

KAB Series Air Cooled Condensers with 500mm & 630mm AC fan motors

Karyer KAB series remote air cooled condensers are designed for high efficiency to provide professional solutions for industrial coolrooms, freezer applications, chillers and air conditioning projects.

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 32 bar, are supplied with 2.1mm fin spacings plus a Gold Epoxy fin treatment.

KAB condensers are factory fitted with AC fan technology by ebm-papst & Ziehl-Abegg who are renowned worldwide for their quality, reliability and superior performance.

There are two AC fan motor assemblies utilised in KAB series condensers:

- 1) 500mm 230V-1Ph-50Hz: Ziehl-Abegg FN050-6EK.4F.V7P1 fan assembly
- 2) 630mm 400V-3Ph-50Hz: ebm-papst S6D630-AN01-01 fan assembly

KAB Condensers - Standard Features:

- Quality AC fan motor assemblies 500mm (1ph) & 630mm (3ph)
- High performance coils designed for multiple refrigerants.
- Coils have a maximum operating pressure of 32 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 KAB CONDENSERS with AC motors

KAB Series Remote Air Cooled Condensers

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

Fin Spacing: 2.1mm

Airefrig Model		KAB21SC2500AC1	KAB23SC2500AC1	KAB31SC3500AC1
R134A 890 rpm Ziehl fan assembly FN050-6EK.4F.V7P1	Watts 1ktd	2048	2272	3048
	Watts 10ktd	20480	22720	30480
R513A 890 rpm Ziehl fan assembly FN050-6EK.4F.V7P1	Watts 1ktd	2038	2253	3027
	Watts 10ktd	20390	22530	30270
R404A 890 rpm Ziehl fan assembly FN050-6EK.4F.V7P1	Watts 1ktd	2105	2339	3139
	Watts 10ktd	21050	23390	31390
R507 890 rpm Ziehl fan assembly FN050-6EK.4F.V7P1	Watts 1ktd	2109	2342	3144
	Watts 10ktd	21090	23420	31440
R449A 890 rpm Ziehl fan assembly FN050-6EK.4F.V7P1	Watts 1ktd	2124	2365	3173
	Watts 10ktd	21240	23650	31730
R448A 890 rpm Ziehl fan assembly FN050-6EK.4F.V7P1	Watts 1ktd	2125	2368	3180
	Watts 10ktd	21250	23680	31800

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

*** R449A and R448A refrigerant capacities are calculated at middle points (not dew point) ***



KARYER KAB CONDENSERS with AC motors

KAB Series Remote Air Cooled Condensers

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

Fin Spacing: 2.1mm

Airefrig Model	KAB36SC2630AC3	KAB54SC3630AC3	KAB71TC4630AC3	KAB89TC4630AC3
R134A 890 rpm ebm fan assembly S6D630-AN01-01	Watts 1ktd	3504	5242	6962
	Watts 10ktd	35040	52420	69620
R513A 890 rpm ebm fan assembly S6D630-AN01-01	Watts 1ktd	3486	5214	6925
	Watts 10ktd	34860	52140	69250
R404A 890 rpm ebm fan assembly S6D630-AN01-01	Watts 1ktd	3604	5395	7162
	Watts 10ktd	36040	53950	71620
R507 890 rpm ebm fan assembly S6D630-AN01-01	Watts 1ktd	3610	5401	7173
	Watts 10ktd	36100	54010	71730
R449A 890 rpm ebm fan assembly S6D630-AN01-01	Watts 1ktd	3638	5444	7230
	Watts 10ktd	36380	54440	72300
R448A 890 rpm ebm fan assembly S6D630-AN01-01	Watts 1ktd	3645	5454	7244
	Watts 10ktd	36450	54540	72440

Airefrig Model	KAB106TC6630AC3	
R134A 890 rpm ebm fan assembly S6D630-AN01-01	Watts 1ktd	10379
	Watts 10ktd	103790
R513A 890 rpm ebm fan assembly S6D630-AN01-01	Watts 1ktd	10327
	Watts 10ktd	103270
R404A 890 rpm ebm fan assembly S6D630-AN01-01	Watts 1ktd	10671
	Watts 10ktd	106710
R507 890 rpm ebm fan assembly S6D630-AN01-01	Watts 1ktd	10688
	Watts 10ktd	106880
R449A 890 rpm ebm fan assembly S6D630-AN01-01	Watts 1ktd	10767
	Watts 10ktd	107670
R448A 890 rpm ebm fan assembly S6D630-AN01-01	Watts 1ktd	10768
	Watts 10ktd	107680

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

*** R449A and R448A refrigerant capacities are calculated at middle points (not dew point) ***

KARYER KAB CONDENSERS with AC motors

Technical Specifications – 500mm Fan Condensers

Airefrig Model	KAB21SC2500AC1	KAB23SC2500AC1	KAB31SC3500AC1
Coil Configuration	Single Coil	Single Coil	Single Coil
Air Flow (max. speed) (m ³ /hr)	8604	7899	12906
500mm AC Fans (Qty)	2	2	3
230/1/50Hz AC Fan Motors	Total Watts	600	900
	Total Amps	2.6	3.9
Inlet Connection (mm)	19.0	19.0	22.0
Outlet Connection (mm)	16.0	16.0	19.0
Fin Spacing (mm)	2.1	2.1	2.1
Heat Exchange Surface Area (m ²)	95.6	127.3	143
Internal Tube Volume (l)	10.6	13.6	14.9
Maximum Pressure (bar)	32	32	32
Dry Weight (To Be Confirmed) (kg)	151 (T.B.C)	161 (T.B.C)	212 (T.B.C)
Dimension Diagrams	Horizontal mounting	KAB11H	KAB12H
	Vertical mounting	KAB11V	KAB12V



KARYER KAB CONDENSERS with AC motors

Technical Specifications – 630mm Fan Condensers

Airefrig Model	KAB36SC2630AC3	KAB54SC3630AC3	KAB71TC4630AC3	KAB89TC4630AC3
Coil Configuration	Single Coil	Single Coil	Twin Coil	Twin Coil
Air Flow (max. speed) (m ³ /hr)	16851	25981	34439	30163
630mm AC Fans (Qty)	2	3	4	4
400/3/50Hz AC Fan Motors	Total Watts	1200	1800	2400
	Total Amps	2.4	3.6	4.8
Inlet Connection (mm)	22.0	28.0	2 x 22.0	2 x 28.0
Outlet Connection (mm)	19.0	22.0	2 x 19.0	2 x 22.0
Fin Spacing (mm)	2.1	2.1	2.1	2.1
Heat Exchange Surface Area (m ²)	116.3	174.2	229.6	382
Internal Tube Volume (dm ³)	12.1	17.6	23.1	37.6
Maximum Pressure (bar)	32	32	32	32
Dry Weight (To Be Confirmed) (kg)	219 (T.B.C)	310 (T.B.C)	381 (T.B.C)	452 (T.B.C)
Dimension Diagrams	Horizontal mounting	KAB013H	KAB014H	KAB15H
	Vertical mounting	KAB013V	KAB014V	KAB15V

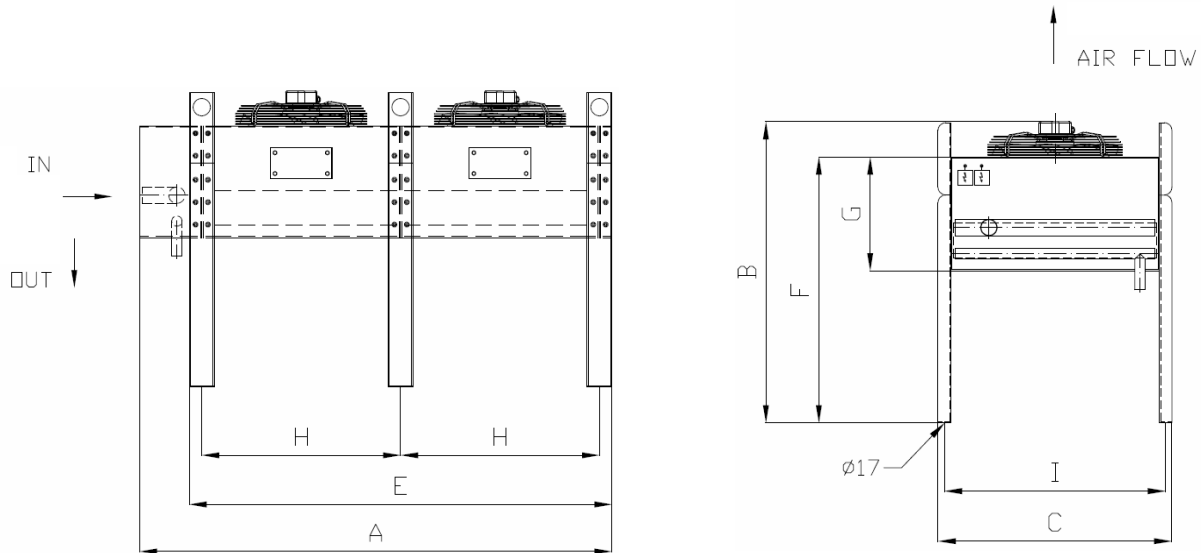
Airefrig Model	KAB106TC6630AC3	
Coil Configuration	Twin Coil	
Air Flow (max. speed) (m ³ /hr)	51659	
630mm AC Fans (Qty)	6	
400/3/50Hz AC Fan Motors	Total Watts	3600
	Total Amps	7.2
Inlet Connection (mm)	2 x 28.0	
Outlet Connection (mm)	2 x 22.0	
Fin Spacing (mm)	2.1	
Heat Exchange Surface Area (m ²)	344	
Internal Tube Volume (dm ³)	34.7	
Maximum Pressure (bar)	32	
Dry Weight (To Be Confirmed) (kg)	535 (T.B.C)	
Dimension Diagrams	Horizontal mounting	KAB16H
	Vertical mounting	KAB16V

KARYER KAB CONDENSERS with AC motors

Condenser Dimensions

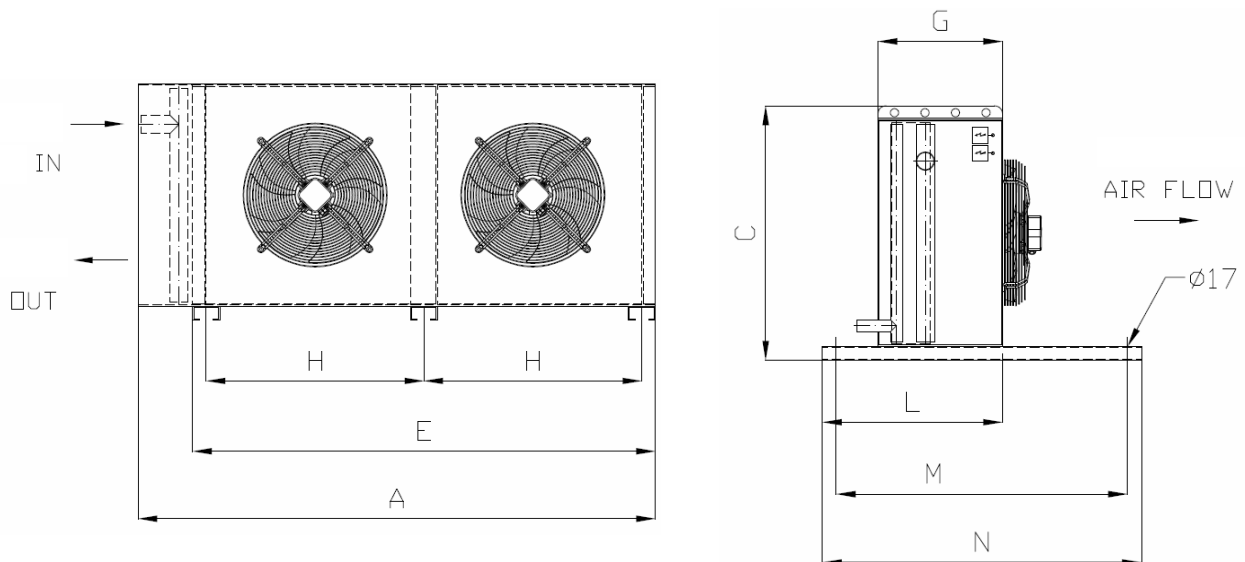
Horizontal Mount - Dimension Diagram: KAB11H

Condenser Model (2 x 500mm AC Fans)	A (mm)	B (mm)	C (mm)	E (mm)	F (mm)	G (mm)	H (mm)	I (mm)
KAB21SC2500AC1	1600	1200	920	1400	1050	450	650	870
KAB23SC2500AC1	1600	1200	920	1400	1050	450	650	870



Vertical Mount - Dimension Diagram: KAB11V

Condenser Model (2 x 500mm AC Fans)	A (mm)	C (mm)	E (mm)	G (mm)	H (mm)	L (mm)	M (mm)	N (mm)
KAB21SC2500AC1	1600	920	1400	450	650	650	1155	1255
KAB23SC2500AC1	1600	920	1400	450	650	650	1155	1255

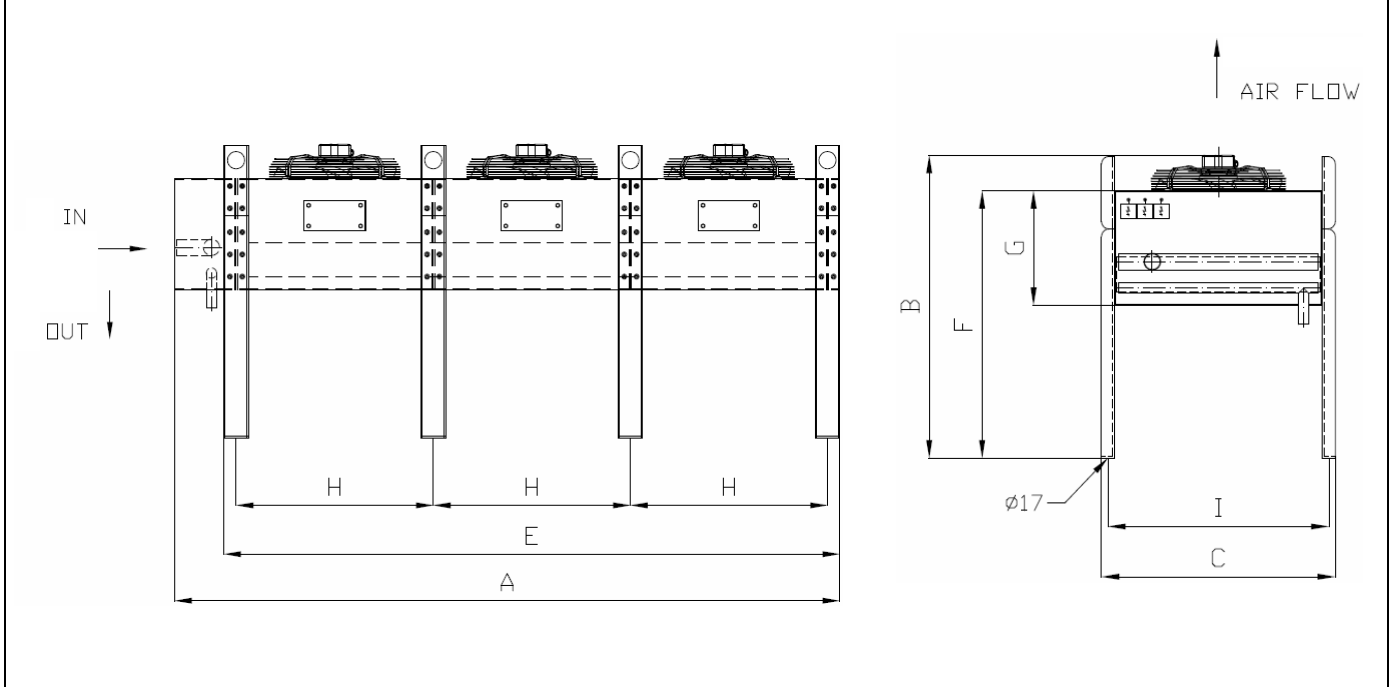


KARYER KAB CONDENSERS with AC motors

Condenser Dimensions (cont'd)

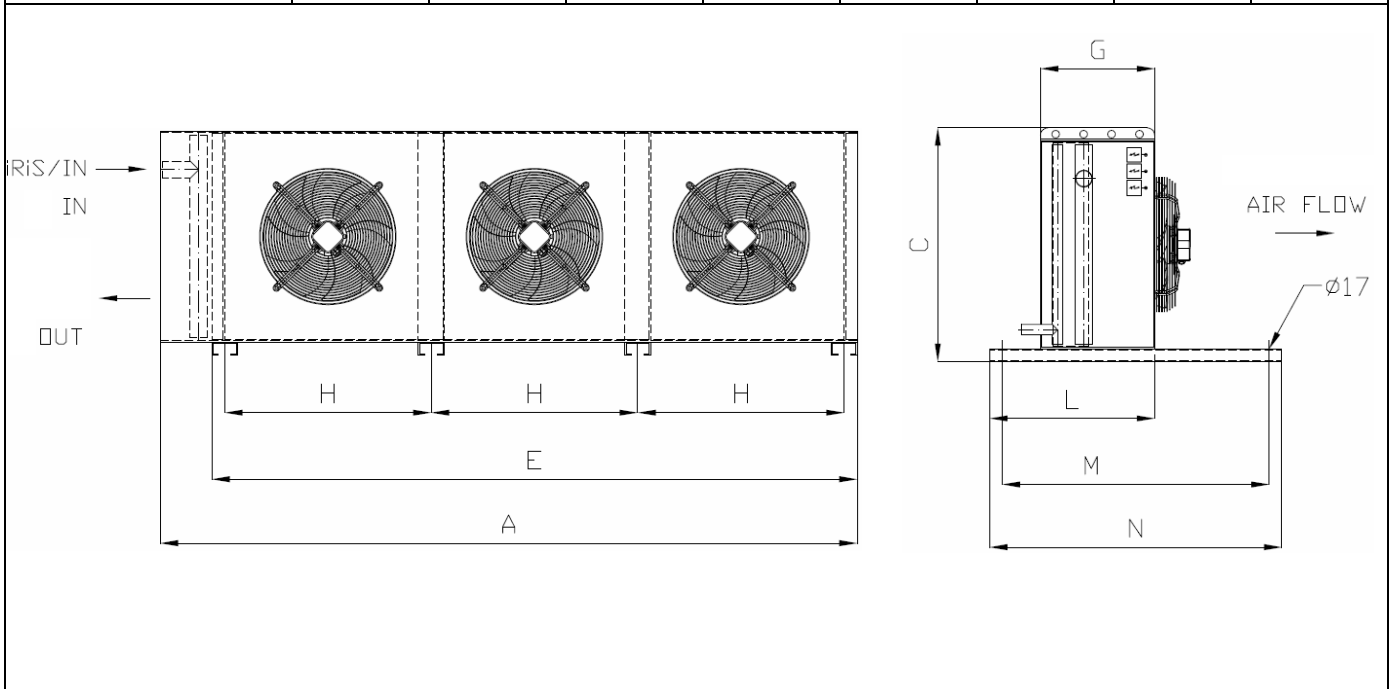
Horizontal Mount - Dimension Diagram: KAB12H

Condenser Model (3 x 500mm AC Fans)	A (mm)	B (mm)	C (mm)	E (mm)	F (mm)	G (mm)	H (mm)	I (mm)
KAB31SC3500AC1	2250	1200	920	2050	1050	450	650	870



Vertical Mount - Dimension Diagram: KAB12V

Condenser Model (3 x 500mm AC Fans)	A (mm)	C (mm)	E (mm)	G (mm)	H (mm)	L (mm)	M (mm)	N (mm)
KAB31SC3500AC1	2250	920	2050	450	650	650	1155	1255

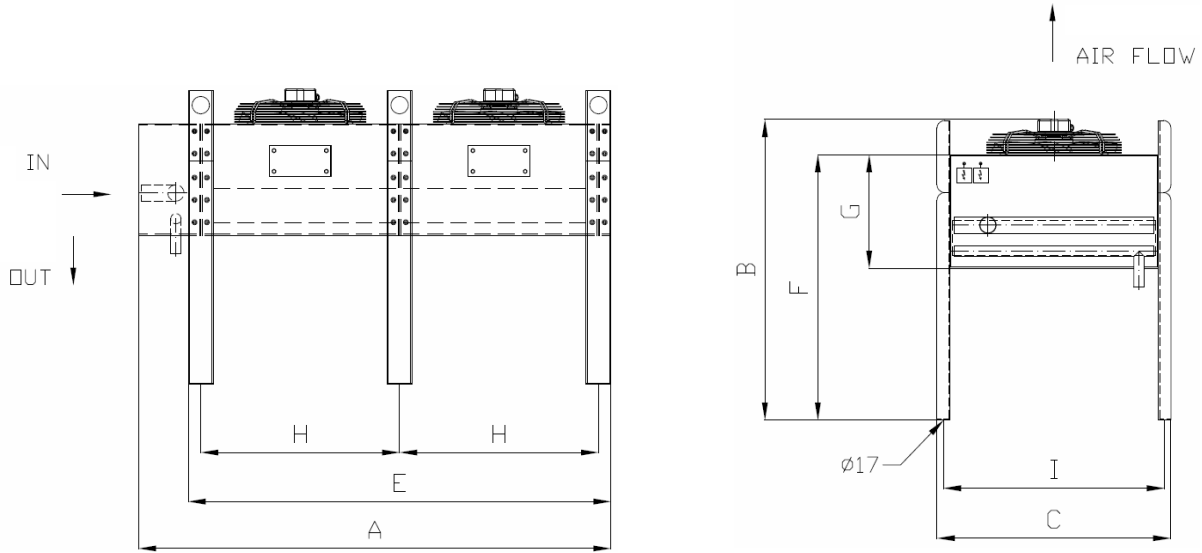


KARYER KAB CONDENSERS with AC motors

Condenser Dimensions (cont'd)

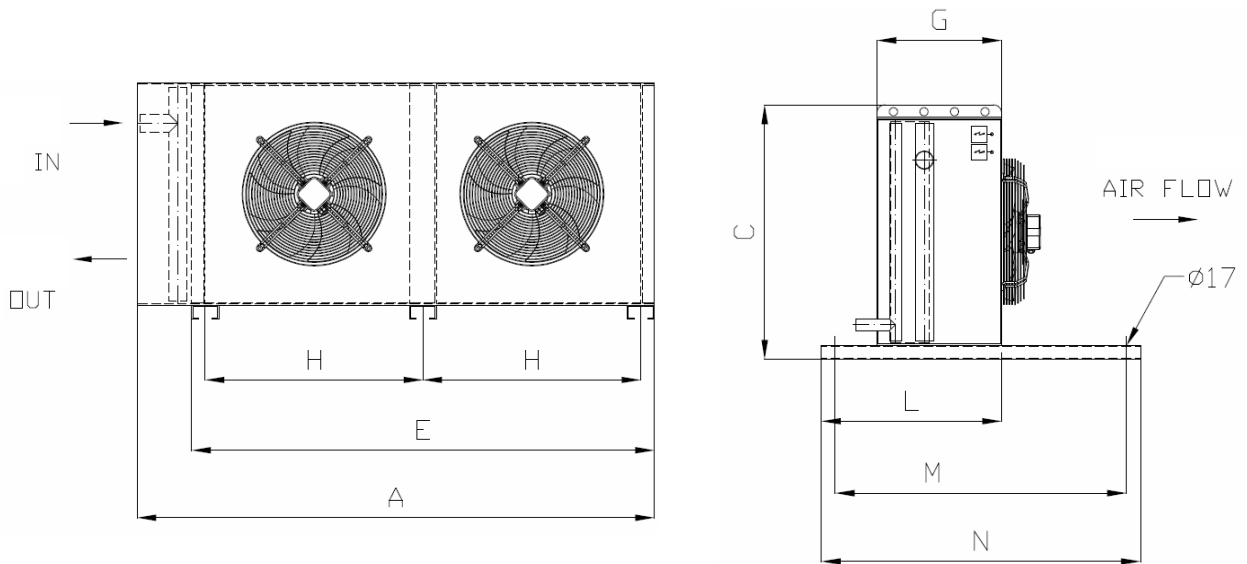
Horizontal Mount - Dimension Diagram: KAB13H

Condenser Model (2 x 630mm AC Fans)	A (mm)	B (mm)	C (mm)	E (mm)	F (mm)	G (mm)	H (mm)	I (mm)
KAB36SC2630AC3	1800	1200	1230	1600	1050	450	750	1180



Vertical Mount - Dimension Diagram: KAB13V

Condenser Model (3 x 630mm AC Fans)	A (mm)	C (mm)	E (mm)	G (mm)	H (mm)	L (mm)	M (mm)	N (mm)
KAB36SC2630AC3	1800	1230	1600	450	750	650	1155	1255

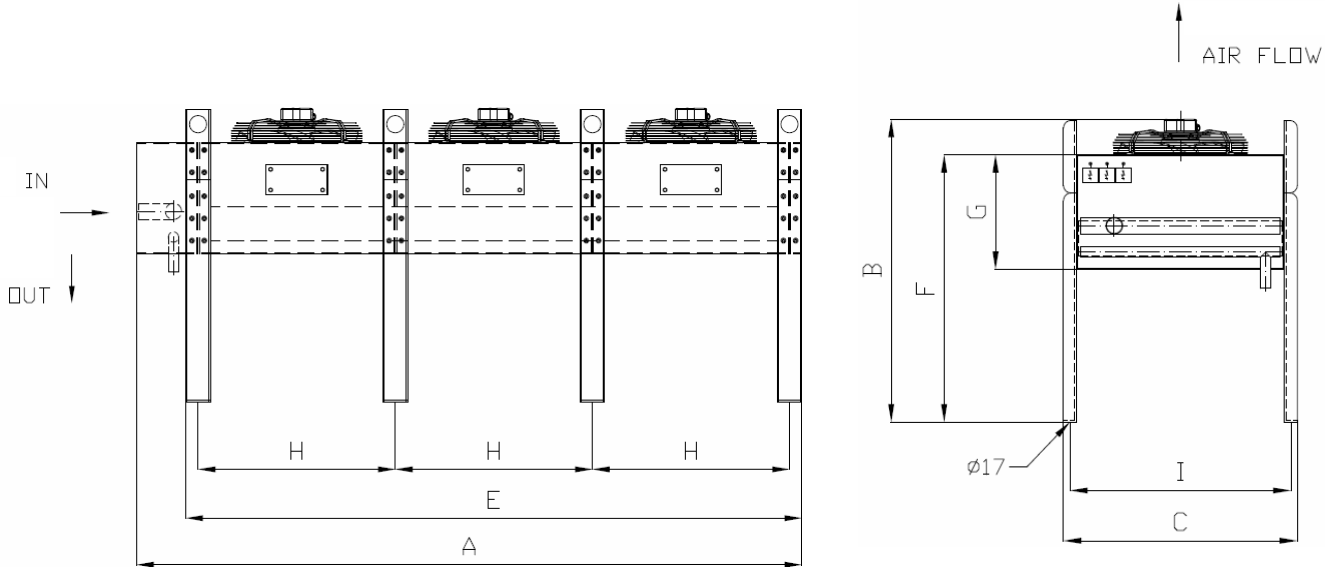


KARYER KAB CONDENSERS with AC motors

Condenser Dimensions (cont'd)

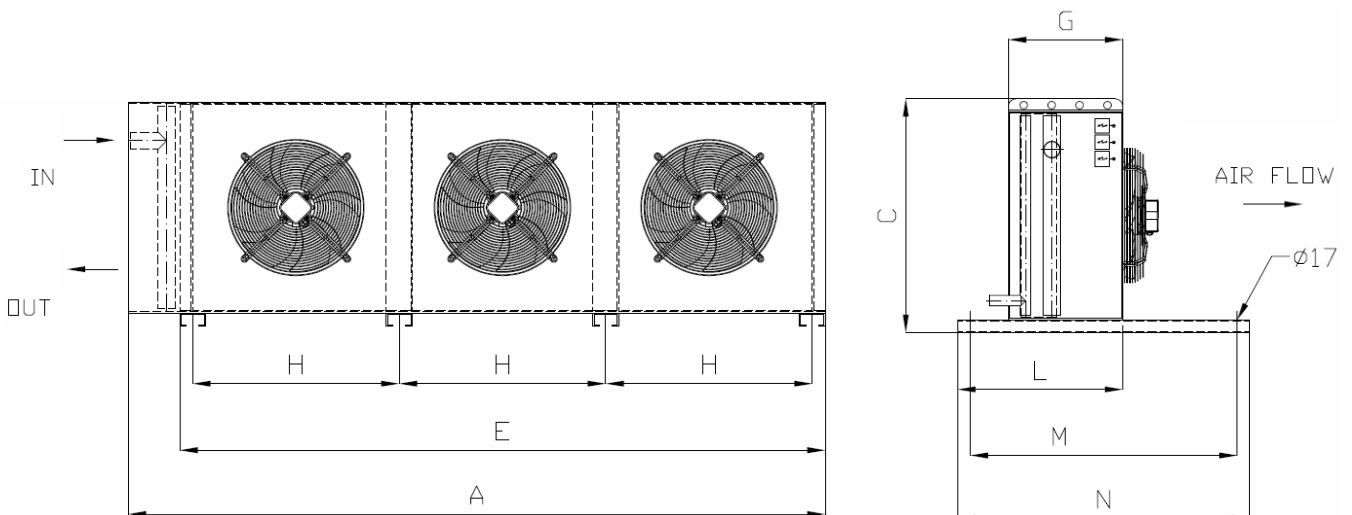
Horizontal Mount - Dimension Diagram: KAB14H

Condenser Model (3 x 630mm AC Fans)	A (mm)	B (mm)	C (mm)	E (mm)	F (mm)	G (mm)	H (mm)	I (mm)
KAB54SC3630AC3	2550	1200	1230	2350	1050	450	750	1180



Vertical Mount - Dimension Diagram: KAB14V

Condenser Model (3 x 630mm AC Fans)	A (mm)	C (mm)	E (mm)	G (mm)	H (mm)	L (mm)	M (mm)	N (mm)
KAB54SC3630AC3	2550	1230	2350	450	750	650	1155	1255

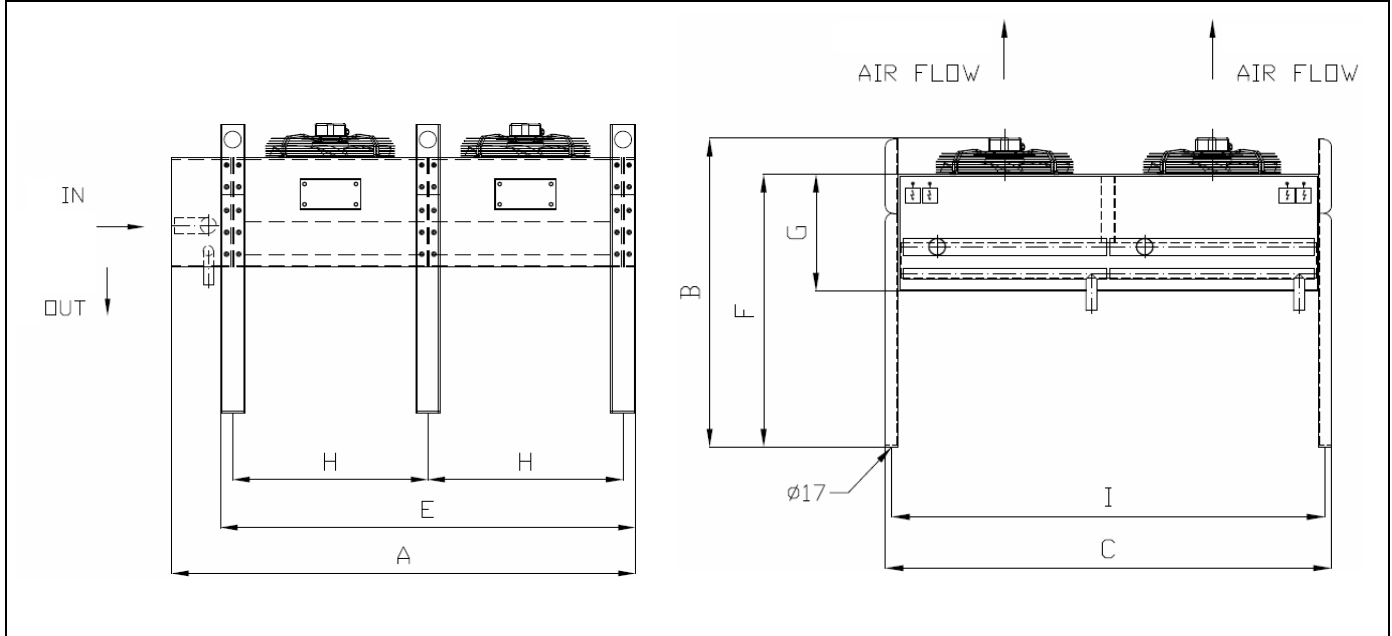


KARYER KAB CONDENSERS with AC motors

Condenser Dimensions (cont'd)

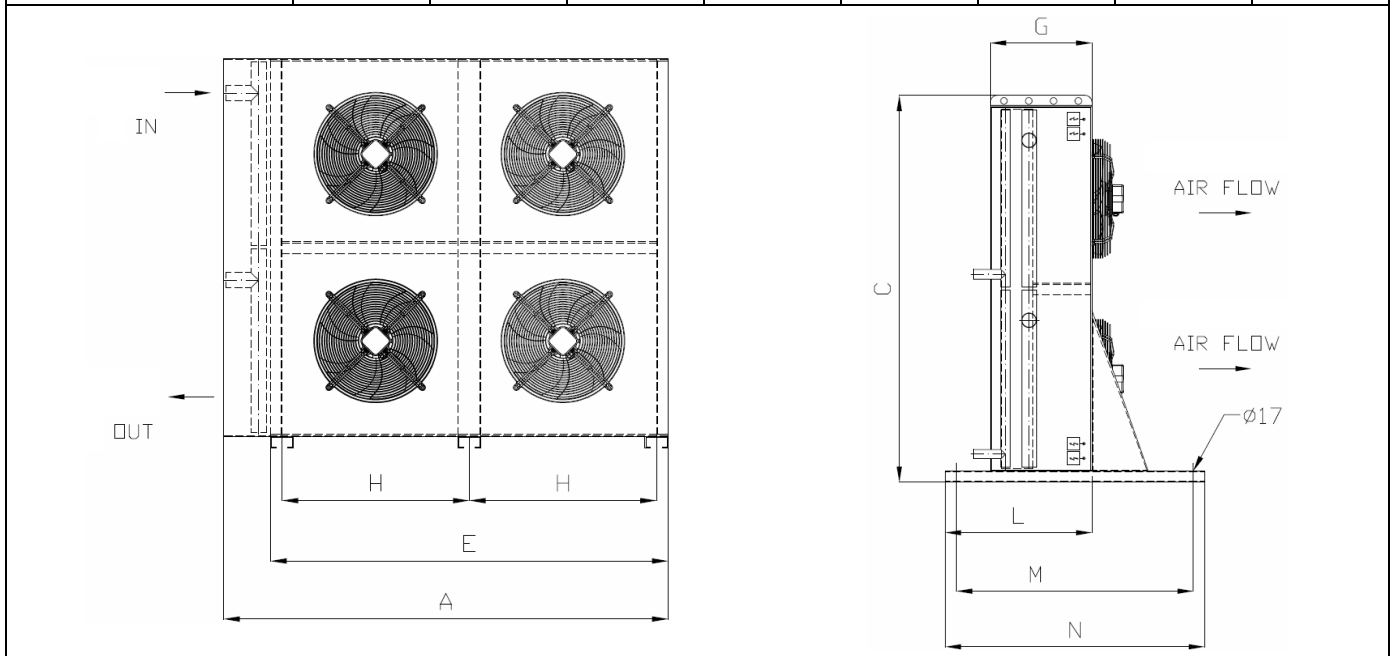
Horizontal Mount - Dimension Diagram: KAB15H

Condenser Model (4 x 630mm AC Fans)	A (mm)	B (mm)	C (mm)	E (mm)	F (mm)	G (mm)	H (mm)	I (mm)
KAB71TC4630AC3	1800	1200	2310	1600	1050	450	750	2260
KAB89TC4630AC3	1800	1200	2310	1600	1050	450	750	2260



Vertical Mount - Dimension Diagram: KAB15V

Condenser Model (4 x 630mm AC Fans)	A (mm)	C (mm)	E (mm)	G (mm)	H (mm)	L (mm)	M (mm)	N (mm)
KAB71TC4630AC3	1800	2310	1600	450	750	650	1155	1255
KAB89TC4630AC3	1800	2310	1600	450	750	650	1155	1255

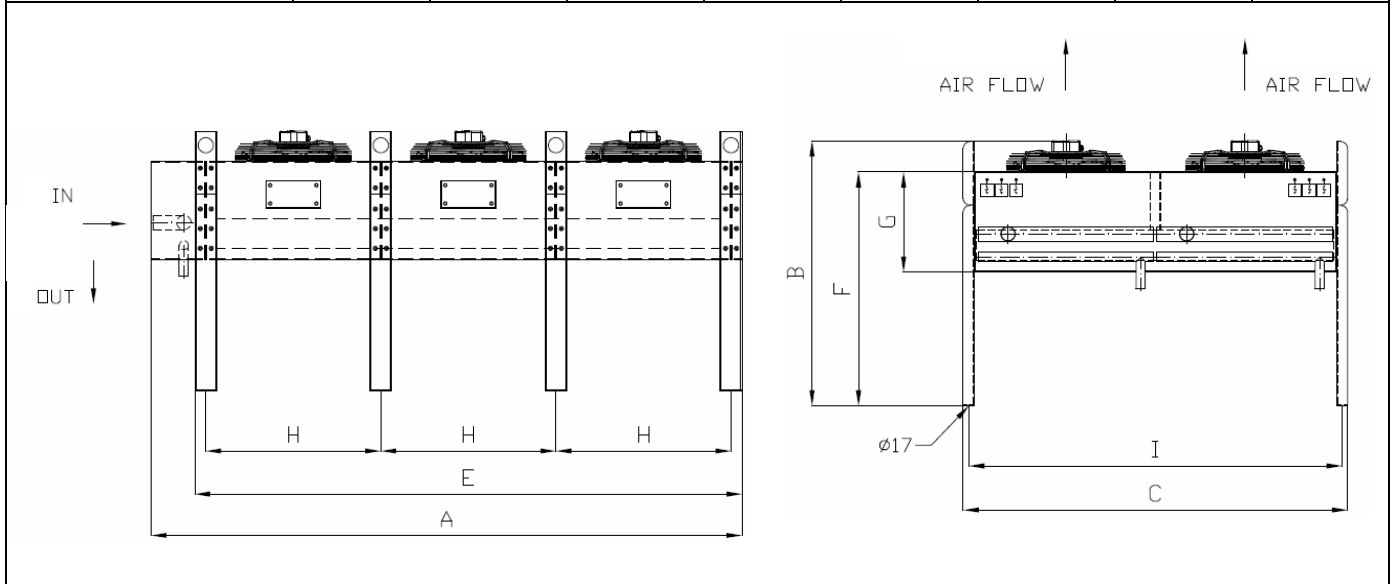


KARYER KAB CONDENSERS with AC motors

Condenser Dimensions (cont'd)

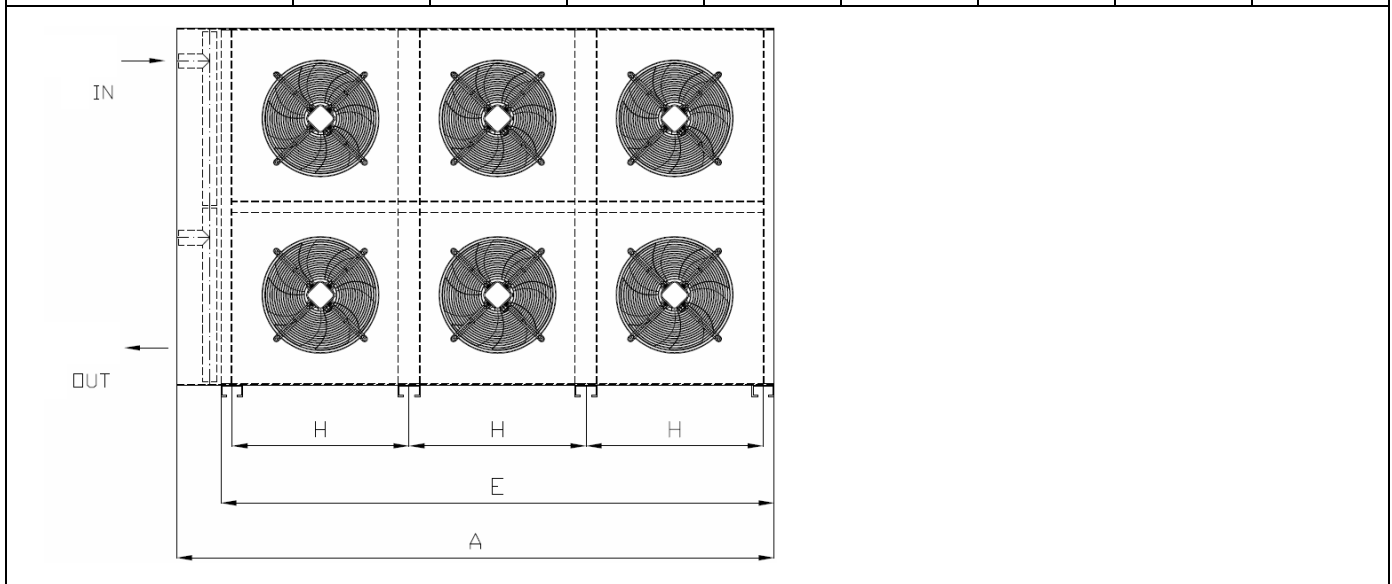
Horizontal Mount - Dimension Diagram: KAB16H

Condenser Model (6 x 630mm AC Fans)	A (mm)	B (mm)	C (mm)	E (mm)	F (mm)	G (mm)	H (mm)	I (mm)
KAB106TC6630AC3	2550	1200	2310	2350	1050	450	750	2260



Vertical Mount - Dimension Diagram: KAB16V

Condenser Model (6 x 630mm AC Fans)	A (mm)	C (mm)	E (mm)	G (mm)	H (mm)	L (mm)	M (mm)	N (mm)
KAB106TC6630AC3	2550	2310	2350	450	750	650	1155	1255



KARYER KAB CONDENSERS with AC motors

Condenser Shipping Dimensions & Weights

KAB Condenser Models	Shipping Package Dimensions			Shipping Weight (Kg)
	Depth (mm)	Width (mm)	Height (mm)	

500mm Diameter Fans

KAB21SC2500AC1	950	1650	1060	192
KAB23SC2500AC1	950	1650	1060	203
KAB31SC3500AC1	950	2300	1060	269

630mm Diameter Fans

KAB36SC2630AC3	950	1850	1370	269
KAB54SC3630AC3	950	2600	1370	380
KAB71TC4630AC3	950	1850	2450	475
KAB89TC4630AC3	950	1850	2450	546
KAB106TC6630AC3	950	2600	2450	670

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

Condenser Spare Parts

KAB Condenser Models	Fan Motor Qty	Fan Motors (AC)		
		Model	Fan Diameter	Voltage

500mm Diameter Fans

KAB21SC2500AC1	2	FN050-6EK.4F.V7P1 Ziehl-Abegg Fan Assembly	500mm	230V / 1 Phase / 50Hz
KAB23SC2500AC1	2			
KAB31SC3500AC1	3			

630mm Diameter Fans

KAB36SC2630AC3	2	S6D630-AN01-01 ebm-papst Fan Assembly	630mm	400V / 3 Phase / 50Hz
KAB54SC3630AC3	3			
KAB71TC4630AC3	4			
KAB89TC4630AC3	4			
KAB106TC6630AC3	6			