

KAB 43bar Series Remote Air Cooled Condensers with EC fan motors

Karyer KAB 43bar EC Fan series remote air cooled condensers are designed for high efficiency to provide professional solutions for projects utilising R410A refrigerant.

KAB series condensers can be installed horizontally or vertically without having to order separate mounting kits.

KAB series condensers are supplied with corrugated aluminium fin surface and optimum tube diameters for excellent heat transfer in order to increase efficiency.

These condensers have a maximum operating pressure of 43 bar and are supplied with 2.1mm fin spacings plus a Gold Epoxy fin treatment.

KAB EC fan condensers are factory fitted with the latest EC fan technology by ebm who are renowned worldwide for their quality, reliability and high energy savings with superior performance.

There are three ebm EC fan motor assemblies utilised in KAB series condensers:

- 1) 500mm 230V-1Ph-50Hz - ebm S3G500-AK07-G1 fan assembly
- 2) 630mm 400V-3Ph-50Hz - ebm W3G630-GE55-51 fan assembly
- 3) 800mm 400V-3Ph-50Hz - ebm W3G800-KS39-03 fan assembly

KAB 43bar EC Fan Condensers - Standard Features:

- Quality ebm EC fan motor assemblies 500mm (1ph), 630mm (3ph) & 800mm (3ph)
- High performance coils specifically designed for R410A refrigerant.
- Coils have a maximum operating pressure of 43 bar.
- Aluminium corrugated fin surface with 2.1mm spacings and high-performance copper tube.
- Condensers are supplied with Gold Epoxy fin treatment.
- Condensers are equipped to be installed Horizontally or Vertically.
- Fan motors individually pre-wired to an electrical connection box.
- Stainless steel fasteners - screws, nuts & bolts etc.
- Panels are galvanised sheet coated in Traffic White (RAL 9016) electrostatic powder coating.



KARYER 43bar KAB CONDENSERS with EC motors

500mm EC Fan Motors (230V-1Ph-50Hz.)

Fin Spacing: 2.1mm

Airefrig Part Number	Fan Speeds (rpm)	R410A Capacities (Watts)		ebm EC Fan Motors
		Watts @ 1ktd	Watts @ 10ktd	
KAB21SC2500EC1B43	970 rpm	2210	22100	S3G500-AK07-G1 (230V-1PH-50Hz.) (Max. speed 970 rpm)
	680 rpm	1710	17100	
	380 rpm	1070	10700	
KAB25SC2500EC1B43	970 rpm	2560	25600	S3G500-AK07-G1 (230V-1PH-50Hz.) (Max. speed 970 rpm)
	680 rpm	1860	18600	
	380 rpm	1060	10600	
KAB31SC3500EC1B43	970 rpm	3320	33200	S3G500-AK07-G1 (230V-1PH-50Hz.) (Max. speed 970 rpm)
	680 rpm	2570	25700	
	380 rpm	1610	16100	

Note: Based on 43°C Ambient & 53°C Condensing Temperature

630mm EC Fan Motors (400V-3Ph-50Hz.)

Fin Spacing: 2.1mm

Airefrig Part Number	Fan Speeds (rpm)	R410A Capacities (Watts)		ebm EC Fan Motors
		Watts @ 1ktd	Watts @ 10ktd	
KAB39SC2630EC3B43	1000 rpm	4360	43600	W3G630-GE55-51 (400V-3PH-50Hz.) (Max. speed 1000 rpm)
	680 rpm	3260	32600	
	380 rpm	2090	20900	
KAB45SC2630EC3B43	1000 rpm	5020	50200	W3G630-GE55-51 (400V-3PH-50Hz.) (Max. speed 1000 rpm)
	680 rpm	3670	36700	
	380 rpm	2260	22600	
KAB58SC3630EC3B43	1000 rpm	6530	65300	W3G630-GE55-51 (400V-3PH-50Hz.) (Max. speed 1000 rpm)
	680 rpm	4880	48800	
	380 rpm	3130	31300	
KAB77TC4630EC3B43	1000 rpm	8650	86500	W3G630-GE55-51 (400V-3PH-50Hz.) (Max. speed 1000 rpm)
	680 rpm	6490	64900	
	380 rpm	4170	41700	
KAB89TC4630EC3B43	1000 rpm	10700	107000	W3G630-GE55-51 (400V-3PH-50Hz.) (Max. speed 1000 rpm)
	680 rpm	7720	77200	
	380 rpm	4620	46200	
KAB104TC6630EC3B43	1000 rpm	11720	117200	W3G630-GE55-51 (400V-3PH-50Hz.) (Max. speed 1000 rpm)
	680 rpm	8900	89000	
	380 rpm	5830	58300	
KAB115TC6630EC3B43	1000 rpm	12960	129600	W3G630-GE55-51 (400V-3PH-50Hz.) (Max. speed 1000 rpm)
	680 rpm	9780	97800	
	380 rpm	6280	62800	
KAB147TC6630EC3B43	1000 rpm	16290	162900	W3G630-GE55-51 (400V-3PH-50Hz.) (Max. speed 1000 rpm)
	680 rpm	11650	116500	
	380 rpm	6940	69400	

Note: Based on 43°C Ambient & 53°C Condensing Temperature

KARYER 43bar KAB CONDENSERS with EC motors

800mm EC Fan Motors (400V-3Ph-50Hz.)

Fin Spacing: 2.1mm

Airefrig Part Number	Fan Speeds (rpm)	R410A Capacities (Watts)		ebm EC Fan Motors
		Watts @ 1ktd	Watts @ 10ktd	
KAB176SC3800EC3B43	940 rpm	18100	181000	W3G800-KS39-03 (400V-3PH-50Hz.) (Max. speed 940 rpm)
	680 rpm	13800	138000	
	380 rpm	8300	83000	
KAB233TC4800EC3B43	940 rpm	24100	241000	W3G800-KS39-03 (400V-3PH-50Hz.) (Max. speed 940 rpm)
	680 rpm	18300	183000	
	380 rpm	11000	110000	
KAB322TC6800EC3B43	940 rpm	33700	337000	W3G800-KS39-03 (400V-3PH-50Hz.) (Max. speed 940 rpm)
	680 rpm	26000	260000	
	380 rpm	15900	159000	
KAB374TC6800EC3B43	940 rpm	38800	388000	W3G800-KS39-03 (400V-3PH-50Hz.) (Max. speed 940 rpm)
	680 rpm	29400	294000	
	380 rpm	17700	177000	
KAB466TC8800EC3B43	940 rpm	48300	483000	W3G800-KS39-03 (400V-3PH-50Hz.) (Max. speed 940 rpm)
	680 rpm	36400	364000	
	380 rpm	21700	217000	
KAB495TC8800EC3B43	940 rpm	52100	521000	W3G800-KS39-03 (400V-3PH-50Hz.) (Max. speed 940 rpm)
	680 rpm	39600	396000	
	380 rpm	23800	238000	
KAB536TC10800EC3B43	940 rpm	56300	563000	W3G800-KS39-03 (400V-3PH-50Hz.) (Max. speed 940 rpm)
	680 rpm	43400	434000	
	380 rpm	26600	266000	
KAB584TC10800EC3B43	940 rpm	60800	608000	W3G800-KS39-03 (400V-3PH-50Hz.) (Max. speed 940 rpm)
	680 rpm	45900	459000	
	380 rpm	27400	274000	

Note: Based on 43°C Ambient & 53°C Condensing Temperature

KARYER 43bar KAB CONDENSERS with EC motors

Technical Specifications – 500mm Fan Condensers

Airefrig Model		KAB21SC2500EC1B43	KAB25SC2500EC1B43	KAB31SC3500EC1B43
Coil Configuration		Single Coil	Single Coil	Single Coil
Air Flow (max. speed)	(m ³ /hr)	9352	8128	14029
500mm EC Fans	(Qty)	2	2	3
230/1/50Hz EC Fan Motors	Total Watts	500	500	750
	Total Amps	2.2	2.2	3.3
Inlet Connection	(mm)	16	19	19
Outlet Connection	(mm)	12	16	16
Fin Spacing	(mm)	2.1	2.1	2.1
Heat Exchange Surface Area	(m ²)	95.6	159.1	143
Internal Tube Volume	(dm ³)	10.6	16.9	15.6
Maximum Pressure	(bar)	43	43	43
Dry Weight (*Approximate - TBA)	(kg)	**141	**151	**196
Dimension Diagrams	Horizontal mounting	KAB2500H	KAB2500H	KAB3500H
	Vertical mounting	KAB2500V	KAB2500V	KAB3500V



KARYER 43bar KAB CONDENSERS with EC motors

Technical Specifications – 630mm Fan Condensers

Airefrig Model	KAB39SC2630EC3B43	KAB45SC2630EC3B43	KAB58SC3630EC3B43	KAB77TC4630EC3B43
Coil Configuration	Single Coil	Single Coil	Single Coil	Twin Coil
Air Flow (max. speed) (m ³ /hr)	20226	19204	30339	40330
630mm EC Fans (Qty)	2	2	3	4
400/3/50Hz EC Fan Motors	Total Watts	1400	2100	2800
	Total Amps	2.2	3.3	4.4
Inlet Connection (mm)	22	22	28	2 x 22
Outlet Connection (mm)	19	19	22	2 x 19
Fin Spacing (mm)	2.1	2.1	2.1	2.1
Heat Exchange Surface Area (m ²)	132	176	197	260
Internal Tube Volume (dm ³)	13.6	17.7	19.8	25.3
Maximum Pressure (bar)	43	43	43	43
Dry Weight (**Approximate - TBA) (kg)	**220	**231	**328	**405
Dimension Diagrams	Horizontal mounting	KAB2630H	KAB2630H	KAB4630H
	Vertical mounting	KAB2630V	KAB2630V	KAB4630V

Airefrig Model	KAB89TC4630EC3B43	KAB104TC6630EC3B43	KAB115TC6630EC3B43	KAB147TC6630EC3B43
Coil Configuration	Twin Coil	Twin Coil	Twin Coil	Twin Coil
Air Flow (max. speed) (m ³ /hr)	36395	61548	60495	54918
630mm EC Fans (Qty)	4	6	6	6
400/3/50Hz EC Fan Motors	Total Watts	2800	4200	4200
	Total Amps	4.4	6.6	6.6
Inlet Connection (mm)	2 x 22	2 x 22	2 x 22	2 x 28
Outlet Connection (mm)	2 x 19	2 x 22	2 x 22	2 x 22
Fin Spacing (mm)	2.1	2.1	2.1	2.1
Heat Exchange Surface Area (m ²)	434	330	390	651
Internal Tube Volume (dm ³)	42.7	37.8	37.8	64.1
Maximum Pressure (bar)	43	43	43	43
Dry Weight (**Approximate - TBA) (kg)	**391	**480	**622	**679
Dimension Diagrams	Horizontal mounting	KAB4630H	KAB6630H	KAB6630H
	Vertical mounting	KAB4630V	KAB6630V	KAB6630V

KARYER 43bar KAB CONDENSERS with EC motors

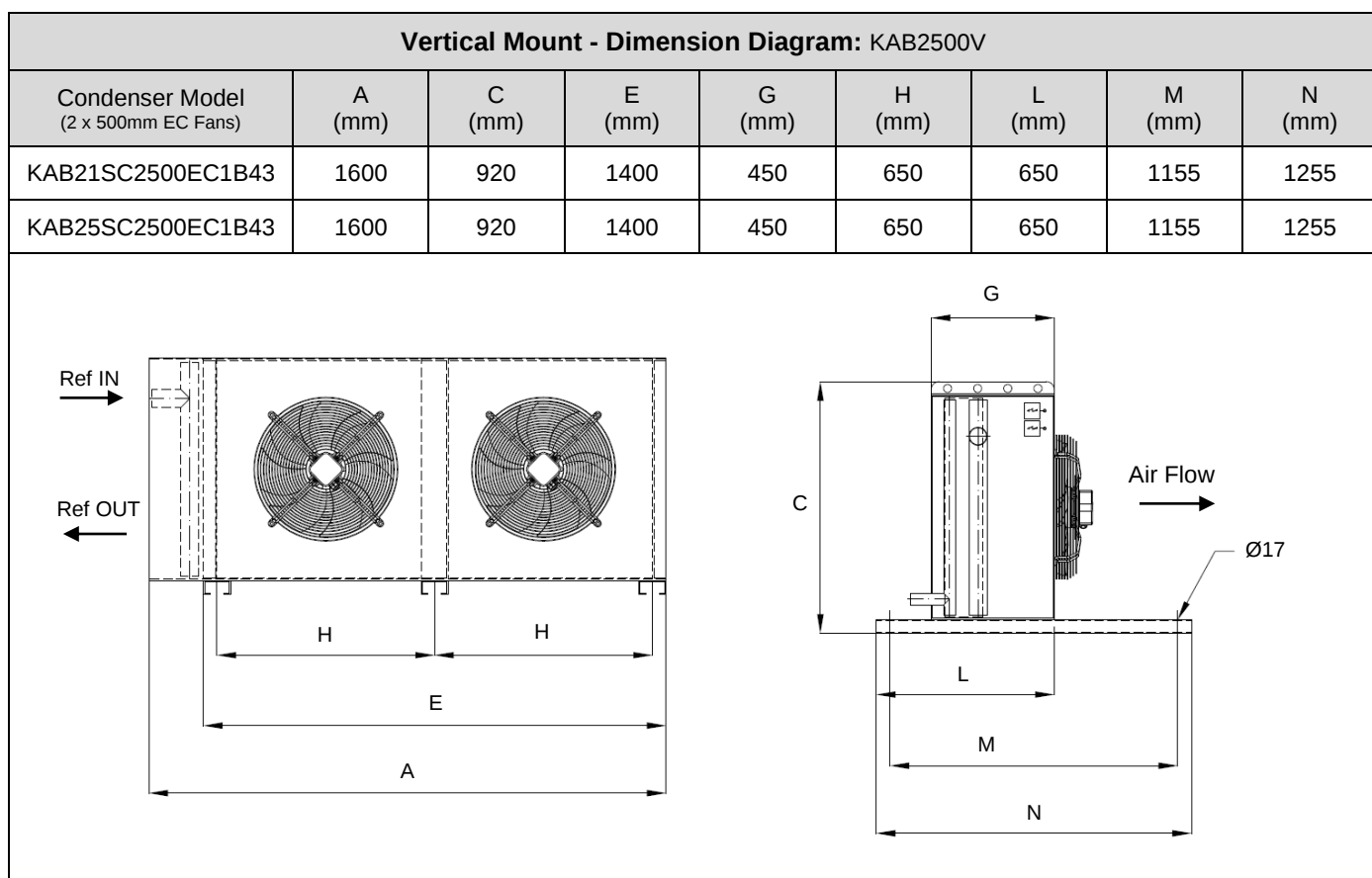
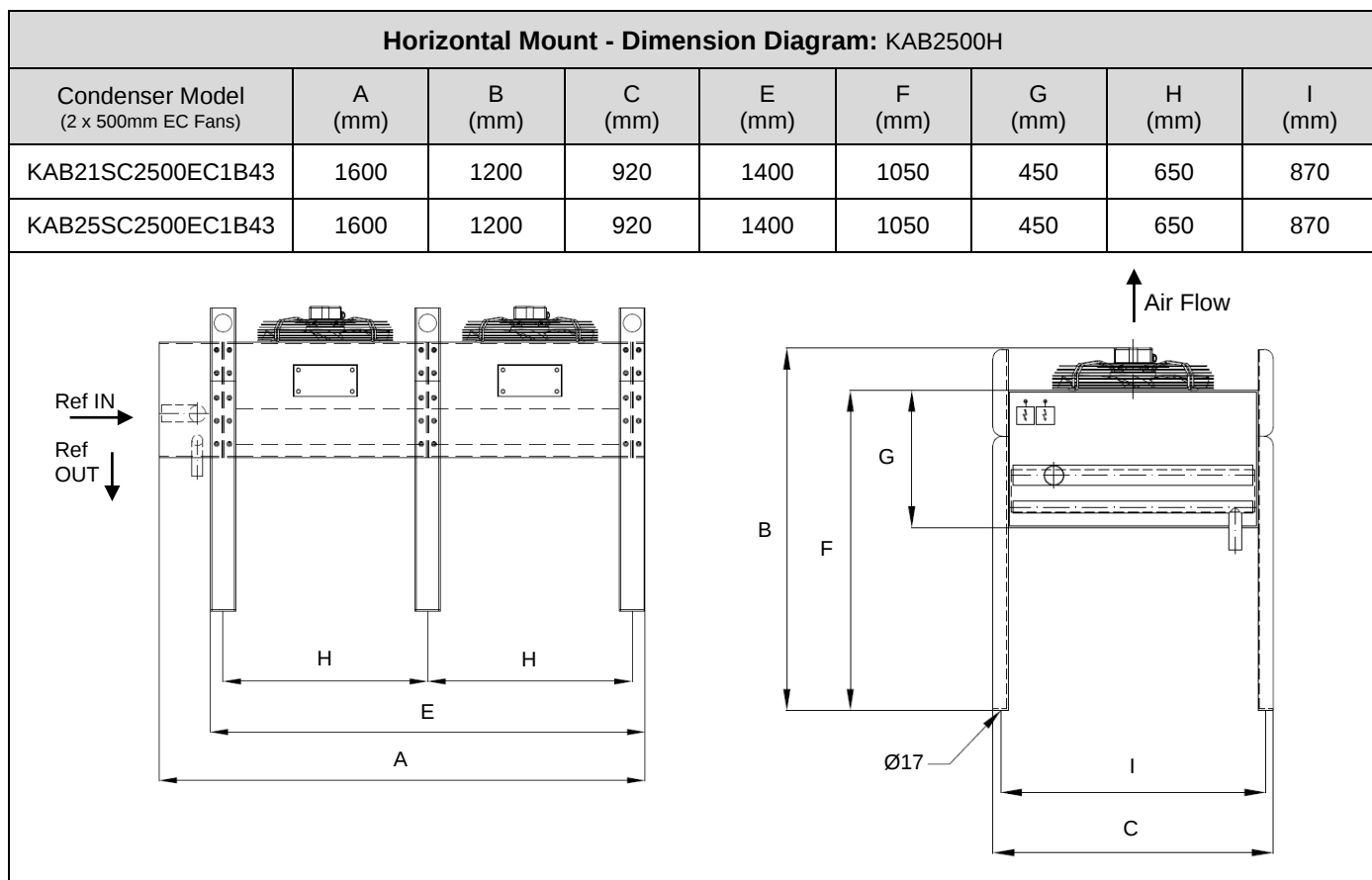
Technical Specifications – 800mm Fan Condensers

Airefrig Model	KAB176SC3800EC3B43	KAB233TC4800EC3B43	KAB322TC6800EC3B43	KAB374TC6800EC3B43
Coil Configuration	Single Coil	Twin Coil	Twin Coil	Twin Coil
Air Flow (max. speed) (m ³ /hr)	62081	81885	128318	137372
800mm EC Fans (Qty)	3	4	6	6
400/3/50Hz EC Fan Motors	Total Watts	5850	7800	11700
	Total Amps	9.3	12.4	18.6
Inlet Connection (mm)	42	2 x 35	2 x 42	2 x 42
Outlet Connection (mm)	35	2 x 28	2 x 35	2 x 35
Fin Spacing (mm)	2.1	2.1	2.1	2.1
Heat Exchange Surface Area (m ²)	678	1201	1441	1976
Internal Tube Volume (dm ³)	68.4	126.9	154.2	210
Maximum Pressure (bar)	43	43	43	43
Dry Weight (**Approximate - TBA) (kg)	**653	**756	**1122	**1387
Dimension Diagrams	Horizontal mounting	KAB3800H	KAB4800H	KAB6800H
	Vertical mounting	KAB3800V	KAB4800V	KAB6800V

Airefrig Model	KAB466TC8800EC3B43	KAB495TC8800EC3B43	KAB536TC10800EC3B43	KAB584TC10800EC3B43
Coil Configuration	Twin Coil	Twin Coil	Twin Coil	Twin Coil
Air Flow (max. speed) (m ³ /hr)	163769	183163	213864	204588
800mm EC Fans (Qty)	8	8	10	10
400/3/50Hz EC Fan Motors	Total Watts	15600	15600	19500
	Total Amps	24.8	24.8	31.0
Inlet Connection (mm)	2 x 42	2 x 42	2 x 42	2 x 42
Outlet Connection (mm)	2 x 42	2 x 42	2 x 42	2 x 42
Fin Spacing (mm)	2.1	2.1	2.1	2.1
Heat Exchange Surface Area (m ²)	2401	2636	2402	3003
Internal Tube Volume (dm ³)	255.3	283.4	258.9	321.9
Maximum Pressure (bar)	43	43	43	43
Dry Weight (**Approximate - TBA) (kg)	**1640	**1756	**1750	**2024
Dimension Diagrams	Horizontal mounting	KAB8800H	KAB8800H	KAB10800H
	Vertical mounting	KAB8800V	KAB8800V	KAB10800V

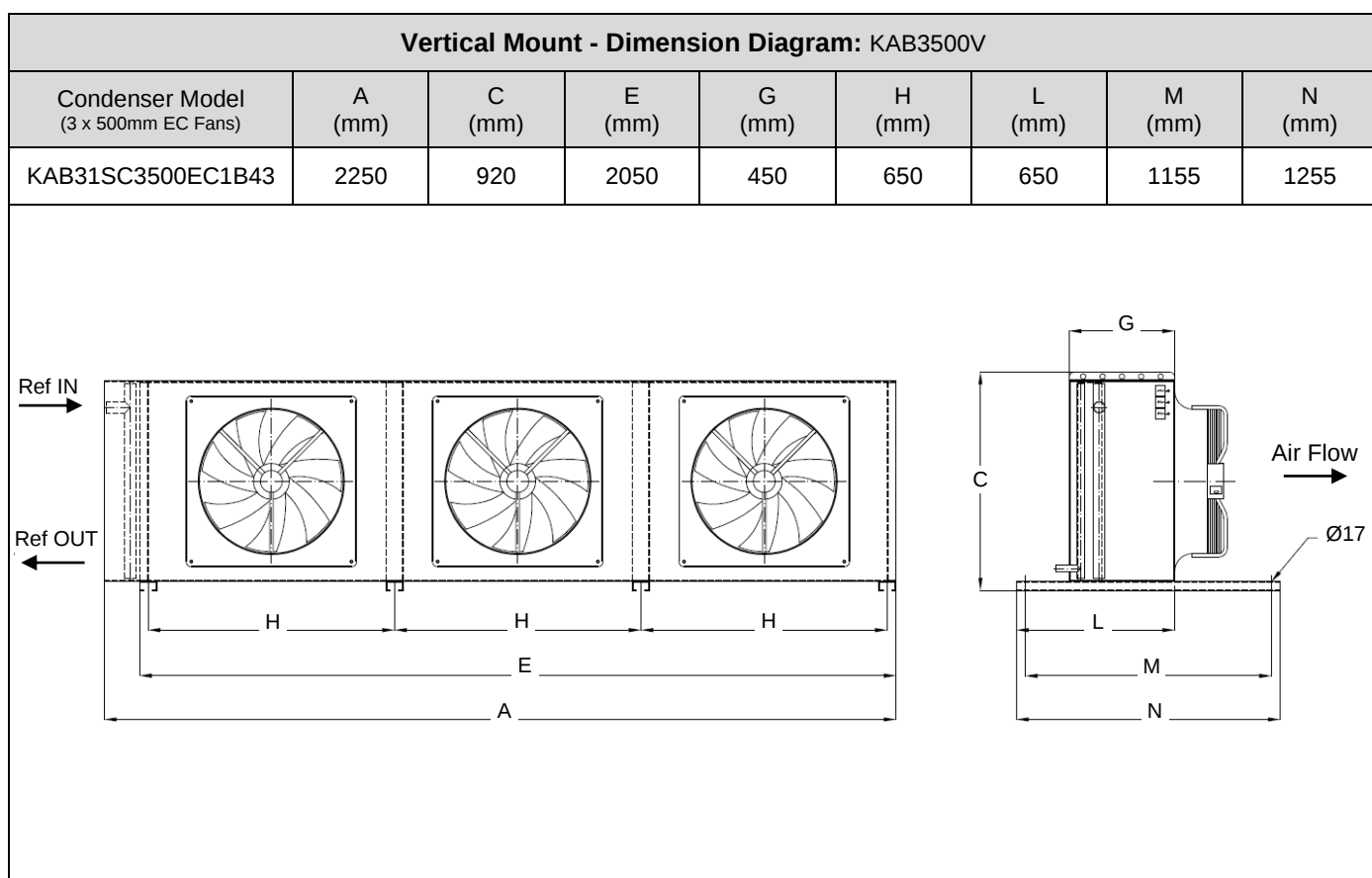
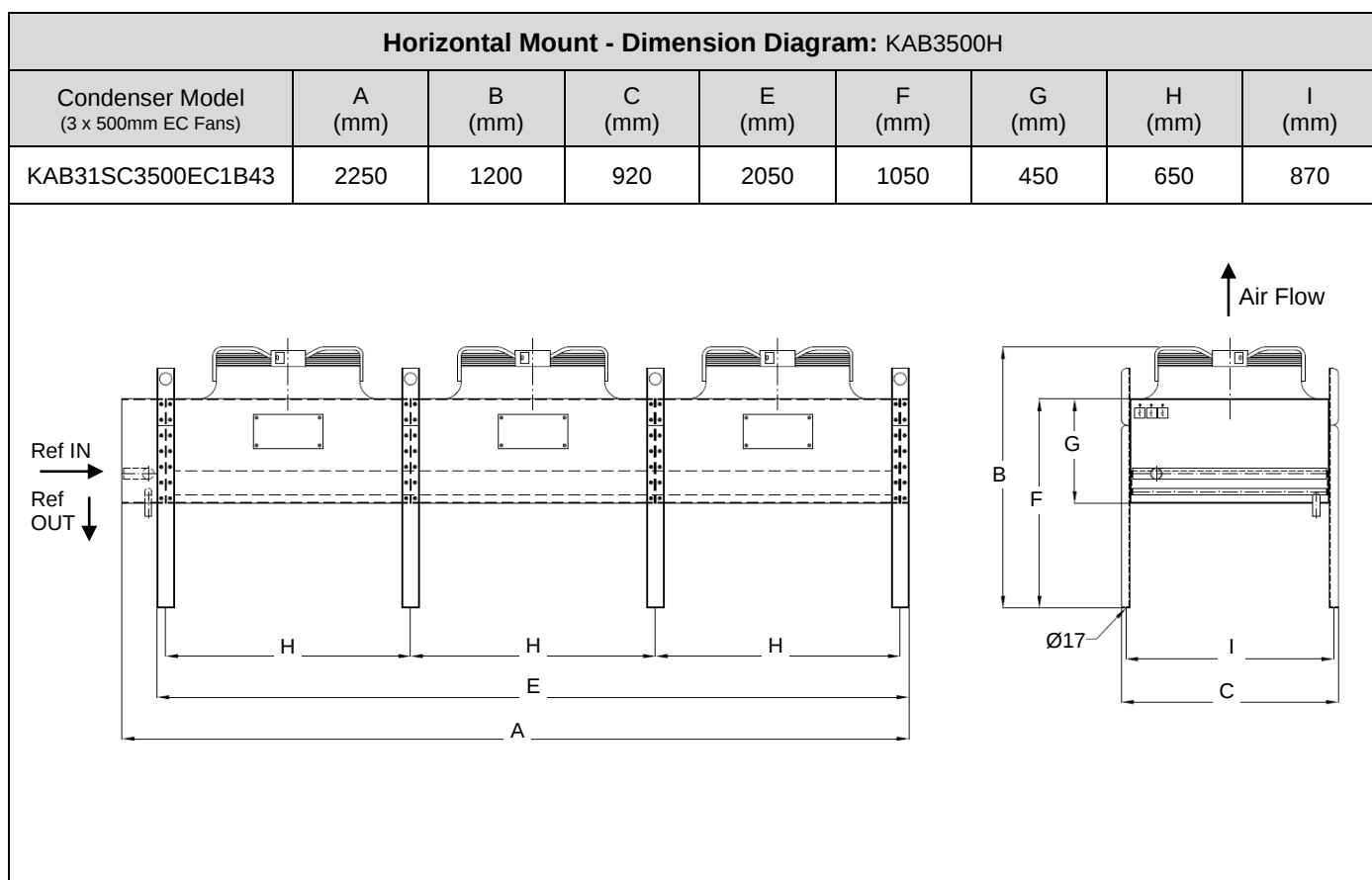
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Condenser Dimensions



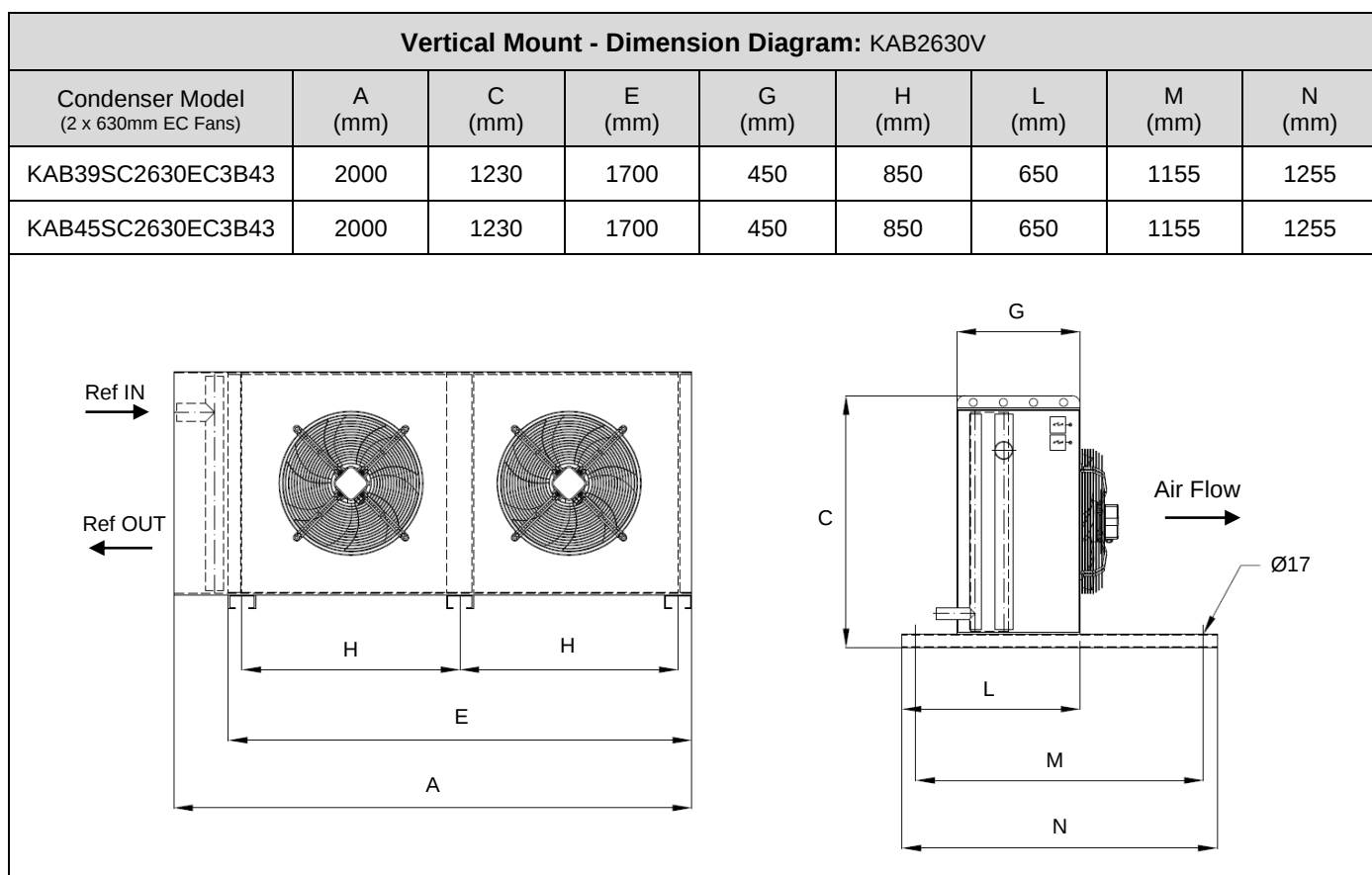
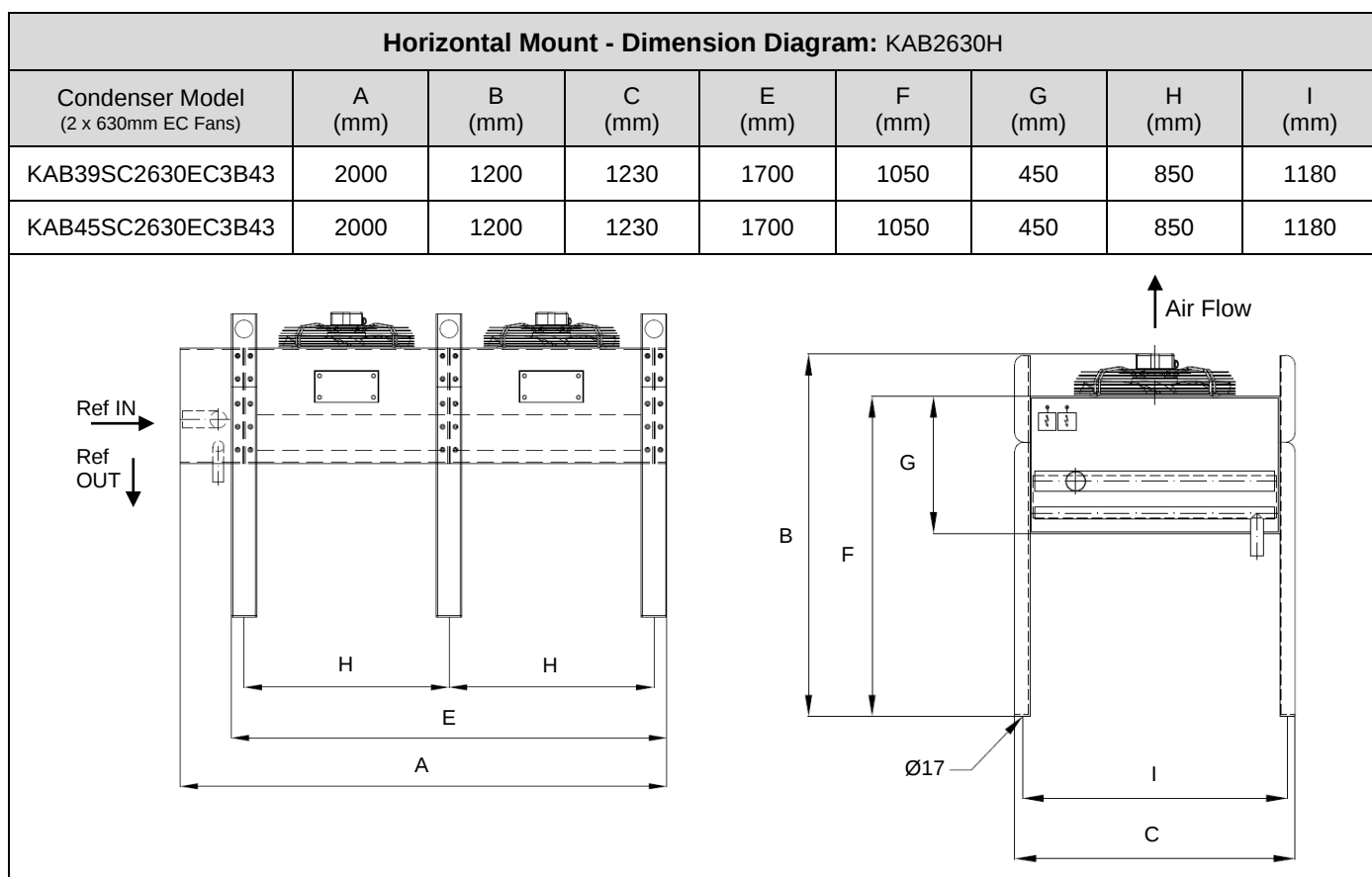
KARYER 43bar KAB CONDENSERS with EC motors

Condenser Dimensions (cont'd)



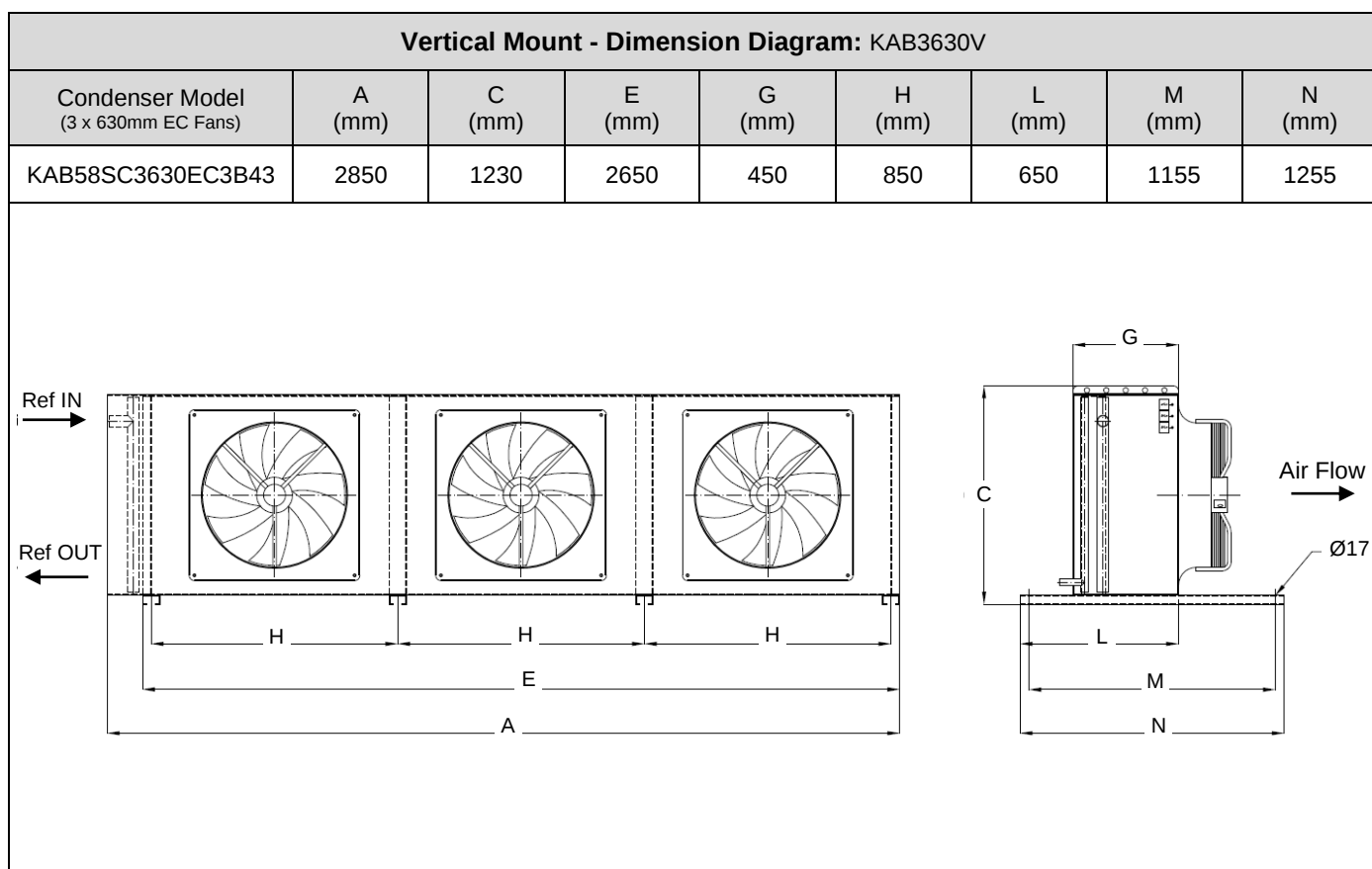
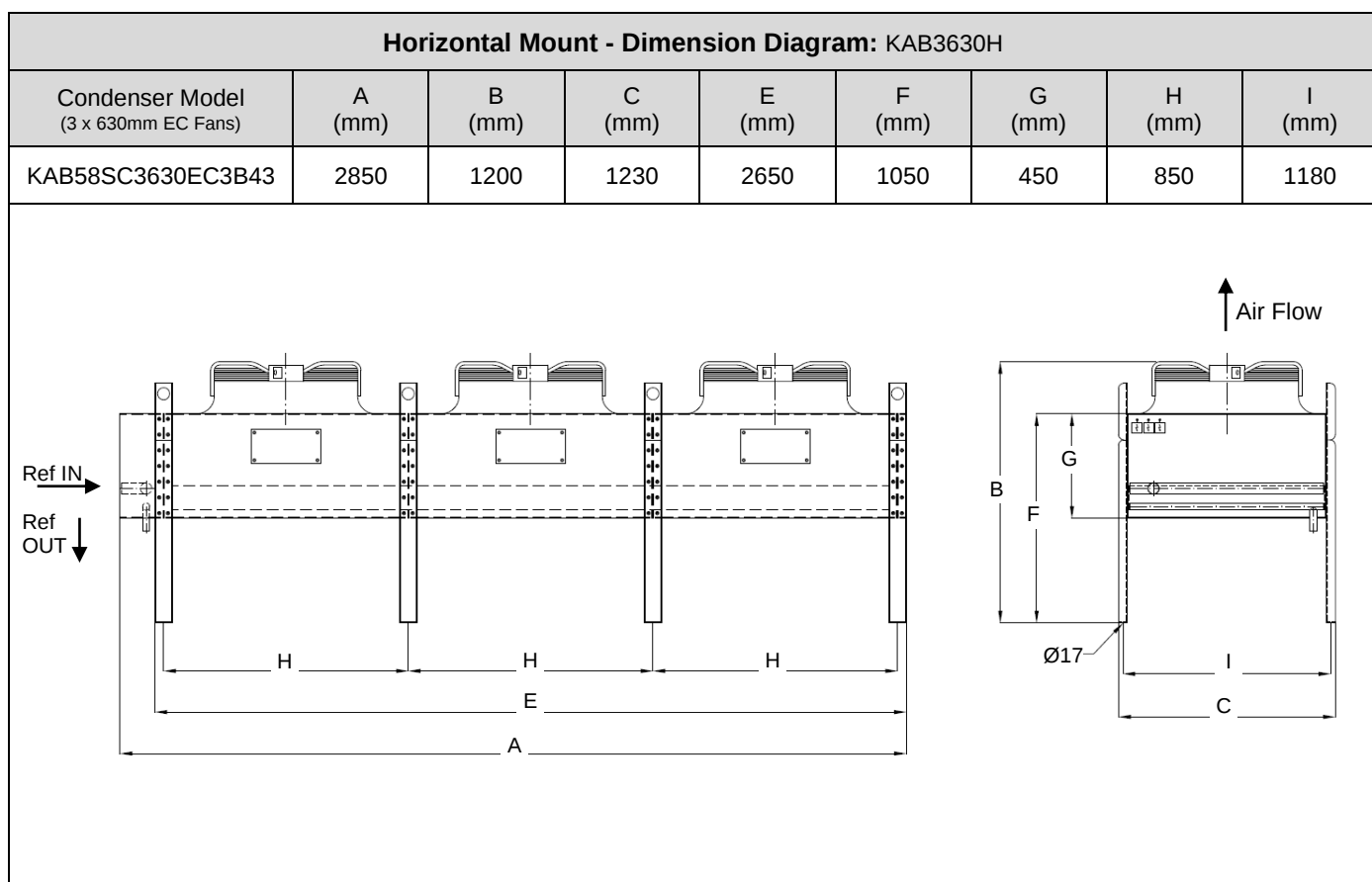
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Condenser Dimensions (cont'd)



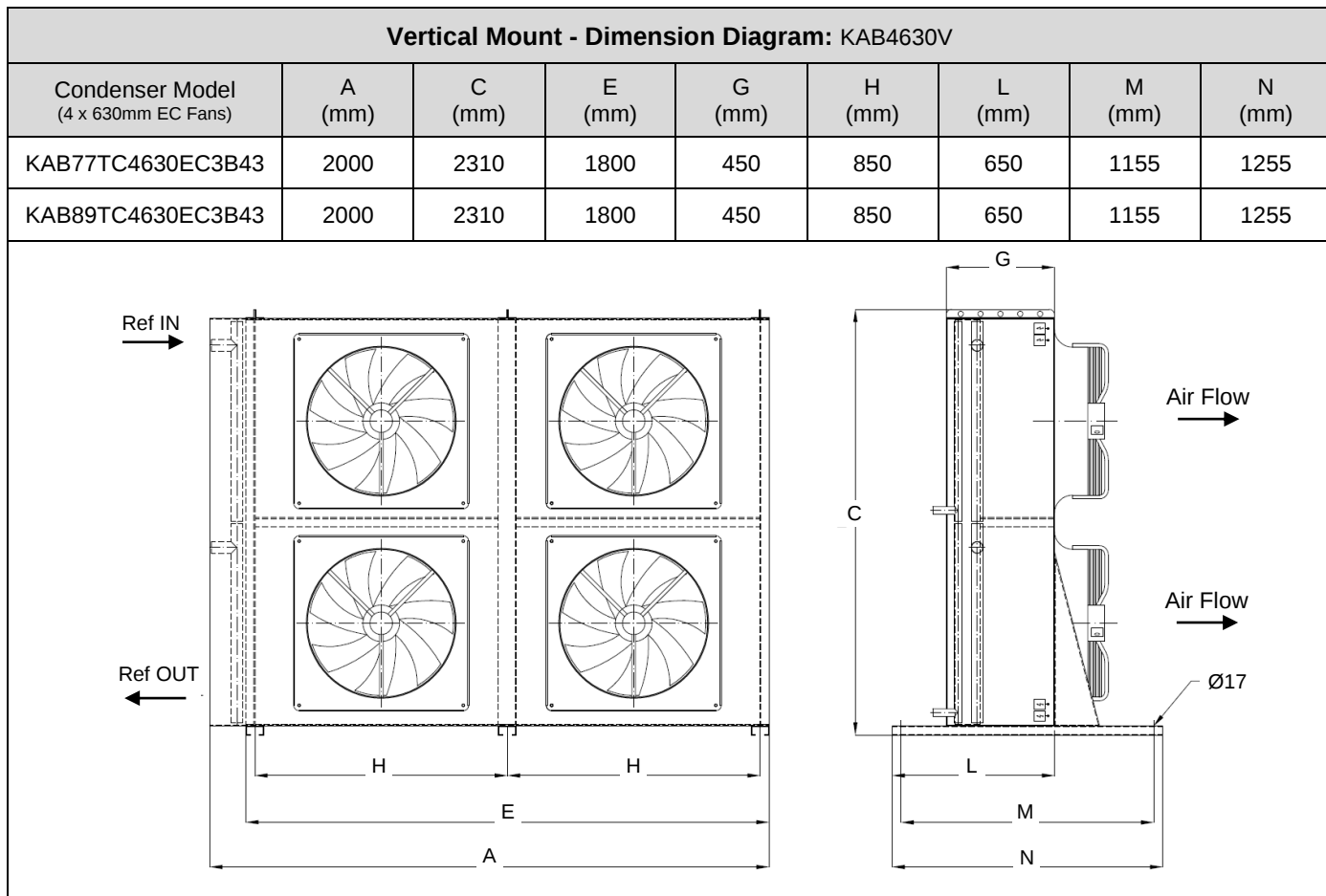
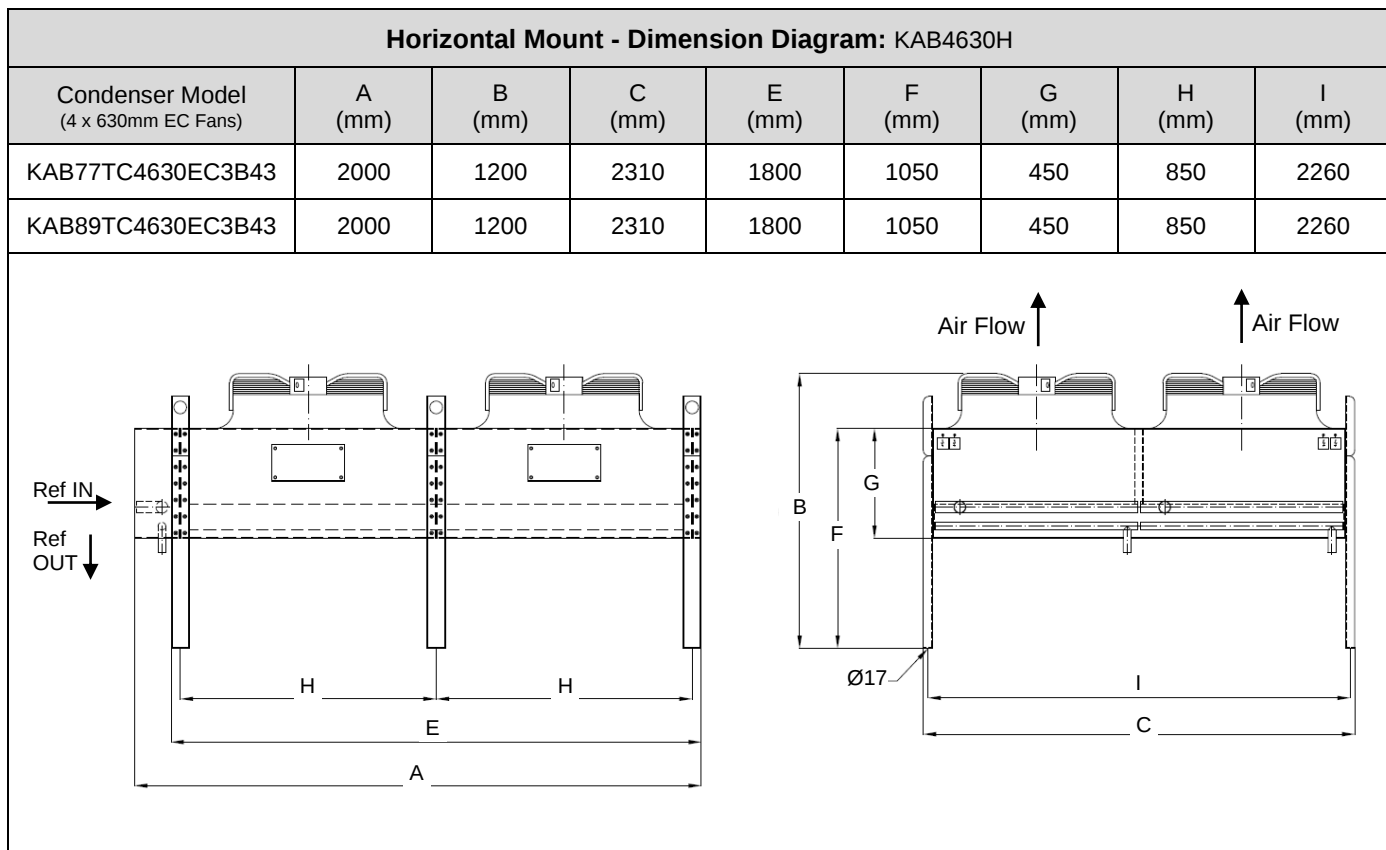
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Condenser Dimensions (cont'd)



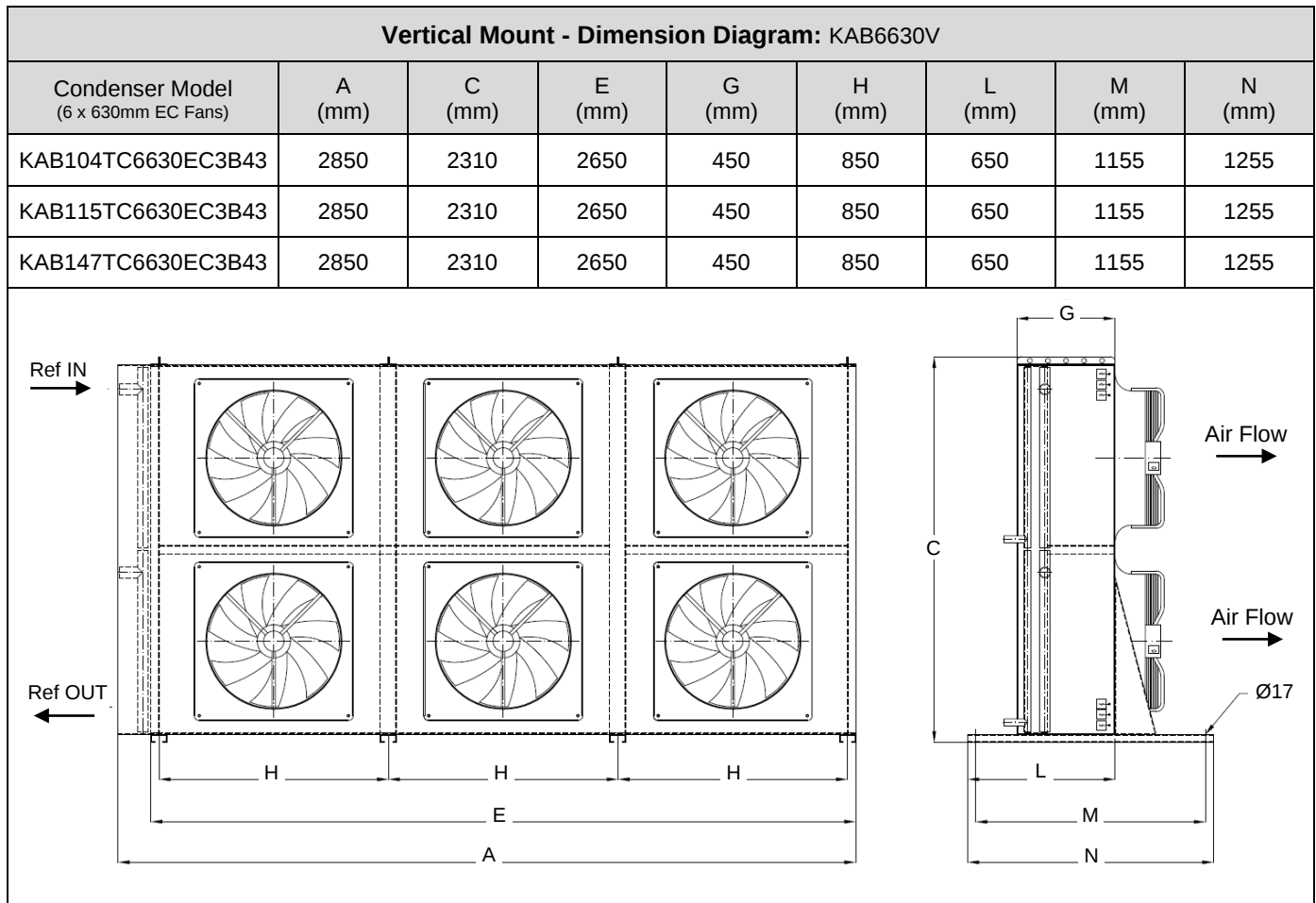
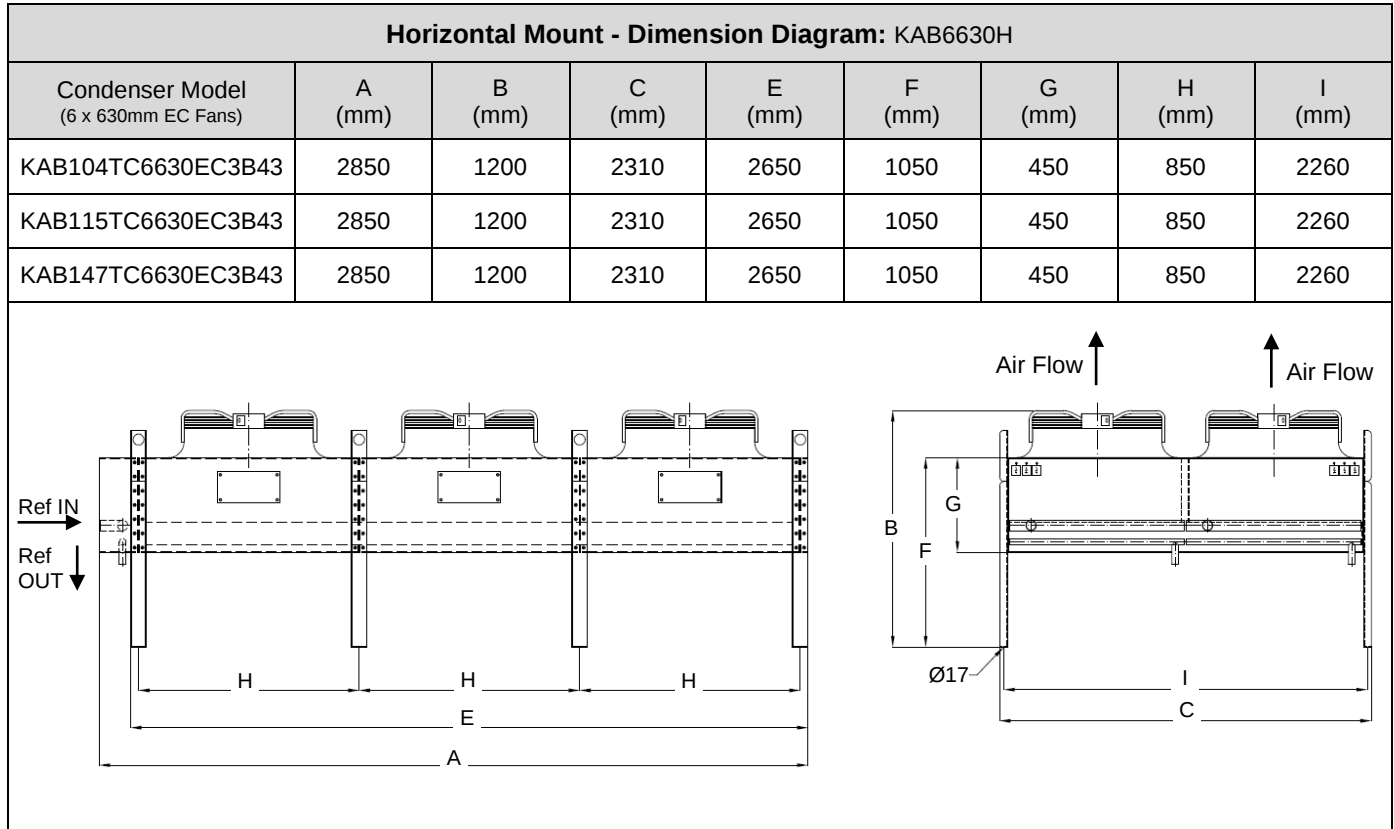
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Condenser Dimensions (cont'd)



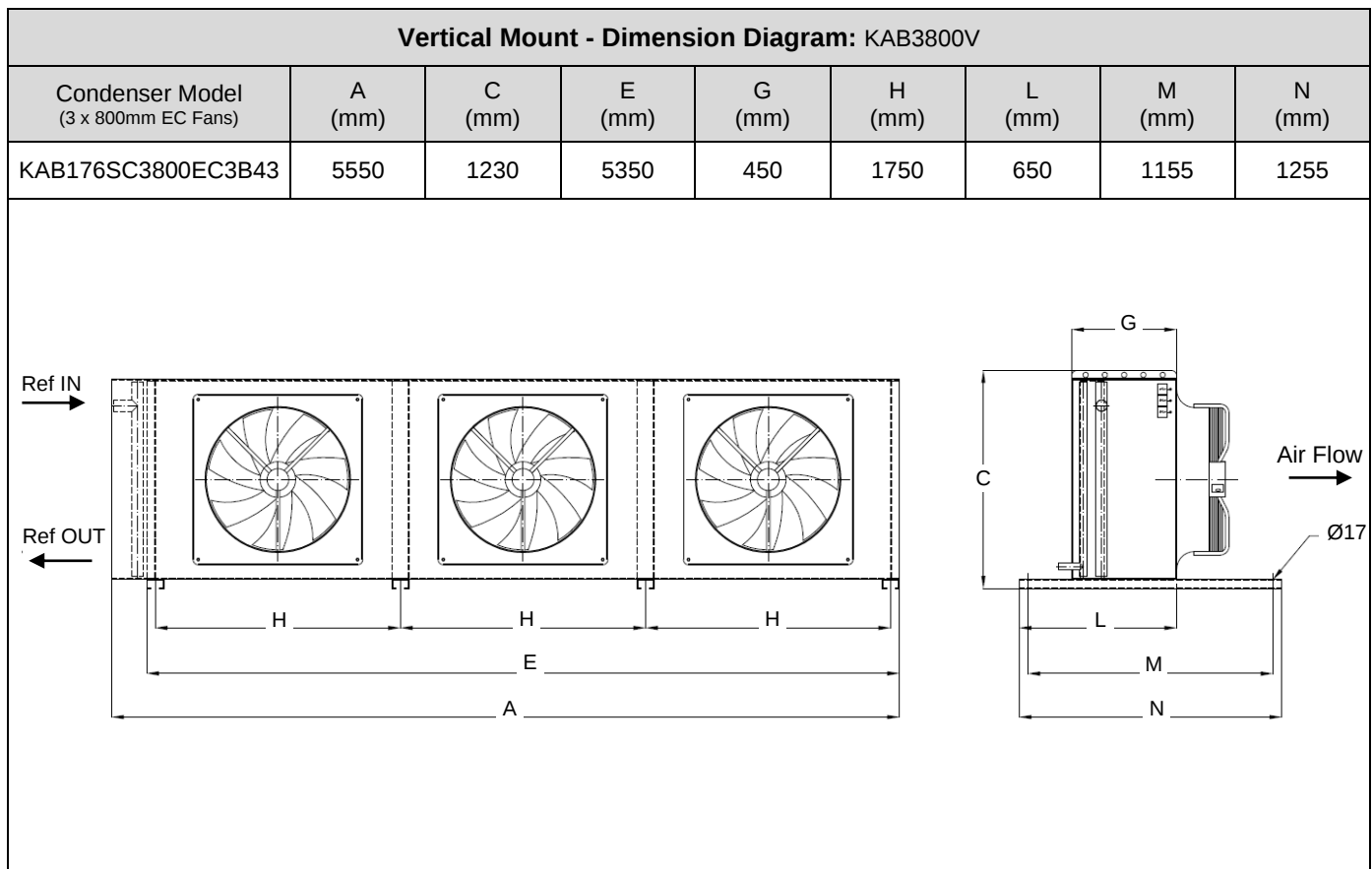
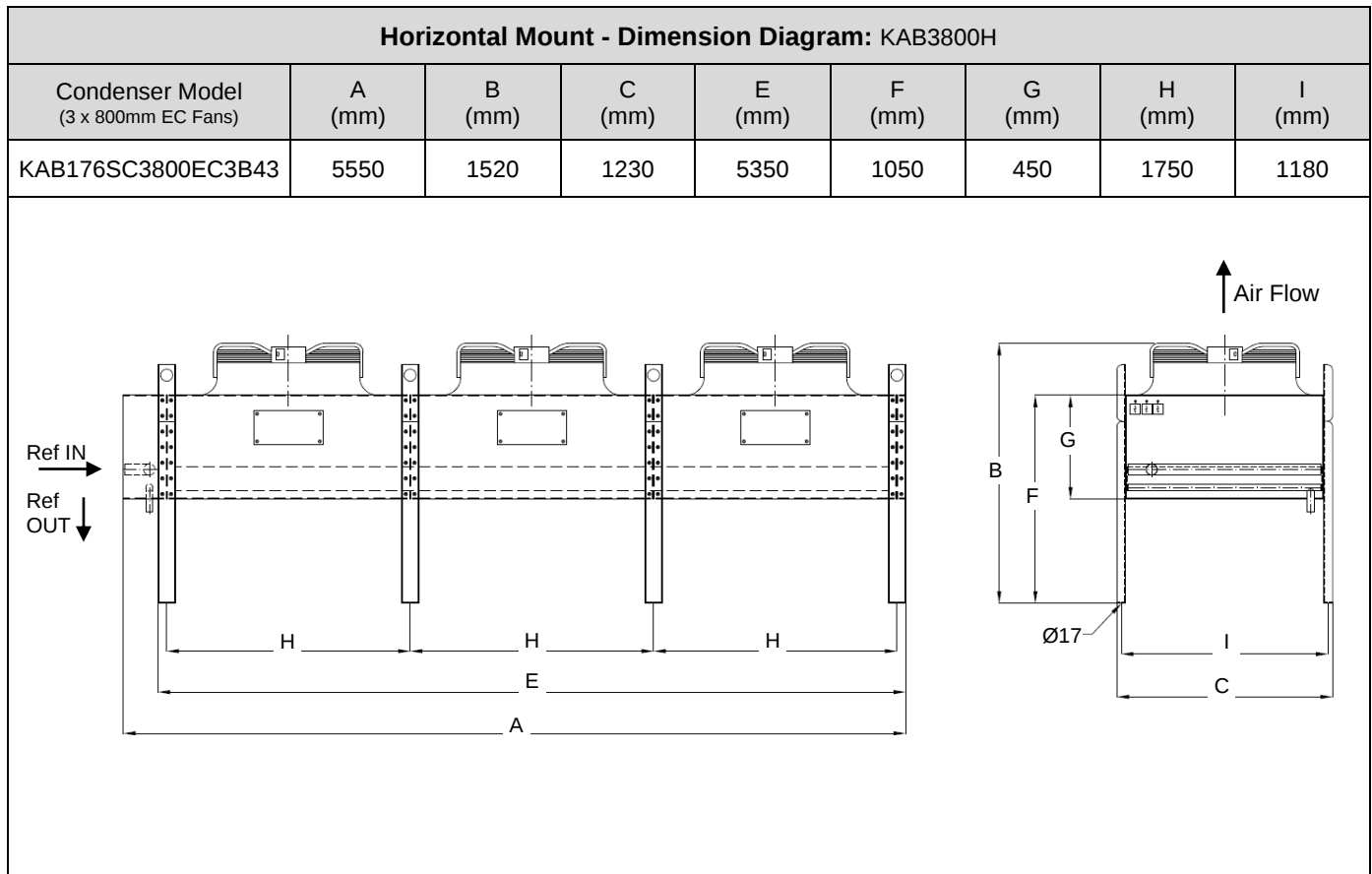
KARYER 43bar KAB CONDENSERS with EC motors

Condenser Dimensions (cont'd)



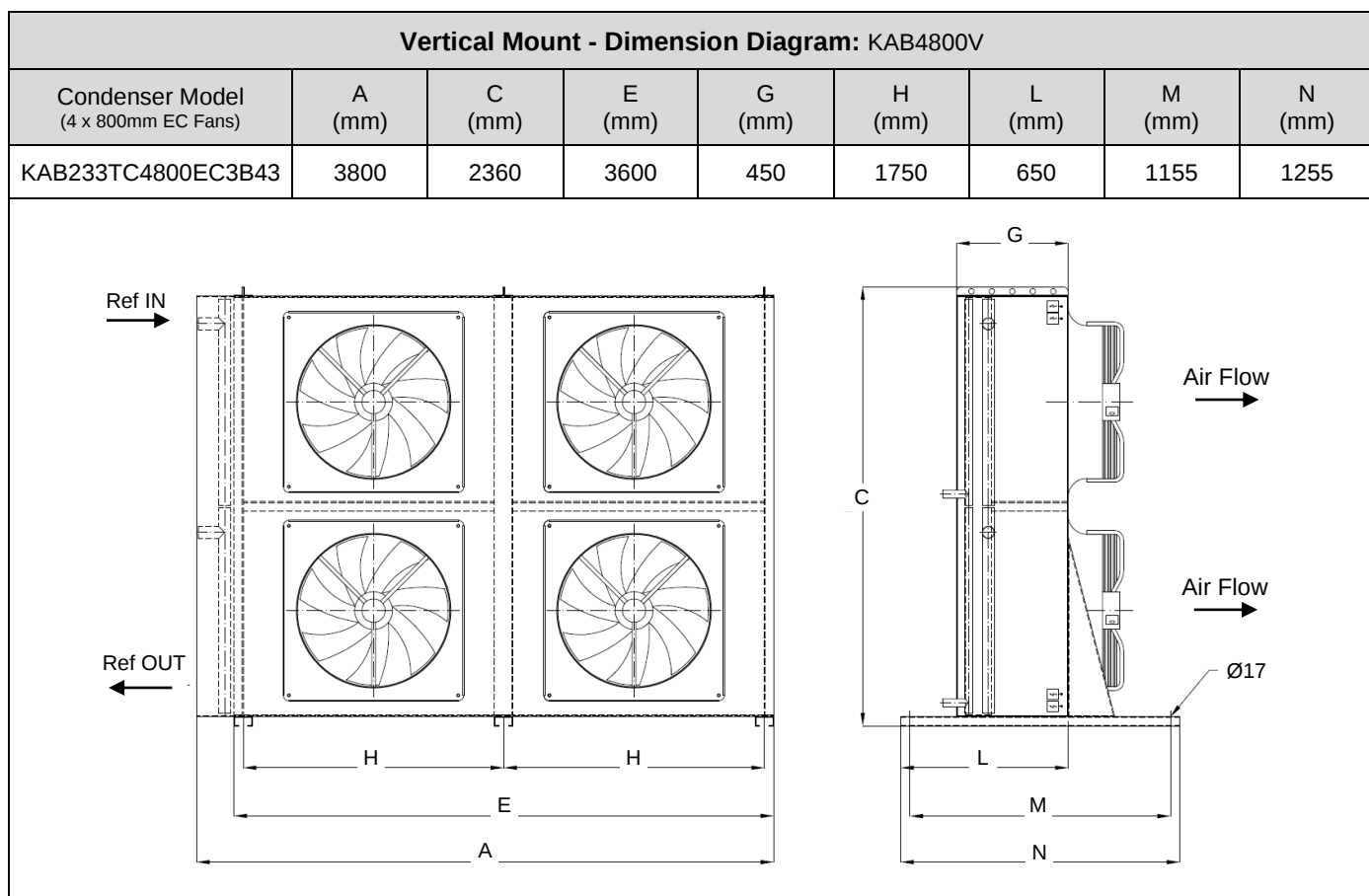
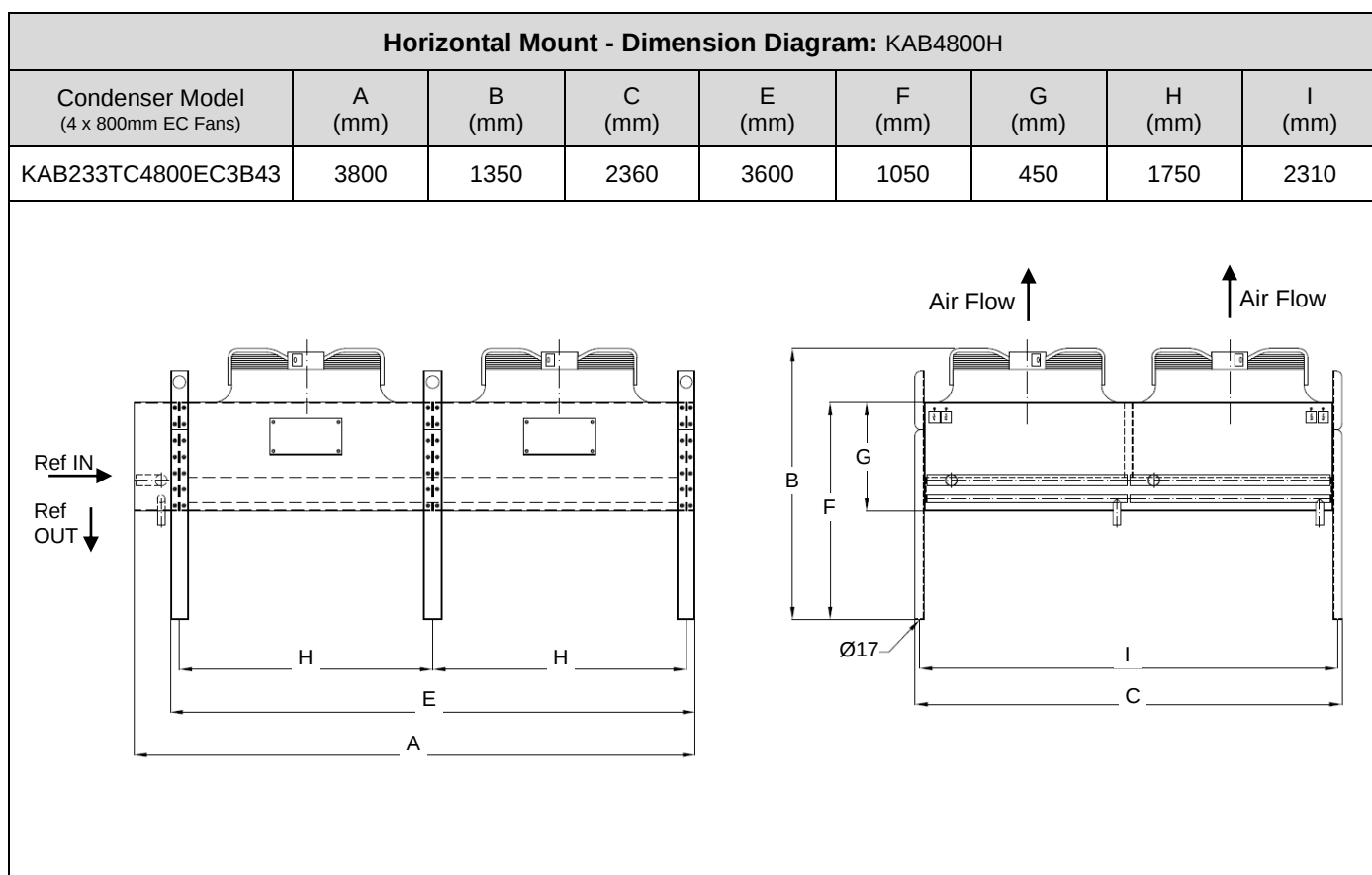
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Condenser Dimensions (cont'd)



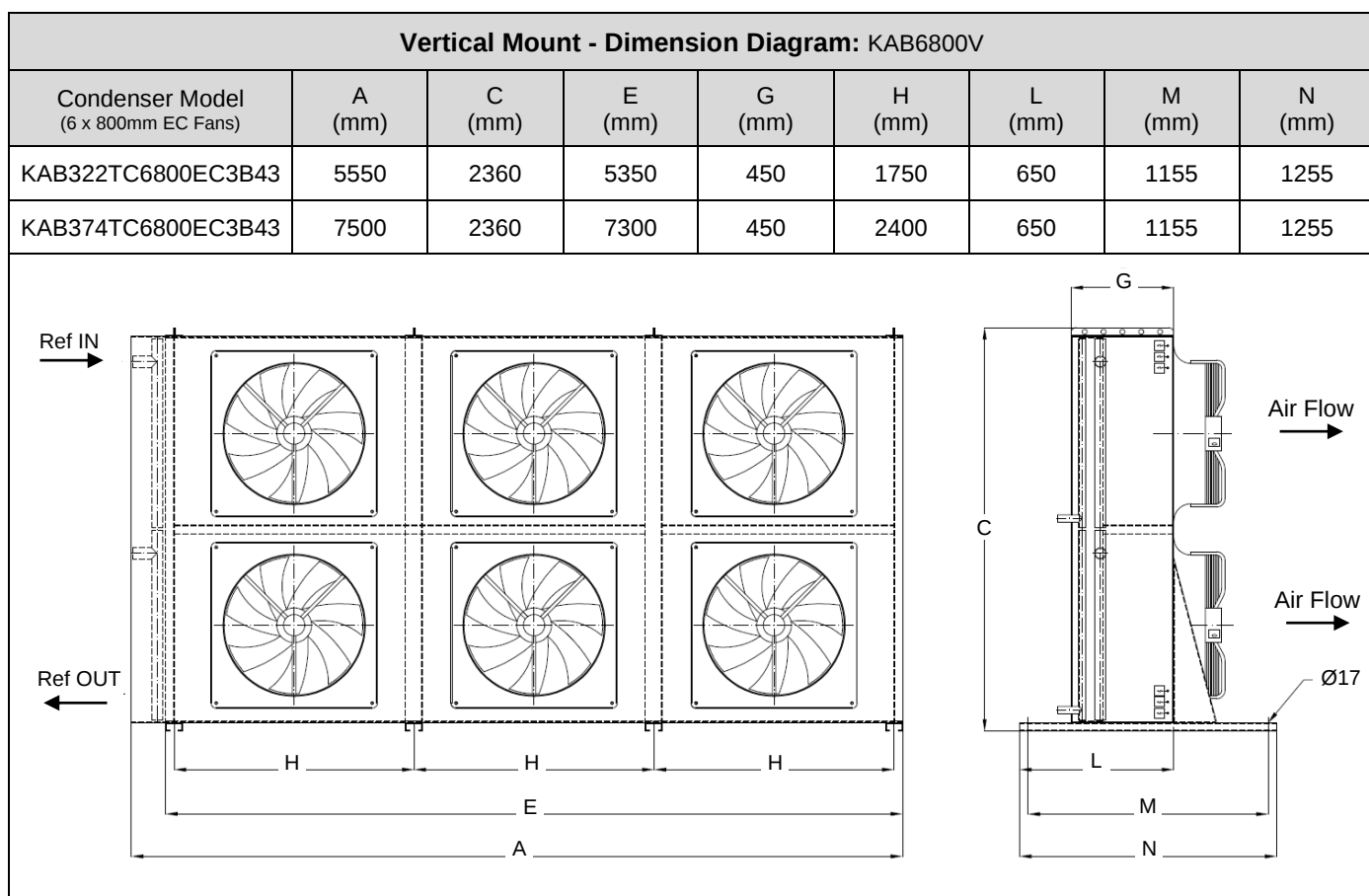
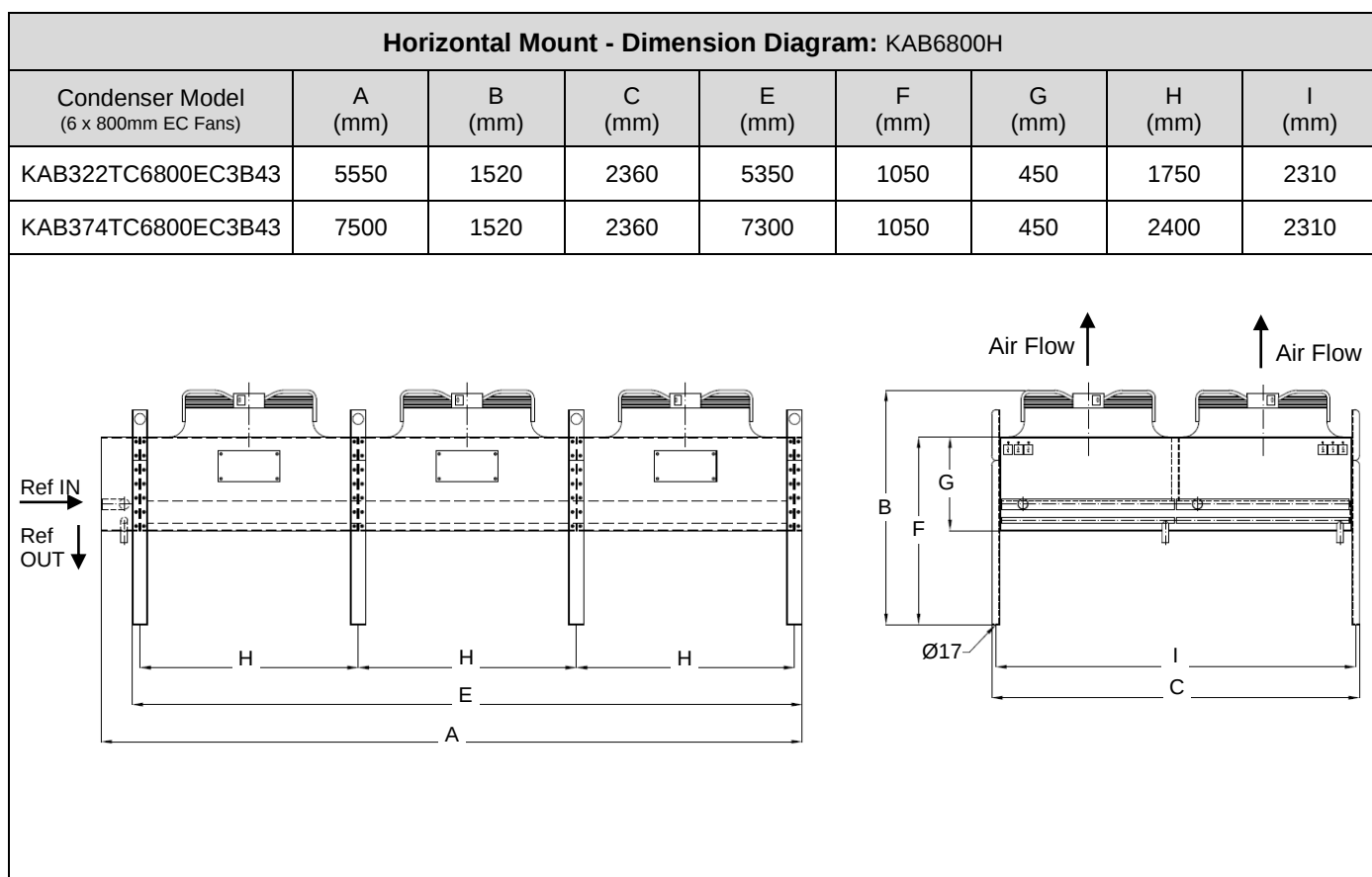
KARYER 43bar KAB CONDENSERS with EC motors

Condenser Dimensions (cont'd)



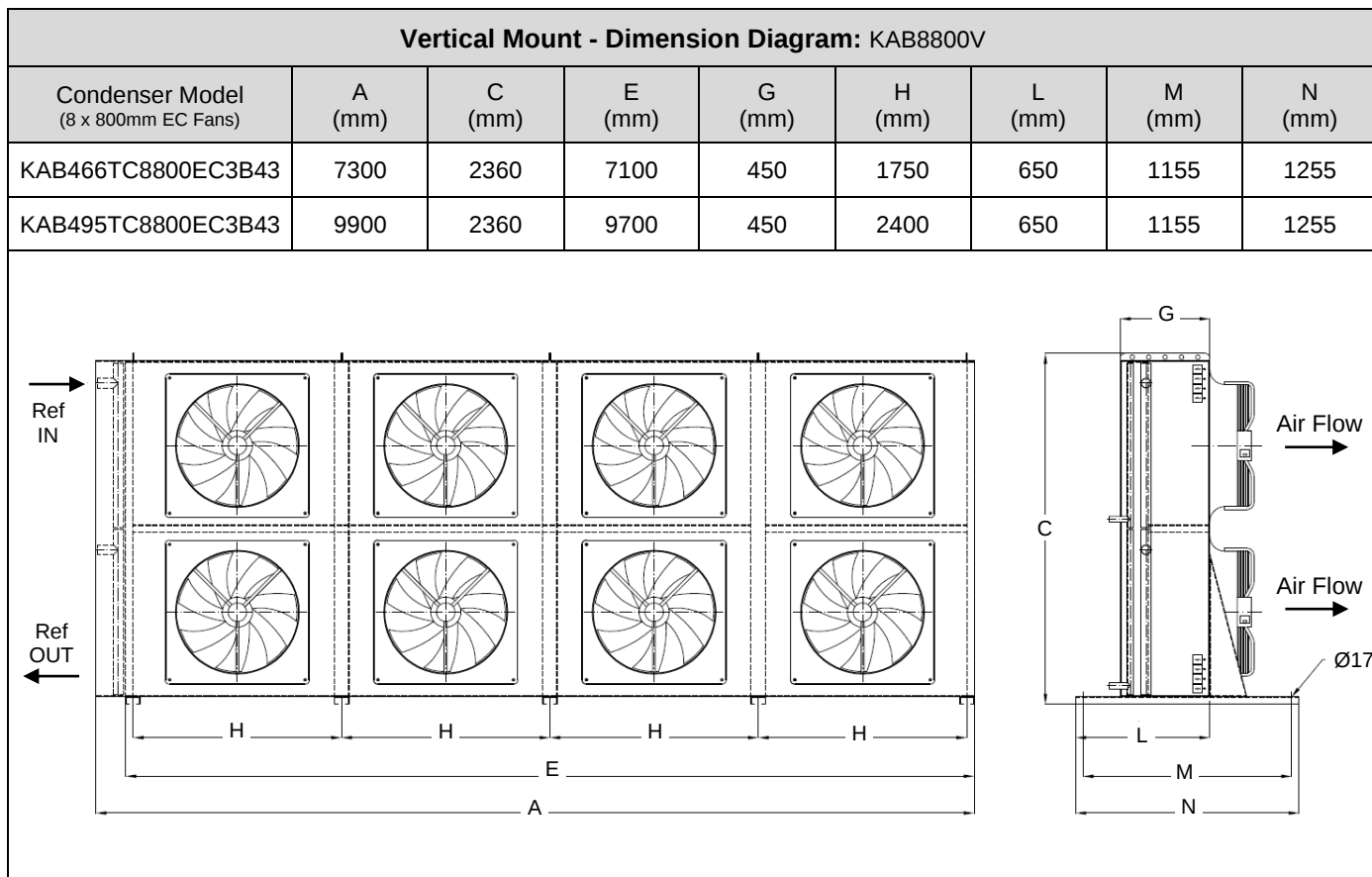
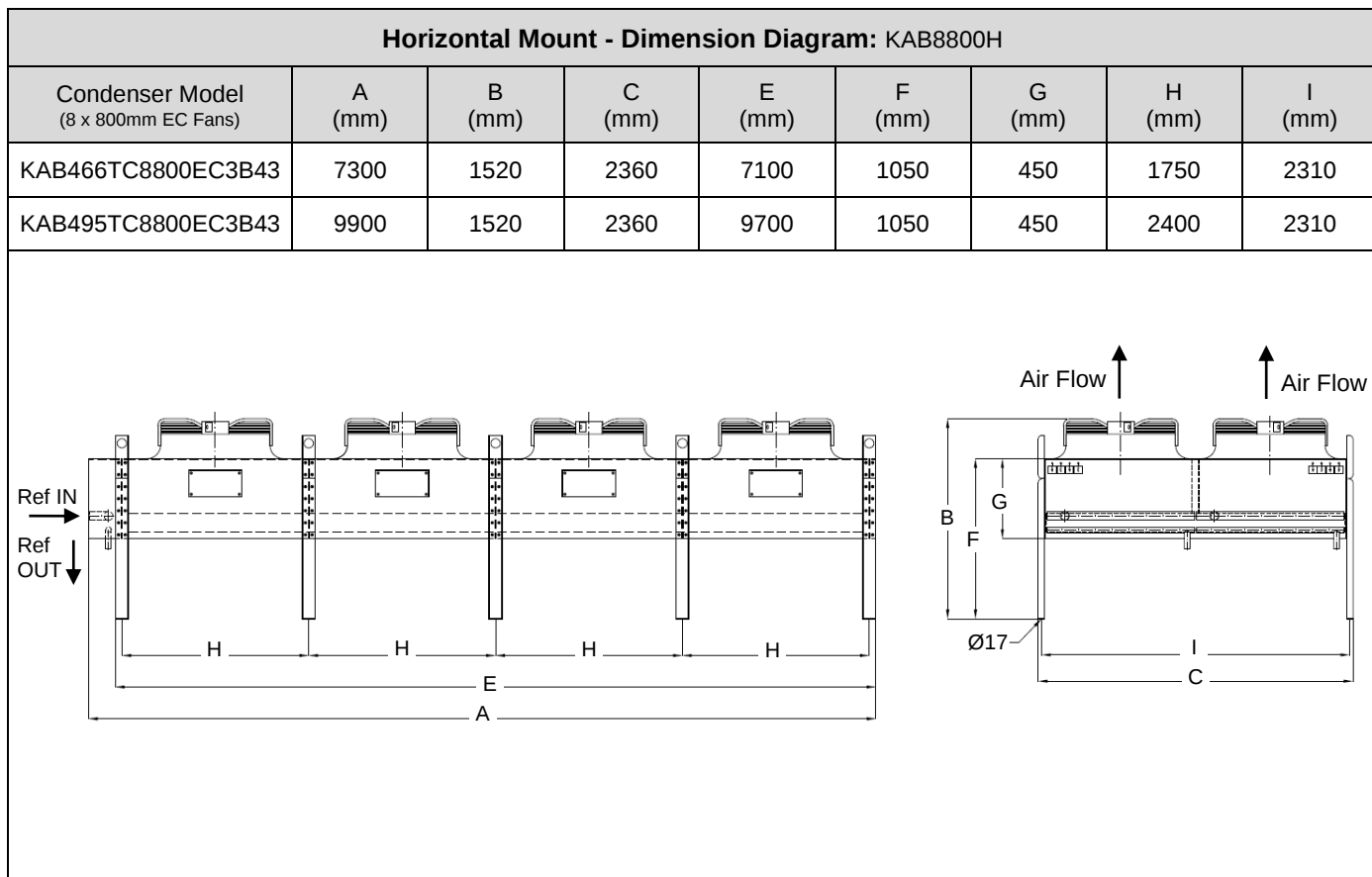
KARYER 43bar KAB CONDENSERS with EC motors

Condenser Dimensions (cont'd)



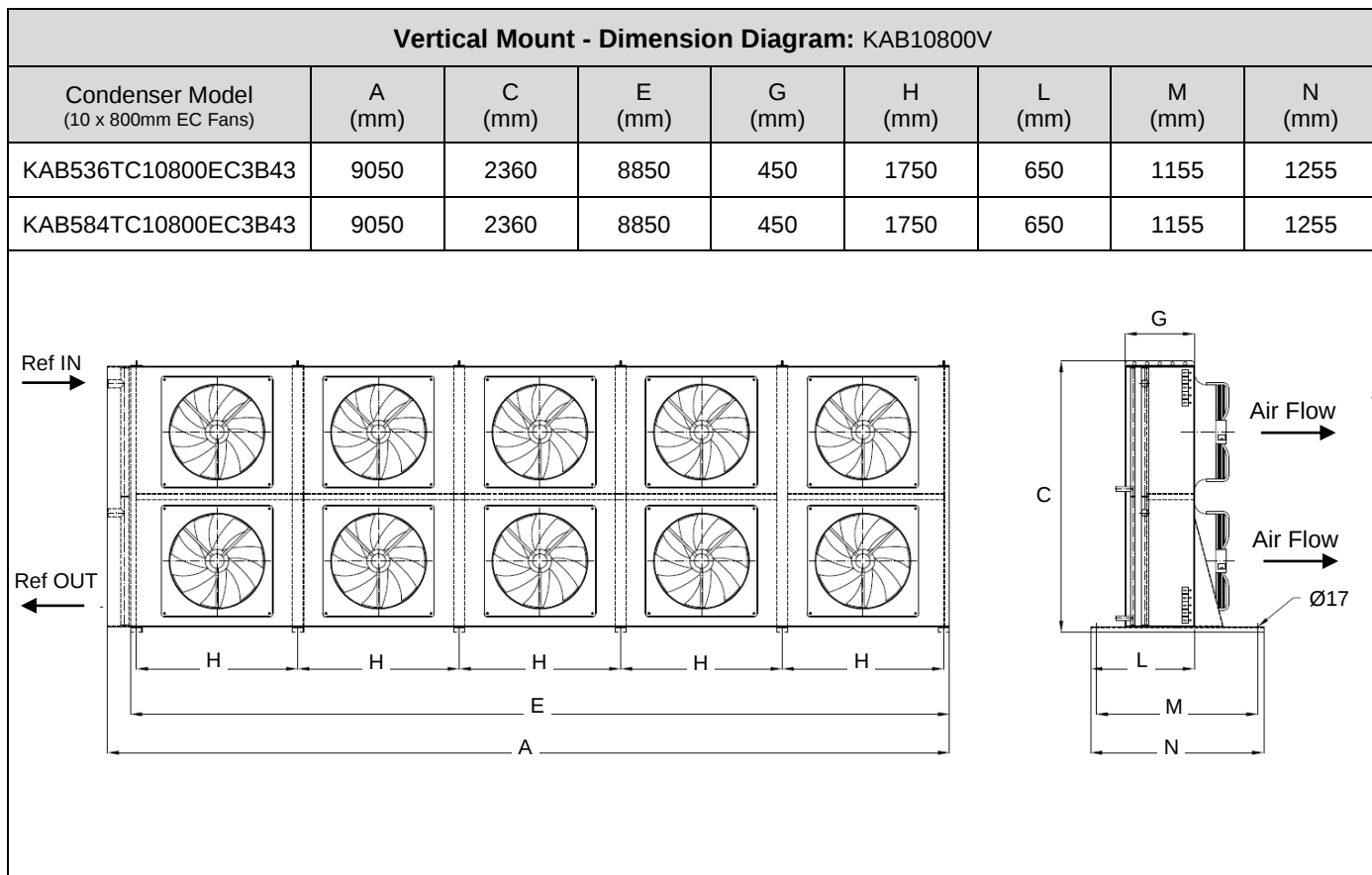
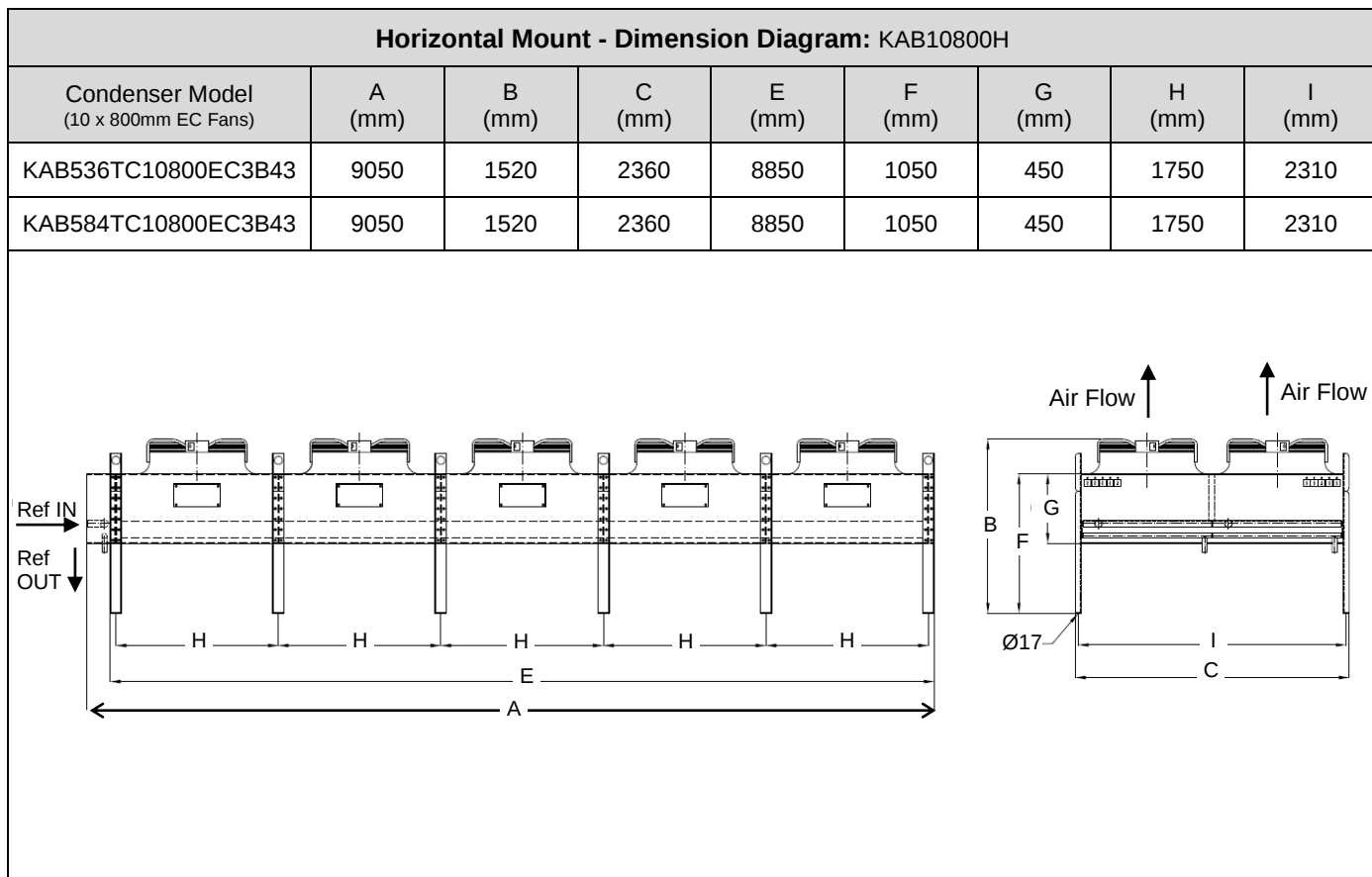
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Condenser Dimensions (cont'd)



KARYER 43bar KAB CONDENSERS with EC motors

Condenser Dimensions (cont'd)



KARYER 43bar KAB CONDENSERS with EC motors

Condenser Shipping Dimensions & Weights

KAB 43bar EC Fan Condenser Models	Shipping Package Dimensions			Shipping Weight (Kg) (These weights are a guide only & are subject to change)
	Depth (mm)	Width (mm)	Height (mm)	

500mm Diameter Fans

**Approximate - TBA

KAB21SC2500EC1B43	950	1650	1060	**186
KAB25SC2500EC1B43	950	1650	1060	**206
KAB31SC3500EC1B43	950	1650	1060	**265

630mm Diameter Fans

KAB39SC2630EC3B43	950	2050	1370	**310
KAB45SC2630EC3B43	950	2050	1370	**322
KAB58SC3630EC3B43	950	2800	1370	**378
KAB77TC4630EC3B43	950	2050	2450	**460
KAB89TC4630EC3B43	950	2050	2450	**498
KAB104TC6630EC3B43	950	2800	2450	**591
KAB115TC6630EC3B43	950	2800	2450	**742
KAB147TC6630EC3B43	950	2800	2450	**799

800mm Diameter Fans

KAB176SC3800EC3B43	1020	5670	1450	**808
KAB233TC4800EC3B43	1020	3870	2510	**927
KAB322TC6800EC3B43	1020	5670	2510	**1371
KAB374TC6800EC3B43	1020	7620	2510	**1636
KAB466TC8800EC3B43	1020	7420	2510	**1967
KAB495TC8800EC3B43	1020	10020	2510	**2200
KAB536TC10800EC3B43	1020	9170	2510	**2156
KAB584TC10800EC3B43	1020	9170	2510	**2430

Note: Shipping dimensions and shipping weights are subject to change and should be used as a guide only.

KARYER 43bar KAB CONDENSERS with EC motors

Condenser Spare Parts

KAB 43bar EC Fan Condenser Models	Fan Motor Qty	ebm EC Fan Motors		
		Model	Fan Diameter	Voltage

500mm Diameter Fans

KAB21SC2500EC1B43	2	S3G500-AK07-G1	500mm	230V / 1 Phase / 50Hz
KAB25SC2500EC1B43	2			
KAB31SC3500EC1B43	3			

630mm Diameter Fans

KAB39SC2630EC3B43	2	W3G630-GE55-51	630mm	400V / 3 Phase / 50Hz
KAB45SC2630EC3B43	2			
KAB58SC3630EC3B43	3			
KAB77TC4630EC3B43	4			
KAB89TC4630EC3B43	4			
KAB104TC6630EC3B43	6			
KAB115TC6630EC3B43	6			
KAB147TC6630EC3B43	6			

800mm Diameter Fans

KAB176SC3800EC3B43	3	W3G800-KS39-03	800mm	400V / 3 Phase / 50Hz
KAB233TC4800EC3B43	4			
KAB322TC6800EC3B43	6			
KAB374TC6800EC3B43	6			
KAB466TC8800EC3B43	8			
KAB495TC8800EC3B43	8			
KAB536TC10800EC3B43	10			
KAB584TC10800EC3B43	10			