
Liebert MM2 (5&8T): R407C

Parts Manual



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Precision Cooling
For Business-Critical Continuity

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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

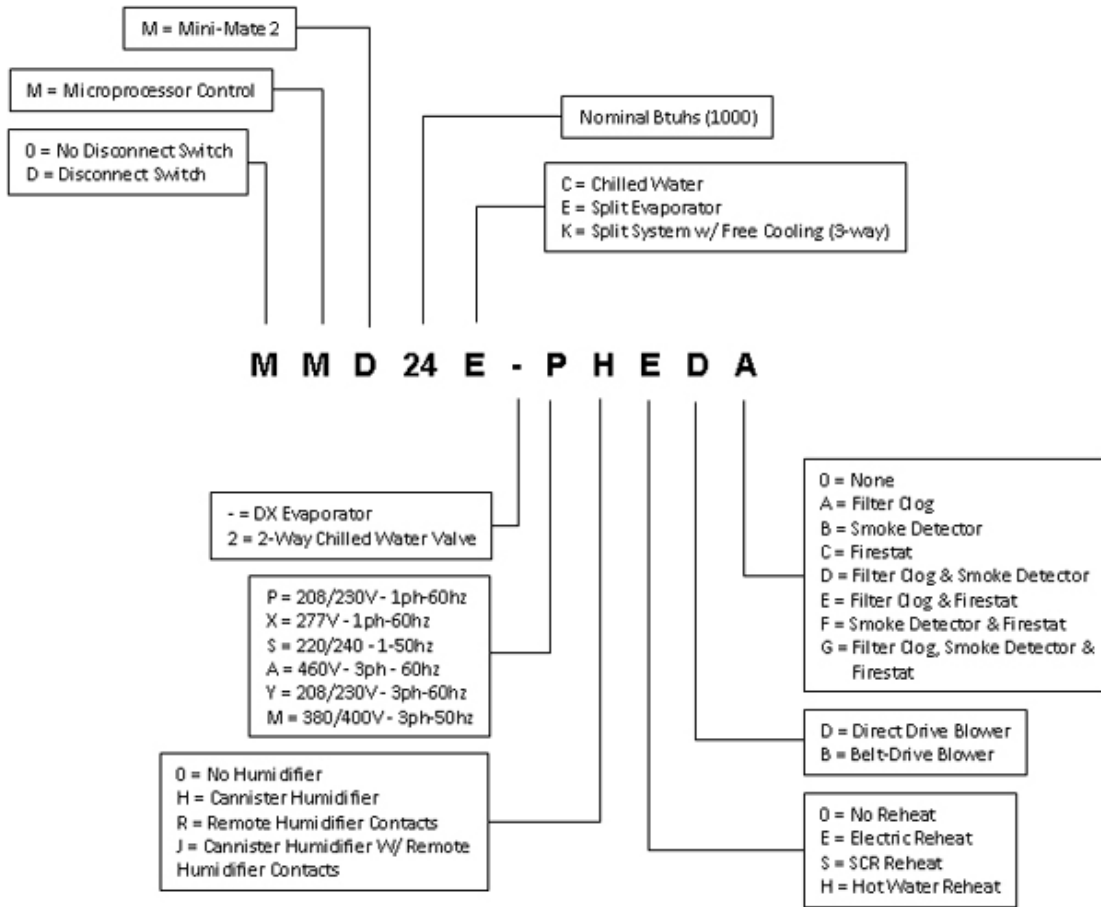
Hot Gas Bypass includes bypass valve, solenoid valve, and necessary piping for manual capacity modulation.

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

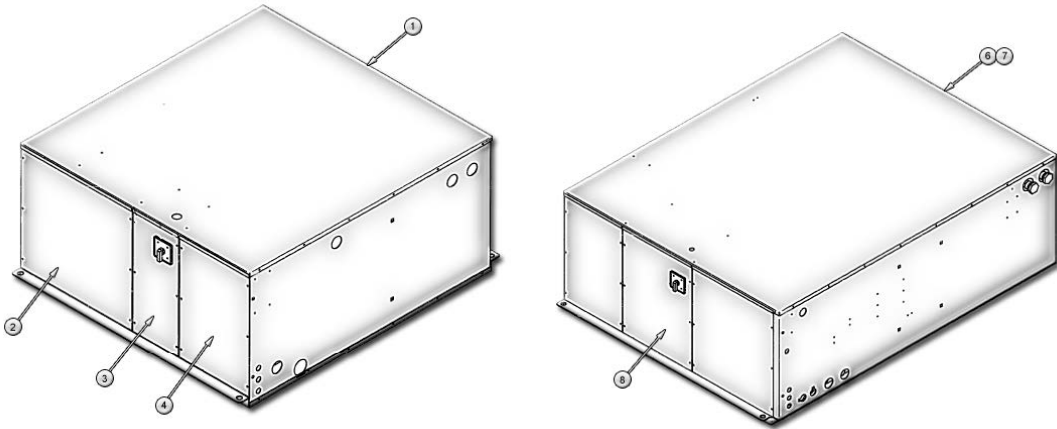
Ship Loose Accessories

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.

2. Model Number Definition



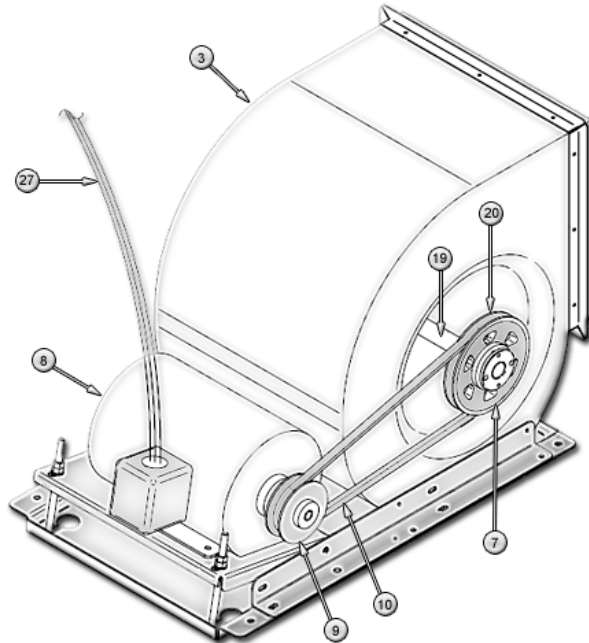
3. Access Panels



Item	Part Number	Description	Voltage	5T	8T
1	164060P1	PANEL FRONT LEFT 5T MM2	230/60/3	1	
2	164034P1	PANEL TOP 5T MM2	208/60/3	1	
3	164062P1	PANEL FRONT RIGHT 5T MM2	208/60/3	1	
4	164434P1	PANEL TOP 5T A COND MM2	380/415/50/3	1	
6	164534P1	PANEL TOP 8T MM2	575/60/3		1
7	164560P1	PNL ACCESS FRONT LEFT 8T MM2	208/60/3		1
8	164562P1	PNL ACCESS FRT RIGHT 8T MM2	208/60/3		1

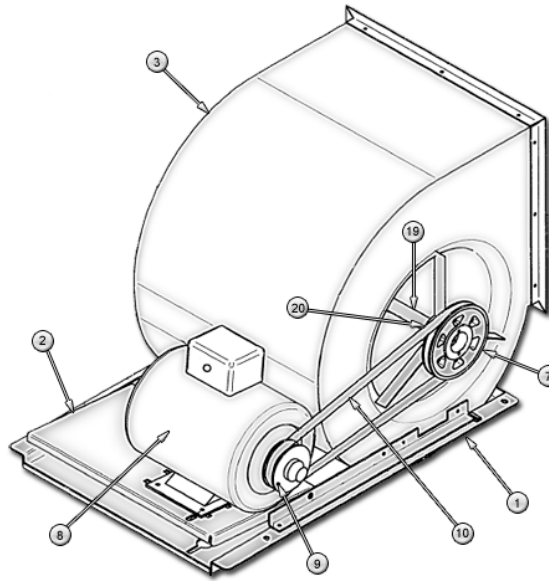
4. Blower/Motor Section

4.1. 5-Ton



Item	Part Number	Description	Voltage	Quantity
3	B-0620	BLOWER W/H A12-11A	-	1
7	B13-0150	PULLEY AK61H	-	1
8	B-022A	MOTOR 2.0HP 208/230/460-3-60	208/230-3-60	1
	B-0920	MOTOR 2.0HP 200/380/400-3-50	460-3-60 MMC	1
	B-023A	MOTOR 2.0HP 575-3-60	380/415-3-50	1
9	B-005A	SHEAVE 1VP50X7/8	575-3-60	1
	B13-0120	SHEAVE 1VP44X7/8	380/415-3-50	1
			208/230-3-60	1
10	149724P1	BELT A-43	460-3-60 MMC	1
			575-3-60	1
			208/230-3-60	1
			380/415-3-50	1
19	B-1150	SHAFT 19.25 X 1.00 C-1018	460-3-60 MMC	1
			575-3-60	1
			208/230-3-60	1
			380/415-3-50	1
20	185861P1	BEARING ASSEMBLY 2-015 SERIES	460-3-60 MMC	2
			575-3-60	2
			208/230-3-60	2
			380/415-3-50	2
	B-0040	BEARING	460-3-60 MMC	2
			575-3-60	2
27	163132G1	WH BLOWER MMC 5T	380/415-3-50	1
			208/230-3-60	1
	163132G2	WH BLOWER MMC 5T	460-3-60 MMC	1
			575-3-60	1

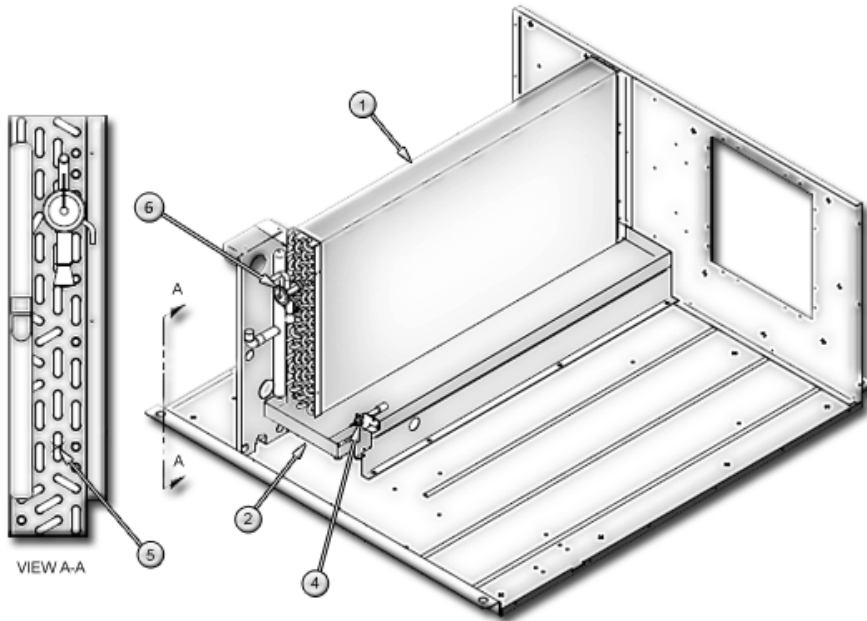
4.2. 8-Ton



Item	Part Number	Description	Voltage	Quantity
1	164955P1	BLOWER SLED 8TMM2 COND	208/230-3-60	1
			380/415-3-50	1
			460-3-60 MMC	1
			575-3-60	1
2	164956P1	BASE MOTOR MNTG 8T MM2 COND	208/230-3-60	1
			380/415-3-50	1
			460-3-60 MMC	1
			575-3-60	1
3	1C11154P1	BLOWER W/H A15-15AX1.00 1SS	208/230-3-60	1
			380/415-3-50	1
			460-3-60 MMC	1
			575-3-60	1
7	B02-0050	PULLEY 2BK90H	380/415-3-50	1
	B-0530	PULLEY 2BK100H	208/230-3-60	1
			460-3-60 MMC	1
			575-3-60	1
8	B-025A	MOTOR 3.0HP 208/230/460-3-60	208/230-3-60	1
	B-026A	MOTOR 3.0HP 575-3-60	460-3-60	1
	B-0930	MOTOR 3HP190/416-3-50 380-3-60	2575-3-60	1
9	B-069B	SHEAVE 2VP60X1-1/8	208/230-3-60	1
			380/415-3-50	1
			460-3-60 MMC	1
			575-3-60	1
10	B-0720	BELT B-55	208/230-3-60	1
			380/415-3-50	1
	149725P1	BELT B-56	460-3-60	1
			575-3-60	1
19	1C11153P1	SHAFT FAN 1.0DIA X 24.12	208/230-3-60	1
			380/415-3-50	1
			460-3-60 MMC	1
			575-3-60	1
20	185861P1	BEARING ASSEMBLY 2-015 SERIES	208/230-3-60	2
			380/415-3-50	2
			460-3-60 MMC	2
			575-3-60	2
	B-0040	BEARING	208/230-3-60	2
			380/415-3-50	2
			460-3-60 MMC	2
			575-3-60	2

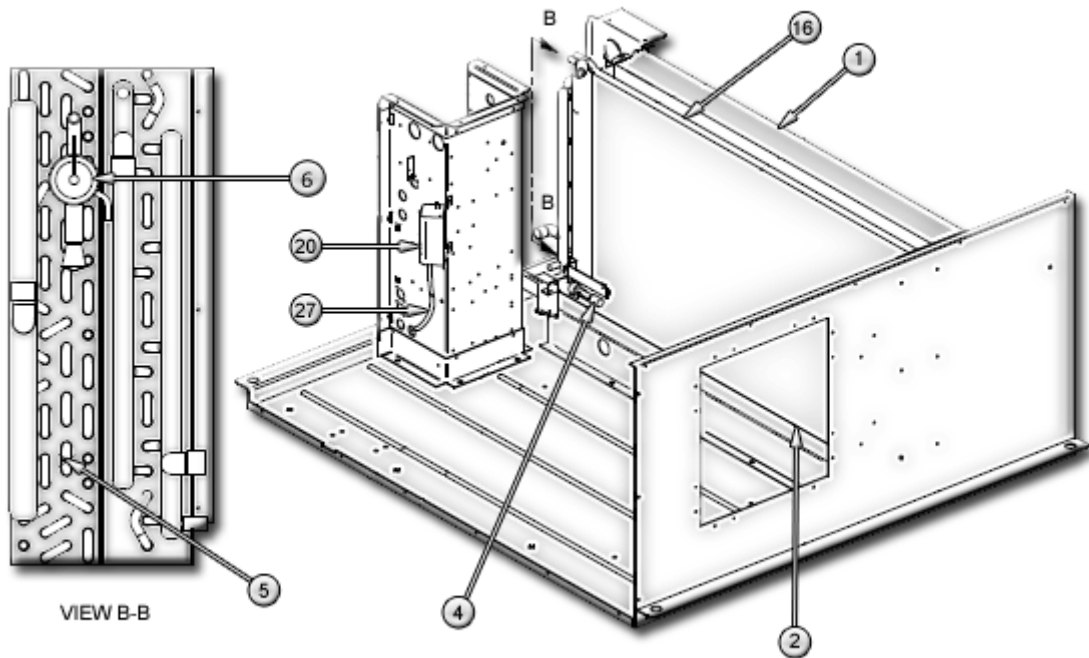
5. Coil Section

5.1. 5-Ton STD DX



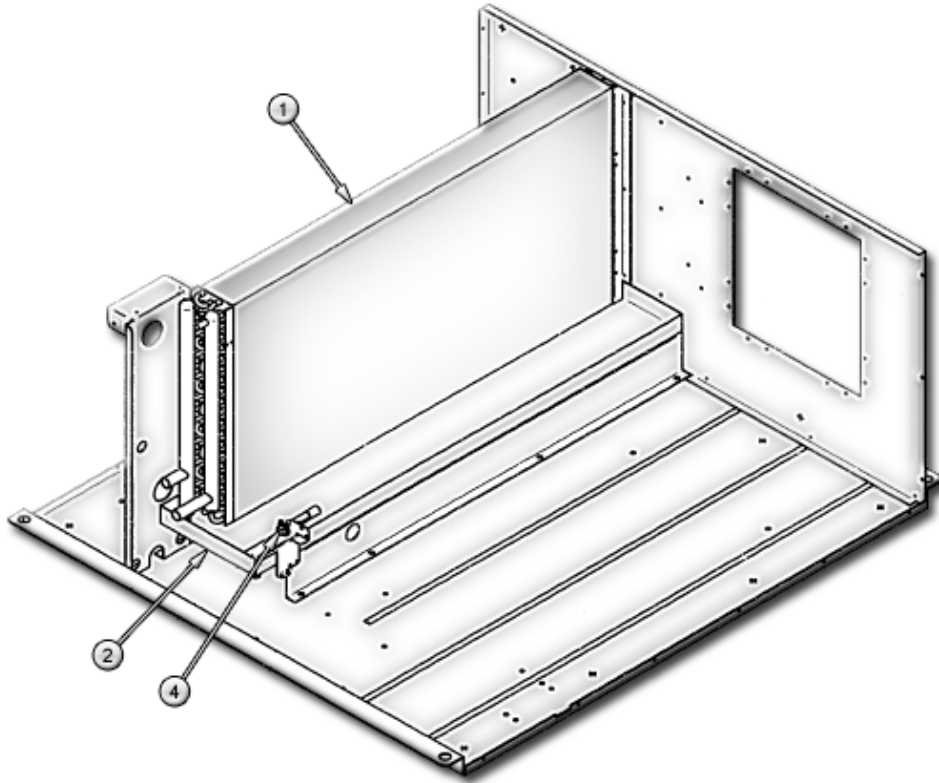
Item	Part Number	Description	Voltage	Quantity
1	164160G1	COIL EVAPORATOR 5T MM2	380/415/50/3	1
2	164047G1	DRAINPAN COIL 5T MM2	380/415/50/3	1
4	1A18660P1	SW LEVEL LIQUID GEMS LS-7	380/415/50/3	1
5	1A19716P1	FREEZSTAT W/BRKT OPN31FCLS48F	380/415/50/3	1
6	176250G1	TXV+DISTRIBUTOR ASSY 5T MM2	380/415/50/3	1
	176250G2	TXV+DISTRIBUTOR ASSY 8T MM2(5T)	380/415/50/3	1
	176250G3	TXV+DISTRIBUTOR ASSY 8T MM2(3T)	380/415/50/3	1
	176250G8	TXV+DISTRIBUTOR ASSY 8T MM2-5T	380/415/50/3	1
	176250G9	TXV+DISTRIBUTOR ASSY 8T MM2-3T	380/415/50/3	1

5.2. 5-Ton STD DX HWRHT/Freecool



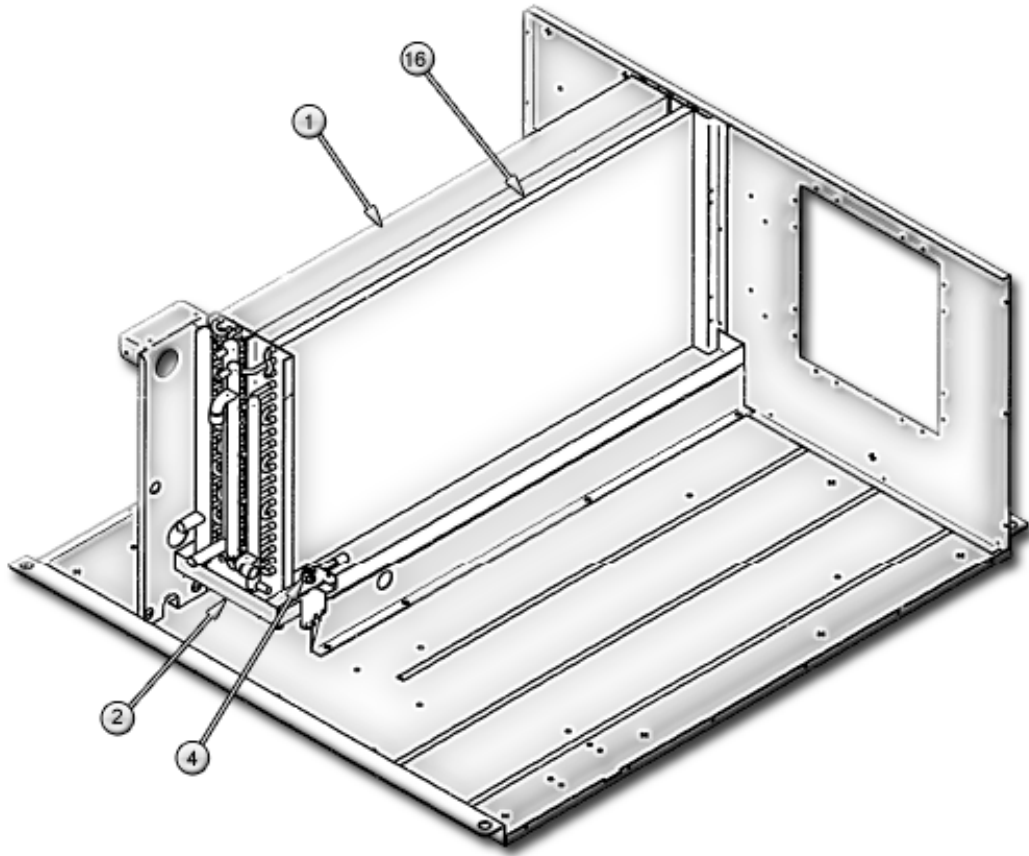
Item	Part Number	Description	Voltage	Quantity
1	164160G1	COIL EVAPORATOR 5T MM2	380/415/50/3	1
2	164047G1	DRAINPAN COIL 5T MM2	380/415/50/3	1
4	1A18660P1	SW LEVEL LIQUID GEMS LS-7	380/415/50/3	1
5	1A19716P1	FREEZSTAT W/BRKT OPN31FCLS48F	380/415/50/3	1
6	176250G1	TXV+DISTRIBUTOR ASSY 5T MM2	380/415/50/3	1
	176250G2	TXV+DISTRIBUTOR ASSY 8T MM2(5T)	380/415/50/3	1
	176250G3	TXV+DISTRIBUTOR ASSY 8T MM2(3T)	380/415/50/3	1
	176250G8	TXV+DISTRIBUTOR ASSY 8T MM2-5T	380/415/50/3	1
	176250G9	TXV+DISTRIBUTOR ASSY 8T MM2-3T	380/415/50/3	1
16	1A19716P1	COIL HOT WATER REHEAT 5T MM2	380/415/50/3	1
	164041G1	COIL CW/FREECOOLING 5T MM2	380/415/50/3	1
20	168166P1	THSTAT SPST 30/50F 2.5FIXDIFF	380/415/50/3	1
27	168167G1	WH LV HW/FC COIL FREEZESTAT	380/415/50/3	1

5.3. 5-Ton Chilled Water



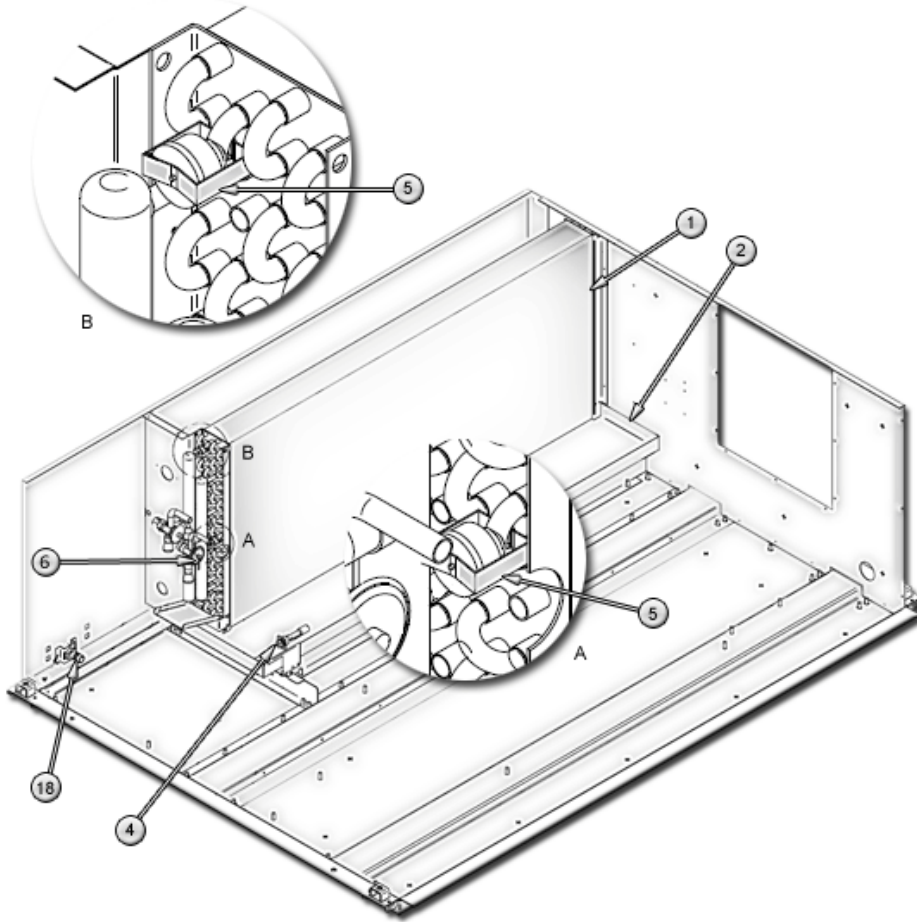
Item	Part Number	Description	Voltage	Quantity
1	164041G1	COIL CW/FREECOOLING 5T MM2	208/60/3	1
2	164047G1	DRAINPAN COIL 5T MM2	575/60/3	1
4	1A18660P1	SW LEVEL LIQUID GEMS LS-7	575/60/3	1

5.4. 5-Ton Chilled Water HWRHT

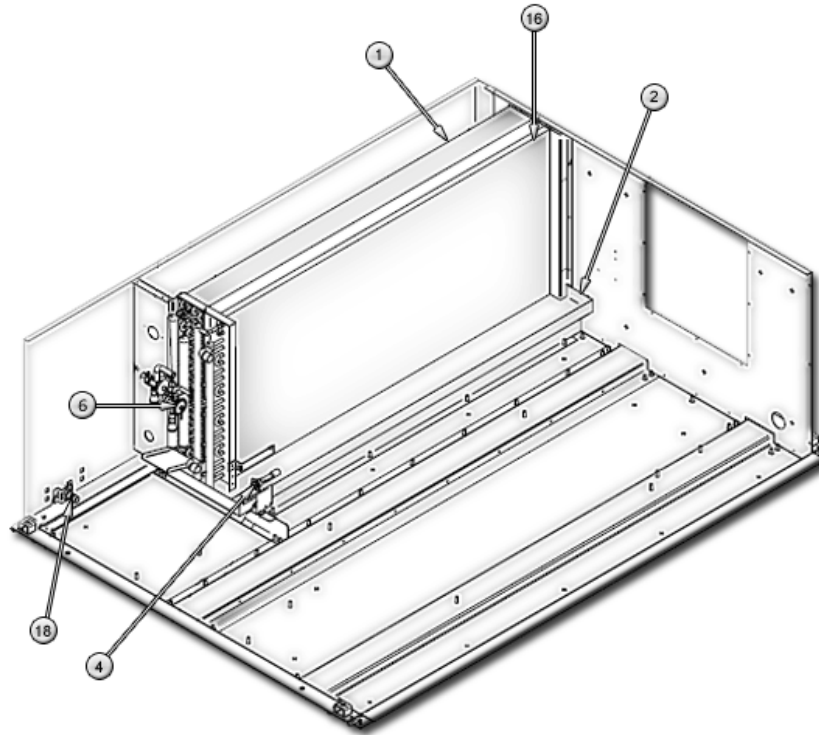


Item	Part Number	Description	Voltage	Quantity
1	164041G1	COIL CW/FREECOOLING 5T MM2	575/60/3	1
2	164047G1	DRAINPAN COIL 5T MM2	230/60/3	1
4	1A18660P1	SW LEVEL LIQUID GEMS LS-7	208/60/3	1
16	164044G1	COIL HOT WATER REHEAT 5T MM2	575/60/3	1

5.5. 8-Ton STD DX

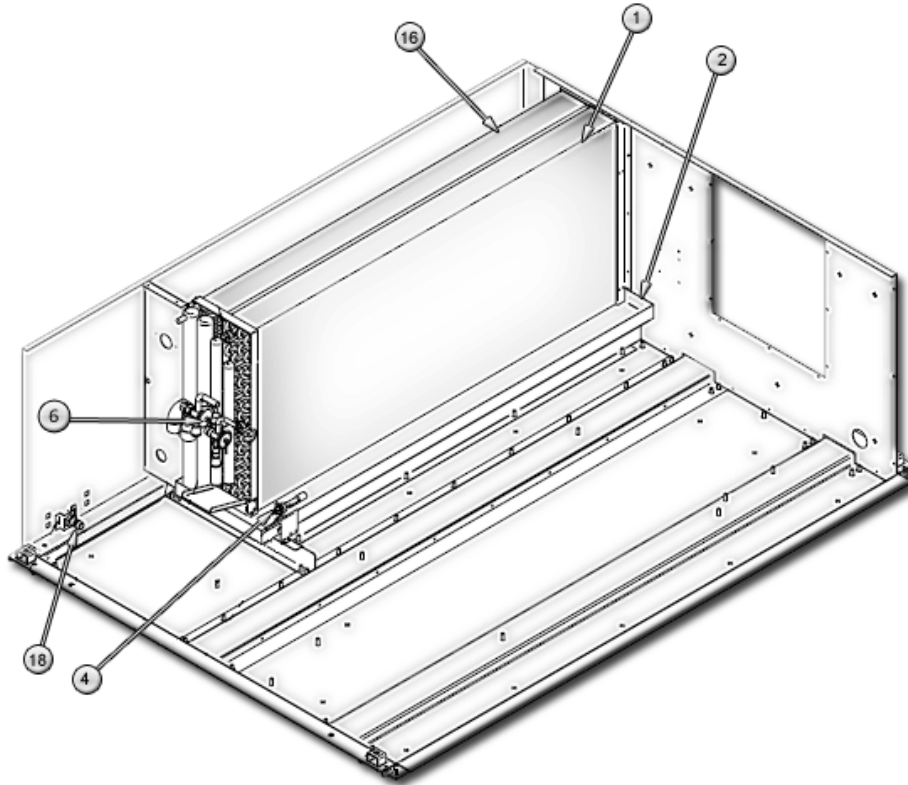


Item	Part Number	Description	Voltage	Quantity
1	164540G1	COIL EVAPORATOR 8T MM2	208/60/3	1
	196812G1	COIL EVAPORATOR 8T MM2 5/7 CKT	208/60/3	1
2	164547G1	PAN DRAIN ASSY 8T MM2	208/60/3	1
4	1A18660P1	SW LEVEL LIQUID GEMS LS-7	575/60/3	1
5	1A19716P1	FREEZSTAT W/BRKT OPN31FCLS48F	208/60/3	2
6	176250G1	TXV+DISTRIBUTOR ASSY 5T MM2	380/415/50/3	1
	176250G2	TXV+DISTRIBUTOR ASSY 8T MM2(5T)	380/415/50/3	1
	176250G3	TXV+DISTRIBUTOR ASSY 8T MM2(3T)	380/415/50/3	1
	176250G8	TXV+DISTRIBUTOR ASSY 8T MM2-5T	380/415/50/3	1
	176250G9	TXV+DISTRIBUTOR ASSY 8T MM2-3T	380/415/50/3	1
18	P02-0260	ADAPTER POLY 3/4FPTX3/4HOSE	460/60/3	1

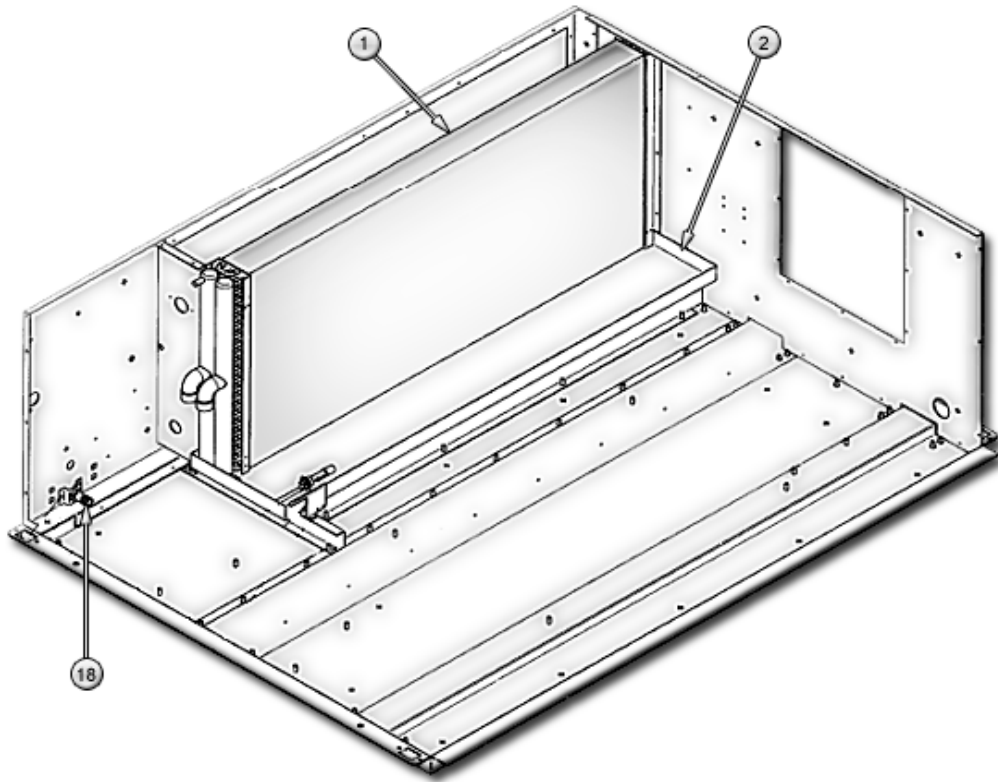
5.6. 8-Ton STD DX HWRH


Item	Part Number	Description	Voltage	Quantity
1	164540G1	COIL EVAPORATOR 8T MM2	575/60/3	1
	196812G1	COIL EVAPORATOR 8T MM2 5/7 CKT	208/60/3	1
2	164547G1	PAN DRAIN ASSY 8T MM2	208/60/3	1
4	1A18660P1	SW LEVEL LIQUID GEMS LS-7	208/60/3	1
6	176250G1	TXV+DISTRIBUTOR ASSY 5T MM2	380/415/50/3	1
	176250G2	TXV+DISTRIBUTOR ASSY 8T MM2(5T)	380/415/50/3	1
	176250G3	TXV+DISTRIBUTOR ASSY 8T MM2(3T)	380/415/50/3	1
	176250G8	TXV+DISTRIBUTOR ASSY 8T MM2-5T	380/415/50/3	1
	176250G9	TXV+DISTRIBUTOR ASSY 8T MM2-3T	380/415/50/3	1
16	164544G1	COIL HWRH 8T MM2	575/60/3	1
18	P02-0260	ADAPTER POLY 3/4FPTX3/4HOSE	575/60/3	1

5.7. 8-Ton STD DX Freecool

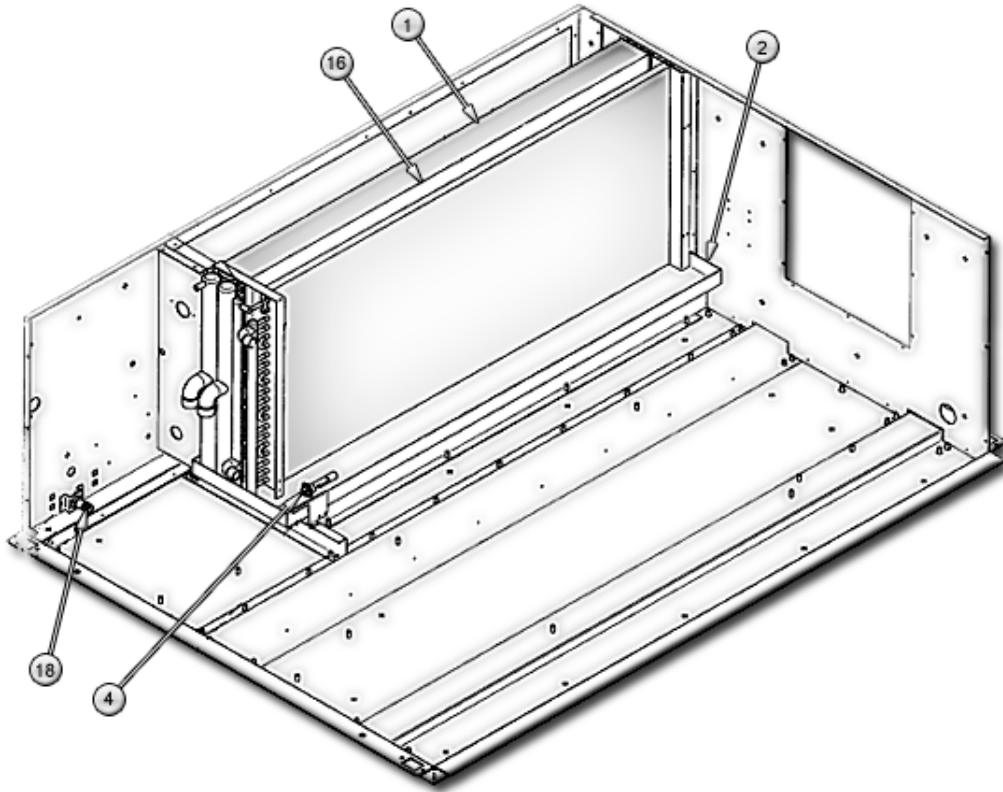


Item	Part Number	Description	Voltage	Quantity
1	164540G1	COIL EVAPORATOR 8T MM2	208/60/3	1
	196812G1	COIL EVAPORATOR 8T MM2 5/7 CKT	575/60/3	1
2	164547G1	PAN DRAIN ASSY 8T MM2	575/60/3	1
4	1A18660P1	SW LEVEL LIQUID GEMS LS-7	575/60/3	1
6	176250G1	TXV+DISTRIBUTOR ASSY 5T MM2	380/415/50/3	1
	176250G2	TXV+DISTRIBUTOR ASSY 8T MM2(5T)	380/415/50/3	1
	176250G3	TXV+DISTRIBUTOR ASSY 8T MM2(3T)	380/415/50/3	1
	176250G8	TXV+DISTRIBUTOR ASSY 8T MM2-5T	380/415/50/3	1
	176250G9	TXV+DISTRIBUTOR ASSY 8T MM2-3T	380/415/50/3	1
16	164541G1	COIL CW/ ECON-O-COIL 8TMM2	575/60/3	1
18	P02-0260	ADAPTER POLY 3/4FPTX3/4HOSE	208/60/3	1

5.8. 8-Ton Chilled Water


Item	Part Number	Description	Voltage	Quantity
1	164541G1	COIL CW/ ECON-O-COIL 8TMM2	380/400/50/3	1
2	164547G1	PAN DRAIN ASSY 8T MM2	380/400/50/3	1
18	P02-0260	ADAPTER POLY 3/4FPTX3/4HOSE	380/400/50/3	1

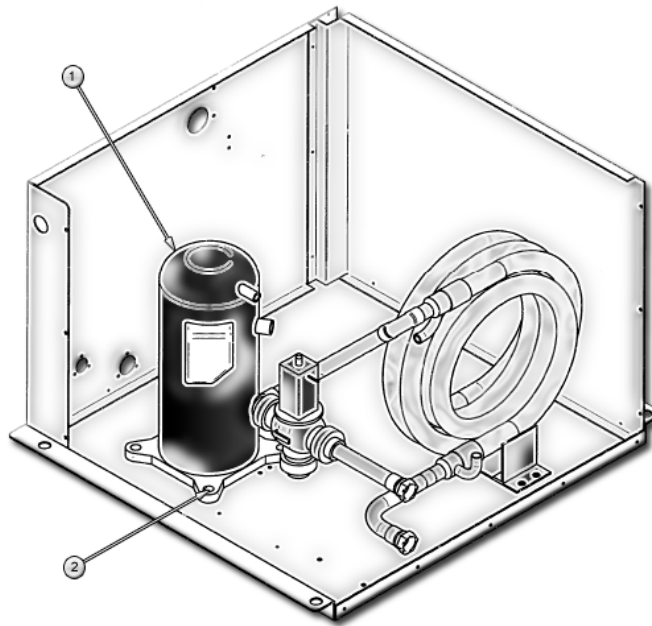
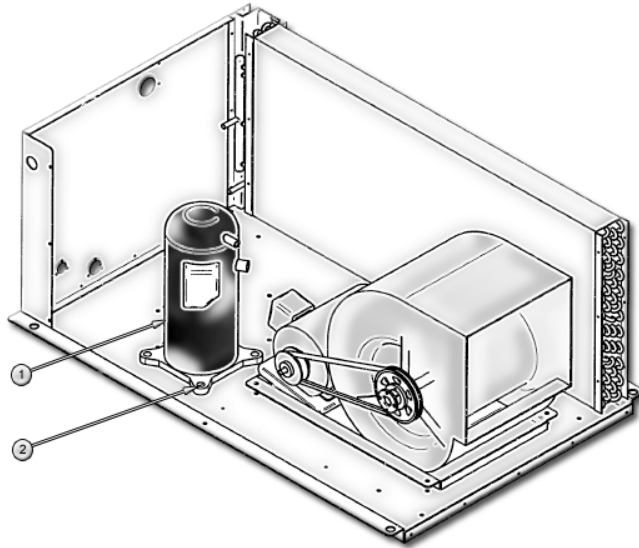
5.9. 8-Ton Chilled Water HWRH



Item	Part Number	Description	Voltage	Quantity
1	164541G1	COIL CW/ ECON-O-COIL 8TMM2	380/400/50/3	1
2	164547G1	PAN DRAIN ASSY 8T MM2	380/400/50/3	1
4	1A18660P1	SW LEVEL LIQUID GEMS LS-7	380/400/50/3	1
16	164544G1	COIL HWRH 8T MM2	575/60/3	1
18	P02-0260	ADAPTER POLY 3/4FPTX3/4HOSE	380/400/50/3	1

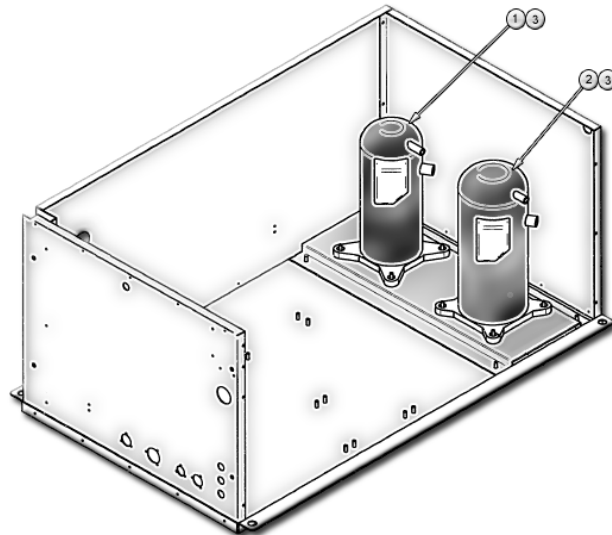
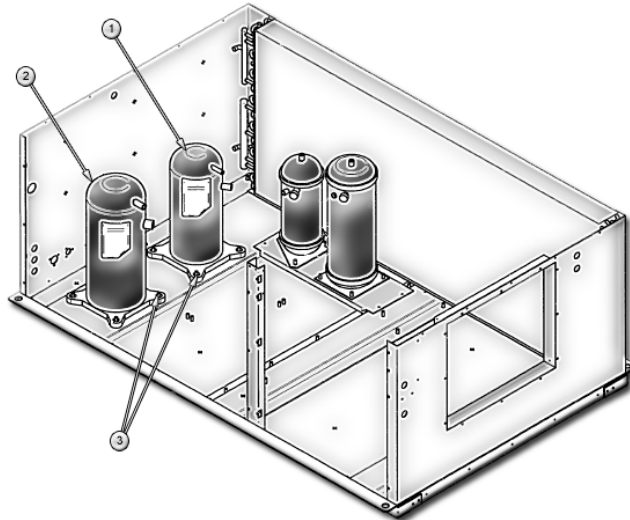
6. Compressor Section

6.1. 5-Ton Air Cooled and Water/Glycol



Item	Part Number	Description	Voltage	Quantity
1	132101P2	COMP SCRL ZR61KC-TF5 W/O ROTA	208/230-3-60	1
	132101P3	COMP SCRL ZR61KC-TFD W/O ROTA	460-3-60	1
	132101P4	COMP SCRL ZR61KC-TFE W/O ROTA	575-3-60	1
	138400P2	COMP SCRL ZR72KC-TFD W/O ROTA	380/415-3-50	1
	166317P3	COMP SCRL ZR61KCE-TFD W/O ROTO	460-3-60	1
	169237P3	COMP SCRL ZR61KCE 575V-3 SWEAT	575-3-60	1
	169317P2	COMP SCRL ZR72KCE-TFD W/O ROTA	380/415-3-50	1
	176774P2	COMP SCRL ZR61KCE-TF5 W/O ROTO	208/230-3-60	1
2	1A17649P1	KIT COMP MTG SPRING	208/230-3-60	1
			380/415-3-50	1
			460-3-60	1
			575-3-60	1

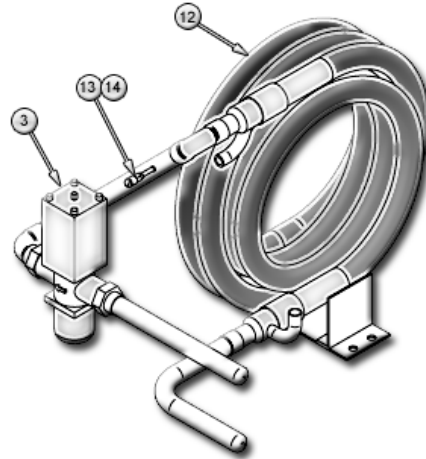
6.2. 8-Ton Air Cooled and Water/Glycol



Item	Part Number	Description	Voltage	Quantity
1	138430P2	COMP SCRL ZR40K3-TFD W/O ROTA	380/415-3-60	1
	148325P1	COMP SCRL ZR34K3-TF5 W/O ROTO	208/230-3-60	1
	148325P2	COMP SCRL ZR34K3-TFD W/O ROTO	460-3-60	1
	148325P3	COMP SCRL ZR34K3-TFE W/O ROTO	575-3-60	1
	168919P2	COMP SCRL ZR40K3E-TFD W/O ROTA	380/415-3-60	1
	169388P1	COMP SCRL ZR34K3E-TF5 W/O ROTO	208/230-3-60	1
	169388P2	COMP SCRL ZR34K3E-TFD W/O ROTO	460-3-60	1
	169388P3	COMP SCRL ZR34K3E-TFE W/O ROTO	169388P3	1
2	132101P2	COMP SCRL ZR61KC-TF5 W/O ROTA	208/230-3-60	1
	132101P3	COMP SCRL ZR61KC-TFD W/O ROTA	460-3-60	1
	132101P4	COMP SCRL ZR61KC-TFE W/O ROTA	575-3-60	1
	138400P2	COMP SCRL ZR72KC-TFD W/O ROTA	380/415-3-50	1
	166317P3	COMP SCRL ZR61KCE-TFD W/O ROTO	460-3-60	1
	169237P3	COMP SCRL ZR61KCE 575V-3 SWEAT	575-3-60	1
	169317P2	COMP SCRL ZR72KCE-TFD W/O ROTA	380/415-3-50	1
	176774P2	COMP SCRL ZR61KCE-TF5 W/O ROTO	208/230-3-60	1
3	1A17649P1	KIT COMP MTG SPRING	208/230-3-60	2
			380/415-3-50	2
			460-3-60	2
			575-3-60	2

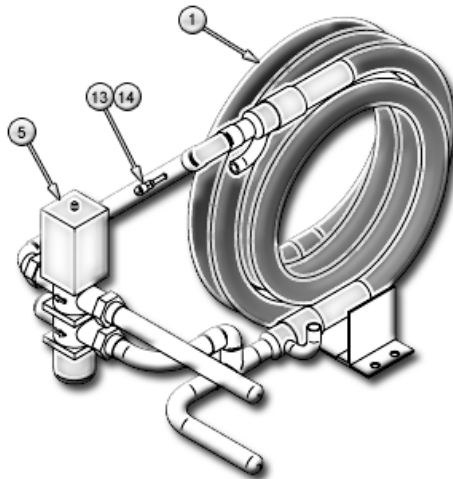
7. Condenser Section

7.1. 5-Ton, 2-Way



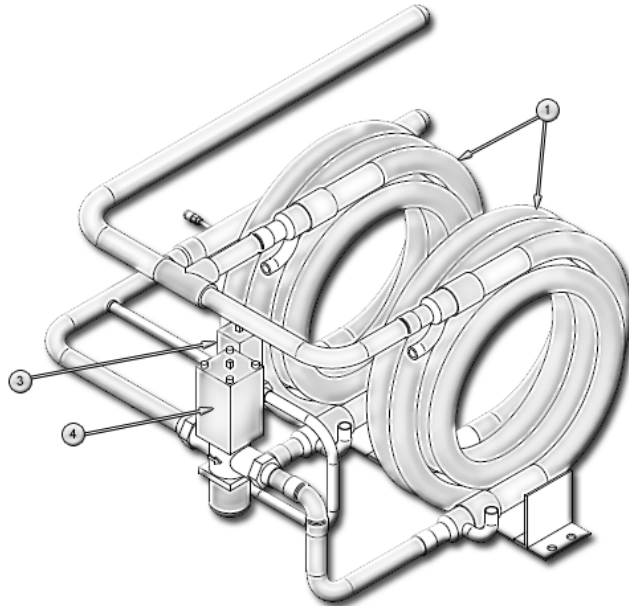
Item	Part Number	Description	Voltage	Quantity
3	131852P1	VALVE H2O REG 2WAY 1" UB	575/60/3 (SP)	1
	171819P4	VALVE H2O REG 2WAY 1" 350#	460/60/3 (HP)	1
12	128159P1	CONDENSER COAXIAL	All	1
13	187933G2	VALVE ACC BODY 1/4 EXT1" BEAD	All	1
14	P02-0290	VALVE CORE REFRIGERANT	All	1

7.2. 5-Ton, 3-Way



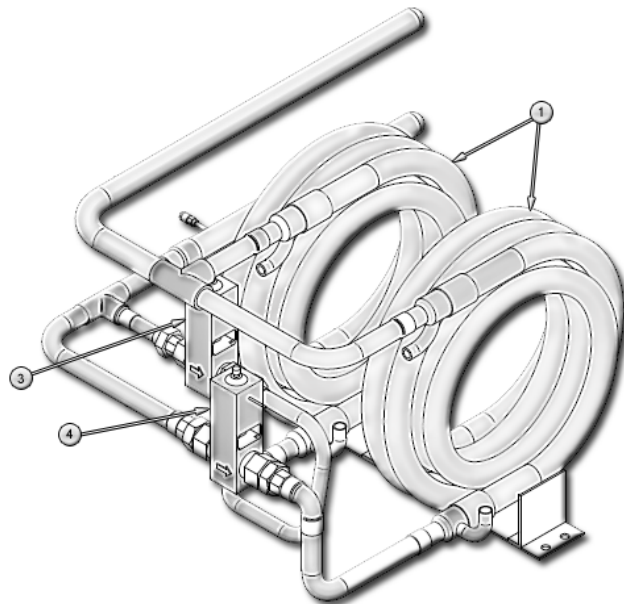
Item	Part Number	Description	Voltage	Quantity
1	128159P1	CONDENSER COAXIAL	All	1
5	131853P1	VALVE H2O REG 3WAY 1" UB	208/230/60/3	1
	171818P4	VALVE H2O REG 3WAY 1" 350#	208/230/60/3	1
13	187933G2	VALVE ACC BODY 1/4 EXT1" BEAD	All	1
14	P02-0290	VALVE CORE REFRIGERANT	All	1

7.3. 8-Ton, 2-Way Standard Pressure



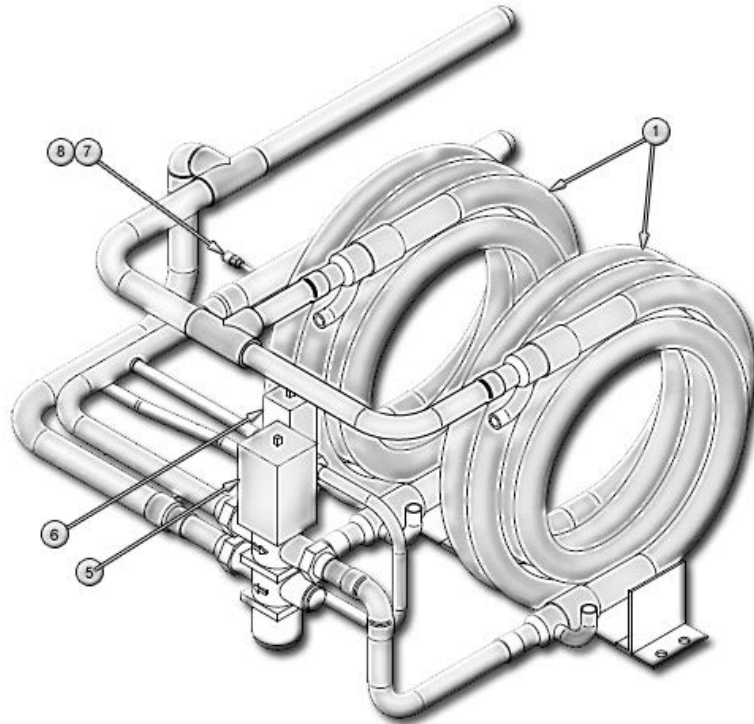
Item	Part Number	Description	Voltage	Quantity
1	128159P1	CONDENSER COAXIAL	All	1
3	156400P1	VALVE H2O REG 2WAY 1/2" UB	All	2
4	131852P1	VALVE H2O REG 2WAY 1" UB	575/60/3 (SP)	1
	171819P4	VALVE H2O REG 2WAY 1" 350#	460/60/3 (HP)	1

7.4. 8-Ton, 2-Way High Pressure



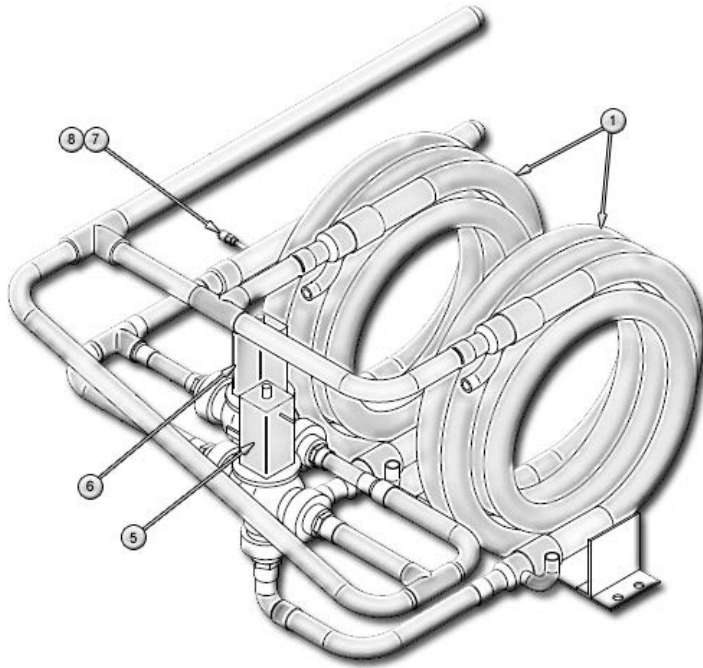
Item	Part Number	Description	Voltage	Quantity
1	128159P1	CONDENSER COAXIAL	All	1
3	P-026A	VALVE H2O REG 2WAY 3/4" 350#	All	1
4	P-311A	VALVE H2O REG 2WAY 1" 300#	All	1

7.5. 8-Ton, 3-Way Standard Pressure



Item	Part Number	Description	Voltage	Quantity
1	128159P1	CONDENSER COAXIAL	All	2
5	131853P1	VALVE H2O REG 3WAY 1" UB	208/230/60/3	1
	171818P4	VALVE H2O REG 3WAY 1" 350#	208/230/60/3	1
6	156401P1	VALVE H2O REG 3WAY 1/2" UB	All	1
7	187933G2	VALVE ACC BODY 1/4 EXT1" BEAD	All	1
8	P02-0290	VALVE CORE REFRIGERANT	All	1

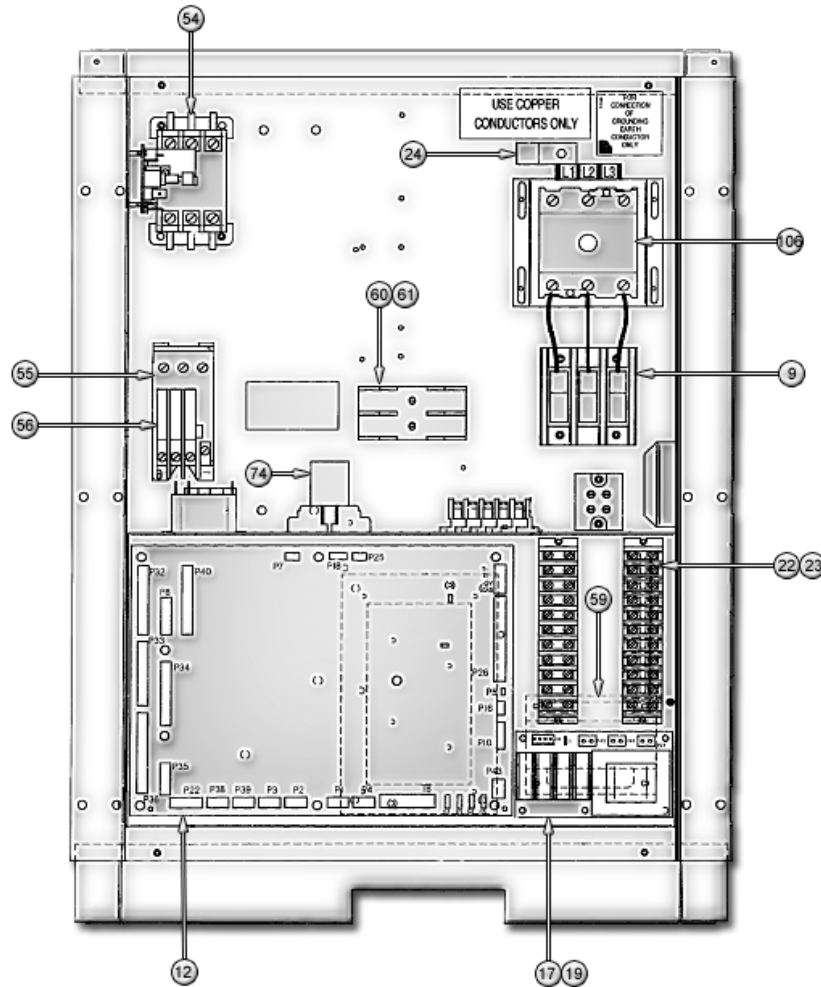
7.6. 8-Ton, 3-Way High Pressure



Item	Part Number	Description	Voltage	Quantity
1	128159P1	CONDENSER COAXIAL	All	2
5	P-4760	VALVE H2O REG 3WAY 3/4" 300#	208/230/60/3	1
6	P-311B	VALVE H2O REG 3WAY 1" 300#	208/230/60/3	1
7	187933G2	VALVE ACC BODY 1/4 EXT1" BEAD	All	1
8	P02-0290	VALVE CORE REFRIGERANT	All	1

8. Electrical Section

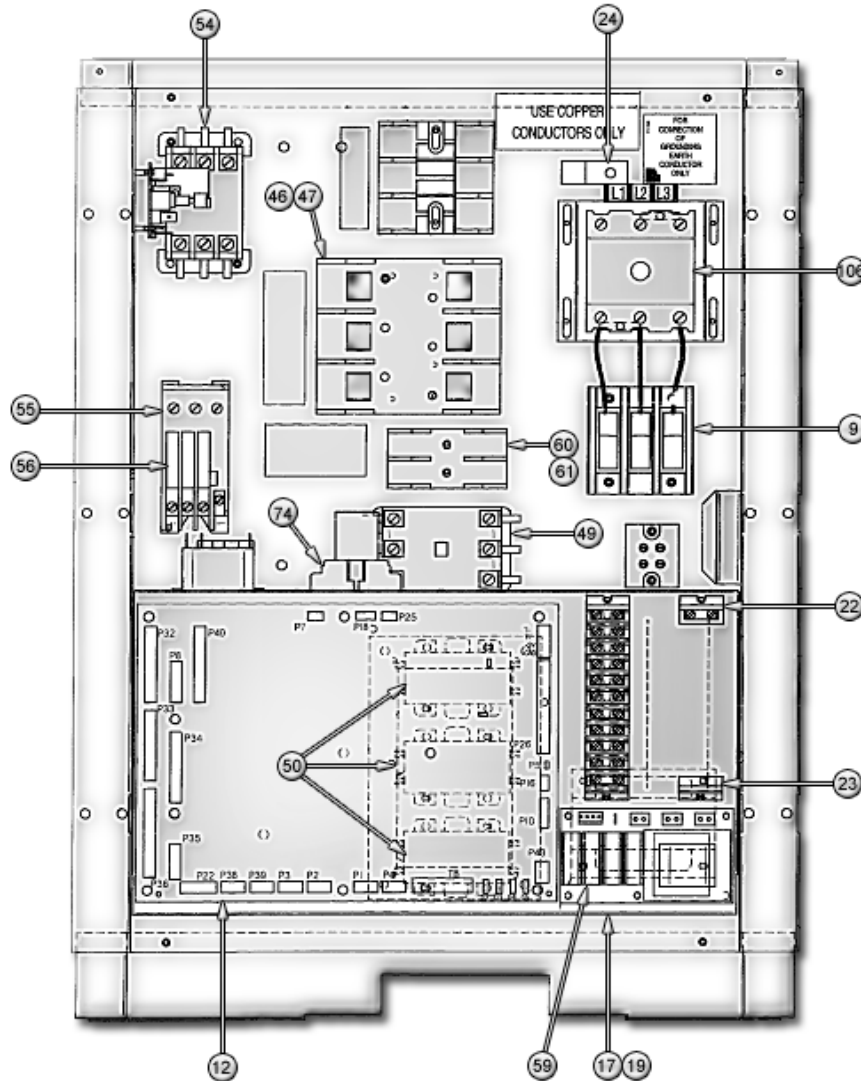
8.1. Standard Electrical Panel



Item	Part Number	Description	Voltage	Quantity
9	E13-0040	TERMBLK 3PL 1)2/0:14 X 4)4:14	208/60/3	1
			380/400/50/3	1
			460/60/3	1
			575/60/3	1
12	415761G1	PWA UNIVERSAL CONTROL MM2 8T	208/60/3	1
			230/60/3	1
			380/400/50/3	1
			460/60/3	1
17	4C14651G1	PWA ISO XFMR/FUSE INTF	575/60/3	1
			208/60/3	1
			230/60/3	1
			380/400/50/3	1
19	135409P2	FUSE GLASS 250V 4AMP .25X1.25	460/60/3	1
			575/60/3	1
			208/60/3	4
			230/60/3	4
			380/400/50/3	4
			460/60/3	4
			575/60/3	4

Item	Part Number	Description	Voltage	Quantity
22	132487P1	TERMLSTRIP SECTION 1 POS	208/60/3	26
			230/60/3	26
			380/400/50/3	26
			460/60/3	26
			575/60/3	26
	E-0380	TERMBLK SECTION 1POS	460/60/3	26
23	132487P2	TERMLSTRIP SECTION END BARRIER	208/60/3	3
			380/400/50/3	3
			460/60/3	3
			575/60/3	3
	E-0390	TERMBLK SECTION END BARRIER	460/60/3	3
24	E-362B	TERM LUG MECH #14-2/0 1/4"	208/60/3	1
			380/400/50/3	1
			460/60/3	1
			575/60/3	1
54	124501P1	CONTACTOR 3PL 24VCOIL 15/20AMP	208/60/3	1
			230/60/3	1
			380/400/50/3	1
			460/60/3	1
	E-0110	CONTACTOR 3PL 24VCOIL 25/30AMP	575/60/3	1
			208/60/3	1
			230/60/3	1
			380/400/50/3	1
55	124547P1	OVERLOAD RELAY W/B MNT 32A C-H	380/400/50/3	1
56	125768P8	HEATER CLASS 20 3.23-5.23A C-H	380/400/50/3	3
59	136201P1	XFMR 200VA 200-240/2450	208/60/3	1
			380/400/50/3	1
			460/60/3	1
			575/60/3	1
	136201P2	XFMR 200VA 380-415/2450	380/400/50/3	1
60	1C13244P1	FUSEBLOCK 600V 2P 030A	208/60/3	1
			230/60/3	1
			380/400/50/3	1
			460/60/3	1
			575/60/3	1
61	127977P1	FUSE FNO-R-3/4	208/60/3	2
			380/400/50/3	2
			460/60/3	2
			575/60/3	2
		127977P5	FUSE FNO-R-1.5	208/60/3
			230/60/3	2
106	1C18351P2	SW DISC 600V 3PL 60A	208/60/3	1
			380/400/50/3	1
			460/60/3	1
			575/60/3	1

8.2. Electrical Panel with Reheat

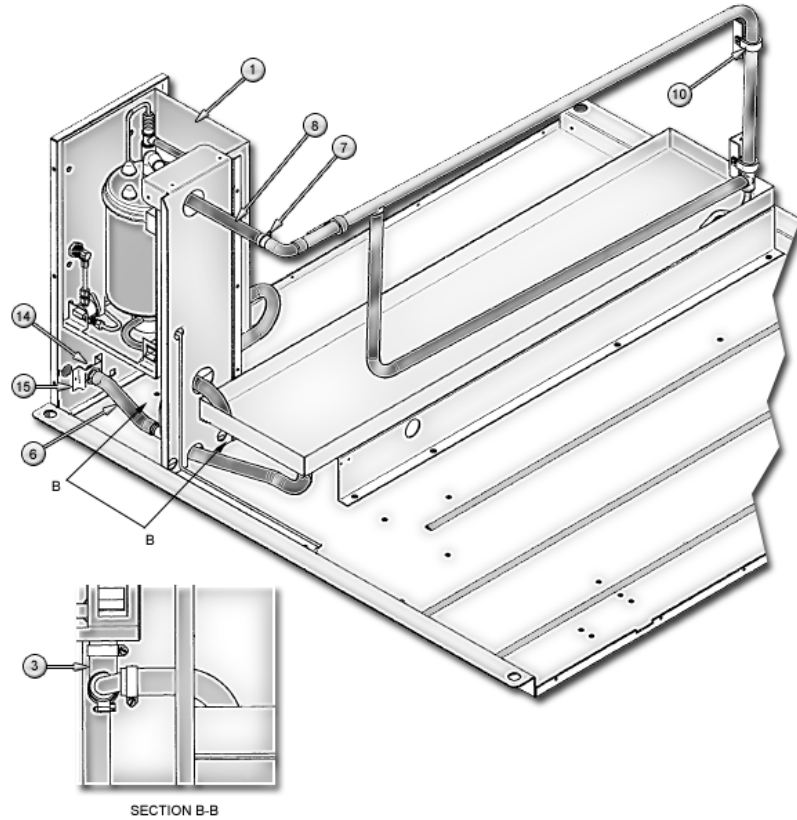


Item	Part Number	Description	Voltage	Quantity
9	E13-0040	TERMBLK 3PL 1)2/0:14 X 4)4:14	208/60/3	1
			380/400/50/3	1
			460/60/3	1
			575/60/3	1
12	415761G1	PWA UNIVERSAL CONTROL MM2 8T	208/60/3	1
			230/60/3	1
			380/400/50/3	1
			460/60/3	1
17	4C14651G1	PWA ISO XFMR/FUSE INTF	575/60/3	1
			208/60/3	1
			230/60/3	1
			380/400/50/3	1
19	135409P2	FUSE GLASS 250V 4AMP .25X1.25	460/60/3	1
			575/60/3	1
			208/60/3	4
			230/60/3	4
			380/400/50/3	4
			460/60/3	4
			575/60/3	4

Item	Part Number	Description	Voltage	Quantity
22	132487P1	TERMLSTRIP SECTION 1 POS	208/60/3	26
			230/60/3	26
			380/400/50/3	26
			460/60/3	26
			575/60/3	26
	E-0380	TERMBLK SECTION 1POS	460/60/3	26
23	132487P2	TERMLSTRIP SECTION END BARRIER	208/60/3	3
			380/400/50/3	3
			460/60/3	3
			575/60/3	3
				E-0390
24	E-362B	TERM LUG MECH #14-2/0 1/4"	208/60/3	1
			380/400/50/3	1
			460/60/3	1
			575/60/3	1
46	E-1200	FUSE DUAL ELMNT 250V 35.0AMP	208/60/3	3
47	E-1040	FUSEBLOCK 250V 3P 060A	208/60/3	1
49	124503P1	CONTACTOR 3PL 24V 15/20 1NO1NC	208/60/3	1
			230/60/3	1
			380/400/50/3	1
			575/60/3	1
50	E-013A	CONTACTOR 2PL 24VCOIL 10/25AMP	208/60/3	3
			230/60/3	3
			380/400/50/3	3
			460/60/3	3
			575/60/3	3
54	124501P1	CONTACTOR 3PL 24VCOIL 15/20AMP	208/60/3	1
			230/60/3	1
			380/400/50/3	1
			460/60/3	1
			575/60/3	1
		E-0110	CONTACTOR 3PL 24VCOIL 25/30AMP	208/60/3
			230/60/3	1
			380/400/50/3	1
55	124547P1	OVERLOAD RELAY W/B MNT 32A C-H	380/400/50/3	1
56	125768P8	HEATER CLASS 20 3.23-5.23A C-H	380/400/50/3	3
59	136200P1	XFMR 150VA 460/615/2460	208/60/3	1
			230/60/3	1
			380/400/50/3	1
			460/60/3	1
			575/60/3	1
60	1C13244P1	FUSEBLOCK 600V 2P 030A	208/60/3	1
			230/60/3	1
			380/400/50/3	1
			460/60/3	1
			575/60/3	1
61	127977P1	FUSE FNQ-R-3/4	208/60/3	2
			380/400/50/3	2
			460/60/3	2
			575/60/3	2
		127977P5	FUSE FNQ-R-1.5	208/60/3
			230/60/3	2
74	E-2440	RELAY 4P2T 24VAC 125V MAXLOAD	208/60/3	1
			230/60/3	1
			380/400/50/3	1
			460/60/3	1
			575/60/3	1
106	1C18351P2	SW DISC 600V 3PL 60A	208/60/3	1
			380/400/50/3	1
			460/60/3	1
			575/60/3	1

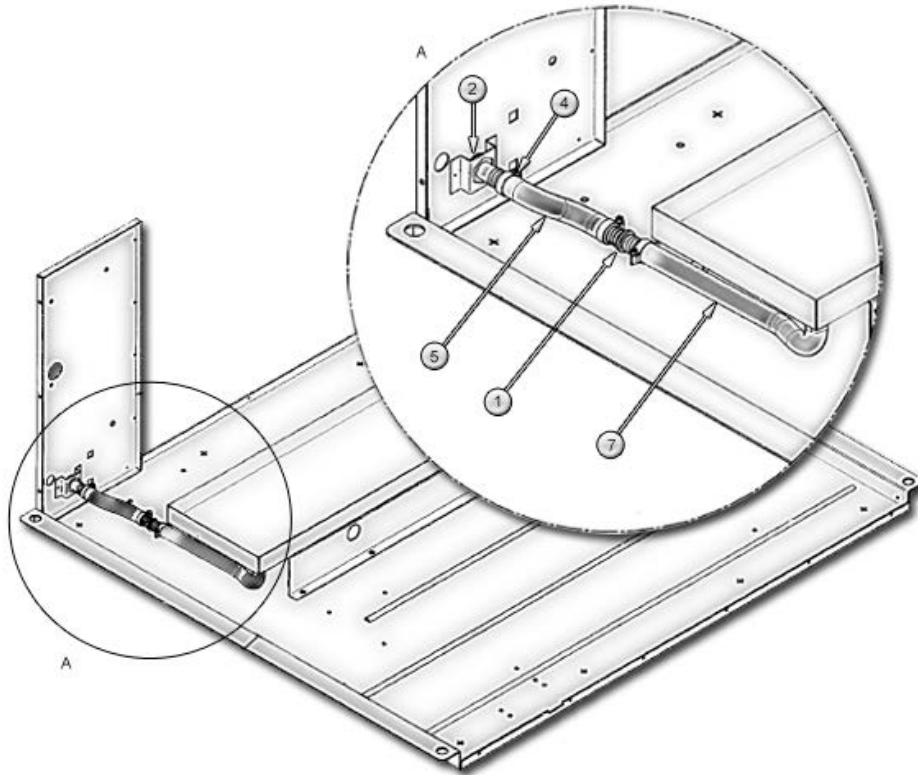
9. Humidifier Section

9.1. Humidifier



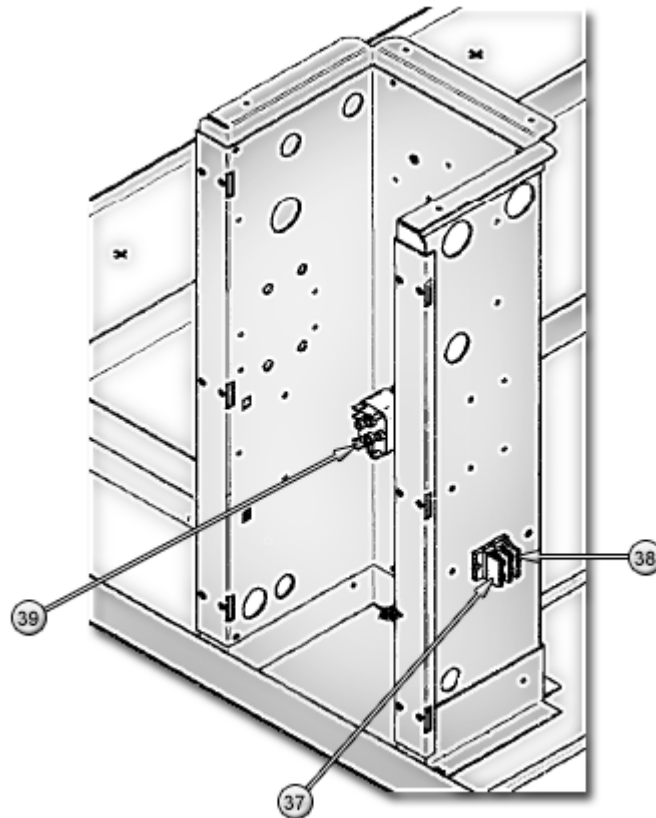
Item	Part Number	Description	Voltage	Quantity
1	-	Humidifier Detail	-	-
3	-	Drain Assembly (Overflow)	-	-
6	-	Drain Assembly	-	-
7	124216P2	CLAMP HOSE WORM DRIVE .31X1.25	All	6
8	166724G1	STEAM HOSE ASSY MM2 5T	All	1
10	P-3820	CLAMP INSULATED METAL 7/8"	All	3
14	132487P2	TERMLSTRIP SECTION END BARRIER	All	3
	E-0390	TERMLBLK SECTION END BARRIER	All	3
15	E03-0170	RELAY 1P2T 24V 50/60HZ	All	1

9.2. No Humidifier



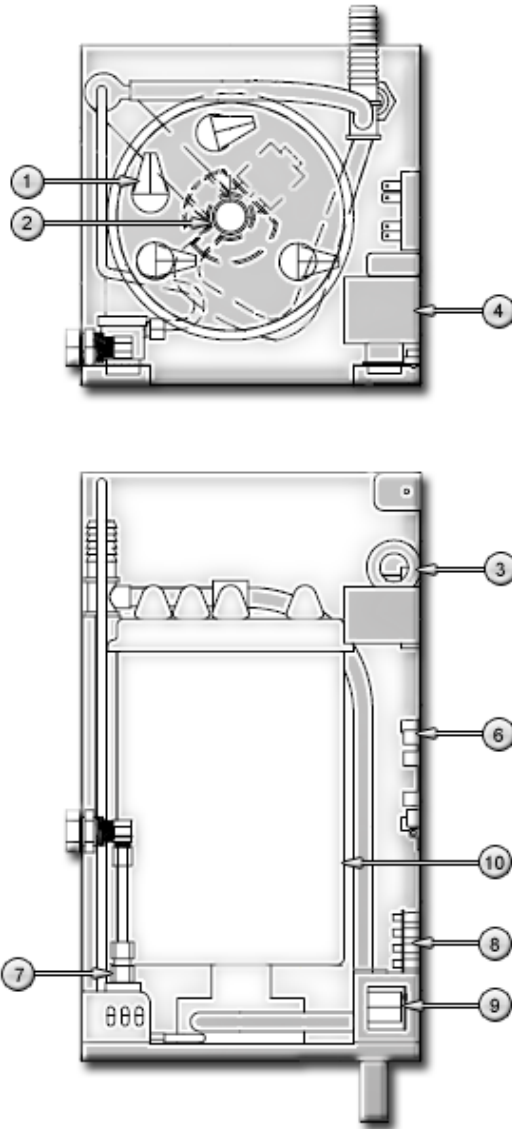
Item	Part Number	Description	Voltage	Quantity
1	P15-0140	UNION NYLON 3/4BARBX3/4BARB	All	1
2	P02-0260	ADAPTER POLY 3/4FPTX3/4HOSE	All	1
4	124216P2	CLAMP HOSE WORM DRIVE .31X1.25	All	6
5	154229P1	HOSE DRAIN .75 ID FORMED	All	1
	164224P1	HOSE DRAIN 5T MM2 W/HUM	All	1
7	164220P1	HOSE DRAIN 5T MM2 W/HUM	All	1
	164224P2	HOSE DRAIN 5T MM2 W/HUM	All	1

9.3. Remote Contact



Item	Part Number	Description	Voltage	Quantity
37	132487P1	TERMLSTRIP SECTION 1 POS	All	2
	E-0380	TERMBLK SECTION 1POS	All	2
38	132487P2	TERMLSTRIP SECTION END BARRIER	All	3
	E-0390	TERMBLK SECTION END BARRIER	All	3
39	E03-0170	RELAY 1P2T 24V 50/60HZ	All	1

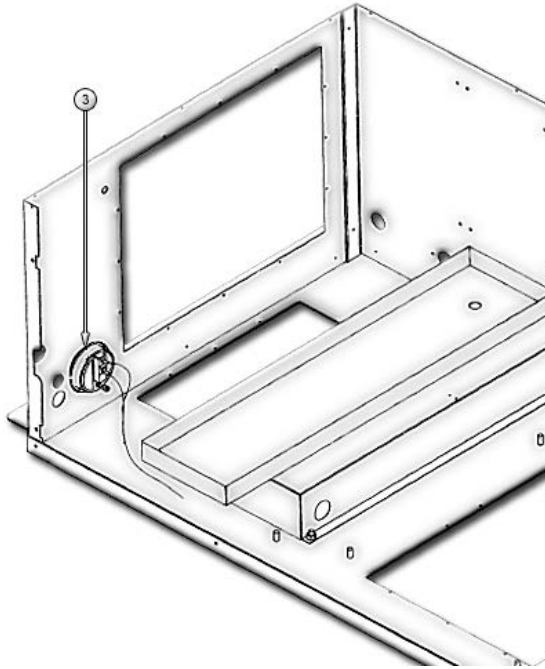
9.4. Humidifier Detail



Item	Part Number	Description	Voltage	Quantity
1	128759P1	BOOT RUBBER SG HUM TERM COVER	All	4
2	127992P1	VALVE SOL DRAIN KIT HUM 24V	All	1
3	127853P1	XFMR TORROID HUM 5T MME	All	1
4	164161P1	CONTACTOR TRION GTU-14	All	1
6	154243P1	PCB SGH MM2	All	1
7	KIT-164659P1	KIT SG FILL VLV MM2 1-8TON *P1	All	1
8	136972P1	TERMBLK SGHC3000	All	1
9	1A19592P1	SW 2P2T ROCKER	All	1
10	136798P1	TANK HUMIDIFIER 200//230 11#	All	1
	136798P2	TANK HUMIDIFIER 380//575 11#	All	1

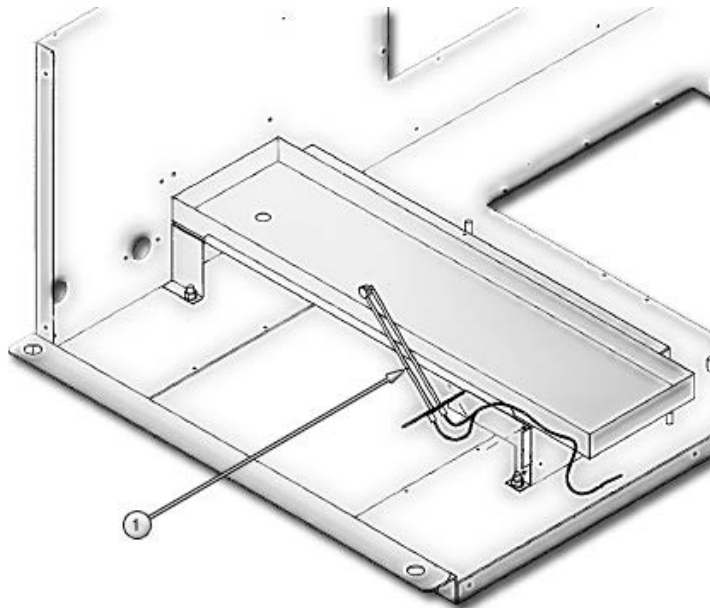
10. Miscellaneous Section

10.1. Filter Clog



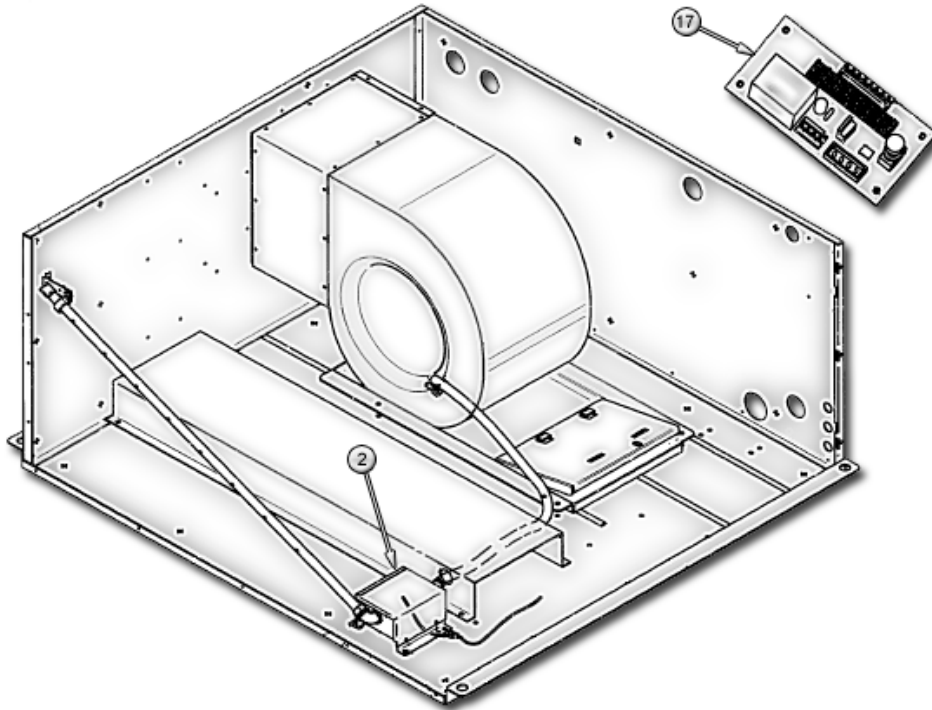
Item	Part Number	Description	Voltage	Quantity
3	154020P1	SWITCH AIR DIFFNTL/CLOGGED FILTER	All	1

10.2. Fire Stat



Item	Part Number	Description	Voltage	Quantity
1	154213P1	FIRESTAT OPEN ON RISE MM2	All	1

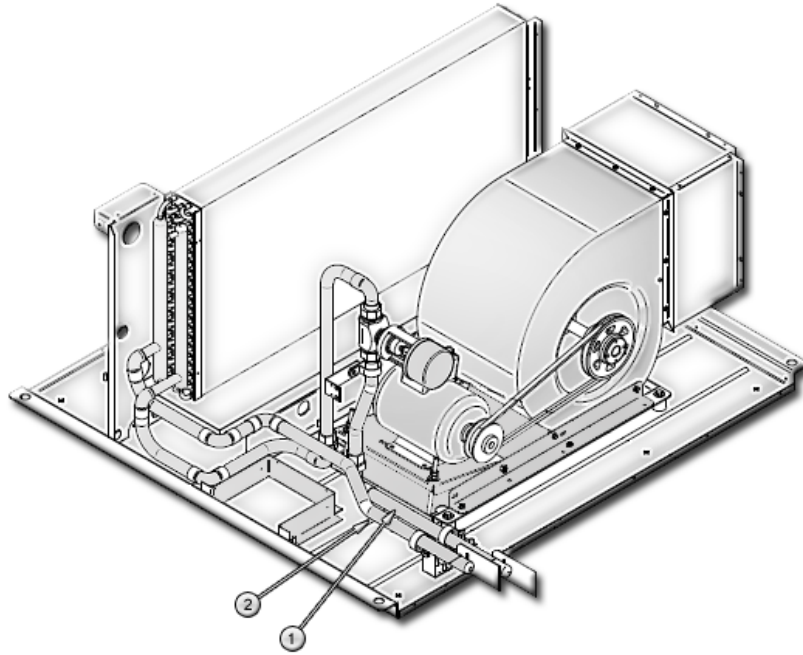
10.3. Smoke Detector



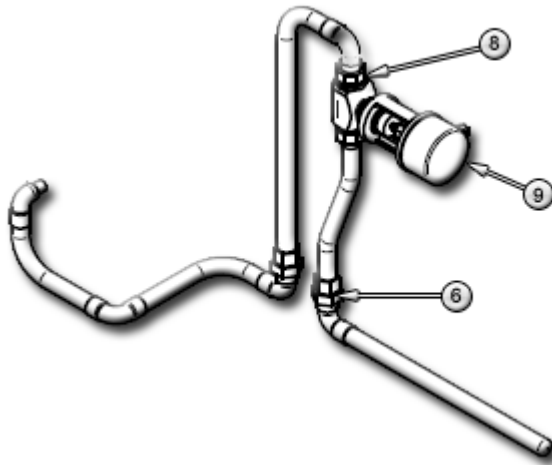
Item	Part Number	Description	Voltage	Quantity
2	149105P1	SMOKE DETECT BASE & HEAD 731L	All	1
17	124502P2	PWA SMOKE DET CNTL 24VDC 2CONN	All	1

11. Piping Section

11.1. 2-Way Modulating

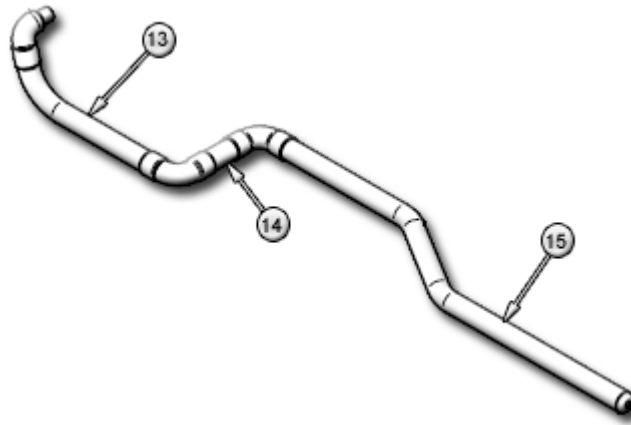


1. Chilled Water Piping Assembly

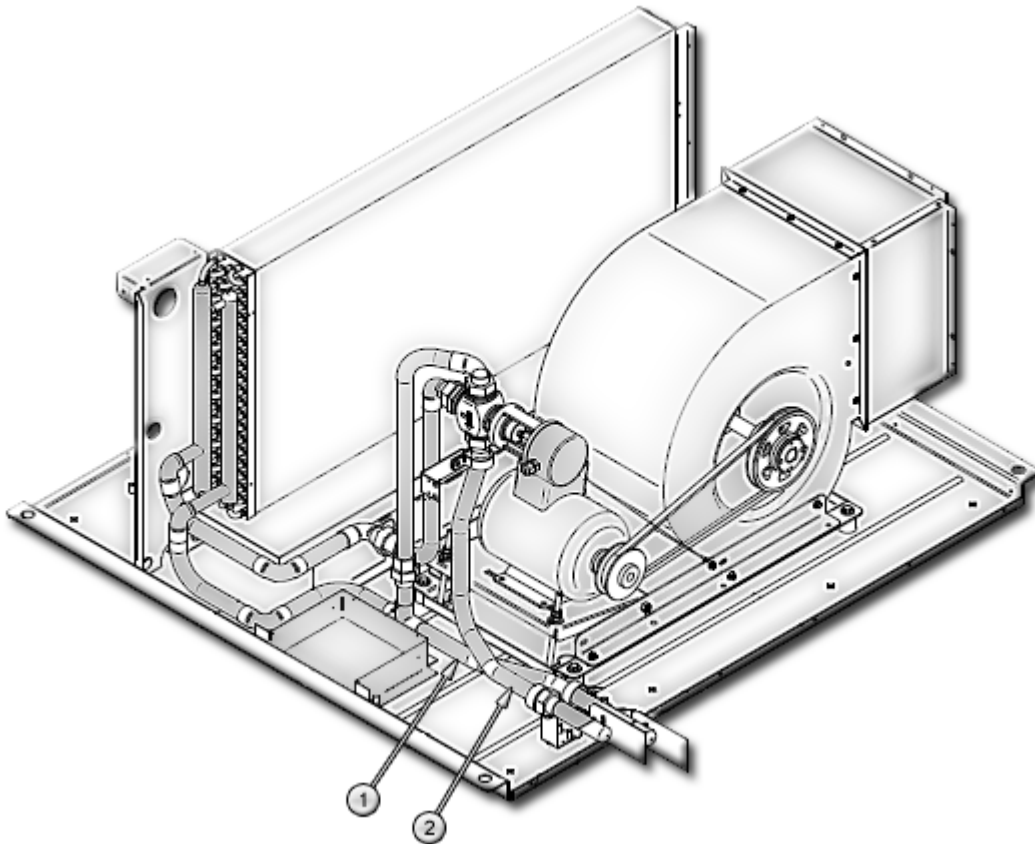


Item	Part Number	Description	Voltage	Quantity
6	P-0950	UNION CU CXC 1-1/8" SWT	208/60/3	2
			230/60/3	2
8	159009P1	VALVE 1" 2WAY UNION BODY	575/60/3	1
9	146350P1	MOTOR MOD 24VAC 50/60HZ SML JC	208/60/3	1
			380/400/50/3	1
			575/60/3	1

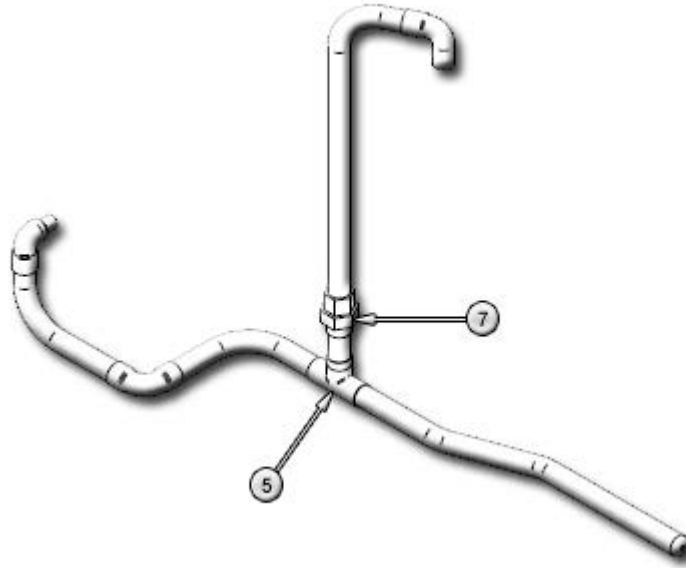
2. Chilled Water Return Assembly



Item	Part Number	Description	Voltage	Quantity
13	164215P1	TUBE FORM CU 1-1/8 WTR	230/60/3	1
14	9A20005P7	TUBE STR CU 1-1/8X.050X 3.50"	575/60/3	1
15	164216P1	TUBE FORM CU 1-1/8 WTR	575/60/3	1
	199060P1	TUBE FORM CU 1-1/8 WTR	575/60/3	1

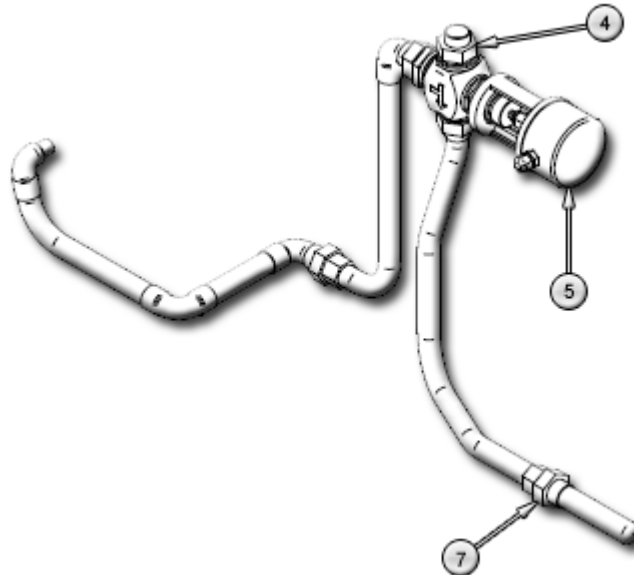
11.2. 3-Way Modulating


1. Chilled Water Supply Assembly



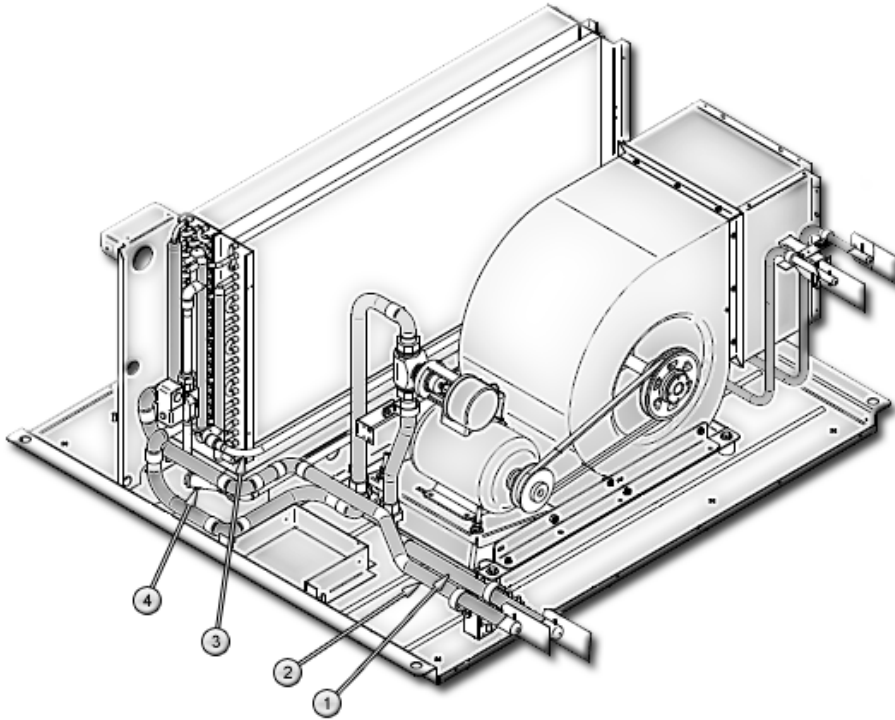
Item	Part Number	Description	Voltage	Quantity
5	P-1040	TEE CXCXC 1-1/8"	575/60/3	1
7	P-0950	UNION CU CXC 1-1/8"SWT	208/60/3	2
			230/60/3	1

2. Chilled Water Return Assembly

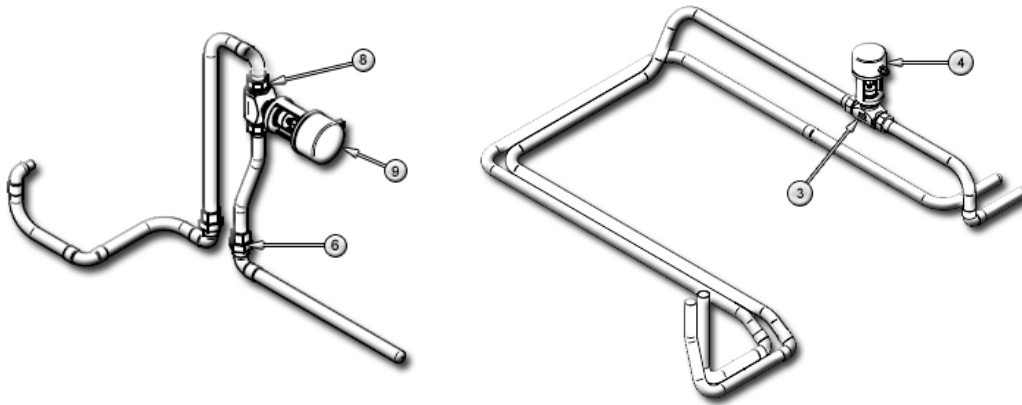


Item	Part Number	Description	Voltage	Quantity
4	159010P1	VALVE 1" 3WAY UNION BODY	575/60/3	1
5	146350P1	MOTOR MOD 24VAC 50/60HZ SML JC	208/60/3	1
			380/400/50/3	1
			575/60/3	1
7	P-0950	UNION CU CXC 1-1/8"SWT	208/60/3	2
			230/60/3	1

11.3. 2-Way Modulating with HWRH

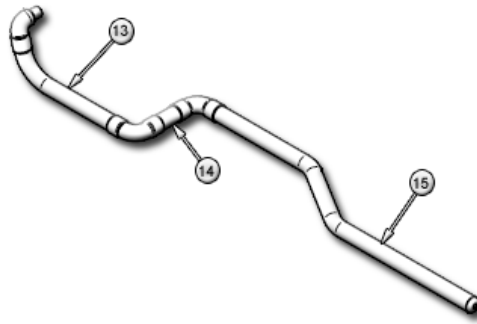


1. 2-Way Piping Supply 5T/8T



Item	Part Number	Description	Voltage	Quantity
6	P-0950	UNION CU CXC 1-1/8"SWT	208/60/3	2
			230/60/3	1
8	159009P1	VALVE 1" 2WAY UNION BODY	575/60/3	1
9/4	146350P1	MOTOR MOD 24VAC 50/60HZ SML JC	208/60/3	1
			380/400/50/3	1
			575/60/3	1
3	159009P4	VALVE 1-1/4" 2WAY UNION BODY	380/400/50/3	1

2. 2-Way Piping Return 5T/8T



Item	Part Number	Description	Voltage	Quantity
13	164215P1	TUBE FORM CU 1-1/8 WTR	230/60/3	1
14	9A20005P7	TUBE STR CU 1-1/8X.050X 3.50"	575/60/3	1
15	164216P1	TUBE FORM CU 1-1/8 WTR	575/60/3	1
	199060P1	TUBE FORM CU 1-1/8 WTR	575/60/3	1

3. 2-Way HWRH Return 5T



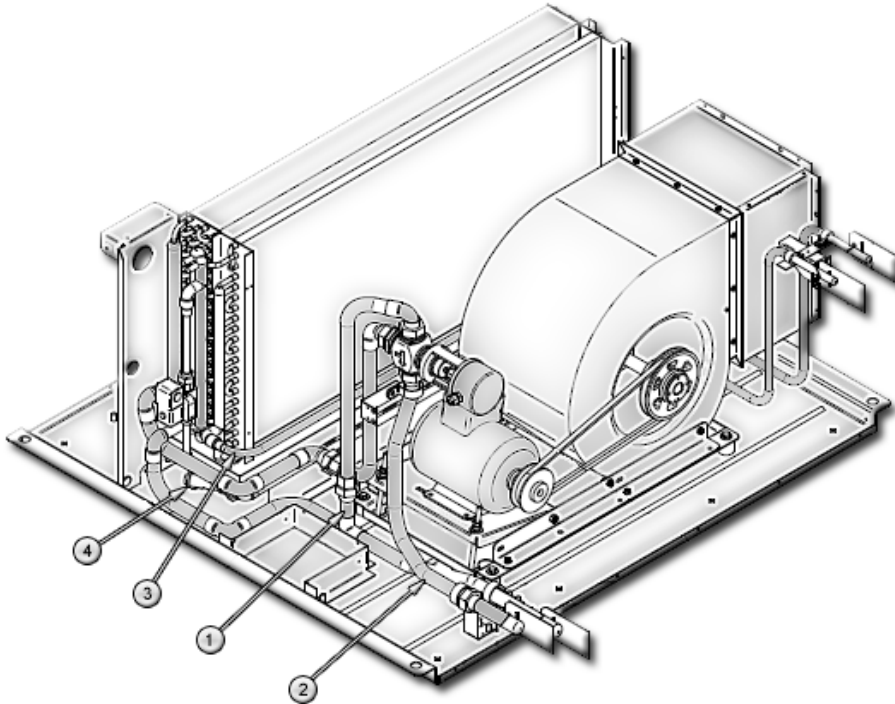
Item	Part Number	Description	Voltage	Quantity
2	P-1130	REDUCER CU FTGXC 7/8"X5/8"	230/60/3	1

4. 2-Way HWRH Supply 5T

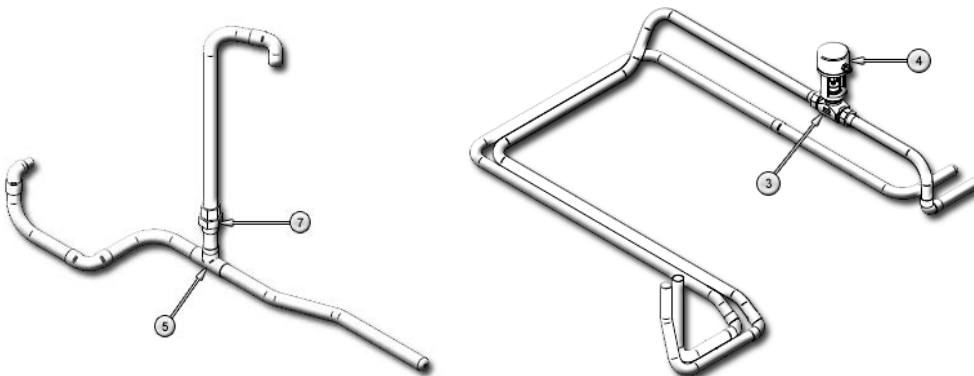


Item	Part Number	Description	Voltage	Quantity
4	P-2380	UNION CU CXM 5/8"X1/2"	230/60/3	2
8	1A23985P1	VALVE SOLND 1/2" NC 24V 50/60	575/60/3	1
10	P-1130	REDUCER CU FTGXC 7/8"X5/8"	230/60/3	1

11.4. 3-Way Modulating with HWRH

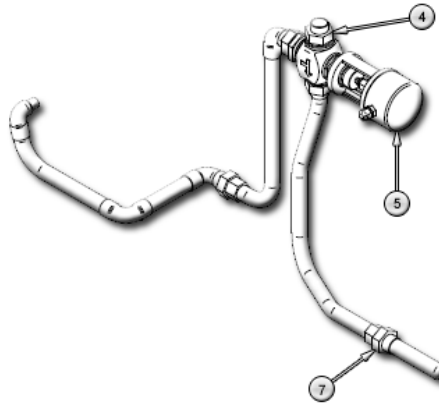


1. 3-Way Piping Supply 5T/8T



Item	Part Number	Description	Voltage	Quantity
5	P-1040	TEE CXCXC 1-1/8"	575/60/3	1
7	P-0950	UNION CU CXC 1-1/8"SWT	208/60/3	2
			230/60/3	1
3	159009P4	VALVE 1-1/4" 2WAY UNION BODY	380/400/50/3	1
			208/60/3	1
4	146350P1	MOTOR MOD 24VAC 50/60HZ SML JC	380/400/50/3	1
			575/60/3	1

2. 3-Way Piping Return 5T/8T



Item	Part Number	Description	Voltage	Quantity
4	159010P1	VALVE 1" 3WAY UNION BODY	575/60/3	1
5	146350P1	MOTOR MOD 24VAC 50/60HZ SML JC	208/60/3	1
			380/400/50/3	1
			575/60/3	1
7	P-0950	UNION CU CXC 1-1/8"SWT	208/60/3	2
			230/60/3	1

3. 2-Way HWRH Return 5T



Item	Part Number	Description	Voltage	Quantity
2	P-1130	REDUCER CU FTGXC 7/8"X5/8"	230/60/3	1

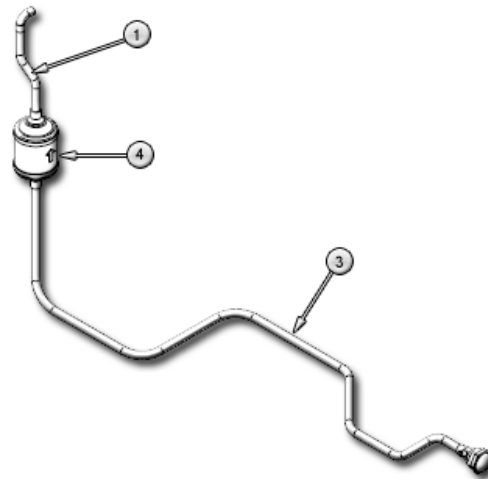
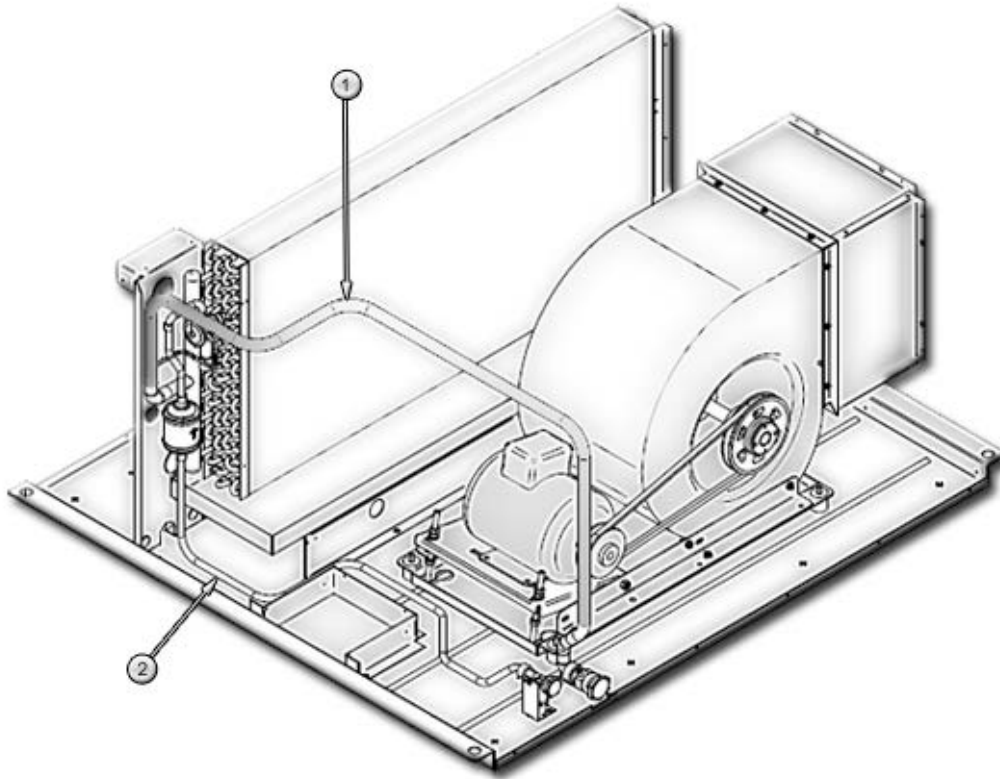
4. 2-Way HWRH Supply 5T



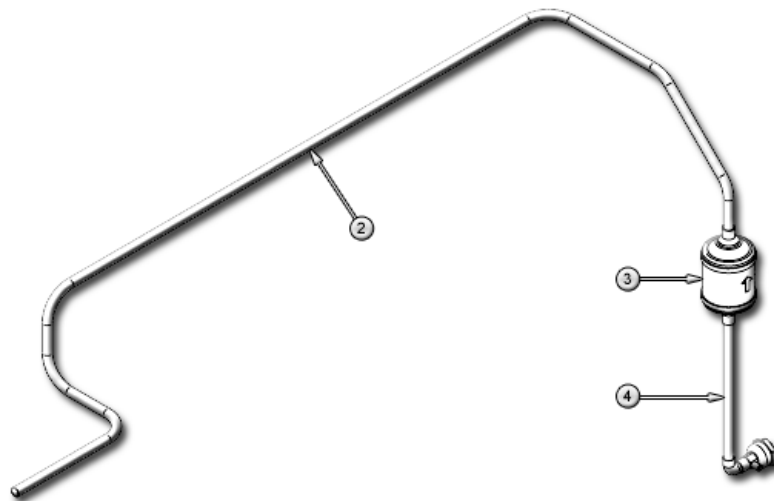
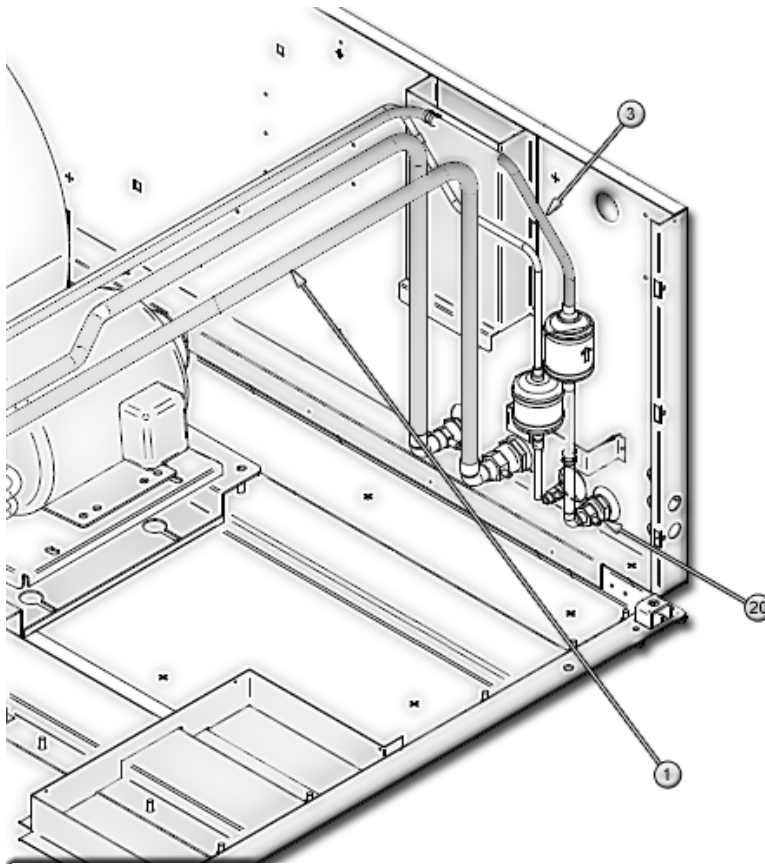
Item	Part Number	Description	Voltage	Quantity
4	P-2380	UNION CU CXM 5/8"X1/2"	230/60/3	2
8	1A23985P1	VALVE SOLND 1/2" NC 24V 50/60	575/60/3	1
10	P-1130	REDUCER CU FTGXC 7/8"X5/8"	230/60/3	1

11.5. Split System DX

11.5.1. 5T

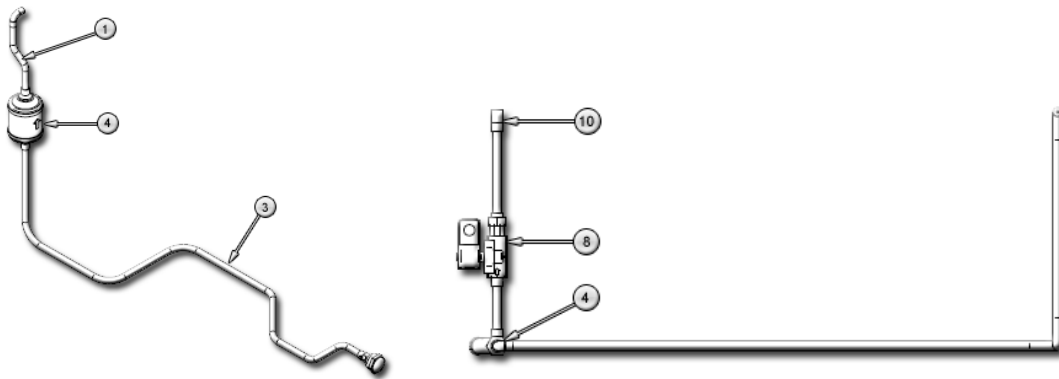
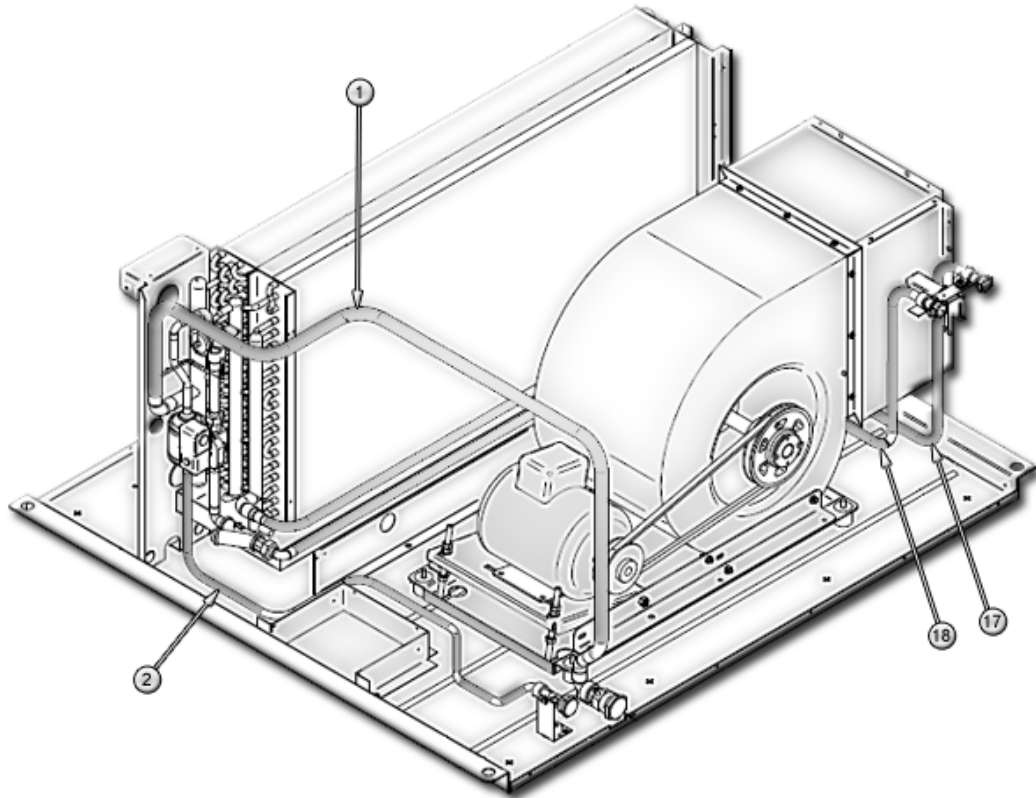


Item	Part Number	Description	Voltage	Quantity
1	164230P1	TUBE FORM CU 7/8	380/415/50/3	1
2	164232P1 (1)	TUBE FRM 04L 03.5X00.5	380/415/50/3	1
	164233P1 (3)	TUBE FORM CU 1/2	380/415/50/3	1
	128177P1 (4)	FILTER/DRIER SOLDER	380/415/50/31	1

11.5.2. 8T


Item	Part Number	Description	Voltage	Quantity
1	164576P1	TUBE FORM CU 7/8 SCTN 8TMM2E	208/60/3	1
3	164765P2 (2)	TUBE FORM CU 1/2 LOUD	208/60/3	1
	128177P1 (3)	FILTER/DRIER SOLDER	380/415/50/3	1
	9A20002P28 (4)	TUBE STR CU 1/2X.028X 8.75"	575/60/3	1
20	P02-0290	VALVE CORE REFRIGERANT	208/60/3	4

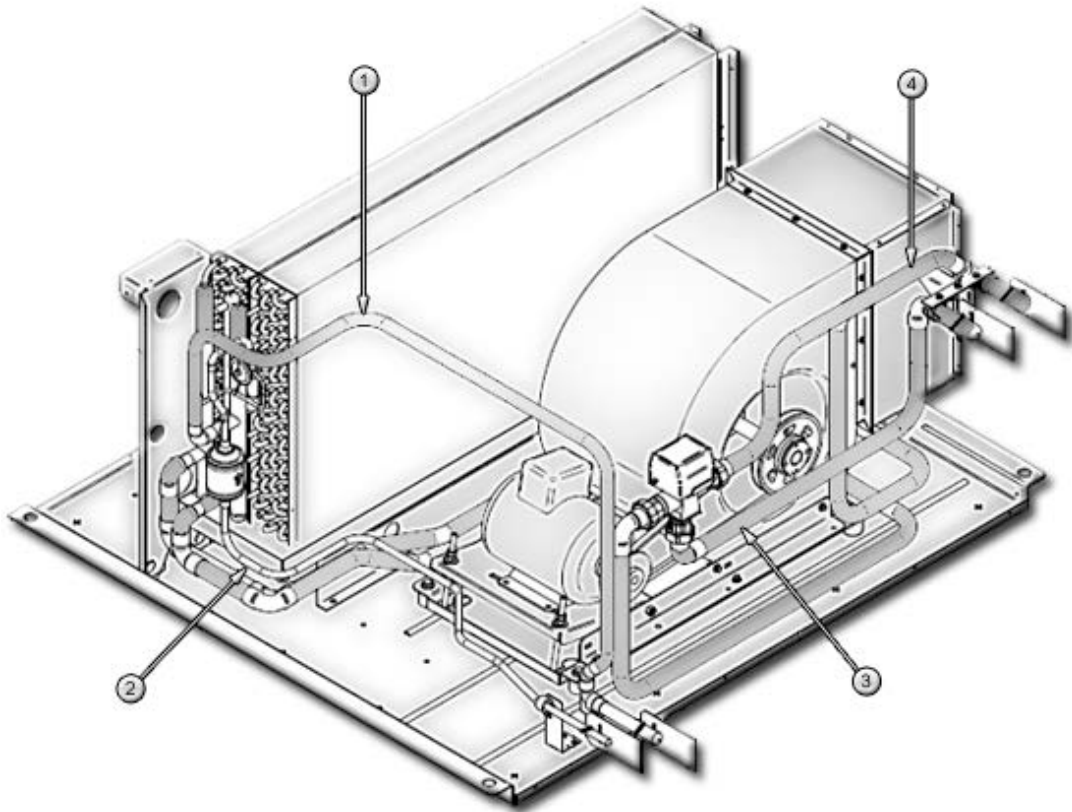
11.6. DX with HGBP



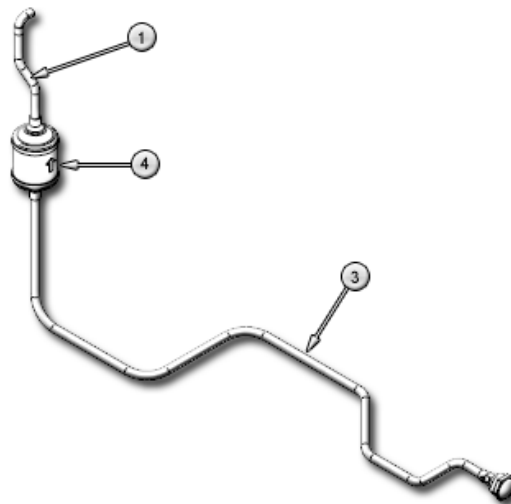
Item	Part Number	Description	Voltage	Quantity
1	164230P1	TUBE FORM CU 7/8	380/415/50/3	1
2	164232P1 (1)	TUBE FRM 04L 03.5X00.5	380/415/50/3	1
	164233P1 (3)	TUBE FORM CU 1/2	380/415/50/3	1
	128177P1 (4)	FILTER/DRIER SOLDER	380/415/50/3	1
17	P-1130	REDUCER CU FTGXC 7/8"X5/8"	230/60/3	1
	P-2380 (4)	UNION CU CXM 5/8"X1/2"	230/60/3	2
18	1A23985P1 (8)	VALVE SOLND 1/2" NC 24V 50/60	575/60/3	1
	P-1130 (10)	REDUCER CU FTGXC 7/8"X5/8"	230/60/3	1

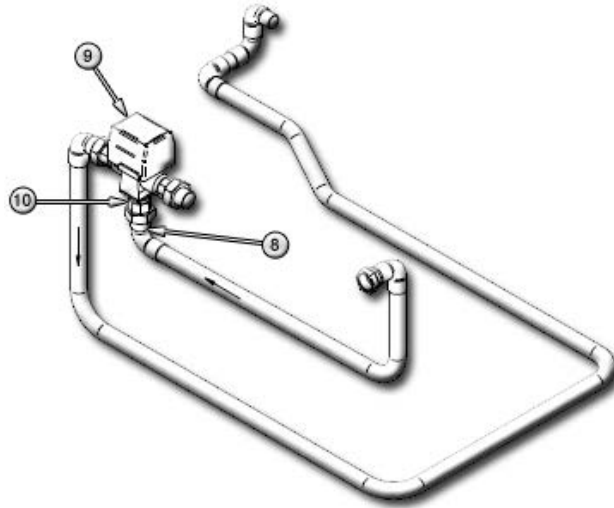
11.7. DX with Freecooling

11.7.1. 5T

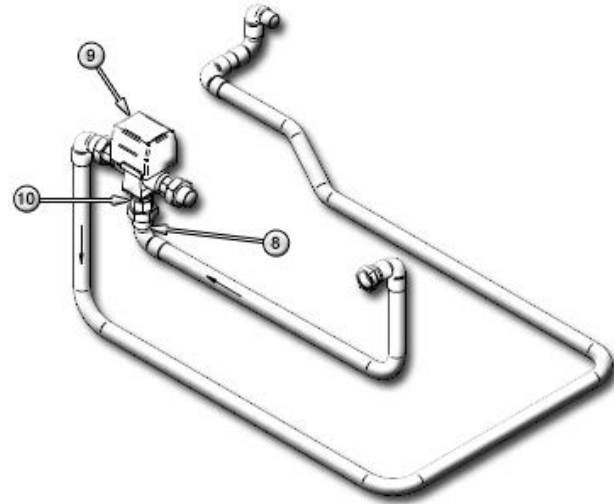


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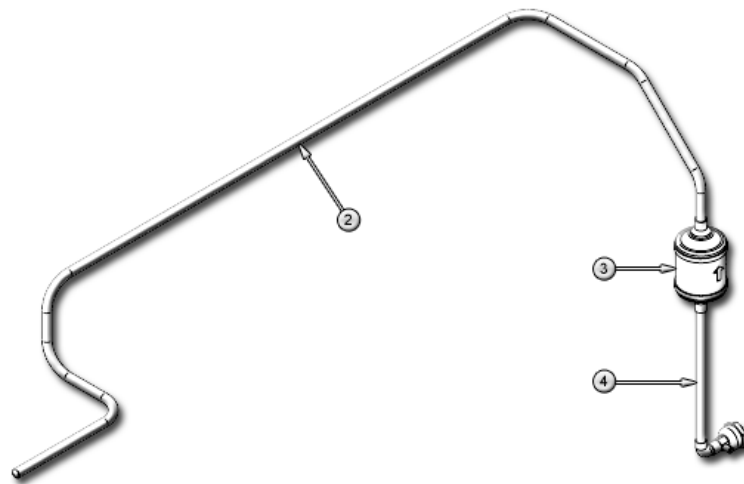
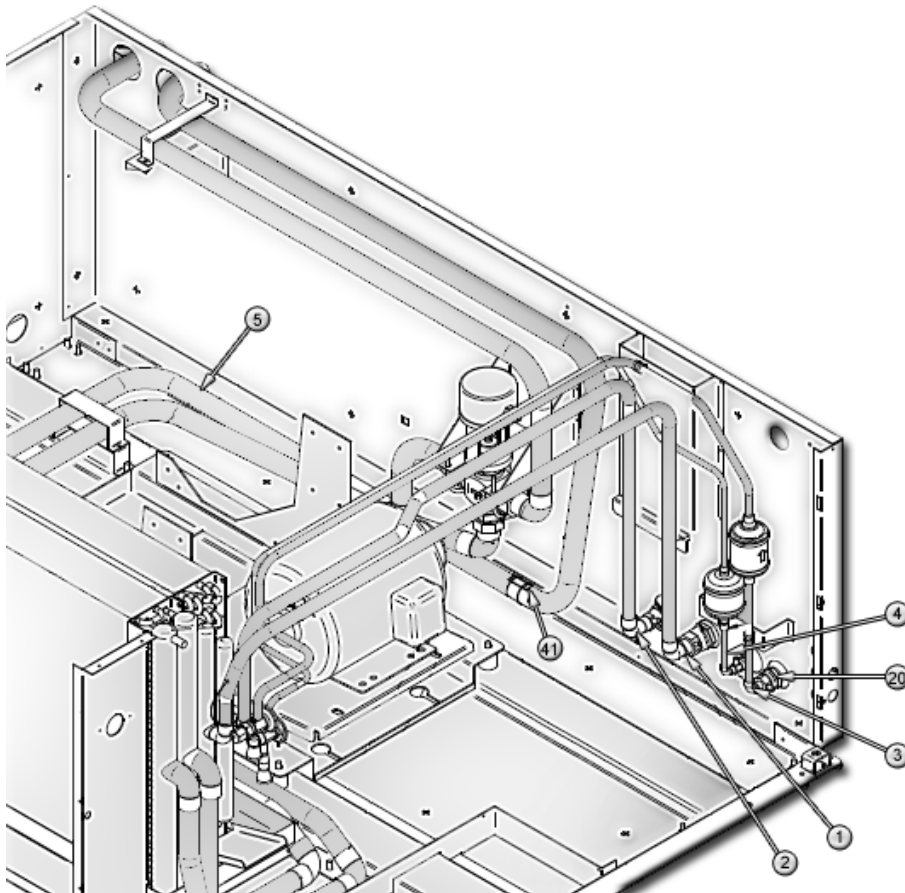
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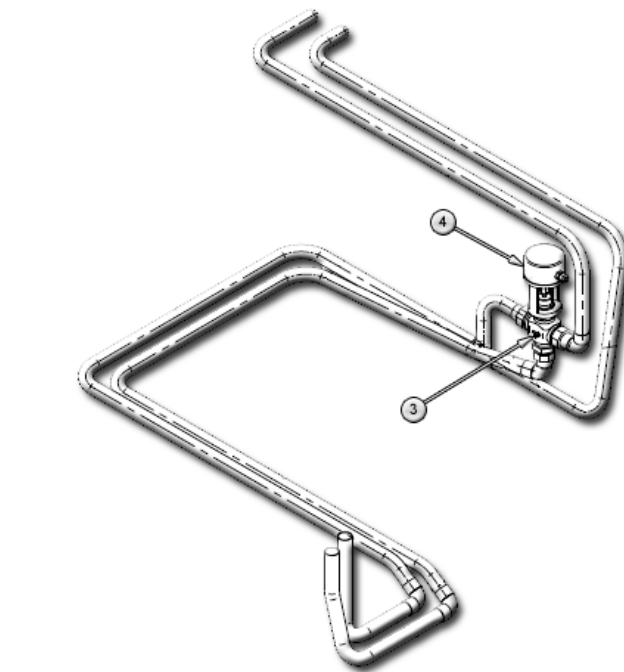
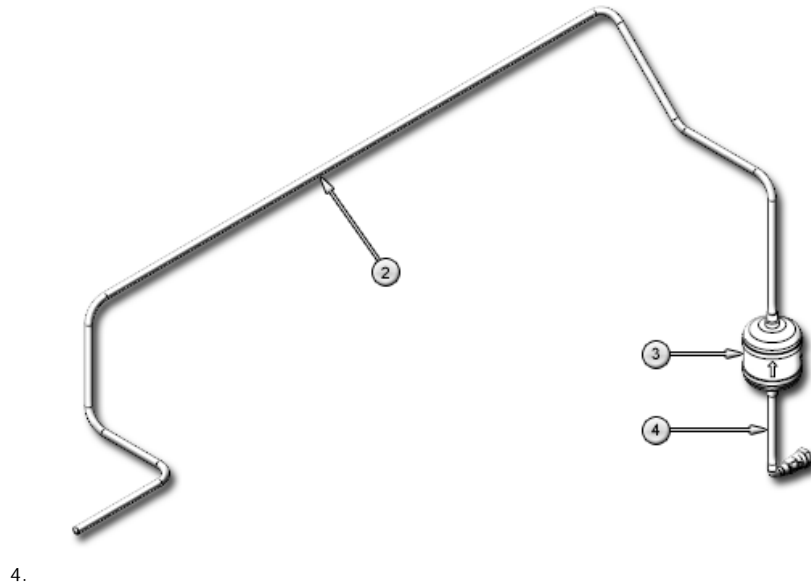
4.

Item	Part Number	Description	Voltage	Quantity
1	164230P1	TUBE FORM CU 7/8	380/415/50/3	1
2	164232P1 (1)	TUBE FRM 04L 03.5X00.5	380/415/50/3	1
	164233P1 (3)	TUBE FORM CU 1/2	380/415/50/3	1
3	128177P1 (4)	FILTER/DRIER SOLDER	380/415/50/3	1
	P-2400 (8)	UNION CU CXM 1-1/8"X1"	380/415/50/3	3
	192472P2 (9)	ACTUATOR ON/OFF MM2	380/415/50/3	1
4	192472P3 (10)	VALVE H2O SLOW 3WAY 1"	380/415/50/3	1
	164236P1 (8)	TUBE FORM CU 1-1/8	380/415/50/3	1
	193562P1 (8)	TUBE FORM CU 1-1/8 WTR	380/415/50/3	1
	164237P1 (9)	TUBE FORM CU 1-1/8	380/415/50/3	1
	193564P1 (9)	TUBE FORM CU 1-1/8 WTR	380/415/50/3	1
	9A20005P9 (10)	TUBE STR CU 1-1/8X.050X 4.00"	380/415/50/3	1
	9A20005P13 (10)	TUBE STR CU 1-1/8X.050X 5.00"	380/415/50/3	1

11.7.2. 8T

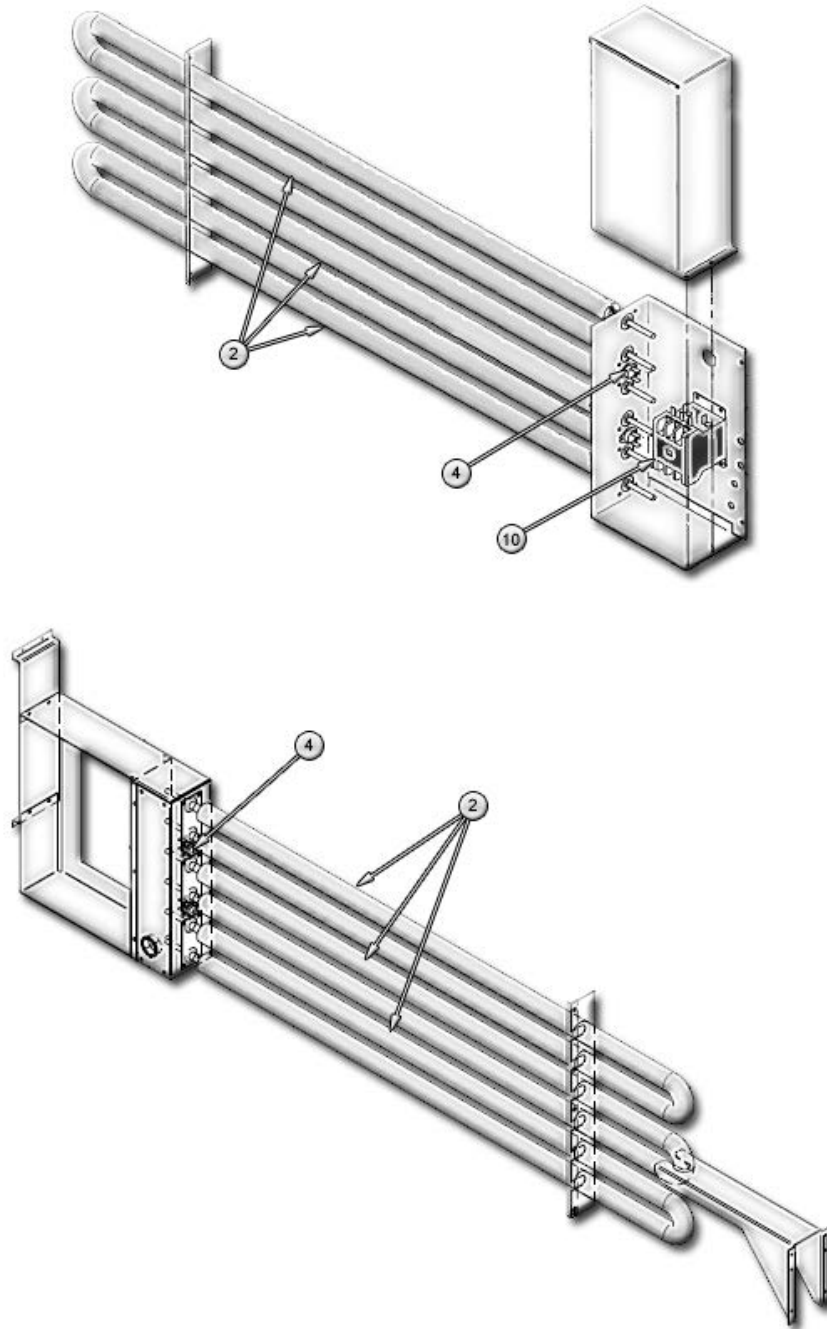


3.



Item	Part Number	Description	Voltage	Quantity
1	164576P1	TUBE FORM CU 7/8 SCTN 8TMM2E	208/60/3	1
2	164588P2	TUBE FORM CU 7/8 SCTN 8TMM2E	208/60/3	1
3	164765P2 (2)	TUBE FORM CU 1/2 LOUD	208/60/3	1
	128177P1 (3)	FILTER/DRIER SOLDER	380/415/50/3	1
	9A20002P28 (4)	TUBE STR CU 1/2X.028X 8.75"	575/60/3	1
4	164766P2 (2)	TUBE FORM CU 3/8 LOUD	575/60/3	1
	P03-0030 (3)	FILTER/DRIER 3/8ODF SLDR	575/60/3	1
	9A20002P11 (4)	TUBE STR CU 3/8X.028X 4.50"	575/60/3	1
5	159010P4 (3)	VALVE 1-1/4" 3WAY UNION BODY	575/60/3	1
	146350P1 (4)	MOTOR MOD 24VAC 50/60HZ SML JC	208/60/3	1
			380/400/50/3	1
			575/60/3	1
20	P02-0290	VALVE CORE REFRIGERANT	208/60/3	4

12. Reheat Section 5T/8T







Liebert MM2 (5&8T): R407C

Item	Part Number	Description	Voltage	5T	8T
2	148367P3	HEATER 03.3KW 400V SS 304 S/F	380/415/50/3	3	
	148367P4	HEATER 03.3KW 460V SS 304 S/F	460/60/3	3	
	148367P1	HEATER 03.3KW 208V SS 304 S/F	208/60/3		3
	148367P2	HEATER 03.3KW 230V SS 304 S/F	230/60/3		3
	148367P3	HEATER 03.3KW 400V SS 304 S/F	380/415/50/3		3
	148367P4	HEATER 03.3KW 460V SS 304 S/F	460/60/3		3
	148367P5	HEATER 03.3KW 575V SS 304 S/F	575/60/3		3
	148367P6	HEATER 05.0KW 208V SS 304 S/F	208/60/3		3
	148367P7	HEATER 05.0KW 230V SS 304 S/F	230/60/3		3
	148367P8	HEATER 05.0KW 400V SS 304 S/F	380/400/50/3		3
	148367P9	HEATER 05.0KW 460V SS 304 S/F	460/60/3		3
4	136965P1	SAFETY SWT THERM 105F	380/415/50/3	2	
			460/60/3	2	
	136965P1	SAFETY SWT THERM 105F	208/60/3		2
			230/60/3		2
			460/60/3		2
			575/60/3		2
			380/400/50/3		2
	136965P2	SAFETY SWT THERM 100F	208/60/3		2
			230/60/3		2
460/60/3				2	
380/400/50/3				2	
10	E-009F	CONTACTOR 3PL 24VCOIL 30/40AMP	380/415/50/3	2	
			460/60/3	2	

13. Parts Gallery

Blower Section

			
1C11153P1	1C11154P1	149724P1	164955P1
			
164956P1	185861P1 / B-0040	B02-0050	B13-0150
			
B-022A	B-025A	B-069B	B-0620
			
B-1150			











Coil Section

			
1A18660P1	1A19716P1	1A19716P1	164047G1
			
164160G1	164541G1	164547G1	168166P1
			
P02-0260			

Compressor Section

	
1A17649P1	132101P2

Condenser Section

			
128159P1	131852P1	131853P1	156400P1
			
156401P1	187933G2	P02-0290	P-026A
			
P-311A	P-4760		


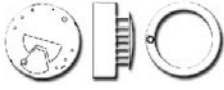


Electrical Section

			
1C13244P1	1C18351P2	4C14651G1	124501P1
			
124503P1	124547P1	125768P8	127977P1
			
132487P1	132487P2	135409P2	136200P1
			
136201P1	415761G1	E13-0040	E-013A
			
E-362B	E-1040	E-1200	E-2440







Humidifier Section

			
1A16207P1	1A19592P1	124216P2	127853P1
			
127992P1	128759P1	132487P1	132487P2
			
136798P1	136972P1	154229P1	154243P1
			
164221P1	166724G1	E03-0170	KIT-164659P1
			
P02-0260	P15-0140		



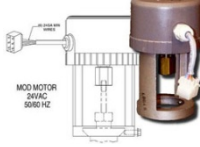

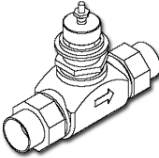






Miscellaneous Section

			
124502P2	149105P1	154020P1	154213P1




Panel Section

			
164034P1	164062P1	164434P1	164534P1
			
164560P1	164562P1		

Piping Section

			
1A23985P1	128177P1	146350P1	148039P1
			
159009P1	159009P4	159010P1	159010P4
			
164232P1	P02-0290	P03-0030	

Reheat Section

		
136965P1	148367P1	E-009F

14. Revision Page

Revision Date	Modification	Details
11/2014	Coil Section	Added TXV Assembly