

Liebert DCP Parts Manual



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1. Product Description

The Liebert DCP coolant pumping unit is a part of the highly energy-efficient, high heat density Liebert DCW chilled water-based cooling system. Designed to support Liebert DCD rack door and Liebert XDK-W rack enclosure, Liebert DCP is an isolating interface between the pumped water and the building chilled water system. Liebert DCP may also be used with other brands of rack cooling equipment.

Flexibility

- Includes enclosure, pumps, heat exchanger, expansion tank, controls, valves and piping as a packaged unit for easy installation
- Allows for scalability for future growth
- Available in 60 Hz and 50 Hz models
- Ensures water quality control by creating a closed loop within the datacenter

Higher Availability

- Maintains the coolant at a temperature always above the actual dewpoint, to prevent condensation. There is no need to insulate the piping
- Isolates the chilled water circuit from the XDK-W or DCD water circuit
- Minimizes the impact of a water leak to the gallons in the circuit vs. the entire building chilled water system

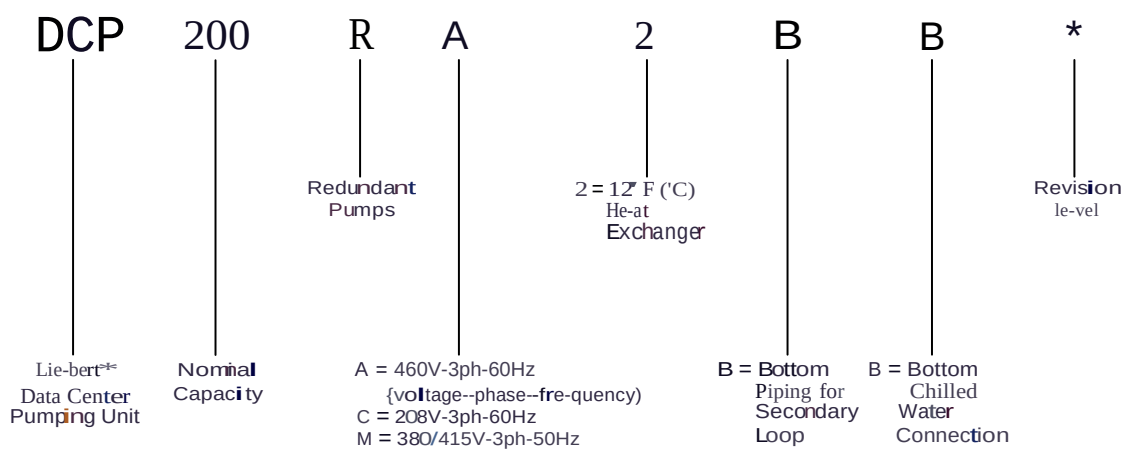
Lowest Total Cost of Ownership

- Operates with energy efficient redundant pumps
- Uses floor space efficiently

Ideally Suited For:

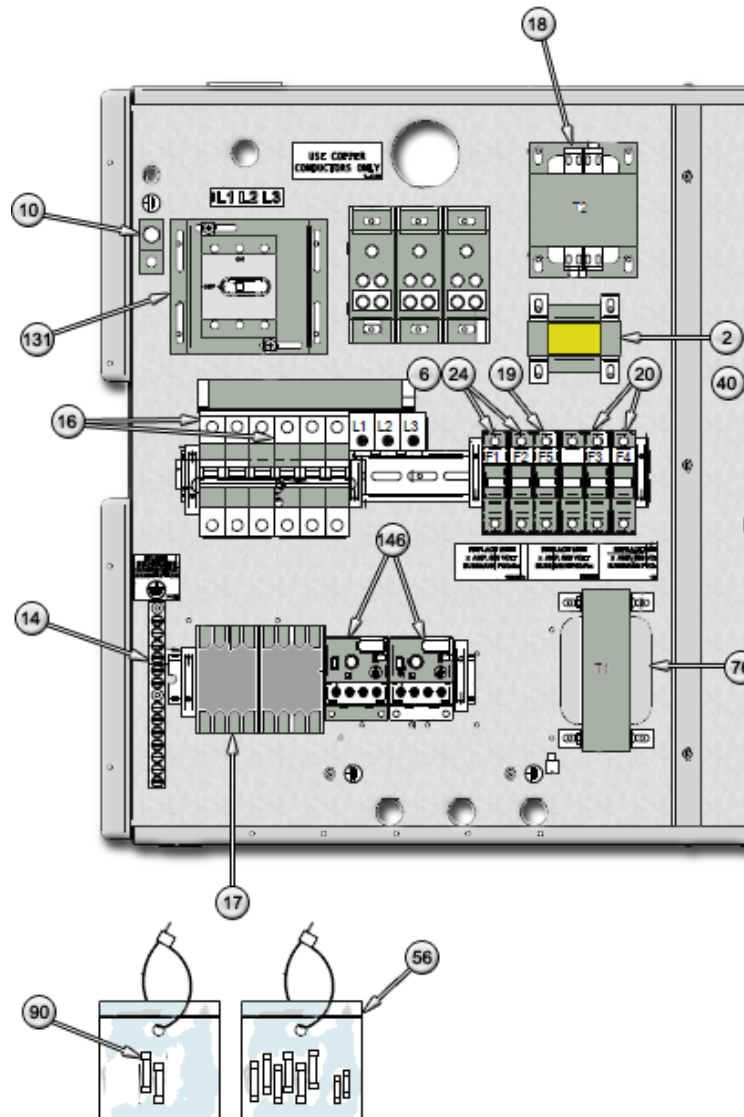
- Liebert DCD and Liebert XDK-W systems.
- Other brands of water-cooled rack equipment

2. Model Number Definition



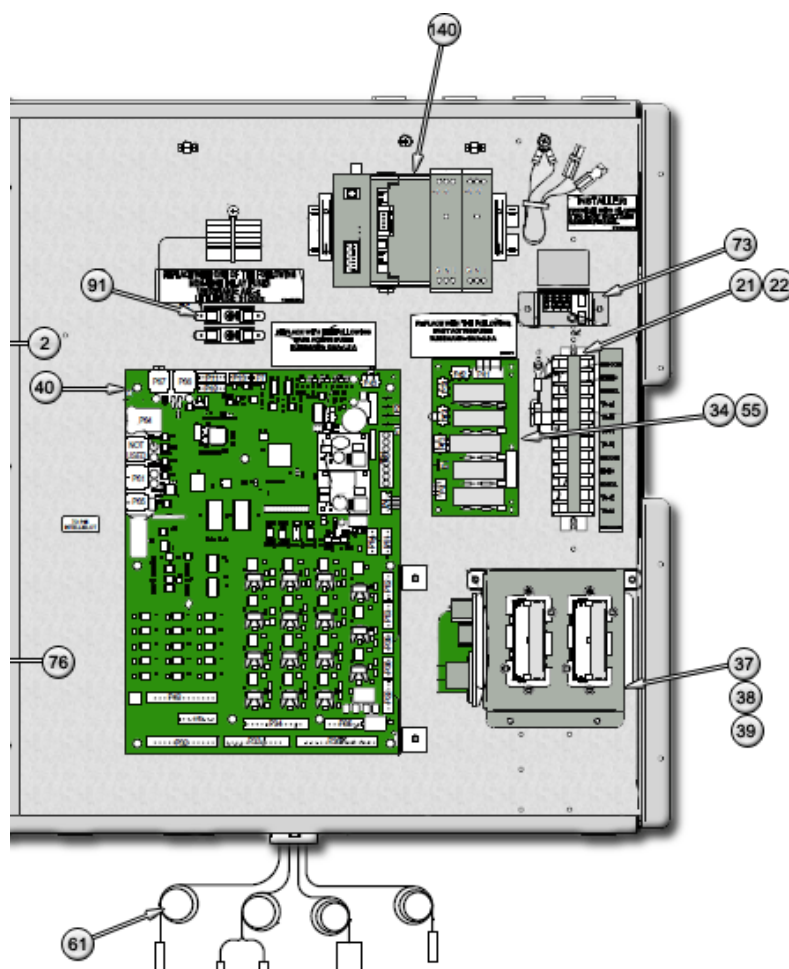
3. Electrical Section

3.1. Electrical – 50 Hz



Item	Part Number	Description	Voltage	Quantity
2	180792P1	TRANSFORMER ISOLATION	ALL	1
6	186695P1	FUSEBLCK TCH PRF 30A 600V	380/415V-3PH-50HZ	3
10	E-362B	TERM LUG MECH #14-2/0 1/4"	ALL	1
14	E-3620	GROUND LUG STRIP 13POS SCRTRM	380/415V-3PH-50HZ	1
16	136241P10	CB MCB 3P 240/415V 16A K CURVE	380/415V-3PH-50HZ	2
17	136221P1	CONTACTOR 3P16IND/21RES24/50	380/415V-3PH-50HZ	2
18	182893P1	XFMR 75VA 400-120/240 50/60 CE	380/415V-3PH-50HZ	1
19	511885P2	FUSE DUAL ELMNT T/D 1 AMP	ALL	1

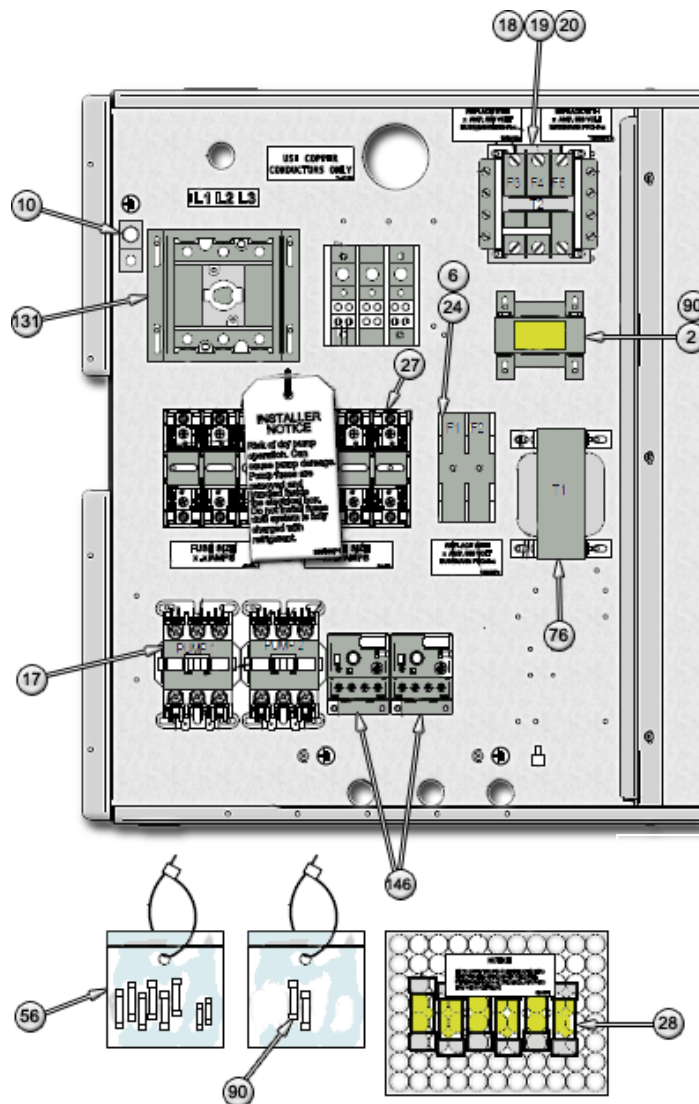
Item	Part Number	Description	Voltage	Quantity
20	127977P7	FUSE FNQ-R-1/2	ALL	2
24	127977P1	FUSE FNQ-R-3/4	380/415V-3PH-50HZ	2
56	135637P6	FUSE KIT QTY 6-6A/2-3A NON-TD	380/415V-3PH-50HZ	1
76	192838G1	XFMR 400V-24V 200VA 50HZ ASSY	380/415V-3PH-50HZ	1
90	135409P4	FUSE GLASS 250V 3AMP .25X1.25	ALL	4
131 -1	179718P2	DISC ABB OT80F3 XD 6MM SHAFT	380/415V-3PH-50HZ	1
131 - 2	179714P1	STANDOFF DISC 63A ABB XD CE	380/415V-3PH-50HZ	1
146	198884P2	MOT OVLD RLY PASS-THRU 3.2-12A	ALL	2



Item	Part Number	Description	Voltage	Quantity
2	180792P1	TRANSFORMER ISOLATION	ALL	1
21	132487P1	TERMLSTRIP SECTION 1 POS	ALL	12
22	132487P2	TERMLSTRIP SECTION END BARRIER	ALL	2

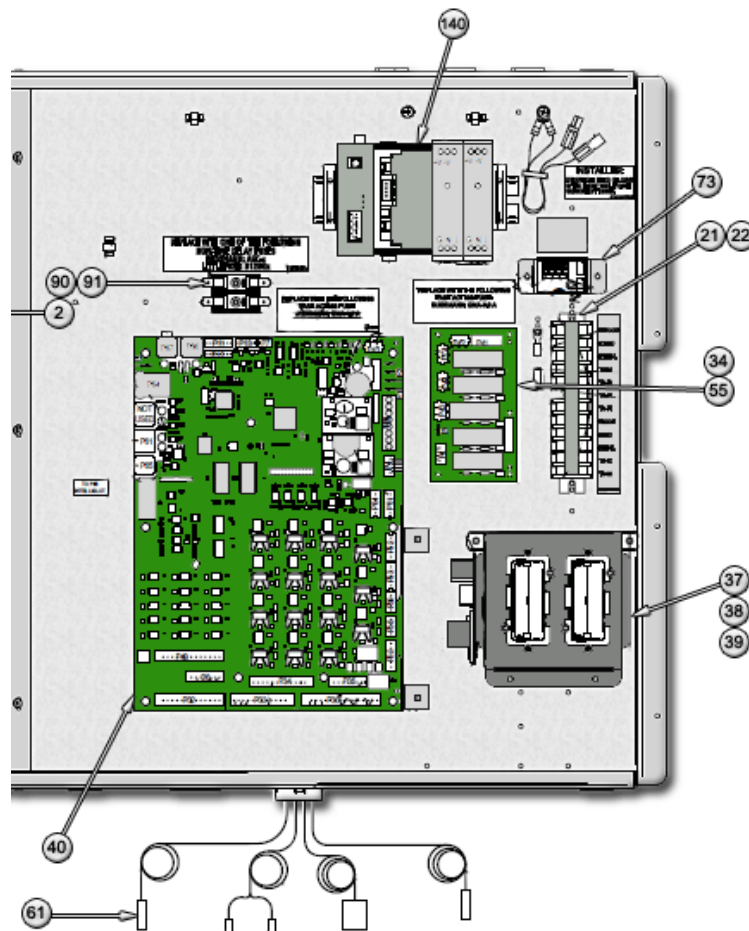
Item	Part Number	Description	Voltage	Quantity
34	417341G1	PWA ENV GLOBAL FUSE BOARD	380/415V-3PH-50HZ	1
	417401G1	PWA ENV GLOBAL FUSE BOARD ROHS	380/415V-3PH-50HZ	1
37	180294P1	BRKT MTG INTELLESLOT DS	ALL	1
38	200509P1	ENCLOSURE INTELLISLOT 34 PIN	ALL	2
39	416911G2	PWA INTELLISLOT PWR SPLY DC IN	ALL	1
	417761G2	PWA I-SLOT PWR SPLY DC IN ROHS	ALL	1
40				
	416761G3	PWA ENV ICOM CTRL LARGE	ALL	1
	417171G1	PWA ENV ICOM CTRL LARGE ROHS	ALL	1
55	135409P2	FUSE GLASS 250V 4AMP .25X1.25	380/415V-3PH-50HZ	5
61	194747P1	THERMISTOR NTC PROBE 10K 72IN	ALL	1
73	190160P2	TRANSMITTER 1000OHM 30-90F RTD	ALL	1
	190160P3	TRANSMITTER 1000OHM 30-90 ROHS	ALL	1
91	176023P1	FUSEBLOCK 1P 300V	ALL	2
140	301275G2	ASSY CAN ISO XDP/XDC CE	380/415V-3PH-50HZ	1

3.2.Electrical – 60 Hz



Item	Part Number	Description	Voltage	Quantity
2	180792P1	TRANSFORMER ISOLATION	ALL	1
6	513733P1	FUSEBLOCK CLASS CC W/REJECT	460V-3PH-60HZ	1
10	E-362B	TERM LUG MECH #14-2/0 1/4"	ALL	1
17	124501P1	CONTACTOR 3PL 24VCOIL 15/20AMP	460V-3PH-60HZ	2
18	519458P1	XFMR 100VA 480-240/120 W/FUSE	460V-3PH-60HZ	1
19	511885P2	FUSE DUAL ELMNT T/D 1 AMP	ALL	1
20	127977P7	FUSE FNQ-R-1/2	ALL	2
24	127977P7	FUSE FNQ-R-1/2	460V-3PH-60HZ	2
27	136811P1	FUSEBLOCK CLASS J 600V 30A 3P	460V-3PH-60HZ	2
28	136821P10	FUSE DUAL ELMNT "J" 600V 10.0A	460V-3PH-60HZ	6

Item	Part Number	Description	Voltage	Quantity
56	135637P5	FUSE KIT QTY 6-4A/2-3A NON-TD	460V-3PH-60HZ	1
90	135409P4	FUSE GLASS 250V 3AMP .25X1.25	460V-3PH-60HZ	1
131 -1	1C18351P1	SW DISC 600V 3PL 100A	460V-3PH-60HZ	1
131 -1	303398P1	DISC FUSED 600V ABB 30A	460V-3PH-60HZ	1
131 -2	303059P1	STANDOFF DISCONNECT XD SPCL	460V-3PH-60HZ	1
131 -2	179810P1	STANDOFF DISCONNECT XDC/XDP	460V-3PH-60HZ	1
131 -3	1C18354P1	COLLAR LKG DISC W/2 SCREWS KM	460V-3PH-60HZ	1
146	198884P2	MOT OVLD RLY PASS-THRU 3.2-12A	ALL	2



Item	Part Number	Description	Voltage	Quantity
21	132487P1	TERMLSTRIP SECTION 1 POS	ALL	12
22	132487P2	TERMLSTRIP SECTION END BARRIER	ALL	2
34	417341G1	PWA ENV GLOBAL FUSE BOARD	ALL	1

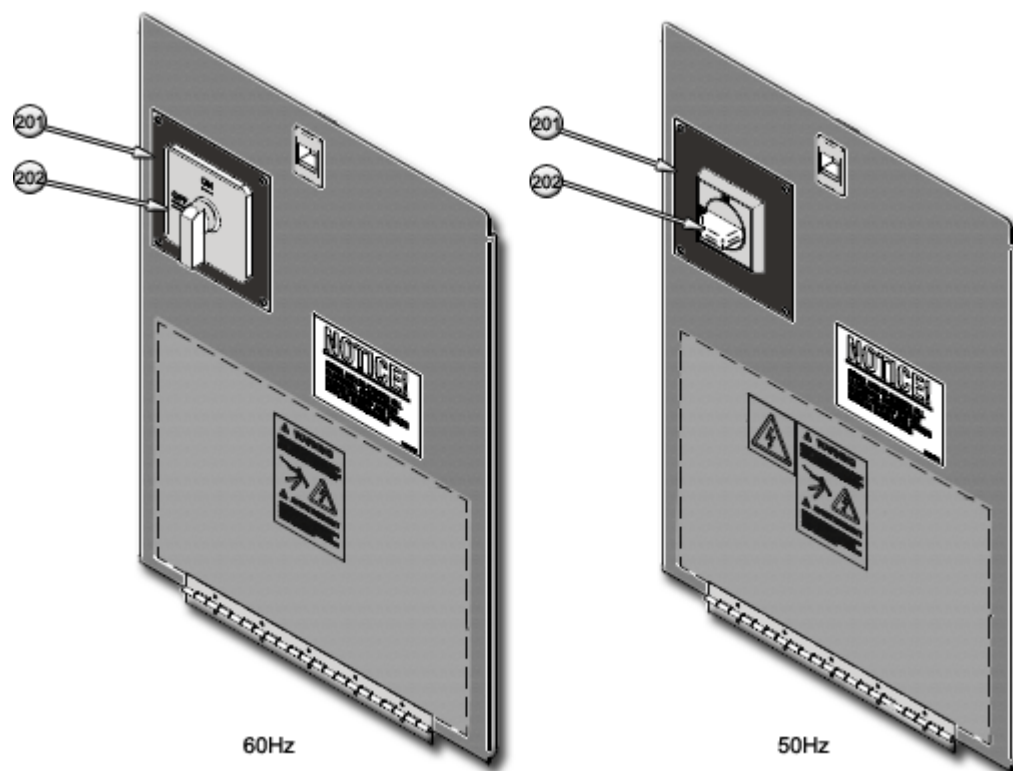
Item	Part Number	Description	Voltage	Quantity
37	180294P1	BRKT MTG INTELLESLOT DS	ALL	1
38	200509P1	ENCLOSURE INTELLISLOT 34 PIN	ALL	2
39	416911G2	PWA INTELLISLOT PWR SPLY DC IN	ALL	1
	417761G2	PWA I-SLOT PWR SPLY DC IN ROHS	ALL	1
40				
	416761G3	PWA ENV ICOM CTRL LARGE	ALL	1
	417171G1	PWA ENV ICOM CTRL LARGE ROHS	ALL	1
55	135409P2	FUSE GLASS 250V 4AMP .25X1.25	460V-3PH-60HZ	5
61	194747P1	THERMISTOR NTC PROBE 10K 72IN	ALL	1
73	190160P2	TRANSMITTER 1000OHM 30-90F RTD	ALL	1
	190160P3	TRANSMITTER 1000OHM 30-90 ROHS	ALL	1
90	135409P4	FUSE GLASS 250V 3AMP .25X1.25	ALL	4
91	176023P1	FUSEBLOCK 1P 300V	ALL	2
140	301275G1	ASSY CAN ISO	460V-3PH-60HZ	1

3.3. EP Display



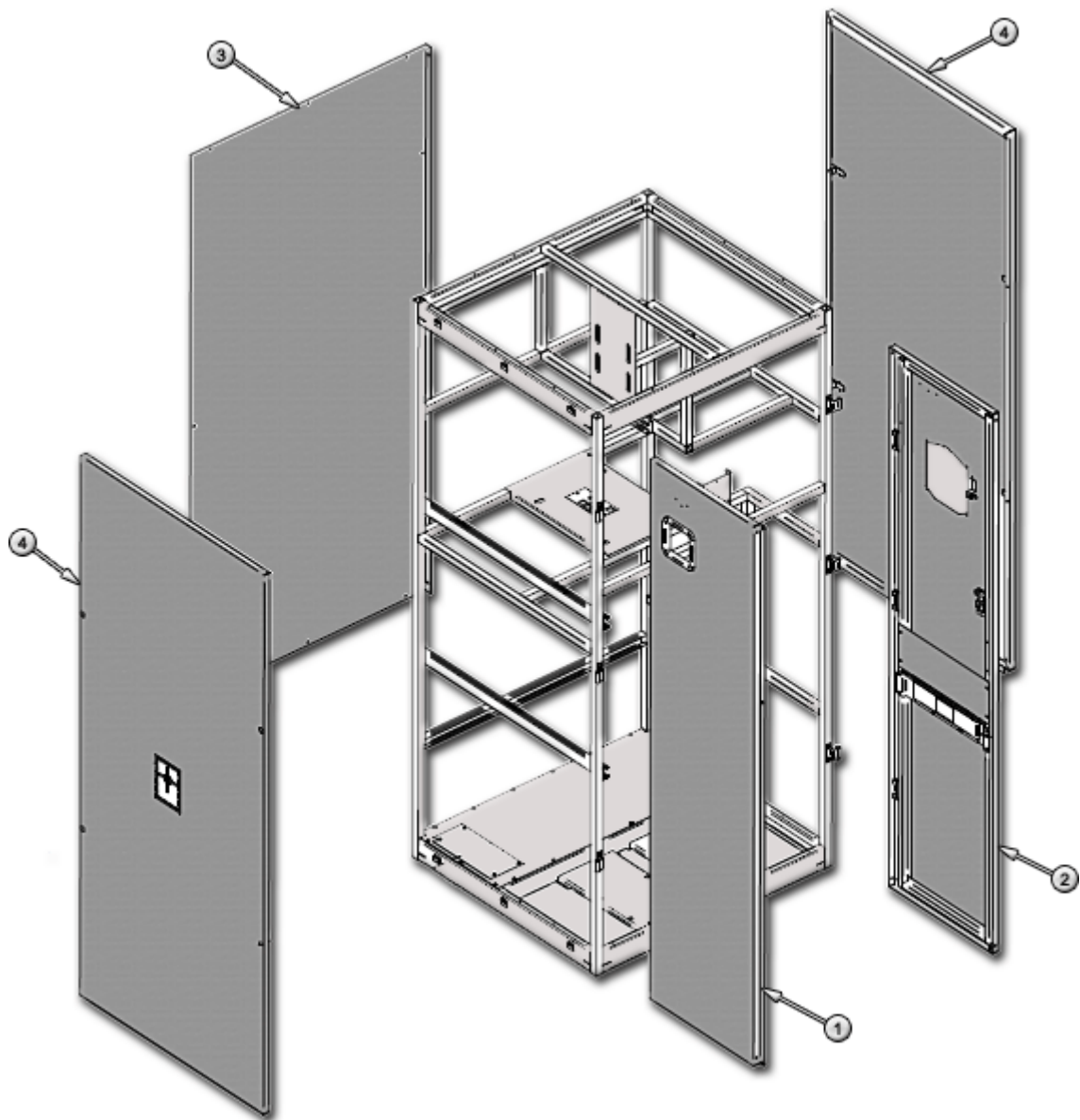
Item	Part Number	Description	Voltage	Quantity
8	180632G6	DISPL ASSY LRG GR ICOM LED	ALL	1
9	181898P1	COUPLER XOVER CAT5E RJ45 F/F	ALL	1

3.4.EP Disconnect



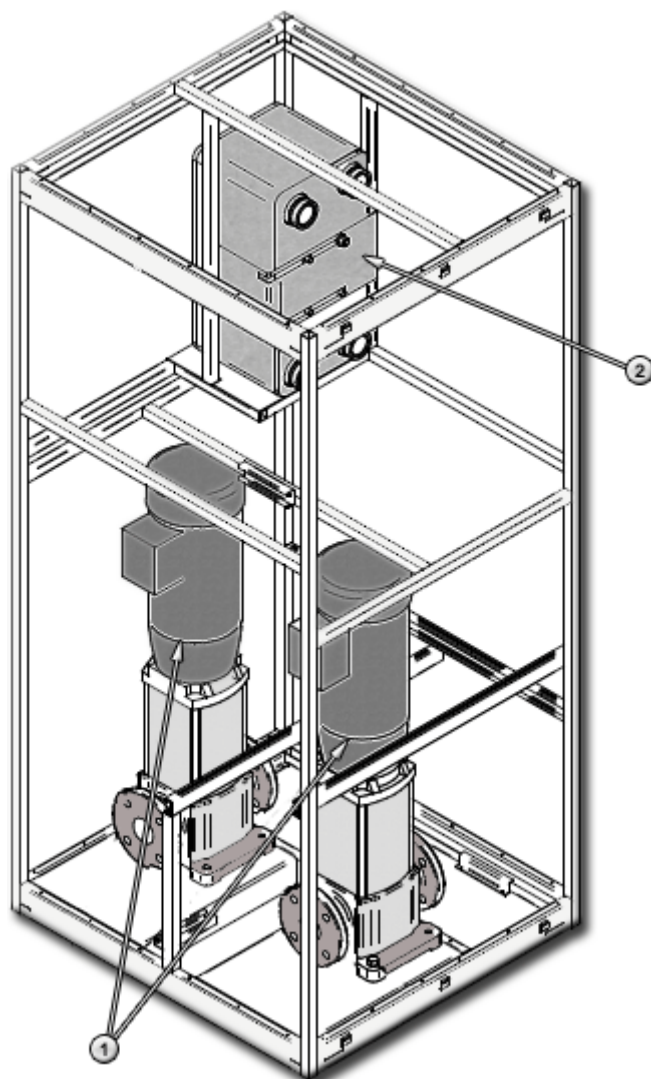
Item	Part Number	Description	Frequency	Quantity
201	1C18707P1	PLATE DISC K/M	ALL	1
	303063P1	PLATE FUSED DISC ABB SPCL	460V-3PH-60HZ	1
	305336P1	DISC HANDLE MTG PLATE SNGL ABB	460V-3PH-60HZ	1
	179709P1	PLATE DISC ABB	380/415V-3PH-50HZ	
202	303392P3	HANDLE DISC ABB 80MM	460V-3PH-60HZ	1
	302708P1	HANDLE DISC FUSED ABB	460V-3PH-60HZ	1
	1C18352P1	HANDLE DISC SWT/FACEPLATE K/M	ALL	1
	179716P1	DISC ABB FACEPLATE W/HANDLE XD	380/415V-3PH-50HZ	1
	179716P2	DISC FACEPLATE W/HANDLE XD 6MM	380/415V-3PH-50HZ	1

4. Exterior Section



Item	Part Number	Description	Quantity
1	308503G1	DOOR ASSY LEFT STIFF XDP FD	1
	186024G1	DOOR ASSY LEFT STIFF XDP XDWP	1
2	191146G1	PNL DR ASSY ICOM DSLY NO B XDP	1
3	179334P1	PANEL WRAPPER BACK XDC	1
4	183058G1	PANEL SIDE ASSY XDC XDP XDWP	2

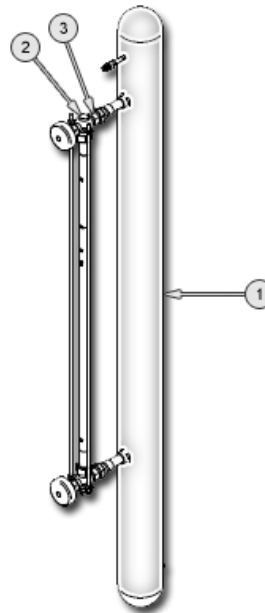
5. Pump and Heat Exchanger Section



Item	Part Number	Description	Voltage	Quantity
1	305513P1	PUMP 5HP 400-3-50	380/415V - 3PH - 50HZ	2
	306819P1	PUMP 5HP 460-3-60	460V - 3PH - 60HZ	2
2	305828G1	HX 160KW COMPLETE DCP	ALL	1

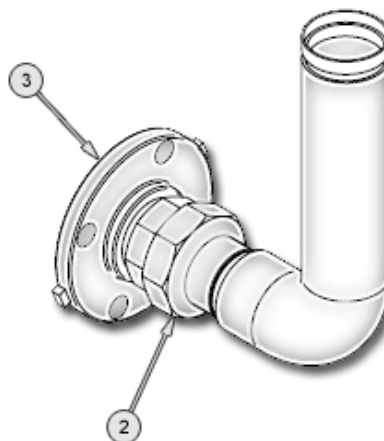
6. Piping Section

6.1. Standpipe Assembly



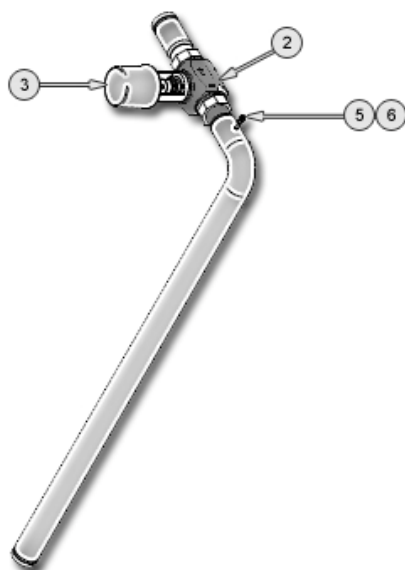
Item	Part Number	Description	Quantity
1	305856G1	STAND PIPE DCP	1
2	1A34258P7	GAUGE WATER COMP TK KIT 30"	1
3	310279P1	SIGHT GLASS CLEAR W/FLOAT 1/2"	1

6.2. Inlet Line SV22



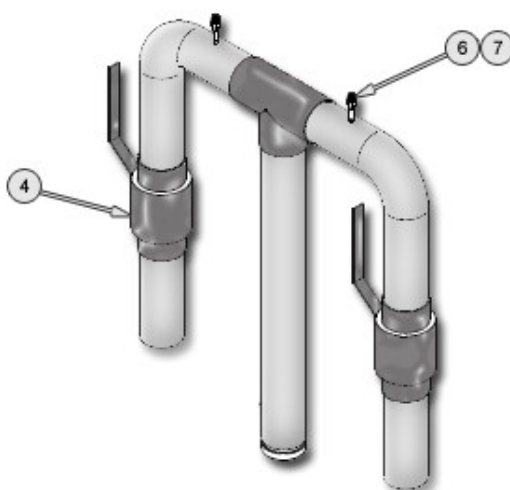
Item	Part Number	Description	Quantity
2	P05-2720	ADAPTER CU CXM 2-1/8"X2" REDR	1
	P-361A	UNION CU CXM 2-1/8"X2"	1
3	130749P1	VALVE H2O REG FLANGE KIT 2"	1

6.3. Inlet Line w/Check Valves



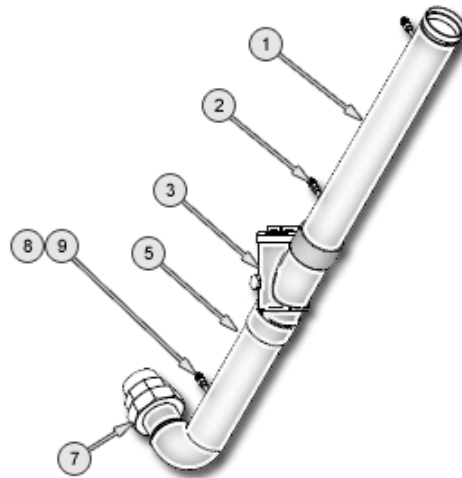
Item	Part Number	Description	Quantity
2	159009P3	VALVE 2" 2WAY UNION BODY	1
3	146351P1	MOTOR MOD 24VAC 50/60HZ LRG JC	1
5	187933G2	VALVE ACC BODY 1/4 EXT1" BEAD	1
6	P02-0290	VALVE CORE REFRIGERANT	1

6.4. Secondary Inlet SO



Item	Part Number	Description	Quantity
4	1C14431P7	VALVE BALL BRONZE 2-1/2 SWT SP	2
6	187933G2	VALVE ACC BODY 1/4 EXT1" BEAD	6
7	P02-0290	VALVE CORE REFRIGERANT	2

6.5.Outlet Line w/Check Valves



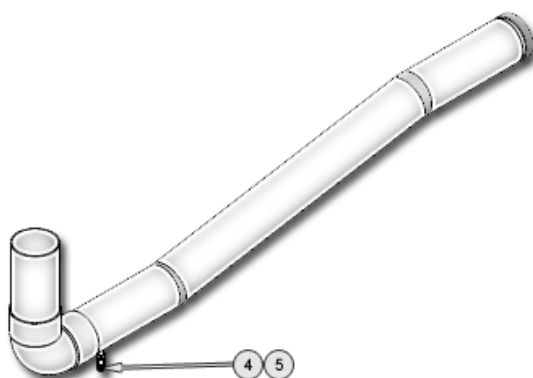
Item	Part Number	Description	Quantity
1	P-361A	UNION CU CXM 2-1/8"X2"	1
2	187933G2	VALVE ACC BODY 1/4 EXT1" BEAD	2
3	305522P1	VALVE CHECK 2-5/8" ODBRONZE SWT	1
	310390P1	VALVE CHK Y 2" BRNZ SWT ROHS	1
5	P-3790	ADAPTER CU CXF 5/8"X1/4"	1
7	P05-2720	ADAPTER CU CXM 2-1/8"X2" REDR	1
	P-361A	UNION CU CXM 2-1/8"X2"	1
8	130749P1	VALVE H2O REG FLANGE KIT 2"	1
	187933G2	VALVE ACC BODY 1/4 EXT1" BEAD	2
9	P02-0290	VALVE CORE REFRIGERANT	22

6.6.Outlet Line w/FS



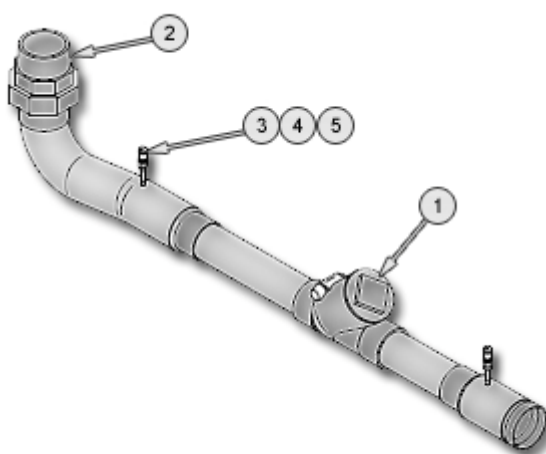
Item	Part Number	Description	Quantity
2	187933G2	VALVE ACC BODY 1/4 EXT1" BEAD	1
5	P02-0290	VALVE CORE REFRIGERANT	5
4	P-4120	SW FLOW SPDT MPT Production	1

6.7.Secondary Outlet



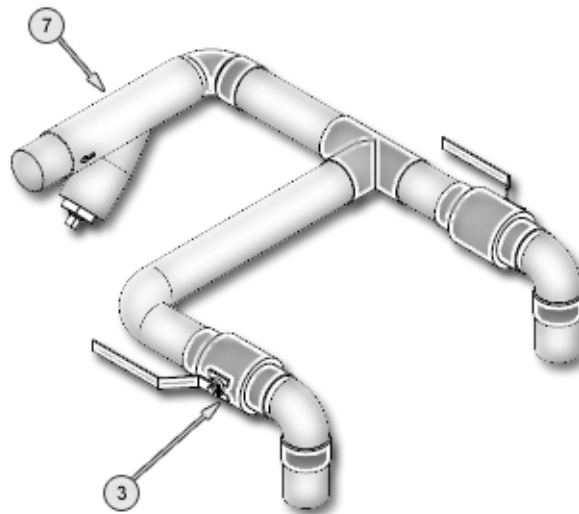
Item	Part Number	Description	Quantity
4	187933G2	VALVE ACC BODY 1/4 EXT1" BEAD	1
5	P02-0290	VALVE CORE REFRIGERANT	1

6.8.Pump Out Line w/Check Valve



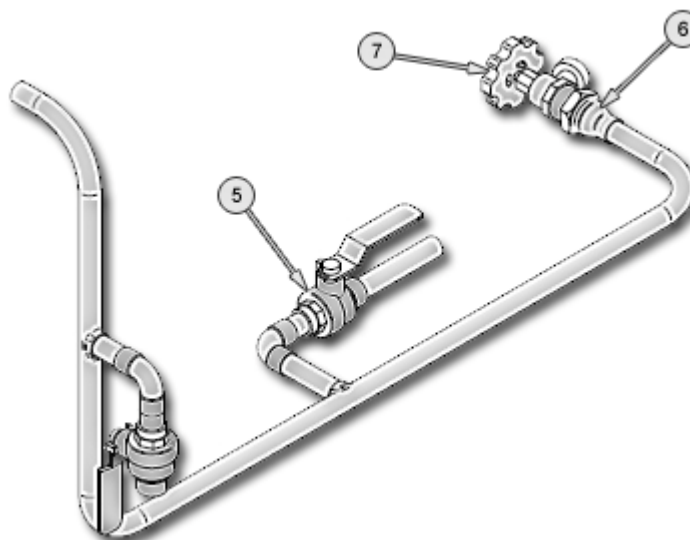
Item	Part Number	Description	Quantity
1	310390P1	VALVE CHK Y 2" BRNZ SWT ROHS	1
	305522P1	VALVE CHECK 2-5/8"ODBRONZE SWT	1
2	131077P1	UNION CU CXM 2-5/8 X 2-1/2"	1
	1A13375P1	ADAPTER CU CXM 2-5/8"X2-1/2"	1
3	187933G2	VALVE ACC BODY 1/4 EXT1" BEAD	2
	305522P1	VALVE CHECK 2-5/8"ODBRONZE SWT	1
4	P02-0290	VALVE CORE REFRIGERANT	2
5	P-3790	ADAPTER CU CXF 5/8"X1/4"	1

6.9. Merge Pump Line



Item	Part Number	Description	Quantity
3	1C14431P7	VALVE BALL BRONZE 2-1/2 SWT SP	2
	310276P7	VALVE BALL BRAS 2-1/2 SWT ROHS	2
7	305538P1	STRAINER -Y-2-5/8 BRONZE SWT60	1
	310274P1	STRAINER -Y-2-5/8 BRS SWT ROHS	1

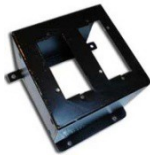
6.10. Fill Line w/Valve



Item	Part Number	Description	Quantity
5	1C14431P4	VALVE BALL BRONZE 1/2SWT F/P	2
6	175839P1	ADAPTER CXF 0.625X0.75	1
7	P07-0350	VALVE BOILER DRAIN3/4"NPT MALE	1

7. Parts Gallery

Electrical Section

			
182893P1	E-362B	136241P10	E-3620
			
136221P1	135409P4	135637P6	127977P1
			
127977P7	416761G1	180792P1	176023P1
			
132487P1	132487P2	417341G1	135409P2
			
180294P1	200509P1	416911G2	124501P1
			
136821P10	136811P1	180632G5	181898P1
			
1C18707P1	1C18352P1		

Exterior Section

			
308503G1	191146G1	179334P1	183058G1

Piping Section

			
1C14431P4	146351P1	159009P3	P02-0290
			
P07-0350			

8. Revision Page

Revision Date	Modification	Details
09/2014	-	Manual Released Date