

---

# Mini Mate 2 (2 and 3 Ton) Parts Manual

## Indoor Condenser



While every precaution has been taken to ensure accuracy and completeness in this manual, Vertiv Co. assumes no responsibility, and disclaims all liability for damages resulting from use of this information or for any errors or omissions.

© 2016 Vertiv Co. All rights reserved throughout the world. Specifications are subject to change without notice.

® Vertiv and the Vertiv logo are the registered trademarks of the Vertiv Co.

<b>Mini Mate 2 (2 and 3 Ton) Parts Manual .....</b>	<b>ii</b>
<b>1. Product Description .....</b>	<b>2</b>
<b>2. Model Number Definition .....</b>	<b>4</b>
<b>3. Mini Mate 2 Families .....</b>	<b>5</b>
<b>4. Blower/Motor Section .....</b>	<b>6</b>
<b>5. Piping Section .....</b>	<b>7</b>
5.1. Water Glycol .....	7
5.1.1. HGBP Piping Assembly .....	8
5.2. Piping Air Cooled .....	9
5.2.1. Compressor Assembly .....	10
5.2.2. Liquid Line Assembly .....	11
5.2.3. Receiver Panel Assembly .....	12
5.2.4. HGBP Piping Assembly .....	13
5.2.5. HPCV Piping Assembly .....	14
<b>6. Condenser Section .....</b>	<b>15</b>
6.1. 2W Valve Standard Pressure .....	15
6.2. 2W Valve High Pressure .....	16
6.3. 3W Valve Standard Pressure .....	16
6.4. 3W Valve High Pressure .....	17
<b>7. Access Panel Section .....</b>	<b>18</b>
7.1. Evaporator Section .....	18
7.2. Condenser Section – AIR .....	19
7.3. Condenser Section – W/G .....	19
<b>8. Electrical Section .....</b>	<b>20</b>
8.1. EP Air Cooled 1 Phase .....	20
8.2. EP Air Cooled 3 Phase .....	21
8.3. EP Water/Glycol 1 Phase .....	22
8.4. EP Water/Glycol 3 Phase .....	23
<b>9. Parts Gallery .....</b>	<b>24</b>
<b>10. Revision Page .....</b>	<b>26</b>

## 1. Product Description

The **Mini-Mate2** is a split system air, water/glycol cooled unit, or self contained chilled water unit.

The **Evaporator Section** includes the evaporator coil, factory mounted disconnect switch, blower assembly, and microprocessor control with wall mounted control box. The unit is provided with supply and return air openings for field supplied ducting. Evaporator sections are available in 208/230 Volt 1-phase or 277 Volt 1-phase models. 3-ton Evaporators are also available in 208/230 Volt 3-phase, or 460 Volt 3-phase models. Evaporators can be configured with canister humidifier and/or reheat. A condensing unit must be selected for each evaporator.

The **Evaporator** can also be ordered as a belt-drive unit. In this configuration the blower and direct drive motor are removed from the evaporator, and replaced by the high static blower assembly. The high static blower assembly is ordered separately.

**Microprocessor Control** includes a 2 line, 16 character, wall-mounted LCD display which provides temperature set point and sensitivity adjustment, humidity set point and sensitivity adjustment, digital display of temperature, humidity, set points and sensitivities, and alarm conditions. An 8-key membrane keypad for setpoint/program control, unit on/off, fan speed, and alarm silence is located below the LCD display. The display can be located up to 300 ft (91.4 m) from the evaporator unit, using field supplied wire. Temperature and humidity sensors are located in the wallbox.

### Air Cooled Condensing Units

**MCD Centrifugal Fan Unit** includes scroll compressor, factory mounted disconnect switch, condenser coil, centrifugal blower assembly, high pressure switch, Lee-Temp head pressure control system, and filter drier. Unit must be mounted indoors. Duct flanges are provided. (See pricing for voltages). Hot Gas Bypass is available as an option.

**Prop Fan Condensing Unit** includes scroll compressor, condenser coil, prop fan, high pressure switch, Lee-Temp head pressure control, and filter drier. Unit is designed for outdoor location (see pricing for voltages). Condensing unit is available with optional hot gas bypass, Quiet-line, and high ambient models (Consult the Prop Fan Condensing Unit Price Book for optional selections).

**MCD Water/Glycol Condensing Unit** includes a scroll compressor, factory mounted disconnect switch, coaxial condenser, two-way or optional three-way water regulating valve, and filter drier. Design pressure is 150 psi (1034 kPa) or optional 300 psi (2068 kPa). (See pricing for voltages and complete model number). Drycooler(s) and pump(s) selected separately for applications using glycol loop.

**Chilled Water Models** are self-contained and include chilled water coil, slow close two-way solenoid valve, and factory mounted disconnect switch. Design pressure is 300 psi (2068 kPa) static pressure, with 60 psi (414 kPa) close-off pressure rating.

### Optional Factory Installed Equipment

Evaporator Options

**Electric Reheat** includes 304/304 stainless steel finned tubular reheat, with high limit safety switch.

**SCR Electric Reheat** includes the controller and software to provide full cooling with modulating reheat.

**Hot Water Reheat** includes a hot water coil, 2-way solenoid valve, and Y-strainer. Note: this option not available with free-cooling option or other reheat options.

**Humidifier Package** includes steam generating type humidifier with automatic flushing circuit, inlet strainer, drain, and solenoid valves. Humidifier Problem alarm is annunciated to wallbox.

**Free-Cooling** coil can be ordered with the evaporator section. This option contains a 3-way, slow-close solenoid valve, thermostat, flushing circuit, and separated supply and return piping for chilled water cooling. A 3-way regulating valve is recommended for the water/glycol condensing unit.

**Smoke Detector** is factory wired to provide an audible and visual alarm at the control display, and shuts the unit off.

**Firestat** senses return air temperature and shuts down unit if temperature reaches the 125°F (51.7°C).

**Filter Clog** senses pressure drop across the filters and annunciates the display upon reaching a customer set point.

### **Condensing Unit Options**

**Hot Gas Bypass** includes bypass valve, solenoid valve, and necessary piping for manual capacity modulation.

**High Ambient, Quietline, and Hot Gas Bypass** options are also available on Prop-Fan Condensing Units. Consult Prop-Fan Condensing Unit Pricebook for pricing.

### **Ship Loose Accessories**

**Filter Box (for ducted applications)** includes filter box with duct flange connection, 20"x 20"x 4" (508mm x 508mm x 102mm) filter, and a duct flange for use on the supply air opening of the unit. Available with 20% or 30% filters.

**Air Distribution Plenum** includes molded plastic four-way discharge plenum. 16"x 25"x 4" (406mm x 535mm x 102mm) filter, and sheet metal block-off plates for covering the ducting openings on the evaporator unit. Filter is rated for 20%.

**Condensate Pump** is field mounted on side of cabinet and equipped with check valve.

**Remote Temperature & Humidity Sensors** include sensors mounted in an attractive case with 30 ft (9m) of cable.

**Pre-charged Refrigerant Line Set** contains an insulated copper suction line and a copper liquid line for interconnection of the indoor and outdoor sections. Available in 15 ft (4.5m) and 30 ft (9m) sections.

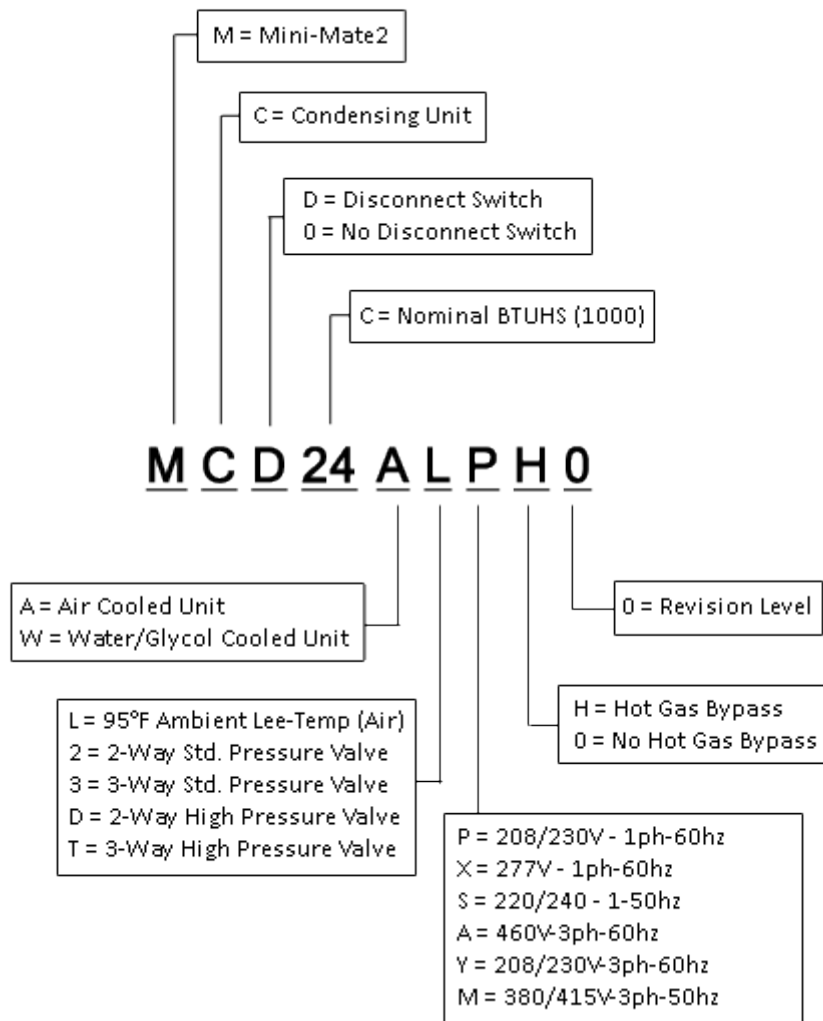
**Refrigerant-line Sweat Adapter Kit** contains two suction and two liquid line compatible fittings that allow field-supplied interconnecting refrigerant lines to be used. See Installation, Operation & Maintenance Manual for maximum recommended installed distances.

**277 Volt Step Down Transformer (37.5 amps)** is for use on Prop Fan Condensing Units requiring 277 volt power. The transformer is epoxy encapsulated and is suitable for indoor/outdoor installation.

**Single Point Power Kit** contains the necessary electrical components to interconnect the high voltage sections of a close-coupled evaporator and condensing unit.

**High Static Blower Assembly** is a blower box that contains a centrifugal, belt driven blower, to provide up to 2.0" (51mm) of external static pressure on the discharge side of the evaporator. The blower box is field mounted to the evaporator unit. The evaporator should be ordered with the "belt Drive" option, which removes the direct drive motor and blower from the evaporator. Deduct the direct drive.

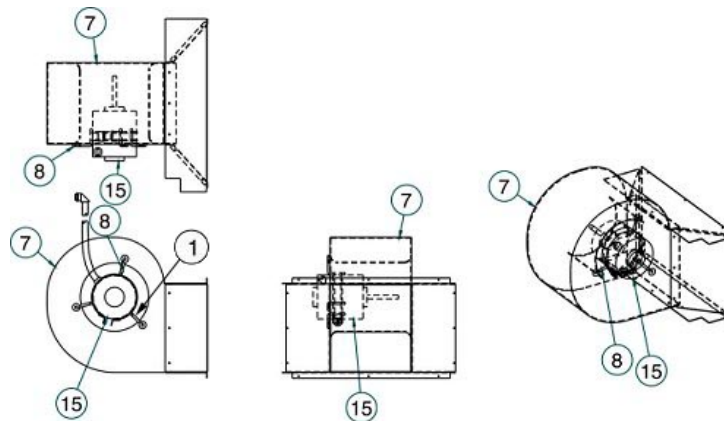
## 2. Model Number Definition



### 3. Mini Mate 2 Families

	208/230-1-60	277-1-60	208/230-3-60	460-3-60	220/240-1-50	380/400-3-50
<b>SPLIT EVAPORATOR</b>						
1.0 TON	MMD12E-P	MMD12E-X	N/A	N/A	MMD11A-S	N/A
1.5 TON	MMD18E-P	MMD18E-X	N/A	N/A	MMD17A-S	N/A
2.0 TON	MMD24E-P	MMD24E-X	N/A	N/A	MMD23E-S	MMD23E-M
3.0 TON	MMD36E-P	MMD36E-X	MMD36E-Y	MMD36E-A	MMD35E-S	MMD35E-M
<b>AIR COOLED</b>						
1.0 TON	MMD12A-P	N/A	N/A	N/A	N/A	N/A
1.5 TON	N/A	N/A	N/A	N/A	N/A	N/A
2.0 TON	MCD24A-P	MCD24A-X	N/A	N/A	MCD23A-S	MCD23A-M
3.0 TON	MCD36A-P	MCD36A-X	MCD36A-Y	MCD36A-A	MCD35A-S	MCD35A-M
<b>WATER/GLYCOL COOLED</b>						
1.0 TON	MMD14W-P	MMD14W-X	N/A	N/A	MMD13W-S	N/A
1.5 TON	MMD20W-P	MMD20W-X	N/A	N/A	MMD19W-S	N/A
2.0 TON	MCD26W-P	MCD26W-X	N/A	N/A	MCD25W-S	MCD25W-M
3.0 TON	MCD38W-P	MCD38W-X	MCD38W-Y	MCD38W-A	MCD37W-S	MCD37W-M
<b>CHILLED WATER</b>						
1.0 TON	N/A	N/A	N/A	N/A	N/A	N/A
1.5 TON	MMD23C-P	MMD23C-X	N/A	N/A	MMD22C-S	N/A
2.0 TON	N/A	N/A	N/A	N/A	N/A	N/A
3.0 TON	MMD40C-P	MMD40C-X	MMD40C-Y	MMD40C-A	MMD39C-S	MMD39C-M

### 4. Blower/Motor Section



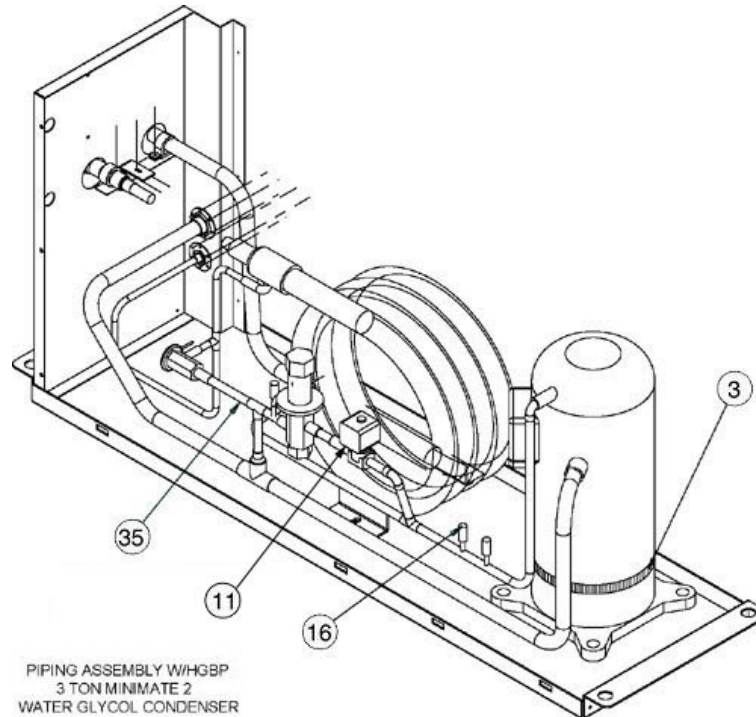
Item	Part #	Description	Volts	Quantity
1	127843P1	GROMMET WASHER	*	3
	127843P2	GROMMET TUBE	*	3
	127843P3	SLEEVE SPACING	*	3
	127844P1	SCREW CAP ZINC 1/4-20 x 1-3/4	*	3
	S-1110	WASHER PLAIN FLAT Z 1/4in	*	6
	S-1130	NUT LOCK HEX NYL INSR 1/4-20 Z	*	3
	S-128A	SCREW CAP HEX G8 PO5/16-18 x 1-3/8	*	1
	S-3380	NUT HEX FLANGE SERR ZC 5/16-18	*	1

Note: Hardware used on 3 Ton 50Hz units, and 3.5 Ton 50 and 60 Hz units.

Item	Part #	Description	Volts	2 Ton	3 Ton	3.5 Ton
7	1C19515P1	BLOWER w/H DD09-09AVPX0.50	208/230-1-60 277-1-60	1 1		
	1C19516P1	BLOWER w/H DD10-08APX0.50	220/240-1-50 380/415-3-50 208/230-1-60 208/230-3-60 277-1-60 460-3-60	1 1	1 1 1 1	
	127651P1	BLOWER w/H DD11-09ATX0.50 W/RG	220/240-1-50 380/415-3-50 208/230-3-60 460-3-60		1 1	1 1 1
8	1C19519P1	BRKT MTR MTG MINI-MATE	60Hz	1		
	1C19518P1	BRKT MTR MTG MINI-MATE	50Hz	1	1	
	127842P1	MOUNT MOTOR 5T MME	50Hz 50/60Hz		1	1 1
15	1D19533P1	MOTOR .33HP 205//236-1-50/60	208/230-1-60 220/240-1-50	1 1		
	1D19535P2	MOTOR .50HP 277-1-60	277-1-60	1	1	
	1D19535P5	MOTOR .50HP 380//415-1-50	380/415-3-50	1	1	
	1D19534P1	MOTOR .50HP 205//236-1-50/60	208/230-1-60 208/230-3-60 220/240-1-50		1 1 1	
	1D19535P3	MOTOR .50HP 460/1-60	460-3-60		1	
	128198P1	MOTOR 1.0HP 208/230-1-60	208/230-3-60			1
	128198P2	MOTOR 1.0HP 460-1-60	460-3-60			1
	128198P4	MOTOR 1.0HP 380/415-1-50	380/415-3-50			1

## 5. Piping Section

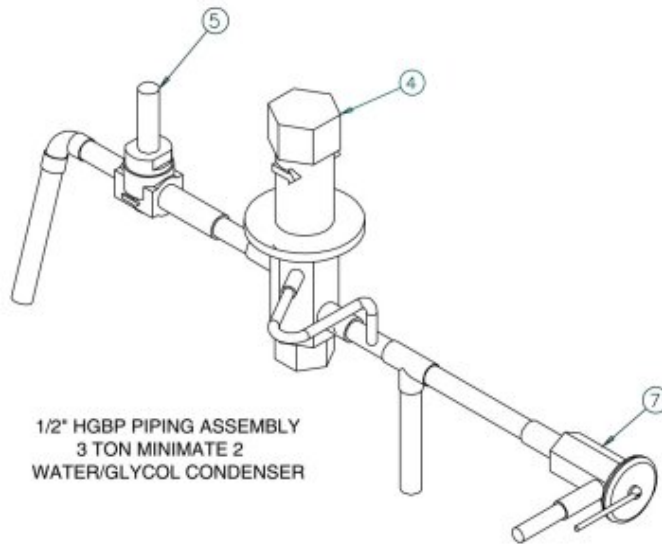
### 5.1. Water Glycol



Item	Part #	Description	Volts	2 Ton	3 Ton	3.5 Ton
3	1C21138P1	CRANKCASE HEATER BAND 240V 30W	208/230-1-60	1		
	1C21138P2	CRANKCASE HEATER BAND 240V 22W	277-1-60	1		
	132102P1	CRANKCASE HEATER 40W COPELAND	208/230-1-60 208/230-3-60 220/240-1-50		1 1 1	1
	132102P2	HEATER C/CASE 480V 40W SCROLL	380/415-3-50 460-3-60	1	1 1	1 1
	132102P4	HEATER C/CASE 277V 40W SCROLL	277-1-60		1	
11	127935P2	SOLENOID COIL DMC 5T 208/35-60	208/230-1-60 208/230-3-60 220/240-1-50	1 1 1	1 1 1	1 1 1
	127935P3	SOLENOID COIL DMC 5T 460-50/60	380/415-3-50 460-3-60	1 1	1 1	1 1
	127935P10	SOLENOID COIL DMC 5T 277-60	277-1-60	1	1	1
16	148372P1	Press SW HP SPDTAR C/Out 370PS	All	1	1	1
18		HGBP Piping Assembly on Page 8				

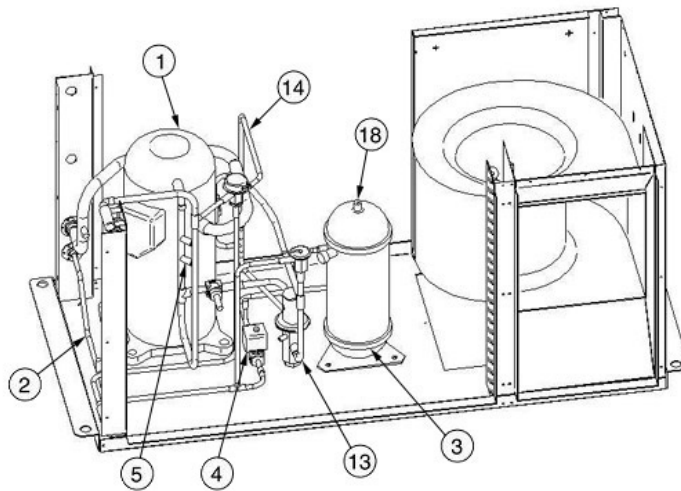


### 5.1.1. HGBP Piping Assembly



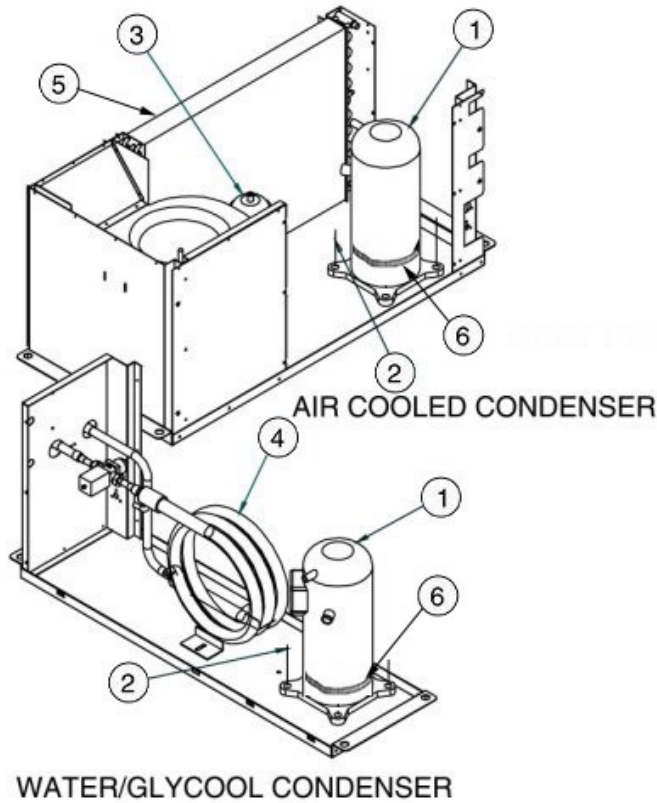
Item	Part #	Description	Volts	2 Ton	3/3.5 Ton
4	P-0180	VALVE BYPASS/DISCH 1/2ODF SLDR	ALL	1	
5	127935P1	VALVE SOLND 1/2ODFXODM NO COIL	ALL	1	
	127935P8	VALVE SOLND 1/2ODFXODM NO COIL	ALL		1
7	148250P2	VALVE LIV 1/2T 3/8x3/8 ANGLE	ALL	1	
	148250P3	VALVE LIV 1T 3/8x1/2 ANGLE	ALL		1

## 5.2. Piping Air Cooled



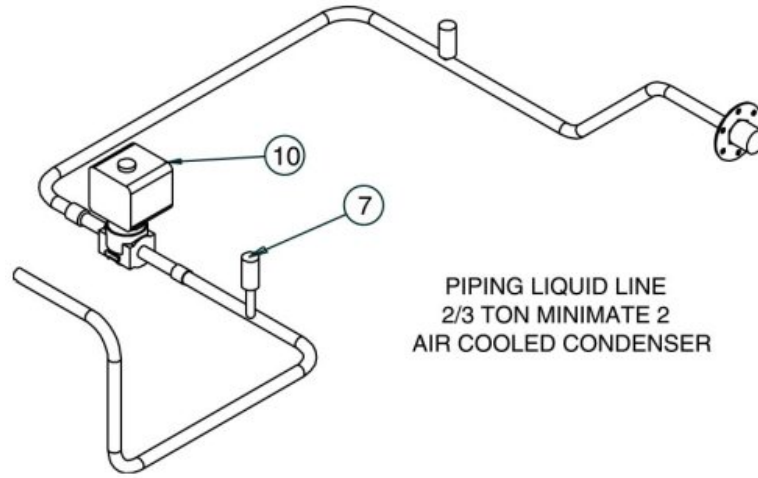
Item	Part #	Description	Volts	2 Ton	3 Ton	3.5 Ton
1		Compressor Assembly on Page 10				
2		Liquid Line on Page 11				
3	1C21138P1	CRANKCASE HEATER BAND 240V 30W	208/230-1-60 208/230-3-60 220/240-1-50 277-1-60 380-3-50 460-3-60		1 1 1 1 1 1	1 1 1 1 1 1
	1C21138P2	CRANKCASE HEATER BAND 240V 22W	208/230-1-60 220/240-1-50 277-1-60 380/415-3-50	1 1 1 1		
4	127935P2	SOLENOID COIL DMC 5T 208/35-60	208/230-1-60 208/230-3-60 220/240-1-50	1 1 1	1 1 1	1 1 1
	127935P3	SOLENOID COIL DMC 5T 460-50/60	380/415-3-50 460-3-60	1 1	1 1	1 1
	127935P10	SOLENOID COIL DMC 5T 277-60	277-1-60	1	1	
5	148372P1	Press SW HP SPDTAR C/Out 370PS	All	1	1	1
13		HGBP Piping Assembly on Page 13				
14		HPCV Piping on Page 14				
18	168198P1	Valve Relief 440# 1/4NPTx3/8FLR	ALL	1	1	1

**5.2.1. Compressor Assembly**



Item	Part #	Description	Volts	2 Ton	3 Ton	3.5 Ton	
1	159145P1	COMP SCRL ZR22KC-PFV W/O ROTO	208/230-1-60	1			
	138493P2	COMP SCRL ZR26K3-PFJ W/O ROTO	220/240-1-50	1			
	156204P1	COMP SCRL ZR22K4-PFJ-230	277-1-60	1			
	148324P2	COMP SCRL ZR26K3-TFD W/O ROTO	380/415-3-50	1			
	159149P1	COMP SCRL ZR34KC-PFV W/O ROTO	208/230-1-60		1	1	
	148325P1	COMP SCRL ZR34K3-TF5 W/O ROTO	208/230-3-60		1	1	
	148326P2	COMP SCRL ZR40K3-PFJ W/O ROTO	220/240-1-50		1	1	
	148221P2	COMP SCRL ZR34K3-PFJ W/O ROTO	277-1-60		1	1	
	138430P2	COMP SCRL ZR40K3-TFD W/O ROTA	380/415-3-50		1	1	
	148325P2	COMP SCRL ZR34K3-TFD W/O ROTO	460-3-60		1	1	
	138430P1	COMP SCRL ZR40K3-TF5 W/O ROTA	208/230-3-60			1	
	148228P2	COMP SCRL ZR49KC-TFD W/O ROTA	380/415-3-50			1	
	138430P2	COMP SCRL ZR40K3-TFD W/O ROTA	460-3-60			1	
2	1A17649P1	Kit Compressor Mtg Spring	All	1	1		
3		Receiver/ Panel Assembly on Page 12					
4		Cond Assembly 2-Way on Page 15					
5	156301P1	COIL COND MM2 2T A	ALL	1			
	156300P1	COIL COND MM2 3T A	ALL		1	1	
6	1C21138P1	CRANKCASE HEATER BAND 240V 30W	208/230-1-60	1			
	1C21138P2	CRANKCASE HEATER BAND 240V 22W	277-1-60	1			
	132102P1	CRANKCASE HEATER 40W COPELAND	208/230-1-60			1	
			208/230-3-60			1	
			220/240-1-50	1		1	
132102P2	HEATER C/CASE 480V 40W SCROLL	380/415-3-50 460-3-60	1		1	1	
132102P4	HEATER C/CASE 277V 40W SCROLL	277-1-60			1		

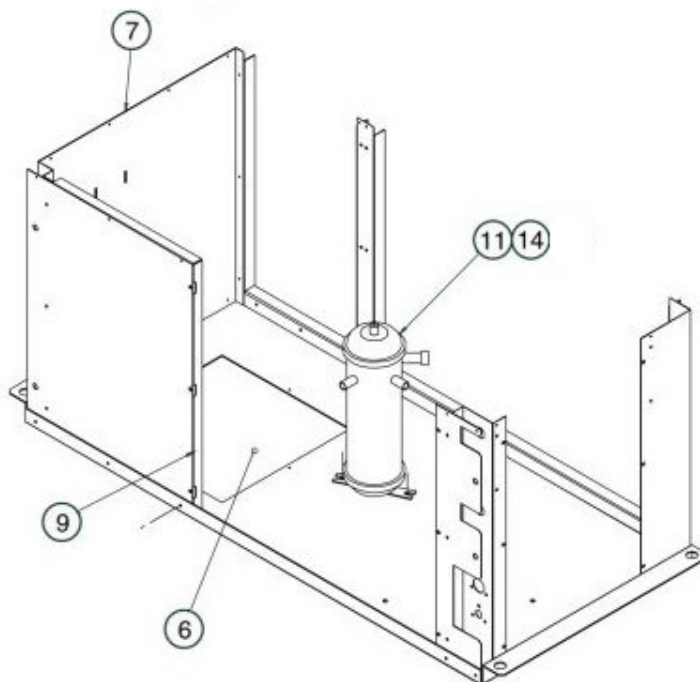
**5.2.2. Liquid Line Assembly**



PIPING LIQUID LINE  
2/3 TON MINIMATE 2  
AIR COOLED CONDENSER

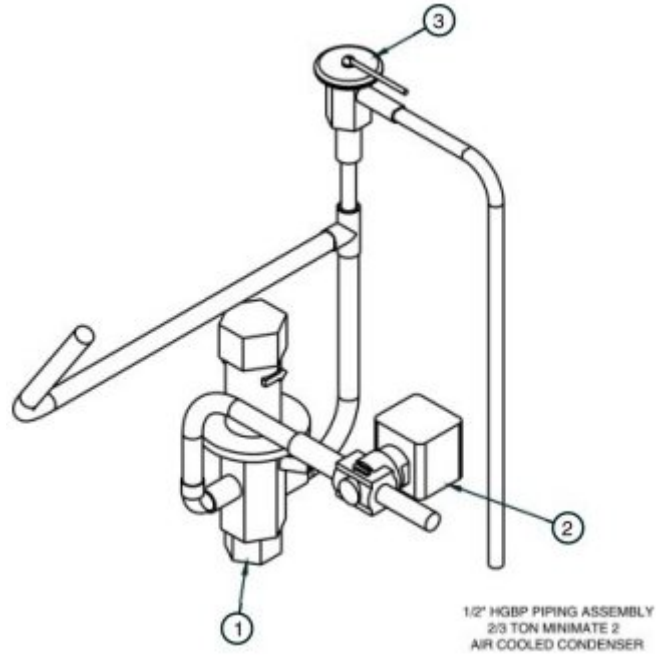
Item	Part #	Description	Volts	2 Ton	3 Ton
7	127972P1	SW HP SPST AR 150CO 100CI	ALL	1	1
10	127935P5	VALVE SOLND 3/8ODFXODM NO COIL	ALL	1	1

### 5.2.3. Receiver Panel Assembly



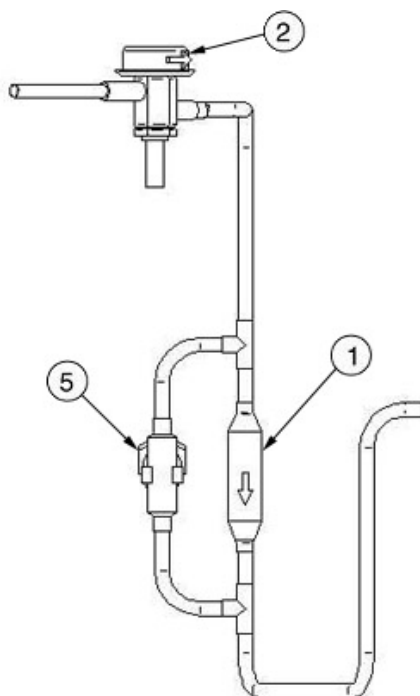
Item	Part #	Description	Volts	2 Ton	3 Ton	3.5 Ton
6	1C19554P1	PLATE BLOWER ACCESS	ALL	1	1	
7	156353P1	PANEL RIGHT 2/3T A COND MM2	ALL	1	1	
9	156355P1	PLATE RT RR 2/3T A COND MM2	ALL	1	1	
11	148213P3	RECVR V 4X13 .38IN/OUT 450# SG	ALL	1		
	148213P1	RECVR V 5X14 .50IN/OUT 450# SG	ALL		1	1
14	1C21230P2	INSULATION RECEIVER 13.5X4RCVR	ALL	1		
	1B21231P1	INSULATION RCVR TOP 1.0/2.0T	ALL	1		
	1C21230P3	INSULATION RECEIVER 14.0X5RCVR	ALL		1	1
	1B21231P2	INSULATION RECEIVER TOP	ALL		1	1

**5.2.4. HGBP Piping Assembly**



Item	Part #	Description	Volts	2 Ton	3 Ton	3.5 Ton
1	P-0180	VALVE BYPASS/DISCH 1/2ODF SLDR	ALL	1	1	
2	127935P1	VALVE SOLND 1/2ODFXODM NO COIL	ALL	1	1	
	127935P8	VALVE SOLND 1/2ODFXODM NO COIL	ALL		1	1
3	148250P2	VALVE LIV 1/2T 3/8x3/8 ANGLE	ALL	1		
	148250P3	VALVE LIV 1T 3/8x1/2 ANGLE	ALL		1	1

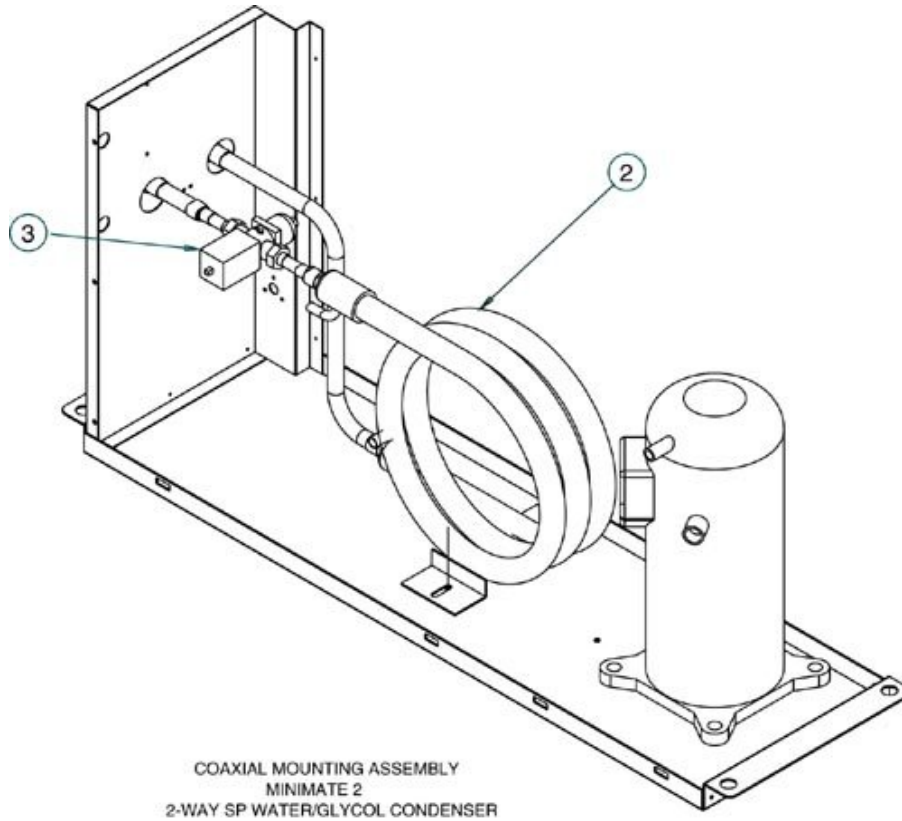
### 5.2.5. HPCV Piping Assembly



Item	Part #	Description	Volts	2 Ton	3 Ton	3.5 Ton
1	W-0092	VALVE CHECK 3/8" OD	ALL	1	1	
2	1C21207P5	VALVE LOW AMB CNTL-SPORLAN	ALL	1	1	
5	167770P1	VALVE CHECK 3/8" OD SPRING	ALL	1	1	1

## 6. Condenser Section

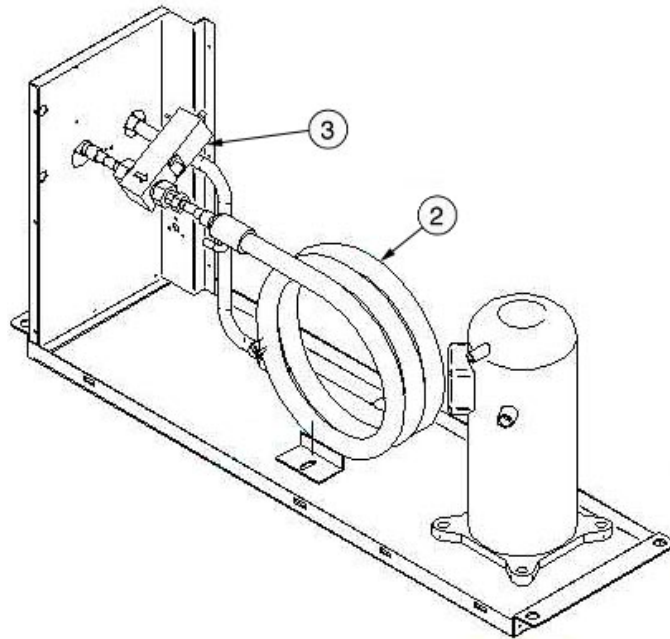
### 6.1. 2W Valve Standard Pressure



Item	Part #	Description	Volts	2 Ton	3 Ton	3.5 Ton
2	1C19530P1	CONDENSER COAXIAL TUBE-IN-TUBE	ALL	1		
	1C21115P1	CONDENSER COAXIAL TUBE-IN-TUBE	ALL		1	1
3	156400P1	VALVE H2O REG 2WAY 1/2" UB	ALL	1	1	
	136696P1	VALVE H2O REG 2WAY 3/4" UB	ALL			1

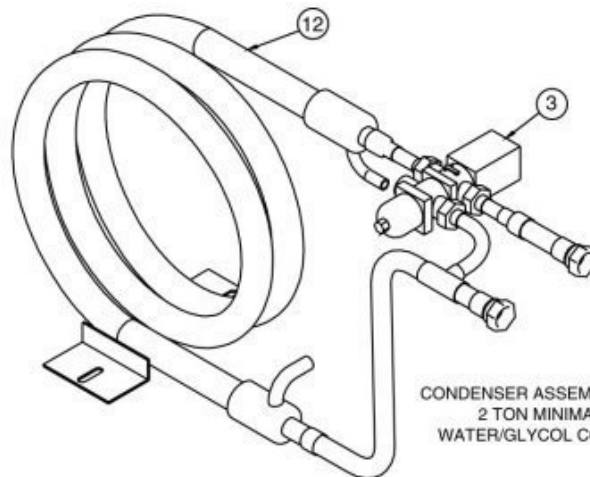


### 6.2. 2W Valve High Pressure



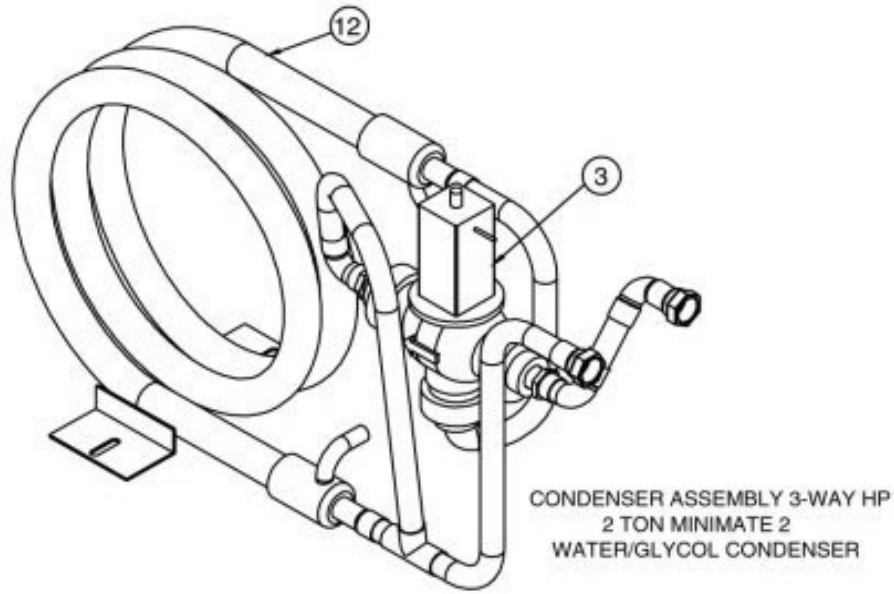
Item	Part #	Description	Volts	2 Ton	3 Ton	3.5 Ton
2	1C19530P1	CONDENSER COAXIAL TUBE-IN-TUBE	ALL	1		
	1C21115P1	CONDENSER COAXIAL TUBE-IN-TUBE	ALL		1	1
3	P-025A	Valve H2O Reg 2way 1/2" 350#	ALL	1		
	P-026A	Valve H2O Reg 2way 3/4" 350#	ALL		1	1

### 6.3. 3W Valve Standard Pressure



Item	Part #	Description	Volts	2 Ton	3 Ton	3.5 Ton
3	156401P1	VALVE H2O REG 3WAY 1/2" UB	ALL	1	1	
	P-4760	VALVE H2O REG 3WAY 3/4" 300#	ALL			1
12	1C19530P1	CONDENSER COAXIAL TUBE-IN-TUBE	ALL	1		
	1C21115P1	CONDENSER COAXIAL TUBE-IN-TUBE	ALL		1	1

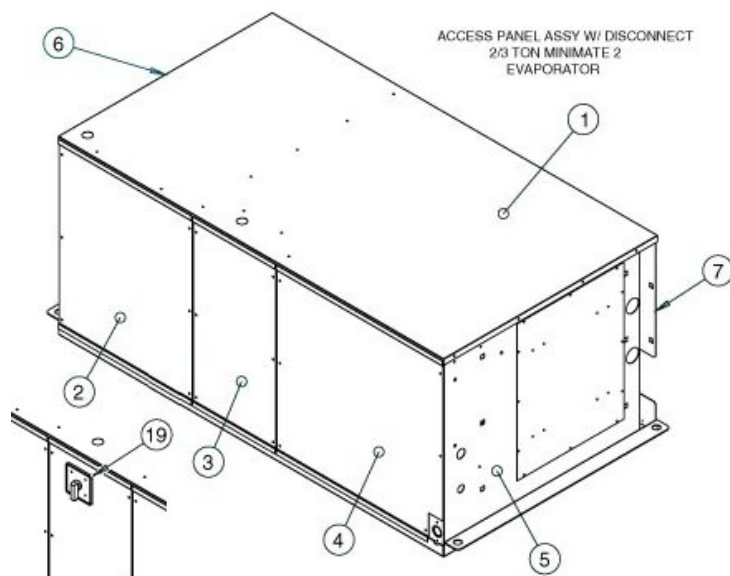
**6.4. 3W Valve High Pressure**



Item	Part #	Description	Volts	2 Ton	3 Ton	3.5 Ton
3	P-4760	Valve H2O Reg 3way 3/4" 300#	ALL	1	1	1
12	1C19530P1	CONDENSER COAXIAL TUBE-IN-TUBE	ALL	1		
	1C21115P1	CONDENSER COAXIAL TUBE-IN-TUBE	ALL		1	1

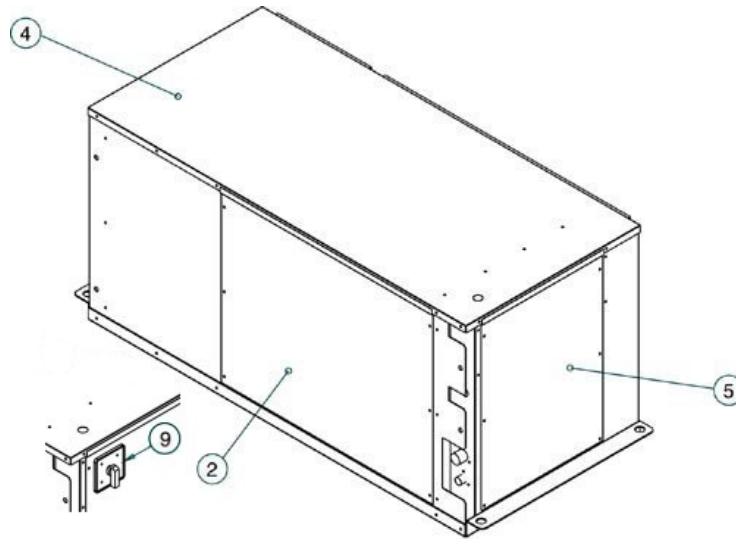
## 7. Access Panel Section

### 7.1. Evaporator Section



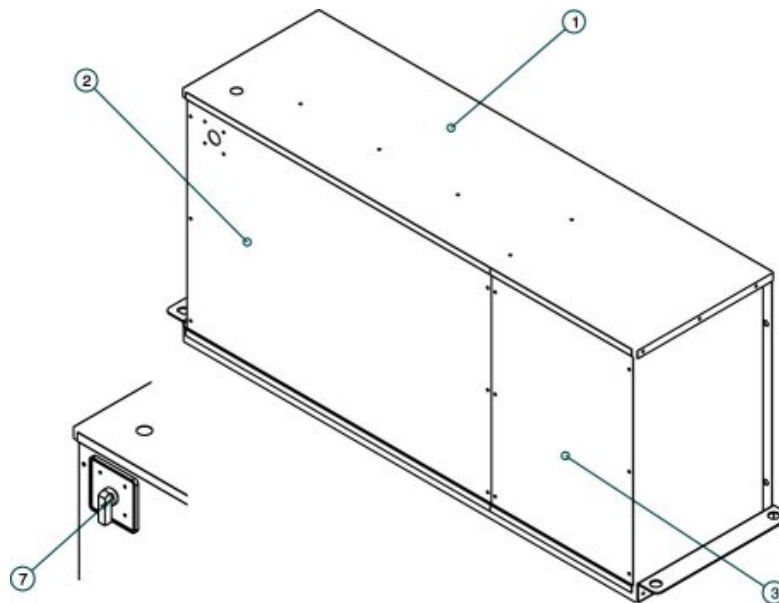
Item	Part #	Description	Volts	2 Ton	3 Ton
1	156171P1	PANEL TOP 2/3T MM2	ALL	1	1
2	156168P1	PANEL FRONT LEFT 2/3T MM2	ALL	1	1
3	156168P1	PANEL FRONT LEFT 2/3T MM2	ALL	1	1
	156168P1	PANEL FRONT LEFT 2/3T MM2	ALL	1	1
4	156170P1	PANEL FRONT RIGHT 2/3T MM2	ALL	1	1
5	156167P1	PANEL RIGHT SIDE 2/3T MM2	ALL	1	1
6	156166P1	PANEL LEFT SIDE 2/3T MM2	ALL	1	1
7	156165P1	PANEL REAR 2/3T MM2	ALL	1	1
19	1C18352P1	Handle Disconnect Switch Faceplate	ALL	1	1

### 7.2. Condenser Section – AIR



Item	Part #	Description	Volts	2 Ton	3 Ton
2	156359P1	Panel ACC Right 2/3T A Cond MM2	ALL		1
4	156356P1	Panel Top 2/3T A Cond MM2	ALL	1	1
5	156366P1	PANEL ACC LFT 2/3T A COND MM2	ALL	1	1
	156366P2	PANEL ACC LFT 2/3T A COND MM2	ALL	1	1
9	1C18352P1	Handle Disconnect Switch Faceplate	All	1	1

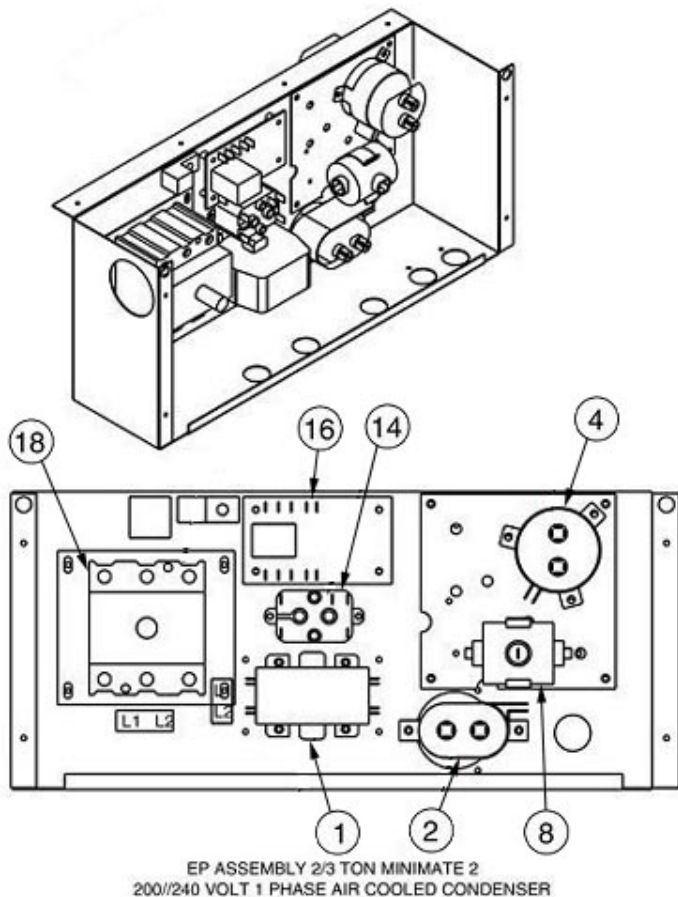
### 7.3. Condenser Section – W/G



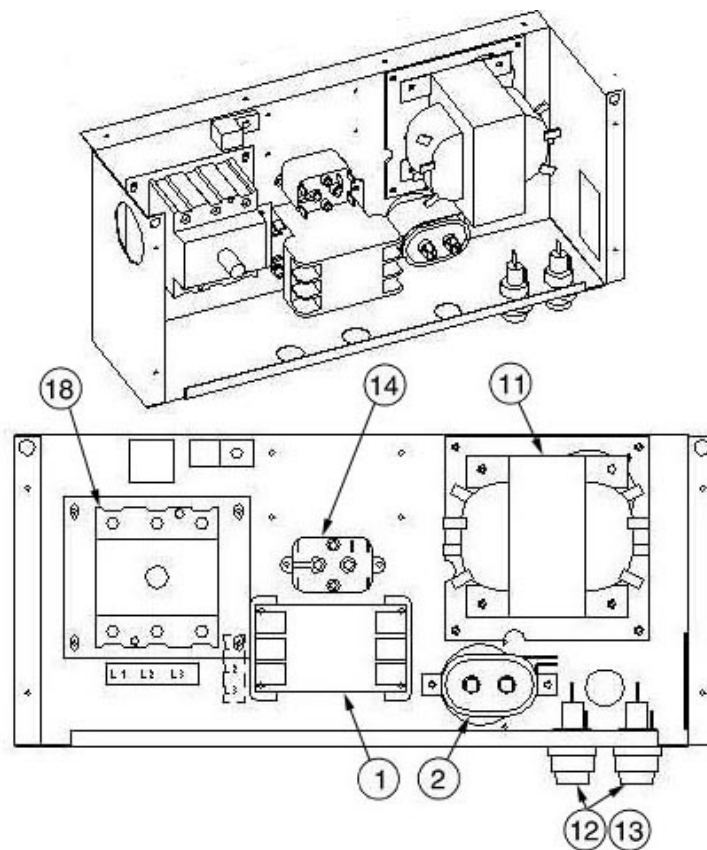
Item	Part #	Description	Volts	2 Ton	3 Ton
1	156554P1	Panel Top Rear WG Cond 2/3T MM2	ALL	1	1
2	156556P1	Panel Left Frt WG Cond 2/3T MM2	ALL	1	1
	156556P2	Panel Left Frt WG Cond 2/3T MM2 No Disc	ALL	1	1
3	156557P1	Panel Right Frt WG Cond 2/3T	ALL	1	1
7	1C18352P1	Handle Disconnect Switch Faceplate	All	1	1

## 8. Electrical Section

### 8.1. EP Air Cooled 1 Phase

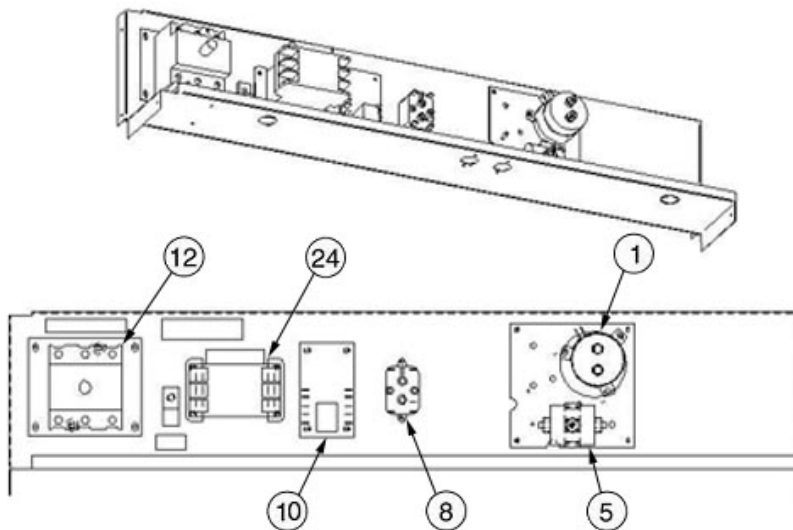


Item	Part #	Description	Volts	2 Ton	3 Ton
1	E-011B	CONTACTOR 2PL 24V COIL 25/35AMP	208/230-1-60	1	1
			220/240-1-50	1	1
			277-1-60	1	1
2	B03-0030	CAP RUN 10MF 370VAC	208/230-1-60	1	
			220/240-1-50	1	
	B03-002A	CAP RUN 15MF 370VAC	277-1-60	1	1
4	1A19536P1	CAP RUN 20MF 370VAC	208/230-1-60		1
			220/240-1-50		1
			C15-0090	CAP RUN 35MF 440VAC	208/230-1-60
			277-1-60	1	
8	1C19540P1	RES PTC 12.5 OHM 20%	208/230-1-60	1	1
			220/240-1-50	1	1
			277-1-60	1	1
14	E03-0170	Relay 1P2T 24V 50/60HZ	208/230-1-60	1	1
			220/240-1-60	1	1
			277-1-60	1	1
16	139101P1	RELAY 2P2T 24VAC 30S/60M ON/OFF	ALL	1	1
		<i>Note: The Time Delay Relay was removed from the Electrical Panels May 2001.</i>			
18	1C18351P2	Switch Disconnect 600V 3PL 60A	All	1	1

**8.2. EP Air Cooled 3 Phase**


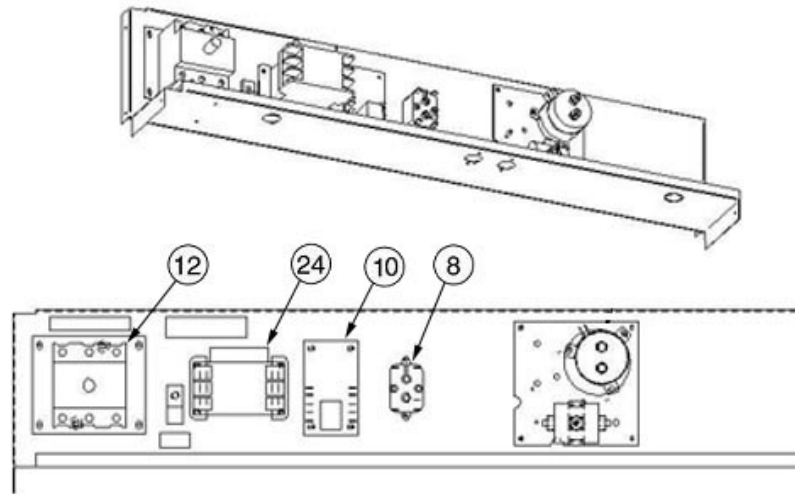
Item	Part #	Description	Volts	2 Ton	3/3.5 Ton
1	E-0110	CONTACTOR 3PL 24V COIL 25/30AMP	208/230-3-60 380/415-3-50 460-3-60	1	1
2	B03-002A	CAP RUN 15MF 370VAC	380/415-3-50 460-3-60	1	1
	1A19536P1	CAP RUN 20MF 370VAC	208/230-3-60		1
11	127937P1	XFMR 150VA 460/230	460-3-60		1
	127937P3	XFMR 150VA 380/440/600-230 50/60	380/415-3-50	1	1
12	4A10033P1	FUSE HLDR PNL-MNT SCRWCAP REJN	380/415-3-50 460-3-60	2	2
13	127977P1	FUSE FNQ-R-3/4	380/415-3-50 460-3-60	2 2	2 2
14	E03-0170	RELAY 1P2T 24V 50/60HZ	208/230-3-60		1
	127661P1	RELAY SPDT 24V 50/60HZ	380/415-3-50 460-3-60	1	1 1
18	1C18351P2	Switch Disconnect 600V 3PL 60A	All	1	1

### 8.3. EP Water/Glycol 1 Phase



Item	Part #	Description	Volts	2 Ton	3/3.5 Ton
1	C15-0090	CAP RUN 35MF 440VAC	208/230-3-60 277-1-60	1 1	
	1A19538P1	CAP RUN 40MF 370VAC	208/230-1-60 220/240-1-50	1	1
	E17-0250	CAP MTLFLM 55MF 480VAC	220/240-1-50 277-1-60		1 1
5	1C19540P1	RES PTC 12.5 OHM 20%	208/230-1-60 220/240-1-50 277-1-60	1 1 1	1 1 1
8	E03-0170	Relay 1P2T 24V 50/60HZ	All	1	1
10	139101P1	RELAY 2P2T 24VAC 30S/60M ON/OFF	ALL	1	1
		Note: The Time Delay Relay was removed from the Electrical Panels May 2001.			
12	1C18351P2	Switch Disconnect 600V 3PL 60A	All	1	1
24	123273P1	CONTACTOR 3PL 25/30 NO/NC AUX	ALL	1	1

### 8.4. EP Water/Glycol 3 Phase



Item	Part #	Description	Volts	2 Ton	3 Ton
8	E03-0170	RELAY 1P2T 24V 50/60HZ	208/230-3-60		1
	127661P1	RELAY SPDT 24V 50/60HZ	380/415-3-50 460-3-60	1	1
10	139101P1	RELAY 2P2T 24VAC 30S/60M ON/OFF	ALL	1	1
		Note: The Time Delay Relay was removed from the Electrical Panels May 2001.			
12	1C18351P2	Switch Disconnect 600V 3PL 60A	All	1	1
24	123273P1	CONTACTOR 3PL 25/30 NO/NC AUX	ALL	1	1



## 9. Parts Gallery

127843P1	1C19515P1	1C19518P1	1D19533P1
1C21138P1	127935P2	148372P1	148250P2
P-0180	127935P1	159145P1	1A17649P1
148213P3	1C21230P3   1B21231P2	156400P1	1C19530P1
156301P1	1C21138P1	127972P1	127935P5
1C21138P1	167770P1	1C21207P5	168198P1
E-011B	B03-0030	1A19538P1	1C19540P1

			
E03-0170	1C18351P2	E-0110	B03-002A
			
127937P1 127937P3	4A10033P1	127977P1	E03-0170 127661P1
			
139101P1	123273P1	1C18352P1	156166P1
			
156171P1	156165P1	156167P1	156170P1
			
156169P1	156168P1	156356P1	156366P1
			
156556P1	156554P1	156557P1	

## 10. Revision Page

Revision Date	Modification	Details
11/05/2010	Model Definition	Changed model definition information.
02/2009	Manual conversion	