The logo features the word "USA" in a stylized, outlined font with a red triangle containing a white star on the right. Below it, the word "PARTS" is written in a large, bold, red font with a white outline. The background consists of a blue and red geometric pattern with a faint world map.

**USA**  
**PARTS**

HVAC & REFRIGERATION

01

# COOPER TUBE & FITTING



QUALITY DELIVERED



## ACR Soft Drawn Coil

50ft or 15m Pancake Coil

\* To be adjusted as per specific requirement.



Standard according to ASTM B280.  
Ends capped, shrink wrapped package in cardboard box.

O.D. (inch)	Thickness* (inch)	O.D. (mm)	Thickness* (mm)
3/16	0.030	4.76	0.76
1/4	0.030	6.35	0.76
5/16	0.032	7.94	0.81
3/8	0.032	9.52	0.81
1/2	0.032	12.70	0.81
5/8	0.035	15.88	0.89
3/4	0.035	19.05	0.89
7/8	0.045	22.23	1.41

## Capillary Tube

\* To be adjusted as per specific requirement.



Standard according to ASTM B360.  
Average O.D. Tolerance: ±0.03mm  
Average I.D. Tolerance: ±0.02mm  
Condition: Soft, Half hardness, Hardness, etc.

O.D. inch (mm)	I.D. inch (mm)	Thickness inch (mm)
0.072 (1.83)	0.026 (0.660)	0.023 (0.584)
0.072 (1.83)	0.028 (0.711)	0.022 (0.558)
0.081 (2.06)	0.031 (0.787)	0.025 (0.635)
0.081 (2.06)	0.033 (0.838)	0.024 (0.609)
0.087 (2.21)	0.039 (0.991)	0.024 (0.609)
0.093 (2.36)	0.042 (1.07)	0.0255 (0.648)
0.097 (2.46)	0.046 (1.17)	0.025 (0.635)
0.106 (2.69)	0.054 (1.37)	0.026 (0.660)
0.112 (2.84)	0.059 (1.50)	0.0265 (0.673)
0.125 (3.18)	0.064 (1.63)	0.0305 (0.775)
0.145 (3.68)	0.080 (2.03)	0.0325 (0.826)
0.188 (4.78)	0.130 (3.30)	0.029 (0.737)
0.200 (5.08)	0.145 (3.68)	0.0275 (0.699)
0.220 (5.59)	0.160 (4.06)	0.030 (0.762)
0.240 (6.10)	0.175 (4.45)	0.0325 (0.826)

## ACR Straight Tube

20ft (6m) or 19ft (5.8m) Lengths\*

\* To be adjusted as per specific requirement.



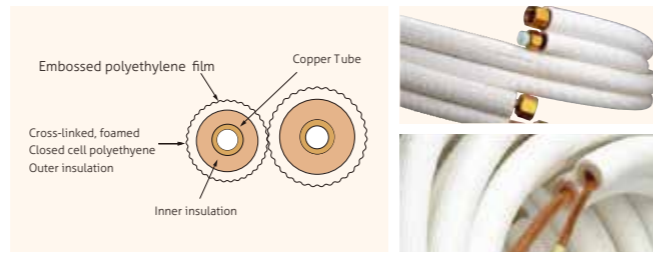
Standard according to ASTM B280.  
Ends capped, wooden case packing.  
Condition: Soft, Half hardness, Hardness, etc.

Outside (inch)	Diameter (mm)	Wall Thickness*		Nominal Weight (kgs/5.8 metres)
		inch	mm	
3/8	9.52	0.030	0.76	1.08
1/2	12.70	0.035	0.89	1.71
5/8	15.88	0.040	1.02	2.46
3/4	19.05	0.042	1.07	3.12
7/8	22.23	0.045	1.14	3.90
1-1/8	28.58	0.050	1.27	5.63
1-3/8	34.93	0.055	1.40	7.62
1-5/8	41.28	0.060	1.52	9.81
2-1/8	53.98	0.070	1.78	15.09
2-5/8	66.68	0.080	2.03	21.31
3-1/8	79.38	0.090	2.29	28.67
3-5/8	92.08	0.100	2.54	36.93
4-1/8	104.78	0.110	2.79	46.21

## Polyethylene (PE) Insulated Double Coil

### Insulation Technical Data

**Material:** Highly Flexible Paired Polyethylene  
**Thermal Conductivity:** 0.035w/m. k. at 0°C  
**Tensile Strength:** 55.8 N/cm<sup>2</sup> (kgf/cm<sup>2</sup>)  
**Water Absorption:** 0.0051 MAX g/100cm<sup>2</sup>  
**Thickness Shrinkage:** 6% MAX @ 120±5°C  
**Appearance Density:** Inner Tube: 0.028g/cm<sup>3</sup>; Outside Tube: 0.0303g/cm<sup>3</sup>  
**Moisture Permeability:** 8.6x10-11g/(m<sup>2</sup>·s·pa)



Part No.	Pair Coil Description Copper Tube Outside Diameter x Wall Thickness (mm)	Insulating Thickness (mm)	R-Value	Pair Coils Per Carton	Carton Dimensions	
					(20m)	(30m)
FC-1438	6.35x0.80-9.53x0.80	8	0.26	1	57x57x18	67x67x17
FC-1412	6.35x0.80-12.70x0.80	8	0.26	1	61x61x19	69x69x18
FC-1458	6.35x0.80-15.88x1.00	8	0.26	1	72x72x20	83x83x22
FC-3812	9.53x0.80-12.70x0.80	8	0.26	1	61x61x19	72x72x19
FC-3858	9.53x0.80-15.88x1.00	8	0.26	1	72x72x20	83x83x22
FC-3834	9.53x0.80-19.05x1.00	8	0.26	1	75x75x22	87x87x22
FC-1234	12.70x0.80-19.05x1.00	8	0.26	1	75x75x22	87x87x22

\* To be adjusted as per specific requirement. 1. Length 3m, 4m, 5m, 20m, 30m are available. 2. Length wall thickness can be adjusted as per specific requirement.

## Rubber Insulation Tube

20' Load: 124CTNS  
 40' HQ Load: 311CTNS  
 Carton Size: 1890\*340\*400mm



Item	Unit	Performance Index	Implemented Standard
Surface Density	kg/m <sup>3</sup>	≥60	GB/T6343
Burning Performance	-	meet requirement	GB/T2406
		Grade B	GB8624
Smoke Toxicity	-	meet requirement	B1
		ZA3	GB/T20285
Thermal Conductivity	-20°C	≤0.031	GT/T10294
	0°C	≤0.033	
	40°C	≤0.037	
Water Vapor Permeability	g/(m.s.Pa)	≤1.96×10 <sup>-11</sup>	GB/T17146
		Moisture Resistance	
Water Absorption in Vacuum	%	≤8	GB/T17794
(105°C+3°C, 7d) Dimension stability	%	≤10	GB/T8811
Reboundrate After Compression	%	≥70	GB/T16669
Compression Rate 50%, 72h	%		
Aging Resistance	-	Slightly crumpling, no cracks, no pin holes, not deforming	GB/T16259
Temperature Range	°C	-40~105	GB/T17794

I.D. (inch)	Thickness 3/8" (pcs/ctn)	Thickness 1/2" (pcs/ctn)	Thickness 3/4" (pcs/ctn)	Thickness 1" (pcs/ctn)
1/4	168	100	48	30
3/8	120	90	36	30
1/2	100	72	30	24
5/8	90	63	30	20
3/4	72	56	25	20
7/8	65	42	24	18
1	49	42	20	16
1-1/8	49	36	20	16
1-1/4	42	30	20	15
1-3/8	36	30	16	12
1-5/8	30	25	16	12
1-7/8	28	20	15	10
2	24	20	12	9
2-1/8	20	18	12	9
2-3/8	20	18	10	9
2-5/8	18	13	9	8
2-7/8	18	13	9	8
3	18	12	8	8
3-1/8	15	12	8	6
3-1/2	15	12	6	6

## Insulation Sheet

L*W	Thickness 3/8" (pcs/ctn)	Thickness 1/2" (pcs/ctn)	Thickness 3/4" (pcs/ctn)	Thickness 1" (pcs/ctn)
36"x48"	26	20	14	10
1m x 10m	1	1	1	1



## Distribute Tube for Mitsubishi Central Air-conditioner



Part No.		A	B	C
DIS-2A-1	gas tube	38.1/31.8	28.58/25.4	28.58/25.4
	liquid tube	22.22/19.05/15.88	12.7	12.7
DIS-22-1	gas tube	19.05/15.88/12.7	15.88/12.7/9.52	15.88/12.7/9.52
	liquid tube	9.52	9.52/6.35	9.52/6.35
DIS-180-1	gas tube	22.22/19.05/15.88	19.05/15.88/12.7/9.52	19.05/15.88/12.7/9.52
	liquid tube	15.88/12.7/9.52	12.7/9.52/6.35	12.7/9.52/6.35
DIS-371-1	gas tube	31.8/28.58/25.4	25.4/22.22/19.05	25.4/22.22/19.05
	liquid tube	15.88/12.7	15.88/12.7/9.52/6.35	15.88/12.7/9.52/6.35
DIS-540-1	gas tube	38.1/31.8/28.6	31.8/28.58/25.4/19.05	31.8/28.58/25.4/19.05
	liquid tube	22.22/19.05/15.88/12.7	19.05/15.88/12.7/9.52	19.05/15.88/12.7/9.52

## FB Liquid Distributor



Part No.	Inlet (mm)	Outlet (mm)	Hole Quantity
FB-16x6.35/3	Φ16	Φ6.35	3
FB-16x6.35/4	Φ16	Φ6.35	4
FB-16x6.35/5	Φ16	Φ6.35	5
FB-16x6.35/6	Φ16	Φ6.35	6
FB-16x6.35/7	Φ16	Φ6.35	7
FB-16x6.35/8	Φ16	Φ6.35	8
FB-16x6.35/9	Φ16	Φ6.35	9
FB-16x6.35/10	Φ16	Φ6.35	10
FB-16x6.35/12	Φ16	Φ6.35	12

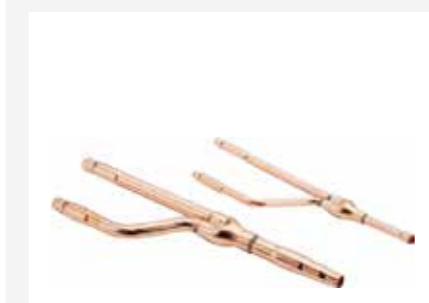


## Distribute Tube for Toshiba Central Air-conditioner



Part No.		A	B	C
RBM-BY53E	gas tube	15.9	12.7	12.7
	liquid tube	12.7	9.5	9.5
RBM-BY103E	gas tube	22.2	19.1	19.1
	liquid tube	15.9	12.7	12.7
RBM-BY203E	gas tube	31.8	28.6	28.6
	liquid tube	15.9	15.9	15.9
RBM-BY303E	gas tube	38.1	38.1	38.1
	liquid tube	22.2	19.1	19.1

## Distribute Tube for Dakin Central Air-conditioner



Part No.		A	B	C
11T	gas tube	19.05/15.88	15.88/12.7	15.88/12.7
	liquid tube	9.52	9.52/6.35	9.52/6.35
18T	gas tube	19.05/15.88	19.05/15.88/12.7	15.88/12.7
	liquid tube	9.52	9.52/6.35	9.52/6.35
22T	gas tube	19.05/15.88/12.7	15.88/12.7	15.88/12.7
	liquid tube	9.52	9.52/6.35	9.52/6.35
33T	gas tube	19.05/22.22	19.05/15.88	15.88/12.7
	liquid tube	12.7/9.52	9.52/6.35	9.52/6.35
37T	gas tube	25.4/28.58/31.8	25.4/19.05/15.88	19.05/15.88/12.7
	liquid tube	12.7/15.88	12.7/9.52	12.7/9.52/6.35
40T	gas tube	31.8/38.1	31.8/28.58/25.4	25.4/19.05/15.88
	liquid tube	19.05/15.88	19.05/15.88/12.7	15.88/12.7/9.52
72T	gas tube	25.4/28.58/31.8	25.4/19.05/15.88	19.05/15.88/12.7
	liquid tube	12.7/15.88	12.7/9.52	12.7/9.52/6.35
73T	gas tube	31.8/38.1	31.8/28.58/25.4	25.4/19.05/15.88
	liquid tube	19.05/15.88	19.05/15.88/12.7	15.88/12.7/9.52

## Copper Fitting

The copper fittings have covered ASME B16.22, EN1254-1 & ASTM B88L standards.  
The ASME B 16.22 standard ranges from 1/4" to 10-1/8", EN1254-1/BS864-2 standard ranges from 6mm to 219mm.  
Products approved by UPC, NSF61, WRAS, ROHS.

 <b>FC100</b> Coupling with Stop CxC	 <b>FC100-R</b> Coupling with Roll-Stop CxC	 <b>FC101-R</b> Reducing Coupling CxC	 <b>FC118</b> Fitting Reducing FTGxC.
 <b>FC107-C</b> 90° Elbow-Short Radius CxC	 <b>FC107-C-2</b> 90° Elbow-Short Radius CxFTG.	 <b>FC107-L</b> 90° Elbow-Long Radius CxC	 <b>FC107-L-2</b> 90° Elbow-Long Radius CxFTG.
 <b>FC106</b> 45° Elbow CxC	 <b>FC106-2</b> 45° Elbow CxFTG.	 <b>FC111</b> Tee CxCxC	 <b>FC117</b> Cap (Tube End)
 <b>FC138</b> Return Bend CxC	 <b>FC123</b> Suction Line(P-Trap) CxC	 <b>FC136</b> Cross Over Coupling CxC	 <b>FC137</b> Y Shape Tee
 <b>FC104</b> Male Adapter MxC	 <b>FC103</b> Female Adapter FxC	 <b>FC132</b> Copper Gasket	 <b>FC120</b> Tube Strap



## Brass Fitting

 <b>Short Nut</b>	 <b>Forged Brass Nut</b>	 <b>Union</b>	 <b>Union Tee</b>	 <b>Solder Union with Valve Core</b>																																																		
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 <b>Adapter for R410A</b>	 <b>Reducing Union (SAE*SAE)</b>	 <b>Adapter for R410A</b>	 <b>Male Connector (SAE*NPT)</b>	 <b>Reducer (Solder)</b>																																																		
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## Adapter for R1234yf

	Part No.	Description
	FR-04x08L	1/4" SAE female x 1/2" ACME LH male
	FR-08Lx04	1/2" ACME LH female x 1/4" SAE male

## Capillary Tube with Nuts

	Part No.	Description
	CTN-90	Capillary tube 1/8"x90cm with two nuts
	CTN-100	Capillary tube 1/8"x100cm with two nuts
	CTN-120	Capillary tube 1/8"x120cm with two nuts
	CTN-150	Capillary tube 1/8"x150cm with two nuts

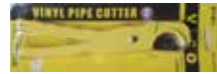
## Access Valves

	Part No.	Description
	HT-03A	Completed with valve core, valve core remover & tube 3/16" O.D.
	HT-04A	Completed with valve core, valve core remover & tube 1/4" O.D.
	HT-04B	Completed with valve core, quick seal cap & tube 1/4" O.D.
	HT-04C	Completed with valve core, valve core remover & without tube
	HT-05A	Completed with valve core, valve core remover & tube 5/16" O.D.
	HT-06A	Completed with valve core, valve core remover & tube 3/8" O.D.
	CT-7000	For 3/16", 1/4", 5/16", 3/8" or 1/2" tube

## Thermoplastic Capillary Hoses



Crimper TPC-CM



Cutter TPC-CT



TPC-100-B/U/R

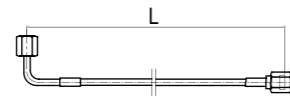
Hose Part Number	Inner Diametre	Outer Diametre	Tolerances	Min Bending Radius	Working Pressure	Working Temp	Weight
TPC-100-B	2.0 mm	5.9 mm	0.1 mm	10 mm	45 bar	-40°C~130°C	30 g/m
TPC-100-U	2.0 mm	5.9 mm	0.1 mm	10 mm	45 bar	-40°C~130°C	30 g/m
TPC-100-R	2.0 mm	5.9 mm	0.1 mm	10 mm	45 bar	-40°C~130°C	30 g/m

Whole Set Numbe	Name	Connecting Thread	Components Codes	
2001	Straight fitting	7/16"-20UNF	TPC-101	+TPC-107 +TPC-201 +TPC-401
2002	Insert with depressor	7/16"-20UNF	TPC-102	+TPC-107 +TPC-201 +TPC-401
2003	90° female fitting 1/4" SAE	7/16"-20UNF	TPC-202	+TPC-107 +TPC-401
2004	Tee nipple	7/16"-20UNF	TPC-104	+TPC-107 +TPC-107 +TPC-107 +TPC-401
2005	Tee female nipple	7/16"-20UNF	TPC-203	+TPC-107 +TPC-107 +TPC-107 +TPC-401
2006	Tee female with side nut 1/4" SAE	7/16"-20UNF	TPC-204	+TPC-107 +TPC-107 +TPC-401

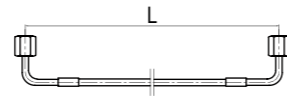
### Hose Assembly Overall Length (mm)



STRAIGHT--STRAIGHT



90'--STRAIGHT



90'-90'

### Instructions for Manual Assembling of Capillary Hose ID 2mm

Working Temperature: -40°C+130°C Working Pressure: 45 bar

Assemble one hose and check that the average diameter of the crimped sleeve is 7.1mm (just one of the four diameters can be maximum 7.3mm).

If not, regulate the cam till the obtained crimped sleeve is perfect on the basis of the above mentioned measures.

### Advantages

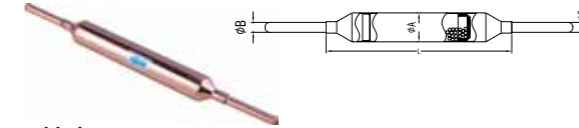
- High elasticity
- No more brazing, flaring and bending of copper tubes.
- Time saving for system installation and assembling.
- Very low refrigerating gas permeation rate.

### References for Application Scenario

Connection with pressure gauge, control units and oil return pipe.

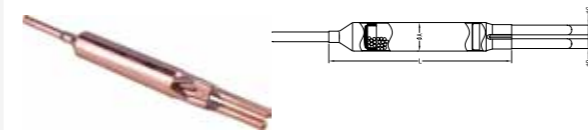


## Copper Spun Filter Drier



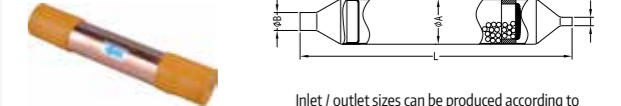
Welded Type

Part No.	Molec.	External Dia. (A)	Length (L)
XS110	10	16	110
XS115	15	19	115
XS120	20	19	141
XS125	25	24	125
XS130	30	24	140
XS140	40	24	170
XS150	50	29	160



Welded type

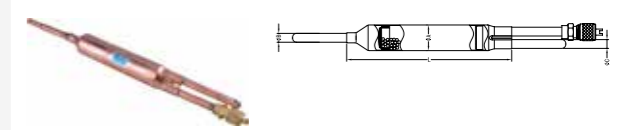
Part No.	Molec.	External Dia. (A)	Length (L)
XS310	10	16	110
XS315	15	19	115
XS320	20	19	141



Common Type (Big Cap)

Inlet / outlet sizes can be produced according to customer's requirements.  
Molecular Sieve: XH-9

Part No.	Molec.	External Dia. (A)	Length (L)
XS210	10	16	115
XS215	15	19	115
XS220	20	19	141
XS225	25	24	125
XS230	30	24	140
XS240	40	24	170
XS250	50	29	160



Welded type

2 inlets (with access valve)+1 outlet

Part No.	Molec.	External Dia. (A)	Length (L)
XS410	10	16	110
XS415	15	19	115
XS420	20	19	141

## Sight Glass



Part No.	Description
FC-04CF	1/4"x1/4" Flare with two nuts
FC-06CF	3/8"x3/8" Flare with two nuts
FC-08CF	1/2"x1/2" Flare with two nuts
FC-10CF	5/8"x5/8" Flare with two nuts



Part No.	Description
FC-04CS	1/4"x1/4" copper solder type
FC-06CS	3/8"x3/8" copper solder type
FC-08CS	1/2"x1/2" copper solder type
FC-10CS	5/8"x5/8" copper solder type



Part No.	Connection	Size		Code
		inch*inch	mm*mm	
SGN 6	Flare M*M	1/4"x1/4"	6x6	014-0161
SGN 10	Flare M*M	3/8"x3/8"	10x10	014-0162
SGN 12	Flare M*M	1/2"x1/2"	12x12	014-0163
SGN 16	Flare M*M	5/8"x5/8"	16x16	014-0164
SGN 19	Flare M*M	3/4"x3/4"	19x19	014-0166



Part No.	Connection	Size		Code
		inch*inch	mm*mm	
SGN 6s	Solder ODFxODF	1/4"x1/4"	-	014-0181
SGN 10s	Solder ODFxODF	3/8"x3/8"	-	014-0182
SGN 12s	Solder ODFxODF	1/2"x1/2"	-	014-0183
SGN 16s	Solder ODFxODF	5/8"x5/8"	16x16	014-0184
SGN 19s	Solder ODFxODF	3/4"x3/4"	19x19	014-0185
SGN 22s	Solder ODFxODF	7/8"x7/8"	22x22	014-0186

# Panasonic



02

## COMPRESSOR

QUALITY DELIVERED



### LG LBP Hermetic Compressor for Refrigerator

R134a: 220V~240V/50Hz



Ref.	No.	Category	Model	Ref.	App.	Power (V/Hz)	C/Capa (W)	COP (W/W)	Qty/Pallet (PCS)	Qty/20GP (PCS)
R134a	220V/50Hz 115V/60Hz	1/12 HP	CSB024LHMG	R134a	LBP	220~240/50	50	0.81	125	3250
		1/10 HP	CSB030LHMG	R134a	LBP	220~240/50	76	0.95	125	3250
		1/8 HP	CMA042LHEG	R134a	LBP	220~240/50	107	1.35	72	2016
		1/6 HP	CMA053LHEG	R134a	LBP	220~240/50	150	1.42	72	2016
		1/5 HP	CMA057LHEG	R134a	LBP	220~240/50	163	1.42	72	2016
		1/4 HP	CMA069LHEM	R134a	LBP	220~240/50	195	1.52	72	2016
		1/4+ HP	CMA075LAEM	R134a	LBP	220~240/50	215	1.67	72	2016
		1/3 HP	LX95LHBM	R134a	LBP	220/50, 60	267	1.28	64	1664
		1/2 HP	LX110LAJM	R134a	LBP	220/50	323	1.39	64	1664
		1/8 HP	CSB035LJCM	R134a	LBP	115/60	105	0.94	125	3000
R600a	220V/50Hz 115V/60Hz	1/5 HP	CMA053LHCG	R134a	LBP	115/60	167	1.42	72	2016
		1/4 HP	CMA062LH	R134a	LBP	115/60	203	1.43	72	2016
		1/10 HP	CMSB057NJEG	R600a	LBP	220~240/50	100	1.30	125	3250
		1/8 HP	CSB069NJEG	R600a	LBP	220~240/50	126	1.40	125	3250
		1/6 HP	CSB075NJEG	R600a	LBP	220~240/50	139	1.36	125	3250
		1/5 HP	CSB090NJJM	R600a	LBP	220~240/50	160	1.30	125	3000
		1/5+ HP	CMA098NJEG	R600a	LBP	220~240/50	180	1.60	72	2016
		1/4 HP	CMA110NJEM	R600a	LBP	220~240/50	194	1.58	72	2016
		1/4+ HP	CMA121NBEM	R600a	LBP	220~240/50	220	1.85	72	2016
		1/10 HP	CSB045NHCG	R600a	LBP	115/60	86	1.41	125	3250
1/8 HP	CSB057NHCG	R600a	LBP	115/60	120	1.50	125	3250		

### Zeta

R600a: 220V~240V/50Hz~60Hz



Model	Motor	Freq.(hz)	Displ. (cm <sup>3</sup> )	Motor Type	Cooling apacity		Input Power (W)	COP (W/W)	Height (mm)	Net Weight (kg)	Certification
					w	kcal/h					
HDZ220FSM*	AL	43(1300rpm)	9.2	PMSM	60	52	36	1.68	135.4	6	-
		53(1600rpm)			90	77	51	1.78			
		80(2400rpm)			134	115	74	1.80			
		100(3000rpm)			166	143	93	1.79			
HDZ240FSM*	AL	43(1300rpm)	10.3	PMSM	74	64	44	1.68	135.4	6.4	-
		53(1600rpm)			102	88	57	1.78			
		80(2400rpm)			153	132	84	1.82			
		100(3000rpm)			188	162	105	1.79			
HDZ270FSM*	AL	43(1300rpm)	11.4	PMSM	83	71	52	1.61	135.4	6.4	-
		53(1600rpm)			109	94	63	1.74			
		80(2400rpm)			169	145	94	1.80			
		100(3000rpm)			213	183	120	1.78			
140(4200rpm)	250	215	153	1.63							

### Lambda

R134a: 220V~240V/50Hz



Model	Motor	Displ. (cm <sup>3</sup> )	Motor Type	Freq. (hz)	Cooling apacity		Input Power (W)	COP (W/W)	Start apacitor (μF)	Run apacitor (μF)	Height (mm)	Net Weight (kg)	Certification
					w	kcal/h							
GML110A	AL	4.1	RSCR	50	113	97	84	1.35	-	2.5	152	6.3	CCC/VDE
GML125A	AL	4.3	RSCR	50	124	107	90	1.38	-	3	152	6.3	CCC/VDE
GML140A	AL	4.5	RSCR	50	140	120	104	1.35	-	3	152	6.3	CCC/VDE
GML160A	AL	5.7	RSCR	50	162	139	114	1.42	-	4	161	7.3	-
GML180A	AL	6.0	RSCR	50	178	153	125	1.42	-	4	164	7.3	CCC/VDE
GML200A M	AL	6.5	RSCR	50	190	163	128	1.48	-	5	164	7.3	CCC/VDE
GML200A	AL	7.0	RSCR	50	205	176	139	1.48	-	5	164	7.3	CCC/VDE

## China R600a-LBP Compressor for Refrigerator

R600a: 220V~240V/50Hz



Series	Model	VOL/FRE. (V/Hz)	Capacity (W)	COP (W/W)	Cooling	Motor Type	Capacitor	Certificate
V	VY33C45D	220-240/50	50	1.25	ST	RSIR	-	CCC. CE. CB. VDE
	VY43C45B	220-240/50	50	1.30	ST	RSCR	2.5	CCC. CE. CB. VDE
	VY51C45B	220-240/50	68	1.50	ST	RSCR	2.5	CCC. CE. CB. VDE
NV	VY60C45F	220-240/50	83	1.50	ST	RSCR	2.5	-
	MY68C45V	220-240/50	98	1.55	ST	RSCR	3	CCC
	MY73C45V	220-240/50	115	1.80	ST	RSCR	3	-
M	MY80C45V	220-240/50	125	1.80	ST	RSCR	3	-
	MY88C45V	220-240/50	140	1.80	ST	RSCR	3	-
	MY97C45V	220-240/50	152	1.80	ST	RSCR	4	-
	QY11R45V	220-240/50	165	1.80	ST	RSCR	4	-
	QY11R45V	220-240/50	190	1.50	ST	RSIR	-	CCC. CE. CB. VDE
	QY11R45V	220-240/50	205	1.50	ST	RSIR	-	CCC. CE. CB. VDE

## China R134a DC Compressor for Refrigerator



Refrigerant	Application	Model	Displacement (cm³)	Rotate speed (rpm)	-23.3°C Ashrae					Oil Charge (ml)	Cooling	Power Suooly
					Cooling Capacity			Efficiency				
					W	Kcal/h	Btu/h	W/W	Btu/w.h			
R134a	LBP	QDZH25G	2.5	2000	40	35	136	1.2	3.75	150	FC	12/24V (DC)
				2500	50	43	170	1.2	3.75			
				3000	60	51	205	1.2	3.75			
				3500	70	60	239	1.2	3.75			
R134a	LBP	QDZH28G	2.8	2000	50	43	170	1.2	3.75	150	FC	12/24V (DC)
				2500	60	51	205	1.2	3.75			
				3000	70	60	239	1.2	3.75			
				3500	80	69	272	1.2	3.75			
R134a	LBP	QDZH35G	3.5	2000	60	51	205	1.33	4.43	150	FC	12/24V (DC)
				2500	75	65	255	1.3	4.43			
				3000	88	76	300	1.25	4.26			
				3500	100	86	341	1.2	4.09			

## Rotary Compressor for Air Conditioner

Fixed Frequency: R22 (1-50Hz-220/240V)



Series	Part No.	Displ. (cm³/rev)	Cooling Capacity		Power (W)	COP (W/W)	Capacitor (µF/V)	Compressor Height (mm)	Discharge Pipe ID (mm)	Suction Pipe ID (mm)
			W	Btu/h						
SM	HSM165	16.4	2870	9792	910	3.15	30/370	292	8.1	9.8
	HSM200	20.1	3470	11840	1145	3.03	35/370	301	9.8	12.9
	HSM215	21.4	3725	12710	1175	3.17	35/370	301	9.8	12.9
	HSM215	21.4	3700	12624	1175	3.15	35/370	301	9.8	12.9
M2	PH225	22.4	3915	13358	1265	3.10	35/400	293	8.1	12.9
	PH240	24.0	4225	14416	1340	3.15	35/400	293	8.1	12.9
	PH290	28.8	5090	17367	1650	3.08	35/370	348	9.8	12.9
	PH295	29.7	5350	18254	1700	3.15	45/370	348	9.8	12.9
	PH310	31	5565	18988	1750	3.18	40/400	348	9.8	12.9
	PH320	32	5710	19483	1840	3.10	60/400	348	9.8	12.9
	PH300	33.7	6030	20575	1865	3.23	60/400	310	9.8	12.9
	PH310	29.8	5340	18220	1645	3.25	55/400	297	9.8	12.9
G2	PH340	36	6475	22093	2005	3.23	50/400	324	9.8	16.2
	PH360	30.8	5515	18817	1695	3.25	55/400	310	9.8	16.2
	PH370	37	6650	22690	2065	3.22	50/400	324	9.8	16.2
	PH400	39.8	7100	24226	2255	3.15	50/400	354	9.8	16.2
X3	PH420	42.3	7420	25318	2390	3.10	50/400	354	9.8	16.2
	PH440	43.5	7810	26648	2390	3.27	50/400	354	9.8	16.2
	PH460	45.9	8080	27569	2600	3.10	55/400	396.5	9.8	16.2
	PH480	47.9	8460	28866	2730	3.10	55/400	396.5	9.8	16.2

## Fixed Frequency: R410A (1-50Hz-220/240V)



Series	Part No.	Displ. (cm³/rev)	Cooling Capacity		Power (W)	COP (W/W)	Capacitor (µF/V)	Compressor Height (mm)	Discharge Pipe ID (mm)	Suction Pipe ID (mm)
			W	Btu/h						
SM	ASM106	10.6	2560	8734	853	3.00	25/370	292	8.1	9.8
	ASM118	11.8	2850	9724	950	3.00	25/370	292	8.1	12.9
	ASM125	12.5	3095	10560	1025	3.02	35/370	292	8.1	9.8
	ASM135	13.3	3300	11260	1110	2.95	35/370	292	8.1	12.9
	ASM140	13.9	3440	11737	1165	2.95	35/370	292	8.1	12.9
X2	PA150	15.1	3660	12488	1260	2.90	35/370	299	8.1	12.9
	PA160	16.0	3910	13341	1350	2.90	35/400	299	8.1	12.9
	PA170	17.1	4190	14297	1385	3.03	35/400	299	8.1	12.9
M2	PA185	18.5	4495	15337	1500	3.00	35/400	299	8.1	12.9
	PA200	19.9	4975	16975	1670	2.98	45/370	340	8.1	12.9
	PA215	21.4	5295	18067	1755	3.02	50/370	340	8.1	12.9
	PA225	22.4	5500	18766	1835	3.00	50/370	340	8.1	12.9
	PA240	23.9	5840	19926	1980	2.95	50/370	340	8.1	12.9
	PA250	25.1	6245	21308	2095	2.98	60/400	310	9.8	12.9
G2	PA260	26.0	6500	22178	2130	3.05	65/400	310	9.8	12.9
	PA270	27.0	6665	22741	2220	3.00	60/400	310	9.8	12.9
	PA290	28.7	7295	24891	2410	3.03	50/400	344	9.8	16.2
	PA331	32.6	8190	27944	2715	3.02	55/400	381.5	9.8	16.2

## Constant-speed T1 R22: 1Φ 220/240V 50Hz



Model	Displacement (cc/rev)	Cooling Capacity (w)	Cooling Capacity (Btu/h)	COP (W/W)	Capacitor (µF/V)	Height (mm)	Test Mode
SD086CV	8.6	1410	4811	2.94	15/400	205.0	ASHRAE/T
SD104CV	10.4	1740	5937	3.03	15/400	232.9	ASHRAE/T
SD122CV	12.2	2040	6960	2.96	15/400	232.9	ASHRAE/T
SD135UV	13.5	2300	7848	3.15	30/400	242.9	ASHRAE/T
SD156CV	15.6	2650	9042	3.05	25/400	232.9	ASHRAE/T
SG184SV	18.4	3050	10407	3.11	35/450	256.0/263.9	ASHRAE/T
SG210CV	21.0	3550	12113	3.17	30/450	261.0	ASHRAE/T
SL253CV	25.3	4210	14365	2.95	35/450	264.0	ASHRAE/T
SL286UV	28.6	4845	16531	3.20	45/450	289.0	ASHRAE/T
SL310UV	31.0	5240	17879	3.20	50/450	313.0	ASHRAE/T
SL325UV	32.5	5540	18902	3.20	40/450	313.0	ASHRAE/T
SH356UV	35.6	6120	20881	3.32	65/450	307.8	ASHRAE/T
SHV33Z***U	40.0	6740	22997	2.99	50/450	338.9	ASHRAE/T
SHV33Y***U	41.7	7100	24225	3.04	50/450	338.9	ASHRAE/T
TH454RV	45.4	7630	26034	3.23	70/450	372.7	ASHRAE/T
TH508	50.8	8660	29548	3.00	90/450	358.9	ASHRAE/T

## Constant-speed T1 R410a: 1Φ 220/240V 50Hz



Model	Displacement (cc/rev)	Cooling Capacity (w)	Cooling Capacity (Btu/h)	COP (W/W)	Capacitor (µF/V)	Height (mm)	Test Mode
ASD086UV	8.6	2030	6926	2.84	20/400	248.8	ASHRAE/T
ASD099HV	9.9	2340	7984	2.95	30/400	248.8	ASHRAE/T
ASG108TV	10.8	2510	8564	2.90	25/450	261.0	ASHRAE/T
ASG116CV	11.6	2730	9315	2.80	35/450	261.0	ASHRAE/T
ASG130UV	13.0	3170	10816	2.95	30/450	261.0	ASHRAE/T
ASL150UV	15.0	3555	12130	2.96	30/450	289.0	ASHRAE/T
ASL180SV-1	18.0	4300	14672	2.97	35/450	279.0	ASHRAE/T
ASL201UV	20.1	4800	16378	3.00	50/450	304.0	ASHRAE/T
ASH218SV	21.8	5180	17674	2.90	60/400	298.5	ASHRAE/T
ASH232SV	23.2	5510	18800	2.90	60/400	298.5	ASHRAE/T
ASH255TV	25.5	6080	20745	2.94	55/450	298.5	ASHRAE/T
ASH264UV	26.4	6420	21905	3.05	55/450	325.5	ASHRAE/T
ASH275CV	27.5	6500	22178	2.83	50/450	312.9	ASHRAE/T
ASH280TV	28.0	6830	23304	3.00	70/450	312.9	ASHRAE/T
ATH290TV	29.0	7130	24328	2.98	45/450	364.0	ASHRAE/T
ATH307RV	30.7	7330	25010	2.90	50/450	358.0	ASHRAE/T
ATH325CV	32.5	7780	26545	2.87	60/450	358.0	ASHRAE/T
ATH356CV	35.6	8440	28797	2.85	65/450	358.0	ASHRAE/T
ATH420	41.8	10100	29531	2.95	90/450	375.8	ASHRAE/T



### Copeland ZB Series R404a Scroll Compressor

Part No.	Motor TFD	Nominal Power (Hp)	Displ. (m³/h)	Current		Capacitor (Single Phase Select)	Connection Tube (inch)		Oil Charge (L)
				(RLA) TFD	(A) PF		Discharge	Suction	
ZB15KQ / ZB15KQE	PFJ/TFD	2	5.9	4.3	11.4	40µF/370V	1/2	3/4	1.18
ZB19KQ / ZB19KQE	PFJ/TFD	2.5	6.8	4.3	12.9	45µF/370V	1/2	3/4	1.45
ZB21KQ / ZB21KQE	PFJ/TFD	3	8.6	5.7	16.4	50µF/370V	1/2	3/4	1.45
ZB26KQ / ZB26KQE	PFJ/TFD	3.5	9.9	7.1	18.9	60µF/370V	1/2	3/4	1.45
ZB29KQ / ZB29KQE	TFD	4	11.4	7.9	19.3	60µF/370V	1/2	7/8	1.36
ZB38KQ / ZB38KQE	TFD	5	14.5	8.9	-	-	1/2	7/8	1.89
ZB45KQ / ZB45KQE	TFD	6	17.2	11.5	-	-	1/2	7/8	1.89
ZB48KQ / ZB48KQE	TFD	7	18.8	12.1	-	-	3/4	7/8	1.80
ZB58KQ / ZB58KQE	TFD	8	22.1	16.4	-	-	7/8	1-1/8	2.51
ZB66KQ / ZB66KQE	TFD	9	25.7	17.3	-	-	7/8	1-3/8	3.25
ZB76KQ / ZB76KQE	TFD	10	28.8	19.2	-	-	7/8	1-3/8	3.25
ZB95KQ / ZB95KQE	TFD	13	36.4	22.1	-	-	7/8	1-3/8	3.30
ZB114KQ / ZB114KQE	TFD	15	43.4	27.1	-	-	7/8	1-3/8	3.30
ZB130KQ / ZB130KQE	TED	20	45.7	37.4	-	-	1-1/8	1-5/8	4.2
ZB150KQ / ZB150KQE	TWM	22	56.6	33.6	-	-	1-3/8	1-5/8	4.4
ZB190KQ / ZB190KQE	TWM	25	71.4	41.4	-	-	1-3/8	1-5/8	6.5
ZB220KQ / ZB220KQE	TWM	30	87.5	54.3	-	-	1-3/8	1-5/8	6

### Copeland ZR Series R407c Scroll Compressor

Part No.	Nominal Power (HP)	Nominal Capacity		Input power (W)	Current (A)	Displ (cm³/rev)	Weight (kg)	Height (mm)	Noise (dBA)
		(W)	(Btu/h)						
ZR24K3E-TFD	2.0	5,900	20,119	1,920	4.3	5.92	25.0	383	69.0
ZR36K3E-TFD	3.0	8,900	30,3493	2,680	5.7	8.61	28.0	406	71.0
ZR42K3E-TFD	3.5	10,250	4,952	3,100	7.1	9.94	28.0	406	69.0
ZR47KCE-TFD	3.92	11,550	39,385	3,430	7.2	11.16	30.0	436	71.0
ZR61KCE-TFD	5.1	14,000	47,600	4,460	8.4	3.14	28.0	436	71.0
ZR68KCE-TFD	5.7	14,800	54,000	5,100	8.9	3.11	39.0	436	72.0
ZR72KCE-TFD	6.0	16,600	56,500	5,150	9.1	3.22	38.6	457	72.0
ZR81KCE-TFD	6.8	18,600	63,500	5,900	10.9	3.17	39.0	457	72.0
ZR94KCE-TFD	7.8	23,000	78,600	6,950	12.9	3.34	57.2	462	74.0
ZR108KCE-TFD	9.0	28,800	88,100	7,580	13.8	3.40	59.9	497	74.0
ZR125KCE-TFD	10.4	30,000	103,000	8,950	16.0	3.40	61.2	552	74.0
ZR144KCE-TFD	12.0	34,500	11,800	10,150	17.7	3.40	61.2	552	75.0
ZR160KCE-TFD	13.3	37,500	128,000	11,450	20.5	3.28	64.9	552	78.0
ZR190KCE-TFD	15.8	44,000	150,000	13,650	26.5	3.22	66.2	552	82.0
ZR250KCE-TWD	20.8	58,500	200,000	18,000	30.1	3.25	139.3	552	83.0
ZR310KCE-TWD	25.8	72,500	248,000	22,300	37.9	3.25	160.1	552	85.0
ZR380KCE-TWD	31.7	91,500	313,000	26,700	45.5	3.43	176.9	552	88.0

### R407C Scroll Compressor



Part No.	Phase	Out Put (HP)	Displacement (cm³/rev)	Compressor Code	50Hz				60Hz			
					Capacity		COP		Capacity		COP	
					kW	kBTU/h	W/W	BTU/Wh	kW	kBTU/h	W/W	BTU/Wh
C-SBN263H8A	3	3.5	55.7	809 930 88	9.6	32.8	2.87	9.8	11.8	40.3	2.87	9.8
C-SBN303H8A	3	4	66.8	809 940 88	11.6	39.6	3.05	10.4	14.6	49.8	3.17	10.8
C-SBN303H8G	3	4	66.8	809 946 88	11.6	39.6	3.05	10.4	14.6	49.8	3.17	10.8
C-SBN353H8A	3	4.5	77.4	809 942 88	13.4	45.8	2.91	9.9	16.5	56.3	2.95	10.1
C-SBN353H8G	3	4.5	77.4	809 944 88	13.4	45.8	2.91	9.9	16.5	56.3	2.95	10.1
C-SBN373H8A	3	5	83.2	809 950 88	14.5	49.5	2.93	10.0	17.8	60.8	2.99	10.2
C-SBN373H8G	3	5	83.2	809 956 88	14.5	49.5	2.93	10.0	17.8	60.8	2.99	10.2
C-SBN453H8A	3	6	100.0	809 960 88	17.6	60.1	3.03	10.3	21.3	72.7	3.04	10.4
C-SBN453H8G	3	6	100.0	809 966 88	17.6	60.1	3.03	10.3	21.3	72.7	3.04	10.4
C-SBS235H38A	3	7	110.2	-	19.5	66.6	3.10	10.6	23.4	79.9	3.10	10.6
C-SBS235H38B	3	7	110.2	-	19.5	66.6	3.10	10.6	23.4	79.9	3.10	10.6
C-SCN583H8H	3	8	131.9	809 184 88	23.6	80.6	3.13	10.7	28.0	95.6	3.03	10.3
C-SCN583H8K	3	8	131.9	809 186 88	23.6	80.6	3.13	10.7	28.0	95.6	3.03	10.3
C-SCN603H8H	3	8	137.0	809 181 88	24.5	83.6	3.16	10.8	29.1	99.4	3.08	10.5
C-SCN603H8K	3	8	137.0	809 183 88	24.5	83.6	3.16	10.8	29.1	99.4	3.08	10.5
C-SCN603H8T	3	8	137.0	809 185 88	24.5	83.6	3.16	10.8	29.1	99.4	3.08	10.5
C-SCN673H8H	3	9	148.8	809 191 88	26.5	90.5	3.12	10.7	32.0	109.3	3.06	10.4
C-SCN673H8K	3	9	148.8	809 193 88	26.5	90.5	3.12	10.7	32.0	109.3	3.06	10.4
C-SCN753H8H	3	10	171.1	809 101 88	29.9	102.1	3.20	10.9	35.9	122.6	3.12	10.7
C-SCN753H8K	3	10	171.1	809 103 88	29.9	102.1	3.20	10.9	35.9	122.6	3.12	10.7
C-SCN753H8T	3	10	171.1	809 105 88	29.9	102.1	3.20	10.9	35.9	122.6	3.12	10.7
C-SCN903H8H	3	12	205.4	809 121 88	34.9	119.2	3.09	10.5	-	-	-	-
C-SCN903H8K	3	12	205.4	809 123 88	34.9	119.2	3.09	10.5	-	-	-	-
C-SCN903H8T	3	12	205.4	809 125 88	34.9	119.2	3.09	10.5	-	-	-	-

### R404A Scroll Compressor



Part No.	HP	(W)		(W)	(A)		(Btu/Wh)	(cc/Rev.)	(l)
		W	Btu/h		kW	COP			
MLZ015	2	3,300	11,300	1.75	1.89	6.45	33.8	5.9	1.1
MLZ021	3	4,700	16,000	2.27	2.08	7.10	46.2	8.0	1.1
MLZ026	3.5	5,800	19,800	2.9	2.00	6.83	57.1	9.9	1.1
MLZ030	4	7,100	24,200	3.35	2.11	7.20	68.8	12.0	1.6
MLZ038	5	8,400	28,700	3.86	2.19	7.47	81.0	14.1	1.6
MLZ045	6	10,200	34,800	4.81	2.11	7.20	98.6	17.2	1.6
MLZ048	7	11,100	37,900	5.17	2.14	7.30	107.5	18.7	1.6
MLZ058	7.5	13,000	44,400	6.08	2.13	7.27	126.0	21.9	2.7
MLZ066	9	15,100	51,500	7.01	2.15	7.34	148.8	25.9	2.7
MLZ076	10	17,300	59,000	7.93	2.18	7.44	162.4	28.3	2.7

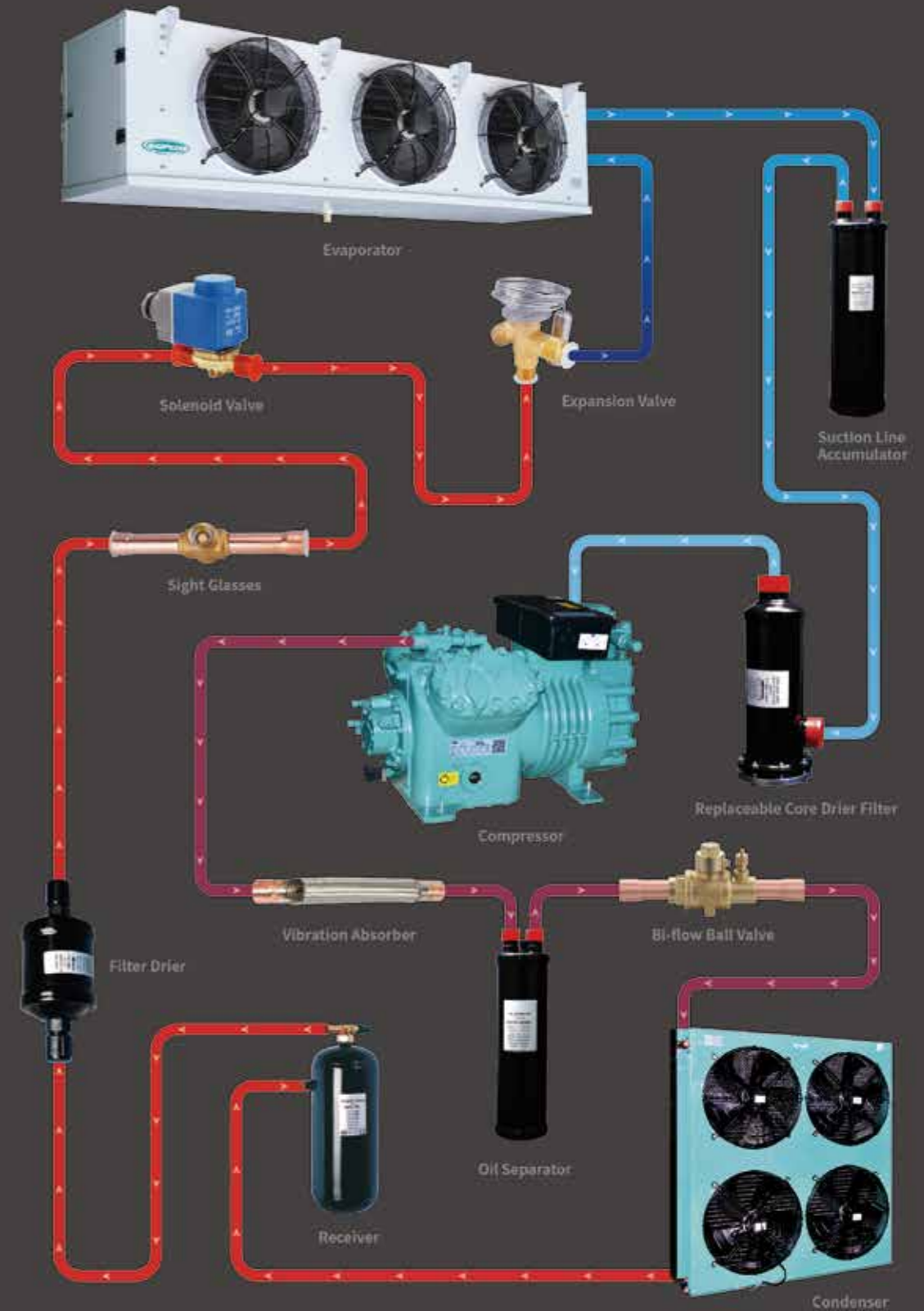
03

# REFRIGERATION SPARE PARTS

QUALITY DELIVERED



## Refrigeration Cycle



**SRK Liquid Line Filter Drier (Solid Core)**



SRK liquid line filter driers are designed with a molded core with a mix of components which provides high filtration capacity.

This assures the optimal drying capacity and avoids acid formation in the refrigeration system.



**Feature:**

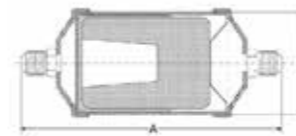
- 100% molecular sieve core;
- Compatible with all CFC, HCFC and HFC refrigerants and oils;
- High dirt retention, down to 40µm particles, with minimal pressure drop;
- High absorbent and acid removable capacity;
- Highly corrosion-resistant powder coating finish. Can be used in all environments, including marine applications;
- Maximum working pressure: 4.7MPa/680Psig.

Part No.	Connections		Liquid Flow Capacity (KW)					Dimensions		
	ODF	SEA	R134a	R22/R410A	R407C	R404A/R507	R502	A	B	D
SRK-032	-	1/4	6.7	7.4	7.2	4.9	4.6	113	66	43
SRK-032	1/4	-	8.1	8.7	8.5	6.0	5.6	110	66	43
SSRK-033	-	3/8	9.5	10.2	10.2	7.0	6.7	123	66	43
SRK-033S	3/8	-	10.5	11.6	11.6	7.7	7.4	114	66	43
SRK-052	-	1/4	61.2	49.8	61.8	41.3	40.3	119	72	63.5
SRK-052S	1/4	-	9.7	10.4	10.2	7.9	7.6	116	72	63.5
SRK-053	-	3/8	11.5	12.3	12.1	9.7	9.4	129	72	63.5
SRK-053S	3/8	-	47	52	51	32	31	120	72	63.5
SRK-082	-	1/4	50	55	54	35	34	145	98	63.5
SRK-082S	1/4	-	70.5	76.7	76.7	50.9	49.8	142	98	63.5
SRK-083	-	3/8	12.7	12.5	12.1	10	9.8	155	98	63.5
SRK-083S	3/8	-	14.5	15.9	15	9.7	27	146	98	63.5
SRK-084	-	1/2	36	31	42	42	34	163	98	63.5
SRK-084S	1/2	-	50.6	55	54	35.4	39	148	98	63.5
SRK-085S	5/8	-	55.6	60.1	59.1	40.4	61.6	146	98	63.5
SRK-162	-	1/4	87.6	95	93.2	63.3	11.6	159	112	76
SRK-162S	1/4	-	16.5	17.9	17.6	11.9	33	156	112	76
SRK-163	-	3/8	42.8	37	48	48	24.2	169	112	76
SRK-163S	3/8	-	34.4	37.3	36.6	24.9	26.4	160	112	76
SRK-164	-	1/2	37.6	40.8	40.1	27.4	39	177	112	76
SRK-164S	1/2	-	60	60	59	40	53	162	112	76
SRK-165	-	5/8	67	75	74	54	78.8	185	112	76
SRK-165S	5/8	-	111.6	121.4	121	80.5	5.2	160	112	76
SRK-166	-	3/4	7.3	7.9	7.9	5.3	9.0	191	112	76
SRK-166S	3/4	-	12.8	13.9	13.9	9.2	11.4	166	112	76
SRK-167S	7/8	-	16.2	17.6	17.6	11.7	16.6	172	112	76
SRK-302	-	1/4	23.5	25.5	25.5	16.9	5.2	232	185	76
SRK-303	-	3/8	7.3	7.9	7.9	5.3	9.0	242	185	76
SRK-303S	3/8	-	12.8	13.9	13.9	9.2	13.6	233	185	76
SRK-304	-	1/2	19.2	20.9	20.3	13.9	18.5	250	185	76
SRK-304S	1/2	-	26.1	28.4	27.9	18.9	22.9	235	185	76
SRK-305	-	5/8	32.3	35.3	34.3	23.4	25.7	258	185	76
SRK-305S	5/8	-	36.5	39.5	39.5	26.2	15.1	233	185	76
SRK-306	-	3/4	21.4	23.3	23.0	15.4	20.5	264	185	76
SRK-306S	3/4	-	29.0	31.6	31.6	21.0	30.2	239	185	76
SRK-307S	7/8	-	42.8	46.5	46.5	30.9	36.2	245	185	76
SRK-309S	1-18	-	51.3	55.8	55.8	37	45.3	245	185	76

**SDCL Liquid Line Filter Drier (Solid Core)**



This machine uses 80% 3A molecular sieve core and 20% active aluminum inside, it is a perfect core mixture for the equipment system which has strong drying requirement and work under lowest frozen temperature. It has best result to apply to refrigeration of CFC & HCFC (R22, R502) using with the petrol and ALKY-phenyl oil.



**Feature:**

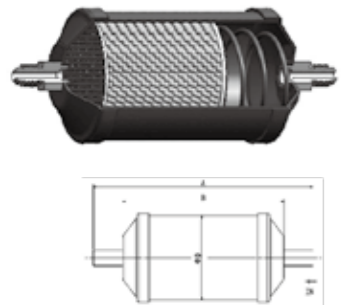
- 80% 3A molecular sieve and 20% active aluminum;
- Compatible with all CFC, HCFC and HFC refrigerants and oils;
- High dirt retention, down to 40 µm particles, with minimal pressure drop;
- High absorbent and acid removable capacity;
- Highly corrosion-resistant powder coating finish. Can be used in all environments, including marine applications;
- Maximum working pressure: 4.7MPa/680Psig.

Part No.	Connections		Liquid Flow Capacity (KW)					Dimensions		
	ODF	SEA	R134a	R22/R410A	R407C	R404A/R507	R502	A	B	D
SDCL-032	-	1/4	6.7	7.4	7.2	4.9	4.6	113	66	43
SDCL-032S	1/4	-	8.1	8.7	8.5	6.0	5.6	110	66	43
SDCL-033	-	3/8	9.5	10.2	10.2	7.0	6.7	123	66	43
SDCL-033S	3/8	-	10.5	11.6	11.6	7.7	7.4	114	66	43
SDCL-052	-	1/4	61.2	49.8	61.8	41.3	40.3	119	72	63.5
SDCL-052S	1/4	-	9.7	10.4	10.2	7.9	7.6	116	72	63.5
SDCL-053	-	3/8	11.5	12.3	12.1	9.7	9.4	129	72	63.5
SDCL-053S	3/8	-	47	52	51	32	31	120	72	63.5
SDCL-082	-	1/4	50	55	54	35	34	145	98	63.5
SDCL-082S	1/4	-	70.5	76.7	76.7	50.9	49.8	142	98	63.5
SDCL-083	-	3/8	12.7	12.5	12.1	10	9.8	155	98	63.5
SDCL-083S	3/8	-	14.5	15.9	15	9.7	27	146	98	63.5
SDCL-084	-	1/2	36	31	42	42	34	163	98	63.5
SDCL-084S	1/2	-	50.6	55	54	35.4	39	148	98	63.5
SDCL-085S	5/8	-	55.6	60.1	59.1	40.4	61.6	146	98	63.5
SDCL-162	-	1/4	87.6	95	93.2	63.3	11.6	159	112	76
SDCL-162S	1/4	-	16.5	17.9	17.6	11.9	33	156	112	76
SDCL-163	-	3/8	42.8	37	48	48	24.2	169	112	76
SDCL-163S	3/8	-	34.4	37.3	36.6	24.9	26.4	160	112	76
SDCL-164	-	1/2	37.6	40.8	40.1	27.4	39	177	112	76
SDCL-164S	1/2	-	60	60	59	40	53	162	112	76
SDCL-165	-	5/8	67	75	74	54	78.8	185	112	76
SDCL-165S	5/8	-	111.6	121.4	121	80.5	5.2	160	112	76
SDCL-166	-	3/4	7.3	7.9	7.9	5.3	9.0	191	112	76
SDCL-166S	3/4	-	12.8	13.9	13.9	9.2	11.4	166	112	76
SDCL-167S	7/8	-	16.2	17.6	17.6	11.7	16.6	172	112	76
SDCL-302	-	1/4	23.5	25.5	25.5	16.9	5.2	232	185	76
SDCL-303	-	3/8	7.3	7.9	7.9	5.3	9.0	242	185	76
SDCL-303S	3/8	-	12.8	13.9	13.9	9.2	13.6	233	185	76
SDCL-304	-	1/2	19.2	20.9	20.3	13.9	18.5	250	185	76
SDCL-304S	1/2	-	26.1	28.4	27.9	18.9	22.9	235	185	76
SDCL-305	-	5/8	32.3	35.3	34.3	23.4	25.7	258	185	76
SDCL-305S	5/8	-	36.5	39.5	39.5	26.2	15.1	233	185	76
SDCL-306	-	3/4	21.4	23.3	23.0	15.4	20.5	264	185	76
SDCL-306S	3/4	-	29.0	31.6	31.6	21.0	30.2	239	185	76
SDCL-307S	7/8	-	42.8	46.5	46.5	30.9	36.2	245	185	76
SDCL-309S	1-18	-	51.3	55.8	55.8	37	45.3	245	185	76

**SR Filter Drier (Compact Beads)**



The drier filters adopt a composition design of drying and filtration, and take gas as medium, effectively preventing filtration and soluble substances from entering the key positions of the refrigeration system, in order to secure and operation under the best condition.



**Feature:**

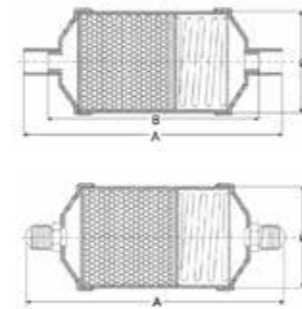
- 100% 3A molecular sieve core;
- Shock resistant steel shell construction;
- High dirt retention, down to 25 μm particles, with minimal pressure drop;
- High absorbent and acid removable capacity;
- Highly corrosion-resistant powder coating finish. Can be used in all environments, including marine applications;
- Maximum working pressure: 4.7MPa/680Psig.

Part No.	Connections		Liquid Flow Capacity (KW)					Dimensions		
	ODF	SEA	R134a	R22/R410A	R407C	R404A/R507	R502	A	B	D
SR-052	-	1/4	9.0	9.8	7.7	6.5	6.3	119	72	63.5
SR-052S	1/4	-	13.3	14.4	12.3	9.6	9.4	116	72	63.5
SR-053	-	3/8	21.4	23.3	13.4	15.4	15.1	129	72	63.5
SR-053S	3/8	-	26.5	28.9	16.9	19.1	18.7	120	72	63.5
SR-054S	1/2	-	34	36	23	24	23.5	122	72	63.5
SR-082	-	1/4	8.6	9.3	8.4	6.2	6.0	145	98	63.5
SR-082S	1/4	-	13.7	14.6	12.0	9.9	9.7	142	98	63.5
SR-083	-	3/8	21.8	23.7	15.1	15.7	15.4	155	98	63.5
SR-083S	3/8	-	27.4	29.8	17.2	19.8	19.3	146	98	63.5
SR-084	-	1/2	36.4	29.6	25.0	26.2	25.7	163	98	63.5
SR-084S	1/2	-	38.9	42.4	26.4	28.1	27.5	148	98	63.5
SR-085	5/8	-	60	67	35	42	51	146	98	63.5
SR-162	-	1/4	11	12	12.1	8	7	168.5	121.5	63.5
SR-162S	1/4	-	15	14	14	10	9	165.5	121.5	63.5
SR-163	-	3/8	22.2	24.2	14.4	16.1	15.7	178.5	121.5	63.5
SR-163S	3/8	-	31.7	34.3	16.5	22.9	22.4	169.5	121.5	63.5
SR-164	-	1/2	38.5	41.9	27.0	27.8	27.2	186.5	121.5	63.5
SR-164S	1/2	-	49.6	54.0	31.6	35.8	35.1	171.5	121.5	63.5
SR-165	-	5/8	50.5	54.9	36.2	36.4	35.7	194.5	121.5	63.5
SR-165S	5/8	-	67.2	73.1	37.6	48.5	47.5	169.5	121.5	63.5
SR-166	-	3/4	60	62	42	42	40	200.5	121.5	63.5
SR-167S	7/8	-	70.6	76.8	58.0	51.0	49.5	181.5	121.5	63.5
SR-302	-	1/4	13	15	15	11	10	232	185	76
SR-303	-	3/8	23	26	16	18	17	242	185	76
SR-303S	3/8	-	33	37	19	25	25	233	185	76
SR-304	-	1/2	43.6	47.5	30.2	31.5	30.8	250	185	76
SR-304S	1/2	-	54.3	59.1	38.0	39.2	38.4	235	185	76
SR-305	-	5/8	55.6	60.5	39.7	40.1	39.3	258	185	76
SR-305S	5/8	-	74.0	80.5	46.8	53.4	52.3	233	185	76
SR-306	-	3/4	65	67	47	47	45	264	185	76
SR-306S	3/4	-	79	85	51	58	57	239	185	76
SR-307S	7/8	-	83.4	90.8	62.9	60.2	59.0	245	185	76
SR-309S	1-18	-	109.1	118.7	73.1	78.7	77.1	245	185	76

**SDML Liquid Line Filter Drier (Solid Core)**



We use 100% 3A molecular sieve core in the Filter Drier, it has strong drying capability to maximum reduce the risk of hydrolyze acid reaction, and it can with HFC refrigerant (R134a, R404A, R410A) which is used with POE & PAG oil together, it is also a non-oil consuming additive compatible with R22.



**Feature:**

- 100% 3A molecular sieve core;
- Additives consuming no oil;
- Joint type: ODF or SAE;
- Corrosive resistance mold;
- Max working pressure: 4.7MPa/680Psig.

Part No.	Connections (in)		Liquid Flow Capacity (KW)			Dimensions (mm)			Max. Operating Pressure P B (bar)
	ODF	SEA	R134a	R404A/R507	R22/R407C/R410A	A	D	L	D
SDML-032	-	1/4	7	5	7	66	43	113	46
SDML-032S	1/4	-	7	5	7	66	43	110	46
SDML-033	-	3/8	17	13	19	66	43	123	46
SDML-033S	3/8	-	17	13	19	75	54	114	46
SDML-052	-	1/4	7	5	8	75	54	122	46
SDML-052S	1/4	-	7	5	8	75	54	119	46
SDML-053	-	3/8	18	14	19	75	54	132	46
SDML-053S	3/8	-	18	14	19	75	54	123	46
SDML-082	-	1/4	7	5	8	101	54	148	46
SDML-082S	1/4	-	7	5	8	101	54	145	46
SDML-083	-	3/8	19	14	21	101	54	158	46
SDML-083S	3/8	-	19	14	21	101	54	149	46
SDML-084	-	1/2	26	20	29	101	54	166	46
SDML-084S	1/2	-	26	20	29	101	54	151	46
SDML-085	-	5/8	42	31	46	101	54	174	46
SDML-085S	5/8	-	42	31	46	101	54	149	46
SDML-162	-	1/4	7	5	8	110	76	157	46
SDML-162S	1/4	-	7	5	8	110	76	154	46
SDML-163	-	3/8	22	16	24	110	76	167	46
SDML-163S	3/8	-	22	16	24	110	76	158	46
SDML-164	-	1/2	30	22	33	110	76	175	46
SDML-164S	1/2	-	30	22	33	110	76	160	46
SDML-165	-	5/8	43	30	47	110	76	183	46
SDML-165S	5/8	-	43	30	47	110	76	158	46
SDML-166	-	3/4	44	31	48	110	76	189	35
SDML-166S	3/4	-	44	31	48	110	76	164	35
SDML-167S	7/8	-	44	31	48	110	76	170	35
SDML-303	-	3/8	21	15	23	186	76	243	46
SDML-303S	3/8	-	21	15	23	186	76	234	46
SDML-304	-	1/2	31	22	34	186	76	251	46
SDML-304S	1/2	-	31	22	34	186	76	236	46
SDML-305	-	5/8	45	33	49	186	76	259	46
SDML-305S	5/8	-	45	33	49	186	76	234	46
SDML-306	-	3/4	62	45	68	186	76	265	35
SDML-306S	3/4	-	62	45	68	186	76	240	35
SDML-307S	7/8	-	62	45	68	186	76	246	35
SDML-309S	1-18	-	62	45	68	186	76	246	30

Indication: Refrigerant quantity capacity: evaporating temperature=-15°C, liquid temperature=30°C, drop pressure ΔP=0.07bar.

### Suction Line Filter

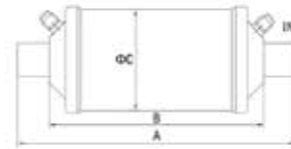
**Feature:**

These designs come with two access valves side to provide most effective protection for compressor.

Filteration: 40um

Appropriate temperature: -45°C~+65°C

Maximum pressure: 3.1Mpa.

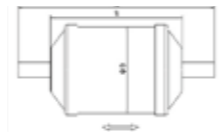
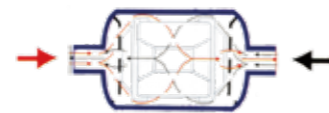


Part No.	Connection Size (inch)	A (inch)	B (inch)	C (inch)	Part No.	Connection Size (inch)	A (inch)	B (inch)	C (inch)
SSR-283-T	3/8	5.59	4.40	3.5	SSR-287-T	7/8	7.87	6.22	3.5
SSR-284-T	1/2	5.69	4.43	3.5	SSR-289-T	1-1/8	8.25	6.60	3.5
SSR-285-T	5/8	6.38	4.92	3.5	SSR-2811-T	1-3/8	10.81	8.84	3.5
SSR-286-T	3/8	7.75	6.18	3.5	SSR-2813-T	1-5/8	10.50	8.50	3.5

### Bi-flow Filter Drier (Solid Core)



100% Molecular Sieve Core



Part No.	Connections		Liquid Flow Capacity (KW)			Dimensions		
	ODF	SEA	R22	R410A	R407C	A	B	D
SRS-082	-	1/4	7.0	7.0	7.0	145	98	63.5
SRS-082S	1/4	-	7.0	7.0	7.0	142	98	63.5
SRS-083	-	3/8	15.8	15.8	15.5	155	98	63.5
SRS-083S	3/8	-	17.9	17.9	17.6	146	98	63.5
SRS-084	-	1/2	22.5	22.5	22.1	163	98	63.5
SRS-084S	1/2	-	23.5	23.6	23.2	148	98	63.5
SRS-085S	5/8	-	7.0	7.0	7.0	146	98	63.5
SRS-163	-	3/8	16.2	16.2	15.8	169	112	76
SRS-163S	3/8	-	18.3	18.3	17.9	160	112	76
SRS-164	-	1/2	27.0	27.0	26.7	177	112	76
SRS-164S	1/2	-	28.5	28.5	27.8	162	112	76
SRS-165	-	5/8	29.2	29.2	28.5	185	112	76
SRS-165S	5/8	-	30.6	30.6	29.9	160	112	76
SRS-307S	7/8	-	58	58	58	252	192	76

### Burn-out Filter Drier (Solid Core)

- Used on the suction pipeline of refrigeration and air-conditioning. 48% alumina, 47% molecule and 5% carbon filter core.
- It can absorb the acid and water in the system very efficiency and also can absorb injurant that burnt by the compressor.

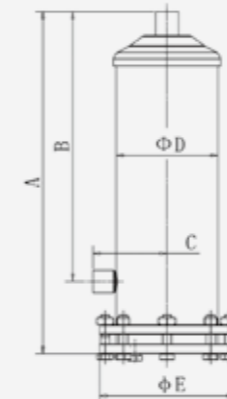


Part No.	Connection Size (inch)	A(mm)(±2)	ΦB (mm)(±0.5)	Refrigeration Vapacity (KM)		
				R407C	R134a	R404A
SRE-032	1/4	110	46	4	3	3
SRE-082	1/4	130	64	6	3.5	4
SRE-083	3/8	130	64	6	3.5	4.5
SRE-084	1/2	130	64	10	5.5	8
SRE-162	1/4	158	78	10.5	5	7.5
SRE-163	3/8	158	78	13	5.5	8
SRE-164	1/2	158	78	15	6	8.5
SRE-165	5/8	164	78	20	9.5	13
SRE-304	1/2	230	78	17	10	15
SRE-305	5/8	238	78	18	12.5	15
SRE-306	3/4	238	78	22	14	19

### Replaceable Filter Drier Shell



Part No.	Inlet & Outlet Size	Number of Cores	Recommended Value (kw)					Dimensions (mm)						
			Cooling			Air-conditioning		A	B	C	D	E		
			Commercial Refrigeration and Low-temperature Equipment	System of Replace or Assemble in the Spot										
			12/134a	22	404A/502 & 507	12/134a	22							
RSPA-485	5/8	1	26.4	35.2	26.4	26.4	35.2	233	152	78	114	151		
RSPA-487	7/8	1	42.2	52.8	35.2	42.2	52.8	238	157	82	114	151		
RSPA-489	1-1/8	1	42.2	52.8	35.2	52.8	70.3	240	159	84	114	151		
RSPA-4811	1-3/8	1	42.2	52.8	35.2	52.8	70.3	243	162	87	114	151		
RSPA-4813	1-5/8	1	47.8	58.2	42.2	56.3	74.6	245	164	88	114	151		
RSPA-4817	2-1/8	1	49.3	64.9	47.1	60.2	78.5	251	170	92	114	151		
RSPA-4824	3	1	55.4	70.2	56.9	66.1	83.4	266	168	116	114	151		
RSPA-967	7/8	2	70.3	87.9	52.8	70.3	87.9	383	301	82	114	151		
RSPA-969	1-1/8	2	87.9	128	87.9	87.9	123	385	303	84	114	151		
RSPA-9611	1-3/3	2	111.5	152	111.1	111.1	155	388	306	87	114	151		
RSPA-9613	1-5/8	2	132.1	194	134.5	134.5	190	390	308	88	114	151		
RSPA-9617	2-1/8	2	135.1	203	157	156	208	396	314	92	114	151		
RSPA-9621	2-5/8	2	157	220	191	173	232	413	315	116	114	151		
RSPA-9624	3	2	181	240	210	193	257	411	313	116	114	151		
RSPA-9625	3-1/8	2	206	263	231	225	270	408	310	116	114	151		
RSPA-1449	1-1/8	3	106	141	106	106	141	521	438	84	114	151		
RSPA-14411	1-3/8	3	141	176	123	141	176	524	441	87	114	151		
RSPA-14413	1-5/8	3	183	205	134	173	206	526	443	88	114	151		
RSPA-14417	2-1/8	3	224	236	156	205	247	532	449	92	114	151		
RSPA-14424	3	3	257	269	193	231	286	548	450	116	114	151		
RSPA-19211	1-3/8	4	176	246	176	176	246	675	595	87	114	151		
RSPA-19213	1-5/8	4	211	281	193	211	287	677	597	88	114	151		
RSPA-19217	2-1/8	4	229	299	211	229	299	683	603	92	114	151		
RSPA-19224	3	4	257	257	248	267	347	698	600	116	114	151		



**Feature:**

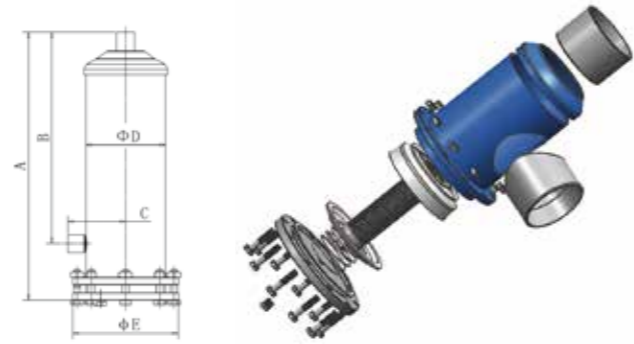
- Can match with all brands of 48 series cores;
- Has access port that can check the pressure drop & changing;
- Whole range Size, Max. connection is 3-1/8";
- Can choose D-48 or H-48 for liquid line;
- Can choose F-48 or X-48 for suction line.



### Replaceable Filter Drier Shell

**Feature:**

- Can match with all brands of 100 series cores.
- Has access port that can check the pressure drop & changing.
- Whole range Size, Max. connection is 5-1/4".
- Can choose D-100 or H-100 for liquid line.
- Can choose F-100 or X-100 for suction line.



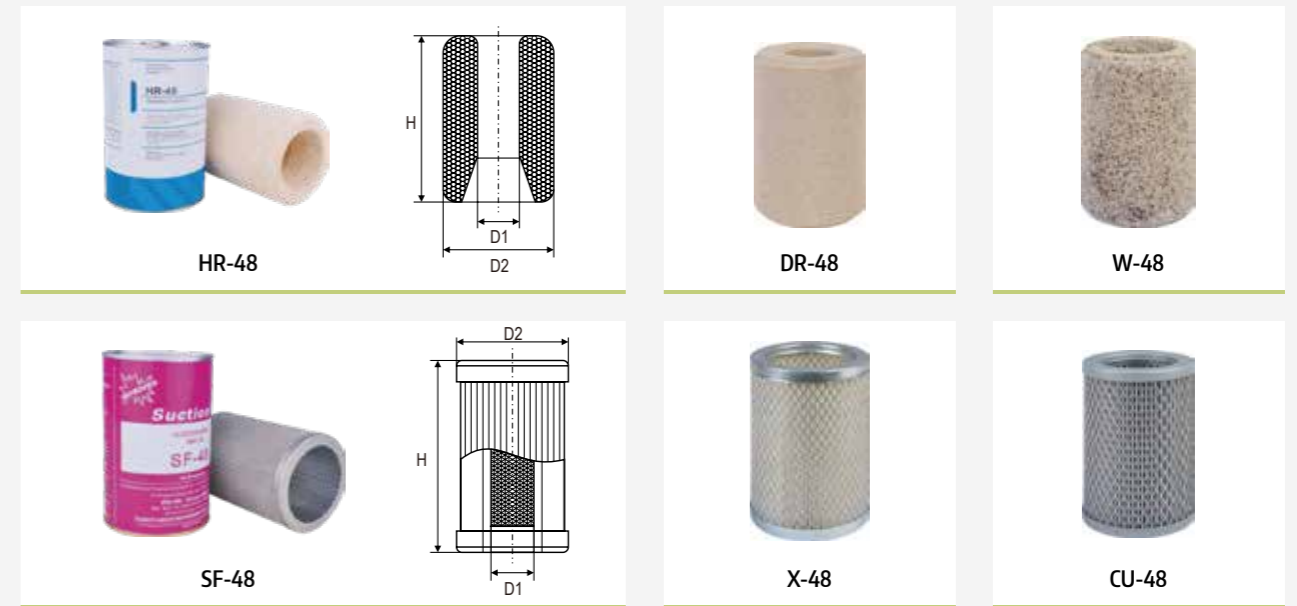
Part No.	Inlet & Outlet Size	Number of cores	Recommended value (kw)						Dimensions (mm)				
			Cooling			Air-conditioning			A	B	C	D	E
			Commerial Refrigeration and low-temperature equipment			System of replace or Assemble in the spot							
			12/134a	22	404A/502 & 507	12/134a	22						
RSPA-10013	1-5/8	1	67	98	59	63	106	288	180	106	152	200	
RSPA-10017	2-1/8	1	74	121	65	69	121	295	187	111	152	200	
RSPA-10024	3	1	95	164	84	88	156	301	188	136	152	200	
RSPA-20013	1-5/8	2	113	195	103	114	191	453	345	106	152	200	
RSPA-20017	2-1/8	2	128	209	112	132	207	460	352	111	152	200	
RSPA-20024	3	2	162	251	153	165	243	466	353	136	152	200	
RSPA-20028	3-1/2	2	193	282	186	193	280	464	341	136	152	200	
RSPA-20029	3-5/8	2	219	308	205	205	301	463	340	136	152	200	
RSPA-20034	4-1/4	2	242	329	221	221	323	467	344	136	152	200	
RSPA-30013	1-5/8	3	264	352	246	264	352	612	504	106	152	200	
RSPA-30017	2-1/8	3	285	367	267	279	374	618	504	111	152	200	
RSPA-30024	3	3	315	399	292	296	404	625	512	136	152	200	
RSPA-30028	3-1/2	3	336	422	305	317	423	623	500	136	152	200	
RSPA-30029	3-5/8	3	343	431	310	324	429	622	499	136	152	200	
RSPA-30034	4-1/4	3	369	457	324	335	441	626	503	136	152	200	
RSPA-30042	5-1/4	3	391	481	359	362	476	615	467	136	152	200	
RSPA-40013	1-5/8	4	351	426	321	352	424	786	678	106	152	200	
RSPA-40017	2-1/8	4	387	457	352	387	457	792	684	111	152	200	
RSPA-40024	3	4	415	503	388	415	527	799	686	136	152	200	
RSPA-40028	3-1/2	4	461	559	433	462	579	797	674	136	152	200	
RSPA-40029	3-5/8	4	485	573	457	491	593	796	673	136	152	200	
RSPA-40034	4-1/4	4	507	591	482	512	617	800	677	136	152	200	
RSPA-40042	5-1/4	4	529	615	504	536	633	789	641	136	152	200	

### Replaceable Liquid Line Filter Blocks and Suction Line Filter Core

Cores are individually packed in metal cans, It and hermetically packed against grease moisture and dirt. Includes the X suction line filter cores and the D/H liquid line block series. The method of mounting the cores or felt elements on the end plate by means of tie rods makes them very easy to install and remove. Detailed instructions are printed on each can.

**Feature:**

High moisture, foreign matter and acid removal ability in special environment. Protects the normal system and clean up the compressor.



**Technical Parameter**

\* Packing condition: 12 pcs/carton, please order according to packing.

Part No.	Danfoss Model	Emerson Model	Description	D1 (in)	D2 (in)	H (in)
DR-48	48DN/DC	D-48	80% Molecular Sieve 20% Activated Aluminium Oxide, High Acid Removal	1.85	3.78	5.51
HR-48	48DU/DM	H-48	100% Molecular Sieve, High water Removal	1.85	3.78	5.51
W-48	48DA	W-48-HH	48% Molecular Sieve, 47% Activated Aluminium Oxide, 5% Activated Carbon, Burnout Cleanup	1.85	3.78	5.51
X-48	48F	F-48R	Filter for Suction Line, Reverse Flow	0.79	3.74	5.51
SF-48	-	-	Stainless Steel Filter for Oil System	0.79	3.74	5.51
CU-48	-	-	Stainless Steel Filter for Suction Line, Could be Used Repeatedly After Cleaning	0.79	3.74	5.51



**Technical Parameter**

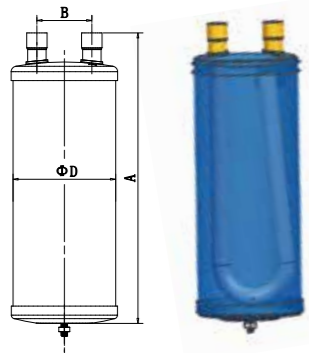
\* Packing condition: 12 pcs/carton, please order according to packing.

Part No.	Danfoss Model	Emerson Model	Description	D1 (in)	D2 (in)	H (in)
HR-100	-	H-100	100% Molecular Sieve, High Water Removal	2.09	4.80	6.50
X-100	-	F-100R	Filter for Suction Line, Reverse Flow	1.10	4.69	6.54
SF-100	-	-	Stainless Steel Filter for Suction Line, Could be Used Repeatedly After Cleaning	1.10	4.69	6.54
CU-100	-	-	Stainless Steel Filter for Oil System	1.10	4.69	6.54

### Suction Line Accumulator



In circulatory system, the refrigerant must be convert became gas before returning to compressor. So it has to separate gas and liquid before the refrigerant enters into the compressor. And let the gas refrigerant enters into the compressor will not cause strike. The liquid refrigerant evaporate slowly in the vessel, then enter the comperssor after evaporation. In order to make the residual refrigerant oil come back to compressor, there is a hole in the bottom of tube in Accumulator which may let the oil come back. When the residual refrigerant in the system come into Accumulator, it will go back to compressor with gas refrigerant. Because of the protection from Accumulator, The life time of compressor can be longer and the circulatory system can run better.

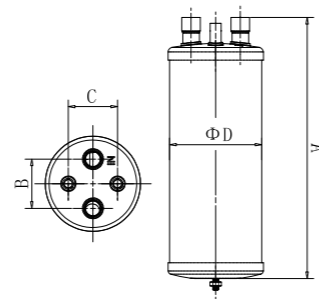


Part No.	Volume (L)	Inlet & Outlet	A (mm)	B (mm)	D (mm)	Normal Capacity (KW) @-18C Vaporize Temp.		
						R22	R134a	R404A
RSPQ-204	1.5	1/2	254	52	102	3.2	2.17	2.8
RSPQ-205	1.8	5/8	294	52	102	4.9	2.8	4.2
RSPQ-206	3.8	3/4	316	75	140	6.3	3.2	5.3
RSPQ-207	4.3	7/8	356	75	140	11.6	6.3	9.5
RSPQ-208	7.3	1-1/8	450	85	159	18.9	10.9	15.5
RSPQ-209	9.6	1-3/8	574	85	159	29.9	16.2	25.3
RSPQ-210	10.4	1-5/8	624	85	159	45.0	25.7	37.6
RSPQ-595	2.4	5/8	257	70	127	5.1	2.7	4.5
RSPQ-596	2.4	3/4	257	70	127	6.3	3.2	5.3
RSPQ-597	2.4	7/8	262	70	127	11.6	6.3	9.5
RSPQ-5126	3.3	3/4	332	70	127	6.3	3.2	5.3
RSPQ-5127	3.3	7/8	337	70	127	11.6	6.3	9.5
RSPQ-5137	3.5	7/8	358	70	127	11.6	6.3	9.5
RSPQ-5139	3.5	1-1/8	363	70	127	18.9	10.9	15.5
RSPQ-5179	4.7	1-1/8	465	70	127	18.9	10.9	15.5
RSPQ-51711	4.7	1-3/8	465	70	127	29.9	16.2	25.3
RSPQ-61411R	6.0	1-3/8	390	85	159	29.9	16.2	25.3
SPQ-62013	8.8	1-5/8	548	85	159	45.0	25.7	37.6

### Suction Accumulators with Heat Exchanger

RSPR Series suction accumulators with heat exchanger are particularly recommended for installations with a low overheating of refrigerant vapours at compressor suction (liquid cooler, low temperature display cabinets, vehicle refrigerating, etc...) and recommended for installations where the suction line accumulator is positioned outside (in this case, the exchanger allows a faster re-evaporation of the liquid).

The heat exchanger allows the increase of the refrigerant's refrigerating effect, by high pressure liquid sub-refrigerating, upstream of the pressure relief valve; it therefore prevents the risks of gas presence at the intake of the pressure relief valve.



Part No.	Volume (L)	Suction Line ODF (inch)	Liquid Line ODF (inch)	A (mm)	B (mm)	C (mm)	D (mm)	Normal Capacity (KW) @-18C Vaporize Temp.		
								R22	R134a	R404A
RSPR-2404	1.5	1/2	3/8	254	52	52	102	3.2	2.17	2.8
RSPR-2405	1.8	5/8	3/8	294	52	52	102	4.9	2.8	4.2
RSPR-2406	3.8	3/4	1/2	316	75	75	140	6.3	3.2	5.3
RSPR-2407	4.3	7/8	1/2	356	75	75	140	11.6	6.3	9.5
RSPR-2411	7.3	1-1/8	5/8	450	85	85	159	18.9	10.9	15.5
RSPR-2413	9.6	1-3/8	3/4	574	85	85	159	29.9	16.2	25.3
RSPR-2415	10.4	1-5/8	7/8	624	85	85	159	41.0	24.1	32.6
RSPR-2417	10.4	2-1/8	7/8	629	85	85	159	49.6	35.4	42.8

### Oil Separators



Part No.	Connection Size (in)	A (mm)	B (mm)	C (mm)
RSPW-55833	3/8	102	279	48
RSPW-55824	1/2	102	279	48
RSPW-55855	5/8	102	378	48
RSPW-55877	7/8	102	460	48
RSPW-55889	1-1/8	102	494	48
RSPW-559011	1-3/8	102	524	48
RSPW-569011	1-3/8	159	394	75
RSPW-569213	1-5/8	159	480	75
RSPW-569417	2-1/8	159	485	75

### Demountable Oil Separators



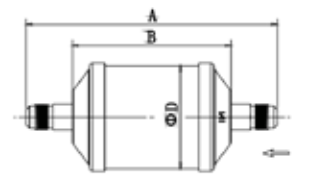
Part No.	Connection Size (in)	A (mm)	B (mm)	C (mm)
RSPW-5301	1/2	102	275	48
RSPW-5302	5/8	102	370	48
RSPW-5303	7/8	102	455	48
RSPW-5304	1-1/8	102	490	48
RSPW-5305	1-3/8	102	520	48
RSPW-5306	1-5/8	102	525	48
RSPW-6303	1-3/8	159	404	75
RSPW-6304	1-5/8	159	490	75
RSPW-6305	2-1/8	159	495	75

### Oil Filter

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

G series oil filter has a very high capacity of filtration.

It can return the cleanness POE oil and mineral oil back to the compressor.



Part No.	Connection Size		Liquid Refrigeration Volume (kw)				A (mm)	B (mm)	C (mm)
	ODF	SAE	R134a	R22	R404a	R502			
G-053	-	3/8	21.4	23.3	15.4	15.1	129	72	63.5
G-053S	3/8	-	26.5	28.9	19.1	18.7	120	72	63.5
G-054S	1/2	-	27.4	29.8	19.8	19.3	122	72	63.5
G-083	-	3/8	21.8	23.7	15.7	15.4	155	98	63.5
G-083S	3/8	-	27.4	29.8	19.8	19.3	146	98	63.5
G-084	-	1/2	21.8	23.7	15.7	15.4	163	98	63.5
G-084S	1/2	-	27.4	29.8	19.8	19.3	148	98	63.5
G-085	-	5/8	27.4	29.8	19.8	19.3	146	98	63.5

**Vertical Receiver**



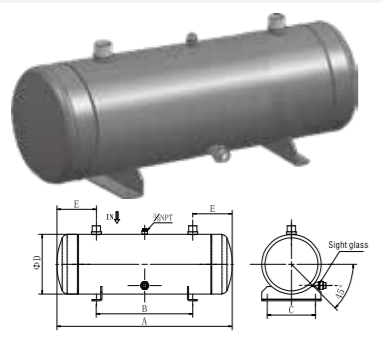
Part No.	Volume (L)	ODF	A (mm)	B (mm)	D (mm)	°C
RSPC-133	1.1	3/8	170	35	102	18.2°
RSPC-166	1.6	3/8	192	40	114	22.3°
RSPC-233	2	3/8	185	42	127	20°
RSPC-333	3	3/8	293	42	127	20°
RSPC-433	4	3/8	238	55	165	21°
RSPC-644	6	1/2	332	55	165	21°
RSPC-844	8	1/2	432	55	165	21°
RSPC-1055	10	5/8	322	75	219	17°
RSPC-1255	12	5/8	380	75	219	17°
RSPC-1455	14	5/8	435	75	219	17°
RSPC-1466	14	3/4	435	75	219	17°
RSPC-1677	16	7/8	492	75	219	17°
RSPC-1877	18	7/8	549	75	219	17°
RSPC-2077	20	7/8	606	75	219	17°

Part No.	Volume (L)	ODF	A (mm)	B (mm)	D (mm)
RSPC-101J	1.0	3/8	200	132	89
RSPC-102J	2.9	3/8	258	181	127
RSPC-103J	3.2	3/8	290	203	127
RSPC-104J	6.2	1/2	348	257	165
RSPC-105J	7.5	5/8	414	320	165
RSPC-106J	11.2	3/4	600	495	165
RSPC-107J	13.2	7/8	700	585	165

Part No.	Volume (L)	SAE	A (mm)	B (mm)	C (mm)	D (mm)
RSPC-101	1.0	1/4, 3/8	218	136	136	89
RSPC-102	2.9	3/8, 3/8	245	160	160	130
RSPC-103	3.5	3/8, 3/8	298	208	208	130
RSPC-104	6.0	1/2, 1/2	360	275	275	152
RSPC-105	9.6	5/8, 5/8	412	275	322	180

Part No.	Volume (L)	Inlet & Outlet	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)
RSPOR-6	6	3/8	338	94	150	165	-
RSPOR-8	8	3/8	438	109	220	165	-
RSPOR-10	10	3/8	548	131	285	165	-
RSPOR-12	12	3/8	638	139	360	165	-
RSPOR-14	14	1/2	738	110	518	165	259
RSPOR-19	19	1/2	580	140	300	219	-
RSPOR-23	23	5/8	700	140	420	219	210

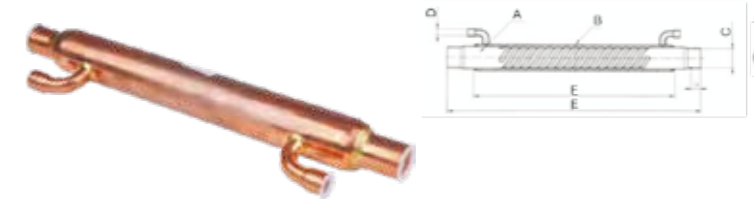
**Horizontal Receiver**



Part No.	Inlet & Outlet	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)
30L	1-1/8	900	600	190	219	150
35L	1-1/8	1000	700	190	219	150
40L	1-3/8	800	440	220	273	180
45L	1-3/8	900	540	220	273	180
50L	1-5/8	1000	640	220	273	180
55L	1-5/8	1100	740	220	273	180
60L	2-1/8	1200	840	220	273	180

**Copper Heat Exchanger**

Copper Heat exchanger is used for heat transfer between the liquid and suction lines of refrigeration system. The purpose is to utilize the cooling effect to subcool the refrigerant liquid. The Heat Exchanger prevents the loss of cooling in the ambient air via uninsulated suction lines in the heat exchange process.



Refrigerants	Working Temperature
CFCs, HCFCs, HFCs, Hcs	-60C~120°C
Max. Working Pressure	Max. Testing Pressure
21.5bar	28bar

Part No.	Inlet & Outlet Size	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)
HXR-25	1/2-1/4	19.05	25.4	12.7	6.35	230	180	30
HXR-50	5/8-3/8	22.5	28.6	15.88	9.52	260	210	31.7
HXR-75	7/8-3/8	28.6	34.9	22.2	9.52	330	270	34.8
HXR-100	1-1/8-3/8	34.9	41.3	28.6	9.52	380	310	38
HXR-150	1-1/8-1/2	34.9	41.3	28.6	12.7	380	310	48
HXR-250	1-3/8-1/2	41.3	47.7	34.9	12.7	380	310	51.2
HXR-250	1-5/8-5/8	47.7	54.1	41.3	15.88	435	340	63

**Coaxial Coils Heat Exchanger**



Part No.	Heating Capacity (kw)	Copper Tube Connection				Dimensions		
		Refrigerant		Water		Length (mm)	Height (mm)	Width (mm)
		Inlet-outlet Diameter (mm)	Thickness (mm)	Inlet-outlet Diameter (mm)	Thickness (mm)			
SR-BA-009-H	2.64	12.7-9.52	0.75	18-18	1.2	235	174	148
SR-BA-012-H	3.52	12.7-9.52	0.75	18-18	1.2	235	174	173
SR-BA-018-H	5.28	19.0-12.7	1.1-0.75	19-19	1.5	290	211	148
SR-BA-024-H	7.04	19.0-12.7	1.1-0.75	19-19	1.5	264	222	177
SR-BA-030-H	8.8	22.2-12.7	1.1-0.75	19-19	1.5	350	292	160
SR-BA-036-H	10.56	22.2-12.7	1.1-0.75	19-19	1.5	343	310	185
SR-BA-042-H	12.32	22.2-12.7	1.1-0.75	23-23	1.5	368	287	248
SR-BA-048-H	14.08	22.2-12.7	1.1-0.76	25-25	2.0	389	292	249
SR-BA-060-H	17.6	22.2-12.7	1.1-0.77	25-25	2.0	430	350	251
SR-BA-072-H	21.12	22.2-12.7	1.1-0.78	25-25	2.0	435	338	280
SR-BA-090-H	26.4	22.2-12.7	1.1-0.79	32-32	2.0	440	345	332

**Plate Type Heat Exchanger**



Part No.	Capacity Per Plate (KW)	Surface Per Plate (m²)	Layers of Plate (pcs)	Operates Pressure (Mpa)	Thickness of Plate (mm)	Operates Temperature	Type of Connection	Material	Material of Welding	Capacity of Heat Exchange (KW)	Dimension			
											A (mm)	B (mm)	C (mm)	D (mm)
SR-B3-12-X	0.08	0.012	8-60	3.0						1-5	73	40	154	191
SR-B3-14-X	0.1	0.014	8-60	3.0						1-5	86	46	156	196
SR-B3-23-X	0.15	0.023	8-60	3.0	0.3	-195~+250°C	Solder/Flare	316L or 304 Stainless Steel	99.9% Copper or Nickel	3-10	73	40	278	315
SR-B3-52-X	0.4	0.052	20-120	3.0						10-70	112	50	466	526
SR-B3-95-X	1	0.095	20-120	3.0						50-250	192	90	519	617

**Pressure Ventilator for Cold Room**

FC-110

**PRODUCT DESCRIPTION**

- Aluminum Alloy Surface
- Stainless Steel Filter
- Electric Heater to Prevent Frozen(220V/36W)



FC-220

**PRODUCT DESCRIPTION**

- ABS Frame
- Stainless Filter
- Electric Heater to Prevent Frozen(220V/36W)



**Hinges**



FC-306



FC-1132



FC-1332 FC-1336



FC-1238



FC-1230S



FC-201



FC-1424



FC-380



FC-1432



FC-1470 FC-1460 FC-1450



FC-8064-1



FC-650

Part No.	Description
FC-306	Reversible Reach-in Edge mount Can-lift Hinge
FC-1132	Reversible Reach-in Edge mount Can-lift Hinge
FC-1332	Reversible Reach-in Edge mount Can-lift Hinge (high 32mm)
FC-1336	Reversible Reach-in Edge mount Can-lift Hinge (high 36mm)
FC-1238	Reversible Reach-in Plane Hinge
FC-1230S	Reversible Reach-in Plane Hinge (with spring)
FC-201	Reversible Reach-in Plane Hinge (w/o spring)
FC-1424	Cam-Lift Hinge 24mm
FC-380	Cam-Lift Hinge 32mm

Part No.	Description
FC-1432	Cam-Lift Hinge 32mm
FC-1470	Reach-in door hinge, adjustable height from 40 to 70 mm, Zinc body.
FC-1460	Reach-in door hinge, adjustable height from 32 to 60 mm, Zinc body.
FC-1450	Reach-in door hinge, adjustable height from 32 to 50 mm, Zinc body.
FC-8064-1	Hinge for flush door, width 100m, length 100mm, stainless steel.
FC-650 (3.5)	Refrigerator spring hinge, spring diameter: 3.5mm
FC-650 (4.0)	Refrigerator spring hinge, spring diameter: 4.0mm
FC-650 (5.0)	Refrigerator spring hinge, spring diameter: 5.0mm

**Latches**



FC-1178



FC-1200



FC-1250



FC-1240



FC-1060 FC-1040



FC-1400



FC-1061



FC-3-0681



FC-3-0680



FC-4000



FC-4100



FC-4255

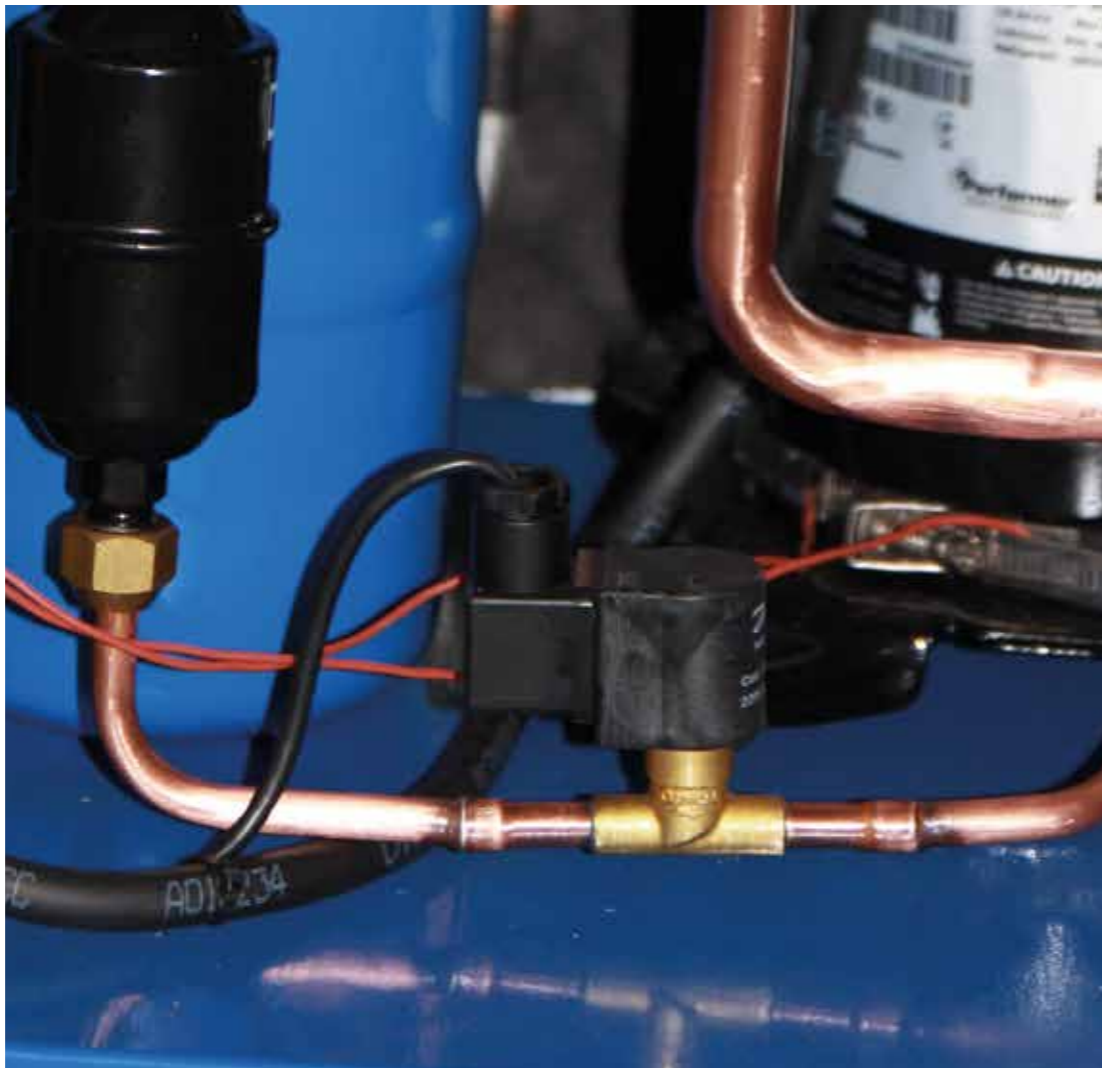
Part No.	Description
FC-1178	Safety latches with inside release handle, adjustable height from 35mm to 70mm, Zinc body
FC-1200	Edge mount mechanical latches, adjustable height from 18mm to 22mm, Zinc body
FC-1250	Edge mount mechanical latches, adjustable height from 18mm to 22mm, Zinc body
FC-1240	Edge mount mechanical latches, adjustable height from 18mm to 22mm, Zinc body
FC-1060	6" Lever & Roller latches, Zinc body
FC-1040	4" Lever & Roller latches, Zinc body
FC-1400	Edge mount mechanical latches, adjustable height from 26mm to 36.5mm, Zinc body

Part No.	Description
FC-1061	Edge mount mechanical latches, adjustable height from 26mm to 36mm, Zinc body
FC-3-0681	Edge mount mechanical latches, adjustable height from 26mm to 36mm, Zinc body
FC-3-0680	Edge mount mechanical latches, adjustable height from 26mm to 36mm, Zinc body
FC-4000	Safety latch
FC-4100	Safety latch
FC-4255	Safety latch

04

# VALVE & CONTROL

QUALITY DELIVERED



## Shut-off Valve (Hand Valves)



Part No.	Connection
HT-04	1/4" flare
HT-06	3/8" flare
HT-08	1/2" flare
HT-10	5/8" flare
HT-12	3/4" flare



Part No.	Connection
HT-04S	1/4" ODF
HT-06S	3/8" ODF
HT-08S	1/2" ODF
HT-10S	5/8" ODF
HT-12S	3/4" ODF

## Rotalock Valves



Part No.	Tube	Thread
V01	3/8"	1"x14
V02	1-1/8"	1-3/4"x12
V03	1-3/8"	1-3/4"x12
V04	3/4"	1-1/4"x12
V05	7/8"	1-1/4"x12
V06	1/2"	1"x14
V07	7/8"	1-3/4"x12
V08	5/8"	1"x14
V09	5/8"	1-1/4"x12

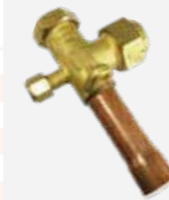


Part No.	Tube	Thread
VS01	3/8"	1"x14
VS02	1-1/8"	1-3/4"x12
VS03	1-3/8"	1-3/4"x12
VS04	3/4"	1-1/4"x12
VS05	7/8"	1-1/4"x12
VS06	1/2"	1"x14
VS07	7/8"	1-3/4"x12
VS08	5/8"	1"x14
VS09	5/8"	1-1/4"x12

## Split A/C Valves

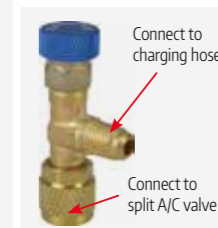
- Applicable Medium: R22, R134a, R410a, R407C, R32 etc.
- Applicable Medium Temperature: -30°C~+120°C.
- Maximum Working Pressure: 4.2MPa.

Part No.	Pipe Diameter (mm)	Normal Diameter (mm)	Connection Thread Specification
FC-602	6.35	5	7/16-20UNF
FC-603	9.52	8	5/8-18UNF
FC-604	12.7	10	3/4-16UNF
FC-605	15.88	12.8	7/8-14UNF
FC-606	19.05	16	17/16-14UNF
FC-607	22.23	18.5	19/16-12UNF



## Safety Valve

Connect to Split A/C valve ,  
Avoid leakage of refrigerants during charging.



Part No.	Male x Female
FC-34	1/4x1/4 SAE
FC-34A	1/4x5/16 SAE
FC-34B	5/16x5/16 SAE
FC-34C	5/16x1/4 SAE

## Thermostat Expansion Valves



Flare x Flare Connection Without Orifice

Refrigerant	Part No.	Pressure Equalization	Capillary Tybe(m)	Connection		Danfoss Code	
				Inlet x Outlet	mm x mm	N Series (-40~+10°C)	N Series (-40~+10°C)
R22	Tx2	int.	1.5	3/8x1/2	10x12	068Z3206	068Z3281
	TEX2	ext.		3/8x1/2	10x12	068Z3209	068Z3284
R407C	Tz2	int.	1.5	3/8x1/2	10x12	068Z3496	068Z3502
	TEZ2	ext.		3/8x1/2	10x12	068Z3501	068Z3446
R134A	Tn2	int.	1.5	3/8x1/2	10x12	068Z3346	068Z3383
TEN2	ext.	3/8x1/2		10x12	068Z3348	068Z3385	
R404A/R507	Ts2	int.	1.5	3/8x1/2	10x12	068Z3400	068Z3414
	TES2	ext.		3/8x1/2	10x12	068Z3403	068Z3415

## Orifice: -40~+40°C



Orifice Number	Nominal Capacity (TR)				Nominal Capacity (KW)				Danfoss Code
	R22	R407C	E134A	R404A/R507	R22	R407C	E134A	R404A/R507	
0X	0.15	0.16	0.11	0.11	0.5	0.5	0.4	0.38	068-2002
00	0.3	0.3	0.25	0.21	1	1.1	0.9	0.7	068-2003
01	0.7	0.8	0.5	0.45	2.5	2.7	1.8	1.6	068-2010
02	1	1.1	0.8	0.6	3.5	3.8	2.6	2.1	068-2015
03	1.5	1.6	1.3	1.2	5.2	5.6	4.6	4.2	068-2006
04	2.3	2.5	1.9	1.7	8	8.6	6.7	6	068-2007
05	3	3.2	2.5	2.2	10.5	11.3	8.6	7.7	068-2008
06	4.5	4.9	3	2.6	15.5	16.7	10.5	9.1	068-2009

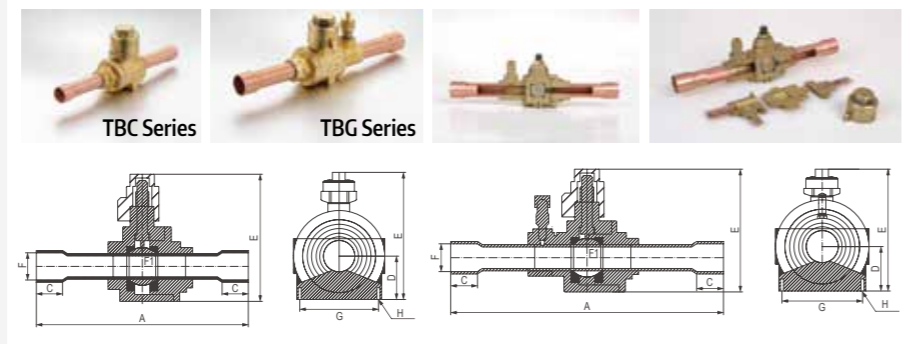
### Bi-directional Ball Valves



Part No.	ODF		Part No.	ODF		Part No.	ODF	
	mm	inch.		mm	inch.		mm	inch.
BV001-1	-	1/4"	BV006	18	-	BV0012	42	-
BV001	10	-	BV007	-	3/4"	BV0013	-	1-5/8"
BV002	-	3/8"	BV008	22	7/8"	BV0014	54	2-1/8"
BV003	12	-	BV009	18	-	BV0015	67	2-5/8"
BV004	-	1/2"	BV010	-	1-1/8"	BV0016	-	3-1/8"
BV005	16	5/8"	BV011	35	1-3/8"	BV0017	-	4-3/8"

### Super Bi-directional Ball Valves

- Bigger & Stronger valve body.
- Chrome-plated brass ball inside.
- Higher working pressure can reach to 48bar,700Psi.
- Valve body is brazed after screw, which is more hermetic.
- Special gasket with Graphene material, can make the valve body more clean and reduce the possibility of ball valve leakage.
- Piercing valve is on valve body, not on copper tube, stronger and safer.



Part No.	Part No.	A (mm)	G (mm)	E (mm)	F (mm)	F1 (mm)	C (mm)	D (mm)	H
TBC-6S	TBG-6S	148	22	60	1/4	10	8	16	M4x0.7
TBC-10S	TBG-10S	150	22	60	3/8	10	8	16	M4x0.7
TBC-12S	TBG-12S	152	22	60	1/2	11	10	16	M4x0.7
TBC-16S	TBG-16S	162	22	60	5/8	13	13	16.5	M4x0.7
TBC-19S	TBG-19S	162	22	60	3/4	13	16	16.5	M4x0.7
TBC-22S	TBG-22S	182	34	78	7/8	19	19	22.5	M4x0.7
TBC-28S	TBG-28S	202	36	82	1-1/8	23	19	25.5	M4x0.7
TBC-35S	TBG-35S	218	36	96	1-3/8	30	25	31	M6x1.0
TBC-42S	TBG-42S	224	62	116	1-5/8	38	28	38.5	M6x1.0
TBC-54S	TBG-54S	274	62	132	2-1/8	48	34	45	M6x1.0
TBC-67S	TBG-67S	294	62	146	2-5/8	56	37	52.5	M6x1.0
TBC-79S	TBG-79S	294	62	146	3-1/8	70	37	52.5	M6x1.0

Part No.	Part No.	Connection Size ODF		Kv Value (m³/h)	Port (mm)	Copper Thickness (mm)	Max. Working Pressure MWP	
		inch	mm				psi	bar
TBC-6S	TBG-6S	1/4	6	1	10	1	700	48
TBC-10S	TBG-10S	3/8	10	4	10	1	700	48
TBC-12S	TBG-12S	1/2	13	5	11	1	700	48
TBC-16S	TBG-16S	5/8	16	10	13	1	700	48
TBC-19S	TBG-19S	3/4	19	16	13	1.2	700	48
TBC-22S	TBG-22S	7/8	22	24	19	1.2	700	48
TBC-28S	TBG-28S	1-1/8	29	47	23	1.3	700	48
TBC-35S	TBG-35S	1-3/8	35	77	30	1.5	700	48
TBC-42S	TBG-42S	1-5/8	41	99	38	1.8	700	48
TBC-54S	TBG-54S	2-1/8	54	211	48	2	700	48
TBC-67S	TBG-67S	2-5/8	67	347	56	2.5	700	48
TBC-79S	TBG-79S	3-1/8	79	478	70	2.5	700	48

### FRF Thermostatic Expansion Valve



#### Technical Parameters

- Applicable Refrigerants: R22/R134a/R404A
- Applicable Medium: R22: -40°C~+10°C, R134a: -30°C~+10°C, R404A: -40°C~+10°C
- Applicable Range of Superheat: 2°C~8°C
- Maximum Working Pressure: 2.8MPa
- Maximum Testing Pressure: 3.2MPa

Refrigerant	Model	Pressure Equalisation	Thread (Connection Size)		
			Inlet inch	Outlet inch	External Equaliser
R22	FRF22W-3-3-5	External Equalisation	3/8"ODF	5/8"ODF	
	FRF22W-3-4-5		1/2"ODF	5/8"ODF	
	FRF22W-4-4-7		1/2"ODF	7/8"ODF	
	FRF22W-6-4-5		1/2"ODF	5/8"ODF	
	FRF22W-6-4-7		1/2"ODF	7/8"ODF	
	FRF22W-7.5-5-7		5/8"ODF	7/8"ODF	
	FRF22W-11-5-7		5/8"ODF	7/8"ODF	
	FRF22W-11-5-9		5/8"ODF	1-1/8"ODF	
	FRF22W-12-5-7		5/8"ODF	7/8"ODF	
	FRF22W-12-5-9		5/8"ODF	1-1/8"ODF	1/4"ODF
	FRF22W-15-5-9		5/8"ODF	1-1/8"ODF	
	FRF22W-15-7-9		7/8"ODF	1-1/8"ODF	
	FRF22W-18-7-9		7/8"ODF	1-1/8"ODF	
	FRF22W-18-7-11		7/8"ODF	1-3/8"ODF	
FRF22W-26-7-11	7/8"ODF	1-3/8"ODF			
FRF22W-26-9-11	1-1/8"ODF	1-3/8"ODF			
FRF22W-30-7-11	7/8"ODF	1-3/8"ODF			
FRF22W-30-9-11	1-1/8"ODF	1-3/8"ODF			
FRF22W-38-9-11	1-1/8"ODF	1-3/8"ODF			
R404A	FRF404W-4-4-5	External Equalisation	1/2"ODF	5/8"ODF	
	FRF404W-5-5-7		5/8"ODF	7/8"ODF	
	FRF404W-7.5-5-7		5/8"ODF	7/8"ODF	
	FRF404W-9-5-7		5/8"ODF	7/8"ODF	
	FRF404W-11-5-9		5/8"ODF	1-1/8"ODF	1/4"ODF
	FRF404W-13-7-9		7/8"ODF	1-1/8"ODF	
	FRF404W-18-7-11		7/8"ODF	1-3/8"ODF	
	FRF404W-21-7-11		7/8"ODF	1-3/8"ODF	
	FRF404W-26-9-11		1-1/8"ODF	1-3/8"ODF	

### Magnetic Check Valve

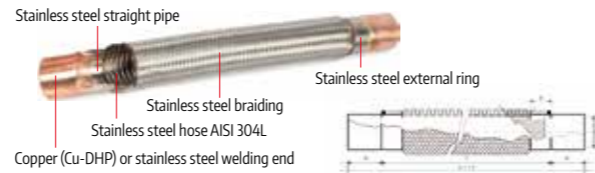
- Magnet valve seat, tectorial diaphragm. Copper connection size 1/4" to 3-1/8".
- Near zero internal leak rate.
- Compatible with all CFC, HCFC and HFC refrigerants and oils.
- Working temperature range: -40°C~+130°C.
- Minimum current resistance, large flow rate.
- Small volume, light weight and can be installed in any position.
- Mesh in the valve body, it's not just a check valve, but also a filter.



Part No.	Connection	Safety Working Pressure (KPa)	OD (mm)	Length (mm)	Mesh No.	Liquid Capacity (KW)
CV-4	1/4	5500	22	102	40	6.8
CV-6	3/8	5500	22	102	40	14.2
CV-8	1/2	5200	29	127	40	38.2
CV-10	5/8	5200	29	127	40	42.67
CV-12	3/4	4100	41	178	40	9.7
CV-14	7/8	4100	41	178	40	108.5
CV-18	1-1/8	4100	54	213	40	188.52
CV-22	1-3/8	4000	67	238	40	32.8
CV-26	1-5/8	3000	80	267	40	397.7
CV-34	2-1/8	3200	92	305	40	691.1
CV-42	2-5/8	3000	105	330	40	927.3
CV-50	3-1/8	3000	105	330	40	1262.5

### Vibration Eliminator

- Adjustment of Structure--Extended copper tube from both ends of corrugated pipe.
- Sleeve protect clamp at the extended copper tubes, decrease the transversal surface during argon-arc welding process.
- Use auto-matic argon-arc welding machine, to avoid the defectives caused by manual welding operations.
- Use internal welding for both ends of copper tubes, to avoid the leaking points caused by normal outside welding



Part No.	I.D. (inch)	Length (inch)	Max Working Pressure (psig)	Burst Pressure (psig)	A (I.D.) mm	B (±3) mm	C (±3) mm	D (±3) mm	E (±3) mm
DH-1	3/8	8-9/16	500	2500	9.62	20	177.5	217.5	13
DH-2	1/2	9	500	2500	12.8	20	188.6	228.6	13
DH-3	5/8	9-7/8	500	2500	16.2	22	206.8	250.8	17
DH-4	3/4	10-9/16	500	2500	19.2	28	212.3	268.3	17
DH-5	7/8	12	500	2500	22.5	30	244.8	304.8	18
DH-6	1-1/8	13-9/16	500	2500	28.8	38	255.3	331.3	20
DH-7	1-3/8	15-9/16	500	2500	35.3	40	315	395	22
DH-8	1-5/8	16-7/8	500	2500	41.7	50	328.6	428.6	23
DH-9	2-1/8	20-5/8	390	1950	54.5	60	403.8	523.8	23
DH-10	2-5/8	24-5/16	340	1700	67	76	465.5	617.5	25
DH-11	3-1/8	26-15/16	300	1500	79.6	85	514.2	684.2	25
DH-12	3-5/8	32-3/16	175	252	92.5	100	617.5	817.5	25
DH-13	4-1/8	32-15/16	175	252	104.9	110	616.6	836.6	25

### 4-Way Reversing Valves



DSF-9



DSF-20

Part No.	Connection (ODF)
DSF-4	Discharge: 5/16", Suction: 3/8"
DSF-9	Discharge: 3/8", Suction: 1/2"
DSF-11	Discharge: 1/2", Suction: 5/8"
DSF-11B	Discharge: 3/8", Suction: 5/8"
DSF-20	Discharge: 1/2", Suction: 3/4"
DSF-20B	Discharge: 1/2", Suction: 7/8"
DSF-34	Discharge: 3/4", Suction: 7/8"
DSF-50	Discharge: 7/8", Suction: 1-1/8"

Part No.	Connection Size	Part No.	Connection Size	Part Size (mm)	M.O.P.D. (Bars)	Kv Factor (m³/hr)
SV1020/2	1/4" Flare	SV1028/2	1/4" Copper solder	2.5	21	0.175
SV1020/3	3/8" Flare	SV1028/3	3/8" Copper solder	3.0	21	0.230
SV1064/3	3/8" Flare	SV1068/3	3/8" Copper solder	7.0	21	0.800
SV1064/4	1/2" Flare	SV1068/4	1/2" Copper solder	7.0	21	0.800
SV1070/4	1/2" Flare	SV1078/4	1/2" Copper solder	12.5	21	2.200
SV1070/5	5/8" Flare	SV1078/5	5/8" Copper solder	12.5	21	2.600
SV1070/6	3/4" Flare	SV1078/6	3/4" Copper solder	17.0	21	4.300
SV1090/6	3/4" Flare	SV1098/6	3/4" Copper solder	16.5	21	5.700

- Ambient Temperature: -20~50°C
- Medium Temperature: -25~120°C
- Max. Working Pressure: Regular 3MPa
- Max. Working Pressure: 3MPa
- Available Medium: R134a, R22, R407C, R404A/J507, air, water and oil

### Solenoid Valves

Part No.	Coil	Connection		Connection		
		inch	mm	Flare inch/mm	ODF	
EVR3	a.c/d.c	1/4	6	032F8107	032F1206	032F1207
		3/8	10	032F8116	032F1204	032F1208
EVR6	a.c/d.c	3/8	10	032F8072	032F1212	032F1213
		1/2	12	032F8079	032F1209	032F1236
EVR10	a.c/d.c	1/2	12	032F8095	032F1217	032F1218
		5/8	16	032F8098	032F1214	032F1214
EVR15	a.c/d.c	5/8	16	032F8101	032F1228	032F1228
		7/8	22	-	032F1225	032F1225
EVR20	a.c	7/8	22	-	032F1240	032F1240
		1-1/8	28	-	032F1244	032F1208
EVR22	a.c	1-3/8	-	-	032F3267	-
EVR25	a.c	1-1/8	-	-	032F2201	-
		1-3/8	-	-	032F2208	-
EVR32	a.c	1-5/8	-	-	042H1106	-
		1-5/8	-	-	042H1104	-
EVR40	a.c	2-1/8	-	-	042H1110	-
		1-3/8	-	-	042H1112	-



Soldering



Flare



### Pressure Controller

Part No.	A.C.110	A.C.220
Non-Inductive Current	24	16
Full Load	24	16
Starting	144	96



Part No.	Low Pressure (Mpa)	High Pressure (Mpa)	Differential (Mpa)		Reset		Max. Work Pressure	
	Adjust Range	Adjust Range	LP.	H.P.	LP.	H.P.	LP.	H.P.
HLP110	0.1~1.0	-	0.1~0.3	-	Auto	-	1.7	-
HLP506	-0.05~0.6	-	0.1~0.4	-	Auto	-	1.7	-
HLP506M	-0.05~0.6	-	≤0.2 fixed	-	Manual	-	1.7	-
HLP520	-	0.4~2.0	-	0.2~0.5	-	Auto	-	3.3
HLP530M	-	0.5~3.0	-	≤0.4 fixed	-	Manual	-	3.3
HLP530D	-	0.5~3.0	-	0.5~1.0	-	Auto	-	3.3
HLP830	-0.05~0.6	0.5~3.0	0.1~0.4	≤0.4 fixed	Auto	Auto	1.7	3.3
HLP830HM	-0.05~0.6	0.5~3.0	0.1~0.4	≤0.4 fixed	Auto	Manual	1.7	3.3
HLP830HLM	-0.05~0.6	0.5~3.0	≤0.4 fixed	≤0.4 fixed	Manual	Manual	1.7	3.3



Pressure	Part No.	Danfoss Code			Low Pressure (LP)		Reset		Reset		Contact System
		1/4 in 6mm SAE	1/4 in ODF	6mm ODF	Adjust Range (bar)	Differential Pressure (bar)	Adjust Range (bar)	Differential Pressure (bar)	High Pressure	Low Pressure (LP)	
Low	KP1	060-1101	060-1112	060-1110	-0.2~7.5	0.7-4.0	-	-	Auto	-	SPDT
		060-1103	060-1111	060-1109	-0.9~7.0	Fixed 0.7	-	-	Manual	-	
High	KP5	060-1171	-	060-1123	-0.2~5.0	0.4-1.5	-	-	Auto	-	SPDT
Dual	KP15	060-1173	060-1179	060-1177	-	-	8~32	1.8-6.0	Auto	-	SPDT
		060-1265	060-1180	060-1178-	-	-	8~32	Fixed 3	Manual	-	
Low	KP2	060-1264	060-1254	-	-0.2~7.5	0.7~4.0	8~32	Fixed 4	Auto	Auto	SPDT-Low Signal
		060-1120	-	-	0.2~7.5	0.7~4.0	8~32	Fixed 4	-	Manual	
Dual	KP15	060-1241	-	-	-0.9~7.0	Fixed 0.7	8~32	Fixed 4	Manual	Manual	SPDT-Low high Signal
		060-1243	060-1299	-	-0.2~7.5	0.7~4.0	8~32	Fixed 4	Auto	Auto	
		060-1245	060-1284	-	-	-	8~32	Fixed 4	Auto	Auto	

### Pressure Controls



A Type

B Type

Part No.	Application	Setting P.S.L		Setting Tolerance
		OFF °C	Close	
LPS0520	Low Pressure Automatic Reset	5	20	+/-5
LPS1020	Low Pressure Automatic Reset	10	20	+/-5
LPS2550	Low Pressure Automatic Reset	25	50	+/-5
HPS200150	High Pressure Automatic Reset	200	150	+/-15
HPS250150	High Pressure Automatic Reset	250	150	+/-15
HPS300200	High Pressure Automatic Reset	300	200	+/-15
HPS350250	High Pressure Automatic Reset	350	250	+/-15
HPS400300	High Pressure Automatic Reset	400	300	+/-15

05

# FAN & MOTOR

QUALITY DELIVERED



**YJFN Series**  
Condenser Fan Motor



**EBM Series**  
Condenser Fan Motor



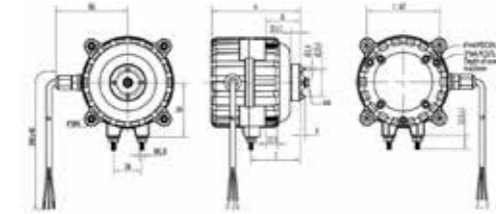
Part No.	Part No.	Part No.	Power (W)	Voltage (VAC)	Frequency (Hz)	Diameter (mm)	RPM	Rotation
YZF-5	YJFN205	EBM205	5	110V or 220V	50/60	170/200	1300/1550	CW or CCW
YZF-7	YJFN207	EBM207	7	110V or 220V	50/60	200/230	1300/1550	CW or CCW
YZF-10	YJFN310	EBM310	10	110V or 220V	50/60	200/230	1300/1550	CW or CCW
YZF-16	YJFN316	EBM316	16	110V or 220V	50/60	230/250	1300/1550	CW or CCW
YZF-18	YJFN318	EBM318	18	110V or 220V	50/60	230/250	1300/1550	CW or CCW
YZF-25	YJFN325	EBM325	25	110V or 220V	50/60	250/300	1300/1550	CW or CCW
YZF-34	YJFN334	EBM334	34	110V or 220V	50/60	300	1300/1550	CW or CCW



**YJF Series**  
Condenser Fan Motor

## EC Motor

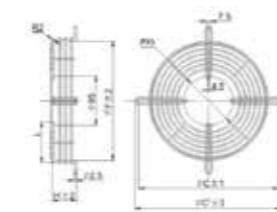
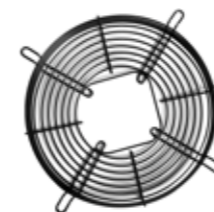
- EC Motor's efficiency rate is significantly raised to 60%, while ordinary motor is only 20%;
- Permanent magnet brushless;
- More energy saving, more steady, more popular and more environment friendly.



### Technical Data

Type	Nominal Data		Voltage (V)	Frequency (Hz)	Speed (r/min)	Output Capacity (W)	Perm. Amb. Temp (°C)	Dimensions		
	Features							A	B	C
ECM7108	Standard CW/CCW 2 Speeds Vari-speed		AC110/220	50/60	1300-1800	7	-40~+50	83	32.5	43.5
	Vari-speed		DC24	-	1300-1800	7	-40~+50			
ECM7112	Standard CW/CCW 2 Speeds Vari-speed		AC110/220	50/60	1300-1800	12	-40~+50	87	32.5	43.5
	Vari-speed		DC24	-	1300-1800	12	-40~+50			
ECM7120	Standard CW/CCW 2 Speeds Vari-speed		AC110/220	50/60	1300-1800	25	-40~+50	95	32.5	43.5
	Vari-speed		DC24	-	1300-1800	25	-40~+50			

## Grid



Fantype	C	C	F	H	L
40W	277	264	222	39	70
60W	327	314	272	49	96
75W	337	324	280	49	100
90W	377	364	319	49	120

### EC Axial Fan

Emphasizing on energy saving, environmental protection, and high efficiency, we absorbed advanced technology to research and develop a new generation of EC series Fan motors that was based on our years-long experience manufacturing traditional AC series Fan motors. The new product has improved working efficiency greatly and is ideal for Air-Conditioning, purification, and refrigeration industries.



Model	Voltage (V)	Frequency (Hz)	Current Draw (A)	Power Input (W)	Speed /rpm (r/min)	Air Flow / max (m³/h)	Static Pressure (Pa)	N.W. (Kg)	Noise Level dB(A)
FC2EC300/072/II-1PSPK	230	50/60	0.83	85	1500	2060	85	2.5	60
FC2EC300/092/II-1PSPK	230	50/60	1.36	170	2020	2780	140	2.4	70
FC2EC350/072/II-1PSPK	230	50/60	0.65	73	1040	2900	55	2.7	56
FC2EC350/092/II-1PSPK	230	50/60	1.34	165	1475	3780	100	3.2	67
FC2EC400/092/II-1PSPK	230	50/60	1.2	173	1080	4000	75	2.7	69
FC2EC400/102/III-1PSPK	230	50/60	2.3	500	1760	6000	180	3.2	79
FC2EC400/102/IX-3PSPK	400	50/60	0.9	500	1760	6000	180	3.2	79
FC2EC450/092/II-1PSPK	230	50/60	1.34	163	980	5600	74	2.7	68
FC2EC450/102/III-1PSPK	230	50/60	2.2	500	1500	7400	150	3.2	74
FC2EC450/102/IX-3PSPK	400	50/60	0.9	530	1520	7500	165	3.2	78
FC2EC500/102/III-1PSPK	230	50/60	2.2	500	1260	8200	120	1.5	70
FC2EC500/102/IX-3PSPK	400	50/60	1.0	630	1370	8400	150	2.7	72
FC2EC500/138/VII-1PSPK	230	50/60	3.2	740	1440	9100	180	3.2	74
FC6EC500/138/IV-3PSPK	400	50/60	2.1	1300	1770	11500	240	3.2	80
FC2EC560/138/VIII-1PSPK	230	50/60	3.2	735	1230	10200	150	12.8	72
FC6EC560/138/IV-3PSPK	400	50/60	2.1	1300	1520	13000	200	15.4	76
FC2EC630/138/VI-1PSPK	220	50/60	3.2	730	1020	12000	150	14.9	73
FC6EC630/138/VI-3PSPK	400	50/60	1.1	730	1000	12000	130	14.9	71
FC6EC630/188/IX-3PSPK	400	50/60	5	3520	1510	21800	320	38	82
FC2EC710/138/VIII-1PSPK	220	50/60	1.1	250	620	9800	60	15.8	60
FC6EC710/138/IV-3PSPK	400	50/60	0.67	400	730	11000	85	15.9	67
FC6EC710/188/IX-3PSPK	400	50/60	4.4	2875	1250	25000	240	34.8	80
FC2EC800/138/VIII-1PSPK	220	50/60	2.1	480	630	15000	75	16.8	65
FC6EC800/138/VIII-3PSPK	400	50/60	1.1	700	700	17500	100	18.8	65
FC6EC800/188/IX-3PSPK	400	50/60	3.9	2560	1020	26500	230	32	75
FC2EC910/138/VIII-1PSPK	220	50/60	2.8	630	620	20000	75	19.4	66
FC6EC910/138/VIII-3PSPK	400	50/60	1.1	700	640	22000	85	19.4	67
FC6EC910/138/IX-3PSPK	400	50/60	3.2	2100	885	31000	160	33.5	76



### C Frame Shaded Pole Motor



Part No.	Voltage (V)	Frequency (Hz)	Current (A)	Input	Shaft Size (Inch)	Rotation
SM102J	220	50/60	0.12	13	1/8"x1"	CW
2J01289B	220	50/60	0.085	8	-	CCW
KM334	220	50/60	0.18	15	3/16"x1/16"	CW
YJF607A-5C	220	50/60	0.065	7	1/8"x1-5/16"	CW/CCW
SM672	220	50/60	0.32	20	3/16"x1-7/16"	CW/CCW
SM998	240	50	0.2	18	1/8"x2"	CW
MA-61103D-2Z	220	50/60	0.06	6	-	CW
PSC4W	220	50/60	0.2	27	-	CCW
YZF2261	220	50	0.08	6.5	1/8"x1-5/16"	CW/CCW
DC D4612AAA21	12	-	0.233	3.3	-	CCW

### Axial Flow Draft Fan

- Operating Temperature: -10°C to 70°C (Sleeve) -20°C to 80°C (Ball)
- Operating Voltage: 110V ranged from 85V to 125V; 220V ranged from 190V to 245V
- Operating Humidity: between 20% to 85%
- Insulation Resistance: 10MΩ at 500VDC
- Dielectric Strength: 1 minute at 1500VAC/50-60Hz
- Current: <50mA



Q Type

Part No.	Bearing	Voltage (V)	Current (A)	Noise dB (A)	Power (W)	RPM	Airflow (CFM)
FC8025A2HSL	Sleeve	220	0.08/0.07	29/33	17.6/15.4	2100/2250	17/21
FC8025A2HBL	Ball	220	0.08/0.07	30/34	17.6/15.4	2200/2300	18/22
FC8038A2HSL	Sleeve	220	0.07/0.06	31/35	15.4/13.2	2200/2400	30/35
FC8038A2HBL	Ball	220	0.07/0.06	32/36	15.4/13.2	2200/2400	30/35
FC9225A2HSL	Sleeve	220	0.08/0.07	32/36	17.6/15.4	2000/2150	25/31
FC9225A2HBL	Ball	220	0.08/0.07	34/38	17.6/15.4	2050/2200	27/32
FC1025A2HSL	Sleeve	220	0.08/0.07	32/36	17.6/15.4	2000/2150	45/55
FC1025A2HBL	Ball	220	0.08/0.07	34/38	17.6/15.4	2050/2200	46/56
FC1225A2HSL	Sleeve	220	0.08/0.07	33/37	17.6/15.4	2000/2150	58/73
FC1225A2HBL	Ball	220	0.08/0.07	34/38	17.6/15.4	2050/2200	60/76
FC1238A2HSL	Sleeve	220	0.14/0.12	44/46	30.8/22.0	2600/3000	75/90
FC1238A2HBL	Ball	220	0.14/0.12	45/47	30.8/22.0	2600/3000	77/92

06

# TEMPERATURE CONTROLLER & MULTIMETERS

QUALITY DELIVERED



## Thermometer

Part No.	Diameter (mm)	Cap. Length (mm)	Measuring Range
60D1.5	60	1500	
80D1.5	80	1500	-40°C~+40°C
100D1.5	100	1500	



60D1.5



WT-2

-50°C~+300°C (-58°F~+572°F)  
Resolution: 0.1, >200°C: 1  
Accuracy: ±1°C (-20°C~+80°C)  
±5°C (other range)



TPM-10

-50°C~+70°C  
Resolution: 0.1°C  
Accuracy: ±1°C



WT-1

-50°C~+300°C (-58°F~+572°F)  
Resolution: 0.1>200°C is 1  
(>400°F is 1°F)  
Accuracy: (-20°C~+80°C) ±1°C



PT1005

-40°C~+80°C  
-40°F~+160°F



DST-50

-50°C~+150°C  
(-58°F~+302°F)



RT-200

1m, Capillary: -40°C~+40°C  
Accuracy: ±2°C  
L\*W\*H: 56\*58\*25mm



ST50

-40°C~+150°C or -40°C~+270°C,  
2"(50mm)dial, 48" Cable Back-up  
Lithium Battery, Solar Powered



RF221

2-1/2", Capillary:  
48", -40°C~+15°C / -40°F~+60°F,  
Stainless Steel Frame



TPM-900

Power Voltage: 220VAC  
Measuring Range: -30°C~+110°C  
Product Size: 60\*25.7\*32mm  
Screen Size: 64\*31mm



DT-2

Measuring Range:  
Temperature: -50°C~+70°C  
Humidity: 20%~99%  
Power: DC1.5V



DT-3

Measuring Range:  
IN: -30°C~+50°C  
Out: -50°C~+70°C  
Temperature Range: 20%~99%  
Power: DC1.5V



BT-2

Indoor Temp:  
-30°C~+50°C (-22°F~+122°F)  
Outdoor Temp.:  
-50°C~+70°C (-58°F~+158°F)  
Humidity: 20%~99%

### Microcomputer Temperature Controller



STC-200+

**Technical Parameter**

- Power Supply: 220VAC±10% (12VAC/DC, 24VDC optional)
- Power Consumption: <5W
- Temperature Measuring and Controlling Range: -50~+120°C
- Display Resolution: 0.1 when ≥100°C
- Accuracy: ±0.5°C from -10 to 85°C; <±2°C at others



STC-8080H

**Technical Parameter**

- Power Supply: 220VAC+10%/15% 50/60Hz
- Power Consumption: <3W
- Temperature Measuring Range: -50~+99°C
- Temperature Measuring Range: -40~+50°C
- Resolution: 1°C
- Accuracy: ±1°C from -50 to 70°C; <±2°C at others



STC-9200

**Technical Parameter**

- Power Supply: 220VAC 50Hz
- Power Consumption: <5W
- Ambient Temperature: 0~+60°C
- Relative Humidity: 20%~85% (No condensate)
- Accuracy: ±1°C



EK3010/3020/3030

**Technical Parameter**

- Measuring Range: -40°C~+99°C
- Controlling Range: -40°C~+85°C
- Temperature Resolution: 0.1°C/1°C
- Accuracy: -30°C~+50°C, ±1°C; others, ±2°C
- Power Supply: 200VAC±10% 50Hz/60Hz
- Mounting Size: 71mm \* 29mm
- Power: <5W



ETC-961

**Technical Parameter**

- Temperature Controlling Range: -30°C~+85°C
- Product Size: 75mm x 34.5mm x 58mm
- Mounting: 71mm x 29mm
- Measuring Range: NTC (-50°C~+120°C)
- Control Output: 10A/250VAC for compressor
- Power Supply: 220VAC±10%



ETC-974

**Technical Parameter**

- Temperature Controlling Range: -50°C~+99°C
- Product Size: 75mm x 34.5mm x 58mm
- Mounting: 71mm x 29mm
- Measuring Range: NTC (-50°C~+120°C)
- Control Output: 8A/250VAC for compressor
- Power Supply: 220VAC±10%

### Thermostat Guard



Part No.	Dimensions (mm)	White-rodgers	Mars
BTG-EK	125x120x75	F29-0025	70201
BTG-RK	180x110x95	F29-0143	70210
BTG-K	151x140x85	F29-0227	70205
BTG-DK	225x145x75	F29-0231	70217
BTG-UK2	230x130x105	F29-0198	70220

### Electric Control Box



ECB-5060

**Technical Parameters:**

- Power Supply: Three-phase five-wire (or three-phase four-wire), 380VAC ±10%, 50Hz
- Temperature Measuring and Controlling Range: -50~+50°C
- Accuracy: ±1°C
- Resolution: 0.1
- Compressor Start-up Delay Protection Time: 0~120 minutes (Adjustable)
- Capacity: 5HP, 10HP, 15HP



ECB-1000Q

**Features:**

- Big display area shows all necessary information

**Technical Parameters:**

- Power Supply: 220VAC±10%, 50/60Hz
- Power Consumption: Less than 5W
- Temperature Measuring Range: -45°C~99°C
- Accuracy: ±1°C
- Temperature Controlling Range: -40°C~90°C
- Resolution: 0.1°C/1°C OR 1°F
- Relay Capacity of Compressor: Max. capacity for compressor: 3HP  
Max. capacity for fan: 500W  
Max. capacity for light: 300W
- Defrost: 8A/220VAC
- Alarm: 5A/220VAC
- Work Temperature: -5°C~60°C
- Sensor Type: NTC(10K /25C, B-3435K)



ECB-5080

**Specification:**

- Product size: 300x420x150mm

**Technical Parameters:**

- Power Supply: Three-phase five-wire (or three-phase four-wire), 380VAC ±10%, 50Hz
- Temperature Measuring and Controlling Range: -50~+50°C
- Accuracy: ±1°C
- Resolution: 0.1
- Compressor Start-up Delay Protection Time: 0~120 minutes (Adjustable)
- Max. Capacity of Controlling the Compressor, Defroster, Fan(KW): 11

### DR-400 Temperature Data Logger

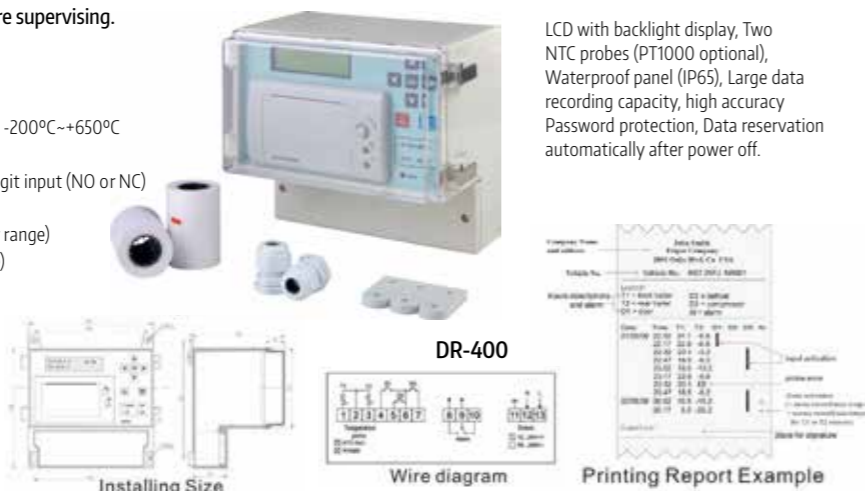
DR-400 is widely used for the storage and transportation of foodstuff, medicine, fresh and live goods, or be used in any place where need temperature supervising.

**Technical Parameter:**

- Temperature Range: NTC: -40°C~+120°C, PT1000: -200°C~+650°C
- Display: LCD, two lines, backlight adjustable
- Input: Two NTC probes (PT1000 optional), Three-digit input (NO or NC)
- Recording Channel: Two (one optional) channels
- Accuracy: NTC: +/-0.5°C (-40°C~+80°C); 1°C (other range)  
PT1000: +/-0.3°C (-50°C~+200°C); 1°C (other range)
- Memory Capacity: 13000 points (MAX)
- Recording Cycle: 1 Min. to 999 Min (adjustable)
- Recording: 0.1°C
- Printing Output: Mini thermal printer, printer paper wide is 57mm,40 characters each line
- Relay Output Capacity: SPDT 10A 250V
- Power: 12~24VDC (85~265Vac optional)
- Operation Temperature Range: -20°C~+50°C

**Feature:**

LCD with backlight display, Two NTC probes (PT1000 optional), Waterproof panel (IP65), Large data recording capacity, high accuracy Password protection, Data reservation automatically after power off.



### Electric Control Box ECB-2000 Series

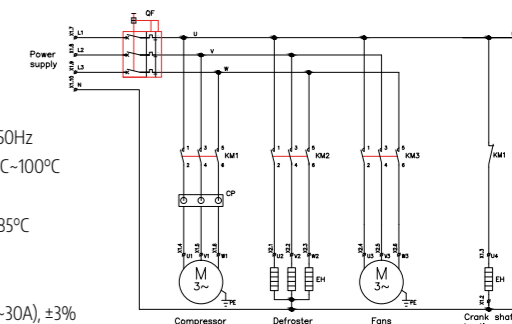


ECB2010/2020 ECB2030

Part No.	Power (HP)	Compressor	Defrosting	Fan
ECB2010	5	✓		
	10	✓		
ECB2020	5	✓	✓	
	10	✓	✓	
ECB2030	5	✓	✓	✓
	10	✓	✓	✓

**Technical Parameters:**

- Power Supply: three-phase-four-wire 380VAC±10%/50Hz
- Temperature Measuring Range: -45°C~100°C
- Temperature Accuracy: ±1°C
- Temperature Control Range: -40°C~85°C
- Temperature Resolution: 0.1°C
- Current Measuring Range: 0~80A
- Current Measuring Accuracy: ±2A (0~30A), ±3% (within the nominal range of mutual inductor)
- Current Display Resolution: 0.1A
- The Maximum Continuous Output Current of Compressor Loop: 10A (5HP), 21A (10HP)
- The Maximum Continuous Output Current of Defrosting Loop: 10A (5HP), 21A (10HP)
- The Maximum Continuous Output Current of Fan Loop: 5A



- The Maximum Continuous Output Current of Cold Storage Light Loop: 5A/220VAC (inductive load)
- Ambient Temperature: 0°C~40°C
- Sensor: NTC (thermistors) (10kΩ/25°C, B value 3435K)
- Communication Interface: RS485

07

# SERVICE TOOL

QUALITY DELIVERED



## Vacuum Pump



\* Intake Fitting Can Select: 1/4 SAE or 3/8 SAE.

Part No.	Capacity at 220V/50Hz	Capacity at 110V/60Hz	Ultimate Vacuum		Motor Power (hp)	Motor Speed (rpm)	Intake Fitting (inch)
			Partial Pressure	Total Pressure			
VP-0.5A	1 CFM, 28 L/min	1.2 CFM, 34 L/min	2 Pa	150 micron	1/6	1440	1/4" SAE
VP-1A	2 CFM, 57 L/min	2.4 CFM, 68 L/min	2 Pa	150 micron	1/4	1440	1/4" SAE
VP-1.5A	3 CFM, 85 L/min	3.6 CFM, 102 L/min	2 Pa	150 micron	1/4	1440	1/4" SAE
VP-2A	4 CFM, 113 L/min	4.8 CFM, 136 L/min	2 Pa	150 micron	1/3	1440	1/4" SAE
VP-3A	6 CFM, 170 L/min	7.2 CFM, 204 L/min	2 Pa	150 micron	1/2	1440	1/4" SAE
VP-4A	8 CFM, 226 L/min	9.6 CFM, 272 L/min	2 Pa	150 micron	3/4	1440	1/4" SAE
2VP-0.5C	1 CFM, 28 L/min	1.2 CFM, 34 L/min	2x10-1 Pa	150 micron	1/4	1440	1/4" SAE
2VP-1C	2 CFM, 57 L/min	2.4 CFM, 68 L/min	2x10-1 Pa	150 micron	1/3	1440	1/4" SAE
2VP-2C	4 CFM, 113 L/min	4.8 CFM, 136 L/min	2x10-1 Pa	150 micron	1/2	1440	1/4" SAE
2VP-3C	6 CFM, 170 L/min	7.2 CFM, 204 L/min	2x10-1 Pa	150 micron	3/4	1440	1/4" SAE
2VP-4C	8 CFM, 226 L/min	9.6 CFM, 272 L/min	2x10-1 Pa	150 micron	3/4	1440	1/4" SAE

## Super Vacuum Pump



Part No.	Capacity at 220V/50Hz	Capacity at 110V/60Hz	Ultimate Vacuum		Motor Power (hp)	Motor Speed (rpm)	Intake Fitting (inch)
			Partial Pressure	Total Pressure			
VP115	1.5 CFM, 42 L/min	1.8 CFM, 51 L/min	2 Pa	150 micron	1/3	1440	1/4" SAE
VP125	2.8 CFM, 79 L/min	3.4 CFM, 96 L/min	2 Pa	150 micron	1/3	1440	1/4" SAE
VP130	3.0 CFM, 85 L/min	3.6 CFM, 102 L/min	2 Pa	150 micron	2/5	2880	1/4" SAE
VP145	4.5 CFM, 127 L/min	5.4 CFM, 153 L/min	2 Pa	150 micron	1/2	2880	1/4" SAE
VP165	6.5 CFM, 184 L/min	7.8 CFM, 221 L/min	2 Pa	150 micron	3/4	2880	1/4" SAE
VP185	8.0 CFM, 226 L/min	9.6 CFM, 272 L/min	2 Pa	150 micron	3/4	2880	1/4" SAE
VP1100	10.0 CFM, 283 L/min	12 CFM, 340 L/min	2 Pa	150 micron	3/4	2880	1/4" SAE
VP215	1.5 CFM, 42 L/min	1.8 CFM, 51 L/min	2x10-1 Pa	150 micron	1/2	1440	1/4" SAE
VP230	3.0 CFM, 85 L/min	3.6 CFM, 102 L/min	2x10-1 Pa	150 micron	3/4	2880	1/4" SAE
VP245	4.5 CFM, 127 L/min	5.4 CFM, 153 L/min	2x10-1 Pa	150 micron	4/5	2880	1/4" SAE
VP265	6.5 CFM, 184 L/min	7.8 CFM, 221 L/min	2x10-1 Pa	150 micron	1	2880	1/4" SAE
VP285	8.0 CFM, 226 L/min	9.6 CFM, 272 L/min	2x10-1 Pa	150 micron	1	2880	1/4" SAE
VP2100	10.0 CFM, 283 L/min	12 CFM, 340 L/min	2x10-1 Pa	150 micron	1	2880	1/4" SAE

## Vacuum Pump (Lithium Battery)



Model	1-Stage				2-Stage			
	VI-1DLi	VI-1.5DLi	VI-2DLi	VI-3DLi	2VI-1DLi	2VI-1.5DLi	2VI-2DLi	2VI-3DLi
Flow Rate (CFM)	2	3	4	6	2	3	4	6
Ultimate Vacuum (Micron)	150	150	150	150	15	15	15	15
Motor Power (W)	150	180	250	370	200	370	370	550
Intake Fittings	1/4" Flare	1/4" & 3/8" Flare	1/4" & 3/8" Flare	1/4" & 3/8" Flare	1/4" Flare	1/4" & 3/8" Flare	1/4" & 3/8" Flare	1/4" & 3/8" Flare
Dimensions (mm)	274x92x196	364x118x283	364x118x283	364x118x283	274x92x196	364x118x283	364x118x283	364x118x283
Oil Capacity (ml)	250	330	330	500	200	330	500	500

## Power Supply Plugs



A01 Europe Plug    A02 Europe Plug    A03 Europe Plug    A04 Europe Plug    A05 American Plug    A06 Taiwan Plug    A07 Australia Plug    A08 Europe Plug

### Refrigerant Recovery Unit



Model	RR12L (R32)	RR24L (R32)					
Refrigerants	III: R-12, R-134a, R-401C, R-406A, R-500,1234YF IV: R-22, R-401A, R-401B, R-402B, R-407C, R-407D, R-408A,R-409A, R-411A, R-411B, R-412A, R-502, R-509 V: R-402A, R-404A, R-407A, R-407B, R-410A, R-507, R-32						
Power	220-240VAC 50-60Hz	110-120VAC 60Hz					
Motor	3/4HP	1HP					
Motor Speed	1450RPM/1750RPM	1750RPM					
Maximal Current Draw	5A	10A					
Compressor	Oil-less, Air-cooled, Piston						
High Pressure Shou-off	38.5bar/3850KPa (558psi)						
Recovery Rate	III	IV	V	III	IV	V	
	Vapor	0.23kg/min	0.25kg/min	0.26kg/min	0.46kg/min	0.50kg/min	0.52kg/min
	Liquid	1.57kg/min	1.81kg/min	1.85kg/min	3.14kg/min	3.62kg/min	3.70kg/min
	Push / Pull	4.64kg/min	5.57kg/min	6.22kg/min	7.47kg/min	8.37kg/min	9.95kg/min
Operating Temperature	0°C-40°C						
Dimensions	418mm×250mm×345mm						
Net Weight	14kg			15kg			



6A, oil-less, Air-cooled, 2 Piston style

Part No.	WK-520			
Refrigerant gas	Category I	R12 R134A R401C R406A R500		
	Category II	R22 R401A R401B R402B R407C R407D R408A R409A R411A R411B R412A R502 R509		
	Category III	R402A R404A R407A R407B R410A R507		
Recovery rate (kg/min)	Category IV	Category V	Category VI	
	Gas	0.46kg/min	0.50kg/min	0.52kg/min
	Liquid	3.14kg/min	3.62kg/min	3.7kg/min
	Push/Pull	9.28kg/min	11.04kg/min	12.44kg/min

### Recovery Machine

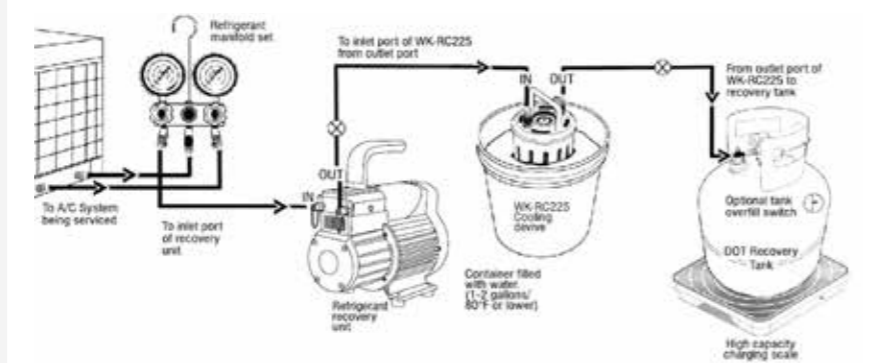
WK-225



Refrigerant Cooling Device WK-RC225



Part No.	WK-225			
Part No.	Push/Pull	Liquid	Vapor	High Temp Vapor (*104F)
Recovery Rate	kg/min			
R22	14.3	4.02	0.27	0.39
R134a	11.64	3.54	10.22	N/A
R407C	13.22	4.31	80.24	N/A
E410A	14.38	5.42	30.319	0.37



### Manifold



FC-136G



FC-R136G



FC-N136G



FC-436G



FC-536G



FC-636G

Part No.	Description
FC-136G	aluminium body, sight glass, 2 gauges, 336RYB hose.
FC-R136G	aluminium body, sight glass, 2 gauges, with rubber boots, 336RYB hose.
FC-N136G	aluminium body, sight glass, 2 gauges, with rubber boots, 336RYB hose.
FC-436G	aluminium body, sight glass, 2 gauges, 336RYB hose.
FC-536G	brass body, sight glass, 2 gauges, 336RYB hose.
FC-636G	brass body, 2 gauges, 336RYB hose.

\* Please indicate refrigerants, max 4 types in each gauge. \* Please indicate length of hose - 90cm,150,180cm and more.

### Digital Manifolds



FC-E301

**Features:**

Applied CFCs, HCFCs, HFCs refrigerant. Accurate superheat and sub-cooling temperature display. High Side pressure Display Range: Opsig to 725 psig. Low Side Pressure Display Range: Opsig to 435 psig. Vacuum Display Range: 29.2 in. Hg to 0 in.Hg. Temperature Display Range: -40°F to 203°F (-40°C to 95°C).

Description
2Valve Digital manifolds + 3 pcs of charge hose. Working pressure, 800PSI, Burst. 4000PSI + 1pc of 9V Battery + 2pcs of temperature sensor + 1 pc of vacuum sensor + 1pc of suitcase + 1 set of QC-L/QC-H + 1 pc of can tap valve + 1 set of Hose-seal, Gasket & Core Kit

### R1234YF Manifolds



FC60-1234MK

**Features:**

High quality aluminum alloy valve body. Gentle and comfortable design hard knob structure. Prevalent streamline design pressure gauge. Durable product quality.

Description
Manifold Gauge Set Aluminum Valve Body Connection:M12-1.5 60" charging hose. 800-4000PSI

### Refrigerant Charging Scale



RCS-7040



RCS-N9030 with auto-charge

Part No.	RCS-7040	RCS-N9030
Capacity	100KGS/220LB	100KGS/220LB
Accuracy	±0.5% of reading ±1 least	±0.5% of reading ±1 least
Resolution	±5g/0.010 IB/0.25 OZ	±0.25 OZ/5G
Platform Size	223mm x 223mm	223mm x 223mm
Power	5 x 1.5V alkaline battery(7.5VDC)	5 x 1.5V alkaline battery(7.5VDC)
Battery Life	30 hours continuous use	60 hours continuous use

**Refrigerant Charging Scale**



Model	Max Capacity	Resolution	Accuracy	Power Supply	Operating Temperature	Storage Temperature	Overall Size
RCS-220C	100kg/220lb	5g/0.2oz	±0.5% reg + 10g	6LR61 9V	-10°C~40°C/14°F~104°F	-15°C~50°C/5°F~122°F	227 x 227 x 70mm/ 8.9 x 2.8 x 2.8 inch
RCS-220V	100kg/220lb	5g/0.2oz	±0.5% reg + 10g	6LR61 9V	-10°C~40°C/14°F~104°F	-15°C~50°C/5°F~122°F	227 x 227 x 70mm/ 8.9 x 2.8 x 2.8 inch

Model	Max Capacity	Resolution	Accuracy	Power Supply	Operating Temperature	Storage Temperature	Overall Size	Max Working Pressure	IN/OUT Fittings
RCS-320C	100kg/220lb	5g/0.2oz	±0.05% rdg+10g	6 AAA alkaline battery	-10°C~40°C/ 14°F~104°F	-15°C~50°C/ 5°F~122°F	270 x 270 x 73mm	-	-
RCS-320V	100kg/220lb	5g/0.2oz	±0.05% rdg+10g	6AAA+6AA alkaline battery	-10°C~40°C/ 14°F~104°F	-15°C~50°C/ 5°F~122°F	270 x 270 x 73mm	500Psi (34.5Bar)	1/4SAE Male

**Charging Hose**



Part No.	Size	Connection	Description
336RYB-B	3-36"	1/4" SAE	600~3000psi, for R22, R134a, R404a, R407c, R507
360RYB-B	3-60"	1/4" SAE	
372RYB-B	3-72"	1/4" SAE	
M-336RYB-B	3-36"	1/4" SAE	600~3000psi, for R22, R134a, R404a, R407c, R507, with ball valves in the middle of hose.
M-360RYB-B	3-60"	1/4" SAE	
M-372RYB-B	3-72"	1/4" SAE	
E-336RYB-B	3-36"	1/4" SAE	600~3000psi, for R22, R134a, R404a, R407c, R507, with ball valves in the end of hose.
E-360RYB-B	3-60"	1/4" SAE	
E-372RYB-B	3-72"	1/4" SAE	
336RYB-C	3-36"	1/4" or 5/16" SAE	800~4000psi, for R32, R410a
360RYB-C	3-60"	1/4" or 5/16" SAE	
372RYB-C	3-72"	1/4" or 5/16" SAE	
M-336RYB-C	3-36"	1/4" or 5/16" SAE	800~4000psi, for R32, R410a with ball valves in the middle of hose.
M-360RYB-C	3-60"	1/4" or 5/16" SAE	
M-372RYB-C	3-72"	1/4" or 5/16" SAE	
E-336RYB-C	3-36"	1/4" or 5/16" SAE	800~4000psi, for R32, R410a with ball valves in the end of hose.
E-360RYB-C	3-60"	1/4" or 5/16" SAE	
E-372RYB-C	3-72"	1/4" or 5/16" SAE	

\* 1/2" ACME or other connection size available upon customer requirements

**Color-coded Pressure and Compound Gauge**



Part No.	Description
RG-250	Blue compound 30" -0-250 PSI, class 2.5, connection, bottom 1/8" NPT, 2-3/4" dia
RG-500	Red pressure 0-500PSI, class 2.5, connection bottom 1/8" NPT, 2-3/4" dia
250-GF	Compound filled glycerine 30" -0-250 PSI class 1.6, connection back 1/4" SAE, 2-3/4" dia, stainless steel frame
500-GF	Pressure filled glycerine 0-500 PSI, class 1.6, connection back 1/4" SAE, 2-3/4" dia, stainless steel frame
250B-GF	Compound filled glycerine 0-250 PSI, class 1.6, connection bottom 1/8" NPT, 2-3/4" dia, stainless steel frame
500B-GF	Pressure filled glycerine 0-500PSI, class 1.6, connection bottom 1/8NPT, 2-3/4" dia, stainless frame
PG-30L	R22, R290, R32, R404A, R407C, R134A, R410A... Build-in 78 refrigerants 1/8NPT, 0~500psi, Mpa, kPa, bar, psi, kgf/cm2, mmHg
PG-30H	R22, R290, R32, R404A, R407C, R134A, R410A... Build-in 78 refrigerants 1/8NPT, 0~800psi, Mpa, kPa, bar, psi, kgf/cm2, mmHg

**Automotive Quick Coupler**

New Quick Coupler: Direct Plug-In, Self-hermetic



### Hose-seal, Gasket & Core Kit



CH-236



CH-237



CH-238



CH-239

Part No.	QTY	Description
CH-9520C	10	Valve Cores
CH-9800	10	R134 Valve Cores
CH-L08	5	8mm Low Side
CH-VO66	5	For peugeot/Volvo
CH-H10	5	10mm High Side
CH-GMH	5	For GM High
CH-1213P	1	Valve Core remover
CH-1213AL	1	Valve Core remover
CH-9520C	10	Valve Core
CH-9800	10	R134 Valve Core
OR9134-4	10	R410 5/16" SAE Hose Gasket
OR501-3	30	R12 1/4" SAE Hose Gasket
OGB79583	10	1/4" SAE Depressor
ORQCL-3	10	for QC-L
ORQCH-3	10	for QC-H
ORQC-3	10	for QC-12L
ORQC-4	10	for QC-12H
OR340-2	10	for QC-340
OR146	10	for QC-146 CA-04x06 CA-04x08
ORVCR	10	for VCR-04
OR501-3	15	for R12 1/4" SAE Hose Gasket
OR9134-4	10	for R10 5/16" SAE Hose Gasket
OR501-3H	15	for R134 1/4" SAE Hose Gasket
CH-1213AL	1	Valve Core remover
CH-9520C	10	Valve Core
OGB79583P1	10	1/4" SAE Depressor
OR9134-4	10	R410 5/16" SAE Hose Gasket
OR501-3	30	R12 1/4" SAE Hose Gasket
OGB79583	10	1/4" SAE Depressor

### Dye and Oil Injector



FC-UV01L

FC-UV02L

### Valve Core Tool



VC15



VC183

### Oil Charging Pump



PCO-1

PCO-2

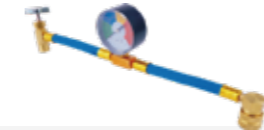
PCO-4

### Automotive Refrigerant Charging Tools

FC-AL801G70



FC-BR801G50



FC-BR801G70



### Automotive Adapter Kit



FC-01A(CH-135)

FC-01B(CH-138)

Part No.	Description
FC-01A (CH-135)	Complete kit: red hose, blue hoses & 3pcs 90 adapter
FC-01B (CH-138)	Complete Kit: red hoses, blue hoses & 3pcs 90 adapter & 3pcs connectors

### Single Gauge Valve



FC-466G



FC-467G



FC-468G



FC-470



FC-471L



FC-471H

Part No.	Description
FC-466G	Charging and testing unit
FC-467G	Aluminium body
FC-468G	Aluminium body with sight glass

Part No.	Description
FC-470	Aluminium body with sigh glass, low pressure gauge
FC-471L	Aluminium body, low pressure gauge
FC-471H	Aluminium body, high pressure gauge

### Can Tap Valve



FC-336



FC-334  
FC-335  
FC-337



FC-338  
FC-339



FC-340



FC-1020



Part No.	Description
FC-334	Refrigerant can tap valve, 1/4" SAE outlet valve bottom and female thread with 1/2"-16UNF SAE can thread.
FC-335	Refrigerant can tap valve, 1/4" SAE outlet valve bottom and female thread fitted with 1/4" SAE can thread.
FC-336	Refrigerant can tap valve, 1/4" SAE outlet valve bottom and female thread fitted with 7/16"-27UNF can thread.
FC-337	Refrigerant can tap valve, 1/4" SAE outlet valve bottom and female thread fitted with 7/16"-27UNF can thread.
FC-338	Refrigerant can tap valve, 1/4" SAE outlet valve bottom and female thread fitted with 12mmx1.25 can thread.
FC-339	Refrigerant can tap valve, 1/4" SAE outlet valve bottom and female thread fitted with 14mmx1.25 can thread.
FC-340	Refrigerant can tap valve for both R12 & R134a.
FC-1020	Support 1 kg GAS can, 1/4" SAE - Mx1/4" SAE-F.

### Quick Coupler



WX-02 Connection 1/4"  
Rotate Quick Coupler

### Ball Valve for Charging-hose



Part No.	Description
BC-01	1/4" M*5/16"F
BC-02	5/16" M*1/4"F
BC-03	1/4" M*1/4"F

### Piercing Valve



Part No.	Tubing Size O.D.
PV-1	1/4", 5/16", 3/8"
PV-341	3/16"~3/8"

### Clamp Meter



Part No.	AC Current	AC Voltage	Resistance
FC-2017	200/600A ±(2.0%rdg+5dgt)	200/600A ±(1.5%rdg+5dgt)	200Ω ±(1.5%rdg+5dgt)
UT-202	2/20/200/400A ±(2.0%rdg+5dgt)	2/20/200/600V ±(1.5%rdg+5dgt)	200/2K/20K/2M/20M ±(1.0%rdg+3dgt)
FC-266	200/1000A ±(2.0%rdg+5dgt)	750V ±(1.0%rdg+5dgt)	200/20KΩ ±(1.0%rdg+2dgt)
FC-260D	200/1000A ±(2.0%rdg+5dgt)	200/750V ±(1.0%rdg+5dgt)	200/2K/20K/2M/20MΩ ±(1.0%rdg+3dgt)

### Refrigerant Gas Leak Detector

#### LD-200

R1234yf / R290 / R600a / R32

- LD-200 Leak Detector offers the greatest sensitivity and fastest response of refrigerant leaks.
- Refrigerant: CFC, HCFC, HFC, HC, HFO etc.
- Sensitivity: 3g (0.1 Oz)/year
- Power Supply: Rechargeable Lithium battery 3000mAh
- Warm-up Time: 30s
- Response Time: <3s
- Certificate & Approval: CE Rohs, SAF J2791, SAF J2913



#### LD-CO2

CO2

- LD-CO2 is the most technologically advanced of its kind. The fully automatic LD-CO2 low power requirements, small size and high sensitivity combine to create a tool which is easy to handle and ultra effective at locating even the most difficult-to-find leaks.
- Refrigerant: R-744, CO2
- Sensitivity: 400-4000ppm
- Power Supply: Rechargeable Lithium battery 3000mAh
- Warm-up Time: 30s · Response Time: <3s
- Certificate & Approval: CE Rohs, SAE J2791, SAE J2913



#### HLD-101

- Detects all halogenated refrigerants
- Detect once power on, no need manual-adjustment
- Vari-speed sensitivity adjustment
- Enter into the best state of detecting automatically while adjusting the sensitivity.
- Tricolor battery voltage indication
- Equipped with quality sensor, high sensitivity, 6gr/yr
- Inner precise IC with ultra-low consume circuit design, more stable, longer battery time.



HLD-102



HLD-201



HLD-202

	HLD-102	HLD-201	HLD-202
Dimensions	17CMx6CMx3.8CM	22.9CMx6.5CMx6.5CM	22.9CMx6.5CMx6.5CM
Batteries	2x1.5V AA'	2x1.5V AA'	2x1.5V AA'
	Alkaline Batteries (3VDC)	Alkaline Batteries (3VDC)	Alkaline Batteries (3VDC)
Battery Life	40hours	40hours	40hours
Sensitivity	<3G/year (0.1 oz/yr)	<3G/year (0.1 oz/yr)	<3G/year (0.1 oz/yr)
Sensor Lifetime	Approx. 30hours	Approx. 30hours	Approx. 30hours
Operation Temperature	+32~+122°F(0~+50°C)	+32~+122°F(0~+50°C)	+32~+122°F(0~+50°C)
Warm Up Time	<2SEC	<10 SEC	<10 SEC
Response Time	Instantaneous	Instantaneous	Instantaneous
Reset Time	Instantaneous	Instantaneous	Instantaneous
Probe Length	12" (30cm)	14" (33.5cm)	14" (33.5cm)

### Digital Multimeter



UT-33D



UT-139C



FC-2010



FC-838

Part No.	DC Current	AC Voltage	Resistance	DC Voltage
UT-33D	2m/20m/200m/10A	200/200V	200/2000/20k/200k/20M/200M	0.2/2/20/200/500V
UT139C	600μA/6000μA/60mA/600mA/6A/10	6V/60V/600V	600Ω/6KΩ/60KΩ/600KΩ/6MΩ/60MΩ	600mV/6V/60V/600V
FC-2010	A2m/20m/200m/10A	200/600V	200/2000/20k/200k/2M/200M	200m/2/20/200/600V
FC-838	2000u/20m/200m/10A	200/750V	200/2000/20k/2000k	200m/2000m/20/200/1000V



**UT-300A Infrared Thermometer**  
 Temperature Range: -18C~280°C  
 Repeat Precision: ±0.5°C  
 Resolution: 0.1°C  
 Distance to Spot size: 10:1  
 Response Time: 500mS  
 Emissivity: 0.95



**AM-4836V**  
 Range: 0.4~45.0 ±(2%n+0.1m/s)  
 Operating Temperature: 0~60°C  
 Function: Auto power-off, Data hold, wind sleep, units Switch, Auto Record time setup, Low Battery Display, Display Backlight



**LM-60 Distance Meter**  
 Accuracy: ±2mm  
 Measuring Distance(m): 0.05~60m  
 Unit: m/in/ft  
 Laser Class: 620~680nm, <1mw  
 Multiple Lines Display: 3 lines  
 Auto Power Off: around 3 minutes



**KS-7115 Capacitance Testers**  
 Display: 19 Power: 9Vx1(6F22)  
 Test pen: Part No: Ks-3008  
 Weight: Approx. 315g including battery  
 Dimension: 170(L)x80(W)x50(H)mm  
 Standard Quantity Per Carton: 40PCS  
 Standard Carton Measurement: 540x375x240mm  
 Standard Carton Gross Weight: 18Kg

### Mini Series

<b>Mini Infrared Thermometer</b> <b>UT300S</b> Temperature: -32°C~400°C		<b>Mini Temperature &amp; Humidity Meter</b> <b>UT333</b> Humidity: 0~99%RH Temperature: -10~60°C		<b>Mini Sound Meter</b> <b>UT353</b> Noise: 30~130dB		<b>Mini Anemometer</b> <b>UT363</b> Wind Speed: 0~30m/s	
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### Digital Programmable Vacuum Meter

	Part No. <b>FC-VG89</b> Vacuum range 1000pa-0.01pa (7500~0.075Microns) Operating Temperature range -40°C~45°C Battery model 4 x 1.5V batteries Battery life 300 hours of using Vacuum meter units pa, mBar, mmHg, mTorr, inHg, Micron
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### Tubing Tool Kit

\* Please order according to packing condition

<p>12 PCS/CTN CT-275L</p>	<p>10 PCS/CTN CT-278L</p>	<p>10 PCS/CTN CT-808FT-L</p>	<p>5 PCS/CTN CT-404A-L</p>	<p>10 PCS/CTN WK-809AM</p>
<p>5 PCS/CTN CT-100</p>	<p>5 PCS/CTN CT-300</p>	<p>5 PCS/CTN CT-999</p>	<p>10 PCS/CTN CT-519FT-L</p>	<p>10 PCS/CTN CT-808AM-L</p>

Part No.	Description	CapaCity
CT-275L	Flaring & swaging tool kit	1/8", 3/16", 1/4", 5/16", 1/2", 5/8", & 3/4" O.D. tubing and 5 swaging adaptors which cover 3/16", 1/4", 5/16", 3/8", 1/2", 5/8", & 3/4" O.D.
CT-278L	CT-275 & CT274 & CT-122	see above
CT-808FT-L	flaring tool and CT-532 & CT-207	3/16", 1/4", 5/16", 3/8", 1/2", 5/8", & 3/4" O.D. tubing and 5mm, 6mm, 8mm, 10mm, 12mm, 16mm & 19mm O.D. tubing
CT-400A-L	Hydraulic expander & flaring tools	3/16", 1/4", 5/16", 3/8", 1/2", 5/8", 3/4" & 7/8" O.D. tubing
WK-809AM	Flaring Tool	For inch and metric: 6mm, 1/4", 5/16"(8mm), 3/8", 10mm, 12mm, 1/2", 5/8"(16mm) & 3/4" (19mm) O.D.
CT-100A	Tubing tool kit	Expander heads: 3/8", 1/2", 5/8", 3/4", 7/8", 1", 1-1/8", FC-312 & FC-208
CT-100M	Tubing tool kit	Expander heads: 10, 12, 16, 19, 22, 25, 28mm, FC-312 & FC-208
CT-300A	Tubing tool kit	Expander heads: 3/8", 1/2", 5/8", 3/4", 7/8", 1", 1-1/8", FC-312 & FC-208
CT-300M	Tubing tool kit	Expander heads: 10mm, 12mm, 16mm, 19mm, 22mm, 25mm, 28mm, FC-312 & FC-208
CT-999	Bender kit	Expander heads: 1/4", 5/16", 3/8", 1/2", 5/8", 3/4" & 7/8" O.D.
CT-519FT-L	Tubing tool kit	For 1/4", 5/16", 3/8", 1/2", 5/8", 3/4", O.D. Tubing and 6mm, 8mm, 10mm, 12mm, 16mm, 19mm, O.D.
CT-808AM-L	45 Eccentric Cone Type Flaring Tools	For inch: 1/4", 5/16", 3/8", 1/2", 5/8", & 3/4" O.D. Tubing (6mm, 8mm, 12mm, 16mm & 19mm, O.D. Tubing

### New Tubing Tool Kit



<p>ST-519FT</p>	<p>ST-100A</p>	<p>ST-806FT-L</p>	<p>ST-E809AM-L</p>	<p>ST-R999</p>
Description 1/4", 3/8", 1/2", 5/8"(16mm), 3/4"(19mm) Optional Flaring Clamps: 5/16"(8mm), 6mm, 9mm, 10mm, 12mm	Description For Inch: 3/8", 1/2", 5/8", 3/4", 7/8", 1", 1-1/8" O.D. Tubing	Description For Inch and Metric: 1/4", 5/16", 3/8", 1/2", 5/8", 3/4" & 6, 9, 10, 12, 16, 19mm	Description Metric & Inch 2 in 1: 6mm, 1/4", 9mm, 3/8", 10mm, 12mm, 1/2", 5/8"(16mm) & (19mm)	Description For Inch: 1/4", 5/16", 3/8", 1/2", 5/8", 3/4", 7/8" For Metric: 6, 8, 10, 12, 16, 19, 22mm In Blow-mold Carrying Case Aluminum Wheel

### New Tube Cutter

<p>ST-428</p>	<p>ST-532</p>	<p>ST-432S</p>	<p>ST-532S</p>	<p>ST-650S</p>
Description Roller Type Tube Cutter For Φ3/16" to 1-1/8"(4-28mm)	Description Roller Type Tube Cutter For Φ3/16" to 1-1/4"(5-32mm)	Description Smart Spring Tube Cutter For Φ3/16" to 1-1/4"(4-32mm)	Description Smart Spring Tube Cutter For Φ3/16" to 1-1/4"(5-32mm)	Description Smart Spring Tube Cutter For Φ 1-4" to 2"(6-50mm)

### New Tube Bender

<p>ST-612A</p>	<p>ST-N364A-08</p>
Part No. <b>ST-612A</b> Description For 1/4", 3/8" & 1/2" O.D. Tubing (5-32mm)	Part No. <b>ST-N364A-06</b> Description use for 3/8" O.D. Tubing
Part No. <b>ST-N364A-08</b> Description use for 1/2" O.D. Tubing	Part No. <b>ST-N364A-10</b> Description use for 5/8" O.D. Tubing
Part No. <b>ST-N364A-12</b> Description use for 3/4" O.D. Tubing	Part No. <b>ST-N364A-14</b> Description use for 7/8" O.D. Tubing

### Flaring & Swaging Tools



Part No.	Description	CapaCity
CT-193	Set of swaging punches	1/4", 5/16", 3/8", 1/2" & 5/8"
CT-94	3-in-1 swaging punch	1/2", 5/8" & 7/8"
CT-95	5-in-1 swaging punch	1/4", 5/16", 3/8", 1/2" & 5/8"
CT-195	Flaring tool	3/16", 1/4", 5/16", 3/8", 7/16", 1/2" & 5/8" O.D. Tubing
CT-525F	Flaring tool	5-16mm or 3/16" - 5/8" O.D. Tubing
CT-622	Tube expander	6mm, 8mm, 9mm, 10mm, 12mm, 1/4", 5/16", 3/8", 1/2", 5/8", 3/4" & 7/8" O.D.

### Tube Cutter

\* Please order according to packing condition

Part No. Description	Part No. Description	Part No. Description	Part No. Description	Part No. Description
CT-127 For 1/8"-5/8" O.D.	CT-174 For 3/8"-1-1/8" O.D.	CT-274 For 1/8"-1-1/8" O.D.	CT-312 For 1/4"-1-5/8" O.D.	CT-107 For 1/4"-2" O.D.
220 PCS/CTN	100 PCS/CTN	72 PCS/CTN	56 PCS/CTN	42 PCS/CTN

### Tube Cutter (Roller Type)

\* Please order according to packing condition

Part No. Description	Part No. Description	Part No. Description	Part No. Description	Part No. Description
CT-319 For 1/8"-3/4" O.D.	CT-428 For 3/16"-1-1/8" O.D.	CT-532 For 3/16"-1-1/4" O.D.	CT-650 For 1/4"-2" O.D.	CT-670 For 1/4"-2-3/4" O.D.
120 PCS/CTN	78 PCS/CTN	32 PCS/CTN	32 PCS/CTN	15 PCS/CTN

### Lever Type Tube Bender

\* Please order according to packing condition



Part No.	Qty/Ctn	O.D.Tubing	Description
CT-364A-06	24 PCS/CTN	3/8"	Bend radius 23mm
CT-364A-08	6 PCS/CTN	1/2"	Bend radius 35.8mm
CT-364A-10	6 PCS/CTN	5/8"	Bend radius 54.4mm
CT-364A-12	6 PCS/CTN	3/4"	Bend radius 75.3mm
CT-364A-14	6 PCS/CTN	7/8"	Bend radius 82.1mm
CT-364M-08	6 PCS/CTN	12mm	Bend radius 35.8mm
CT-364M-10	6 PCS/CTN	16mm	Bend radius 54.4mm
CT-364M-12	12 PCS/CTN	19mm	Bend radius 75.3mm
CT-364M-14	12 PCS/CTN	22mm	Bend radius 82.1mm
CT-N368-180	40 PCS/CTN	1/4", 5/16" & 3/8"	3-in-1 180° Bend radius 24mm

### Tube Bender



Part No.	O.D. Tubing	Description
CT-102-04	1/4"	Spring bender, length 10"
CT-102-05	5/16"	Spring bender, length 10"
CT-102-06	3/8"	Spring bender, length 10"
CT-102-08	1/2"	Spring bender, length 12"
CT-102-10	5/8"	Spring bender, length 14"
CT-102-12	3/4"	Spring bender, length 14"

### Other Tubing Tools



Part No.	Description
PTC-01	Capillary tube cutter for 1mm~3mm O.D.
PTC-02	Cutter for all sizes of capillary tube without collapsing or swaging the tubes
CT-207	Handy deburrer, Blade can be sevelled.
CT-208	Inner-outer reamer, plastic body, 3/16" to 1/2"
CT-351	Fin straightener; 8, 9, 10, 12, 14 & 15 spacing per inch
CT-352	Steel fin straightener

### Electric Cordless Flaring Tool

CT-E806AM-L 5 PCS/CTN

Part No. WK-E806AM+WK-532 +CT-207+Spare battery+Charger(9.6V) +2 Steel bar

Description For inch: 1/4", 5/16", 3/8", 1/2", 5/8" & 3/4" O.D. Tubing 6mm, 8mm, 10mm, 12mm, 16mm & 19mm O.D. Tubing Packed in hand carrying plastic case.



Part No.	Description	
CT-201B	7" Pinch-off-plier	
CT-122	1/4", 3/8", 3/16" & 5/16" square ratchet wrench	
CT-123	1/4", 3/16" square & 9/16", 1/2" hex ratchet wrench	
Part No.	Description	Description
CT-501	32mm Inspect Mirror	Lrngth: 127~500mm
CT-502	50mm Inspect Mirror	Lrngth: 200~410mm
CT-503	Pick up tool	Lrngth: 126~637mm

### Tee-Extractor Sets

Extractor Heads Size							
10mm	12mm	16mm	19mm	22mm	25mm	28mm	32mm
3/8"	1/2"	5/8"	3/4"	7/8"	1"	1-1/8"	1-1/4"



### Hydraulic Hose Compressing Tools



Heavy Duty Compressing Tools Fast & Convenient

Part No.	Description
CT-700	CT-700+7PCS Includes tablet compressing #6, #8, #10, #12, #5SRB, #8SRB, #10SRB, #12SRB O.D. Tubing Packed in hand carrying plastic case.

08

# WELDING TOOL

QUALITY DELIVERED



## Welding Gas



Part No.	Description
<b>MAPP</b>	CGA600 connection, 16 oz/cylinder



Part No.	Description
<b>Propane</b>	CGA600 connection, 14 oz/cylinder



Part No.	Description
<b>Oxygen</b>	CGA600 connection, 14 oz/cylinder

## Welding Torch

\* Please order according to packing condition

### T-AM

- Suggest to use with Mapp, Propane cylinder with CGA600 connection.
- Adjustable Flame
- Self-ignition
- Mini torch



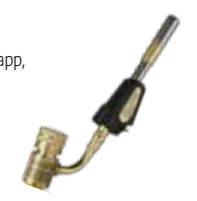
### T-A

- Suggest to use with Mapp, Propane cylinder with CGA600 connection.
- Adjustable Flame
- Self-ignition
- 360° swivel tube



### T-AS

- Suggest to use with Mapp, Propane cylinder with CGA600 connection.
- Reinforced Nozzle
- Self-ignition
- 360° swivel tube



### T-2B

- Suggest to use with Mapp, Propane cylinder with CGA600 connection.
- Adjustable Flame
- 360° swivel tube
- Double tube flame, welded large copper tube.



### T-2BA

- Suggest to use with Mapp, Propane cylinder with CGA600 connection.
- Reinforced Nozzle
- Self-ignition
- 360° swivel tube
- Double tube flame, welded large copper tube.



### T-3B

- Suggest to use with Mapp, Propane cylinder with CGA600 connection.
- Adjustable Flame
- 360° swivel tube
- Triple tube flame, welded large copper tube.



### T-B

- Suggest to use with Mapp, Propane cylinder with CGA600 connection.
- Adjustable Flame
- 360° swivel tube



### T-CA

- Suggest to use with Mapp, Propane cylinder with CGA600 connection.
- Adjustable Flame
- Self-ignition
- 1.5 meters hose.



### T-CA-FB

- Suggest to use with Mapp, Propane cylinder with CGA600 connection.
- Reinforced Nozzle
- Metal Ignitor
- 1.5 meters hose.



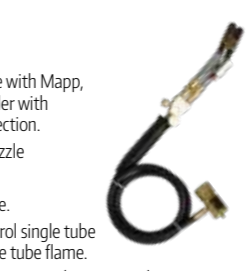
### T-C2A-2F

- Suggest to use with Mapp, Propane cylinder with CGA600 connection.
- Adjustable Flame
- Self-ignition.
- 1.5 meters hose.
- Switch to control single tube flame or double tube flame.
- 2 in 1 torch for 6-22mm(single flame) and 16-38mm(dual flame).



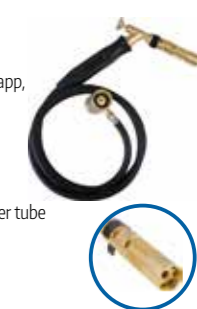
### T-C2A-2FB

- Suggest to use with Mapp, Propane cylinder with CGA600 connection.
- Reinforced Nozzle
- Metal Ignitor
- 1.5 meters hose.
- Switch to control single tube flame or double tube flame.
- 2 in 1 torch for 6-22mm(single flame) and 16-38mm(dual flame).



### T-CD

- Suggest to use with Mapp, Propane cylinder with CGA600 connection.
- Adjustable Flame.
- 1.5 meters hose.
- For welding large copper tube up to 38mm.



**BTM-7010**

- Suggest to use with Mapp, Propane cylinder with CGA600 connection.
- Mini Torch
- 360° swivel tube



**BTM-7012**

- Suggest to use with Mapp, Propane cylinder with CGA600 connection.
- Mini Torch
- 360° swivel tube



**BTS-8071**

- Suggest to use with Mapp, Propane cylinder with CGA600 connection.
- Easy to hold
- Self-ignitation
- 360° swivel tube



**BTS-8090**

- Suggest to use with Mapp, Propane cylinder with CGA600 connection.
- Easy to hold
- Self-ignitation
- 360° swivel tube



**BTS-8096**

- Suggest to use with Mapp, Propane cylinder with CGA600 connection.
- Easy to hold
- Self-ignitation
- 360° swivel tube



**HB-875B**

- Suggest to use with Mapp, Propane cylinder with CGA600 connection.
- Easy to hold
- Self-ignitation
- 360° swivel tube



**MRS-7014B**

- Suggest to use with Mapp, Propane cylinder with CGA600 connection.
- Easy to hold
- Self-ignitation
- 360° swivel tube



**T-DS**

- Suggest to use with Mapp, Propane cylinder with CGA600 connection.
- Easy to hold
- Self-ignitation
- 360° swivel tube



**T-8000**

- Suggest to use with Mapp, Propane cylinder with CGA600 connection.
- Easy to hold
- Self-ignitation
- 360° swivel tube



**Welding Torch**

\* Please order according to packing condition



**H01-6A**  
French Type Welding Torch  
20 PCS/CTN



**H01-6B**  
French Type Welding Torch  
20 PCS/CTN



**H01-6C**  
French Type Welding Torch  
20 PCS/CTN



**H01-6F**  
French Type Welding Torch  
20 PCS/CTN



**H02-6**  
Switzerland Type Welding Torch  
20 PCS/CTN



**H01-6**  
Japanese Type Welding Torch  
20 PCS/CTN

**Tool kit**



**HCW-1411**

Content	
1 pc empty cylinder 2L for Oxygen	1 pc of Welding Torch
1 pc Mapp gas (optional)	1 set of 1.5m Twin hose
1 pc of Oxygen Regulator	2pcs of Welding Nozzle
1 pc of Fuel gas Regulator	1 pc of Sparker
1 pc 2L of Oxygen Empty Regulator	1 pc Plastic Case

**HCW-1704**



**Content:**

1. Oxygen Cylinder-4L
2. Oxygen Switch
3. Oxygen Pressure Reducer
4. Oxygen Pressure Gauge
5. Oxygen Crossover
6. Fuel Gas Cylinder-4L
7. Fuel-gas Pressure Reducer
8. Welding Torch
9. Oxygen Hose (red)
10. Oxygen Hose (black)
11. Fuel-gas Crossover

**HCW-11**

**Content:**

1. Oxygen Cylinder -2L
2. Fuel Gas Cylinder -0.6L with Connection ZG1/4"-19
3. Inner Diameter of Connection Hose - 4mm
4. With Anti-backfire Device
5. Torch for Welding Purpose
6. Plastic Case



**HCW-111**

**Content:**

1. Oxygen Cylinder -2L
2. Fuel Gas Cylinder -0.6L with Connection ZG1/4"-19
3. Inner Diameter of Connection Hose - 4mm
4. With Anti-backfire Device
5. Torch for Welding Purpose
6. Alum-Alloy Case

**HCW-22**

**Content:**

1. Oxygen Cylinder -2L
2. Fuel Gas Cylinder -0.6L
3. Inner Diameter of Connection Hose - 4mm
4. With Anti-backfire Device
5. Torch for Welding & Cutting Purpose
6. Plastic Case



**HCW-122**

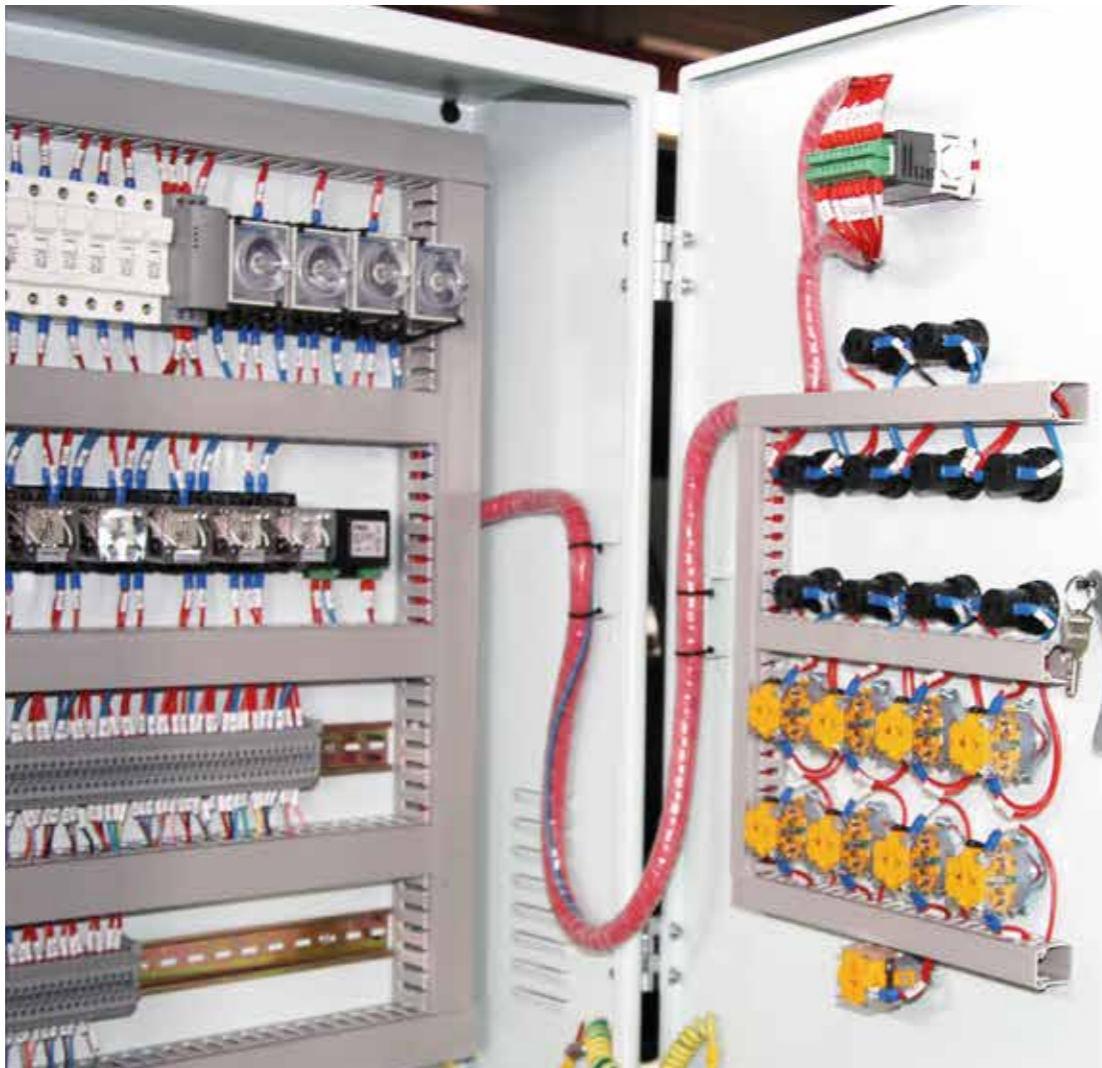
**Content:**

1. Oxygen Cylinder -2L
2. Fuel Gas Cylinder -0.6L
3. Inner Diameter of Connection Hose - 4mm
4. With Anti-backfire Device
5. Torch for Welding & Cutting Purpose
6. Alum-Alloy Case

09

# ELECTRICAL PARTS

QUALITY DELIVERED



## BC Series Run Capacitors (CBB65)

Available Round or Oval  
The widest selection of ratings  
Non-PCB capacitors



### Specifications:

Part No.	3(μf)~80(μf)
Reference Standard	GB/T 3667.1-2005, IEC 60252-1, UL810
Climatic Category	40/70/21
Capacitance Tolerance	±5%, ±10%, ±15%
Dissipation Factor	≤0.002(100Hz, C≤10μF) ≤0.006(100Hz, C≤33μF) ≤0.008(100Hz, C>33μF)

Insulation Resistance (IR×CN)	≥3000MΩ	
Voltage Proof	Between Terminals	2Un(2s)
	Between Terminals and Case	2000V(60s)
Rated Voltage (UN)	250/300/400/450/500/560V	
Rated Frequency (fN)	50/60Hz	
Class of Operation	Class C ( 3000h )	
Class of Safety Protection	S1(P1)	
Flame Retardant Grade	UL94V-0	
Leading-out Structure	Terminal or Wire	
Safety Approvals	CQC, TÜV, UL	
Inductance	16-60μH	
Storage Temperature	-40°C~70°C	
Capacitance Range (CN)	1μF~110μF	
Maximum Permissible Operating Voltage	1.1UN	

## CBB61 Series Run Capacitors

### Feature:

Capacitor for motor From 1μF~10μF  
Voltage 250V or 450Vature



### Specifications:

Reference Standard	GB/T 3667.1-2005, IEC 60252-1
Climatic Category	40/70/21
Capacitance Tolerance	±5%, ±10%, ±15%
Dissipation Factor	≤0.002(100Hz, 20°C)
Insulation Resistance (IR×CN)	≥3000MΩ

Voltage Proof	Between Terminals	2Un(2s)
	Between Terminals and Case	2000V(60s)
Rated Voltage (UN)	450/500V	
Rated Frequency (fN)	50/60Hz	
Class of Operation	Class C ( 3000h )	
Class of Safety Protection	S0(P0)	
Flame Retardant Grade	UL94V-0	
Leading-out Structure	Terminal or Wire	
Safety Approvals	CQC, TÜV	
Storage Temperature	-40°C~70°C	
Capacitance Range (CN)	0.5μF~35μF	
Maximum Permissible Operating Voltage	1.1UN	

## CBB Series Run Capacitors (CBB60)

A Type



B Type



C Type



### Specifications:

Part No.	4(μf)~30(μf)
Reference Standard	GB/T 3667.1-2005, IEC 60252-1, UL810
Climatic Category	40/70/21, 40/85/21
Capacitance Tolerance	±5%, ±10%, ±15%
Dissipation Factor	≤0.002(100Hz, C≤10μF) ≤0.006(100Hz, C≤35μF) ≤0.008(100Hz, C>35μF)

Insulation Resistance (IR×CN)	≥3000MΩ	
Voltage Proof	Between Terminals	2Un(2s)
	Between Terminals and Case	2000V(60s)
Rated Voltage (UN)	250/300/400/450/500/560V	
Rated Frequency (fN)	50/60Hz	
Class of Operation	Class C ( 3000h ), Class B ( 10000h )	
Class of Safety Protection	S0(P0)	
Flame Retardant Grade	UL94V-0	
Leading-out Structure	Terminal or Wire	
Safety Approvals	CQC, TÜV, UL	
Inductance	10-60μH	
Storage Temperature	-40°C~70°C, -40°C~85°C	
Capacitance Range (CN)	1μF~110μF	
Maximum Permissible Operating Voltage	1.1UN	

### MS Series Start Capacitors (CD60)



**Feature:**

- Plastic Case, Moisture and Oil Resistant
- Voltage from 110 VAC-330 VAC
- SEA-1 Meets EIA Type 1 Specifications
- SEA-2 Meets EIA Type 2 Specifications
- UL Recognized Capacitors

**Specifications:**

Operating Temperature	-45°C~+65°C
Voltage Range	110-330VAC
Capacitance Range	21-1800µF
Capacitance Tolerance	-0%~+20%
Operating Frequency	50-60Hz
Case Size	8 Standard Sizes from 1.437" x 2.750" - 2.562" x 4.365"
Termination	1/4" Quick Disconnect Terminals (Std.)
Meets Requirements of EIA-463-A	SEA-1 Meets Type 1, Heavy Duty, Specifications SEA-2 Meets Type 2, Standard Duty, Specifications

### Super Starters

SPP-5		SPP-6		SPP-8	
BRAND	REFERENCE PART NO.	BRAND	REFERENCE PART NO.	BRAND	REFERENCE PART NO.
MARS	32701	MARS	32702	KICKSTART	TO5
ROBERTSHAW	600-052	ROBERTSHAW	600-057	SUPCO	SPP8
SUPCO	SPP5	SUPCO	SPP6	A-1	WSX-1
GEMLINE	HS600	GEMLINE	HS650		

Item ID	Compressor Sizes	Volts
HS210	1/ 2 HP	220
HS410	1/4 and 1/3 HP	115
HS810	1/12 thru 1/5 HP	115

Part No.	Mars	Gemline	Robertshaw	Supco
SEC410	1/12 THRU 1/5	115	600-410	RCO410
SEC810	1/12 THRU 1/5	115	600-810	RCO810



### Potential Relay and Start Capacitor

- Covering Applications from 1 to 5 ton Units
- For Single Phase 208V, 230V, and 265V HVAC/R Applications (1-5 HP)
- Component Rated Life Expectancy of 50k Cycles
- Instant Restarts
- UL/CSA and CE Recognized
- 2 Wire Non-polarized System
- OEM Versions Available on Request

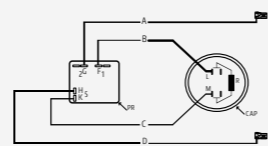


SEC-U1 / U2 / U3

**General Specifications:**

- Extends Life of Compressor
- Protect Internal Components
- Start A/C in 30-50% Less Time
- For Scroll/Reciprocating 208-240V Only
- Capacitor Size: 88-108MFD

**WIRING DIAGRAM**



	SEC-U1	SEC-U2	SEC-U3
Capacitance	108-130MFD	189-227MFD	270-324MFD
VAC	330	330	330
Frequency	50/60Hz	50/60Hz	50/60Hz
Dimensions	52.37mmx111.12mm	52.37mmx111.12mm	65.5mmx111.12mm

### Two Pole Contactors

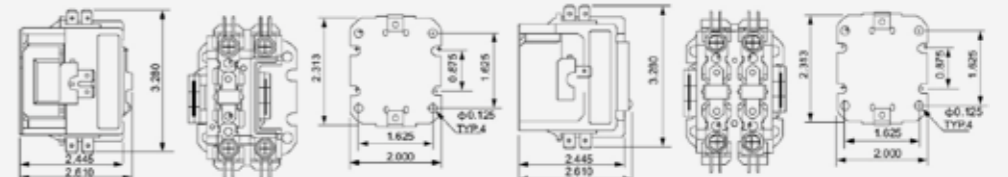


**Products Details**

Model	QCA-302	QCB-302	QCC-302	QCA-402	QCB-402	QCC-402
FIL	30	30	30	40	40	40
Poles	2	2	2	2	2	2
Resistive Amps	40	40	40	50	50	50
Coil Voltage	24	120	240	24	120	240
Hertz	50/60	50/60	50/60	50/60	50/60	50/60
Locked Rotor AMPS 240/480/600	180/150/120	180/150/120	180/150/120	240/200/160	240/200/160	240/200/160

- Electrical Contact Ratings: 20A-90A
- Electrical Coil Ratings: 24-600V life rating, 100,000 & 250,000 cycle options.
- Options: 1, 2, 3, 4 pole fits 24,120 240 and 480 VAC coils wide range of electrical ratings screw, box or pressure plate connections NEMA mounting base.
- NO/NC end Switch Kits.
- Terminations: #10-32 screw - 20, 25 & 30 FLA Models, Box Lug - 40, 50, 60, 75 & 90 FLA Models
- Temperature Range: -40°F to +150°F / -40°C to +65°C

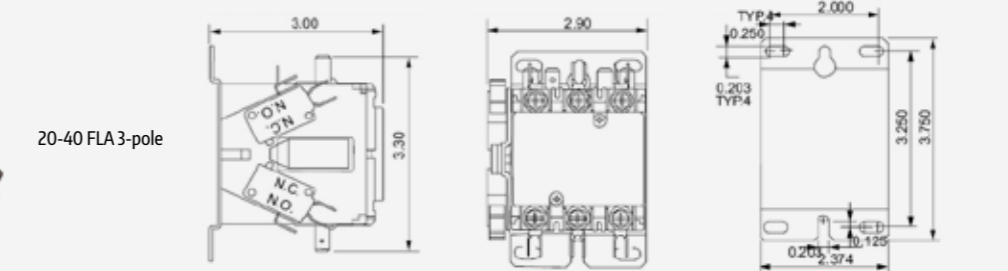
**Outline Dimensions: 1.5 & 3 pole (shown in inches)**  
XKJL 1-2P-30A-24V



### Three Pole Contactors



**Outline Dimensions: 20-40FLA, 3 pole (shown in inches)**



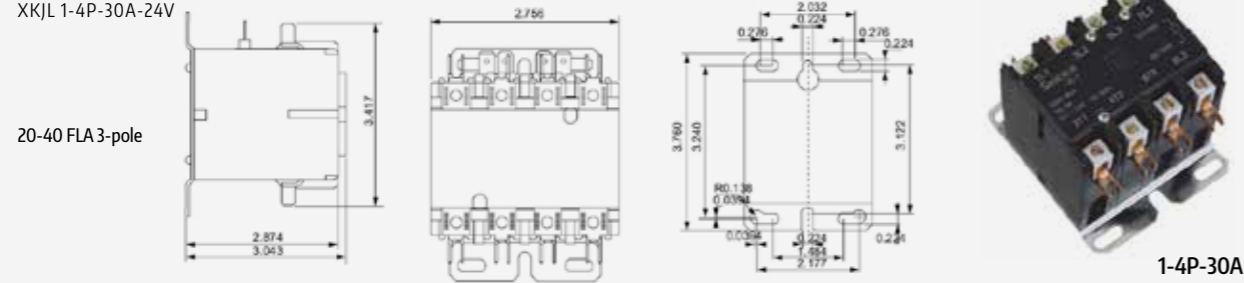
**Products Details**

Model	QCA-303	QCB-303	QCC-303	QCA-403	QCB-403	QCC-403
FIL	30	30	30	40	40	40
Poles	3	3	3	3	3	3
Resistive Amps	40	40	40	50	50	50
Coil Voltage	24	120	240	24	120	240
Hertz	50/60	50/60	50/60	50/60	50/60	50/60
Locked Rotor AMPS 240/480/600	180/150/120	180/150/120	180/150/120	240/200/160	240/200/160	240/200/160

- Electrical Contact Ratings: 20A-90A
- Electrical Coil Ratings: 24-600V life rating, 100,000 & 250,000 cycle options.
- Options: 1, 2, 3, 4 pole fits 24,120 240 and 480 VAC coils wide range of electrical ratings screw, box or pressure plate connections NEMA mounting base.
- NO/NC end Switch kits.
- Terminations: #10-32 screw - 20, 25 & 30 FLA Models, Box Lug - 40, 50, 60, 75 & 90 FLA Models
- Temperature Range: -40°F to +150°F / -40°C to +65°C

### Four Pole Contactors

Outline Dimensions: 25-40FLA, 4 pole (shown in inches)  
XKJL 1-4P-30A-24V



#### Products Details

Model	QCA-304	QCB-304	QCC-304	QCA-404	QCB-404	QCC-404
FIL	30	30	30	40	40	40
Poles	4	4	4	4	4	4
Resistive Amps	40	40	40	50	50	50
Coil Voltage	24	120	240	24	120	240
Hertz	50/60	50/60	50/60	50/60	50/60	50/60
Locked Rotor AMPS 240/480/600	180/150/120	180/150/120	180/150/120	240/200/160	240/200/160	240/200/160

- Electrical Contact Ratings: 20A-90A
- Electrical Coil Ratings: 24-600V life rating, 100,000 & 250,000 cycle options.
- Options: 1, 2, 3, 4 pole fits 24, 120, 240 and 480 VAC coils wide range of electrical ratings screw, box or pressure plate connections NEMA mounting base.
- NO/NC end Switch Kits.
- Terminations: #10-32 screw - 20, 25 & 30 FLA Models, Box Lug - 40, 50, 60, 75 & 90 FLA Models
- Temperature Range: -40°F to +150°F / -40°C to +65°C

### Potential Relay Cross Reference

Part No.	Mars No.	G.E. Groups No.	WR/RBM No.	Techmesh No.
QRP-63	19002	2J, 2K, 2L, 2M, 7J, 7K, 7L, 7M, 7N, 8M, 8N	90-1, 90-17, 90-21, 90-63	82777
QRP-64	19003	3A, 3B, 3AV, 3AU, 4A, 4B, 6A, 6B, 6AB, 10A, 10B, 10AV, 10AV	90-4, 90-8, 90-11, 90-14, 90-22, 90-64	82783
QRP-65	19004	3P, 3R, 3AP, 5P, 5R, 5S, 5T, 22S	90-3, 90-7, 90-40, 90-65	82778
QRP-66	19005	3U, 3V, 3AT, 6U, 6V, 6W	90-13, 90-27, 90-66	-
QRP-67	19006	3C, 3D, 3AA, 4C, 4D, 4BK, 6C, 6D, 6AA, 10C, 10D, 26A, 26B, 26C, 26D	90-9, 90-6, 90-15, 90-19, 90-25, 90-67	82785
QRP-68	19007	3E, 3F, 3AB, 3AC, 4E, 4F, 4G, 6E, 6F, 6G, 10H, 10AB, 10AC, 26E, 26F, 26G, 26H, 27E, 27G	90-9, 90-12, 90-16, 90-20, 90-23, 90-68	82787
QRP-69	19008	3S, 3T, 10S, 10T, 25S, 25T, 10AS	90-10, 90-18, 90-24, 90-26, 90-41	82779

### 4TM Overload Protector

Power	Voltage (V)
1/8HP	220V/110V
1/6HP	220V/110V
1/5HP	220V/110V
1/4HP	220V/110V
1/3HP	220V/110V
1/2HP	220V/110V

### PTK-2 Overload Protector

Power	Voltage (V)
1/8HP	220V
1/6HP	220V
1/5HP	220V
1/4HP	220V
1/3HP	220V
1/2HP	220V

### Time Delay



QD-068

#### QD-068 Delay On Make

- 18-240VAC/VDC
- 1.5Amp
- 15Amp.inrush
- SPST.N.O
- Adjustable delays from 0.03 to 10min (1.8 to 600 seconds)



QD-072

#### QD-072 Delay On Break

- 18-240VAC/VDC
- 1.5Amp
- 15Amp.inrush
- SPST.N.O
- Adjustable delays from 0.03 to 10min (1.8 to 600 seconds)

### Defrost Timer



SB3.82

Part No.	SB3.82
Defrost circle / Day	1-12times Adjustment
Defrost period	2-60min Adjustment
Added Feature	3.5min+2.5sec Fan Delay
Cont Art. Voltage	16A SPDT: 220V-50Hz



TD



DBZ



DBZA



DBZC



DBZD

Part No.	Working Cycle Time		Defrost Time	
	50Hz	60Hz	50Hz	60Hz
<b>TD</b>				
TD-20C 200-240V	8hr±10min	6hr40min±10min	7min±2min	5min50s±2min
TD-20L 110-120V	8hr±10min	6hr40min±10min	7min±2min	5min50s±2min
TD-20C SA 200-240V	8hr±10min	6hr40min±10min	14min24s±2min	12min±2min
<b>DBZ</b>				
TMDE-625	6hr	5hr	25min	20min49s
TMDE-706	7hr54min	6hr35min	7min	5min50s
TMDE-802	8hr46min	7hr18min	2min24s	2min
TMDE-807	8hr1min	6hr40min	7min3s	5min53s
TMDE-814	8hr1min	6hr40min	14min	11min40s
TMDE-816	8hr1min	6hr40min	16min	13min20s
TMDE-912	9hr40min	8hr03min	12min	10min
TMDEX09UM1	12hr06min	10hr05min	10min48s	9min36s
<b>DBZA</b>				
TMDF-603	7hr12min	6hrmin	4min	3min19s
TMDF-702	8hr48min	7hr20min	2min24s	2min30s
TMDF-704	8hr48min	7hr20min	4min50s	4min2s
TMDF-706	8hr1min	6hr40min	7min3s	5min53s
TMDF-X04	10hr	8hr19min	4min20s	3min36s
TMDF-Y06	13hr6min	10hr55min	7min12s	6min

Part No.	Working Cycle Time		Defrost Time	
	50Hz	60Hz	50Hz	60Hz
<b>DBZC</b>				
TMDC-621	6hr	5hr	21min	17min30s
TMDC-625	6hr	5hr	25min	21min
TMDC-625110V	7hr12min	6hr	30min	25min
TMDC-807	8hr	6hr40min	7min	5min50s
TMDC-820	8hr	6hr40min	20min	16min40s
TMDC-824	8hr	6hr40min	24min	20min
TMDC-830	8hr	6hr40min	30min	25min
TMDC-832	8hr	6hr40min	32min	26min
TMDC-825 110V	9hr36min	8hr	30min	25min
TMDC-832 110V	9hr36min	8hr	38min	32min
<b>DBZD</b>				
TMDJ625ZF1 220V	6hr	5hr	25min	20min
TMDJ621ZN9 110V	7hr12min	6hr	25min	20min
TMDJ625RN9 110V	7hr12min	6hr	30min	25min
TMDJ702AC1 220V	8hr	6hr40min	2min24s	2min
TMDJX35RB9 110V	12hr	10hr	42min	35min
TMDJY26RC1 220V	14hr25min	12hr50min	31min12s	26min
TMDJ-2045	20min	16hr40s	45s	38s

### PW Series Relay Protector



Part No.	PW4.5A	PW5.5A
Pick-up Current (A)	3	3.7
Drop-out Current (A)	2.5	3
Horsepower (hp)	6.5	7.8

Part No.	PW-S1	PW-S2	PW-S3
Pick-up Current (A)	4.25	4.75	5.3
Drop-out Current (A)	3.35	3.75	4.25
Horsepower (hp)	1/5	1/4	1/3

Part No.	PP1100-1	PP1100-2
Resistance (Ω)	5	22
Voltage (V)	110	220
Current (A)	4	6

### ICG Series Relay



Part No.	ICG-1	ICG-220
Voltage (V)	115	230
Horsepower (hp)	1/12 thru 1/2	1/12 thru 1/3

### QD Series Thermoprotector

used in refrigerator



Part No.	Horsepower (hp)	Operating Temp. (°C)	Overload Current (A)
QD-18	1/8	110±5	5.6
QD-16	1/6	110±5	6.0
QD-15	1/5	115±5	7.2
QD-14	1/4	115±5	9.0
QD-13	1/3	120±5	11.0
QD-12	1/2	120±5	13.0

### RP Series Push-on Type Relay



Part No.	Pick-up Current (A)	Drop-out Current (A)	Horsepower (hp)
RP18	3.15	2.5	1/8
RP16	3.75	3	1/6
RP15	4.75	3.75	1/5
RP14	5.35	4.25	1/4
RP13	6	5.2	1/3
RP12	8.4	7	1/2

### MZ Series PTC Starting Relay with One, Two and Three Heads



Part No.	Resistance at 25°C (Ω)	Voltage (V)	Recovery Times (S)	Current (A)	Power (W)
MZ-12	12	≥450	≤80	6	6
MZ-15	15	≥600	≤80	7	7
MZ-22	22	≥600	≤80	7	7
MZ-33	33	≥600	≤80	6	6
MZ-47	47	≥600	≤80	8	8
MZ-100	100	≥600	≤80	3	3

### ICA Series Relay-overload Combination



Part No.	Voltage (V)	Frequency (Hz)	Horsepower (hp)
ICA-13	120	50/60	1/4, 1/3
ICA-15	120	50/60	1/8, 1/5
ICA-23	240	50/60	1/4, 1/3
ICA-25	240	220	1/8, 1/5

### IC Series Solid State Relay



IC-1, IC2      IC-3      IC-4

Part No.	Voltage (V)	OTC Resistance (Ω)
IC-1	110	5±20%
IC-2	240	22±20%
IC-3	240	22±20%
IC-4	110	22±20%

### SPP Starter Pow-R-Pak



Part No.	Voltage (V)	Increased Torque
SPP	115-230	210 Once Inches

### Cold Room & Refrigerator LED Lights

#### Description:

Voltage: 220V/110V/36V  
 Power: 8W  
 Frequency: 50Hz/60Hz  
 Temperature: 6000-6500K  
 Display: more than 70  
 Light Flux: 800LM  
 Protection Level: IP68  
 Used in < 4M Height Coldroom  
 Operating Temperature: -20° to 40°  
 Service Lifetime: 10000 hours



LED-401

#### Description:

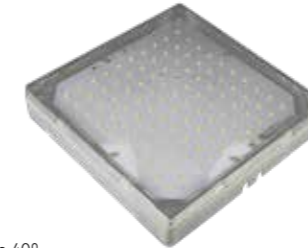
Voltage: 220V/110V  
 Power: 20W  
 Frequency: 50Hz/60Hz  
 Temperature: 6000-6500K  
 Display: above 70  
 Light Flux: 2000LM  
 Protection Level: IP68  
 Used in < 4M Height Coldroom  
 Operating Temperature: -20° to 40°  
 Service Lifetime: 10000 hours



LED-407

#### Description:

Voltage: 220V/110V  
 Power: 30W  
 Frequency: 50Hz/60Hz  
 Temperature: 6000-6500K  
 Display: above 70  
 Light Flux: 3000LM  
 Protection Level: IP65  
 Used in < 5M Height Coldroom  
 Operating Temperature: -20° to 40°  
 Service Lifetime: 10000 hours



LED-409

#### Description:

Voltage: 220V/36V  
 Power: 15W  
 Frequency: 50Hz  
 Temperature: 6000-6500K  
 Display: above 70  
 Light Flux: 3000LM  
 Protection Level: IP65  
 Used in < 5M Height Coldroom  
 Operating Temperature: -20° to 40°  
 Service Lifetime: 10000 hours



LED-501

#### Description:

Voltage: 220V/110V  
 Power: 100W  
 Frequency: 50Hz/60Hz  
 Temperature: 2700-7000K  
 Display: 70 or more  
 Light Flux: 10000LM  
 Protection Level: IP65  
 10meters Below 50 Square or so  
 Operating Temperature: -20° to 40°  
 Service Lifetime: 10000 hours



LED-1102

#### Description:

Voltage: 220V/110V  
 Power: 50W  
 Frequency: 50Hz/60Hz  
 Temperature: 2700-7000K  
 Display: 70 or more  
 Light Flux: 5000LM  
 Protection Level: IP65  
 Super Bright 6-7m 40 Square or so  
 Operating Temperature: -20° to 40°  
 Service Lifetime: 10000 hours



LED-603

#### Description:

Voltage: 220V/110V  
 Power: 55W  
 Frequency: 50Hz/60Hz  
 Temperature: 2800-6800K  
 Display: 70 or more  
 Light Flux: 6000LM  
 Protection Level: IP65  
 5meters Below / 20-40 Square or so  
 Operating Temperature: -20° to 40°  
 Service Lifetime: 10000 hours



LED-503

#### Description:

Voltage: 220V  
 Power: 16W  
 Frequency: 50Hz/60Hz  
 Temperature: 2800-6800K  
 Display: 70 or more  
 Light Flux: 1600LM  
 Protection Level: IP65  
 4meters Below / 15-20 Square or so  
 Operating Temperature: -20° to 40°  
 Service Lifetime: 10000 hours



LED-406

### Lamp for Refrigerator



LED-E14  
6500k cold 220v/50Hz



Mini strip type



U groove type



U type

### TAM Series Thermostat



Part No.	Temperature Range
TAM112-0.8M	-7°C/-4°C
TAM113-1.3M	-10°C/+10°C
TAM113-2.0M	-10°C/+10°C
TAM125-2.5M	-20°C/-27°C
TAM125-2.3M	-20°C/-27°C
TAM133-1.3M	-35°C/-10°C
TAM135-2.5M	-15°C/-26°C
TAM145-1.3M	-27°C/-20°C
TAM145-2.0M	-16°C/-13°C

### K Series Thermostat



Part No.	Warm		Cold		Capillary Tube (mm)
	ON (°C)	OFF (°C)	ON (°C)	OFF (°C)	
K50-P1110=VC1	2	-	-14.5	-23	1200
K59-L1102	3.5	-12	3.5	-22	1200
K50-P1125	8.5	-	-9.5	-18	1200
K50-P1126	-9.5	-	-18	-24.5	1200
K50-P1127	12.5	-	5	1.5	1200
K50-P1117=VF3	-7	-12	-22	-30	1200
K50-P1118=VB7	13	8	1.8	-3.3	1200
K54-P1102=VS5	-11.5	-16	-20	-26	1200
K60-P1013=VP4	-4	-11	-15	-24	1200

### 007B Series Thermostat



Part No.	Temperature		Capillary Tube (mm)
	Cold	Warm	
077B7001	-25	2	1300
077B7002	-21	0	1300
077B7003	-27.5	3.5	1600
077B7004	-11	3.5	1500
077B7005	-32.5	-7.5	2300
077B7006	-34.5	-10	2300
077B7007	-35.5	-10	2300
077B7008	-8.5	11.5	2000

### Thermostat



Part No.	Operating Temperature						Capillary (mm)
	Warm		Normal		Cold		
	ON (°C)	OFF (°C)	ON (°C)	OFF (°C)	ON (°C)	OFF (°C)	
A2000	-	(+35)	-	0±3	-	(-35)	120
F2000	-	(+35)	-	0±3	-	(-35)	1750

### Icemaker Thermostat



### ML and SL Series Defrost / Icemaker Thermostat



ML Series Part No.	ML37	ML45	ML50	ML55	ML60	ML70	ML80	ML90
SL Series Part No.		SL45	SL50	SL55	SL60	SL70	SL80	SL90
°DIFF	10	20	20	20	20	20	50	7
OPEN°F	37	45	50	55	60	70	80	90
CLOSE°F	47	25	30	35	40	50	30	35

### Glass Tube Heater



Size	Voltage	Power	Size	Voltage	Power
10"	220V	120W	16"	220V	160W
12"	220V	130W	18"	220V	160W
14"	220V	150W	20"	220V	180W

### Defrost Heater



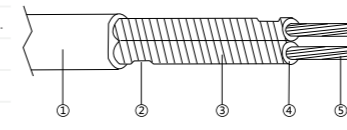
### Constant Power Parallel Heating Cable (AKO-5234)

#### Application:

To heat the floor of building, Cooling house and warehouse. To melt snow and frost in slope, Trough and roof. To prevent frost and to preserve heat of petroleum pipeline and other devices.



Silicone Insulating Layer.  
Conductor Connecting Point.  
Resistance Wire.  
Silicone Insulating Layer.  
Copper Conductor.



Power Output	at230V	40W/m
Max. Exposure Temp. Power On		55°C
Max. Exposure Temp. Power Off		70°C
Maximum Circuit Length		60m
Heating Zone Length		500m
Tinned Copper Conductors		2 x 0.75mm <sup>2</sup>
Heating Conductor Element		Nickel-chrome
Insulation Material		Silicone rubber
Electric Strength	Test Voltage	1500V~
Loading Tolerance		±7%
Outer Dimensions	Nominal	8 x 5 ±0.5mm
Minimum Bendradius	at-25C	20mm
Standard Reel Length		110~150mm

### Drainpipe Anti-freezing Heating Cable



- Waterproof
- Double Insulation
- Molded Terminations
- Extremely Flexible

Part No.	Cold tail (m)	Heating Cable (m)	Total length (m)	Output Power (m)
CSC-1.0	1	1	2	40
CSC-1.5	1	1.5	2.5	60
CSC-2.0	1	2	3	80
CSC-3.0	1	3	4	120
CSC-4.0	1	4	5	160
CSC-5.0	1	5	6	200
CSC-6.0	1	6	7	240
CSC-7.0	1	7	8	280

### Heating Strip for Crankcase of Compressor



Rated Voltage	Heater District/Length	Power
110~240V	357/395mm	20W
110~240V	462/500mm	35W
110~240V	537/575mm	55W
110~240V	657/695mm	75W
110~240V	726/800mm	90W
110~240V	912/950mm	90W

# FIFi air

## A/C & INSTALLATION PARTS



### T1 Air Curtain



Model	Unit Size (mm)	Voltage (V)	Hz	Input (W)	Air Speed (m/s)	Air Volume (m <sup>3</sup> /h)	Noise (dB)	Height (m)	G.W. (kg)
FM-1106GK	600 x 145 x 175	220	50	88	10.5	770	56	2.5	5
FM-1109GK	900 x 145 x 175	220	50	90	10.5	1260	56	2.5	5.9
FM-1110GK	1000 x 145 x 175	220	50	95	10.5	1440	56	2.5	6.1
FM-1112GK	1200 x 145 x 175	220	50	110	10.5	1800	58	2.5	7.15
FM-1115GK	1500 x 145 x 175	220	50	130	10.5	2350	60	2.5	8.45
FM-1118GK	1800 x 145 x 175	220	50	160	10.5	2880	62	2.5	11.2
FM-1120GK	2000 x 145 x 175	220	50	190	10.5	3240	63	2.5	12.2

### T2 Air Curtain



Model	Unit Size (mm)	Voltage (V)	Hz	Input (W)	Air Speed (m/s)	Air Volume (m <sup>3</sup> /h)	Noise (dB)	Height (m)	G.W. (kg)
FM-1109GKA	900 x 160 x 185	220	50	90	10.5	1260	56	2.5	7.7
FM-1110GKA	1000 x 160 x 185	220	50	95	10.5	1440	56	2.5	8.2
FM-1112GKA	1200 x 160 x 185	220	50	110	10.5	1800	58	2.5	9.4
FM-1115GKA	1500 x 160 x 185	220	50	130	10.5	2350	60	2.5	11.5
FM-1118GKA	1800 x 160 x 185	220	50	160	10.5	2880	62	2.5	13.6
FM-1120GKA	2000 x 160 x 185	220	50	190	10.5	3240	63	2.5	14.5

### T3 Air Curtain (with controller)



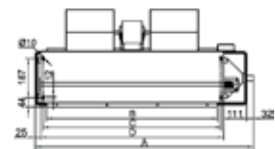
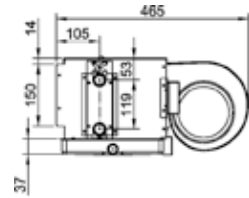
Model	Unit Size (mm)	Voltage (V)	Hz	Input (W)	Air Speed (m/s)	Air Volume (m <sup>3</sup> /h)	Noise (dB)	Height (m)	G.W. (kg)
FM-1209GY	900 x 216 x 191	220	50	135	11.5	1580	55	3	10.8
FM-1210GY	1000 x 216 x 191	220	50	145	11.5	1800	55	3	11.8
FM-1212GY	1200 x 216 x 191	220	50	165	11.5	2260	56	3	14
FM-1215GY	1500 x 216 x 191	220	50	225	11.5	2950	57	3	15.8
FM-1218GY	1800 x 216 x 191	220	50	280	11.5	3600	58	3	18

10

QUALITY DELIVERED



### Fan Coil Unit Ceiling Conceal Ducted Type (2 Tube System)



	A	B	C	B
FP-34WA-B	624	400	430	456
FP-51WA-B	814	590	620	464
FP-68WA-B	864	640	670	696
FP-85WA-B	944	720	750	776
FP-102WA-B	1044	820	850	876
FP-136WA-B	1424	1200	1230	1256
FP-170WA-B	1474	1250	1280	1306
FP-204WA-B	1674	1450	1480	1506
FP-238WA-B	1824	1600	1630	1656

Model (2-tube system)		FP-34WA-B	FP-51WA-B	FP-68WA-B	FP-85WA-B	FP-102WA-B		
Power Supply		220V, 50Hz, 1Ph						
Air Volume	H	340	510	680	850	1020		
	M	270	380	515	660	765		
	L	190	260	340	430	530		
Static Pressure		Pa						
Cooling Capacity	TH	W	2150	3200	4000	5000	5800	
		H	BTU/h	7335	10918	13648	17060	19789
		W	1530	2230	2850	3530	4230	
	SH	M	BTU/h	5220	7608	9724	12044	14432
		W	1710	2510	3305	4090	4790	
		L	W	1210	1715	2320	2890	3345
	TH	M	W	1355	2000	2470	3000	3520
		L	W	980	1420	1735	2020	2500
		H	W	3350	5050	6250	7900	9150
Heating Capacity	M	W	2650	3900	5100	6350	7400	
	L	W	2100	3100	3850	4650	5450	
	High Speed	12Pa	dB(A)	37	39	41	43	45
Noise	30/50	dB(A)	39/42	41/44	43/46	45/47	48/49	
	12Pa	W	37	52	62	76	96	
	30/50	W	44/49	59/66	72/84	87/100	108/118	
Waterflow Volume	m <sup>3</sup> /h	0.37	0.55	0.69	0.86	0.99		
Pressure Dropping	kPa	16	22	18	29	22		
Water Tube Connection (inlet)		ZG 3/4"	ZG 3/4"	ZG 3/4"	ZG 3/4"	ZG 3/4"		
Water Tube Connection (outlet)		ZG 3/4"	ZG 3/4"	ZG 3/4"	ZG 3/4"	ZG 3/4"		
Coil	Type	Hydrophilic Aluminum Fin to Wear Copper Tube						
Max. Working Pressure	Mpa	1.6	1.6	1.6	1.6	1.6		
Condensation Pipe Size (diameter)	mm	DN20 (External Thread)						
Net Dimension	L×W×H	mm	624×465×235	814×465×235	864×465×235	944×465×235	1044×465×235	
Net Weight	kg	11	13	14	16	17		

Model (2-tube system)		FP-136WA-B	FP-170WA-B	FP-204WA-B	FP-238WA-B		
Power Supply		220V, 50Hz, 1Ph					
Air Volume	H	1360	1700	2040	2380		
	M	1040	1280	1550	1800		
	L	710	860	1050	1280		
Static Pressure		Pa					
Cooling Capacity	TH	W	8000	9500	11300	12800	
		H	BTU/h	27296	32414	38555	43673
		W	5790	6850	8110	9140	
	SH	M	BTU/h	19755	23372	27671	31185
		W	6660	7695	9153	10000	
		L	W	4715	5470	6340	7165
	TH	M	W	5150	5870	6820	7850
		L	W	3530	4075	4950	5580
		H	W	12500	15100	17800	20100
Heating Capacity	M	W	10300	11950	14200	15500	
	L	W	8000	9100	10550	12150	
	High Speed	12Pa	dB(A)	47	48	50	52
Noise	30/50	dB(A)	49/50	50/52	52/54	54/56	
	12Pa	W	134	152	189	228	
	30/50	W	156/174	174/210	212/250	253/300	
Waterflow Volume	m <sup>3</sup> /h	1.37	1.63	1.94	2.19		
Pressure Dropping	kPa	27	35	37	38		
Water Tube Connection (inlet)		ZG 3/4"	ZG 3/4"	ZG 3/4"	ZG 3/4"		
Water Tube Connection (outlet)		ZG 3/4"	ZG 3/4"	ZG 3/4"	ZG 3/4"		
Coil	Type	Hydrophilic Aluminum Fin to Wear Copper Tube					
Max. Working Pressure	Mpa	1.6	1.6	1.6	1.6		
Condensation Pipe Size (diameter)	mm	DN20 (External thread)					
Net Dimension	L×W×H	mm	1424×465×235	1474×465×235	1674×465×235	1824×465×235	
Net Weight	kg	26	29	32	34		

### Aluminum Foil Adhesive Tape



By roll, 27m lengths  
24 rolls per carton.  
\* To be adjusted as per specific requirement.

Thickness (mm)	Width (mm)
0.03	45
0.03	50
0.04	45
0.04	50
0.05	45
0.05	50

### Aluminum Reinforced Tape



Thickness (mm)	Width (mm)
0.015	45
0.015	50
0.015	75
0.015	100

By roll, 30m lengths 24 rolls per carton.

### PVC Air Conditioner Insulation Tape



Part No.	Size
PVC1	0.13mmx48mmx15m
PVC2	0.13mmx48mmx18m

### PVC Electrical Insulation Tape



Part No.	Size
EIT-06	0.13mmx19mmx6yds
EIT-08	0.13mmx19mmx8yds
EIT-10	0.13mmx19mmx10yds
EIT-20	0.13mmx19mmx20yds
EIT-10M	0.13mmx19mmx10m
EIT-20M	0.13mmx19mmx20m

### Insulation Tape with Self-adhesive



Thickness (mm)	Width (mm)
3	25
3	50
5	50

1By roll, 30ft(9.14m)lengths 30rolls carton.

### Cloth Duct Tape



Thickness (mm)	Width (mm)	Length (m)
0.15	50	30
0.15	75	30
0.15	100	30

### SB Series Cleaner



Recommended for Evaporator Coils, Air Filters and Mechanical Equipment Removes.

- Environmentally Safe
- Non-Caustic, Self-Rinsing
- USDA Authorized
- Contains Metal Fatigue Inhibitors
- Non-acid, Non-toxic
- Good for all Metal, Copper & Aluminium



SB-910



Heavy Duty  
Cleans & Brightens Finned Air Coils  
Good for Copper, Aluminium and Brass



SB-920

External Condenser Coil Cleaner and Brightener Recommended for evaporator and Condenser Coils, Air Filters and Mechanical Equipment. Removes Grease, Oxidation and Built-up Dirt



- Biodegradable
- Eliminate Dirt, Grease & Oxides
- USDA Authorized
- Contains Metal Fatigue Inhibitors
- Non-acid
- Good for all Metal, Copper & Aluminium



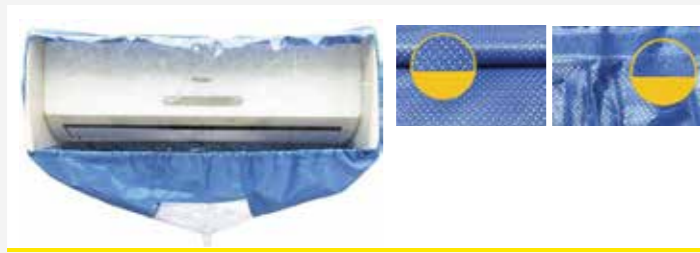
SB-930

**Air Conditioning Cleaning Cover**



- Q-532**  
 • Medium: size is suitable for circumference of less than 2.4 meters of air conditioning  
 • Size: FOR9000BTU,12000BTU,18000BTU A/C UNIT  
 • Color: BLUE
- Q-535**  
 • Large: size is suitable for circumference of less than 3.2 meters of air conditioning  
 • Size: FOR18000BTU,24000BTU,36000BTU A/C UNIT  
 • Color: BLUE

**Support Plate Cleaning Cover**



- Q-562**  
 • Medium: Applicable to air conditioning length70-100CM  
 • Color: BLUE
- Q-565**  
 • Large: Applicable to air conditioning length100-130CM  
 • Color: BLUE

**Ceiling Cleaning Cover**



- Q-536**  
 • The length of the four sides of the ceiling hood is 1.2m.  
 • Color: YELLOW



**Power Washer**

Part No.	PCW-4
Voltage	220V/50-60Hz
Power	80W
Flow Rate	4L/min
Working Pressure	0.7~1MPa
Weight	5kgs



**Condensate Water Pump**



Part No.	PC-12B	PC-36B
Voltage	230V, 50/60Hz or 115V/60Hz	100~230V, 50/60Hz
Suction Lift	Max.2m (6.5f)	Max.2m (6.5f)
Discharge Head	Max.8m/H (26f)	Max.10m (33f)
Flow Rate	Max.12L/H (3.2GPH)	Max.36L/H (9.5GPH)
Sound Level	<19dB (A)	<21dB (A)
Tank Capacity	35ml	35ml
Mini Splits Up To	8KW (30,000bUT/H)	15KW (96,000but/hr)
Ambient Temperature	0°C~50°C	0°C~50°C
Power Consumption	16W	3W



Part No.	PC-30228	PC-50288
Voltage	230V, 50/60Hz	230V, 50/60Hz
Discharge Head	Max.3m (9.8f)	Max.5m (16.4f)
Flow Rate	Max.15L/H (3.2GPH)	Max.50L/H (9.5GPH)
Sound Level	<45dB (A)	<55dB (A)
Tank Capacity	200ml	200ml
Ambient Temperature	0°C~50°C	0°C~50°C
Power Consumption	55W	58W
Current Intensity	50mA	50mA
Power Consumption	16W	0°C~50°C



Part No.	PC-1218	PC-1028
Voltage	230V, 50/60Hz or 115V/60Hz	230V, 50/60Hz or 115V/60Hz
Suction Lift	Max.2m (6.5f)	Max.2m (6.5f)
Discharge Head	Max.12m	Max.12m
Flow Rate	Max.12L/H (3.2GPH)	Max.12L/H (3.2GPH)
Sound Level	<25dB (A)	<25dB (A)
Tank Capacity	35ml	35ml
Mini Splits Up To	10KW (30,000BUT/H)	10KW (30,000BUT/H)
Ambient Temperature	0°C~50°C	0°C~50°C
Power Consumption	<16W	<16W

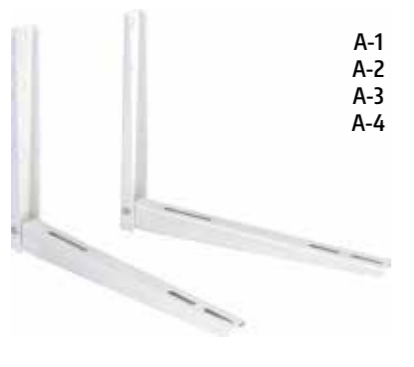


Part No.	PC-24B	PC-40B
Voltage	100~230V, 50/60Hz	100~230V, 50/60Hz
Suction Lift	Max.2m (6.5f)	Max.2m (6.5f)
Discharge Head	Max.10m (33f)	Max.10m (33f)
Flow Rate	Max.24L/H (6.2GPH)	Max.40L/H (10.5GPH)
Sound Level	<19dB (A)	<21dB (A)
Tank Capacity	55ml	55ml
Mini Splits Up To	8KW (30,000but/hr)	15KW (96,000but/hr)
Ambient Temperature	0°C~50°C	0°C~50°C
Power Consumption	3W	3W

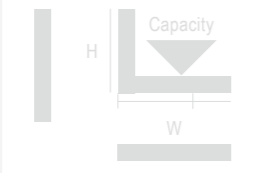


Part No.	PC-320A	PC-125A
Voltage	100~230V, 50/60Hz	230V, 50/60Hz or 115V/60Hz
Suction Lift	--	--
Discharge Head	Max.6m (20)	Max.4m (13f)
Flow Rate	Max.320L/H (85GPH)	Max.125L/H (33GPH)
Sound Level	<28dB (A)	<48dB (A)
Tank Capacity	1.8L	1.8L
Ambient Temperature	0°C~50°C	0°C~50°C
Power Consumption	20W	60W
Current Intensity	100mA	500mA




**Bracket for A/C Outdoor Unit**




**A-1  
A-2  
A-3  
A-4**

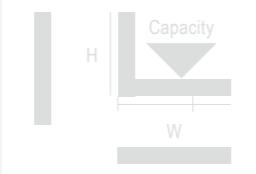


Model	H (mm)	W (mm)	Thickness (mm)	N.W. (kg)	G.W. (kg)	Capacity (kg)
A-1	365	400	1.8	2.2	2.7	150
A-2	365	450	1.8	2.5	3.0	180
A-3	400	500	2	3.0	3.5	200
A-4	450	550	2	3.4	3.9	250











**B-1  
B-2  
B-3  
B-4**

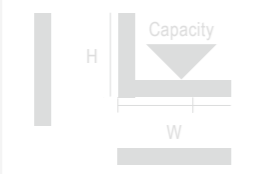


Model	H (mm)	W (mm)	Thickness (mm)	N.W. (kg)	G.W. (kg)	Capacity (kg)
B-1	450	450	1.8	1.7	2.2	150
B-2	500	500	1.8	2.2	2.8	180
B-3	550	550	2	2.7	3.2	200
B-4	600	600	2	3.0	3.5	210










**C-1  
C-2  
C-3**



Model	H (mm)	W (mm)	Thickness (mm)	N.W. (kg)	G.W. (kg)	Capacity (kg)
C-1	200	400	1.8	2.5	3	150
C-2	250	550	1.8	3	3.5	180
C-3	350	650	2	3.5	4	200










**G-1  
G-2  
G-3**



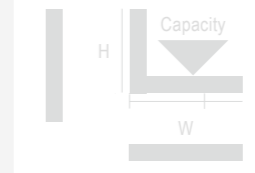
Model	H (mm)	W (mm)	Thickness (mm)	N.W. (kg)	G.W. (kg)	Capacity (kg)
G-1	365	420	1.8	1.8	2.3	150
G-2	400	450	1.8	2.2	2.7	180
G-3	400	550	1.8	2.9	3.4	200





**Bracket for A/C Outdoor Unit**




**GL-1  
GL-2**

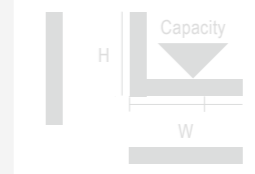


Model	H (mm)	W (mm)	Thickness (mm)	Capacity (kg)	Applicable Scope
GL-1	400	450	1.5	200	7000Btu-18000Btu A/C
GL-2	400	550	1.8	250	7000Btu-36000Btu A/C










**M-1  
M-2**

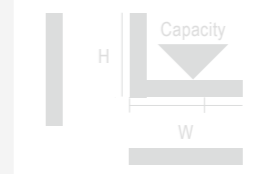


Model	H (mm)	W (mm)	Thickness (mm)	Capacity (kg)	Applicable Scope
M-1	400	450	1.8	180	7000Btu-18000Btu A/C
M-2	400	550	1.8	180	7000Btu-36000Btu A/C











**GM-1  
GM-2**

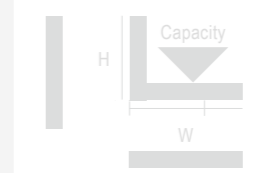


Model	H (mm)	W (mm)	Thickness (mm)	Capacity (kg)	Applicable Scope
GM-1	400	450	1.5	150	7000Btu-18000Btu A/C
GM-2	400	550	1.8	180	7000Btu-36000Btu A/C










**Z-1  
Z-2**



Model	H (mm)	W (mm)	Thickness (mm)	Capacity (kg)	Applicable Scope
Z-1	400	450	1.8	150	7000Btu-18000Btu A/C
Z-2	400	550	2.0	180	7000Btu-36000Btu A/C

**Plastic A/C Brackets**



Part No.	A (mm)	B (mm)	C (mm)	D (mm)	Application
WTG111-A	350	89	80	68	7000-12000Btu
WTG111-B	450	89	80	68	12000-24000Btu



Part No.	A (mm)	B (mm)	C (mm)	D (mm)	Application
WTG118-A	390	115	73	82	7000-12000Btu
WTG118-B	490	115	73	82	12000-24000Btu
WTG118-C	450	115	73	82	12000-24000Btu

**Rubber Anti Vibration Mountings**

**Accessory Include:**

- 2 pcs fixed screw rod.
- 2 pcs washer.
- 2 pcs nut



Part No.	Size (mm)	Material	N.W.(kg)	G.W.(kg)
AVB-250	250x160x95	Rubber, Alum Alloy	2.3	2.6
AVB-450	450x160x95	Rubber, Alum Alloy	4.5	4.8
AVB-600	600x160x95	Rubber, Alum Alloy	6.2	6.5
AVB-1000	1000x160x95	Rubber, Alum Alloy	10	10.3

**WTG002**

Model	A	B	C	D	E	F	G	H	I	J	K	Applicable Scope
WTG002-A	107	48	15	48	38	58	36	35	30	8	20	7500Btu-24000Btu A/C
WTG002-B	112	50	17	53	43	60	40	36	30	8	20	7500Btu-24000Btu A/C
WTG002-C	110	48	17	50	38	121	90	35	26	8	20	7500Btu-24000Btu A/C
WTG002-D	100	45	13	48	38	53	40	36	30	8	20	7500Btu-24000Btu A/C
WTG002-E	92	42	14	41	37	52	36	35	30	8	20	7500Btu-24000Btu A/C

**WTG001-A**

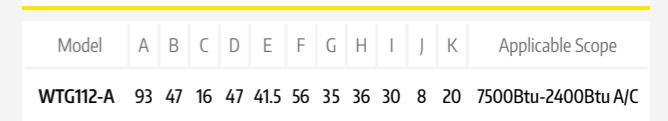
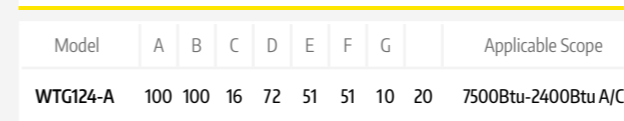
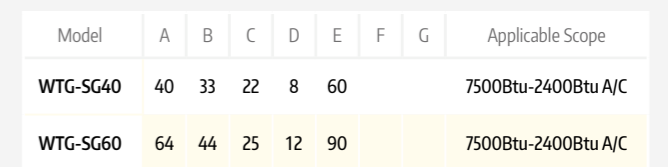
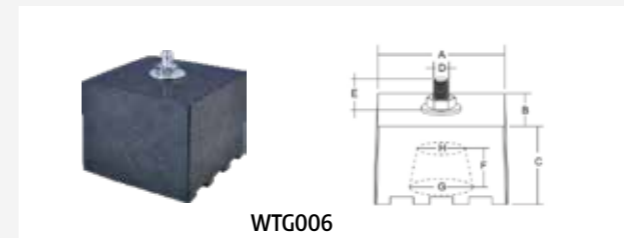
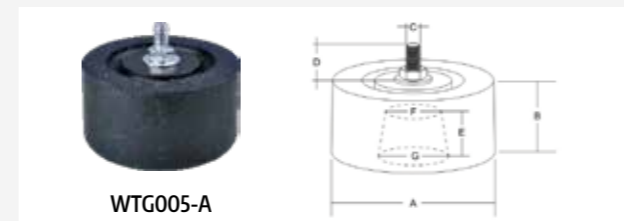
Model	A	B	C	D	E	F	G	H	I	J	K	Applicable Scope
WTG001-A	110	50	17	37	37	66	35	30	22	8	20	7500Btu-24000Btu A/C

**WTG112-A**


Model	A	B	C	D	E	F	G	H	I	J	K	Applicable Scope
WTG112-A	104	47	15	39	41	61	41	32	26	8	20	7500Btu-24000Btu A/C




**Rubber Anti Vibration Mountings**



**Rubber Anti Vibration Mountings**

 WTG004-A A:40 B:8	 WTG004-B A:44 B:10	 WTG004-C A:48 B:15	 WTG117-A A:30 B:30 C:10
 WTG009-A A:23 B:37	 WTG008-A A:40 B:40 C:15 D:14 E:20	 WTG117-C A:9.5 B:15 C:12.5 D:27	 WTG117-B A:40 B:28 C:14

**Air Conditioner Trunking**




**Ducting:**

- Air conditioning duct made of white rigid PVC.
- Stabilized against UV rays, shock proof & Fire proof.
- Comes in standard 2 meter lengths.
- Italian Style & quality, home owners like the look.
- Fast & simple to Install.

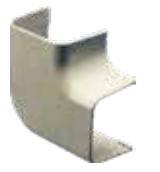




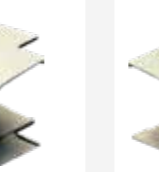





Part No.	Dimension (wxd)
PC2001	90x65x2mt

**Flexible Joint:**



- Used in difficult up installations.
- Made out of white rigid PVC and are suitable for duct size 90mmx65mm.
- Stabilized against UV rays, shock proof & Fire proof.
- Only available in 90mmx65mm dimensions.

Part No.	Dimension (wxd)
PC2002	90x65x500mm

 Part No. Dimension (wxd) PC2115 90x65	 Part No. Dimension (wxd) PC2117 90x65	 Part No. Dimension (wxd) PC2116 90x65	 Part No. Dimension (wxd) PC2200 90x65	 Part No. Dimension (wxd) PC2113 90x65	 Part No. Dimension (wxd) PC2112 90x65
 Part No. Dimension (wxd) PC2102 90x65	 Part No. Dimension (wxd) PC2104 Upper Connector with Seal	 Part No. Dimension (wxd) PC2101 90x65	 Part No. Dimension (wxd) PC2114 90x65	 Part No. Dimension (wxd) PC2201 90x65	 Part No. Dimension (wxd) PC2111 90x65

# BODEGA 2024



## BODEGA Y OFICINA DE: EMPACADO, ALMACENAMIENTO Y EMBARQUES CHINA - AMERICA



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**T-HVAC15**  
Touch-Screen Programmable Thermostat  
Programmable Thermostat  
5+2 Programmable  
Easy to Program  
Easy to Install



**T-HVAC15 WIFI**  
Touch-Screen Programmable Thermostat  
Be Able to Operate Your Air Conditioner Whenever and Wherever You are with Your Mobile Phone  
Mobile Phone Control and Suitable for Android & IOS System



**T-HVAC10(2S)**  
Programmable Thermostat  
Operate on Single Stage Heat and Cool  
Operate on Multistage Heat and Cool  
5+2 Programmable  
Battery Power or 24V Hardwire



**T-HVAC10**  
Programmable Thermostat  
5+2 Programmable  
6.8 sq. Inch Backlight LCD  
Battery Power or 24V Hardwire



**T-HVAC11**  
Programmable Thermostat  
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**T-HVAC20**  
Air Conditioner Thermostat  
Easy for Installation and Applicable for Two Two-way Valves or Two Three-way Valves  
5+2 Weekly Timer Function  
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6.8 sq. Inch Backlight LCD  
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Touch Screen Thermostat  
Full Screen Design Integrated Touch Panel  
Silver Metal Coating Process  
Power Button 3D Concave Inside  
White Backlight, Automatic Brightness Adjustment



**T-QD92**  
Thermostat for Water Floor Heating  
Large LCD Display with White Back Light  
Switch Power with Wide Voltage  
AUTO Restart

**Room Thermostat**



T200



T201



T202



T-PIR1



T-HVAC10

**A/C Remote Controller**



UPKT-400



UPKT-9018E

**Universal A/C Control System**



UPQD-U08C



UPQD-U02B(SW)+



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# USA PARTS

HVAC & REFRIGERATION



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Del Valle, C.P. 66220 - San Pedro Garza García, N.L., México



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