

Enthalpy

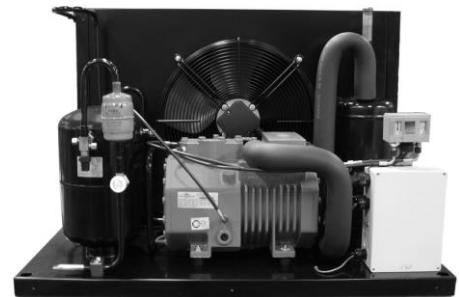
Semi Hermetic Flat Base Condensing Units

Standard Features

- Bitzer Ecoline Compressor with Oil Sight Glass
- Crankcase Heater
- OLC-K1 Oil Level Monitor (4 Cylinder Compressors)
- 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 for 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 °C	Refrigeration Capacity Watts									
				Evaporating Temperature °C									
				-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 fitted with OLC-K1 Oil Level Monitors & have one head ready for capacity control – contact Airefrig for details.

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)

ENTHALPY SEMI-HERMETIC CONDENSING UNITS

R134a - Semi Hermetic Flat Base Condensing Units

Airefrig Part Number	H/P (Nominal)	Displ m³/h	Ambient Temp °C	Refrigeration Capacity Watts							
				Evaporating Temperature °C							
				-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 fitted with OLC-K1 Oil Level Monitors & have one head ready for capacity control – contact Airefrig for details.

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)

ENTHALPY SEMI-HERMETIC CONDENSING UNITS

R449a – Semi Hermetic Flat Base Condensing Units

Airefrig Part Number	H/P (Nominal)	Displ m³/h	Ambient Temp °C	Refrigeration Capacity Watts									
				Evaporating Temperature °C									
				-40	-35	-30	-25	-20	-15	-10	-5	0	+5
2JES07Y1003	3/4	5.21	32	408	629	893	1209	1580	2007	2490	3034	3636	4295
			38	329	528	769	1058	1396	1786	2228	2724	3275	3876
			43	249	434	657	924	1237	1599	2011	2472	2982	3544
2GES2Y2603	1.5	7.58	32	681	1016	1417	1894	2454	3104	3843	4678	5610	6640
			38	569	872	1240	1677	2191	2786	3464	4228	5080	6021
			43	452	733	1075	1482	1960	2512	3144	3855	4645	5517
2FES3Y260453	1.8	9.54	32	868	1286	1786	2379	3073	3873	4778	5798	6929	8170
			38	727	1104	1562	2105	2742	3473	4305	5237	6273	7408
			43	578	929	1354	1860	2451	3132	3908	4776	5736	6798
2DES3Y3603	3.0	13.4	32	1415	2025	2754	3614	4617	5773	7091	8579	10245	12089
			38	1212	1771	2445	3241	4172	5247	6474	7860	9408	11120
			43	1044	1564	2190	2934	3805	4812	5963	7262	8712	10309
2CES4Y5203	4.0	16.2	32	1850	2591	3478	4526	5748	7158	8768	10588	12627	14889
			38	1616	2297	3116	4086	5220	6532	8031	9724	11620	13719
			43	1426	2057	2819	3725	4787	6015	7419	9007	10779	12738
4EES6Y8603*	5.5	22.7	32	2484	3509	4745	6210	7927	9913	12193	14779	17689	20935
			38	2151	3090	4227	5581	7171	9018	11138	13546	16254	19270
			43	1885	2753	3808	5069	6555	8282	10268	12524	15059	17876
4DES7Y11003*	7.5	26.8	32	2898	4111	5575	7314	9356	11725	14448	17547	21041	24950
			38	2501	3612	4959	6566	8459	10661	13196	16082	19336	22972
			43	2185	3210	4460	5958	7727	9787	12163	14869	17917	21318
4CES9Y11003*	9.0	32.5	32	3721	5174	6918	8980	11384	14161	17328	20901	24897	29318
			38	3267	4599	6205	8111	10341	12920	15863	19184	22892	26985
			43	2904	4137	5629	7406	9488	11899	14652	17758	21217	25026

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 fitted with OLC-K1 Oil Level Monitors & have one head ready for capacity control – contact Airefrig for details.

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)

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
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

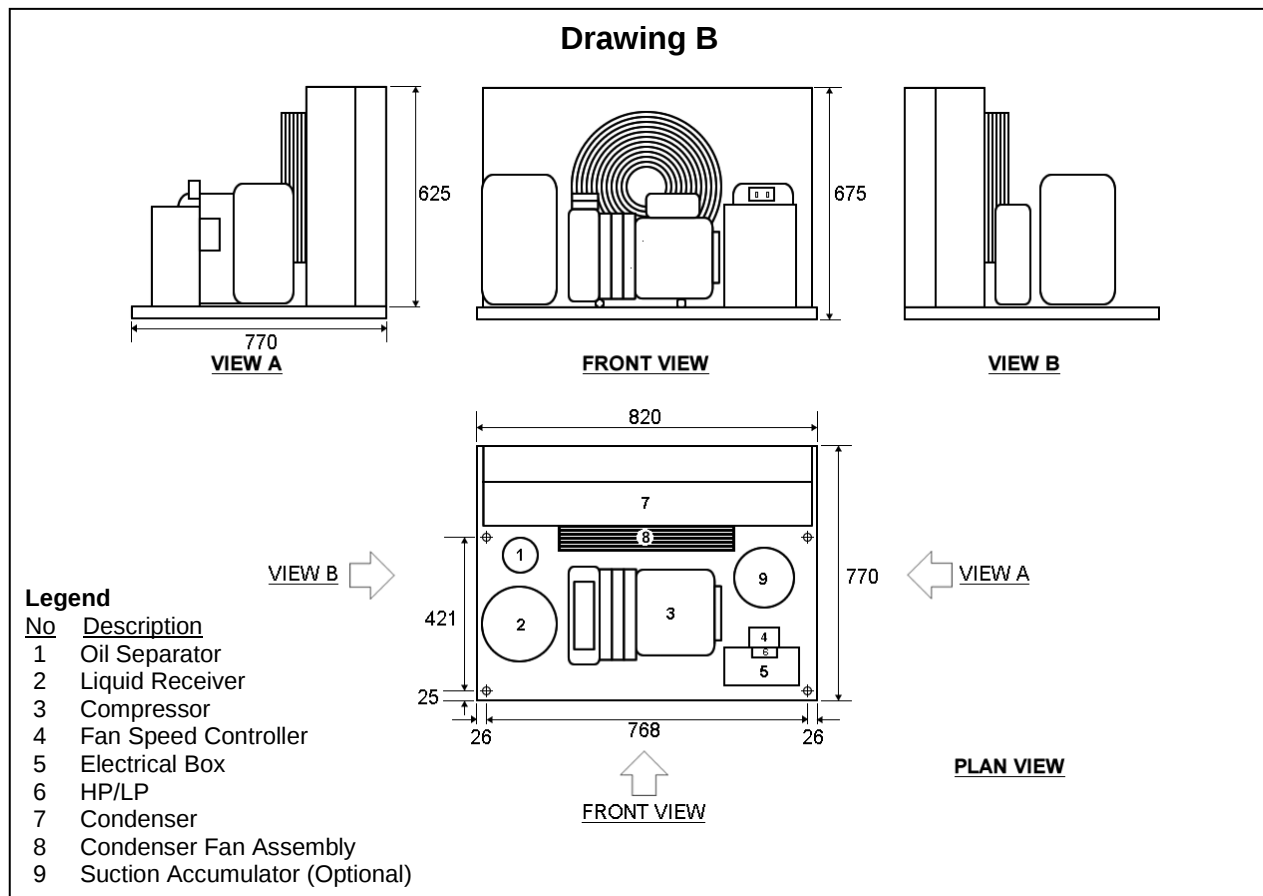
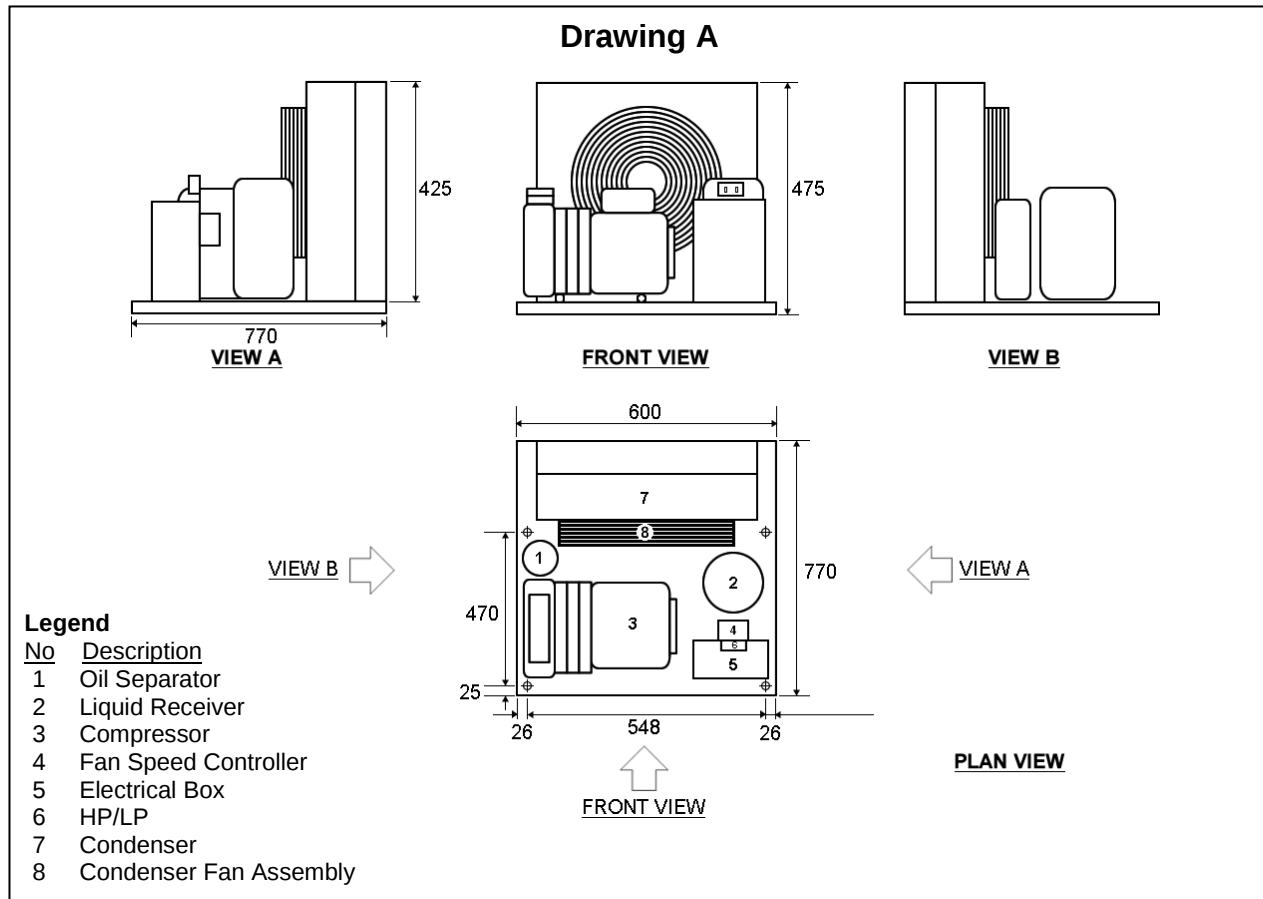
Model	Dimensions mm			Weight Kg	Connections Inches (mm)		Compressor		Fan Motor(s) 230v-1Ø-50Hz		Receiver @ 90% (R404a) KG	Dimension Drawing
	Depth	Width	Height		Suction	Liquid	Voltage	MOC (Max Amps)	Diam. (mm)	Amps per fan		
2JES07Y1003	770	600	475	92	5/8"	1/2"	D.O.L. 380- 400V 3Phase 50Hz	3.7	1 x 350	0.58	4.29	A
2GES2Y2603		820	675	113	5/8"	1/2"		5.0	1 x 400	0.73		B
2FES3Y260453				114	5/8"	1/2"		6.1	1 x 450	1.55		
2DES3Y3603	850	1075	725	175	7/8"	5/8"		8.6	1 x 450	1.55	8.10	C
2CES4Y5203				180	7/8"	5/8"		10.0	1 x 500	3.0		
4EES6Y8603	1100	1480	970	315	1-1/8"	5/8"		13.6	2 x 450	1.55	12.0	D
4DES7Y11003				325	1-1/8"	5/8"		16.5	2 x 500	3.0		
4CES9Y11003				327	1-1/8"	5/8"		20.2	2 x 500	3.0		

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



ENTHALPY SEMI-HERMETIC CONDENSING UNITS

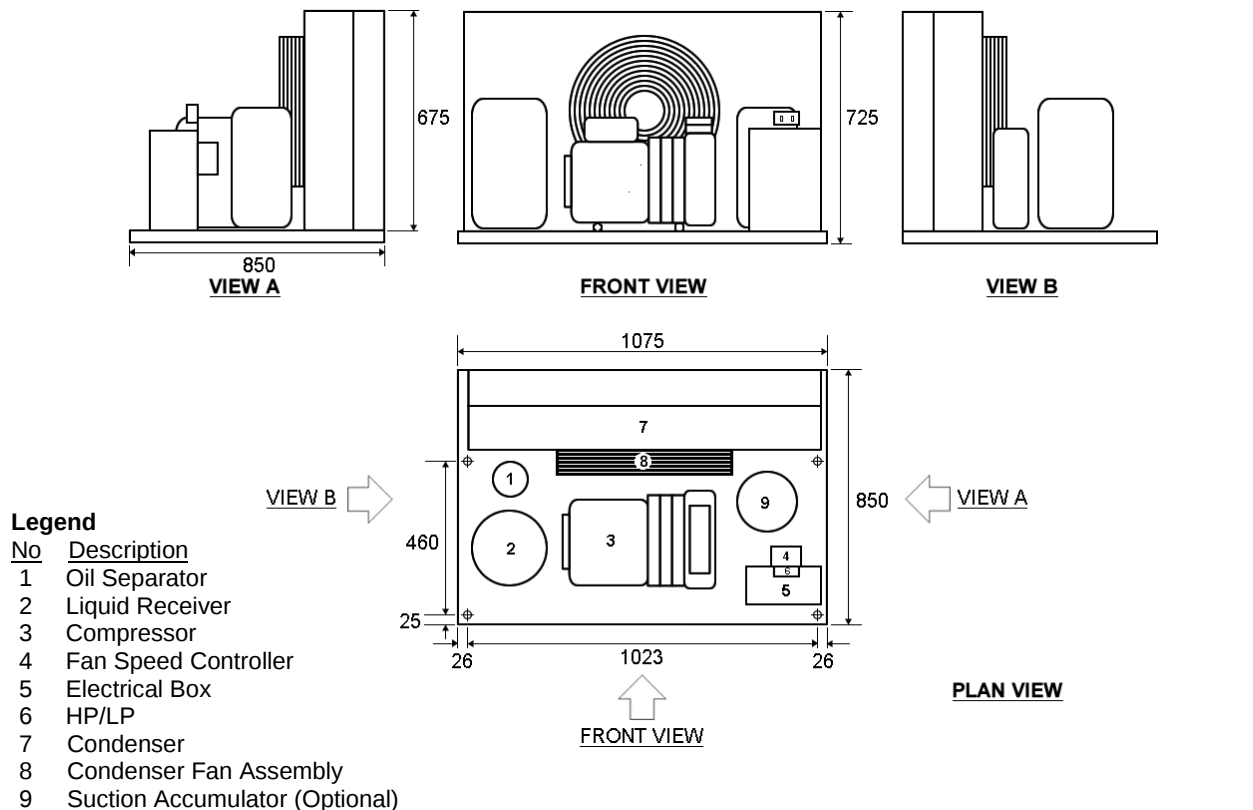
Semi-Hermetic Flat Base Unit Dimensions



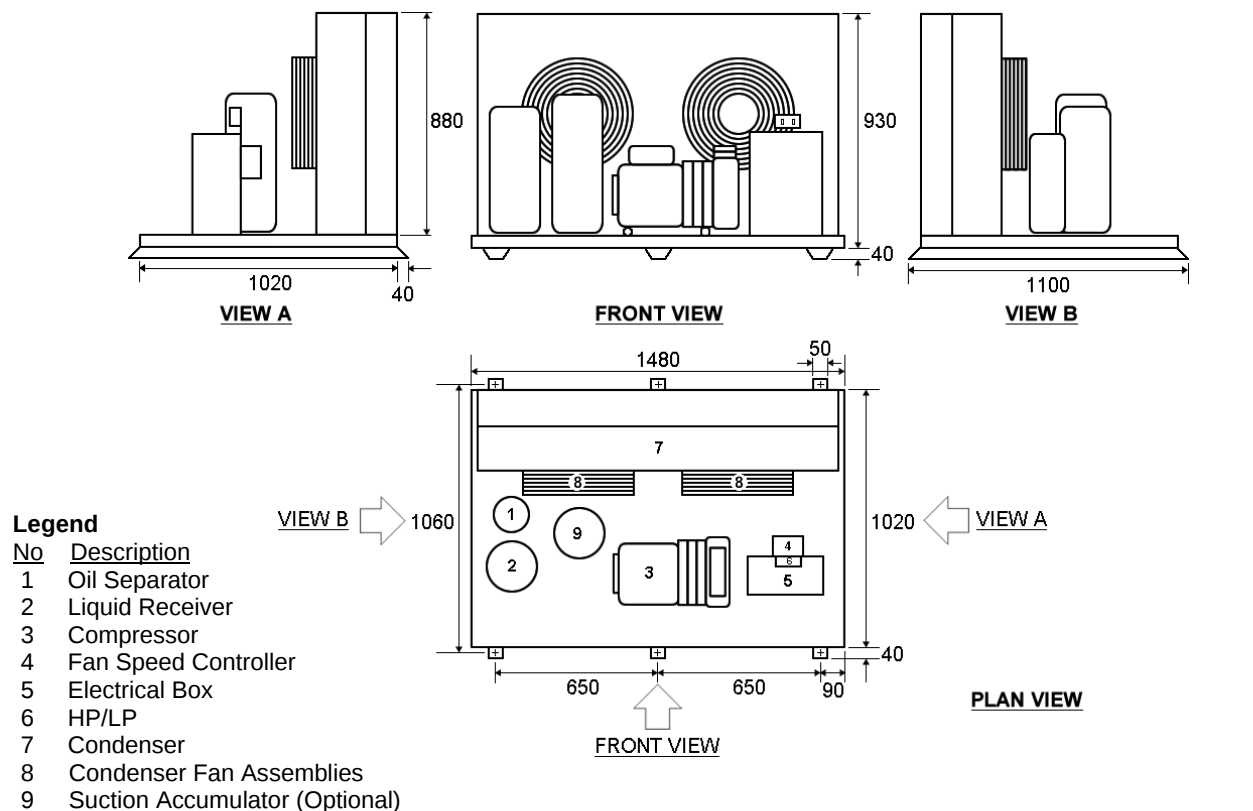
ENTHALPY SEMI-HERMETIC CONDENSING UNITS

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

Drawing C

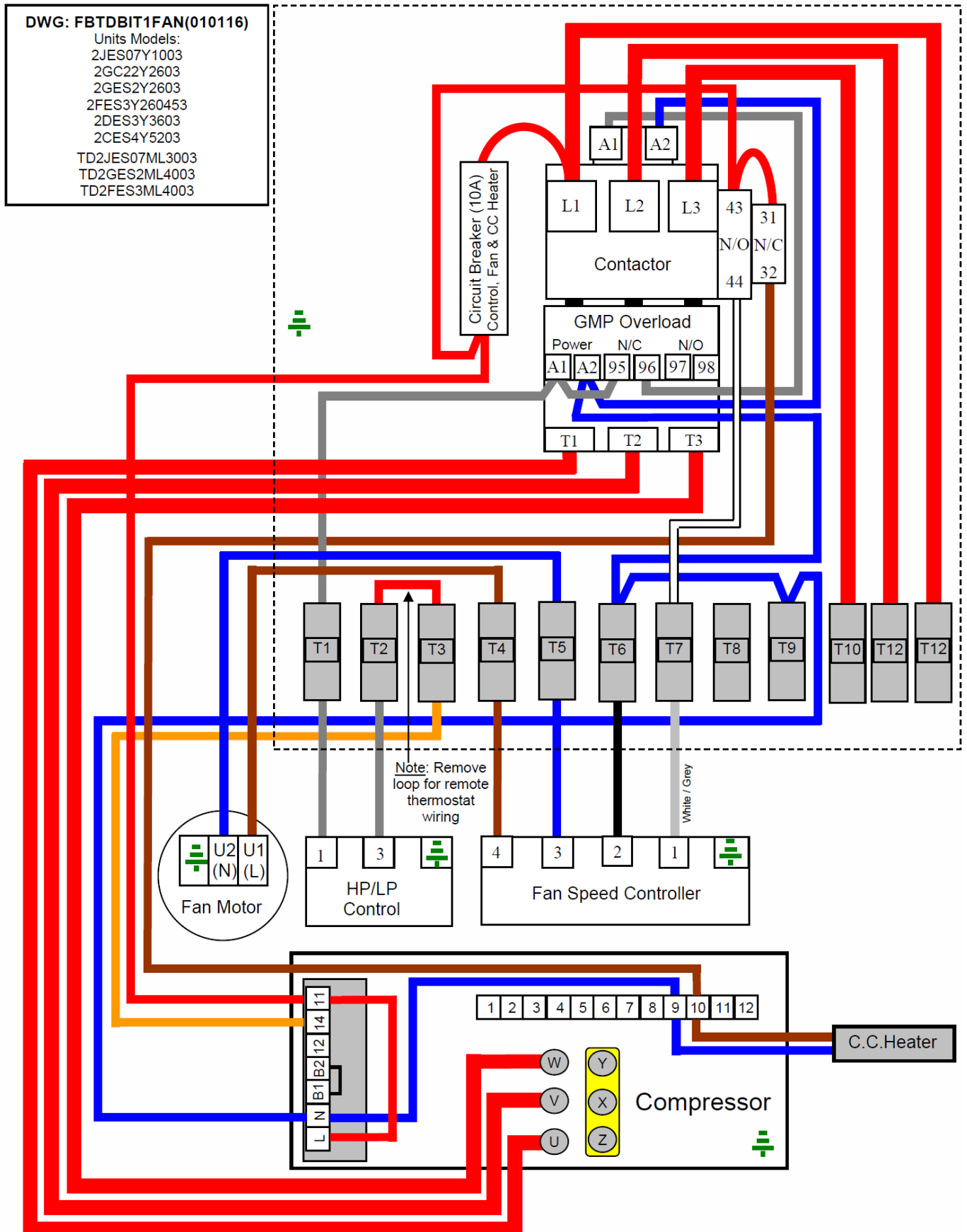


Drawing D



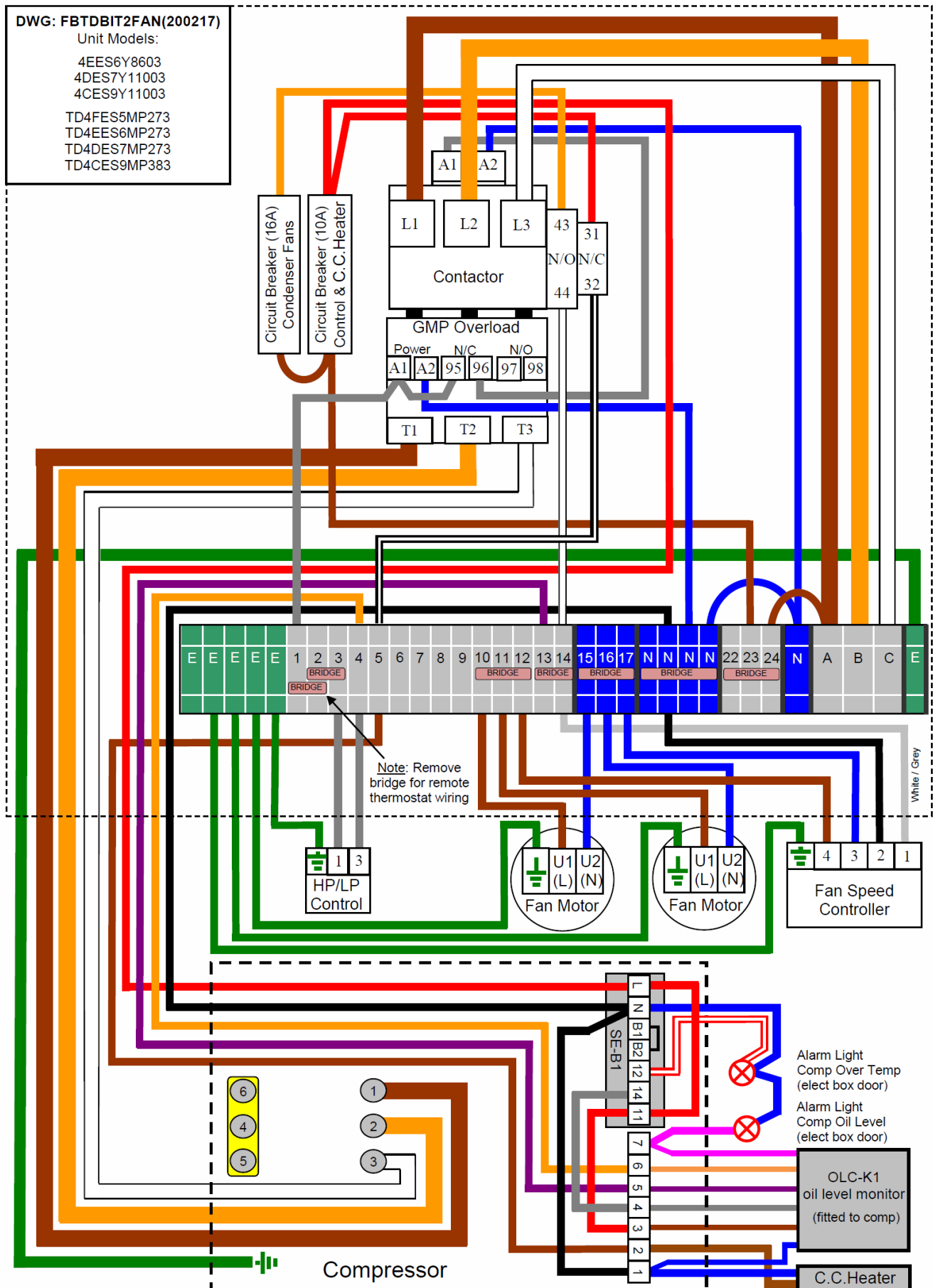
ENTHALPY SEMI-HERMETIC CONDENSING UNITS

Semi-Hermetic Flat Base Unit Wiring Diagrams



ENTHALPY SEMI-HERMETIC CONDENSING UNITS

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



ENTHALPY SEMI-HERMETIC CONDENSING UNITS

Semi-Hermetic Flat Base Units Spare Parts

Part Description	Model			
	2JES07Y1003	2GES2Y2603	2FES3Y260453	2DES3Y3603
Compressor - Bitzer	2JES07Y	2GES2Y	2FES3Y	2DES3Y
ebm Fan Motor	S4E350AN0248 (x1)	S4E400AP0244 (x1)	S4E450AU0337 (x1)	S4E450AU0337 (x1)
Speed Controller	RGEZ1N45MFQ1	RGEZ1N45MFQ1	RGEZ1N45MFQ1	RGEZ1N45MFQ1
HP/LP	DNSD306X	DNSD306X	DNSD306X	DNSD306X
Compressor Contactor	MC12B240V	MC12B240V	MC12B240V	MC12B240V
Thermal Overload Block	GMP223P5A	GMP223P22A	GMP223P22A	GMP223P22A
Control & Fan Circuit Breaker	PLSMD10	PLSMD10	PLSMD10	PLSMD10
Control Circuit Breaker	N/A	N/A	N/A	N/A
Fan Circuit Breaker	N/A	N/A	N/A	N/A
Oil Separator	EOS1004	EOS1004L	EOS1004L	EOS1005
Liquid Receiver	1300134B	1300134B	1300134B	1320315A
Receiver Outlet Valve	R051FA8DS	R051FA8DS	R051FA8DS	R051FB2DS
Receiver Valve Gasket	020002800	020002800	020002800	020002800
Liquid Drier & Sight Glass	CSG084S (combo)	CSG084S (combo)	CSG084S (combo)	CSG165S (combo)
Electrical Box	AIRENTENCL	AIRENTENCL	AIRENTENCL	AIRENTENCL
Optional:				
Suction Accumulator	Not Available	PA5083116C	PA5083116C	PA5083157C

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	RGEZ1Q45MFQ1	RGEZ1Q45MFQ1	RGEZ1Q45MFQ1	RGEZ1Q45MFQ1
HP/LP	DNSD306X	DNSD306X	DNSD306X	DNSD306X
Compressor Contactor	MC12B240V	MC22B240V	MC22B240V	MC32A240V
Thermal Overload Block	GMP223P22A	GMP223P22A	GMP223P22A	GMP403P40A
Control & Fan Circuit Breaker	PLSMD10	N/A	N/A	N/A
Control Circuit Breaker	N/A	PLSMD10	PLSMD10	PLSMD10
Fan Circuit Breaker	N/A	PLSMD16	PLSMD16	PLSMD16
Oil Separator	EOS1005	EOS1007	EOS1007	EOS1007
Liquid Receiver	1320315A	1320620A	1320620A	1320620A
Receiver Outlet Valve	R051FB2DS	R051FB2DS	R051FB2DS	R051FB2DS
Receiver Valve Gasket	020002800	020002800	020002800	020002800
Liquid Drier & Sight Glass	CSG165S (combo)	CSG165S (combo)	CSG165S (combo)	CSG165S (combo)
Electrical Box	AIRENTENCL	AIR50650	AIR50650	AIR50650
Optional:				
Suction Accumulator	1010853P	1010853P	1010854P	1010854P