230	1	5150	1330	330	1.65	6	74	40		
FC0454EA4CA7	450	A	230	1	6300	1310	400	1.95	8	71	40		P.O.A.
FC045VDA4CV7	450	V	400	3	6200	1350	340	0.74	-	71	60	Grey	
FC0504EA4F1	500	A	230	1	8100	1230	580	2.7	10	75	50	Grey	
FC0504EA4FA7													
FC050VDA4FV7	500	V	400	3	8300	1400	550	1.15	-	76	45	Grey	
FC056VDA4IA7	560	A	400	3	12900	1280	1050	2.1	-	82	40	Grey	
FC063VDA6KV7	630	V	400	3	18200	1310	1900	3.45	-	83	40	Grey	



AC Axial FE (Bare) Fan Only

Airefrig Part Number	Fan Diameter (mm)	Air Flow Direction	Voltage (V)	Phase	Air Volume (m^3/hr)	Speed (RPM)	Power Input (watts)	Current (amps)	Capacitor (u/F)	Noise Level (dBA@1M)	Max. Air Temp (C)	Colour	List Price Excl GST
FE0354EAOFV7	350	V	230	1	3140	1400	200	0.9	5	62	70	Black	
FE035VDA0CV7	350	V	400	3	3100	1360	180	0.35	-	61	70	Black	
FE0404EA2F2	400	V	230	1	4700	1320	310	1.35	4	67	60	Black	
FE0404EA2FV7													
FE040VDA2CV7	400	V	400	3	4650	1300	270	0.48	-	66	70	Black	
FE0454EA4IA7	450	A	230	1	7200	1310	610	2.8	14	69	60	Black	
FE0504EA4IA7	500	A	230	1	9050	1210	770	3.4	16	68	60	Black	
FE0504EA4I2	500	V	230	1	9050	1210	770	3.4	16	68	60	Black	
FE0504EA4IV7													
FN0504EA4IV7P1	500	V	230	1	9000	1230	750	3.3	16	69	70	No paint	
FE050VDA4IA7STD	500	A	400	3	9000	1340	780	1.45	-	69	60	Black	
FN050VDA4IA7P1	500	A	400	3	9500	1330	830	1.45	-	69	70	Black	
FE050VDA4IV7JBO	500	V	400	3	9750	1340	780	1.35	3	69	60	Black	
FN050VDA4IV7P1	500	V	400	3	9500	1330	830	1.45	-	69	70	Black	

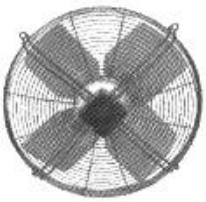


NOTE: More options available on request

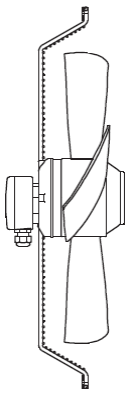
ZIEHL-ABEGG FAN MOTORS

AC Axial Fan (FA/FB type) – Basket Grille

Airefrig Part Number	Fan Diameter (mm)	Air Flow Direction	Voltage (V)	Phase	Air Volume (m^3/hr)	Speed (RPM)	Power Input (watts)	Current (amps)	Capacitor (u/F)	Noise Level (dBA@1M)	Max. Air Temp (C)	Colour	List Price Excl GST
FA0404EK2F6	400	V	230	1	4000	1260	320	1.65	6	69	40	Black	
FB0404EK2F6P	400	V	230	1	4100	1350	280	1.45	6	66	50	Black	
FB0404EK2FV4P													
FB0454EK4F6P	450	V	230	1	5900	1325	480	2.3	10	70	60	Black	
FB0454EK4FV4P													
FB0504EK4FV4L	500	V	230	1	7100	1240	570	2.7	12	68	50	Black	
FB0504EK4IV4PST	500	V	230	1	7100	1180	640	2.8	10	70	60	Black	
FB050VDK4FV4L	500	V	400	3	7100	1370	580	1.15	-	69	40	Black	
FB050VDK4IV4P	500	V	400	3	8300	1330	650	1.15	-	73	55	Black	
FB0566EK4IV4P	552	V	230	1	8300	930	470	2.5	12	67	55	Black	
FB056SDK4FV4P	552	V	400	3	7900	860	390	0.92	-	66	50	Black	
FB0636EK4IV4P	630	V	230	1	11200	830	670	3.3	14	72	40	Black	
FB063SDK4IV4PKI	630	V	400	3	10800	870	480	0.93	-	72	70	Black	
FB063VDK4MV4L	630	V	400	3	12500	1300	1100	2.2	-	83	60	Black	



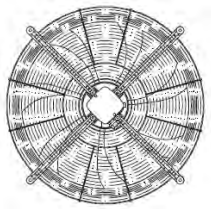
'FB'

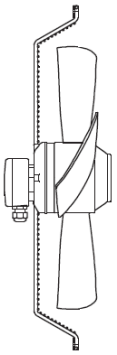


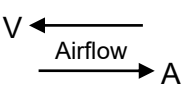


AC Axial Fan (FE/FN type) – Basket Grille

Airefrig Part Number	Fan Diameter (mm)	Air Flow Direction	Voltage (V)	Phase	Air Volume (m^3/hr)	Speed (RPM)	Power Input (watts)	Current (amps)	Capacitor (u/F)	Noise Level (dBA@1M)	Max. Air Temp (C)	Colour	List Price Excl GST
FE0424EK2FV7	420	V	230	1	5200	1280	0.37	1.6	5	65	60	Black	
FE0504EK4IV7JBO	500	V	230	1	9050	1210	770	3.4	16	68	60	Black	
FE0506EK4FV7JBO	500	V	230	1	6400	890	290	1.25	10	61	60	Black	
FN0506EK4FV7P1	500	V	230	1	6400	910	300	1.3	10	61	70	Black	
FE063SDK4IV7	630	V	400	3	11200	900	690	1.25	-	70	65	Black	
FE071SDK6FV7	710	V	400	3	14700	900	880	1.65	-	70	70	Black	
FN071SDK6FV7P1	710	V	400	3	14700	900	940	1.75	-	65	70	Black	







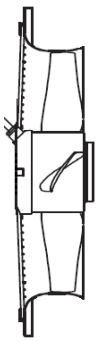
NOTE: More options available on request

ZIEHL-ABEGG FAN MOTORS

AC Axial Fan (FB/FC type) - Square Plate Assembly

Airefrig Part Number	Fan Diameter (mm)	Air Flow Direction	Voltage (V)	Phase	Air Volume (m^3/hr)	Speed (RPM)	Power Input (watts)	Current (amps)	Capacitor (u/F)	Noise Level (dBA@1M)	Max. Air Temp (C)	Colour	List Price Excl GST
FC0314EQ2A3	315	A	230	1	2050	1300	150	0.75	3	61	65	Grey	
FC0314EQ2AA7													
FC0354EQ2CA7	350	A	230	1	3500	1270	210	1.05	5	68	50	Grey	
FC0404EQ2FA7	400	A	230	1	5150	1330	330	1.65	6	74	40	Grey	
FC040VDQ2FA7	400	A	400	3	5100	1310	240	0.5	-	73	70	Grey	
FC0456EQ4CA7	450	A	230	1	4250	915	170	0.84	5	62	70	Grey	
FC045VDQ4CA7	450	A	400	3	6200	1350	340	0.74	-	71	60	Grey	
FB0504EQ4IV4P	500	V	230	1	7900	1220	640	3.0	12	73	50	Grey	
FC0504EQ4F3	500	A	230	1	8100	1230	580	2.7	10	75	50	Grey	
FC0504EQ4FA7													
FC050VDQ4FV7	500	V	400	3	8300	1400	550	1.15	-	76	60	Grey	
FC056VDQ6FV7	560	V	400	3	13300	1340	1370	2.7	-	76	60	Grey	
FC0636EQ41A7	630	A	230	1	12400	870	700	3.4	14	72	40	Grey	
FC063SDQ4IA7	630	A	400	3	12200	900	600	1.45	-	73	40	Grey	
FC063VDQ6KV7LT	630	V	400	3	18200	1310	1900	3.45	-	83	60	Grey	







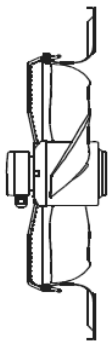
AC Axial Fan (FC type) - Round Plate Assembly

FC045VDL4CV7	450	V	400	3	6200	1350	320	0.6	-	71	60	Grey	

AC Axial Fan (FE/FN type) - Square Plate Assembly

Airefrig Part Number	Fan Diameter (mm)	Air Flow Direction	Voltage (V)	Phase	Air Volume (m^3/hr)	Speed (RPM)	Power Input (watts)	Current (amps)	Capacitor (u/F)	Noise Level (dBA@1M)	Max. Air Temp (C)	Colour	List Price Excl GST
FN0504EQ4IV7BLK	500	V	230	1	8900	1230	750	3.3	5	69	70	Black	
FE050SDQ4FV7GRE	500	V	400	3	6350	900	320	1.74	-	60	70	Grey	
FE050VDQ4IV7GRE	500	V	400	3	9700	1340	780	1.35	-	69	60	Grey	
FE050VDQ4IV7STD	500	V	400	3	9700	1340	780	1.35	-	69	60	Black	
FN050VDQ4IV7P1	500	V	400	3	9500	1330	830	1.45	-	69	70	Black	
FE063VDQ6NV7GRY	630	V	400	3	20200	1310	2600	4.8	-	82	65	Grey	
FE080ADQ6N5	800	V	400	3	19500	680	1050	2.4	-	70	65	Black	
FE080ADQ6NV7													
FN080SDQ6NV7P2	800	V	400	3	25600	860	2100	4.1	-	69	70	Black	
FE091SDQ6NV7	910	V	400	3	26000	860	1650	3.5	-	78	60	Black	





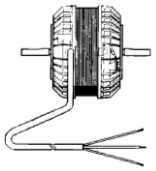


NOTE: More options available on request

FAN MOTORS

50D Double Shaft Fan Motors 240 Volt 50 Hz

Airefrig Part Number	Amps	Watts Output	Maximum Fan	Shaft Diameter	Body Diameter	List Price Excl GST
50D50180A	0.3	10	225mm x 40°	5/16” 7.9mm	4” 102mm	
50D50280A	0.5	20	250mm x 40°			
50D50380A	0.75	40	275mm x 40°			
50D50580A	1.0	60	350mm x 30°			



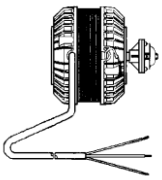
Double Shaft Fan Motors 240 Volt 50 Hz

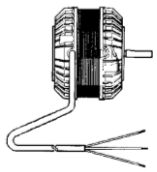
Airefrig Part Number	Amps	Watts Output	Maximum Fan	Shaft Diameter	Body Diameter	List Price Excl GST
EN12D	0.30	12	225mm x 40°	5/16” 7.9mm	4” 102mm	
EN22D	0.45	22	250mm x 40°			
EN42D	0.70	42	275mm x 40°			



50D Special Purpose Fan Motors

Airefrig Part Number	Amps	Watts Output	Application	Shaft	Rotation	List Price Excl GST
50D55201A	0.3	10	Suit Hub Less Fan	Hub	ACW	
50D50181A	0.3	10				
50D55102A	0.5	20				
50D50275A	0.5	25				
50D50389A	0.78	40	3 Rear Mount Holes	Hub	ACW	
50D50571C	1.0	60	4 Mount Bolts on Rear	5/16”	CW	
50D50911A	0.4	40	415 Volt	Hub	ACW	
50D50922A	0.4	40		5/16”		
50D52082A	0.18	8	Replaces 39D52079A	Hub		
50D52176A	0.3	-	Agitator Motor 140mm	5/16”		
50D52177A	0.3	-	Agitator Motor 190mm			
S40013	Impellor to suit agitator motor above					
50D54303A	0.63	35	Kirby AJ Cond Units	Hub		
50D55101A	0.48	14	Suit Muller CDN CDL	5/16”		
384001	Replacement Plastic Fan Hub to suit 50D Motors					P.O.A.





Double Shaft CMG Universal Fan Motor 240 Volt 50 Hz

Airefrig Part Number	Amps	Watts Output	Maximum Fan	Shaft(s)	Rotation	Capacitor (Supplied)	List Price Excl GST
CT5254004TN02	0.5	40	275mm x 40° Pitch	5/16” (Std) + Hub Drive	Reversible	2µF / 440V	



Open Frame 240 Volt 50 Hz Motors

Airefrig Part Number	Amps	Stack	Shaft	Rotation	Application	List Price Excl GST
J03RF03	0.14	9.5mm	1/8”	CW	Frost Free	
J03RF08	0.14	9.5mm	1/8”	ACW	Frost Free	
J04RF01	0.30	12.7mm	3/16”	ACW	Frost Free	
J06BM19	0.30	19mm	3/16”	ACW	Cabinets	
J06OR05S	0.27	19mm	3/16”	ACW	Orford Cabinets	
J06RC01	0.20	19mm	3/16”	CW	150mm Long Shaft	
J06BM15	0.34	19mm	3/16”	CW	Cabinets	
J090R05S	0.45	28mm	Thread	ACW	Orford Cabinets	



Low Temperature 240 Volt 50 Hz Motors

Airefrig Part Number	Amps	Watts Output	Application	Shaft	Rotation	List Price Excl GST
D564	0.30	9	Low Temperature –30C	Hub	ACW	



FAN MOTORS

Single Shaft Fasco Motors

Airefrig Part Number	Application / Mounting	Volts	Watts	Speed	RPM	Amps	Shaft Dia	Run Cap	Rotation	List Price Excl GST
8061S07702	No mounting lugs or brkt (for Emaii M15,MM140,MM150)	240	60	1	920	0.75	14mm	2/440	CW-lead end	
808557KTBA11	No mount, elec box,w/proof	240	150	3	900	1.2	1/2”	6/440	Reversible	
8061S05904	No mounting lugs or brkt	240	150	3	920	0.9	1/2”	6/440	CW-drive end	
808554LTBA80	No mount, elec box,w/proof	240	180	1	1380	1.25	1/2”	-	Reversible	
808534LTBA12	No mount, elec box,w/proof	415/3	180	1	1400	0.90	1/2”	-	Reversible	
808554LTBA13	4x Lug mount, rear elec box	415/3	185	1	1400	0.90	1/2”	-	CCW-drive end	
8061S12080	No mount, elec box,w/proof	240	240	1	900	2.90	1/2”	8/440	CW-drive end	
8061S13780	No mount, elec box,w/proof	240	250	1	910	2.30	1/2”	4/440	Reversible	
8061S00906	No mounting lugs or brkt	240	250	1	915	2.65	1/2”	6/440	CW-drive end	
8061S11802	No mounting lugs or brkt	240	300	3	910	2.70	1/2”	6/440	CW-drive end	
8061S10903	Vented, Resilient Mount	240	315	3	1315	2.50	1/2”	4/440	CCW-lead end	
8061S12180	No mounting lugs or brkt	415/3	370	1	890	1.10	1/2”	-	Reversible	
808557NTAA11	No mounting lugs or brkt	240	370	3	840	2.40	1/2”	12/440	CW-drive end	
809436NTBB11	4 Lug Mount, weatherproof	415/3	375	1	940	1.1	5/8”	-	CW-drive end	
808557NVBB11	4 Lug Mount	240	450	2	900	3.0	19mm	20/440	CW-drive end	
809454PVBB19	Vented, Resilient Mount	240	550	1	1400	3.3	5/8”	20/440	CW-drive end	
8061S08203	Vented, Resilient Mount	240	600	3	1200	4.4	1/2”	15/440	CW-drive end	
8061S12802	Vented, Resilient Mount 8061S12802 has 2 wiring harnesses (1x for capacitor) & 8061S12803 has 1 x harness.	240	750	3	1360	4.9	1/2”	20/440	CW-drive end	P.O.A.
8061S12803		240	750	3	1360	4.9	1/2”	20/440	CW-drive end	P.O.A.
809454QVBB11	Vented, Resilient cradle	240	750	1	1400	4.2	5/8”	20/440	-	
809455SVBB14	Vented, Resilient cradle	240	1100	1	1400	6.0	5/8”	30/440	CCW-drive end	
809455XVBB14	Vented, Resilient cradle	240	1500	2	1400	8.5	5/8”	45/440	CCW-drive end	

NOTE: More motor options available on request









FAN MOTORS

Double Shaft Fasco Motors

Airefrig Part Number	Application / Mounting	Volts	Watts	Speed	RPM	Amps	Shaft Dia	Run Cap	Rotation	List Price Excl GST
8061S13480	Resilient cradle mount (run cap is fitted on to motor)	240	40	3	900	-	1/2”	2/440	CW-lead end	
808554MVAA15	Kelv 1-1/4 RAC, 3xlug mount	240	90	2	940	0.90	1/2”	4/440	-	
8061S08380	Resilient cradle mount	240	100	2	1370	1.1	1/2”	2/440	CCW-lead end	
8061S13080	Resilient cradle mount	240	130	3	910	0.90	1/2”	4/440	CW-lead end	
8061S10901	Vented, Resilient cradle	240	425	3	1330	3.35	1/2”	10/440	CCW-lead end	
8061S08280	Vented, Resilient cradle	240	600	3	1330	4.0	1/2”	15/440	CCW-lead end	
8061S12880	Vented, Resilient cradle	240	750	3	1360	4.90	1/2”	20/440	CCW-lead end	
809455SVAB12	Vented, Resilient cradle	240	1100	3	1420	6.3	1/2”	30/440	CCW-lead end	

NOTE: More options available on request






Spares & Accessories

Airefrig Part Number	Description	List Price Excl GST
391127A	4 Point Mounting Band/Bracket 160mm OD (outside Dia. from lug to lug)	
391127B	4 Point Mounting Band/Bracket 177mm OD (outside Dia. from lug to lug)	
391127U	4 Point Mounting Band/Bracket 189mm OD (outside Dia. from lug to lug)	
39107401	Bearing Service Pack	
MUA1331	Spider Bracket 4 Legs 390mm Hole Centres	
MUA1341	Spider Bracket 4 Legs 300mm Hole Centres	
MUA3951	Slinger Metal 1/2” Shaft	
F4282	3 Point Mounting Bracket 110mm ID – 120mm OD Suit 35F Series	



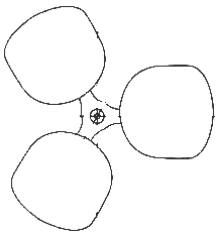

Fan Motor & Blade Kit

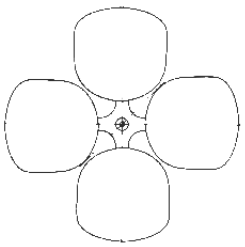
Airefrig Part Number	Description	List Price Excl GST
SM672	5/8” Motor Stack 240 Volts 0.32 amps 1¼" long x 3/16” diameter Shaft & Hub adaptor Includes 4” CW Fan Blade & 5½” ACW Fan Blade	

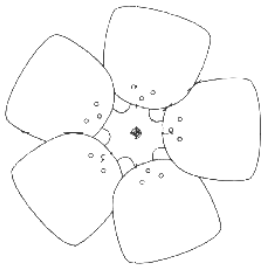


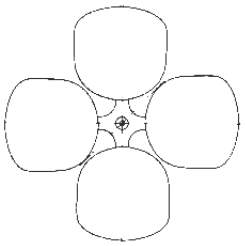
FAN BLADES

Airefrig Part Number	Diameter		No Blades	Pitch Deg	Bore Inches	List Price Excl GST
	mm	Inches				
FBP1782NY (Plastic)	178	7	3	25	3/16	
PU5178A30R05AA			5	30		
PS3203N30L05AA	203	8	3	30		P.O.A.
PS3203N30R05AA			3	30		P.O.A.
PU5203N30R05AA			5	30	5/16	
PU5203A30R05AA			5	30		P.O.A.
PS3229N30L05AA	229	9	3	30		
PS3229N30R05AA			3	30		
PS3254N30L05AA	254	10	3	30		
PS4254A30R05AA			4	30		
PS4254A30L05AA			4	30		
PS4254N30R05AA			4	30	5/16	
PS4254N40L05AA			4	38		
PU5254A30R05AA			5	30		
PU5254N30R05AA			5	30		
PU5254N40R58AA			5	40	8mm	
PS3305A25R05AA	305	12	3	25		
PS3305N25R05AA			3	25		
PS3305N30L05AA			3	30	5/16	
PM3356A20R05AA	356	14	3	20		P.O.A.
PM3356N30R05AA			3	30		P.O.A.
PM3356A30R09AA			3	30	9/16	
PM3356N30R09AA			3	30		
PM3356N30R10AA			3	30	5/8	
PM4356A35R05AA			4	35	5/16	
PM4356N35L05AA			4	35		P.O.A.
PM4356N35L09AA			4	35	9/16	P.O.A.
PM3406A20L09AA	406	16	3	20		P.O.A.
PM3406N30R08AA			3	30	1/2	P.O.A.
PM5406A40R08AA			5	40		
PH3508A20L09AA	508	20	3	20	9/16	
PH3508A20R12AA			3	20	3/4	P.O.A.
PH3508N25L10AA			3	25	5/8	
PH3508A30R08AA			3	30	1/2	
PM5508A40R08AA			5	40		
PM5508A40R10AA			5	40	5/8	P.O.A.
PH4610A20L08AA	610	24	4	20		P.O.A.
PH4610A25L08AA			4	25	1/2	
PH4610A40L08AA			4	40		P.O.A.
PH4610A40R08AA			4	40		
PH4610A40R10AA			4	40	5/8	









See next page for Fan Blade Nomenclature.

NOTE: More options available on request

FAN BLADES

Fan Blade Nomenclature for blades listed on previous page.

Part Number Code

1	2	3	4	5	6	7	8	9	10	11	12	13	14

1	Product Prefix	P	Propeller
2	Fan Series	U	One Piece
		S	Standard
		M	Medium Duty
		H	Heavy Duty
3	Number of Paddles	3, 4, 5 or 6	
4,5,6	Diameter Millimetres		
7	Hub/ Boss Position	A	Away Opposite side to discharge of propeller blade.
		N	Near Same side as discharge of propeller blade.
8,9	Pitch	Pitch angle of blade.	
10	Direction of Rotation	L	Left Anti CW with respect to discharge side of propeller blade.
		R	Right CW with respect to discharge side of propeller blade.
11,12	Bore Size		

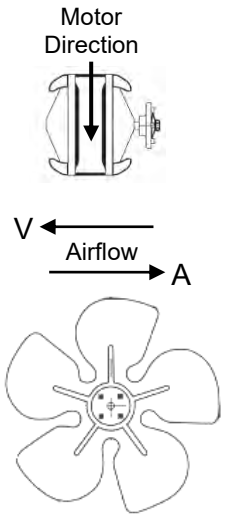
Imperial		Metric	
1/4”	04	6mm	56
5/16”	05	8mm	58
3/8”	06	10mm	60
1/2”	08	12mm	62
9/16”	09	14mm	64
5/8”	10	19mm	69
3/4”	12	20mm	70
1”	16	25mm	75

13	Rivet Type	A	Steel
14	Bore Type	A	Standard Bore, no keyway

Pressed Aluminium 4 Point Hub Fan Blades

Airefrig Part Number	Diameter		No Blades	Pitch Deg	Airflow V or A	List Price Excl GST
	mm	Inches				
109211	172	6.8	5	28	V	
PU5178W40R00AA	178	7	5	40		
FBP190UWEFR *	190	7.5	5	25		
PU5203W40R00AA	200	7.9	5	40		
PU5203W40L00AA	200	7.9	5	40	A	
PU5229W40L00AA	229	9	5	40		
PU5229W40R00AA	229	9	5	40	V	

(Plastic Blade *)



Universal Fan Blades (1 x blade will replace multiple blade options)

Airefrig Part Number	Multiple Blade Diameter Options	No Blades	Shaft Type	Pitch Deg °	Airflow V or A	List Price Excl GST
VFU612	6”,7”,8”,9”,10” & 12” snap off segments to achieve req diam.	5	5/16” or Hub Type	4x pitch options 20° to 40°	2x CW 2x CCW rotation options	
VFU1626	16”,18”, 20”, 22”, 24”& 26” snap off segments to achieve req diam.	4	1/2” or 5/8” with key slot	8x pitch options 12° to 48°	4x CW 4x CCW rotation options	

(VFU blades are made from reinforced UV protected Poly Nylon, temp rating: -25 to +220°C)



DIRECT DRIVE BLOWERS

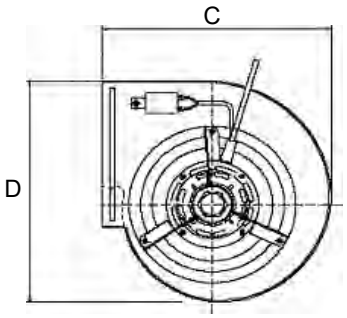
Torin Single Fan Decks

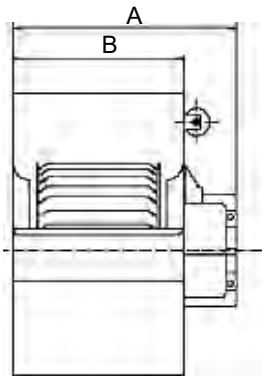
Airefrig Part Number	Motor Model	Wheel (mm) Diam x width	Motor	Watts Out	Dimensions mm				List Price Excl GST
					A	B	C	D	
DDG203203481	40P5134-180SC	203 x 203	240 Volt 4 Pole 3 Speed	180	386	248	306	319	
DDG203203060	40P5134-315SA	203 x 203		315	386	248	306	319	
DDC241181200C	40P5134-315SA	241 x 181		315	305	234	380	392	P.O.A.
DDG241T181200C	40P5134-315SA	241 x 181		315	305	234	325	327	
DDC241241200	40P5134-315SA	241 x 241		315	345	300	380	392	
DDC241241300	40P5134-600SA	241 x 241		600	365	300	380	392	
DDG270270300	40P5134-600SA	270 x 270		600	400	334	420	442	
DDC270270360	40P5134-750SA	270 x 270		750	400	334	420	442	P.O.A.
DDG270270360	40P5134-750SA	270 x 270		750	400	334	420	442	

NOTE: More options available on request

The direct drive blowers have a forward curved wheel mounted directly to the motor shaft. Double inlet allows air to be drawn from both sides. The motors are 4 or 6 pole, 3 speed and some models maybe fitted with a particular size capacitor to give the desired performance. All motors have thermal overload protection and insulation that conforms to class B requirements. The housings are made from G2 Galvabond Steel Z275.
DDG uses the 'G' type wheels which have plastic wheels available from 82mm, 203mm, 241 & 270mm diameter.
DDC uses the 'C' type wheels which have individual blades that use a centre locking disc arrangement for the 241mm or 270mm diameter units.







Part Number Selection Chart

Basic Outline of Code:

1	2	3	4	5	6	7	8	9	10	-	11	12	13	14

Details of Code:

1	**Type of Drive**	D = Direct
2	**Configuration**	D = Double inlet
3	**Wheel Type**	C = inserted blade G = plastic
4 5 6	**Wheel Diameter**	In millimetres
7	**Housing**	Dash = Standard housing T = Tight housing
8 9 10	**Wheel Width**	In millimetres
11 12 13	**Final Code**	Odd number = clockwise rotation. Even number = anti-clockwise rotation. (view rotation from drive side)
14	**Capacitor**	Blank = fixed value capacitor supplied. C = Different value capacitors available. Request value of capacitor required..

DIRECT DRIVE BLOWERS

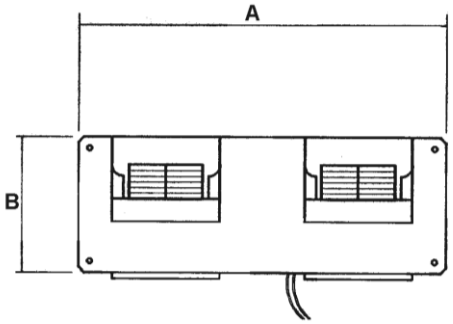
Torin Twin Fan Decks

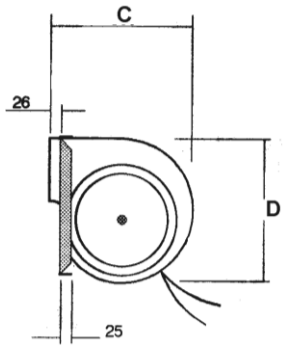
Airefrig Part Number	Motor Model	Wheel (mm) Diam x width	Motor	Watts Out	Dimensions mm				List Price Excl GST
					A	B	C	D	
DXG080095013	C12FB98	80 x 95	240 Volt 4 Pole 3 Speed	-	448	94	123	121.5	
DXA080102002	C12FB98	80 x 102		-	448	94	121	127	
DXA158203561	40P5134-130TA	158 x 203		130	800	255	262	270	
DXG203203401	40P5134-315TA	203 x 203		315	813	308	306	320	
DXG203203441	40P5134-600TA			600	813	308	306	320	
DXG241T181441	40P5134-600TA	241 x 181		600	813	308	325	327	
DXC241T181521	40P5134-750TA			750	810	300	380	327	
DXG241181521	40P5134-750TA			750	810	300	380	392	
DXC241241521	40P5134-750TA	241 x 241		750	900	300	380	392	
DXC241241541	40P5134-1100TA			1100	1040	305	380	392	

NOTE: More options available on request

The direct drive fan decks have forward curved wheels mounted directly to the motor shaft. The motors are 4 pole, 3 speed and some models maybe fitted with a particular size capacitor to give the desired performance. All motors have thermal overload protection and insulation that conforms to class B requirements. The housings are made from G2 Galvabond Steel Z275.
DXC uses the 'C' type wheels which have individual blades that use a centre locking arrangement for the 241mm diameter unit.
DXG uses the 'G' type wheels which have plastic wheels available from 82mm, 203mm, 241 & 270mm diameter.
DXA uses the 'A' type wheels which have a louvred strip.







Part Number Selection Chart

Basic Outline of Code:

1	2	3	4	5	6	7	8	9	10	-	11	12	13	14

Details of Code:

1	**Type of Drive**	D = Direct
2	**Configuration**	X = Twin housings double inlet
3	**Wheel Type**	A = louvre strip (R) C = inserted blade (CL) G = plastic
4 5 6	**Wheel Diameter**	In millimetres
7	**Housing**	Dash = Standard housing T = Tight housing
8 9 10	**Wheel Width**	In millimetres
11 12 13	**Final Code**	Always an odd number
14	**Capacitor**	Blank = fixed value capacitor supplied. C = different value capacitors available. Request value of capacitor required

DIRECT DRIVE BLOWERS

Blower Wheels

Airefrig Part Number	Suits Fan Deck	Wheel (mm) Diam x width	List Price Excl GST
GA080404R5648 x 1	DXG080095013	80 x 95	P.O.A.
GA080404L5648 x 1			P.O.A.
R080505R5621 x 1	DXA080102002	80 x 102	P.O.A.
R080505L5621 x 1			P.O.A.
R151010R0891 x 1	DXA158203561	158 X 203	
R151010L0891 x 1			P.O.A.
GD201010R0845 x 2	DXG203203401 DXG203203441	203 x 203	P.O.A.
GD240909R0846 x 2	DXG241T181441 DXG241T181521 DXG241181521	241 x 181	P.O.A.
CL242400R0874 x 1	DXC241241521 DXC241241541	241 x 241	
CL242400L0874 x 1			

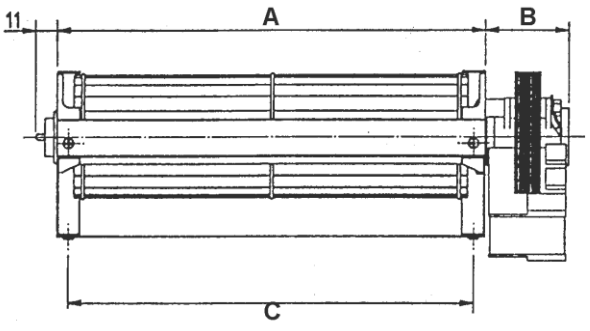
NOTE: More options available on request

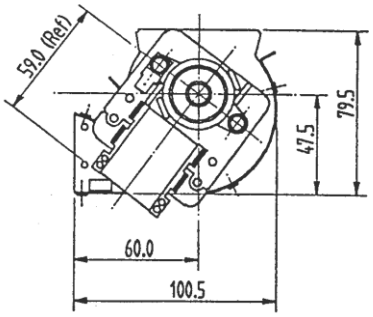


Torin Cross Flow

Airefrig Part Number	Motor Model	Motor Speeds	Wheel Dia mm	Volts	Dimensions			List Price Excl GST
					A	B	C	
FTR1809302	C08FB07	Single	60	240	204	54.5	193	
FTR1809402	C06FB26-H1	Two			204	50.0	193	
FZR3009302	C08FB07	Single			326	54.5	315	
FZR3009402	C06FB26-H1	Two			326	50.0	315	
FZR3609302	C08FB07	Single			385	54.5	374	

NOTE: 2 Speed Motors	
Low Speed	Black Wire
High Speed	Brown Wire
Common	Blue Wire





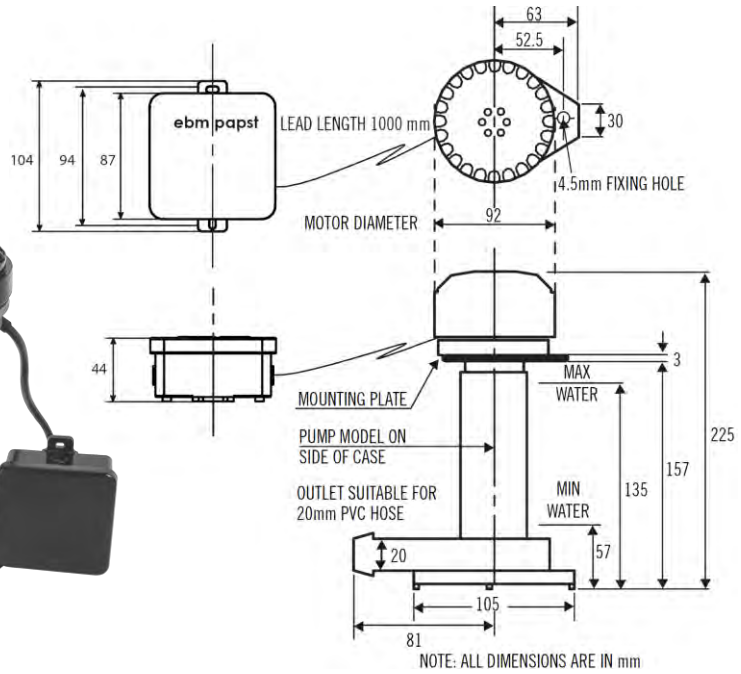
EVAPORATIVE COOLER PUMPS

ebmpapst Evaporative Cooler Pump

Airefrig Part Number	List Price Excl GST
EBMALPHA	

Capacity @ 1.0 metre Head	32 litres/min
Capacity @ 2.0 metre Head	25 litres/min
Power Supply	240V/1/50Hz
Nominal Watts	50 watts
Outlet Connection	20mm





Fasco Evaporative Cooler Pumps

Airefrig Part Number	Capacity (Ltr/min)	Head (mm)	Electrical Data	Outlet	List Price Excl GST
EP28ST (replaces: JRM28)	24.0 21.5 20.0 18.0 16.5	600 1000 1200 1400 1600	240V/1/50Hz 0.38 Amps Output: 10W Nominal: 45W	20mm	
EP38ST (replaces: JRM38)	29.5 27.5 26.0 24.5 23.0	600 1000 1200 1400 1600	240V/1/50Hz 0.43 Amps Output: 15W Nominal: 50W	20mm	
EP50ST (replaces: JRM50)	38.0 35.5 34.0 32.0 30.5	600 1000 1200 1400 1600	240V/1/50Hz 0.58 Amps Output: 20W Nominal: 60W	20mm	
JRMBASKET	Filter Basket – Optional				





Latent Evaporative Cooler Pumps

Airefrig Part Number	Capacity (Ltr/min)	Head (mm)	Volts/Hz	Outlet	List Price Excl GST
T0030L	27.5 24.0	1000 1500	240V/1/50Hz	20mm	
T0035L	35.5 31.0	1000 1500			



Tornado Evaporative Cooler Pump - (replaces Magnadrive)

Airefrig Part Number	Capacity Ltr/min	Head Mtr	Volts/Hz	Outlet	List Price Excl GST
EVAPUMPMAG	18.0	1.2	230/50	20mm	



LATENT CONDENSATE PUMPS

Condensate Pumps - Quick Guide

(Note: See following pages for detailed technical information)

Airefrig Part Number	Capacity (Litres/Hr)	*Head (Metres)	Technical Information (note: supplied ready to fit into Latent FB105 duct elbow)	List Price Excl GST
EE1200	8 5.5 2.5 0	0 2 4 6	For Air Conditioners up to 10.0kw Pump Unit Size (mm): 78L x 42W x 46H Sensor Unit Size (mm): 82L x 39W x 39H Electrical Specs: 230V 50/60Hz 18VA Alarm Switch: NO/NC, max.230V, 8A (ohmic load)	



*Head (delivery height) is from pump outlet.

Airefrig Part Number	Capacity (Litres/Hr)	*Head (Metres)	Pump with 2-Level Float switch Sensor Technical Information	List Price Excl GST
EE600	6 4 2 0	0 2 4 6	For Air Conditioners up to 7.5kw Pump Unit Size (mm): 77L x 32W x 50H Sensor Unit Size (mm): 82L x 39W x 39H Electrical Specs: 230V 50/60Hz 18VA Alarm Switch: not applicable	



*Head (delivery height) is from pump outlet, maximum suction height of EE600 is 1.5 metres.

Airefrig Part Number	Capacity (Litres/Hr)	*Head (Metres)	Pump with 3-Level Float switch Sensor Technical Information	List Price Excl GST
EE1000	10 8 6.5 4.8	0 2 4 6	For Air Conditioners up to 10.0kw Pump Unit Size (mm): 77L x 35W x 62H Sensor Unit Size (mm): 82L x 39W x 39H Electrical Specs: 230V 50/60Hz 18VA Alarm Switch: NO/NC, max.230V, 8A (ohmic load)	



*Head (delivery height) is from pump outlet, maximum suction height of EE1000 is 2.5 metres.

Airefrig Part Number	Capacity (Litres/Hr)	*Head (Metres)	Pump with 3-Level Float switch Sensor Technical Information	List Price Excl GST
EE1800	18 13 7.5 2.5 0	0 2 4 6 7	For Air Conditioners up to 18.0kw Pump Unit Size (mm): 77L x 35W x 62H Sensor Unit Size (mm): 82L x 39W x 39H Electrical Specs: 230V 50/60Hz 18VA Alarm Switch: NO/NC, max.230V, 8A (ohmic load)	



*Head (delivery height) is from pump outlet, maximum suction height of EE1800 is 2.5 metres.

Airefrig Part Number	Capacity (Litres/Hr)	*Head (Metres)	Pump with Tank/Reservoir Technical Information	List Price Excl GST
EE150	120 80 0	0 1 1.5	For Air Conditioners up to 50.0kw Pump Unit Size (mm): 165L x 65W x 85H Electrical Specs: 230V 50/60Hz 48VA Alarm Switch: not applicable Tank/Reservoir Capacity: max 0.2 litres	



*Head (delivery height) is from pump outlet, outlet pressure hose (not included) 8mm inside diam x 2mm thick wall.

Airefrig Part Number	Capacity (Litres/Hr)	*Head (Metres)	Pump with Tank/Reservoir Technical Information	List Price Excl GST
EE400	350 280 220 100 0	0 1 2 3 4	For Air Conditioners up to 50.0kw Pump Unit Size (mm): 185L x 85W x 100H Electrical Specs: 230V 50/60Hz 65VA Alarm Switch: NO/NC, max.230V, 8A (ohmic load) Tank/Reservoir Capacity: max 0.5 litres	



*Head (delivery height) is from pump outlet, outlet pressure hose (not included) 8mm inside diam x 2mm thick wall.

Airefrig Part Number	Constant Flow	*Head (Metres)	Reciprocating Pump ultra-quiet for sensitive areas Technical Information	List Price Excl GST
EE900M	6 (L/Hour)	7mtr maximum discharge 2mtr maximum delivery	Constant flow independent of discharge height 3x sensing opts: float, temp sensors & cool signal Pump Unit Size (mm): 152L x 85W x 114H Electrical Specs: 230V 50/60Hz 10VA Alarm Switch(float option): N/O, 48V AC/DC, 1.5A	



*Head (max discharge= pump outlet / max delivery= pump inlet) pressure hose (not included) 6mm ID x 2mm wall.

LATENT CONDENSATE PUMPS - EE1200

The EE1200 condensate pump is ready to integrated into a Latent duct elbow (part number: FB105) allowing it to be installed directly on the outlet side of the air conditioner. This pump is suitable for mini split, ceiling and wall mounted air conditioners.

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Technical Data

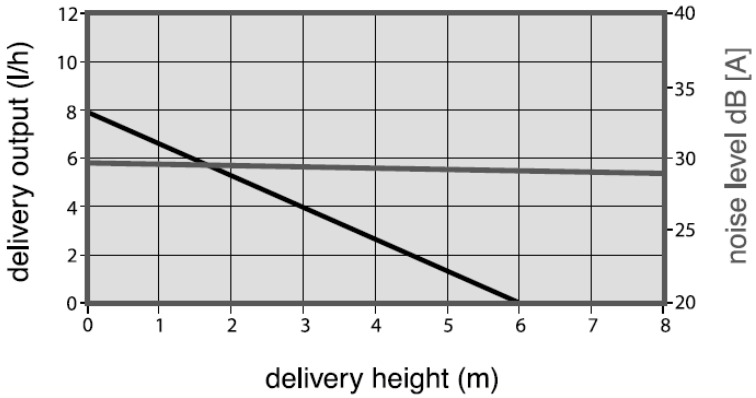
Maximum flow rate: 8 l/h

Maximum delivery height: 6-metre head
(Delivery height is from pump outlet)

Voltage: 230/1/50 **Output**: 18VA

Pump Dimensions: 78(L) x 42(W) x 46(H) mm

Sensor Dimensions: 82(L) x 39(W) x 39(H) mm

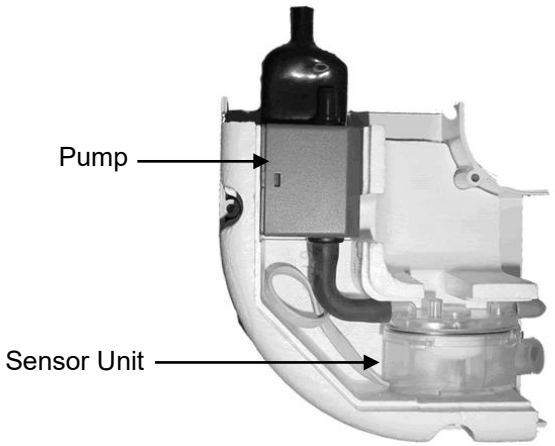


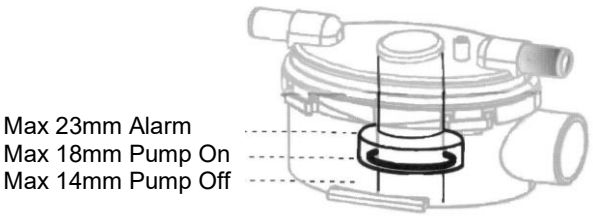
Alarm Switch: normally open / normally closed voltage free contacts. (Max 230V, 8A res.)
Can be wired to cut out the air conditioner and prevent any overflow using a relay or contactor.

Housing Components: Manufactured from self-extinguishing materials.

Warranty Period: 12 months (parts or replacement only)







Sensor Unit
Replacement sensor unit
part # 9001301023

Electrical Connection:

- Connect pump to 230v 50Hz mains using 3 x 0.75mm^2 cable.
- Pump must be earthed / grounded.
- Ensure that the electrical connections to the pump are sealed fully using the insulating cap as per the manufacturers instructions.

LATENT CONDENSATE PUMPS - EE1200

Pump Installation:

- Clean all elements of the air conditioning unit's drain, in order to ensure that the condensate water to be pumped will be clean.
- The drain tank should be deep enough such that it is capable of containing the water, above the alarm level, which will continue to flow from the evaporator in the event of a power failure.
- The pump assembly is able to be installed on either the left or right side of the air conditioner.
- Mark and drill the holes to fix the elbow to the wall fit the elbow, polystyrene hull and the duct.
- Connect the detection sensor to the air conditioner unit's drain tank (according to instruction manual) Then fit the ventilation tube onto the sensor and position the pump and detection sensor into the elbow.
- Connect the discharge tube to the pump using a 6mm flexible tube.
- The electrical cable must be attached to the anti-wrenching support using a cable tie.
- Pre-form the refrigeration pipes and position them into the duct.
- Before closing the duct it is advised to support the cable and the discharge tube between the insulation of the refrigerant pipes, so they do not touch the walls and the lid of the duct. This will help to decrease the noise level of the installation.

Note:

- When installing a condensate pump make sure that it is installed in such a way that there is access to the pump and sensor for required maintenance.
- Clear vinyl tube 6.0mm ID x 1.5mm wall for the delivery line is available from Airefrig Australia if required. (P/No: 3220207 – sold by the metre)

Starting Procedure:

- Before start up ensure that the system is thoroughly cleaned to eliminate metal splinters and foreign bodies that may damage or impair the condensate pumps operation.
- Make sure that all hoses are connected properly.
- Pour water into the air conditioner's drain tank & check the pump switches on & off when the water rises or falls
- To check operation of the alarm switch keep adding water until the alarm function is triggered (Check that the alarm contacts work ie. air conditioner cut-out or audible/visual warning signal, etc.)

Required Preventative Maintenance:

- Maintenance is required at least every 12 months before the start of the season.
- Turn all power to the pump off. (Warning: alarm contacts may have different power source)
- Remove the lid of the elbow to access the sensor.
- Remove the sensor.
- Carefully take off the lid and remove the float.
- Using a mild commercial cleaning agent, carry out the following.
- Clean the filter, float & the inside of the sensor housing.
- Re-assemble making sure that the magnet on the float points downwards.
- Some environments may require service more frequently.



LATENT CONDENSATE PUMPS – EE600

The EE600 condensate pump is comprised of two parts – the pump & float switch & is suitable for integration into air conditioners – mini split, ceiling and wall mounted units. The small sensor can easily be adapted to fit the air conditioners condensate drain hose. The pump assembly is supplied with 2 x adhesive cellular tape pads, breather pipe, rubber drain connection tube, 1.5 metres of 6mm suction hose & instruction sheet.

Technical Data

Maximum flow rate: 6 l/h

Maximum delivery height: 6.0 metre head
(Delivery height is from pump outlet)

Maximum suction height: 1.5 metre head
(Suction height is between sensor & pump inlet)

Voltage: 230/1/50 **Output**: 18VA

Pump Dimensions: 77(L) x 32(W) x 50(H) mm

Sensor Dimensions: 82(L) x 39(W) x 39(H) mm



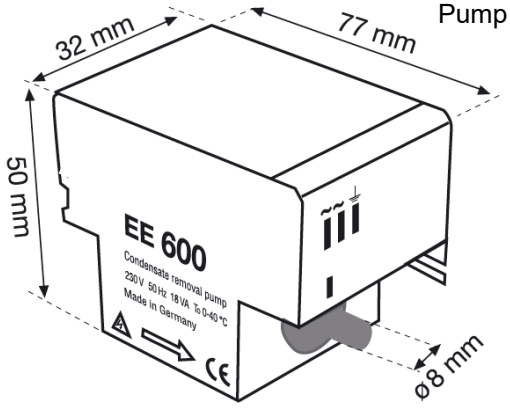
Alarm Switch: not applicable to this model

Thermal Protection: Pump will automatically switch off if temperature at the piston drive reaches over +100 degrees Celsius. (Auto reset after cooling period)

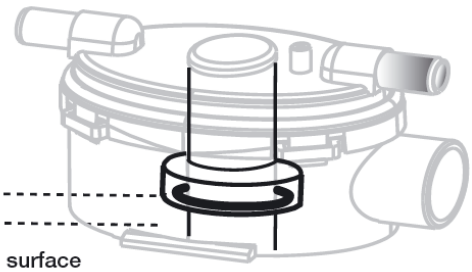
Housing Components: Manufactured from self-extinguishing materials.

Warranty Period: 12 months (parts or replacement only)

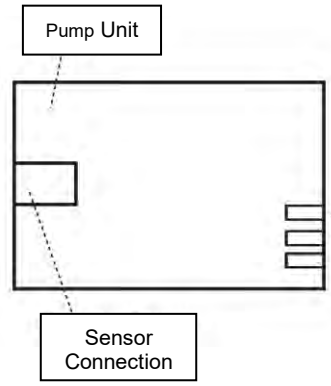
Pump Unit



Sensor Unit



Replacement sensor unit
part # 9001301008



Electrical Connection:

- Connect pump to 230v 50Hz mains using 3 x 0.75mm^2 cable.
- Pump must be earthed / grounded (PE connection)

LATENT CONDENSATE PUMPS - EE1000

The EE1000 condensate pump is comprised of two parts – the pump & float switch & is suitable for integration into air conditioners – mini split, ceiling and wall mounted units. The small sensor can easily be adapted to fit the air conditioners condensate drain hose. The pump assembly is supplied with 2 x adhesive cellular tape pads, breather pipe, rubber drain connection tube, 1.5 metres of 6mm suction hose & instruction sheet.

Technical Data

Maximum flow rate: 10 l/h

Maximum delivery height: 10.0 metre head
(Delivery height is from pump outlet)

Maximum suction height: 2.5 metre head
(Suction height is between sensor & pump inlet)

Voltage: 230/1/50 **Output**: 18VA

Pump Dimensions: 77(L) x 35(W) x 62(H) mm

Sensor Dimensions: 82(L) x 39(W) x 39(H) mm



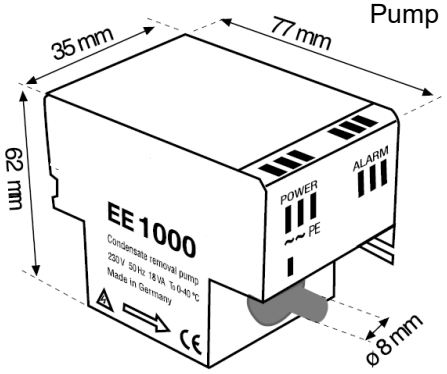
Alarm Switch: normally open / normally closed voltage free contacts. (Max 230V, 8A res.)
Can be wired to cut out the air conditioner and prevent any overflow using a relay or contactor.

Thermal Protection: Pump will automatically switch off if temperature at the piston drive reaches over +100 degrees Celsius. (Auto reset after cooling period)

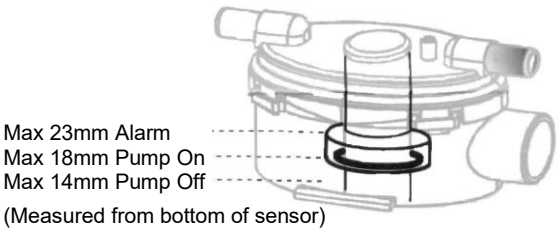
Housing Components: Manufactured from self-extinguishing materials.

Warranty Period: 12 months (parts or replacement only)

Pump Unit

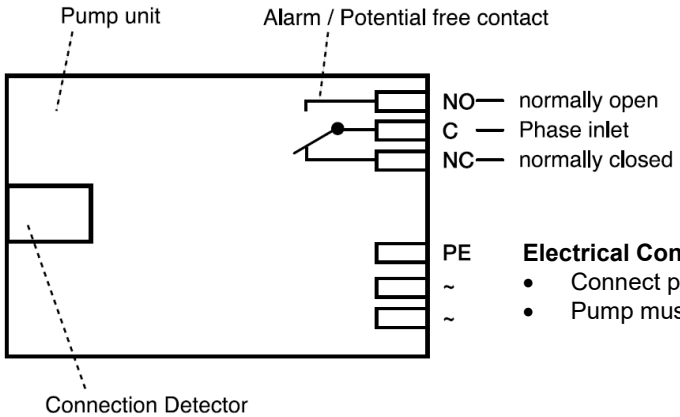


Sensor Unit



(Measured from bottom of sensor)

Replacement sensor unit
part # 9001301008



Electrical Connection:

- Connect pump to 230v 50Hz mains using 3 x 0.75mm^2 cable.
- Pump must be earthed / grounded (PE connection)

LATENT CONDENSATE PUMPS - EE1800

The EE1800 condensate pump is comprised of two parts – the pump & float switch & is suitable for integration into air conditioners – mini split, ceiling and wall mounted units. The small sensor can easily be adapted to fit the air conditioners condensate drain hose. The pump assembly is supplied with 2 x adhesive cellular tape pads, breather pipe, rubber drain connection tube, 1.5 metres of 6mm suction hose & instruction sheet.

Technical Data

Maximum flow rate: 18 l/h

Maximum delivery height: 10.0 metre head
(Delivery height is from pump outlet)

Maximum suction height: 2.5 metre head
(Suction height is between sensor & pump inlet)

Voltage: 230/1/50 **Output**: 18VA

Pump Dimensions: 77(L) x 35(W) x 62(H) mm
Sensor Dimensions: 82(L) x 39(W) x 39(H) mm



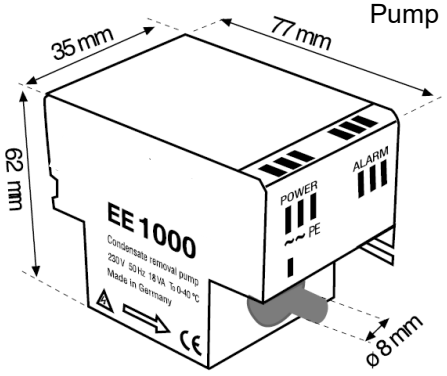
Alarm Switch: normally open / normally closed voltage free contacts. (Max 230V, 8A res.)
Can be wired to cut out the air conditioner and prevent any overflow using a relay or contactor.

Thermal Protection: Pump will automatically switch off if temperature at the piston drive reaches over +100 degrees Celsius. (Auto reset after cooling period)

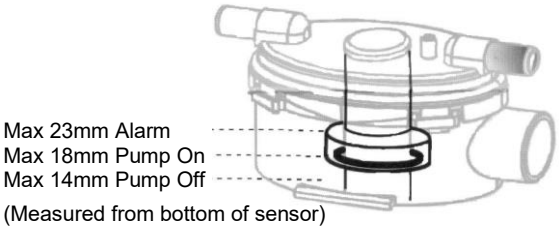
Housing Components: Manufactured from self-extinguishing materials.

Warranty Period: 12 months (parts or replacement only)

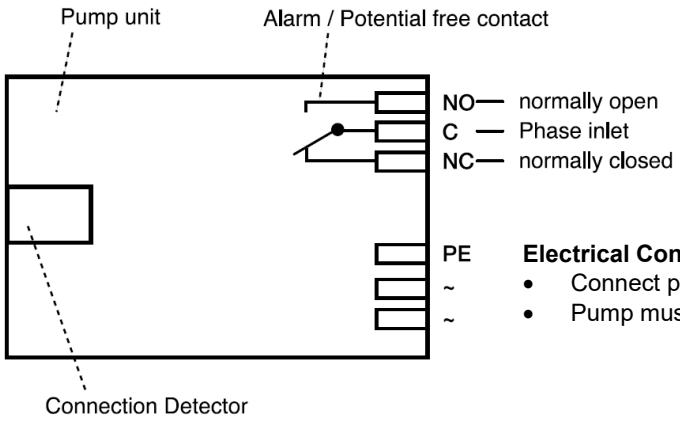
Pump Unit



Sensor Unit



Replacement sensor unit
part # 9001301008



Electrical Connection:

- Connect pump to 230v 50Hz mains using 3 x 0.75mm^2 cable.
- Pump must be earthed / grounded (PE connection)

LATENT CONDENSATE PUMPS – EE600,EE1000 & EE1800

Pump Installation and Mounting:

- Can be mounted Horizontally or Vertically. (DO NOT MOUNT UPSIDE DOWN)
- It is recommended to secure the pump into position to prevent contact that may transmit vibration or running noise.
- Allow sufficient clearance around the pump to ensure that the pump is able to cool down after prolonged operation. (DO NOT insulate or cover the pump)
- Arrow on the pump indicates direction of flow.
- Prior to start up ensure that the system is thoroughly cleaned to eliminate metal splinters and foreign bodies that may damage or impair the condensate pumps operation.

Sensor Installation and Mounting:

- Always install the float module horizontally.
- Maximum angle the sensor can be mounted is 10 degrees.
- The sensor can be mounted directly onto metal surfaces without any detrimental effects on the magnetic float.
- Ensure the plastic bracket and adhesive tape (supplied) is used to secure the sensor.
- Drain or breather tube (150mm x 6mm diam.) should be fitted to easily dispel air.
- Sensor can be fitted to the end of the split air conditioner drain tube or on other types of air conditioners connected to the side outlet of the condensate tank.

Note:

- When installing a condensate pump make sure that it is installed in such a way that there is access to the pump and sensor for required maintenance.
- Clear vinyl tube 6.0mm ID x 1.5mm wall for the delivery & suction lines are available from Airefrig Australia if required (P/No: 3220207 – sold by the metre)
- Sensor - pump wiring extension leads are available on request through Airefrig Australia.

Starting Procedure:

- Before start up ensure that the system is thoroughly cleaned to eliminate metal splinters and foreign bodies that may damage or impair the condensate pumps operation.
- Make sure that all hoses are connected properly.
- Pour water into the air conditioner drain and check the pump switches on and off when the water rises or drops.
- To check operation of the alarm switch keep adding water until the alarm function is triggered (Check that the alarm contacts work ie. air conditioner cut-out or audible/visual warning signal, etc.)

Required Preventative Maintenance:

- Maintenance is required at least every 12 months before the start of the season.
- Turn all power to the pump off. (Warning: alarm contacts may have different power source)
- Remove the sensor from the bracket.
- Carefully take off the lid and remove the float.
- Using a mild commercial cleaning agent, carry out the following.
- Clean the filter, float & the inside of the sensor housing.
- Re-assemble making sure that the magnet on the float points downwards.
- Some environments may require service more frequently.

LATENT CONDENSATE PUMPS - EE150

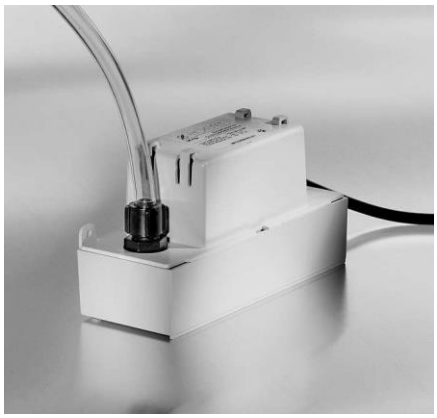
The EE150 condensate pump is designed to automatically remove water from air conditioners and evaporator coils etc. This pump has its own reservoir / tank.

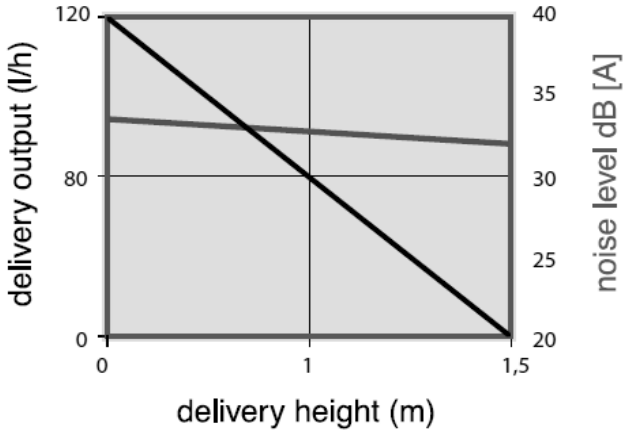
Features

- **Silent running – centrifugal pump**
- **1.5 metre 3 x core power lead**
- **Ball Bearing drive shaft**
- **Can be Wall mounted**
- **Check valve to prevent back-flow of condensate water into the pump**

Technical Data

- **Maximum flow rate:** 120 l/h
- **Maximum head:** 1.5 metres
- **Voltage:** 230/1/50 **Output:** 48VA
- **Housing:** Made from tough corrosion & impact resistant ABS plastic
- **Warranty Period:** 12 months (parts or replacement only)
- **Pressure Hose:** Not supplied - 8.0mm ID x 2.0mm wall clear vinyl tube is recommended & available from Airefrig Australia if required (P/No: 3220257 - sold by the metre)
- **Tank / Reservoir Capacity:** max. 0.2 litres
- **Compact size:** 165(L) x 65(W) x 85(H) mm





Pump Installation and pipe connections

- Pump assembly must be mounted level & the inlet must be below the lowest drain point
- When installing the pump assembly, make sure that it is installed in such a way that there is access to the pump for required maintenance.
- Run flexible tubing or pipe from the condensate drain on the evaporator pan and / or drain to the inlet hole on the pump assembly. This drain line should have a continuous downward slope to allow for gravity flow. Cut the end of the line at an angle so the end does not close off on the bottom of the pump's tank.
- Connect the discharge line by hand – tighten the cap nut of the check valve in a clockwise direction. Clear vinyl tube 8.0mm ID x 2.0 wall mm is recommended. Extend the discharge line straight up from the pump to the highest point, run the discharge line to a drain with a downward slope.
- For best results, the drain should be below or approximately level with the bottom of the pump's tank. If it is not possible to slope the line downward, make an inverted "U" trap at the highest point of the discharge line above the pump.
- Make sure pump is connected to a constant power source, not a fan or other device that may run intermittently.

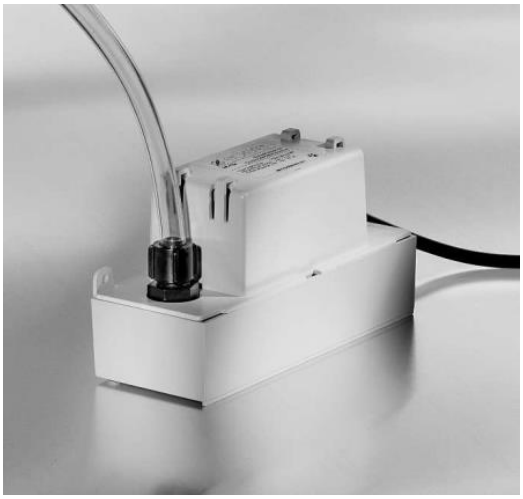
LATENT CONDENSATE PUMPS - EE150

Starting & Testing Procedure:

- Before start up ensure that the system is thoroughly cleaned to eliminate any foreign bodies that may damage or impair the condensate pumps operation.
- Make sure that the hose is connected properly.
- Pour water into the pump reservoir and check the pump switches on and off when the water rises or drops.
- To test the overflow alarm circuit:
- Kink the tube coming from the pump discharge, or turn off power supply
- Pour water into the pump reservoir, filling it completely.
- As the water level nears the top of the unit, the overflow alarm switch will activate. (Eg. triggering alarm circuit, if used.)
- Un-kink the tube, or turn power back on and allow the pump to empty the tank, as the water level drops the overflow safety switch will de-activate.

Required Preventative Maintenance:

- Maintenance is required at least every 12 months before the start of the season.
  Some environments may require service more frequently.
- Turn off all power to the pump.
- Remove the reservoir / tank cover & lift the drive / pump unit out
  (The tank of the EE150 can be removed by inserting a screwdriver in one of the side slots of the tank & levering it away – do not overstress the material – then remove the 2 x Phillips screws located on top.)
- Remove the discharge line from the check valve by unscrewing the cap nut
- Unscrew the check valve from the drive / pump unit using a SW20 wrench
- Check the valve for any obstructions or damage.
  To re-install valve, tighten by hand then a half turn more using the SW20 wrench.
- Check that the float mechanisms are clean & move up & down freely.
- Clean the reservoir / tank & float mechanisms using a damp cloth & mild detergent
- Do not open the drive / pump unit, as this should never require maintenance.
  Note: breaking the seal on the drive / pump assembly may void warranty.
- Re-assemble unit in reverse order & check operation



LATENT CONDENSATE PUMPS - EE400

The EE400 condensate pump is designed to automatically remove water from air conditioners and evaporator coils etc. This pump has its own reservoir / tank but can be taken out of its housing and placed into an external pan if required. (pan height requirements need to be maximum height of 70mm & minimum height of 60mm).

Features

- **Silent running – centrifugal pump**
- **Pump encapsulated and liquid cooled**
- **1.5 metre 3 x core power lead**
- **Ball Bearing drive shaft**
- **Overflow safety alarm switch** (1metre 2 x core lead)
- **Wall mounting bracket**
- **Check valve to prevent back-flow of condensate water into the pump**

Technical Data

- **Maximum flow rate:** 350 l/h
- **Maximum head:** 4 metres
- **Voltage:** 230/1/50 **Output:** 65VA
- **Alarm Switch:** Voltage free contacts. (max. 24V, 6VA, normally open)
- **Housing:** Made from tough corrosion & impact resistant ABS plastic
- **Warranty Period:** 12 months (parts or replacement only)
- **Pressure Hose:** Not supplied - 8.0mm ID x 2.0mm wall clear vinyl tube is recommended & available from Airefrig Australia if required (P/No: 3220257 - sold by the metre)
- **Tank / Reservoir Capacity:** max. 0.5 litres
- **Compact size:** 185(L) x 85(W) x 100(H) mm **Weight:** 1600 grams





Pump Installation and pipe connections

- Pump assembly must be mounted level & the inlet must be below the lowest drain point
- When installing the pump assembly, make sure that it is installed in such a way that there is access to the pump for required maintenance.
- Run flexible tubing or pipe from the condensate drain on the evaporator pan and / or drain to the inlet hole on the pump assembly. This drain line should have a continuous downward slope to allow for gravity flow. Cut the end of the line at an angle so the end does not close off on the bottom of the pump's tank.
- Connect the discharge line by hand – tighten the cap nut of the check valve in a clockwise direction. Clear vinyl tube 8.0mm ID x 2.0 wall mm is recommended. Extend the discharge line straight up from the pump to the highest point, run the discharge line to a drain with a downward slope.
- For best results, the drain should be below or approximately level with the bottom of the pump's tank. If it is not possible to slope the line downward, make an inverted "U" trap at the highest point of the discharge line above the pump.
- Make sure pump is connected to a constant power source, not a fan or other device that may run intermittently.

LATENT CONDENSATE PUMPS - EE400

Starting & Testing Procedure:

- Before start up ensure that the system is thoroughly cleaned to eliminate any foreign bodies that may damage or impair the condensate pumps operation.
- Make sure that the hose is connected properly.
- Pour water into the pump reservoir and check the pump switches on and off when the water rises or drops.
- To test the overflow alarm circuit:
- Kink the tube coming from the pump discharge, or turn off power supply
- Pour water into the pump reservoir, filling it completely.
- As the water level nears the top of the unit, the overflow alarm switch will activate. (Eg. triggering alarm circuit, if used.)
- Un-kink the tube, or turn power back on and allow the pump to empty the tank, as the water level drops the overflow safety switch will de-activate.

Required Preventative Maintenance:

- Maintenance is required at least every 12 months before the start of the season.
  Some environments may require service more frequently.
- Turn off all power to the pump.
  Warning alarm contacts may have different power source.
- Remove the reservoir / tank cover & lift the drive / pump unit out
- Remove the discharge line from the check valve by unscrewing the cap nut
- Unscrew the check valve from the drive / pump unit using a SW20 wrench
- Check the valve for any obstructions or damage.
  To re-install valve, tighten by hand then a half turn more using the SW20 wrench.
- Check that the float mechanisms are clean & move up & down freely.
- Clean the reservoir / tank & float mechanisms using a damp cloth & mild detergent
- Do not open the drive / pump unit, as this should never require maintenance.
  Note: breaking the seal on the drive / pump assembly may void warranty.
- Re-assemble unit in reverse order & check operation



LATENT CONDENSATE PUMPS – EE900M

The patented and whisper-quiet EE900M pump is designed for condensate removal in noise sensitive areas.

In contrast to conventional peristaltic pumps, the EE900M operates on the same principle as a reciprocating piston pump (i.e. no peristaltic tube resulting in a maintenance free pump, with no wear & tear or costly tube replacement).

- Low noise levels are achieved due to the slow movement of the piston.
- The pump maintains a constant flow rate independent of the discharge height.
- 6mm ID x 2mm wall flexible pipe is required for delivery & suction lines (not supplied with pump)
- A test switch located on the side of the pump will allow pump to run for approximately 3 minutes.

EE900M pumps can be configured to operate with 1 of 3 sensing options:

- Water level float detection sensor (supplied standard with pump).
- Temperature differential (optional sensor kit - purchased separately).
- Cooling Signal – wire to the air conditioning unit cooling signal.
  (Note: The cooling signal option should not be used with inverter units)



Maximum flow rate: 6 l/h

Maximum delivery height: 7 metre head
(Delivery height is from pump outlet)

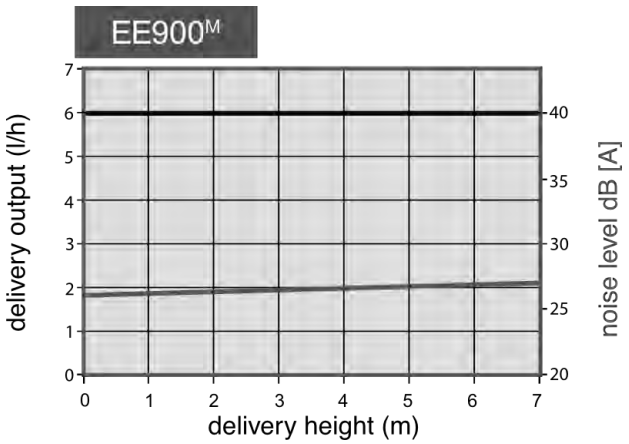
Maximum suction height: 2 metre head
(Suction height is between sensor & pump inlet)

Voltage: 230/1/50 **Output**: 10VA

Pump Weight: 700g

Pump Dimensions: 152(L) x 85(W) x 114(H) mm

Sensor Dimensions: 82(L) x 39(W) x 39(H) mm



Alarm Switch: 48V AC/DC / 1.5A (resistive load), N/O normally open
(Note: alarm switch is available only when water level float sensor option is used)

IP Rating: 20

Housing Components: Manufactured from self-extinguishing materials.

Warranty Period: 12 months (parts or replacement only)



Replacement sensor unit
part # 9001301011

Electrical connections:
Brown wire: Phase
Blue wire: Neutral
Green / yellow wire: PE
Black wire: Cooling Signal
Red wire: Alarm contact
White wire: Alarm contact





Optional sensor kit
part # 9704010011

LATENT CONDENSATE PUMPS – EE900M

Option with Water level float sensor

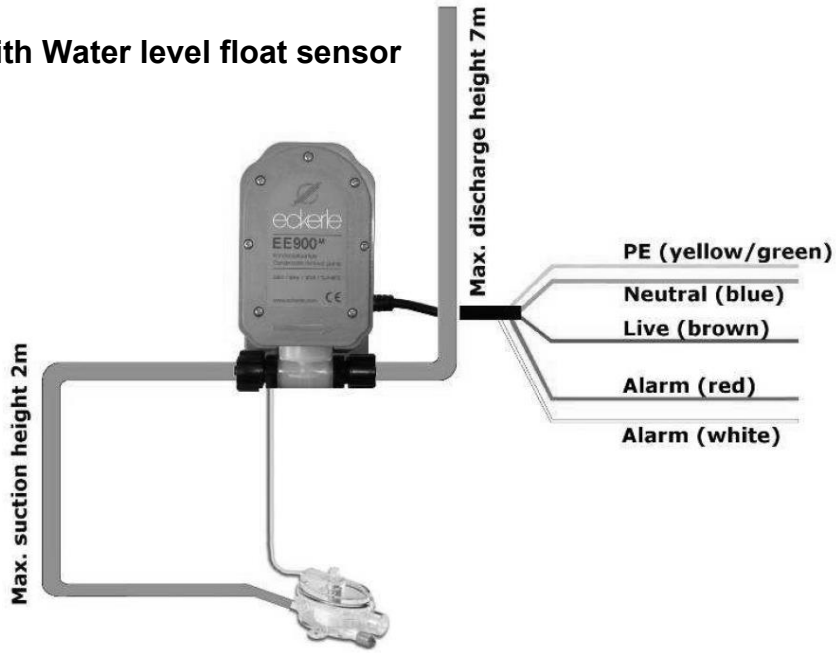
Install the pump in the intermediate ceiling using the relevant mounting holes.

Connect the water level sensor to the pump.

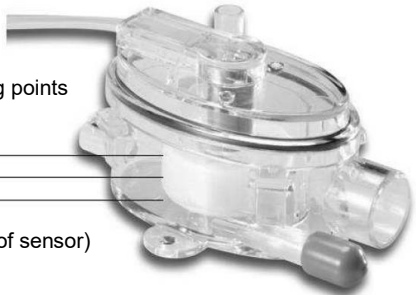
Alarm switch notes:
The integrated alarm switch (N/O, normally open) is used for overflow detection and should be wired in.

The pump has a build in alarm delay of 10s to prevent false alarms.
Maximum allowed Voltage: 48 V AC/DC
Maximum allowed Current: 1.5A (resistive load)





Water Level Sensor
The water level sensor has 3 switching points



(Measured from bottom of sensor)

Sensor Installation and Mounting:

- Always install the float module horizontally.
- Maximum angle the sensor can be mounted is 10 degrees.
- The sensor can be mounted directly onto metal surfaces without any detrimental effects on the magnetic float.
- Drain or breather tube (150mm x 6mm diam.) should be fitted to easily dispel air.
- Sensor can be fitted to the end of the split air conditioner drain tube or on other types of air conditioners connected to the side outlet of the condensate tank.

Starting Procedure:

- Before start up ensure that the system is thoroughly cleaned to eliminate metal splinters and foreign bodies that may damage or impair the condensate pumps operation.
- Make sure that all hoses are connected properly.
- Pour water into the air conditioner drain & check the pump switches on and off when the water rises or drops.
- To check operation of the alarm switch keep adding water until the alarm function is triggered (Check that the alarm contacts work ie. air conditioner cut-out or audible/visual warning signal, etc.)

Required Preventative Maintenance:

- Maintenance is required <u>at least</u> every 12 months before the start of the season.
- Turn all power to the pump off. (Warning: alarm contacts may have different power source)
- Remove the sensor.
- Carefully take off the lid and remove the float.
- Using a mild commercial cleaning agent, carry out the following.
- Clean the filter, float & the inside of the sensor housing.
- Re-assemble making sure that the magnet on the float points downwards.
- Some environments may require service more frequently.

LATENT CONDENSATE PUMPS – EE900M

Option to Control by Temperature Sensors

Install the pump in the intermediate ceiling using the relevant mounting holes.

The red sensor measures the ambient temperature (“air on”)

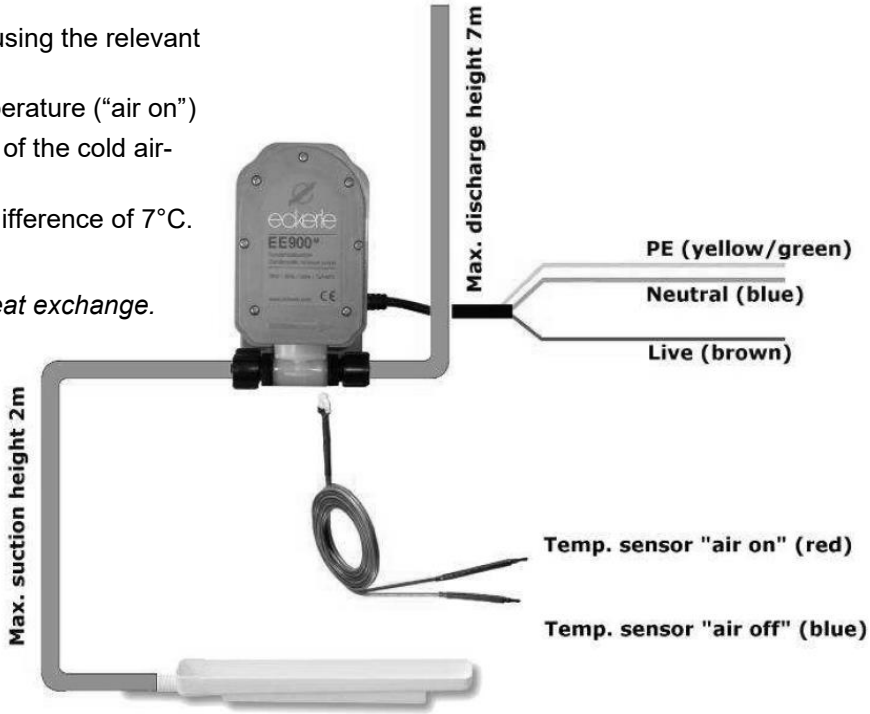
The blue sensor measures the temperature of the cold air-conditioner airflow (“air off”).

The pump starts working at a temperature difference of 7°C.

Warning:
Sensors must never touch the gills of the heat exchange.



Optional sensor kit
part # 9704010011



Option to Control by the Cooling Signal

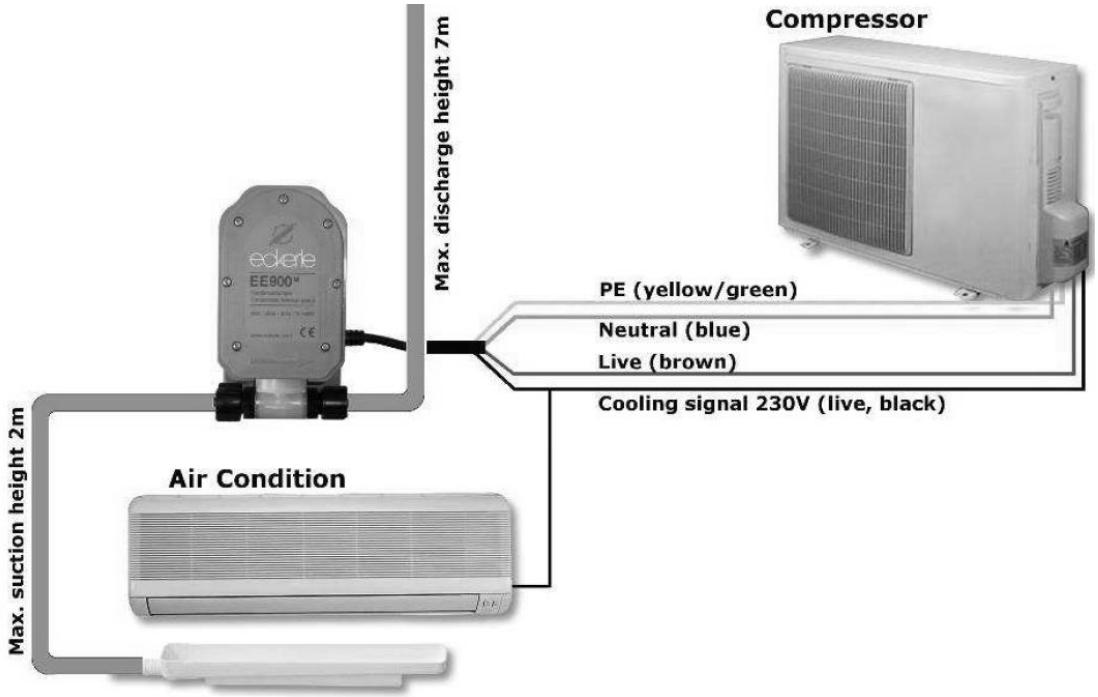
Install the pump in the intermediate ceiling using the relevant mounting holes.

Connect the black wire to the live (230V cooling signal) of the compressor.

The pump only works during the cooling phase of the air-conditioner.

The pump is controlled by the cooling signal and has an overrun time of 3 minutes.

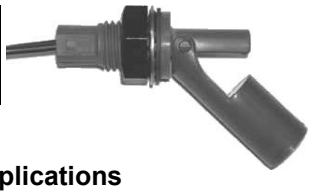
Warning:
Do not connect the black wire to live directly, as continuous operation of the pump is not allowed.
Do not use the cooling signal option on inverter units



LIQUID LEVEL SENSOR

Internal Liquid Level Sensor (Not for use with refrigerants)

Airefrig Part Number	Description	List Price Ex GST
LS30311NBB	Liquid Level Sensor	



Design Features
- High or low level sensing
- Internal fitting
- Reed Switch reliability
- Nitrile sealing components
- Easy installation

Product Comments
- UL listed model, File E98428
- Suitable for a wide range of liquids
- Interface option available
- Nylon 6.6 Material
- Normally open or normally closed by rotating through 180º

Typical Applications
(Not for use with refrigerants)
- Chemical high or low level
- Diesel Fuel
- Fuel low level
- Alcohols
- Low Oil Detection

Material, Design & Operation

Mounting: Side Entry
Material: Nylon 6.6
Fitting: Internal Fitting
Contact Form: Form A - SPST
Contact Material: Ruthenium
Max Switching Volts: 250 VAC or 200VDC
Max Switching Current: 1.0
Max Power: 15 Watts
Housing Temp Range °C: 110
Float Material: Glass Filled Nylon 6.6
Connection Type: Stripped Cables
Cable Type: 2 x 18AWG 32/0.2mm PVC insulated 0.5m long to UL/CSA/BS6361

Cable Colour: Black/Black
Housing Material: Glass Filled Nylon 6.6
Housing Colour: Blue
Minimum Specific Gravity: 0.85
Operating Temperature °C: 110
Medium/Liquid: Fuels & Oils , Alcohols
Operating Pressure: 4 Bar maximum
Sealing Components: Nitrile
Mounting Shock: 50g for 11ms duration
Mounting Vibration: 35g up to 500Hz
Operate Mode: N/C with float horizontal
Approvals: UL
Electrical Switching: SPST

External Liquid Level Sensor (Not for use with refrigerants)

Airefrig Part Number	Description	List Price Ex GST
LS80331	Liquid Level Sensor	



Design Features
- High or low level sensing
- External fitting by ½" NPT
- Reed Switch reliability
- Easy installation

Product Comments
- UL listed model, File E98428
- Suitable for a wide range of liquids
- Interface option available
- Polypropylene Material
- Normally open or normally closed by rotating through 180º

Typical Applications
(Not for use with refrigerants)
- Drinking water Level
- Coolant level indication
- Cooling systems
- Water high or low Level
- Waste water Level

Material, Design & Operation

Mounting: Side Entry
Material: Polypropylene
Fitting: External Fitting
Contact Form: Form A - SPST
Contact Material: Ruthenium
Max Switching Volts: 250 VAC
Max Switching Current: 1.0
Max Power: 15 Watts
Housing Temp Range °C: 80
Connection Type: Stripped Cables
Cable Type: 2 x 18AWG 32/0.2mm PVC insulated 0.5m long to UL/CSA/BS6361

Cable Colour: Black/Black
Housing Material: Glass Filled Polypropylene
Housing Colour: Charcoal
Float Material: Glass Filled Polypropylene
Minimum Specific Gravity: 0.65
Operating Temperature °C: 80
Operating Pressure: 4 Bar
Sealing Components: Silicone
Mounting Shock: 50g for 11ms duration
Mounting Vibration: 35g up to 500Hz
Operate Mode: N/C with float horizontal

LIQUID LEVEL SWITCH

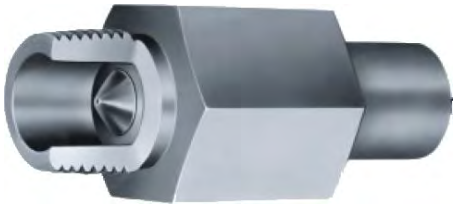
HENRY TECHNOLOGIES

Liquid Level Switch

The S-9400 series liquid level switches use infrared light reflecting from a conical glass prism moulded in the sight glass as a means of detecting the absence of a fluid at the level of the glass cone. When no fluid covers the lower half of the cone, infra-red light from the module reflects from the mirror-like inner surface of the cone back to a light detector signalling the electronic module to switch. When fluid covers the lower half of the glass cone, the light from the module passes into the fluid. This absence of light is detected by the module, which switches into the opposite direction. The module provides a .06/.10 differential distance from the cone point down.

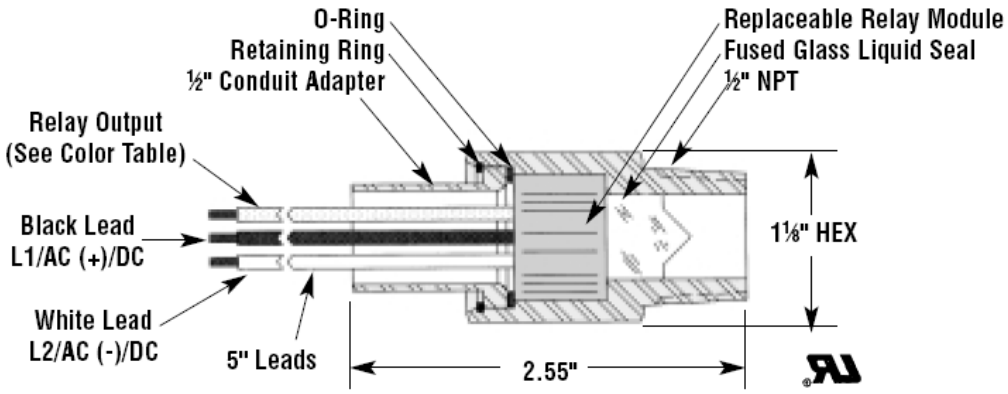
Features:

- Switches Solid-State for liquid sensing
- No contact level sensing
- Serviceable without loss of refrigerant
- Works with oil, refrigerants, or any non-hazardous non-corrosive fluid
- Glass prism in contact with fluid medium
- Industry approved for Nema 4 and 4X for Water tight
- Meets UL Standard #873 & #207 File Numbers E141577 & sa6720*
  *U.S. Patent #5,278,426 & other U.S. and Foreign Patents pending



Specifications:

- Mounting: 1/2 " NPT Connection; Horizontal Only
- Switch Inductive Ratings: 36 va Pilot Duty Rated
- Contacts, Power Off: Normally Open (N.O.)
- Contact Life: Over 1 Million Cycles at Rated Electrical Load
- Pressure Rating: 1200 PSI Working, 6000 Burst
- Power for Operation: 3.5 ma AC, 5.5 ma DC
- Minimum Load: 2 ma (without bleed resistor)



Airefrig Part Number	Voltage	Resistive Rating	Contacts Liquid Present	Wire Colour Code	Min / Max Fluid Temp	List Price Ex GST
S9420A	208/240 50/60hz	0.25 Amps	N.O.	Red & White/Stripe	-40°C / 93°C	

CAPACITORS

Motor Start Capacitor Kits (Includes end cap & mounting bracket)

Airefrig Part Number	MFD	Volts	Dimensions mm	List Price Ex GST
25-30MFDKIT	25-30	250	85 x 46	
36-43MFDKIT	36-43			
40-48MFDKIT	40-48			
47-56MFDKIT	47-56			
50-60MFDKIT	50-60			
53-64MFDKIT	53-64			
60-72MFDKIT	60-72			
64-77MFDKIT	64-77		85 x 46	
72-88MFDKIT	72-88			
80-96MFDKIT	80-96			
88-108MFDKIT	88-108			
108-130MFDKIT	108-130			
120-144MFDKIT	120-144	330	110 x 45	
124-149MFDKIT	124-149	250	85 x 46	
161-193MFDKIT	161-193		110 x 52	
270-324MFDKIT	270-324	330	111 x 46	



Motor Run Capacitors

Airefrig Part Number	MFD	Volts	Dimensions mm	List Price Ex GST
1MFD	1.0	440	30 x 55	
1.5MFD	1.5			
2MFD	2.0			
2.5MFD	2.5		25 x 57	
3MFD	3.0		30 x 72	
3.5MFD	3.5			
4MFD	4.0		25 x57	
5MFD	5.0		30 x 57	
6MFD	6.0			
8MFD	8.0		30 x 70	
10MFD	10.0			
12MFD	12.0		35 x 70	
15MFD	15.0			
20MFD	20.0		40 x 70	
25MFD	25.0		40 x 94	
30MFD	30.0			
35MFD	35.0		45 x 94	
40MFD	40.0			
45MFD	45.0		50 x 94	
50MFD	50.0		50 x 116	
60MFD	60.0		55 x 116	
70MFD	70.0	440	50 x 116	
75MFD	75.0	400		
80MFD	80.0	440	55 x 116	



Contactors & Overloads

AC Contactors (240V Coils)

Airefrig Part Number	Ratings 415 V			Auxiliary Contacts		List Price Excl GST
	KW	*AC3 (Amps)	**AC1 (Amps)	NO	NC	
MC9B240V	5.0	9	25	1	1	
MC12B240V	5.5	12	25	1	1	
MC18B240V	7.5	18	32	1	1	
MC22B240V	11.0	22	40	1	1	
MC32A240V	15.0	32	50	2	2	
MC40A240V	18.5	40	60	2	2	
MC50A240V	22.0	50	70	2	2	P.O.A.
MC65A240V	30.0	65	100	2	2	
MC75A240V	37.0	75	110	2	2	P.O.A.
MC85A240V	45.0	85	135	2	2	P.O.A.


MC22B240V


MC32A240V

* AC3 – Inductive (ie. Motor start etc.) ** AC1 – Resistive (ie. Heaters etc.)

Features:

- 3 Pole Contactors
- Add on Accessories
- Complies with standards: - IEC/BS/EN 60947

Note: GMC (obsolete) & the latest MC thermal overload relays & aux contacts are not interchangeable.

Contactor Coils to suit MC series contactors

Airefrig Part Number	Voltage 50/60Hz	Suit Contactors	List Price Excl GST
MC22CO24VAC	24	MC9 to MC22	
MC22CO240VAC	240		
MC22CO415VAC	415		
MC40CO24VAC	24	MC32 to MC40	
MC40CO240VAC	240		P.O.A.
MC40CO415VAC	415		P.O.A.


MC22CO24VAC

Auxiliary Contacts – suit MC series contactors

Airefrig Part Number	Contacts		Mounting Position	Suit Contactors	List Price Excl GST
	NO	NC			
MCUA111	1	1	Side	MC6 to MC150	
MCAU202	0	2	Top		
MCAU220	2	0			
MCAU422	2	2			


MCUA111


MCAU220

Mechanical Interlock – suit MC series contactors

Airefrig Part Number	Description	List Price Excl GST
MCUR02	To Suit Contactors MC9 to MC100	



Contactors & Overloads

Thermal Overload Relays suit MC series contactors

Airefrig Part Number	Range - Amps	Suit MC Series Contactors	List Price Excl GST
MT323K0.16	0.10 - 0.16	MC9 to MC40	P.O.A.
MT323K0.25	0.16 - 0.25		
MT323K0.40	0.25 - 0.40		
MT323K0.63	0.40 - 0.63		
MT323K1	0.63 - 1.00		
MT323K1.6	1.0 - 1.6		
MT323K2.5	1.6 - 2.5		
MT323K4	2.5 - 4.0		
MT323K6	4.0 - 6.0		
MT323K8	5.0 - 8.0		
MT323K9	6.0 - 9.0		
MT323K10	7.0 - 10.0		
MT323K13	9.0 - 13.0		
MT323K18	12.0 - 18.0		
MT323K22	16.0 - 22.0		
MT323K25	18.0 - 25.0		
MT323K32	22.0 - 32.0		
MT323K40	28.0 - 40.0		
MT633K50	34.0 - 50.0	MC50 to MC65	P.O.A.
MT633K65	45.0 - 65.0		P.O.A.
MT953K75	54.0 - 75.0	MC75 to MC100	P.O.A.
MT953K85	63.0 - 85.0		P.O.A.



MT323K1



MT953K85

Note: MC series overloads are not interchangeable with obsolete GMC series contactors.
: Other overload relay sizes available upon request.

Electronic Overload Relays

Airefrig Part Number	Range - Amps	Suit MC Series Contactors	List Price Excl GST
GMP223P5A	1.0 – 5.0	MC9B to MC22B	
GMP223P22A	4.4 – 22.0		
GMP403P40A	8.0 – 40.0	MC32A to MC40A	



Electronic Overload Relays (Suit obsolete GMC Series contactors)

Airefrig Part Number	Range - Amps	Suit (obsolete) GMC Series Contactors	List Price Excl GST
GMP223P5	1.0 – 5.0	GMC9 to GMC22	
GMP223P22	4.4 – 22.0		
GMP403P20	4.0 – 20.0	GMC32 & GMC40	
GMP403P40	8.0 – 40.0		



Enclosed DOL Starters

Airefrig Part Number	KW	Amps	Voltage	Overload	List Price Excl GST
GMW12MB240VAC	5.5	12	240	Not Included	
GMW12MB415VAC	5.5	12	415		
GMW18MB240VAC	7.5	18	240		



ELECTRICAL PRODUCTS

Timers, Relays & Switches etc

Timers

Airefrig Part Number	Description	List Price Excl GST
GT3A2AD24	Multi-Function 8 Pin Timer 24V AC/DC	
GT3A2AF20	Multi-Function 8 Pin Timer 100-240V AC	
GT3A3AD24	Time Delay 8 Pin Relay 24V AC/DC	
GT3A3AF20	Time Delay 8 Pin Relay 100-240V AC	
SR2P05	8 Pin Mounting Base – Din Rail – Suit Above	
CRM93H	Multi-Function Dim Rail Timer 24-240V AC/DC 8 amp	


GT3A2AD24


SR2P05

Relays

Airefrig Part Number	Description	List Price Excl GST
RU2SA220	Relay Flat 8 Pin 2 x C\O Contact 220V AC	
RU2SA24	Relay Flat 8 Pin 2 x C\O Contact 24V AC	
RU4SA220	Relay Flat 14 Pin 2 x C\O Contact 220V AC	
RU4SA24	Relay Flat 14 Pin 2 x C\O Contact 24V AC	
SM2S05C	Relay Base – Flat 8 Pin	
SY4SO5C	Relay Base – Flat 14 Pin	


RU2SA220


SY4SO5C

Weatherproof Isolators

Airefrig Part Number	Amps	Poles	Motor Rated	IP Rating	List Price Excl GST
IPW201	20	1	AC-23B	IP66	
IPW203	20	3			
IPW204	20	4			
IPW351	35	1			
IPW353	35	3			



Plastic Enclosure

Airefrig Part Number	Description	List Price Excl GST
861656	Grey Plastic Enclosure 254 x 180 x 111mm IP66	

(861656 are used on some Enthalpy units)



Circuit Breaker

Airefrig Part Number	Description	List Price Excl GST
G61C02	C Curve 6KA 2amp 240 / 415 Vac	
G61C10	C Curve 6KA 10amp 240 / 415 Vac	
G61C16	C Curve 6KA 16amp 240 / 415 Vac	
G61D10	D Curve Motor Application 6KA 10amp 240 / 415 Vac	
G61D16	D Curve Motor Application 6KA 16amp 240 / 415 Vac	



ELECTRICAL PRODUCTS

Fuses & Fuse Holders

HRC BS Type Fuse Links – Offset Tags Clip Fixing

Airefrig Part Number	Volts AC	Amps	Sizes	Carton Quantity	List Price Excl GST
NS2	415	2	62mm	20	
NS4		4			
NS6		6			
NS10		10			
NS16		16			
NS20		20			
NS25		25			
NS32		32			



HRC BS Type Fuse Links – Offset Tags 2 Hole

Airefrig Part Number	Volts AC	Amps	Sizes	Carton Quantity	List Price Excl GST
NIT10	550	10	44.5mm	20	
NIT16		16			
NIT20		20			
TIA10	660	10	73.0mm	20	
TIA16		16			
TIA20		20			
TIA25		25			
TIA32		32			



Fuse Links for Modular Fuse Holders (suit CMS101)

Airefrig Part Number	Volts AC	Amps	Sizes	Carton Quantity	List Price Excl GST
10G10	500	10	10 x 38mm	10	
10G16		16			
10G20		20			
10G25		25			
10G32		32			



Compact Modular Fuse Holder

Airefrig Part Number	Volts AC	Amps	Sizes	Carton Quantity	List Price Excl GST
CMS101	415	32	10 x 38mm	12	



Red Spot Industrial & Commercial Fuse Holder – Black

Airefrig Part Number	Volts AC	Amps	Sizes	Carton Quantity	List Price Excl GST
RS20H	660	20	NIT	10	
RS32H		32	TIA - TIS		



Safeclip Fuse Holders for Industrial & General Applications - Black

Airefrig Part Number	Volts AC	Amps	Sizes	Carton Quantity	List Price Excl GST
SC32BW	415	32	NS (back wire)	10	
SC32H			NS (front wire)		



W66 Series Weatherproof Switchgear

W66 series Weatherproof Switchgear casings are manufactured using UV stabilised, high impact resistance polycarbonate.

- IP66 water & dust proof
- Plugs & sockets are tested to AS/NZS3112 & 3123
- Interchangeable with other Australian standard plugs & sockets

W66 Series - Straight Plug Tops (Single Phase)

Airefrig Part Number	Pin Config	Amp Rating	Voltage Rating	Dimensions			List Price Excl GST
				Ring Diameter	Body Length	Body Length Including Gland	
W66SP310	3 x flat	10.0	240V AC	70 mm	73 mm	99.5 mm	
W66SP315		15.0					

(3 phase plug top options available upon request)



W66 Series - Switched Outlet Sockets

Airefrig Part Number	Pin Config	Amp Rating	Voltage Rating	Dimensions				List Price Excl GST
				Height	Width	Depth top of cover	Depth top of handle	
W66SS310	3 x flat	10.0	1 Phase (240V)	197 mm	101 mm	66 mm	86 mm	
W66SS315		15.0						
W66SS410	4 x round	10.0	3 Phase (415V)	197 mm	101 mm	91 mm	110 mm	
W66SS420		20.0						
W66SS432		32.0						
W66SS510	5 x round	10.0						
W66SS520		20.0						
W66SS532		32.0						

(Other options available upon request)



W66SS310



W66SS532

W66 Series - Isolating Switches c/w Base

Airefrig Part Number	Switch Type	Amp Rating	Voltage Rating	Dimensions				List Price Excl GST
				Height	Width	Depth top of cover	Depth top of handle	
W66IS220	2 Pole	20.0	415V AC	101 mm	101 mm	91 mm	110 mm	
W66IS320	3 Pole	20.0						
W66IS332	3 Pole	32.0						

(Other options available upon request)



W66 Series - Module Back Boxes

Airefrig Part Number	No of Modules	No of Bridges	Dimensions			List Price Excl GST
			Height	Width	Depth	
W66B1	1	0	101 mm	101 mm	63 mm	
W66B2	2	1	197 mm	101 mm	63 mm	

(Other options available upon request)



W66 Series - Module Lids

Airefrig Part Number	No of Modules	Pre-drilled Holes in Lid	Dimensions			List Price Excl GST
			Height	Width	Depth	
W66L1	1	none	96 mm	96 mm	28 mm	
W66L1H1	1	1 x 22mm				
W66L1H2	1	2 x 22mm				

(Other options available upon request)



W66L1

W66 Series – 4 Pole DIN Mount Circuit Breaker Housing

Airefrig Part Number	Description	Dimensions					List Price Excl GST
		Height	Width	Depth top of cover	Depth top of lock clip	Depth cover open	
W66CB4	with base	197 mm	101 mm	125 mm	140 mm	250 mm	
W66CB4NLB	Low profile without base	197 mm	101 mm	96 mm	104 mm	186 mm	

(Other options available upon request)

Note: Dimensions include “B2” back box/base.



W66CB4



W66CB4NLB

ELECTRICAL PRODUCTS

Connectors, Glands & Cable Ties etc

Electrical Crimp Connectors, Terminals etc

Airefrig Part Number	Description	List Price Excl GST
UBBCPKT	Blue Connector - (Packet of 50)	
UBD5APKT	Blue Cutaway Eye Terminal - (Packet of 50)	
UBD6PKT	Blue Eye Terminal 6mm - (Packet of 50)	
UBDPBQC63PKT	Blue Male Spade Terminal - (Packet of 100)	
UBDQC63PKT	Blue Female Spade Terminal - (Packet of 50)	
UBDQC63INSPKT	Blue Female Insulated Spade Terminal - (Packet of 50)	
URD5PKT	Red Eye Terminal 5mm - (Packet of 100)	
URD5APKT	Red Cutaway Eye Terminal - (Packet of 50)	
URDPBQC63PKT	Red Male/Female Spade Terminal - (Packet of 50)	
UYBCPKT	Yellow Connector - (Packet of 25)	
UYD6PKT	Yellow Eye terminal 6mm - (Packet of 25)	
UYD6APKT	Yellow Cutaway Eye Terminal - (Packet of 25)	
UYD8PKT	Yellow Eye Terminal 8mm - (Packet of 25)	
UYDQC63PKT	Yellow Female Spade Terminal - (Packet of 50)	
YQCMPKT	Yellow Male Spade Terminal - (Packet of 50)	
563A1	Connector 30amp Single Screw (Blue Point)	
10E	12 Way Terminal Strip 30 amp	


Connector


Female Spade Terminal


Male Spade Terminal


Male/Female Spade Terminal


Cutaway Eye Terminal


Eye Terminal

Cable Glands, Hole Plugs & Snap Bushes

Airefrig Part Number	Description	List Price Excl GST
AG16BK	Black Nylon Cable Gland 16mm Straight	
AG20BK	Black Nylon Cable Gland 20mm Straight	
AG25BK	Black Nylon Cable Gland 25mm Straight	
HP19BK	Black Nylon Hole Plug 19mm	
HP38BK	Black Nylon Hole Plug 38mm	
SB16BK	Black Nylon Snap Bush – suit 16mm Hole	
TNCN16B	Black Nylon Conduit Gland 20mm Straight (less lock nut)	
CLI25920BK	Black Nylon 20mm Lock Nut(for TNCN16B Conduit Gland)	



AG16BK


HP19BK


SB16BK

Cable Ties & Cable Cleats

Airefrig Part Number	Description	List Price Excl GST
CABLETIE100	100mm x 2.5mm Black Cable Tie (Packet of 100)	
CABLETIE190	190mm x 4.8mm Black Cable Tie (Packet of 100)	
CABLETIE280	280mm x 4.8mm Black Cable Tie (Packet of 100)	
CABLETIE368	368mm x 4.8mm Black Cable Tie (Packet of 100)	
CABLETIE550	550mm x 8.0mm Black Cable Tie (Packet of 100)	
EP153BP	Black Cable Cleat 23 – 37mm (each)	



ECOPOINT LED TUBES & LIGHTING

ecoLED

LED Tubes
the future of lighting



ecoLED tube lights give you superior quality lighting with huge power savings. Their simple retrofit instantly reduces your energy use for lighting by as much as 70%. Add to that a life prediction of 50,000 hours and you maintenance costs and carbon emissions are massively reduced.

Finest Quality
ecoLED tubes lead the market with cutting edge technology, proprietary features and high quality components. Exclusive use of superior Everlight 3020 and 3528 LED's provide reliable high light output. Tight bin selection ensures true and consistent colour temperature.

Leaders and Longevity
Industry leaders, SOE's and government departments rely on ecoLED tubes to slash energy costs and help save our environment. Ecopoint has been developing green technology in New Zealand since 2005.

Massive Energy Savings with ecoLED
Compared to T8 fluorescent lamps, the energy savings generated with ecoLED's can materially increase bottom line profit with payback in as little as 2 years, particularly for customers with high lighting costs. ecoLED's also provide real and immediate carbon emissions savings.

Rotating End Cap
Rotating end caps with locking facility on ecoLED tubes allows directional lighting to fully optimise product display.



Aluminium Heat Sink
Aluminium strip on the spine of each tube increases heat dissipation and efficiency as well as adding rigidity to the lightweight polycarbonate body and lens.



Safety Wired
All ecoLED products are wired to comply with European Safety Standard EN60598.

Save up to 70% on Energy Costs
Compared to T8 fluorescent tubes, ecoLED's high lumens per watt offer huge and immediate savings on your energy costs for lighting of up to 70%.

50,000 Hour LED Life
Based on 18 hours per day, 7 days per week, ecoLED's 50,000 hour estimated life cycle will last a startling 8 years. At 8 hours per day, 5 days per week, that's over 24 years of operational use!!

Slash Maintenance Costs
Reliable solid-state technology without additional failure points like Ballasts, Capacitors and Starters mean on-going maintenance costs are massively reduced.

Reduce your CO_2 Output
The very low energy running costs of ecoLED's will help organisations meet their energy efficiency sustainability targets.

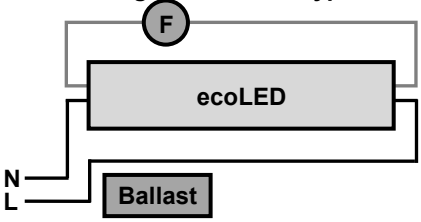
Cooler Lighting
ecoLED's run 40°C cooler than T8 fluorescent tubes, greatly reducing the load on Refrigeration and Air Conditioning systems, another energy saving.

No UV, Mercury or Flicker
ecoLED tubes do not contain Mercury, have zero UV output, do not flicker and offer reduced material waste due to their much longer life cycle.

Easy Retrofit
A quick and simple retro installation into incumbent battens with magnetic ballasts, means immediate energy saving and CO_2 reduction.

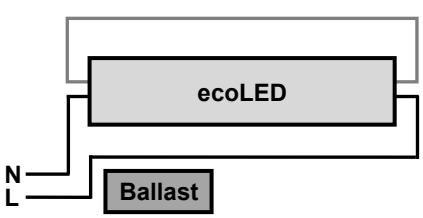
3 Year Warranty
Get peace of mind with a full 3 year manufactures warranty.

Magnetic Ballast Bypass



Required: Bypass ballast & replace starter with ecoLED fuse

Electronic Ballast Bypass



Required: Bypass ballast

ecoLED C Series Tubes

THE FUTURE OF LIGHTING

The only LED tube specifically engineered for the refrigeration industry.

The ecoLED C Series is unique in featuring a 3-row spread of LED's while Still meeting safety standard EN 60598.

In combination with lockable rotating end-caps, this enables you to maximise refrigerated product presentation.

It sports a food safe shatter-proof polycarbonate tube, plus is UV and mercury free.

Applications: *refrigeration – for long life, low heat and power saving.*



C Series Clear Tubes

Airefrig Part Number	ECC5K600	ECC5K900	ECC5K1200	ECC5K1500
List Price Each Excl GST				
Specifications				
Tube Type / LED direction	Clear / 1 x side	Clear / 1 x side	Clear / 1 x side	Clear / 1 x side
Tube Length	600mm	900mm	1200mm	1500mm
Tube Diameter (same as T8 fluro tube)	26mm	26mm	26mm	26mm
Rotating End Cap	Yes	Yes	Yes	Yes
Colour-Temperature (Kelvins)	5000-6000	5000-6000	5000-6000	5000-6000
Replaces Fluro Temp	86	86	86	86
Wattage of Tube	9 watts	12 watts	20 watts	22 watts
Number of LED's	144	216	288	360
Flux (LM)	1095	1500	2416	2650
LM/Watt	118	120	119	120
LUX 1m	280	391	546	590
Input Current (amps)	0.053	0.066	0.083	0.10
Power Factor	≥0.71 - ≥0.83	≥0.71 - ≥0.83	≥0.71 - ≥0.83	≥0.71 - ≥0.83
Colour Index (CRI)	≥70	≥70	≥70	≥70
Input Voltage	100 – 240V	100 – 240V	100 – 240V	100 – 240V
Hertz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz
Life Prediction (hours)	50,000	50,000	50,000	50,000
Working Temperature (°C)	-25 to +10	-25 to +10	-25 to +10	-25 to +10
Storage Temperature (°C)	-40 to +85	-40 to +85	-40 to +85	-40 to +85

ecoLED H Series Tubes

THE FUTURE OF LIGHTING

The H series is the latest flag ship tube for space lighting.

Developed in a sleek 26mm diameter body (visually identical to a fluro) with improved heat sink, dual lens choice, superior lumens-per-watt output, lockable rotating end caps and proven ecoLED quality.



Applications:
The H series is ideal for general fluorescent tube replacement in offices, retail, commercial and industrial lighting.

Availble in frosted and clear:

- Frosted lens tubes are direct replacements for exposed or diffused fluorescent tubes.
- Clear lens tubes offer increased lumen output for installation behind batten or troffer diffusers, avoiding output degradation from double diffusing.

H Series Frosted Tubes

Airefrig Part Number	EHF5K600	EHF5K900	EHF5K1200	EHF5K1500
List Price Each Excl GST				
Specifications				
Tube Type / LED direction	Frosted / 1 x sided	Frosted / 1 x sided	Frosted / 1 x sided	Frosted / 1 x sided
Tube Length	600mm	900mm	1200mm	1500mm
Tube Diameter (same as T8 fluro tube)	26mm	26mm	26mm	26mm
Rotating End Cap	Yes	Yes	Yes	Yes
Colour-Temperature (Kelvins)	5000-6000	5000-6000	5000-6000	5000-6000
Replaces Fluro Temp	86	86	86	86
Wattage of Tube	11 watts	20 watts	20 watts	24 watts
Number of LED's	108	216	216	240
Flux (LM)	1050	2000	2000	2400
LM/Watt	95	100	100	100
LUX 1m	380	600	600	650
Input Current (amps)	0.05	0.09	0.09	0.10
Power Factor	≥0.95	≥0.95	≥0.95	≥0.95
Colour Index (CRI)	≥70	≥70	≥70	≥70
Input Voltage	100 – 240V	100 – 240V	100 – 240V	100 – 240V
Hertz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz
Life Prediction (hours)	50,000	50,000	50,000	50,000
Working Temperature (°C)	-20 to +40	-20 to +40	-20 to +40	-20 to +40
Storage Temperature (°C)	-40 to +85	-40 to +85	-40 to +85	-40 to +85

H Series PINK Tubes for Meat displays

H Series Pink Tubes for Meat displays

Airefrig Part Number	EHFPK600	EHFPK900	EHFPK1200	EHFPK1500
List Price Each Excl GST				

ecoLED D Series Tubes

THE FUTURE OF LIGHTING

Building on ground breaking ecoPoint innovations is the proprietary ecoLED double-sided tube.

This effectively creates a 360-degree light source in the otherwise omni-directional LED tube market.



Applications:
This is the power saving solution for display fridge centre lights, commercial signage and reflected light fittings in general lighting and also refrigeration.

Available in frosted and clear: (or a combination of both on opposing sides)

- Frosted lens tubes are direct replacements for exposed or diffused fluorescent tubes.
- Clear lens tubes offer increased lumen output for installation behind batten or troffer diffusers, avoiding output degradation from double diffusing.

D Series Clear Tubes

Airefrig Part Number	EDC5K600	EDC5K900	EDC5K1200	EDC5K1500
List Price Each Excl GST				
Specifications				
Tube Type / LED direction	Clear / 2 x sided	Clear / 2 x sided	Clear / 2 x sided	Clear / 2 x sided
Tube Length	600mm	900mm	1200mm	1500mm
Tube Diameter (same as T8 fluro tube)	26mm	26mm	26mm	26mm
Rotating End Cap	Yes	Yes	Yes	Yes
Colour-Temperature (Kelvins)	5000-6000	5000-6000	5000-6000	5000-6000
Replaces Fluro Temp	86	86	86	86
Wattage of Tube	15 watts	20 watts	20 watts	24 watts
Number of LED's	144	216	216	240
Flux (LM)	1450	2000	2000	2400
LM/Watt	97	100	100	100
LUX 1m	280	310	310	340
Input Current (amps)	0.08	0.08	0.08	0.10
Power Factor	≥0.95	≥0.95	≥0.95	≥0.95
Colour Index (CRI)	≥70	≥70	≥70	≥70
Input Voltage	100 – 240V	100 – 240V	100 – 240V	100 – 240V
Hertz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz
Life Prediction (hours)	50,000	50,000	50,000	50,000
Working Temperature (°C)	-20 to +40	-20 to +40	-20 to +40	-20 to +40
Storage Temperature (°C)	-40 to +85	-40 to +85	-40 to +85	-40 to +85

ecoPOINT Tube Spares

Airefrig Part Number	Description	List Price (excl GST)
ECOENDFUSE	Fused End - suit H&D Series LED Tubes (c/w: spring & locator)	
ECOENDPOWER	Power End - suit H&D Series LED Tubes (c/w: spring & locator)	
ECOPOINTFUSE	Fuse for LED Tubes (to replace fluro starter - retrofitting to LED)	

ECOPOINT LED TUBES & LIGHTING

ECOPOINT - HI BAY LIGHTING

Hi Bay Lights

Airefrig Part Number	EHB5K100W	EHB5K150W
List Price Each (excl GST)	P.O.A.	
Specifications		
Wattage of Light	108 watts	150 watts
Equiv Std High Bay	350 watts	
Dimensions (mm)	581 x 415D (415)	475 x 500D (515)
Colour-Temperature	5500 kelvins	5500 kelvins
Number of LED's	1	1
Flux (LM)	6800	10500
LM/Watt	68	70
LUX 1m	627 average 2639 centre(515)	1959 average 5383 centre(515)
Input Current	2.85 amps	4.0 amps
Power Factor	≥95%	≥95%
Colour Index (CRI)	≥70	≥70
Input Voltage	100 – 265V	100 – 265V
Hertz	50 - 60 Hz	50 - 60 Hz
Life Prediction	30,000 hours	30,000 hours
Working Temperature	-44 to +55°C	-44 to +55°C
Storage Temperature	-44 to +55°C	-44 to +55°C
Warranty	3 Years	3 Years









ECOPOINT - FLOOD LIGHTS

Flood Lights

Airefrig Part Number	EFL5K70W	EFL5K100W	EFL5K140W
List Price Each (excl GST)	P.O.A.		
Specifications			
Wattage of Light	76 watts	108 watts	150 watts
Equiv Std High Bay	250 watts		400 watts
Dimensions (mm)	368 x 285	600 x 285	600 x 285
Colour-Temperature	5500 kelvins	5500 kelvins	5500 kelvins
Number of LED's	1	2	2
Flux (LM)	4900	7500	9800
LM/Watt	70	75	70
LUX 1m	427 average 1708 centre	900 average 2646 centre	1200 average 3660 centre
Input Current	2.0 amps	2.85 amps	2.0 amps
Power Factor	≥95%	≥95%	≥95%
Colour Index (CRI)	≥70	≥70	≥70
Input Voltage	100 – 265V	100 – 265V	100 – 265V
Hertz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz
Life Prediction	30,000 hours	30,000 hours	30,000 hours
Working Temperature	-44 to +55°C	-44 to +55°C	-44 to +55°C
Storage Temperature	-44 to +55°C	-44 to +55°C	-44 to +55°C
Warranty	3 Years	3 Years	3 Years







REFRIGERANT SENSOR

Danfoss Gas / Refrigerant Sensor (DGS)

The Danfoss Gas Sensor (Type DGS) is designed to support Refrigeration and Air Conditioning Applications; its state-of-the-art fixed gas detector can detect a wide range of different gases and offers customers absolute confidence that both safety and compliance requirements are met or exceeded.

Customer Benefits:

- Cost Effective Detection
- Automatic Monitoring
- Legal Compliance
- Environmental Considerations
- Better Performance
- Tailored to Task, Tailored to Gas / Refrigerant
- Increased Connectivity
- Stand-Alone





Applications:

Compliance health & safety on new or existing systems in:

- Supermarkets
- Process Refrigeration Plants
- Refrigerated & Storage Warehousing
- Special Applications areas/zones

Typical Refrigerant gas applications include:

- Halocarbons – HFCs, HCFCs, CFCs
- Carbon Dioxide
- Hydrocarbons

Technical Information	DGS
Power Supply	12/24 volt AC/DC ±20%
Power Consumption	EC: 60 mA SC: 153 mA, at 12V ir: 136mA
Power Monitoring	Green LED
Visual Alarm	Red LED
Audible Alarm	Sounder, enabled/disabled
Fault Monitoring	Red LED ON – GREEN OFF
Fault State	0-0.5V (1-5V), 0-1V(2-10V), 0-2mA(4-20mA)
Analogue Outputs	0-5V, 1-5V, 0-10V, 2-10V, 4-20mA
Digital Outputs	1 x Relay (1 amp / 24 V d.c. / 120 V a.c
Time Delay	Selectable Delay: 0, 1, 5, 10 min.



Sensor Information		Semiconductor with Filter (mutigas) SC Halocarbons	Semiconductor with (mutigas) SC Hydrocarbons	Infrared IR CO^2
Typical Measurement Range		0-1,000 ppm	0-1,000 ppm	0-10,000 ppm 0-20,000 ppm 0-50,000 ppm
Relay Factory Default Setting		50% of range		
Temperature Range	IP41	-20°C to +50°C	-20°C to +50°C	-20°C to +50°C
	IP66	-40°C to +50°C	-40°C to +50°C	-40°C to +50°C
Humidity Range non condensing		0 to 95%	0 to 95%	0 to 95%
Typical Sensor Life		5 Years	5 Years	5 Years
Alarm Threshold	T50	76 sec (filtered)	50 sec (filtered)	50 sec
	T90	215 sec (filtered)	90 sec (filtered)	120 sec
Recovery Time		600 sec	200 sec	235 sec
Linearity		Linear over calibrated range		
Calibration Requirement		Standards generally require annual test or calibration. Refer to Airefrig Australia or Danfoss for instructions. Semiconductor sensors are non-selective, but calibrated to a specific gas.		

REFRIGERANT SENSOR

Danfoss Gas / Refrigerant Sensor (DGS) – cont'd

Danfoss Gas Sensor (DGS)

Airefrig Part Number	Description	Refrig Type	IP Rating	Range PPM	Alarm Factory Set	Time Delay Factory Set	Digital Outputs (Relay)	Analog Output	Temp (RH%) Range	List Price Excl GST
80Z0276	DGS-SG fixed sensor	R407F	IP41 Refer picture No.1	0-1000	500 ppm (Adjustable)	No Delay 1,5 or 10min	1 x relay 1 amp/24Vdc	0-5V or 1-5V 4-20Ma 0-10V or 2-10V	-20 to +50°C (0 to 95%)	
80Z2088	DGS-SG fixed sensor	R410A		0-1000	500 ppm (Adjustable)	No Delay 1,5 or 10min	1 x relay 1 amp/24Vdc	0-5V or 1-5V 4-20Ma 0-10V or 2-10V	-20 to +50°C (0 to 95%)	
80Z2090	DGS-SG fixed sensor	R22		0-1000	500 ppm (Adjustable)	No Delay 1,5 or 10min	1 x relay 1 amp/24Vdc	0-5V or 1-5V 4-20Ma 0-10V or 2-10V	-20 to +50°C (0 to 95%)	
80Z2092	DGS-SG fixed sensor	R134A		0-1000	500 ppm (Adjustable)	No Delay 1,5 or 10min	1 x relay 1 amp/24Vdc	0-5V or 1-5V 4-20Ma 0-10V or 2-10V	-20 to +50°C (0 to 95%)	
80Z2093	DGS-SG fixed sensor	R407A		0-1000	500 ppm (Adjustable)	No Delay 1,5 or 10min	1 x relay 1 amp/24Vdc	0-5V or 1-5V 4-20Ma 0-10V or 2-10V	-20 to +50°C (0 to 95%)	
80Z2098	DGS-SG fixed sensor	R404A / R507		0-1000	500 ppm (Adjustable)	No Delay 1,5 or 10min	1 x relay 1 amp/24Vdc	0-5V or 1-5V 4-20Ma 0-10V or 2-10V	-20 to +50°C (0 to 95%)	
80Z2095	DGS-IR fixed sensor	CO^2		0-10,000	5000 ppm (Adjustable)	No Delay 1,5 or 10min	1 x relay 1 amp/24Vdc	0-5V or 1-5V 4-20Ma 0-10V or 2-10V	-20 to +50°C (0 to 95%)	
80Z0277	DGS-SC fixed sensor	R407F	IP66 Refer picture No.2	0-1000	500 ppm (Adjustable)	No Delay 1,5 or 10min	1 x relay 1 amp/24Vdc	0-5V or 1-5V 4-20Ma 0-10V or 2-10V	-40 to +50°C (0 to 95%) Freezer Room	
80Z2087	DGS-SC fixed sensor	R410A		0-1000	500 ppm (Adjustable)	No Delay 1,5 or 10min	1 x relay 1 amp/24Vdc	0-5V or 1-5V 4-20Ma 0-10V or 2-10V	-40 to +50°C (0 to 95%) Freezer Room	
80Z2091	DGS-SC fixed sensor	R22		0-1000	500 ppm (Adjustable)	No Delay 1,5 or 10min	1 x relay 1 amp/24Vdc	0-5V or 1-5V 4-20Ma 0-10V or 2-10V	-40 to +50°C (0 to 95%) Freezer Room	
80Z2089	DGS-SC fixed sensor	R134A		0-1000	500 ppm (Adjustable)	No Delay 1,5 or 10min	1 x relay 1 amp/24Vdc	0-5V or 1-5V 4-20Ma 0-10V or 2-10V	-40 to +50°C (0 to 95%) Freezer Room	
80Z2094	DGS-SC fixed sensor	R407A		0-1000	500 ppm (Adjustable)	No Delay 1,5 or 10min	1 x relay 1 amp/24Vdc	0-5V or 1-5V 4-20Ma 0-10V or 2-10V	-40 to +50°C (0 to 95%) Freezer Room	
80Z2099	DGS-SC fixed sensor	R404A / R507		0-1000	500 ppm (Adjustable)	No Delay 1,5 or 10min	1 x relay 1 amp/24Vdc	0-5V or 1-5V 4-20Ma 0-10V or 2-10V	-40 to +50°C (0 to 95%) Freezer Room	
80Z2096	DGS-IR fixed sensor	CO^2		0-10,000	5000 ppm (Adjustable)	No Delay 1,5 or 10min	1 x relay 1 amp/24Vdc	0-5V or 1-5V 4-20Ma 0-10V or 2-10V	-40 to +50°C (0 to 95%) Freezer Room	
80Z2097	DGS-IR Remote Sensor 3metre lead	CO^2	IP66 Refer picture No.3	0-10,000	5000 ppm (Adjustable)	No Delay 1,5 or 10min	1 x relay 1 amp/24Vdc	0-5V or 1-5V 4-20Ma 0-10V or 2-10V	-40 to +50°C (0 to 95%) Freezer Room	

Note: All the above units require 12/24 volt AC/DC power supply plus have visual & audible alarms.
Sensor calibration or replacement is required every 12-24 months depending on local regulations



Picture No.1
(IP41 Model)
Fixed sensor



Picture No.2
(IP66 Model)
Fixed sensor



Picture No.3
(IP66 Model)
With remote
3 metre sensor

NITROGEN & CYLINDERS

Nitrogen & Cylinders

Airefrig Part Number	Description	Cylinder Fill Quantity		Cylinder Water Capacity	List Price Excl GST
		Kg	M^3		
0728010	GAS NITROGEN PACK (D SIZE CYLINDER)	2.2	1.8	10 Litres	P.O.A.
0728020	GAS NITROGEN PACK (E SIZE CYLINDER)	4.4	3.6	20 Litres	
0728050	GAS NITROGEN PACK (G SIZE CYLINDER)	11.0	9.0	50 Litres	

- Nitrogen cylinders are subject to a service fee – please contact your nearest Airefrig Australia branch for details.
- Nitrogen cylinders not returned to Airefrig Australia within an 18 month period will be invoiced as an outright cylinder sale.
- For further information regarding this service please contact your nearest Airefrig Australia branch.

REFRIGERANTS & CYLINDERS

Refrigerants

Airefrig Part Number	Applications
R123	Large Centrifugal Compressors. Interim replacement for R11 - requires careful retrofit procedure. (Availability – large scale reductions from 2005)
R236FA	Replacement for R124. Predominantly found in high temp heat pump & crane cabin A/C applications.
R134a	Medium Temperature Commercial Refrigeration ,Domestic Refrigerators & Automotive Air Conditioning. (Can replace R12 & R500 – but requires careful retro-fit procedures)
R22	Commercial and Domestic Air Conditioning Medium Temperature Refrigeration – occasional low temperature applications. (Availability – large scale reductions from 2005)
R404A	Medium & Low Temperature Refrigeration. (Can replace R502 & R408A – but requires careful retro-fit procedures)
R407C	For new large to medium air conditioning & some smaller applications - Not Retrofit
R407F	To replace R22 in low & medium temp commercial refrigeration. R407F is not a “drop in” replacement – existing mineral or alkylbenzene oils are not suitable – use POE’s only. May be used in new installations as a replacement for R-404A for supermarket applications. Converting existing R404A supermarket systems to R407F will reduce the carbon footprint & should see a reduction in power consumption.
R410A	For new large smaller residential type) air conditioning applications - Not Retrofit (requires high pressure components & service tools)
R438A	ISCEON MO99 - To retrofit most R22 Medium, Low Temp & Air Conditioning systems. (not suitable for flooded systems & centrifugal chillers)
R507	Medium & Low Temperature Refrigeration. (Can replace R502 & R408A – but requires careful retro-fit procedures)
R508B	Ultra low temperature applications.
R717	Ammonia - Large Industrial Refrigeration Systems.
R744	CO^2 Carbon Dioxide – Specific Refrigeration Systems

Note: Other refrigerants are available upon request.

REFRIGERANTS & CYLINDERS

PRE-FILLED REFRIGERANT CYLINDERS

Airefrig Part Number	Description	Quantity (Kg)	List Price Excl GST
Refrigerant R22			
0220012	REFRIGERANT R22 12KG PACK	12	P.O.A.
0220022	REFRIGERANT R22 22KG PACK	22	P.O.A.
0220065	REFRIGERANT R22 65KG PACK	65	P.O.A.
Refrigerant R404A			
0404010	REFRIGERANT R404A 10KG PACK	10	P.O.A.
0404016	REFRIGERANT R404A 16KG PACK	16	P.O.A.
0404050	REFRIGERANT R404A 50KG PACK	50	P.O.A.
Refrigerant R507			
0507010	REFRIGERANT R507 10KG PACK	10	P.O.A.
0507016	REFRIGERANT R507 16KG PACK	16	P.O.A.
0507055	REFRIGERANT R507 55KG PACK	55	P.O.A.
Refrigerant R134A			
0134012	REFRIGERANT R134A 12KG PACK	12	P.O.A.
0134022	REFRIGERANT R134A 22KG PACK	22	P.O.A.
0134065	REFRIGERANT R134A 65KG PACK	65	P.O.A.
Refrigerant R410A			
0410010	REFRIGERANT R410A 10KG PACK	10	P.O.A.
0410018	REFRIGERANT R410A 18KG PACK	18	P.O.A.
0410060	REFRIGERANT R410A 60KG PACK	60	P.O.A.
Refrigerant R407C			
0407011	REFRIGERANT R407C 11KG PACK	11	P.O.A.
0407020	REFRIGERANT R407C 20KG PACK	20	P.O.A.
0407065	REFRIGERANT R407C 65KG PACK	65	P.O.A.
Refrigerant R407F			
0407010	REFRIGERANT R407F 10KG PACK	10	P.O.A.
0407016	REFRIGERANT R407F 16KG PACK	16	P.O.A.
0407050	REFRIGERANT R407F 50KG PACK	50	P.O.A.
Refrigerant R438A (ISCEON MO99)			
0438012	REFRIGERANT R438A 12KG PACK	12	P.O.A.
0438020	REFRIGERANT R438A 20KG PACK	20	P.O.A.
0438060	REFRIGERANT R438A 60KG PACK	60	P.O.A.
Refrigerant R717			
0717034	REFRIGERANT R717 AMMONIA 34KG PACK	34	P.O.A.
0717056	REFRIGERANT R717 AMMONIA 56KG PACK	56	P.O.A.
0717230	REFRIGERANT R717 AMMONIA 230KG PACK	230	P.O.A.
Refrigerant R744 (CO^2 - Carbon Dioxide)			
0744020	REFRIGERANT R744 CO^2 (for Liquid Charging)	13.3 ("E" size)	P.O.A.
V744020	REFRIGERANT R744 CO^2 (for Vapour Charging)	13.3 ("E" size)	P.O.A.
0744050	REFRIGERANT R744 CO^2 (for Liquid Charging)	33.3 ("G" size)	P.O.A.
V744050	REFRIGERANT R744 CO^2 (for Vapour Charging)	33.3 ("G" size)	P.O.A.
Refrigerant R236FA (Replaces R124)			
R236FA66KGCYL	REFRIGERANT R236FA 66KG (cylinder inclusive)	66	P.O.A.
Refrigerant R290 (Refrigerant Grade Propane)			
MGC4009	REFRIGERANT M40 (R290) 9KG	9	P.O.A.
Refrigerant R600A (Refrigerant Grade isobutane)			
GCM1009	REFRIGERANT R600A 9.0KG	9	P.O.A.

- Other refrigerants are available upon request.
- Pre-filled cylinders are subject to a service fee – please contact your nearest Airefrig Australia branch for details.
- Pre-filled cylinders not returned to Airefrig Australia within an 18 month period will be invoiced as an outright cylinder sale.
- Pre-filled cylinders have a refill protection device to prevent backfill, tampering with this device and using pre-filled cylinders for reclaim purposes will result in a valve replacement & cleaning fee being charged.

REFRIGERANTS & CYLINDERS

NEW (empty) REFRIGERANT CYLINDERS & FILLING RATIO GUIDE

New (empty) Refrigerant Cylinders & Filling Ratio Guide

Airefrig Part Number	Water Capacity Litres	R22	R134a	R404A	R407C	R408A	R409A	R410A	R507	List Price Excl GST
		Filling Ratio								
		1.03	1.05	0.90	0.95	0.90	1.05	0.80	0.90	
		Maximum Refrigerant Capacity Kgs								
A4SM2085	12.5	12.8	13.1	11.2	11.8	11.2	13.1	10.0	11.2	
CRX400T	21.6	22.2	22.6	19.4	20.5	19.4	22.6	17.2	19.4	
A4SM2079	70.0	72.1	73.5	63.0	66.5	63.0	73.5	56.0	63.0	
A4SM2254	108	111.2	113.4	97.2	102.6	97.2	113.4	86.4	97.2	P.O.A.

Cylinders may be filled to a maximum net weight in accordance with the above table (Guide Only)

PUMPDOWN REFRIGERANT CYLINDERS

Pumpdown Cylinders (Not for Reclaim Refrigerant)

Airefrig Part Number	Description	List Price Excl GST
MPD0000	CYLINDER (NOM 20KG) FOR PUMPDOWN REFRIGERANT	P.O.A.
LPD0000	CYLINDER (NOM 60KG) FOR PUMPDOWN REFRIGERANT	P.O.A.
LPD0108	CYLINDER (NOM 108KG) FOR PUMPDOWN REFRIGERANT	P.O.A.

- Pumpdown cylinders are available to contractors who require empty & clean short term storage cylinders to decant refrigerant from systems to enable repairs etc to take place.
- Pumpdown cylinders are required to be returned within a 2 week period and must be completely empty.
- Pumpdown cylinders will incur a one off cylinder handling / cleaning charge & will also be subject to a service fee.
- Pumpdown cylinders are not to be used as reclaim cylinders.
- Pumpdown cylinders are 5.2mpa pressure rated - R410A compatible.
- For further information regarding this service please contact your nearest Airefrig Australia branch.

RECLAIM REFRIGERANT CYLINDERS

Reclaim Refrigerant Cylinders (Not for Pumpdown Refrigerant)

Airefrig Part Number	Description	List Price Excl GST
SRR0000	CYLINDER (NOM 10KG) FOR RECLAIM REFRIGERANT	P.O.A.
MRR0000	CYLINDER (NOM 20KG) FOR RECLAIM REFRIGERANT	P.O.A.
LRR0000	CYLINDER (NOM 60KG) FOR RECLAIM REFRIGERANT	P.O.A.

- Reclaim cylinders are available upon request & are 5.2mpa pressure rated - R410A compatible.
- Returned Reclaim cylinders must have more than 5.0kg of reclaim refrigerant nett fill.
- Reclaim cylinders are not to be used as Pumpdown cylinders.
- Reclaim cylinders are subject to a service fee.
- Reclaim cylinders not returned to Airefrig Australia within an 18 month period will be invoiced as an outright cylinder sale.
- For further information regarding this service please contact your nearest Airefrig Australia branch.

OILS

Suniso Mineral Oil

Airefrig Part Number	Type	Size	List Price Ex GST
3GS4L	3GS	3.78 Litre	
3GS20L		18.9 Litre	
3GS205L		205 Litre	P.O.A.
4GS4L		3.78 Litre	
4GS20L		18.9 Litre	
4GS205L		205 Litre	P.O.A.
5GS4L	5GS	3.78 Litre	P.O.A.
5GS20L		20 Litre	P.O.A.
4SA20L	4SA	20 Litre	
4SA205L		205 Litre	



Vacuum Pump Oil

Airefrig Part Number	Type	Size	List Price Ex GST
L340	Vacuum Pump Oil	945 mls	
L341		3.78 Litre	



Emkarate Polyolester Oils

Airefrig Part Number	Type	Size	List Price Ex GST
EMKARATERL100	100	1 Litre	
EMKARATERL32H1Q	32	945 mls	
EMKARATERL32H1G		3.78 Litre	
EMKARATERL32H5G		18.9 Litre	
EMKARATERL46H1G	46	3.78 Litre	
EMKARATERL46H5G		18.9 Litre	
EMKARATERL68H1Q	68	945 mls	
EMKARATERL68H1G		3.78 Litre	
EMKARATERL68H5G		18.9 Litre	
EMKARATRL170H20	BSE 170H (equivalent)	20.0 Litre	



OILS

Bitzer Mineral Oils

Airefrig Part Number	Type	Size	List Price Ex GST
B54L	B5	4 Litre	
B520L	B5	20 Litre	

Bitzer Polyolester Oils

Airefrig Part Number	Type	Size	Notes	List Price Ex GST
BSE321L	BSE32	1 Litre	Suit standard Bitzer Recip Compressors	
BSE325L	BSE32	5 Litre		
BSE3220L	BSE32	20 Litre		
BSE1705L	BSE170	5 Litre	Suit Bitzer Screw Compressors	
BSE17020L	BSE170	20 Litre		
BSE555L	BSE55	5 Litre	Suit high temp HFC's of +55 SCT & above.	



Maneurop Polyolester Oil

Airefrig Part Number	Type	Size	Notes	List Price Ex GST
160PZ2L	160PZ	2 Litre	Suit MTZ compressors	
160SZ2L	160SZ	2 Litre	Suit SZ with R407C, R134A, R404A Suit PSH, VSH, SH with R410A Also refrig scroll comps MFZ & LFZ	P.O.A.



OIL TEST KITS

Oil Test Kits

Airefrig Part Number	Description	List Price Excl GST
TA-1	Oil Test Kit – Mineral & Alkylbenzene & POE	
OILTEST	Castrol Lab Oil Test Kit (c/w Pre-paid Parcel Post Sticker)	
RTK	Retro fit test kit (to test POE for Mineral Oil traces)	



SERVICE AIDS

Parker Hannifin Sealants & Adhesives

Instant Adhesives

Airefrig Part Number	Product	Example Uses	Close Loctite® Equivs.	Partial Cure (setting time)	Total Cure Time for Full Strength	Working Temp (Celsius)	Visco-sity	Colour	Break-away Torque	List Price Ex GST
IA0420	IA04 20g	General purpose bonding of a variety of metals, rubbers, plastics & other non-porous materials. Increase strength when used with ST01 primer.	401 406 495	1 to 20 seconds	24 hours	-30 to +80	Medium	Clear	n/a	
IA0620	IA06 20g	Joining flexible rubber, splicing O-Rings, repairing ceramics, tough polymers like PP, PE, EDPM when primer ST01 used.	406 414 430 496	3 to 20 seconds	24 hours	-30 to +80	High	Clear	n/a	

Threadlockers

Airefrig Part Number	Product	Example Uses	Close Loctite® Equivs.	Partial Cure (setting time)	Total Cure Time for Full Strength	Working Temp (Celsius)	Visco-sity	Colour	Break-away Torque	List Price Ex GST
TL5550	TL55 50g	Medium strength / General purpose. For pumps, compressors, gearboxes, machinery out in the field. Suitable for periodic disassembly using only hand tools.	242 243	10 to 20 minutes	24 hours	-50 to +150	Medium	Green	Medium	
TL8650	TL86 50g	High strength - Large bolts (over M40) critical & heavy duty applications, vibratory equipment etc. Requires power tools &/or heat to assist disassembly.	262 277	10 to 20 minutes	24 hours	-50 to +150	High	Red	High	

Thread Sealants

Airefrig Part Number	Product	Example Uses	Close Loctite® Equivs.	Partial Cure (setting time)	Total Cure Time for Full Strength	Working Temp (Celsius)	Visco-sity	Colour	Break-away Torque	List Price Ex GST
GT2150	GT21 50g	General purpose - Liquid gasket / thread sealer. Can replace tapes & O-ring seals in static applications. Used as a thread / tube sealant. Compatible with most oils. Seals gaps up to **0.8mm**	573 5331 577	30 to 60 minutes	24 hours	-50 to +150	Low	Green	Medium	
GT2450	GT24 50g	High Temp liquid gasket / thread sealer. Can replace tapes & O-ring seals in static applications. Used as a thread / tube sealant Compatible with most oils, steam & process fluids. Seals gaps up to **0.5mm**	567	2.5 to 3 hours	24 hours	-50 to +200	High	White	Medium	

Loctite® is a registered trademark of the Henkel Corporation, Henkel is not affiliated with & does not endorse Parker Hannifin or its products.







SERVICE AIDS

Cleaning Agents

Airefrig Part Number	Description	Size	List Price Ex GST
RT375A	Viper Aerosol nontoxic Coil Cleaner	18 oz	
4X	Coil Cleaner Concentrate - Alkaline	1 Ltr	
COILOX	Coil Cleaner Detergent – Neutral	5 Ltr	
COILKLEEN	Coil Cleaner Detergent – Acidic	5 Ltr	
FINSAVER	Air Cooled Condenser Aerosol Protectant	510 grams	
BIOBLOC	Water Treatment Biocide	5 Ltr	P.O.A.
BIOSUB	Water Treatment – Slow Release	4/Pack	
EDCM	Easy Dose Cartridge	Mini	
EDCL	Easy Dose Cartridge	Large	
DEGREASER	Solvent for Removing Grease & Oil	5 Ltr	
CLEANICE	Ice Machine Cleaner	5 Ltr	
KMPH420	Ice Machine Cleaner	236 ml	
CA	Air Conditioning & Duct Aerosol cleaner	250 grams	
FAS1	Fresh Air Sponge	500 ml	
FAS4	Fresh Air Sponge	2 Ltr	



4X



COILOX



CA

Emery Tape

Airefrig Part Number	Description	Size	List Price Ex GST
EMERYTAPE	100 Grit emery tape	Per metre	



Polyurethane Foam Spray

Airefrig Part Number	Description	Size	List Price Ex GST
FULAFOAMFR500	Foam Spray – Fire Resistant (Fuller)	500 Grams	



FULAFOAMFR500

Polyurethane Foam Spray

Airefrig Part Number	Description	Size	List Price Ex GST
NUTBUSTER	Penetrating Lubricant with *FREEZE* action - Multi Purpose Aerosol	260 Grams	

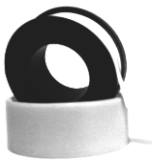
NUTBUSTER



SERVICE AIDS

Tapes

Airefrig Part Number	Description	Size	List Price Ex GST
DUCTTAPEGREY	PVC Duct Tape Grey	30m x 48mm	
DUCTTAPEBLACK	PVC Duct Tape Black		
DUCTTAPEWHITE	PVC Duct Tape White		
ELECTTAPE	Electrical Tapes – Black	20m x 18mm	
GAS1012	Teflon Gas Thread Tape – Yellow	6m x 12mm	
PTFE	Teflon Thread Tape – White		
VAPASTOP	Aluminium Reinforced Tape	50m x 72mm	



GAS1012



VAPASTOP

Silicon & Sealers

Airefrig Part Number	Description	Size	List Price Ex GST
LEAKLOCK	Thread Joint Sealer	39 ML	
PP22	Permagum Slugs	900 Grams	
HBF300TRANS	Clear Silicone Sealant – Neutral Cure	300 Gram	
HBF300BLACK	Black Silicone Sealant – Neutral Cure	300 Gram	
HBF300WHITE	White Silicone Sealant – Neutral Cure	300 Gram	
LITTLERED	Caulking Gun - Heavy Duty (Little Red)	For 300gram cartridges	
MASTIC	Coolroom Mastic – White	450 Grams	
1128	Heat Transfer Sealer	410 Grams	





LITTLERED



Other Aids

Airefrig Part Number	Description	Size	List Price Ex GST
11509	Cool Gel - Protects components and materials during soldering	32 oz	
11575	Heat Seal Stick	11 Grams	
12001	Red Epoxy Kit - 2 part mix (heat cured)	2 x 0.5 oz	



12001



11575

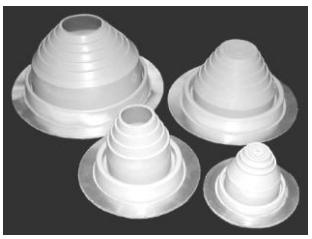


11509

SERVICE AIDS

Flexible Pipe Flashing

Airefrig Part Number	Description	Size Range	Base Size	List Price Ex GST
SPFRTMINI	Springseal (Grey)	0 – 35mm	80mm x 70mm	
SPF660		6 – 60mm	120mm Ø	
SPF5080		50 – 80mm	160mm Ø	
SPF60110		6 – 110mm	195mm Ø	
SPF75150		75 – 150mm	235mm Ø	
SPF110170		110 – 170mm	275mm Ø	P.O.A.
SPF140210		140 – 210mm	320mm Ø	P.O.A.
SPFZ2070	Zipseal - Springseal (Grey)	20 – 70mm	160mm Ø	
SPFZ50190		50 – 190mm	275mm Ø	



Springseal



Zipseal - Springseal

Threaded Rod & Accessories

Airefrig Part Number	Description	List Price Ex GST
M10BRASSROD	Brass Threaded Rod M10 (3ft length)	
M10BRASSNUT	Brass Nut M10	
M10BRASSWSHR	Brass Washer M10	
ALLTHREAD1M	All Thread M10 Zinc Plated x 1 metre length	
ALLTHREAD3M	All Thread M10 Zinc Plated x 3 metre length	
M10NUTS	Nuts M10 Zinc Plated	
M10MUDWASHER	Mudguard Washer M10 Zinc Plated	



Anti Vibration

Airefrig Part Number	Description	Size	List Price Ex GST
WPAD	Waffle Pad	457 x 457	
NMAWHITE	Neoprene Mount	White 7 to 20 Kg	
NMARED		Red 15 to 40 Kg	
NMAGREEN		Green 30 to 70 Kg	
NMABLUE		Blue 50 to 100 Kg	
AVAIRD	Mounting Spring with 2 Caps	30 KG	



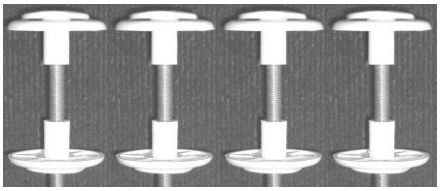
NMA Mount



AVAIRD

Evaporator Hanging Kit

Airefrig Part Number	Description	List Price Ex GST
EHK	Evaporator Hanging Kit c/w 8x M10 nuts & 4x flat washers	



EHK Evaporator Hanging Kit
(M10 threaded rod not included)

SERVICE AIDS

uper Seal HVACR – Seals Refrigerant Leaks

Airefrig Part Number	Description	List Price Ex GST
971KIT	Small systems up to 5.0kw (up to 1.5 Tons)	
972KIT	Medium Systems 5kw to 17kw (1.5 to 5 Tons)	
948KIT	Large Systems 17kw+ (5 Tons+) *no UV dye added* *Note: Do not exceed ratio of 1 can per 3.8L of system oil*	



- All-In-One AC/R leak solution, Total sealing power with moisture eliminator & UV dye.
- Compatible with all CFC, HCFC, HFC & HC refrigerants including R401A.
- Compatible with all refrigerant lubricants including PVE oil.

Water Filtration

Airefrig Part Number	Description	List Price Ex GST
AK200065261	Water filter canister c\w bracket	
RT09B16NN	Water filter cartridge 5 micron	
41AC4633201	Water filter cartridge (taste & odour removal)	


EC10

Evaporative Cooler Sump Dump

Airefrig Part Number	Description	List Price Ex GST
6001200	Solenoid Valve 24volt (not drilled)	
6001331	Evaporative Cooler Sump Dump Valve Kit	
6001333	Elbow to suit Valve Body	
6001334	Transformer 240 to 24 Volts	
6001336	Sump Dump Valve Body	
6001338	Connector Straight 6mm	
89650	O Ring to suit Valve Body	





Glycol

Airefrig Part Number	Description	Size	List Price Ex GST
MPC0005	Monopropylene Glycol (Food Grade)	5 Kg	
MPC0020		20 Kg	
MPC0215		215 Kg	



MPC0005

Flushing Agent - Solvokane

Airefrig Part Number	Description	Size	List Price Ex GST
SVK005	Solvokane Flushing Agent	5 Ltr	
SVK020		20 Ltr	

- Non-flammable azeotropic solvent blend.
- Potent degreaser for light to medium oils & greases.
- Ideal for HVAC/R systems requiring flushing procedure.
- Solvokane is a close alternate product to HCFC141b & CFC113.



SVK005

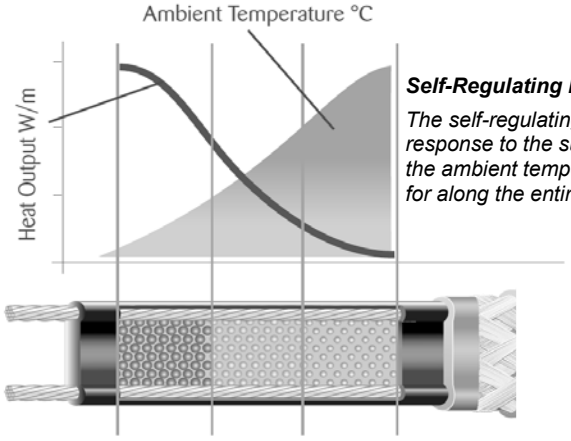
SELF-REGULATING HEATER CABLE

Self-Regulating Heater Cable Kits – 240Vac

Airefrig Part Number	Power Output	Max. Continuous Exposure Temp.	Minimum Bend Radius	Circuit Protection	Pre-Cut Length	List Price Ex GST
FLX5BC5M	16 watts per metre	Power-on: 65°C Power-off: 85°C	10 mm @ +15°C	30mA ground-fault protection required	5 metre	
FLX5BC10M					10 metre	
FLX5BC15M					15 metre	
FLX5BC20M					20 metre	
FLX102BC5M	33 watts per metre				5 metre	
FLX102BC10M					10 metre	
FLX102BC15M					15 metre	
FLX102BC20M					20 metre	
FLX152BC5M	49 watts per metre				5 metre	
FLX152BC10M					10 metre	
FLX152BC15M					15 metre	
FLX152BC20M					20 metre	

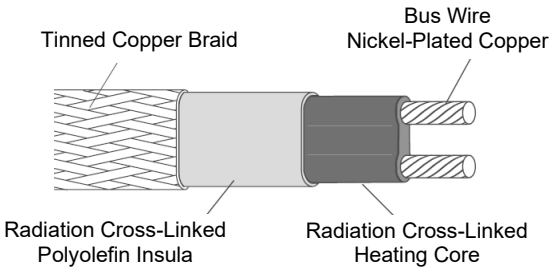
FLX self-regulating heating cables are:

- designed to provide freeze protection for a variety of refrigeration & freezer applications.
- tinned copper braid provides grounding & additional mechanical protection for the cable.
- self-regulating, polyolefin insulated cables which vary output in relation to temperature.



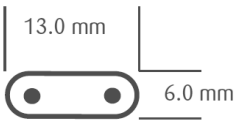
Self-Regulating Heat Output

The self-regulating heat output of the cables varies in response to the surrounding temperature. Variations in the ambient temperature are automatically compensated for along the entire length of heat traced pipe.

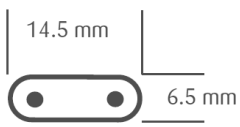


Nominal Outside Dimension . . .

5 or 10-FLX-2



15-FLX-2



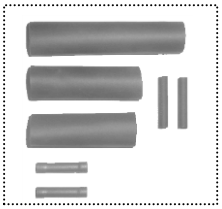
Note . . . Dimensions relate to the outer jacket option on the cable. Subtract 1 mm for braided only cables

Circuit Breaker Sizing and Type . . .

240 Vac Service Voltage		Max. Circuit Length vs. Breaker Size m		
Catalog Number	Start-Up Temp. °C	20A	30A	40A
5-FLX-2	-18	119.8	179.8	179.8
	10	146.0	182.6	182.6
10-FLX-2	-18	68.6	103.0	121.6
	10	85.3	121.6	121.6
15-FLX-2	10	72	114	131
	-18	52	82	117
	-29	47	73	104
	-40	43	67	95

Termination Kit

Airefrig Part Number	Description	List Price Ex GST
FROSTEXKIT	Termination Kit to suit self-limiting heater cable	



EVAPORATION PANS & HEATERS

Silicon Heater Cable

Airefrig Part Number	Description	List Price Ex GST
SRG75	75 Ohms per Metre	
SRG150	150 Ohms per Metre	

Universal Crankcase Heater – Self Regulating

Airefrig Part Number	Description	List Price Ex GST
6511010	Crankcase Heater Universal – Self Regulating 240V 52W (2 x meters self-regulating braided heater cable c/w plastic strap & buckle)	



Evaporation Pans & Heater Pan

Airefrig Part Number	Description	List Price Ex GST
CRH660	Evap Pan - Evaporation Rate157 ml/hr, 225 watt, 240 Volts	
116653	Evaporation Tray Plastic Suit Electrolux P Compressor	
116664	Evaporation Tray Plastic Suit Electrolux L Compressor	



CRH660

SOLID STATE RELAYS & OVERLOADS

Compressor Solid State Relays & Overload Combinations

Airefrig Part Number	Description	List Price Ex GST
SR12	Relay Overload Combination 240V - 1/12 HP - 0.6 FLA	
SR10	Relay Overload Combination 240V - 1/10 HP - 0.8 FLA	
SR8	Relay Overload Combination 240V - 1/8 HP – 1.0 FLA	
SR6	Relay Overload Combination 240V - 1/6 HP – 1.3 FLA	
SR5	Relay Overload Combination 240V - 1/5 HP – 1.5 FLA	
SR2	Relay Overload Combination 240V - 1/2 HP – 4.0 FLA	
SR7	Relay Overload Combination 240V – 3/4 HP – 5.5 FLA	P.O.A.
RO82	Relay Overload Combination 1/12 – 1/8 HP	
RO62	Relay Overload Combination 1/6 – 1/5 HP	
RO42	Relay Overload Combination 1/4 – 1/3 HP	
ICG220	Relay Solid State 1/12 – 1/2 HP	
MDUV480	Solid State Timer	



RO62



ICG220



MDUV48

DOMESTIC ACCESSORIES

Driers Copper Spun & Line Fittings

Airefrig Part Number	Connections		Grams	List Price Ex GST
	Inlet	Outlet		
120110XH9	1/4	Capillary	10	
120115XH9			15	
120120XH9	1/4 (without tail)	Capillary without tail	20	
12011514XH9		1/4 (without tail)	15	
121415XH9	5/16	3/16	15	
121420XH9			20	
121430XH9			30	
RF52	5/16" Aluminium tail to 5/16" copper tail connector			



Accumulator Copper Spun

Airefrig Part Number	Connections	Length	List Price Ex GST
1210D512	1/2 ODS	300 mm	
1210D3	3/8 ODS	200 mm	
1210D438	3/8 ODS	230 mm	
1210D538	3/8 ODS	300 mm	



Light & Fan Switches

Airefrig Part Number	Description	Volts	Action	List Price Ex GST
RF28	Light Switch	240	Press Off	
RF29	Fan Switch		Press On	
RF30	Light & Fan Switch		-	



Defrost Termination Thermostat (Klixon)

Airefrig Part Number	Description	List Price Ex GST
RF27	2 Wire defrost termination klixon thermostat	



Light Globes

Airefrig Part Number	Volts	Watts	Connection	List Price Ex GST
RF33	240	15	Edison Screw	
RF34			Small Edison Screw	
RF35			Bayonet Cap	
RF36			Small Bayonet Cap	



HARDWARE - PRESSURE RELIEF PORT

Pressure Relief Port – suitable for Freezer / Coolrooms

Airefrig Part Number	Description	List Price Ex GST
CRH500	Pressure Relief Port – suitable for freezer / coolrooms	



Suitable for panel thicknesses between 70-150mm / Temperature Range: +40ºC to -42ºC
(can be extended using the CRH-500A extension sleeve for panel thicknesses between 150-250mm).
Material: White polypropylene / Mounting Hole Size : 100mm.
Please contact your nearest Airefrig Australia branch for more detailed Information.



HARDWARE

Hinges

Airefrig Part Number	Description		List Price Ex GST
P11ZMSRH	Rising Hinge Right Hand - Zinc		
P11ZMSLH	Rising Hinge Left Hand - Zinc		
R187V8	M83 Spacer		
R1158LH	Flush Hinge Left Hand		
R1174	Hinge Offset	Adjustable 0 – 16mm	
R1358RH	Hinge Rising Right Hand	Offset 28mm	
CRH40X	Hinge Offset	Adjustable 19 – 25mm	
R52	Hinge Flat		



Strikes & Latches

Airefrig Part Number	Description		List Price Ex GST
R5722	Strike Offset	Adjustable / 60°	
CRH5722X	Strike Offset	Adjustable 19 – 25mm / 60°	P.O.A.
CRH5723X	Strike Offset	Adjustable 19 – 25mm / 90°	P.O.A.
R5622	Strike Offset	Adjustable 0 – 16mm	
R5623	Strike Offset	Adjustable 16 – 32mm	P.O.A.
AH838	Latch Lockable	C/W Internal Release	
CRH5710X	Latch with facility for Padlock		
AH1178	Latch & Strike	With Internal Release	
CRH1961X	Latch & Strike	Adjustable Spring 7 – 16 Kg	
CRH6188LX	Edge mount Latch & Strike	(Lockable)	P.O.A.
CRH6188NX	Edge mount Latch & Strike	(Non-Lockable)	





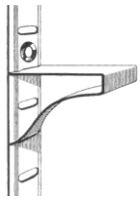
Handle with Plastic Insert

Airefrig Part Number	Description	List Price Ex GST
RH251	Chrome Handle with Plastic Insert (220mm hole centres)	



Shelf Strips

Airefrig Part Number	Description	Length	List Price Ex GST
CSS3	Commercial Shelf Strip	914 mm	
SSA3	Commercial Shelf Strip - Aluminium	914 mm	P.O.A.
CSS4	Commercial Shelf Strip	1220 mm	
SSA4	Commercial Shelf Strip - Aluminium	1220 mm	P.O.A.
CSS5	Commercial Shelf Strip	1524 mm	
SSA5	Commercial Shelf Strip - Aluminium	1524 mm	P.O.A.
SSA6	Commercial Shelf Strip - Aluminium	1829 mm	
SCK	Shelf Clip	rated up to 35kg	
SCLK	Shelf Clip with Lug	rated up to 35kg	



Coolroom Warning Bell

Airefrig Part Number	Description	List Price Ex GST
ANM001	Chrome Coolroom Warning Bell	



THE LEAK SEEKER II (LS2)
ELECTRONIC LEAK DETECTOR

The all new **Leak-Seeker ® II** featuring **E_MOS ™** technology is packed with unique design features.

Features:

- Microprocessor controlled sensor electronics utilizing a multi-channel signal detection method, improves sensitivity while reducing false alarms.
- New **E_MOS ™** sensor technology incorporates a proprietary pulse modulation design to increase both battery and sensor life.
- Software managed sensor rejuvenation mode, automatically initiated at each start-up ensures the highest level of sensitivity every use, for up to 500 hours of detecting leaks of less than .1 oz per year.
- Sensitivity remains constant over the life of the sensor.
- Dynamic signal analysis and automatic sensitivity control, enables the Leak Seeker II to make quick work of any leak regardless of its size or the refrigerant type…without operator intervention.
- The world's only leak detector with fully automatic sensitivity selection and control.
- Senses all refrigerants including those with hydrocarbon components.
- Meets or exceeds all US and International standards for both automotive and commercial use.
- Superior sensitivity to R-410A and new HFO refrigerants.
- Sensor not contaminated by R-404a.
- Sensitivity to 35 parts per million (less than **.**1 oz per year).
- 50 hour battery life (3 x C batteries).
- 500 hours sensor life.







CPS Leak Detector

Airefrig Part Number	Model	Description	List Price Ex GST
LS2	Leak Seeker II	Electronic Leak Detector - Fully Automatic (All HFC, HCFC, CFC, SF6 & HFO Refrigerants)	
LS1	Leak Seeker I	Electronic Leak Detector - Manual Sensitivity Selection (All HFC, HCFC, CFC, SF6, HFO Refrigerants)	
EMOS2	Replacement Sensor for LS2 Leak Detector		
LSXS3	Replacement CCD Sensor suit LS3000 Leak Detector		

LEAK DETECTORS - CPS

GS40 – COMBUSTIBLE GAS LEAK DETECTOR

The GS-40 is a completely self-contained combustible gas leak detector designed to pinpoint gas leaks in the most demanding applications. An efficient and sensitive gas sensor is combined with solid state circuitry which provides an audible alarm that increases in pitch as the concentration of the gas increases. A visual indication is also provided as well as provisions for an earphone for use in noisy environments.

SPECIFICATIONS

Sensitivity:
25 to 1000 PPM, depending on the type of impurity

Sensor Warm Up Time:
Approximately 30 seconds

Response Time:
Less than 20 seconds

Operating Temperature:
15 ˚F to 104 ˚F (-10 ˚C to 40 ˚C)

Power Requirements:
4 AA alkaline or NiMH batteries

Battery Life (approximately)
20 hours with AA alkaline (10 hours with NiMH)

Dimensions:
203 mm. x 69 mm. x 38 cm

Probe Length:
18" (46 cm.)

PARTIAL LIST OF DETECTABLE GASES

Acetylene : (50 ppm)
Ammonia : (30 ppm)
Benzene : (150 ppm)
Butane : (25 ppm)
Carbon Monoxide : (1000 ppm)
Ethanol : (25 ppm)
Hydrogen : (25 ppm)
Hydrogen Sulphide : (10 ppm)
Isopropanol : (100 ppm)
Methane (Natural Gas) : (30 ppm)
Methanol : (50 ppm)
Methyl Ethyl Ketone : (50 ppm)
Propane : (25 ppm)
(ppm) = Minimum Detectable Concentration



CPS Leak Detector (Combustible Gases)

Airefrig Part Number	Description	List Price Ex GST
GS40	Electronic Leak Detector – Combustible Gases	

LEAK DETECTORS - FIELDPIECE

Fieldpiece Infrared Leak Detector - CFC, HFC, HCFC and blends

Airefrig Part Number	Description	List Price Ex GST
SRL2K7	Infrared Leak Detector, Case & 2 x Probe Extensions	

Gases measured:	CFC, HFC, HCFC and blends.
Sensing element:	Infrared
Response time:	Less than 1/2 second to 1 second.
Sensitivity levels: (per SAE J1627)	HIGH 0.1 oz/year and higher MEDIUM 0.5 oz/year and higher LOW 1.0 oz/year and higher
Accuracy:	Exceeds current SAE J1627 standards.
Calibration:	Automatic
Warm up time:	30 seconds
Probe length:	15 inches
Battery type:	7.4VDC(nominal) rechargeable lithium ion polymer battery.
Battery life:	Approx. 8 hours if fully charged.
Features:	Water Blocking Filter – Keeps water & other contaminates out. (10 x extra filters included) AC wall charger & car charger 10 minute auto off



LEAK DETECTORS UV - CPS

UV Dichroic Refrigerant Leak Detection Kit

Airefrig Part Number	Description	List Price Ex GST
UV152E	Kit is supplied with 50w 12vdc dichroic filter lamp with 90° swivel head, rechargeable battery pack, 240v charger, Flow-thru injector, 1oz universal dye, enhancing glasses & case	



UV LED Refrigerant Leak Detection Kit

Airefrig Part Number	Description	List Price Ex GST
UV55	UV LED Refrigerant Leak Detection Kit	



UV55 Includes: UVPRO LED flashlight, squeeze gun injector w/ hose, R-134a 90° low coupler, safety glasses, UVS2 dye cartridge and carrying case.



UV55
- **UVPRO True UV emitting LED light technology**
- **Compact & Rugged anodized aluminum body**
- **Mess-free and easy to use Squeeze Gun™ injector**
- **1 UVS2 universal OEM approved dye cartridge**
- **Includes 90˚ low side snap coupler**
- **Operates 8 continuous hours on (3) AAA batteries (included)**

Refrigerant Dye Capsules & Bottles

Airefrig Part Number	Description	Refrigerant Charge	Refrigerant Oil	List Price Ex GST
UV101	Dye Capsule Stick (6 Pack)	Up to 1.3kg	Up to 0.44 litres	
UVS2	Dye Capsule Stick (1x Capsule)	2.3 to 4.5kg	1.9 to 3.7 litres	
UV3	Dye Capsule Stick (6 Pack)	4.6 to 11.4kg	3.8 to 9.1 litres	
UVUD	Dye Universal (237ml Bottle)	Vehicles: 7.5ml per car (32 x cars per bottle) A/C&R: 7.5ml per 591mls of system lubricant		



UVUD

UV Detection Accessories

Airefrig Part Number	Description	List Price Ex GST
UVPRO	UV Leak Detector LED Light (Battery Operated 3 x AAA)	
UVXG	Enhanced Safety Glasses	
UVCLNR	Leak Detection Dye Cleaner / Remover (750ml Spray Bottle)	



UVCLNR



UVPRO

LEAK DETECTORS – LIQUID TYPE

Leak Detectors (Liquid Type)

Airefrig Part Number	Description	Size	List Price Ex GST
BUBBLEUP980	Leak Detector – Gas & Air	980 ML	
SNOOP8OZ	MS Snoop Leak Detector	8 oz	
RT100S	Big Blu - Leak Detector	1 Litre	



BUBBLEUP

REFRIGERANT IDENTIFIER / ANALYSER

Ultima ID Pro - Refrigerant Analyzer

Diagnostic refrigerant analyser for multiple HVAC and refrigeration applications

Airefrig Part Number	Description	List Price Ex GST
RI700HH	Ultima ID Pro Refrigerant Analyser	
5031000080	Replacement Roll of Printer Paper to suit RI700H	
6026000080	Replacement Filter to suit RI700HH	P.O.A.

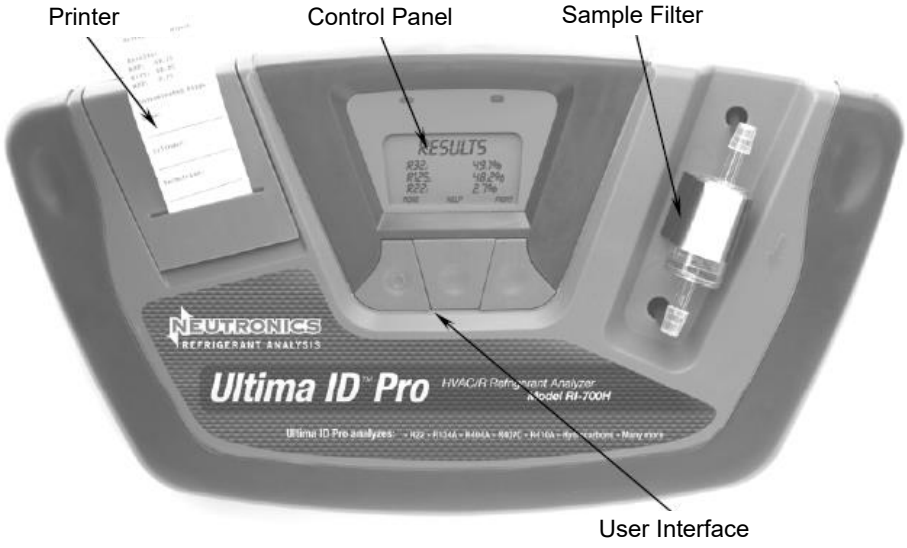
The Ultima ID Pro HVAC/R Refrigerant Analyser enables fast, accurate testing of refrigerant reducing the need for costly & time-consuming gas chromatography.

Improved accuracy & the ability to test for a wide variety of refrigerants make this an essential tool for pre-screening refrigerant prior to consolidation & reclamation.



Key features:
» Oil contamination resistant
» Fast test results
» Internal thermal printer
» Greater accuracy in less time
» Wide refrigerant range
» Refrigerant composition breakdown
» Remote software updates for new refrigerants

Technical specifications:
WEIGHT: .. . . . . Less than 10 Lbs.
REFRIGERANTS: .. . . . . R22, R134A, R404A, R407C, R410A, Hydrocarbons & many more
ACCURACY: .. . . . . +/- 2% of indicated gasses or better
POWER REQUIREMENTS: . . .12 VDC @ 2A via 110/220 VAC Adapter
APPROVALS: .. . . . . CE, UL and CUL
USER INTERFACE: .. . . . . Graphic Display, Soft Keys, Built in Printer
SAMPLE GAS EXTRACTION:.. Pressure from cylinder or system
TEMPERATURE RANGE:.. . . . 50 to 110˚F (10 to 43˚C)
RESPONSE TIME: . . . . . Less than 3 Minutes
HUMIDITY: .. . . . . 0-95% RH non-condensing
TEST SAMPLE SIZE: .. . . . . 5g per test
TEST PRESSURE: .. . . . . 50psi - 500psi (344 – 3447Kpa)



VACUUM PUMPS

CPS Vacuum Pumps – Direct Drive

Airefrig Part Number	Description	Litres Per Minute	Micron	H.P.	List Price Ex GST
VP2DA	Vacuum Pump - 2 stage	45	10	1/4	
VP2DE	Vacuum Pump - 2 stage	48	10	1/4	
VP3DA	Vacuum Pump - 2 stage	75	10	-	
VP4DE	Vacuum Pump - 2 stage	96	10	1/2	
VP6DE	Vacuum Pump - 2 stage	144	10	1/2	
VP8D	Vacuum Pump - 2 stage	192	10	2/3	
VP10DA	Vacuum Pump - 2 stage	236	10	3/4	
VP10D	Vacuum Pump - 2 stage	240	10	3/4	
VP12D	Vacuum Pump - 2 stage	288	10	1.0	



VG200 – Vacuum Gauge

- Advanced 5 digit LCD display
- Reads microns, Torr, in/hg or mBar at a touch of a button.
- Withstand 400PSI pressure.
- Carry case & hook included.



AVT45



Airefrig Part Number	Description	List Price Ex GST
L340	Vacuum Pump Oil (945 mls)	
L341	Vacuum Pump Oil (3.78 Litre)	
CAB001	CPS A/C Power Cord for Vacuum pumps & Recovery units	P.O.A.
VG200	CPS Vacuum Gauge with Digital Display	
AVT45	Tee 1/4M/F x 1/4 Female Flare Knurl x 1/4 M/F (suit VG200)	
VPASU	Vac Pump Anti-Siphon Valve Kit (c/w 1/4,3/8,1/2MF Adaptors)	

Vacuum Pump Maintenance and Service Information

The vacuum pump consists of two cascaded stages driven by a common shaft. The first stage (or roughing stage) takes air/vapour via the inlet port, compresses it and exhausts through an exhaust port. The second stage takes from the inside of this exhaust port and also compresses the vapour and then exhausts this vapour out through a second exhaust port.

The purpose of a gas ballast valve (where fitted) is to bleed dry air into the second chamber at 0 PSIG or very close to it. This way the second stage draws in vapour, it's pressure is reduced and vapour is removed from the oil/vapour as the saturated vapour pressure is lowered. The second stage typically is also fed oil from the pump reservoir and when the pump is under ballast this oil is also exposed to the reduced pressure and this assists removal of moisture from the oil.



As the pump is working slightly harder when under ballast, more heat is also generated so allowing the oil which is being circulated through the second chamber to warm up and return to the reservoir so raising the temperature of the reservoir faster. This enables the pump to reach operating temperature faster. Remember, if the oil is cold the moisture pulled back can blend with the cold oil, overload the oil with moisture and in short order can wreck the pump. The idea is to get the pump HOT, this way moisture hits hot oil and is pushed straight out of the pump. A hot pump works better and will last longer than a pump which is never allowed to reach operating temperature.

To start and use the pump, ensure the ballast and inlet ports are both closed, turn the pump on. Once the pump is started open the ballast valve and leave to run like this for approximately ½ hour. When ready to use, close the ballast and connect to the system to be evacuated, open the suction port and evacuate the system. After the vacuum is complete, it is good practice to run the pump for a further 10 – 15 minutes under ballast again to remove impurities from the oil. An even better practice is to actually drain the oil from the pump, allow the pump to cool before adding fresh oil.

To drain the oil from the pump ensure it is on a level surface (preferable with the oil warm) and remove the drain plug from the pump. You may need to unscrew the exhaust chimney or oil inlet in order to allow air into the pump to allow oil flow. Inspect the oil for cloudiness, impurities and foreign lumps. When refilling, ensure pump is cool and refill to the correct level. DO NOT overfill !! If water is noticed in the pump you may need to refill, run under ballast for a short time, drain and refill in order to ensure the moisture is removed.

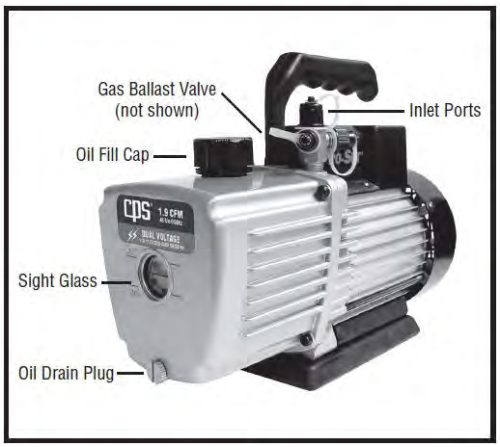
Not all pumps are identical in operation, always, as a first step, read the instructions that come with the pump.

VACUUM PUMP PERFORMANCE CHECK

Vacuum Pump Quick Performance Check

This document describes a simple and quick method to conduct a basic operational and performance check on a vacuum pump.

** Please ensure that your vacuum pump is in sound electrical and mechanical condition prior to applying electrical power and operating.*



1. Check the oil level in the sight glass is between the minimum and maximum level indicators, oil should look clean and clear if the pump has been recently serviced. Oil colour can vary from water clear to honey colour depending on the brand, but it should look translucent and not be dark or opaque which could indicate the presence of contaminants.

2. Ensure the pumps flare inlet port connection that you will be using is clean and dry, give it a wipe with a clean dry cloth to remove any debris.

3. Attach your ball valve (ensure the tap is closed) with the vacuum gauge directly to the inlet port.
In some cases you may require the 3/8" female to 1/4" male adaptor depending on the individual vacuum pumps inlet configuration. In some case you may also need to use the supplied 1/4" ‘ T ’ adaptor and cap the unused ‘ T ’ adaptor 1/4" male port.

4. Start the pump and allow it to run for a few minutes before opening the ball valve. Allow the pump to evacuate the ball valve and vacuum gauge assembly for a couple of minutes prior to checking the vacuum reading.
Older model vacuum pumps may require a longer warm up period due to their internal construction, be guided by the pumps owner who should know his equipment.

5. The best practice is to always close the ball valve prior to stopping the pump to reduce the chance of oil migrating into the vacuum gauges sensitive sensor assembly.

6. If the reading is above 400 microns the pump could be internally worn, in need of an oil change, repairs, have an air leak or perhaps faulty port caps on unused inlets.





VG200 VACUUM GAUGE SERVICING



VG200 Vacuum Gauge Servicing

The **VG200** are simple to use precision digital readout vacuum gauges able to read in Hg", microns, Torr and mbarr selectable by pressing the units button.

In order to maintain peak performance some simple periodic maintenance is required to ensure the units internal vacuum sensor assembly remains as clean as possible. We recommend a quick visual inspection of the sensor assembly gasket daily and cleaning whenever you notice any oil on the gasket. This brochure outlines this simple cleaning procedure. Ensure you have access to a vacuum pump prior to cleaning, you will need to connect your VG200 to a vacuum pump for at least 15 minutes to evacuate moisture from the sensor immediately after cleaning.

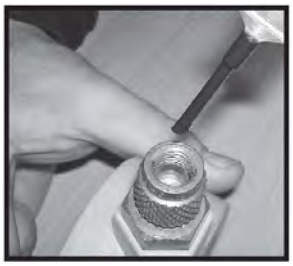
Routine cleaning and service:

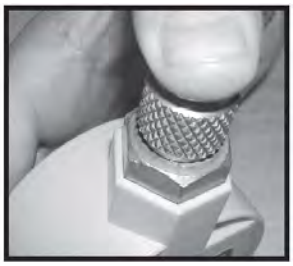
1. Remove the valve core depressor (if fitted) and the black **HXG** gasket with needle nose pliers.





2. Inject methylated spirits into the sensor to fill the gasket cup, a standard medical syringe is perfect for this task.





3. Hold the unit in one hand and place your thumb over the gasket cup area.

4. Using your hand to create a swirling motion will encourage the methylated spirits to enter the sensor chamber.

5. Repeat from **Step 2** until the sensor is full and will not take anymore liquid.

6. Use a continuous swirl motion with the unit to create swirling effect of the solution in the housing for 15 seconds.

7. Invert and flick the unit (sensor out) to eliminate the bulk of the solution from the sensor assembly.

8. Insert a new HXG gasket (flat surface down 45˚ chamfer out) and re-fit the HXD valve core depressor if required. Place your **VG200** on a vacuum pump for at least 15 minutes to evacuate any remaining moisture.

9. When not in use store your vacuum gauge in it's padded protective bag. As with any electronic device if it is going to be stored for an extended period of time consider the removal of the batteries.

Precautions with the VG200:

• There are no user serviceable parts inside the case.

• Keep away from dust, dirt and water.

• Clean the plastic case with a soft moist cloth. **DO NOT USE SOLVENT BASED CLEANERS.**

• Regularly inspect the HXG gasket seal for signs of oil, if oil is evident perform the above cleaning procedure.

RECOVERY UNITS - CPS

CPS - TR21E Recovery Unit

Airefrig Part Number	Description	List Price Ex GST
TR21E	Oil–Less Refrigerant Recovery Machine cps® Flow Rate for Direct Vapour : Up to 56 kg/hr Flow Rate for Direct Liquid : Up to 271 kg/hr Flow Rate for Push Pull Liquid : Up to 768 kg/hr	

Features



- Maintenance free oil-less compressor design
- Aesthetically unique industrial type styling
- Precision machined from aluminum and steel components
- Permanently lubricated and sealed main bearings
- Improved piston seal design for less leakage and deeper vacuums
- 550 psig / 37.9 Bar high pressure cutoff switch with LED indicator
- Cleanable 100 mesh inlet filter
- Weighs less than 11.3 kg
- Fastest recovery rates in its class

Specifications

Compressor Type:	2 Cylinder Oil-less Reciprocating Compressor
Dimensions:	15cm Wide x 30cm Long x 23cm High
Weight:	11.3 kg / 25 lbs.
Operating Temperature Range:	0˚C to 49˚C
Power Source:	220-240V 50/60Hz
Power Consumption:	850 W
Filtration:	Cleanable 100 - mesh screen integrated into Suction Port
Overload Protection:	Motor Thermally Protected
High Pressure Shut-Off:	550 psig / 37.9 Bar
Refrigerants:	R-12, R-134a, R-401C, R-406A, R-500, R-401A, R-409A, R-401B, R-412A, R-411A, R-407D, R-22, R-411B, R-502, R-407C, R-402B, R408A, R-509, R-407A, R-404A, R-402A, R-507, R-407B, R-410A

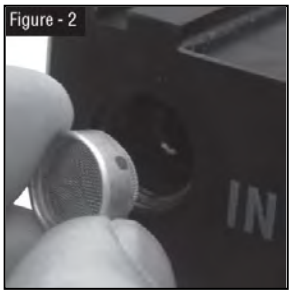
Filter Maintenance

The TR21 is equipped with a 100-mesh screen filter which should be checked periodically as a partially clogged filter will slow down the recovery rate of this unit.



Check the filter cartridge as follows

1. Use a 5/8" socket or wrench to remove the IN port as shown in Figure – 1
2. Remove the suction port-filter cartridge as shown in Figure - 2
3. Either clean the current cartridge or replace with new cartridge (P/N CRXF3)
4. Inspect O-ring. Re-lubricate with compressor oil or equivalent
5. Place filter cartridge back into suction port fitting
6. Hand tighten this assembly back onto the TR21
7. Use a 5/8 socket or boxed end wrench to tighten 1/8 of a turn (Do Not over tighten – over tightening may damage the O-ring)
8. Check the connection for leaks



Piston Seal Maintenance

In cases where a customer is using this unit for virgin refrigerant recovery, it is recommended to add 0.25 ounce of refrigerant oil to the inlet port before each use.

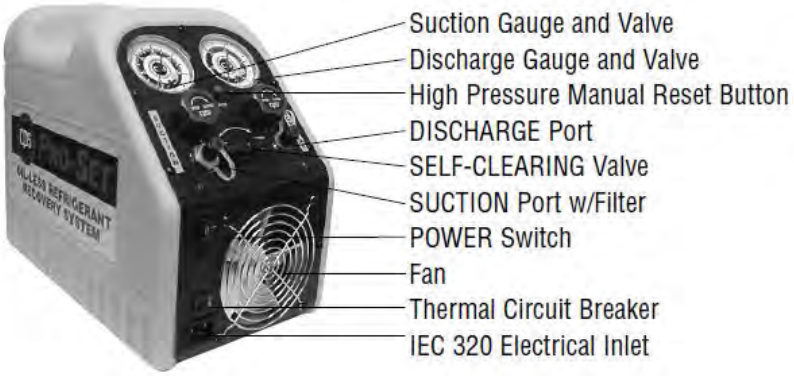
RECOVERY UNITS - CPS

CPS – CR500E Recovery Unit

Airefrig Part Number	Description	List Price Ex GST
CR500E	Oil-Less Refrigerant Recovery Machine cps® Flow Rate for Direct Vapour : Up to 20 kg/hr Flow Rate for Direct Liquid : Up to 42 kg/hr Flow Rate for Push Pull Liquid : Up to 187 kg/hr	

The CR500E is an oil-less refrigerant recovery machine designed to pump liquid or vapour refrigerant for commercial & residential refrigeration systems.

Features



- Maintenance free oil-less compressor
- On board SUCTION and DISCHARGE gauges.
- 0 to 55 bar discharge gauge (suit R-410A)
- Compact physical size.
- Lightweight only weighs 9.1 kg
- Integrated easy to use carrying handle.
- High Pressure manual reset button set at 38 bar.
- Easy access & secure filter accesses
- Replaceable or cleanable filter cartridge
- "On the Run" SELF-CLEARING valve.
  (no need to turn off the unit when switching from recovery to self-clearing)

Specifications



Compressor Type:	1/2 HP Oil-less Reciprocating Compressor
Dimensions:	20cm wide x 37cm long x 30.5cm high
Weight:	9.1 kg
Operating Range:	0°C to 49°C
Power Source:	220/240 VAC 50Hz 1Ph
Power Consumption:	500 W
Suction Pressure Gauge:	-1 to 35 bar
Discharge Pressure Gauge:	0 to 55 bar
Filtration:	Cleanable 100-mesh screen integrated into Suction Port
Shut-off Valves:	Suction piston type & Discharge diaphragm type manifold valves
Construction:	Heavy gauge aluminum chassis with high density polyethylene case
Overload Protection:	5A thermal circuit breaker
High Pressure Shut-off:	38 bar (550 psig)
Control System:	Dependable electro-mechanical interlock system
Refrigerants:	R-12, R-134a, R-401C, R-500, R-401A, R-409A, R-401B, R-407D, R-22, R-502, R-407C, R-402B, R408A, R-509, R-407A, R-404A, R-402A, R-507, R-407B, R-410A

Note: CPS CR500 Recovery Unit maintenance and service info is in the following pages.

CR500 Recovery Unit - Maintenance and Service Information

The CR500 and CR600 are both oil-less recovery machine designed for high performance with minimal maintenance, there are some simple procedures which form a routine to keep peak performance.

Filter Maintenance:

The CR Series is equipped with a 100-mesh screen filter. The filter should be checked periodically. A particularly clogged filter will slow down the recovery rate of this unit.



Fig 1

Replace the filter cartridge as follows:

- Use a 7/8” socket or boxed end wrench to loosen the suction port as shown in fig 1.
- Once loose, remove the suction port filter cartridge assembly as shown in fig 2.
- Either clean the current cartridge or replace with new cartridge.
- Inspect O ring. Re-lubricate with compressor oil or equivalent.
- Place filter back into suction port fitting.
- Hand tighten this assembly back on to the CR unit.
- Use a 7/8” socket or boxed wrench to tighten 1/8 of a turn. Do not over tighten, damage to the O ring may occur.
- Check the connection for leaks.



Fig 2

Service of control valves (diaphragm type)

Depending on the age of the unit the CR500 and CR 600 can use either piston or diaphragm control valves. The service kit for the piston type is part number MXPVO and the service kit for the diaphragm is M2XRK.

The CR500 and CR600 use two Teflon disc type valves. The valves are used only for the manifold assembly valves and can be easily replaced without removing this assembly from the unit.

Peel the label on the valve knob back to expose a Phillips head screw. Remove the screw. Use a 1” socket wrench to remove brass valve body. Remove and discard the Mylar disc, Teflon disc, brass pin and spring from valve cavity. Install new valve parts in the order they were removed. Tighten the brass valve body as follows: Hand tighten, then use 1” socket wrench until snug. Turn 1/8 of a turn. Do not over tighten. Check for leaks. Secure valve knob on valve stem. Detailed instructions are included in the M2XRK packet.

Service of Control Valves (piston type)

Locate and undo the screw securing the valve handle to the shaft. Remove the screw.
Remove the handle using a 5/8” A/F spanner, undo the hex nut and remove assembly.
Remove the spindle from collett piece. Remove O rings and undo screw which holds in the Teflon seal.
Replace the Teflon seal and O rings.
Lightly grease O rings and screw shaft.
Re-assemble valve assembly and place in manifold.
Tighten hex nut to 25 foot pounds. (tight !!)
Attach control knob and re-fit screw.

SUBMERSIBLE RECOVERY SUB-COOLER

CPS – Submersible Recovery Sub-Cooler

Airefrig Part Number	Description	List Price Ex GST
SC410A	Submersible Recovery Sub-Cooler (supplied with bucket)	

The effects of ambient temperature and elevated tank pressures on the speed of the refrigerant recovery process are in many cases more important than the speed of the recovery machine itself.

As the ambient temperature increases, the pressure in the recovery cylinder increases, significantly reducing the recovery speed and in many cases can lead to a high pressure shutdown as the recovery equipment and tank pressure limits are reached.

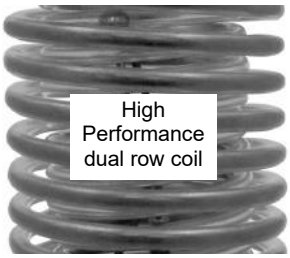
The Pro-Set SC410A submersible sub-cooler significantly reduces the temperature and pressure of recovered refrigerant during the recovery process, dramatically improving the recovery speed and high ambient performance of all commercially available recovery machines in addition to extending the life of the equipment.

The Pro-Set SC410A is a patent pending “Innovation in Design” from CPS, intended for use with all major brands of refrigerant recovery equipment.

It is engineered for harsh field conditions and is extremely easy to use.

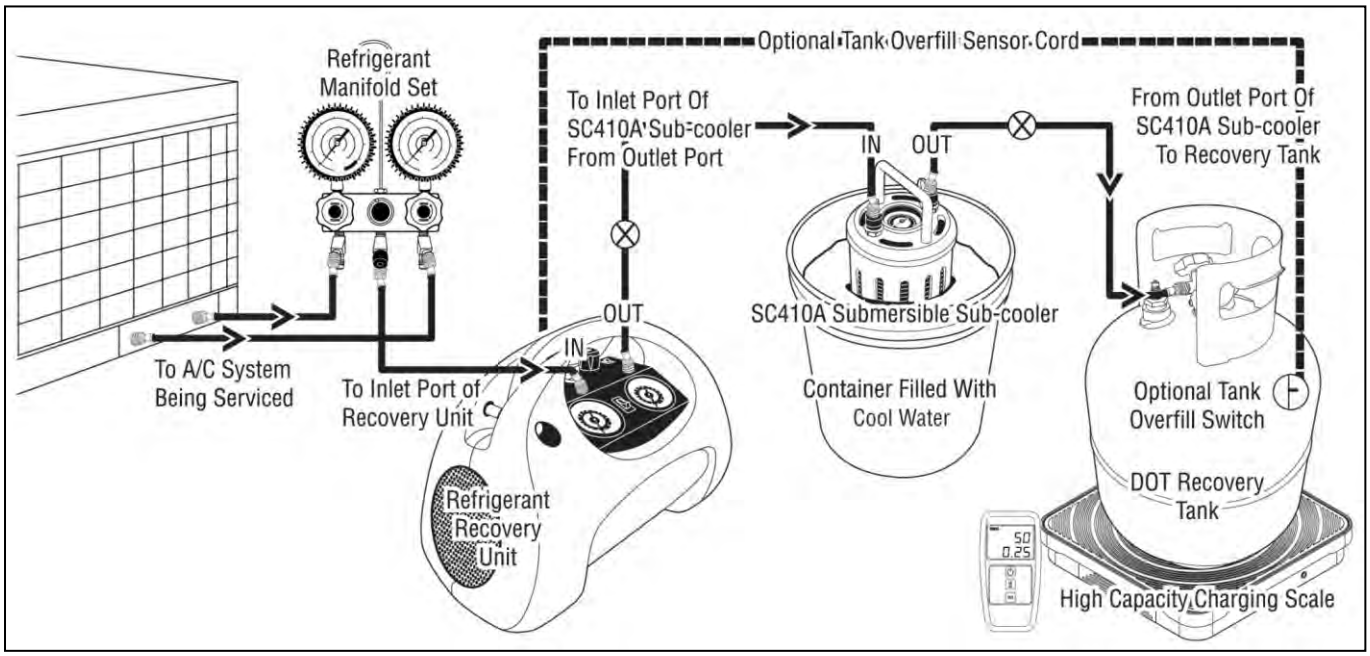
- Dramatically improves the recovery speed & high ambient performance of all commercially available recovery machines.
- Engineered to significantly reduce temperature and pressure of recovered refrigerants, including R-410A.
- Please refer to the diagrams shown for details on the proper operation of the SC410A.





Specifications

- Gauge : PSI/Bar oil filled
- Fittings : 1/4" SAE male flare
- Construction: Environmentally treated metal
- Dimensions: 110mm Diameter x 230mm High



CHARGING SCALES - CPS WIRELESS

CPS Wireless RF Charging Scales

Airefrig Part Number	Description	List Price Ex GST
CC240RF	Charging Scales Wireless RF (110 kg weight capacity)	
CC840RF	Charging Scales Wireless RF with Solenoid Valve - Fully Auto & Programmable (110 kg)	

CC240RF Wireless Scale

- Operates in the international ISM band for worldwide use
- Advanced software ensures uninterrupted connectivity between hand-held display unit & scale platform
- Accuracy specification exceeds all OEM requirements for charging accuracy
- Temperature compensated over the entire operating temperature range to maintain charging accuracy under all ambient conditions
- Selectable measurements in Imperial or Metric units
- Environmentally sealed strain gage beam load cell technology first introduced by CPS in 1985
- Designed to withstand overloads of 150%
- High contrast wide angle LCD Display for ease of viewing
- Platform can be removed from carrying case
- Magnetic back on handheld unit & hanging hook
- User selectable automatic power off to conserve batteries

SPECIFICATIONS

Working load capacity: 110kg / 240 lbs
Operating Temp: -10°C to +50°C
Resolution: ±10 grams / ± 0.25oz
Overload Protection: Visual, electronic and mechanical
Platform Dimensions: 22.23cm x 22.23cm
Weight: kg / lb
Scale platform power: 4 x AA
Display unit power: 1 x 9V battery
Battery Life: 32 hours of continuous use
Battery Indicator: Battery symbol with 3 segment display
RF frequency range: 2.4 GHz, ISM band
RF Transmit range: 9m / 30ft
Readout: Metric / Imperial
Accuracy:
0.05% of reading or ±0.2oz / ±5g whichever is greater

CC840RF Wireless Scale with Integrated Solenoid valve for Fully Automatic programmable Operation

- Operates in the international ISM band for worldwide use
- User programmable, fully automatic operation
- Compatible with high pressure R-410A
- Advanced software ensures uninterrupted connectivity between hand-held display unit & scale platform
- Accuracy specification exceeds all OEM requirements for charging accuracy
- Temperature compensated over the entire operating temperature range to maintain charging accuracy under all ambient conditions
- Selectable measurements in Imperial or Metric units
- Environmentally sealed strain gage beam load cell technology first introduced by CPS in 1985
- Designed to withstand overloads of 150%
- High contrast wide angle LCD Display for ease of viewing
- Platform can be removed from carrying case
- Magnetic back on handheld unit & hanging hook
- User selectable automatic power off to conserve batteries

SPECIFICATIONS

Working load capacity: 110kg / 240 lbs
Operating Temp: -10°C to +50°C
Resolution: ±10 grams / ± 0.25oz
Overload Protection: Visual, electronic and mechanical
Platform Dimensions: 25.4cm x 25.4cm
Weight: 9.8lb / 4.5kg
Scale platform power: 4 x AA
Display unit power: 1 x 9V battery
Battery Life: 32 hours of continuous use
Battery Indicator: Battery symbol with 3 segment display
RF frequency range: 2.4 GHz, ISM band
RF Transmit range: 9m / 30ft
Readout: Metric / Imperial
Accuracy:
0.05% of reading or ±0.2oz / ±5g whichever is greater


CC840RF


Removable scale platform



Wireless hand held display unit

CHARGING SCALES - CPS STANDARD

CPS Standard Charging Scales

CC220 and CC800

- High capacity 100Kg scale
- Calibrated to NIST standards
- Large, easy to read 37 x 48 mm display
- 10g resolution
- Hand held remote features 1.8m curly cord
- Hanging hook and magnet supplied for remote hand piece
- Full mechanical and visual overload protection
- Convenient 9v battery operation

CC800 also offers:

- Full programmable solenoid valve charging
- Audible alert for charge complete
- R410A compatible



CPS Charging Scales & Cylinder Heater Blanket

Airefrig Part Number	Description	List Price Ex GST
CC220	CPS Compute-A-Charge 100 Kg Capacity – Compact (See comparison notes above)	
CC800A		
CCXHBV	Cylinder Heater Blanket (220Vac / 340watts / +65°C)	



CCXHBV

CHARGING SCALES - FIELDPIECE

Fieldpiece Charging Scales

SRS2C – Refrigerant Weighting Scales

- Heavy duty plate aluminium for refrigerant cylinders
- Rubber corner protection
- 100 *kg max weight* range - 104 Kg overload
- Wireless hand piece that stows under platform
- Blue back-light on hand piece
- Hand piece has magnetic flip top to hang





Fieldpiece Weighing Scales

Airefrig Part Number	Description	List Price Ex GST
SRS2C	Refrigerant Wireless Scales c/w case	

SERVICE MANIFOLD DIGITAL - FIELDPIECE

Gauge Digital Manifold - SMAN3

The SMAN3 is like no other digital manifold on the market—they're the only manifolds that automatically calculate target superheat, so you don't have to worry about guesswork or manual calculations.

Plus they're the only manifolds with the ability to perform a linear adjustment of the pressure sensors based on refrigerant type, temperature, and pressure, and it's so easy, you can do it right in the field.

With the SMAN3 you get a built-in micron gauge with resolution from 50 to 9,999.

On top of that, the SMAN3's exclusive micron alarm allows you to set the alarm to a chosen micron level, and when the vacuum reaches that level, the alarm will sound, freeing you up to keep working when pulling a vacuum.

By combining new technology with an intuitive, easy-to-use interface, the SMAN3 makes it easy for you to quickly maximize the efficiency of any A/C or refrigeration unit.

And because they're built by the HVAC&R industry's leading innovator, you know it's packed with the features you want:

Target Superheat
- Automatically Calculated from Measurements Taken
- No Guesswork

Superheat and Subcooling
- Calculated and Displayed Simultaneously

Multiline Backlit Display
- Resistant to Extreme Temperatures
- Viewable up to 20' Away

K-Type Thermocouples
- Fast Reacting
- Accurate Temperatures
- Displays Actual Temperatures

Field Calibration
- Quick and Easy
- Temperature
- 2-Point Pressure

Micron Gauge Alarm
- Alarm Sounds When Chosen Micron Level is Reached
- Frees Up Tech to Work While Pulling Vacuum
- 50 to 9,999 Resolution

Vacuum Stopwatch
- Tracks Time Vacuum Pump's Been Working
- Length of Time Can Indicate Hidden Issues

Long Battery Life
- 135 Hours on SMAN3
- Constant Battery Status
- Auto Power Off

39 Refrigerants
- Built-in P-T Charts

Carrying Case
- Easy to Hang When Not Using
- Leave Hoses & Clamps Attached



What's Included:

SMAN3 Adds:
Vacuum Gauge in Microns, (2) K-type Pipe-clamp Thermocouples

Specifications SMAN3

Operating environment:
32°F to 122°F (0°C to 50°C)
at <75% relative humidity
Display size:
5 inches (diagonal)
Battery:
6 x AA (Battery life based on alkaline type)
Battery life (SMAN3):
Approx. 135 hours (without backlight)
Low battery indication:
is displayed when the battery voltage drops below the operating level
Auto Shut off:
30 minutes of inactivity (switchable)

Pressure
Connector Type:
Standard 1/4 NPT male flare fitting
Resolution:
0.1 psi/inHg; 1 kPa/cmHg
Accuracy:
29" HgV to 0" HgV: ±0.2" HgV,
74 cmHgV to 0 cmHgV: ±0.4 cmHgV,
0 to 200 Psig: ±1 Psi,
0 to 1378 KPa: ±7 KPa,
200 to 500 Psig: ±0.3%+1 Psi,
1378 to 3447KPa: ±0.3%+7 Kpa
Range:
29" HgV to 500Psig (English),
74 cmHgV to 0 to 4000KPa (Metric)
Maximum Overload pressure: 800 psig
Units: Psig, kPa, inHg, and cmHg

Microns for Vacuum (SMAN3)
Connector Type:
Standard 1/4 NPT male flare fitting
Range:
50 to 9999 microns of mercury
Resolution:
1 micron (50 to 2000 microns),
250 microns (2001 to 5000 microns),
500 microns (5001 to 8000 microns),
1000 microns (8001 to 9999 microns)
Accuracy:
±10% or ±10 microns, whichever is greater (50 to 1000 microns)
Maximum Overload pressure:
500 psig
Units:
Microns of mercury

Temperature
Sensor Type:
K-Type thermocouple
Range:
-76°F to 999.9°F
(-60°C to 537.0°C)
Resolution:
0.1°F/°C
Accuracy:
±(1.0°F) -76°F to 199.9°F;
±(0.5°C) -60°C to 93°C
±(2.0°F) 200°F to 999.9°F;
±(1.0°C) 93°C to 537.0°C

Note:
accuracies after field calibration.

Fieldpiece Digital SMAN3 Manifold

Airefrig Part Number	Description	List Price Ex GST
SMAN3	Digital Manifolds for HVAC&R (Measures Vacuum in microns)	

SERVICE MANIFOLD DIGITAL - FIELDPIECE

Gauge Digital Manifold – SMAN4

The SMAN4 is a 4-port, wireless digital manifold with a large 3/8" port for faster evacuations and recovery.

With four ports and a built-in vacuum gauge, HVAC&R professionals can now evacuate a system, pull a vacuum, add refrigerant and dial in the charge at one time, without having to hook and unhook any hoses.

The SMAN4 is the most modern digital manifold for the HVAC&R Technician.

A key feature that leaves the others behind is the ability to do target Superheat wirelessly for fixed orifice & TXV systems.

Unbeatable value in the SMAN4 with a built-in Vacuum Gauge, measuring down to 50 micron!

Features and Inclusions:

- Wireless measurements for inputting temperature & pressure via our ET2W Transmitters and Accessory Heads. [not included]
- Send information to our HG3 Analyser wirelessly for system analysis & logging.
- Measures Temperature x 2 (°C/°F)
- Measures Pressure x 2 (cmHgV-KPa/inHgV-PSIg)
- Measures Vacuum in microns with Hi and Lo adjustable Vacuum alarm points with vacuum timer function
- Calculates Actual Superheat and Subcooling
- Calculates Target Superheat for Fixed Orifice systems
- Huge backlit Extreme Temp Display with toughened Polycarbonate Face shield
- 39 Refrigerants built-In. Includes latest R22 alternatives
- Easy Temperature calibration
- Baseline and Span Pressure Calibration
- Long Battery life with Auto Power-Off
- Simultaneous display of Target Superheat, Superheat and Subcooling
- Magnetic Hook & Thermocouple Clamp storage
- Drawstring Pouch & Hose storage ports
- Sight glass for indication
- Wet and Dry bulb K-Type thermocouples included in both models
- Dual Fieldpiece K-Type Pipe Thermocouples Code : ATC1



Specifications SMAN4

Wireless Range: Up to (30m)
Initial wireless syn range: within 3m
Mini-USB port: for firmware updates
Operating environment:
32°F to 122°F (0°C to 50°C)
at <75% relative humidity
Display size:
5 inches (diagonal)
Battery:
6 x AA (Battery life based on alkaline type)
Battery life (SMAN4):
Approx. 135 hours
(without "blue" backlight & wireless)
Low battery indication:
is displayed when the battery voltage drops below the operating level
Auto Shut off:
30 minutes of inactivity (switchable)

Pressure:
Sensor type: Absolute pressure sensor
Connector type: Standard 1/4 NPT & 3/8NPT male flare fitting
Resolution: 0.1 psi/inHg; 1 kPa/cmHg; 0.001MPa; 0.01bar
Accuracy:
29" HgV to 0" HgV: ±0.2" HgV,
74 cmHgV to 0 cmHgV: ±1 cmHgV,
0 to 200 Psig: ±1 Psi,
0 to 1378 KPa: ±7 KPa,
200 to 580 Psig: ±0.3%+1 Psi,
1378 to 4000KPa: ±0.3%+7 Kpa
Range:
29" HgV to 580Psig (English),
74 cmHgV to 0 to 4000KPa (Metric)
Maximum Overload pressure: 800 psig
Units: Psig, kPa, MPa, bar, inHg, & cmHg

Microns for Vacuum (SMAN4)
Connector Type:
Standard 1/4 NPT & 3/8NPT male flare fitting
Range:
50 to 9999 microns of mercury
Resolution:
1 micron (50 to 2000 microns),
250 microns (2001 to 5000 microns),
500 microns (5001 to 8000 microns),
1000 microns (8001 to 9999 microns)
Accuracy:
±10% or ±10 microns, whichever is greater (50 to 1000 microns)
Maximum Overload pressure:
500 psig
Units:
Microns of mercury

Temperature
Sensor Type:
K-Type thermocouple
Range:
-76°F to 999.9°F
(-60°C to 537.0°C)
Resolution:
0.1°F/°C
Accuracy:
±(1.0°F) -76°F to 199.9°F;
±(0.5°C) -60°C to 93°C
±(2.0°F) 200°F to 999.9°F;
±(1.0°C) 93°C to 537.0°C

Note:
accuracies after field calibration.

Fieldpiece Digital SMAN4 Manifold

Airefrig Part Number	Description	List Price Ex GST
SMAN4	Digital Manifolds for HVAC&R (Measures Vacuum in microns)	

SERVICE MANIFOLD & GAUGES - CPS

VORTEX™ Series Manifolds
Advanced VVS diaphragm valve system
Precision machined aircraft aluminum body
Precision flutter-free metal cased gauges
Certified 15 micron vacuum rating
Over-sized refrigerant sight glass
Heavy duty plastic handles

BLACKMAX™ Series Manifolds
Exclusive Triple seal piston valve design
Precision flutter-free metal cased gauges
Anodized aluminium block body
Floating nylon sealing disk
Heavy duty plastic handles

WORKINGMAN Manifold
Exclusive Triple seal piston valve design
Precision machined aircraft aluminum body
"Gorilla Grip" TPE coated metal knobs
Heavy duty Santoprene gauge boots
Custom fitted carry case when hose taken
1% measurement accuracy

CPS Vortex Series Manifold & Gauges

Airefrig Part Number	Refrigerants	Manifold Type	Gauges Diam.	Connections	Hose Qty & Length	List Price Ex GST
MV2T	R22 R134A R404A	2 Valve	68mm	1/4 Flare	N/A	
MV4T		4 Valve	68mm	1/4 Flare		
MV12BJ5	R410A	4 Valve	68mm	1/2"-20UNF	3x 1525mm	

The sets above are supplied with Rubber Boot Gauge Protectors



CPS Black Max Series Manifold & Gauges

Airefrig Part Number	Refrigerants	Manifold Type	Gauges Diam.	Connections	Hose Qty & Length	List Price Ex GST
MBT	R22 R134A R404A	2 Valve	68mm	1/4 Flare	N/A	
MBY	R22 R407C	2 Valve	68mm	1/4 Flare		
MBHCP3	R290 R600a (Hydrocarbons)	2 Valve	68mm	1/4 Flare	3 x 915mm	



CPS Workingman Series Manifold & Gauges (with Carry Bag)

Airefrig Part Number	Refrigerants	Manifold Type	Gauges Diam.	Connections	Hose Qty & Length	List Price Ex GST
MT2T7P3AA	R22 R134A R404A	2 Valve	80mm	1/4 Flare	3x 915mm	
MT2T7P5AA	R22 R134A R404A	2 Valve	80mm	1/4 Flare	3x 1525mm	P.O.A.
MT11B7J5	R410A	2 Valve	80mm	1/2"-20UNF	3x 1525mm	
MT32B7J5	R410A & R32	2 Valve	80mm	1/4 Flare	3x 1525mm	
MT2CO2PSE	CO^2	2 Valve	80mm	TBA	3x 1525mm	



CPS Gauges

Airefrig Part Number	Description	Diameter mm	Refrigerants	List Price Ex GST
RGTH	Gauge High Pressure	68	R22 R404A R134A	
RGTL	Gauge Compound			
RGYH	Gauge High Pressure		R22 R407C	
RGYL	Gauge Compound			
RGBH	Gauge High Pressure		R410A	
RGBL	Gauge Compound			
RGHCH	Gauge High Pressure	68	R290 R600A (Hydrocarbons)	P.O.A.
RGHCL	Gauge Compound			P.O.A.
RGPH	Gauge High Pressure	80	R22 R404A R134A	
RGPL	Gauge Compound			
RGT7H	Gauge High Pressure		R22 R404A R134A Suit Workingman Series	P.O.A.
RGT7L	Gauge Compound			P.O.A.
RGB7H	Gauge High Pressure		R410A Suit Workingman Series	P.O.A.
RGB7L	Gauge Compound			P.O.A.
RGX68L	Replacement Cover Lens suit 68mm Gauges			
RGX68BB	Rubber Boot Gauge Protector 68mm – Blue			
RGX68RB	Rubber Boot Gauge Protector 68mm – Red			

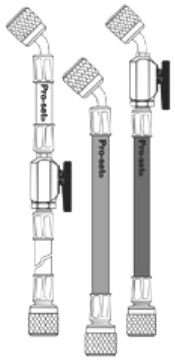


- No flutter gauge design
- Easy to read colour coded dials
- Durable metal casing
- Front calibration access port
- High impact pop in lexan lens
- 1/8" NPT brass connection

CHARGING HOSES - CPS

CPS Charging Hoses - Flare

Airefrig Part Number	Description	List Price Ex GST
HP3	Hose Set 1/4” Flare 915mm Long – Red, Yellow, Blue	
HP3E	Hose Set 1/4” Flare 915mm Long – Red, Yellow, Blue & 3 Ball Valves	
HP6	Hose Set 1/4” Flare 1830mm Long – Red, Yellow, Blue	
HP6E	Hose Set 1/4” Flare 1830mm Long – Red, Yellow, Blue & 3 Ball Valves	
HP3B	Hose 1/4” Flare 915mm Long – Blue	
HP3R	Hose 1/4” Flare 915mm Long – Red	
HP3Y	Hose 1/4” Flare 915mm Long – Yellow	
HP6B	Hose 1/4” Flare 1830mm Long – Blue	
HP6R	Hose 1/4” Flare 1830mm Long – Red	
HP6Y	Hose 1/4” Flare 1830mm Long – Yellow	
HP10B	Hose 1/4” Flare 3000mm Long – Blue	
HP10R	Hose 1/4” Flare 3000mm Long – Red	
HP10Y	Hose 1/4” Flare 3000mm Long – Yellow	
HV5	Hose 3/8” Flare 1525mm Long – Black	



CPS R134A Charging Hoses (1/2" Acme)

Airefrig Part Number	Description	List Price Ex GST
HA6	Hose Set 1/2” Acme 1830mm Long – Red, Yellow, Blue	
HA6B	Hose 1/2” Acme 1830mm long – Blue	
HA6R	Hose 1/2” Acme 1830mm long – Red	
HA6Y	Hose 1/2” Acme 1830mm long – Yellow with Ball Valve	



CPS R410A Charging Hoses (1/2"-20UNF)

Airefrig Part Number	Description	List Price Ex GST
HJ3	Hose Set 900mm Long – Blue, Red, Yellow (R410A)	
HJ5	Hose Set 1500mm Long – Blue, Red, Yellow (R410A)	
HJ3B	Hose 900mm Long – Blue (R410A)	
HJ3R	Hose 900mm Long – Red (R410A)	
HJ3Y	Hose 900mm Long – Yellow (R410A)	
HJ5B	Hose 1500mm Long – Blue (R410A)	
HJ5R	Hose 1500mm Long – Red (R410A)	
HJ5Y	Hose 1500mm Long – Yellow (R410A)	



CPS Charging Hose Ball Valves

Airefrig Part Number	Description	List Price Ex GST
BV	Ball Valve 1/4” Flare Straight	
BV45	Ball Valve 1/4” Flare 45 Deg.	
BV90	Ball Valve 1/4” Flare 90 Deg	
BV38	Ball Valve 3/8 Male Flare to 3/8 Female Flare	
BV12	Ball Valve 1/2 M to 1/2 F ACME	
BV410	Ball Valve 1/2”-20UNF M x 1/2"-20UNF Female Ball – R410A	



CPS Charging Hose Gaskets & Depressors

Airefrig Part Number	Description	List Price Ex GST
HXD	Hose Valve Core Depressor 1/4” Pkt 10	
HXG	Hose Gasket 1/4” Pkt 10	
HX38G	Hose Gasket 3/8” Pkt 10	
HXG2	Hose Gasket to suit CPS 410A Hoses	



CO^2 LIQUID CHARGING KIT

CO^2 Liquid Charging Kit

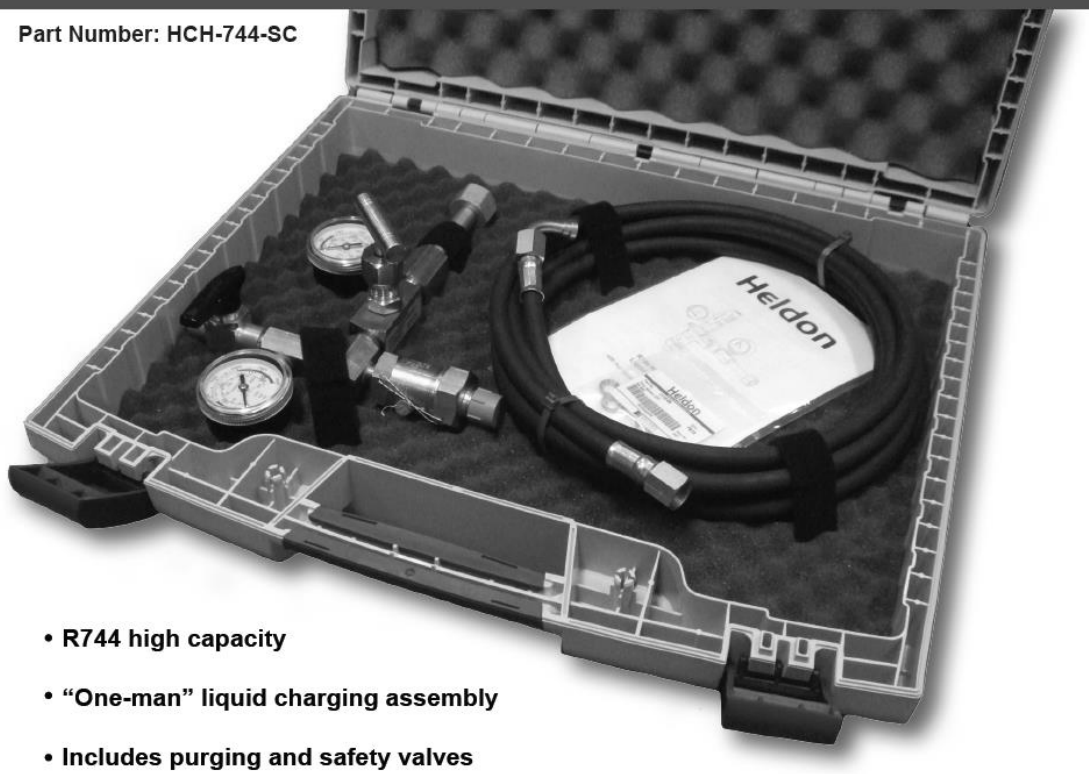
Airefrig Part Number	Description	List Price Ex GST
HCH744SC	CO^2 High Capacity Liquid Charging Kit	

Heldon
Quality Products

HENRY
TECHNOLOGIES

High capacity liquid CO_2 charging kit

Part Number: HCH-744-SC



- **R744 high capacity**
- **"One-man" liquid charging assembly**
- **Includes purging and safety valves**
- **Rated for R744 bottle pressure**
- **No regulator required**

CO_2 charging now takes minutes, not hours!

FEATURES	HELDON	OTHERS
High density liquid charging for rapid servicing	✓	✗
ISO compliant Safety valve protection	✓	✗
One-man operation	✓	✗
Protective carry case	✓	✗
Includes 5m charging hose	✓	✗

Visit **youtube.com/henrytechnologies** for a detailed instructional video on the CO_2 charging kit in action.

TOOLS R410A SPECIFIC - CPS

CPS R410A Manifold & Hose Sets

Airefrig Part Number	Refrigerants	Manifold Type	Gauges Diam.	Connections	Hose Qty & Length	List Price Ex GST
MV12BJ5	R410A	4 Valve	68mm	1/2”-20UNF	3 x 1525mm	
MT11B7J5	R410A	2 Valve	80mm	1/2"-20UNF	3x 1525mm	



CPS R410A Charging Hoses (1/2"-20UNF)

Airefrig Part Number	Description	List Price Ex GST
HJ3	Hose Set 900mm Long – Blue, Red, Yellow (R410A)	
HJ5	Hose Set 1500mm Long – Blue, Red, Yellow (R410A)	
HJ3B	Hose 900mm Long – Blue (R410A)	
HJ3R	Hose 900mm Long – Red (R410A)	
HJ3Y	Hose 900mm Long – Yellow (R410A)	
HJ5B	Hose 1500mm Long – Blue (R410A)	
HJ5R	Hose 1500mm Long – Red (R410A)	
HJ5Y	Hose 1500mm Long – Yellow (R410A)	
HXG2	Hose Gasket to suit CPS 410A Hoses	
BV410	Ball Valve 1/2” 20 UNF M x 1/2" 20 UNF Female Ball	



CPS R410A Torque Wrenches

Airefrig Part Number	Description	List Price Ex GST
TLTWSM	Torque Wrench Set – Metric (Interchangeable heads: 17, 22, 24, 26, 27, 29 mm)	
ATQS41	Torque Wrench Set of 4 (1/4”, 3/8”, 1/2” & 5/8”)	



CPS R410A Flaring Tools

Airefrig Part Number	Description	List Price Ex GST
800FN	Flaring Tool 1/4" - 3/4"	
FT800FN	Flaring Tool 1/4" - 3/4" with Ratchet	



FT800FN

CPS R410A Access Fittings

Airefrig Part Number	Description	List Price Ex GST
AD71	3/4” Female BSP x 1/2”-20UNF Male Adaptor (cylinder adaptor)	
AD78	1/4” Female Flare x 1/2”-20UNF Male Adaptor	
TLVCS410	Valve Core Remover Tool for R410A with Side Access	
A44000	Access Valve Tool with Core Depressor – R410A	
AV4410	Schrader Access Valve R410A – 4” Copper Tail	



AD78



TLVCS410



A44000



AV4410

TOOLS – ACCESS FITTINGS

Access Fittings

Airefrig Part Number	Description	List Price Ex GST
AV3RE	1/4" Schrader Access valve & cap with 3/16" copper tail	
AV4LRE	1/4" Schrader Access valve & cap with 1/4" copper tail (100mm)	
AV6RB	1/4" Schrader Access valve & cap with 3/8" copper tail	
BPV21	Bullet Piercing Valve suit 1/2" & 5/8" tube	
BPV31	Bullet Piercing Valve suit 1/4", 5/16" & 3/8" tube	



AV4LRE

Brass Access Fittings

Airefrig Part Number	Description	List Price Ex GST
AVB456B	Multi-Step Access Union 1/4 Schrader x 1/8, 3/16, 1/4, 5/16 ODS	
AVB346E	Multi-Step Access Union 1/4 Schrader x 3/16, 1/4, 3/8 ODS	
AVB46B	Multi-Step Access Union 1/4 Schrader x 1/4, 3/8 ODS	
AVCT4	Access Copper Tee 1/4 Schrader x 1/4 ODS x 1/4 ODS (Pkt-3)	
AVT44	Access Tee 1/4 Schrader x 1/4 M/Flare x 1/4 F/Flare Hex (Pkt-3)	
AVS1	Schrader Valve Cores (Pkt-10)	
AVS1B	Schrader Valve Cores (Pkt-100)	
AVS1B	Schrader Valve Cores (Pkt-1000)	
H31500	Access Union 1/4 Schrader x 1/8 MBSP	
H31501	Access Union 1/4 Schrader x 1/4 MBSP	
570404	Access Union 1/4 Schrader x 1/4 MNPT	
630404	Access Elbow 1/4 Schrader x 1/4 Flare Nut	
AVC4R	Access Valve Cap 1/4 flare Brass with Core Remover (Pkt-6)	
AVC4PS	Access Valve Cap 1/4 flare Plastic with Lanyard (Pkt-6)	



AVB456B & AVB46B



AVCT4



AVT4



570404



630404

CPS Access Valve with Core Depressor

Airefrig Part Number	Description	List Price Ex GST
CD5050	Access Valve Tool with Core Depressor 1/4" Flare	
A33000	Access Valve Tool with Core Depressor 1/4" Flare	



CD5050



A33000

CPS Valve Core Remover

Airefrig Part Number	Description	List Price Ex GST
TLVCS	Valve Core Remover 1/4" Flare with Side Access	
TLVC2	Valve Core Tool Universal	
TLVCT	Valve Core Torque Tool	



TLVC2

TLVCS

TLVCT

Automotive Couplings

Airefrig Part Number	Description	List Price Ex GST
ST1530	Quick Connect Coupler – High Pressure 14mm Female	
QCH134	R134a High Side 14mm Female	
QCL134	R134a low Side 14mm Female	
QCH14	Automotive Coupler 1/4 SAE High Pressure	
QCL14	Automotive Coupler 1/4 SAE Low Pressure	



QCH14 QCL14



QCH134 QCL134

TOOLS - TUBE CUTTERS

CPS Tube Cutters

Airefrig Part Number	Description	List Price EX GST
TC100	Ratchet Tube Cutter 1/4" to 7/8”	
TC127	Tube Cutter Mini 1/8” to 5/8”	
TC174	Tube Cutter Small 3/8” to 1 1/8”	
TC274	Tube Cutter 1/8” to 1 1/8” - fold out reamer	
TC289N	Tube Cutter 1/8” to 1 1/8” - Nickel Blade - auto cutting	
TC312	Tube Cutter 1/4” to 1 5/8” - fold out reamer	
TC206	Tube Cutter Ratchet Feed 3/8” to 2 5/8”	
TCX289NB	Cutter Wheel Nickel suit TC289N (Pack of 2)	
TCX4C	Cutter Wheel suit TC274, TC312	
TCX4S	Screw Cutting Wheel suit TC274 & TC312	
TCX4CTS	Cutter Wheel Titanium & Screw suit TC174,274,312	
TCX6CTS	Cutter Wheel Titanium & Screw suit TC206	
TCX7CTS	Cutter Wheel Titanium & Screw suit TC127	


TC100







TCAP	Capillary Tube Cutter	
A10971	Capillary Tube Gauge & Tube File	P.O.A.


TCAP


A10971

CPS Heavy Duty Cutters – Titanium Cutting Wheels

Airefrig Part Number	Description	List Price EX GST
TCT127	Tube Cutter H/D 1/8” to 5/8”	
TCT174	Tube Cutter H/D 1/8” to 1 1/8”	
TCT274	Tube Cutter 1/8” to 1 3/8” ratchet feed & retractable reamer	
TCT312	Tube Cutter 1/8” to 1 3/4” ratchet feed & retractable reamer	
TCT206	Tube Cutter 1/4” to 2 5/8” ratchet feed & retractable reamer	
TCXT127C	Cutter Titanium Wheel & Screw to suit TCT127	
TCXT174C	Cutter Titanium Wheel & Screw to suit TCT174	
TCXT274C	Cutter Titanium Wheel & Screw to suit TCT274	
TCXT312C	Cutter Titanium Wheel & Screw to suit TCT312	
TCXT206C	Cutter Titanium Wheel & Screw to suit TCT206	
TCXT274R	Replacement Deburring Blade to suit TCT274	P.O.A.
TCXT312R	Replacement Deburring Blade to suit TCT312	P.O.A.





70103	Chain Tube Cutter 19 – 76mm (3/4” – 3”)	



TOOLS - TUBE DEBURRERS

CPS Tube Deburrers

Airefrig Part Number	Description	List Price Ex GST
TLDB2	De-Burring Tool - Pen Type Handle (replaceable blade)	
TLDB	De-Burring Tool - Large Handle (replaceable blade)	
TLDBX	De-Burring Tool Replacement Blade for TLDB2 & TLDB	
TLRM	Universal Reamer / De-burring Tool	





TOOLS - TUBE BENDERS

CPS Tube Benders

Airefrig Part Number	Description	List Price Ex GST
TB04	Tube Bender 1/4”	
TB06	Tube Bender 3/8”	
TB08	Tube Bender 1/2”	
TB10	Tube Bender 5/8”	
TB12	Tube Bender 3/4”	
TB14	Tube Bender 7/8”	
TB250	Universal Tube Bender Kit 1/4", 3/8”, 1/2” 5/8”, 3/4“, 7/8“	
TB368	Tube Bender (3 in 1) 1/4”, 5/16”, 3/8”	





CPS Bending Springs

Airefrig Part Number	Description	List Price Ex GST
TBS04	Bending Spring 1/4”	
TBS06	Bending Spring 3/8”	
TBS08	Bending Spring 1/2”	
TBS10	Bending Spring 5/8”	
TBS12	Bending Spring 3/4”	



TOOLS - FLARE KITS

CPS Flaring Tools

Airefrig Part Number	Description	List Price Ex GST
FT195	Flaring Tool 45 Deg 3/16” to 5/8”	
FT500	Flare & Burnishing Tool 45 Deg 3/16” - 5/8”	
FT525	Universal and Adjustable Flaring Tool 3/16” to 5/16”	P.O.A.
FS275	Flaring & Swaging Tool Kit 1/8” to 3/4”	



FT195



FT500



FT525



FS275

CPS R410A Flaring Tools

Airefrig Part Number	Description	List Price Ex GST
800FN	Flaring Tool Kit for R410A 1/4" - 3/4"	
FT800FN	Flaring Tool Kit for R410A 1/4" - 3/4" with Ratchet	



FT800FN

TOOLS - TUBE EXPANDERS

CPS Tube Expander Kits

Airefrig Part Number	Description	List Price Ex GST
TLE6	Includes 3/8”, 1/2”, 5/8”, 3/4”, 7/8”, 11/8” Heads & Reamer	



CPS Tube Expander Replacement Heads

Airefrig Part Number	Description	List Price Ex GST
TLH06	3/8”	
TLH08	1/2”	
TLH10	5/8”	
TLH12	3/4”	
TLH14	7/8”	
TLH16	1”	
TLH18	1-1/8”	
11059	1-1/4”	P.O.A.
TLH22	1-3/8”	
11038	1-1/2”	P.O.A.
TLH26	1-5/8”	
TLE601	Expander Hand Tool (only)	



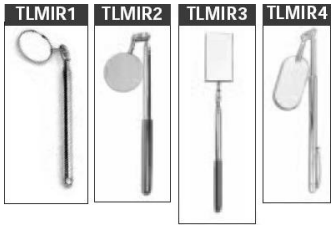


TLE601

TOOLS - MIRRORS

CPS Mirrors

Airefrig Part Number	Description	List Price Ex GST
TLMIR1	Mirror Circular 32mm	
TLMIR2	Mirror Circular 57mm	
TLMIR3	Mirror Rectangular 54mm x 90mm	
TLMIR4	Mirror Oval 50mm x 25mm	



Fieldpiece Mirror

Airefrig Part Number	Description	List Price Ex GST
PLM2	Oval Mirror 25 x 50mm with LED Light in Extendable Handle	



TOOLS - RATCHET WRENCHES

CPS Ratchet Wrenches

Airefrig Part Number	Description	List Price Ex GST
TLSWO	Wrench Ratchet Offset 3/16" x 3/8"	
TLSWS	Wrench Ratchet 3/16", 1/4", 5/16", 3/8"	


TLSWO

TOOLS - GENERAL

Tools - General

Airefrig Part Number	Description		List Price Ex GST
TLWA06	CPS Adjustable Wrenches	6" (150mm)	
TLWA08		8" (200mm)	
TLWA10		10" (250mm)	
TLWA12		12" (300mm)	
17371	Side Cutter	7 1/2" (190mm)	
17352	Combination Pliers	8" (200mm)	
TLPO	Pinch Off Pliers		
TLPP	Tube Piercing Pliers		
TLPPX	Replacement pin for TLPP Piercing Pliers		
TBC122B	Tool Box 5 Cantilever		
TLBAG2	Tool Bag - CPS		
TLWL53AA	Rechargeable Anodized Aluminium LED Work Light		
TCPVC	PVC Ratchet Tube Cutter 1/4" to 2-5/8" (max. 5/8 PVC)		
TLSWH	Hex Key Set Inch : 3/32, 7/16, 1/8, 9/64, 5/32, 3/16, 3/32, 1/4		
TLSWHM	Hex Key Set Metric : 1.5 , 2.0 , 2.5 , 3.0 , 4.0 , 5.0 , 6.0 , 8.0		



TOOLS - GENERAL

Expando Adjustable Condenser Tube Cleaners – Water Cooled Condensers

Airefrig Part Number	Description		List Price Ex GST
E5	Condenser Tube Cleaner (attaches to a threaded rod which fits into an Expando handle or your electric drill)	5/16” to 3/8” ID Tube	
E6		3/8” to 1/2” ID Tube	
E8		1/2” to 5/8” ID Tube	
E10		5/8” to 3/4” ID Tube	
EC56	Couplings for E5 and E6		P.O.A.
EC810	Couplings for E8 and E10		
EE30	Rod – 30” 1/4-28		
EE48	Rod – 48” 1/4-28		
EH1	Expando Handle		

Note: Use EC810 couplings for connecting additional rods.



Nitrogen Regulator

Airefrig Part Number	Description	List Price Ex GST
BRRN1A	Nitrogen Regulator - Range:138-2757KPA (20-400psi)	
BRXRN1GH	HP Gauge 0-28000KPA (4000psi) to suit BRRN1A	
BRXRN1GL	LP Gauge 0-4000KPA (600psi) to suit BRNN1A	
BRXRN1GB	Gauge Protector Black Rubber 50mm to suit BRRN1A	



Nitrogen Flow Meter

Airefrig Part Number	Description	List Price Ex GST
NFM3	The NFM3 is a visual tool that confirms the flow of Nitrogen during soldering. Nitrogen flow is confirmed when the float ball rises up in the flow indicator tube. If the float ball does not rise up in the tube, then there is static pressure and the Oxygen is not being displaced.	



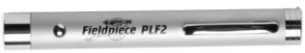
Fieldpiece Voltage Indicator

Airefrig Part Number	Description	List Price Ex GST
SNCV1	Non-Contact Voltage Tester 24Vac – 240Vac	



Fieldpiece Pocket LED Flashlight

Airefrig Part Number	Description	List Price Ex GST
PLF2	Pocket LED Flashlight	



CPS Solenoid Magnet

Airefrig Part Number	Description	List Price Ex GST
TLMKC18	Solenoid Magnet for opening solenoids without power	



Fin Comb Set

Airefrig Part Number	Description	List Price Ex GST
FCHS6	Fin Comb Kit (Set of 6)	



CPS Flush Gun

Airefrig Part Number	Description	List Price Ex GST
TLFG	Flush Gun Kit	



TOOLS - GENERAL

Sling Psychrometer

Airefrig Part Number	Description	List Price Ex GST
0127043	Sling Psychrometer Bacharach - Red Spirit Filled (-5 to +50°C)	
0120011	Sling Psychrometer Bacharach - Wick Replacement Kit (4 x wicks)	P.O.A.



Universal Air Conditioner Remote Controller

Airefrig Part Number	Description	List Price Ex GST
ULTRAPLUSREMOTE	AC Ultra Plus Universal Air Cond Remote Controller - complete with clock & timer - compatible with over 1000 A/C units	



Oil Pumps

Airefrig Part Number	Description	List Price Ex GST
TLOP	CPS Oil Pump - 78ml of oil per each pump) Able to pump against 200 psig system pressure Universal stopper fits most 5,10 & 20 litre containers	
REGA	Bucket Pump – Suit 20 Ltr Container	



TLOP

Tools - Ladders

Airefrig Part Number	Description	List Price Ex GST
LG17HVAC	Little Giant Ladder - Model 17 (3 ladders in one) • Step Ladder Height range: 1.2 to 2.1M • Extension Ladder height range: 2.7 to 4.5M • Storage height: 1.4M • Weight: 14kg • 150kg Rated • Plus bonus work platform & wheels • Australian Standards (1892:1 1996)	
LG22HVAC	Little Giant Ladder - Model 22 (3 ladders in one) • Step Ladder Height range: 1.5 to 2.7M • Extension Ladder height range: 3.3 to 5.8M • Storage height: 1.7M • Weight: 19kg • 150kg Rated • Plus bonus work platform & wheels • Australian Standards (1892:1 1996)	





Bonus work platform

Little Giant Accessories

ANEMOMETERS - CPS

AM50 Air Velocity Meter.

- Precision vane type anemometer.
- K type thermocouple built in for fast temperature measurements.
- A display in Ft/min, m/s, Km/Hr, knots.
- +/- 3% accuracy
- Conversion chart included for volume conversions.



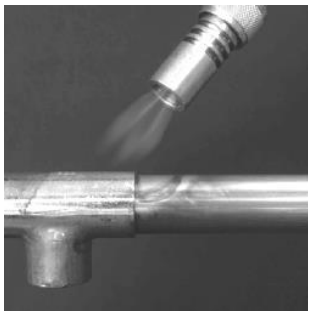
CPS Anemometer

Airefrig Part Number	Description	List Price Ex GST
AM50	Air Velocity Meter	

PRECISION WELDING & CUTTING EQUIPMENT

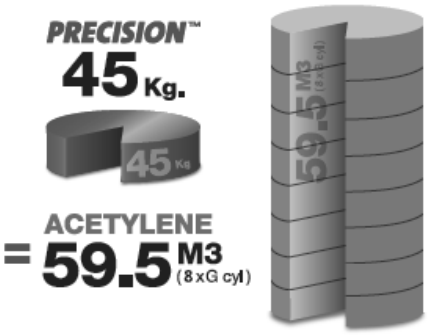
PRECISION™ GAS & OXYGEN FOR WELDING & CUTTING

PRECISION™ welding and cutting gas is a new fuel that is more economical, efficient and safer to use than acetylene and other fuel gases.



Features and Benefits:

- Reduces fuel cost
- High cutting speed – reducing labour
- Equal oxygen consumption
- Reduced handling and storage
- Reduced change out time
- Extremely high flame temperature
- Minimum slag and weld back
- Burns clean – no soot or smoke
- Limited torch backfire
- Narrow explosive limits
- Stable, not sensitive to shock
- Odorized for detection





	PRECISION	Acetylene	Propylene	Propane	Natural Gas
Flame Temp in Oxygen	3316°C	3087°C	2923°C	2526°C	2538°C
Heating Values MJ per M^3	103	55	89	94	39
MJ per Kg	57.5	49.6	50.9	50.3	57.4
M^3 per KG gas (or liquid)	0.55	0.91	0.56	0.54	1.47
Weight compared to Air	1.6	0.91	1.47	1.52	0.55
Limits of Flammability in Air	2.25 - 9.4%	2.5 - 80%	2.0-11.1%	2.4 - 9.6%	5.3 - 14%
Toxicity	Low	Low	Low	Low	Low
Reactivity	Low	Copper & silver alloys	Low	Low	Low
Backfire Tendency	Low	High	Slight	Low	Low
Maximum Pressure	Cylinder	103 kpa	Cylinder	Cylinder	Cylinder
Shock Sensitivity	Stable	Unstable	Stable	Stable	Stable
Boiling Point	-40°C	-63°C	-44°C	-42°C	-157°C

Precision Welding Gas & Cylinders

Airefrig Part Number	Precision vs Acetylene Cylinder Sizes			Precision Cylinder Information					List Price Excl GST
	Precision Nett Weight	Acetylene Equivalent	Acetylene Cylinder	Valve Type	Water Capacity	Gross Weight	Height	Diam.	
PR00001	1.25 kg	1.65M^3	1.0M^3 (D Size)	3/8"BSP Left Hand Thread	3.0 Ltr	4.10 kg	285mm	160 mm	P.O.A.
PR00003	3.0 kg	3.97M^3	3.2M^3 (E Size)		7.2 Ltr	7.50 kg	395 mm	190 mm	
PR00005	4.5 kg	5.95M^3	7.0M^3 (G Size)	POL	10.0 Ltr	10.0 kg	375 mm	260 mm	
PR00009	9.0 kg	11.9M^3	-		22.0 Ltr	18.6 kg	520 mm	310 mm	
PR00045	45.0 kg	59.5M^3	-		108.0 Ltr	101.0 kg	1290mm	390 mm	

- Precision cylinders are subject to a service fee – please contact your nearest Airefrig Australia branch for details.
- Precision cylinders not returned to Airefrig Australia within an 18 month period will be invoiced as an outright cylinder sale.
- For further information regarding this service please contact your nearest Airefrig Australia branch.

OXYGEN GAS FOR WELDING & CUTTING

Oxygen Welding Gas & Cylinders

Airefrig Part Number	Description	Cylinder Fill Quantity		Cylinder Water Capacity	List Price Excl GST
		Kg	M^3		
OXY0010	GAS OXYGEN PACK (D SIZE CYLINDER)	2.7	2.0	10 Litres	P.O.A.
OXY0020	GAS OXYGEN PACK (E SIZE CYLINDER)	5.4	4.0	20 Litres	
OXY0050	GAS OXYGEN PACK (G SIZE CYLINDER)	13.6	10.0	50 Litres	

- Oxygen cylinders are subject to a service fee – please contact your nearest Airefrig Australia branch for details.
- Oxygen cylinders not returned to Airefrig Australia within an 18 month period will be invoiced as an outright cylinder sale.
- For further information regarding this service please contact your nearest Airefrig Australia branch.

PRECISION WELDING & CUTTING EQUIPMENT

PRECISION STANDARD GAS & OXYGEN WELDING EQUIPMENT

Precision Standard Welding & Cutting Equipment

Airefrig Part Number	Description	List Price Ex GST
2510MOX	OXYGEN REGULATOR	
10135MLP	PRECISION / LPG REGULATOR (POL CYLINDER FITTING)	
GM16013B	ADAPTOR – FEMALE POL TO FEMALE 3/8in L/H BSP	
HA505OLP	OXY & PRECISION / LPG TWIN HOSE ASSEMBLY 5M	
HA1005OL	OXY & PRECISION / LPG TWIN HOSE ASSEMBLY 10M	
HA1505OL	OXY & PRECISION / LPG TWIN HOSE ASSEMBLY 15M	
MG241B	TORCH HANDLE (TYPE 41/44)	
800243	MIXER (10mm) - suit MG241B Torch Handle	
808593C	TIP TUBE (suit 800243 Mixer)	
13903N	LPG BRAZING TIP 1-2MM (suit 808593C) Acetylene equivalent= SWT10	
13905N	LPG BRAZING TIP 2-4MM (suit 808593C) Acetylene equivalent= SWT12	
13906N	LPG BRAZING TIP 4-6MM (suit 808593C) Acetylene equivalent= SWT15	
13908N	LPG BRAZING TIP 6-9MM (suit 808593C) Acetylene equivalent= SWT20	
139010N	LPG BRAZING TIP 9-12MM(suit 808593C) Acetylene equivalent=SWT26	
1390H	LPG MULTIFLAME HEATING TIP (suit 808593C)	
MG242B	CUTTING ATTACHMENT (TYPE 41/44) – suit MG241B Handle	
446	LPG CUTTING TIP 1-6MM (suit MG242B) Acetylene equiv = Type 41-6	
448	LPG CUTTING TIP 6-12MM (suit MG242B) Acetylene equiv = Type 41-8	
4412	LPG CUTTING TIP 12-20MM (suit MG242B) Acetylene equ = 41-6/41-12	
4415	LPG CUTTING TIP 20-75MM (suit MG242B) Acetylene equ= Type 41-15	
4420	LPG CUTTING TIP 75-125MM (suit MG242B) Acetylene = Type 41-20	
4424	LPG CUTTING TIP 125-200MM (suit MG242B) Acetylene = Type 41-24	
4432	LPG CUTTING TIP 200-275MM (suit MG242B) Acetylene = Type 41-32	
4432GB	LPG GOUGING TIP BENT 3 x 6MM	
4432GS	LPG GOUGING TIP STRAIGHT	P.O.A.
4448GB	LPG GOUGING TIP 5 x 10MM	P.O.A.
FBARAC	FLASHBACK ARRESTOR - FUEL (REGULATOR END)	
FBAROX	FLASHBACK ARRESTOR - OXY (REGULATOR END)	
FBATAC	FLASHBACK ARRESTOR - FUEL (TORCH END)	
FBATOX	FLASHBACK ARRESTOR - OXY (TORCH END)	


2510MOX


10135MLP


GM16013B


FBAROX


13906N


1390H


808593C

800243


MG241B


4432GB


4412


MG242B

PRECISION MICRO GAS & OXYGEN WELDING EQUIPMENT

Precision Micro Welding & Cutting Equipment

Airefrig Part Number	Description			List Price Ex GST
AG8042	MICRO LPG STARTER KIT	Kit supplied with the following:		
		Part No.	Description	
		800196	Micro Torch Handle	
		H192S	Micro Mixer	
		80D50C	Micro Tip Tube	
		13903N	1-2mm Brazing Tip	
		13905N	2-4mm Brazing Tip	
		6051	Tip Cleaners	
2510MOX	OXYGEN REGULATOR			
10135MLP	PRECISION / LPG REGULATOR (POL CYLINDER FITTING)			
GM16013B	ADAPTOR – FEMALE POL TO FEMALE 3/8in L/H BSP			
HA505OLP	OXY & PRECISION / LPG TWIN HOSE ASSEMBLY 5M			
HA1005OL	OXY & PRECISION / LPG TWIN HOSE ASSEMBLY 10M			
HA1505OL	OXY & PRECISION / LPG TWIN HOSE ASSEMBLY 15M			
800196	TORCH HANDLE (MICRO)			P.O.A.
H192S	MIXER (MICRO) - suit 800196 Torch Handle			P.O.A.
80D50C	TIP TUBE (MICRO) - suit H192S Mixer			P.O.A.
13903N	LPG BRAZING TIP 1-2MM (suit 808593C) Acetylene equivalent=SWT10			
13905N	LPG BRAZING TIP 2-4MM (suit 808593C) Acetylene equivalent=SWT12			
13906N	LPG BRAZING TIP 4-6MM (suit 808593C) Acetylene equivalent=SWT15			
13908N	LPG BRAZING TIP 6-9MM (suit 808593C) Acetylene equivalent=SWT20			
139010N	LPG BRAZING TIP 9-12MM(suit 808593C) Acetylene equivalent=SWT26			
1390H	LPG MULTIFLAME HEATING TIP (suit 808593C)			
800362	CUTTING ATTACHMENT (MICRO)			P.O.A.
369000P	LPG CUTTING TIP MICRO 0-6MM			P.O.A.
36900P	LPG CUTTING TIP MICRO 6-12MM			P.O.A.
36901P	LPG CUTTING TIP MICRO 12-25MM			P.O.A.
36902P	LPG CUTTING TIP MICRO 25-75mm			P.O.A.
FBARAC	FLASHBACK ARRESTOR - FUEL (REGULATOR END)			
FBAROX	FLASHBACK ARRESTOR - OXY (REGULATOR END)			
FBATAC	FLASHBACK ARRESTOR - FUEL (TORCH END)			
FBATOX	FLASHBACK ARRESTOR - OXY (TORCH END)			


2510MOX


10135MLP


GM16013B


FBAROX


13906N


1390H


80D50C


H192S


MG241B


800362


369000P

PRECISION WELDING & CUTTING EQUIPMENT

PRECISION TURBO TORCH WELDING EQUIPMENT

Precision Turbo Torch Welding Equipment

Airefrig Part Number	Description	List Price Ex GST
10135MLP	PRECISION / LPG REGULATOR (POL CYLINDER FITTING)	
GM16013B	ADAPTOR – FEMALE POL TO FEMALE 3/8in L/H BSP	
BFFG4100	TURBO TORCH BRAZING HANDLE	
BFFG4103	TURBO TORCH BURNER SMALL	P.O.A.
BFFG4104	TURBO TORCH BURNER MEDIUM	
BFFG4105	TURBO TORCH BURNER LARGE	
HA1505LP	LPG HOSE ASSEMBLY 1.5M	
HA050LP	LPG HOSE ASSEMBLY 5.0M	
FBARAC	FLASHBACK ARRESTOR - FUEL (REGULATOR END)	
FBATAC	FLASHBACK ARRESTOR - FUEL (TORCH END)	


10135MLP


GM16013B


FBAROX


BFFG4100


BFFG4104


HA1505LP

PRECISION WELDING EQUIPMENT ACCESSORIES

Airefrig Part Number	Description	List Price Ex GST
LP112	HOSE FITTING REUSABLE (RH)	P.O.A.
LP240	HOSE FITTING REUSABLE (LH)	P.O.A.
LP265	HOSE JOINER REUSABLE	P.O.A.
WB34	HOSE JOINER (RH)	P.O.A.
WB35	HOSE JOINER (LH)	P.O.A.
6025	FIRE LIGHTER (SINGLE CUP)	
6027	FLINT REFILL (PKT 5)	
6051	TIP CLEANERS	
GM110	POL TO DISPOSABLE TORCH HOSE 900MM	


6025


6051


GM110

CYLINDER SAFETY PLUGS
(Added protection when gas cylinders are not in use)

Airefrig Part Number	Description	List Price Ex GST
SJ16692	Acetylene Cylinder Safety Plug – with lanyard	
SJ16693	Oxygen Cylinder Safety Plug – with lanyard	
SJ16728	Precision Cylinder Safety Plug – with lanyard	



SOLDER EQUIPMENT

MAPP GAS BRAZING TORCH

Soldering Equipment

Airefrig Part Number	Description	List Price Ex GST
BRHT1	CPS Self-Igniting Brazing Torch	
BRHT2	CPS Self-Igniting Brazing Torch Kit (c/w: carry case , 1x torch , 3x tips , 2x cartridges)	
MAPP	Gas Cartridge - MAPP Gas	
PTV5450	Stop Flame Blanket - Pure Silica (Size: 200mm x 250mm)	



BRHT1



BRHT2



MAPP



PTV5450

SILVER SOLDER

Silver Solder (available per stick or kg packs)

Airefrig Part Number	Description per Stick						List Price Ex GST
	Stick Tip Colour	Silver Content	Composition	Melting Range	Stick Diameter	Typical Applications	
P7824	Yellow	2 %	Ag / Cu / P	645-820°C	2.5 mm	Flows well - Suitable for domestic & industrial plumbing	P.O.A.
P7832					3.0 mm		
P7324	Silver	5 %	Ag / Cu / P	645-810°C	2.5 mm	More ductile, good flow - Popular for plumbing applications	
P7424	Brown	15 %	Ag / Cu / P	645-800°C	2.5 mm	Excellent flow & ductility - Suitable for higher vibration applications	
EF4516	Light Orange	45 %	Ag-Cu-Zn-Sn	640-680°C	1.5 mm	Engineering - Universal general purpose for refrigeration & engineering	
SOLFLOFLUX	Silver Brazing Flux - 200 grams (working temperature 500 - 800°C)						

Joint Material Quick Selector

	Copper	Mild Steel	Brass
Copper	2% , 5% , 15% No flux needed	45% Flux required	2% , 5% , 15% , 45% Flux required
Mild Steel	45% Flux required	45% Flux required	45% Flux required
Brass	2% , 5% , 15% , 45% Flux required	45% Flux required	2% , 5% , 15% , 45% Flux required

Note: Materials indicated above are a guide only - Final selection should be based on customers full assessment of all relevant factors.





THERMOMETERS - DIAL

Thermometers - Dial

Airefrig Part Number	Description	List Price Ex GST
F87R100	100mm Dial Th/meter : –40 to +40 : 3m Cap : rear or flush mount	
150110	50mm Dial Thermometer : 0 to +120 : 1 m Cap : flush mount	
150300	50mm Dial Thermometer : -40 to +40 : 1 m Cap : flush mount	
4303	70mm Dial Thermometer: -50 to +50 : plastic mounting tab	


F87R100


4303

SYSTEM ANALYSER - CPS

CPS Total System Analyser

Airefrig Part Number	Description	List Price Ex GST
SH450	Total System Analyser	

SH450 Total Systems Analyser:

- Economical & effective option to digital manifolds without risk of cross contaminating systems.
- Directly measures superheat, sub-cool, relative humidity, dewpoint, wet bulb & dry bulb.
- Temperature differential between any 2 of the 4 integrated channels.
- Wide range of job specific accessory probes available.
- Measures pressure from -14.7 to 725 PSI, automatically calculates & displays superheat, sub-cooling, relative humidity, wet bulb, dry bulb & dew point readings in seconds.
- Wide range of job specific accessory probes available.
- Records & displays min/max readings for any channel at the touch of a button.
- Scan all 4 temperature channels simultaneously.
- Supplied in a self-contained rugged polyethylene case with room for accessory probes.



SH450 Superheat / Sub-cool Specifications
Pressure Range: -14.7 PSIG to 725.0 PSIG (-100 kPa to 5000 kPa)
Pressure Accuracy: ±1% of reading or ± 0.5 PSIG (± 3.5 kPa), whichever is greater
Pressure Units: PSIG, kPa, BAR, Hg, kg/cm2
Proof Pressure: 1000 PSI (7000 KPa)
Temperature Accuracy: ±0.2˚C from -10.0˚C to 70˚C / 0.3˚C elsewhere in the range
Dew or Bubble saturation: ±1.0˚C

SH450 Thermo-Psychrometer Specifications
Total Measurement Temp Range: -40˚C to +150˚C Actual temperature range depends on the probe being used.
Temperature Resolution: ±0.1˚C
Temperature Accuracy: ±0.2˚C from -10.0˚C to 70˚C / 0.3˚C elsewhere in the range
RH Range: 0 to 100%RH
RH Accuracy (TMX3RH): ±1.8%RH from 10 to 90%RH; ± 3% elsewhere in the range
DB Accuracy (TMX3RH): ± 1.2% of reading ± 0.5˚C from -40˚C to 90˚C

SH450 General Specifications
Power Source: 9V alkaline battery or optional TMX3PS AC adapter for 100 to 240VAC (40 to 60 Hz)
Battery Life: 30 hours continuous use
Automatic Power Off: After 10 minutes of inactivity (no key press) or selectable continuous ON mode.
Backlight: EL panel stays on for 15 seconds upon activation
Dimensions: 30.5cm x 25.4cm x 7.6cm
Weight: 1.4 kg with probes

Note: Calibrated to NIST traceable Standards

THERMOMETERS - CPS

CPS Dual Probe Thermometer

Airefrig Part Number	Temp Range 0.1°C res	Temp Range 1.0°C res	Accuracy	Display	List Price Ex GST
TM75	-200 to 650°C	640 to 1370°C	± 0.1%	4 Digits	

- Dual probe input (TM75 supplied with 1 x only TMXKBEAD –50 to 204°C bead sensor)
- Max / Min temperatures recorded
- Temperature difference between probes
- Hold / Real function
- Supports K,J,T probes
- Auto power off function
- RS232 port for data logging
- CD (optional software w/ D-Sub connector)
- Supplied in hard plastic carry case


TM75

CPS K-Type Probe

Airefrig Part Number	Description	List Price Ex GST
TMXKBEAD	Bead Probe K-TYPE –50 to 204°C 900mm lead	
TMXSK	Surface Probe K-TYPE –50 to 400°C 1 metre coiled lead	


TMXSK

CPS Infrared Thermometer

Airefrig Part Number	Range	Distance To Spot Size	Accuracy	Display	Resolution	List Price Ex GST
TMINI12	-60 to 500°C	12:1	± 2%	4 Digits	1.0°C/F°	


TMINI12

CPS Thermometers

Airefrig Part Number	Description	List Price Ex GST
TM50	Digital Thermometer –40c to +260 °C	


TM50

THERMOMETERS - FIELDPIECE

Fieldpiece Thermometer

Airefrig Part Number	Description	List Price Ex GST
SIR2	Pocket Sized Lase Thermometer -33 C to +250 C	
SIP2	Pocket Sized Infrared Thermometer -30 C to + 530 C	
SPK1	Portable Digital Thermometer -50 C to + 200 C	
ST4	Dual Temperature Meter, c/w Thermocouples, C or F	


SIR2


SIP2


SPK1


ST4

DIGITAL CLAMP METER - CPS

CPS Digital Clamp Meter

Airefrig Part Number	Description	List Price Ex GST
AC750	Digital Clamp Meter	

Item Description:
The AC750 is a Multi-Functional AC/DC Clamp Meter. The AC750 hosts an array of enhanced features such as the ability to capture True Inrush measurements, Non-Contact Voltage Detection and Data Logging your output readings to a PC (USB Connection cable included).

Key Features:

- Versatile for testing AC/DC voltage, AC/DC current, resistance and frequency
- True RMS AC measurement
- Max./Min. value measurement
- Audible continuity and diode test
- Non-contact voltage detection
- Integrated clamp light and LCD backlight
- Auto zero key for DCA measurement
- Auto/Manual range, auto power off
- Secondary injection molded case, safety as per IEC1010 CAT.III 600V



MULTIMETER - FIELDPIECE

Fieldpiece Digital Pocket Multimeter

Airefrig Part Number	Description	List Price Ex GST
SPDM1	Digital Pocket Multimeter	

Display: 3½ digit LCD with a max reading of 1999.
Auto power off: approx. 10 minutes.
Power: Two 1.5V button-type batteries
Battery life: 70 hours continuous operation.
Measurement rate: 2 times per second, nominal.

Resistance (autoranging)
Ranges: 200Ω, 2kΩ, 20kΩ, 200kΩ, 2MΩ, 20MΩ
Resolution: 100mΩ
Accuracy:
±(2.0% rdg + 5 dgts) on 200Ω range
±(2.0% rdg + 4 dgts) on 2kΩ, 20kΩ, 200kΩ
±(3.0% rdg + 4 dgts) on 2MΩ range
±(5.0% rdg + 5 dgts) on 20MΩ range
Overload protection: 450VDC or AC rms

Continuity
Audible indication: Less than 25Ω
Response time: 500ms
Overload protection: 450VDC or AC rms

Diode test
Audible indication: Less than .25V
Range: 2V
Resolution: 10mV
Accuracy: ±(3.0% rdg + 3 dgts)
Test current: 1.2mA
Overload protection: 450VDC or AC rms

DC volts (autoranging)
Ranges: 2V, 20V, 200V, 600V
Resolution: 1mV
Accuracy: ±(2.0% rdg + 2 dgt)
Input impedance: 10MΩ on 2V, 9.1MΩ all other
Overload protection: 600VDC or AC rms

AC volts 50/60Hz (autoranging)
Ranges: 2V, 20V, 200V, 600V
Resolution: 1mV
Accuracy: ±(4.0% rdg + 5 dgts)
Input impedance: 10MΩ on 2V, 9.1MΩ all other
Overload protection: 600V DC or AC rms



SPDM1

MEGAOHM METER - FIELDPIECE

Fieldpiece SMG5 Megohm Meter

Airefrig Part Number	Description	List Price Ex GST
SMG5	Megohm Meter – 1000VDC up to 2000Mohms	

SMG5 Megohm Meter is a low cost meter for checking compressor insulation.

- Predict compressor failure
- 1000VDC stresses insulation to measure up to 2000Mohms
- Backlit LCD display
- Auto-off to extend battery life
- Case, alligator clip, leads with removable tips



FIELDPIECE INSTRUMENTS

HS30 Series Head Attachments

Note: Prices on last page of Fieldpiece Information



ATH4
Dual-Temperature
Accessory Head



AUA2
Milliamps & Microamp
Accessory Head



ADMN2
Dual-Port Manometer
Accessory Head



ATIR3
Non-contact Infrared
Temperature
Accessory Head



AAV3
Anemometer Air Velocity
and Temperature
Accessory Head



ARH5
In-Duct Psychrometer
Accessory Head



AVH1
AC/DC Voltage
Accessory Head



ACH4
400A Amp Clamp
Accessory Head



Superheat & Subcooling
ASX14 for R22 & R410a
ASX24 for R134a & R404a



AVG2
Digital Vacuum Gauge
Accessory Head



DL3
Expandable HVAC/R
Data Logger



EHDL1
Electronic Handle Converts
any Fieldpiece accessory
head into a standalone meter



HS33
Expandable Manual
Ranging Stick Multimeter
for HVAC/R



HS36
Expandable
Autoranging True
RMS Stick Multimeter
w/ Backlight

FIELDPIECE INSTRUMENTS

Stick Multimeter Specifications (for use with either multiple heads or silicon leads)

Function	Range	Accuracy/ Resolution	HS33	HS36
Ranging			Manual	Automatic
Counts			2000	4000
AC Conversion			Average	True RMS
Backlight			-	yes
Bar Graph			-	yes
VAC	200m	1.2% + 5/0.1m	***A**	***C**
	2000m	1.5% + 5/1m	-	***C**
	40	1.5% + 5/0.01	-	yes
	200	2% + 5/0.1	yes	***C**
	600	2% + 5/1	yes	***C**
VDC	200m	0.5% + 2/0.1m	yes	***C**
	2000m	0.5% + 2/1m	yes	***C**
	20	0.5% + 2/0.01	-	***C**
	200	0.5% + 2/0.1	yes	***C**
	600	0.5% + 2/1	-	yes
AAC	20	2.7% +7/0.1	***A**	***A**
	100	3.7% + 8/0.1	***A**	***A**
	400	5.0% + 10/1	***A**	***A**
ADC	400µ	1% + 2/0.1µ	-	yes
	4000µ	1% + 2/1µ	-	yes
°F	200°F	1°F/0.1	yes	***C**
	1000°F	1°F/1	-	yes
MFD	200	3% + 5/0.1m	yes	***C**
Hi-V Indicator		>30V	***B**	***B**
NCV		>24VAC	***B**	***B**
Ohms	200	1% + 4/0/1	yes	***C**
	4K	1% + 4/1	-	yes
	40K	1% + 4/10	-	yes
	200K	1% + 4/100	yes	***C**
	4M	1.5% + 4/1K	-	yes
	20M	3% + 5/10K	-	***C**
Continuity			***B**	***B**
Diode			yes	-
HZ			-	yes

*A = With ACH4 clamp head *B = LED and beeper *C = Range is 40XX, not 20XX



HS33
Expandable Manual Ranging Stick Multimeter for HVAC/R



HS36
Expandable Autoranging True RMS Stick Multimeter w/ Backlight

Stick style digital multi meters for comprehensive on the go HVAC&R testing.

HS33 – HS36
Unique features for HVAC&R
Just snap the head onto the meter or use deluxe silicone leads for remote connection.

- **Non Contact Voltage**
  Loud beeper and bright LED indicate the NCV tab is near AC voltages down to 24 VAC.
- **Auto Ranging HS36**
  Automatically changes range for best resolution
- **Temperature**
  Thermocouple plugs in directly for accurate readings, even in fast changing environments.
- **Micro-amps HS36**
  For flame rectifier diode tests
- **Capacitance**
  For motor-run and motor-start capacitors
- **Frequency HS36**
  For variable frequency drives
- **And many more**

Note: Prices on last page of Fieldpiece Information

FIELDPIECE INSTRUMENTS

DL3 Expandable HVAC/R Data Logger

Measures and records any parameter from any Fieldpiece accessory head connected to it.

- Record data points manually, automatically or trigger to log outside range
- Realtime clock: second, minute, hour, day, month and year
- All data points are time stamped
- Multiple data sets of various parameters can be stored
- Easy downloading to PC
- Cost-Effective, multi-channel recording using multiple DL3 data loggers 20000 data points
- Combine with the AAV3 Anemometer to easily determine CFM



DL3
Data Logger

EHDL1 Electronic Handle Converts any Fieldpiece accessory head into a standalone meter

- MIN/MAX to record highest and lowest readings.
- Ranges: 200mVAC, 2000mVAC, 200mVDC 2000mVDC
- Resolution: 0.1mV
- Accuracy DCV: ±(1.2%rdg + 3 digits.)
- Overload Protection: 30VDC or 24VAC



EHDL1
Electronic Handle

SC45 Basic Mini Clamp Meter

c/w: zippered case, Thermocouple & Silicone Test Leads

- Basic clamp meter with NCV.
- Auto ranging
- 4000 counts
- VAC, VDC, AAC, Ohms, NCV, Continuity & Diode testing



SC45
Mini Clamp Meter

SC56 True RMS Swivel Head Clamp Meter

c/w: zippered case, Thermocouple & Silicone Test Leads

- 180 Degree swivel head
- Inrush current
- Dual Display (backlight)
- True RMS
- Auto or manual ranging



SC56
True RMS Swivel Head
Clamp Meter

ARH5 In-Duct Psychrometer Accessory Head

Measures air temperature, RH% and dew point wet bulb for getting target superheat from charts.

- Select °F or °C.
- Accuracy: ± 1° @ 0° - 45°C.
- ± 2.5% RH, 10% - 90% RH @ 25°C.
- Auto off can be disabled for data logging.



ARH5
In-Duct Psychrometer
Accessory Head

Note: Prices on last page of Fieldpiece Information

FIELDPIECE INSTRUMENTS

ATH4 Dual-Temperature Accessory Head

- Two K type thermocouple inputs
- Display T1, T2, or T1-T2
- Field calibration for ± 1°F accuracy
- Display °F directly at 0.1°F resolution
- on DMM with0.1mVDC resolution
- Select °F or °C
- Converts from -50°F to 1800°F (-45C to 980C)
- (optional thermocouple required)
- Includes two “wrap tab” thermocouples, plus velcro straps.
- Thermocouples insulated to 400°F (205C)
- Auto-off can be disabled for data logging.



ATH4
Dual-Temperature
Accessory Head

AAV3 Anemometer Air Velocity and Temperature Accessory Head

Air Velocity

- Ft/min, meters/sec, MPH, KM/hr
- Range: 80 to 5900ft/min.
- Accuracy: ± 3%fs+1digets.
- Temperature
- Displays °F and °C
- Range: -4°F to 140°F (-20C to 60C)
- Accuracy: ± 1°F from 32°F to 113°F (0C to 45C)
- Resolution: 0.5°F
- Max Operating Temperature 120°F (50C)
- Output: 1mV/unit of measure
- (1mV100ft/min above 2000fpm)



AAV3
Anemometer Air Velocity
and Temperature
Accessory Head

ASX14 Superheat & Subcooling Head - for R22 & R410a
ASX24 Superheat & Subcooling Head - for R134a & R404a
Measures refrigerant pressure, temperature and calculates superheat or subcooling.

- Display pressure in PSI or kPa.
- Display temperature in ºF or ºC.
- Display superheat in ºF or ºC.
- Display subcooling in ºF or ºC.
- Select Refrigerant
- Auto-off can be disabled for data logging
- Includes "T".
- Now accepts K-type thermocouples. ATC1 included.
- LED indicates when readings are stable.
- Thermocouple calibration pot.
- Atmosphere pressure calibration



ASX14 or ASX24
Superheat &
Subcooling Head

AUA2 Milliamps & Microamp Accessory Head
Measure microamps for flame diode test.
Measure 4 - 20mA control circuits.

- Includes flame diode adaptor
- Max Current: 200mA AC/DC



AUA2
Milliamps & Microamp
Accessory Head

Note: Prices on last page of Fieldpiece Information

FIELDPIECE INSTRUMENTS

ATIR3 Non-contact Infrared Temperature Accessory Head

Measures temperature without contact
- 8:1 field of view
- Laser sight included
- Select °F or °C
- Operating ambient temperature 32°F to 122°F (0C to 50C)
- Temperature measurement range 0°F to 752°F (-18C to 400C)
- Accuracy: Whichever is greater.
  At 73°F ± 10°F at <90%RH
  ± 2.0%rdg. or 4°F , 32°F to 160°F
  ±3.0%rdg.or 5.5°F, 0°F to 31°F
  161°F to 752°F.



ATIR3
Non-contact Infrared
Temperature Accessory Head

ADMN2 Dual-Port Manometer Accessory Head

Measure gas pressure and has resolution low enough for static pressure.
- Measures in mBar or WC. (water column).
- 0.01 or 0.1 depending on selected resolution.
- Manual zero-set for comparing two pressures.
- Includes tube and adaptor for gas pressure measurement.
- Auto-off can be disabled for data logging.



ADNM2
Manometer Head

AVG2 Digital Vacuum Gauge Accessory Head

Displays pressure in microns in steps of one micron.
Has pump down indication showing progress from atmospheric pressure
- Range: 50 to 2000 microns of mercury.
- Resolution (steps): 1 micron of mercury
- Pump down indication: output of head goes from over 3VDC at atmosphere to 2VDC at 2000 microns.
- Overload: 500 PSI
- Fitting: 1/4” flared brass fitting (male)
- Accuracy (73°F ±9°F): ±10%, 0 to 1000 microns, <90%RH
- Straight-in access to sensor for easy cleaning.
- New “T” for inline vacuum testing.
- LEDs indicate increasing, decreasing and stable vacuum.
- Auto-off can be disabled for data logging.



AVG2
Digital Vacuum
Gauge Accessory
Head

SVG2 Digital Stand Alone Vacuum Gauge

- Measures from 50-2000 microns.
- Auto off when left in Atmospheric pressure.
- High and low alarm that notifies user when the desired vacuum has been reached with bright red LED and audible alarm.
- Vacuum indicators notifies user if vacuum is decreasing, stable or increasing in pressure
- Fast response and high resolution Accuracy +/- 10 microns from 50 to 1000 microns.
- Rubber boot protection with magnetic hanger.



SVG2 Digital
Vacuum Gauge

AVH1 AC/DC Voltage Accessory Head

Records voltage using DL2 data logger or EHDL1 handle.
Accuracy; DC ±(0.5%rdg + 1dgt.)
AC ±(1.0%rdg + 4dgts.)
Max voltage: 600V AC or DC
Input impedance: 1M Ohm
Standard test leads plug in top



AVH1
Voltage Head

Note: Prices on last page of Fieldpiece Information

FIELDPIECE INSTRUMENTS

ACH4 Current Clamp Accessory Head
Measures to 400VAAC
- Current range: 1A to 400A
- Accuracy: ±1.5%rdg +1digets.
- Maximum conductor size: 23mm (0.91ins)



400A Amp Clamp
Accessory Head

SRH3 Diagnostic Psychrometer (Stand-alone Meter) with Target Superheat
Fully loaded diagnostic psychrometer. Use on Fixed Orifice Systems for the quickest way to check your "Target" Superheat on capillary systems by measuring the *outdoor* dry bulb temperature and the *indoor* wet bulb temperature

- For temperature measurements select built-in thermistor on a telescopic wand.
- Measures Wet bulb temp, dry bulb temp, dew point temp and %RH
- Target Evap. Exit Temp and Target Superheat for "Fixed Orifice Systems"
- Calculate target superheat and target evaporator exit temperature
- Rubber boot protection with magnetic hanger strap

SRH3
Diagnostic
Psychrometer



ADLS2 Deluxe Silicone Test Leads
- High copper stranding, silicone insulated test leads.
- Removable probe tips
- Basket style strain relief
- Fit in test lead holders on back of SC series clamp meters and HS30 series stick meter



ADLS2
Silicone Test Leads

AHDL1 Electronic Handle
Converts any Fieldpiece accessory head into a standalone meter
- Connects any Fieldpiece accessory head to any
- digital multimeter with industry standard jacks

AHDL1
Accessory Head
Adaptor



ATA1 Bead Tip K-Type Thermocouple with Alligator Clip
- Bead type with alligator clip
- Temperature Range -46 to 204°C



ATA1
Thermocouple

ATF1 Thermocouple
- 6” Stainless steel tip for fluids
- Maximum temperature 815°C (1500°F)



ATF1
Thermocouple

ANC1 Carry Case
- Soft sided carry case
- 4 pockets, 1 meter + 2 heads



ANC1
Carry Case

ANC8 Carry Case
- Soft sided carry case
- 4 pockets, 2 meter + 2 heads



ANC8
Carry Case

Note: Prices on last page of Fieldpiece Information

FIELDPIECE INSTRUMENTS

LT Digital Multimeters

Function	Range	Accuracy / Resolution	LT16A	LT17A	LT83A
AC Voltage (50hz to 500hz)	200m	1.5% + 5/0.1	x	x	x
	2000m	1.5% + 5/1.0	x	x	x
	20	1.5% + 5/0.01	x	x	x
	200	2% + 5/0.1	x	x	x
	600	2% + 5/1.0	x	x	x
DC Voltage	200m	0.5% + 1/0.1	x	x	x
	2000m	0.5% + 1/1.0	x	x	x
	20	0.5% + 1/0.01	x	x	x
	200	0.5% + 1/0.1	x	x	x
	600	0.5% + 1/1.0	x	x	x
AC Current (* Using the ACH4 current clamp)	200µ	1.5% + 5/0.1	x	x	x
	2m	1.5% + 5/0.001			x
	20m	1.5% + 5/0.01	x	x	x
	200m	1.5% + 5/0.1	x	x	x
	2	3% + 5/0.001	x		
	10	3.5% + 4/0.01			x
	20*	3.0% + 7/0.01	x	x	x
	100*	4.0% + 8/0.01	x	x	x
	400*	5.0% + 10/1	x	x	x
DC Current	200µ	1% + 1/0.1	x	x	x
	2m	1% + 1/0.001			x
	20m	1% + 1/0.01	x	x	x
	200m	1% + 1/0.1	x	x	x
	2	2.5% + 1/0.001	x		
	10	3% + 3/0.01			x
Capacitance (MFD)	200	4% + 10/0.1	x	x	
	2k	4% + 10/0.001	x	x	
	20K	4% + 10/0.01	x	x	
Resistance (Ohms)	200	1% + 4/0.1	x	x	x
	2k	1% + 4/0.001	x	x	x
	20k	1% + 4/0.01			x
	200k	1% + 4/0.1	x	x	x
	2M	1% + 4/0.001			x
	20M	3% + 4/0.01	x	x	x
	200M	2% + 4/0.1			x
	2000M	5% + 10/1.0	x		
Temperature (K-Type Sensor)	200	1°F/0.1 (32 – 120°F)		x	
	1400	3% + 7/1.0		x	
Battery Check	1.5V	3.5% + 2/0.01			x
True RMS			x		
Phase Rotation			x		
Frequency Autoranging			x	x	
Continuity			x	x	x
Diode Test			x	x	x
Backlight			x	x	x
Supplied with:	ACH4 – 400AAC current clamp		x	x	
	ADLS2 – Deluxe silicone test leads		x	x	x
	ANC5 – Padded pouch case		x	x	
	ASA2 – Short leads with alligator clips		x	x	
	ATB1 – K-Type bead thermocouple			x	
	ASV6 – Velcro thermocouple pipe straps			x	
	Yellow short lead with alligator clips		x		



LT16A



LT17A



LT83A

Note: Prices on last page of Fieldpiece Information

FIELDPIECE INSTRUMENTS

Fieldpiece Prices

Airefrig Part Number	Description	List Price Excl GST
AAV3	Anemometer Air Velocity and Temperature Accessory Head, Range 80 to 5900ft/min	
ACH4	Current Clamp Accessory Head, Range 1A to 400A	
ADLS2	Deluxe Silicone Test Leads with Removable Probes	
ADMN2	Dual-Port Manometer Accessory Head	
AHDL1	Accessory Adaptor Handle, Connects any Head to Digital Multimeters with industry standard jacks	
ANC1	Carry Case – 1 Meter & 2 Heads	
ANC8	Carry Case – 2 Meters & 4 Heads	
ARH5	In-Duct Psychrometer Accessory Head (RH% & Temperature)	
ASX14	Superheat and Subcooling Accessory Head for Air Cond – Refrigerant R22 & R410A	P.O.A.
ASX24	Superheat and Subcooling Accessory Head for Refrigeration – Refrigerant R134A & R404A	P.O.A.
ATA1	K Type Thermocouple with Alligator Clip	
ATBF1	K Type Thermocouple Bead 480 Deg C Insulation	
ATF1	K Type Thermocouple Stainless Steel Pointed	
ATH4	Dual Temperature Accessory Head, Display T1, T2 or T1-T2	
ATIR3	Temperature Head Infrared, Laser light included, F or C Range –18C to 400C	
AUA2	Milliamps & Microamp Accessory Head	
AVG2	Digital Vacuum Gauge Head , Range 50 to 2000 microns of mercury	
AVH1	AC/DC Voltage Accessory Head, Max voltage 600V AC or DC	P.O.A.
DL3	Data Logger Modular Base Unit (Expandable HVAC/R Data Logger)	
EHDL1	Electronic Handle, Converts accessory heads into stand-alone instrument.	
HS33	Stick Meter VAC, VDC, MFD, Ohms, Diode, Temp	
HS36	Stick Meter Auto Ranging, VAC, VDC, Continuity, Ohms, Diode, Temp, Hz, DC microAmps	
LT16A	Digital True RMS Multimeter Kit with Phase Rotation	
LT17A	Digital Multimeter Kit with K-Type Temperature Probe	
LT83A	Digital Multimeter (basic)	
RF16	Fuses (4) 0.1A/250V 5 x 20mm suit LT16, LT17	
RFL83	Fuses (4) 10A/600V 6.35 x 25.4mm suit LT83	
RFM66	Fuses (4) 0.25A/700V 6.35 x 32mm suit SC66, SC77	
RFM70	Fuses (4) 2A/600V 6.35 x 25.4mm suit LT16	
RFM74	Fuses (4) 500mA/500V 6.35 x 32mm suit LT17	P.O.A.
RFS74	Fuses (4) 0.5A/250V 5 x 20mm suit HB74, LT83	
SC45	Mini Combination Clamp Meter with Temperature for HVAC/R	
SC56	True RMS Swivel Head Clamp Meter calculates ac/dc volts, ac/dc current, diode testing capacitance temperature	
SPDM1	Digital Pocket Multimeter	
SRH3	Diagnostic Psychrometer (Stand-alone Meter) with Target Superheat	
SVG2	Digital Stand Alone Vacuum Gauge , Range 50 to 2000 microns of mercury	

DFX TECHNOLOGY – 2eRT CONTROL

2eRT ENERGY SAVINGS CONTROL

The **DFx** 2eRT is a smart energy savings controller that has been specifically designed for use on stand-alone medium temperature refrigerated cabinets with 10 amp single phase power leads.

Installation of the 2eRT is simply done by plugging the controller into a standard 10 amp power supply and then plugging the refrigerated cabinet's lead into the 2eRT and placing a wireless temperature sensor into the refrigerated cabinet.

Key Benefits

- Learns and optimises energy usage patterns, thus saving money.
- Reduces CO2 emissions.
- Can help to prolong refrigeration unit life.
- Shows energy savings over time in GBP, Euros, Dollars or Other.
- Override and Standby facilities.
- Advanced algorithms to help maintain product quality.
- Out of voltage range shutdown



2eRT control

Specifications

- 240 VAC 50Hz
- Total loading not to exceed 10amp (2400 watts).
- kWh Hour 00:00 ~ 99,999
- Clock: 24 Hour, Calendar, Leap Year and Daylight Saving
- Dimensions Base Unit: 130 mm (H) x 65 mm (W) x 85 mm (D)
- Weight: 217g
- Temperature Probe: 48 (H) x 46 mm (W) x 15 mm (D)

2eRT Device Features

- Plugs into mains socket.
- Refrigeration unit plugs into 10 Amp socket on device.
- Graphical LCD display.
- Real-time clock with auto-daylight saving adjustment (where applicable).
- 7-day, 28 period programmable timer.
- Function buttons for setup and information.
- Override function.
- Standby function.
- Adaptive technology.
- Carbon footprint reduction.


Wireless Temperature Sensor

Information Displayed

- Current temperature
- Estimate of the money saved since installation
- Carbon reduction
- Before and after power usage (kWh)

Note:

- 2eRT is designed for indoor use only.
- To prevent fire or shock hazard, do not expose the 2eRT device to rain or moisture.
- The amount of energy saved is dependent upon the establishment's trading hours. Individual savings will vary.

WARNING: The 2eRT device only switches the 'live' on and off. It does not isolate the attached refrigeration unit. The refrigeration unit must be unplugged from the 2Ert device before any maintenance work is carried out.

2eRT Control

Airefrig Part Number	Description		List Price Excl GST
2ERT	ENERGY SAVING CONTROL *Supplied with:* • *2eRT control* • *Wireless Temperature Sensor* • *Power Lead* • *Instruction Manual*	To Suit Medium Temperature Stand-Alone Refrigerated Cabinets with 10amp Single Phase Power Leads	

MAJA FLAKE ICE MAKER HEADS

MAJA Flake Ice Maker Heads

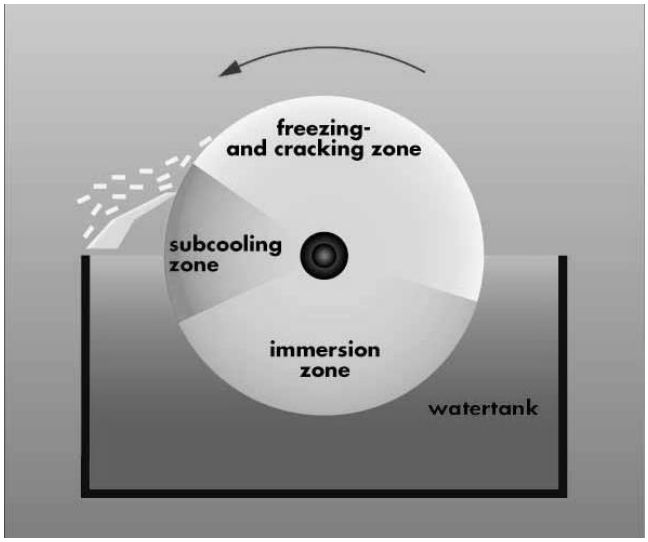
MAJA - ice production technology
A deep-frozen metal cylinder, rotating in a water reservoir, guarantees constant ice quality. With each rotation, water freezes on the evaporation drum. The residual stress in the ice which builds up during the freezing process causes the dry-frozen ice to automatically flake off from the drum.



The flake ice has a temperature of approximately -7 °C, a thickness of 2 to 3 mm and is dry-frozen. The flake ice keeps its advantageous slow melting properties for long periods when stored in adequate bins.

Fresh Water Flake Ice Heads

- Space-saving design
- High standard of hygiene
- Automatic restarting of the machine after power failure
- Automatic restarting after interruption of water supply
- Evaporator after-running system
- Programming of start / stop time
- Remote control with 5m cable
- Low maintenance
- Use of electrical components with all common approvals
- Frame construction in stainless steel
- Solid execution, thus high stability of value
- For connection into an existing refrigeration system



Marine Water Flake Ice Heads

- Suitable for sea-water freezing
- Non-corroding evaporator
- Evaporator side panels in plastic for avoiding corrosion
- Machine housing in non-corroding V4A stainless steel
- Switch box with control panel included
- For connection into an existing refrigeration system
- Compact size
- Water tank slop-over protection for trouble free operation in rough seas

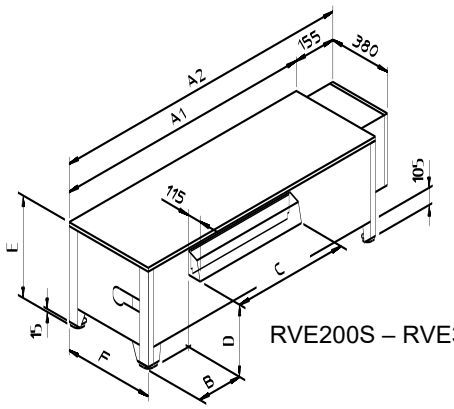
MAJA FLAKE ICE MAKER HEADS

MAJA Freshwater Flake Ice Maker Heads

Freshwater - R404a

Airefrig Part Number	Output Kg/Day*	Water Consumption kL / Day	Refrigeration Capacity kW **	Dimension mm							Weight Kg
				A1	A2	B	C	D	E	F	
RVE200S	200	0.20	1.0	745	900	225	210	290	470	512	75
RVE400S	400	0.40	2.0	745	900	225	210	290	470	512	75
RVE700S	750	0.75	3.8	1185	1340	250	370	290	470	512	120
RVE1500S	1500	1.50	8.4	1535	1690	250	720	290	470	512	160
RVE3100S	3000	3.00	16.2	1370	1525	233	720	355	580	600	215
RVE6000S	6000	6.00	33.0	length+box 1450mm / depth 1100mm / height+feet 585mm							305
RVE9000S	9000	9.00	50.0	length+box 1730mm / depth 1148mm / height+feet 1330mm							670
RVE12000S	12000	12.00	66.0	length+box 1730mm / depth 1280mm / height+feet 1360mm							-

* water supply temperature = +16 ºC / ambient temperature = +20 ºC; Higher temperatures may lead to reduced ice output.
** evaporating temperature = -20 ºC / condensing temperature = +40 ºC



RVE200S – RVE3100S

Freshwater - NH3 (Ammonia)

Airefrig Part Number	Output Kg/Day *	Water Consumption kL / Day	Refrigeration Capacity kW **	Weight Kg
RVE6000SNH3D	6000	6.0	36.0	950
RVE12000SNH3D	12000	12.0	71.5	1400

* water supply temperature = +16 ºC / ambient temperature = +20 ºC; Higher temperatures may lead to reduced ice output.
** evaporating temperature = -20 ºC / condensing temperature = +40 ºC

Freshwater - R404a & NH3 Prices

Airefrig Part Number	Description	List Price Excl GST
RVE200S	Ice Maker Head 200 Kg/Day with On/Off Switch for R404a	P.O.A.
RVE400S	Ice Maker Head 400 Kg/Day with On/Off Switch for R404a	P.O.A.
RVE700S	Ice Maker Head 700 Kg/Day with On/Off Switch for R404a	P.O.A.
RVE1500S	Ice Maker Head 1500 Kg/Day with On/Off Switch for R404a	P.O.A.
RVE3100S	Ice Maker Head 3100 Kg/Day with On/Off Switch for R404a	P.O.A.
RVE6000S	Ice Maker Head 6000 Kg/Day with On/Off Switch for R404a	P.O.A.
RVE9000S	Ice Maker Head 9000 Kg/Day with On/Off Switch for R404a	P.O.A.
RVE12000S	Ice Maker Head 12000 Kg/Day with On/Off Switch for R404a	P.O.A.
RVE6000SNH3D	Ice Maker Head 6000 Kg/Day for Direct Ammonia Operation	P.O.A.
RVE12000SNH3D	Ice Maker Head 12000 Kg/Day for Direct Ammonia Operation	P.O.A.

MAJA FLAKE ICE MAKER HEADS

MAJA Marine Flake Ice Maker Heads



MAJA rotating sea-water evaporators have been specially designed for seagoing use in the fishing industry. They are ideal for trouble free operation in the harsh conditions on board fishing trawlers, where the quality of the catch depends very much on the availability of a continuous supply of quality ice.

Marine - R404a

Airefrig Part Number	Output Kg/Day*	Water Consumption kL / Day	Refrigeration Capacity kW **	Width with control box mm	Height mm	Depth with chute mm	Weight Kg
RVE702S	750	0.75	4.8	1210	640	884	180
RVE1702S	1700	1.70	9.5	1410	640	884	205
RVE3102S	3000	3.00	17.4	1580	640	884	245

* water supply temperature = +16 ºC / ambient temperature = +20 ºC; Higher temperatures may lead to reduced ice output.
** evaporating temperature = -33 ºC / condensing temperature = +40 ºC

Marine - R404a Prices

Airefrig Part Number	Description	List Price Excl GST
RVE702S	Ice Maker Head 750 Kg/Day for Marine Use (R404a)	P.O.A.
RVE1702S	Ice Maker Head 1700 Kg/Day for Marine Use (R404a)	P.O.A.
RVE3102S	Ice Maker Head 3000 Kg/Day for Marine Use (R404a)	P.O.A.

DROP-IN SLIDE-IN UNITS

Eidis Drop-In Units

Airefrig Part Number	Refrigeration Capacity		Compressor		Evaporator Fan		Power Input Nominal	List Price Ex GST
	Watts	KTD	HP	Refrig	Dia	Watts	Amps	
66/4E	1300	5	1/2	R404A	300	73	3.8	P.O.A.
68/4E	1940	6.8	7/8	R404A	300	73	4.1	P.O.A.
88/4E	2280	7	1 1/4	R404A	300	73	6.0	P.O.A.
1212/4E	3220	6	1 1/2	R404A	350	130	10.2	P.O.A.



Unit models with an 'E' suffix are supplied with electronic controller
All Units are 220/240 Volt 50 Hz

Eidis Drop-In Units – Low Profile

Airefrig Part Number	Refrigeration Capacity		Compressor		Evaporator Fan		Power Input Nominal	List Price Ex GST
	Watts	KTD	HP	Refrig	Dia	Watts	Amps	
64/4LPE	975	6.5	3/8	R404A	2 x 175	60	4.65	P.O.A.
66/4LPE	1200	5.0	1/2	R404A	3 x 175	90	4.88	P.O.A.
68/4LPE	1930	6.8	7/8	R404A	3 x 175	90	7.02	P.O.A.
88/4LPE	2250	7.0	1 1/4	R404A	3 x 175	90	8.42	P.O.A.



Unit models with an 'E' suffix are supplied with electronic controller
All Units are 220/240 Volt 50 Hz

Eidis Slide-In Units

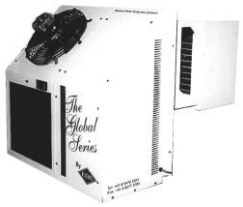
Airefrig Part Number	Refrigeration Capacity		Compressor		Evaporator Fan		Power Input	List Price Ex GST
	Watts	KTD	HP	Refrig	Dia	Watts	Amps	
66/4SIE	1300	5	1/2	R404A	300	73	3.8	P.O.A.
68/4SIE	1940	6.8	7/8	R404A	300	73	4.1	P.O.A.
88/4SIE	2280	7	1 1/4	R404A	300	73	6.0	P.O.A.



Unit models with an 'E' suffix are supplied with electronic controller
All Units are 220/240 Volt 50 Hz

Eidis Global Push-In

Airefrig Part Number	Refrigeration Capacity		Compressor		Evaporator Fan		Power Input	List Price Ex GST
	Watts	KTD	HP	Refrig	Dia	Watts	Amps	
66/4PI	1300	5	1/2	R404A	300	73	3.8	P.O.A.
68/4PI	1940	7	7/8	R404A	300	73	4.1	P.O.A.
88/4PI	2280	6	1 1/4	R404A	300	73	6.0	P.O.A.



All Global Push-In units are supplied with electronic controller as standard
All Units are 220/240 Volt 50 Hz

Package Dimensions

Model	Dimensions mm	Weight Kg
Drop-In Units		
66/4(E)	720 x 460 x 870	47
68/4(E)	720 x 460 x 940	56
88/4(E)	720 x 460 x 940	62
1212/4(E)	920 x 680 x 1010	105
Drop-In Units – Low Profile		
64/4LP(E)	900 x 500 x 650	40
66/4LP(E)	900 x 500 x 650	46
68/4LP(E)	900 x 500 x 650	47
88/4LP(E)	900 x 500 x 650	49

Model	Dimensions mm	Weight Kg
Slide-In Units		
66/4SI(E)	1070 x 700 x 510	58
68/4SI(E)	1070 x 700 x 510	67
88/4SI(E)	1070 x 700 x 510	71
1212/4SI(E)	1320 x 900 x 600	120
Push-In Units		
66/4PI	930 x 810 x 700	56
68/4PI	930 x 810 x 700	58
88/4PI	930 x 810 x 700	60

AIR FILTRATION

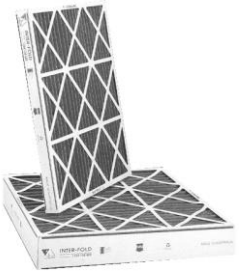
Inter Fold Disposable Filters

Airefrig Part Number	Actual Size mm			Cap	Res	Cap	Res	Media Area M²	List Price Ex GST
	Width	Height	Depth	Med L/s	Med Pa	High L/s	High Pa		
25mm Series									
FS25305610	289	595	22	161	36	495	87	.40	
FS25356508	342	495	22	158	36	453	87	.38	
FS25406508	395	495	22	182	36	522	87	.44	
FS25406635	395	622	22	229	36	656	87	.56	
FS25508508	495	495	22	229	36	656	87	.55	
FS25508635	495	622	22	288	36	824	87	.70	
FS25610610	595	595	22	330	36	670	87	.82	
50mm Series									
FS50255508	241	495	44	227	39	319	77	0.59	
FS50305508	289	495	44	272	39	383	77	0.67	
FS50305610	289	594	44	272	39	383	77	0.71	
FS50356508	342	495	44	321	39	453	77	0.81	
FS50356635	343	622	44	405	39	571	77	1.01	
FS50381508	368	495	44	346	39	487	77	0.86	
FS50406508	395	495	44	371	39	523	77	0.92	
FS50406635	395	622	44	371	39	523	77	0.92	
FS50457508	444	495	44	417	39	588	77	1.05	
FS50457610	444	596	44	502	39	708	77	1.26	
FS50457635	444	622	44	524	39	739	77	1.32	
FS50508508	495	495	44	465	39	656	77	1.17	
FS50508610	495	596	44	560	39	789	77	1.37	
FS50508635	495	622	44	585	39	824	77	1.37	
FS50610610	595	595	44	670	39	944	77	1.42	
100mm Series									
FS100305610	289	595	96	326	40	459	67	1.28	
FS100406508	395	495	96	370	40	522	67	1.44	
FS100406635	395	622	96	465	40	656	67	1.76	
FS100457610	444	595	96	502	40	708	67	1.91	
FS100508508	495	495	96	465	40	656	67	1.83	
FS100508610	495	595	96	559	40	788	67	2.26	
FS100508635	495	622	96	585	40	924	67	2.18	
FS100610610	595	595	96	670	40	944	67	2.55	
FS100635737	732	622	96	855	40	1205	67	3.24	

Features
Compact
Economical
Totally Disposable
Low operating costs

Construction
Durable materials for long service life.

Rating F4
Meets the requirements of:
AS1324.2
AS1668.2



AIR FILTRATION

Inter Pocket Filters

Airefrig Part Number	No Pockets	Actual Size mm			Cap	Res	Cap	Res	Media Area M²	List Price Ex GST
		Width	Height	Depth	Med L/s	Med Pa	High L/s	High Pa		
85% Efficient										
IP856610610560	6	595	595	560	670	72	944	120	4.45	P.O.A.
IP856610610660	6	595	595	660	670	57	944	97	5.20	P.O.A.
IP858610610560	8	595	595	560	670	66	944	105	5.75	P.O.A.
IP858610610660	8	595	595	660	670	57	944	93	6.78	P.O.A.
65% Efficient										
IP656610610560	6	595	595	560	670	43	944	73	4.45	P.O.A.
IP656610610660	6	595	595	660	670	55	944	69	5.20	P.O.A.
IP658610610560	8	595	595	560	670	40	944	65	5.75	P.O.A.
IP658610610660	8	595	595	660	670	47	944	61	6.78	
55% Efficient										
IP553305610380	3	289	595	380	670	53	472	80	1.39	P.O.A.
IP556610610380	6	595	595	380	670	45	944	75	2.73	P.O.A.
IP556610610560	6	595	595	560	670	38	944	65	4.45	P.O.A.



Inter Firm Filters

Airefrig Part Number	Actual Size mm			Cap	Res	Cap	Res	Media Area M²	List Price Ex GST
	Width	Height	Depth	Med. L/s	Med Pa	High L/s	High Pa		
IF65610610305	593	593	292	471	21	943	78	5.38	P.O.A.
IF85610610305	593	593	292	471	48	943	122	5.38	
IF95610610305	593	593	292	471	50	943	137	5.38	



Holding Frames

Airefrig Part Number	Dimensions	List Price Ex GST
FF305610	Filter Frame 305 x 610 x 100mm	P.O.A.
FF406635	Filter Frame 406 x 635 x 100mm	P.O.A.
FF508508	Filter Frame 508 x 508 x 100mm	P.O.A.
FF508635	Filter Frame 508 x 635 x 100mm	P.O.A.
FF610610	Filter Frame 610 x 610 x 100mm	
FF635737	Filter Frame 635 x 737 x 100mm	P.O.A.
FC100	Filter Frame Clip 100mm	P.O.A.

Filter Media

Airefrig Part Number	Dimensions	List Price Ex GST
CM360	White - Per Square Metre 8mm thick (min. 2 x square metres)	
CM360ROLL	White 20 Metre Roll (2000mm wide x 8mm thick)	
GR1032100	Grey - Per Square Metre 15mm thick (min. 2 x square metres)	
GR1032100ROLL	Grey 40 Metre Roll - (2100mm wide x 15mm thick)	
GR122100	White - Per Square Metre 23mm thick (min. 2 x square metres)	
GR122100ROLL	White 20 Metre Roll (2100mm wide x 23mm thick)	

CM360: average arrestance ASHRAE 87% GR122100: average arrestance ASHRAE 85%

PRESSURE TEMPERATURE CHART

Saturated Vapour Pressures (Figures in brackets vacuum inches & -kpa)

Temp		R404A		R507		R407F		R422A		R438A		R407C		R22		R134a		SP34E		R409A		R410a		R123		R744		R717	
° C	° F	psig	kpa	psig	kpa	psig	kpa	psig	kpa	psig	kpa	psig	kpa	psig	kpa	psig	kpa	psig	kpa	psig	kpa	psig	kpa	psig	kpa	psig	kpa	psig	kpa
-40	-40.0	4.9	34	5.4	37	0	0	3.0	21	(5.2)	(-18)	(5.2)	(-18)	0.6	4	(14.8)	(-50)	(14.8)	(-50)	(13.1)	(-44)	10.8	74	(28.9)	(-98)	131	903	(8.6)	(-29)
-38	-36.4	7.0	48	7.5	52	1.5	10	4.8	33	(2.6)	(-9)	(2.6)	(-9)	2.2	15	(12.9)	(-44)	(13.3)	(-45)	(11.4)	(-39)	13.4	92	(28.7)	(-97)	142	979	(6.5)	(-22)
-36	-32.8	9.2	63	9.8	68	2.9	20	6.6	46	(0.2)	0.6	(0.7)	(-2)	4.0	28	(10.9)	(-37)	(11.2)	(-38)	(9.6)	(-32)	16.3	112	(28.5)	(-97)	154	1059	(3.7)	(-13)
-34	-29.2	10.3	71	11.0	76	4.4	30	8.5	59	1.6	11	1.7	12	4.9	34	(9.8)	(-33)	(9.2)	(-31)	(7.7)	(-26)	17.8	123	(28.4)	(-96)	166	1144	(0.9)	(-3)
-32	-25.6	12.8	88	13.5	93	5.8	40	10.7	74	3.2	22	3.3	23	6.9	48	(7.5)	(-25)	(7.4)	(-25)	(5.4)	(-18)	21.0	145	(28.2)	(-95)	179	1233	1.9	13
-30	-22.0	15.4	106	16.2	112	8.7	60	12.7	87	4.9	34	5.1	35	9.1	63	(5.0)	(-17)	(5.0)	(-17)	(3.2)	(-11)	24.5	169	(27.9)	(-94)	192	1327	2.6	18
-28	-18.4	18.3	126	19.1	132	10.2	70	15.6	108	6.8	47	7.0	48	11.4	79	(2.3)	(-8)	(2.7)	(-9)	(2.0)	(-7)	28.2	194	(27.6)	(-93)	207	1425	4.4	30
-26	-14.8	21.3	147	22.2	153	13.1	90	18.1	125	8.8	60	8.9	61	13.9	96	0.3	2	0.1	0.5	0.9	6	32.2	222	(27.3)	(-92)	222	1528	6.2	43
-24	-11.2	22.9	158	23.8	164	16.0	110	20.8	143	10.9	75	11.1	77	15.2	105	1.1	8	1.5	10	2.3	16	34.3	236	(27.2)	(-92)	237	1636	8.3	57
-22	-7.6	26.3	181	27.3	188	18.9	130	23.6	163	13.2	91	13.5	93	17.9	123	2.8	19	2.9	20	3.8	26	38.7	267	(26.8)	(-91)	254	1750	10.4	72
-20	-4.0	29.8	205	30.9	213	20.3	140	27.0	186	15.6	107	16.0	110	20.9	144	4.6	32	4.6	32	5.4	37	43.4	299	(26.4)	(-89)	271	1868	12.9	89
-18	-0.4	33.7	232	34.8	240	24.7	170	30.6	211	18.2	125	18.6	128	24.0	165	6.5	45	6.4	44	7.0	49	48.4	334	(25.9)	(-88)	289	1993	15.4	106
-16	3.2	37.7	260	39.0	269	27.6	190	34.2	236	20.9	144	21.5	148	27.4	189	8.5	59	8.1	56	8.8	61	53.8	371	(25.4)	(-86)	308	2122	18.1	125
-14	6.8	39.8	274	41.1	283	30.5	210	37.8	261	23.8	164	24.5	169	29.1	201	9.6	66	10.2	70	10.7	74	56.6	390	(25.2)	(-85)	328	2258	21.0	145
-12	10.4	44.3	305	45.7	315	34.8	240	41.4	285	27.0	186	27.6	191	32.8	226	11.9	82	12.2	84	12.7	88	62.4	430	(24.6)	(-83)	348	2400	24.2	167
-10	14.0	49.0	338	50.5	348	37.7	260	46.0	317	30.3	209	31.0	214	36.8	254	14.4	99	14.5	100	14.8	102	68.6	473	(23.9)	(-81)	369	2547	27.6	190
-8	17.6	54.0	372	55.6	383	42.1	290	49.6	342	33.8	233	34.7	239	40.9	282	17.0	117	16.8	116	17.1	118	75.2	518	(23.2)	(-79)	392	2701	31.0	214
-6	21.2	59.3	409	61.0	421	46.4	320	55.3	381	37.5	258	38.6	266	45.3	312	19.9	137	19.4	134	19.6	135	82.2	567	(22.5)	(-76)	415	2862	34.8	240
-4	24.8	62.0	427	63.8	440	50.8	350	59.8	412	41.4	286	42.5	293	47.6	328	21.3	147	22.0	152	22.1	152	85.8	592	(22.1)	(-75)	439	3029	38.9	268
-2	28.4	67.7	467	69.7	481	56.6	390	64.3	443	45.5	314	46.8	322	52.4	361	24.5	169	24.9	172	24.8	171	93.4	644	(21.2)	(-72)	465	3203	43.2	298
0	32.0	73.8	509	75.9	523	60.9	420	70.0	483	49.9	344	51.3	353	57.5	396	27.8	192	27.8	192	27.6	190	101	699	(20.3)	(-69)	491	3384	47.7	329
2	35.6	80.2	553	82.4	568	66.7	460	76.0	524	54.5	376	56.0	386	62.9	434	31.3	216	31.2	215	30.6	211	110	758	(19.3)	(-65)	518	3572	52.5	362
4	39.2	86.9	599	89.2	615	72.5	500	82.0	565	59.4	410	61.1	421	68.6	473	35.0	241	34.5	238	33.8	233	119	819	(18.2)	(-62)	547	3768	57.6	397
6	42.8	90.4	623	92.8	640	78.3	540	88.0	607	64.5	444	66.3	457	71.5	493	37.0	255	38.0	262	37.2	256	123	851	(17.6)	(-60)	576	3971	62.9	434
8	46.4	97.6	673	100	691	84.1	580	94.0	648	69.8	482	71.8	495	77.6	535	41.1	283	41.8	288	40.7	280	133	917	(16.3)	(-55)	607	4182	68.7	474
10	50.0	105	726	108	745	91.4	630	102	701	75.5	521	77.5	534	84.1	580	45.4	313	45.8	316	44.3	305	143	987	(15.0)	(-51)	638	4401	74.7	515
12	53.6	113	781	116	801	97	670	109	752	81.5	562	83.6	576	90.8	626	50.0	345	49.9	344	48.2	333	154	1060	(13.5)	(-46)	671	4628	81.1	559
14	57.2	122	839	125	860	104	720	116	796	87.7	605	89.9	620	98.0	676	54.9	379	54.4	375	52.3	360	165	1137	(12.0)	(-41)	706	4865	87.7	605
16	60.8	126	869	129	891	113	780	125	858	94.3	650	96.5	666	102	701	57.4	396	58.9	406	56.5	390	171	1177	(11.2)	(-38)	741	5110	94.7	653
18	64.4	135	931	138	954	120	830	132	912	101	696	104	715	109	754	62.7	432	63.8	440	61.2	422	183	1260	(9.4)	(-32)	778	5364	102	704
20	68.0	144	996	148	1020	129	890	140	965	108	746	111	766	117	809	68.2	470	68.2	470	66.0	455	195	1347	(7.6)	(-26)	816	5628	110	758
22	71.6	154	1064	158	1090	138	950	149	1027	116	797	119	819	126	867	74.1	511	74.5	514	70.9	489	208	1437	(5.6)	(-19)	856	5902	118	816
24	75.2	165	1135	169	1162	146	1010	158	1089	123	851	127	873	135	927	80.2	553	80.8	557	76.1	524	222	1532	(3.5)	(-12)	897	6186	127	873
26	78.8	170	1171	174	1200	156	1080	169	1165	132	907	135	930	139	958	83.4	575	85.6	590	81.5	562	229	1581	(2.4)	(-8)	940	6482	136	937
28	82.4	181	1248	185	1278	165	1140	179	1231	140	965	144	991	148	1023	90.0	621	90.4	623	87.3	602	244	1682	(0.0)	(0)	985	6791	145	1000
30	86.0	193	1327	197	1359	176	1210	190	1310	149	1027	153	1055	158	1091	97.0	669	95.8	661	93.4	644	259	1788	1.2	8	1032	7112	155	1070
32	89.6	205	1410	209	1443	187	1290	199	1372	158	1090	162	1120	168	1161	104	719	101	698	99.6	687	275	1899	2.5	17			165	1140
34	93.2	217	1496	222	1531	199	1370	211	1455	168	1158	172	1189	179	1235	112	772	108	745	106	732	292	2014	3.9	27			176	1215
36	96.8	223	1540	229	1577	210	1450	224	1544	178	1227	183	1259	185	1273	116	799	115	792	113	778	301	2073	4.6	32			187	1290
38	100.4	237	1633	242	1671	223	1530	236	1627	189	1300	193	1332	196	1351	124	856	121	836	120	827	319	2196	6.1	42			199	1375
40	104.0	251	1728	257	1769	235	1620	248	1706	199	1375	204	1410	208	1432	133	915	128	880	127	878	337	2324	7.7	53			212	1460
42	107.6	265	1828	271	1870	248	1710	262	1803	211	1452	216	1492	220	1517	142	977	134	927	135	933	357	2458	9.4	65			223	1540
44	111.2	280	1931	287	1976	261	1800	276	1900	222	1533	229	1577	233	1605	151	1042	142	977	144	990	377	2597	11.2	77			236	1630
46	114.8	288	1985	295	2031	276	1900	289	1993	235	1618	241	1664	239	1651	156	1076	149	1026	152	1047	387	2668	12.1	83			251	1730
48	118.4	304	2095	311	2143	290	2000	302	2082	248	1706	255	1755	253	1744	166	1145	156	1078	161	1108	408	2816	14.1	97			265	1830
50	122.0	320	2209	328	2260	306	2110	320	2206	261	1798	268	1849	267	1842	177	1217	164	1130	170	1171	431	2970	16.1	111			280	1930
52	125.6	338	2328	345	2381	322	2220	333	2296	275	1893	282	1947	282	1942	187	1292	173	1193	179	1236	454	3129	18.3	126			296	2040
54	129.2	356	2452	364	2508	338	2330	351	2420	289	1991	298	2053	297	2047	199	1370	181	1249	190	1307	478	3295	20.6	142			313	2155
56	132.8	365	2516	373	2573	355	2450	369	2544	304	2094	313	2161	305	2101	205	1411	190	1312	200	1379	490	3381	21.7	150			329	2270
60	140.0	404	2783	413	2848	393	2710	404	2784	335	2310	346	2387	337	2326	229	1580	210	1450	222	1529	543	3740	26.8	185			364	2510

AIREFRIG AUSTRALIA PTY LTD
RECOMMENDED LIST PRICES
A.B.N. 95 008 761 573

ALL PRICES ARE EXCLUSIVE OF GST
SUBJECT TO CHANGE WITHOUT NOTICE
EFFECTIVE MARCH 2014

AIREFRIG AUSTRALIA Pty Ltd

A.B.N 95 008 761 573

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