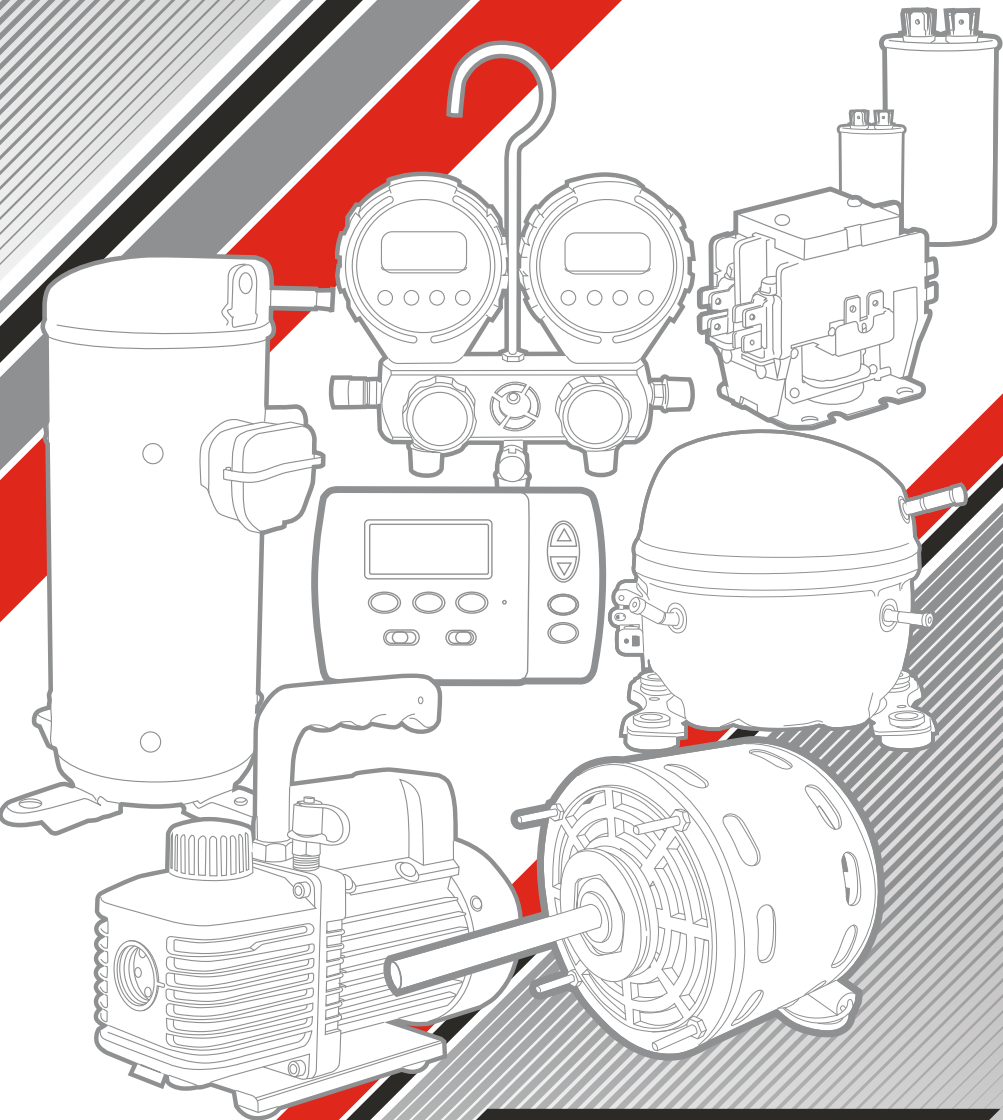




*HVAC/R Equipment, Parts and Tools*



**Parts & Tools CATALOG**

Miami - Florida

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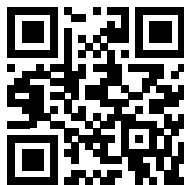
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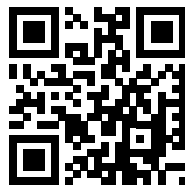
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## Parts Catalog

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**HARDI**LATAM

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# Motors

## Condenser Fan Motors

### Rostock

#### Features:

- Double Rotation CW/CCW
- Permanent split capacitor
- Shaft slinger ring included
- All angle mount (totally enclosed)
- Frame 48 (5 5/8")
- Automatic reset thermal protection
- Shaft of 1/2", length 5 1/2".
- Direct drive air-over
- Capacitor not included
- Insulation class B
- Totally enclosed
- 30" (76.2cm) leads
- UL Recognized Component
- Max. working temp.: 140°F (60°C)



Totally Enclosed

Part No.	HP	Power	Amp	RPM	Capacitor (mfd/V)	Bearing	Speeds	Shaft Diameter
RS1873	1/6	208-230/1/60	1.2	825	5X370	Ball	1	1/2"
RS1874	1/4	208-230/1/60	1.9	825	5X370	Ball	1	1/2"
RS1875	1/3	208-230/1/60	2.1	825	7.5X370	Ball	1	1/2"
RS1859	1/6	208-230/1/60	1.6	1,075	5X370	Ball	1	1/2"
RS1860	1/4	208-230/1/60	1.8	1,075	5X370	Ball	1	1/2"
RS1861	1/3	208-230/1/60	2.1	1,075	7.5X370	Ball	1	1/2"
RS1862	1/2	208-230/1/60	2.8	1,075	10X370	Ball	1	1/2"
RS1868	3/4	208-230/1/60	4.2	1,075	10X370	Ball	1	1/2"
RS5462	1/6, 1/3	208-230/1/60	1.5/2.8	1,075	5/7/5X370	Ball	2	1/2"
RS3742	3/4	440-460/1/60	2.0	1,075	10X370	Ball	1	1/2"

#### Motor Cross Reference

Rostock	GE	Universal	AO Smith	Fasco	Emerson
RS1873	-	-	FE1018S	D798	1873
RS1874	-	-	FE1028S	D934	1874
RS1875	-	-	FE1038S	D791	1875
RS1859	3731	-	FSE1016S	-	1859
RS1860	3732	176	FSE1026S	D909	1860
RS1861	3733	175	FSE1036S	D908	1861
RS1862	3734	187	FE1056S	D907	1862
RS1868	3735	668	FE1076S	D931	1868
RS5462	3465	-	FE6000	D2827	5462
RS3742	-	-	FEH1076	D910	3742



## Century

### Features:

- All angle mount
- Totally enclosed air-over
- Extended thru bolts both ends
- Ball bearings
- ½" diameter shaft, double flat
- 48 frame (5-5/8")
- Reversible rotation
- 48" leads
- Thermally protected
- Class F insulation
- Max. working temp.: 158°F (70°C)



Part No.	HP	Power	Amp	RPM	Capacitor (mfd/V)	Bearing	Speeds	Shaft Diameter
FE1016SF	1/6	208-230/1/60	-	1,075	5X370	Ball	1	1/2"
FE1026SF	1/4	208-230/1/60	-	1,075	5X370	Ball	1	1/2"
FE1036SF	1/3	208-230/1/60	-	1,075	5X370	Ball	1	1/2"
FE1056SF	1/2	208-230/1/60	-	1,075	5X370	Ball	1	1/2"
FE1076SF	3/4	208-230/1/60	-	1,075	5X370	Ball	1	1/2"

⚠ Cancer & Reproductive Harm [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

## FASCO

### Features:

- Condenser fan motor
- 48 frame (5-5/8")
- PSC
- Thermally protected
- Totally enclose, air-over
- ½" diameter shaft, double flat
- Reversible rotation
- 27" (68.5cm) leads
- Class B insulation
- Extended thru bolts both ends
- Max. working temp.: 104°F (40°C)



Part No.	HP	Power	Amp	RPM	Capacitor (mfd/V)	Bearing	Speeds	Shaft Diameter
D7909	1/4	208-230/1/60	-	1,075	5X370	Ball	1	1/2"
D7908	1/3	208-230/1/60	-	1,075	5X370	Ball	1	1/2"
D7907	1/2	208-230/1/60	-	1,075	5X370	Ball	1	1/2"
D931	3/4	208-230/1/60	-	1,075	5X370	Ball	1	1/2"

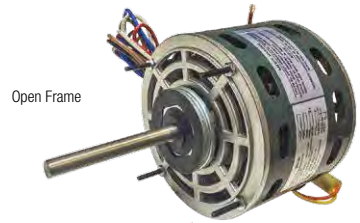
⚠ Cancer & Reproductive Harm [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

## Direct Drive Blower Motors

### Rostock

#### Features:

- Reversible rotation
- Continuous air-over
- All angle mounting
- Frame 48 (5 5/8")
- Automatic reset thermal protection
- Shaft 1/2" with extra long leads
- High efficiency and quiet operation
- Capacitor not included
- Insulation class B
- UL Recognized Component
- Max. working temp.: 104°F (40°C)



Part No.	HP	Power	Amp	RPM	Capacitor (mfd/V)	Bearing	Speeds	Shaft Diameter
RS1971	1/4	208-230/1/60	1.7	1,075	5X370	Ball	3	1/2"
RS1972	1/3	208-230/1/60	2.7	1,075	5X370	Ball	3	1/2"
RS1973	1/2	208-230/1/60	3.7	1,075	7.5X370	Ball	3	1/2"
RS8905	3/4	208-230/1/60	4.6	1,075	10X370	Ball	3	1/2"
RS5461	1/6, 1/2	208-230/1/60	3.9	1,075	10X370	Ball	4	1/2"

#### Motor Cross Reference

Rostock	GE	AO Smith	Fasco	Marathon	Packard	Wagner	Mars	Emerson
RS1971	3584	D1026	D725	X001	43584	WG840584	10584	1971
RS1972	3586	D1036	D923	X003	43586	WG840586	10586	1972
RS1973	3588	D1056	D703	X005	43588	WG840588	10588	1973
RS8905	-	-	-	-	-	-	-	8905
RS5461	3464	FD6000	D833	X073	-	WG840464	10464	5461

## Double Shaft Motors

### Rostock

#### Features:

- Permanent split capacitor
- Resilient base included
- Auto reset thermal protection
- Direct drive air over
- Insulation Class B
- 26" (66cm) leads
- 4 speeds



Part No.	HP	Speeds	RPM		Volts	Bearing	Shaft Dimensions	
			@50Hz	@60Hz			Diameter	Length
RS504	1/8"	4	1,250	1,500	208/230	Sleeve	1/2"	10" & 10"
RS505	1/6"	4	1,250	1,500	208/230	Sleeve	1/2"	10" & 10"
RS506	1/4"	4	1,250	1,500	208/230	Sleeve	1/2"	10" & 10"
RS507	1/3"	4	1,250	1,500	208/230	Sleeve	1/2"	10" & 10"
RS508	1/2"	4	1,250	1,500	208/230	Sleeve	1/2"	10" & 10"

# Refrigeration Fan Motors

## Rostock

### Features:

- Shaded pole motor
- Ball bearing
- Open enclosure
- Automatic reset thermal protection
- Insulation Class B
- Mount type: Stud.
- Frame size: 3.3"
- Bold circle: 2.85"
- Shaft: 5/16" x 2 1/4"
- UL Recognized Component
- Max. working temp.: 104°F (40°C)



Part No.	HP	Power	Amp	Rotation	RPM	Frame Size	Bearing	Speeds	Shaft Dimensions
RS1101	1/20	115/1/60	2.1	CCW	1,550	3.3"	Ball	1	5/16"x2-1/4"
RS1103	1/20	208-230/1/60	1.1	CCW	1,550	3.3"	Ball	1	5/16"x2-1/4"
RS1122	1/15	208-230/1/60	0.4	CW	1,550	3.3"	Ball	1	5/16"x2-1/4"
RS1123	1/15	208-230/1/60	0.5	CCW	1,550	3.3"	Ball	1	5/16"x2-1/4"
RS1124	1/20	115/1/60	2.1	CW	1,550	3.3"	Ball	1	5/16"x2-1/4"
RS1125	1/12	208-230/1/60	0.4	CW	1,550	3.3"	Ball	1	5/16"x2-1/4"
RS1126	1/15	208-230/1/60	1.2	CW	1,550	3.3"	Ball	1	5/16"x2-1/4"

Motor Cross Reference						
Rostock	A0 Smith	Fasco	Larkin	Magnetek	Emerson	GE/Bohn
RS1101	A01101	D2113/D1101	253-1194	574	9650	5KSM59ES2405CS 5KSM59ES3443
RS1103	A01103	D1103/D1127	253-1195	575	9651	5KSM59GS2708S
RS1122	-	D1122 7090-0442	-	-	9652	5KSM59JS5036S
RS1123	-	D1154 7190-2084	-	-	9653	5KSM59LS226AS
RS1124	A01124-5034LS	D1124	-	572	9656	5KSM59JS5036S 5KSM59JSK143S
RS1125	-	D1125 7190-2285	-	-	9664	-
RS1126	A01126	D1126	-	573	-	5KSM59S262AS

▲ Cancer & Reproductive Harm [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

## Multi-Horsepower Commercial Refrigeration Motors

### Rostock

These motor replace hundreds of OEM shaded pole evaporator fan motors found in Bohn, Nutone, Chandler, Larkin, Kramer, Climate Control, McQuay, Heatcraft and reduce truck stock cost. Use a PSC type motor and deliver more power and lower Amp draw compared to shaded pole.

#### Features:

- Shaded pole
- Dual voltage 115V/208-230V
- Reversible plug for easy rotation
- Class "B" Insulation
- Shaft of 3" x 5/16" of diameter
- Ball Bearing
- Mounting: Extended through-bolt with nuts
- Capacitor included (7.5µF x 370V) pre mounted
- Open ventilation
- Thermal overload protected
- Single speed
- UL Recognized Component
- Working temp.: 32°-104°F (0°-40°C)



#### Replace 12 Motor Ratings:

- 1/12Hp CW or CCW, 115V or 208-230V
- 1/15Hp CW or CCW, 115V or 208-230V
- 1/20Hp CW or CCW, 115V or 208-230V

Part No.	HP	Power	Amp	RPM	Rotation
RS8888	1/12, 1/15, 1/20	115/208-230V, 50/60Hz	1.1/0.6	1,550	CW/CCW

#### Motor Cross Reference

Rostock	AO Smith	Emerson	Fasco	GE	OEM	Packard	
RS8888	97721	9650 9651 9652 9653 9656 9662 9664	7163-2113 7163-3371 7190-0442 7190-2084 7190-2255 7190-2285 7190-2969	D1101	5KSM59ES2001 5KSM59JSK143S 5KSM59JS5036S 5KSM59LS2262AS	25308601 25309101 2531194 2531195 7071061	49101
				D1103			
				D1123			
				D1124			
				D1125			
				D1126			
				D1127			
				D1152			
				D1154			
				PD1125			
				PD1127			
				D1122			

## Shaded Pole Motors

### Square Shaded Pole Motors

#### Features:

- Universal mounting
- Class B Insulation
- 50/60 Hz
- Rotation CW/CCW
- RPM: 1300 for 50Hz, 1550 for 60Hz
- Base and fan blade included

Part No.	Output (Watts)	Power (Volts)	Fan Size		Master Box
			mm	in	
FM1-5-1	5	115	154	6 2/3	20
FM1-5-2	5	220	154	6 2/3	20
FM1-7-1	7	115	170-200	6 2/3 - 7 7/8	20
FM1-7-2	7	220	170-200	6 2/3 - 7 7/8	20
FM1-10-1	10	115	200-230	7 7/8 - 9	20
FM1-10-2	10	220	200-230	7 7/8 - 9	20
FM1-16-1	16	115	230-250	9 - 9 5/6	12
FM1-16-2	16	220	230-250	9 - 9 5/6	12
FM1-18-1	18	115	230-250	9 - 9 5/6	12
FM1-18-2	18	220	230-250	9 - 9 5/6	12
FM1-25-1	25	115	250-300	9 5/6 - 11 4/5	12
FM1-25-2	25	220	250-300	9 5/6 - 11 4/5	12
FM1-34-1	34	115	300	11 4/5	12
FM1-34-2	34	220	300	11 4/5	12

⚠ Cancer & Reproductive Harm [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)



### Round Shaded Pole Motors

#### Features:

- Round type shaded pole motor
- Shaded pole watt motors
- Threaded shaft
- All angle operation
- Cast iron body
- Continuous air-over
- Overload protection
- Sleeve bearing
- 50/60Hz
- Thermal protection
- Permanent lubrication
- Operating temperature: 32°-104°F (0°-40°C)

Part No.	Output (Watts)	Power (Volts)	Rotation
FM1-5211	4W	115	CW
FM1-5411	9W	115	CW

⚠ Cancer & Reproductive Harm [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)



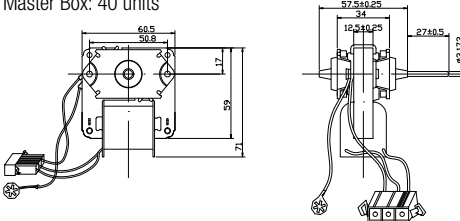
## Skeleton Fan Motors

### Replacement for GE-Hotpoint Hang Mount

Part No.	Voltage	RPM	Current (a)	Rotation	Shaft
FM2-317	115V/1Ph/60Hz	3000	0.15	CW/CCW	1-1/4"x1/8"

△ Cancer & Reproductive Harm [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

Master Box: 40 units



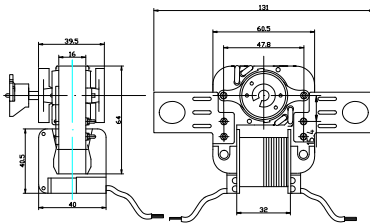
Reversible with screw and nut

### Replacement for Whirlpool Wing Mount

Part No.	Voltage	RPM	Current (a)	Rotation	Shaft
FM2-329	115V/1Ph/60Hz	2600	0.26	CW	Length 31/32" Hub 1-3/64"

△ Cancer & Reproductive Harm [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

Master Box: 40 units

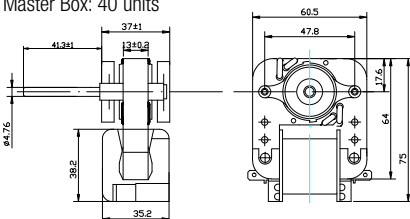


### Replacement for Whirlpool Hang Mount

Part No.	Voltage	RPM	Current (a)	Rotation	Shaft
FM2-334	115V/1Ph/60Hz	3000	0.40	CW	1-3/4"x3/16"

△ Cancer & Reproductive Harm [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

Master Box: 40 units

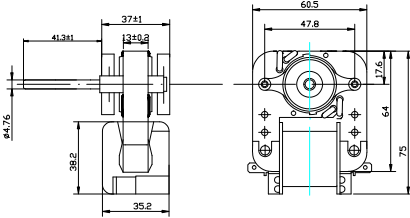


## Replacement for Admiral Hang Mount

Part No.	Voltage	RPM	Current (a)	Rotation	Shaft
FM2-335	115V/1Ph/60Hz	3000	0.48	CW/CCW	1-3/4"x3/16"

⚠ Cancer & Reproductive Harm [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

Master Box: 40 units



## Universal Replacement Motor Kits

Part No.	Voltage	RPM	Current (a)	Rotation	Shaft
FM2-670	115V/1Ph/60Hz	3000	0.45	CW/CCW	1-5/8"x3/16"

⚠ Cancer & Reproductive Harm [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

Master Box: 40 units

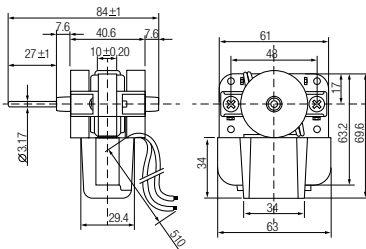


## Replacement for Kelvinator & Indurama

Part No.	Voltage	RPM	Current (a)	Rotation	Shaft
F61-10	110V/1Ph/50-60Hz	2800	0.14	CW	1-1/16" x 1/8"

⚠ Cancer & Reproductive Harm [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

Master Box: 40 units

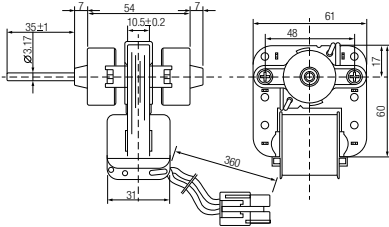


## Replacement for Samsung & LG

Part No.	Voltage	RPM	Current (a)	Rotation	Shaft
4680JB1017E	110V/1Ph/50-60Hz	2800	0.14	CCW	1-3/8"x1/8"

⚠ Cancer & Reproductive Harm www.P65Warnings.ca.gov

Master Box: 40 units

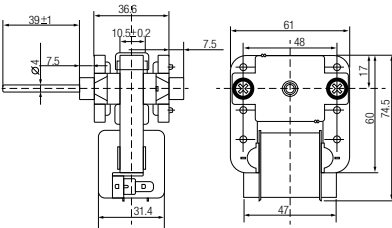


## Replacement for LG

Part No.	Voltage	RPM	Current (a)	Rotation	Shaft
RE-01WT52	110V/1Ph/50-60Hz	2700	0.14	CW	1-17/32"x5/32"

⚠ Cancer & Reproductive Harm www.P65Warnings.ca.gov

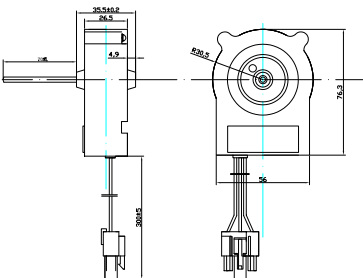
Master Box: 40 units



Part No.	Voltage	RPM	Current (a)	Rotation	Shaft
4681JB1027C	110V/1Ph/50-60Hz	2400	0.24	CCW	1-6/8"x1/8"

⚠ Cancer & Reproductive Harm www.P65Warnings.ca.gov

Master Box: 40 units



new

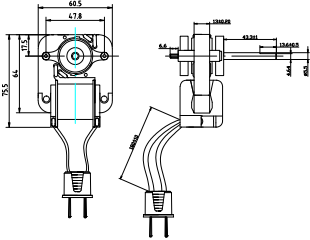


## Replacement for Nutone

Part No.	Voltage	RPM	Current (a)	Rotation	Shaft
FM2-650	110V/1Ph/50-60Hz	2700	0.65	CCW	1-1/2" x 3/16"

△ Cancer & Reproductive Harm [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

Master Box: 40 units

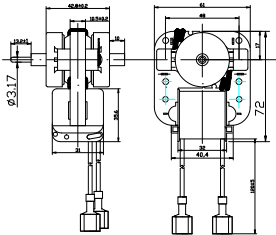


## Universal Replacement Motor

Part No.	Voltage	RPM	Current (a)	Rotation	Shaft
FM2-2321	115V/1Ph/60Hz	3230	0.13	CW/CCW	1/2"x1/8"

△ Cancer & Reproductive Harm [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

Master Box: 40 units

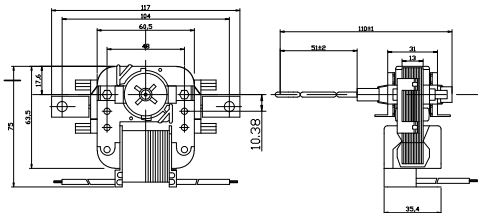


## Universal Replacement Kits

Part No.	Voltage	RPM	Current (a)	Rotation	Shaft
FM2-998	220V/1Ph/60Hz	3000	0.45	CW	2"x1/8"
FM2-999	115V/1Ph/60Hz	3000	0.45	CW	2"x1/8"

△ Cancer & Reproductive Harm [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

Master Box: 40 units

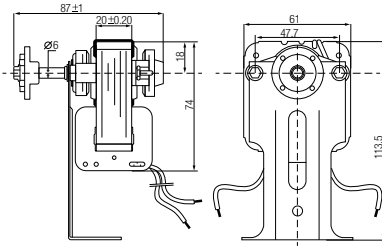


## Condensing Units Fan Motors for Refrigeration

Part No.	Voltage	RPM	Current (a)	Rotation	Shaft
YZF-PSC4W	110V/1Ph/50-60Hz	2800	0.40	CCW	15/64"

⚠ Cancer & Reproductive Harm [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

Master Box: 30 units



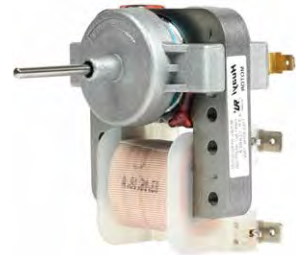
## Huayi - Evaporator Fan Motors

Replacement for GE WR60X162, Hotpoint HYZPF326 and GE EM338.

Part No.	Voltage	RPM	Current (a)	Rotation	Shaft
HY6010U120	115V/1Ph/60Hz	2850	0.19A	CW/CCW	-

⚠ Cancer & Reproductive Harm [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

Master Box: 48 units



## ECM Motors Replacement

### Part No. QL6100

QwikSwap V3 is a direct replacement for any constant torque or variable air flow ECM motor up to 1 HP. QL6100 is a low-cost, robust alternative to expensive unreliable ECM motors

#### Features:

- Direct replacement for any constant torque or variable air flow ECM motor up to 1 HP
- The solution is on your truck – No need to wait and pay for that expensive OEM motor replacement
- Provides variable blower air flow
- Fast replacement, without programming; simply transfer the connection from the ECM motor to the QwikSwap board and wire the QwikSwap board to any PSC motor
- QwikSwap X3 automatically select the optimum PSC motor blower speed (Low, Medium or High) every time the unit cycles on
- Provide improved humidity removal compared to fixed-speed operation (56 % improvement at 82°F, 157% at 97°F outdoor air temperature)
- Equipped with 6,000 Amp, 100 joules surge protection on all high voltage circuits



new

**QwikProducts**  
by Mainstream Engineering

## Axial Fan Suction Motors

### Features:

- Basket guard grille
- Aerodynamic axial fan blades
- Terminal Box: Die-cast aluminum, painted black
- Blade material: Sheet aluminum, painted black
- Fan housing: Sheet steel, galvanized and coated
- Guard grille: steel, coated with black-aluminium plastic
- Low Noise
- Low vibration
- Single phase



Part No.	Output (Watts)	Power (Volts)	RPM	Fan Size	
				in	mm
FM3-45250-2	55	220	1625	9.84	250
FM3-45300-1	115	110	1625	11.81	300
FM3-45300-2	102	220	1625	11.81	300
FM3-45350-1	180	110	1625	13.78	350
FM3-45350-2	196	220	1625	13.78	350
FM3-45400-2	300	220	1625	15.75	400
FM3-45450-2	436	220	1625	17.72	450
FM3-45500-2	557	220	1625	19.69	500
FM3-45550-2	725	220	1625	21.65	550
FM3-45600-2	920	220	1625	23.62	600
FM3-45630-2	1150	220	1625	24.80	630

⚠ Cancer & Reproductive Harm [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

## Universal Evaporator Motor for Minisplits in White Resin Pack

Part No.	Power	Watts	Btu/h	Shaft
YYS-16-4	220V/1Ph/50-60Hz	16	9000	5/16"
YYS-19-4	220V/1Ph/50-60Hz	19	12000	5/16"
YYS-23-4	220V/1Ph/50-60Hz	23	18000	5/16"
YYS-30-4	220V/1Ph/50-60Hz	30	24000	5/16"



⚠ Cancer & Reproductive Harm [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

## Universal Condenser Motors for Minisplits



A



B

Part No.	Power	Watts	Btu/h	Shaft	Image
YDK-30-6	220V/1Ph/50-60Hz	30	9000	5/16"	A
YDK-35-6	220V/1Ph/50-60Hz	35	12000	5/16"	A
YDK-50-6	220V/1Ph/50-60Hz	50	18000-24000	1/2"	B

⚠ Cancer & Reproductive Harm [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

## Universal Double Shaft Motors for Window A/C

new



C

Part No.	Power	Watts	Btu/h	Shaft	Image
YDK-60-6	220V/1Ph/60Hz	60	9000-18000	5/16"	C

⚠ Cancer & Reproductive Harm [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

## Ball Bearings for Fan Motors

Part No.	Seal	Dimensions (mm)	Master Box	Box
608-2RS	Rubber	8 x 2 x 7	200	10
608-ZZ	Metal	8 x 2 x 7	200	10
6201-2RS-C3	Rubber	12 x 32 x 10	80	10
6201-2RS-1/2	Rubber	1/2" x 35 x 10	80	10
6202-2RS-C3	Rubber	15 x 35 x 11	54	10

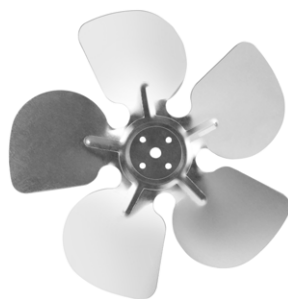


## Fan Blades and Accesories

### Aluminum Fan Blades - Hubless

#### Features:

- CW shaft end use CW motor to push air. Reverse fan blade and use CCW motor for suction
- CCW shaft end use CCW motor to push air. Reverse fan blade and use CW motor for suction
- CFM figures are 1550 RMP at free air
- 6" are 220 CFM @ 3000 RPM



Part No.	Size	Rotation	CFM	Pitch
FB-0601-21	6"	CW	118	21°
FB-0602-21	6"	CCW	118	21°
FB-0601-31	6"	CW	160	31°
FB-0602-31	6"	CCW	160	31°
FB-0701-21	7"	CW	150	21°
FB-0702-21	7"	CCW	150	21°
FB-0701-31	7"	CW	199	31°
FB-0702-31	7"	CCW	199	31°
FB-0801-25	8"	CW	225	25°
FB-0802-25	8"	CCW	225	25°
FB-0801-31	8"	CW	300	31°
FB-0802-31	8"	CCW	300	31°
FB-0901-27	9"	CW	345	27°
FB-0902-27	9"	CCW	345	27°
FB-0901-31	9"	CW	370	31°
FB-0902-31	9"	CCW	370	31°
FB-1001-27	10"	CW	425	27°
FB-1002-27	10"	CCW	425	27°
FB-1001-31	10"	CW	510	31°
FB-1002-31	10"	CCW	510	31°
FB-1201-25	12"	CW	595	25°
FB-1202-25	12"	CCW	595	25°

## Aluminum Fan Blades - Hub Type

Designed for walk-in boxes. 8", 10", 12" will replace Bohn/Heatcraft, Singer, Hill and other cases.

- 5-1/2" are 175 CFM @ 3000 RPM
- 6" are 220 CFM @ 3000 RPM

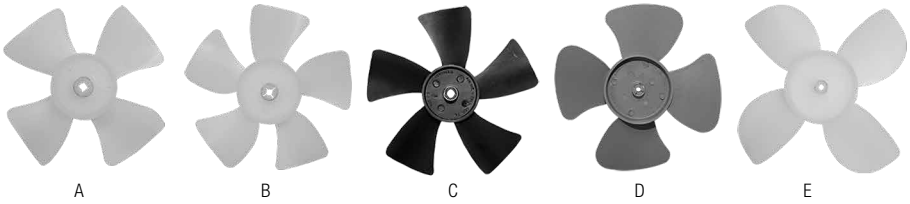


Part No.	Size	Rotation	CFM	Bore	Pitch
FBH-05511-27	5-1/2"	CW	85	3/16"	27°
FBH-05521-27	5-1/2"	CCW	85	3/16"	27°
FBH-05512-27	5-1/2"	CW	85	1/4"	27°
FBH-05522-27	5-1/2"	CCW	85	1/4"	27°
FBH-06012-27	6"	CW	106	1/4"	27°
FBH-06022-27	6"	CCW	106	1/4"	27°
FBH-06013-27	6"	CW	106	5/16"	27°
FBH-06023-27	6"	CCW	106	5/16"	27°
FBH-06512-27	6-1/2"	CW	118	1/4"	27°
FBH-06512-27	6-1/2"	CCW	118	1/4"	27°
FBH-07011-27	7"	CW	200	3/16"	27°
FBH-07012-27	7"	CW	200	1/4"	27°
FBH-07022-27	7"	CCW	200	1/4"	27°
FBH-07013-27	7"	CW	200	5/16"	27°
FBH-07023-27	7"	CCW	200	5/16"	27°
FBH-08012-36	8"	CW	300	1/4"	36°
FBH-08022-36	8"	CCW	300	1/4"	36°
FBH-08013-36	8"	CW	300	5/16"	36°
FBH-08023-36	8"	CCW	300	5/16"	36°
FBH-10012-40	10"	CW	810	1/4"	40°
FBH-10022-40	10"	CCW	810	1/4"	40°
FBH-10013-40	10"	CW	810	5/16"	40°
FBH-10023-40	10"	CCW	810	5/16"	40°
FBH-11014-30	11"	CW	900	3/8"	30°
FBH-12013-25	12"	CW	990	5/16"	25°
FBH-12023-25	12"	CCW	990	5/16"	25°
FBH-14013-19	14"	CW	1200	5/16"	19°
FBH-14023-19	14"	CCW	1200	5/16"	19°

## Plastic Fan Blades

### Features:

- For use on unit bearing and C-frame motors
- Made of durable plastic
- Available for CW and CCW



Part No.	Size	Rotation	CFM @3000 RPM	Bore	Figure
PFB-3511	3-1/2"	CW	65	3/16"	A
PFB-3521	3-1/2"	CCW	65	3/16"	A
PFB-4012	4"	CW	110	1/8"	B
PFB-4022	4"	CCW	110	1/8"	B
PFB-4011	4"	CW	110	3/16"	B
PFB-4021	4"	CCW	110	3/16"	B
PFB-5021	5"	CCW	210	3/16"	C
PFB-5023	5"	CCW	210	1/4"	C
PFB-5511	5-1/2"	CW	240	3/16"	D
PFB-5521	5-1/2"	CCW	240	3/16"	D
PFB-6011	6"	CW	300	3/16"	E
PFB-6021	6"	CCW	300	3/16"	E

## Metal Hubs

Part No.	Description	Bore
MH-3001	Adapter hubless fan blades to fit standard shafts.	5/16"
MH-3002		1/4"



## ***Motor Mount***

### ***Rigid Jok Motor Mount***

#### **Part No. MM-135**

Solid 48 frame motor double ring mounting system. Complete with lock-on hangers, lock washer and 2-1/2" bolt for extra security. 3/8" mounting hole fits Carrier and others.



### ***Big Rigid Jok Motor Mount***

#### **Part No. MM-137**

48" frame motor mounting system with 3 lugs. Double wire ring 2-1/2" bolt, nut and lock washer included. For blowers, air conditioners, furnaces, etc.

#### **Replaces:**

- Fasco 55L
- Gemline MB822
- Magnetek 1364



### ***Flat Band Motor Mount***

#### **Part No. MM-131**

48" frame motor mounting system with 3 lock-on hangers with solid 1" steel band.



### ***Rain Guard***

#### **Part No. RG-155**

6-3/4" diameter for protecting condensing unit motors. Press fit on shaft or mount on studs with plug in bore.





# Compressors

## A/C Reciprocant Compressors

### Tecumseh Hermetic Compressors

Tecumseh designs and manufactures hermetic compressors for residential and light commercial air conditioning, heat pump and refrigeration applications and is one of the largest compressor manufacturers in the world.



**Tecumseh**



Part No.	Ref	Power	Capacity		Motor Input Watts	ERR/COP		Displacement cm <sup>3</sup> /rev
			Btu/h	Watts		Btu/wh	w/w	
AWG5524EXN	R-22	208-230/1/60	24200	7091	2480	9.76	2.86	43.11
AWG5528EXN		208-230/1/60	28000	8204	2870	9.76	2.86	48.43
AVB5535EXN		208-230/1/60	35000	10255	3210	10.91	2.75	59.69
AVB5535EXT		200-230/3/50-60	34500	10109	3250	10.62	3.11	59.69
AVB5542EXN		208-230/1/60	42000	12306	3880	10.82	3.17	69.34
AVB5542EXT		200-230/3/50-60	41500	12160	3950	10.51	3.08	69.34
AVB5549EXN		208-230/1/60	49000	14357	4570	10.72	3.14	78.97
AVB5549EXT		200-230/3/50-60	48000	14064	4610	10.41	3.05	78.97
AVB5558EXN		208-230/1/60	57500	16848	5480	10.49	3.07	91.04
AVB5558EXT		200-230/3/50-60	57000	16701	5400	10.56	3.09	91.04
AGA5561EXN		208-230/1/60	61000	17873	6500	9.38	2.75	112.44
AGA5561EXT		200-230/3/50-60	61000	17873	6300	9.68	2.84	112.44

Part No.	Description
31529-1	Tecumseh rotolock valve 7/8" sweat tin

⚠ Cancer & Reproductive Harm [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

## Scroll Compressors

### Panasonic Scroll Compressors

Panasonic scroll compressors provide customers the world's foremost product quality and technology. They are developed to satisfy the particular purposes, design objectives, and performance as well as size requirements of environmental control equipment - from air conditioners to dehumidifiers and cooling systems.

#### Features:

- Compact and light weight design
- Low noise, high efficiency
- High quality delivered by superior machining technology

#### Test Conditions:

- Evaporating Temp: 45°F (7.2°C)
- Condensing Temp: 130°F (54.4°C)
- Suction Gas Temp: 65°F (18.3°C)
- Temp. before expansion valve: 115°F (46.1°C)



**Panasonic**

Part No.	Ref.	Output (Btu/h)	Disp. (cm <sup>3</sup> /rev)	Power	Capacitor Specs		Capacity		COP	
					Run (uF/v)	Start (uF/v)	KW	KBtu/h	w/w	Btu/wh
C-SBR120H16A	R-22	38200	51.8	208-230/1/60	50/440	-	11.2	38.2	3.1	10.6
C-SBR145H16A		49000	66.8		50/440	-	14.5	49.5	3.3	11.1
C-SBR165H16A		57400	77.4		70/440	-	16.8	57.4	3.2	10.9

C-SB263H6B	R-22	36000	55.7	208-230/3/60	-	-	11.9	40.6	3.2	11.0
C-SB303H6B		49000	66.8		-	-	14.4	49.2	3.3	11.2
C-SB353H6B		57400	77.4		-	-	16.8	57.4	3.3	11.2
C-SC603H6H		99400	137.0		-	-	29.6	101.1	3.3	11.3
C-SC753H6H		127700	171.2		-	-	37.0	126.3	3.4	11.5
C-SC903H6H		147700	205.4		-	-	43.2	147.5	3.2	10.8

C-SB353H8A	R-22	57400	77.4	440-460/3/60	-	-	16.8	57.4	3.3	11.2
C-SC603H8H		97000	137.0		-	-	29.6	101.1	3.3	11.2
C-SC753H8H		127000	171.2		-	-	36.9	126.0	3.3	11.3

C-SBP105H16A	R-410a	36000	34.9	208-230/1/60	-	-	10.5	35.8	2.8	9.4	
C-SBP120H16A		41000	39.6		-	-	12.2	41.7	2.9	9.8	
C-SBP140H16A		48800	46.4		-	-	14.3	49.3	2.9	9.9	
C-SBP160H16A		53900	51.8		-	-	16.2	55.3	3.0	10.2	
C-SBP170H16A		59400	54.8		-	-	16.8	57.4	3.0	10.2	
C-SCP315H36B		89000	104.1		-	-	32.2	109.9	3.1	10.7	
C-SCP315H36A		108000	104.1		208-230/3/60	-	-	32.2	109.9	3.1	10.7
C-SCP315H38B		89000	104.1		440-460/3/60	-	-	26.0	88.8	3.1	10.7

C-SBR120H15A	R-22	33100	55.7	220-240/1/50	-	-	9.70	33.1	3.0	10.2
C-SBR165H15A		46800	77.4	220-240/1/50	-	-	13.7	46.8	3.1	10.5
C-SBR200H15A		56000	93.1	220-240/1/50	-	-	16.4	56.0	3.1	10.7
C-SBR453H5A		60800	100.0	220-240/3/50	-	-	17.8	60.8	3.2	11.1

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## Invotech Scroll Compressors

### Features:

- High-tech compressor technology
- High reliability and durability
- Both build-in radius and axial compliance design, improved floating seal design for better energy efficiency
- Wide range of applications
- Low noise, high efficiency
- UL, TUV, ISO Certifications

### Test Conditions (ASHRAE):

- Evaporating Temp: 45°F (7.2°C)
- Condensing Temp: 130°F (54.4°C)
- Suction Gas Temp: 65°F (18.3°C)
- Temp. before expansion valve: 115°F (46.1°C)



Part No.	Ref.	Power	KBtu/h	Disp (cm <sup>3</sup> )	KW
YH69A3-100	R-22	208-230/1Ph/60Hz	27.84	38.10	8.16
YH89A3-100			36.44	49.00	10.68
YH104A3-100			43.40	59.00	12.72
YH119A3-100			48.73	65.70	14.28
YH128A3-100			52.41	71.00	15.36
YH140A3-100			57.32	77.10	16.80
YH150A3-100			61.42	82.90	18.00
YH128A7-100		208-230/3Ph/60Hz	52.41	71.00	15.36
YH140A7-100			57.32	77.10	16.80
YH230A7-100			96.00	123.00	28.18
YH266A7-100			110.73	141.10	32.45
YH355A7-210			144.00	188.00	43.31
YH355A7-100			147.78	188.00	43.31

Part No.	Ref.	Power	KBtu/h	Disp (cm <sup>3</sup> )	KW
YH95C3-100	R-410A	208-230/1Ph/60Hz	39.55	38.30	11.59
YH119C3-100			49.54	45.70	14.52
YH128C3-100			53.28	49.10	15.62
YH150C3-100			62.44	62.44	18.30
YH150C7-100			62.44	58.90	18.30
YH230C7-100		208-230/3Ph/60Hz	95.75	90.30	28.06
YH292C7-100			121.55	106.90	35.62
YH355C7-100			144.87	130.90	42.46

Part No.	Ref.	Power	KBtu/h	Disp (cm <sup>3</sup> )	KW
YM34E3G-100	R-404A	208-230/1Ph/60Hz	24	33.30	4.27
YM43E3G-100			30	42.00	5.10
YM49E3G-100			36	46.60	5.81
YM70E3G-100			48	67.80	8.30
YM86E3G-100			60	83.30	10.20
YM34E7G-100			208-230/3Ph/60Hz	24	33.30
YM43E7G-100		30		42.00	5.19
YM49E7G-100		36		46.60	5.91
YM70E7G-100		48		67.80	8.44
YM86E7G-100		60		83.30	10.31

## Rotary Compressors

### GMCC Rotary Compressors

Part of the Midea Group, GMCC is one of the largest rotary compressor manufacturers in the world. It is dedicated to a sustainable and environmentally friendly development of high efficiency, quality, and cost competitive rotary compressors.

#### Test Conditions (ASHRAE):

- Evaporating Temp: 45°F (7.2°C)
- Condensing Temp: 130°F (54.4°C)
- Suction Temp: 95°F (35.0°C)
- Ambient Temp: 95°F (35.0°C)
- Sub-Cooling Temp: 115°F (46.1°C)

# GMCC



Part No.	Ref.	Power Supply (V/Ph/Hz)	Displ. (cm <sup>3</sup> )	W	Btu/h	Power (W)	COP (W/W)	Run Capacitor
HSM130N12UEZ	R-22	208-230V/1Ph/60Hz	13.0	2750	9383	846	3.25	30x370
PH170G1C-3DZDU1		208-230V/1Ph/60Hz	16.5	3500	11942	1060	3.30	30x370
EH170M1B-1DZ1		115V/1Ph/60Hz	16.4	3430	11824	1045	3.29	40x370
HSM170N2UDZ		208-230V/1Ph/60Hz	16.9	3540	12078	1115	3.17	40x370
PH250M2A-3FTU2		208-230V/1Ph/60Hz	24.8	5285	18032	1625	3.25	40/370
PH310G2C-3KUU		208-230V/1Ph/60Hz	30.8	6780	23133	2085	3.25	55x440
PH370G2C-3MTS		208-230V/1Ph/60Hz	37.0	8110	24671	2655	3.05	55x440
ASM113E1UDZ		R-410A	115V/1Ph/60Hz	11.3	3215	10970	745	4.32
PA118M1C-3FZU	208-230V/1Ph/60Hz		12.0	4160	14194	990	4.20	40x370
PA170M2A-3FT1	208-230V/1Ph/60Hz		17.1	5155	17589	1662	3.10	45x370
PA240M2C-3MTU2	208-230V/1Ph/60Hz		24.0	7220	24635	2475	2.92	55x370
ASM130V1VDZ	R-410A	220V/1Ph/50Hz	13.0	3760	12829	885	4.25	35x370
PA185M2C-4FT2		220V/1Ph/50Hz	18.5	5015	17060	1500	3.00	35x440
PA240X2CS-4KU1		220V/1Ph/50Hz	23.9	5840	19926	1980	2.95	50x370

# Refrigeration Compressors

## Tecumseh Refrigeration Compressors

Tecumseh Products Company is recognized for bringing an extra dimension in product innovation, customer confidence and product quality to air conditioners and refrigeration industries. As a result of our innovative spirit and performance, people rely on our products every day.

### Test Conditions (ASHRAE):

- Evaporating Temp: LBP: -10°F (-23.3°C), MBP: 20°F (-6.7°C), and HBP: 45°F (7.2 °C)
- Condensing Temp: 130°F (54.4°C)

### Features:

- All compressors with individual packaging.
- Wide operation range with good voltage adaptability
- Low noise and vibration



Part No.	Ref.	App.	Hp	Capacity		Displ. (cm <sup>3</sup> )	EER (Btu/Wh)	Current (a)	Voltage (v)	
				Btu/h	Kcal/h					
THG1340YS	R-134a	LBP	1/8	425	107	3.79	4.25	1.26	127	
THG1352YLS			1/6	525	132	5.01	4.39	1.49	127	
THG1352YGS			1/6	525	132	5.01	4.27	0.82	220	
THG1358YS			1/5	600	151	5.58	4.17	1.93	127	
THG1358YGS			1/5	600	151	5.58	4.41	0.96	220	
TSB1380YDS			1/4	800	202	6.53	4.94	2.09	127	
TSB1380YGS			1/4	800	202	6.53	5.10	1.04	220	
TSB1390YS			1/3	900	227	7.28	4.90	2.58	127	
TP1413YS			R-401a	1/3+	1255	316	10.86	4.48	3.67	127
TP1413YS			R-401a	1/3+	1255	316	10.86	4.48	2.12	220
TP1415YS	R-401b	1/2	1440	363	12.52	4.60	4.30	127		
TP1415YS		1/2	1440	363	12.52	4.60	2.35	220		
AE4430YDS	MBP HBP	1/4	3400	857	8.02	8.40	4.60	127		
AE4440YDS		1/3	4300	1084	10.33	7.85	6.10	127		
AE4450YDS		1/2	5500	1386	13.24	7.71	7.60	127		
AE4450YES		1/2	5500	1386	13.24	8.11	3.78	220		
TYA4466YES		1/2+	6900	1739	19.00	7.62	5.40	220		
TYA4475YES		3/4	8000	2016	22.00	7.12	7.39	220		
TYA4489YES		1	9400	2369	2600	7.30	7.30	127		
AEA2411ZFR		R-404a	LBP	1/2	1600	403	8.09	3.77	3.00	220
AEA2413ZFR				1/2+	1760	444	10.10	3.61	3.76	220
AEA2415ZFR				3/4	2220	559	12.54	3.88	3.71	220
TYA2431ZES	1			3225	813	19.00	4.16	3.65	220	
TYA2438ZES	1-1/4			3810	960	22.00	4.12	4.73	220	
TYA2446ZES	1-1/2			4775	1203	26.00	4.15	6.07	220	
TYA4452YDS	1/2			5500	1386	16.00	5.11	7.11	127	
TPA9421YLS	1/3			2340	590	10.86	5.23	6.87	127	

## Bautzen Refrigeration Compressors

These series compressors belongs to the hermetical piston rod type by electromotor driving. It adopts PTC starter or starting relay and matches overload protection inside. Widely used for house refrigerators, freezers, commercial refrigerators, dehumidifiers, etc.

### Features:

- Excellent Starting performance
- Small space, light weight
- Low noise, little vibration
- High efficiency = energy savings
- Good adaptability of voltage
- Low, Medium, High back pressure. All in one compressor

### Test Conditions (ASHRAE):

- Evaporating Temp: -10°F (-23.3°C)
- Condensing Temp: 130°F (54.4°C)
- Suction Temp: 90°F (32.2°C)
- Ambient Temp: 90°F (32.2°C)
- Sub-Cooling Temp: 90°F (32.2°C)



**BAUTZEN**  
Compressors

Part No.	Ref.	App.	Hp	Power (V/Ph/Hz)	Displ (Cm <sup>3</sup> )	Cap (w)	Input Power (w)	C.O.P.	Current (a)	Cooling Type	Motor Type
QD30H	R-134a	LMHB/P	1/10	110-120/1/60	3.0	75	72	1.1	1.3	ST	RSIR
QD35H			1/8		3.5	100	90	1.3	1.0	ST	RSIR
QD52H			1/6+		5.2	158	116	1.8	2.0	ST	RSIR
QD65H			1/5		6.5	201	144	1.3	2.3	ST	RSIR
QD75H			1/4		7.5	216	163	2.5	3.3	ST	RSIR/ CSIR
QD110H			1/3		11.0	336	260	3.4	4.0	F	RSIR/ CSIR
QD128H			1/2		12.8	425	326	1.3	4.0	F	CSIR
QD128H2			1/2		220/1/60	12.8	430	320	1.3	2.2	F

QD43HB	R-134a	LMHB/P	1/8	110/1/50	3.5	120	95	1.3	1.0	ST	RSIR
QD52HB			1/6+		5.2	137	102	1.8	2.0	ST	RSIR
QD65HB			1/5		6.5	172	144	1.3	2.3	ST	RSIR
QD75HB			1/4		7.5	189	145	2.5	3.3	ST	RSIR
QD110HB			1/3		11.0	292	230	3.4	4.0	F	RSIR

# Black Units

## Tecumseh Black Units

Tecumseh Products Company is recognized for bringing an extra dimension in product innovation, customer confidence and product quality to air conditioners and refrigeration industries. As a result of our innovative spirit and performance, people rely on our products every day.

### Features and Specifications:

- Black Units from 1-1/3 to 12 Hp and Light Commercial from 1/4 to 1-1/2 Hp
- High efficiency
- Heavy duty and low noise
- Not for sale in USA



Part No.	Ref.	App.	Hp	5°F (-15°C)		20°F (-6.7°C)		32°F (0°C)		45°F (7.2°C)		Dimensions (mm)			Displ. (Cm <sup>3</sup> )
				Kcal/h	Btu/h	Kcal/h	Btu/h	Kcal/h	Btu/h	Kcal/h	Btu/h	A	B	C	
UAE4430Y	R134a R401a R401b	MBP HBP	1/4	1127	284	1571	460	2500	630	3400	856	390	316	235	8.02
UAE4440Y			1/3	1230	358	1892	554	3329	839	4350	1096	391	327	235	10.33
UAE4450Y			1/2	1578	397	2150	630	4002	1008	5500	1385	391	327	286	13.24
UTY4466Y			1/2+	3009	758	4681	1179	6179	1556	7557	1904	510	368	280	18.80
UTY4475Y			3/4	3370	849	5243	1321	6920	1744	8464	2133	510	368	280	22.30
UTY4489Y			1	4204	1059	5883	1482	7499	1889	9400	2368	490	407	330	26.00

Part No.	Ref.	App.	Hp	-30°F (-34.4°C)		-10°F (-23.3°C)		0°F (-17.8°C)		54°F (12.2°C)		Dimensions (mm)			Displ. (Cm <sup>3</sup> )
				Kcal/h	Btu/h	Kcal/h	Btu/h	Kcal/h	Btu/h	Kcal/h	Btu/h	A	B	C	
UAE2411Z	R404a	LBP	1/2	803	202	1600	403	2128	536	2723	686	391	327	286	8.09
UAE2420G			1/3+	883	222	1760	444	2341	590	2995	754	391	327	286	10.10
UAE2425Z			3/4	1166	294	2100	529	2793	704	3570	899	391	327	286	12.54
UTY2431Z			1	1326	334	3353	845	4386	1105	5701	1436	510	368	280	18.80
UTY2438Z			1-1/4	2280	575	3955	997	4380	1104	5851	1474	510	368	280	22.33
UTY2446Z			1-1/2	2658	670	4617	1163	5139	1294	5976	1505	510	368	280	26.00
AWS2495Z			2	2668	673	5440	1372	7507	1893	10302	2598	512	527	445	-
AWS2512Z			3	3113	785	6967	1757	9771	2464	13499	3404	512	527	445	-

Part No.	Ref.	App.	Hp	Kcal/h					Dimensions (mm)		
				-40°F (-40°C)	-22°F (-30°C)	-10°F (-23.3°C)	-4°F (-20°C)	14°F (-10°C)	A	B	C
CAJ2464Z	R404a	LBP	1-1/2	633	1110	1493	1697	2367	320	440	480
FH2480Z			2	863	1645	2242	2539	3424	420	515	607
FH2511Z			3	1004	2127	2917	3327	4506	450	510	630
TAG2516Z			4	1651	3179	4355	4979	7024	456	992	894
TAG2522Z			5	2173	4013	5415	6156	8569	565	1072	590
TAGD2532Z			8	2991	5998	8421	9735	14202	670	1417	738
TAGD2544Z			10	4075	7633	10349	11785	16529	670	1417	738

Part No.	Ref.	App.	Hp	Kcal/h					Dimensions (mm)		
				-4°F (-20°C)	14°F (-10°C)	32°F (0°C)	41°F (5°C)	59°F (15°C)	A	B	C
UAW4522E	R22	MBP HBP	2	1803	2774	4094	4833	6543	512	527	445
UAW4532E			2-1/2	2398	4032	5786	6701	8639	512	527	445
UAW4538E			3	2481	4687	6965	8064	-	512	527	445
TAG4553TK			4	3565	6310	9751	11710	16010	1080	974	565
TAG4561TK			5	4220	7105	10827	12994	18110	1080	974	565
TAGD4590T			7	5782	10329	16571	20110	27612	1417	720	868
TAGD4612T			10	8157	13828	21253	25338	-	1417	720	868

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## Compressor Terminal Repair Kits

### Part No. TLC-3-10

Term-Loks are made of high quality heat sensed brass and are guaranteed for the life of the compressor. The kit contains a brass cylindrical tube with a diameter large enough to slip over the pins and has a stainless set screw to lock onto the terminal. A wrench is provided with every kit for easy installation and an anti-arc spacer is also included to prevent arcing between posts.

#### Features:

- 600V, 105 strand copper-tin coated wire
- 10 gauge connection kit
- Kit includes: 3 wires, short arm hex key, anti-arc spacer

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new

**TERM-LOK**

### Part No. QL2800

Terminal repair kit QwikLug® easily attaches to damaged or corroded spade connectors, quickly and easily solving the problem of a compressor with pitted or severely corroded spade terminals.

#### Features:

- 3 Lugs / Male spades / No wire
- Compressor terminal repair kit
- Replaces corroded terminals
- QL2800 has spanish instructions
- Provides durable brass connection
- Tested for more than 100,000 compressor starts

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new

**QwikProducts**  
by Mainstream Engineering



# Capacitors

## Run Capacitors

### Features:

- No induction winding structure of metallic polypropylene membrane
- Credible insulation performance, super electric performance with ability of self-heating and safety explosion proof equipment
- Excellent heat dispersion, small volume, wide range of capacity, low loss stable capacitance
- With stand impact current, strong overload performance and long live span
- Suitable for starting and operating 50Hz or 60Hz AC single phase electro-motor
- UL Listed – E477014

### Main Technical Parameters:

- Working Temperature: -13 to 158°F (-25 to 70°C)
- Capacitance Tolerance: J:±5% K:±10%.
- Non-PCB capacitor
- Expected life 60,000 hours



## Round Run Capacitors - 370V

Part No.	Capacitance		Terminals	Dimensions(mm)		Master Box
	Rating (uF)	@Voltage		Capacitor	Box	
3x370	3	370	2x4	40x60	42x75	50
5x370	5	370	2x4	40x60	42x75	50
7.5x370	7.5	370	2x4	40x60	42x75	50
10x370	10	370	2x4	40x60	42x75	50
12.5x370	12.5	370	2x4	40x70	42x85	50
15x370	15	370	2x4	40x70	42x85	50
17.5x370	17.5	370	2x4	40x70	42x85	50
20x370	20	370	2x4	40x90	42x105	50
25x370	25	370	2x4	40x90	42x105	50
30x370	30	370	2x4	50x100	52x115	50
35x370	35	370	2x4	50x100	52x115	50
40x370	40	370	2x4	50x100	52x115	50
45x370	45	370	2x4	50x100	52x115	50
50x370	60	370	2x4	50x100	52x115	50
55x370	55	370	2x4	50x100	52x140	50
60x370	60	370	2x4	50x100	52x140	50
70x370	70	370	2x4	50x100	52x140	50
80x370	80	370	2x4	50x100	57x140	50

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## Round Run Capacitors - 440V

Part No.	Capacitance		Terminals	Dimensions(mm)		Master Box
	Rating (uF)	@Voltage		Capacitor	Box	
3x440	3	440	2x4	40x90	42x105	50
5x440	5	440	2x4	40x90	42x105	50
7.5x440	7.5	440	2x4	40x90	42x105	50
10x440	10	440	2x4	40x90	42x105	50
12.5x440	12.5	440	2x4	40x90	42x105	50
15x440	15	440	2x4	40x90	42x105	50
17.5x440	17.5	440	2x4	40x90	42x105	50
20x440	20	440	2x4	40x90	42x105	50
25x440	25	440	2x4	50x90	52x105	50
30x440	30	440	2x4	50x100	52x115	50
35x440	35	440	2x4	50x100	52x115	50
40x440	40	440	2x4	50x100	52x115	50
45x440	45	440	2x4	50x100	52x115	50
50x440	50	440	2x4	50x110	52x125	50
55x440	55	440	2x4	50x125	52x140	50
60x440	60	440	2x4	50x125	52x140	50
70x440	70	440	2x4	55x125	57x140	50
80x440	80	440	2x4	55x125	57x140	50

⚠ Cancer & Reproductive Harm [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

## Dual Round Run Capacitors - 370V

Part No.	Capacitance		Terminals	Dimensions(mm)		Master Box
	Rating (uF)	@Voltage		Capacitor	Box	
25-3x370	25+3	370	3x4	50x100	52x115	50
30-3x370	30+3	370	3x4	50x110	52x125	50
35-3x370	35+3	370	3x4	50x110	52x125	50
40-3x370	40+3	370	3x4	50x125	52x140	50
45-3x370	45+3	370	3x4	50x125	52x140	50
50-3x370	50+3	370	3x4	50x125	52x140	50
25-5x370	25+5	370	3x4	50x100	52x115	50
30-5x370	30+5	370	3x4	50x110	52x125	50
35-5x370	35+5	370	3x4	50x110	52x125	50
40-5x370	40+5	370	3x4	50x125	52x140	50
45-5x370	45+5	370	3x4	50x125	52x140	50
50-5x370	50+5	370	3x4	50x125	52x140	50
55-5x370	55+5	370	3x4	50x125	52x140	50
60-5x370	60+5	370	3x4	50x125	52x140	50
70-5x370	70+5	370	3x4	55x125	57x140	50
80-5x370	80+5	370	3x4	55x125	57x140	50

⚠ Cancer & Reproductive Harm [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

## Dual Round Run Capacitors - 440V

Part No.	Capacitance		Terminals	Dimensions(mm)		Master Box
	Rating (uF)	@Voltage		Capacitor	Box	
35-1.5x440	35+1.5	440	3x4	50x110	52x125	50
40-1.5x440	40+1.5	440	3x4	50x125	52x140	50
45-1.5x440	45+1.5	440	3x4	50x125	52x140	50
25-5x440	25+5	440	3x4	50x100	52x115	50
30-5x440	30+5	440	3x4	50x110	52x125	50
35-5x440	35+5	440	3x4	50x110	52x125	50
40-5x440	40+5	440	3x4	50x125	52x140	50
45-5x440	45+5	440	3x4	50x125	52x140	50
50-5x440	50+5	440	3x4	50x125	52x140	50
55-5x440	55+5	440	3x4	50x125	52x140	50
60-5x440	60+5	440	3x4	50x125	52x140	50
70-5x440	70+5	440	3x4	55x125	57x140	50
80-5x440	80+5	440	3x4	55x125	57x140	50
30-7.5x440	30+7.5	440	2+3+4	50x95	53x115	50
35-7.5x440	35+7.5	440	2+3+4	50x95	53x115	50
40-7.5x440	40+7.5	440	2+3+4	50x100	53x115	50
45-7.5x440	45+7.5	440	2+3+4	50x100	53x115	50
50-7.5x440	50+7.5	440	2+3+4	55x100	58x120	50
55-7.5x440	55+7.5	440	2+3+4	50x130	53x145	50
60-7.5x440	60+7.5	440	2+3+4	50x130	53x145	50
70-7.5x440	70+7.5	440	2+3+4	60x110	63x130	50
80-7.5x440	80+7.5	440	2+3+4	60x110	63x130	50

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## Square Run Capacitors - 250V

### Features:

- Replacement capacitor for mini splits & PTAC units
- 50/60 Hz A/C motors
- Spade terminals
- Filled with epoxy resin
- Flame-retardant plastic case
- UL Listed – E507618



Part No.	Capacitance		Dimensions (mm)	Master Box
	Rating (µF)	@Voltage		
CBB6101-1	1	250	36x14x36	200
CBB6102-1	1.5	250	36x14x36	200
CBB6103-1	2	250	36x14x36	200
CBB6104-1	2.5	250	36x14x36	200
CBB6105-1	3	250	36x14x36	200
CBB61055-1	3.5	250	38x16x36	200
CBB6106-1	4	250	38x16x36	200
CBB6107-1	4.5	250	38x16x36	200
CBB6108-1	5	250	38x16x36	200
CBB6109-1	6	250	44x19x46	200
CBB6110-1	7	250	44x19x46	200
CBB6111-1	8	250	44x19x46	200
CBB6112-1	9	250	38x18.5x29	200
CBB6113-1	10	250	38x18.5x29	200

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## Square Run Capacitors - 450V

Part No.	Capacitance		Dimensions (mm)	Master Box
	Rating (µF)	@Voltage		
CBB6101-2	1	450	32x14x36	200
CBB6102-2	1.5	450	32x14x36	200
CBB6103-2	2	450	32x14x36	200
CBB6104-2	2.5	450	38x16x36	200
CBB6105-2	3	450	38x19x36	200
CBB61055-2	3.5	450	44x19x46	200
CBB6106-2	4	450	44x19x46	200
CBB6107-2	4.5	450	44x19x46	200
CBB6108-2	5	450	44x32x46	200
CBB6109-2	6	450	44x32x46	200
CBB6110-2	7	450	44x32x46	200
CBB6111-2	8	450	44x32x46	200
CBB6112-2	9	450	48x26x37	200
CBB6113-2	10	450	48x28x39	200

⚠ Cancer & Reproductive Harm [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

## Start Capacitors

Also known as electrolytic capacitor.

### Features:

- Round type
- Bakelite plastic case
- Max. operation temp: 149°F (65°C)
- Suitable for operating 50Hz or 60Hz AC single phase electro-motor
- UL Listed – E481006



## Start Capacitors - 110/125V

Part No.	Capacitance		Dimensions(mm)		Master Box
	Rating (µF)	@Voltage	Capacitor	Box	
72-86-1	72-86	110/125	36x70	36x75	50
88-106-1	88-106	110/125	36x70	36x75	50
108-130-1	108-130	110/125	36x70	36x75	50
124-148-1	124-149	110/125	36x70	36x75	50
130-156-1	130-156	110/125	36x70	36x75	50
145-175-1	145-175	110/125	36x70	36x75	50
161-193-1	161-193	110/125	36x70	36x75	50
189-227-1	189-227	110/125	36x70	36x75	50
216-259-1	216-259	110/125	36x70	36x75	50
233-280-1	233-280	110/125	36x70	36x75	50
243-292-1	243-292	110/125	36x70	36x75	50
270-324-1	270-324	110/125	36x70	36x75	50
324-389-1	324-389	110/125	36x85	36x90	50
340-408-1	340-408	110/125	36x85	36x90	50
378-454-1	378-454	110/125	36x85	36x90	50
430-516-1	430-516	110/125	36x85	36x90	50
400-480-1	400-480	110/125	36x85	36x90	50
460-552-1	460-552	110/125	36x85	36x90	50
540-648-1	540-648	110/125	46x85	46x90	50
590-708-1	590-708	110/125	46x85	46x90	50
645-774-1	645-774	110/125	46x85	46x90	50
708-850-1	708-850	110/125	46x85	46x90	50
720-864-1	720-864	110/125	46x111	46x116	50
829-995-1	829-995	110/125	46x111	46x116	50
850-1020-1	850-1020	110/125	46x111	46x116	50
1000-1200-1	1000-1200	110/125	46x111	46x116	50

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## Start Capacitors - 220/250V

Part No.	Capacitance		Dimensions(mm)		Master Box
	Rating (µF)	@Voltage	Capacitor	Box	
72-86-2	72-86	220/250	36x85	36x90	50
88-106-2	88-106	220/250	36x85	36x90	50
108-130-2	108-130	220/250	36x85	36x90	50
124-148-2	124-148	220/250	36x85	36x90	50
130-156-2	130-156	220/250	36x85	36x90	50
145-175-2	145-175	220/250	36x85	36x90	50
161-193-2	161-193	220/250	36x85	36x90	50
189-227-2	189-227	220/250	36x85	36x90	50
216-259-2	216-259	220/250	46x85	46x90	50
233-280-2	233-280	220/250	46x85	46x90	50
243-292-2	243-292	220/250	46x85	46x90	50
270-324-2	270-324	220/250	46x85	46x90	50
324-389-2	324-389	220/250	46x111	46x116	50
340-408-2	340-408	220/250	46x111	46x116	50
378-454-2	378-454	220/250	46x111	46x116	50
400-480-2	400-480	220/250	46x111	46x116	50

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## Start Capacitors - 330V

Part No.	Capacitance		Dimensions(mm)		Master Box
	Rating (µF)	@Voltage	Capacitor	Box	
88-106-3	88-106	330	36x85	36x90	50
108-130-3	108-130	330	36x85	36x90	50
124-148-3	124-148	330	46x85	46x90	50
130-156-3	130-156	330	46x85	46x90	50
145-175-3	145-175	330	46x85	46x90	50
161-193-3	161-193	330	46x85	46x90	50
189-227-3	189-227	330	46x85	46x90	50
216-259-3	216-259	330	46x111	46x116	50
270-324-3	270-324	330	46x111	46x116	50

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# Hard Start Kits

## Hard Start Kits for A/C Compressors

### Features:

- Contains relay and start capacitor for extra starting torque
- Installs in seconds across run capacitor terminals
- UL Listed - E481006

### Applications:

- Room A/C Units
- Residential and commercial PSC A/C units and heat pumps
- For all PSC A/C units from 4,000 to 120,000 BTU's (1/2 thru 10 HP)
- Can be used on 120 - 288 VAC units
- For low voltage and hard starting compressors

Part No.	Voltage	HP	Increase Torque Up to
SK-5	115-230	1/2 to 5	300%
SK-6	115-230	1/2 to 10	500%
SK-7	170-277	1 to 4	600%

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Master Box: 50 units



## Hard Start Kits for Appliance Compressors

DC Type 3-in-1 start relay. Extends the life of old refrigerators and freezers by providing an additional boost to the compressor.

### Features:

- Installs quickly and easily by simply pushing on 3 female pin terminals
- Completely pre-wired
- UL Listed - E481006

### Applications:

- All 3 electrical components: relay, overload and start capacitor
- For all capillary systems

Part No.	Voltage	HP
DC-810	115	1/12 to 1/5
DC-410	115	1/4 to 1/3

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Master Box: 50 units



## Contactors

### Features:

- Universal mounting
- 50/60 cycles
- Compact size
- Field serviceable
- Class B insulation
- High temperature range
- 100,000 hours of operations
- UL Listed – E47852



### 2 Poles Definite Purpose Contactors

Part No.	Poles	Full Load Amp (FLA)	Lock Rotor Amp@240 LRA	Resistive (Amp)	Coil Voltage	Master Box
DPCA-230	2	30	150	40	24	50
DPCB-230	2	30	125	40	120	50
DPCC-230	2	30	100	40	240	50
DPCA-240	2	40	240	50	24	50
DPCB-240	2	40	200	50	120	50
DPCC-240	2	40	160	50	240	50

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### 3 Poles Definite Purpose Contactors

Part No.	Poles	Full Load Amp (FLA)	Lock Rotor Amp@240 LRA	Resistive (Amp)	Coil Voltage	Master Box
DPCA-330	3	30	180	40	24	50
DPCB-330	3	30	150	40	120	50
DPCC-330	3	30	120	40	240	50
DPCA-340	3	40	240	50	24	50
DPCB-340	3	40	200	50	120	50
DPCC-340	3	40	160	50	240	50
DPCA-350	3	50	300	60	24	40
DPCB-350	3	50	250	60	120	40
DPCC-350	3	50	200	60	240	40
DPCA-360	3	60	360	75	24	40
DPCB-360	3	60	300	75	120	40
DPCC-360	3	60	240	75	240	40
DPCA-375	3	75	-	93	24	20
DPCB-375	3	75	-	93	120	20
DPCC-375	3	75	300	93	240	20



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# Relays

## Potential Relays

### Features:

- 50/60 cycles
- Contact rating 35 amp, 480 VAC
- Totally enclosed
- Universal break-off bracket
- Non-positional
- UL Recognized Component

Part No.	Continuous Coil Voltage	Pick-Up		Drop-Out Max.
		Min	Max	
PR-63	170	139	153	55
PR-64	395	260	275	120
PR-65	332	168	182	90
PR-66	395	215	225	120
PR-67	420	295	315	125
PR-68	502	325	345	135
PR-69	336	180	195	105

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Master Box 100 units



UL US

## Fan Relays

### Features:

- 50/60 cycles
- Universal mounting bracket
- ¼" Quick connect terminals
- Compact size
- Easy to install
- UL Listed - E478521

Part No.	Coil (V)	Type
90-360	24	SPST
90-362	110/120	SPST
90-364	208/240	SPST
90-380	24	SPNO/SPNC

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Master Box: 200 units



UL US

## Universal Push-On Relays

### Features:

- Electromagnetic type
- 50/60 cycles
- Sealed relay

Part No.	Capacity (Hp)	Voltage
RP-18	1/8	115
RP-16	1/6	115
RP-15	1/5	115
RP-14	1/4	115
RP-13	1/3	115
RP-12	1/2	115

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Box: 10 units. Master Box: 100 units



## Short Starter Relays

Part No.	Capacity (Hp)	Voltage
RS1-18	1/8	115
RS1-16	1/6	115
RS1-15	1/5	115
RS1-14	1/4	115
RS1-13	1/3	115
RS1-12	1/2	115

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Box: 10 units. Master Box: 500 units



## Long Starter Relays - Danfoss / SECOP

Part No.	Capacity (Hp)	Voltage
RL-18	1/8	115
RL-16	1/6	115
RL-15	1/5	115
RL-14	1/4	115
RL-13	1/3	115
RL-12	1/2	115

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Box: 5 units. Master Box: 250 units



## Universal Solid State Relays

Part No.	Capacity (Hp)	Voltage
SSR-3	1/12 to 1/2	115

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Master Box: 500 units



## ICG Series Relays

Part No.	Capacity (Hp)	Voltage
ICG-1	1/12 thru 1/2	115
ICG-2	1/12 thru 1/2	230

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Box: 500 units. Master Box: 1000 units



## Universal Solid State Relay - Klixon Type

Part No.	Capacity (Hp)	Terminals	Voltage
SSR-4	1/12 to 1/2	4	115

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Box: 10 units. Master Box: 1000 units



## Universal Solid State Relay for LG

Part No.	Capacity (Hp)	Terminals	Voltage
QP2-3R9	Up to 1/3	1	115

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Box: 15 units. Master Box: 630 units



## Universal Solid State Relays

Part No.	Capacity (Hp)	Terminals	Voltage
SSR2-18	1/8	2	115
SSR2-16	1/6	2	115
SSR2-15	1/5	2	115
SSR2-14	1/4	2	115
SSR2-13	1/3	2	115
SSR2-12	1/2	2	115
SSR3-18	1/8	3	115
SSR3-16	1/6	3	115
SSR3-15	1/5	3	115
SSR3-14	1/4	3	115
SSR3-13	1/3	3	115
SSR3-12	1/2	3	115
SSR4-18	1/8	4	115
SSR4-16	1/6	4	115
SSR4-15	1/5	4	115
SSR4-14	1/4	4	115
SSR4-13	1/3	4	115
SSR4-12	1/2	4	115

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Box: 10 units. Master Box: 1000 units



## Universal PCB Replacement Kits

### PC Board Kit for On/Off Mini Split System

**Part No. MCRC-001**

**Features:**

- Temperature control and time control
- 3 fan speeds
- Heat/Cool control
- Swing function
- Forced emergency start
- Delay compressor for protection
- Power Input: 220-240, 50/60Hz
- Auto Restart

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### PC Board Kit for Inverter Mini Split System

**Part No. MCRC-002**

Our universal DC inverter PCB for mini splits allows you to repair 99.99% of most ductless units up to 18,000 btu. Works with fan motors with DC and AC current.

**Features:**

- Temperature control and time control
- 3 fan speeds
- Heat/Cool control
- Swing function
- Power Input 220-240, 50/60Hz

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### Dual Voltage PC Board Kit for Fan Coil and Floor Ceiling Units

**Part No. QD-60**

**Features:**

- High quality, full function
- It's suitable for both split and cabinet air conditioner
- Remote control and display panel show all states and control all functions
- Power Input: 100-240V, 50/60Hz. Can be used in 115V mini splits
- Delay compressor start for protection
- 3 fan speed
- Swing function
- Heat/Cool Control

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## Thermistor – Sensor Cable for Mini Splits

Coil and ambient temperature sensor. NTC temperature sensor kit – thermistor (2 pcs copper & epoxy coated).

Bag: 100 sets

Master Bag: 1000 sets



B25/50-0921



B25/50-TWIN-L



B25/50-TWIN-VOL



B25/50-05,10,15,20

Part No.	R25	Cable	Terminals
B25/50-05	5K $\Omega$ ±2%	26AWG-50cm	XH Red/White
B25/50-10	10K $\Omega$ ±2%	26AWG-50cm	XH Red/White
B25/50-15	15K $\Omega$ ±2%	26AWG-50cm	XH Red/White
B25/50-20	20K $\Omega$ ±2%	26AWG-50cm	XH Red/White
B25/50-0921		For Samsung	
B25/50-TWIN-L		For LG	
B25/50-TWIN-VOL		For TCL, Midea, Chigo, Kelong, Haier, etc.	

## Universal PCB Replacement Relay for Mini Splits

**MEISHUO**

**Part No. MPY-S-112-A**

- Universal replacement relay for most mini split PCB brands
- 12V, 4 Pin
- UL Recognized Component



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## Universal Remote Controllers for Mini Split

### 10000 Codes - Universal Remote Control

#### Part No. KT-618

##### Features:

- 10000 codes in 1 control. Compatible with most A/C brands
- New and modern shape, large LCD display with backlight
- Accurate clock display, function of timer On/Off
- Function of Code Memory, once set-up, can be used forever
- Indoor temperature display
- Temperature display in °C and °F
- Sleep, Swing and Vane function
- Intelligent Cooling and Intelligent Heating function
- Simple setting and convenient use, full function, and reliable performance
- Wall base included
- Uses 2 x AAA Batteries (not included)

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new

### 6000 Codes - Universal Remote Control

#### Part No. KT-E08

##### Features:

- 6000 codes in 1 control. Compatible with most A/C brands
- Accurate clock display, function of timer On/Off
- Function of Code Memory, once set-up, can be used forever
- Back light display button
- Indoor temperature display
- Temperature display in °C only
- Sleep, Swing and Vane function
- Simple setting and convenient use, full function, and reliable performance
- Delay compressor for protection.
- Uses 2 x AAA Batteries (not included)

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### 2000 Codes - Universal Remote Control

#### Part No. KT-628

##### Features

- 2000 codes in 1 control. Designed to control 99.99% of A/C brands
- New and moder design
- Thermometer function
- Unique function of "Intelligent Cool" and "Intelligent Heat"
- Temperature display in °C and °F
- Accurate clock display, function of timer On/Off
- Function of Code Memory, once set-up, can be used forever
- Back light display button
- Indoor temperature display
- Swing and Vane function
- Simple setting and convenient use, full function, and reliable performance
- Wall base included
- Uses 2 x AAA Batteries (not included)

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## 1000 Codes - Universal Remote Control

### Part No. KT-ERC

#### Features:

- 1000 codes in 1 control. Compatible with most A/C brands
- New and modern design
- Accurate clock display, function timer on off
- Sleep, Swing and Vane function
- Indoor temperature display
- Temperature display in °C only
- Uses 2 x AAA Batteries (not included)

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## Deluxe Universal Remote Control with WIFI

### Part No. K-380EW

Convert your air conditioner into a smart A/C with this top of the line universal control remote! Its Wi-Fi capability will allow you to control your air conditioner wherever you are through its easy-to-use smartphone app!

- Compatible with most A/C brands
- Built-in backlight and LED light enables you to operate it easily in the dark and for emergencies
- Slim and ergonomic shape
- Built-in rechargeable, lithium battery (not included)
- Durable and long-lasting quality

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## Thermostats

### Room Thermostats

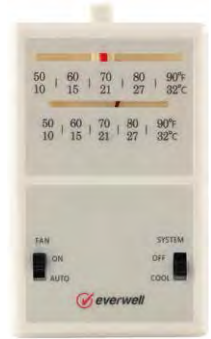
#### Analog Room Thermostat

##### Part No. TH-57

##### Features:

- 1 Stage Cooling Only
- Room temperature setting
- Fan Auto or continuously On button
- On/Off Switch button
- Temperature display in °C and °F

⚠ Cancer & Reproductive Harm [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)



##### Part No. RT-107

##### Features:

- 1 stage cooling, 1 stage heating
- Manual switch to select work status and use knob to set the temperature
- Room temperature setting
- Multiple fan speed selection (Low/Medium/High)
- Thermostat can be directly mounted on the wall or standard wiring box
- Elegant shape with high reliability
- Temperature Range: 10 °C to 30 °C
- Temperature display in °C only

⚠ Cancer & Reproductive Harm [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)



#### Digital Programmable Room Thermostat 5+2

##### Part No. TH-AC10

##### Features:

- Easy to install and program
- Operates on 1 stage heat, 1 stage cool
- Heat pump without aux or emergency heat
- Separate heating and cooling swing (cycle rate) adjustments
- 5 minutes compressor delay protection (selectable on or off)
- Gas, electric or oil
- Temperature display in °C or °F
- Low battery indicator
- Display temperature calibration
- 5+2 programmable
- Battery power or 24V hardwire
- Backlight LCD

⚠ Cancer & Reproductive Harm [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)





## Pro1 IAQ Thermostats 700 Series

The most commonly desired features at a great value with a model for nearly any system.

### Part No. T701

#### Features:

- Single Stage
- 1 heat, 1 cool
- Battery or Hardwire
- Non-Programmable
- Temp. Display Range: 41 to 95°F (5 to 35°C)
- Control Temp. Range: 44 to 90°F (7 to 32°C)
- Operating Ambient: 32 to 105°F (0 to 41°C)
- Dimensions: 4.7"W x 4.4"H x 1.1"D

⚠ Cancer & Reproductive Harm [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)



### Part No. T701i

#### Features:

- Single stage
- 1 heat, 1 cool
- Programmable through app
- Hardwire only
- Temp. display range: 41 to 95°F (5 to 35°C)
- Control temp. range: 44 to 90°F (7 to 32°C)
- Operating ambient: 32 to 105°F (0 to 41°C)
- Dimensions: 4.7"W x 4.4"H x 1.1"D

⚠ Cancer & Reproductive Harm [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)



### Part No. T721

#### Features:

- Heat pump / conventional
- 1 heat, 1 cool conventional
- 2 heat, 1 cool heat pump
- Battery or hardwire
- Non-programmable
- Temp. display range: 41 to 95°F (5 to 35°C)
- Control temp. range: 44 to 90°F (7 to 32°C)
- Operating ambient: 32 to 105°F (0 to 41°C)
- Dimensions: 4.7"W x 4.4"H x 1.1"D

⚠ Cancer & Reproductive Harm [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)



## Part No. T725

### Features:

- Heat pump / conventional
- 1 heat, 1 cool conventional
- 2 heat, 1 cool heat pump
- Battery or hardwire
- Non-programmable
- Temp. display range: 41 to 95°F (5 to 35°C)
- Control temp. range: 44 to 90°F (7 to 32°C)
- Operating ambient: 32 to 105°F (0 to 41°C)
- Dimensions: 4.7"W x 4.4"H x 1.1"D

⚠ Cancer & Reproductive Harm [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)



## 800 Series

Striking designs and the perfect blend of advanced features that are easy to use.

## Part No. T805

### Features:

- Single Stage
- 1 Heat, 1 Cool Only
- Battery or Hardwire
- 7 Day, 5/1/1 or Non-Programmable
- Temp. Display Range: 41 to 95°F (5 to 35°C)
- Control Temp. Range: 44 to 90°F (7 to 32°C)
- Operating Ambient: 32 to 105°F (0° to 41°C)
- Dimensions: 4.7"W x 4.4"H x 1.1"D

⚠ Cancer & Reproductive Harm [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)



## Part No. T855iSH

### Features:

- Universal - WIFI
- Residential/Light Commercial
- Up to 2 Heat, 2 Cool Conventional
- Up to 5 Heat, 3 Cool Heat Pump
- Hardwire Only
- 7 Day or Non-Programmable
- Temp. Display Range: 41 to 95°F (5 to 35°C)
- Control Temp. Range: 44 to 90°F (7 to 32°C)
- Operating Ambient: 32 to 105°F (0 to 41°C)
- Dimensions: 4.7"W x 4.4"H x 1.1"D

⚠ Cancer & Reproductive Harm [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)



## Thermostats Guards

Clear plastic thermostat guards with metal key



Part No. TG-2



Part No. TG-4

Part No.	Dimensions			Cross-Reference		
	Length	Width	High	Beko	White Rodgers	Mars
TG-2	6 9/16" (167mm)	5 13/16" (148mm)	3 11/32" (85mm)	BTG-K	F29-0227	70205
TG-4	10 1/32" (255mm)	6 7/32" (158mm)	3 13/16" (97mm)	BTG-UK2	F29-0198	70220

## Thermostat Wire

### Features:

- Constructed of solid bare copper conductor
- PVC insulation
- PVC jacket

Part No.	Description
W2004150	20 AWG, 0.81 copper, 4 lines (red, yellow, green and black) 150' (45.7m) per roll, CM PVC.
W2006150	20 AWG, 0.81 copper, 6 lines (red, yellow, green, black, brown & white) 150' (45.7m) roll, CM PVC.

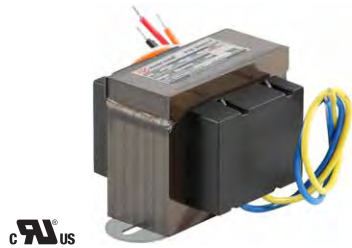


## Transformers

### Features:

- Closed construction
- Multi-mount with brackets
- Power 50/60Hz
- Class B insulation system
- Class 2 transformers
- UL Recognized Component

Part No.	Power	Primary Voltage	Secondary Voltage
W4031F	40Va	120/208/240	24
W5031F	50Va	120/208/240	24
W8031F	80Va	120/208/240	24
W10031F	100Va	120/208/240	24



Voltage	Primary Lead				Secondary Lead	
	Common	120	208	240	Common	24
Color	White	Black	Red	Orange	Blue	Yellow
Lead Length	12" (30.48cm)	12" (30.48cm)	12" (30.48cm)	12" (30.48cm)	12" (30.48cm)	12" (30.48cm)
Strip Length	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"

△ Cancer & Reproductive Harm www.P65Warnings.ca.gov

## Refrigeration Thermostats

### Universal Replacement Cold Controls

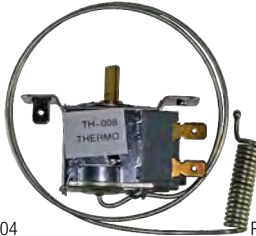
Designed to replace many OEM controls. Governs the compressor ON/OFF function. Wide temperature control range and compact size makes them an ideal replacement unit.

#### Features:

- For room A/C units
- Wide temperature control range
- Cooling only
- Mounting of sensing element in any position
- Compact size



Part No. TH-004



Part No. TH-008



Part No. A30-1884

Part No.	Operating Temp.		Diff	Electrical Rating		Contact Type	Sensing Element	Capillary Type
	Warm On	Cold Off		FLA	LRA			
TH-004	90.7°F	50°F	4°F	25	95	SPST	48"	Straight
TH-008	90.7°F	50°F	4°F	25	95	SPST	18"	1" Air Coil
A30-1884	90.7°F	50°F	4°F	25	80	SPST	18"	Straight

⚠ Cancer & Reproductive Harm [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

Master Box: 100 units

### Everwell Refrigeration Thermostats - Ranco® Type

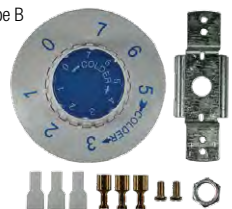


Type A



**RU** US

Type B



Part No.	Application	Cold Off °C	Cold On °C	Warm On °C	Capillary Length (mm)	Kit Type
K50-P1117	Freezers	-32.0	-	-12.0	1,200	B
K50-P1125	Freezer	-18.0	-9.5	8.5	1,200	A
K50-P1126	Freezers	-24.5	-18.0	-8.5	1,200	A
K50-P1127	Bottle Cooler & Displays	1.5	5.0	12.5	1,200	A
K50-P1133	Refrigerators	-18.0	-9.5	8.5	1,000	B
K59-L1102	Dual Temp. Refrigerators	-26.0	3.5	3.5	1,200	B
K60-P1038	Refrig. & Comn. Display Units	-26.0	0.0	-2.0	600	B

⚠ Cancer & Reproductive Harm [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

Master Box: 100 units

## Ranco® Refrigeration Thermostats

The Ranco® K Controls are used all over the globe to control the temperature in commercial and domestic refrigeration, air conditioning and heating applications. Typical uses include refrigerators, freezers, bottle and liquid coolers, and refrigerator display cases

### Features and Benefits:

- Compact size
- Standard mounting configurations
- Constant/fixed differential
- SPST close-on-rise switching
- Various capillary lengths



**RANCO**

Part No.	Application	Cold Off °C	Cold On °C	Warm On °C	Capillary Length (mm)	Kit Type
K50P-1125	Refrigerators	-18.0	-9.5	8.5	1,200	A
K50P-1126	Freezers	-24.5	-18.0	-8.5	1,200	A
K50P-1127	Bottle Cooler & Displays	1.5	5.0	12.5	1,200	A

⚠ Cancer & Reproductive Harm [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

Master Box: 100 units

## Everwell Refrigeration Thermostats - Robertshaw® Type

Our line of refrigeration thermostats, is specially designed to control the temperature in refrigerators, freezers, water coolers and other applications that require an interruption of the operation of the appliances according to the temperature.

Part No.	Application	Hot On °C	Hot Off °C	Cool On °C	Cool Off °C
RC-11375-7	Indurama	12.4	7.7	-3.7	-10.5

⚠ Cancer & Reproductive Harm [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)



**new**

## Refrigeration Thermostats

Part No.	Rating	Temperature Range	Master Box
F-2000	16A/220V/380V	-30°C to 30°C	100

⚠ Cancer & Reproductive Harm [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

Master Box: 100 units



## Part No. W1609-101

These remote bulb controllers provide control of temperature in refrigerated milk tanks, crop drying, tobacco curing, beverage dispensers, ice cube machines, dishwashers, and similar agricultural and industrial applications.

### Features:

- 16A/120VAC, 8A/240VAC
- Temp Range: -34°C-32°C (-30-90°F)
- Diff. Adj.: 1.6-9°C (3.5 to 16°F)
- Capillary length 5'
- Close on rise
- UL Listed - E486748

⚠ Cancer & Reproductive Harm www.P65Warnings.ca.gov



## Ranco® Low Temperature Control

### O Series Temperature Controls

The Ranco® O Series features heavy-duty plated steel frames, non-conductive covers with front-located captive cover screws, raised screw terminals for fully accessible wiring, and large easy-to-read scales.

### Features and Benefits:

- Maximum adjustment accuracy with 7 revolution range adjustment screws
- NEMA 1 enclosure with non-conductive cover
- Universal mounting and compact design
- Laser-welded bellows for extended life
- Wide range adjustable differential



Part No.	Temperature				Capillary Length with Bulb	Relay Output Ratings			
	Range		Diff.			FLA		LRA	
	°F	°C	°F	°C		120V	240V	120V	240V
010-1408	-15/40	-10/5	3/20	-16/-7	72"	24	24	144	144

## Ranco® Electronic Temperature Control

The Ranco® ETC Series Electronic Temperature Control offers a full-featured electronic replacement for electrical-mechanical temperature controls used in many commercial refrigeration applications. Models available include 120/208/240V AC and 24V AC.

### Features and Benefits:

- High Amp output relay (FLA 16 Amps @ 120V AC and 8 Amps @ 208/240 VAC) single stage
- 8 foot lead with sensor is extendable up to 400 feet using 18 or 22-gauge
- Selectable °F or °C heating/cooling modes



Part No.	Stage	Temperature				Relay Output Ratings							
		Range		Diff		FLA		LRA		Resistive A		HP	
		°F	°C	°F	°C	120V	208 240V	120V	208 240V	120V	208 240V	120V	208 240V
ETC-111000-000	1	-30/220	34/104	1/30	1/16	16 (5.8)	8 (2.9)	96 (34.8)	48 (17.4)	15 (5.8)	8 (2.9)	1 (1/4)	1 (1/4)
ETC-211000-000	2	30/220	34/104	1/30	1/16	9.8 (5.8)	4.0 (2.9)	58.8 (34.8)	29.4 (17.4)	9.8 (5.8)	4.9 (2.9)	1/2 (1/4)	1/2 (1/4)

# Defrost Thermostats

## Blister Package Defrost Thermostat



B-0641  
Samsung  
DA47-10143B



B-6192  
Samsung  
DA47-10160H



B-8115  
Samsung  
Z Wire-Short



B-3003  
Samsung  
DA47-10160F



B-3002  
LG  
6615IB2002A



B-4008  
Samsung  
DA47-10150F



B-20018  
Samsung  
Z Wire-Large



B-261N  
ELTH-20T80K-K11(Type)

⚠ Cancer & Reproductive Harm [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

## Defrost Bi-Metal Thermostat with Clip

### Electrical Specs:

- 10 Amp @ 120 VAC
- 5 Amp @ 250 VAC



Part No.	Open		Close		Diff.		Type
	°F	°C	°F	°C	°F	°C	
DT-47	47	8	22	-6	25	-4	A
DT-45	45	7	25	-4	20	-7	B
DT-50	50	10	30	-1	20	-7	B
DT-55	55	13	35	2	20	-7	B
DT-60	60	16	40	4	20	-7	B
DT-70	70	21	50	10	20	-7	B
DT-80	80	27	30	-1	50	10	B
DT-90	90	32	35	2	55	13	B

⚠ Cancer & Reproductive Harm [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

Master Box: 500 units

## Overload Protectors

### Motor Protectors/Overloads for Appliance Compressors

Part No.	Capacity (HP)	Voltage	Diameter
OP-18	1/8	115/230	3/4"
OP-16	1/6	115/230	3/4"
OP-15	1/5	115/230	3/4"
OP-14	1/4	115/230	3/4"
OP-13	1/3	115/230	3/4"
OP-12	1/2	115/230	3/4"

⚠ Cancer & Reproductive Harm [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)  
 Bag: 20 units. Master Bag: 1000 units



### Motor Protectors/Overloads for HVAC-R

Part No.	Capacity (Btu/h)	Voltage	Diam.	Type
OP-120-1	12,000	115/230	1"	B
OP-150-1	15,000	115/230	1"	B
OP-180-1	18,000	115/230	1"	B
OP-190-1	19,000	115/230	1"	B
OP-240-1	24,000	115/230	1"	B

Part No.	Capacity (Btu/h)	Voltage	Diam.	Type
OP-120-2	12,000	115/230	3/4"	A
OP-150-2	15,000	115/230	3/4"	A
OP-180-2	18,000	115/230	3/4"	A
OP-190-2	19,000	115/230	3/4"	A
OP-240-2	24,000	115/230	3/4"	A

⚠ Cancer & Reproductive Harm [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)  
 Bag: 20 units. Master Bag: 1000 units



Type A



Type B

### PTC Overload Protector

Part No.	Capacity (HP)	Voltage
EOP-18	1/8	115
EOP-16	1/6	115
EOP-15	1/5	115
EOP-14	1/4	115
EOP-13	1/3	115

⚠ Cancer & Reproductive Harm [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)  
 Bag: 20 units. Master Bag: 1000 units

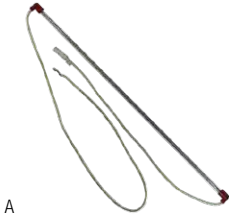




# Defrost Heaters

## Quartz Defrost Heaters

Glass Tubes: Universal replacement radiant defrost, constructed of Vycor Glass with molded seals of high temperature silicone. Protective oxide coated element wire for longer lasting heater life. The Vycor Glass will withstand thermal shock. Can be handled without gloves with no fear of damage during or after installation.



A



B



C

Part No.	Glass Length (W/O end Caps)	Overall End to End	Watts	Volts	Number of tubes	Style
DH-008	8"	8-3/4"	-	115	1	A
DH-009	9"	9-3/4"	-	115	1	A
DH-010	10"	10-3/4"	-	115	1	A
DH-011	11"	11-3/4"	-	115	1	A
DH-012	12"	12-3/4"	-	115	1	A
DH-013	13"	13-3/4"	-	115	1	A
DH-014	14"	14-3/4"	-	115	1	A
DH-015	15"	15-3/4"	-	115	1	A
DH-016	16"	16-3/4"	-	115	1	A
DH-018	18"	18-3/4"	-	115	1	A
DH-261	21-3/16"	21-15/16"	550	115	1	A
DH-263	21-5/8"	22-3/8"	630	115	1	A
DH-264	8-1/2"	9-1/4"	550	115	2	C
DH-267	22-13/16"	23-13/16"	500	115	1	A
DH-276	10-5/8"	11-3/8"	550	115	2	B



Part No. DH-319



Part No. DH-10053



Part No. DH-10055



Part No. DH-442



Part No. DH-443

Part No.	Glass Length (W/O end Caps)	Overall End to End	Watts	Volts	Number of tubes	Style
DH-319	17-1/8"	17-7/8"	400	115	1	-
DH-442	7-1/2"	9-1/2"	525	115	2	-
DH-443	10-1/2"	12-13/16"	772	115	2	-
DH-10053	8"	9-1/2"	525	115	1	-
DH-10055	10-1/2"	12"	725	115	1	-

## Flexible Bend-to-Fit Defrost Heaters

For Evaporator coils and condensate drain pans in commercial refrigeration.

### Features:

- Bend and shape easily with hands at job site
- To replace a coil heater, measure the old heater length and bend our heater to match the configuration of the old heater and install
- The encapsulated ends on the heaters are water resistant, but should not be submerged in water
- Quickly replaces most defrost heaters
- Measure length of original and order a similar length
- The heaters are 0,250 incoloy which is comparable to alloy 334



### Sometimes more than 1 heater is needed to handle a replacement. In that situation, remember the following:

- Two heaters of equal wattage. Connect in series at rated voltage. This will generate 1/2 the wattage of 1 heater. For example, 2 ea 500W heaters, 230V connected in series to 230V = 250 watts total
- Two 115V heaters with equal wattage connected in series to 230V power will generate their total wattage. For example, 2 ea 300W, 115V heaters connected in series = 600W total output
- Two heaters with equal voltage connected in parallel (at rated voltage) will produce the total of their wattages. For example, 1 ea 500W heater and 1 ea 300W heater, both 115V wired in parallel = 800W total



Part No.	Watts	Volts	Amp	Length (in)	
				Sheath	Heated
FDH-045	300	120	2.5	45	31
FDH-068	450	120	3.8	68	54
FDH-091	675	240	2.9	91	77
FDH-105	850	240	3.6	105	91
FDH-118	1,000	240	4.1	118	104
FDH-150	1,350	240	5.7	150	136
FDH-188	1,250	240	5.2	188	174

# Switches

## Flow Switch

### Part No. F61KB-11C

#### Features:

- Fluid Temp: 0-121 °C / 32-250 °F
- FLA/LRA: 16A/96A/120V, 8.8A/50A/240V
- Max. Fluid Pressure: 150 psi
- Actuates Switch with less than 1.0 GPM (3.8 L/min) flow of water applications or 9.0 GPM (34.1 L/min) flow for steam applications
- Switch: SPDT
- Paddle of 6"
- Connection Size: 1"



## Rotary Switches

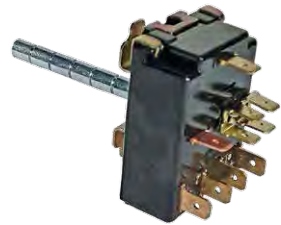
#### Features:

- Break-Off half moon shaft ¼" in diameter and 2" long
- Electrical Ratings: 25 amp, 277Vac, 1 Hp 120V, 2Hp 240V

Part No.	Diff
RS-4	4 Positions: Off, High, Medium and Low

△Cancer & Reproductive Harm [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

Master Box: 100 units



#### Features:

- Break-Off half moon shaft ¼" in diameter and 2" long
- Electrical Ratings: 25 amp, 277Vac, 1 Hp 120V, 2Hp 240V

Part No.	Diff
RS-5	5 Positions: Off, High Cool, Low Cool, High Fan, Low Fan.

△Cancer & Reproductive Harm [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

Master Box: 100 units



#### Features:

- Break-Off half moon shaft ¼" in diameter and 2" long
- Electrical Ratings: 25 amp, 120/240Vac, 1-¼ Hp 120V, 2Hp 240V

Part No.	Diff
RS-7	7 Positions: Off, High, Cool, Medium Cool, Low Cool, High Fan, Medium Fan, Low Fan.

△Cancer & Reproductive Harm [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

Master Box: 100 units



# Presostats

## High & Low Pressure Switches

### Features:

- Available for R22, R410A and R407C pressure ratings
- SPST switch
- 1/4" female SAE mounting
- Automatic Reset
- Tamper proof
- 24V, 120V, 240VAC 50-60Hz, 6FLA, 36LRA
- Low pressure switch – open on pressure drop, closes on pressure rise.
- High pressure switch – open on pressure rise, closes on pressure drop.
- UL Recognized Component



Part No.	Refrig.	Color	Settings (psi)		Tolerance (psi)	
			Open	Close	Open	Close
PL-2580	R22	Blue	25	80	±5	±5
PH-350250	R22	Black	350	250	±5	±5
PL-80130	R410A	Blue	80	130	±5	±5
PH-550450	R410A	Black	550	450	±5	±5
PH-375265	R407C	Black	375	265	±5	±5

Box: 10 units. Master Box: 350 units

## Low Pressure Control

### Features:

- Front located captive cover screw
- Capillary protection system
- Universal mounting and compact design
- Laser welded bellows for extended life

Part No.	Switch	Range (psi)	Differential (psi)	Capillary
010-1402	SPST Open Low	0 to 80	5 to 60	36" with Flare Nut

△Cancer & Reproductive Harm [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)



## High Pressure Control

### Features:

- Front located captive cover screw
- Capillary protection system
- Universal mounting and compact design
- Laser welded bellows for extended life

Part No.	Switch	Range (psi)	Differential (psi)	Capillary
016-200	SPST Open Low	100 to 450	Manual Reset	36" with Flare Nut

△Cancer & Reproductive Harm [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)



## Ranco® Low Pressure Control

### Features and Benefits:

- Controls available for most refrigerant types
- High-amp rated switch (SPST) design (O10-1402/O10-1483)
- Super Cap® capillary vibration protection system
- Non-conductive front cover with captive screw
- Adjustable differential and range
- Easy-to-read scale plate
- Vibration cone (absorbs and reduces vibration away from brazed joint)
- Low mass copper alloy capillary tube (reduces capillary stress caused by equipment vibration)

Part No.	Pressure			Capillary Length	Connection
	Low				
	Cut-In (psi)	Diff (psi)	Reset		
O10-1402	12/50	5/35	Auto	36"	1/4" SAE
O10-1483	10/100	10/40	Auto	36"	1/4" SAE

⚠ Cancer & Reproductive Harm [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)



**RANCO**

## Ranco® High Pressure Control

### Features and Benefits:

- High-impact non-conductive plastic cover with center mount captive screw
- Super Cap® capillary protection system - Vibration cone (absorbs and reduces vibration away from brazed joint) - Low mass copper alloy capillary tube (reduces capillary stress caused by equipment vibration)
- Easy-to-read scale plate
- Heavy-duty plated steel frame
- Universal mounting and compact design
- Compatible with most refrigerants including R124, 134A, 401A, 401B, 402A, 402B, 403A, 403B, 404A and R507. Newer refrigerants that are replacing older refrigerants may be compatible with these controls, however, testing is recommended for full compatibility assurance
- A high-pressure limit is combined with suction pressure sensing to provide temperature control and/or pump down
- High-limit adjustment screw
- Selector screw for manual or automatic
- Screw terminals are raised and fully accessible for easy wiring
- Reset button on manual controls
- High-pressure scale plate
- Color-coded for easy identification of pressure line - High-side capillary flare nut (silver)
- Laser-welded bellows for extended life

Part No.	Pressure			Capillary Length	Connection
	Low				
	Cut-In (psi)	Diff (psi)	Reset		
O16-108	100/400	40	Auto	36"	1/4" SAE
O16-200	150/450	40	Manual	48"	1/4" SAE

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**RANCO**

## Everwell Dual Pressure Control

Dual Pressure Control for Commercial Refrigeration and Air Conditioning. These controls offer a tailored variety of ranges and options for Low and high pressure. Functions are combined into a single control with one switch.

### Features:

- Switch type SPST
- for R12, R22, and R502 refrigerants
- Reset Low Auto and High Auto
- Mounting in any Position
- Main Switch Off Time (Sec.) 1-30
- Main Switch On Time (Sec.) 30-90
- Voltage 24/240



Part No.	Pressure						Capillary Length	Connection
	High			Low				
	Cut-Out (psi)	Diff (psi)	Reset	Cut-In (psi)	Diff (psi)	Reset		
E012-1549	150/450	70 Fixed	Auto	10/100	10 Fixed	Auto	36"	1/4" SAE

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## Ranco® Dual Pressure Control

### 0 Series Pressure Controls

The Ranco® Dual Pressure Controls combine the functions of a single high-pressure limit control and a single low-pressure control in one unit with a single pole, single throw (SPST) switch.

### Features and Benefits:

- A high-pressure limit is combined with suction pressure sensing to provide temperature control and/or pump down
- High-limit adjustment screw
- Low-pressure differential and range adjusting screws
- Selector screw for manual or automatic
- Reset button
- Low-pressure scale plate
- High-impact plastic cover with center mount screw
- High-pressure scale plate
- Super Cap® capillary protection system
- Color-coded for easy identification of pressure line
- High-side capillary flare nut (silver)
- Low-side capillary flare nut (brass)



Part No.	Pressure						Capillary Length	Connection
	High			Low				
	Cut-Out (psi)	Diff (psi)	Reset	Cut-In (psi)	Diff (psi)	Reset		
O12-1506	100/250	50 Fixed	Auto	12/50	10/35	Auto	36"	1/4" SAE
O12-1549	150/450	70 Fixed	Auto	10/100	10 Fixed	Auto	36"	1/4" SAE
O12-1594	150/450	70 Fixed	Manual	10/100	10 Fixed	Manual	36"	1/4" SAE

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## Everwell Lube Oil Pressure Control

These lube oil protection controls guard pressure-lubricated refrigeration compressors against major damage due to loss of oil pressure. If adequate oil pressure is lost, the built-in EP-30 Time Delay Switch starts timing. If the oil pressure does not recover within the set period, the control circuit is opened, stopping the compressor.



Part No.	Lube Oil Pressure	Reset	Time Delay	Electrical Rating	Capillary Length	Connection
EP-30-5826	9 psi Fixed	Manual	120 sec	120 VAC or 240 VAC	36"	1/4" SAE

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## Ranco® Lube Oil Pressure Control

### P30 Series Lube Oil Controls

The Ranco® P30 Series Lube Oil Protection Controls guard pressure-lubricated refrigeration compressors against major damage due to loss of oil pressure. This control utilizes the built-in P30 Time Delay Switch to start timing when oil pressure drops below operating requirements. The timer is designed not only to track oil pressure recovery within a set period, but also to alert the control circuit to open and stop the compressor when the recovery period is exceeded.

#### Features and Benefits:

- Alarm circuit standard
- Ambient temperature compensated
- Super Cap® capillary protection system
- High impact, non-conductive cover
- Field replaceable switch module
- Manual reset
- Industry standard circuitry and terminal identification



Part No.	Lube Oil Pressure	Reset	Time Delay	Electrical Rating	Capillary Length	Connection
P30-5826	9 psi Fixed	Manual	120 sec	120 VAC or 240 VAC	36"	1/4" SAE

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## Timers

### Delay On Make Timers

The Delay-on-Make is designed to delay fan start-up. Prevents rapid cycling of compressor and as a pre-purge on oil and gas systems. Help reduce power surges in multiple compressor applications.

Part No.	Description
DOM-068	18-240 VAC/VDC: 1.5-15 Amp in rush Adjustable Delays: 0.1 to 10 min.

△Cancer & Reproductive Harm www.P65Warnings.ca.gov

Master Box: 200 units



### Delay On Break Timer

The Delay-on-Break timer allows for circuit operation. Once power is interrupted, the circuit opens for the time set on the dial. After the time period elapses, the circuit closes, allowing the protected motor or compressor to start.

Part No.	Description
DOB-072	18-240 VAC/VDC: 1.5-15 Amp in rush Adjustable Delays: 0.1 to 10 min.

△Cancer & Reproductive Harm www.P65Warnings.ca.gov

Master Box: 200 units



### Universal Defrost Timer with Plastic Body

Part No.	Defrost		Power
	Freq. (Hrs)	Time (min)	
DTC-621	6	21	120V/60Hz
DTC-625	6	25	120V/60Hz
DTC-820	8	20	120V/60Hz

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Master Box: 100 units





## Defrost Timer for LG and Samsung

Part No.	Defrost		Power
	Freq. (hrs)	Time (min)	
DTZ-617	6	17	120V/60Hz
DTZ-617-2	6	17	220V/60Hz
DTZ4-64012-2	6,40	12	220V/60Hz
DTZ-621	6	21	120V/60Hz
DTZ-625	6	25	120V/60Hz
DTZ-820	8	20	120V/60Hz

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Master Box: 100 units



## Universal Defrost Timer with Metal Body

Part No.	Defrost		Power
	Freq. (Hrs)	Time (min)	
DTB-621	6	21	120V/60Hz
DTB-625	6	25	120V/60Hz
DTB-820	8	20	120V/60Hz

△Cancer & Reproductive Harm www.P65Warnings.ca.gov

Master Box: 100 units



## Defrost Timer Sankyo Type

Part No.	Defrost		Power
	Freq. (Hrs)	Time (min)	
TMDJ625RN9	6	25	120V/60Hz

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Master Box: 100 units



## Programmable Universal Defrost Timer

Part No.	Defrost		Power
	Freq. (Hrs)	Time (min)	
DT-ALL	6,8,12,24	15,21,25,32	90-250V/50-60Hz, 7A

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Master Box: 200 units



## Robertshaw Defrost Timer

Part No.	Defrost		Power
	Freq. (Hrs)	Time (min)	
A1401-00	6	21	120V/60Hz
A1401-21	6	21	208-240V/50Hz
B1401-00	8	20	120V/60Hz
B1401-21	8	20	208-240V/50Hz
G1401-00	6	25	120V/60Hz

△Cancer & Reproductive Harm www.P65Warnings.ca.gov

Master Box: 200 units. Layers: 50 units



**Robertshaw**

## Paragon 8000 Series Defrost Timers

The Paragon® 8000 Series Commercial Defrost Controls are designed for commercial freezers and refrigerators to provide automatic defrost capability. They accommodate various types of defrost systems including electric defrost heaters, hot gas, and compressor off cycle.

### Features and Benefits:

- Time initiated; temperature, pressure or time terminated models available.
- High-amp switch contacts: 40 amps, 2 HP.
- Positive slider bar switch design assures positive electrical contact and wipes the contact surface of contaminants.
- Temperature or pressure terminated models are designed for defrost termination using an external temperature or pressure device.
- Safety back-up – mechanical time-driven defrost termination.
- Heavy-duty synchronous design drive motor.
- Choice of three contact arrangements
- Adjustable frequency of defrost initiation from 1 to 6 cycles per day with a minimum of 4 hours between successive operations.
- Adjustable back-up defrost termination from 4 to 110 minutes in 2 minute increments.
- Heavy-duty steel enclosure with knockouts (on the bottom, back and sides) and hasp and staple padlock.
- All 8240 models have an adjustable cut-in pressure dial calibrated from 36-110 pounds for R12, R22, R502.



**PARAGON**

Part No.	Number of Cycles	Max. Capacity	Power
8145-00	1 to 6	40 Amp, 2 Hp	120V/60Hz
8145-20	1 to 6	40 Amp, 2 Hp	208-220V/60Hz

### Part No. 8145-AV

The Paragon® 8000 Series Auto Voltage Defrost Timer is designed for commercial freezers and refrigerators. Paragon Defrost Controls have provided reliable automatic defrost capability for decades. They accommodate various types of defrost systems including electric defrost heaters, hot gas, and compressor off cycle. This all-in-one auto voltage defrost timer replaces over 40 competitive voltage-specific mechanical defrost timers, eliminating the need for a separate short cycle timer and single-phase voltage monitor. The 8145-AV will become a mainstay in any contractor's truck. The 8145-AV reduces installation time, and minimizes the number of SKUs to stock.

### Features and Benefits:

- Replaces over 40 competitive models.
- Auto Voltage automatically adjusts for 120-277V AC.
- Compressor contacts 3HP.
- Heater/Fan contacts 2HP.
- LED indicators for defrost and refrigeration cycles.
- Built-in permanent housing protects components from damage.
- Mounts into existing closures, no tools required.
- Real time clock face for easy accurate settings.
- Defrost times programmable in 15-minute intervals with captive trippers.
- Heavy-duty steel enclosure with knockouts (on the bottom, back and sides) and hasp.
- Mechanism only model available 8145-AV-M.



**PARAGON**

# Voltage Monitors

## Pluggable Single Phase Line Voltage Monitor/Protector

### Part No. EW-V162-120

Pluggable Single Phase Voltage Compact Protector 115V - 50/60Hz

#### Features:

- For fridges with compressors up to 3/4Hp and air conditioners up to 5KBtu. Can be used on a variety of other appliances such as for refrigerators, pressure cleaners and portable air conditioners
- Designed under international quality certifications
- Electricity: 110V, 50/60Hz, Current 15A
- Time delay: 3 min. fixed
- Under and Over Voltage: 130/90V fixed
- Type B USA / Canada plug connector
- Work Temperature: -5 to 55°C (23 to 131°F)
- Over voltage disconnected: 140V

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Master Box: 50 units



### Part No. EW-V009-120

Pluggable Single Phase Voltage Protector 115V, 50/60Hz

#### Features:

- For fridges with compressors up to 3/4Hp and air conditioners up to 5KBtu. Can be used on a variety of other appliances such as for refrigerators, pressure cleaners and portable air conditioners
- Designed under international quality certifications
- 110V, 50/60Hz, current 12A
- Time delay: 3 min fixed
- Under and Over Voltage: 130V / 90V to fixed
- Type B USA / Canada plug connector
- Work Temperature: -5 to 55°C (23 to 131°F)
- Under voltage disconnected: 90V
- Over voltage disconnected: 140V

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Master Box: 50 units



### Part No. EW-V010-120

Pluggable Single Phase Voltage Protector 115V - 50/60Hz – Deluxe

#### Features:

- For fridges with compressors up to 1Hp and air conditioners up to 14KBtu. Can be used on a variety of other appliances such as for refrigerators, pressure cleaners and portable air conditioners
- Adjustable minimum voltage
- Designed under international quality certifications
- 110V, 50/60Hz, current 20A
- Time delay: 2 to 5 min
- Under and Over Voltage: 130/90V to 105V adjustable
- Type B USA /Canada plug connector

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Master Box: 50 units



## Part No. EW-V010-220

Pluggable Single Phase Voltage Protector 220V - 50/60Hz – Deluxe

### Features:

- For fridges with compressors up to 1Hp and air conditioners up to 14KBtu. Can be used on a variety of other appliances such as for refrigerators, pressure cleaners and portable air conditioners
- Adjustable minimum voltage
- Designed under international quality certifications
- Electricity: 220V, 50/60Hz, current 20A
- Time delay: 2 to 5 min
- Under and Over Voltage: 260V / 170V to 197V Adjustable
- 240Volt - 20Amp plug connector

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Master Box: 50 units



## Single Phase Line Voltage Monitor/Protector

## Part No. EW-V015-120

Single Phase Voltage Protector 115V - 50/60Hz

### Features:

- For fridges with compressors up to 1Hp and air conditioners up to 18KBtu. Can be used on a variety of other appliances such as for refrigerators, pressure cleaners and portable air conditioners
- Minimal and maximal voltage and adjustable time delay
- Designed under international quality certifications
- 110V, 50/60Hz, current 20A
- Time delay: 1.5 to 5 min
- Under and Over Voltage: 125 to 145V / 90 to 115V. Adjustable

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Master Box: 50 units



## Part No. EW-V015-220

Single Phase Voltage Protector 208/220V - 50/60Hz

### Features:

- Heavy duty protector for refrigerators and air conditioners up to 36KBtu, and single phase compressors and motors
- Minimal and maximal voltage and adjustable time delay
- Designed under international quality certifications
- 208/220V, 50/60Hz, current 30A
- Time delay: 1.5 to 5 min.
- Under and Over Voltage: 220V to 260V / 170V to 210V. Adjustable

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Master Box: 50 units



## Three Phase Line Voltage Monitor/Protector

### Part No. EW-V086-220

Three Phase Voltage Protector 208/220V - 50/60Hz

#### Features:

- Protector for air conditioners, refrigerators, motors, etc.
- Minimal and maximal voltage and adjustable time delay
- Designed under international quality certifications
- 208/220V, 50/60Hz, current 3.5A
- Under and Over Voltage: 230 to 255/190V to 210V
- Time delay: 5 to 300 sec.

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Master Box: 50 units



### Part No. EW-V0178

Three Phase Digital Voltage Protector 208/220V - 50/60Hz

#### Features:

- Digital surge protector for any 3Hp motor, air conditioner, etc. Can be used on a variety of appliances such as for refrigerators, portable air conditioners, or other electronics.
- Designed under international quality certifications
- DOB: 0-12 min.
- Imbalance: 2-25%
- Tolerance: 6-18%
- 18-250VAC, 50/60Hz, current 10A
- Delay Timer: 0-30 sec.

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Master Bag: 50 units.



## Wagner Voltage Monitor

### Part No. DSP-1

Wagner Digital Single Phase Line Voltage Monitor

Automatic voltage monitor and control system. Continuously measures incoming line voltage, allowing detection of any voltage outside the tolerances that you set. If these limits are exceeded, the response timer begins counting. You may also set response time a short time for a quick response or a long time to avoid nuisance tripping. If the voltage remains outside the tolerance after the time has elapsed, the DSP-1 will turn off its output relay and protect your device. While output is off, an additional delay timer activates to avoid rapid restarts.



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## Features:

Digital voltmeter displays instantaneous line voltage. Automatic voltage tester adjusts from 90 to 300 volts; Adjustable response timer (0.1 to 10 sec.) prevents nuisance tripping; Adjustable delay timer (1 to 720 sec.) prevents rapid restarts; Digital display makes for easy viewing and operation.

## Specifications:

- Voltmeter: 70 to 325 Volts.
- Voltage Set Point: 90 to 300 Volts.
- Tolerance Limits: 6 to 18%.
- Response Timer: 0.1 to 10 seconds
- Delay Timer: 1 to 720 seconds
- Output Relay: 10 Amps, 250 VAC resistive, single-pole/double-throw
- Control Input: 18 to 250 VAC with anticipator load for 24 volt thermostats

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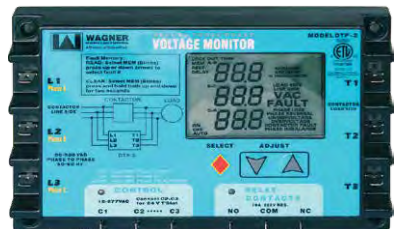
## Part No. DTP-3

### Wagner Digital Three Phase Line Voltage Protector

DTP-3 offers continuous protection against voltage anomalies which can damage compressors, motors and other sensitive electrically operated devices.

- Protection: Loss of Phase, Phase Reversal, Voltage Imbalance, Low Voltage, High Voltage.
- Display: Large custom LCD display indicates all operating conditions at a glance. Three large sets of digits provide easy system troubleshooting.
- Voltmeter: Three independent voltmeters read both line and contactor load (backside) voltages.
- Monitored Voltage: 160 to 600 Volts 50-60 Hz.
- Power Supply: Power for the DTP-3 is automatically derived from any active phase. System operation is not dependent on the control voltage or a specific phase for power.
- Control Voltage: 19-277 VAC. Anticipator load is provided for operation with 24 volt electronic and mechanical thermostats.
- Operating Voltage Set Point: 175 to 650 VAC. Digitally adjustable in one volt increments.
- Voltage Trip Point: Adjustable in 1% increments between 6% and 18% of selected operating voltage. Restart voltage set point (hysteresis) fixed at cutout voltage + 3%.
- Voltage Symmetry: Adjustable imbalance trip point from 2% to 25% of selected operating voltage.
- Response Times: Phase Loss/Reversal: 100 ms max. Imbalance: Adjustable Response Timer Over or Under. Voltage: Adjustable Response Timer.
- Lockout Delay Timer: Fully adjustable 0 to 720 Seconds (0 to 12 minutes). Digital display shows remaining time and user set points.
- Sequential Start Timer: 0 to 30 seconds in one second increments.
- Response Timer: 0.1 to 20 Seconds. Digital display shows remaining time and user set points.
- Memory: Up to 25 past fault conditions are stored for later retrieval and analysis. The faults may be displayed or cleared by the front panel buttons.

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# Condensate Pumps

## Condensate Pumps

Designed to automatically pump up to 20ft (6m) upwards of condensation produced by high efficiency air conditioner units, boilers and humidifiers once the level of the condensate tank reaches a specific level.

### Features:

- Built-in automatic safety switch
- Compact design
- ABS tank and cover
- Dual stage motor float switch (start-stop)
- Replaceable discharge valve
- Max. water temperature up to 120°F (49°C)



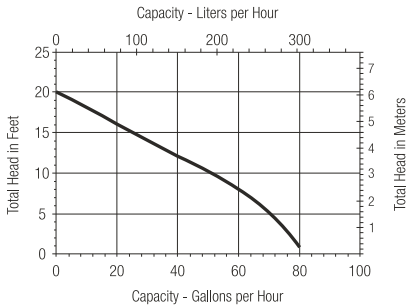
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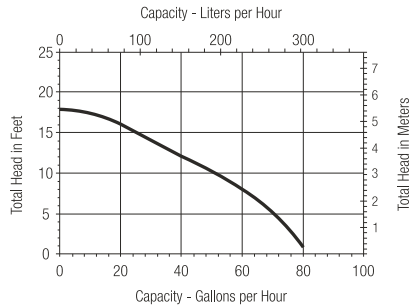
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Part No.	Lift	Amp	Watts	Power	Image
CP-MPG-115	20' (6m)	1.6	96	115V/1Ph/60Hz	A
CP-MPG-220	17' (5m)	0.5	75	220V/1Ph/50-60Hz	A
CP-MPG-115-LP	20' (6m)	1.6	96	115V/1Ph/60Hz	B
CP-MPG-220-LP	17' (5m)	0.5	75	220V/1Ph/50-60Hz	B

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CP-MPG-115 / CP-MPG-115-LP



CP-MPG-220 / CP-MPG-220-LP

## Mini Condensate Pump

### Part No. CP-MOP-220

#### Features:

- Power Supply: 220-240V AC < 16W, 1Ph 50/60Hz.
- 3A volt-free Alarm wires, N/O N/C contacts
- Continuously rated
- Class I appliance
- Hall effect semi conductor level sensors
- Water flow rate: 3.7g (14 Lt.) per hr @ 0 head
- Maximum water temp: 104°F (40°C)
- Maximum recommended head: 26'-3" (8m)
- Sound level: 23 dB(A) @ 1m & 8m head
- Suction lift: 3'-3" (1m)
- Discharge tube: 1/4" (6mm) ID
- Includes 59" (1.5m) clear drain hose and connection accessories
- CE Marked
- Thermally protected
- Fully potted

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## Mute Box Condensate Pump

### Part No. CP-MBP

#### Features:

- Power Supply: 115/220-240V AC, 1Ph 50/60Hz
- Water flow rate: 5.3g (20l) per hr @ 0 head
- Maximum recommended head: 26'-3" (20m)
- Max. unit output: 20Kw/68000Btu/h
- Sound level: <19 dB(A) @ 3'-3" (1m)
- Suction lift: 6'-7" (2m)
- IP protection: IPX5

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## Mute Wedge Condensate Pump

### Part No. CP-MWP

#### Features:

- Power Supply: 115/220-240V AC, 1Ph 50/60Hz
- Water flow rate: 38 lt. (10 gal) per hr @ 0 head
- Maximum water temp: 70°C (158°F)
- Maximum recommended head: 20m (65ft)
- Water storage: 230 ml (7.77 oz)
- Sound level: <19 dB(A) @ 1m (3'3.3")
- Discharge tube: 6mm (1/4") ID

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# Accumulators & Filter-Driers

## Liquid Line Filter Driers

### Features:

- Solid copper fittings
- Shock resistant steel shell construction
- High acid and moisture removal
- Corrosion resistant epoxy powder paint finish
- Full flow fittings for low pressure drop
- Non-positional
- Filtration: 40 microns
- Max. working pressure: 680 psi, 4700 KPA
- Working temperature: -40° to 70°C (-40° to 160°F)



### Applications:

- Use with CFC, HCFC and HFC refrigerants

Part No.	Connection Size	Liquid Low Capacity (Tons)						Dimensions (in)		
		R134a	R12	R22	R407a	R404a	R502	A	B	C
SEK-032	1/4" SAE									
SEK-032S	1/4" Solder	1.61	2.09	2.21	2.12	1.45	1.45	4.38	3.13	1.63
SEK-052	1/4" SAE									
SEK-052S	1/4" Solder	1.72	2.12	2.32	1.52	1.52	1.52	4.81	3.69	2.50
SEK-053	3/8" SAE									
SEK-053S	3/8" Solder	2.91	2.53	3.85	3.69	2.54	2.54	5.13	3.36	2.50
SEK-082	1/4" SAE									
SEK-082S	1/4" Solder	1.89	2.31	2.28	2.45	1.69	1.58	5.63	4.50	2.50
SEK-083	3/8" SAE									
SEK-083S	3/8" Solder	3.33	4.01	4.35	4.36	2.94	2.84	5.94	4.44	2.50
SEK-163	3/8" SAE									
SEK-163S	3/8" Solder	3.19	3.88	4.25	4.11	2.78	2.71	6.88	5.38	2.50
SEK-164	1/2" SAE									
SEK-164S	1/2" Solder	5.88	7.14	7.81	7.77	5.23	5.12	7.06	5.38	2.50
SEK-165	5/8" SAE									
SEK-165S	5/8" Solder	8.02	9.71	10.45	10.32	7.01	6.82	7.50	5.31	2.50
SEK-167S	7/8" Solder	12.78	15.56	16.87	16.54	11.26	10.92	7.13	5.63	2.50
SEK-303	3/8" SAE	3.61	4.34	4.71	4.61	3.16	3.11	9.63	5.63	3.00
SEK-304	1/2" SAE									
SEK-304S	1/2" Solder	6.64	8.13	8.89	8.64	5.92	5.71	9.88	8.13	3.00
SEK-305	5/8" SAE									
SEK-305S	5/8" Solder	8.78	10.69	11.56	11.35	7.74	7.54	10.31	8.06	3.00
SEK-414	1/2" SAE									
SEK-414S	1/2" Solder	8.55	10.41	11.32	11.15	7.51	7.31	10.00	8.05	3.50
SEK-415	5/8" SAE									
SEK-415S	5/8" Solder	9.95	12.06	13.05	12.84	8.74	8.54	10.44	8.19	3.50
SEK-417S	7/8" Solder	16.66	20.35	22.01	21.60	14.78	14.35	9.88	8.38	3.50
SEK-419S	1-1/8" Solder	22.75	27.78	30.25	29.41	20.14	19.51	10.38	8.56	3.50

## Bi-Flow Heat Pump Filter Drier

### Features:

- Designed with internal check valve for dual direction flow and filtration
- Solid copper fittings
- High acid and moisture removal
- Corrosion resistant epoxy powder paint
- Max. working pressure: 680 psi, 4700 KPA

**new**



Part No.	Connection Size	Liquid Low Capacity (Tons)					Dimensions (in)		
		R134a	R12	R22	R410a	R407a	A	B	C
SBF-083S	3/8" Solder	3.33	4.01	17.80	17.80	17.40	5.43	3.94	2.50
SBF-163S	3/8" Solder	3.19	3.88	18.30	18.30	17.90	5.83	4.33	3.00
SBF-164S	1/2" Solder	5.88	7.14	28.50	28.50	27.80	5.91	4.33	3.00

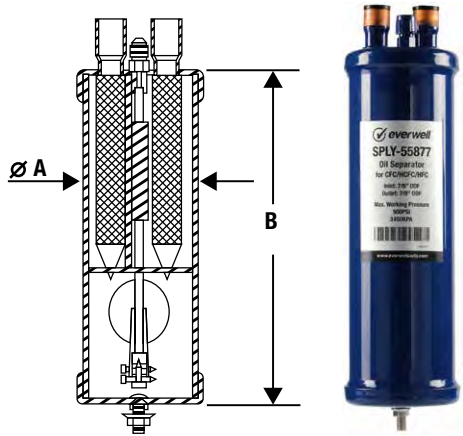
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## A/C Oil Separators

In air conditioning systems the oil separator ensures that the compressor lubricating oil is fed back directly to the compressor. This protects the compressor and increases the efficiency of the system by preventing oil or other contaminants from circulating with the refrigerant.

### Features:

- Hermetical construction with steel oil-return system (1/4" or 3/8" SAE connection)
- Dependable shut-off system of floating valve
- Anti-corrosive spurring model
- Solid copper connections
- Max. working pressure: 3.5Mpa/500Psi



Part No.	Connection Size	Dimensions (in)		Liquid Low Capacity (Tons)							
		A	B	R12		R22/R407c		R502		R134a	
				-40°F	+40°F	-40°F	+40°F	-40°F	+40°F	-40°F	+40°F
SPLY-55855	5/8" ODF	4.00	14.25	3	4	4-1/2	5-1/2	4-3/4	5-3/4	3-1/4	4-1/2
SPLY-55877	7/8" ODF	4.00	17.75	4-1/2	5-1/2	7	8	7-1/2	8-1/2	4-3/4	6-1/2
SPLY-55889	1-1/8" ODF	4.00	21.00	6	7-1/2	9	11	9-1/2	11-1/2	6-1/2	8-1/2
SPLY-559011	1-3/8" ODF	4.00	21.25	7-1/2	10	11-1/2	14	12	14-1/2	8	11-1/3
SPLY-569011	1-3/8" ODF	6.00	15.75	9	12	13	14	15	20	9-1/2	13-3/4
SPLY-569213	1-5/8" ODF	6.00	19.00	11	14	16	18	20	24	11-3/4	16
SPLY-569417	2-1/8" ODF	6.00	19.50	17	22	25	30	30	35	18	25-1/4

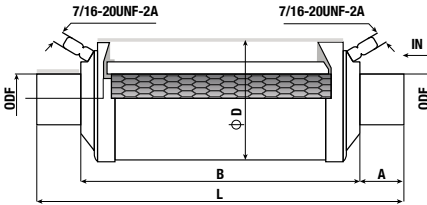
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## Suction Line Filter Drier

SSFD Series suction line filter has a large shell diameter with optimal design to provide maximum filtration efficiency and effective compressor protection.

### Features:

- Having a shortest length allow the installation in narrow areas
- When low pressure drops, its increase the effective filtration with pleated filter design
- Copper at the end of joint to make easeast the welding process
- Two valves for measuring pressure drops
- Filtration precision 40microns
- Painted with corrosion resistant epoxy powder coating, matching the requirement of 500 hours salt spray testing
- Maximun working pressure 510psi (35 bar)



Part No.	Connection Size	Filter Paper Area (in <sup>2</sup> )	Dimensions (in)			
			A	B	D	L
SSFD-283T	3/8" ODF	83	19	112	89	150
SSFD-284T	1/2" ODF	83	20	112	89	152
SSFD-285T	5/8" ODF	83	24	112	89	160
SSFD-286T	3/4" ODF	141	26	152	89	204
SSFD-287T	7/8" ODF	141	28.5	152	89	209
SSFD-289T	1-1/8" ODF	141	29	152	89	210
SSFD-2811T	1-3/8" ODF	219	32	205	89	269
SSFD-2813T	1-5/8" ODF	219	32	205	89	269

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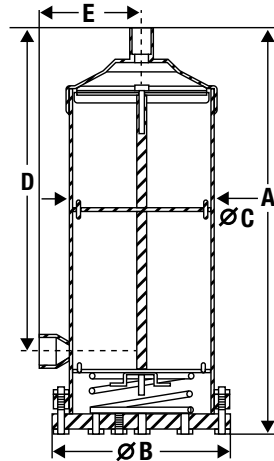
## Core Filter Drier Shells

Filter drier shells are used to eliminate possible moisture, acid, and particles in refrigeration and air conditioning systems and prevent malfunction and ensure full capacity and efficiency.

### Features:

Max operating pressure:

- T-Liquid pipe use 3.5Mpa/500psig
- SV-Aspirating tube use 3.1Mpa/450psig
- Filtration (with Core): 40 microns
- Shells and Gasket are compatible with CFC, HCFC, and HFC refrigerants, oils, and additives
- Full flow fittings for low pressure drop
- Corrosion resistant epoxy powder paint finish
- Durable steel shells for long life
- Solid copper connections

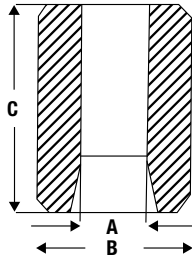


Part No.	Connection Size	Dimensions (in)					Refrigeration Capacity Under Low Temp Commercial Use (tons)					Qty. of Cores
		A	B	C	D	E	R134a	R12	R22	R404a R502	R502	
SPL-485	5/8" ODF	9.31	6.05	4.50	6.09	3.13	19	15	21	14	15	1
SPL-487	7/8" ODF	9.50	6.05	4.50	6.25	3.25	35	28	38	25	24	1
SPL-489	1-1/8" ODF	9.38	6.05	4.50	6.31	3.25	48	40	53	35	34	1
SPL-967	7/8" ODF	15.10	6.05	4.50	11.90	3.28	37	31	41	27	26	2
SPL-969	1-1/8" ODF	15.20	6.05	4.50	12.00	3.28	58	47	63	42	40	2
SPL-9611	1-3/8" ODF	15.30	6.05	4.50	12.10	3.38	72	59	79	52	51	2

## Liquid Line Cores

Universal replacement cores for use in take-apart type filter drier shells. Cores are hermetically packaged in metal cans to prevent contamination. Available in Standard and High Moisture Capacity.

Part No.	Dimensions (in)		
	A	B	C
D-48	1.85	3.78	5.51
H-48	1.85	3.78	5.51
H-100	2.09	4.80	6.50



## Suction Line Accumulators

The suction line accumulator is designed with internal bend pipes to prevent internal splashing and help the aggregation of the oil at the bottom of the accumulator. The accumulator should be installed as close to the compressor as possible and should be changed when a compressor is replaced.

### Features:

- Vertically mounted only
- Adapt to CFC, HCFC and HFC refrigerants
- Corrosion resistant paint
- Solid copper connections
- Max. working pressure: 3.1Mpa (450 PSIG)

Part No.	Connection Size	Dimensions (in)	
		A	B
SPLQ-204	1/2" ODF	4.00	8.38
SPLQ-205	5/8" ODF	4.00	10.63
SPLQ-206	3/4" ODF	5.50	10.25
SPLQ-207	7/8" ODF	5.50	12.50
SPLQ-208	1-1/8" ODF	6.50	15.63
SPLQ-209	1-3/8" ODF	6.50	20.63
SPLQ-210	1-5/8" ODF	6.50	22.63

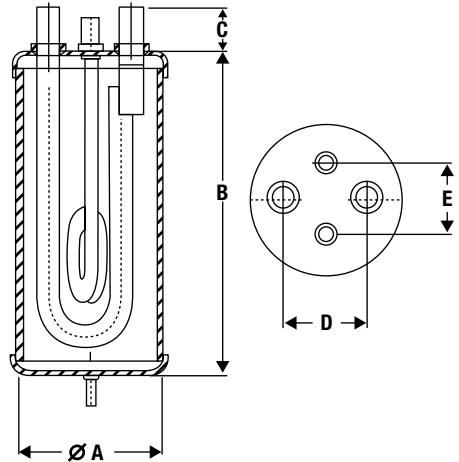


## Heat Exchanger of Gas-Liquid Separators

Heat exchangers greatly improve system efficiency, and prevent liquid from entering the compressor suction, by pre-cooling hot gas prior to entering the condenser and pre-heating the suction gas prior to entering the compressor.

### Features:

- Gas suction line sizes range from 1/2" to 2-1/8"
- Liquid line sizes range from 3/8" to 1-1/8"
- Corrosion resistant painting
- Maximum operating pressure: 3.1Mpa/450Psi
- Saving refrigerant capacity



Part No.	Connection (ODF)		Dimensions (in)					Normal Refrigeration Capacity (tons)		
	Suction Line	Liquid Line	A	B	C	D	E	R134a	R22	R404a R507
SPLR-2405	5/8"	3/8"	4.0	10.8	1.4	2.1	2.4	4.4	4.0	4.2
SPLR-2407	7/8"	1/2"	5.5	12.6	1.6	3.2	2.7	8.5	7.8	8.0
SPLR-2413	1-3/8"	3/4"	6.5	20.9	2.2	3.3	3.2	18.0	16.5	17.0
SPLR-2415	1-5/8"	7/8"	6.5	22.9	2.4	3.2	3.2	23.0	21.0	22.0
SPLR-2417	2-1/8"	1-1/8"	6.5	22.6	2.4	3.2	3.2	25.0	23.0	21.0

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## Copper Filter Driers

Part No.	OD Size	Inlet	Outlet	Molecular (g)	Bag	Master Box
CF-10	3/4"	1/4"	1/4"	10	20	400
CF-15	3/4"	1/4"	1/4"	15	20	400
CF-25	1"	1/4"	1/4"	25	10	250
CF-30	1"	1/4"	1/4"	30	10	250



## Copper Filter Drier with Access Valve

Part No.	OD Size	Inlet	Outlet	Molecular (g)	Bag	Master Box
CF-25AV	1"	1/4"	1/4"	10	20	400



## Copper Filter Drier with SAE Connection

### Features:

- SAE connections
- Flare nuts included

Part No.	OD Size	Inlet	Outlet	Molecular (g)	Bag	Master Box
CF-25S	1"	1/4"	1/4"	25	10	250



## Strainers

All copper strainers available with two, three, four and five outlets.

### Features:

- Outlet dimensions: 0.093" to 3/8"
- Inlet dimensions 1/4" to 3/8"
- Designed with internal mesh screen

Part No.	OD Size	Inlet	Outlet	No. of Outlets	Bag	Master Box
ST-02	3/4"	1/4"	1/8"	2	20	800
ST-03	3/4"	1/4"	1/8"	3	20	800
ST-04	3/4"	1/4"	1/8"	4	20	800
ST-05	3/4"	1/4"	1/8"	5	20	800



## Valves

### Push Valve for Water Dispenser

Part No.	Description	Thread	Figure
B-M	Faucet activated by hand pull	Male M17 x 2	A
B5-M	Faucet activated by pushing drinking glasses	Male M17 x 2	B



Figure A



Figure B

### Access Valve

#### Features:

- Copper stem available in 1/4" and 3/16" SAE
- Poppet valve assisted core
- Anti-backflow check valve
- Brass cap with core remover

Part No.	Tube OD Size	Tube Length		Bag	Master Box
		(mm)	(in)		
AV-14S	1/4"	60	2	50	500
AV-14	1/4"	100	4	50	500
AV-316	3/16"	100	4	50	500



### Pinch-Off Valve for Refrigerant Line Tap

#### Features:

- Self piercing
- Mounts in any position
- Compatible with all refrigerants
- Corrosion resistant

Part No.	Description
LTV-1	For 1/4", 5/16", 3/8" OD Tubing

Master Box: 250 units





## Pinch-Off Valve for Refrigerant Line Tap - Heavy Duty

### Features:

- Brass body, corrosion resistant
- Retractable piercing needle for refrigerant flow
- Compatible with all refrigerants
- Includes valve cap

Part No.	Description
LTV-341	For 3/16" - 1/2" OD Tubing

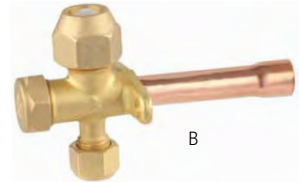
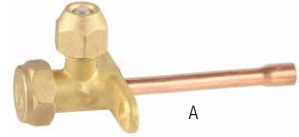
Master Box: 200 units



## Service Valve

For charging condensing unit with R410A and R22.

Part No.	OD Size	Type	Image
ACV2S410-14	1/4"	2 way	A
ACV3S410-12	1/2"	3 way	B
ACV3S410-38	3/8"	3 way	
ACV3S410-58	5/8"	3 way	
ACV3S410-34	3/4"	3 way	
ACV3S410-78	7/8"	3 way	



## Hand Valves

Part No.	O.D.	Connection Type
HV-14	1/4"	Flare
HV-38	3/8"	Flare
HV-12	1/2"	Flare
HV-58	5/8"	Flare
HV-34	3/4"	Flare



## Ball Valves with Access Valve

### Features:

- Designed with copper press / FTG connections
- For use with: CFC, H CFC, HFC and HFO refrigerant
- Forced brass body one quarter turn for open or close
- Temperature range: -40° to 121°C (-40° to 250°F)
- Bi-directional flow

Part No.	O.D.	Connection Type
BV-14	1/4"	Solder
BV-38	3/8"	Solder
BV-12	1/2"	Solder
BV-58	5/8"	Solder
BV-34	3/4"	Solder
BV-78	7/8"	Solder
BV-118	1-1/8"	Solder
BV-138	1-3/8"	Solder
BV-158	1-5/8"	Solder
BV-218	2-1/8"	Solder
BV-258	2-5/8"	Solder



## Expansion Valves

### Danfoss Type

To assemble our expansion valves, combine expansion valve body with any orifice for refrigerant and capacity as needed.

Part No.	Refrig.	Equalizer	Size			Cap. Length
			Input SAE	Output SAE	External Equalizer	
XTEX2	R22	External	3/8"	1/2"	1/4"	1.5m
XTX2	R22	Internal	3/8"	1/2"	-	1.5m
XTEV2	R134a	External	3/8"	1/2"	1/4"	1.5m
XTN2	R134a	Internal	3/8"	1/2"	-	1.5m
XTES2	R404a/R507	External	3/8"	1/2"	1/4"	1.5m
XTS2	R404a/R507	External	3/8"	1/2"	-	1.5m



### Orifices

Part No.	Capacity (tons)					
	R12	R134a	R22	R502	R404a/R507	R407
TXVA-00X	0.09	0.09	0.13	0.11	0.11	0.15
TXVA-000	0.15	0.19	0.32	0.22	0.22	0.39
TXVA-001	0.36	0.43	0.80	0.50	0.51	0.99
TXVA-002	0.60	0.73	1.31	0.86	0.87	1.62
TXVA-003	0.96	1.20	2.10	1.36	1.40	2.61
TXVA-004	1.58	1.90	3.44	2.22	2.30	4.27
TXVA-005	1.91	2.40	4.18	2.70	2.80	5.20
TXVA-006	2.22	3.10	4.82	3.13	3.20	5.99



### Sporlan Type

Part No.	Refrig.	Cap. (Tons)	Equalizer	Size		Cap. Length
				Input SAE	Output SAE	
FVE-3C	R22	3	External	3/8"	1/2"	30"
FVE-4C	R22	4	External	3/8"	1/2"	30"
FVE-5C	R22	5	External	3/8"	1/2"	30"
SVE-8CP100	R22	8	External	5/8"	5/8"	60"
SVE-10CP100	R22	10	External	5/8"	7/8"	60"
SVE-12CP100	R22	12	External	5/8"	7/8"	60"



## Expansion Device – Accurators

Part No.	Capacity	Refrigerant	Master Box
ACC-12	12KBtu	R22	500
ACC-18	18KBtu	R22	500
ACC-24	24KBtu	R22	500
ACC-36	36KBtu	R22	500
ACC-48	48KBtu	R22	500
ACC-60	60KBtu	R22	500



## Solenoid Valves

This series of electromagnetic valves have advanced design, it uses high-quality diaphragms to take the place of the traditional piston structures. Its internal accessories adapt to a variety of refrigerants, and it can also be able to bear the temperature at 110°C (130°F). Our products have sensitive and dependable motion, utilizing the full plastic enveloped electromagnetic coils with better insulation, waterproof, moisture proof, vibration, and other characteristics.

### Features:

- Refrigerants: CFC's, HCFC's and HFC
- Power: 200-230V, 50-60Hz
- Pressure: 3 Mpa
- Temperature: -35 °C to 105 °C (-31°F to 221°F)

Part No.	Size	Type
SR-1020/2	1/4"	SAE
SR-1020/3	3/8"	SAE
SR-1064/4	1/2"	SAE
SR-1070/5	5/8"	SAE
SR-1070/6	3/4"	SAE
SR-1079/7	7/8"	Solder
SR-1078/9	1-1/8"	Solder
SR-1079/11	1-3/8"	Solder
SR-1079/13	1-5/8"	Solder



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## Cold Room Hardware

### *Complete Door Latch Set with inside Release & Keys*

**Part No. ECL-1178**

**Features:**

- Adjustable height from 63mm to 100mm
- Made with high pressure die-cast zinc
- Chrome finish



### *Adjustable Door Latch Set with Stricker Height & Keys*

**Part No. ECL-1200**

**Features:**

- Adjustable height from 63mm to 100mm
- Made with high pressure die-cast zinc
- Chrome finish



### *Adjustable Door Latch Set with Lever and Roller*

**Part No. ECL-1400**

**Features:**

- Adjustable height from 63mm to 100mm
- Made with high pressure die-cast zinc
- Chrome finish



### *Adjustable Door Hinge*

**Part No. ECH-1460**

**Features:**

- Adjustable height from 50mm to 62mm
- Made with high pressure die-cast zinc
- Chrome finish



## Part No. ECH-1238

### Features:

- Reversible reach-in cam-lift hinge without spring
- Made with high pressure die-cast zinc
- Chrome finish

Box: 2 units



## Part No. ECH-1336

### Features:

- Reversible door hinge
- Made with high pressure die-cast zinc
- Chrome finish

Box: 2 units



## Cold Storage Led Lamp

Our LED lamps are waterproof with IP68 rating, ideal for cold storage rooms and other applications where a sealed lamp is required.

Part No.	Watts	Power	Operating Temperature
ECSL-L0801	8	24-220V, 50/60Hz	-40°C to 50°C (-40°F to 122°F)

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## Plastic Air Curtain Strips

Low Temperature PVC plastic strips for cold storage environments. Our plastic curtains stay flexible and resist breaking and cracking in lower temperature applications. Freezer grade PVC strips are also common in outdoor applications where temperatures drop below freezing. Available in transparent vinyl rolls of 150' and 300' feet. Ideal for separating environments by preventing depletion of cold or hot air, also effective in guarding against dust, polluting particles, pests and offer protection from ultraviolet radiation.

Part No.	Description	Thread
LTRS-88150	Ribbed PVC Strip for low temp. 76°C to -29°C (168°F to -20°F)	8"x0.08"x150'
LTRS-88300		8"x0.08"x300'
L428N020302009200A	PVC reinforced air curtain roll for low temp. <b>Made in USA</b>	8"x0.08"x300'
L428R020301804700A	Durarib PVC air curtain roll for low temp. <b>Made in USA</b>	8"x0.07"x150'



## Thermometers

### Build In Digital Thermometer

#### Features:

- Internal panel
- Product size: 2.4x1.16x0.75 in (6.25x2.95x1.9 cm)
- Installing size: 2.3x0.98 in (5.95x2.5 cm)

Part No.	Battery Replacement	Temperature Range
TD-10	Back	-60°F to 160°F (-50°C to 70°C)
TD-30	Front	-60°F to 160°F (-50°C to 70°C)



### Wall Mount Thermometer

#### Features:

- Dual Temperatures °C and °F
- Plastic Construction

Part No.	Temperature Range	
	°C	°F
TD-50	-50 to 50	-60 to 120



### Cased Type Dial Thermometer

#### Features:

- Dual temperatures °C and °F
- Stainless steel case with flush mount
- 48 in (121.92 cm) capillary
- 2 in (5.08 cm) dial diameter

Part No.	Temperature Range	
	°C	°F
RF-60	-40 to 20	-40 to 65



### Flange Type Digital Thermometer

#### Features:

- Temperature display in °C or °F
- Stainless steel case with flush mount
- 48 in (121.92 cm) wire lead
- 2 in (5.08 cm) dial diameter
- Solar-powered display with backup battery

Part No.	Temperature Range	
	°C	°F
RD-60	-50 to 70	-58 to 158



# Copper Tubing

## Pancake Coils - ASTM B280

Soft copper tube is widely used in refrigerators, freezers, air conditioners and HVAC tubing pipe. High temperature resistance, corrosion resistance, oxidation resistance, durability, long service life.

Part No.	OD Size	Thickness (mm)	Length	Master Box
CC-0316	3/16"	0.61	50' (15,24 m)	20
CC-014	1/4"	0.61	50' (15,24 m)	15
CC-0516	5/16"	0.61	50' (15,24 m)	10
CC-038	3/8"	0.61	50' (15,24 m)	10
CC-012	1/2"	0.61	50' (15,24 m)	10
CC-058	5/8"	0.71	50' (15,24 m)	8
CC-034	3/4"	0.71	50' (15,24 m)	5
CC-078	7/8"	0.81	50' (15,24 m)	4
CC-118	1-1/8"	0.81	50' (15,24 m)	1



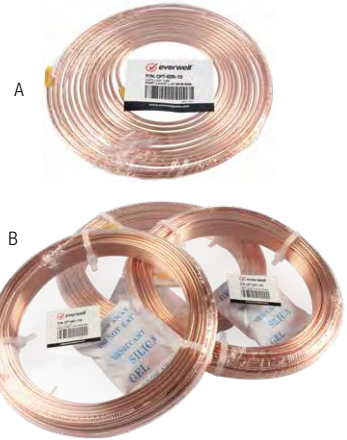
## Twin Tube Line Sets

Part No.	Insulation	Length	O.D. Size Tube	
			Low Pres.	High Pres.
LS1538-14X12	3/8"	15' (4.6m)	1/4"	1/2"
LS1538-14X38	3/8"	15' (4.6m)	1/4"	3/8"
LS1538-14X58	3/8"	15' (4.6m)	1/4"	5/8"
LS1538-38X58	3/8"	15' (4.6m)	3/8"	5/8"
LS2538-14X12	3/8"	25' (7.6m)	1/4"	1/2"
LS2538-14X38	3/8"	25' (7.6m)	1/4"	3/8"
LS2538-14X58	3/8"	25' (7.6m)	1/4"	5/8"
LS2538-38X58	3/8"	25' (7.6m)	3/8"	5/8"
LS5038-14X12	3/8"	50' (15.2m)	1/4"	1/2"
LS5038-14X38	3/8"	50' (15.2m)	1/4"	3/8"
LS5038-14X58	3/8"	50' (15.2m)	1/4"	5/8"
LS5038-38X58	3/8"	50' (15.2m)	3/8"	5/8"



## Capillary Tubes - ASTM B360

Part No.	O.D	I.D	Length	Master Box	Image
CPT-026-10	0.072"	0.026"	10' (3 m)	270	A
CPT-031-10	0.081"	0.031"	10' (3 m)	270	A
CPT-036-10	0.087"	0.036"	10' (3 m)	270	A
CPT-042-10	0.093"	0.042"	10' (3 m)	270	A
CPT-049-10	0.099"	0.049"	10' (3 m)	270	A
CPT-054-10	0.106"	0.054"	10' (3 m)	270	A
CPT-059-10	0.110"	0.059"	10' (3m)	270	A
CPT-064-10	0.125"	0.064"	10' (3 m)	270	A
CPT-070-10	0.125"	0.070"	10' (3 m)	270	A
CPT-026-100	0.072"	0.026"	100' (30m)	20	B
CPT-031-100	0.081"	0.031"	100' (30m)	20	B
CPT-036-100	0.087"	0.036"	100' (30m)	20	B
CPT-042-100	0.093"	0.042"	100' (30m)	20	B
CPT-049-100	0.099"	0.049"	100' (30m)	20	B
CPT-054-100	0.106"	0.054"	100' (30m)	15	B
CPT-059-100	0.110"	0.059"	100' (30m)	15	B
CPT-064-100	0.125"	0.064"	100' (30m)	10	B
CPT-070-100	0.125"	0.070"	100' (30m)	10	B



## Rigid Tubes - ASTM B88 Type L

Part No.	OD Size	Length
CS-014	1/4"	20' - 6.1m
CS-516	5/16"	20' - 6.1m
CS-038	3/8"	20' - 6.1m
CS-012	1/2"	20' - 6.1m
CS-058	5/8"	20' - 6.1m
CS-034	3/4"	20' - 6.1m
CS-078	7/8"	20' - 6.1m
CS-118	1-1/8"	20' - 6.1m
CS-138	1-3/8"	20' - 6.1m
CS-158	1-5/8"	20' - 6.1m
CS-218	2-1/8"	20' - 6.1m
CS-258	2-5/8"	20' - 6.1m





## Pipe Insulation Tubes

Our pipe insulation is widely recognized by the HVAC/R and Plumbing industry as having superior product characteristics, including cold weather flexibility, durable skin surface and exacting manufacturing tolerances.

### Features:

- Moisture vapor resistance
- Condensation control
- Temperature range: -297 °F to 220 °F (-182 °C to 104 °C)
- Mold and mildew resistant
- Non-porous, non-fibrous



### 3/8" Wall Thickness

Part No.	ID Size		Wall		Length		Master Box Qty
	in	mm	in	mm	ft	m	
Π-09X09	3/8	9	3/8	9	6	1.83	120
Π-09X13	1/2	13	3/8	9	6	1.83	115
Π-09X16	5/8	16	3/8	9	6	1.83	90
Π-09X19	3/4	19	3/8	9	6	1.83	72
Π-09X22	7/8	22	3/8	9	6	1.83	65
Π-09X28	1-1/8	28	3/8	9	6	1.83	55
Π-09X35	1-3/8	35	3/8	9	6	1.83	36
Π-09X42	1-5/8	42	3/8	9	6	1.83	30
Π-09X54	2-1/8	54	3/8	9	6	1.83	25

### 1/2" Wall Thickness

Part No.	ID Size		Wall		Length		Master Box Qty
	in	mm	in	mm	ft	m	
Π-13X09	3/8	9	1/2	13	6	1.83	90
Π-13X13	1/2	13	1/2	13	6	1.83	72
Π-13X16	5/8	16	1/2	13	6	1.83	63
Π-13X19	3/4	19	1/2	13	6	1.83	56
Π-13X22	7/8	22	1/2	13	6	1.83	42
Π-13X28	1-1/8	28	1/2	13	6	1.83	36
Π-13X35	1-3/8	35	1/2	13	6	1.83	30
Π-13X42	1-5/8	42	1/2	13	6	1.83	25
Π-13X54	2-1/8	54	1/2	13	6	1.83	20

### 3/4" Wall Thickness

Part No.	ID Size		Wall		Length		Master Box Qty
	in	mm	in	mm	ft	m	
Π-19X09	3/8	9	3/4	19	6	1.83	40
Π-19X13	1/2	13	3/4	19	6	1.83	40
Π-19X16	5/8	16	3/4	19	6	1.83	35
Π-19X19	3/4	19	3/4	19	6	1.83	30
Π-19X22	7/8	22	3/4	19	6	1.83	30
Π-19X28	1-1/8	28	3/4	19	6	1.83	25
Π-19X35	1-3/8	35	3/4	19	6	1.83	20
Π-19X42	1-5/8	42	3/4	19	6	1.83	17
Π-19X54	2-1/8	54	3/4	19	6	1.83	15

## Copper Fittings

### Copper Elbow-Short Radius 90° (CxC) - 107C

Part No.	Size	Bag Qty	Master Box
107C-14	1/4"	100	6,000
107C-38	3/8"	100	5,000
107C-12	1/2"	100	2,500
107C-58	5/8"	100	1,400
107C-34	3/4"	50	800
107C-78	7/8"	50	500
107C-118	1-1/8"	25	250
107C-138	1-3/8"	10	140
107C-158	1-5/8"	10	80
107C-218	2-1/8"	1	40
107C-258	2-5/8"	1	25



### Copper Elbow-Long Radius 90° (CxC) - 107L

Part No.	Size	Bag Qty	Master Box
107L-14	1/4"	100	3,000
107L-38	3/8"	100	2,500
107L-12	1/2"	100	1,500
107L-58	5/8"	50	900
107L-34	3/4"	50	500
107L-78	7/8"	25	350
107L-118	1-1/8"	10	160
107L-138	1-3/8"	10	80
107L-158	1-5/8"	5	50
107L-218	2-1/8"	1	25
107L-258	2-5/8"	1	15



### Copper Elbow 45° (CxC) - 106

Part No.	Size	Bag Qty	Master Box
106-14	1/4"	100	6,000
106-38	3/8"	100	5,000
106-12	1/2"	100	2,500
106-58	5/8"	100	1,500
106-34	3/4"	50	1,000
106-78	7/8"	50	500
106-118	1-1/8"	25	250
106-138	1-3/8"	10	160
106-158	1-5/8"	10	100
106-218	2-1/8"	1	50
106-258	2-5/8"	1	30



## ***Copper Coupling with Stop (CxC) - 100***

Part No.	Size	Bag Qty	Master Box
100-14	1/4"	100	10,000
100-38	3/8"	100	7,000
100-12	1/2"	100	4,000
100-58	5/8"	100	2,000
100-34	3/4"	100	1,200
100-78	7/8"	50	800
100-118	1-1/8"	25	400
100-138	1-3/8"	25	250
100-158	1-5/8"	10	160
100-218	2-1/8"	5	90
100-258	2-5/8"	1	50



## ***Copper Tee (CxCx) - 111***

Part No.	Size	Bag Qty	Master Box
111-14	1/4"	100	5,000
111-38	3/8"	100	2,500
111-12	1/2"	100	1,500
111-58	5/8"	50	800
111-34	3/4"	50	500
111-78	7/8"	25	300
111-118	1-1/8"	10	150
111-138	1-3/8"	10	80
111-158	1-5/8"	5	50
111-218	2-1/8"	1	30
111-258	2-5/8"	1	20



## ***Copper Female Adapter (Cx)F - 103***

Part No.	Size	Bag Qty	Master Box
103-12x12	1/2" x 1/2"	100	1,000
103-12x34	1/2" x 3/4"	50	500
103-58x12	5/8" x 1/2"	50	500
103-58x34	5/8" x 3/4"	50	500
103-58x14	5/8" x 1/4"	50	500
103-34x12	3/4" x 1/2"	50	500
103-34x34	3/4" x 3/4"	50	500
103-78x12	7/8" x 1/2"	25	250
103-78x34	7/8" x 3/4"	25	250



### **Copper Male Adapter (CxM) - 104**

Part No.	Size	Bag Qty	Master Box
104-12x12	1/2" x 1/2"	50	500
104-58x12	5/8" x 1/2"	50	500
104-34x12	3/4" x 1/2"	25	250
104-34x34	3/4" x 3/4"	25	250
104-78x34	7/8" x 3/4"	25	250



### **Copper P-Trap Suction Line (CxC) - 123**

Part No.	Size	Bag Qty	Master Box
123-12	1/2"	5	200
123-58	5/8"	5	100
123-34	3/4"	2	80
123-78	7/8"	2	50
123-118	1-1/8"	2	30
123-138	1-3/8"	1	20
123-158	1-5/8"	1	10
123-218	2-1/8"	1	4
123-258	2-5/8"	1	1



### **Copper Tube Cap - 117**

Part No.	Size	Bag Qty	Master Box
117-14	1/4"	50	1,000
117-38	3/8"	50	1,000
117-12	1/2"	50	1,000
117-58	5/8"	100	1,000
117-34	3/4"	25	500
117-78	7/8"	50	500
117-118	1-1/8"	50	500



### **Copper Flush Bushing (FTGxC) - 119**

Part No.	Size	Bag Qty	Master Box
119-38x14	3/8" x 1/4"	50	1,000
119-12x38	1/2" x 3/8"	50	1,000
119-58x38	5/8" x 3/8"	50	1,000
119-58x12	5/8" x 1/2"	50	1,000
119-34x12	3/4" x 1/2"	25	500
119-34x58	3/4" x 5/8"	25	500
119-78x58	7/8" x 5/8"	50	500
119-78x34	7/8" x 3/4"	50	500



## Copper Coupling-Reducing (CxC) - 101R

Part No.	Size	Bag Qty	Master Box
101R-38x14	3/8" x 1/4"	100	4,000
101R-12x14	1/2" x 1/4"	100	4,000
101R-12x38	1/2" x 3/8"	100	4,000
101R-58x14	5/8" x 1/4"	100	2,500
101R-58x38	5/8" x 3/8"	100	2,500
101R-58x12	5/8" x 1/2"	100	2,500
101R-34x38	3/4" x 3/8"	50	1,500
101R-34x12	3/4" x 1/2"	50	1,500
101R-34x58	3/4" x 5/8"	50	1,500
101R-78x38	7/8" x 3/8"	50	1,000
101R-78x12	7/8" x 1/2"	50	1,000
101R-78x58	7/8" x 5/8"	50	1,000
101R-78x34	7/8" x 3/4"	50	1,000
101R-118x12	1-1/8" x 1/2"	25	600
101R-118x58	1-1/8" x 5/8"	25	600
101R-118x34	1-1/8" x 3/4"	25	600
101R-118x78	1-1/8" x 7/8"	25	600
101R-138x58	1-3/8" x 5/8"	25	400
101R-138x78	1-3/8" x 7/8"	25	400
101R-138x118	1-3/8" x 1-1/8"	25	400
101R-158x58	1-5/8" x 5/8"	10	250
101R-158x78	1-5/8" x 7/8"	10	250



Part No.	Size	Bag Qty	Master Box
101R-158x118	1-5/8" x 1-1/8"	10	250
101R-158x138	1-5/8" x 1-3/8"	10	250
101R-218x58	2-1/8" x 5/8"	10	160
101R-218x78	2-1/8" x 7/8"	10	160
101R-218x118	2-1/8" x 1-1/8"	10	160
101R-218x138	2-1/8" x 1-3/8"	10	160
101R-218x158	2-1/8" x 1-5/8"	10	160
101R-258x118	2-5/8" x 1-1/8"	1	80
101R-258x138	2-5/8" x 1-3/8"	1	80
101R-258x158	2-5/8" x 1-5/8"	1	80
101R-258x218	2-5/8" x 2-1/8"	1	80

## Vibration Eliminators

### Features:

- Flexible stainless steel hose with high tensile stainless steel wire braid for maximum strength
- Brazed female copper-end connection
- Pressure and vacuum tested
- Max working pressure 500psi, burst pressure 2500
- Not for use with ammonia
- Compatible with all HFC, HCFC, and CFC refrigerants
- Inside surface conforms with ASME/ANSI B16.18 and B16.22

Part No.	Size	Length	Max Working Pres. (psi)	Burst Pressure (psi)
VE-38	3/8"	8-9/19"	500	2,500
VE-12	1/2"	9"	500	2,500
VE-58	5/8"	9-7/8"	500	2,500
VE-34	3/4"	10-9/16"	500	2,500
VE-78	7/8"	15"	500	2,500
VE-118	1-1/8"	19-3/16"	500	2,500
VE-138	1-3/8"	15-9/16"	500	2,500
VE-158	1-5/8"	16-7/8"	500	2,500
VE-218	2-1/8"	20-5/8"	500	2,500



### Refrigerant Compatibility Chart

R12	R22	R23	R125	R134A	R401
R401B	R402A	R402B	R404A	R407A	R407B
502	R507	R508	R410A		

## Brass Fittings

### Short Nut

Part No.	Flare	Type	Bag	Master Box
SN-14	1/4"	Short Nut	100	1500
SN-516	5/16"	Short Nut	100	1000
SN-38	3/8"	Short Nut	50	500
SN-12	1/2"	Short Nut	50	500
SN-58	5/8"	Short Nut	30	300
SN-34	3/4"	Short Nut	20	200



### Flare Union

Part No.	Flare	Type	Bag	Master Box
U-14	1/4"	Union	100	1500
U-516	5/16"	Union	100	600
U-38	3/8"	Union	50	400
U-12	1/2"	Union	50	400
U-58	5/8"	Union	30	300
U-34	3/4"	Union	20	100



### Flare Plug

Part No.	Flare	Type	Bag	Master Box
P-14	1/4"	Plug	100	1000
P-516	5/16"	Plug	100	1000
P-38	3/8"	Plug	100	1000
P-12	1/2"	Plug	100	1000
P-58	5/8"	Plug	50	500
P-34	3/4"	Plug	30	300



# Sight Glasses & Moisture Indicators

## Flare Male Type

### Features:

- Large wide angle viewing window for ease of monitoring
- Solid copper connections
- Hermetic design
- Leak-proof
- For use with CFC, HCFC and HFC refrigerants

Part No.	O.D	Connection Type
SG-14	1/4"	Flare
SG-38	3/8"	Flare
SG-12	1/2"	Flare
SG-58	5/8"	Flare
SG-34	3/4"	Flare



## Sweat Type

Part No.	O.D	Connection Type
SG-14S	1/4"	Solder
SG-38S	3/8"	Solder
SG-12S	1/2"	Solder
SG-58S	5/8"	Solder
SG-34S	3/4"	Solder
SG-78S	7/8"	Solder



## Flare Male x Female Type

Part No.	O.D	Connection Type
SG-14MF	1/4"	Flare Male x Female
SG-38MF	3/8"	Flare Male x Female
SG-12MF	1/2"	Flare Male x Female
SG-58MF	5/8"	Flare Male x Female
SG-34MF	3/4"	Flare Male x Female



## Tapes

### Aluminum Foil Tape

Aluminum foil tape with Acrylic Adhesive. Seal out moisture and reflects heat. Handles temperature from -54°C to 150°C (-65°F to 300°F).

Part No.	Width	Length	Type	Thickness (mm)
AFT-250	2"	164 ft (50m)	Normal	0.026
AFT-250R	2"	164 ft (50m)	Reinforced	0.026
AFT-350	3"	164 ft (50m)	Normal	0.026

Master Box: 24 units

⚠ Cancer & Reproductive Harm [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)



### Duct Tape

Duct tape with great adhesion and tack will not twist or curl during application. Especially formulated pressure sensitive adhesive. Designed for the most demanding HVAC applications with excellent tensile strength, and extra thick adhesive to provide excellent sealing bond to all types of surfaces. Backing acrylic adhesive. Max. Temp. 93°C (200°F).

Part No.	Width	Length	Color	Thickness (mm)
CDT-250	2"	164 ft (50m)	Gray	0.19
CDT-250B	2"	164 ft (50m)	Black	0.19
CDT-350	3"	164 ft (50m)	Gray	0.19

Master Box: 24 units

⚠ Cancer & Reproductive Harm [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)



### Foam Pipe Tape

Prevents pipe sweat. Can also be used to reduce heat loss on hot pipes below 160 °F. Easily cuts into pieces and molds around fittings and valves. Adheres to clean metal surfaces and to itself.

Part No.	Width	Length	Thickness
FPT-210	2"	33 ft (10m)	3mm

Master Box: 24 units

⚠ Cancer & Reproductive Harm [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)





## Cork Insulation Tape

This tape is formulated to prevent condensation on pipes and fittings used in HVAC equipment. Good adhesion in dry surfaces and to itself; the material keeps its flexibility and adhesive properties after prolonged exposure to UV and over high temperatures.

Part No.	Width	Length	Thickness
CKT-23018	2"	30ft (9m)	1/8" (3.3mm)

Master Box: 10 units

⚠ Cancer & Reproductive Harm [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)



## PVC Tape for Mini-Splits

It's an Non-adhesive tape used to protect the insulation tube in all splits units. Also know as Mummy Tape.

### Features:

- Non-adhesive
- Fully flexible
- Flame retardant
- Elongation at break 150% ~ 220%
- Tensile strength 20~ 30N / 10mm
- Application temperature: 0° to 80°C / 32° to 176°F

Part No.	Width	Length	Thickness
PVCT-615	2" (60mm)	50ft (15m)	2mm

⚠ Cancer & Reproductive Harm [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

Master Box: 100 units



## PVC Electric Tape

Splice and insulate wires with premium grade electrical tape. Flame retardant, cold resistant. Suitable for use up to 600V and rated for -10 to 80°C (14 to 104°F) operating temperature.

Part No.	Width	Length	Thickness (mm)
PETB-B1918A	3/4" (19mm)	18 m (60 ft)	0.18

⚠ Cancer & Reproductive Harm [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

Master Case: 100 units



## Ideal Tape

### Ideal Tape 469 Cloth Duct Tape

Generally used for general purpose packaging, bundling, and securing materials on the job site. Also commonly used to hold plastic sheeting in abatement and waterproofing projects. UL 723 Rated.

Part No.	Adhesive System	Thickness (mm / mils)	Tensile Strength (lbs/in-N/25mm)	Master Box
469S-2G	Rubber	0.23 (9)	20 (88)	24



### Cold Seal 791 FSK Tape

A Foil/Scrim/Kraft (FSK) backing coated with a high-performance acrylic adhesive system. The adhesive provides a durable, long-term bond in extreme temperature conditions when sealing seams and joints on insulation systems. A release liner provides easy removal for an efficient job site application. UL 723 Rated, Coast Guard Approved USCG COA 164.112/162/0.

Part No.	Adhesive System	Thickness (mm / mils)	Tensile Strength (lbs/in-N/25mm)	Master Box
791FSK-3	Acrylic	0.15 (6)	35 (153)	16



### Ideal Seal 2000 Professional Grade Foil Tape

Generally used as a vapor seal. Also commonly used to ensure the integrity of seams and joints on both fiberglass duct boards and flexible duct systems. Ideal Seal 2000 has a limited 20-year warranty and is printed for identification. UL 181A-P and UL 181B-FX Listed.

Part No.	Adhesive System	Thickness (mm / mils)	Tensile Strength (lbs/in-N/25mm)	Master Box
IS2000	Acrylic	0.11(4.3)	25 (109)	20



# Ducting & Venting

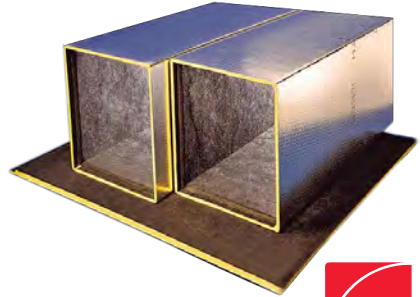
## Duct Board

### Part No. T0475

Duct Board is a rigid, resin bonded fibrous glass board with a tough, damage-resistant, flame retardant, reinforced aluminum foil (FRK) facing. When fabricated into duct systems, it combines excellent thermal and acoustical insulating properties with substantially airtight transmission of air.

#### Features:

- Virtually eliminates air leakage thus saving heating and cooling costs.
- Assured thermal R-value performance.
- Absorbs noise and reduces popping noises caused by expansion, contraction and vibration.
- Thermal/acoustical insulation board plus jacket forms a single component duct system, thus reducing inspection time.
- Lightweight boards are easier to transport and handle than insulated sheet metal ducts.
- Bacterial and fungal growth resistant with an EPA registered biocide that protects the air stream surface from microbial



- growth Standards, Code compliance.
- Meets NFPA 90A/90B.
- Meets ICC International Mechanical Code, Corps of Engineers Guide. Spec., NYC MEA #186-69.
- Supported by NAIMA and SMACNA industry standards.
- Meets requirements of ASTM C1338, ASTM G21 (fungi test) and ASTM G22 (bacteria test).

Part No.	T0475	T0800	T1400
Property	1" (25mm)	1.5" (38mm)	2" (51mm)
R-Value, hr-ft <sup>2</sup> -°F/Btu (RSI, m <sup>2</sup> -°C/W)	4.3 (0.76)	6.5 (1.15)	8.7 (1.53)
k-Value, Btu-in/hr-ft <sup>2</sup> -°F (W/m-°C)	0.23 (0.033)	0.23 (0.033)	0.23 (0.033)
C-Value, Btu/hr-ft <sup>2</sup> -°F (W/m <sup>2</sup> -°C)	0.23 (1.32)	0.16 (0.87)	0.12 (0.65)

## Flex Ducts

Our flex duct is constructed with aluminum inner duct with yellow fiberglass insulation and outer jacket. It is used to minimize the heat gain and loss during ventilation.

#### Features:

- Made with Yellow Fiberglass 16kg/m<sup>3</sup>
- Single Layer Insulated Aluminum
- Temperature Range: -30 °C / +140 °C
- Max. Air Velocity: 30mt/seg
- Max. Positive Working Pressure: 2000 Pa

Part No.	Diameter	Length	Thickness	Master Bags
FD-04	4"	25'	1"	25
FD-06	6"	25'	1"	20
FD-08	8"	25'	1"	16
FD-10	10"	25'	1"	9
FD-12	12"	25'	1"	9
FD-14	14"	25'	1"	4
FD-16	16"	25'	1"	4



## Duct Wrap

### Part No. RF-3075

Duct Wrap is a blanket of glass fiber insulation factory-laminated to FRK vapor retarder facing. A 2" (50mm) staplin and taping flange is provided on one edge. This product is designed to meet existing performance standards such as NFPA 90A and 90B and other mechanical and energy codes.

#### Features:

- Condensation control
- Enhanced comfort control
- Easy to clean surface
- Flexible and easy to install



Thermal Performance/Availability: Standard roll width: 48" (1.2m) Installed R (RSI) values: When installed in accordance with recommended installation procedures, Duct Wrap FRK will provide installed R (RSI) values as follows:

Nominal Thickness		Out of Package R (RSI) Value		Installed Thickness		Installed R (RSI) Value	
in	mm			in	mm		
<b>Type 75-0.75pcf (12Kg/m<sup>2</sup>)</b>							
1.5	(38)	5.1	(0.9)	1.125	(29)	4.2	(0.74)
2	(50)	6.8	(1.17)	1.5	(38)	5.6	(0.98)
2.2	(56)	7.4	(1.3)	1.625	(42)	6	(1.06)
3	(76)	10	(1.76)	2.25	(57)	8.3	(1.46)
<b>Type 100-1.00pcf (16Kg/m<sup>2</sup>)</b>							
1.5	(38)	5.5	(0.99)	1.125	(29)	4.5	(0.79)
2	(51)	7.4	(1.33)	1.5	(38)	6	(1.06)

## Ceiling Diffusers L-JS

### Features:

- Extruded aluminum construction
- Electro-static powder coating finish with white paint, other colors available
- Available in 1, 2, 3 and 4 ways

### Configuration:

- Available sizes (A) x (B) from 6"x6" to 24"x24". Multiple of 2" on 2"

### Frame Style:

- L-JSF for Flush Mounted (standard)
- L-JSS for Surface Mounted
- OB for Opposed Blade Damper



L-JS-1-OB



L-JS-2-90°-OB  
(Square/Rectangular)



L-JS-2-180°-OB



L-JS-3-OB



L-JS-4-OB  
(Square/Rectangular)

## Curved Blade Ceiling Diffusers L-CL

### Features:

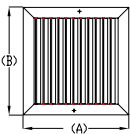
- Extruded aluminum construction.
- Electro-static powder coating finish with white paint, other colors available.
- Available in 1, 2, 3 and 4 ways.

### Configuration:

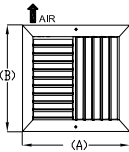
- Available sizes (A) x (B) from 4"x4" to 24"x24" for Square and from 4"x4" to 60"x24" for Rectangular Diffusers. Multiple of 2" on 2"

### Frame Style:

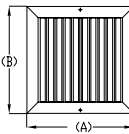
- L-CLF for Flush Mounted (standard)
- L-CLS for Surface Mounted
- OB for Opposed Blade Damper



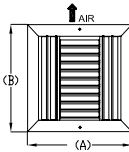
L-CL-1-OB



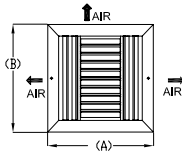
L-CL-2-90°-OB



L-CL-2-180°-OB



L-CL-3-OB



L-CL-4-OB

## Return Grilles L-RF

### Features:

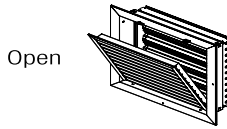
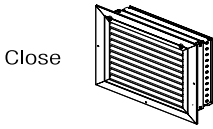
- Extruded aluminum construction.
- Electro-static powder coating finish with white paint, other colors available.
- Available with and without filter.

### Configuration:

- Available sizes (A) from 8" to 48" and (B) from 4" to 48" . Multiple of 2" on 2".

### Frame Style:

- L-RA for standard grilles.
- L-RF for grilles with Filter.
- -OB for Opposed Blade Damper.



## Wall Supply Grilles L-V, L-H

### Features:

- Extruded aluminum construction.
- Blades supported by Polypropylene bushing.
- Electro-static powder coating finish with white paint, other colors available.
- Available with and without filter.

### Configuration:

- Available sizes (A) x (B) from 4"x4" to 48"x48" . Multiple of 2" on 2".

### Frame Style:

- L-V0 for Vertical Blades.
- L-VH for Horizontal Blades.
- -G for Damper Actuator.
- -OB for Opposed Blade Damper.



## Manual Volume Dampers

### Features:

- Now with "ever-lock" self locking.
- Spring loaded adjusting button release and moves to desired setting.

Part No.	Description	Diameter (in)
MVD-06	Manual Volume Damper	6"
MVD-08		8"
MVD-10		10"
MVD-12		12"
MVD-14		14"



## ***Inline Air Booster Fans***

Fits all ducts 6" and up made of metal, fiberglass or flexible. Can be installed in round, square, or rectangular ducts.

### **Features:**

- Heavy duty steel housing with solid seam construction.
- Auto thermal reset
- Aluminum fan blade
- Totally enclosed motor
- Special mounting plate to fit square or rectangular duct standard with each duct fan



Part No.	CFM	Power	Diameter
AB-9008-1	380	120V/1Ph/60Hz	8" and up
AB-9008-2		120-240V/1 Ph/60Hz	
AB-9010-1	600	120V/1Ph/60Hz	10" and up
AB-9010-2		240V/1Ph/60Hz	
AB-9012-1	910	120V/1Ph/60Hz	12" and up
AB-9012-2		240V/1Ph/60Hz	
AB-9014-1	1290	120V/1Ph/60Hz	14" and up
AB-9014-2		240V/1Ph/60Hz	

## ***Wall Mount Ventilation Fans***

Part No.	Power (V/Ph/Hz)	AirFlow	Inside Diam.	Outside Diam.
EVF-AC8	110-120/1/60	480CFM	10" (24 cm)	11-1/4" (28.5 cm)



## ***Bathroom Ventilation Fans***

Part No.	Power (V/Ph/Hz)	AirFlow	Inside Diam.	Outside	Exhaust Diam.
EVF-BC810	110-120/1/60	150CFM	8" (20 cm)	10" (24 cm)	4" (10 cm)



## Installation Products

### Cable Whip

Weather-proof flexible non-metallic PVC conduit cable whip.

#### Features:

- 3 conductors
- Max. temp. 75°C (167°F)

Part No.	Type
ECW-126103	1/2" x 6ft, 3 x 10AWG Red-Black-Green, Straight and 90° Connector
ECW-346083	3/4" x 6ft, 2 x 8AWG Red-Black, 1 x 10AWG Green, Straight and 90° Connector



C  US

### Mini Split Wall Brackets

#### Features:

- Galvanized steel
- Epoxy-coated paint
- Includes mounting hardware
- Pre-assembled



Part No.	Capacity (btu)	Dimensions (mm)			Loading Capacity
		Length	Width	Thickness	
F017C	9000/12000/18000	450	400	2.0	220Lbs (100Kg)
F019C	24000/36000	450	400	2.0	440Lbs (200Kg)

### Stainless Steel Mini Split Wall Brackets

#### Features:

- Heavy duty stainless steel 201
- Easy to install
- Rust free
- Pre-assembled



Part No.	Capacity (btu)	Dimensions (mm)			Loading Capacity
		Length	Width	Thickness	
FSS017C	9000/12000/18000	350	450	1.8	220Lbs (100Kg)
FSS019C	24000/36000	550	450	1.8	440Lbs (200Kg)



## Line Set Covers

### Features:

- Weather resistant PVC
- Fire resistant ABS
- UV stabilized
- Includes cable ties to secure linesets

Part No.	Description	Dimensions
CDS-2	4 Ducts, 1 Corner, 1 Flat, 1 Bend 90°, 4 Joints, 1 Elbow 90°, 1 Endcover, 1 Flexjoint, Instkit.	3"x2.5"x6.5' (7.5cmx6.2cmx0.4mt)
CDS-3	4 Ducts, 1 Corner, 1 Flat, 1 Bend 90°, 4 Joints, 1 Elbow 90°, Instkit.	4"x2.75"x6.5' (10cmx7cmx0.4mt)



## PVC Floor Support Kit

### Features:

- White UV resistant PVC material
- Resists 140 kg per ft
- Includes set of 2 with screws, nuts, washers and caps

Part No.	Description	Length
FSP1-350	9000/12000	13.7" (35cm)
FSP1-450	18000/24000	17.7" (45cm)



## Floor Support Riser

### Features:

- One piece heavy duty plastic
- Nestable design for shipping and storage

Part No.	Height
FSR-3	3" (7.6 cm)
FSR-6	6" (15.2 cm)



## Drain Line

### Part No. DNH-02-8

Ribbed AC drain line of 5/8" with 26ft/8m long

### Features:

- UV protected
- Ivory color

Master Box: 20 units

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## Cable Ties

Part No.	Length	Color	Min. Loop Tensile Strength	Qty per Bag
CT3.6*200	8" (20.3cm)	White	40 lb (18kg)	100
CT3.6*250	10" (25.4cm)	White	40 lb (40kg)	100
CT9.0*920	36" (91.4cm)	Black	175 (80kg)	50



## Wire Connectors

Insulated Female Wire Connectors

Part No.	Type	Color	Max Current	Cable Size
FDD2-250	Female	Blue	15 Amp	AWG 16-14
FDD5.5-250	Female	Yellow	24 Amp	AWG 12-10

Master Bag: 100 units



### Part No. NL5.5-4Y

Nylon Insulated Fork Connector for AWG 10-12 wires.

Master Bag: 100 units



### Part No. SCC-4

Screw-On Connector - Wire Nuts for AWG 10-12 wires.

Master Bag: 100 units



## Grommet Sets

Compressor grommets are used to isolate and reduce noise and vibration when a compressor is in use.

### Features:

- Made of high quality rubber
- Durometer tested for size and weight
- Noise and vibration isolator

Part No.	Description	Bag
GRST-10	for Bristol compressors	4 cushion rubs plus 4 collars
GRST-20	for Sanyo-Panasonic compressors	4 cushion rubs plus 4 collars



## Ice Maker and Humidifier Installation Kit

### Part No. STV-KIT

Our ice maker and humidifier installation kit is compatible with major brands in the market and can easily connect to your refrigerator or freezer. Kit includes everything for installation, is lead free, and can adapt water lines and pipe connections to refrigerator and freezer.

#### Features:

- Lead free
- 0.64cm (1/4 in) x 7.62 m (25 ft) poly-tubing
- Self-piercing saddle valve



## Refrigerant Gases

#### Features:

- 1,140 cylinders bulk or 20 pallets of 40 cylinders each per 20' GP container
- DOT cylinders available



Part No.	Description	Formula	Net Weight	B.P. °C	Vap. Pres. 25 °C Bar	Loading 20GP
R134A-500G	R-134a	CF <sub>3</sub> CH <sub>2</sub> F	500g	-26.1	6.62	-
R134A-30	R-134a	CF <sub>3</sub> CH <sub>2</sub> F	30lb	-26.1	6.62	1140
R404A-24	R-404a	R-125/R-143a/R-134a	24lb	-46.1	12.60	1140
R407C-25	R-407c	R-32/R-125/R-134a	25lb	-43.9	11.74	1140
R409-30	R-409a	CH <sub>3</sub> CClF <sub>2</sub> , CHClF <sub>2</sub> , CHClFCF <sub>3</sub>	30lb	-35	8.32	1140
R410A-25	R-410a	R-32/R-125	24lb	-52.7	16.64	1140
R134A-340G	R-134a	CF <sub>3</sub> CH <sub>2</sub> F	340g	-26.1	6.62	-
R407C-850G	R-407c	R-32/R-125/R-134a	850g	-43.9	11.74	-
R410A-650G	R-410a	R-32/R-125	650g	-52.7	16.64	-
R410A-850G	R-410a	R-32/R-125	850g	-52.7	16.64	-

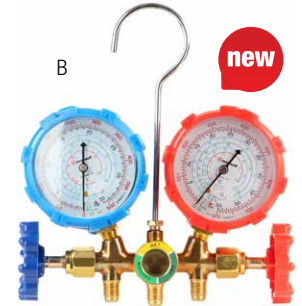
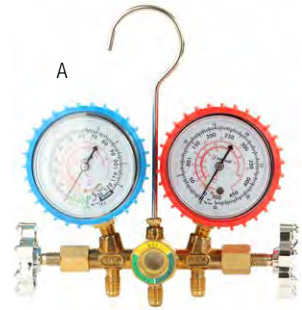
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## Tools

### Manifold Set with Hoses

#### Features:

- Forged brass body with sight glass
- Color coded refrigerants dials
- High impact protective boots
- Durable teflon® seat and adjustable packing
- Large sight glass
- Includes 36" hose set
- Supports up to 800 psi



Part No.	Description	Refrigerants	Figure
CT-536G-12/22	Manifold with 36" (92cm) hoses. Shock proof and sight glass.	R12/R22/R502	A
CT-536G-134		R134/R404a	A
CT-536G-410		R410a/R22/R404a/R507a	A
CT-536G-A4		R410a/R22/R134a/R404a	B

### Single Manifold



Part No.	Description	Refrigerants
CT-466G	Support up to 500 psi. Shock proof.	R140a/R22/R404a/R134a

### Digital Manifold Set with Hoses

#### Features:

- High quality aluminum alloy body
- Dual channel RT measurement for superheat and supercooling
- Large LCD screen with backlight for use in low light
- Micro-power electronic component for extended battery life
- Digital pressure units (MPa, KPa, bar, PSI) Temperature in °C or °F
- Large sight glass
- Range: -0.1 Mpa - 5.0 Mpa
- Pressure accuracy: 0.4 class



Part No.	Description
CT-1000UM	Digital Manifold with 36" hose, all refrigerants, quick coupler (H/L), R-410a adapter set, electronic gauge, aluminum handle, carrying case.

## Charging Hose Sets

Part No.	Refrigerant	Hose Length	Color Code
CT-336-RYB	R12/R22/R502	36" (92cm)	3 pieces (red, blue and yellow)
CT-336-RYB-S	R134a/R404a	36" (92cm)	3 pieces (red, blue and yellow)
CT-360-RYB	R12/R22/R502	60" (152cm)	3 pieces (red, blue and yellow)
CT-360-RYB-S	R134a/R404a	60" (152cm)	3 pieces (red, blue and yellow)
CT-360-RYB-X	R410a	60" (152cm)	3 pieces (red, blue and yellow)



## Hose Gaskets

### Part No. HG-6

Our quick coupler hose gaskets are designed for peak performance and manufactured to resist blow out. Can work with all refrigerants.

Bag: 6 units/set

Master Bag: 2000 units



## Automotive Adapter Kit

Part No.	Description
CT-138	Red & blue hoses, 3 pcs 90° adapters and 3 pcs connector.



## Automotive Quick Couplers

Part No.	Description
QC-12L/H	High and low couplers kit for R-134a, set of 2 pieces.



## Automotive Quick Couplers with Valve

Part No.	Description
QC-H	High side coupler for R-134a with red valve
QC-L	Low side coupler for R-134a with blue valve



## End Hose Charging Valve

Part No.	Description
ECBFF-1	1/4" SAE female x 1/4" SAE male



## R410a Adapter

**Part No. CT-14516**

**Features:**

- Valve adapter for R410a with quick coupler and depressor valve
- 1/4" male flare x 5/16" female with depressor
- Universal size makes it compatible for all refrigerant services for mini splits and HVAC equipment
- Long lasting brass material

Box: 2 units



## R410a Curved Adapter

**Part No. CT-14516S**

**Features:**

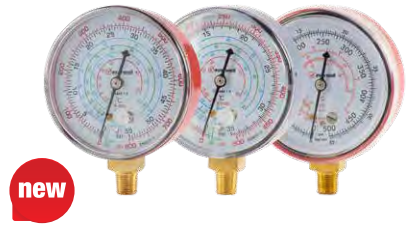
- Curved valve adapter for R410a with depressor valve
- 1/4" male flare x 5/16" female quick couplers
- Universal size makes it compatible for all refrigerant services for mini splits and HVAC equipment
- Long lasting brass material



## Manifold Gauges

Part No.	Case	Refrigerant	Max Pressure (psi)
RG-250	Blue	R12/R22/R502	250
RG-250-A	Blue	R134a/R404a	250
RG-250-B	Blue	R410a/R22/R404a	250
RG-500-C	Blue	R410a/R22/R404a/R134a	500
RG-500	Red	R12/R22/R502	500
RG-500-A	Red	R134a/R404a	500
RG-500-B	Red	R410a/R22/R404a	800
RG-800-C	Red	R410a/R22/R404a/R134a	800

Master Box: 100 units.



## Refrigerant Recovery Unit

**Part No. RRU520D**

**Features:**

- Compressor: oil-less, air cooled, piston style
- Drive train: Direct Drive, 1/2Hp & 1Hp AC Motor
- Motor speed: 1450Rpm at 50Hz, 1750Rpm at 60Hz
- Dual voltage 110V-240V / 50-60Hz
- Size: 50x22x34 cm (19.6x8.6x13.3 in)
- Weight: 16 kg (35.2 lb)
- Category III-9.28Kg/min, IV-11.1Kg/min, V-12.4Kg/min, 1Hp, Oil-Less, 17.5kg



## Recovery Cylinder

**Features:**

- Steel recovery tank
- Y-valve with 1/4" brass connectors
- Explosion proof valve
- Pressure proof
- Color coded
- Insulated knobs to avoid static slip
- Large collar handles for easy transport
- Available in 30lb (13.6kg) and 50lb (22.7kg)

Part No.	Capacity	Connector	Image
ECLD-30Y	30lb (13.6kg)	1/4"	A
ECLD-50Y	50lb (22.7kg)	1/4"	B



## Electronic Refrigerant Scale

### Part No. ERS-820

Everwell Refrigerant Charging and Recovery Scale is designed for HVAC and refrigeration service, perfect for residential and automotive refrigeration systems, it offers the highest accuracy of +/-0.25oz (5grams.). Equipped with a programmable weight limit shut-off solenoid valve with audible alarm for charging and recovery accuracy. The slip-resistant rubber platform handles all types of refrigerant cylinders up to 220lb (100kg).



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#### Features:

- Max weighting: 220lb (100kg)
- Resolution 0.01lb (5gr)
- Accuracy: +/- 0.05% rdg+10g
- Operation temp.: 14°F-104°F (-10°C-40°C)
- Works with three different units of measurement (Kg, Oz, and Lb)
- Convenient cover for transportation and storage
- Auto off
- LCD with backlight to easiest read at dark areas
- Power supply: 5 AAA batteries (duration 35hr)

## Refrigerant Can Tap Valve

### Part No. CT-340

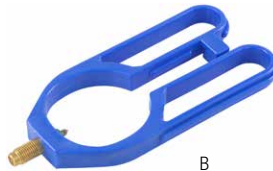
These refrigerant control valves are required to open up refrigerant flow from a refrigerant can to a manifold. Ours can be used for any type of refrigerant can and ensures leak proof operation. Manufactured with top-class material with maximum endurance, durability, and anti-aging properties.



## Refrigerant Can Piercing Tool



A



B



C

Part No.	Description	Image
RCPT-31	3-in-1 for R12/R22/R134a cans	A
RCPT-258V	R12/R22 1/4" SAE for 2-5/8" diam. cans	B
RCPT-278V	R134A 1/4" ACME for 2-7/8" diam. cans	C



# Vacuum Pumps

## 1 Stage Vacuum Pump

### Features:

- Backflow prevention
- Ergonomic grip handle



A



B

Part No.	Stages	CFM	Vacuum Rating ( $\mu\text{m}$ )	Power	Motor (Hp)	Speed (Rpm)	Net Weight	Image
1LVP-1.5	1	2.5	5	115V/1Ph/60Hz	1/4	1720	13.6 lb (6.2kg)	A
1LVP-5MP	1	5	15	115-220V/1Ph/50-60Hz	1/3	3440	16.5 lb (7.5kg)	B

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## 2 Stage Vacuum Pump

Our high-quality commercial vacuum pumps can be widely used for commercial and household applications, suitable for cleaning a household air conditioner, automobile maintenance, vacuum packaging, refrigerator vacuum, industry, etc.

### Features:

- Dual voltage with switch
- Backflow prevention
- Ergonomic grip handle



A



B

Part No.	Stages	CFM	Vacuum Rating ( $\mu\text{m}$ )	Power	Motor (Hp)	Speed (Rpm)	Net Weight	Image
2LVP-2.5MP	2	2.5	15	115-220V/1Ph/50-60Hz	1/3	1720	19.4 lb (8.8kg)	A
2LVP-8MP	2	7	12	115-220V/1Ph/50-60Hz	3/4	3440	32 lb (14.5kg)	B

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## Multimeters

### Part No. 266

Heavy Duty Digital Clamp Meter

#### Features:

- DCV: 200m-20-200-1000V
- ACV: 200-750V
- ACA: 20-200-1000A
- Ohm: 200-2k-20k-200k-2m-20m-2000m
- Diode check: 2.8V/1mA
- Includes black deluxe protector case

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### Part No. MT87

Mini Digital Clamp Meter

This meter uses large scale integration and unique function circuits. It can measure AC and DC voltage, AC current, resistance, diode and fulfill audible continuity test.

#### Features:

- Max Display: 1999
- Auto polarity display
- Sampling speed: 2-3 times per second
- Operating environment: 0°C to 40°C (32°F to 104°F)
- DCV: 600V
- ACV: 600V
- ACA: 20-200-400A
- Ohm: 200k
- Diode check

#### Specifications:

- Product Size: 5.9x2.5x1.1 in (15x6.3x2.8cm)
- Clamp Dimension: 19mm for open jaw, 25mm for inner diameter
- Power: 2 x AAA batteries (included)
- Weight: 5.1oz (145g) (including batteries)

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### Part No. DT2015A

Digital Clamp Multimeter

#### Features:

Overload protection, data hold, auto ranging, diode/capacitor test, true-rms, back light.

- Max Display 5999
- DCV: 600V
- ACV: 600V
- ACA: 60-600A
- OHM: 600-6K-60K-600K-6M-60M
- 3 5/6" Digit LDC
- Pen rod length: 98.5mm (3.9 in)
- Probe length: 16.5mm (0.65 in)

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## Part No. DT201D

Heavy Duty Digital Clamp Multimeter with Capacitance Meter

### Features:

- Overload protection, data hold, auto range, diode test, true-rms, back light.
- Max Display 5999
- DCV: 600m-6-60-600-1000V
- ACV: 600m-6-60-600-750V
- ACA: 60-600-1000A
- Ohm: 600-6K-60K-600K-6M-60M
- Frequency: 0-60MHz, 0.5-1KHz
- Capacitance: 60nF-600nF-6uF-60uF-400uF-20mF
- Temperature: -40 to 1370°C (-40 to 2000°F)
- Duty Cycle: 0.1-99.9% 45x23mm LCD
- Pen Rod Length: 3.9in (98.5mm)
- Probe Length: 0.65in (16.5mm)

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## Part No. CM9601A

Digital Capacitance Multimeter

### Features:

- Data hold
- Auto power off
- Large LCD display
- Auto zero function
- Single 9 position switch for function and range
- Range: 200pF, 2000pF, 20nF, 200nF, 2uF, 20uF, 200uF, 2000uF, 20mF

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## Universal Test Leads for Digital Multimeters

### Part No. CMC-30RB

Universal replacement of test leads for clamp meters, or any other meter.

### Features:

- Rated for 1000 Volts
- 30in (76.2cm) long each lead for convenient access to difficult places
- Fits most clamp meter models



## Digital Mini-Anemometer

### Part No. DA816

Measure wind speed and temperature for industrial and home purposes such measuring wind speed and temperature of air conditioners, air blowers, CPU computers fan, etc. Also, an ideal tool for windsurfing, sailing, fishing, kite flying and mountaineering.

#### Features:

- Wind speed range: 0-30 m/s
- Wind temperature range: -10 to 45°C (14 to 113°F)
- Current/Max/Average wind speed reading
- Wind speed units: m/s, km/h, ft/min, knots, and mph
- Temperature display in °C or °F
- LCD backlight display
- Auto/Manual power off
- Power: 3V, CR2032 (included)

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## Laser Infrared Thermometer

### Part No. WH380

Can measure temperatures from a distance without making physical contact with the surface. Use this unit to measure the temperature of heating and air conditioners, hot engine parts, hot water pipes, cooking surface, electrical connections, hot tubes and insulation, electric motors, etc.

#### Features:

- Temperature display in °C or °F
- Repeatability: 1% of reading
- Response time: 500ms, 95% response
- Spectral response: 8~14µm
- Emissivity: 0.95 default
- Distance to spot size: 12:1
- Operating temperature: 0 to 40°C (32 to 104°F)
- Operating humidity: 10-95%Rh
- Storage temperature: -20 to 60°C (-4 to 140°F)
- Power: 9V 6F22 battery
- Weight: 147.5 gr (5.2 oz)
- Size: 16.5x11x5 cm (6.5x4.3x2 in)
- Uses 9Volt battery

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## Halogen Leak Detector

### Part No. CPU-C

#### Features:

- Microprocessor control with Advanced Digital Signal Processing
- Single color visual display
- 7 levels of sensitivity provide an increase of up to 64x
- Tactile keypad controls
- Real time sensitivity adjustment
- Battery voltage indication
- Certified to delicacy for detecting R134a, R12, R22, R410a, etc.
- Detects all halogenated refrigerants
- True mechanical pumping provides positive airflow through sensing tip
- Cordless and portable, operates on 2 x "C" cell batteries
- 14" (35.5cm) flexible stainless steel probe
- Metal carry case

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### Part No. HLD-100

#### Features:

- Detects all kind of halogenated refrigerants
- Single color LED display with 6 level leak alarm
- Double color display of battery voltage
- Reset key that can provide convenient and fast resetting function
- Real time sensitivity adjustment
- Use quality sensors that can detect slightly leaked halogen gases
- 14" (35.5cm) flexible stainless steel probe

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## Pressure Cleaners

### Part No. EPC-4M2

#### Features:

- Can source water from any size tank
- Includes carry bag, water gun, inlet hose 1.5m (60 in), outlet hose 5m (4.85ft)
- Power: 110V/1Ph/50-60Hz
- Pressure Flow Rate: Low Speed 58-72psi @ 2.5l/min, High Speed 101-145 psi @ 4l/min.

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## Part No. EPCW-4WLI

### Features:

- Portable pressure cleaner with 4g (16l) tank
- Maximum cleaning pressure of 5/10BAR-75/145 PSIG @ 4L/min
- Includes 220° rotational nozzle and 0° pinpoint nozzle
- Stainless steel extension wand with brass quick-connect fitting 16in (37cm)
- Auto-stop spray gun with ergonomic grip
- TPU-Polyurethane coiled outlet hose 16ft (5m)
- Anti-slip wide shoulder straps with cushion padded back for comfort
- Includes 18V 4.0Ah Lithium-ion battery with battery level indicator and battery charger

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## Pressure Sprayers

### Features:

- Made of high-density translucent polyethylene
- Multi-purpose versatile design
- Adjustable piston type nozzle with multiple pattern settings
- Easy pump system
- Funnel top design for easy pouring

Part No.	Capacity	Image
SX-5077-20	1/2 gal (2 lt)	A
EPS50001	1 gal (5 lt)	B
EPS80001	2 gal (8 lt)	C



## Cleaner Covers

### Features:

- Heavy-Duty reusable
- Made of watertight material
- Integrated drainage design
- 9ft (2.7m) drain hose included
- Easy to install

Part No.	Description	Image
EQ532	Size M, Blue for 9KBtu to 18KBtu	A
EQ535	Size L, Blue for 18KBtu to 36KBtu	A
EQ536	Yellow for Ceiling Cassettes and Fan Coils	B



## 45° Flaring Tool

### Features:

- Use to flare 7 different sizes of copper, aluminum, soft steel and brass tubing
- Creates single and double flares
- Heat-treated flaring bars

Part No.	Description
CT-195A	For 3/16", 1/4", 5/16", 3/8", 7/16", 1/2" & 5/8"



## Heavy Duty 45° Flaring Tool

### Features:

- Use to flare 4 different sizes of copper, aluminum, stainless steel, medium steel and brass tubing
- Creates single and double flares
- Constructed from high quality carbon steel

Part No.	Description
CT-203A	For 5/8", 3/4", 7/8" and 1-1/8"



## 45° Double Flaring & Swaging Tool Kit

### Features:

- Flares 9 different sizes and Swage 7 tube sizes
- Includes carrying case

Part No.	Description
CT-275	Flares 1/8", 3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 5/8" & 3/4" O.D. Includes 5 swage adapters that swage 7 tube sizes 3/16", 1/4", 5/16", 3/8", 1/2", 5/8" & 3/4" O.D.



## 45° Flaring & Cutter Tool Kit

### Features:

- Use to flare 7 different sizes of copper, aluminum, brass tubing, etc
- Creates single and double flares
- Heat-treated flaring bars
- Constructed from high quality carbon steel
- Includes CT-274 tube cutter
- Carrying case

Part No.	Description
CT-1226AL	Includes CT-195. Common extrusion flaring tool. For 3/16", 1/4", 5/16", 3/8", 7/16", 1/2" & 5/8" O.D. Tubing. CT-274 tube cutter from 1/8" packed in.



## Swaging Punch 5-in-1

Part No.	Description
CT-95	For 1/4", 5/16", 3/8", 1/2" & 5/8".



## Swaging Punch Kit

Part No.	Description
CT-193	For 1/4", 5/16", 3/8", 1/2" & 5/8".



## Lever Tube Expanding Tool Kit

### Features:

- Hand-operated, single-stage expander is designed to expand tubing for fast, accurate joints in soft copper, aluminum and soft steel tube without using fittings
- Free-floating and self-centering expander mechanism
- Expander segments are made from high-quality hardened steel

Part No.	Description
CT-100A	Includes CT-312 and CT-207. For 3/8", 1/2", 5/8", 3/4", 7/8", 1" & 1-1/8" O.D.



## Capillary Tube Cutter

- Cuts all sizes of capillary tubes without collapsing or swaging the tubes

Part No.	Description
CT-156	Up to 1/8" O.D. Tubing





## Mini-Tube Cutter

### Features:

- For cutting copper, titanium, stainless steel, and aluminum tubing
- Smooth groove in rollers can stabilize damaged flares and cut easily
- Special 65 Mn material blade, cuts tubes sharper and more accurate
- New reinforced body

Part No.	Description	O.D. Size	Material
CT-127	Mini Tube Cutter	1/8" to 5/8"	Zinc Alloy Body



## Tube Cutter

Part No.	Description	O.D. Size	Material
CT-274	Tube Cutter	1/8" to 1-1/8"	Aluminum Alloy Body



## Heavy Duty Tube Cutter

Part No.	Description	O.D. Size	Material
CT-105	Heavy-Duty Tube Cutter	1/8" to 1-1/4"	Aluminum Alloy Body



Part No.	Description	O.D. Size	Material
CT-312	Heavy-Duty Tube Cutter	1/4" to 1-5/8"	Aluminum Alloy Body



## Tube Cutter Replacement Blades

Part No.	Replacement Compatibility	Material
CT-127-B	CT-127, CT-128	65 Mn Steel
CT-274-B	CT-274, CT-105, CT-312, CT-174, CT-109	65 Mn Steel

Blister Pack: 2 units  
Master Box: 1000 units



## Inner-Outer Reamer

### Features:

- Plastic Body
- Reams both inside and outside edges of tubing

Part No.	Description
CT-208	From 3/16" to 1-1/2"



## Spring Copper Tubing Bender Kit

Part No.	OD Tubing
CT-102L	For 1/4", 5/16", 3/8", 1/2" and 5/8"



## 180° Tube Bender 3-in-1

### Features:

- Aluminum alloy body
- Open size-slips on tubing at any point, can bend 0.4mm thin tube without distortion
- Calibrated markings for making accurate left-hand, right-hand and offset bend 180°
- Start requires less effort; makes bending fast and easy

Part No.	O.D. Tubing	Radius to Center (mm)
CT-368-180A	1/4", 5/16" and 3/8"	24.0



## 180° Lever Tube Benders

### Features:

- Each tool bends one size only
- For bending soft copper, brass, aluminum, steel, stainless steel, and other very thinner metals
- Calibrated marking with red color to show angle of bend, wide hook grips tugging securely
- Makes smooth short radius bend up to 190° with minimum effort. No marking, scraping, or flattening of tubing
- New fixed hook tube benders furnished have easy 90° start- requires less effort to make fast, accurate bends



Part No.	O.D. Tubing	Radius to Center (mm)
CT-364A-06	3/8"	23.0
CT-364A-08	1/2"	35.8
CT-364A-10	5/8"	54.4
CT-364A-12	3/4"	75.3
CT-364A-14	7/8"	82.1

## Radiator Fin Straightener

### Part No. CT-351

This helix Radiator Fin Straightener will save a lot of time cleaning and straightening radiator and oil cooler fins. Sections are marked for it to align with proper fin sizes.

### Features:

- 6 in 1
- Removable acetate handle
- Spacing 8, 9,10,12,14 and 15 fins per inch



## Ratchet Wrench

### Features:

- For use installing or servicing HVAC or refrigeration units
- Straight type, fully reversible
- Forward and reverse ratchet mechanism
- For use with hex key wrench inserts (not included)
- Drop forged steel, chrome plated

Part No.	OD Tubing
CT-122	4 sizes: 1/4", 3/8", 3/16" & 5/16" square ratchet



## 7" Pinch-Off Tool

Part No.	Sizes
CT-201	Pinch of copper tubing up to 5/16"



## Inspection Mirror

### Features:

- Telescopic to 19-11/16"
- Pocket size
- Double ball joint swivel
- Perfect for 360° viewing
- Chrome plated

Part No.	Mirror O.D.	Length Closed	Length Open
CT-501	1 1/4" (32mm)	5" (127mm)	19 11/16" (500mm)



## Magnetic Pick-Up Tool

### Features:

- Telescopic arm extends 637mm (25")
- Powerful magnetic head
- Pocket clip for convenient storage
- Chrome plated

Part No.	Length Closed	Length Open
CT-503	126mm	637mm



## Hallow-Shank Nut Driver

### Features:

- Hollow shank provides access to nuts with extended bolts or shafts
- Chrome plated to resist corrosion
- Comfort grip handle
- High torque acetate handle

Part No.	Socket Size
LTN-14	1/4"
LTN-516	5/16"
LTN-38	3/8"



## Clip Flashlight

### Part No. CL-1.5W

#### Features:

- Material: ABS
- LED: COB 1.5 Watts, CCT 6500K
- Size: 6.42"x1.26"x0.71" (163mmx32mmx18mm )
- Battery: 3 x AAA.
- Clip with magnet
- Display Box: 12 units

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## Glass Tube Pocket Thermometer

#### Features:

- Temperature display in °C and °F
- 6" (15cm) long

Part No.	Temperature Range	
	°C	°F
TP-476	-40 to 70	-40 to 160



## Pocket Dial Thermometers

#### Features:

- 1" (2.5cm) dial diameter
- 5" (12.7cm) long stainless steel probe

Part No.	Temperature Range
TD-70	-40°C to 70°C
TD-160	-40°F to 160°F



## Pocket Digital Thermometer

#### Features:

- 1-1/4" (3.18cm) dial diameter
- 5" (12.7cm) long stainless steel probe
- On/Off switch
- Temperature display in °C or °F

Part No.	Temperature Range	
	°C	°F
TD-300	-50 to 200	-50 to 392



## Single Hand Torch

### Part No. JH-1

Features a CGA600 cylinder connection to fit standard propane and MAPP gas cylinders, a solid brass pressure regulator and knob, stainless steel burn tube, high output, swirl flame, and 100% fire tested.

#### Features:

- Burn tip swivels 360°
- Pressure regulated
- Adjustable flame control
- Rugged brass and stainless steel construction

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Master Box: 20 units



## Dual Hand Torch

### Part No. JH-1D2

#### Features:

- Swirl flame and variable flame control
- Tip swivels 360°
- High temperature offers faster soldering with dual torch

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Master Box: 20 units



## Hand Torch with Self Ignitor

### Part No. JH-1S6

#### Features:

- Quick self-lighting
- Swirl flame, variable flame control
- Tip swivels 360°
- High temperature, faster soldering
- Save fuel, durable

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Master Box: 20 units



## Hand Torch with Hose

### Part No. JH-3SW

#### Features:

- Self-lighting
- Pressure regulated to burn in all directions
- Efficient swirl flame for maximum heat output
- Comfort grip
- 5ft (150cm) hose

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Master Box: 20 units



## MAP-Pro Hand Torch Cylinder

### Part No. MAPP308431

MAP-Pro Hand Torch Cylinder enables you to complete tasks faster and more efficiently using a higher burn temperature than standard propane. MAP-Pro is premium fuel suited for a variety of job site projects including soldering large copper pipes, brazing and heat treating. The durable steel cylinder is slim and lightweight for easy gripping and maneuvering. Net weight 4 kl (14 oz).

#### Features:

- Flame temperature in air of 2054.4 °C (3730 °F), ideal for medium to heavy soldering and brazing
- Faster heat transfer than propane fuel
- Slim, lightweight cylinder is easy to grip and maneuver
- Durable steel construction
- Standard CGA600 connection

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## Portable Welding Kit

### Part No. UW-1515

#### Features:

- 1G (4l) oxygen cylinder
- 1/2G (2l) acetylene cylinder
- Oxygen and acetylene regulators included
- Torch handle
- Welding Tip #1 & #2
- 15ft (4.5m) twin hose with fittings
- Spark lighter
- Tip cleaner
- Welding goggles
- Spanner
- Carry tote

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## Brazing Alloys

Part No.	Rod Length	Chemical Composition			Melting Range	
		Ag% Silver	Cu% Copper	P% Phosphorous	Solidus °F/°C	Liquid °F/°C
SIL0-20	20"	0	92.9	7.1	1310/710	1475/802
SIL2-20	20"	2	91.0	7.0	1190/643	1450/788
SIL5-20	20"	5	89.0	6.0	1190/643	1500/816
SIL15-20	20"	15	80.0	4.8	1190/643	1470/800

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## Soldering Flux

### Part No. FLUX-4

All-purpose, high temperature flux for silver brazing. Formulated for applications where the work is subjected to rapid, localized heating. Particularly useful in applications where large amounts of refract oxides may form, such as stainless steel alloys. Use with stainless steel, carbide, heavy parts, prolonged heating cycles. Active Range is 538°C (1000°F) to 982°C (1800°F). Net weight 114 gr (4 oz).

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Master Box: 120 units



## Oil Charging Pump

Part No.	Description
EPC0-1	Oil Charging Pump with SAE Hose Terminal 200 PSI. Max pump rate per Stroke 50ml





## OEM White Appliance Parts

### *Oster Blade with Gasket*

**Part No. 4961**

**Features:**

- Stainless steel blade is compatible with most Oster 5 & 6 cup glass or plastic jars
- 2 piece blender accessory includes: 1 blade & 1 sealing ring
- Fits most Oster blenders, Osterizers and all Oster Kitchen centers
- Replaces: 937-45, 4898, 24877, 209841



**Oster**

## Lubricants

### *Multi Purpose Lubricant*

**Part No. WD-40-52008**

WD-40 is a multipurpose lubricant that protects and lubricates thousands of items throughout your home or office. It is used for cleaning, loosening and reducing friction between surfaces. Can be used on chains, electrical components, fasteners, hinges, nuts, springs, wires and more. Available in cans of 8oz (277ml).

Master Box: 12 cans



### *3-In-One® Multi-Purpose Oil*

**Part No. 10138**

3-IN-ONE Multi-Purpose Oil is a versatile formula that cleans off grime, lubricates moving parts, penetrates rust, and protects tools and equipment. Its easy-to-use drip spout allows for quick and precise application with no overspray or splatter, making this multi-purpose oil a go-to solution for professional tradesmen and do-it-yourselfers alike. 3-IN-ONE Multi-Purpose Oil has a fill level indicator strip so it's easy to know when you're running low, and comes in easy-squeeze bottles for versatility. Use this long-lasting multi-purpose oil on hinges, nuts and bolts, bicycles, wheels—nearly everything with moving parts. Available in cans of 8oz (277ml).

Master Box: 12 units



## Cleaners & Chemicals

### Acid Tabs - Cleaner for Condensers

#### Part No. AB1102.01.JA

ACID TABS is an acid cleaner for condensers with degreasing and descaling effect, which removes limestone and saline excesses (smog, excrement etc.), releasing a pleasant fresh smell. It does not damage plastic materials and surfaces. It is recommended for all those condensers located in marine or highly polluted areas that are frequently cleaned.

Master Box: 12 containers, each container has 18 tablets



### Evo Tabs - Cleaner for Evaporators

#### Part No. AB1089.01.JA

EVO TABS is an alkaline effervescent tablet that diluted in 5 liters of water produces an evaporator cleaner able to have a good purifying action, remove intense dirt and leave a strong smell of cleanliness.

Master Box: 12 containers, each container has 18 tablets



### Emerald Tabs - Biodegradable Eco Draining Tablets

EMERALD TABS and EMERALD TABS MINI are small tablets, which have been specifically developed in order to avoid the moisture formation inside the A/C system. Thanks to their high biodegradability level (more than 99%), EMERALD TABS and EMERALD TABS MINI prevent and eliminate the putrefaction process and the formation of algae, mucilage, slime, and molds that risk to clog and block the condensate drainpipes of A/C systems. Their formulation has been thought of in total respect towards the environment.

Thanks to their small dimensions EMERALD TABS and EMERALD TABS MINI are a universal solution, suitable for every kind of A/C system. The monthly usage of EMERALD TABS and EMERALD TABS MINI is highly recommended in order to have an effective result.

#### Benefits:

- Their very high level of biodegradability (more than 99%) avoids pollution and impacts towards the environment
- Prevents the putrefaction process of the condensate
- Prevents the formation of algae, mucilage, and molds
- Prevents the clogging of condensate drainpipes



A



B

Part No.	Description	Quantity	Image
AB1098.01	Emerald Tabs Mini	100 tabs x container	A
AB1099.01	Emerald Tabs	18 tabs x container	B

## **Stop Heat - Anti Heat Paste for Soldering**

### **Part No. TR1173.01**

During soldering and brazing operations, STOP-HEAT blocks the heat conduction, protecting surfaces and preventing areas surrounding the welding point from burning or deforming. Its formula in paste adheres without dripping, slipping, or leaving residues, protecting also the painted and varnished surfaces by color changes.

#### **Benefits:**

- Simple to use
- Safe and non-toxic
- It absorbs the heat emanated from the soldering or brazing torch, reverting the areas surrounding the welding point from burning or deforming
- It protects components and materials during soldering to avoid expensive damages caused by heat
- It does not drip or slip

Master Box: 12 containers, 500 gr. (17.6 oz.) per container



## **Acid Test for AC/R Systems**

### **Part No. RK1349.S1**

Test to verify the presence of Acid in AC/R Compressors Lubricant. ACID-TEST is an essential product to locate the presence and the formation of acid inside AC/R systems. The use of ACID-TEST is a very important step in regular preventative maintenance and provides a fast and accurate method to detect the presence of acid into compressor oils.

#### **Benefits:**

- Quick and accurate test of the acid presence in the AC/R system
- Universally formulated: suitable for every lubricant
- Easy-to-use, immediate result
- Eco-friendly and biodegradable
- Non-toxic and non-flammable
- Inexpensive: one box contains 4 tests



## **Brilliant - Fluorescent UV Leak Detector Dye**

### **Part No. TR1058.01.P1**

BRILLIANT is a fluorescent UV leak detector dye that allows to locate refrigerant gas leaks quickly and accurately in HVAC/R systems. BRILLIANT has to be introduced in a HVAC/R system through the charging valve. The product will get out from the leak point and – lit by a UV Lamp – will allow to locate it.

#### **Benefits:**

- Solvent-free
- It does not damage the systems and recovery units
- Visible to any UV lamp
- Non-toxic
- It complies with SAE J2297 & SAE J2298

Master Bag: 12 units



## External - Putty Leak Stop

### Part No. TR1166.01

External is a ready-to-use putty leak stop that seals refrigerant gas leaks up to 5 mm on rubber and metal components of air conditioning and refrigeration systems, including those of vehicles.

Quick and easy application for a quick and permanent repair: it can be easily mixed by using two fingers and once applied, it permanently repairs the leak in 4-5 hours. Once dried, it can be easily sanded or removed.

#### Benefits:

- There is no risk of product dispersion in AC/R systems.
- Ideal for urgent repairs on systems that cannot be stopped (refrigerating rooms, medicine storage facilities, server, and data center air conditioning systems, etc.)
- Perfectly adheres to metal (copper, aluminum, and steel) and rubber components
- Resists refrigeration lubricants (Mineral, POE, PAG, PAO and Alkylbenzene)
- Resists refrigerant gases (CFC, HFC, HCFC, CO<sub>2</sub>, R32 and R1234yf)
- Resists additives and flushing fluids, including chlorinated ones
- Temperature range use: -100-270°C (-148-518°F)
- Can be used on either the high or low pressure side

#### Different pressure resistance depending on the size of the leak:

- 5 mm = 40 bar/580 psi.
- 2 mm = 50 bar/725 psi.
- 1 mm = 57 bar/800 psi.

Master Box: 60 units



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COMPONENTI E SISTEMI PER CLIMA E RISCALDAMENTO

## Extreme Ultra - Injectable Refrigerant Sealant

### Part No. TR1163.AL.H3.S2

EXTREME ULTRA is an ultimate REFRIGERANT GAS LEAK SEALANT that solves all the problems related to small refrigerant gas leakages in AC/R systems. After more than 4 years of R&D efforts and thousand of tests, Errecom projected a 6ml dose leak stop that can work with all types of refrigerant gases included R32, R134a & R1234, EXTREME ULTRA 6ml new formula treats A/C and Refrigeration systems up to 21KW (6 tons).

EXTREME ULTRA locates the refrigerant gas leaks and permanently seals them, without reacting to moisture and oxygen. EXTREME ULTRA is a polymer-free solution that repairs leaks up to 0.3 mm.

#### Benefits:

- Only 6ml can treat A/C & Refrigeration Systems up to 21 KW (6 tons)
- New advanced formula
- Less product in the system
- Compatible with all refrigerant gases, R32, R134a & R1234yf included
- Permanently seals refrigerant gas leaks both in metal and rubber components of A/C and Refrigeration systems
- Safe to AC/R system components
- Harmless to recovery unit components
- Non reactive to humidity and air
- Polymer-free
- Visible to any UV lamp
- Not flammable, Not irritant, Safe for the operator
- Significantly reduces compressor noise
- Ideal for preventative maintenance



## ***Kit Ultra – AC/R Restoring Treatment***

### **Part No. RK1421.H3**

KIT ULTRA uses four steps to solve the problem of refrigerant gas leaks. Errecom has developed a procedure composed of 4 specific additives that, used in a precise sequence, eliminate the consequences of these actions/reactions, preserving the Air Conditioning & Refrigeration System from all the problems inherent to refrigerant gas leaks and the decrease of performance.

#### **Instructions For The Use In AC/R Systems:**

- Turn the air conditioning ON and set the lowest temperature
- Locate the low-pressure charging port of the A/C system
- Connect the cartridge of NO-ACID ULTRA through the specific adapter
- Introduce NO-ACID ULTRA in the system
- Disconnect the cartridge of NO-ACID ULTRA from the adapter
- Run the A/C System in this condition for at least 5 minutes
- Connect the cartridge of SUPER-DRY ULTRA to the adapter
- Introduce SUPER-DRY ULTRA in the system
- Disconnect the cartridge of SUPER-DRY ULTRA from the adapter
- Run the A/C System in this condition for at least 6 minutes
- Connect the cartridge of COOL-SHOT ULTRA to the adapter
- Introduce COOL-SHOT ULTRA in the system
- Disconnect the cartridge of COOL-SHOT ULTRA from the adapter
- Run the A/C System in this condition for at least 20 minutes
- Connect the cartridge of EXTREME ULTRA to the adapter.
- Introduce EXTREME ULTRA in the system.
- Run the A/C System in this condition for at least 30 minutes.



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## ***No-Age Treatment for Condensers***

### **Part No. AB1100.K.01**

NO-AGE is a protective treatment, designed for all those systems that are exposed in highly oxidizing environments (seaside, heavily polluted sites) where salt and acid rain significantly reduce the condenser life. Once you have cleaned the condenser with one acid or alkaline Cleaners, spray NO-AGE directly on it: this solution generates a microfilm that does not limit the heat exchange of the condenser but reduces the ability of dirt (such as salt and smog) to cling to the surfaces, protecting the metals thanks to an anticorrosive barrier.

#### **Advantages:**

- Easy to use.
- Safe for operator and materials.
- Extends the life of the condenser.



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## Easy Inject - Tool for Injecting Additives into the AC/R System

### Part No. IN1031.R1

Allows additives to be added to AC/R systems using refrigerant gas.

#### Features:

- Pump down not required
- Eco friendly: re-usable
- Safe for technicians and systems: check valve included.



new

## Plastic Straight Adapters

Plastic straight adapters to be used with Extreme Ultra, Super-Dry Ultra, and/or any Leak Stop Aditives from Errecom.



new

Part No.	Description	Qty x Box
RK1425	Pack containing (1) FLEX HOSE + (2) 1/4" SAE	30
RK1426	Pack containing (1) FLEX HOSE + (3) 5/16" SAE	30

## Touch 'n Seal® Quick Cure Multipurpose Foam Sealant

### Part No. 7565000057

A fast and easy, high-yield means to permanently seal and insulate gaps and cracks. Quick Cure foam blocks drafts, moisture and insects while improving comfort and reducing energy usage in commercial, industrial, agricultural, and residential applications. Available in 12 oz. can, 12 box pack.

#### Features:

- High yield
- Provides a permanent seal against air, moisture, and insect infiltration
- Air seals and saves energy
- ICC-ES ESR-1926
- Class A fire rated
- Reusable adapter for multiple projects per can
- All direction dispensing



new



## Max Seal Leak Sealant

### Part No. 20-101

#### Features:

- For 1.5 to 5 ton air conditioners
- Most trusted and proven sealant formula on the market
- Fast acting, travels with gas
- Permanently repairs A/C leaks
- Works with all oils and refrigerants (excluding ammonia)
- Proven not to plug TXV, cap tubes or pistons, nor clog manifold gauges
- Sealant made in USA

⚠ Cancer & Reproductive Harm [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

Master Box: 6 units



## Rust Protection

### Part No. ACT509

#### Action Corrosion

The Action Clear aerosol is the all-in-one coating to protect cabinets, coils, and P.C. boards of air conditioning compressor units. Also insulates the board against geckos and other vermin. Touch dry in 15 minutes, containing inhibitors against UV, heat, cold, and salt spray. Hard, non-yellowing coating which repels water. Its non-conductive properties do not affect heat exchange. 12.35 fl oz can.

⚠ Cancer & Reproductive Harm [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)



## Qwik System Flush® and Accessories

Qwik System Flush® is a superior formulation that is 9-10 times more effective in moisture absorption and acid removal than competitive products. QT1100 (2-lb aerosol), QT1130 (1-lb aerosol), or QT1150 (complete starter kit with two 1-lb aerosol cans, charging hose, can access valve, and QwikNozzle™. Qwik System Flush® is approved by original equipment manufacturers.

#### Qwik System Flush® Packaging Options:

**Part No. QL1191:** 1-lb aerosol can - English label (up to a 5-ton system)

**Part No. QL1130:** 1-lb aerosol can - Spanish label (up to a 5-ton system)

**Part No. QL1150:** Complete starter kit includes:

- (2) 1-lb aerosol cans (QL1130)
- (1) Can access valve (QL1105)
- (1) QwikNozzle™ Line Set Flush Tool (QL1106)
- (1) Short charging hose



## QwikInjector® - Liquid Injection Tools

### Part No. QL2510

Anytime a liquid product needs to be introduced into an operating system, QwikInjector® can be used. QwikShot® Refrigerant and Oil Treatment, QwikSeal®, QwikGlowPro®, dyes, oils, and additives can all be quickly added. Our patented displacer piston cap assures that all air is displaced from the QwikInjector® as the cap is tightened.

#### Features:

- Includes the hose
- 0.5oz capacity
- Rated for 800psig
- Tested and approved for R410a
- Compatible with ALL oils and dyes



## QwikCheck® - 2-Second Acid Test Kit

### Part No. QL2000

Detects inorganic acid in 2-seconds down to 1 part per million. Fast, accurate, and easy to use, QwikCheck provides an early warning of acid problems. The Yellow to Red color change allows you to easily and clearly communicate the need for action to the equipment owner.

#### Features:

- Color Change Indicates Pass/Fail
- Tests for Inorganic Acids to the ARI-700 limit of 1ppm
- Works with All Refrigerants & Oils
- Meets EPA Venting Regulations
- Unique Patented Disposable Design



## QwikShot® - Refrigerant & Oil Treatment

### Part No. QL2501

QwikShot Refrigerant and Oil Treatment Has a unique formulation, which carries unwanted acid and moisture into the filter-drier where the acid, moisture and the QwikShot are removed. QwikShot is the only acid treatment on the market guaranteed not to invalidate any equipment manufacturer's warranty.

#### Features:

- Guaranteed safe for ALL systems
- OEM Approved
- Works with all refrigerants, oils, and filter-driers
- Produces no residue or contamination
- One bottle treats up to a 6-ton unit and removes up to 26 drops of moisture!





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