Refrigeration & Air Conditioning Product Catalogue

ICEAGE Refrigeration

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No. 666 Tiantong south road
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About Us

ICEAGE was established in 2000 to supply equipments and spare parts for HVAC/R industry. Over the past years, ICEAGE has earned its reputation as the leading supplier among customers due to its experience, professionalism and integrity.

Dedicated ICEAGE team attends to each customer's specific requirements and helps customers make informed buying decisions.

Through a growing network of over 100 suppliers after filtration in China, ICEAGE strives to work together with our customers and manufacturers, to supply a product based on requirements of performance, price and application.

Our Vision

ICEAGE is committed to providing the best services and meeting the needs of businesses through reliable quality, competitive price, and rapid delivery.

Our hope is to grow and do business with you for shared benefit not only for ICEAGE, but also for you as closely connected business partner.

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Contents

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Refrigerant Gas

ICEAGE provides Refrigerant Gas with top quality. Wide range and timely delivery are our advantages.

The standard package method is disposable cylinder or can type. The recycled cylinder, ton cylinder etc is also available on request.

Find Out More

For more product infomation, please contact ICEAGE sales team or visit: www.iceage-hvac.com

Refrigerant gas in 30lb disposable cylinder.

Refrigerant gas in disposable can for auto-mobile a/c.

Item	Regular Packaging	ODP	GWP	Molecular Weight	Boiling Point °C	Critical Temperature °C	Critical Pressure Mpa	Purity %	Moisture PPm	Acidity MMp	Vapor Residue PPm
R-22	30lb/13.6kg	0.034	1700	86.47	-40.8	96.2	4.99	≥99.9	≤10	≤1	≤100
R-134A	30lb/13.6kg	0	1200	102.03	-26.1	101.1	4.05	≥99.9	≤10	≤1	≤100
R-404A	24lb/10.9kg	0	3800	97.6	-46.5	72.1	3.74	≥99.9	≤10	≤1	≤100
R-407C	25lb/11.3kg	0	1700	86.2	-43.8	87.3	4.63	≥99.9	≤10	≤1	≤100
R-410A	25lb/11.3kg	0	2000	72.58	-51.6	72.5	4.95	≥99.9	≤10	≤1	≤100
R-507	25lb/11.3kg	0	3900	98.86	-47.1	70.9	3.79	≥99.9	≤10	≤1	≤100
R-600A	11lb/5.0kg	0	3	58.12	-11.7	134.71	3.64	≥99.9	≤10	≤1	≤100
R-125	ISO Tank	0	3400	120.2	-48.1	66.2	3.63	≥99.9	≤10	≤1	≤100
R-141B	250kg	0.11	0.09	116.95	32.05	204.15	4.25	≥99.9	≤30	≤1	≤100
R-142B	30lb/13.6kg	0.043	2400	100.5	-9.8	136.45	4.15	≥99.9	≤10	≤1	≤100
R-152A	ISO Tank	0	120	66.05	-24	113.3	4.52	≥99.9	≤10	≤1	≤100
R-290	11lb/5.0kg	0	0.01	44.1	-42.07	96.67	4.24	≥99.9	≤20	≤1	≤100
R-32	ISO Tank	0	550	52.02	-51.7	78.25	5.81	≥99.9	≤10	≤1	≤100
R-406A	30lb/13.6kg	0.038	2060	89.86	-32.7	116.5	4.88	≥99.9	≤10	≤1	≤100
R-415B	30lb/13.6kg	0.009	530	70.2	-26.72	124	4.768	≥99.9	≤10	≤1	≤100
R-417A	25lb/11.3kg	0	-	106.75	-41.8	89.9	4.10	≥99.9	≤10	≤1	≤100

Copper Tube

Copper Tubes are used mainly to transport refrigerant gas, liquids in refrigeration and air conditioning units as well as heat exchangers.

ICEAGE copper tubes are made of C12200 DHP. Pancake coil and straight length are in accordance with both ASTM B-280 and EN 12735-1.

ICEAGE offers pancake coils in soft annealed temper, while for straight length in hard drawn temper.

Size Available

Standard sizes for Pancake Coil and Straight Length are shown in the following table. Other dimensions and tempers are available on request.

Dimensions (O.D. x thickness) to ASTM B-280	Dimensions (O.D. x thickness) to EN 12735-1	Length for Pancake Coil	Length for Straight Length
Inch	mm	m	m
1/4 (6.35mm) x 0.030	**6** x 1	15 / 30 / 50	3 / 5 / 5.8
5/16 (7.92mm) x 0.032	**8** x 1	15 / 30 / 50	3 / 5 / 5.8
3/8 (9.52mm) x 0.032	**10** x 1	15 / 30 / 50	3 / 5 / 5.8
1/2 (12.7mm) x 0.032	**12** x 1	15 / 30 / 50	3 / 5 / 5.8
5/8 (15.9mm) x 0.035	**15** x 1	15 / 30 / 50	3 / 5 / 5.8
3/4 (19.1mm) x 0.035	**16** x 1	15 / 30 / 50	3 / 5 / 5.8
3/4 (19.1mm) x 0.042	**18** x 1	15 / 30 / 50	3 / 5 / 5.8
7/8 (22.3mm) x 0.045	**22** x 1	15 / 30 / 50	3 / 5 / 5.8
1-1/8 (28.6mm) x 0.050	**28** x 1.5	-	5 / 5.8
1-3/8 (34.9mm) x 0.055	**35** x 1.5	-	5 / 5.8
1-5/8 (41.3mm) x 0.060	**42** x 1.5	-	5 / 5.8
2-1/8 (54.0mm) x 0.070	**54** x 2	-	5 / 5.8
2-5/8 (66.7mm) x 0.080	**64** x 2	-	5 / 5.8
3-1/8 (79.4mm) x 0.090	**76.1** x 2	-	5 / 5.8
3-5/8 (92.1mm) x 0.100	**88.9** x 2	-	5 / 5.8
4-1/8 (105mm) x 0.110	**108** x 2.5	-	5 / 5.8

Packaging

All the tubes are ended with caps to ensure cleanness of the inner surface during transportation and storage.

Pancake coils are shrink-wrapped and in cardboard box; straight lengths in bundles in plastic bag or in wooden boxes.

Cu-ETP

ICEAGE provides copper tube with Cu-ETP (UNS C11000) which has a very high electrical and thermal conductivity. It is widely used in electrical terminals, switches, conductors, cables, etc.

Please contact ICEAGE sales team or visit: www.iceage-hvac.com for more information.

Level Wound Coil

ICEAGE Level Wound Coil copper tube is a convenient solution for manufacturers and contractors when large quantity soft tubing is required.

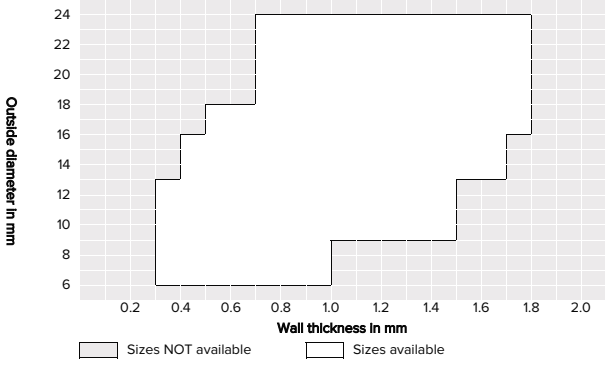
Copper material is made of C12200 DHP and in accordance with ASTM B-743. Available in soft annealed, light annealed and hard drawn temper.

Packaging

LWCs are supplied with board reels (approx. 100kg or 150kg each coil) on wooden pallets and shrink-wrapped in PE foil.

Size Available

ICEAGE LWCs are available in sizes from 6mm to 22.22mm depending on the wall thickness.



Capillary

Capillary copper tube is used for restrictor applications in HVACR system.

ICEAGE Capillary copper tube is manufactured from Cu-DHP copper and supplied in accordance with ASTM B-360.

It can be supplied in 5kg coil, then in cardboard box with PE bag.

Standard sizes for Capillary are shown in the following table, other sizes can be provided on request, taking into account volume and manufacturing lead time.

Inside Diameter		Outside Diameter		Wall Thickness	
Inch	mm	Inch	mm	Inch	mm
0.026	0.660	0.072	1.83	0.023	0.584
0.028	0.711	0.072	1.83	0.022	0.559
0.031	0.787	0.081	2.06	0.025	0.635
0.039	0.990	0.087	2.21	0.024	0.610
0.059	1.50	0.112	2.84	0.027	0.673
0.064	1.63	0.125	3.18	0.031	0.775
0.070	1.78	0.125	3.18	0.028	0.699
0.080	2.03	0.145	3.68	0.033	0.826
0.090	2.29	0.145	3.68	0.028	0.699

Insulated Copper Tube Set

ICEAGE insulated copper tube set consists of seamless copper tube (Cu-DHP) with high quality insulation layer widely used for the installation of split air conditioners and refrigeration equipments.

Copper tubes are produced according to ASTM B-280 with the temper of soft annealed.

All sizes suitable for R-410a refrigerant and other high pressure refrigerants.

◀ Spiral Design

ICEAGE specially designed spiral section provides outstanding benefit of flexibility.

The tube set can be bended more easily even without bender tools during installation. Therefore the damage of bending can be properly prevented.

Insulation Layer

The insulation layer is made of cross linked foam polyethylene with closed cells. The insulation is covered with embossed polyethylene film to prevent the foam creasing.

Insulation Properties

Thermal Conductivity (average temp. 20 °C) Kcal/mh °C	Tensile Strength N/cm²	Water Absorption g/100cm²	Max. Temp. of Heat Resistant
≤ 0.037	≥ 24.5	≤ 0.01	120 °C

Specifications

Type	Copper Tube Size Diameter x Thickness	Length m	Ending
Single	1/4" x 0.8mm	3m, 4m 20m, or on request	Brass nuts or cap
Single	3/8" x 0.8mm		
Single	1/2" x 0.8mm		
Single	5/8" x 1.0mm		
Single	3/4" x 1.0mm		
Twin Pair	1/4" x 0.8mm – 3/8" x 0.8mm		
Twin Pair	1/4" x 0.8mm – 1/2" x 0.8mm		
Twin Pair	1/4" x 0.8mm – 5/8" x 1.0mm		
Twin Pair	3/8" x 0.8mm – 1/2" x 0.8mm		
Twin Pair	3/8" x 0.8mm – 5/8" x 1.0mm		
Twin Pair	3/8" x 0.8mm – 3/4" x 1.0mm		
Twin Pair	1/2" x 0.8mm – 3/4" x 1.0mm		

Accessories and Packaging

Those two accessories combinations consist of necessary components that for the application of air conditioners installation.

Please contact ICEAGE sales team for detailed information.

ICEAGE insulated copper tubes and accessories come with individual pizza box. ▼

Accessories group 1

a). Drain pipe (dia. 16mm x 3m)
b). PVC tape adhesive (18mm x 0.13mm x 10m)
c). PVC tape non-adhesive (50mm x 0.15mm x 20m)
d). Electrical wire
e). Paste (200g)
f). Insulation pad (300 x 200mm)
g). Peg (4pcs)
h). Wall entry fitting
i). Pipe tie

Accessories group 2

a). Drain pipe (dia. 16mm x 3m)
b). Paste (200g)
c). PVC tape non-adhesive (50mm x 0.15mm x 20m)
d). Wall entry fitting
e). Wire pipe.

Compressor

ICEAGE supplies original branded compressors in a variety of applications of industrial & commercial refrigeration, air conditioning and household refrigerators.

Copeland Scroll

ZB & ZR Series Scroll Compressor

Designation

Z B 15K Q E

- Z: Scroll compressor
- B: high and medium temperature / R: low temperature
- 15K: Nominal capacity rating in BTU / h ("K" = x 1000, "M" = x 10000)
- Q: Model variation
- E: Blank = mineral oil / E = ester oil

Performance Data for ZR series

Model	Cond. Temp.	Cooling Capacity (kW) R-22 Evaporating Temp. °C							Cooling Capacity (kW) R-407C Evaporating Temp. °C							Cooling Capacity (kW) R-134a Evaporating Temp. °C						
		-20	-15	-10	-5	0	5	10	-20	-15	-10	-5	0	5	10	-20	-15	-10	-5	0	5	10
ZR18K3E	30	1.8	2.2	2.7	3.4	4.0	4.8	5.7	1.6	2.1	2.6	3.2	3.9	4.7	5.7	0.9	1.3	1.6	2.1	2.6	3.2	3.9
	40	1.5	2.0	2.5	3.0	3.7	4.4	5.2	1.4	1.8	2.3	2.8	3.5	4.2	5.1	0.8	1.1	1.4	1.8	2.3	2.9	3.5
	50	-	-	2.1	2.7	3.3	4.0	4.7	-	-	1.9	2.4	3.0	3.7	4.5	-	0.9	1.2	1.6	2.0	2.5	3.1
ZR22K3E	30	2.1	2.7	3.4	4.1	5.0	6.0	7.1	1.9	2.4	3.0	3.8	4.7	5.7	6.8	1.2	1.6	2.1	2.6	3.3	4.0	4.9
	40	1.9	2.4	3.0	3.7	4.5	5.4	6.4	1.6	2.1	2.7	3.4	4.2	5.2	6.3	1.1	1.4	1.8	2.3	2.9	3.6	4.4
	50	-	-	2.6	3.3	4.0	4.9	5.8	-	-	2.3	2.9	3.7	4.6	5.6	-	1.2	1.6	2.0	2.6	3.2	3.9
ZR28K3E	30	2.8	3.6	4.4	5.4	6.5	7.7	9.1	2.3	3.1	3.9	4.9	6.1	7.4	8.9	1.5	2.0	2.7	3.4	4.3	5.3	6.4
	40	2.5	3.2	4.0	4.9	5.9	7.0	8.3	2.1	2.7	3.5	4.4	5.5	6.7	8.1	1.4	1.8	2.3	3.0	3.8	4.7	5.8
	50	-	-	3.5	4.3	5.3	6.3	7.5	-	-	3.0	3.8	4.8	5.9	7.2	-	1.6	2.0	2.7	3.4	4.2	5.1
ZR34K3E	30	3.4	4.3	5.3	6.4	7.7	9.2	10.9	2.9	3.8	4.7	5.9	7.2	8.8	1.1	2.0	2.5	3.2	4.1	5.0	6.1	7.4
	40	3.0	3.8	4.7	5.8	7.0	8.4	9.9	2.5	3.3	4.2	5.2	6.5	7.9	9.6	1.7	2.2	2.9	3.6	4.5	5.6	6.7
	50	-	-	4.2	5.2	6.3	7.5	9.0	-	-	3.5	4.5	5.7	7.0	8.5	-	1.9	2.5	3.2	4.0	4.9	6.0
ZR40K3E	30	4.0	5.0	6.2	7.5	9.1	10.8	12.8	3.3	4.3	5.5	6.8	8.4	10.3	12.3	2.2	2.9	3.8	4.8	5.9	7.1	8.5
	40	3.6	4.5	5.6	6.8	8.2	9.9	11.7	2.9	3.8	4.9	6.2	7.7	9.4	11.3	1.8	2.5	3.3	4.2	5.2	6.4	7.8
	50	-	-	4.9	6.1	7.4	8.9	10.6	-	-	4.2	5.3	6.7	8.2	10.0	-	2.1	2.8	3.6	4.6	5.7	7.0
ZR48K3E	30	4.8	6.0	7.4	9.1	10.9	13.0	15.4	4.4	5.5	6.9	8.6	10.5	12.7	15.3	2.7	3.6	4.6	5.7	7.1	8.7	10.5
	40	4.2	5.4	6.7	8.3	10.0	12.0	14.2	3.8	4.9	6.1	7.7	9.4	11.5	13.8	2.3	3.1	4.1	5.1	6.4	7.8	9.5
	50	-	-	5.9	7.3	8.9	10.8	12.8	-	-	5.3	6.7	8.3	10.1	12.3	-	2.6	3.4	4.4	5.6	6.9	8.4
ZR61KCE	30	5.6	7.1	9.0	11.1	13.5	16.0	18.8	5.8	7.1	8.8	10.7	13.1	15.9	19.4	3.5	4.6	5.8	7.3	9.0	11.0	13.4
	40	4.9	6.3	8.0	10.0	12.2	14.7	17.3	5.1	6.6	8.3	10.1	12.2	14.7	17.6	3.1	4.1	5.2	6.6	8.1	10.0	12.1
	50	-	-	6.9	8.7	10.8	13.1	15.6	-	-	7.1	8.9	10.9	13.1	15.6	-	3.5	4.6	5.8	7.2	8.9	10.8
ZR72KCE	30	7.4	9.2	11.3	13.7	16.3	19.4	22.8	6.4	8.2	10.4	12.8	15.6	18.9	22.6	4.3	5.6	7.1	8.8	10.9	13.3	16.0
	40	6.5	8.3	10.2	12.5	15.0	17.8	21.0	5.3	7.0	9.0	11.3	13.9	16.8	20.3	3.8	4.8	6.2	7.8	9.7	11.9	14.5
	50	-	-	9.0	11.0	13.4	15.9	18.9	-	-	7.6	9.7	12.1	14.8	17.9	-	4.2	5.3	6.8	8.5	10.5	12.8
ZR81KCE	30	8.0	10.1	12.5	15.2	18.2	21.5	24.9	6.9	9.0	11.4	14.1	17.3	20.9	25.2	4.9	6.2	7.9	9.8	12.0	14.6	17.6
	40	7.1	9.0	11.2	13.9	16.8	20.0	23.5	5.8	7.8	10.1	12.7	15.6	19.0	23.0	4.3	5.6	7.0	8.8	10.8	13.2	16.0
	50	-	-	9.9	12.2	15.0	18.0	21.4	-	-	8.6	10.9	13.6	16.7	20.4	-	4.8	6.2	7.7	9.6	11.8	14.3
ZR94KCE	30	9.1	11.7	14.6	17.8	21.5	25.7	30.5	9.1	11.5	14.2	17.4	21.1	25.3	30.5	-	7.1	9.0	11.2	13.8	16.7	20.1
	40	7.6	10.2	13.0	16.1	19.6	23.5	28.0	7.3	9.9	12.6	15.7	19.3	23.3	27.9	-	6.3	8.0	10.0	12.4	15.1	18.3
	50	-	-	11.1	14.1	17.4	21.1	25.3	-	-	10.3	13.4	16.8	20.6	24.9	-	-	7.0	8.8	11.0	13.5	16.3
ZR108KCE	30	10.9	13.6	16.7	20.2	24.3	28.9	34.0	10.2	12.8	15.9	19.6	23.9	29.0	35.0	-	8.2	10.3	12.8	15.7	19.1	23.0
	40	9.7	12.3	15.1	18.4	22.2	26.5	31.5	8.8	11.3	14.2	17.6	21.5	26.2	31.5	-	7.2	9.2	11.5	14.2	17.3	20.9
	50	-	-	13.4	16.5	20.0	23.9	28.4	-	-	12.2	15.3	18.9	23.0	27.9	-	-	8.0	10.1	12.5	15.4	18.7
ZR125KCE	30	12.9	16.0	19.7	24.0	28.8	34.0	40.0	11.9	15.0	18.6	22.8	27.8	33.5	40.0	-	9.4	11.8	14.7	18.1	22.0	26.4
	40	11.6	14.4	17.8	21.7	26.2	31.0	36.5	10.1	13.1	16.5	20.5	25.2	30.5	36.5	-	8.3	10.5	13.1	16.3	19.9	24.0
	50	-	-	15.8	19.4	23.5	28.1	33.5	-	-	14.0	17.7	22.0	27.0	32.5	-	-	9.1	11.5	14.3	17.6	21.4
ZR144KCE	30	14.9	18.5	22.8	27.6	33.0	39.0	-	13.0	16.7	21.0	25.9	31.5	38.0	45.5	-	12.5	15.2	18.4	22.0	25.9	30.0
	40	13.2	16.5	20.4	25.0	30.0	36.0	42.0	10.6	14.5	18.7	23.4	28.9	35.0	42.0	-	11.1	13.6	16.5	19.9	23.7	27.8
	50	-	-	17.8	21.9	26.7	32.0	38.0	-	-	15.5	20.1	25.2	31.0	37.5	-	-	11.5	14.2	17.4	20.9	24.8
ZR160KCE	30	15.6	19.9	24.6	29.8	35.5	42.0	49.5	13.6	17.8	22.8	28.7	35.5	43.5	52.5	-	13.1	16.2	19.7	23.5	27.9	33.0
	40	12.0	16.7	21.7	26.9	32.5	38.5	45.5	11.0	14.9	19.5	24.9	31.5	38.5	47.5	-	11.0	14.3	17.7	21.4	25.5	30.0
	50	-	-	17.5	22.9	28.6	34.5	41.0	-	-	15.9	20.8	26.7	33.5	41.5	-	-	11.5	15.0	18.8	22.8	27.1
ZR190KCE	30	18.3	23.4	29.0	35.5	42.5	50.5	59.5	16.6	21.3	26.8	33.0	40.5	49.0	58.5	-	15.5	19.2	23.4	28.1	33.5	39.5
	40	14.9	20.0	25.6	31.5	38.5	46.0	54.5	13.9	18.5	23.8	29.8	36.5	44.5	54.0	-	13.3	16.9	21.0	25.5	30.5	36.0
	50	-	-	21.3	27.3	34.0	41.0	49.0	-	-	19.8	25.5	32.0	39.5	47.5	-	-	14.1	18.0	22.4	27.2	32.5
ZR250KCE	30	24.8	31.0	38.0	45.5	54.5	65.5	77.5	23.3	29.3	36.5	45.0	54.4	66.0	78.5	-	18.8	23.6	29.3	36.0	44.0	53.0
	40	21.1	27.4	34.0	41.5	50.0	59.5	70.5	20.1	25.7	32.0	40.0	49.0	59.5	71.5	-	16.6	21.0	26.3	32.5	39.5	48.0
	50	-	-	29.6	37.0	45.0	54.0	64.0	-	-	27.5	34.5	42.5	52.0	63.0	-	-	18.4	23.1	28.8	35.5	43.0
ZR310KCE	30	30.0	37.5	46.5	56.5	68.0	81.0	96.0	28.5	36.5	46.0	57.0	69.5	84.5	101.5	-	23.2	29.1	36.0	44.5	54.0	65.5
	40	26.3	33.5	41.5	51.0	62.0	74.5	88.5	24.0	31.0	39.5	49.5	61.5	75.0	90.5	-	20.5	26.0	32.5	40.0	49.0	59.5
	50	-	-	36.5	45.0	55.5	67.0	80.5	-	-	33.5	42.5	53.0	65.0	79.0	-	-	22.8	28.7	35.5	44.0	53.5

Performance Data for ZB series

Model	Cond. Temp.	Cooling Capacity (kW) R-22 Evaporating Temp. °C						Cooling Capacity (kW) R-404A Evaporating Temp. °C						Cooling Capacity (kW) R-134a Evaporating Temp. °C					
		-12	-10	-5	0	5	10	-25	-20	-15	-10	-5	0	5	-15	-10	-5	0	5	10
ZB15KQ	30	3.70	4.00	4.80	5.80	6.90	8.20	2.30	2.88	3.55	4.35	5.25	6.25	7.45	1.81	2.36	2.95	3.60	4.35	5.30
	40	3.30	3.55	4.35	5.20	6.25	7.40	1.87	2.40	3.00	3.70	4.45	5.35	6.35	1.54	1.98	2.57	3.15	3.85	4.70
	50	2.79	3.05	3.75	4.55	5.50	6.55	-	1.84	2.37	2.95	3.60	4.35	5.15	-	1.64	2.11	2.65	3.35	4.05
ZB19KQ	30	4.00	4.35	5.30	6.40	7.70	9.10	2.89	3.55	4.35	5.25	6.30	7.50	8.90	1.90	2.56	3.25	4.10	5.00	6.05
	40	3.65	3.95	4.85	5.85	7.00	8.30	2.49	3.05	3.75	4.55	5.45	6.50	7.70	1.67	2.19	2.90	3.65	4.50	5.40
	50	3.20	3.50	4.35	5.25	6.30	7.50	-	2.54	3.10	3.75	4.55	5.45	6.45	-	1.88	2.45	3.15	3.95	4.80
ZB21KQ	30	5.15	5.60	6.80	8.15	9.65	11.40	3.45	4.30	5.25	6.35	7.65	9.10	10.75	2.58	3.40	4.20	5.15	6.30	7.55
	40	4.65	5.05	6.20	7.45	8.85	10.50	3.00	3.70	4.55	5.50	6.60	7.90	9.35	2.27	2.90	3.80	4.65	5.65	6.80
	50	4.05	4.40	5.50	6.60	7.90	9.45	-	3.10	3.75	4.55	5.50	6.55	7.80	-	2.51	3.20	4.00	5.00	6.00
ZB26KQ	30	5.65	6.10	7.45	9.00	10.75	12.75	4.05	5.00	6.10	7.35	8.85	10.55	12.50	2.69	3.60	4.55	5.60	6.80	8.15
	40	5.10	5.55	6.80	8.20	9.85	11.70	3.50	4.30	5.25	6.35	7.65	9.10	10.80	2.28	3.00	4.00	5.00	6.10	7.35
	50	4.50	4.90	6.05	7.35	8.85	10.55	-	3.55	4.35	5.30	6.40	7.65	9.10	-	2.55	3.35	4.25	5.40	6.55
ZB30KQ	30	6.15	6.80	8.60	10.70	13.05	15.70	4.75	5.90	7.20	8.70	10.45	12.45	14.65	3.50	4.60	5.75	7.05	8.55	10.25
	40	5.40	6.05	7.70	9.65	11.90	14.40	4.05	5.05	6.20	7.50	9.05	10.75	12.75	3.05	3.95	5.10	6.30	7.70	9.25
	50	4.60	5.15	6.80	8.55	10.60	12.90	-	4.15	5.10	6.20	7.50	9.00	10.75	-	3.35	4.30	5.40	6.75	8.15
ZB38KQ	30	8.15	8.90	11.00	13.40	16.00	18.80	5.90	7.30	8.90	10.80	12.95	15.40	18.20	4.30	5.65	7.05	8.65	10.55	12.70
	40	7.30	8.00	9.95	12.20	14.65	17.30	5.10	6.25	7.70	9.30	11.20	13.35	15.80	3.80	4.90	6.35	7.80	9.50	11.45
	50	6.25	6.90	8.80	10.80	13.10	15.60	-	5.20	6.35	7.75	9.35	11.20	13.30	-	4.25	5.40	6.75	8.40	10.15
ZB45KQ	30	10.35	11.20	13.55	16.30	19.30	22.80	6.95	8.60	10.55	12.75	15.30	18.20	21.50	5.20	6.80	8.45	10.40	12.65	15.20
	40	9.40	10.20	12.40	14.90	17.80	21.00	6.00	7.40	9.05	10.95	13.15	15.70	18.60	4.50	5.75	7.50	9.25	11.30	13.65
	50	8.20	8.95	11.10	13.35	16.00	18.90	-	6.15	7.50	9.10	10.95	13.10	15.60	-	4.90	6.25	7.85	9.85	11.95
ZB50KQ	30	11.99	12.91	15.70	18.90	22.60	26.90	7.85	10.00	12.40	15.00	18.00	21.50	25.40	6.20	7.80	9.65	11.80	14.25	17.10
	40	10.60	11.66	14.35	17.40	20.80	24.70	6.10	8.25	10.50	12.90	15.60	18.60	22.00	5.55	6.95	8.65	10.60	12.85	15.40
	50	8.90	9.75	12.55	15.50	18.80	22.40	-	5.90	8.10	10.35	12.75	15.40	18.30	-	6.10	7.60	9.30	11.30	13.60
ZB58KQ	30	13.35	14.50	17.70	21.40	25.70	30.50	8.90	11.25	13.95	17.00	20.60	24.60	29.20	6.95	8.75	10.85	13.25	16.00	19.20
	40	11.80	12.95	16.10	19.60	23.50	28.00	7.05	9.25	11.70	14.40	17.50	21.00	24.90	6.20	7.80	9.70	11.90	14.40	17.30
	50	10.15	11.05	14.15	17.40	21.10	25.30	-	6.90	9.10	11.50	14.15	17.10	20.40	-	6.85	8.50	10.45	12.70	15.30
ZB66KQ	30	15.30	16.60	20.10	24.20	28.80	34.00	10.35	12.80	15.60	18.90	22.60	27.00	32.00	8.00	10.00	12.40	15.20	18.40	22.00
	40	13.95	15.10	18.40	22.20	26.50	31.50	8.90	11.10	13.55	16.40	19.60	23.40	27.60	7.10	8.90	11.05	13.60	16.50	19.80
	50	12.45	13.40	16.50	20.00	23.90	28.40	-	9.15	11.30	13.70	16.40	19.60	23.10	-	7.80	9.70	11.95	14.55	17.50
ZB76KQ	30	18.00	19.60	23.80	28.10	33.00	38.50	12.40	15.40	18.80	22.80	27.40	32.50	38.50	9.15	11.45	14.20	17.40	21.10	25.20
	40	16.40	17.80	21.70	25.80	30.50	35.50	10.90	13.30	16.10	19.40	23.30	27.80	33.00	8.15	10.20	12.65	15.60	18.90	22.70
	50	14.70	15.80	19.50	23.40	27.70	32.50	-	11.20	13.20	15.70	18.70	22.20	26.40	-	8.95	11.10	13.65	16.60	20.00
ZB92KC	30	21.40	23.10	27.70	33.00	39.50	46.50	14.80	18.20	22.10	26.60	32.00	38.00	44.50	10.75	13.80	17.00	20.70	25.00	30.00
	40	19.50	21.00	25.30	30.00	36.00	42.50	12.90	15.80	19.10	23.00	27.50	32.50	38.50	9.40	11.85	15.20	18.50	22.40	26.80
	50	17.30	18.70	22.80	27.20	32.50	38.00	-	13.25	16.10	19.30	23.00	27.40	32.50	-	10.25	12.85	15.90	19.70	23.60
ZB11MC	30	26.10	28.10	34.00	40.50	48.00	56.50	18.00	22.10	26.80	32.50	39.00	46.00	54.50	13.15	16.90	20.70	25.20	30.50	36.50
	40	23.70	25.60	31.00	37.00	44.00	52.00	15.50	19.10	23.30	28.10	33.50	40.00	47.50	11.50	14.45	18.50	22.50	27.30	32.50
	50	21.00	22.80	27.80	33.50	39.50	47.00	-	15.90	19.50	23.50	28.20	33.50	40.00	-	12.40	15.60	19.30	23.90	28.80

Specification

ZR series R-22 / R-407C / R-134a

Model	Nominal Horsepower	Disp.	Oil Capacity	Suction	Discharge	Net Weight	Max. Operating Current (A)		Locked Rotor Current (A)	
	HP	m³/h	Liter	Inch	Inch	kg	PFJ	TFD	PFJ	TFD
ZR18K3E	1.5	4.4	0.70	3/4	1/2	20	10	-	35	-
ZR22K3E	2.0	5.3	1.00	3/4	1/2	22	11	4	47	24
ZR28K3E	2.5	6.8	1.00	3/4	1/2	25	15	5	61	32
ZR34K3E	2.8	8.0	1.10	3/4	1/2	26	17	6	76	40
ZR40K3E	3.5	9.4	1.10	3/4	1/2	27	23	7	100	46
ZR48K3E	4.0	11.4	1.36	7/8	1/2	31	23	10	114	50
ZR61KCE	5.0	14.4	1.66	7/8	1/2	43	30	11	150	65
ZR72KCE	6.0	17.1	1.77	7/8	1/2	39	-	13		74
ZR81KCE	6.8	18.7	1.77	7/8	3/4	39	-	15		101
ZR94KCE	8.0	22.1	2.65	1-1/8	7/8	57	-	16		95
ZR108KCE	9.0	24.9	3.38	1-3/8	7/8	60	-	17		111
ZR125KCE	10.0	29.1	3.38	1-3/8	7/8	61	-	19		118
ZR144KCE	12.0	33.2	3.38	1-3/8	7/8	61	-	22		118
ZR160KCE	13.0	36.4	3.38	1-3/8	7/8	65	-	28		140
ZR190KCE	15.0	43.3	3.38	1-3/8	7/8	66	-	34		174
ZR250KCE	20.0	56.6	4.70	1-5/8	1-3/8	140	-	41		225
ZR310KCE	25.0	71.4	6.80	1-5/8	1-3/8	160	-	52		272

ZB series R-22 / R-404A / R-134a

Model	Nominal Horsepower	Disp.	Oil Capacity	Suction	Discharge	Net Weight	Max. Operating Current (A)		Locked Rotor Current (A)	
	HP	m³/h	Liter	Inch	Inch	kg	PFJ	TFD	PFJ	TFD
ZB15KQ(E)	2.0	5.9	1.18	3/4	1/2	23	16	6	58	26
ZB19KQ(E)	2.5	6.8	1.45	3/4	1/2	25	18	6	61	32
ZB21KQ(E)	3.0	8.6	1.45	3/4	1/2	27	23	8	82	40
ZB26KQ(E)	3.5	9.9	1.45	3/4	1/2	28	24	10	97	46
ZB29KQ(E)	4.0	11.4	1.89	7/8	1/2	33	27	11	113	50
ZB38KQ(E)	5.0	14.5	1.89	7/8	1/2	38	-	12.5	-	65.5
ZB45KQ(E)	6.0	17.2	1.89	7/8	1/2	40	-	16.1	-	74
ZB48KQ(E)	7.5	19.8	2.51	7/8	3/4	59	-	17	-	101
ZB58KQ(E)	8.0	22.1	2.51	1-1/8	7/8	60	-	23	-	95
ZB66KQ(E)	9.0	25.7	3.25	1-1/8	7/8	60	-	24.2	-	111
ZB76KQ(E)	10.0	28.8	3.25	1-3/8	7/8	65	-	26.9	-	118
ZB88KQ	12.0	33.2	3.25	1-3/8	7/8	65	-	31	-	118
ZB95KC(E)	13.0	35.6	4.14	1-3/4	1-1/8	103	-	31	-	140
ZB11MC(E)	15.0	42.1	4.14	2-1/4	1-3/8	112	-	38	-	174

Semi-hermetic Reciprocating Compressor

Designation

4 F E S - 3 Y

- Number of cylinders
- Code for bore x stroke
- Code for Bitzer Ecoline series
- Code for ester oil charge
- Code for motor size
- Code for centrifugal lubrication

Performance Data for R-134a & R-404A

Model	Cond. Temp.	Cooling Capacity (kW) R-134a, Evaporating Temp. °C							Cond. Temp.	Cooling Capacity (kW) R-404A, Evaporating Temp. °C									
		10	5	0	-5	-10	-15	-20		5	0	-5	-10	-15	-20	-25	-30	-35	-40
2KES-05Y	40	2.77	2.25	1.81	1.42	1.09	0.82	0.58	30	4.29	3.57	2.94	2.39	1.92	1.51	1.16	0.87	0.61	0.40
	50	2.42	1.96	1.57	1.22	0.93	0.69	0.47	40	3.52	2.92	2.39	1.94	1.54	1.20	0.90	0.65	0.44	0.26
	60	2.09	1.69	1.35	1.05	0.79	0.57	0.39	50	2.81	2.32	1.89	1.52	1.19	0.91	0.67	0.46	0.29	0.14
2JES-07Y	40	3.54	2.88	2.31	1.82	1.40	1.04	0.74	30	5.67	4.73	3.92	3.21	2.60	2.07	1.62	1.23	0.90	0.63
	50	3.10	2.51	2.00	1.57	1.19	0.88	0.61	40	4.74	3.95	3.25	2.65	2.13	1.68	1.29	0.96	0.68	0.44
	60	2.69	2.17	1.73	1.34	1.02	0.74	0.50	50	3.85	3.19	2.62	2.12	1.68	1.30	0.98	0.70	0.47	0.27
2HES-1Y	40	4.65	3.82	3.10	2.49	1.96	1.52	1.14	30	-	5.92	4.91	4.04	3.28	2.63	2.07	1.59	1.18	0.84
	50	4.08	3.33	2.69	2.15	1.68	1.28	0.94	40	-	4.95	4.09	3.34	2.69	2.13	1.65	1.24	0.89	0.60
	60	3.51	2.85	2.29	1.81	1.39	1.04	0.74	50	-	4.00	3.29	2.67	2.13	1.66	1.25	0.91	0.62	0.37
2GES-2Y	40	5.40	4.45	3.63	2.93	2.32	1.81	1.37	30	8.23	6.89	5.73	4.72	3.85	3.09	2.45	1.89	1.42	1.03
	50	4.76	3.91	3.18	2.55	2.01	1.54	1.15	40	6.91	5.78	4.79	3.93	3.19	2.54	1.99	1.52	1.11	0.78
	60	4.12	3.37	2.73	2.17	1.69	1.28	0.94	50	5.65	4.71	3.89	3.18	2.56	2.02	1.56	1.16	0.83	0.54
2FES-2Y	40	6.85	5.64	4.59	3.69	2.92	2.27	1.72	30	-	8.69	7.22	5.94	4.83	3.87	3.05	2.35	1.75	1.25
	50	5.88	4.82	3.91	3.13	2.45	1.88	1.40	40	-	7.19	5.96	4.88	3.95	3.15	2.45	1.86	1.36	0.93
	60	4.96	4.06	3.27	2.60	2.02	1.53	1.11	50	-	5.77	4.77	3.90	3.14	2.48	1.91	1.42	1.00	0.65
2EES-2Y	40	8.60	7.04	5.70	4.56	3.58	2.76	2.07	30	-	10.92	9.07	7.47	6.08	4.89	3.86	2.98	2.23	1.60
	50	7.44	6.07	4.90	3.89	3.04	2.32	1.71	40	-	9.25	7.67	6.30	5.10	4.07	3.18	2.42	1.77	1.22
	60	6.29	5.11	4.10	3.23	2.50	1.88	1.35	50	-	7.49	6.18	5.04	4.05	3.19	2.45	1.82	1.28	0.83
2DES-2Y	40	10.24	8.39	6.80	5.45	4.30	3.32	2.51	30	-	12.99	10.81	8.91	7.27	5.86	4.64	3.59	2.71	1.96
	50	8.87	7.26	5.87	4.68	3.67	2.81	2.09	40	-	11.04	9.17	7.54	6.12	4.90	3.85	2.94	2.18	1.53
	60	7.53	6.13	4.94	3.91	3.04	2.20	1.68	50	-	8.96	7.42	6.07	4.89	3.87	2.99	2.24	1.60	1.07
2CES-3Y	40	12.53	10.29	8.37	6.72	5.32	4.14	3.15	30	-	15.89	13.25	10.95	8.96	7.25	5.77	4.50	3.42	2.50
	50	10.90	8.94	7.25	5.81	4.58	3.54	2.67	40	-	13.55	11.28	9.31	7.59	6.11	4.83	3.73	2.79	2.00
	60	9.29	7.60	6.15	4.90	3.84	2.94	2.18	50	-	11.06	9.18	7.54	6.12	4.88	3.81	2.89	2.11	1.45
4FES-3Y	40	13.59	11.04	8.88	7.06	5.52	4.24	3.19	30	-	17.51	14.46	11.84	9.61	7.70	6.10	4.75	3.64	2.72
	50	11.65	9.44	7.56	5.97	4.63	3.51	2.59	40	-	14.84	12.26	10.04	8.14	6.52	5.14	3.99	3.03	2.25
	60	9.73	7.84	6.24	4.88	3.73	2.78	1.99	50	-	12.03	9.94	8.14	6.58	5.25	4.12	3.17	2.38	1.73
4EES-4Y	40	17.03	14.00	11.41	9.19	7.32	5.73	4.41	30	-	22.10	18.30	15.01	12.20	9.79	7.76	6.05	4.63	3.46
	50	14.76	12.11	9.83	7.89	6.24	4.85	3.69	40	-	18.81	15.55	12.74	10.33	8.27	6.52	5.06	3.83	2.83
	60	12.50	10.23	8.28	6.61	5.19	3.98	2.98	50	-	15.36	12.69	10.38	8.39	6.69	5.24	4.02	3.01	2.17
4DES-5Y	40	20.50	16.69	13.47	10.75	8.46	6.55	4.98	30	-	26.20	21.75	17.86	14.54	11.70	9.28	7.25	5.55	4.14
	50	17.65	14.36	11.55	9.18	7.18	5.51	4.13	40	-	22.40	18.53	15.19	12.32	9.87	7.79	6.03	4.58	3.37
	60	14.83	12.03	9.63	7.60	5.89	4.45	3.27	50	-	18.44	15.22	12.44	10.04	8.00	6.26	4.80	3.60	2.60
4CES-6Y	40	25.05	20.45	16.56	13.26	10.49	8.17	6.25	30	-	31.75	26.30	21.65	17.61	14.16	11.22	8.73	6.65	4.93
	50	21.70	17.69	14.29	11.40	8.97	6.95	5.27	40	-	27.15	22.40	18.35	14.85	11.85	9.31	7.18	5.40	3.93
	60	18.32	14.92	12.01	9.54	7.45	5.71	4.26	50	-	22.50	18.52	15.08	12.12	9.61	7.48	5.69	4.22	3.01
4VES-7Y	40	26.95	22.00	17.72	14.09	11.02	8.44	6.29	30	-	34.10	28.15	23.00	18.59	14.82	11.60	8.89	6.63	4.75
	50	22.95	18.68	15.00	11.85	9.16	6.86	4.96	40	-	28.80	23.65	19.18	15.36	12.11	9.35	7.04	5.13	3.56
	60	19.06	15.48	12.38	9.69	7.38	5.40	3.70	50	-	23.55	19.18	15.43	12.21	9.48	7.19	5.28	3.71	2.44
4TES-9Y	40	32.35	26.45	21.40	17.08	13.42	10.34	7.76	30	-	40.85	33.80	27.70	22.45	17.97	14.15	10.93	8.23	6.00
	50	27.70	22.60	18.21	14.45	11.24	8.51	6.21	40	-	34.70	28.60	23.30	18.75	14.87	11.58	8.82	6.52	4.63
	60	23.10	18.84	15.14	11.93	9.16	6.78	4.74	50	-	28.50	23.30	18.86	15.04	11.78	9.03	6.74	4.84	3.30
4PES-12Y	40	37.45	30.50	24.50	19.45	15.17	11.57	8.57	30	-	47.25	38.90	31.75	25.60	20.35	15.90	12.16	9.05	6.50
	50	31.80	25.80	20.70	16.28	12.53	9.36	6.70	40	-	40.00	32.80	26.55	21.20	16.68	12.86	9.66	7.02	4.87
	60	26.30	21.30	16.97	13.24	10.02	7.26	4.91	50	-	32.55	26.50	21.25	16.79	13.01	9.83	7.20	5.04	3.30
4NES-14Y	40	43.85	35.80	28.90	23.00	18.05	13.86	10.37	30	-	55.40	45.70	37.40	30.25	24.15	18.98	14.65	11.05	8.09
	50	37.40	30.50	24.50	19.41	15.05	11.35	8.24	40	-	47.20	38.80	31.55	25.40	20.10	15.64	11.91	8.82	6.29
	60	31.15	25.35	20.30	15.96	12.20	8.97	6.21	50	-	38.55	31.55	25.50	20.35	15.95	12.24	9.14	6.58	4.51
4JE-15Y	40	48.65	40.05	32.65	26.30	20.85	16.23	12.33	30	-	62.40	51.90	42.85	34.95	28.20	22.40	17.44	13.25	9.73
	50	42.25	34.70	28.20	22.60	17.80	13.72	10.26	40	-	53.40	44.30	36.40	29.55	23.65	18.60	14.30	10.68	7.65
	60	35.95	29.40	23.80	18.92	14.75	11.20	8.18	50	-	44.20	36.50	29.85	24.05	19.08	14.81	11.20	8.16	5.64
4HE-18Y	40	57.40	47.25	38.55	31.10	24.75	19.39	14.87	30	-	72.70	60.50	50.00	40.90	33.05	26.30	20.60	15.75	11.68
	50	49.80	40.95	33.30	26.80	21.25	16.53	12.57	40	-	62.20	51.70	42.60	34.70	27.90	22.05	17.08	12.89	9.39
	60	42.40	34.60	28.10	22.50	17.69	13.63	10.22	50	-	51.40	42.65	35.00	28.35	22.60	17.72	13.57	10.07	7.16
4GE-23Y	40	65.10	53.50	43.60	35.15	27.90	21.80	16.64	30	-	83.80	69.90	57.80	47.35	38.35	30.65	24.10	18.54	13.88
	50	56.20	46.00	37.25	29.80	23.45	18.11	13.64	40	-	71.80	59.80	49.35	40.30	32.55	25.90	20.20	15.42	11.43
	60	47.00	38.25	30.75	24.40	18.98	14.45	10.69	50	-	59.30	49.30	40.60	33.05	26.55	21.00	16.29	12.32	9.01
4FE-28Y	40	79.20	65.20	53.30	43.10	34.45	27.20	21.10	30	-	99.40	83.00	68.80	56.40	45.80	36.70	28.95	22.35	16.83
	50	69.30	57.00	46.50	37.55	29.90	23.50	18.13	40	-	85.00	71.00	58.80	48.20	39.00	31.10	24.35	18.59	13.72
	60	59.30	48.75	39.70	31.90	25.30	19.76	15.11	50	-	70.10	58.60	48.50	39.65	32.00	25.35	19.63	14.71	10.52
6JE-25Y	40	72.50	59.40	48.20	38.65	30.55	23.70	18.02	30	-	92.40	76.90	63.50	51.90	41.85	33.25	25.95	19.79	14.61
	50	62.70	51.20	41.40	33.00	25.85	19.84	14.83	40	-	79.40	65.90	54.10	43.90	35.15	27.70	21.30	15.97	11.51
	60	52.80	42.95	34.50	27.30	21.15	15.99	11.68	50	-	66.10	54.60	44.55	35.90	28.45	22.10	16.75	12.26	8.54
6HE-28Y	40	85.10	69.80	56.80	45.70	36.30	28.35	21.70	30	-	106.70	88.90	73.40	60.10	48.60	38.75	30.35	23.30	17.32
	50	73.80	60.50	49.05	39.30	31.00	24.00	18.13	40	-	91.30	75.90	62.60	51.00	41.00	32.45	25.15	19.02	13.88
	60	62.50	51.10	41.20	32.80	25.65	19.63	14.59	50	-	75.70	62.80	51.50	41.75	33.30	26.10	19.97	14.80	10.49

Performance Data for R-407A & R-407F

Model	Cond. Temp.	Cooling Capacity (kW) R-407A, Evaporating Temp. °C									Cond. Temp.	Cooling Capacity (kW) R-407F, Evaporating Temp. °C								
		0	-5	-10	-15	-20	-25	-30	-35	-40		0	-5	-10	-15	-20	-25	-30	-35	-40
2KES-05Y	30	3.53	2.87	2.30	1.82	1.40	1.06	0.77	0.53	0.34	30	3.73	3.03	2.43	1.92	1.49	1.13	0.83	0.57	0.37
	40	3.06	2.46	1.95	1.52	1.16	0.85	0.60	0.39	0.22	40	3.25	2.62	2.08	1.63	1.24	0.92	0.65	0.43	0.25
	50	2.57	2.05	1.60	1.23	0.91	0.65	0.43	0.26	0.12	50	2.77	2.21	1.73	1.33	0.99	0.71	0.47	0.29	0.14
2JES-07Y	30	4.64	3.78	3.05	2.42	1.89	1.45	1.07	0.76	0.51	30	4.89	3.99	3.22	2.57	2.01	1.54	1.14	0.82	0.55
	40	4.04	3.27	2.62	2.06	1.59	1.19	0.87	0.60	0.48	40	4.29	3.48	2.79	2.20	1.70	1.28	0.93	0.64	0.41
	50	3.44	2.76	2.19	1.70	1.29	0.94	0.66	0.43	0.25	50	3.69	2.97	2.35	1.83	1.39	1.02	0.72	0.47	0.28
2HES-1Y	30	5.86	4.79	3.87	3.09	2.43	1.87	1.40	1.01	0.69	30	6.18	5.06	4.09	3.27	2.57	1.98	1.49	1.08	0.74
	40	5.13	4.17	3.35	2.65	2.05	1.56	1.15	0.81	0.53	40	5.44	4.43	3.56	2.82	2.19	1.67	1.23	0.87	0.58
	50	4.38	3.54	2.82	2.20	1.69	1.26	0.90	0.61	0.38	50	4.70	3.80	3.03	2.37	1.82	1.36	0.98	0.67	0.42
2GES-2Y	30	6.87	5.62	4.55	3.64	2.86	2.21	1.66	1.21	0.84	30	7.24	5.93	4.81	3.85	3.03	2.34	1.77	1.29	0.90
	40	6.02	4.90	3.94	3.12	2.43	1.85	1.37	0.98	0.66	40	6.39	5.21	4.19	3.33	2.60	1.98	1.47	1.05	0.71
	50	5.16	4.17	3.33	2.62	2.01	1.51	1.09	0.76	0.49	50	5.53	4.48	3.58	2.81	2.17	1.63	1.18	0.82	0.53
2FES-2Y	30	8.67	7.09	5.75	4.60	3.62	2.80	2.11	1.54	1.07	30	9.13	7.48	6.07	4.86	3.83	2.97	2.24	1.64	1.15
	40	7.60	6.19	4.98	3.95	3.09	2.36	1.75	1.25	0.85	40	8.06	6.58	5.30	4.21	3.29	2.52	1.88	1.35	0.92
	50	6.52	5.28	4.22	3.32	2.56	1.93	1.41	0.98	0.64	50	6.98	5.66	4.53	3.57	2.76	2.08	1.52	1.06	0.70
2EES-2Y	30	10.08	8.21	6.61	5.25	4.09	3.12	2.31	1.64	1.10	30	10.61	8.66	6.98	5.55	4.34	3.32	2.47	1.76	1.19
	40	8.76	7.09	5.66	4.44	3.42	2.56	1.85	1.27	0.81	40	9.30	7.54	6.03	4.75	3.67	2.76	2.00	1.38	0.88
	50	7.44	5.96	4.71	3.65	2.76	2.02	1.41	0.93	0.54	50	7.98	6.42	5.08	3.95	2.99	2.20	1.54	1.01	0.58
2DES-2Y	30	12.00	9.78	7.89	6.28	4.91	3.76	2.80	2.01	1.37	30	12.63	10.32	8.33	6.64	5.21	4.00	2.99	2.16	1.48
	40	10.45	8.47	6.78	5.34	4.13	3.12	2.28	1.59	1.04	40	11.09	9.01	7.22	5.70	4.42	3.35	2.45	1.72	1.13
	50	8.90	7.16	5.67	4.42	3.36	2.49	1.77	1.19	0.73	50	9.54	7.69	6.11	4.77	3.64	2.70	1.92	1.29	0.79
2CES-3Y	30	14.69	12.00	9.70	7.75	6.09	4.69	3.53	2.57	1.79	30	15.46	12.65	10.25	8.19	6.45	4.98	3.76	2.75	1.92
	40	12.83	10.43	8.38	6.64	5.17	3.94	2.92	2.09	1.41	40	13.62	11.09	8.92	7.08	5.52	4.21	3.13	2.24	1.52
	50	10.98	8.87	7.07	5.55	4.27	3.21	2.33	1.62	1.06	50	11.77	9.52	7.60	5.97	4.60	3.46	2.52	1.76	1.15
4FES-3Y	30	15.93	12.95	10.40	8.24	6.41	4.88	3.60	2.56	1.71	30	16.80	13.67	11.00	8.72	6.80	5.19	3.84	2.74	1.84
	40	15.93	12.95	10.40	8.24	6.41	4.88	3.60	2.56	1.71	40	14.67	11.85	9.45	7.41	5.70	4.27	3.09	2.13	1.36
	50	13.80	11.14	8.87	6.94	5.33	3.98	2.87	1.97	1.25	50	12.53	10.04	7.91	6.12	4.62	3.38	2.37	1.56	0.92
4EES-4Y	30	20.20	16.43	13.22	10.49	8.19	6.25	4.64	3.32	2.25	30	21.30	17.34	13.97	11.11	8.68	6.64	4.95	3.55	2.42
	40	17.52	14.17	11.30	8.88	6.84	5.14	3.74	2.60	1.69	40	18.63	15.07	12.04	9.47	7.31	5.51	4.02	2.81	1.83
	50	14.86	11.91	9.41	7.30	5.54	4.08	2.88	1.93	1.17	50	15.96	12.81	10.13	7.87	5.98	4.41	3.13	2.10	1.29
4DES-5Y	30	24.00	19.58	15.78	12.55	9.82	7.53	5.63	4.06	2.79	30	25.30	20.65	16.68	13.28	10.41	8.00	5.99	4.34	3.00
	40	20.90	16.93	13.54	10.67	8.26	6.25	4.58	3.23	2.14	40	22.20	18.01	14.42	11.38	8.82	6.68	4.92	3.48	2.32
	50	17.78	14.30	11.34	8.84	6.75	5.01	3.60	2.45	1.55	50	19.09	15.37	12.20	9.52	7.28	5.42	3.90	2.67	1.70
4CES-6Y	30	29.40	24.00	19.41	15.49	12.18	9.39	7.08	5.17	3.62	30	31.00	25.35	20.50	16.38	12.89	9.96	7.52	5.52	3.88
	40	25.70	20.85	16.75	13.26	10.33	7.88	5.86	4.21	2.88	40	27.30	22.20	17.82	14.13	11.02	8.42	6.27	4.52	3.10
	50	21.95	17.73	14.13	11.09	8.55	6.44	4.70	3.30	2.19	50	23.55	19.03	15.19	11.94	9.21	6.94	5.08	3.58	2.39
4VES-7Y	30	30.95	25.15	20.20	15.99	12.42	9.42	6.92	4.86	-	30	32.55	26.50	21.30	16.91	13.17	10.04	7.43	5.28	-
	40	26.80	21.60	17.21	13.47	10.32	7.68	5.50	3.72	-	40	28.15	22.80	18.24	14.33	11.03	8.24	5.92	4.01	-
	50	22.55	18.06	14.23	10.98	8.26	6.00	4.15	-	-	50	23.80	19.16	15.19	11.80	8.91	6.48	4.45	-	-
4TES-9Y	30	37.45	30.55	24.60	19.59	15.33	11.74	8.74	6.27	-	30	39.30	32.05	25.80	20.55	16.08	12.32	9.19	6.61	-
	40	32.60	26.40	21.15	16.69	12.91	9.75	7.14	4.99	-	40	34.05	27.70	22.20	17.54	13.57	10.24	7.45	5.15	-
	50	27.70	22.30	17.71	13.82	10.55	7.84	5.60	-	-	50	28.90	23.40	18.64	14.57	11.11	8.18	5.74	-	-
4PES-12Y	30	43.20	35.15	28.20	22.35	17.35	13.16	9.67	6.79	-	30	45.50	37.00	29.75	23.55	18.30	13.89	10.23	7.22	-
	40	37.40	30.20	24.05	18.81	14.41	10.73	7.69	5.20	-	40	39.30	31.80	25.35	19.88	15.24	11.34	8.09	5.41	-
	50	31.50	25.20	19.87	15.34	11.54	8.38	5.80	-	-	50	33.10	26.60	21.05	16.27	12.23	8.82	5.98	-	-
4NES-14Y	30	50.80	41.35	33.35	26.50	20.70	15.80	11.73	8.37	-	30	53.70	43.75	35.25	28.00	21.90	16.75	12.47	8.94	-
	40	44.10	35.70	28.60	22.50	17.36	13.07	9.52	6.62	-	40	46.50	37.75	30.25	23.85	18.44	13.87	10.06	6.92	-
	50	37.40	30.10	23.85	18.56	14.13	10.44	7.41	-	-	50	39.40	31.85	25.35	19.77	15.03	11.04	7.70	-	-
4JE-15Y	30	56.90	46.50	37.60	29.90	23.30	17.74	13.01	9.03	-	30	61.10	49.85	40.20	32.00	25.05	19.17	14.26	10.18	-
	40	49.45	40.15	32.15	25.35	19.52	14.61	10.49	7.06	-	40	53.40	43.40	34.85	27.50	21.30	16.05	11.67	8.06	-
	50	42.00	33.85	26.90	20.95	15.90	11.67	8.17	-	-	50	45.55	36.80	29.35	22.95	17.52	12.96	9.17	-	-
4HE-18Y	30	66.60	54.50	44.15	35.25	27.60	21.15	15.65	11.02	-	30	71.60	58.50	47.40	37.85	29.75	22.90	17.17	12.42	-
	40	58.10	47.30	38.00	30.10	23.35	17.62	12.83	8.83	-	40	62.80	51.20	41.25	32.70	25.50	19.38	14.27	10.05	-
	50	49.60	40.10	32.00	25.10	19.25	14.32	10.23	-	-	50	53.80	43.70	35.00	27.50	21.20	15.89	11.46	-	-
4GE-23Y	30	77.00	63.30	51.40	41.20	32.50	25.10	18.78	13.46	-	30	82.80	67.90	55.00	44.05	34.75	26.90	20.30	14.79	-
	40	67.50	55.20	44.60	35.50	27.80	21.20	15.71	11.12	-	40	72.90	59.60	48.10	38.30	30.00	22.95	17.05	12.16	-
	50	58.00	47.20	37.90	30.00	23.30	17.62	12.90	-	-	50	62.70	51.10	41.00	32.45	25.15	19.02	13.89	-	-
4FE-28Y	30	91.40	74.90	60.80	48.60	38.20	29.40	21.85	15.54	-	30	98.90	81.10	65.70	52.60	41.50	32.10	24.20	17.66	-
	40	79.90	65.20	52.50	41.70	32.50	24.70	18.11	12.65	-	40	87.10	71.10	57.40	45.70	35.75	27.35	20.30	14.50	-
	50	68.40	55.50	44.45	35.00	27.00	20.30	14.66	-	-	50	74.80	60.90	48.90	38.70	30.00	22.65	16.54	-	-
6JE-25Y	30	85.40	69.80	56.40	44.85	35.00	26.60	19.52	13.55	-	30	91.60	74.80	60.30	48.00	37.55	28.75	21.40	15.29	-
	40	74.20	60.20	48.25	38.00	29.30	21.90	15.73	10.60	-	40	80.10	65.10	52.20	41.20	31.90	24.05	17.50	12.11	-
	50	63.00	50.80	40.30	31.40	23.85	17.51	12.25	-	-	50	68.20	55.10	43.90	34.30	26.20	19.40	13.74	-	-
6HE-28Y	30	99.90	81.80	66.20	52.90	41.45	31.70	23.50	16.53	-	30	107.40	87.80	71.00	56.70	44.55	34.30	25.75	18.66	-
	40	87.10	70.90	57.00	45.15	35.00	26.45	19.25	13.26	-	40	94.20	76.80	61.80	49.00	38.20	29.05	21.40	15.11	-
	50	74.40	60.20	48.05	37.65	28.90	21.50	15.35	-	-	50	80.60	65.40	52.30	41.20	31.75	23.80	17.17	-	-

Specification

Model	Motor Version	Displacement at 1450 min^{-1}	No. of cylinders	Oil charge	Connection		Motor Connection	Max. operating current	Max. power consumption
		m^3/h		dm^3	Discharge	Suction	Volt	Amp.	kW
2KES-05(Y)	1	4.06	2	1.0	1/2	5/8	220..240 Δ/ 380..420 Y/3/50 265..290 Δ/ 440..480 Y/3/60	4.9 / 2.8	1.5
2JES-07(Y)	1	5.21	2	1.0	1/2	5/8		6.4 / 3.7	1.9
2HES-1(Y)	2	6.51	2	1.0	1/2	5/8		6.7 / 3.8	2.0
2GES-2(Y)	1	7.58	2	1.0	1/2	5/8		8.7 / 5.0	2.7
2FES-2(Y)	2	9.54	2	1.0	1/2	5/8		9.2 / 5.3	2.9
2EES-2(Y)	2	11.4	2	1.5	5/8	7/8		10.4 / 6/0	3.3
2DES-2(Y)	2	13.4	2	1.5	5/8	7/8		13.4 / 7.5	4.0
2CES-3(Y)	2	16.2	2	1.5	5/8	7/8		15.8 / 9.1	5.0
4FES-3(Y)	2	18.1	4	2.0	5/8	7/8		16.5 / 9.5	5.3
4EES-4(Y)	2	22.7	4	2.0	5/8	1-1/8		21.2 / 12.2	6.9
4DES-5(Y)	2	26.8	4	2.0	7/8	1-1/8		25.2 / 14.5	8.1
4CES-6(Y)	2	32.5	4	2.0	7/8	1-1/8		30.8 / 17.7	9.7
4VES-7(Y)	2	34.7	4	2.6	7/8	1-1/8	380..420 YY/3/50 440..480 YY/3/60	16.6	11
4TES-9(Y)	2	41.3	4	2.6	1-1/8	1-3/8		19.9	13
4PES-12(Y)	2	48.5	4	2.6	1-1/8	1-3/8		22.7	14
4NES-14(Y)	2	56.2	4	2.6	1-1/8	1-3/8		26.6	17
4JE-15(Y)	2	63.5	4	4.0	1-1/8	1-5/8		30.8	19
4HE-18(Y)	2	73.7	4	4.0	1-1/8	1-5/8		36.7	22
4GE-23(Y)	2	84.6	4	4.5	1-1/8	2-1/8		43.9	27
4FE-28(Y)	2	101.8	4	4.5	1-1/8	2-1/8		52.8	31
6JE-25(Y)	2	95.3	6	4.75	1-3/8	2-1/8		46.4	27
6HE-28(Y)	2	110.5	6	4.75	1-3/8	2-1/8		53.2	33

GMCC

Rotary Compressor for Air Conditioner

R-22
1ø – 50Hz – 220/240V

Model	Displ.	Capacity	Capacity	Power	COP	Capacitor	Height	Discharge Pipe I.D.	Suction Pipe I.D.
	cm^3/rev	W	Btu/h	W	w/w	uF/V	mm	mm	mm
PH60G0C-4BZDE	6.0	985	3361	345	2.86	20/370	241	6.5	9.8
PH104G0C-4BZDE	10.4	1745	5954	580	3.01	25/370	259	6.5	9.8
PH108G0C-4BZDE	10.8	1820	6214	590	3.10	25/370	259	6.5	9.8
PH122M0A-4FZ	12.2	2113	7225	664	3.18	30/370	270	6.5	9.8
PH130M0A-4FZ	13.0	2243	7670	705	3.18	30/370	270	6.5	9.8
PH135M0A-4FZ	13.4	2317	7923	728	3.18	30/370	270	6.5	9.8
PH145M0A-4FZ	14.6	2535	8670	797	3.18	30/370	270	8.2	12.9
HSM185V2UFT	18.5	3260	11117	1035	3.15	35/370	294	8.2	12.9
HSM190V2UFT	19.1	3360	11458	1070	3.15	35/370	294	8.2	12.9
HSM195V2UFT	19.6	3450	11765	1195	3.15	35/370	294	8.2	12.9
HSM200V2UFT	20.0	3480	11867	1105	3.15	35/370	294	8.2	12.9
HSM210V2UFT	20.9	3630	12378	1150	3.15	35/370	294	8.2	12.9
HSM215V2UFT	21.4	3680	12549	1170	3.15	35/370	294	8.2	12.9
PH225M2A-4FT	22.4	3915	13357	1265	3.10	35/400	293	8.2	12.9
PH240M2A-4FT1	24.0	4195	14346	1353	3.10	35/400	293	8.2	12.9
PH290M2A-4FT1	28.8	5090	17367	1650	3.08	35/370	348	9.8	12.9
PH295M2AS-4KUH1	29.7	5350	18253	1715	3.12	45/370	348	9.8	12.9
PH300G2C-4KU1	29.8	5340	18220	1645	3.25	55/400	297	9.8	12.9
PH310G2C-4KU1	30.8	5515	18817	1695	3.25	55/400	310	9.8	12.9
PH340G2C-4KU1	33.7	6030	20574	1865	3.23	60/400	310	9.8	12.9
PH360G2C-4MU1	36.0	6450	22007	2010	3.20	50/400	324	9.8	16.2
PH370G2CS-4MU1	37.0	6650	22690	2065	3.22	50/400	324	9.8	16.2
PH420G2AS-4MU1	42.0	7465	25471	2300	3.25	60/400	310	9.8	12.9
PH430G2AS-4MU1	42.6	7575	25846	2355	3.22	60/400	310	9.8	12.9
PH440G2AS-4MU1	43.6	7720	26341	2395	3.22	60/400	324	9.8	16.2
PH460X3CS-4MU1	45.9	8060	27501	2600	3.10	55/400	397	9.8	16.2
PH480X3CS-4MU1	47.9	8460	28866	2730	3.10	55/400	397	9.8	16.2

R-22
1ø – 60Hz – 208/230V

Model	Displ.	Capacity	Capacity	Power	COP	Capacitor	Height	Discharge Pipe I.D.	Suction Pipe I.D.
	cm^3/rev	W	Btu/h	W	w/w	uF/V	mm	mm	mm
PH104G0C-3BZDU	10.4	2095	7148	675	3.10	25/250	259	6.5	9.8
PH108G0C-3BZDU	10.8	2200	7575	710	3.10	25/370	259	6.5	9.8
PH120M1C-3DZDU1	12.2	2490	8496	790	3.15	30/370	266	8.2	9.8
PH130M1C-3DZDU1	13.1	2660	9076	850	3.13	30/370	270	6.5	9.8
PH140G1C-3DZDU1	13.9	2890	9861	895	3.23	35/370	285	8.2	9.8
PH160G1C-3DZDU2	16.0	3280	11190	1040	3.15	35/370	285	8.2	9.8
PH165G1C-3DZDU2	16.4	3355	11445	1050	3.20	35/370	285	8.2	9.8
PH170G1C-3DZDU2	16.8	3420	11670	1085	3.15	35/370	285	8.2	9.8
PH180G1C-3FTU2	18.1	3795	12949	1225	3.10	35/370	294	8.2	12.9
PH195G1C-3FTU1	19.6	4155	14177	1310	3.17	40/370	294	8.2	12.9
PH240M2A-3FTU1	24.0	5194	17762	1638	3.17	40/370	294	8.2	12.9
PH250M2A-2FVU1	25.0	5410	18502	1717	3.15	40/370	333	9.8	12.9
PH260M2AS-3KUU1	26.1	5626	19191	1815	3.10	40/370	333	9.8	12.9
PH330G2C-3MUU1	32.8	7100	24225	2150	3.30	55/400	297	9.8	16.2
PH340G2C-3MUU	33.7	7345	25060	2225	3.30	55/400	297	9.8	16.2
PH370G2C-3MUU1	37.0	8020	27365	2505	3.20	55/400	310	9.8	16.2
PH401X3CS-3MUU	40.2	8735	29804	2705	3.23	60/400	372	9.8	16.2
PH441X3CS-3MUU	43.5	9470	32312	2915	3.25	60/400	372	9.8	16.2

R-410a
1ø – 50Hz – 220/240V

Model	Displ.	Capacity	Capacity	Power	COP	Capacitor	Height	Discharge Pipe I.D.	Suction Pipe I.D.
	cm^3/rev	W	Btu/h	W	w/w	uF/V	mm	mm	mm
PA71M0A-4DZDE	7.1	1714	5850	571	3.00	25/370	279	8.1	9.8
PA84M0A-4DZDE	8.4	2044	6973	681	3.00	25/370	279	8.1	9.8
PA89M0A-4DZDE	8.9	2160	7370	720	3.00	25/370	279	8.1	9.8
PA93M1C-4DZDE1	9.3	2185	7455	740	2.95	25/370	279	8.1	9.8
PA98M1C-4DZDE1	9.8	2340	7984	785	2.98	25/370	279	8.1	9.8
PA103M1C-4DZDE	10.3	2470	8428	820	3.01	25/370	279	8.1	9.8
PA108M1C-4DZDE2	10.8	2570	8769	860	2.98	25/370	279	8.1	9.8
PA118M1C-4DZ2	11.8	2780	9485	955	2.91	25/370	279	8.1	9.8
PA130G1C-4FT	13.0	3155	10765	1060	2,98	25/370	279	8.1	9.8
PA140G1C-4FT	13.9	3395	11584	1145	2.97	25/370	279	8.1	9.8
PA145G1C-4FT	14.7	3600	12283	1225	2.94	25/370	279	8.1	9.8
PA150G1C-4FT	15.1	3700	12625	1275	2.90	25/370	279	8.1	9.8
PA160M2C-4FT1	16.1	4000	13648	1365	2.93	35/400	299	8.1	12.9
PA170M2C-4ET2	17.1	4190	14295	1375	3.05	35/400	299	8.1	12.9
PA185M2C-4FT2	18.5	4495	15335	1500	3.00	35/400	299	8.1	12.9
PA215M2CS-4KU	21.4	5255	17930	1790	2.94	50/370	340	8.1	12.9
PA225M2CS-4KU	22.4	5520	18834	1905	2.90	50/370	340	8.1	12.9
PA240M2CS-4KU1	23.9	5840	19926	1980	2.95	50/370	340	8.1	12.9
PA270G2CS-4MU1	27.0	6830	23304	2285	2.99	60/400	344	9.8	16.2
PA290G2CS-4MU1	28.7	7270	24805	2420	3.00	50/400	344	9.8	16.2
PA331X3CS-4MU1	32.6	8190	27944	2715	3.02	55/400	382	9.8	16.2

R-410a
1ø – 60Hz – 208/230V

Model	Displ.	Capacity	Capacity	Power	COP	Capacitor	Height	Discharge Pipe I.D.	Suction Pipe I.D.
	cm^3/rev	W	Btu/h	W	w/w	uF/V	mm	mm	mm
PA71M0A-3FZU	7.1	2065	7062	670	3.08	25/370	251	8.1	9.8
PA89M0A-3FZU	8.9	2602	8898	845	3.08	25/370	251	8.1	9.8
PA108M1C-3FZDU1	10.8	3110	10611	1045	2.98	35/370	279	8.1	12.9
PA118M1C-3FZU	11.8	3390	11567	1125	3.01	35/370	279	8.1	12.9
PA130K1C-3DZ1	13.0	3830	13060	1235	3.1	40/370	298	8.1	12.9
PA140K1C-3FT3	13.9	4240	14458	1402	3.03	40/370	298	8.1	12.9
PA150K1C-3FT3	15.1	4445	15157	1505	2.95	40/370	298	8.1	12.9
PA160M2A-3ETU	16.0	4785	16325	1570	3.05	40/370	303	9.8	12.9
PA165M2A-3ETU	16.5	4935	16876	1618	3.05	60/370	344	9.8	16.2
PA170M2A-3ETU	17.0	5084	17387	1667	3.05	40/370	303	9.8	12.9
PA240M2A-3MTU2	24.0	7160	24430	2365	3.03	55/370	322	9.8	16.2
PA271X3CS-3MUU1	26.9	8155	27825	2640	3.09	55/400	382	9.8	16.2
PA291X3CS-3MTTU	28.8	8850	30196	2805	3.08	55/400	382	9.8	16.2

T3 - Tropical Condition

R-22
1ø – 50Hz – 220/240V

Model	Displ.	Capacity	Capacity	Power	COP	Capacitor	Height	Discharge Pipe I.D.	Suction Pipe I.D.
	cm^3/rev	W	Btu/h	W	w/w	uF/V	mm	mm	mm
PH200M2A-4FTS1	19.9	3555	12123	1095	3.25	35/370	292	8.2	12.9
PH210M2A-4FTS1	21.0	3752	12830	1154	3.25	35/370	292	8.2	12.9
PH310M2AS-4KTS1	31.0	5620	19174	1755	3.20	50/370	292	8.2	12.9
PH340G2C-4KTS1	33.7	6050	20643	1890	3.20	60/400	310	9.8	12.9
PH400G2CS-4KTS1	40.0	7055	24130	2240	3.15	50/400	354	9.8	12.9
PH420G2CS-4KTS1	42.0	7408	25335	2350	3.15	50/400	354	9.8	12.9
PH440G2CS-4KTS1	43.5	7685	26221	2500	3.08	60/400	354	9.8	12.9

R-22
1ø – 60Hz – 208/230V

Model	Displ.	Capacity	Capacity	Power	COP	Capacitor	Height	Discharge Pipe I.D.	Suction Pipe I.D.
	cm^3/rev	W	Btu/h	W	w/w	uF/V	mm	mm	mm
PH280M2AS-3KTS1	27.9	6025	20556	1910	3.15	40/400	311	9.8	12.9
PH240M2A-3FTS1	24.0	5180	17673	1660	3.12	40/370	311	9.8	12.9
PH370G2C-3KTS1	37.0	7885	26967	2540	3.10	55/400	354	9.8	12.9

Rotary Compressor for Air Conditioner

R-22
1ø – 50Hz – 220/240V

Model	Cooling Capacity				Motor Input		COP		Height	Discharge Pipe I.D.	Suction Pipe I.D.
	Btu/h		Watt		Watt		w/w		mm	mm	mm
QA075P	4110	4150	1204	1216	410	430	2.94	2.83	265.9	8.06	9.70
QA096P	5470	5530	1603	1620	512	537	3.14	3.02	246.8	6.53	9.70
QA114P	6468	6540	1895	1916	625	654	3.02	2.93	245.9	8.06	9.70
QK134P	7550	7650	2213	2242	719	742	3.08	3.02	243.6	8.06	9.70
QK145P	8250	8300	2418	2432	778	798	3.10	3.05	253.6	8.06	12.80
QK156P	8850	8950	2594	2623	835	860	3.10	3.05	264.0	8.06	12.80
QK175P	9700	9800	2843	2872	950	970	2.99	2.96	290.9	8.06	9.70
QK185P	10500	10650	3077	3121	1000	1029	3.08	3.03	262.6	6.53	12.80
QK196P	11000	11050	3224	3238	1067	1093	3.02	2.96	266.0	8.06	12.80
QJ208P	11800	12000	3458	3516	1093	1121	3.16	3.14	266.2	9.70	12.80
QJ222P	12900	13000	3780	3808	1183	1203	3.20	3.16	315.2	9.70	12.80
QJ236P	13600	13700	3985	4013	1308	1356	3.05	2.96	275.0	9.70	12.80
QJ250P	14500	14650	4249	4291	1355	1382	3.14	3.10	220.0	9.70	12.80
QJ264P	15100	15200	4426	4452	1411	1434	3.14	3.10	259.3	9.70	16.00
QJ282P	16600	16700	4864	4894	1523	1561	3.19	3.13	302.5	9.70	12.80
QJ292P	16700	16900	4894	4950	1575	1625	3.11	3.05	267.3	9.70	12.80
QJ306P	18300	18500	5360	5419	1710	1760	3.13	3.08	292.0	9.70	12.80
QJ311P	18650	18800	5463	5507	1743	1880	3.13	2.93	292.0	9.70	12.80
QJ330P	19900	20000	5829	5858	1877	2040	3.10	2.87	297.3	9.70	12.80
QP325P	19200	19300	5626	5656	1778	1856	3.16	3.05	312.0	9.70	12.80
QP348P	20500	20600	6007	6037	1884	1967	3.19	3.07	345.0	9.70	12.80
QP376P	22600	22700	6623	6652	2112	2183	3.14	3.05	312.0	9.70	16.00
QP390P	23000	23200	7048	6799	2130	2188	3.16	3.11	325.0	9.70	16.00
QP407P	24050	24300	7048	7121	2227	2314	3.16	3.08	312.3	9.70	16.00
QP425P	25000	25100	7326	7355	2404	2535	3.05	2.90	381.0	9.70	16.00
QP442P	26000	26100	7619	7648	2430	2534	3.14	3.02	345.0	9.70	16.00
QP464P	27600	27700	8088	8117	2654	2885	3.05	2.81	345.0	9.70	16.00

R-22
1ø – 60Hz – 208/230V

Model	Cooling Capacity		Motor Input	COP	Height	Discharge Pipe I.D.	Suction Pipe I.D.
	Btu/h	Watt	Watt	w/w	mm	mm	mm
QS050K	3440	1008	351	2.87	260.0	8.06	9.70
QA075K	5180	1518	493	3.08	265.9	8.06	9.70
QA104K	7250	2125	671	3.16	285.9	8.06	9.70
QA110K	7600	2227	704	3.16	207.0	8.06	9.70
QA114K	7890	2312	731	3.16	246.0	8.06	9.70
QA125K	8600	2520	804	3.14	253.6	8.06	12.80
QK134K	9350	2740	874	3.13	263.6	6.53	9.70
QK145K	10100	2960	935	3.17	248.6	8.06	12.80
QK156K	11000	3223	1028	3.14	248.6	8.06	12.80
QK173K	12100	3546	1141	3.11	263.6	8.06	12.80
QK182K	12600	3696	1211	3.05	256.0	8.06	12.80
QK185K	13000	3810	1215	3.14	266.0	8.06	12.80
QJ196K	13900	4073	1275	3.19	266.2	9.70	12.80
QJ208K	14650	4293	1356	3.17	266.2	9.70	12.80
QJ222K	15700	4601	1440	3.19	266.2	9.70	12.80
QJ230K	16300	4777	1495	3.20	257.2	9.70	12.80
QJ250K	17600	5158	1630	3.16	257.2	9.70	12.80
QJ258K	18000	5275	1667	3.16	258.3	9.70	16.00
QJ264K	18650	5465	1727	3.16	272.3	9.70	16.00
QJ282K	19850	5817	1838	3.16	296.2	9.70	16.00
QP306K	22600	6623	2055	3.22	345.0	9.70	16.00
QP325K	24000	7033	2162	3.25	345.0	9.70	12.80
QP348K	25900	7590	2312	3.28	345.0	9.70	16.00
QP362K	27000	7912	2571	3.08	345.0	9.70	16.00
QP390K	28700	8410	2707	3.11	345.0	9.70	16.00
QP407K	30100	8821	2736	3.22	325.0	9.70	16.00
QP425K	31900	9348	2927	3.19	345.0	9.70	16.00
QP442K	32500	9524	3037	3.14	345.0	9.70	16.00

R-410a
1ø – 50Hz – 220/240V

Model	Cooling Capacity				Motor Input		COP		Height	Discharge Pipe I.D.	Suction Pipe I.D.
	Btu/h		Watt		Watt		w/w		mm	mm	mm
GK080P	6550	6600	1919	1934	682	702	2.81	2.76	243.6	8.06	9.70
GK094P	7700	7750	2256	2271	794	824	2.84	2.76	243.6	8.06	9.70
GK102P	8250	8350	2418	2447	841	870	2.87	2.81	262.6	8.06	12.80
GK113P	9000	9100	2637	2667	914	938	2.89	2.84	235.6	8.06	9.70
GK134P	10750	10850	3150	3179	1132	1154	2.78	2.76	262.6	8.06	12.80
GK141P	11450	11600	3355	3399	1180	1221	2.84	2.78	253.6	8.06	12.80
GJ151P	12500	12650	3663	3707	1269	1304	2.89	2.84	229.0	9.70	12.80
GJ189P	15500	15700	4542	4601	1581	1635	2.87	2.81	271.2	9.70	12.80
GJ208P	17500	17700	5128	5187	1750	1823	2.93	2.85	340.9	9.70	12.80
GJ230P	19100	19300	5597	5656	1949	2010	2.87	2.81	320.2	9.70	12.80
GP270P	23100	23400	6769	6857	2347	2392	2.88	2.87	345.3	9.70	16.00
GP290P	24700	24900	7238	7297	2470	2541	2.93	2.87	406.4	9.70	16.00

R-410a
1ø – 60Hz – 208/230V

Model	Cooling Capacity		Motor Input	COP	Height	Discharge Pipe I.D.	Suction Pipe I.D.
	Btu/h	Watt	Watt	w/w	mm	mm	mm
GK080K	8050	2359	805	2.93	253.6	8.06	12.80
GK102K	10150	2975	1015	2.93	253.6	8.06	12.80
GK120K	12100	3546	1222	2.90	259.6	8.06	12.80
GK141K	14200	4162	1434	2.90	259.6	8.06	12.80
GJ176K	18200	5334	1820	2.93	258.2	9.70	12.80
GJ208K	21700	6360	2170	2.93	257.9	9.70	12.80
GJ230K	24000	7034	2400	2.93	237.9	9.70	12.80

T3 - Tropical Condition

R-22
1ø – 50Hz – 220/240V

Model	Cooling Capacity				Motor Input		COP		Height	Discharge Pipe I.D.	Suction Pipe I.D.
	Btu/h		Watt		Watt		w/w		mm	mm	mm
QK208P	12100	12200	3546	3575	1163	1245	3.05	2.87	267.8	8.06	12.80
QJ264P	15400	15500	4513	4542	1457	1529	3.10	2.97	216.0	9.70	16.00
QP325P	19200	19300	5626	5656	1778	1856	3.16	3.05	345.0	9.70	16.00
QP376P	22500	22600	6593	6623	2143	2282	3.08	2.90	312.0	9.70	16.00
QP407P	24050	24300	7048	7121	2227	2303	3.16	3.09	312.3	9.70	16.00
QP464P	27600	27700	8088	8117	2654	2885	3.05	2.81	345.0	9.70	16.00

R-22
1ø – 60Hz – 208/230V

Model	Cooling Capacity		Motor Input	COP	Height	Discharge Pipe I.D.	Suction Pipe I.D.
	Btu/h	Watt	Watt	w/w	mm	mm	mm
QK173K	12400	3634	1205	3.02	263.9	8.06	12.80
QJ250K	17800	5216	1703	3.06	257.2	9.70	12.80
QJ278K	19600	5744	1885	3.05	302.3	9.70	12.80
QP306K	22600	6623	2055	3.08	345.0	9.70	16.00
QP348K	25700	7531	2424	3.11	345.0	9.70	16.00
QP362K	27000	7912	2571	3.08	345.0	9.70	16.00

R-410a
1ø – 50Hz – 220/240V

Model	Cooling Capacity				Motor Input		COP		Height	Discharge Pipe I.D.	Suction Pipe I.D.
	Btu/h		Watt		Watt		w/w		mm	mm	mm
GJ151P	12500	12650	3663	3707	1269	1304	2.89	2.84	257.2	9.70	12.80
GJ208P	17500	17700	5128	5128	1750	1823	2.93	2.85	340.9	9.70	12.80
GJ230P	19100	19300	5597	5597	1949	2010	2.87	2.81	320.2	9.70	12.80
GP280P	23700	23900	6945	6945	2370	2439	2.93	2.87	345.0	9.70	16.00
GP290P	24700	24900	7238	7238	2470	2541	2.93	2.87	406.4	9.70	16.00

R-410a
1ø – 60Hz – 208/230V

Model	Cooling Capacity		Motor Input	COP	Height	Discharge Pipe I.D.	Suction Pipe I.D.
	Btu/h	Watt	Watt	w/w	mm	mm	mm
GJ176K	18200	5334	1820	2.93	258.2	9.70	12.80
GJ208K	21700	6360	2170	2.93	257.9	9.70	12.80
GJ230K	24000	7034	2400	2.93	273.9	9.70	12.80

HITACHI

Rotary Compressor for Air Conditioner

R-22
1ø – 50Hz – 220/240V

Model	Displacement	Cooling Capacity		COP	Capacitor	Height
	cc	Watt	Btu/h	W/W	uF/V	mm
SD074CV	7.4	1210	4129	2.90	13/400	205.0
SD086CV	8.6	1410	4811	2.94	15/400	205.0
SD091CV	9.1	1490	5084	2.94	13/400	205.0
SD104CV	10.4	1740	5937	3.03	15/400	232.9
SD122CV	12.2	2040	6960	2.96	15/400	232.9
SD127CV	12.7	2050	6995	2.92	17/400	232.9
SD134CV	13.4	2260	7711	3.01	17/400	232.9
SD145CV	14.5	2480	8462	3.04	20/400	232.9
SD156CV	15.6	2650	9042	3.05	25/400	232.9
SG162CV	16.2	2650	9042	3.03	30/400	242/249.3
SG167CV	16.7	2760	9417	3.00	35/400	242/249.3
SG173CV	17.3	2850	9724	3.00	35/400	242/249.3
SG733R	18.4	2990	10202	3.04	35/400	256.0
SL193CV	19.3	3250	11089	3.00	35/450	264.0
SL211CV	21.1	3540	12078	3.05	35/450	264.0
SL222CV	22.2	3740	12761	3.05	35/450	264.0
SL232CV	23.2	3900	13307	3.05	35/450	264.0
SL242CV	24.2	4100	13989	3.05	30/450	264.0
SL253CV	25.3	4210	14365	2.95	35/450	264.0
SH272RV	27.2	4470	15252	3.05	35/400	278.4
SH280RV	28.0	4675	15951	3.15	45/400	288.4
SH286UV	28.6	4750	16207	3.15	40/400	293.4
SH295UV	29.5	5010	17094	3.25	40/450	293.4
SH300UV	30.0	5120	17469	3.25	40/450	307.8
SH307UV	30.7	5160	17606	3.20	55/450	293.4
SH315RV	31.5	5330	18186	3.15	35/450	293.4
SH365RV	36.5	6170	21052	3.15	60/400	330.9
SH380RV	38.0	6410	21871	3.10	45/450	320.9
SH438RV	43.8	7420	25317	3.15	70/450	330.9

R-22
1ø – 60Hz – 208/230V

Model	Displacement	Cooling Capacity		COP	Capacitor	Height
	cc	Watt	Btu/h	W/W	uF/V	mm
SD074SN	7.4	1460	4982	2.96	13/400	205.0
SD086SN	8.6	1740	5937	3.05	17/400	205.0
SD091SN	9.1	1845	6295	3.07	17/400	205.0
SD097SN	9.7	1945	6636	3.13	17/400	205.0
SD104SN	10.4	2130	7268	3.13	17/400	232.9
SD111SN	11.1	2290	7813	3.05	17/400	232.9
SD122SN	12.2	2490	8496	3.05	17/400	232.9
SD127SN	12.7	2600	8871	3.08	17/400	232.9
SD134SN	13.4	2785	9502	3.11	25/400	232.9
SG167SN	16.7	3380	11533	3.12	30/420	256.0
SG173SN	17.3	3465	11823	3.12	30/420	256.0
SG184SN	18.4	3760	12829	3.15	30/420	256.0
SG193SN	19.3	3975	13563	3.05	35/400	264.0
SL211CN	21.1	4350	14842	3.10	35/400	264.0
SL253CN	25.3	5170	17640	3.08	40/450	264.0
SHZ73L***U	28.6	5910	20165	3.02	45/440	278.4
SHY73M***U	30.7	6595	22502	3.16	45/440	293.4
SH336SN	33.6	6880	23475	3.28	60/450	317.8
SHW73T***U	35.6	7305	24925	3.02	50/450	293.4
SHV73Y***U	41.7	8520	29070	3.00	50/450	338.9
THK73X***U	45.4	9150	31220	3.05	50/450	338.9

R-410a
1ø – 50Hz – 220/240V

Model	Displacement	Cooling Capacity		COP	Capacitor	Height
	cc	Watt	Btu/h	W/W	uF/V	mm
ASG080CV	8.0	1840	6278	2.71	30/400	247.0
ASG088CV	8.8	2055	7012	2.76	30/400	247.0
ASG096CV	9.6	2200	7506	2.76	30/400	247.0
ASG102CV	10.2	2400	8189	2.77	35/400	247.0
ASG108CV	10.8	2550	8701	2.77	35/400	247.0
ASG116CV	11.6	2730	9315	2.80	35/400	261.0
ASG125CV	12.5	2890	9861	2.75	40/450	261.0
ASL135SV	13.5	3250	11089	2.90	35/450	279.0
ASL140SV	14.0	3370	11498	2.90	35/450	279.0
ASL145SV	14.5	3500	11942	2.95	35/450	279.0
ASL155SV	15.5	3700	12624	2.90	35/450	279.0
ASL180SV	18.0	4350	14842	2.90	35/450	279.0
ASH184SV	18.4	4310	14706	2.80	50/400	283.5
ASH201SV	20.1	4785	16326	2.90	60/400	298.5
ASH210SV	21.0	4995	17043	2.90	60/400	298.5
ASH218SV	21.8	5180	17674	2.90	60/400	298.5
ASH232SV	23.2	5510	18800	2.90	60/400	298.5
ASH244SV	24.4	5800	19790	2.86	50/450	298.5
ASH264SV	26.4	6310	21530	2.85	50/450	298.5
ASH275CV	27.5	6500	22178	2.83	50/450	312.9
ASH307CV	30.7	7330	25010	2.82	60/450	332.0
ASH325CV	32.5	7800	26614	2.82	60/450	332.0

R-410a
1ø – 60Hz – 208/230V

Model	Displacement	Cooling Capacity		COP	Capacitor	Height
	cc	Watt	Btu/h	W/W	uF/V	mm
ASD080SN	8.0	2300	7848	2.85	35/250	243.8
ASD084SN	8.4	2470	8428	2.85	35/250	248.8
ASD102SN	10.2	3020	10304	2.85	35/250	243.8
ASG108SN	10.8	3045	10390	2.85	30/420	261.0
ASG112SN	11.2	3195	10901	2.88	30/450	261.0
ASG116RN	11.6	3239	11051	2.81	25/400	261.0
ASG125SN	12.5	3550	12113	2.84	35/450	261.0
ASL135SN	13.5	3950	13477	2.96	40/400	279.0
ASL145SN	14.5	4195	14313	2.90	40/400	279.0
ASL155SN	15.5	4560	15559	2.94	40/400	279.0
ASL165SN	16.5	4860	16582	2.92	35/450	279.0
ASL170SN	17.0	4950	16889	2.90	50/400	279.0
ASL180SN	18.0	5275	17998	2.90	50/400	279.0
ASH184SN	18.4	5290	18049	2.85	45/400	283.5
ASH195SN	19.5	5640	19244	2.85	45/400	283.5
ASH201SN	20.1	5860	19994	2.88	45/400	283.5
ASH210SN	21.0	5990	20438	2.85	50/400	283.5
ASH218RN	21.8	7755	26460	5.30	35/400	283.5
ASH232SN	23.2	6780	23133	2.87	50/450	302.5
ASH244SN	24.4	7100	24225	2.87	50/450	312.9
ASH264SN	26.4	7700	26272	2.87	50/450	302.5
ATH270RN	27.0	9600	32755	5.15	50/450	335.9
ATH280RN	28.0	10168	34693	5.05	60/450	358.0
ATH290RN	29.0	10850	37020	5.05	60/450	358.0
ATH325RN	32.5	11891	40572	5.05	60/450	358.0
ATH356RN	35.6	13000	44356	5.10	60/450	358.0

T3 - Tropical Condition

R-22
1ø – 50Hz – 220/240V

Model	Displacement	Cooling Capacity		COP	Capacitor	Height
	cc	Watt	Btu/h	W/W	uF/V	mm
SL232MV	23.2	3890	13273	3.05	45/450	264.0
SH286MV	28.6	4815	16429	3.00	45/420	293.4
SH307MV	30.7	5200	17742	3.00	50/400	293.4
SH336MV	33.6	5655	19295	2.95	50/450	293.4
SH356MV	35.6	6010	20506	2.97	50/420	293.4
SH417MV	41.7	7040	24020	3.01	60/450	338.9

R-22
1ø – 60Hz – 208/230V

Model	Displacement	Cooling Capacity		COP	Capacitor	Height
	cc	Watt	Btu/h	W/W	uF/V	mm
SHZ83L***E	28.6	6030	20574	2.98	50/400	293.4
SHW73T***E	35.6	7330	25010	3.00	60/420	307.8
SHV73Y***E	41.7	8520	29070	2.90	60/450	338.9

Panasonic

Rotary Compressor for Air Conditioner

R-22
1ø – 50Hz – 220/240V

Model	Displ.	Capacity	Capacity	Power	COP	Capacitor
	cm^3/rev	W	Btu/h	W	w/w	uF/V
2P14S225CZ	13.2	2220	7575	705	3.15	30/370
2P14T225AZ	13.6	2255	7694	735	3.07	30/370
2P14R225AZ	14.1	2310	7882	760	3.04	30/370
2P15S225CZ	14.7	2430	8291	770	3.16	30/370
2P15S225DZ	14.7	2415	8240	785	3.08	30/370
2PS156D3EA	15.6	2630	8974	885	2.97	30/370
2P16S225CZ	15.6	2610	8905	825	3.16	30/370
2P16T225AZ	16.0	2660	9076	880	3.02	30/370
2P16T226BZ	16.0	2685	9161	845	3.18	30/370
2P17S225BU	16.4	2780	9485	880	3.16	30/370
2P18S225BU	17.4	2940	10031	955	3.08	30/370
2P20T225BZ	19.9	3370	11498	1065	3.16	30/370
2P21T225AZ	21.1	3520	12010	1115	3.16	30/370
2K25S225BU	25.2	4245	14484	1380	3.08	40/370
2K28C225DU	28.2	4660	15900	1550	3.01	45/370
2K31S225AU	30.7	5180	17674	1680	3.08	50/400
2K32S225AU	31.4	5310	18118	1725	3.08	50/400
2KS306D5AB	30.7	5170	17640	1680	3.08	50/400
2KS324D5DA	32.5	5485	18715	1765	3.11	50/370
2V32S225AU	31.6	5375	18340	1700	3.16	60/370
2V32S225BU	31.6	5410	18459	1695	3.19	60/370
2V34S225AU	33.6	5820	19858	1880	3.10	50/370
2V34S225BU	33.6	5810	19824	1815	3.20	60/400
2V36S225BU	35.6	6140	20950	1980	3.10	50/400
2V38S225AU	37.7	6615	22570	2070	3.20	60/370
2V42S225AU	41.6	7200	24566	2340	3.08	50/370
2V42W225AZ	41.0	7355	25095	2305	3.19	55/400
2V43W225CZ	42.1	7355	25095	2260	3.25	55/400
2V43W225BZ	42.1	7435	25368	2270	3.28	55/400
2V44W225CZ	43.6	7610	25965	2415	3.15	60/370
2V47W225AU	47.2	8355	28507	2680	3.12	60/400
2V49W225AU	48.8	8675	29599	2795	3.10	60/400

R-410a
1ø – 50Hz – 220/240V

Model	Displ.	Capacity	Capacity	Power	COP	Capacitor
	cm^3/rev	W	Btu/h	W	w/w	uF/V
5RS066EA	6.7	1525	5203	570	2.68	15/370
5RS080EA	8.0	1840	6278	665	2.77	20/370
5PS102EB	10.2	2415	8240	820	2.95	35/370
5PS108EA	10.8	2515	8581	880	2.86	30/370
5PS132EA	13.2	3120	10645	1085	2.88	30/370
5PS136EA	13.6	3280	11191	1095	3.00	35/370
5PS146EA	14.7	3505	11959	1225	2.86	30/370
5PS146EB	14.7	3525	12027	1210	2.91	30/370
5KS170EA	17.0	4090	13955	1400	2.92	40/370
5KS205EA	20.7	4875	16634	1685	2.89	50/370
5KS225EA	22.5	5400	18425	1920	2.81	50/400
5VS245EA	24.9	6090	20779	2075	2.93	60/400
5VS270EZ	27.4	6705	22877	2270	2.95	60/370
5VS280EZ	28.0	6820	23270	2260	3.02	60/370
5VS295EZ	29.5	7220	24635	2445	2.95	60/370

R-410a
1ø – 60Hz – 208/230V

Model	Displ.	Capacity	Capacity	Power	COP	Capacitor
	cm^3/rev	W	Btu/h	W	w/w	uF/V
5RS058FA	5.8	1630	5562	590	2.76	15/370
5RS062FA	6.2	1745	5954	630	2.77	15/370
5RS062FB	6.2	1765	6022	605	2.92	15/370
5RS072FA	7.3	2020	6892	740	2.73	15/370
5RS080FB	8.0	2265	7728	790	2.87	15/370
5PS102FA	10.2	2855	9741	1010	2.83	30/330
5PS108FB	10.8	3150	10748	1090	2.89	30/370
5PS112FB	11.2	3240	11055	1110	2.92	30/370
5PS118FB	11.8	3430	11703	1180	2.91	30/330
5PS136FB	13.6	3965	13529	1380	2.87	40/330
5PS136FC	13.6	4020	13716	1330	3.02	40/330
5PS146FA	14.7	4355	14859	1480	2.94	40/370
5KS170FB	17.0	5120	17469	1710	2.99	40/370

T3 - Tropical Condition

R-22
1ø – 50Hz – 220/240V

Model	Displ.	Capacity	Capacity	Power	COP	Capacitor
	cm^3/rev	W	Btu/h	W	w/w	uF/V
2V34S225CU	33.6	5780	19720	1870	3.09	50/400
2V36S225CU	35.6	6375	21752	2020	3.16	50/400
2V38S225CU	37.7	6595	22502	2145	3.07	60/400

R-22
1ø – 60Hz – 220/230V

Model	Displ.	Capacity	Capacity	Power	COP	Capacitor
	cm^3/rev	W	Btu/h	W	w/w	uF/V
2K28C226AU	28.2	6055	20660	2000	3.03	50/370
2V34S226AU	33.6	7165	24447	2245	3.19	55/400
2V36S226AU	35.6	7450	25419	2395	3.11	50/400
2V28S236AU	28.2	5915	20182	1840	3.21	50/400
2V30S236AU	29.5	6275	21410	1915	3.28	50/440
2V34S236AU	33.6	7190	24532	2260	3.18	50/400
2V40S236AU	39.3	8470	28900	2935	2.89	50/400

R-410a
1ø – 50Hz – 220/240V

Model	Displ.	Capacity	Capacity	Power	COP	Capacitor
	cm^3/rev	W	Btu/h	W	w/w	uF/V
5KS162FA	16.2	4885	16668	1625	3.01	40/370
5KS164FA	16.5	4980	16992	1660	3.00	40/370
5KS170FC	17.0	5120	17469	1705	3.00	40/370
5KS196FA	19.6	5840	19926	1980	2.95	35/370
5KS225FC	22.5	6670	22758	2285	2.92	35/370
5VS245FA	24.9	7650	26102	2510	3.05	50/400

R-410a
1ø – 60Hz – 208/230V

Model	Displ.	Capacity	Capacity	Power	COP	Capacitor
	cm^3/rev	W	Btu/h	W	w/w	uF/V
5VS270EC	27.4	6705	22877	2270	2.95	60/400
5VS295EC	29.5	7212	24607	2480	2.91	60/400

SECOP

Compressor for Light Commercial Applications

Designation

SC 18 FT X .2

- SC — Design series
- 18 — Nominal displacement in cm³
- FT — CN: R-290 LBP; CL: R-404A/R507 LBP; F: R-134a LBP/MBP; FT: R-134a LBP tropical; G: R-134a LBP/MBP/HBP
- X — Blank: universal; X: HST; K: LST
- .2 — Blank: first generation; .2: second generation; .3: third generation etc.

R-134a 220-240V LBP

Freq.	Model	Code No. Nominal	Code No. Oil Cooling	Nominal HP	ASHRAE Capacity (W) Evaporating Temperature (°C) -45	-40	-35	-30	-25	-23.3	-20	-15	-10	-5	Displ. cm³
50Hz	SC12FT	104G8205	104G8215	3/8	-	-	103	163	233	259	314	408	517	645	12.87
	SC15FT	104G8505	104G8515	1/2	-	-	126	197	280	311	376	489	620	772	15.28
	SC18FTX	104G8805	-	5/8	-	-	144	229	325	361	437	567	719	896	17.69
	SC21FTX	104G8105	-	3/4	-	-	192	296	415	460	553	713	901	1119	20.95
60Hz	SC12FT	104G8205	104G8215	1/2	-	-	125	192	272	302	366	477	608	761	12.87
	SC15FT	104G8505	-	5/8	-	-	154	235	330	365	441	571	724	904	15.28
	SC18FTX	104G8805	-	3/4	-	-	187	280	390	432	520	675	857	1071	17.69
	SC21FTX	104G8106	-	7/8	-	-	240	345	470	518	620	800	1012	1262	20.95

R-404A / R-507 220-240V LBP

Freq.	Model	Code No. Nominal	Code No. Oil Cooling	Nominal HP	ASHRAE Capacity (W) Evaporating Temperature (°C) -45	-40	-35	-30	-25	-23.3	-20	-15	-10	-5	Displ. cm³
50Hz	SC10CLX	104L2533	-	1/3	-	-	166	255	360	400	483	625	789	977	10.29
	SC12CL	104L2623	-	3/8	58	140	237	353	490	541	650	835	1048	1292	12.87
	SC12CLX.2	104L2697	-	1/2	130	205	294	399	522	569	666	834	1026	-	12.87
	SC15CL	104L2853	-	1/2	-	151	299	452	615	673	792	988	1208	1458	15.28
	SC15CLX.2	104L2896	-	1/2	159	250	358	486	637	694	813	1017	1251	1519	15.28
	SC18CL	104L2123	-	5/8	167	271	395	542	715	781	918	1154	1425	1735	17.69
	SC18CLX.2	104L2197	-	3/4	194	306	439	595	780	849	995	1245	1532	-	17.69
	SC21CL	104L2322	-	7/8	226	325	455	617	813	887	1042	1306	1606	-	20.95
60Hz	SC10CLX	104L2533	-	3/8	-	-	224	335	455	499	588	738	906	1096	10.29
	SC12CLX	104L2695	-	1/2	-	146	282	429	590	649	770	972	1200	-	12.87
	SC12CLX.2	104L2697	-	1/2	155	233	342	473	626	683	804	1011	1248	-	12.87
	SC15CLX	104L2854	-	5/8	-	179	351	530	720	788	928	1158	1417	-	15.28
	SC15CLX.2	104L2897	-	5/8	194	305	437	593	776	846	991	1239	1525	-	15.28
	SC18CLX.2	102L2195	-	7/8	113	338	542	737	938	1010	1157	1410	1708	-	17.69

R-290 220-240V LBP

Freq.	Model	Code No. Nominal	Code No. Oil Cooling	Nominal HP	ASHRAE Capacity (W) Evaporating Temperature (°C) -45	-40	-35	-30	-25	-23.3	-20	-15	-10	-5	Displ. cm³
50Hz	SC10CNX	104H8065	-	1/3	-	126	179	245	325	355	420	531	660	809	10.29
	SC12CNX	104H8265	-	3/8	-	178	250	331	426	462	540	678	846	1050	12.87
	SC12CNX.2	104H8266	-	3/8	-	186	258	346	453	493	578	725	895	-	12.87
	SC15CNX	104H8565	-	1/2	-	195	297	415	550	601	707	887	1093	1328	15.28
	SC15CNX.2	104H8566	-	1/2	-	252	332	434	560	609	714	900	1120	-	15.28
	SC18CNX	104H8865	-	5/8	-	219	341	480	640	700	824	1033	1272	1543	17.69
	SC18CNX.2	104H8866	-	5/8	-	244	384	531	689	747	863	1058	1273	-	17.69
	SC21CNX.2	104H8166	-	3/4	-	339	492	654	828	891	1020	1233	1471	-	20.95

R-134a 220-240V MBP

Freq.	Model	Code No. Nominal	Code No. Oil Cooling	Nominal HP	ASHRAE Capacity (W) Evaporating Temperature (°C) -20	-15	-10	-6.7	-5	0	5	7.2	10	Displ. cm³
50Hz	SC10G	104G8000	-	5/16	183	268	369	445	486	618	764	833	925	10.29
	SC12G	104G8240	104G8250	1/3	252	348	464	553	603	768	960	1054	1182	12.87
	SC15G	104G8520	104G8530	3/8	290	424	568	672	728	908	1110	1207	1340	15.28
	SC18G	104G8820	104G8830	1/2	394	526	684	804	870	1087	1337	1459	1624	17.68
	SC21G	104G8140	-	5/8	453	606	793	934	1013	1269	1561	1700	1889	20.95
	SC21MFX	104G8120	-	5/8	530	682	866	1006	1085	1343	1645	1793	1996	20.95
60Hz	SC12G	104G8245	-	3/8	248	370	519	632	696	907	1157	1280	1449	12.87
	SC15G	104G8526	-	1/2	308	468	641	766	834	1049	1292	1409	1567	15.28
	SC18G	104G8823	-	5/8	432	573	745	879	955	1207	1506	1654	1858	17.68

R-404A / R-507 220-240V MBP

Freq.	Model	Code No. Nominal	Code No. Oil Cooling	Nominal Hp	ASHRAE Capacity (W) Evaporating Temperature (°C) -20	-15	-10	-6.7	-5	0	5	7.2	10	Displ. cm³
50Hz	SC10MLX	104L2506	-	1/2	546	687	855	981	1051	1278	1537	1662	-	10.29
	SC12MLX	104L2606	-	5/8	669	838	1038	1188	1272	1542	1852	2001	-	12.87
	SC15MLX	104L2869	-	3/4	829	1038	1285	1471	1574	1909	2293	-	-	15.28
	SC18MLX	104L2139	-	7/8	968	1210	1497	1712	1832	2220	2665	-	-	17.68
	SC18MLX.3	104L2146	-	7/8	1018	1266	1557	1779	1898	2292	2743	2964	-	17.68
60Hz	SC10MLX	104L2506	-	5/8	646	816	1015	1164	1246	1510	1812	1958	-	10.29
	SC12MLX	104L2606	-	3/4	773	970	1199	1370	1465	1770	2118	2286	-	12.87
	SC15MLX.2	104L2803	-	7/8	915	1145	1418	1623	1737	2107	2531	2735	-	15.28

R-290 220-240V MBP

Freq.	Model	Code No. Nominal	Code No. Oil Cooling	Nominal HP	ASHRAE Capacity (W) Evaporating Temperature (°C) -20	-15	-10	-6.7	-5	0	5	7.2	10	Displ. cm³
50Hz	SC10CNX	104H8065	-	1/3	420	531	660	748	809	979	1172	-	-	10.29
	SC12CNX	104H8265	-	3/8	540	678	846	976	1050	1293	1582	-	-	12.87
	SC15CNX	104H8565	-	1/2	707	887	1093	1245	1328	1594	1894	-	-	15.28
	SC18CNX	104H8865	-	5/8	824	1033	1272	1447	1543	1849	2193	-	-	17.68

Test Conditions

Application	R-134a	R-404A/R-507	R-290
Condensing temperature	55 °C	54.4 °C	45 °C
Ambient temperature	32 °C	35 °C	32 °C
Suction gas temperature	32 °C	35 °C	32 °C
Liquid temperature	32 °C	46.1 °C	32 °C

Compressor Unit

ICEAGE supplies air cooled hermetic condensing units which are widely used for light commercial applications: fridge, beverage machine, showcase, etc.

- 100% tested for leakage
- Secop high efficient compressor
- Low electrical consumption and low running cost
- Reliable components for longer life
- High COP
- Wide application range
- Low noise and low vibration

Please contact ICEAGE team for more information.

Compressor for Household Applications

Designation

CD 1 24 C - L 1 Z A

- CD: Compressor series
- 1: R-134a (LBP)
- 4: R-600a (LBP)
- 6: R-134a (HBP)
- 24: Displacement (cc/rev.) x 10
- C: 115V/60Hz
- Q: 220-240V/50Hz
- L: L/R/S: low back pressure
- 1: 1: static cooling
- Z: 0: oil cooling
- A: Optional

R-134a LBP 220-240/50Hz

Model	Motor Type	ASHRAE							Cooling Type
		Cooling Capacity			Power Input	Efficiency			
						EFF	COP	EER	
		kcal/Hr	Watt	BTU/Hr	W	Kcal/WHr	W/W	BTU/WHr	
CD124Q-L1Z2	RSIR	43	50	171	57	0.75	0.88	2.99	ST
CD130Q-L1Z2	RSIR	58	67	230	65	0.89	1.04	3.54	ST
CD130Q-S1ZA	RSIR	58	67	230	74	0.78	0.91	3.11	ST
SD137Q-L1ZB	RSIR	75	87	298	86	0.87	1.01	3.46	ST
SD137Q-L1UB	RSCR	75	87	298	80	0.94	1.09	3.72	ST
SD143Q-L1U2	RSCR	95	110	377	99	0.96	1.12	3.81	ST
MSA143Q-S1Z	RSIR	96	112	381	83	1.16	1.34	4.59	ST
SD152Q-L1UB	RSCR	120	140	476	104	1.15	1.34	4.58	ST
MD152Q-L1U2	RSCR	118	137	468	98	1.2	1.4	4.78	ST
SD162Q-L1UB	RSCR	146	170	580	125	1.17	1.36	4.64	ST
MK162Q-L1UA	RSCR	145	169	576	105	1.38	1.61	5.48	ST
MSS162Q-L1U	RSCR	151	176	599	105	1.44	1.67	5.71	ST
MSA162Q-L1G	RSCR	151	176	599	111	1.36	1.58	5.4	ST
SK170Q-L1U	RSCR	168	195	667	141	1.19	1.39	4.73	ST/OC
MSA170Q-L1B	RSCR	173	201	687	129	1.34	1.56	5.32	ST
MK172Q-L2UB	RSCR	176	205	699	129	1.36	1.59	5.42	FC
SK182Q-L2U	RSCR	203	236	806	164	1.24	1.44	4.91	FC/OC
MK183Q-L2UB	RSCR	203	236	806	142	1.43	1.66	5.68	FC
SK190Q-L2U	RSCR	227	264	901	180	1.26	1.47	5.01	FC/OC
MK190Q-L2U	RSCR	225	262	893	157	1.43	1.67	5.69	FC
SK1A1Q-L2UB	RSCR	275	320	1092	229	1.2	1.4	4.77	FC

R-600a LBP 220-240/50Hz

Model	Motor Type	ASHRAE							Cooling Type
		Cooling Capacity			Power Input	Efficiency			
						EFF	COP	EER	
		kcal/Hr	Watt	BTU/Hr	W	Kcal/WHr	W/W	BTU/WHr	
MD462Q-L1UA	RSCR	78	91	310	68	1.15	1.33	4.55	ST
MSS470Q-L1U	RSCR	98	114	389	67	1.46	1.7	5.81	ST
MSE482Q-L1U	RSCR	127	148	504	77	1.65	1.92	6.55	ST
MSE482Q-L1G	RSCR	125	145	496	81	1.54	1.79	6.13	ST
MSS488Q-L1U	RSCR	120	140	476	82	1.46	1.7	5.81	ST
MSA488Q-L1B	RSCR	120	140	476	90	1.33	1.55	5.29	ST
MD490Q-L1U2	RSCR	130	151	516	94	1.38	1.61	5.49	ST
MD490Q-L1UA	RSCR	130	151	516	99	1.31	1.53	5.21	ST
MSE4A0Q-L1U	RSCR	158	184	627	100	1.58	1.84	6.27	ST
MSE4A0Q-L1G	RSCR	162	188	643	107	1.51	1.76	6.01	ST
MD4A1Q-L1U2	RSCR	157	183	623	111	1.41	1.64	5.62	ST
MSS4A1Q-L1U	RSCR	164	191	651	109	1.5	1.75	5.97	ST
MSA4A1Q-L1B	RSCR	164	191	651	115	1.43	1.66	5.66	ST
MSE4A1Q-L1U	RSCR	176	205	699	112	1.57	1.83	6.24	ST
MSE4A1Q-L1G	RSCR	175	203	695	118	1.48	1.72	5.89	ST
MSS4A2Q-R1U	RSCR	180	209	715	120	1.5	1.74	5.96	ST
MSE4A2Q-L1U	RSCR	192	223	762	126	1.52	1.77	6.05	ST
MD4A3Q-L1U2	RSCR	179	208	711	132	1.36	1.58	5.38	ST
MK4A3Q-L1UA	RSCR	179	208	711	132	1.36	1.58	5.38	ST
MK4A5Q-L1U	RSCR	222	258	881	162	1.37	1.59	5.44	ST
MK4A5Q-R1U	RSCR	222	258	881	152	1.46	1.7	5.8	ST

R-134a LBP 115/60Hz

Model	Motor Type	ASHRAE							Cooling Type
		Cooling Capacity			Power Input	Efficiency			
						EFF	COP	EER	
		kcal/Hr	Watt	BTU/Hr	W	Kcal/WHr	W/W	BTU/WHr	
CD124C-L1Z2	RSIR	52	60	206	65	0.8	0.93	3.18	ST
CD124C-L1ZA	RSIR	50	58	199	68	0.74	0.85	2.92	ST
CD124C-S1Z2	RSIR	52	60	206	57	0.91	1.06	3.62	ST
CD130C-L1Z2	RSIR	70	81	278	76	0.92	1.07	3.66	ST
CD130C-S1Z2	RSIR	70	81	278	73	0.96	1.12	3.81	ST
CD130C-S1ZA	RSIR	70	81	278	82	0.85	0.99	3.39	ST
SD137C-L1ZB	RSIR	93	108	369	102	0.91	1.06	3.62	ST
SD137C-L1UB	RSCR	93	108	369	96	0.97	1.13	3.85	ST
SD143C-L1U2	RSCR	114	133	453	114	1	1.16	3.97	ST
MSA143C-S1A	RSIR	124	144	492	100	1.24	1.44	4.92	ST
MSA143C-S1B	RSCR	124	144	492	94	1.32	1.53	5.24	ST
SD152C-L1UA	RSCR	146	170	580	123	1.19	1.38	4.71	ST
MD152C-L1UB	RSCR	147	171	584	115	1.28	1.49	5.07	ST
MD152C-R1UA	RSCR	152	177	603	116	1.31	1.52	5.2	ST
MSS151C-L1U	RSCR	152	177	603	107	1.42	1.65	5.64	ST
MSA151C-L1U	RSCR	152	177	603	113	1.35	1.56	5.34	ST
MSA151C-L1G	RSCR	152	177	603	109	1.39	1.62	5.54	ST
MSA151C-L1B	RSCR	152	177	603	113	1.35	1.56	5.34	ST
SD162C-L1U2	RSIR	170	198	675	157	1.08	1.26	4.3	ST
	RSCR	170	198	675	150	1.13	1.32	4.5	
MD162C-S1U2	RSCR	166	193	659	146	1.14	1.32	4.51	ST
MK162C-L1UA	RSCR	184	214	730	134	1.37	1.6	5.45	ST
MSS162C-L1U	RSCR	182	212	723	129	1.41	1.64	5.6	ST
MSA162C-L1U	RSCR	182	212	723	136	1.34	1.56	5.31	ST
MSA162C-L1B	RSCR	187	217	742	145	1.29	1.5	5.12	ST
SK170C-L2W	CSR	206	240	818	170	1.21	1.41	4.81	FC
MK172C-L2UA	RSCR	224	260	889	159	1.41	1.64	5.59	FC
MSS170C-L1U	RSCR	222	258	881	152	1.46	1.7	5.8	ST
MSA170C-L1U	RSCR	222	258	881	160	1.39	1.61	5.51	ST
MSA170C-L1B	RSCR	222	258	881	160	1.39	1.61	5.51	ST
SK182C-L2U	RSCR	239	278	949	201	1.19	1.38	4.72	FC
SK182C-L2W	CSR	239	278	949	196	1.22	1.42	4.84	FC
MK183C-L2U	RSCR	258	300	1024	179	1.44	1.68	5.72	FC
MK183C-S2U	RSCR	258	300	1024	187	1.38	1.6	5.48	FC
SK1A1C-L2W	CSR	303	352	1203	275	1.1	1.28	4.37	FC

R-134a HBP 220-240/50Hz

Model	Motor Type	ASHRAE							Cooling Type
		Cooling Capacity			Power Input	Efficiency			
						EFF	COP	EER	
		kcal/Hr	Watt	BTU/Hr	W	Kcal/WHr	W/W	BTU/WHr	
SD643Q-H2Z2	RSIR	370	430	1469	197	1.88	2.18	7.46	FC
SD652Q-H2Z2	RSIR	450	523	1787	220	2.05	2.38	8.12	FC
SK670Q-H2S	CSIR	600	698	2382	310	1.94	2.25	7.68	FC
SK670Q-H2Z	RSIR	595	692	2362	310	1.92	2.23	7.62	FC
SK682Q-H2Z	RSIR	700	814	2779	365	1.92	2.23	7.61	FC
SK6A1Q-S2S	CSIR	900	1047	3573	480	1.88	2.18	7.44	FC
HK672Q2Z	RSIR	610	709	2422	305	2	2.33	7.94	FC
HK680Q2Z	RSIR	700	814	2779	350	2	2.33	7.94	FC
HK690Q2Z	RSIR	780	907	3097	380	2.05	2.39	8.15	FC
HK6A1Q2Z	RSIR	910	1058	3613	465	1.96	2.28	7.77	FC
HK6A3Q2U	RSCR	1050	1221	4169	535	1.96	2.28	7.79	FC

R-134a HBP 115/60Hz

Model	Motor Type	ASHRAE							Cooling Type
		Cooling Capacity			Power Input	Efficiency			
						EFF	COP	EER	
		kcal/Hr	Watt	BTU/Hr	W	Kcal/WHr	W/W	BTU/WHr	
SD643C-H2U2	RSCR	450	523	1787	220	2.05	2.38	8.12	FC
SD652C-H2U2	RSCR	550	640	2184	262	2.1	2.44	8.33	FC
SK670C-H2Y	RSIR	720	837	2858	390	1.85	2.15	7.33	FC
SK682C-H2Y	RSIR	830	965	3295	460	1.8	2.1	7.16	FC
SK6A1C-H2Y	RSIR	1080	1256	4288	630	1.71	1.99	6.81	FC
HK672C2Z	RSIR	750	872	2978	370	2.03	2.36	8.05	FC
HK680C2Z	RSIR	850	988	3375	430	1.98	2.3	7.85	FC
HK690C2Z	RSIR	950	1105	3772	490	1.94	2.25	7.7	FC
HK6A1C2U	RSCR	1090	1267	4327	545	2	2.33	7.94	FC
HK6A3C2W	CSR	1250	1453	4963	690	1.81	2.11	7.19	FC

embraco

Compressor for Household Applications

Designation

EM T 65 H L R

- EM: Basic type
- T: Generation code
- 65: Rated cooling capacity divided by10 in btu/h
- H: R-134a; C: R-600a
- L: LBP; H: HBP
- R: P: PTC + optional run capacitor; C: PTC + run capacitor; T: TSD

R-600a LBP (-35 °C to -10 °C)

Model	Vol./Freq.	Displacement	Cooling Capacity		COP		Capacitor
	V/Hz	cm^3	W	Kcal/h	W/W	Kcal/wh	uF
EMT46CLP	220-240/50	7.96	142	122.1	1.35	1.16	0
EMT45CLP	100/50	5.96	99	85.1	1.38	1.19	0
	100/60	5.96	114	98.0	1.51	1.30	0
EMT55CLP	220-240/50	9.05	162	139.3	1.40	1.20	0
EMU32CLP	220-240/50	5.96	100	85.1	1.49	1.28	0
	200-230/50	5.96	102	87.7	1.41	1.21	0
EMU46CLP	220-240/50	7.96	142	122.1	1.49	1.28	4
EMY32CLP	220-240/50	5.96	99	85.1	1.60	1.38	0
EMY40CLP	220-240/50	7.24	125	107.5	1.60	1.38	4
EMY45CLP	100/50	5.96	99	85.1	1.55	1.33	12
	100/60	5.96	114	98.0	1.63	1.40	12
	100/50	5.96	99	85.1	1.50	1.29	0
	100/60	5.96	114	98.0	1.57	1.35	0
EMYS45CLP	100/50	5.96	99	85.1	1.57	1.35	12
	100/60	5.96	114	98.0	1.65	1.42	12
EMYS46CLC	100/50	7.96	139	119.5	1.57	1.35	20
EMY46CLP	220-240/50	7.96	142	122.1	1.60	1.38	0
EMYS46CLP	220-240/50	7.96	142	122.1	1.60	1.38	4
EMY46CLP	220-240/50	7.96	142	122.1	1.60	1.38	4
EMY55CLP	220-240/50	9.05	162	139.3	1.60	1.38	4
EMR32CLP	220-240/50	5.96	100	86.0	1.68	1.44	2.5
EMR40CLP	220-240/50	7.24	128	110.1	1.68	1.44	4
EMR46CLP	220-240/50	7.96	142	122.1	1.66	1.43	4
EMR55CLP	220-240/50	9.05	165	141.9	1.67	1.44	4
EMS32CLP	220-240/50	5.96	100	86.0	1.71	1.43	2.5
EMS40CLP	220-240/50	7.24	128	110.1	1.75	1.44	4
EMZ32CLP	220-240/50	5.96	100	86.0	1.71	1.47	2.5
EMZ40CLP	220-240/50	7.24	128	110.1	1.72	1.48	4
EMZ66CLP	220-240/50	10.61	190	163.4	1.74	1.50	4
EMX32CLC	220-240/50	5.96	102	87.7	1.78	1.53	2.5
EMX40CLC	220-240/50	7.24	128	110.1	1.80	1.55	4
EMM32CLC	220-240/50	5.96	98	84.3	1.86	1.60	2.5
EMB32CLC	220-240/50	5.96	103	88.6	1.88	1.62	2.5
EMB40CLC	220-240/50	7.24	128	110.1	1.90	1.63	3
EMB46CLC	100/50	7.96	139	119.5	1.67	1.44	20
	100/60	7.96	158	135.9	1.70	1.46	20
EMB46CLC	220-240/50	7.96	142	122.1	1.90	1.63	4
EMB55CLC	220-240/50	9.05	162	139.3	1.88	1.62	4
EMB66CLC	220-240/50	10.61	190	163.4	1.82	1.57	4
	220-240/50	10.61	190	163.4	1.87	1.61	4
EMB46CLC	100/50	7.96	139	119.5	1.67	1.44	20
EMB55CLC	100/50	9.05	158	135.9	1.66	1.44	20
	100/60	9.05	179	153.9	1.72	1.49	20
EM2C32CLT	220-240/50	5.96	98	84.3	1.93	1.66	2.5
EM2C40CLT	220-240/50	7.24	124	106.6	1.94	1.67	3
EMD32CLT	220-240/50	5.96	98	84.0	1.96	1.68	2.5
EMD80CLT	220-240/50	12.21	222	190.9	1.89	1.63	5
EME32CLT	220-240/50	5.96	99	85.0	2.03	1.75	2.5

Test condition: -28/40 °C

R-134a LBP (-35 °C to -10 °C)

Model	Vol./Freq.	Displacement	Cooling Capacity		COP		Capacitor
	V/Hz	cm^3	W	Kcal/h	W/W	Kcal/wh	uF
EMT40HLP	200-240/50	4.15	130	111.8	1.30	1.12	0
EMT45HLP	220-240/50	4.85	145	124.7	1.40	1.20	0
EMT55HLC	200-240/50	5.20	155	133.3	1.43	1.23	5
EMT65HLC	200-240/50	5.96	182	156.5	1.38	1.19	5
EMU45HLP	220-240/50	4.85	145	124.7	1.50	1.29	4
EMU55HLP	220-240/50	5.20	160	137.6	1.50	1.29	4
EMU65HLP	220-240/50	5.96	185	159.1	1.47	1.26	0
EMU45HLP	200-230/50	4.85	145	124.7	1.44	1.24	0
EMU55HLP	200-230/50	5.20	160	157.6	1.44	1.24	0
EMU60HEP	115/60	4.85	178	153.1	1.52	1.31	12
EMU65HLP	200-230/50	5.96	185	159.1	1.44	1.24	0
EMY55HLC	220-240/50	5.20	160	137.6	1.60	1.38	4
EMY65HLC	220-240/50	5.96	185	159.1	1.44	1.24	4
EMY75HLC	220-240/50	7.00	215	184.9	1.60	1.38	4
	200-230/50	7.00	222	190.9	1.52	1.31	4
EMY55HLC	200-230/50	5.20	158	135.9	1.68	1.44	5
	200-230/60	5.20	185	159.1	1.68	1.44	5
EMY65HLC	200-230/50	5.96	180	154.8	1.67	1.44	5
	200-230/60	5.96	208	178.9	1.66	1.43	5
EMY75HLC	200-230/50	7.00	215	184.9	1.50	1.29	5
	200-230/60	7.00	254	218.4	1.62	1.39	5
EMR40HLC	220-240/50	4.15	110	94.6	1.65	1.42	4
EMR50HLC	200-230/50	4.85	150	129.0	1.70	1.46	4
EMR60HLC	200-230/50	5.54	170	146.2	1.70	1.46	4
EMU55HLP	115/60	4.15	142	122.1	1.46	1.26	0
EMY50HLP	115/60	4.15	140	120.4	1.60	1.38	12
EMY55HLP	115/60	4.50	160	137.6	1.60	1.38	12
EMY60HLP	115/60	4.85	175	150.5	1.60	1.38	12
EMH60HER	115-127/60	5.19	189	162.5	1.47	1.26	0
EM2Y60HLP	115/60	5.54	192	165.1	1.65	1.42	12
EM2Z60HLT	115/60	5.54	198	170.3	1.72	1.48	12
EM2Z80HLT	115/60	6.76	240	206.4	1.76	1.51	12
EM3Y60HLP	115/60	5.19	188	161.7	1.69	1.45	12

Test condition: -28/40 °C

Dimensional Drawings

For detailed dimension sizes and further technical data, please contact ICEAGE sales team.

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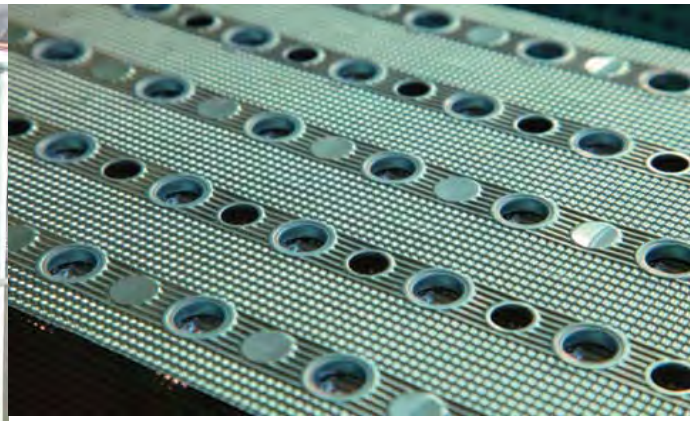
Condensing Unit
Evaporator
Condenser

ICEAGE high-efficient condensing units, air cooled evaporators and condensers come from...



Hydrophilic Coated Fin (optional)

Hydrophilic coated aluminum fin gives better protection and longer life to the aluminum fins against harsh outdoor conditions.

Furthermore, it also can improve heating efficiency by accelerating the defrosting process.

Coil and Circuit

The heat exchanger coils are manufactured with both internally smooth seamless copper tube and inner-grooved copper tube (depends on heat exchange area).

Tubes are arranged in a staggered pattern to enhance available tube surface by exposing more tubes to air flow.

Fin

Extruded aluminum fin collars ensure optimum heat transfer by maximizing tube contact and accurate fin spacing.

The unique corrugated design effectively increases the fin surface, therefore produces higher rate of heat exchange.

JCU Series Condensing Unit

+10 °C to -15 °C
2 to 6 HP
Air Cooled
Outdoor Application

Casing

The casing of unit is made from cold rolled steel sheet with white powder coating.

Compact dimensions for easy installation.

Compressor

Equipped with Copeland scroll compressor to meet the designed requirement of less vibration & noise and ensure reliability.

Heat Exchanger

Corrugated aluminum fins and staggered copper tubes for high heat transfer. High-efficiency condenser coils allow higher application conditions.

Option: hydrophilic coating gives better protection and longer service life against harsh conditions. Copper tubes with latest extended inner surface technology giving the most effective heat transfer characteristics.

Condenser Fan

The condenser fans with high efficiency design motors and blades to offer best combined performance for air volume, noise level and efficiency.

Motors protected by thermal contacts.

Option: famous branded fans available on request.

Designation

JCU	-	5	M	
			M	M: medium temp.; L: low temp.
		5		Nominal horsepower
JCU				Code of series

Cooling Performance

For R-22

Model	Cooling Capacity kW Evaporation Temperature °C			Power Consumption kW Evaporation Temperature °C		
	+5	-5	-12	+5	-5	-12
Medium Temperature: +10 °C to -15 °C						
JCU-2M	5.85	4.20	3.21	1.76	1.62	1.56
JCU-3M	8.22	5.97	4.60	2.63	2.38	2.25
JCU-5M	13.1	9.27	7.16	4.26	3.78	3.40
JCU-6M	16.2	11.8	9.37	5.08	4.68	4.23

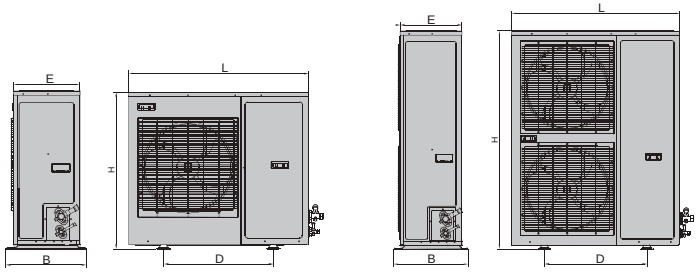
For R-404A

Model	Cooling Capacity kW Evaporation Temperature °C			Power Consumption kW Evaporation Temperature °C		
	+5	-5	-12	+5	-5	-12
Medium Temperature: +10 °C to -15 °C						
JCU-2M	5.88	3.75	2.92	1.92	1.99	1.95
JCU-3M	7.91	4.93	3.96	3.02	3.18	2.98
JCU-5M	12.3	8.23	6.60	5.44	5.40	5.04
JCU-6M	13.4	10.1	8.06	6.53	5.92	5.57

Cooling performance data is based on ambient temperature of 32 °C

Technical Data and Dimensions

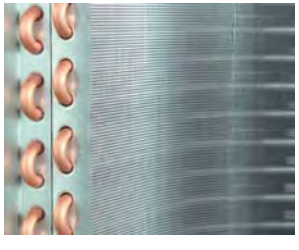
Model	Q'ty of Fan	Max. Air Flow Condenser	Max. Fan Power	Suction Line Size	Liquid Line Size	Dimensions				
						L	B	H	D	E
		m^3/h	W	inch	inch	mm	mm	mm	mm	mm
JCU-2M	1	1x 3200	1x 60	5/8	3/8	970	410	835	625	380
JCU-3M	1	1x 3200	1x 60	5/8	3/8	970	410	835	625	380
JCU-5M	2	2x 3200	2x 60	3/4	1/2	980	410	1330	625	380
JCU-6M	2	2x 3200	2x 60	3/4	1/2	980	410	1330	625	380



Special Design and Support

ICEAGE is waiting to study, design, and advise you in details for your applications and supply the best unit and develop a complete solution in accordance with your requirements.

Standard components	Optional components
Copeland scroll compressor	Fan speed control
Filter drier	Oil separator
Liquid receiver	Vibration eliminator
Pressure gauge	Suction accumulator
Solenoid valve	Sight glass
Pressure control	
Electrical panel	



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KCU Series Condensing Unit

+10 °C to -15 °C
8 to 15 HP
Air Cooled
Outdoor Application

Heat Exchanger

Corrugated aluminum fins and staggered copper tubes for high heat transfer. High-efficiency condenser coils allowing higher application conditions.

Option: hydrophilic coating gives better protection and longer service life against harsh conditions. Copper tubes with latest extended inner surface technology giving the most effective heat transfer characteristics.

Casing

The casing of unit is made from cold rolled steel sheet with white powder coating.

Compact dimensions for easy installation.

Option: galvanized steel sheet for high resistance to corrosion.

Compressor

Equipped with Copeland scroll compressor to meet the designed requirement of less vibration & noise and ensure reliability.

Condenser Fan

The condenser fans with high efficiency design motors and blades to offer best combined performance for air volume, noise level and efficiency.

Motors protected by thermal contacts.

Option: famous branded fans available on request.

Designation

KCU	-	5	M
			M M: medium temp.; L: low temp.
		5	Nominal horsepower
KCU			Code of series

Cooling Performance

For R-22

Model	Cooling Capacity kW Evaporation Temperature °C			Power Consumption kW Evaporation Temperature °C		
	+5	-5	-12	+5	-5	-12
Medium Temperature: +10 °C to -15 °C						
KCU-8M	21.1	15.0	11.6	6.60	6.00	5.46
KCU-10M	29.8	21.5	16.6	8.01	7.32	6.93
KCU-13M	34.2	24.5	18.5	11.1	9.97	9.32
KCU-15M	39.4	28.2	21.2	13.7	12.3	11.5

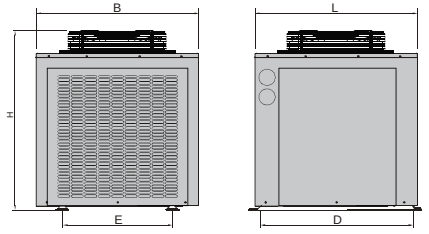
For R-404A

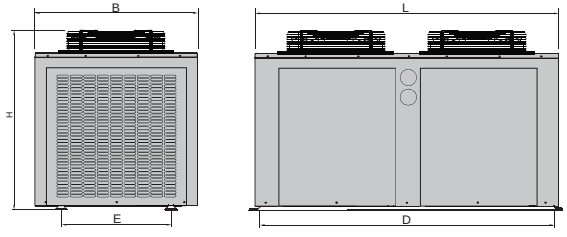
Model	Cooling Capacity kW Evaporation Temperature °C			Power Consumption kW Evaporation Temperature °C		
	+5	-5	-12	+5	-5	-12
Medium Temperature: +10 °C to -15 °C						
KCU-8M	20.0	14.7	11.4	7.67	7.06	6.69
KCU-10M	28.3	20.7	16.2	9.55	8.84	8.41
KCU-13M	32.5	24.0	18.8	12.9	11.8	11.1
KCU-15M	37.3	27.5	21.4	15.9	14.5	13.7

Cooling performance data is based on ambient temperature of 32 °C

Technical Data and Dimensions

Model	Q'ty of Fan	Max. Air Flow Condenser	Max. Fan Power	Suction Line Size	Liquid Line Size	Dimensions				
						L	B	H	D	E
		m^3/h	W	Inch	Inch	mm	mm	mm	mm	mm
KCU-8M	1	1x 8720	1x 600	1-1/8	5/8	1000	900	980	650	870
KCU-10M	1	1x 12200	1x 800	1-3/8	5/8	1100	900	980	750	870
KCU-13M	2	2x 6570	2x 450	1-3/8	5/8	1350	900	980	1000	870
KCU-15M	2	2x 8720	2x 600	1-3/8	5/8	1350	900	980	1100	870





Special Design and Support

ICEAGE is waiting to study, design, and advise you in details for your applications and supply the best unit and develop a complete solution in accordance with your requirements.

Standard components	Optional components
Copeland scroll compressor	Fan speed control
Filter drier	Oil separator
Liquid receiver	Vibration eliminator
Pressure gauge	Suction accumulator
Solenoid valve	Sight glass
Pressure control	
Electrical panel	

LCU Series Condensing Unit

-5 °C to -20 °C
2 to 15 HP
Air Cooled
Indoor Application

Heat Exchanger

Corrugated aluminum fins and staggered copper tubes for high heat transfer. High-efficiency condenser coils allow higher application conditions.

Option: hydrophilic coating gives better protection and longer service life against harsh conditions. Copper tubes with latest extended inner surface technology give the most effective heat transfer characteristics.

Casing

The casing of unit is made from cold rolled steel sheet with powder coating.

The base frame has eye hook for easy installation.

Option: galvanized steel sheet for high resistance to corrosion.

Compressor

Equipped with Copeland scroll compressor to meet the designed requirement of less vibration & noise and ensure reliability.

Condenser Fan

The condenser fans with high efficiency design motors and blades to offer best combined performance for air volume, noise level and efficiency.

Motors protected by thermal contacts.

Option: famous branded fans available on request.

Designation

LCU - 5 L

	M	M: medium temp.; L: low temp.
	5	Nominal horsepower
LCU		Code of series

Cooling Performance

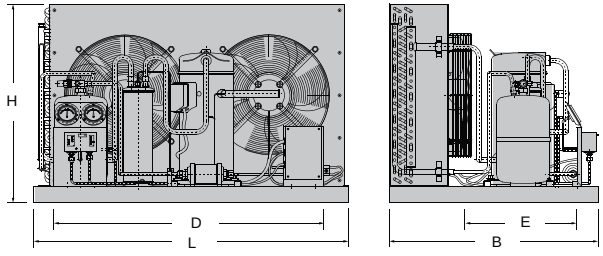
For R-404A

Model	Cooling Capacity kW Evaporation Temperature °C			Power Consumption kW Evaporation Temperature °C		
	-5	-15	-20	-5	-15	-20
Medium Temperature: -5 °C to -20 °C						
LCU-2M	4.23	2.88	2.03	1.86	1.84	1.84
LCU-3M	5.82	3.58	3.37	2.81	2.90	2.56
LCU-4M	6.47	4.58	3.80	3.39	3.17	3.07
LCU-5M	8.23	5.96	5.36	5.40	4.90	4.39
LCU-6M	11.0	7.78	6.06	5.64	5.25	5.21
LCU-8M	14.2	9.90	7.95	7.58	6.94	6.65
LCU-9M	16.5	11.7	9.67	8.19	7.56	7.27
LCU-10M	19.6	14.9	11.5	9.37	8.89	8.19
LCU-13M	22.0	15.5	14.0	12.9	11.7	10.6
LCU-15M	28.0	19.4	15.6	14.8	13.6	13.2

Cooling performance data is based on ambient temperature of 32 °C

Technical Data and Dimensions

Model	Q'ty of Fan	Max. Air Flow Condenser	Max. Fan Power	Suction Line Size	Liquid Line Size	Dimensions				
						L	B	H	D	E
		m^3/h	W	inch	inch	mm	mm	mm	mm	mm
LCU-2M	1	1x 1800	1x 90	3/4	3/8	600	700	520	550	420
LCU-3M	1	1x 3000	1x 120	3/4	3/8	600	700	550	960	420
LCU-4M	2	2x 1800	2x 120	7/8	3/8	1010	710	570	960	420
LCU-5M	2	2x 3000	2x 120	7/8	1/2	1010	710	570	960	420
LCU-6M	2	2x 3000	2x 120	7/8	1/2	1010	710	670	960	420
LCU-8M	2	2x 4500	2x 180	1-1/8	1/2	1230	800	680	1180	520
LCU-9M	2	2x 4500	2x 180	1-3/8	5/8	1230	800	780	1180	520
LCU-10M	2	2x 4500	2x 180	1-3/8	5/8	1230	800	880	1180	520
LCU-13M	2	2x 6570	2x 450	1-3/8	5/8	1430	800	980	1380	500
LCU-15M	2	2x 8720	2x 600	1-5/8	5/8	1430	800	1080	1380	500



Special Design and Support

ICEAGE is waiting to study, design, and advise you in details for your applications and supply the best unit and develop a complete solution in accordance with your requirements.

Standard components	Optional components
Copeland scroll compressor	Fan speed control
Filter drier	Oil separator
Sight glass	Vibration eliminator
Liquid receiver	Suction accumulator
Pressure gauge	Crankcase heater
Solenoid valve	
Pressure control	
Electrical panel	

Customized Solution

We believe that a customized condensing unit with suitable components can make your job easier. Based on our high-efficient heat exchange platform, we offer customers a wide range of reliable, branded components in order to design and produce the perfect customization solution.

MCU Series Condensing Unit

+5 °C to -40 °C
3 to 15 HP
Air Cooled
Indoor Application

Designation

MCU	- 5	L	
		L	M: medium temp.; L: low temp.
	5		Nominal horsepower
MCU			Code of series

Cooling Performance

For R-22

Model	Cooling Capacity kW					Power Consumption kW				
	Evaporation Temperature °C					Evaporation Temperature °C				
	-5	-10	-15	-25	-35	-5	-10	-15	-25	-35
Medium Temperature: +5 °C to -20 °C										
MCU-3M	5.66	4.20	3.46	-	-	3.04	2.55	2.50	-	-
MCU-4M	7.12	5.24	4.28	-	-	3.64	2.76	2.90	-	-
MCU-5M	9.34	7.12	5.91	-	-	4.60	3.57	3.81	-	-
MCU-8M	13.2	9.98	8.16	-	-	6.06	4.59	4.80	-	-
MCU-10M	18.9	14.5	12.1	-	-	9.24	7.07	7.58	-	-
MCU-15M	27.6	21.1	19.9	-	-	11.9	10.1	9.68	-	-
Low Temperature: -5 °C to -40 °C										
MCU-2L	-	-	3.05	2.96	1.12	-	-	1.93	2.09	1.21
MCU-3L	-	-	4.42	3.63	1.73	-	-	2.59	2.43	1.67
MCU-4L	-	-	6.57	4.80	3.52	-	-	3.62	2.90	2.95
MCU-10L	-	-	14.5	8.94	7.16	-	-	7.70	6.35	6.33
MCU-15L	-	-	19.5	12.5	9.90	-	-	10.5	8.52	8.59

For R-404A

Model	Cooling Capacity kW					Power Consumption kW				
	Evaporation Temperature °C					Evaporation Temperature °C				
	-5	-10	-15	-25	-35	-5	-10	-15	-25	-35
Low Temperature: -5 °C to -40 °C										
MCU-2L	-	-	-	2.83	16.5	-	-	-	2.07	1.49
MCU-3L	-	-	5.69	3.80	2.26	-	-	3.40	2.69	2.02
MCU-4L	-	-	6.81	4.58	2.75	-	-	4.17	3.21	2.40
MCU-10L	-	-	16.3	10.7	6.37	-	-	8.61	6.87	5.20
MCU-15L	-	-	20.0	13.7	8.48	-	-	11.9	9.19	6.94

Heat Exchanger

Corrugated aluminum fins and staggered copper tubes for high heat transfer. High-efficiency condenser coils allow higher application conditions.

Option: hydrophilic coating gives better protection and longer service life against harsh conditions. Copper tubes with latest extended inner surface technology give the most effective heat transfer characteristics.

Condenser Fan

The condenser fans with high efficiency design motors and blades to offer best combined performance for air volume, noise level and efficiency.

Motors protected by thermal contacts.

Option: famous branded fans available on request.

Compressor

Equipped Copeland or Bitzer semi-hermetic compressor to meet the design requirement and ensure reliability.

Casing

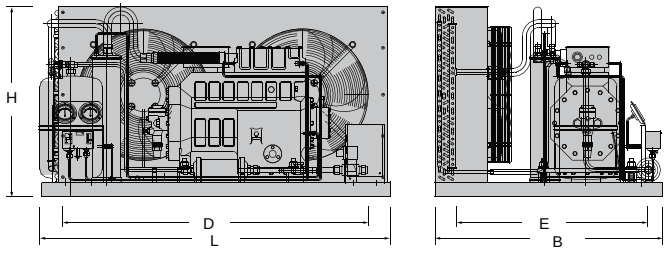
The casing of unit is made from cold rolled steel with powder coating.

The base frame has eye hook for easy installation.

Option: galvanized steel sheet for high resistance to corrosion.

Technical Data and Dimensions

Model	Q'ty of Fan	Max. Air Flow Condenser	Max. Fan Power	Suction Line Size	Liquid Line Size	Dimensions				
						L	B	H	D	E
		m^3/h	W	inch	inch	mm	mm	mm	mm	mm
MCU-3M	2	2x 1800	2x 120	3/4	3/8	1010	710	520	960	420
MCU-4M	2	2x 3000	2x 120	3/4	3/8	1010	710	570	960	420
MCU-5M	2	2x 3000	2x 120	1	1/2	1010	710	570	960	420
MCU-8M	2	2x 4500	2x 180	1-1/8	5/8	1230	800	780	1180	520
MCU-10M	2	2x 4500	2x 180	1-1/8	5/8	1430	900	880	1390	600
MCU-15M	2	2x 8720	2x 600	1-3/8	5/8	1430	900	1080	1390	600
MCU-2L	1	1x 1800	1x 120	7/8	3/8	600	700	520	550	420
MCU-3L	2	2x 1800	2x 120	7/8	3/8	1010	710	520	960	420
MCU-4L	2	2x 3000	2x 120	1-1/8	3/8	1010	710	570	960	420
MCU-10L	2	2x 4500	2x 180	1-3/8	5/8	1430	900	880	1390	600
MCU-15L	2	2x 8720	2x 600	1-3/8	5/8	1430	900	1080	1390	600



Special Design and Support

ICEAGE is waiting to study, design, and advise you in details for your applications and supply the best unit and develop a complete solution in accordance with your requirements.

Standard components	Optional components
Copeland / Bitzer semi-hermetic compressor	Fan speed control
Filter drier	Oil separator
Liquid receiver	Vibration eliminator
Pressure gauge	Suction accumulator
Solenoid valve	Sight glass
Pressure control	Crankcase heater
Electrical panel	

Customized Solution

We believe that a customized condensing unit with suitable components can make your job easier. Based on our high-efficient heat exchange platform, we offer customers a wide range of reliable, branded components in order to design and produce the perfect customization solution.

NCU Series Condensing Unit

+5 °C to -40 °C
15 to 50 HP
Air Cooled
Outdoor Application

Designation

NCU - 5 L

- **L** — M: medium temp.; L: low temp.
- **5** — Nominal horsepower
- **NCU** — Code of series

Cooling Performance

For R-22

Model	Cooling Capacity kW					Power Consumption kW				
	Evaporation Temperature °C					Evaporation Temperature °C				
	+5	-10	-15	-25	-35	+5	-10	-15	-25	-35
Medium Temperature: +5 °C to -20 °C										
NCU-20M	43.4	26.8	22.1	-	-	16.2	12.2	11.1	-	-
NCU-25M	60.8	36.2	25.5	-	-	19.9	15.5	14.8	-	-
NCU-30M	69.2	41.2	33.6	-	-	24.3	18.4	16.5	-	-
NCU-35M	81.2	50.2	41.6	-	-	31.4	23.8	21.6	-	-
NCU-40M	92.6	56.6	46.4	-	-	38.4	28.0	25.0	-	-
NCU-50M	110.5	69.2	57.7	-	-	44.3	32.2	28.7	-	-
Low Temperature: -5 °C to -40 °C										
NCU-15L	-	-	25.5	16.7	9.9	-	-	14.8	11.5	8.6
NCU-20L	-	-	29.2	19.1	11.3	-	-	17.2	13.1	9.6
NCU-25L	-	-	38.9	25.2	14.5	-	-	22.2	17.5	13.2
NCU-32L	-	-	44.1	28.6	16.8	-	-	26.0	19.9	14.9
NCU-40L	-	-	47.7	28.7	21.0	-	-	29.7	23.5	19.0

For R-404A

Model	Cooling Capacity kW					Power Consumption kW				
	Evaporation Temperature °C					Evaporation Temperature °C				
	+5	0	-15	-25	-30	+5	0	-15	-25	-30
Medium Temperature: +5 °C to -20 °C										
NCU-20M	41.6	36.0	21.7	-	-	18.1	15.9	12.2	-	-
NCU-25M	60.9	52.2	30.3	-	-	22.3	20.6	15.9	-	-
NCU-30M	65.9	57.9	36.1	-	-	26.9	25.0	18.9	-	-
NCU-35M	81.6	70.8	43.2	-	-	34.4	31.8	25.2	-	-
NCU-40M	85.0	76.4	48.2	-	-	38.6	38.3	27.5	-	-
NCU-50M	100.3	82.3	41.7	-	-	45.4	42.4	31.4	-	-
Low Temperature: -5 °C to -40 °C										
NCU-15L	-	-	25.3	13.3	10.4	-	-	16.7	9.6	8.4
NCU-20L	-	-	28.8	17.2	13.6	-	-	19.8	12.8	11.1
NCU-25L	-	-	31.6	22.4	18.1	-	-	25.4	14.1	16.2
NCU-32L	-	-	41.5	27.0	20.9	-	-	23.6	18.5	16.1
NCU-40L	-	-	46.3	30.4	23.4	-	-	27.7	21.2	18.2

Heat Exchanger

Corrugated aluminum fins and staggered copper tubes for high heat transfer. High-efficiency condenser coils allow higher application conditions.

Option: hydrophilic coating gives better protection and longer service life against harsh conditions. Copper tubes with latest extended inner surface technology give the most effective heat transfer characteristics.

Condenser Fan

The condenser fans with high efficiency design motors and blades to offer best combined performance for air volume, noise level and efficiency.

Motors protected by thermal contacts.

Option: famous branded fans available on request.

Compressor

Equipped Copeland or Bitzer semi-hermetic compressor to meet the design requirement and ensure reliability.

Casing

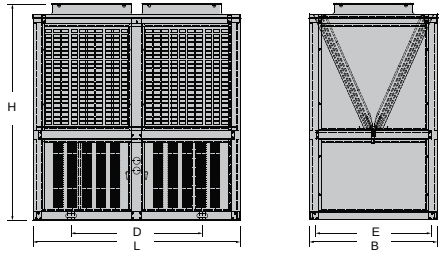
The casing of unit is made from cold rolled steel with white powder coating.

Compact dimensions for easy installation.

Option: galvanized steel sheet for high resistance to corrosion.

Technical Data and Dimensions

Model	Q'ty of Fan	Max. Air Flow Condenser	Max. Fan Power	Suction Line Size	Liquid Line Size	Dimensions				
						L	B	H	D	E
		m^3/h	W	inch	inch	mm	mm	mm	mm	mm
NCU-20M	2	2x 12200	2x 800	1-5/8	3/4	1750	1000	1900	1050	920
NCU-25M	2	2x 15000	2x 750	2-1/8	3/4	1900	1175	1980	1200	1100
NCU-30M	2	2x 19000	2x 1100	2-1/8	3/4	2250	1175	1980	1550	1100
NCU-35M	3	3x 13200	3x 550	2-1/8	7/8	2650	1175	1980	1950	1100
NCU-40M	3	3x 15000	3x 750	2-1/8	7/8	2950	1175	1980	2250	1100
NCU-50M	3	3x 19000	3x 1100	2-58	1-1/8	3400	1175	1980	2700	1100
NCU-15L	2	2x 8720	2x 600	1-5/8	5/8	1430	1000	1080	1390	700
NCU-20L	2	2x 10820	2x 780	2-1/8	3/4	1470	1000	1180	1430	700
NCU-25L	2	2x 10820	2x 780	2-1/8	3/4	1700	1000	1780	1000	920
NCU-32L	2	2x 15000	2x 750	2-1/8	7/8	1900	1175	1980	1200	1100
NCU-40L	2	2x 19000	2x 1100	2-58	7/8	2250	1175	1980	1550	1100



Special Design and Support

ICEAGE is waiting to study, design, and advise you in details for your applications and supply the best unit and develop a complete solution in accordance with your requirements.

Standard components	Optional components
Copeland / Bitzer semi-hermetic compressor	Fan speed control
Filter drier	Oil separator
Liquid receiver	Vibration eliminator
Sight glass	Suction accumulator
Pressure gauge	Crankcase heater
Solenoid valve	
Pressure control	
Electrical panel	
* Oil separator	
* Vibration eliminator	
* Suction accumulator	
* Suction line filter drier	

* Suitable for cooling capacity higher than 20HP.

Customized Solution

We believe that a customized condensing unit with suitable components can make your job easier. Based on our high-efficient heat exchange platform, we offer customers a wide range of reliable, branded components in order to design and produce the perfect customization solution.

www.iceage-hvac.com

WCU Series Condensing Unit

+5 °C to -40 °C
20 to 50 HP
Water Cooled
Indoor Application

Water Cooled Condenser

Designed and manufactured in accordance with ASTM; shell is made from carbon steel, copper tubes are made from finned tubes which result in high efficiency of cooling.

2.8Mpa tube leakage test qualified. Safety device installed.

Compressor

Equipped Copeland or Bitzer semi-hermetic compressor to meet the design requirement and ensure reliability.

Designation

WCU	-	5	L
			L M: medium temp.; L: low temp.
		5	Nominal horsepower
WCU			Code of series

Cooling Performance

For R-22

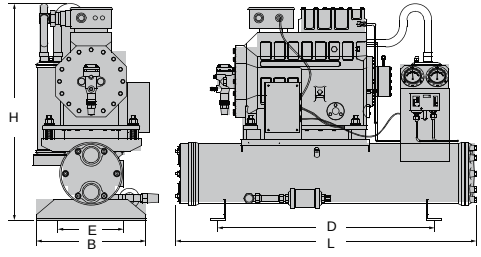
Model	Cooling Capacity kW Evaporation Temperature °C					Power Consumption kW Evaporation Temperature °C				
	+5	-5	-15	-25	-35	+5	-5	-15	-25	-35
Medium Temperature: +5 °C to -20 °C										
WCU-20M	44	30	20	-	-	12.4	11.4	9.9	-	-
WCU-25M	57	39	25	-	-	16.0	14.6	12.5	-	-
WCU-30M	67	46	29	-	-	19.5	17.4	14.7	-	-
WCU-35M	82	56	37	-	-	24.7	22.4	19.4	-	-
WCU-40M	98	67	43	-	-	29.3	26.4	22.4	-	-
WCU-50M	118	79	52	-	-	34.3	30.7	25.8	-	-
Low Temperature: -5 °C to -40 °C										
WCU-20L	-	-	32.2	21.3	12.7	-	-	15.0	11.9	8.9
WCU-25L	-	-	42.8	28.1	16.5	-	-	19.8	15.9	11.8
WCU-32L	-	-	48.4	31.8	19.1	-	-	23.1	18.1	13.4
WCU-40L	-	-	53.3	32.6	21.2	-	-	27.8	22.4	16.9

For R-404A

Model	Cooling Capacity kW Evaporation Temperature °C					Power Consumption kW Evaporation Temperature °C				
	+5	-5	-15	-25	-35	+5	-5	-15	-25	-35
Medium Temperature: +5 °C to -20 °C										
WCU-20M	46	32	21	-	-	14.4	13.0	11.4	-	-
WCU-25M	58	40	27	-	-	18.8	16.9	14.4	-	-
WCU-30M	69	48	32	-	-	22.0	19.9	16.9	-	-
WCU-35M	88	62	41	-	-	28.0	25.3	21.3	-	-
WCU-40M	94	71	48	-	-	40.9	30.2	25.1	-	-
WCU-50M	121	84	56	-	-	40.0	35.8	29.8	-	-
Low Temperature: -5 °C to -40 °C										
WCU-20L	-	-	34.4	24.5	15.9	-	-	17.6	13.9	10.2
WCU-25L	-	-	47.8	33.2	20.9	-	-	22.4	17.6	12.7
WCU-32L	-	-	49.5	29.6	18.1	-	-	26.6	21.1	15.6
WCU-40L	-	-	58.9	38.0	22.6	-	-	32.2	25.4	18.7

Technical Data and Dimensions

Model	Rated Water Flow Condenser, m^3/h		Suction Line Size	Liquid Line Size	Dimensions				
					L	B	H	D	E
	R-22	R-404A	Inch	Inch	mm	mm	mm	mm	mm
WCU-20M	8	12	1-5/8	3/4	1162	300	781	600	200
WCU-25M	10	14	2-1/8	3/4	1360	300	781	800	200
WCU-30M	12	17	2-1/8	3/4	1360	300	781	800	200
WCU-35M	15	22	2-1/8	7/8	1360	300	828	800	200
WCU-40M	17	25	2-1/8	1-1/8	1440	300	883	800	200
WCU-50M	22	30	2-5/8	1-1/8	1646	300	878	1000	200
WCU-20L	7	9	2-1/8	3/4	1162	300	781	600	200
WCU-25L	9	12	2-1/8	3/4	1360	300	776	800	200
WCU-32L	10	13.3	2-1/8	7/8	1360	300	883	800	200
WCU-40L	13	16.5	2-5/8	7/8	1440	300	878	800	200



Special Design and Support

ICEAGE is waiting to study, design, and advise you in details for your applications and supply the best unit and develop a complete solution in accordance with your requirements.

Standard components	Optional components
Copeland / Bitzer semi-hermetic compressor	Fan speed control
Filter drier	Oil separator
Liquid receiver	Vibration eliminator
Sight glass	Suction accumulator
Pressure gauge	Crankcase heater
Solenoid valve	
Pressure control	
Electrical panel	
* Oil separator	
* Vibration eliminator	
* Suction accumulator	
* Suction line filter drier	

* Suitable for cooling capacity higher than 20HP.

Customized Solution

We believe that a customized condensing unit with suitable components can make your job easier. Based on our high-efficient heat exchange platform, we offer customers a wide range of reliable, branded components in order to design and produce the perfect customization solution.

ID Series High-Efficient Air Cooler

The ID series air cooler is designed for a variety of applications. Its wide range of applicable temperature and cooling capacity enable it to meet any requirements.

Casing

The casing of cooler is made from cold rolled steel with white powder coating.

Ceiling mounting brackets for easy installation.

Drip tray for perfect condensation water drainage.

Option: galvanized steel, aluminum, stainless steel sheet for high resistance to corrosion.

Heat Exchanger

Corrugated aluminum fins and staggered copper tubes for high heat transfer.

Suitable fin spacing prevents ice build-up from blocking the fin gaps.

Option: hydrophilic coating gives better protection and longer service life against harsh conditions. Electric heater cable in the drain tray and coil for quick defrosting.

Fan

High efficient axial fans, with low-noise designed steel blades to maximize performances. Each fan is protected by steel guard.

Fan motors have thermal protectors.

Option: more powerful and brand fans for special application. Streamer to extend the air flow distance.

Designation

ID	H	-	4.3	/	20

	20	Heat exchange area, m^2
4.3		Nominal cooling capacity, kW
H		H: high temp.; M: medium temp.; L: low temp.
ID		Code of series

Special Design and Support

ICEAGE is waiting to study, design, and advise you in detail for your applications and supply the best unit and develop a complete solution in accordance with your requirements.

Technical Data

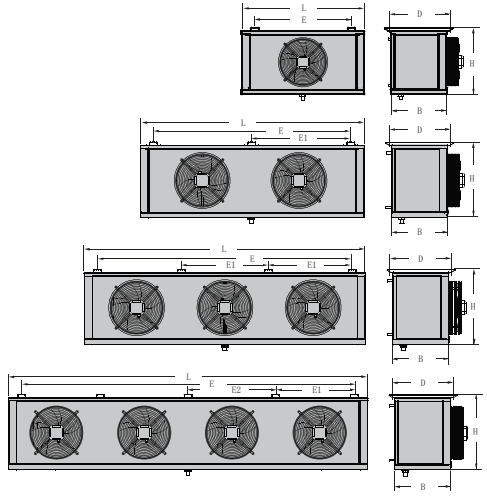
Model	Cooling Capacity*	Area	Refrigerant Volume	Connection Inlet - Outlet	Fan				Electric Defrosting	
					Air Flow	Nx ø(mm)	Power	Range	Fin	Drain Tray
	kW	m^2	L	mm	m^3/h		W	m	W	W
High Temperature +5 to -5 °C: Fin Space 4.5mm										
IDH-2/10	2.0	10	1.4	12 - 14	1566	1x 300	1x 75	8	500	500
IDH-3/15	3.0	15	1.8	12 - 14	3126	2x 300	2x 75	8	900	900
IDH-4.3/20	4.3	20	2.7	12 - 16	3126	2x 300	2x 75	8	900	900
IDH-5.3/25	5.3	25	3.5	12 - 16	4689	3x 300	3x 75	8	1200	1200
IDH-8.4/40	8.4	40	5.8	16 - 25	6800	2x 400	2x 180	10	1300	1300
IDH-12/55	11.6	55	7.6	16 - 25	6800	2x 400	2x 180	10	1500	1500
IDH-17/80	16.8	80	10.1	19 - 32	12000	2x 500	2x 550	15	2400	1200
IDH-23/105	23.2	105	13.5	19 - 32	12000	2x 500	2x 550	15	3600	1200
IDH-28/125	27.6	125	17.3	19 - 38	18000	3x 500	3x 550	15	4800	1600
IDH-35/160	34.6	160	19.6	19 - 38	18000	3x 500	3x 550	15	5100	1700
IDH-40/185	40.3	185	22.7	25 - 42	24000	4x 500	4x 550	15	6000	2000
IDH-46/210	46.1	210	25.8	25 - 42	24000	4x 500	4x 550	15	6600	2200
IDH-52/260	52.0	260	32.2	25 - 50	24000	4x 500	4x 550	15	6600	2200
IDH-66/330	66.0	330	41.9	25 - 50	32000	4x 550	4x 550	15	11000	2200
IDH-82/410	82.0	410	51.6	25 - 50	36000	4x 600	4x 750	17	11000	2200
IDH-94/470	94.0	470	62.2	25 - 54	36000	3x 700	3x 1500	17	16000	2000
DH-116/580	116.0	580	72.8	28 - 54	36000	3x 700	3x 1500	17	17600	2000
Medium Temperature -10 to -20 °C: Fin Space 6.0mm										
IDM-1.2/7	1.2	7	1.4	12 - 14	1563	1x 300	1x 75	8	1000	500
IDM-2.1/12	2.1	12	1.8	12 - 14	3126	2x 300	2x 75	8	900	900
IDM-2.6/15	2.6	15	2.7	12 - 16	3126	2x 300	2x 75	8	1800	900
IDM-3.9/22	3.9	22	3.5	12 - 16	4689	3x 300	3x 75	8	2400	1200
IDM-5.3/30	5.3	30	5.8	16 - 25	6800	2x 400	2x 180	10	2000	1000
IDM-7.0/40	7.0	40	7.6	16 - 25	6800	2x 400	2x 180	10	2400	1200
IDM-11/60	10.5	60	10.1	19 - 32	12000	2x 500	2x 550	15	4200	1400
IDM-14/80	14.0	80	13.5	19 - 32	12000	2x 500	2x 550	15	7000	1400
IDM-18/100	17.5	100	17.3	19 - 38	18000	3x 500	3x 550	15	8000	1600
IDM-21/120	21.0	120	19.6	19 - 38	18000	3x 500	3x 550	15	8500	1700
IDM-25/140	24.5	140	22.7	25 - 42	24000	4x 500	4x 550	15	10000	2000
IDM-28/160	28.0	160	25.8	25 - 42	24000	4x 500	4x 550	15	11000	2200
IDM-35/200	35.0	200	32.2	25 - 50	24000	4x 500	4x 550	15	11000	2200
IDM-44/250	43.8	250	41.9	25 - 50	32000	4x 550	4x 550	15	17600	2200
IDM-54/310	54.3	310	51.6	25 - 50	36000	4x 600	4x 750	17	17600	2200
IDM-63/360	63.0	360	62.2	25 - 54	36000	3x 700	3x 1500	17	20000	2000
IDM-77/440	77.0	440	72.8	28 - 54	36000	3x 700	3x 1500	17	22000	2200

*The cooling capacity at room temperature 0 °C for IDH series and -18 °C for IDM series.

Model	Cooling Capacity*	Area	Refrigerant Volume	Connection Inlet - Outlet	Fan				Electric Defrosting	
					Air Flow	Nx ø(mm)	Power	Range	Fin	Drain Tray
	kW	m^2	L	mm	m^3/h		W	m	W	W
Low Temperature below -20 °C: Fin Space 9.0mm										
IDL-1.2/8	1.2	8	1.8	12 - 14	3126	2x 300	2x 75	8	900	900
IDL-1.9/12	1.9	12	2.7	12 - 16	3126	2x 300	2x 75	8	1800	900
IDL-2.3/15	2.3	15	3.5	12 - 16	4689	3x 300	3x 75	8	2400	1200
IDL-3.1/20	3.1	20	5.8	16 - 25	6800	2x 400	2x 180	10	2600	1300
IDL-4.7/30	4.7	30	7.6	16 - 25	6800	2x 400	2x 180	10	3000	1500
IDL-6.2/40	6.2	40	10.1	19 - 32	12000	2x 500	2x 550	15	3600	1200
IDL-8.5/55	8.5	55	13.5	19 - 32	12000	2x 500	2x 550	15	6000	1200
IDL-11/70	10.9	70	17.3	19 - 38	18000	3x 500	3x 550	15	8000	1600
IDL-13/85	13.2	85	19.6	19 - 38	18000	3x 500	3x 550	15	8500	1700
IDL-16/100	15.5	100	22.7	25 - 42	24000	4x 500	4x 550	15	10000	2000
IDL-18/115	17.8	115	25.8	25 - 42	24000	4x 500	4x 550	15	11000	2200
IDL-22/140	21.7	140	32.2	25 - 50	24000	4x 500	4x 550	15	11000	2200
IDL-26/170	26.4	170	41.9	25 - 50	32000	4x 550	4x 550	15	17600	2200
IDL-33/210	32.6	210	51.6	25 - 50	36000	4x 600	4x 750	17	17600	2200
IDL-39/250	38.8	250	62.2	25 - 54	36000	3x 700	3x 1500	17	20000	2000
IDL-47/300	46.5	300	72.8	28 - 54	36000	3x 700	3x 1500	17	22000	2200

*The cooling capacity at room temperature – 25 °C for IDL series.

Dimensions



Model	L	B	H	D	E	E1	E2
	mm	mm	mm	mm	mm	mm	mm
IDH-2/10 IDM-1.2/7	730	420	475	340	510	-	-
IDH-3/15 IDM-2.1/12 IDL-1.2/8 IDH-4.3/20 IDM-2.6/15 IDL-1.9/12	1280	420	475	340	1060	-	-
IDH-5.3/25 IDM-3.9/22 IDL-2.3/15	1580	420	475	340	1360	-	-
IDH-8.4/40 IDM-5.3/30 IDL-3.1/20	1380	490	600	380	1110	-	-
IDH-12/55 IDM-7.0/40 IDL-4.7/30	1750	490	600	380	1480	-	-
IDH-17/80 IDM-11/60 IDL-6.2/40 IDH-23/105 IDM-14/80 IDL-8.5/55	1920	580	680	510	1650	840	-
IDH-28/125 IDM-18/100 IDL-11/70	2420	580	680	510	2150	740	700
IDH-35/160 IDM-21/120 IDL-13/85	2720	580	680	510	2450	840	800
IDH-40/185 IDM-25/140 IDL-16/100	3120	580	680	510	2850	740	700
IDH-46/210 IDM-28/160 IDL-18/115	3520	580	680	510	3250	840	800
IDH-52/260 IDM-35/200 IDL-22/140	3520	680	680	580	3250	840	800
IDH-66/330 IDM-44/250 IDL-26/170	3520	680	740	580	3250	840	800
IDH-82/410 IDM-54/310 IDL-33/210	3520	940	910	630	3250	840	800
IDH-94/470 IDM-63/360 IDL-39/250	3020	1040	960	720	2750	940	900
IDH-116/580 IDM-77/440 IDL-47/300	3320	1050	1010	720	3050	1040	1000

IGS Series Dual Discharge Air Cooler

The IGS series air cooler with dual air flow is an ideal evaporating unit for food operating & processing workshop. Applicable to about 0 °C cold room.

Casing

The casing of cooler is made from cold rolled steel with white powder coating.

Ceiling mounting hanger for easy installation.

Double drip tray for perfect condensation water drainage.

Option: galvanized steel sheet for high resistance to corrosion.

Heat Exchanger

Corrugated aluminum fins (with 4mm fin spacing) and staggered copper tubes for high heat transfer.

Option: hydrophilic coating gives better protection and longer service life against harsh conditions. Electric heater cable on coils for quick defrosting.

Fan

High efficient 350mm axial fans, with low-noise designed steel blades to maximize performances. Each fan is protected by steel guard.

Fan motors of 130W and 0.7A with thermal contacts installed.

Option: more powerful and brand fans for special application.

Special Design and Support

ICEAGE is waiting to study, design, and advise you in detail for your applications and supply the best unit and develop a complete solution in accordance with your requirements.

Designation

IGS	-	B	/	3	
				3	Qty of fans
		B			Qty of rows of copper tubes A: 4 rows; B: 6 rows
IGS					Code of series

Technical Data

Model	Cooling Capacity*	Area	Refrigerant Volume	Connection Inlet - Outlet	Fan					
					Air Flow	Q'ty x ø(mm)	Power	Current	Range	Noise
	kW	m^2	L	mm	m^3/h		W	A	m	dB (A)
IGS-A/1	2.86	13.5	2.3	12 - 19	2290	1x 350	1x 140	1x 0.38	2x 6	64
IGS-B/1	3.76	20.2	3.4	16 - 19	2290	1x 350	1x 140	1x 0.38	2x 5	64
IGS-A/2	5.74	26.3	4.3	16 - 28	4580	2x 350	2x 140	2x 0.38	2x 6	67
IGS-B/2	7.58	39.5	6.4	16 - 28	4580	2x 350	2x 140	2x 0.38	2x 5	67
IGS-A/3	8.64	39.2	6.2	16 - 28	6870	3x 350	3x 140	3x 0.38	2x 6	69
IGS-B/3	11.4	58.7	9.3	16 - 28	6870	3x 350	3x 140	3x 0.38	2x 5	69
IGS-A/4	11.5	52	8.2	16 - 28	9160	4x 350	4x 140	4x 0.38	2x 6	70
IGS-B/4	15.3	78	12.3	16 - 28	9160	4x 350	4x 140	4x 0.38	2x 5	70

*The cooling capacity at room temperature 0 °C.

Dimensions

IDE Series Slim Type Air Cooler

The IDE series air coolers are suitable for all applications in normal cooling temperature range. Its slim-type design guarantees optimum space use for small cold storage room & display cabinet.

Casing

The casing of cooler is made from cold rolled steel with white powder coating.

Ceiling mounting brackets for easy installation.

Drip tray for perfect condensation water drainage.

Option: galvanized steel, aluminum, stainless steel sheet for high resistance to corrosion.

Heat Exchanger

Corrugated aluminum fins (with 6mm fin spacing) and staggered copper tubes for high heat transfer.

Option: hydrophilic coating gives better protection and longer service life against harsh conditions. Electric heater cable on coils for quick defrosting.

Fan

High efficient 200mm low-noise designed aluminum blades running at a nominal speed of 1300rpm.

Fan motors are 5W, 230V, 0.2A, single phase, shaded pole and are suitable for both 50Hz and 60Hz supplies.

Option: more powerful and brand fans for special application.

Special Design and Support

ICEAGE is waiting to study, design, and advise you in detail for your applications and supply the best unit and develop a complete solution in accordance with your requirements.

Designation

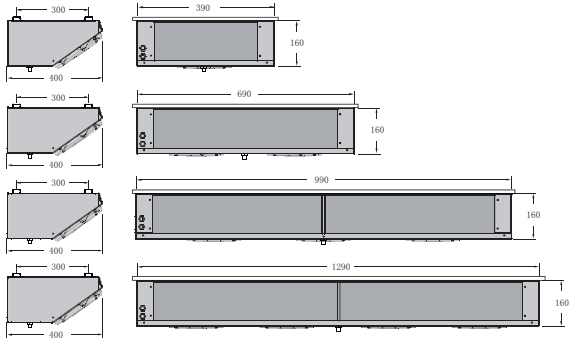
IDE	-	0.47	/	2.5	
				2.5	Heat exchange area, m^2
		0.47			Nominal cooling capacity, kW
IDE					Code of series

Technical Data

Model	Cooling Capacity*	Area	Refrigerant Volume	Connection Inlet - Outlet	Fan					Electric Defrosting
					Air Flow	Q'ty x ø(mm)	Power	Current	Range	
	kW	m^2	L	mm	m^3/h		W	A	m	W
IDE-0.47/2.5	0.47	2.75	0.7	10 - 14	400	1x 200	29	0.2	4	300
IDE-0.93/5.0	0.93	5.20	1.3	10 - 14	800	2x 200	29	0.2	4	600
IDE-1.40/7.5	1.40	7.40	1.9	10 - 14	1200	3x 200	29	0.2	4	900
IDE-1.9/10.5	1.86	10.50	2.7	10 - 14	1600	4x 200	29	0.2	4	1200

*The cooling capacity at room temperature +2 °C.

Dimensions



INH Series V-Type Condenser

The INH series air cooled condensers are designed to work with the most common refrigerants. Compact-design construct and pre-wired axial fans suitable for a variety of applications.

Fan

Factory pre-wired axial fans with wide range of size (ø200 to 600mm) provide with optimal ventilation and sound characteristics. Each fan is protected by steel guard.

Option: more powerful and brand name fans for special application.

Heat Exchanger

The air-cooled heat exchanger consists of inner-smooth seamless copper tubes or inner-grooved copper tubes (heat exchange area > 70 m^2) arranged in staggered rows.

Option: hydrophilic coating gives better protection and longer service life against harsh conditions.

Casing

The casing of condenser is made from cold rolled steel with white powder coating.

Option: galvanized steel sheet for high resistance to corrosion.

Special Design and Support

ICEAGE is waiting to study, design, and advise you in detail for your applications and supply the best unit and develop a complete solution in accordance with your requirements.

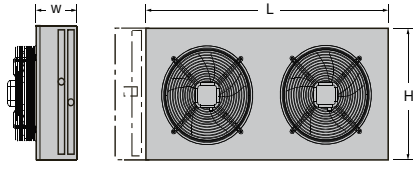
Designation

INH	35	/	100	
			100	Heat exchange area
	35			Nominal heat exchange capacity
INH				Code of series

Technical Data

Model	Nominal Capacity	Heat Exchange	Total Air Flow	Total Consumed	Fan Q'ty x ø(mm)	Connection Inlet - Outlet	Coil Row x Coil Circuit	Dimensions		
	kW, Δt = 15K	Area m^2	m^3/h	Power, kW		mm		L mm	W mm	H mm
INH-0.7/2	0.7	2	430	35	1x 200	10 - 10	2 x 4	250	120	240
INH-1.2/3.4	1.2	3.4	430	35	1x 200	10 - 10	3 x 4	250	120	240
INH-1.4/4.0	1.4	4	430	35	1x 200	10 - 10	3 x 4.5	300	120	255
INH-1.6/4.4	1.6	4.4	910	60	1x 250	10 - 10	3 x 5	325	120	280
INH-1.9/5.2	1.9	5.2	1530	75	1x 300	10 - 10	3 x 6	370	130	340
INH-2.9/8	2.9	7	1530	75	1x 300	12 - 12	4 x 6	370	150	340
INH-3.0/8.4	3.0	8.4	1530	75	1x 300	12 - 12	3 x 6	450	170	350
INH-3.8/10.6	3.8	10.6	1530	75	1x 300	12 - 12	4 x 6	450	170	350
INH-3.6/10	3.6	10	1800	90	1x 350	16 - 12	3 x 8	450	170	420
INH-4.3/12	4.3	12	1800	120	1x 350	16 - 12	4 x 8	440	180	420
INH-5.4/15	5.3	15	1800	120	1x 350	16 - 12	4 x 9	490	180	470
INH-6.4/18	6.4	18	3000	120	1x 400	16 - 12	4 x 10	530	180	520
INH-7.9/22A	7.9	22	3000	120	1x 400	16 - 12	5 x 10	530	200	520
INH-10/27	10.0	27	3000	120	1x 400	19 - 16	6 x 9	590	240	470
INH-7.9/22B	7.9	22	3600	240	2x 350	16- 12	4 x 8	810	180	420
INH-10/28	10.0	28	3600	240	2x 350	19 - 14	4 x 9	890	180	470
INH-12/33	11.9	33	6000	240	2x 400	19 - 14	4 x 10	940	180	520
INH-15/42	15.0	42	6000	240	2x 400	19 - 16	5 x 10	940	200	520
INH-19/52	18.7	52	6000	240	2x 400	19 - 16	5 x 12	940	200	620
INH-21/60	21.4	60	9000	360	2x 450	22 - 19	5 x 12	1160	240	620
INH-25/70	24.6	70	9000	360	2x 450	25 - 19	4 x 14	1160	240	720
INH-28/80	28.2	80	9000	360	2x 450	25 - 19	4 x 16	1160	240	820
INH-35/100	35.4	100	13140	900	2x 500	25 - 19	4 x 17	1350	260	870
INH-39/110	39.1	110	13140	900	2x 500	32 - 19	4 x 18	1350	260	920
INH-42/120	42.2	120	17440	1200	2x 550	32 - 19	4 x 20	1350	260	1020
INH-48/135	47.8	135	17440	1200	2x 550	32 - 19	5 x 18	1350	260	920
INH-55/155	55.0	155	21640	1560	2x 600	32 - 22	5 x 20	1400	300	1020
INH-60/170	59.5	170	21640	1560	2x 600	32 - 22	5 x 22	1400	300	1120

Dimensions



INV Series V-Type Condenser

The INV series air cooled condensers are designed to work with the most common refrigerants such as R-410a, R-404a, R-507A, ...R-134a.

Space-saving construction due to the V-type arrangement of heat exchanger coils. The capacity range is from 25kW to 165kW suitable for use in most large scale refrigeration and air conditioning condenser applications.

Casing

The casing of condenser is made from cold rolled steel with white powder coating.

Option: galvanized steel sheet for high resistance to corrosion.

Heat Exchanger

The air-cooled heat exchanger consists of inner-smooth seamless copper tubes or inner-grooved copper tubes (heat exchange area > 70 m^2) arranged in staggered rows.

Option: hydrophilic coating gives better protection and longer service life against harsh conditions.

Fan

Fans are the highest quality and efficiency for long service life, with optimal ventilation and sound characteristics.

Option: more powerful and brand name fans for special application.

Special Design and Support

ICEAGE is waiting to study, design, and advise you in detail for your applications and supply the best unit and develop a complete solution in accordance with your requirements.

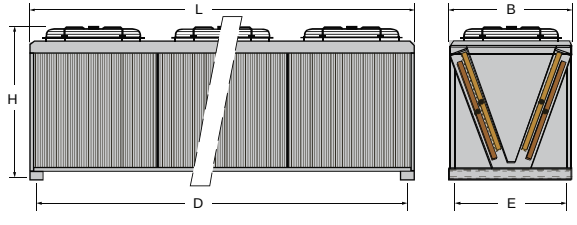
Designation

INV	35	/	100	
			100	Heat exchange area
	35			Nominal heat exchange capacity
INV				Code of series

Technical Data

Model	Nominal Capacity	Heat Exchange Area m^2	Air Flow m^3/h	Total Consumed Power, kW	Fan Q'ty x ø(mm)	Connection Inlet - Outlet	Dimensions				
	kW, Δt = 15K						L mm	B mm	H mm	D mm	E mm
INV-25/72	24.8	72	1x 8720	0.60	1x 550	22 - 16	950	900	880	870	650
INV-30/87	30.1	87	1x 10820	0.78	1x 600	25 - 16	1100	1000	880	1020	650
INV-39/110	39.1	110	2x 6570	0.90	2x 500	25 - 16	1400	900	880	1320	650
INV-45/130	44.9	130	2x 8720	1.20	2x 550	28 - 19	1550	900	880	1470	650
INV-55/155	55.0	155	2x 8720	1.20	2x 550	28 - 19	1600	1000	980	1520	750
INV-64/185	63.8	185	2x 10820	1.56	2x 600	28 - 22	1700	1000	1080	1620	750
INV-73/210	72.7	210	2x 12200	1.60	2x 630	32 - 22	1750	1000	1180	1670	750
INV-83/240	82.8	240	2x 15000	1.50	2x 700	32 - 22	1900	1175	1260	1820	925
INV-104/300	103.8	300	2x 19000	2.20	2x 750	35 - 25	2250	1175	1260	2170	925
INV-111/320	111.0	320	2x 19000	2.20	2x 750	38 - 25	2350	1175	1260	2270	925
INV-125/360	124.6	360	3x 13200	1.65	3x 650	42 - 28	2650	1175	1260	2570	925
INV-138/400	138.4	400	3x 15000	2.25	3x 700	42 - 28	2950	1175	1260	2870	925
INV-166/480	165.6	480	3x 19000	3.30	3x 750	54 - 28	3400	1175	1260	3320	925

Dimensions



IGP Series Flat Type Condenser

The IGP series air cooled condensers are designed to work with the most common refrigerants such as R-410a, R-404a, R-507A, ...R-134a.

The flat-type with 800mm fans in single or double row. The capacity range is from 40kW to 400kW suitable for use in most large scale refrigeration and air conditioning condenser applications.

Casing

The casing of condenser is made from cold rolled steel with white powder coating.

Option: galvanized steel sheet for high resistance to corrosion.

Heat Exchanger

The air-cooled heat exchanger consists of inner-smooth seamless copper tubes or inner-grooved copper tubes (heat exchange area > 70 m^2) arranged in staggered rows.

Option: hydrophilic coating gives better protection and longer service life against harsh conditions.

Fan

Fans are the highest quality and efficiency for long service life, with optimal ventilation and sound characteristics.

Option: more powerful and brand name fans for special application.

Designation

IGP	B	/	1	2	5	
					5	Qty of row of copper tubes
				2		Qty of fans
			1			Qty of row of fans
	B					B: 6-pole of motor; C: 8-pole of motor
IGP						Code of series

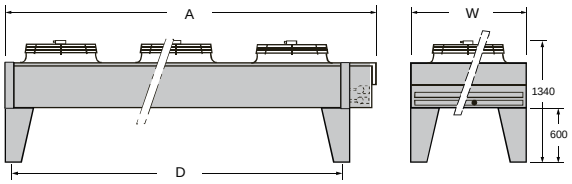
Special Design and Support

ICEAGE is waiting to study, design, and advise you in detail for your applications and supply the best unit and develop a complete solution in accordance with your requirements.

Technical Data

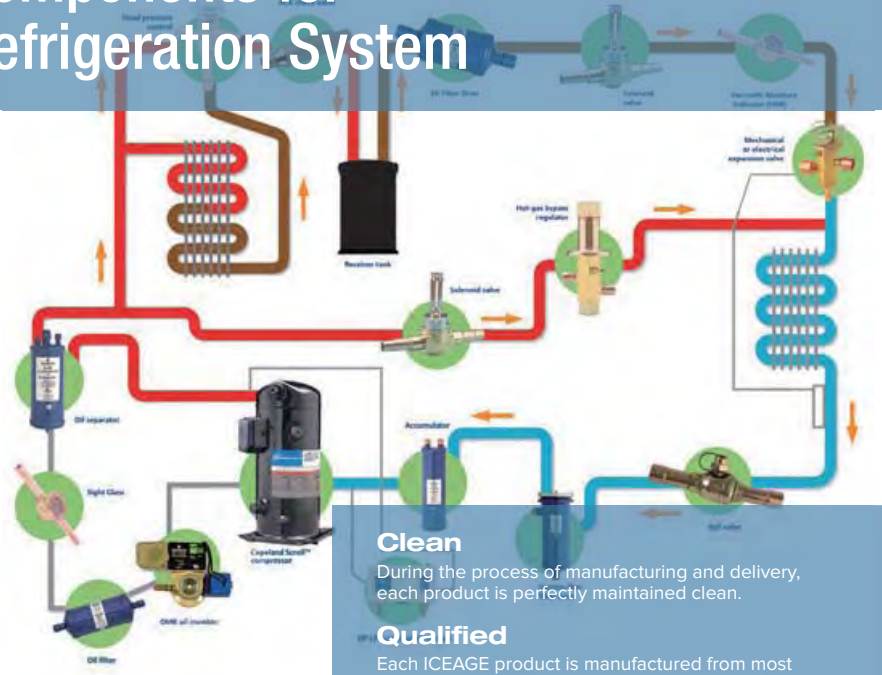
Model	Nominal Capacity kW Δt = 15K		Air Flow m^3/h		Total Consumed Power, kW		Total Current A		Noise Level dB(A) 10m		Area	Volume	Fan Q'ty x ø(mm)
	Δ	Y	Δ	Y	Δ	Y	Δ	Y	Δ	Y	m^2	L	
IGPB/116	66	60	18660	14140	1.80	1.15	3.80	2.20	52	46	200	19	1x 800
IGPC/116	58	48	14770	12200	0.80	0.49	1.95	1.00	45	41			
IGPB/125	109	99	39000	29680	3.60	2.30	7.60	4.40	54	48	330	31	2x 800
IGPC/125	96	79	30120	24920	1.60	0.98	3.90	2.00	47	43			
IGPB/126	132	120	37320	28280	3.60	2.30	7.60	4.40	54	48	400	38	2x 800
IGPC/126	116	96	29540	24400	1.60	0.98	3.90	2.00	47	43			
IGPB/135	165	150	58500	44520	5.40	3.45	11.40	6.60	56	50	500	46	3x 800
IGPC/135	145	120	45180	37380	2.40	1.47	5.85	3.00	49	45			
IGPB/136	198	180	55980	42420	5.40	3.45	11.40	6.60	56	50	600	55	3x 800
IGPC/136	174	144	44310	36600	2.40	1.47	5.85	3.00	49	45			
IGPB/146	264	240	74640	56560	7.20	4.60	15.20	8.80	57	51	800	73	4x 800
IGPC/146	232	192	56080	48800	3.20	19.60	7.80	4.00	50	46			
IGPB/265	330	300	115070	87100	10.8	6.90	22.80	13.20	59	53	1000	92	6x 800
IGPC/265	290	240	88740	70750	4.80	2.94	11.70	6.00	52	48			
IGPB/266	396	360	109620	79020	10.8	6.90	22.80	13.20	59	53	1200	110	6x 800
IGPC/266	348	288	86000	67330	4.80	2.94	11.70	6.00	52	48			

Dimensions



Fan Q'ty	Connection Inlet - Outlet	A	D	W
	mm	mm	mm	mm
1	42 - 35	1600	1250	1220
2	54 - 42	2900	2550	1220
3	54 - 42	4200	3850	1220
4	67 - 54	5500	5150	1220
6	2x 67 - 54	4200	3850	2220

Protection and Control Components for Refrigeration System



Clean

During the process of manufacturing and delivery, each product is perfectly maintained clean.

Qualified

Each ICEAGE product is manufactured from most reliable materials, and undertook high pressure leakage test to guarantee long service life.

FDEK Series Liquid Line Filter Drier

ICEAGE FDEK series liquid line filter driers have a solid core designed to meet the requirements of high-pressure refrigerants.

40 microns filter provides high retention with minimal pressure drop.

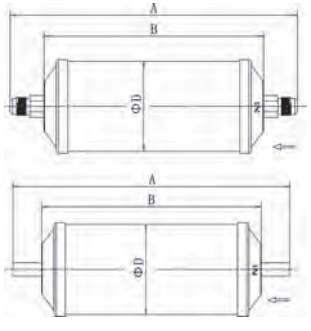
Feature

- Compatible with all CFC, HCFC and HFC refrigerants and oils.
- Max. working pressure up to 4.7Mpa/680psig.
- Firm powder paint exterior coating for high-resistant from corrosion.
- Available with solder (pure copper) and flare connections.
- Regular solid core composed of 80% molecular sieves, 20% activated alumina for moisture and acid removal. (100% molecular sieve high drying capacity core available on request)
- CE certified.

Specification

Model	Connection	Dimension			Flow Capacity (kW)			
		A	B	D	R-134A	R-22	R-404A	R-502
	Inch	mm	mm	mm		R-410A	R-507	
FDEK-032	1/4 SAE Flare	113	66	43	6.7	7.4	4.9	4.6
FDEK-032S	1/4 ODF Solder	110	66	43	8.1	8.7	6.0	5.6
FDEK-033	3/8 SAE Flare	123	66	43	9.5	10.2	7.0	6.7
FDEK-033S	3/8 ODF Solder	114	66	43	10.5	11.6	7.7	7.4
FDEK-052	1/4 SAE Flare	119	72	63.5	7.3	7.9	5.3	5.2
FDEK-052S	1/4 ODF Solder	116	72	63.5	12.8	13.9	9.2	9.0
FDEK-053	3/8 SAE Flare	129	72	63.5	16.2	17.6	11.7	11.4
FDEK-053S	3/8 ODF Solder	120	72	63.5	23.5	25.5	16.9	16.6
FDEK-082	1/4 SAE Flare	145	98	63.5	8.1	8.1	7.3	7.2
FDEK-082S	1/4 ODF Solder	142	98	63.5	11.3	11.5	9.7	9.7
FDEK-083	3/8 SAE Flare	155	98	63.5	12.7	12.5	10	9.8
FDEK-083S	3/8 ODF Solder	146	98	63.5	14.5	15.9	9.7	9.4
FDEK-084	1/2 SAE Flare	163	98	63.5	36	31	42	27
FDEK-084S	1/2 ODF Solder	148	98	63.5	50.6	55	35.4	34
FDEK-085S	5/8 ODF Solder	146	98	63.5	55.6	60.1	40.4	39
FDEK-162	1/4 SAE Flare	159	112	76	15.3	15.6	12.7	12.2
FDEK-162S	1/4 ODF Solder	156	112	76	16.5	17.9	11.9	11.6
FDEK-163	3/8 SAE Flare	169	112	76	21.4	23.3	15.4	15.1
FDEK-163S	3/8 ODF Solder	160	112	76	29	31.6	21	20.5
FDEK-164	1/2 SAE Flare	177	112	76	42.8	46.5	30.9	30.2
FDEK-164S	1/2 ODF Solder	162	112	76	51.3	55.8	37	36.2
FDEK-165	5/8 SAE Flare	185	112	76	64.2	69.8	46.3	45.3
FDEK-165S	5/8 ODF Solder	160	112	76	66	72.5	47	46
FDEK-166	3/4 SAE Flare	191	112	76	65.8	70.9	46.7	45.8
FDEK-166S	3/4 ODF Solder	166	112	76	69.5	74.8	49.1	48.5
FDEK-167S	7/8 ODF Solder	172	112	76	70.5	76.7	50.9	49.8
FDEK-302	1/4 SAE Flare	232	185	76	12.3	12.3	11	11
FDEK-303	3/8 SAE Flare	242	185	76	14.6	14.6	12	12
FDEK-303S	3/8 ODF Solder	233	185	76	35	35	27	27
FDEK-304	1/2 SAE Flare	250	185	76	49	49	37	37
FDEK-304S	1/2 ODF Solder	235	185	76	54	54	43	43
FDEK-305	5/8 SAE Flare	258	185	76	67.6	73.5	52.5	47.8
FDEK-305S	5/8 ODF Solder	233	185	76	72.7	79.1	51	51.4
FDEK-306	3/4 SAE Flare	264	185	76	70.3	78	58	51
FDEK-306S	3/4 ODF Solder	239	185	76	79	85	71.1	57
FDEK-307S	7/8 ODF Solder	245	185	76	98.4	107	78.7	69.9
FDEK-309S	1-1/8 ODF Solder	245	185	76	110.4	118.7	46.3	77.1
FDEK-413	3/8 SAE Flare	249	192	89	27	27	21	21
FDEK-413S	3/8 ODF Solder	240	192	89	42	42	36	36
FDEK-414	1/2 SAE Flare	257	192	89	51	51	43	43
FDEK-414S	1/2 ODF Solder	242	192	89	62	62	52	52
FDEK-415	5/8 SAE Flare	265	192	89	69.7	69.7	56	56
FDEK-415S	5/8 ODF Solder	240	192	89	74	74	63	63
FDEK-416	3/4 SAE Flare	271	192	89	81.3	88.5	68.5	60.2
FDEK-416S	3/4 ODF Solder	246	192	89	98.6	100	71	68
FDEK-417S	7/8 ODF Solder	252	192	89	100.5	109.4	80.5	57.5
FDEK-419S	1-1/8 ODF Solder	252	192	89	111.6	121.4		78.8

Dimensions



Construction

FDFE Series Liquid Line Burnout Filter Drier

ICEAGE FDFE series liquid line burn-out filter driers are used to clean up refrigeration and AC systems with after a compressor motor burn-out

The solid core is composed of 48% alumina, 47% molecular and 5% carbon, which effectively absorbs acids & moisture and filters the residue and clean the system. Thus it can protect the new compressor against premature failure.

Access valves on both the inlet and outlet sides make it easy to measure pressure accurately.

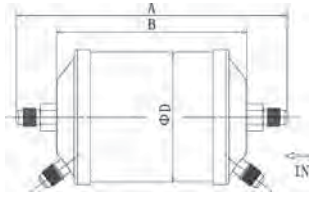
Feature

- Compatible with all CFC, HCFC and HFC refrigerants and oils.
- Max. working pressure up to 4.7Mpa/680psig.
- Firm powder paint exterior coating for high-resistant from corrosion.
- Available with solder (pure copper) and flare connections.
- CE certified.

Specification

Model	Connection	Dimension			Flow Capacity (kW)			
		A	B	D	R-134A	R-22	R-404A	R-407C
	Inch	mm	mm	mm				
FDFE-052	1/4 SAE Flare	119	72	63.5	3.3	5	3.3	5
FDFE-052S	1/4 ODF Solder	116	72	63.5	3.3	5	3.3	5
FDFE-053	3/8 SAE Flare	129	72	63.5	3.3	5	3.3	5
FDFE-053S	3/8 ODF Solder	120	72	63.5	3.3	5	3.3	5
FDFE-082	1/4 SAE Flare	145	98	63.5	3.5	6	4	6
FDFE-082S	1/4 ODF Solder	142	98	63.5	3.5	6	4	6
FDFE-083	3/8 SAE Flare	155	98	63.5	3.5	6	4.5	6
FDFE-083S	3/8 ODF Solder	146	98	63.5	3.5	6	4.5	6
FDFE-084	1/2 SAE Flare	163	98	63.5	5.5	10	8	10
FDFE-084S	1/2 ODF Solder	148	98	63.5	5.5	10	8	10
FDFE-085S	5/8 ODF Solder	146	98	63.5	7	15	10	15
FDFE-162	1/4 SAE Flare	159	112	76	5	10.5	7.5	10.5
FDFE-162S	1/4 ODF Solder	156	112	76	5	10.5	7.5	10.5
FDFE-163	3/8 SAE Flare	169	112	76	5.5	13	8	13
FDFE-163S	3/8 ODF Solder	160	112	76	5.5	13	8	13
FDFE-164	1/2 SAE Flare	177	112	76	6	15	8.5	15
FDFE-164S	1/2 ODF Solder	162	112	76	6	15	8.5	15
FDFE-165	5/8 SAE Flare	185	112	76	9.5	20	13	20
FDFE-165S	5/8 ODF Solder	160	112	76	9.5	20	13	20
FDFE-166	3/4 SAE Flare	191	112	76	10	17	12	17
FDFE-166S	3/4 ODF Solder	166	112	76	12	22	15	22
FDFE-167S	7/8 ODF Solder	172	112	76	13	24	17	24
FDFE-302	1/4 SAE Flare	232	185	76	7	14.5	9	14.5
FDFE-303	3/8 SAE Flare	242	185	76	7	14.5	9	14.5
FDFE-303S	3/8 ODF Solder	233	185	76	8.5	16	11	16
FDFE-304	1/2 SAE Flare	250	185	76	10	17	15	17
FDFE-304S	1/2 ODF Solder	235	185	76	10	17	15	17
FDFE-305	5/8 SAE Flare	258	185	76	12.5	18	15	18
FDFE-305S	5/8 ODF Solder	233	185	76	12.5	18	15	18
FDFE-306	3/4 SAE Flare	264	185	76	14	22	19	22
FDFE-306S	3/4 ODF Solder	239	185	76	14	22	19	22
FDFE-307S	7/8 ODF Solder	245	185	76	16	26	22	26
FDFE-309S	1-1/8 ODF Solder	245	185	76	20	31	27	31
FDFE-413	3/8 SAE Flare	249	192	89	14	19	17	19
FDFE-413S	3/8 ODF Solder	240	192	89	14	19	17	19
FDFE-414	1/2 SAE Flare	257	192	89	14.5	25	23	25
FDFE-414S	1/2 ODF Solder	242	192	89	14.5	25	23	25
FDFE-415	5/8 SAE Flare	265	192	89	16	26.5	24.5	26.5
FDFE-415S	5/8 ODF Solder	240	192	89	16	26.5	24.5	26.5
FDFE-416	3/4 SAE Flare	271	192	89	17.5	29.5	25	29.5
FDFE-416S	3/4 ODF Solder	246	192	89	17.5	29.5	25	29.5
FDFE-417S	7/8 ODF Solder	252	192	89	18	30	25	30
FDFE-419S	1-1/8 ODF Solder	252	192	89	21	32	27	32

Dimensions



Construction

FDF Series Suction Line Filter Drier

ICEAGE FDF series suction line filter driers are used to protect the compressor from dirt and all solid contaminants.

Dual access valves on both the inlet and outlet sides for easy pressure readings.

Feature

- Compatible with all CFC, HCFC and HFC refrigerants and oils.
- Max. working pressure up to 3.5Mpa
- Filtration: 40 microns.
- Firm powder paint exterior coating for high-resistant from corrosion.
- Available with solder (pure copper) and flare connections.
- CE certified.

Specification

Model	Connection	Filter Area	Dimension (mm)	
	Inch	in^2	Body Length	Body Diameter
FDF-283F	3/8 SAE Flare	28	223	76
FDF-285T	5/8 ODF Solder	28	212	76
FDF-286T	3/4 ODF Solder	28	223	76
FDF-287T	7/8 ODF Solder	28	227	76
FDF-289T	1-1/8 ODF Solder	28	241	76
FDF-489T	1-1/8 ODF Solder	48	315	76
FDF-4811T	1-3/8 ODF Solder	48	332	76
FDF-4813T	1-5/8 ODF Solder	48	340	76

FDG Series Oil Filter

The FDG series oil filter can filtrate 99% of 3 micron grain but still have enough flow rate to maintain the low pressure drop.

Feature

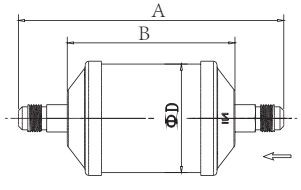
- Compatible with all oils.
- Max. working pressure up to 4.7Mpa/680psig.
- Optional access valve for pressure drop monitoring.
- Firm powder paint exterior coating for high-resistant from corrosion.
- Available with solder (pure copper) and flare connections.
- CE certified.

Specification

Model	Connection	Dimension (mm)			Flow Capacity (kW)			
	Inch	A	B	D	R-134A	R-22	R-404A	R-502
FDG-083	3/8 SAE Flare	155	98	63.5	21.8	23.7	15.7	15.4
FDG-083S	3/8 ODF Solder	146	98	63.5	27.4	29.8	19.8	19.3
FDG-084	1/2 SAE Flare	163	98	63.5	21.8	23.7	15.7	15.4
FDG-084S	1/2 ODF Solder	148	98	63.5	27.4	29.8	19.8	19.3
FDG-085	5/8 SAE Flare	146	98	63.5	27.4	29.8	19.8	19.3

Construction

Dimensions



FDK Series Bi-Flow Filter Drier

The bi-flow filter driers are for use in liquid lines on heat pump or reverse cycle. The device can save two external check valves and two normal filter driers reducing complex lines and cost.

ICEAGE FDK series bi-flow filter driers have built-in check valves which ensure refrigerant liquid always flows from the outer side of the filter core towards the center. Therefore all contaminants are retained irrespective of flow direction.

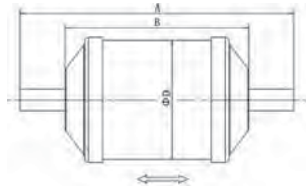
Feature

- Compatible with all CFC, HCFC and HFC refrigerants and oils.
- Max. working pressure up to 4.7Mpa/680psig.
- Firm powder paint exterior coating for high-resistant from corrosion.
- Available with solder (pure copper) and flare connections.
- Regular solid core composed of 80% molecular sieves, 20% activated alumina for moisture and acid removal. (100% molecular sieve high drying capacity core on request).
- CE certified.

Specification

Model	Connection	Dimension mm			Flow Capacity kW		
	Inch	A	B	D	R-22	R-410A	R-407C
FDK-082	1/4 SAE Flare	145	98	63.5	7	7	7
FDK-082S	1/4 ODF Solder	142	98	63.5	8.7	8.7	8.7
FDK-083	3/8 SAE Flare	155	98	63.5	15.8	15.8	15.5
FDK-083S	3/8 ODF Solder	146	98	63.5	17.9	17.9	17.6
FDK-084	1/2 SAE Flare	163	98	63.5	22.5	22.5	22.1
FDK-084S	1/2 ODF Solder	148	98	63.5	23.5	23.5	23.2
FDK-085S	5/8 SAE Flare	146	98	63.5	27	27	27
FDK-162	1/4 SAE Flare	159	112	76	9.9	9.9	9.9
FDK-162S	1/4 ODF Solder	156	112	76	13	13	13
FDK-163	3/8 SAE Flare	169	112	76	16.2	16.2	15.8
FDK-163S	3/8 ODF Solder	160	112	76	18.3	18.3	17.9
FDK-164	1/2 SAE Flare	177	112	76	27	27	26.7
FDK-164S	1/2 ODF Solder	162	112	76	28.5	28.5	27.8
FDK-165	5/8 SAE Flare	185	112	76	29.2	29.2	28.5
FDK-165S	5/8 ODF Solder	160	112	76	30.6	30.6	29.9
FDK-166	3/4 SAE Flare	191	112	76	42	42	42
FDK-166S	3/4 ODF Solder	166	112	76	42	42	42
FDK-167S	7/8 ODF Solder	172	112	76	42.2	42.2	39.8
FDK-307S	7/8 ODF Solder	252	192	76	58	58	58

Dimensions



Construction

FDA Series Replaceable Core Shell

ICEAGE FDA series replaceable core shell is for use in both liquid and suction line of large commercial air conditioning and refrigeration systems.

The shell allows replacement of 48 series cores for the removal of moisture, acid and foreign contaminant.

Feature

- Compatible with all CFC, HCFC and HFC refrigerants.
- Max. working pressure up to 3.5Mpa.
- Firm powder paint exterior coating for high-resistant from corrosion.
- Available with solder (pure copper) and flare connections.
- 100 mesh outlet screen.
- ODF solder fittings 5/8" to 3-1/8".
- CE certified.

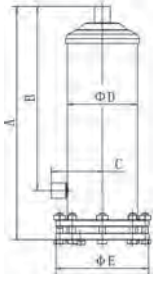
Dimension Data

Model	Connection Inch	Q'ty of Cores	Dimension (mm)				
			A	B	C	D	E
FDA-485	5/8 ODF	1	233	152	78	114	151
FDA-487	7/8 ODF	1	238	157	82	114	151
FDA-489	1-1/8 ODF	1	240	159	84	114	151
FDA-4811	1-3/8 ODF	1	243	162	87	114	151
FDA-4813	1-5/8 ODF	1	245	164	88	114	151
FDA-4817	2-1/8 ODF	1	251	170	92	114	151
FDA-4821	2-5/8 ODF	1	268	170	116	114	151
FDA-967	7/8 ODF	2	383	301	82	114	151
FDA-969	1-1/8 ODF	2	385	303	84	114	151
FDA-9611	1-3/8 ODF	2	388	306	87	114	151
FDA-9613	1-5/8 ODF	2	390	308	88	114	151
FDA-9617	2-1/8 ODF	2	396	314	92	114	151
FDA-9621	2-5/8 ODF	2	413	315	116	114	151
FDA-9624	3 ODF	2	411	313	116	114	151
FDA-9625	3-1/8 ODF	2	408	310	116	114	151
FDA-1449	1-1/8 ODF	3	521	438	84	114	151
FDA-14411	1-3/8 ODF	3	524	441	87	114	151
FDA-14413	1-5/8 ODF	3	526	443	88	114	151
FDA-14417	2-1/8 ODF	3	532	449	92	114	151
FDA-19211	1-3/8 ODF	4	675	595	87	114	151
FDA-19213	1-5/8 ODF	4	677	597	88	114	151
FDA-19217	2-1/8 ODF	4	683	603	92	114	151
FDA-19221	2-5/8 ODF	4	700	602	116	114	151

Technical Data

Model	Nominal Flow Capacity (kW) Pressure Drop 0.014Mpa				Recommendation (kW) Refrigeration Low Temp.			Field Replacement	
	R-134a	R-22	R-404A R-507	R-502	R-134a	R-22	R-404A R-507	R-134a	R-22
FDA-485	64.7	70.3	52.8	45	26.4	35,2	26.4	26.4	35.2
FDA-487	108	116	87.9	75.3	42.2	52.8	35.2	42.2	52.8
FDA-489	195	211	158	136	42.2	52.8	35.2	52.8	70.3
FDA-4811	234	250	230	197	42.2	52.8	35.2	52.8	70.3
FDA-4813	274	299	197	180	47.8	58.2	42.2	56.3	74.6
FDA-4817	310	338	236	217	49.3	64.9	47.1	60.2	78.5
FDA-4821	336	347	269	239	52.7	67.3	49.7	63.3	80.2
FDA-967	177	190	144	123	70.3	87.9	52.8	70.3	87.9
FDA-969	220	236	176	153	87.9	128	87.9	87.9	123
FDA-9611	255	276	195	187	111.5	152	111.1	111.1	155
FDA-9613	297	311	232	213	132.1	194	134.5	134.5	190
FDA-9617	332	329	367	303	135.1	203	157	156	208
FDA-9621	352	347	393	314	157	220	191	173	232
FDA-9624	378	369	432	349	181	240	210	193	257
FDA-9625	396	405	457	378	206	263	231	225	270
FDA-1449	265	285	215	184	106	141	106	106	141
FDA-14411	305	327	246	212	141	176	123	141	176
FDA-14413	374	358	270	245	183	205	134	174	206
FDA-14417	431	392	301	279	224	236	156	205	247
FDA-19211	387	415	313	269	176	246	176	176	246
FDA-19213	447	478	362	312	211	281	193	211	287
FDA-19217	471	503	380	327	229	299	211	229	299
FDA-19221	495	528	498	342	243	243	232	241	325

Dimensions



Construction

FDB Series Replaceable Core Shell

ICEAGE FDB series replaceable core shell is for use in both liquid and suction line of large commercial air conditioning and refrigeration systems.

The shell allows replacement of 100 series cores for the removal of moisture, acid and foreign contaminant.

Feature

- Compatible with all CFC, HCFC and HFC refrigerants.
- Max. working pressure up to 3.5Mpa.
- Firm powder paint exterior coating for high-resistant from corrosion.
- Available with solder (pure copper) and flare connections.
- 100 mesh outlet screen.
- ODF solder fittings 5/8" to 3-1/8".
- CE certified.

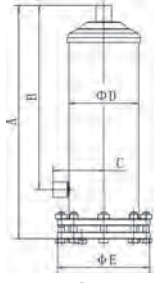
Dimension Data

Model	Connection Inch	Q'ty of Cores	Dimension (mm)				
			A	B	C	D	E
FDB-10013	1-5/8 ODF	1	288	180	106	152	200
FDB-10017	2-1/8 ODF	1	295	187	111	152	200
FDB-10021	2-5/8 ODF	1	303	195	136	152	200
FDB-10024	3 ODF	1	301	188	136	152	200
FDB-10025	3-1/8 ODF	1	300	187	136	152	200
FDB-20013	1-5/8 ODF	2	453	345	106	152	200
FDB-20017	2-1/8 ODF	2	460	352	111	152	200
FDB-20021	2-5/8 ODF	2	468	360	136	152	200
FDB-20024	3 ODF	2	466	353	136	152	200
FDB-20025	3-1/8 ODF	2	465	352	136	152	200
FDB-30013	1-5/8 ODF	3	612	504	111	152	200
FDB-30017	2-1/8 ODF	3	618	504	136	152	200
FDB-30021	2-5/8 ODF	3	627	519	136	152	200
FDB-30024	3 ODF	3	625	512	136	152	200
FDB-30025	3-1/8 ODF	3	624	511	136	152	200
FDB-40013	1-5/8 ODF	4	786	678	111	152	200
FDB-40017	2-1/8 ODF	4	792	684	136	152	200
FDB-40021	2-5/8 ODF	4	801	693	136	152	200
FDB-40024	3 ODF	4	799	686	136	152	200
FDB-40025	3-1/8 ODF	4	798	685	136	152	200

Technical Data

Model	Nominal Flow Capacity (kW) Pressure Drop 0.014Mpa				Recommendation (kW) Refrigeration Low Temp.			Field Replacement	
	R-134a	R-22	R-404A R-507	R-502	R-134a	R-22	R-404A R-507	R-134a	R-22
FDB-10013	190	280	240	156	67	98	59	63	106
FDB-10017	206	294	260	172	74	121	65	69	121
FDB-10021	225	302	287	191	82	145	72	75	139
FDB-10024	238	325	316	204	95	164	84	88	156
FDB-10025	249	342	339	230	102	173	91	98	170
FDB-20013	260	360	374	256	113	195	103	114	191
FDB-20017	273	382	390	280	128	209	112	132	207
FDB-20021	297	408	308	312	145	236	138	147	230
FDB-20024	319	431	321	340	162	251	153	165	243
FDB-20025	327	453	336	367	179	266	171	180	264
FDB-30013	510	545	411	355	264	352	246	264	352
FDB-30017	534	579	433	370	285	367	267	279	374
FDB-30021	556	602	457	389	302	385	285	285	391
FDB-30024	572	617	462	396	315	399	292	296	404
FDB-30025	589	635	480	405	329	413	299	307	417
FDB-40013	632	681	493	421	351	426	321	352	424
FDB-40017	654	703	528	457	387	457	352	387	457
FDB-40021	694	729	549	478	401	480	370	401	492
FDB-40024	734	754	570	499	415	503	388	415	527
FDB-40025	754	776	591	520	438	526	409	436	558

Dimensions



Construction

Filter Drier Core

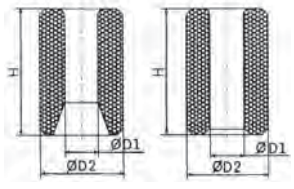
Universal replacement for filter drier shell.

Feature

- For use in either liquid or suction line application.
- Compatible with all CFC, HCFC and HFC refrigerants and oils.

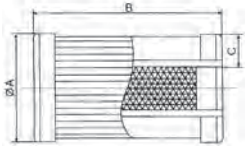
Specification – Solid core

Model	Description	Dimension (inch)		
		D1	D2	H
D-48	Solid core with 80% molecular sieve and 20% activated alumina for moisture and acid adsorption.	1.85	3.78	5.51
W-48	Burnout solid core with 48% alumina, 47% molecular and 5% carbon for clean up after burnout.	1.85	3.78	5.51
H-48	100% solid molecular sieve solid core for high drying capacity.	1.85	3.78	5.51
H-100		2.09	4.80	6.50



Specification – Filter / Strainer core

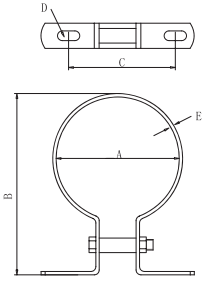
Model	Description	Dimension (inch)		
		A	B	C
F-48	100 mesh filter for suction line	3.74	5.51	0.79
X-48	Balayruse type filter core for use in filtering out solid contaminants in both liquid and suction line.	3.74	5.51	0.79
X-100		4.69	6.54	1.10



Mounting Bracket

Dimension

Model	Dimension (inch)				
	A	B	C	D	E
FDB-114	4.99	6.50	3.75	0.41 x 0.81	0.12
FDB-152	6.00	7.45	4.00		



FDW Series Oil Separator

The oil separator is for use in all refrigeration system where the compressor lubricating oil must be returned directly to the compressor oil sump under all operating conditions.

In this way lubricating oil from the compressor is prevented from circulating with the refrigerant in the refrigeration system itself.

Feature

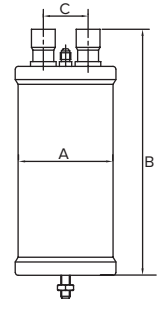
- Refrigerants: R-22, R-134a, R-404A, R-502, R-407C, R-507 etc.
- Temperature of medium: -40 to +120 °C.
- Max. working pressure up to 3.1Mpa.
- Firm powder paint exterior coating for high-resistant from corrosion.
- CE certified.

Specification – Hermetic

Model	Connection	Dimension (mm)			Volume	Nominal Capacity (kW)		
	Inch	A	B	D	ml	R-22	R-134a	R-404a
FDW-55833	3/8 ODF	102	279	48	600	7.0	6.2	7.0
FDW-55824	1/2 ODF	102	279	48	600	7.0	6.2	7.0
FDW-55855A	5/8 ODF	102	338	48	600	19.3	15.8	19.3
FDW-55855	5/8 ODF	102	378	48	600	19.3	15.8	19.3
FDW-55877A	7/8 ODF	102	384	48	600	28.1	22.4	28.8
FDW-55877	7/8 ODF	102	460	48	600	28.1	22.4	28.8
FDW-55889A	1-1/8 ODF	102	414	48	600	37.0	29.9	37.4
FDW-55889	1-1/8 ODF	102	494	48	600	37.0	29.9	37.4
FDW-559011	1-3/8 ODF	102	524	48	600	47.5	40.4	49.0
FDW-569011	1-3/8 ODF	159	394	75	800	49.2	48.4	50.8
FDW-569213	1-5/8 ODF	159	480	75	800	63.3	56.3	65.1
FDW-569417	2-1/8 ODF	159	485	75	800	105.5	88.8	108.6

The nominal capacity is based on evaporating temp. +5 °C.

Dimensions

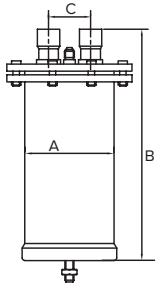


Specification – Top Flange

Model	Connection	Dimension (mm)			Volume	Nominal Capacity (kW)		
	Inch	A	B	D	ml	R-22	R-134a	R-404a
FDW-5301	1/2 ODF	102	275	48	600	7.0	6.2	7.0
FDW-5302	5/8 ODF	102	370	48	600	19.3	15.8	19.3
FDW-5303	7/8 ODF	102	455	48	600	28.1	22.4	28.8
FDW-5304	1-1/8 ODF	102	490	48	600	37.0	29.9	37.4
FDW-5305	1-3/8 ODF	102	520	48	600	47.5	40.4	49.0
FDW-5306	1-5/8 ODF	102	525	48	600	47.5	40.4	49.0
FDW-6303	1-3/8 ODF	159	404	75	800	49.2	48.4	50.8
FDW-6304	1-5/8 ODF	159	490	75	800	63.3	56.3	65.1
FDW-6305	2-1/8 ODF	159	495	75	800	105.5	88.8	108.6

The nominal capacity is based on evaporating temp. +5 °C.

Dimensions



FDC Series Liquid Receiver

The FDC series liquid receiver is designed for refrigerant storage during normal operation and system pump down.

Feature

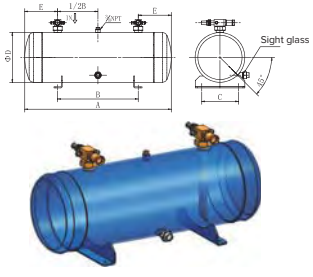
- Max. working pressure up to 35bar.
- Firm powder paint exterior coating for high-resistant from corrosion.
- Available with rotalock valves.
- PTFE gasket seal for valve.

Specification – Horizontal

Model	Connection	Dimension (mm)					Volume
	Inch	A	B	C	D	E	L
FDC-30V7	7/8 ODF	900	600	190	219	150	30
FDC-30V9	1-1/8 ODF	900	600	190	219	150	30
FDC-30	1-1/8 ODF	900	600	190	219	150	30
FDC-35V9	1-1/8 ODF	1000	700	190	219	150	35
FDC-35	1-1/8 ODF	1000	700	190	219	150	35
FDC-40V9	1-1/8 ODF	800	440	220	273	180	40
FDC-40V11	1-3/8 ODF	800	440	220	273	180	40
FDC-40	1-3/8 ODF	800	440	220	273	180	40
FDC-45V11	1-3/8 ODF	900	540	220	273	180	45
FDC-45	1-3/8 ODF	900	540	220	273	180	45
FDC-50V11	1-3/8 ODF	1000	640	220	273	180	50
FDC-50V13	1-5/8 ODF	1000	640	220	273	180	50
FDC-50	1-5/8 ODF	1000	640	220	273	180	50
FDC-55V13	1-5/8 ODF	1100	740	220	273	180	55
FDC-55	1-5/8 ODF	1100	740	220	273	180	55
FDC-60V11	1-5/8 ODF	1200	840	220	273	180	60
FDC-60V13	1-5/8 ODF	1200	840	220	273	180	60
FDC-60V17	2-1/8 ODF	1200	840	220	273	180	60
FDC-60	2-1/8 ODF	1200	840	220	273	180	60

Model with "V" means with rotalock valve for inlet and outlet.

Dimensions and constructions



Specification – Vertical

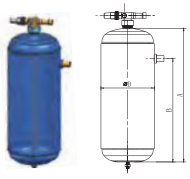
Model	Connection	Dimension (mm)				Volume
	Inch	A	B	D	α°	L
FDC-133	3/8 ODF	170	35	102	18.2	1.1
FDC-166	3/8 ODF	192	40	114	22.3	1.6
FDC-233	3/8 ODF	185	42	127	20	2.0
FDC-333	3/8 ODF	293	42	127	20	3.0
FDC-433	3/8 ODF	238	55	165	21	4.0
FDC-644	1/2 ODF	332	55	165	21	6.0
FDC-844	1/2 ODF	432	55	165	21	8.0
FDC-855	5/8 ODF	432	55	165	21	8.0
FDC-1055	5/8 ODF	322	75	219	17	10.0
FDC-1255	5/8 ODF	380	75	219	17	12.0
FDC-1455	5/8 ODF	435	75	219	17	14.0
FDC-1466	3/4 ODF	435	75	219	17	14.0
FDC-1677	7/8 ODF	492	75	219	17	16.0
FDC-1877	7/8 ODF	549	75	219	17	18.0
FDC-2077	7/8 ODF	606	75	219	17	20.0

Dimensions and constructions

Specification – Vertical

Model	Connection	Dimension (mm)			Volume
	Inch	A	B	D	L
FDC-101J	3/8 ODF	200	132	89	1.0
FDC-102J	3/8 ODF	258	181	127	2.9
FDC-103J	3/8 ODF	290	203	127	3.2
FDC-104J	1/2 ODF	348	257	165	6.2
FDC-105J	5/8 ODF	414	320	165	7.5
FDC-106J	3/4 ODF	600	495	165	11.2
FDC-107J	7/8 ODF	700	585	165	13.2

Dimensions and constructions



FDQ Series Suction Line Accumulator

The FDQ series suction line accumulator is designed to protect compressor from returning of liquid refrigerant.

Feature

- Temperature of medium: -40 to +120 °C.
- Max. working pressure up to 3.0Mpa.
- Firm powder paint exterior coating for high-resistant from corrosion.
- Solder (pure copper) connections.

Specification

Model	Connection	Dimension mm			Flow Capacity kW			Volume
	Inch	A	B	D	R-22	R-134A	R-404A	L
FDQ-204	1/2 ODF	254	52	102	7.0	4.3	4.6	1.5
FDQ-205	5/8 ODF	294	52	102	10.5	6.0	7.0	1.8
FDQ-206	3/4 ODF	316	75	140	14.1	8.1	9.2	3.8
FDQ-207	7/8 ODF	356	75	140	25.7	14.0	16.2	4.3
FDQ-208	1-1/8 ODF	450	85	159	41.5	25.3	26.7	7.3
FDQ-209	1-3/8 ODF	574	85	159	66.1	37.6	42.9	9.6
FDQ-210	1-5/8 ODF	624	85	159	101.3	59.8	64.0	10.4
FDQ-595	5/8 ODF	257	70	127	11.8	7.1	7.2	2.4
FDQ-596	3/4 ODF	257	70	127	14.1	8.1	9.2	2.4
FDQ-597	7/8 ODF	262	70	127	25.7	14.0	16.2	2.4
FDQ-5126	3/4 ODF	332	70	127	14.1	8.1	9.2	3.3
FDQ-5127	7/8 ODF	337	70	127	25.7	14.0	16.2	3.3
FDQ-5137	7/8 ODF	358	70	127	25.7	14.0	16.2	3.5
FDQ-5139	1-1/8 ODF	363	70	127	41.5	25.3	26.7	3.5
FDQ-5179	1-1/8 ODF	465	70	127	41.5	25.3	26.7	4.7
FDQ-51711	1-3/8 ODF	465	70	127	66.1	37.6	42.9	4.7
FDQ-61411	1-3/8 ODF	390	85	159	66.1	37.6	42.9	6.0
FDQ-62013	1-5/8 ODF	548	85	159	101.3	59.8	64.0	8.8

The flow capacity is based on evaporating temp. +5 °C.

Dimensions and construction

Sight Glass

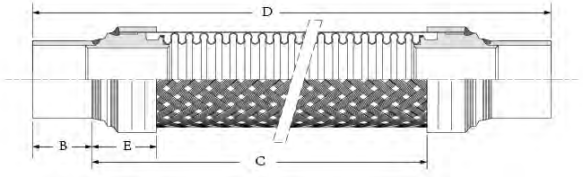
ICEAGE sight glass provides accurate and quick visual of refrigerant and moisture levels within a system.

Feature

- Compatible with all CFC, HCFC and HFC refrigerants and oils.
- 100% leakage tested.
- Solid brass construction.
- Large viewing window and indicator for better visibility.
- Available with extended solder (pure copper) and flare (with brass nuts) connections.
- CE certified.

Specification

Model	Connection Size Inch	Connection Type
VASG-1/4F	1/4	Flare to flare
VASG-3/8F	3/8	Flare to flare
VASG-1/2F	1/2	Flare to flare
VASG-5/8F	5/8	Flare to flare
VASG-1/4F-N	1/4	Flare to flare, with brass nut
VASG-3/8F-N	3/8	Flare to flare, with brass nut
VASG-1/2F-N	1/2	Flare to flare, with brass nut
VASG-5/8F-N	5/8	Flare to flare, with brass nut
VASG-1/4S	1/4	Solder to solder, extended copper tube
VASG-3/8S	3/8	Solder to solder, extended copper tube
VASG-1/2S	1/2	Solder to solder, extended copper tube
VASG-5/8S	5/8	Solder to solder, extended copper tube



Vibration Absorber Tube

ICEAGE vibration absorbers are designed to dampen the transmission of compressor's vibrations to the refrigeration system pipes, reducing the risk of damage and the noise level.

Feature

- Compatible with all CFC, HCFC and HFC refrigerants and oils.
- 100% leakage tested.
- Solder copper connections.
- CE certified.

Specification

Model	Connection	Dimension Inch				Max. Working Pressure	Burst Pressure
	Inch	B	C	D	E	psig	psig
VAT-3/8	3/8 ODF	13/16	6-15/16	8-9/16	1/2	500	2500
VAT-1/2	1/2 ODF	7/8	7-1/4	9	1/2	500	2500
VAT-5/8	5/8 ODF	15/16	8	9-7/8	11/16	500	2500
VAT-3/4	3/4 ODF	1-1/4	8-1/16	10-9/16	11/16	500	2500
VAT-7/8	7/8 ODF	1-7/16	9-1/8	12	13/16	500	2500
VAT-1-1/8	1-1/8 ODF	1-13/16	9-7/16	13-9/16	13/16	500	2500
VAT-1-3/8	1-3/8 ODF	2	11-1/2	15-9/16	7/8	500	2500
VAT-1-5/8	1-5/8 ODF	2-1/4	12-3/8	16-7/8	15/16	500	2500
VAT-2-1/8	2-1/8 ODF	2-3/4	15-3/16	20-5/8	15/16	390	1950
VAT-2-5/8	2-5/8 ODF	3-1/8	18-1/16	24-5/16	1-1/4	340	1700
VAT-3-1/8	3-1/8 ODF	3-7/16	20	26-15/16	1-1/2	300	1500
VAT-3-5/8	3-5/8 ODF	4-1/8	24	32-3/16	1-9/16	175	525
VAT-4-1/8	4-1/8 ODF	4-7/16	24	32-15/16	1-9/16	175	525

Rotalock Valve

ICEAGE Rotalock Valve is applied in the compressor, liquid receiver or tube line connection of refrigeration system to control the open and close of refrigerant flow in system.

Its optimized body assures maximum flow while minimum pressure-drop.

Feature

- Temperature of operation: -40 to +150 °C.
- Max. working pressure up to 48bar.
- 100% leakage tested.
- Solder copper connections.
- Tin coating or copper plating for optimized protection in all application condition.
- Tin coated or solid brass nut for option.
- CE certified.

Specification

Model	Body mm	Base Connection	Tube Connection Inch	
VARV-20-3/4+3/8S	20	3/4"-16UNF	3/8 ODF	
VARV-20-3/4+1/4	20	3/4"-16UNF		1/4 SAE
VARV-20-3/4+3/8	20	3/4"-16UNF		3/8 SAE
VARV-20-3/4+1/2	20	3/4"-16UNF		1/2 SAE
VARV-20-1+1/4S	20	1"-14UNF	1/4 ODF	
VARV-20-1+3/8S	20	1"-14UNF	3/8 ODF	
VARV-20-1+1/2S	20	1"-14UNF	1/2 ODF	
VARV-20-1+5/8S	20	1"-14UNF	5/8 ODF	
VARV-20-1+3/8	20	1"-14UNF		3/8 SAE
VARV-20-1+1/2	20	1"-14UNF		1/2 SAE
VARV-22-1+5/8S	22	1"-14UNF	5/8 ODF	
VARV-22-1+5/8	22	1"-14UNF		5/8 SAE
VARV-30-1 1/4+5/8S	30	1-1/4"-12UNF	5/8 ODF	
VARV-30-1 1/4+3/4S	30	1-1/4"-12UNF	3/4 ODF	
VARV-30-1 1/4+7/8S	30	1-1/4"-12UNF	7/8 ODF	
VARV-30-1 1/4+5/8	30	1-1/4"-12UNF		5/8 SAE
VARV-30-1 1/4+3/4	30	1-1/4"-12UNF		3/4 SAE
VARV-30-1 1/4+7/8S	30	1-3/4"-12UNF	7/8 ODF	
VARV-30-1 1/4+1 1/8S	30	1-3/4"-12UNF	1-1/8 ODF	
VARV-36-1 3/4+1 1/8S	36	1-3/4"-12UNF	1-1/8 ODF	
VARV-36-1 3/4+1 3/8S	36	1-3/4"-12UNF	1-3/8 ODF	
VARV-36-1 3/4+1 5/8S	36	1-3/4"-12UNF	1-5/8 ODF	
VARV-50-2 1/4+1 5/8S	50	2-1/4"-12UNF	1-5/8 ODF	
VARV-50-2 1/4+2 1/8S	50	2-1/4"-12UNF	2-1/8 ODF	

Gasket

Hand Valve

Valve bodies are made from forged brass. Its full-size openings for maximum flow and minimum pressure drop, mounting brackets for easy installation.

Feature

- Forged brass construction.
- Compatible with all refrigerants and oils.
- Available with solder and flare with nuts connections.
- 100% leakage tested.
- CE certified.

Specification

Model	Connection Size Inch	Connection Type
VAHV-1/4F	1/4	Flare to flare, with brass nut
VAHV-3/8F	3/8	Flare to flare, with brass nut
VAHV-1/2F	1/2	Flare to flare, with brass nut
VAHV-5/8F	5/8	Flare to flare, with brass nut
VAHV-3/4F	3/4	Flare to flare, with brass nut
VAHV-1/4S	1/4	Solder to solder
VAHV-3/8S	3/8	Solder to solder
VAHV-1/2S	1/2	Solder to solder
VAHV-5/8S	5/8	Solder to solder
VAHV-3/4S	3/4	Solder to solder

Solenoid Valve

Solenoid valves are the most frequently used control elements in refrigeration and air-conditioning systems.

The valve is controlled by electric current through the solenoid, made from solid brass offering long service life, fast and save switching.

Supplied with both NC (normally closed) and NO (normally open) versions.

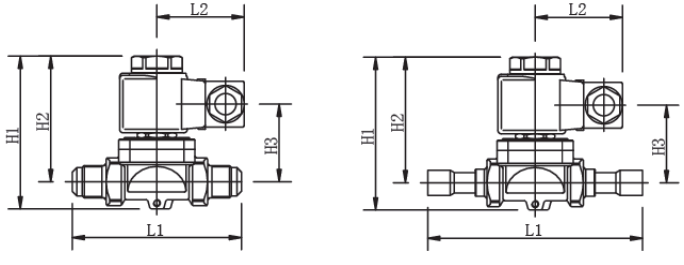
- Temp. of medium: -25 °C to +105 °C.
- Max. working pressure: 30bar.
- Coil enclosure: up to IP65.

Coil voltage:

AC: 24V, 36V, 110V, 220V
DC: 12V, 24V, 110V, 220V

Specification & Dimension

Model	Connection	Coil Port Size	Kv Value	Operation Mode	Opening Pressure Differential		Dimension				
					Min. to Max. (bar)		mm				
	Inch	mm	m^3/h		AC	DC	H1	H2	H3	L1	L2
VASV-1020/2	1/4 SAE Flare	2.2	0.2	Direct Acting	0 - 21	0 - 17	80	67.5	39	58	50
VASV-1020/2S	1/4 ODF Solder	2.2	0.2							125	
VASV-1020/3	3/8 SAE Flare	3.0	0.2							65	
VASV-1020/3S	3/8 ODF Solder	3.0	0.2							125	
VASV-1064/3	3/8 SAE Flare	7.0	0.8	Pilot Operated	0.05 - 21	0.05 - 17	87	74.5	45	68	
VASV-1064/3S	3/8 ODF Solder	7.0	0.8							111	
VASV-1064/4	1/2 SAE Flare	7.0	0.8							72	
VASV-1064/4S	1/2 ODF Solder	7.0	0.8							127	
VASV-1070/4	1/2 SAE Flare	12.5	2.2				96	80	52	100	
VASV-1070/4S	1/2 ODF Solder	12.5	2.2							127	
VASV-1070/5	5/8 SAE Flare	12.5	2.6							106	
VASV-1070/5S	5/8 ODF Solder	12.5	2.6							175	
VASV-1078/6S	3/4 ODF Solder	12.8	2.8							180	
VASV-1098/6S	3/4 ODF Solder	17.5	4.8				115	92	72	128	55
VASV-1098/7S	7/8 ODF Solder	19.0	5.7							216	
VASV-1098/8S	1 ODF Solder	23.0	6.5							128	
VASV-1098/9S	1-1/8 ODF Solder	23.0	6.5							282	
VASV-1098/10S	1-1/4 ODF Solder	23.0	6.5							282	
VASV-1099/11S	1-3/8 ODF Solder	25.5	10.0				135	109	77	282	
VASV-1099/13S	1-5/8 ODF Solder	27.0	16.0							282	



4-Way Reversing Valve

ICEAGE 4-way Reversing Valves are suitable for refrigeration system or heat pump applications, which require a reversal of the refrigeration cycle to provide cooling or heating as seasonal condition.

Solenoid Coils

Voltage: 23VAC, 110VAC, 115VAC, 120VAC, 220VAC, 240VAC, 265VAC
Terminal: Pin or Pre-wired
Frequency: 50/60Hz
Power: 4 – 7W

- Max. working pressure: 3.0Mpa.
- Compatible with all refrigerants.
- CE certified.

Specification

Model	Nominal Capacity	Connection Inch		Operating Pressure Differential (Mpa)			Internal leakage
				Max.		Min.	
	kW	Discharge	E.S.C.	R-22 R-407C	R-410A		ml/min.
VAFRV-5	5	5/16 ODF	3/8 ODF	2.5	3.1	0.25	≤1000
VAFRV-9	9	3/8 ODF	1/2 ODF	2.5	3.1	0.34	≤2000
VAFRV-11	11	1/2 ODF	5/8 ODF	2.5	3.1	0.34	≤2000
VAFRV-20	20	1/2 ODF	3/4 ODF	2.5	3.1	0.34	≤4000
VAFRV-34	34	3/4 ODF	7/8 ODF	2.5	3.1	0.34	≤4000
VAFRV-45	45	7/8 ODF	1-1/8 ODF	2.5	3.1	0.34	≤6000

Ball Valve

Ball Valves are widely used in liquid, suction and hot gas lines in refrigeration and air-conditioning systems. They are manually operated shut-off valves suitable for bi-directional flow.

- Max. working pressure: 45bar.
- Temp. of operation: -40 to +150 °C.
- Compatible with all CFC, HCFC and HFC refrigerants and oils.
- Access port optional.
- Large port design for maximum flow without pressure drop.
- CE certified.

Specification – standard

Model	Solder ODF Connection		Liquid Flow Capacity (kW)			Kv Value
	Inch	mm	R-22	R-134A	R-502	m^3/h
VABV-04S	1/4	6	11.0	10.1	7.3	0.8
VABV-06S	3/8	10	22.0	20.2	14.6	3.8
VABV-08S	1/2	12	105	96	70	5.6
VABV-10S	5/8	16	143	132	95	10.1
VABV-12S	3/4	18	241	221	160	20.4
VABV-14S	7/8	22	358	329	238	28.2
VABV-18S	1-1/8	28	633	582	421	52.0
VABV-22S	1-3/8	35	756	696	503	80.9
VABV-26S	1-5/8	42	1293	1190	860	196
VABV-34S	2-1/8	54	1348	1240	1156	248
VABV-43S	2-5/8	67	1470	1320	1235	252
VABV-50S	3-1/8	79	1532	1480	1345	279

Specification – with access port

Model	Solder ODF Connection		Liquid Flow Capacity (kW)			Kv Value
	Inch	mm	R-22	R-134A	R-502	m^3/h
VABV-04S-AV	1/4	6	11.0	10.1	7.3	0.8
VABV-06S-AV	3/8	10	22.0	20.2	14.6	3.8
VABV-08S-AV	1/2	12	105	96	70	5.6
VABV-10S-AV	5/8	16	143	132	95	10.1
VABV-12S-AV	3/4	18	241	221	160	20.4
VABV-14S-AV	7/8	22	358	329	238	28.2
VABV-18S-AV	1-1/8	28	633	582	421	52.0
VABV-22S-AV	1-3/8	35	756	696	503	80.9
VABV-26S-AV	1-5/8	42	1293	1190	860	196
VABV-34S-AV	2-1/8	54	1348	1240	1156	248
VABV-43S-AV	2-5/8	67	1470	1320	1235	252
VABV-50S-AV	3-1/8	79	1532	1480	1345	279

Split Shut-off Valve

- Combined function of shut-off, charging and testing.
- 100% forged brass body
- Compact foot mounted design allows fast installation
- Access port is available
- Compatible for all refrigerants
- CE certified

Specification

Model	Tube O.D.	Connection Thread	Remark
VAAC-1/4	1/4"	7/16"-20UNF	-
VAAC-3/8	3/8"	5/8"-18UNF	-
VAAC-1/2	1/2"	3/4"-16UNF	-
VAAC-5/8	5/8"	7/8"-14UNF	-
VAAC-3/4	3/4"	1-1/6"-14UNF	-
VAAC-1/4-2W	1/4"	7/16"-20UNF	Without access port
VAAC-3/8-2W	3/8"	5/8"-18UNF	Without access port
VAAC-1/2-2W	1/2"	3/4"-16UNF	Without access port
VAAC-5/8-2W	5/8"	7/8"-14UNF	Without access port
VAAC-3/4-2W	3/4"	1-1/6"-14UNF	Without access port

Pressure Control

The pressure controls are widely used in refrigeration system to provide protection against excessively low suction/high discharge pressure.

- Operation temp.: -20 to +70 °C
- CE certified

Specification

Model	Type	Low Pressure MPa		High Pressure MPa		Factory Setting	Reset
		Regulating Range	Differential Δp	Regulating Range	Differential Δp	MPa	
ECPC-6	Low	-0.065 – 0.6	0.06 – 0.4	-	-	0.2 – 0.3	Auto
ECPC-10	Low	0.1 – 1	0.1 – 0.3	-	-	0.4 – 0.6	Auto
ECPC-20	High	-	-	0.5 – 2	0.2 – 0.5	1.2 – 1.5	Auto
ECPC-30	High	-	-	0.5 – 3	0.2 – 0.7	2.0 – 2.5	Auto
ECPC-6S	Low	-0.065 – 0.6	Act & self lock	-	-	0.2	Manual
ECPC-10S	Low	0.1 – 1		-	-	0.5	Manual
ECPC-20S	High	-	-	0.5 – 2		1.4	Manual
ECPC-30S	High	-	-	0.5 – 3	Act & self lock	2.0	Manual
ECPC-130S	High	-	-	0.8 – 3		2.0	Manual
ECPC-130	High	-	-	0.8 – 3	0.4	1.6 – 2.0	Fixed
ECPC-306	Dual	-0.065 – 0.6	0.06 – 0.4	0.8 – 3	0.4	0.2 – 0.3 (LP) 1.6 – 2.0 (HP)	Auto (LP) Fixed (HP)
ECPC-306S	Dual	-0.065 – 0.6	0.06 – 0.4	0.8 – 3	Act & self lock	0.2 – 0.3 (LP) 2.0 (HP)	Auto (LP) Manual (HP)

Magnetic Check Valve

Check Valves are normally closed that prevents reverse refrigerant flow in liquid lines and compressor discharge lines.

- Max. working pressure: 3.0Mpa.
- Temp. of operation: -40 to +130 °C.
- 40 mesh screen.
- Compatible with all CFC, HCFC and HFC refrigerants and oils.
- Hermetic construction, it can be installed in any position.
- 100% tested.
- CE certified.

Specification

Model	Connection	Dimension (mm)	
	Inch	Overall Length	Body Diameter
VACV-4	1/4 ODF Solder	102	22
VACV-6	3/8 ODF Solder	102	22
VACV-8	1/2 ODF Solder	127	29
VACV-10	5/8 ODF Solder	127	29
VACV-12	3/4 ODF Solder	178	41
VACV-14	7/8 ODF Solder	178	41
VACV-18	1-1/8 ODF Solder	213	54
VACV-22	1-3/8 ODF Solder	238	67
VACV-26	1-5/8 ODF Solder	267	80
VACV-34	2-1/8 ODF Solder	305	92
VACV-42	2-5/8 ODF Solder	330	105
VACV-50	3-1/8 ODF Solder	330	105

Plunger Check Valve

- 100% tested.
- Max. working pressure: 4.5Mpa.
- Temp. of medium: -40 °C to +140 °C.
- Compatible with all CFC, HCFC and HFC refrigerants and oils.
- CE certified.

Specification – standard

Model	Connection	Dimension (mm)	
	Inch	Overall Length	Height
VACV-3122/7	7/8 ODF Solder	100	85
VACV-3122/9	1-1/8 ODF Solder	100	85
VACV-3122/11	1-3/8 ODF Solder	118	102
VACV-3122/13	1-5/8 ODF Solder	141	126
VACV-3122/17	2-1/8 ODF Solder	173	142

Specification – with extended tube

Model	Connection	Dimension (mm)	
	Inch	Overall Length	Height
VACV-3122/7E	7/8 ODF Solder	170	85
VACV-3122/9E	1-1/8 ODF Solder	201	85
VACV-3122/11E	1-3/8 ODF Solder	232	102
VACV-3122/13E	1-5/8 ODF Solder	256	126
VACV-3122/17E	2-1/8 ODF Solder	285	142

Thermoplastic Capillary Hose

The thermoplastic flexible capillary hose provides quick and easy connection to the pressure switches, gauges, oil return circuits and oil level equalization in air-conditioning and refrigeration systems.

- High flexibility
- Superior vibration absorption and noise reduction
- No brazing, flaring and bending
- Extremely low permeation rate

Material:

- Inner tube material: thermoplastic nylon
- Reinforcing material: polyester fiber of high tensile strength
- Cover material: thermoplastic nylon

Specification

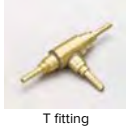
Model	Inner Dia.	Outer Dia.	Min. Bend Radius	Working Pressure		Working Temperature	
	mm	mm	mm	MPa	psi	min. °C	max. °C
BFTCH-01	2.6	5.8	15	19.6	2843	-40	+130
BFTCH-02	5.0	10.0	20	9.8	1421	-40	+130
BFTCH-03	8.2	13.5	30	9.8	1421	-40	+130
BFTCH-04	11.2	16.2	40	9.8	1421	-40	+130
BFTCH-05	14.3	20.0	50	9.8	1421	-40	+130
BFTCH-06	17.3	24.0	50	9.8	1421	-40	+130

Fittings and Accessories

Available in any combination of 1/4" or 3/8" brass SAE flare straight or 90° angel fittings.


90° insert with nut


Straight insert with nut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Copper gasket


Straight insert


Sleeve

Assembly Instructions

1. Cut the hose to the required length
2. Put the sleeve onto the hose
3. Slip the nut over the hose, ensure the threaded side toward the end of the hose
4. Push the ferrule over the hose end
5. Push the insert into the hose end
6. Insert the copper gasket
7. Position the ferrule in line with the insert
8. Crimp the ferrule with hand plier

Capillary Tube

The capillary tubes are equipped with brass nuts. Widely used to connect pressure-switches, gauges and other control devices in refrigeration systems.

Capillary:

Diameter outside: 1/8" (3.0 mm)
Thickness: 0.5 mm

Connection:

2 brass nuts 1/4" SAE

Model	Capillary Length	With Depressor
BFCT-900	900 mm	No
BFCT-1200	1200 mm	No
BFCT-1500	1500 mm	No
BFCT-900-D	900 mm	Yes
BFCT-1200-D	1200 mm	Yes
BFCT-1500-D	1500 mm	Yes

Thermostatic Expansion Valve

Thermostatic expansion valve regulate the flow of refrigerant liquid into evaporators. They are widely used in air conditioning, refrigeration, heat pump and chiller applications.

- Evap. Temp.: -40 °C to +10 °C
- Constant superheat adjusting performance
- Can be supplied with MOP (max. operating pressure)
- Standard capillary length: 1.5m
- CE certified

Designation

NRF E - 1/4 M

- NRF = valve code
- E = external equalizer; Omit for internal
- Nominal capacity in Tons
- M= R-134a; H= R-22; S= R-404A

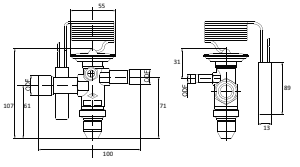
Specification

Refrigerant	Valve Type	Model	Nominal Capacity	Connection SAE / ODF		Pressure Equalization
			kW	Inlet	Outlet	
R-134a	NRF(E) / RT (E)	1/4M	0.88	3/8"	1/2"	NRFE / RTE: ext. 1/4" NRF / RT: int.
		1/2M	1.76	3/8"	1/2"	
		1M	3.52	3/8"	1/2"	
		1-1/2M	5.28	3/8"	1/2"	
		2M	7.04	3/8"	1/2"	
		2-1/2M	8.80	3/8"	1/2"	
		3M	10.56	3/8"	5/8"	
		4M	12.32	1/2"	5/8"	
		5-1/2M	19.36	1/2"	5/8"	
		7-1/2M	26.40	1/2"	5/8"	
		9M	31.68	1/2"	5/8"	
R-22 R-407C	NRF(E) / RT (E)	1/2H	1.76	3/8"	1/2"	NRFE / RTE: ext. 1/4" NRF / RT: int.
		1H	3.52	3/8"	1/2"	
		1-1/2H	5.28	3/8"	1/2"	
		2H	7.04	3/8"	1/2"	
		3H	10.56	3/8"	1/2"	
		4H	14.08	3/8"	1/2"	
		5H	17.60	3/8"	5/8"	
		6H	21.12	1/2"	5/8"	
		7-1/2H	26.40	1/2"	5/8"	
		10H	35.20	1/2"	5/8"	
		12H	42.24	1/2"	5/8"	
R-404A R-507	NRF(E) / RT (E)	1/3S	1.17	3/8"	1/2"	NRFE / RTE: ext. 1/4" NRF / RT: int.
		2/3S	2.35	3/8"	1/2"	
		1S	3.52	3/8"	1/2"	
		1-1/2S	5.28	3/8"	1/2"	
		2S	7.04	3/8"	1/2"	
		3S	10.56	3/8"	1/2"	
		3-1/2S	12.32	3/8"	5/8"	
		4S	14.08	1/2"	5/8"	
		5S	17.60	1/2"	5/8"	
		7S	24.64	1/2"	5/8"	
		8-1/2S	29.92	1/2"	5/8"	

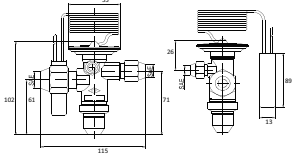
Rated capacity is based on:

- Evaporating temperature te = +4.4 °C
- Condensing temperature tc = +40 °C
- Refrigerant liquid temperature ahead of valve tl = +37.8 °C

Drawing & Dimension



RT / RTE



NRF / NRFE

T Series Take-apart Thermo Expansion Valve

The T-series take-apart thermo expansion valves are with adjustable superheat and replaceable components are ideal for easy service in air conditioning, heat pump and refrigeration applications.

Please contact ICEAGE sales team for more information.

Capacitor

For motor run, starting applications

TUV, UL, CE approved

Build in reliable explosion-proof device, metalized polypropylene film, high capacity of self-healing.

Specification – CBB65-1

Capacitance	Dimension - Diameter x Height (mm)	
uF	370VAC - 400VAC	440VAC - 450VAC
7.5	45 x 55	45 x 55
10	45 x 55	45 x 55
15	45 x 65	45 x 65
20	45 x 65	45 x 65
25	45 x 85	45 x 85
30	45 x 85	45 x 90
35	45 x 105	45 x 105
40	45 x 105	50 x 105
45	45 x 105	50 x 105
50	50 x 105	55 x 105
55	50 x 105	55 x 105
60	55 x 105	55 x 105
65	55 x 105	55 x 120
70	55 x 105	55 x 120
80	60 x 105	55 x 130

Specification – CBB65-2

Capacitance	Dimension – Width x Thickness x Height (mm)	
uF	370VAC - 400VAC	440VAC - 450VAC
4	31.5 x 51 x 55	31.5 x 51 x 55
5	31.5 x 51 x 55	31.5 x 51 x 55
7.5	31.5 x 51 x 55	31.5 x 51 x 65
10	31.5 x 51 x 65	31.5 x 51 x 65
12.5	31.5 x 51 x 65	31.5 x 51 x 85
15	31.5 x 51 x 85	31.5 x 51 x 85
20	45 x 71 x 65	45 x 71 x 65
25	45 x 71 x 65	45 x 71 x 85
30	45 x 71 x 85	45 x 71 x 85
35	45 x 71 x 85	45 x 71 x 85
40	45 x 71 x 85	45 x 71 x 105
45	45 x 71 x 105	45 x 71 x 105
50	45 x 71 x 105	45 x 71 x 105
55	45 x 71 x 105	45 x 71 x 115
60	45 x 71 x 115	45 x 71 x 115
65	45 x 71 x 120	45 x 71 x 130
70	45 x 71 x 120	45 x 71 x 130

Specification – CBB65A

Capacitance	Dimension – Diameter x Height (mm)	
uF	370VAC - 400VAC	440VAC - 450VAC
20+5	50 x 65	50 x 85
25+5	50 x 85	50 x 85
30+5	50 x 85	50 x 90
35+5	50 x 85	50 x 105
40+5	50 x 90	50 x 105
45+5	50 x 105	55 x 105
50+5	50 x 105	55 x 105
50+7.5	50 x 105	55 x 105
55+5	55 x 105	55 x 105
55+7.5	55 x 105	60 x 105
55+10	55 x 105	60 x 105
60+5	55 x 105	60 x 105
60+7.5	55 x 105	60 x 105
80+5	60 x 105	60 x 120
80+7.5	60 x 105	60 x 120
80+10	60 x 105	60 x 120

CBB65-1

For motor run applications

Aluminum round cylinder
Operating temperature: -40 °C to + 70°C
Rated frequency: 50/60Hz

CBB65-2

For motor run applications

Aluminum oval cylinder
Operating temperature: -40 °C to + 70°C
Rated frequency: 50/60Hz

CBB65A

For motor run applications

Aluminum round cylinder
Operating temperature: -40 °C to + 70°C
Rated frequency: 50/60Hz

Specification – CBB65B

Capacitance	Dimension – Width x Thickness x Height (mm)	
uF	370VAC - 400VAC	440VAC - 450VAC
10+5	45 x 71 x 55	45 x 71 x 65
20+5	45 x 71 x 65	45 x 71 x 85
25+5	45 x 71 x 85	45 x 71 x 85
25+10	45 x 71 x 85	45 x 71 x 90
30+5	45 x 71 x 85	45 x 71 x 105
35+5	45 x 71 x 105	45 x 71 x 105
35+7.5	45 x 71 x 105	45 x 71 x 105
40+5	45 x 71 x 105	45 x 71 x 105
45+5	45 x 71 x 105	45 x 71 x 130
55+5	45 x 71 x 115	45 x 71 x 130

Specification – CBB60

Capacitance	Dimension – Diameter x Height (mm)	
uF	370VAC - 400VAC	440VAC - 450VAC
3	25 x 60	25 x 60
6	25 x 60	30 x 60
8	30 x 60	34 x 52
10	30 x 60	34 x 52
12	30 x 60	34 x 62
15	34 x 52	35 x 71
16	34 x 52	35 x 71
18	34 x 52	40 x 71
20	34 x 52	40 x 71
25	34 x 62	45 x 71
30	40 x 71	45 x 71
35	40 x 71	45 x 92
40	40 x 71	50 x 92
50	42 x 70	50 x 102
60	45 x 71	50 x 120
65	45 x 71	50 x 120
70	50 x 85	55 x 120
75	50 x 85	55 x 120
80	50 x 92	55 x 120
100	50 x 102	
120	50 x 120	

Specification – CBB61

Capacitance	Dimension – Width x Thickness x Height (mm)	
uF	370VAC - 400VAC	450VAC
1	32 x 14 x 25	32 x 14 x 25
1.2	32 x 14 x 25	32 x 14 x 25
1.5	38 x 14 x 26	38 x 14 x 26
2	38 x 14 x 26	38 x 14 x 26
2.5	38 x 18 x 30	38 x 18 x 30
3	38 x 18 x 30	38 x 18 x 30
3.5	38 x 18 x 30	38 x 18 x 30
4	48 x 18 x 34	48 x 18 x 34
5	48 x 18 x 34	48 x 18 x 34
6	48 x 18 x 34	48 x 18 x 34
8	47 x 26 x 38	47 x 26 x 38
10	47 x 26 x 38	47 x 26 x 38
20	62.5 x 28 x 45	62.5 x 28 x 45

SPP series Start Capacitors

SPP series A/C start electrolytic capacitor with PTC thermistor
Completely pre-wired
Rated frequency: 50/60Hz

Model	Recommended Horse Power	Operating Voltage VAC	Capacitance uF
SPP4	1/8 – 1	90 – 130	88 – 106
SPP5	1/3 – 2	90 – 227	43 – 52
SPP6	1/2 – 3	90 – 227	88 – 106
SPP7	1 – 4	90 – 227	130 – 156

CBB65B

For motor run applications

Aluminum oval cylinder
Operating temperature: -40 °C to + 70°C
Rated frequency: 50/60Hz

CBB60

For motor run applications

Flame retardant plastic (bakelite on request) case
Operating temperature: -40 °C to + 70°C
Rated frequency: 50/60Hz
Pin or wire outlet

CBB61

For motor run applications

Flame retardant plastic (bakelite on request) case
Operating temperature: -40 °C to + 70°C
Rated frequency: 50/60Hz
Pin or wire outlet

SPP

For motor starting applications

Specification - CD60

Capacitance	Dimension – Diameter x Height (mm)		
uF	110VAC	220VAC	330VAC
88 – 106	36 x 70	36 x 85	46 x 85
108 – 130	36 x 70	36 x 85	46 x 85
124 – 149	36 x 70	46 x 85	46 x 85
130 – 156	36 x 70	46 x 85	46 x 85
145 – 174	36 x 70	46 x 85	46 x 85
161 – 193	36 x 70	46 x 85	46 x 85
189 – 227	36 x 70	46 x 85	46 x 111
216 – 259	36 x 70	46 x 85	46 x 111
233 – 280	36 x 70	46 x 85	46 x 111
243 – 292	36 x 70	46 x 85	46 x 111
270 – 324	36 x 70	46 x 85	46 x 111
324 – 389	36 x 70	46 x 111	46 x 111
340 – 408	36 x 70	46 x 111	46 x 111
378 – 454	36 x 85	46 x 111	46 x 111
400 – 480	36 x 85	46 x 111	
430 – 516	36 x 85	46 x 111	

CD60

For motor starting applications

Flame retardant plastic (bakelite on request) case
Operating temperature: -40 °C to + 65°C
Rated frequency: 50/60Hz

Contactor

Definite purpose contactors with TUV, UL, CE and RoHS approvals

Initial dielectric strength

- Between contacts & coils: 2200 VAC
- Between poles: 2200 VAC
- Between open contacts: 2200 VAC

Insulation system

- 130 °C class B

Temperature range

- 40 °C to +65 °C (-40°F to +150 °F)

Electrical Rating for 1 & 2 Pole (20-40 FLA)

Full Load Amps	Resistive Amps @ 600 VAC	Locked Rotor Amps @ 240/277 VAC	Locked Rotor Amps @ 480VAC	Locked Rotor Amps @ 600 VAC	Max. Horsepower		
					Voltage	Single Phase	Three Phase
1 Pole Contactor (20 – 40 FLA)							
20	30	120	100	80	120 240	1 2	-
25	35	150	125	100	120 240	1 2	-
30	40	150	125	100	120 240	1 2	-
40	50	240	200	160	120 240	1 2	-
2 Pole Contactor (20 – 40 FLA)							
20	30	120	100	80	120 240	1 2	-
25	35	150	125	100	120 240	1 2	-
30	40	150	125	100	120 240	1 2	-
40	50	240	200	160	120 240	1 2	-

Coil Rating for 1 & 2 Pole (20-40 FLA)

	1 Pole Contactor				2 Pole Contactor			
Nominal coil voltage	24	120	208/240	277	24	120	208/240	277
Nominal coil resistance Ohms	18	420	1800	2500	11	237	1000	1600
Max. pick up volt.	18	88	177	221	18	88	177	221
Min. drop out volt.	6-15	20-70	40-140	50-165	6-15	20-70	40-140	50-165
Nominal inrush VA @ 50Hz	31	31	31	31	33	33	33	33
Nominal inrush VA @ 60Hz	28	28	28	28	30	30	30	30
Nominal sealed VA @ 50Hz	6	6	6	6	8	8	8	8
Nominal sealed VA @ 60Hz	5	5	5	5	6.5	6.5	6.5	6.5
Max. coil voltage	30	132	264	300	30	132	264	300

Electrical Rating for 3 & 4 Pole (20-40 FLA)

Full Load Amps	Resistive Amps @ 600 VAC	Locked Rotor Amps @ 240/277 VAC	Locked Rotor Amps @ 480VAC	Locked Rotor Amps @ 600 VAC	Max. Horsepower		
					Voltage	Single Phase	Three Phase
3 Pole Contactor (20 – 40 FLA)							
20	30	120	100	80	120 240/277 480/600	1.5 3 -	- 7.5 7.5
25	35	150	125	100	120 240/277 480 600	2 5 - -	- 10 15 20
30	40	180	150	120	120 240/277 480 600	2 5 - -	- 10 15 20
40	50	240	200	160	120 240/277 480 600	3 7.5 - -	- 10 20 25
4 Pole Contactor (20 – 40 FLA)							
30	40	180	150	120	120 240/277 480	2 5 -	- 10 15
40	50	240	200	160	120 240/277 480	3 7.5 -	- 10 20

Coil Rating for 3 & 4 Pole (20-40 FLA)

	1 Pole Contactor				2 Pole Contactor			
Nominal coil voltage	24	120	208/240	277	24	120	208/240	277
Nominal coil resistance Ohms	7	420	1800	2500	6	150	600	750
Max. pick up volt.	18	88	177	221	18	88	177	221
Min. drop out volt.	6-15	20-70	40-140	50-165	6-15	20-70	40-140	65-185
Nominal inrush VA @ 50Hz	65	65	65	65	62	62	62	62
Nominal inrush VA @ 60Hz	60	60	60	60	59	59	59	59
Nominal sealed VA @ 50Hz	7.5	7.5	7.5	7.5	9	8	8	8
Nominal sealed VA @ 60Hz	5	5	5	5	7	7	6	7
Max. coil voltage	30	132	264	300	30	132	264	300

Electrical Rating for 3 Pole (50-90 FLA)

Full Load Amps	Resistive Amps @ 600 VAC	Locked Rotor Amps @ 240/277 VAC	Locked Rotor Amps @ 480VAC	Locked Rotor Amps @ 600 VAC	Max. Horsepower		
					Voltage	Single Phase	Three Phase
3 Pole Contactor (50 – 90 FLA)							
50	65	300	250	200	120 240/277 480/600	3 10 -	- 15 25
60	75	360	300	240	120 240/277 480/600	5 10 -	- 25 30
75	93	450	375	300	120 240/277 480/600	- 15 -	- 25 40
90	120	540	450	360	120 240/277 480/600	- 20 -	- 30 50

Coil Rating for 3 Pole (50-90 FLA)

	3 Pole Contactor				3 Pole Contactor			
Nominal coil voltage	24	120	208/240	277	24	120	208/240	277
Nominal coil resistance Ohms	2.4	45	180	280	0.65	16	64	85
Max. pick up volt.	18	93	177	235	18	88	177	220
Min. drop out volt.	6-15	20-70	40-140	50-185	6-15	20-70	40-110	65-185
Nominal inrush VA @ 50Hz	138	138	138	138	285	285	285	285
Nominal inrush VA @ 60Hz	130	130	130	130	240	240	240	240
Nominal sealed VA @ 50Hz	18	18	18	18	42	42	42	42
Nominal sealed VA @ 60Hz	13	13	13	13	27	27	27	27
Max. coil voltage	30	132	264	300	30	132	264	300

Electronically Control Device

SE Series Starting Relay

For 1/8HP, 1/6HP, 1/5HP, 1/4HP, 1/3HP, 1/2HP compressor

SF Series Starting Relay

For 1/8HP, 1/6HP, 1/5HP, 1/4HP, 1/3HP, 1/2HP compressor

SG Series Starting Relay

For 1/8HP, 1/6HP, 1/5HP, 1/4HP, 1/3HP, 1/2HP compressor

SH Series Starting Relay

PTC Series Starting Relay

Overload Protector

For 1/8HP, 1/6HP, 1/5HP, 1/4HP, 1/3HP, 1/2HP compressor

2-Pole Switching Relay

Model	Coil Voltage
PR340	24 V
PR341	110/240 V
PR342	208/240 V

Contact Rating

Voltage	120 V	208/240 V
Full Load Amps	12	6
Resistive Amps (277 VAC)	15	15
Inrush Amps	60	35
Horsepower	1/2	1/2

Pressure Switch

- High pressure SPST open on pressure rise
- Low pressure SPST open on pressure fall

Model	Application	Open PSI	Close PSI	Tolerance
LPS0520	Low pressure automatic reset	5	20	± 5 PSI
LPS1020		10	20	± 5 PSI
LPS2550		25	50	± 5 PSI
LPS2580		25	80	± 5 PSI
LPS4080		40	80	± 5 PSI
HPS200150	High pressure automatic reset	200	150	± 15 PSI
HPS250150		250	150	± 15 PSI
HPS300200		300	200	± 15 PSI
HPS350250		350	250	± 15 PSI
HPS400200		400	200	± 15 PSI
HPS400300		400	300	± 15 PSI
HPS450250		450	250	± 15 PSI
MPS350	High pressure manual Reset	350	-	± 15 PSI
MPS450		450	-	± 15 PSI

Fan Relay

Model	Description	Amps RES	FLA/LRA @ 125V	FLA/LRA @ 250V	Coil Voltage VAC
PR-360	SPST-NO	18	12/60	8/48	24
PR-362	SPST-NO	18	12/60	8/48	120
PR-364	SPST-NO	18	12/60	8/48	240
PR-366	SPST-NO	18	12/60	8/48	277
PR-370	SPDT	18	12/60	8/48	24
PR-372	SPDT	18	12/60	8/48	120
PR-374	SPDT	18	12/60	8/48	240
PR-376	SPDT	18	12/60	8/48	277
PR-380	SPST NO+NC	18	12/60	8/48	24
PR-382	SPST NO+NC	18	12/60	8/48	120
PR-384	SPST NO+NC	18	12/60	8/48	240

F2000 / A2000 Thermostat

- Control Temperature Range
- Rated at 16A / 250V 50/60Hz

Model	Cold		Warm		Capillary Length
	Off	Difference	Off	Difference	
F2000	-35 °C	≤ 4.5 °C	+35 °C	≤ 4.5 °C	1750 mm
A2000	-35 °C	≤ 4.5 °C	+35 °C	≤ 4.5 °C	120 mm

Thermostat

ICEAGE cycling thermostats with SPST close – on – rise switch are widely used in refrigerators, freezers, air conditioning units, etc.

- Application range between -40 °C to +10 °C.
- Compact design.
- Adjustable or fixed operating range.
- Fixed differential.
- Standard mounting or with bracket.
- Capillary length available from 300 to 3000 mm.

Model	Temperature Value °C		Capillary Length
	Cold	Warm	mm
K50-P1110	-14.5	+2	1200
K50-P1174	-14.5	+3.5	2000
K50-P1118	+2	+12.5	1200
K50-P1125	-9.5	+9.5	1200
K50-P1126	-18	-9.5	1200
K50-P1127	+5	+12.5	1200
K50-H1104	-22.5	+2	1200
K50-H1105	-18	+3.5	1200
K50-H1106	-32	-12	2000
K50-H1107	-3	+12.5	2000
K60-L2024	-19	-1	1600
K60-L2025	-31	-5	1500
K54-H1404	-34	-12	2000
K59-H1303	-21	+4.5	2000
K59-H2805	-28	+5	1500
077B7001	-25	+2	1300
077B7005	-32.5	-7.5	2300
077B7008	-8.5	+11.5	2000
077B7002	-21	0	1300
077B7003	-27.5	+3.5	1600
077B7004	-11	+3.5	1500
077B7006	-34.5	-10	2300
077B7007	-35.5	-10	2300

www.iceage-hvac.com

Universal Remote Control System for Air Conditioner

QD-U20A

- Wireless remote control up to 100 meters.
- Large, clear LCD screen with backlight display.
- Accuracy of 0.1 degree for precise temperature control.
- Built-in battery indicator.
- 5 working mode, 3 fan speed, timer on/off, sleep mode on time.
- Break down protection and auto-restart function.

QD-U03C+

- 5 working mode, 3 fan speed, timer on/off, sleep function.
- Double sensors, outdoor fans are independently controlled.
- Compressor project timer.
- No cold wind in heating mode.
- Automatic defrosting, auto-restart function.

QD-U05PG+

- 5 working mode, unlimited fan speed, low noise, timer on/off, sleep function, PG motor.
- Double sensors, pipe protection.
- No cold wind in heating mode.
- Automatic defrosting.
- Updated receiver and transformer.

QD-U08PGC

- 5 working mode, unlimited fan speed, low noise, timer on/off, sleep function.
- Double sensors, pipe protection, fault self-examine.
- No cold wind in heating mode.
- Automatic defrosting, auto-restart function.
- Updated receiver and transformer.

QD-U11A

- Full function.
- Suitable for both split and cabinet conditioner.
- LED digital display panel.
- Auto-restart function.

QD-U12A

- Full function.
- Suitable for both split and cabinet conditioner.
- LED backlight display panel.
- Electrical heating function.
- Auto-restart function, power protection.

Universal Remote Controller For Air-Conditioner

KT-e02

- 4000 in 1
- Large and clear temperature display
- Memory function
- Automatic searching

One key non-stop: press One Key Power key, it can open the A/C and also judge the room is winter or summer, then set the temperature at 20 °C or 26 °C with middle fan swing.

KT-e03

- 4000 in 1
- Input codes directly by digit keys
- Memory function
- Automatic searching

One key non-stop: press One Key Power key, it can open the A/C and also judge the room is winter or summer, then set the temperature at 20 °C or 26 °C with middle fan swing.

KT-e05

- 4000 in 1
- Input codes directly by digit keys
- Permanent memory
- Full function

One key non-stop: press One Key Power key, it can open the A/C and also judge the room is winter or summer, then set the temperature at 20 °C or 26 °C with middle fan swing.

KT-e08

- 6000 in 1
- Input codes directly by digit keys
- Permanent memory
- Full function

One key non-stop: press One Key Power key, it can open the A/C and also judge the room is winter or summer, then set the temperature at 20 °C or 26 °C with middle fan swing.

KT-518

- 508 in 1
- Accurate clock display, function of timer on/off
- Function of code memory
- Selection by code input or auto search

KT-528

- 1028 in 1
- Backlight function
- Room temperature display
- Accurate clock display, function of timer on/off
- Code memory, full function

KT-N828

- 2000 codes in 1
- LCD backlight function
- Room temperature display
- Intelligent cool and heat
- Timer on and off at the same time
- Manual code input by digital key

KT-4000

- 4000 codes in 1
- Full function
- Room temperature display
- Permanent memory
- Manual code input by digital key

One key non-stop: press One Key Power key, it can open the A/C and also judge the room is winter or summer, then set the temperature at 20 °C or 26 °C with middle fan swing.

Digital Temperature Controller

Model: ETC-974

- Flexible parameter setting: sensor NTC / PTC optional, switch between refrigeration and heating mode.
- °C / °F selection
- Sensor:
  NTC (10 kΩ / 25 °C)
  PTC (990 Ω / 25 °C)
- Temperature range:
  NTC: -50 to +110 °C
  PTC: -55 to +140 °C
- Temperature control range: -5 to +55 °C
- Relay contact output capacity: 10A / 250VAC
- Working voltage: 230VAC 50/60H
- Resolution: 1.0 or 0.1 °C

Model: STC-8080A+

- Refrigerating, timing defrost modes optional
- Exceeding temperature alarm
- Temperature upper and lower limit setting
- Compressor delay protection time is fixed as 3 minutes
- Sensor error occurs, compressor turns on / off with proportional time
- Sensor type: NTC, 2M
- Temperature range: -50 to +99 °C
- Temperature control range: -40 to +50 °C
- Resolution: 1.0 °C
- Accuracy:
  ± 1 °C (-40 to +50 °C)
  ± 2 °C at others
- Compressor output contact capacity:
  7A / 220VAC
- Power supply: 220VAC 50/60H

Model: STC-9200

- Refrigerating, double controlled defrosting by temperature and time
- User menu and administrator menu set separately
- Temperature upper and lower limit setting
- Multiple defrosting and fan modes
- Water – dripping time setting
- Code – key (optional)
- Temperature range: -50 to +50 °C
- Temperature control range: -50 to +50 °C
- Resolution: 0.1 °C
- Accuracy: ± 1 °C
- Relay capacity of compressor, defrost and fan: 8A / 220VAC
- Power supply: 220VAC 50/60H
- Sensor type: NTC (2m)

Model: EK-3030

- Six touch key design, quick parameter setting, easy operation
- Multiple defrost control modes, more stable and energy saving, avoid cold storage swell
- Defrost cycle power off memory function
- Three work modes: refrigerating / heating / constant temperature
- Construction contractor could preset a group of parameters, with one key recovery function
- Temperature range: -40 to +99 °C
- Temperature control range: -40 to +85 °C
- Resolution: 0.1 / 1.0 °C
- Accuracy:
  ± 1 °C (-30 to +50 °C)
  ± 2 °C at others
- Relay capacity of compressor, defrost and fan: 10A / 220VAC
- Power supply: 220VAC 50/60H
- Sensor type: NTC (2m)

Digital Thermo-Hygrometer

Model: DT-2 / DT-3

- Measures temperature and humidity
- Clock function (DT-2)
- Temperature (indoor): -30 to +50 °C
- Temperature (outdoor): -50 to +70 °C
- Humidity: 20 % -to 99 % RH
- Resolution: 0.1 (temp.) / 1.0 (humidity)
- Accuracy: ± 1 °C / ± 5 %
- Large LCD display

Model: BT-1 / BT-3

- Clock function (BT-3)
- Temperature (indoor): -30 to +50 °C
- Temperature (outdoor): -50 to +70 °C
- Humidity: 20 % -to 99 % RH (BT-3)
- Resolution: 0.1 (temp.) / 1.0 (humidity)
- Accuracy: ± 1 °C / ± 5 %
- °C / °F selection (BT-3)
- Large LCD display

Digital Thermometer

Model: WT-1B

- Temperature memory
- Temperature: -30 to +300 °C
- Resolution: 0.1 (≥ 400 °F), 0.1 at others
- Accuracy: ± 1 (-20 to +80 °C) ± 5 at others
- °C / °F selection

Model: WT-5

- Temperature memory
- Head 180° rotation for easy reading
- Temperature: -50 to +150 °C
- Resolution: 0.1
- Accuracy: ± 1 (-20 to +80 °C) ± 2 (-50 to +20 °C, +80 to +120 °C) ± 5 at others
- °C / °F selection

Data Logger

Model: RC-4 / RC-4HA / RC-4HC

- Automatically detect temperature/humidity and upload data.
- Automatically generate report.
- Temperature record capacity:
  RC-4: 16000
  RC-4HA: 8000
  RC-4HC: 16000
- Humidity record capacity:
  RC-HA: 8000
  RC-HC: 16000
- Temperature range: -40 to +85 °C
- Resolution: 0.1 °C / 0.1 % RH
- Temperature accuracy: ± 0.6 °C (-20 to +50 °C) ± 1.2 °C at others
- Humidity accuracy: ± 3 % RH (20 to 90 %) ± 5 % RH at others
- Large LCD display
- USB interface
- Record interval: 10s to 24hr adjustable
- Sensor: internal NTC thermal resistor

Model: RC-5

- Automatically detect temperature and upload data.
- Automatically generate report.
- Record capacity: 32000 points (max.)
- Temperature range: -30to +70 °C
- Resolution: 0.1 °C
- Temperature accuracy: ± 1 °C
- Large LCD display
- USB interface
- Record interval: 10s to 24hr adjustable
- Sensor: internal NTC thermal resistor

Electric Control Box

Model: ECB-5060

ECB-5060 is specially designed for refrigeration unit.

- Double-screen display
- Double sensors
- Manage and control compressor and defroster separately
- Auto and manual control optional
- Defrosting over temperature protection
- crank heating
- Power supply: 3-phase 380VAC / 50Hz
- Temperature range: -50 to +50 °C
- Temperature control range: -50 to +50 °C
- Accuracy: ± 1 °C
- Resolution: 0.1 °C
- Compressor start – up delay protection:
  0 to 120 minutes
- Max. capacity of compressor: 11 kW
- Max. capacity of defroster: 11 kW

Model: ECB-30

ECB-5060 is specially designed for refrigeration unit.

- Double sensors
- Control three – load (compressor, fan, defroster) synchronously
- Thermal and electric function for compressor
- Auto and manual control function
- Sensor error alarm and alarm when exceeding the temperature limits functions
- Compressor start – up delay adjustable
- Power supply: 3-phase 380VAC / 50Hz
- Temperature range: -50 to +50 °C
- Temperature control range: -50 to +50 °C
- Accuracy: ± 1 °C
- Resolution: 0.1 °C
- Compressor start – up delay protection:
  0 to 9 minutes (adjustable)
- Max. capacity of compressor: 11 kW
- Max. capacity of defroster: 11 kW
- Max. capacity of fan: 4 kW

Copper Fitting

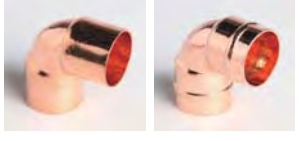
ICEAGE copper fittings are made of high-grade copper material and produced in accordance with standard ASME/ANSI B 16.22 and EN 1254-1.

Solder Ring

Pre-soldered copper fittings provide an ideal approach to tubing installation jobs. Once heated, solder immediately flows in both directions to make a perfect joint.

For further information of solder ring copper fittings, please contact ICEAGE sales team.

90˚ Elbow Short Radius C X C



Size ASME/ANSI B 16.22	Size EN 1254-1
1/4"	8 mm
5/16"	10 mm
3/8"	12 mm
1/2"	16 mm
5/8"	18 mm
3/4"	22 mm
7/8"	25 mm
1"	28 mm
1-1/8"	32 mm
1-1/4"	35 mm
1-3/8"	42 mm
1-1/2"	54 mm
1-5/8"	64 mm
1-3/4"	67 mm
2-1/8"	76 mm
2-5/8"	80 mm
3-1/8"	89 mm
3-5/8"	108 mm
4-1/8"	133 mm
5-1/8"	159 mm
6-1/8"	219 mm

90˚ Elbow Short Radius FTG X C

Size ASME/ANSI B 16.22	Size EN 1254-1
1/4"	8 mm
3/8"	10 mm
1/2"	12 mm
5/8"	16 mm
3/4"	18 mm
7/8"	22 mm
1"	25 mm
1-1/8"	28 mm
1-3/8"	35 mm
1-1/2"	42 mm
1-5/8"	54 mm
1-3/4"	64 mm
2-1/8"	67 mm
2-5/8"	76 mm
3-1/8"	80 mm
3-5/8"	89 mm
4-1/8"	108 mm

90˚ Elbow Short Radius Reducing C X C

Size ASME/ANSI B 16.22	Size EN 1254-1
5/8" x 1/2"	15 x 12 mm
7/8" x 5/8"	22 x 15 mm
1-1/8" x 5/8"	28 x 15 mm
1-1/8" x 7/8"	28 x 22 mm
1-3/8" x 7/8"	35 x 22 mm
1-3/8" x 1-1/8"	35 x 28 mm
1-5/8" x 1-1/8"	42 x 28 mm
1-5/8" x 1-3/8"	42 x 35 mm
2-1/8" x 1-1/8"	54 x 35 mm
2-1/8" x 1-3/8"	54 x 42 mm
2-1/8" x 1-5/8"	
2-5/8" x 1-1/8"	
2-5/8" x 1-3/8"	
2-5/8" x 1-5/8"	
2-5/8" x 2-1/8"	
3-1/8" x 1-5/8"	
3-1/8" x 2-1/8"	
3-1/8" x 2-5/8"	
4-1/8" x 2-5/8"	
4-1/8" x 3-1/8"	

90˚ Elbow Long Radius C X C

Size ASME/ANSI B 16.22	Size EN 1254-1
1/4"	8 mm
5/16"	10 mm
3/8"	12 mm
1/2"	16 mm
5/8"	18 mm
3/4"	22 mm
7/8"	25 mm
1"	28 mm
1-1/8"	32 mm
1-1/4"	35 mm
1-3/8"	42 mm
1-1/2"	54 mm
1-5/8"	64 mm
1-3/4"	67 mm
2-1/8"	76 mm
2-5/8"	80 mm
3-1/8"	89 mm
3-5/8"	108 mm
4-1/8"	133 mm

90˚ Elbow Long Radius FTG X C

Size ASME/ANSI B 16.22	Size EN 1254-1
1/4"	8 mm
3/8"	10 mm
1/2"	12 mm
5/8"	15 mm
3/4"	16 mm
7/8"	18 mm
1"	22 mm
1-1/8"	28 mm
1-3/8"	35 mm
1-5/8"	42 mm
2"	54 mm
2-1/8"	67 mm
2-5/8"	76 mm
3-1/8"	80 mm
3-5/8"	89 mm
4-1/8"	108 mm

45˚ Elbow C X C

Size ASME/ANSI B 16.22	Size EN 1254-1
1/4"	12 mm
5/16"	15 mm
3/8"	16 mm
1/2"	18 mm
5/8"	22 mm
3/4"	28 mm
7/8"	35 mm
1"	42 mm
1-1/8"	54 mm
1-3/8"	67 mm
1-1/2"	76 mm
1-5/8"	80 mm
1-3/4"	89 mm
2-1/8"	108 mm
2-5/8"	133 mm
3-1/8"	159 mm
3-5/8"	219 mm
4-1/8"	

45˚ Elbow FTG X C

Size ASME/ANSI B 16.22	Size EN 1254-1
1/4"	15 mm
3/8"	18 mm
1/2"	22 mm
5/8"	28 mm
3/4"	35 mm
7/8"	42 mm
1"	54 mm
1-1/8"	64 mm
1-3/8"	67 mm
1-5/8"	76 mm
2-1/8"	80 mm
2-5/8"	89 mm
3-1/8"	108 mm
3-5/8"	
4-1/8"	

Tee Equal C X C X C

Size ASME/ANSI B 16.22	Size EN 1254-1
1/4"	8 mm
3/8"	10 mm
1/2"	12 mm
5/8"	14 mm
3/4"	16 mm
7/8"	18 mm
1"	22 mm
1-1/8"	25 mm
1-1/4"	28 mm
1-3/8"	35 mm
1-1/2"	42 mm
1-5/8"	54 mm
1-3/4"	64 mm
2"	67 mm
2-1/8"	76 mm
2-5/8"	80 mm
3-1/8"	89 mm
3-5/8"	108 mm
4-1/8"	133 mm
5-1/8"	159 mm
6-1/8"	219 mm

Tee Reducing C X C X C

Size ASME/ANSI B 16.22	Size EN 1254-1
5/16" x 5/16" x 1/4"	8 x 8 x 6 mm
3/8" x 3/8" x 1/4"	15 x 15 x 8 mm
3/8" x 3/8" x 5/16"	15 x 15 x 10 mm
3/8" x 3/8" x 1/2"	15 x 15 x 12 mm
3/8" x 3/8" x 5/8"	18 x 18 x 15 mm
1/2" x 3/8" x 1/4"	22 x 22 x 15 mm
1/2" x 1/2" x 3/16"	22 x 22 x 18 mm
1/2" x 1/2" x 1/4"	28 x 28 x 15 mm
1/2" x 1/2" x 3/8"	28 x 28 x 18 mm
1/2" x 1/2" x 5/8"	28 x 28 x 22 mm
5/8" x 3/8" x 1/2"	35 x 35 x 18 mm
5/8" x 1/2" x 1/2"	35 x 35 x 22 mm
5/8" x 5/8" x 1/4"	35 x 35 x 28 mm
5/8" x 5/8" x 3/8"	42 x 42 x 15 mm
5/8" x 5/8" x 1/2"	42 x 42 x 22 mm
5/8" x 5/8" x 3/4"	42 x 42 x 28 mm
5/8" x 5/8" x 7/8"	42 x 42 x 35 mm
3/4" x 5/8" x 5/8"	54 x 54 x 22 mm
3/4" x 5/8" x 3/4"	54 x 54 x 28 mm
3/4" x 3/4" x 3/16"	54 x 54 x 35 mm
3/4" x 3/4" x 1/4"	54 x 54 x 42 mm
3/4" x 3/4" x 3/8"	67 x 67 x 28 mm
3/4" x 3/4" x 1/2"	67 x 67 x 35 mm
3/4" x 3/4" x 5/8"	67 x 67 x 42 mm
3/4" x 3/4" x 7/8"	67 x 67 x 54 mm
7/8" x 5/8" x 1/2"	76 x 76 x 35 mm
7/8" x 5/8" x 5/8"	76 x 76 x 42 mm
7/8" x 5/8" x 7/8"	76 x 76 x 54 mm
7/8" x 7/8" x 3/8"	76 x 76 x 67 mm
7/8" x 7/8" x 1/2"	89 x 89 x 42 mm
7/8" x 7/8" x 5/8"	89 x 89 x 54 mm
7/8" x 7/8" x 3/4"	89 x 89 x 67 mm
7/8" x 7/8" x 1-1/8"	89 x 89 x 76 mm
1-1/8" x 5/8" x 7/8"	108 x 108 x 54 mm
1-1/8" x 5/8" x 1-1/8"	108 x 108 x 67 mm
1-1/8" x 3/4" x 1-1/8"	108 x 108 x 76 mm
1-1/8" x 7/8" x 5/8"	108 x 108 x 89 mm

Size ASME/ANSI B 16.22	Size ASME/ANSI B 16.22
1-1/8" x 7/8" x 7/8"	2-1/8" x 2-1/8" x 7/8"
1-1/8" x 7/8" x 1-1/8"	2-1/8" x 2-1/8" x 1-1/8"
1-1/8" x 7/8" x 1-3/8"	2-1/8" x 2-1/8" x 1-3/8"
1-1/8" x 1-1/8" x 3/8"	2-1/8" x 2-1/8" x 1-5/8"
1-1/8" x 1-1/8" x 1/2"	2-5/8" x 2-1/8" x 2-1/8"
1-1/8" x 1-1/8" x 5/8"	2-5/8" x 2-5/8" x 5/8"
1-1/8" x 1-1/8" x 3/4"	2-5/8" x 2-5/8" x 7/8"
1-1/8" x 1-1/8" x 7/8"	2-5/8" x 2-5/8" x 1-1/8"
1-1/8" x 1-1/8" x 1"	2-5/8" x 2-5/8" x 1-3/8"
1-1/8" x 1-1/8" x 1-3/8"	2-5/8" x 2-5/8" x 1-5/8"
1-1/8" x 1-1/8" x 1-5/8"	2-5/8" x 2-5/8" x 2-1/8"
1-1/4" x 1-1/4" x 1"	3-1/8" x 3-1/8" x 5/8"
1-3/8" x 7/8" x 7/8"	3-1/8" x 3-1/8" x 7/8"
1-3/8" x 1-1/8" x 7/8"	3-1/8" x 3-1/8" x 1-1/8"
1-3/8" x 1-1/8" x 1-1/8"	3-1/8" x 3-1/8" x 1-3/8"
1-3/8" x 1-3/8" x 3/8"	3-1/8" x 3-1/8" x 1-5/8"
1-3/8" x 1-3/8" x 1/2"	3-1/8" x 3-1/8" x 2-1/8"
1-3/8" x 1-3/8" x 5/8"	3-1/8" x 3-1/8" x 2-5/8"
1-3/8" x 1-3/8" x 7/8"	4-1/8" x 4-1/8" x 1-1/8"
1-3/8" x 1-3/8" x 1-1/8"	4-1/8" x 4-1/8" x 1-3/8"
1-3/8" x 1-3/8" x 1-5/8"	4-1/8" x 4-1/8" x 1-5/8"
1-3/8" x 1-3/8" x 2-1/8"	4-1/8" x 4-1/8" x 2-1/8"
1-5/8" x 1-3/8" x 1-3/8"	4-1/8" x 4-1/8" x 2-5/8"
1-5/8" x 1-3/8" x 1-5/8"	4-1/8" x 4-1/8" x 3-1/8"
1-5/8" x 1-5/8" x 5/8"	5-1/8" x 5-1/8" x 3-1/8"
1-5/8" x 1-5/8" x 3/4"	5-1/8" x 5-1/8" x 4-1/8"
1-5/8" x 1-5/8" x 7/8"	6-1/8" x 6-1/8" x 3-1/8"
1-5/8" x 1-5/8" x 1-1/8"	6-1/8" x 6-1/8" x 4-1/8"
1-5/8" x 1-5/8" x 1-3/8"	6-1/8" x 6-1/8" x 5-1/8"
1-5/8" x 1-5/8" x 2-1/8"	
2-1/8" x 1-3/8" x 1-1/8"	
2-1/8" x 1-3/8" x 1-3/8"	
2-1/8" x 1-3/8" x 2-1/8"	
2-1/8" x 1-5/8" x 1-5/8"	
2-1/8" x 2-1/8" x 1/2"	
2-1/8" x 2-1/8" x 5/8"	
2-1/8" x 2-1/8" x 3/4"	

Coupling Equal C X C

Size ASME/ANSI B 16.22	Size EN 1254-1
1/4"	8 mm
3/8"	10 mm
1/2"	12 mm
5/8"	14 mm
3/4"	16 mm
7/8"	18 mm
1"	22 mm
1-1/8"	25 mm
1-1/4"	28 mm
1-3/8"	35 mm
1-1/2"	42 mm
1-5/8"	54 mm
1-3/4"	64 mm
2"	67 mm
2-1/8"	76 mm
2-5/8"	80 mm
3-1/8"	89 mm
3-5/8"	108 mm
4-1/8"	133 mm
5-1/8"	159 mm
6-1/8"	219 mm

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Coupling Reducing C X C

Size ASME/ANSI B 16.22	Size EN 1254-1
1/4" x 3/16"	10 x 8 mm
3/8" x 1/4"	12 x 8 mm
3/8" x 5/16"	12 x 10 mm
1/2" x 1/4"	15 x 8 mm
1/2" x 5/16"	15 x 10 mm
1/2" x 3/8"	15 x 12 mm
5/8" x 1/4"	16 x 10 mm
5/8" x 3/8"	16 x 12 mm
5/8" x 1/2"	16 x 15 mm
3/4" x 3/8"	18 x 10 mm
3/4" x 1/4"	18 x 12 mm
3/4" x 1/2"	18 x 15 mm
3/4" x 5/8"	22 x 10 mm
7/8" x 1/4"	22 x 12 mm
7/8" x 3/8"	22 x 15 mm
7/8" x 1/2"	22 x 16 mm
7/8" x 5/8"	22 x 18 mm
7/8" x 3/4"	28 x 15 mm
1" x 1/2"	28 x 18 mm
1" x 5/8"	28 x 22 mm
1" x 7/8"	35 x 15 mm
1" x 3/4"	35 x 18 mm
1-1/8" x 3/8"	35 x 22 mm
1-1/8" x 1/2"	35 x 28 mm
1-1/8" x 5/8"	42 x 22 mm
1-1/8" x 3/4"	42 x 28 mm
1-1/8" x 7/8"	42 x 35 mm
1-1/8" x 1"	54 x 22 mm
1-1/4" x 1-1/8"	54 x 28 mm
1-3/8" x 3/8"	54 x 35 mm
1-3/8" x 1/2"	54 x 42 mm
1-3/8" x 5/8"	67 x 35 mm
1-3/8" x 3/4"	67 x 42 mm

Size ASME/ANSI B 16.22	Size EN 1254-1
1-3/8" x 7/8"	67 x 54 mm
1-3/8" x 1-1/8"	76 x 22 mm
1-5/8" x 1/2"	76 x 28 mm
1-5/8" x 5/8"	76 x 35 mm
1-5/8" x 3/4"	76 x 42 mm
1-5/8" x 7/8"	76 x 54 mm
1-5/8" x 1-1/8"	76 x 67 mm
1-5/8" x 1-3/8"	108 x 54 mm
1-1/2" x 1-1/4"	108 x 67 mm
1-1/2" x 1-1/8"	108 x 76 mm
2-1/8" x 1/2"	108 x 89 mm

Size ASME/ANSI B 16.22	Size ASME/ANSI B 16.22
2-1/8" x 5/8"	3-1/8" x 3-1/8"
2-1/8" x 7/8"	3-5/8" x 2-5/8"
2-1/8" x 1-1/8"	3-5/8" x 3-1/8"
2-1/8" x 1-3/8"	4-1/8" x 1-1/8"
2-1/8" x 1-5/8"	4-1/8" x 1-3/8"
2-5/8" x 5/8"	4-1/8" x 1-5/8"
2-5/8" x 7/8"	4-1/8" x 2-1/8"
2-5/8" x 1-1/8"	4-1/8" x 2-5/8"
2-5/8" x 1-3/8"	4-1/8" x 3-1/8"
2-5/8" x 1-5/8"	4-1/8" x 3-5/8"
2-5/8" x 2-1/8"	5-1/8" x 2-1/8"
3-1/8" x 7/8"	5-1/8" x 2-5/8"
3-1/8" x 1-1/8"	5-1/8" x 3-1/8"
3-1/8" x 1-3/8"	5-1/8" x 4-1/8"
3-1/8" x 1-5/8"	6-1/8" x 3-1/8"
3-1/8" x 2-1/8"	6-1/8" x 4-1/8"
3-1/8" x 2-5/8"	6-1/8" x 5-1/8"

Adapter Female C X FPT

Size ASME/ANSI B 16.22	Size EN 1254-1
1/4"	8 mm
3/8"	10 mm
1/2"	12 mm
3/4"	18 mm
7/8"	22 mm
1-1/8"	28 mm
1-3/8"	35 mm
1-5/8"	42mm
2-1/8"	54 mm
2-5/8"	67 mm
3-1/8"	76 mm
4-1/8"	108 mm

Adapter Male C X MPT

Size ASME/ANSI B 16.22	Size EN 1254-1
1/4"	8 mm
3/8"	10 mm
1/2"	12 mm
3/4"	18 mm
7/8"	22 mm
1-1/8"	28 mm
1-3/8"	35 mm
1-5/8"	42 mm
2-1/8"	54 mm
2-5/8"	67 mm
3-1/8"	76 mm
4-1/8"	108 mm

Cap C

Size ASME/ANSI B 16.22	Size EN 1254-1
1/4"	8 mm
3/8"	10 mm
1/2"	12 mm
5/8"	15 mm
3/4"	18 mm
7/8"	22 mm
1-1/8"	28 mm
1-3/8"	35 mm
1-5/8"	42 mm
2-1/8"	54 mm
2-5/8"	67 mm
3-1/8"	76 mm
3-5/8"	89 mm
4-1/8"	108 mm

Return Bend C X C

Size ASME/ANSI B 16.22	Size EN 1254-1
1/4" x 1"	8 x 24 mm
3/8" x 1-1/2"	10 x 30 mm
3/8" x 4-1/2"	12 x 36 mm
1/2" x 1-1/2"	14 x 45 mm
1/2" x 3"	15 x 45 mm
5/8" x 1-7/8"	16 x 48 mm
5/8" x 2"	18 x 54 mm
5/8" x 2-1/4"	22 x 66 mm
3/4" x 2-1/2"	28 x 84 mm
7/8" x 2-1/2"	35 x 140 mm
1-3/8" x 3"	42 x 168 mm
1-3/8" x 3-1/4"	54 x 216 mm
1-3/8" x 4"	64 x 154 mm
1-5/8" x 3-1/2"	70 x 210 mm
1-5/8" x 4-1/2"	76 x 183 mm
1-1/2" x 1-1/4"	80 x 240 mm
1-1/2" x 1-1/8"	89 x 213 mm
2-1/8" x 5-1/2"	108 x 259 mm

P-Trap C X C

Size ASME/ANSI B 16.22	Size EN 1254-1
1/2"	22 mm
5/8"	28 mm
3/4"	35 mm
7/8"	42 mm
1-1/8"	64 mm
1-3/8"	67 mm
1-5/8"	76 mm
2-1/8"	80 mm
2-5/8"	89 mm

Brass Fitting

ICEAGE brass fittings can be used in a quick and easy way during the connecting work. Fittings generally comply with SAE, ASME, ASA, EN378-2 standard.

Forged Nut

Part No.	Size
BFFN-1/4	1/4" F. SAE x ø 1/4" O.D.
BFFN-3/8	3/8" F. SAE x ø 3/8" O.D.
BFFN-1/2	1/2" F. SAE x ø 1/2" O.D.
BFFN-5/8	5/8" F. SAE x ø 5/8" O.D.
BFFN-3/4	3/4" F. SAE x ø 3/4" O.D.

Adapter

Part No.	Size
BFAD-1/4-1/8	1/4" M. SAE x 1/8" F. NPT
BFAD-1/4-1/4	1/4" M. SAE x 1/4" F. NPT
BFAD-1/4-3/8	1/4" M. SAE x 3/8" F. NPT
BFAD-3/8-1/8	3/8" M. SAE x 1/8" F. NPT
BFAD-3/8-1/4	3/8" M. SAE x 1/4" F. NPT
BFAD-3/8-1/2	3/8" M. SAE x 1/2" F. NPT
BFAD-1/2-1/4	1/2" M. SAE x 1/4" F. NPT
BFAD-1/2-3/8	1/2" M. SAE x 3/8" F. NPT

Forged Brass Fittings

Forged brass fittings are made from extruded brass bars, which are then cut to plugs, heated to make them pliable, then pressed into fitting dies. The forged brass fittings are much stronger and appropriate for plumbing.

Standard Short Nut

Part No.	Size
BFSN-1/4	1/4" F. SAE x ø 1/4" O.D.
BFSN-5/16	5/16" F. SAE x ø 5/16" O.D.
BFSN-3/8	3/8" F. SAE x ø 3/8" O.D.
BFSN-1/2	1/2" F. SAE x ø 1/2" O.D.
BFSN-5/8	5/8" F. SAE x ø 5/8" O.D.
BFSN-3/4	3/4" F. SAE x ø 3/4" O.D.

Long Nut

Part No.	Size
BFLN-1/4	1/4" F. SAE x ø 1/4" O.D.
BFLN-5/16	5/16" F. SAE x ø 5/16" O.D.
BFLN-3/8	3/8" F. SAE x ø 3/8" O.D.
BFLN-1/2	1/2" F. SAE x ø 1/2" O.D.
BFLN-5/8	5/8" F. SAE x ø 5/8" O.D.
BFLN-3/4	3/4" F. SAE x ø 3/4" O.D.

Cap Nut

Part No.	Size
BFCN-1/4	1/4" F. SAE x ø 1/4" O.D.
BFCN-5/16	5/16" F. SAE x ø 5/16" O.D.
BFCN-3/8	3/8" F. SAE x ø 3/8" O.D.
BFCN-1/2	1/2" F. SAE x ø 1/2" O.D.
BFCN-5/8	5/8" F. SAE x ø 5/8" O.D.
BFCN-3/4	3/4" F. SAE x ø 3/4" O.D.

Union

Part No.	Size
BFUN-1/4	1/4" M. SAE x 1/4" M. SAE
BFUN-5/16	5/16" M. SAE x 5/16" M. SAE
BFUN-3/8	3/8" M. SAE x 3/8" M. SAE
BFUN-1/2	1/2" M. SAE x 1/2" M. SAE
BFUN-5/8	5/8" M. SAE x 5/8" M. SAE
BFUN-3/4	3/4" M. SAE x 3/4" M. SAE

Tee

Part No.	Size
BFUT-1/4	1/4" M. SAE
BFUT-3/8	3/8" M. SAE
BFUT-1/2	1/2" M. SAE
BFUT-5/8	5/8" M. SAE
BFUT-3/4	3/4" M. SAE

Reducing Union

Part No.	Size
BFRN-3/8-1/4	3/8" M. SAE x 1/4" M. SAE
BFRN-1/2-1/4	1/2" M. SAE x 1/4" M. SAE
BFRN-1/2-3/8	1/2" M. SAE x 3/8" M. SAE
BFRN-5/8-3/8	5/8" M. SAE x 3/8" M. SAE
BFRN-5/8-1/2	5/8" M. SAE x 1/2" M. SAE
BFRN-3/4-1/2	3/4" M. SAE x 1/2" M. SAE
BFRN-3/4-5/8	3/4" M. SAE x 5/8" M. SAE

Access Valve

Access valve is designed to offer convenient access port for refrigeration system, it can be installed in any position on either high or low side for quick testing, pressure checking, purging or charging.

All access valves feature 1/4" SAE male flare access ports and are furnished with cap and gasket preventing any leakage. Each cap is machined to have a valve core quick-remover.

Specification

Model	Extended Copper Tube Size	Remark
VAAV-1/8	1/8" ODF Solder	All access valves come with 1/4" SAE male flare, equipped with valve core & brass caps (with core remover).
VAAV-3/16	3/16" ODF Solder	
VAAV-1/4	1/4" ODF Solder	
VAAV-5/16	5/16" ODF Solder	
VAAV-3/8	3/8" ODF Solder	

Material:

Valve body / cap: solid brass

Extended copper tube: Cu-DHP

Compatible with all refrigerants

Spare Valve Core & Core Remover

Copper Filter Drier

ICEAGE copper filter driers are designed to absorb moisture and acid, and to filter out impurities. Normally be installed as component and replaced as repair part for both domestic and commercial refrigerators, freezers.

Material:

Body shell: Cu-DHP

Molecular sieves: 100% XH-9

Screen: 200 mesh

Wall Thickness:

5 – 20g: 0.40mm

> 20g: 0.50mm

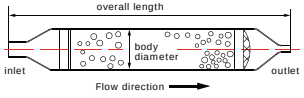
Designation

FD 25 - 021

- FD: Filter Drier
- 25: Molecular sieves grams
- 021: Ending type
  - 010: standard;
  - 011: welding 1 inlet
  - 021: welding 2 inlet;
  - 022: welding 2 inlet + access valve

Specification – standard

Model	Molecular Sieves	Body diameter	Overall length	Screen Depth
	+5%, -0%	±0.10mm	±2mm	±2mm
FD05-010	5g	16	80	24
FD07-010	7g	16	90	24
FD10A-010	10g	16	115	24
FD10B-010	10g	19	100	26
FD12-010	12g	19	105	26
FD13-010	13g	19	110	26
FD15-010	15g	19	115	26
FD18-010	18g	19	128	26
FD20A-010	20g	19	141	26
FD20B-010	20g	24	120	28
FD25-010	25g	24	125	28
FD30-010	30g	24	140	28
FD35-010	35g	24	155	28
FD40-010	40g	24	170	28
FD50-010	50g	29	160	30

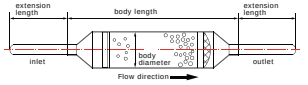


Standard inlet / outlet: 6.5 / 2.5 mm

Other size on request

Specification – welded extension capillary

Model	Molecular Sieves	Body diameter	Overall length	Screen Depth
	+5%, -0%	±0.10mm	±2mm	±2mm
FD05-010	5g	16	80	24
FD07-010	7g	16	90	24
FD10A-010	10g	16	115	24
FD10B-010	10g	19	100	26
FD12-010	12g	19	105	26
FD13-010	13g	19	110	26
FD15-010	15g	19	115	26
FD18-010	18g	19	128	26
FD20A-010	20g	19	141	26
FD20B-010	20g	24	120	28
FD25-010	25g	24	125	28
FD30-010	30g	24	140	28
FD35-010	35g	24	155	28
FD40-010	40g	24	170	28
FD50-010	50g	29	160	30

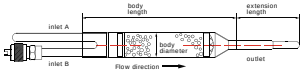


inlet / outlet size on request

Specification – welded extension capillary

2 inlets (with access valve) + 1 outlet

Model	Molecular Sieves	Body diameter	Overall length	Screen Depth
	+5%, -0%	±0.10mm	±2mm	±2mm
FD05-022	5g	16	80	24
FD07-022	7g	16	90	24
FD10A-022	10g	16	115	24
FD10B-022	10g	19	100	26
FD12-022	12g	19	105	26
FD13-022	13g	19	110	26
FD15-022	15g	19	115	26
FD18-022	18g	19	128	26
FD20A-022	20g	19	141	26
FD20B-022	20g	24	120	28
FD25-022	25g	24	125	28
FD30-022	30g	24	140	28
FD35-022	35g	24	155	28
FD40-022	40g	24	170	28
FD50-022	50g	29	160	30



inlet / outlet size on request

Strainer

ICEAGE copper strainers are specially designed with oversized screen for protecting, filtering air conditioning or dehumidifying system from dirt and contaminant.

Material:

Body shell: Cu-DHP

Screen: 200 mesh

Wall Thickness:

> 0.45mm on request

Inlet / Outlet:

On request, available with 1, 2, 3 and 4 outlets

Accumulator

ICEAGE copper accumulators are widely used for liquid storage, liquid/gas separation, impurity filtering, noise reduction and refrigerant cushion.

Material:

Body shell: Cu-DHP

Dimension:

On request

Axial Fan

ICEAGE Axial Fans driven by quiet and high-efficient external rotor motors, are widely used in air conditioning condensing sets and ventilating unit.

Most of axial fans approved by CE, UL, and CCC.

Material:

Guard Grille: steel, coated in black plastic.
Wall ring: sheet steel, re-galvanized, coated in black plastic.
Blades: sheet steel.
Rotor: coated in black plastic.

- Min. working life: 30,000 hours
- Thermal contacts protected.
- Insulation class: class B
- Protection class: IP54
- Certificate: CE, UL, CCC.

Designation

4 D 400 B A

- 4: Q'ty of Motor Pole
- D: E: single - phase capacitor operation; D: three - phase asynchronous operation
- 400: Fan blade diameter in mm
- B: S: suction; B: blowing
- A: A: flat grid type A; B: flat grid type B; C: standard grid type C

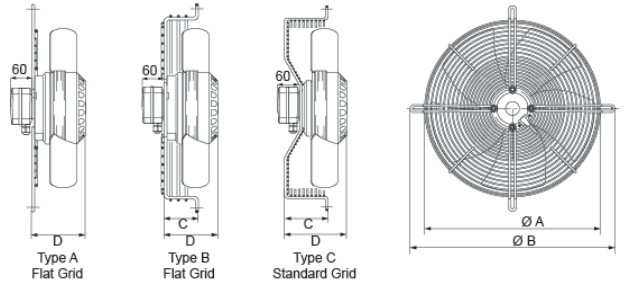
Technical Data

Model	Voltage	Frequency	Current	Input Power	Speed	Max. Air Volume	Capacitor	Noise
	V	Hz	A	W	RPM	m^3/h	uF	dB(A)
2E200	220/120	50/60	0.23/0.62	50/70	2550/2800	780/910	2/8	47/48
4E200	220/120	50/60	0.18/0.28	40/45	1420/1650	540/650	1.5/6	42/43
2D250	380	50	0.22	80	2500	960	-	54
2E250	220/120	50/60	0.5/1.03	110/120	2500/2850	960	3/10	54/55
4D250	380	50	0.18	60	1400	770	-	50
4E250	220/120	50/60	0.26/0.56	56/65	1400/1600	770/810	2/8	50/51
2D300	380	50	0.3	160	2300	2130	-	57
2E300	220/120	50/60	0.8/1.77	165/220	2300/2500	2130/2200	6/16	57/58
4D300	380	50	0.28	90	1400	1600	-	55
4E300	220/120	50/60	0.4/0.87	90/100	1400/1550	1600/1720	3/10	55/56
6E300	220/120	50/60	0.45/0.35	60/70	910/1050	1260/1310	2/8	47/48
4D350	380	50	0.4	145	1380	2500	-	54
4E350	220/120	50/60	0.73/1.6	145/190	1380/1600	2500/2650	4/16	54/55
6D350	380	50	0.3	90	950	1650	-	50
6E350	220/120	50/60	0.5/0.7	90/105	950/1100	1650/1900	3/8	50/52
4D400	380	50	0.53	190	1380	3500	-	60
4E400	220/120	50/60	0.85/2.3	190/270	1380/1600	3500/4000	6/22	60/61
6D400	380	50	0.38	110	920	2510	-	50
6E400	220/120	50/60	0.57/1.15	110/135	920/980	2510/2750	4/12	50/51
4D450	380	50	0.62	250	1350	4850	-	60
4E450	220/120	50/60	1.2/2.6	250/330	1350/1600	4800/5260	8/32	60/62
6D450	380	50	0.45	145	920	3550	-	52
6E450	220/120	50/60	0.7/1.5	150/180	920/1050	3550/3820	6/20	52/54
4D500	380	50	1	390	1350	6570	-	62
4E500	220	50	1.6	350	1350	6570	10	62
6D500	380	50	0.55	180	900	4900	-	58
6E500	220	50	0.65	140	900	4900	6	58
4D550	380	50	1.25	500	1300	8700	/	65
4E550	220	50	2.4	500	1300	8700	12	65
6D550	380	50	0.83	250	900	6430	/	60
6E550	220	50	1.6	280	900	6430	10	60
4D600	380	50	1.61	750	1350	10850	-	68
4E600	220	50	3.3	710	1350	10850	16	68
6D600	380	50	1.2	380	900	8100	-	62
6E600	220	50	2.5	390	900	8100	12	62
4D630	380	50	1.6	750	1310	12000	-	68
4E630	220	50	3.55	750	1310	11000	16	68
6D630	380	50	1.3	450	900	8850	-	65
6E630	220	50	2.55	470	900	8850	12	65
6D710	380	50	2	1100	900	16200	-	70
6D800	380	50	2.4	1100	900	21500	-	73
8D800	380	50	1.5	650	680	17200	-	65

Dimensions

Model	A	B	Grid A (mm)		Grid B (mm)		Grid C (mm)	
	mm	mm	C	D	C	D	C	D
2E200 4E200	220	275	-	65	45	65.5	65	85
2D250 2E250 4D250 4E250	270	340	-	76	60	76	75	95
2D300 2E300 4D300 4E300 6E300	320	380	-	86	60	86	80	115
4D350 4E350 6D350 6E350	370	440	-	109	60	109	80	135
4D400 4E400 6D400 6E400	420	490	-	122	60	122	90	148
4D450 4E450 6D450 6E450	470	545	-	134	60	134	90	160
4D500 4E500 6D500 6E500	520	591	-	137	60	137	90	160
4D550 4E550 6D550 6E550	570	651	-	151	60	151	100	175
4D600 4E600 6D600 6E600	620	703	-	171	60	171	100	195
4D630 4E630 6D630 6E630	650	780	-	171	60	171	100	195
6D710	765	835	-	185	60	185	105	240
6D800 8D800	850	965	-	185	60	185	170	240

Drawings



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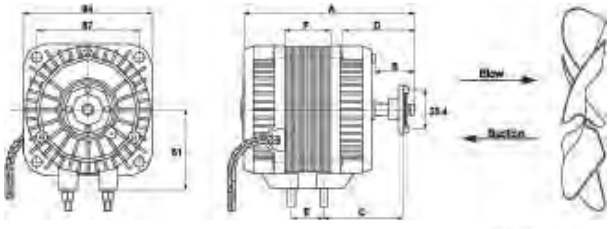
Specification

Model	Voltage	Output Power	Frequency	Current	Speed	Input Power
	V	W	Hz	A	RPM	W
MTSM3	220/240	3	50/60	0.16	1300/1550	20
	110/115		50/60	0.32	1300/1550	
MTSM5	220/240	5	50/60	0.2	1300/1550	30
	110/115		50/60	0.4	1300/1550	
MTSM7	220/240	7	50/60	0.27	1300/1550	38
	110/115		50/60	0.54	1300/1550	
MTSM10	220/240	10	50/60	0.3	1300/1550	42
	110/115		50/60	0.6	1300/1550	
MTSM16	220/240	16	50/60	0.4	1300/1550	58
	110/115		50/60	0.8	1300/1550	
MTSM18	220/240	18	50/60	0.43	1300/1550	64
	110/115		50/60	0.86	1300/1550	
MTSM20	220/240	20	50/60	0.47	1300/1550	65
	110/115		50/60	0.94	1300/1550	
MTSM25	220/240	25	50/60	0.7	1300/1550	100
	110/115		50/60	1.4	1300/1550	
MTSM34	220/240	34	50/60	0.9	1300/1550	120
	110/115		50/60	1.8	1300/1550	

Dimension and Shell Construction



NO Mounting Screws

Mounting Screws
Distance: 26mm or 18mm

Mounting Screws
Distance: 26mm and 18mm

Model	Motor Dimension (mm)						Fan Blade Recommended					
	A	B	C	D	E	F	Ø154	Ø172	Ø200	Ø230	Ø250	Ø300
MTSM3	81	14	46	30	-	12.5	34"	28"	22"			
MTSM5	81	14	46	30	-	12.5	34"	28"	22"			
MTSM7	91	17	49	33	-	20		34"	28"	22"		
MTSM10	91	17	49	33	-	20			34"	28"	22"	
MTSM16	102	18	50	34	-	25				28"	22"	
MTSM18	102	18	50	34	20	30				34"	28"	22"
MTSM20	102	18	50	34	20	30				34"	28"	22"
MTSM25	112	18	50	34	30	40					34"	28"
MTSM34	117	18	50	34	35	45						34"

Shaded Pole Motor

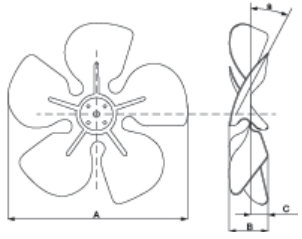
ICEAGE Shaded Pole Motors are widely used for condenser, evaporator and other refrigeration equipment, with single phase, 4 shaded poles running at rated voltage of 220 – 240V 50/60Hz, or 110 – 120V 60Hz.

Most of shaded pole motors approved by **CE**, **UL**, **VDE** and **CCC**.

- Output range: 3 to 34 Watt
- Insulation class: class B
- Protection class: IP42 (IP44 on request)
- Bearing: self-adjusting calotte sleeve bearing
- Operation temp.: -30 to +50 °C
- Min. working life: 20,000 hours
- Certificate: CE, UL, VDE, CCC

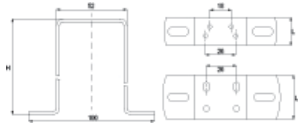
Accessories For Shaded Pole Motor

Fan Blade



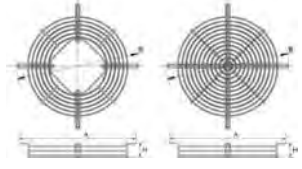
a		Fan Blade Dimension (mm)						
		154	172	200	230	250	265	300
19°	B	24	25	26	28	29	33	35
	C	13	13	14	15	15	17	18
22°	B	27	28	30	33	34	38	41
	C	14	15	16	16	17	20	21
25°	B	31	31	33	37	38	43	45
	C	16	16	17	19	20	22	23
28°	B	34	35	37	41	42	48	54
	C	17	16	19	21	21	25	28
31°	B	37	40	41	46	46	53	58
	C	19	20	21	24	24	27	29
34°	B	40	42	44	50	51	57	63
	C	21	21	23	26	26	29	32

Bracket



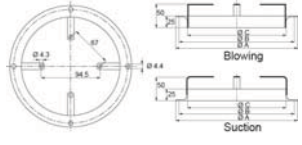
Model	Dimension (mm)	
	H	L
B54	54	24
B72	72	24
B84	84	24
B109-1	109	39
B109-2	109	49

Grid



Model	Dimension (mm)		
	A	B	H
G154A/B	170	202	25
G172A/B	188	220	25
G200A/B	216	248	25
G230A/B	246	278	25
G254A/B	270	300	35
G300A/B	324	354	35

Guard Ring



Model	Dimension (mm)			
	Fan Diameter	ØA	ØB	ØC
R154	154	200	190	164
R172	172	223	208	180
R200	200	246	233	208
R230	230	276	266	238
R250	250	300	290	262
R300	300	356	344	310

Other Motor Shell

ICEAGE provide large range of motor shell available to meet your application, please contact ICEAGE sales team for more information.

Tangential Fan

Cross flow or tangential fans provide wide, uniform air delivery of high capacity, widely used in air curtains, air conditioning and heating applications.

- Impeller: aluminum construction
- Bearing: sleeve bearing or ball bearing
- Working Temp.: 0 to +60 °C
- Insulation class: class B, class F
- Certificate: CE
- Lead wire: cable or terminal

Specification

Model	Voltage	Frequency	Current	Input Power	Speed	Max. Air Volume	Noise
	V	Hz	A	W	RPM	m^3/h	dB(A)
MTTF-30.90	230	50	0.06	8.5	2800	40	35
MTTF-30.120	230	50	0.10	15	2800	55	36
MTTF-30.240	230	50	0.11	16	2800	100	37
MTTF-30.300	230	50	0.10	16	2800	120	39
MTTF-40.120	230	50	0.08	13	2750	90	35
MTTF-40.180	230	50	0.13	21	2700	140	36
MTTF-40.240	230	50	0.11	17.5	2700	190	37
MTTF-40.300	230	50	0.13	21	2700	230	39
MTTF-45.180	230	50	0.10	12.5	1300	64	45
MTTF-45.240	230	50	0.22	23	1600	135	45
MTTF-45.300	230	50	0.19	22.5	1300	107	41
MTTF-45.360	230	50	0.22	26	1400	158	42
MTTF-50.120	230	50	0.08	15	2500	130	40
MTTF-50.180	230	50	0.23	20	2650	210	41
MTTF-50.240	230	50	0.11	20	2200	220	42
MTTF-50.300	230	50	0.13	22	2200	270	45

Designation

MTTF - 30 . 90

- 90: impeller length
- 30: impeller diameter
- MTTF: Tangential fan

Contact us

ICEAGE sales team is waiting to provide more detailed technical information and help you find out proper product that meet your application.

Centrifugal Fan

ICEAGE provides centrifugal fans with forward or backward curved blades and external rotor motors.

- Impeller: aluminum or plastic
- Bearing: sleeve bearing or ball bearing
- Working Temp.: -30 to +60 °C
- Insulation class: class B, class F
- Thermal contacts protected.
- Certificate: CE

Designation

MTCF - 4 D 200

- 200: impeller diameter
- D: E: single - phase; D: three - phase
- 4: Q'ty of Motor Pole
- MTCF: Centrifugal fan

Specification

Model	Voltage	Frequency	Current	Input Power	Speed	Max. Air Volume	Capacitor	Noise
	V	Hz	A	W	RPM	m^3/h	uF	dB(A)
MTCF-4E200	230	50/60	0.52/0.60	115/150	1280/1400	1350/1380	4	48/60
MTCF-4D200	380	50/60	0.26/0.30	110/145	1300/1500	1380/1380	-	58/60
MTCF-4E225	230	50	1.5	270	1400	1550	10	52
MTCF-4D225	230/380	50	2.2	270	1400	1500	-	52
MTCF-4E250	230	50	3.0	500	1380	2430	12	55
MTCF-4D250	230/380	50	2.2/1.1	500	1380	2600	-	55
MTCF-4E280	230/380	50	3.0	650	1285	3230	-	49
MTCF-6D280	230/380	50	1.7	380	895	2100	-	49
MTCF-4E315	230/380	50	2.4/1.5	800	1400	4630	-	60
MTCF-6D315	230/380	50	2.1/1.2	620	840	3300	-	53
MTCF-4E355	230/380	50	3.80/2.20	1300	1400	7000	-	65
MTCF-6D355	230/380	50	2.86/1.65	800	870	4032	-	56

Circular Duct Fan

The circular duct fan is designed for installation in ducts, the external rotor motor with backward curved impeller blades is provided with approved motor protection.

- Casting: fiberglass reinforced plastic
- Integral thermal contacts.
- Insulation class: class B or class F
- Protection class: IP44
- Certificate: CE

Designation

MTCD - 2E 100

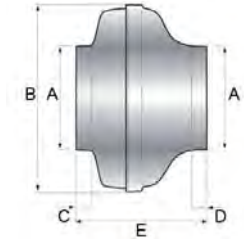
- 100: Diameter of duct
- 2E: 2 pole single phase
- MTCD: Circular duct fan

Specification

Model	Voltage	Frequency	Current	Input Power	Speed	Capacitor
	V	Hz	A	W	RPM	uF
MTCD-2E100	115	60	0.63	77	2550	8
	230	50/60	0.33/0.35	73/80	2300/2500	2
MTCD-2E125	115	60	0.7	85	2500	8
	230	50/60	0.29/0.32	75/85	2300/2500	2
MTCD-2E150	115	60	0.98	125	2550	12
	230	50/60	0.41/0.52	100/125	2300/2500	3
MTCD-2E160	115	60	1	130	2500	12
	230	50/60	0.41/0.54	110/130	2300/2500	3
MTCD-2E200	115	60	1.78	200	2400	16
	230	50/60	0.50/0.68	150/200	2350/2600	5
MTCD-2E250	115	60	1.8	215	2400	16
	230	50/60	0.65/0.73	165/215	2350/2600	5
MTCD-2E315	115	60	2	250	2450	20
	230	50/60	0.88/1.10	200/250	2300/2400	6

Dimension

Model	Dimension (mm)				
	A	B	C	D	E
MTCD-2E100	97	240	20	20	200
MTCD-2E125	121	236	24	24	206
MTCD-2E150	147	280	25	22	206
MTCD-2E160	157	280	27	30	213
MTCD-2E200	197	335	28	25	240
MTCD-2E250	246	335	30	25	220
MTCD-2E315	313	402	25	30	255



C-Frame Evaporator Motor

The C-frame evaporator fan motors are widely used in refrigerator/freezer evaporators.

Please contact ICEAGE sales team for more detailed technical information.

Air Curtain

Air curtains are normally used at the entrance to a building, it generate free flow of air between an inside and outside environment.

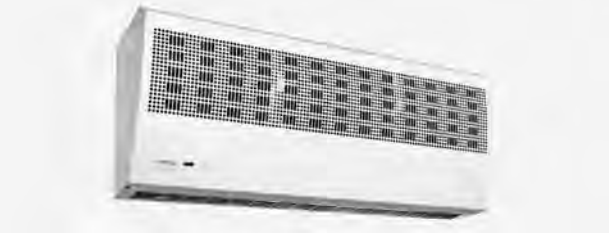
Setting up an air curtain can maintain a constant internal room temp., increasing comfort and saving energy. If co-working with automatic door, it can enhance the a/c utilization ratio to 70 – 90%.

Vertical Air In Centrifugal Aluminum Casting Series

- Sturdy Aluminum Alloy housing
- Centrifugal fan
- Remote control
- Uniform forced air flow
- More than 14.5m/s high speed

Specification

Model	Input Power	Air Speed	Air Volume	Noise	Net Weight	Dimension	Recommended height for installation	Wheel Diameter
	W	m/s	m^3/h	dB	kg	mm	m	mm
ACFM-3509Z-L	260	14.5	1020	44	17	900 x 230 x 215	3 to 3.5	120
ACFM-3510Z-L	260	14.5	1020	44	17	1000 x 230 x 215	3 to 3.5	120
ACFM-3512Z-L	330	14.5	1360	45	20	1200 x 230 x 215	3 to 3.5	120
ACFM-3515Z-L	450	14.5	1700	48	24	1500 x 230 x 215	3 to 3.5	120
ACFM-3518Z-L	495	14.5	2040	50	28	1800 x 230 x 215	3 to 3.5	120
ACFM-4509Z-L	280	18	1260	46	16	900 x 230 x 215	4 to 4.5	120
ACFM-4510Z-L	280	18	1260	46	17	1000 x 230 x 215	4 to 4.5	120
ACFM-4512Z-L	380	18	1680	47	20	1200 x 230 x 215	4 to 4.5	120
ACFM-4515Z-L	480	18	2100	50	24	1500 x 230 x 215	4 to 4.5	120
ACFM-4518Z-L	570	18	2520	52	28	1800 x 230 x 215	4 to 4.5	120
ACFM-5509Z-L	340	20	1450	48	16	900 x 230 x 215	4 to 4.5	120
ACFM-5510Z-L	340	20	1450	48	17	1000 x 230 x 215	4 to 4.5	120
ACFM-5512Z-L	460	20	1930	49	20	1200 x 230 x 215	4 to 4.5	120
ACFM-5515Z-L	570	20	2420	52	24	1500 x 230 x 215	4 to 4.5	120
ACFM-5518Z-L	690	20	2900	54	28	1800 x 230 x 215	4 to 4.5	120

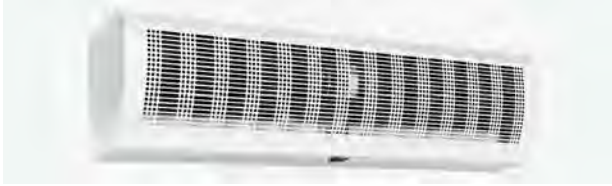


Powerful Heating Centrifugal Series

- Complete metal housing with durable powder coating
- Centrifugal turbine provides high air volume
- Remote control.
- High efficient and safety PTC for heating.

Specification

Model	Input Power		Air Speed	Air Volume	Noise	Net Weight	Dimension	Recommended height for installation	Wheel Diameter
	Fan	Heating							
	W	kW	m/s	m^3/h	dB	kg	mm	m	mm
ACRM-4509G	410	12	14	1020	55	28	900 x 360 x 230	3.5 to 4.5	120
ACRM-4512G	520	16	14	1360	56	37	1200 x 360 x 230	3.5 to 4.5	120
ACRM-4515G	670	20	14	1700	58	46	1500 x 360 x 230	3.5 to 4.5	120



Arc Shape Cross Flow

- Complete metal frame with durable spraying
- Unique design slim body
- High efficiency and low noise
- Convenient operation
- Remote control

Specification

Model	Input Power	Air Speed	Air Volume	Noise	Net Weight	Dimension	Recommended height for installation	Wheel Diameter
	W	m/s	m^3/h	dB	kg	mm	m	mm
ACFM-1209N	150	11	1200	45	13	900 x 220 x 195	2.3 to 3	120
ACFM-1210N	170	11	1350	45	14	1000 x 220 x 195	2.3 to 3	120
ACFM-1212N	180	11	1700	47	18	1200 x 220 x 195	2.3 to 3	120
ACFM-1215N	220	11	2100	47	21.5	1500 x 220 x 195	2.3 to 3	120
ACFM-1218N	280	11	2500	50	25	1800 x 220 x 195	2.3 to 3	120
ACFM-1220N	320	11	2750	51	28	2000 x 220 x 195	2.3 to 3	120
ACFM-1509N	165	12	1260	47	15.5	900 x 255 x 225	3 to 3.5	150
ACFM-1512N	180	12	1930	49	19.5	1200 x 255 x 225	3 to 3.5	150
ACFM-1515N	240	12	2350	50	24	1500 x 255 x 225	3 to 3.5	150

Horizontal Air In Centrifugal Series

- Complete metal housing with unique design
- Centrifugal fan
- Remote control
- High efficiency and low noise
- More than 14.5m/s high speed

Specification

Model	Input Power	Air Speed	Air Volume	Noise	Net Weight	Dimension	Recommended height for installation	Wheel Diameter
	W	m/s	m^3/h	dB	kg	mm	m	mm
ACFM-3509L	325	14.5	1020	44	17	900 x 230 x 212	3 to 3.5	120
ACFM-3512L	420	14.5	1360	45	21	1200 x 230 x 212	3 to 3.5	120
ACFM-3515L	535	14.5	1700	48	25	1500 x 230 x 212	3 to 3.5	120
ACFM-4509L	400	18	1260	46	17	900 x 230 x 212	4 to 4.5	120
ACFM-4512L	540	18	1680	47	21	1200 x 230 x 212	4 to 4.5	120
ACFM-4515L	670	18	2100	50	25	1500 x 230 x 212	4 to 4.5	120
ACFM-5509L	450	21	1520	52	17	900 x 230 x 212	5 to 5.5	120
ACFM-5512L	600	21	2027	54	21	1200 x 230 x 212	5 to 5.5	120
ACFM-5515L	750	21	2534	55	25	1500 x 230 x 212	5 to 5.5	120

Aluminum Casting Air Curtain

- Sturdy Aluminum frame rust resistant
- Unique design slim body
- High efficiency, low noise and internal overload protection
- Convenient operation and installation
- Remote control

Specification

Model	Input Power	Air Speed	Air Volume	Noise	Net Weight	Dimension	Recommended height for installation	Wheel Diameter
	W	m/s	m^3/h	dB	kg	mm	m	mm
ACFM-1209K	110	11	1150	46	14.5	900 x 215 x 205	2.3 to 3.0	125
ACFM-1212K	130	11	1750	46	18	1200 x 215 x 205	2.3 to 3.0	125

AC Axial Fan

Axial flow fan generates air flow through the fan blades to the rotation axis. They are suitable for applications requiring high air performance with moderate pressure build-up.

Working Temp.:

Ball bearing: -20 to +60 °C
Sleeve bearing: 0 to +50 °C

- Bearing: sleeve bearing or ball bearing
- Insulation class: class B, class F
- Min. working life: 30,000 hours
- Certificate: CE
- Lead wire: cable or terminal

Designation

MTAF - 80 25 - 2 B

- MTAF: axial flow fan
- Frame size 80: 80mm etc.
- Frame thickness 25: 25mm, etc.
- B: ball bearing; S: sleeve bearing
- 1: 110VAC; 2: 220VAC; 3: 380VAC

Specification

Model	Bearing	Voltage	Frequency	Current	Input Power	Speed	Air Flow	Static Pressure	Noise
		V	Hz	A	W	RPM	CFM	mm - H_2O	dB(A)
MTAF-8025-2B	Ball	220 - 240	50/60	0.07/0.06	11/9	2500/2900	18/22	3.30/4.83	29/33
MTAF-8025-2S	Sleeve	220 - 240	50/60	0.07/0.06	11/9	2300/2700	18/22	3.30/4.83	29/33
MTAF-8025-1B	Ball	110 - 120	50/60	0.12/0.10	12/11	2500/2900	18/22	3.30/4.83	29/33
MTAF-8025-1S	Sleeve	110 - 120	50/60	0.12/0.10	12/11	2500/2900	18/22	3.30/4.83	29/33
MTAF-8038-2B	Ball	220 - 240	50/60	0.10/0.08	16/12	2400/2800	18/22	3.30/4.83	31/35
MTAF-8038-2S	Sleeve	220 - 240	50/60	0.10/0.08	16/12	2300/2700	18/22	3.30/4.83	31/35
MTAF-8038-1B	Ball	110 - 120	50/60	0.15/0.13	14/12	2400/2800	18/22	3.30/4.83	31/35
MTAF-8038-1S	Sleeve	110 - 120	50/60	0.15/0.13	14/12	2400/2800	18/22	3.30/4.83	31/35
MTAF-9225-2B	Ball	220 - 240	50/60	0.07/0.06	11.5/9.5	2300/2600	18/22	3.30/4.83	31/35
MTAF-9225-2S	Sleeve	220 - 240	50/60	0.07/0.06	11.5/9.5	2300/2600	18/22	3.30/4.83	31/35
MTAF-9225-1B	Ball	110 - 120	50/60	0.12/0.11	13/12	2500/2900	18/22	3.30/4.83	31/35
MTAF-9225-1S	Sleeve	110 - 120	50/60	0.12/0.11	13/12	2500/2900	18/22	3.30/4.83	31/35
MTAF-9238-2B	Ball	220 - 240	50/60	0.12/0.09	17/12	2300/2800	43/49	4.50/5.50	32/37
MTAF-9238-2S	Sleeve	220 - 240	50/60	0.12/0.09	17/12	2200/2600	43/49	4.50/5.50	32/37
MTAF-9238-1B	Ball	110 - 120	50/60	0.22	18	2400	43/49	4.50/5.50	32/37
MTAF-9238-1S	Sleeve	110 - 120	50/60	0.22	18	2400	43/49	4.50/5.50	32/37
MTAF-11025-2B	Ball	220 - 240	50/60	0.10/0.09	19/17	2100/2400	60/71	3.56/4.06	36/38
MTAF-11025-2S	Sleeve	220 - 240	50/60	0.10/0.09	19/17	2000/2100	60/71	3.56/4.06	36/38
MTAF-11025-1B	Ball	110 - 120	50/60	0.19/0.18	19/18	2200/2400	60/71	3.56/4.06	36/38
MTAF-11025-1S	Sleeve	110 - 120	50/60	0.19/0.18	19/18	2200/2400	60/71	3.56/4.06	36/38
MTAF-12025-2B	Ball	220 - 240	50/60	0.07/0.06	12/10	1950	66/78	3.56/4.06	38/40
MTAF-12025-2S	Sleeve	220 - 240	50/60	0.07/0.06	12/10	1700	66/78	3.56/4.06	38/40
MTAF-12025-1B	Ball	110 - 120	50/60	0.19/0.18	19/18	2200/2400	66/78	3.56/4.06	38/40
MTAF-12025-1S	Sleeve	110 - 120	50/60	0.19/0.18	19/18	2200/2400	66/78	3.56/4.06	38/40
MTAF-12038-2B	Ball	220 - 240	50/60	0.13/0.11	20/17	2600/2800	91/113	6.35/7.62	40/45
MTAF-12038-2S	Sleeve	220 - 240	50/60	0.13/0.11	20/17	2600/2800	91/113	6.35/7.62	40/45
MTAF-12038-1B	Ball	110 - 120	50/60	0.22/0.18	21/18	2600/2900	91/113	6.35/7.62	40/45
MTAF-12038-1S	Sleeve	110 - 120	50/60	0.22/0.18	21/18	2600/2900	91/113	6.35/7.62	40/45
MTAF-12038-3B	Ball	380	50	0.06	18	2600	91	6.35	40
MTAF-12038-3S	Sleeve	380	50	0.06	18	2600	91	6.35	40
MTAF-15050-2B	Ball	220 - 240	50/60	0.24	36	2600	190/235	16.00/17.78	45/50
MTAF-15050-2S	Sleeve	220 - 240	50/60	0.24	36	2600	190/235	16.00/17.78	45/50
MTAF-15050-1B	Ball	110 - 120	50/60	0.50/0.45	37/36	2700/3100	190/235	16.00/17.78	45/50
MTAF-15050-1S	Sleeve	110 - 120	50/60	0.50/0.45	37/36	2700/3100	190/235	16.00/17.78	45/50
MTAF-15050-3B	Ball	380	50	0.11	34	2700	190	16.00	45
MTAF-15050-3S	Sleeve	380	50	0.11	34	2700	190	16.00	45
MTAF-22060-2B	Ball	220 - 240	50	0.3	45	2200	388	25.4	56
MTAF-22060-1B	Ball	110 - 120	50/60	0.76/0.77	57/58	2400	388	25.4	56
MTAF-22060-3B	Ball	380	50	0.16	47	2400	388	25.4	56

Vacuum Pump

- Compact design
- Built-in check valve prevents oil back flow during power failure
- Large oil sight glass
- Vacuum gauge & solenoid valve on request
- Larger oil reservoir helps reduce operating temperature and dilute corrosive contaminants.

Specification – Single Stage

Model		VP-0.5	VP-1	VP-1.5	VP-2	VP-3	VP-4	VP-5
Free air Disp.	220V/50Hz	1 CFM 30 L/min	2 CFM 60 L/min	3 CFM 90 L/min	4 CFM 120 L/min	6 CFM 180 L/min	8 CFM 240 L/min	9 CFM 300 L/min
	110V/60Hz	1.2 CFM 36 L/min	2.5 CFM 72 L/min	3.6 CFM 108 L/min	4.8 CFM 144 L/min	7.2 CFM 216 L/min	9.6 CFM 288 L/min	11 CFM 360 L/min
Ultimate vacuum, microns		75	75	75	75	75	75	75
Motor power		1/6 HP	1/4 HP	1/4 HP	1/3 HP	1/2 HP	1/2 HP	3/4 HP
Speed	220V/50Hz	1440 rpm	1440 rpm	1440 rpm	1440 rpm	1440 rpm	1440 rpm	1440 rpm
	110V/60Hz	1720 rpm	1720 rpm	1720 rpm	1720 rpm	1720 rpm	1720 rpm	1720 rpm
Inlet port		1/4" SAE	1/4" SAE	1/4" SAE	1/4" SAE	1/4" SAE	1/4" SAE	1/4" SAE
Oil capacity, ml		160	250	200	250	320	700	700
Dimension, cm		24 x 12 x 23	25 x 12 x 23	25 x 12 x 23	32 x 13 x 24	34 x 14 x 26	39 x 15 x 28	43 x 16 x 28
Net weight, kg		6.0	7.2	7.5	8.8	9.8	15.5	16

Specification – Dual Stage

Model		2VP-0.5	2VP-1	2VP-1.5	2VP-2	2VP-3	2VP-4
Free air Disp.	220V/50Hz	1 CFM 30 L/min	2 CFM 60 L/min	3 CFM 90 L/min	4 CFM 120 L/min	6 CFM 180 L/min	8 CFM 240 L/min
	110V/60Hz	1.2 CFM 36 L/min	2.5 CFM 72 L/min	3.5 CFM 108 L/min	5 CFM 144 L/min	7.2 CFM 216 L/min	9.6 CFM 288 L/min
Ultimate vacuum, microns		37.5	37.5	37.5	37.5	37.5	37.5
Motor Power		1/4 HP	1/3 HP	1/3 HP	1/2 HP	3/4 HP	3/4 HP
Speed	220V/50Hz	1440 rpm	1440 rpm	1440 rpm	1440 rpm	1440 rpm	1440 rpm
	110V/60Hz	1720 rpm	1720 rpm	1720 rpm	1720 rpm	1720 rpm	1720 rpm
Inlet Port		1/4" SAE	1/4" SAE	1/4" SAE	1/4" SAE	1/4" SAE	1/4" SAE
Oil capacity, ml		200	250	300	280	600	650
Dimension, cm		32 x 13 x 24	32 x 13 x 24	34 x 14 x 26	34 x 14 x 26	39 x 15 x 28	43 x 16 x 28
Net weight, kg		7	9	10	10	16	17

Power Plug

EU-2P | US-2P | UK-2P | IT-2P/3P | AG-2P/3P

EU-3P | US-3P | UK-3P | CN-3P/2P | AU-3P/2P

Intake Port Adapter

T1 1/4" tube | **T2** 1/4" SAE | **T3** 1/4" SAE + 1/2" Acme | **T4** 1/4" SAE + 3/8" SAE + 1/2" Acme | **T5** 1/4" SAE + 3/8" SAE

Vacuum Pump Oil

Vacuum pump oil is specially refined and formulated for extremely low vapor pressure and high pump efficiency at all temperature conditions.

Vacuum Gauge

1/4" SAE

Hand Tool For HVAC application

CT-127
Mini tube cutter 1/8″ to 5/8″
(3 to 16mm) O.D.

CT-128
Mini tube cutter 1/8″ to 7/8″
(3 to 22mm) O.D.

CT-174
Mini tube cutter 1/8″ to 1-1/8″
(3 to 28mm) O.D.

CT-274
Tube cutter 1/8″ to 1-1/8″
(3 to 28mm) O.D.

CT-312
Tube cutter 1/4″ to 1-5/8″
(7 to 42mm) O.D.

CT-206
Tube cutter 3/8″ to 2-5/8″
(10 to 66mm) O.D.

CT-109
Tube cutter 5/16″ to 1-5/8″
(8 to 42mm) O.D.

CT-195
45° flaring tool 3/16″, 1/4″, 5/16″, 3/8″, 7/16″, 1/2″, 5/8″ O.D.

CT-525
Grabber flaring tool 3/16″ to 5/8″
(5 to 16mm) O.D.

CT-500
Block flaring tool 3/16″, 1/4″, 3/8″, 1/2″, 5/8″ O.D.

CT-275
45° flaring and swaging tool 1/8″, 3/16″, 1/4″, 5/16″, 3/8″, 7/16″, 1/2″, 5/8″, 3/4″ O.D.

Supplied in sturdy plastic case.

CT-278
45° flaring and swaging tool 1/8″, 3/16″, 1/4″, 5/16″, 3/8″, 7/16″, 1/2″, 5/8″, 3/4″ O.D.
CT-274 tube cutter
CT-122 ratchet wrench

Supplied in sturdy plastic case.

Swaging Punch Tool

CT-94 1/2″, 5/8″, 7/8″ O.D.
CT-95 1/4″, 5/16″, 3/8″, 1/2″, 5/8″ O.D.
CT-96 1/4″, 5/16″, 3/8″, 1/2″, 5/8″, 3/4″ O.D.
CT-193 complete set of tools for 1/4″, 5/16″, 3/8″, 1/2″, 5/8″ O.D.

CT-368A-90
90° tube bender with O.D. of
1/4″, 5/16″, 3/8″

CT-368M-90
90° tube bender with O.D. of
6, 8, 10mm

CT-364-04
1/4″ O.D. bending radius 14.2mm

CT-364-05
5/16″ O.D. bending radius 17.5mm

CT-364-06
3/8″ O.D. bending radius 23mm

CT-364-08
1/2″ O.D. bending radius 35.8mm

CT-364-10
5/8″ O.D. bending radius 54.4mm

CT-364-12
3/4″ O.D. bending radius 75.3mm

CT-364-14
7/8″ O.D. bending radius 82.1mm

CT-208
Inner-Outer Reamer
Plastic type for 3/16″ to 1-1/2″ O.D.

CT-209
Inner-Outer Reamer
Zinc type for 1/4″ to 1-5/8″ O.D.

CT-351
Fin Straightener
Fit all sizes.

CT-122
Ratchet Wrench
1/4″, 3/16″, 3/8″, 5/16″ O.D.

CT-123L
Ratchet Wrench
1/4″, 3/16″, 9/16″, 1/2″ O.D.

CT-201
7″ Pinch-Off Plier
Pinch for copper tubes of up to
5/16″ O.D.

CT-501
Telescopic ø32mm
Length: 127 – 500mm

CT-502
Telescopic ø50mm
Length: 200 – 410mm

CT-368A-180
180° tube bender with O.D. of
1/4″, 5/16″, 3/8″

CT-368M-180
180° tube bender with O.D. of
6, 8, 10mm

Tube Bending Springs

CT-102-04 1/4″ O.D.
CT-102-06 3/8″ O.D.
CT-102-08 1/2″ O.D.
CT-102-10 5/8″ O.D.
CT-102-12 3/4″ O.D.

CT-102-L set of 5 sizes: 1/4″, 5/16″, 3/8″, 1/2″, 5/8″ O.D.
Packed in plastic bag.

CT-207
Handy Deburrer
Blade can be swiveled.

CT-352
Fin Straightener

PTC-01
Capillary Tube Cutter
Cuts all sizes of capillary tubes without collapsing nor swaging the tubes.

CT-204
Pinch-Off Plier
Pinch for copper tubes of up to
3/8″ O.D.

Charge – oil Pump
For oil charge

Manifold Gauge & Charging Hose

For professional A/C testing & charging applications

2 – Way Manifold RTBM-1001

	Standard	Optional on request
Body	Forged brass	
Connection	3 x 1/4" SAE	
Gauge	Dry 68mm gauge	Dry 68mm gauge + gauge boot Dry 80mm gauge Dry 80mm gauge + gauge boot Oil filled 68mm gauge Oil filled 80mm gauge
Refrigerant	R-12/R-22/R-502 R-22/R-134a/R-404a/R-407 R-410/R-22/R-407 R-410a	Other refrigerant combination is available on request.
Temperature scale	°F/°C °C °F	
Pressure scale	bar/psi psi psi/MPa	Scale combination of bar, psi, MPa, kg/cm^2 is available on request.
Packaging	Card board box	Clamshell or portable sturdy plastic case

2 – Way Manifold RTBM-1002

	Standard	Optional on request
Body	Forged brass with sight glass	
Connection	3 x 1/4" SAE	
Gauge	Dry 68mm gauge	Dry 68mm gauge + gauge boot Dry 80mm gauge Dry 80mm gauge + gauge boot Oil filled 68mm gauge Oil filled 80mm gauge
Refrigerant	R-12/R-22/R-502 R-22/R-134a/R-404a/R-407 R-410/R-22/R-407 R-410a	Other refrigerant combination is available on request.
Temperature scale	°F/°C °C °F	
Pressure scale	bar/psi psi psi/MPa	Scale combination of bar, psi, MPa, kg/cm^2 is available on request.
Packaging	Card board box	Clamshell or portable sturdy plastic case

2 – Way Manifold RTAM-1001

	Standard	Optional on request
Body	Anodized aluminum	
Connection	3 x 1/4" SAE	
Gauge	Dry 68mm gauge	Dry 68mm gauge + gauge boot Dry 80mm gauge Dry 80mm gauge + gauge boot Oil filled 68mm gauge Oil filled 80mm gauge
Refrigerant	R-12/R-22/R-502 R-22/R-134a/R-404a/R-407 R-410/R-22/R-407 R-410a	Other refrigerant combination is available on request.
Temperature scale	°F/°C °C °F	
Pressure scale	bar/psi psi psi/MPa	Scale combination of bar, psi, MPa, kg/cm^2 is available on request.
Packaging	Card board box	Clamshell or portable sturdy plastic case

2 – Way Manifold RTAM-1002

	Standard	Optional on request
Body	Anodized aluminum with sight glass	
Connection	3 x 1/4" SAE	
Gauge	Dry 68mm gauge	Dry 68mm gauge + gauge boot Dry 80mm gauge Dry 80mm gauge + gauge boot Oil filled 68mm gauge Oil filled 80mm gauge
Refrigerant	R-12/R-22/R-502 R-22/R-134a/R-404a/R-407 R-410/R-22/R-407 R-410a	Other refrigerant combination is available on request.
Temperature scale	°F/°C °C °F	
Pressure scale	bar/psi psi psi/MPa	Scale combination of bar, psi, MPa, kg/cm^2 is available on request.
Packaging	Card board box	Clamshell or portable sturdy plastic case

2 – Way Manifold RTAM-1004

	Standard	Optional on request
Body	Anodized aluminum with sight glass	
Connection	3 x 1/4" SAE	
Gauge	Dry 68mm gauge	Dry 68mm gauge + gauge boot Dry 80mm gauge Dry 80mm gauge + gauge boot Oil filled 68mm gauge Oil filled 80mm gauge
Refrigerant	R-12/R-22/R-502 R-22/R-134a/R-404a/R-407 R-410/R-22/R-407 R-410a	Other refrigerant combination is available on request.
Temperature scale	°F/°C °C °F	
Pressure scale	bar/psi psi psi/MPa	Scale combination of bar, psi, MPa, kg/cm^2 is available on request.
Packaging	Card board box	Clamshell or portable sturdy plastic case

4 – Way Manifold RTAM-1004

	Standard	Optional on request
Body	Anodized aluminum with sight glass	
Connection	3 x 1/4" SAE + 1 x 3/8" SAE vacuum port	
Gauge	Dry 68mm gauge	Dry 68mm gauge + gauge boot Dry 80mm gauge Dry 80mm gauge + gauge boot Oil filled 68mm gauge Oil filled 80mm gauge
Refrigerant	R-12/R-22/R-502 R-22/R-134a/R-404a/R-407 R-410/R-22/R-407 R-410a	Other refrigerant combination is available on request.
Temperature scale	°F/°C °C °F	
Pressure scale	bar/psi psi psi/MPa	Scale combination of bar, psi, MPa, kg/cm^2 is available on request.
Packaging	Card board box	Clamshell or portable sturdy plastic case

Charging Hose

	Standard	Optional on request
Pressure	750psi max. working 3000psi min. burst	
Length	36" (90cm) 60" (150cm) 72" (180cm)	Other length available on request
Connection	Yellow/blue/red: 1/4" SAE + 1/4" SAE 45°	Other special sizes With compact ball valve

	R-410a compatible	Optional on request
Pressure	800psi max. working 4000psi min. burst	
Length	36" (90cm) 60" (150cm) 72" (180cm)	Other length available on request
Connection	Yellow/blue/red: 1/4" SAE + 1/4" SAE 45° OR Blue/Red: 1/4" SAE + 5/16" SAE 45° Yellow: 1/4" SAE + 1/4" SAE 45°	Other special sizes With compact ball valve

Pressure Gauge

	Standard	Optional on request
Gauge type	Red high pressure Blue low pressure	
Gauge size	68mm (2-1/2") 80mm (3-1/8")	
Connection	1/8" NPT	
Refrigerant	R-12/R-22/R-502 R-22/R-134a/R-404a/R-407 R-410/R-22/R-407 R-410a	Other refrigerant combination is available on request.
Temperature scale	°F/°C °C °F	
Pressure scale	bar/psi psi psi/MPa	Scale combination of bar, psi, MPa, kg/cm^2 is available on request.
Protection		Dry gauge with rubber gauge boot Liquid filled

A/C Quick Coupler

Model	Description
RTQC-HA	Red high side 1/4" SAE
RTQC-LA	Blue low side 1/4" SAE
RTQC-H	Red high side 14mm + adapter
RTQC-L	Blue low side 14mm + adapter

Model	Description
RTQC-HB	Red high side 1/4" SAE
RTQC-LB	Blue low side 1/4" SAE

Model	Description
RTQC-HC	Red high side 1/4" SAE
RTQC-LC	Blue low side 1/4" SAE

Select Your Own Manifold Set

ICEAGE is able to supply complete range of manifold set including manifold valves, charging hoses, quick couplers and various kinds of tools that suitable for your applications.

Can Tap Valve

Model	Description
RTPV-2	R-314a can tap valve 1/4" SAE

Model	Description
RTPV-3	Can tap valve 1/4" SAE

Model	Description
RTPV-4	R-134a can tap valve + high pressure hose with quick connection fitting

Line Piercing Valve

Model	Description
RTPV-1	For 1/4", 5/16", 3/8" O.D. tubing

Model	Description
RTPV-341	For 3/16" to 3/8" O.D. tubing

Refrigerant Scale

	RTWS-70	RTWS-100
Weight capacity	70kg 154lbs	100kg 220lbs
Accuracy	+/- 0.5%	+/- 0.5%
Resolution	5g/0.01lb	5g/0.01lb
Battery	9V	9V
Platform size	223 x 223mm	223 x 223mm
Unit	kg/lb	kg/lb
Working temp.	0 - +50 °C	0 - +50 °C

Leakage Detector

RTLD-300

RTLD-382P

RTLD-6000

RTLD-200

	RTLD – 300	RTLD – 382P	RTLD – 6000	RTLD – 200
Sensitivity	2g/yr.	3g/yr.	6g/yr.	3g/yr.
Probe length	430mm	400mm	200mm	300mm
Response time	10s or less	Instantaneous	Instantaneous	Instantaneous
Warm up time	60s or less	45s or less	6s or less	Instantaneous
Operating temperature	0 °C to 50 °C	0 °C to 40 °C	0 °C to 50 °C	0 °C to 50 °C
Operating humidity	0 to 85% RH non-condensing	0 to 80% RH non-condensing	0 to 95% RH non-condensing	0 to 95% RH non-condensing
Feature	• Heated diode sensor • Efficient air pump locate the leak point more accurately • One-touch reset and 7-level adjustable	• Semi-conductor sensor • Microprocessor control with advanced digital signal processing • DC brushless fan for long life	• Inner precise IC with ultra-low power consume circuit design	• Negative corona sensor • 8-bit microprocessor controller • Auto reset testing

RTWT-9
Manual-lighting hand torch

- Fits both propane and MAP/Pro gas cylinders
- Nozzle with swirl flame – rapid heat-up, less use
- Easy turn fine regulating valve for adjustable flame control
- Swirl tip swivels 360°

RTWT-11
Manual-lighting hand torch

- Fits both propane and MAP/Pro gas cylinders
- Nozzle with swirl flame – rapid heat-up, less use
- Easy turn fine regulating valve for adjustable flame control
- Twin stainless steel torch adds strength & increased working temperature

RTWT-1S
Auto-ignite hand torch

- Piezo igniter for instant flame
- Swirl combustion tip
- Fits both propane and MAP/Pro gas cylinders
- Easy turn fine regulating valve for adjustable flame control
- Swirl tip swivels 360°

RTWT-027
Auto-ignite hand torch

- Ignition button lock for continuous use
- Swirl combustion tip
- Piezo igniter for instant flame
- Fits both propane and MAP/Pro gas cylinders
- Easy turn fine regulating valve for adjustable flame control
- Swirl tip swivels 360°

Contact us

ICEAGE provides complete accessories of tips, hoses and spare parts.

Please contact ICEAGE sales team or visit website: www.iceage-hvac.com for more information.

Solder

For professional brazing, soldering and welding applications.

RoHS compliant

ICEAGE high quality solders are suitable for copper pipe joint installations and gap soldering in HVAC/R applications where no fittings are used.

Specification

Alloy	Chemical Composition	AWS A5.8 Class	Melting Range Solidus	Melting Range Liquidus	Recommended Application
BCu93P	Silver – 0% Copper – 92.9% Phosphorus – 7.1%	**BCuP-2**	1310 °F 710 °C	1475 °F 802 °C	For copper, requires medium fit-up Clearance range: 0.022 – 0.007"
BCu91PAg	Silver – 2% Copper – 91% Phosphorus – 7%	**BCuP-6**	1190 °F 643 °C	1450 °F 788 °C	For copper or brass Clearance range: 0.002 – 0.005"
BCu89PAg	Silver – 5% Copper – 89% Phosphorus – 6%	**BCuP-3**	1190 °F 643 °C	1500 °F 816 °C	For copper or brass, used to bridge gaps where close fit-up can't be maintained
BCu80PAg	Silver – 15% Copper – 80% Phosphorus – 5%	**BCuP-5**	1190 °F 643 °C	1480 °F 804 °C	For copper or brass, useful for wide clearance 0.002 – 0.006", good ductility
BAg30CuZn	Silver – 30% Copper – 38% Zinc – 32%	**BAg-20**	1250 °F 677 °C	1410 °F 766 °C	Use with ferrous and non-ferrous base metals, flow suitable for bridging gaps
BAg45CuZn	Silver – 45% Copper – 30% Zinc – 25%	**BAg-5**	1225 °F 663 °C	1370 °F 743 °C	General purpose filter for steel and copper alloys, melting range useful for wide clearances
BAg50CuZn	Silver – 50% Copper – 34% Zinc – 16%	**BAg-6**	1270 °F 688 °C	1425 °F 774 °C	Often used to braze galvanized steel but suitable for bridging gaps in other ferrous and non-ferrous metals
BAg56CuZnSn	Silver – 56% Copper – 22% Zinc – 17% Sn – 5%	**BAg-7**	1145 °F 618 °C	1205 °F 652 °C	For ferrous and non-ferrous alloys, often used to braze stainless steel for food service

Brazing Flux

For brazing & soldering application

A general purpose brazing flux, good fluidity provides excellent joint penetration, good dispensing performance and is cosmetically superior. Use with copper, brass, stainless steel, carbide and heavy parts.

Model	Type	Active Temperature	Size
FB-102	Paste	600 °C to 850 °C	1000g Jar
FB-308	Powder	600 °C to 750 °C	500g Jar

Recovery Machine

The recovery machine provides fast recovery of all common refrigerants including R-410a.

- Oil-less compressor 1/2 HP, maintenance fee
- Sturdy construction
- Automatic recovery of liquid and vapor refrigerants
- Self purging feature
- Tank overfill sensor
- Built-in filter, easy to clean and replace

Compressor	1/2 HP oil-less maintenance free
Power supply	220/110V, 50/60Hz
Vapor rate	0.8 kg/min.
Liquid rate	3.0 kg/min.
Weight	14.78 kg (33 lbs)

Refrigerant Recovery Cylinder

- Capacity: 30 lbs (13.6 kg) / 50 lbs (22.7 kg)
- Two access valves (one liquid, one vapor) with connection for 1/4" flare
- 400 psi rating
- Overfill protection

Charging Station

The compact charging station is designed for field of repair service.
The unit consists of:

	Standard	Optional on request
Manifold valve	5 - valve aluminum manifold with sight glass	2 – way manifold with sight glass 4 – way manifold with sight glass
High / low pressure gauge	Dry pressure gauge 68 mm	Dry 68mm gauge + gauge boot Dry 80mm gauge Dry 80mm gauge + gauge boot Oil filled 68mm gauge Oil filled 80mm gauge
Vacuum gauge	Vacuum gauge 80 mm diameter	No vacuum gauge
Refrigerant	R-12/R-22/R-502 R-22/R-134a/R-404a/R-407 R-410/R-22/R-407 R-410a	Other refrigerant combination is available on request
Temperature scale	°F/°C °C °F	
Pressure scale	bar/psi psi psi/MPa	Scale combination of bar, psi, MPa, kg/cm^2 is available on request.
Charging hose	60" charging hose	36" charging hose 72" charging hose
Vacuum pump	Dual – stage 2 CFM vacuum pump	Vacuum pump with other CFM
Other necessary devices		R-134a quick coupler
		Refrigerant weight scale 100 kg capacity

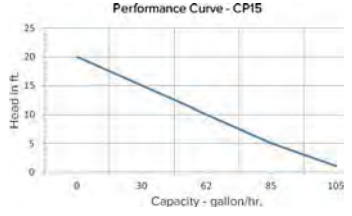
CP Series Condensate Removal Pump

ICEAGE's CP series pumps are designed for removal of condensate water from an air conditioner, dehumidifier and air cooler.

- 1/30 hp high performance motor
- High impact ABS tank
- Thermal overload protection
- 2 inlet drain holes

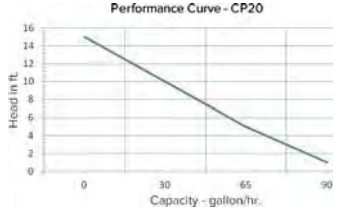
Specification – CP15

	CP15
Capacity	105 gallon/hr. @ 1 ft. (397 liter/hr. @ 0.31 m)
Shut off	20 ft. (6.1 m)
Discharge	3/8" O.D. barbed
Electrical	115 V, 60 Hz, 2.2 A
Cord	6 ft. (1.8 m)
Approval	UL



Specification – CP20

	CP20
Capacity	90 gallon/hr. @ 1ft. (340 liter/hr. @ 0.31 m)
Shut off	14 ft. (4.3 m)
Discharge	3/8" O.D. barbed
Electrical	230 V, 50/60 Hz, 1.1/1.4 A
Cord	6 ft. (1.8 m)
Approval	CE



Mini Orange Pump

The mini orange pump is a perfect design for removal of condensation water from small commercial & domestic A/C units.

- Thermal protected
- CE certified

Typical Performance

Specification – Mini Orange Pump

	Mini Orange Pump
Capacity	14 liter/hr. @ 0 head
Max. recommended head	8m
Electrical	220 – 240 V AC < 16W, 50/60 Hz
Suction lift	1m
Discharge tube	6mm I.D.

Flexible PVC Pipe

For A/C condensate drainage application

The PVC pipes are flexible and with high tenacity for convenient handling and installation. Widely used for drainage of condensate water from air conditioner, dehumidifier and other refrigeration equipments.

Available in various lengths to suit your plumbing needs.

Specification

	Standard	Optional on request
Material	PVC	PA, PP, PERT available on request
Color	White, black	Other color available on request
Diameter	Recommended 10 to 90 mm	
Length	Recommended 10, 20, 30 m	

Nylon Tie

Made of 100% nylon, for securing wiring and bundling tubing insulation, up to 15" (380 mm) bundle diameter.

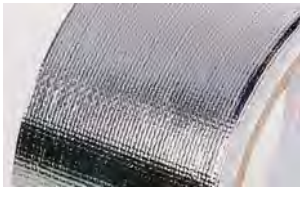
Specification

Length	Width	Tensile Strength	
mm	mm	Lbs	Kgs
60 to 200	2.5	18	8
150 to 370	3.6	40	18
200 to 500	4.8	50	22
200 to 550	7.2	120	55
400 to 1200	9.0	175	79.4

Aluminum Foil Tape

The aluminum foil tape is silver in color, suitable for residential or commercial site application including rigid and flexible HVAC duct work, e.g. fiber glass duct insulation.

Size: recommend in 2.5" x 60 yd.



Reinforced Aluminum Foil Tape

The reinforced aluminum foil tape that combines the superior sealing benefits of foil with the ease of handling and strength of cloth.

The tape is 1/8" thick, 2" wide and 30' long. Each roll is individually packed In plastic bag or cardboard cartons.

Insulation Foam Tape

The insulation foam tapes are particularly suitable for wrapping hot and cold pipe, tubing and fittings.

- Closed cell for excellent thermal conductivity
- High flexibility & self-adhering for easy to apply
- Stop condensation & prevent heat gain/loss

Insulation Cork Tape

The insulation cork tape is cork-filled, rubber-based and ideal for retarding heat gain in cold pipes and preventing heat loss in hot pipes.

- For all kinds of HVAC/R applications
- Self-adhering for easy to apply
- Energy saving

Non-Adhesive PVC Tape

The non-adhesive PVC tapes have very good resistance to chemicals that normally been used for the binding of cables, insulating pipes and electrical assembly for varied industrial applications.

Color: yellow, light grey, black, etc.
Width: from 10 to 600 mm
Length: up to 100 m

Cloth Duct Adhesive Tape

Those cloth self-adhesive tapes are strong and with anti-corrosive adhesion suitable to the most surfaces in a variety of environments.

Color: white, black, grey, etc.
Width: from 10 to 50 mm
Length: up to 50 m

PVC, PE Adhesive Tape

PVC Pipeline Adhesive Tape

For universal use for industry and domestic installation and repairing. Good resistance to low and high temperatures.

PVC Insulation Adhesive Tape

Suitable for electrical insulating work in particular for high voltage insulation cable assembly, repairing of damaged insulation.

PE Adhesive Tape

Anti-corrosion and high adhesive strength tape for duct sealing, protecting and repairing works. Excellent electrical insulating properties.

Color: yellow, red blue, etc.
Width: from 10 to 50 mm
Length: up to 50 m

Bracket

For air conditioner mounting

- Fast, easy and accurate installation
- Rubber mounts to reduce vibration and noise
- Brackets are supplied with fixing screws, plugs and rubber mounts

Material

- Stainless steel / galvanized steel with powder coating / cold rolled steel with powder coating

ACB-1 with welding connection ▼

ACB-2 & ACB-3 with clasp connection ▼

Specification

Type	Model	Horizontal Bar	Vertical Bar	Thickness
		mm	mm	mm
ACB-1	**ACB-1A**	365	400	2.0
	ACB-1B	480	400	2.0
	ACB-1C	620	420	2.0
ACB-2	**ACB-2A**	450	400	1.5
	ACB-2B	500	400	1.5
	ACB-2C	550	400	2.0
	ACB-2D	650	450	2.0
ACB-3	**ACB-2A**	450	400	1.5
	ACB-2B	500	400	1.5
	ACB-2C	550	400	2.0
	ACB-2D	650	450	2.0

Bolt Type Bracket

- Fast, easy and accurate installation
- Rubber mounts to reduce vibration and noise
- Brackets are supplied with fixing screws, plugs and rubber mounts

Material

- Stainless steel / galvanized steel with powder coating / cold rolled steel with powder coating

Specification

Model	Horizontal Bar	Vertical Bar	Thickness
	mm	mm	mm
ACB-4	500	500	3.0

Clasp Type Bracket with Crossbar

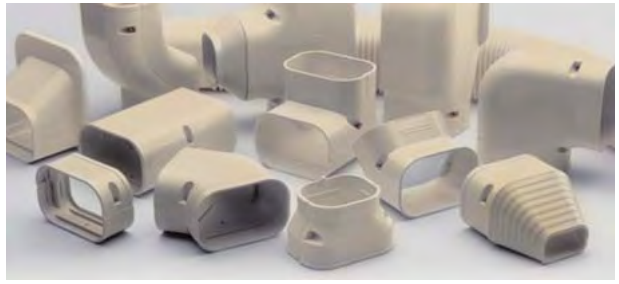
- Crossbar for easy installation and adjustment of mounting distance
- Rubber mounts to reduce vibration and noise
- Brackets are supplied with fixing screws, plugs and rubber mounts

Material

- Stainless steel / galvanized steel with powder coating / cold rolled steel with powder coating

Specification

Model	Horizontal Bar	Vertical Bar	Cross Bar	Thickness
	mm	mm	mm	mm
ACB-5A	380	400	750	1.5
ACB-5B	480	420	750	1.5
ACB-5C	600	420	1000	2.0



Line Set Cover

For professional ductless A/C system installation

Those covers and fittings are specially designed to protect exposed connection tubes, electrical cables, wires and drain pipes.

Ducting

Model	L	W	H
	mm	mm	mm
AD-80	2000	80	63
AD-110	2000	110	78
AD-150	2000	150	100

Flexible Tube

Model	L	W	H
	mm	mm	mm
HFK-80	750	76	60
HFK-110	750	106	73
HFK-150	750	146	97

90 Vertical Elbow

Model	L	W	H
	mm	mm	mm
AC-80	114	80	114
AC-110	138	110	138
AC-150	183	150	183

Tee

Model	L	W	H
	mm	mm	mm
ATK-110	260	163	76
ATK-150	340	214	100

Adjustable Flat Elbow 90° – 135°

Model	L	W	H
	mm	mm	mm
AKM-80	150	80	63
AKM-110	200	100	76
AKM-150	280	150	100

Adjustable Vertical Elbow 45° – 90°

Model	L	W	H
	mm	mm	mm
ACM-80	130	80	63
ACM-110	180	100	76
ACM-150	230	150	100

Coupler

Model	L	W	H
	mm	mm	mm
AJ-80	70	80	63
AJ-110	96	110	76
AJ-150	130	150	100

Coupler Reducer

Model	L	W	H
	mm	mm	mm
AJH-110	60	110	70
AJH-150	70	150	100

Wall Inlet

Model	L	W	H
	mm	mm	mm
AW-80	200	110	82
AW-110	250	150	100
AW-150	290	200	130

End Fitting

Model	L	W	H
	mm	mm	mm
AE-80	70	85	67
AE-110	100	116	80
AE-150	130	156	105

Support

Model	L	W	H
	mm	mm	mm
GAB-350	350	105	95
GAB-400	400	105	95
GAB-450	450	105	95
GAB-1000	1000	105	95
GAB-2000	1000	105	95

Wall Flange

Model	L	W	H
	mm	mm	mm
HKK-80	123	105	32
HKK-110	166	132	45
HKK-150	220	170	50

Vertical Type

Horizontal Type

Hermetic Type

Embedded Installation Box

Model	L	W	H
	mm	mm	mm
GEB-50	422	102	50
GEB-70	422	102	70

Standard Packing

For insulation tube 2 m (or 6 feet) length / piece

I.D. Size		Quantity (Pieces) per Carton				
Inch	mm	1/4" Wall 6 mm	3/8" Wall 9 mm	1/2" Wall 13 mm	3/4" Wall 19 mm	1" Wall 25 mm
1/4	6	300	168	120	48	-
3/8	10	210	120	100	36	30
1/2	13	180	100	80	30	28
5/8	16	140	90	63	30	24
3/4	19	120	72	56	26	20
7/8	22	80	65	42	24	20
1	25	70	49	36	20	18
1-1/8	28	60	49	36	20	18
1-1/4	32	55	42	30	20	16
1-3/8	35	50	36	30	18	15
1-5/8	42	-	30	25	16	12
1-7/8	48	-	28	20	12	10
2	51	-	24	20	12	9
2-1/8	54	-	20	18	12	9
2-3/8	60	-	20	18	9	9
2-5/8	67	-	18	13	8	8
2-7/8	73	-	18	13	8	8
3	76	-	18	12	8	8
3-1/8	80	-	15	12	6	6

Insulation Tube and Sheet

The flexible insulation tubes and sheets can be easily installed to pipe or tubing, which provides a highly efficient method of insulating against both heat loss and heat gain.

- High resistance to water vapor
- Flexibility for easy installation
- Low density and closed cell structure to save energy consumption

Continuous Sheet Roll

The insulation sheet is an ideal choice when insulating tanks, large pipes or irregular shapes.

Those sheets normally come in rolls, sizes on request.

Specification

Density	Thickness	Length	Width	Thermal Conductivity
kg/m³	mm	m	mm	W/mK
12 to 48	25 to 150	10 to 25	1200	0.033 to 0.060

Glass Wool Insulation

The glass wool thermal insulation comes with aluminum foil faced, normally supplied in compression packed rolls and easy to cut and install.

- Non-combustible, high absorption of noise
- Long-life & energy saving
- Light weight & maintenance free

Aluminum Flexible Duct

This flexible duct is made by laminated fire-resistant aluminum foil and high tensile steel wire helix which can be compressed to 10% of its extended length.

- Duct diameter: 3" to 12.5"
- Standard Length: 10 meter
- Temperature range: -30 °C to +140 °C
- Max. working pressure: 2500 pa

Cold Storage Panel

ICEAGE provides high quality panels for cold storage and food processing industries.

- Superior structural performance
- Quick and easy installation
- Minimal maintenance

Panel Material Selection

Material	Characteristics	Applications	Thickness
Stainless steel	High corrosion and heat resistance, non-magnetic	Cold storage of seafood	0.5 – 1.5 mm
PVF steel	Made by thin steel, surface composite light or inferior smooth PVC film	Seafood trunk or refrigerated container	0.6 / 0.8 mm
Stucco embossed aluminum	Use mold to make the flat aluminum plate extrusion grain.	Kitchen	0.6 / 0.8 mm
Painted galvanized steel	Hot galvanized or hot dip aluminum zinc plate as substrate, then coated lacquer.	Cold storage of hotel, logistics or warehousing	0.326 – 0.8 mm
Galvanized steel	80 – 125 grams hot galvanizing on the surface plating layer.	Cold storage bedplate	0.5 – 1.5 mm

Polyurethane Layer Specification

Density	40 ± 2 kg/m³
Heat conductivity	≤ 0.024 W/m*k
Compressive strength	≥ 160 Kpa
Thickness	50, 75, 100, 150 and 200 mm

PVC Strip Curtain

The PVC strip curtains are flexible, transparent-blue suitable for installation in preservation (+0 °C) and freezing (-20 °C) cold storage.

Significant energy savings due to the reduction in massive temperature losses.

Dimension: 200 x 2mm or 300 x 3mm in coil of 50m.

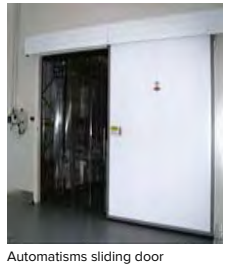
Hinged door

Insert hinged door

Hinged Door

- Suitable for small cold rooms for preservation (+0 °C) and freezing (-20 °C).
- Quick, easy installation.
- High degree of insulation and energy efficiency.
- Ideal closure for doors in small refrigerated spaces.
- Available in a variety of finishes to meet the customer's requirements.

Sliding door



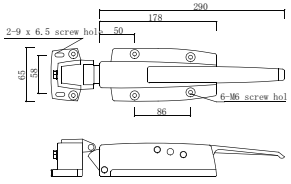
Automatisms sliding door

Sliding Door

- The sliding doors are recommended for large cold rooms with high load traffic and large doors subject to intensive use.
- Time-saving, as the door allows faster handling of goods and optimal workflows.
- Perfect for the meat, fishing, fruit and vegetable, dairy and logistics industries.

Latch & Hinge

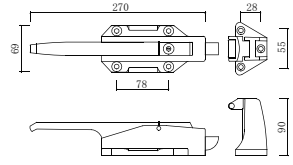
For cold storage applications



Cam-lift Safety Latch

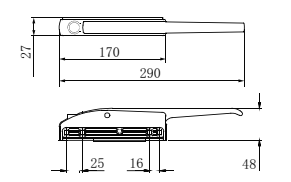
Model	Material	Remark
CRLH-W38	High pressure die-cast zinc	With lock
CRLH-W38B		No lock

Inside Release Handle	Material	Length
P1	Nylon fiber	105 mm
P3	Stainless steel	150 mm
P4	Iron	160 mm



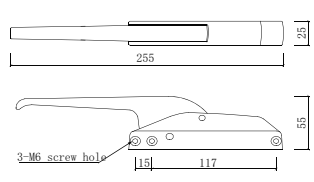
Cam-lift Safety Latch

Model	Material	Remark
CRLH-1178	High pressure die-cast zinc	Installation height: 40 – 70 mm



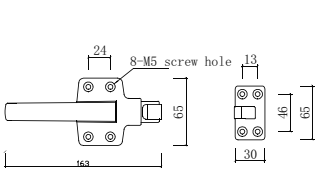
Edge-mount Magnetic Latch

Model	Material	Remark
CRLH-1100	High pressure die-cast zinc	No lock
CRLH-1102		With lock



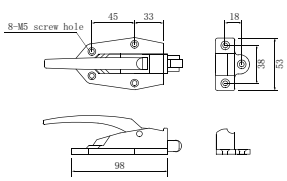
Edge-mount Mechanical Latch

Model	Material	Remark
CRLH-1200	High pressure die-cast zinc	With lock
CRLH-1200B		No lock



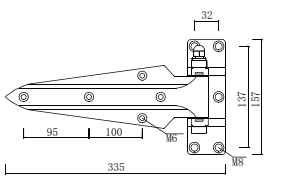
Surface-mount Latch

Model	Material	Remark
CRLH-1061	High pressure die-cast zinc	Installation height: 26 – 36 mm



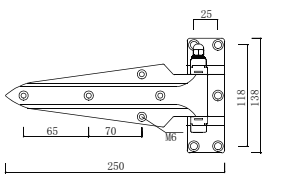
Plane Surface-mount Latch

Model	Material	Remark
CRLH-1050S	High pressure die-cast zinc	



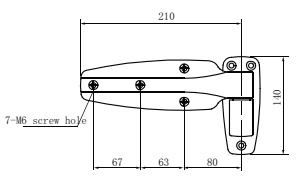
Adjustable Door Hinge

Model	Material	Remark
CRLH-1470	High pressure die-cast zinc	Installation height: 40 – 70 mm



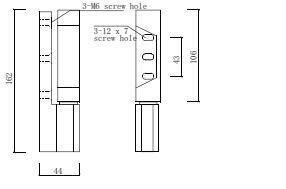
Adjustable Door Hinge

Model	Material	Installation Height
CRLH-1450	High pressure die-cast zinc	32 – 50 mm
CRLH-1460		32 – 60 mm
CRLH-1460SS	Stainless steel	32 – 60 mm
CRLH-1470B	High pressure die-cast zinc	35 – 70 mm
CRLH-1470BSS	Stainless steel	35 – 70 mm



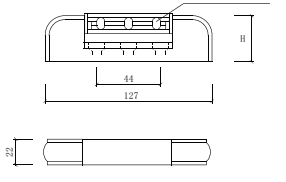
Reversible Reach-in Plane Hinge

Model	Material	Remark
CRLH-1230-3	High pressure die-cast zinc	3 holes in bracket without spring



Reversible Reach-in Edge-mount Cam-lift Hinge

Model	Material	Remark
CRLH-1132	High pressure die-cast zinc	



Edge-mount Hinge

Model	Material	H
CRLH-1332	High pressure die-cast zinc	32 mm
CRLH-1336		36 mm