

Liebert HPC

Parts Manual



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Precision Cooling
For Business-Critical Continuity

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1. Product Description

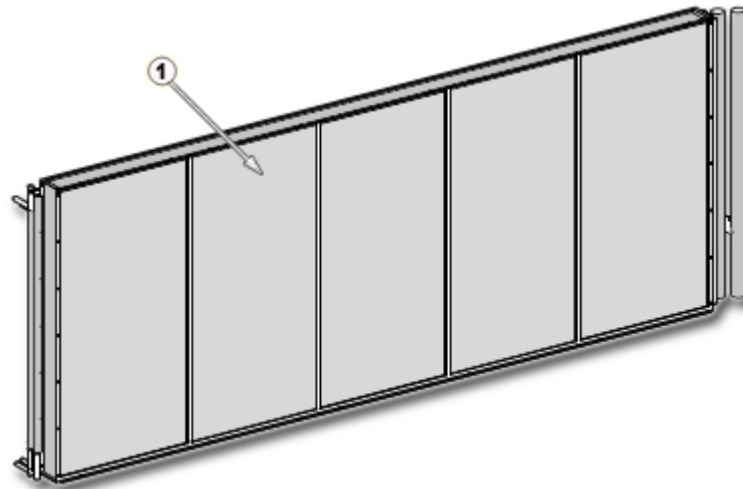
The Liebert HPC-S is an air-cooled liquid chiller utilizing scroll compressors, electrically commutated (EC) condenser fans, thermal expansion device, integral economizing coil, brazed plate heat exchanger and Liebert iCOM[®] microprocessor controls. The entire unit is run tested at the factory prior to shipment to the customer site. The unit is only used with constant flow through the chiller. All units are 460/3/60 only.

2. Model Number Definition

MODEL NUMBER NOMENCLATURE - CONFIGURATION NUMBER

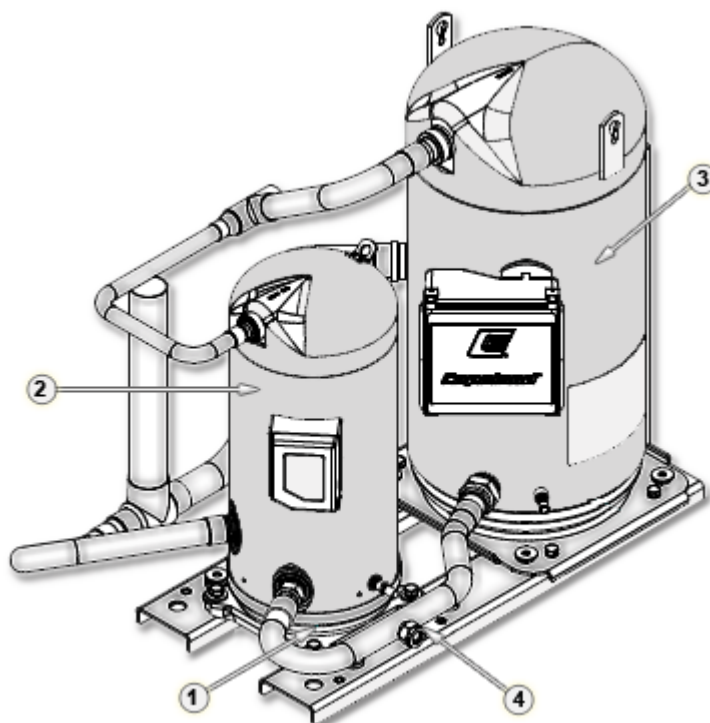
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
F	G	0	0	8	0	0	0	5	1	3	1	0	B	0	0	1	0
Digits 7, 8, 11, 13, 15, 16 and 18 - Factory-Determined Digits 7, 8, 15, 16 and 18 = 0 Digit 13 = 1 Digit 11 = 3 Digits 4-6 - Air-Cooled Chiller with Economizer Nominal Size ¹ 052 = Nominal 175 kW (50 ton) 080 = Nominal 264 kW (75 ton) 110 = Nominal 338 kW (98 ton) Digit 9 - Monitoring 0 = No monitoring card provided 2 = IS-WEBL (Liebert IntelliSlot [®] Web Card) 3 = IS-485L (Liebert IntelliSlot Modbus Card) 4 = IS-485EXI (Liebert SiteScan [®] Protocol Card) 5 = IS-WEBL (Liebert IntelliSlot Web Card) + IS-485L (Liebert IntelliSlot 485 Modbus Card) 6 = IS-WEBL (Liebert IntelliSlot Web Card) + IS-485EXI (Liebert SiteScan Protocol Card) 7 = IS-485L (Liebert IntelliSlot 485 Modbus Card) + IS-485EXI (Liebert SiteScan [™] Protocol Card) 8 = IS-IPBML (Liebert IntelliSlot Web/Modbus IP/BACnet IP Card) Digit 10 - Buffer Tank 0 = No buffer tank provided 1 = With buffer tank factory-installed 1. Capacity Rating Point at 95°F ambient, 10% EG, 50°F Leaving Fluid Temperature and 62°F Entering Fluid Temperature											Digit 12 - Pumps and Piping Options 0 = No pumps or piping options 1 = No pumps provided; with piping options 2 = Single standard head centrifugal pump with piping options 3 = Single high head centrifugal pump with piping options 4 = Dual standard head centrifugal pumps with piping options 5 = Dual high head centrifugal pumps with piping options 6 = Single inverter driven standard head centrifugal pump with piping options Digit 14 - Electrical Panel Options 0 = No electric panel options 1 = With electric heaters A = Fast start ramp B = Fast start ramp and electric heaters Digit 17 - Condenser Coil Filter Guard 0 = No condenser coil guard / filter 1 = With condenser coil guard / filter						

3. Coil Section



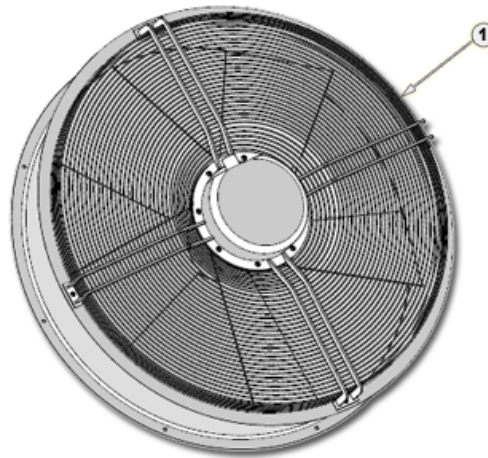
Item	Part Number	Description	Model Number	Quantity
1	113775HPC	COIL W/CD 3+3R 4000X1980 UL (COND + FC)	FG0052	1
	113776HPC	COIL W/CD 3+3R 5000X1980 UL (COND +FC)	FG0080/FB0110	1

4. Compressor Section



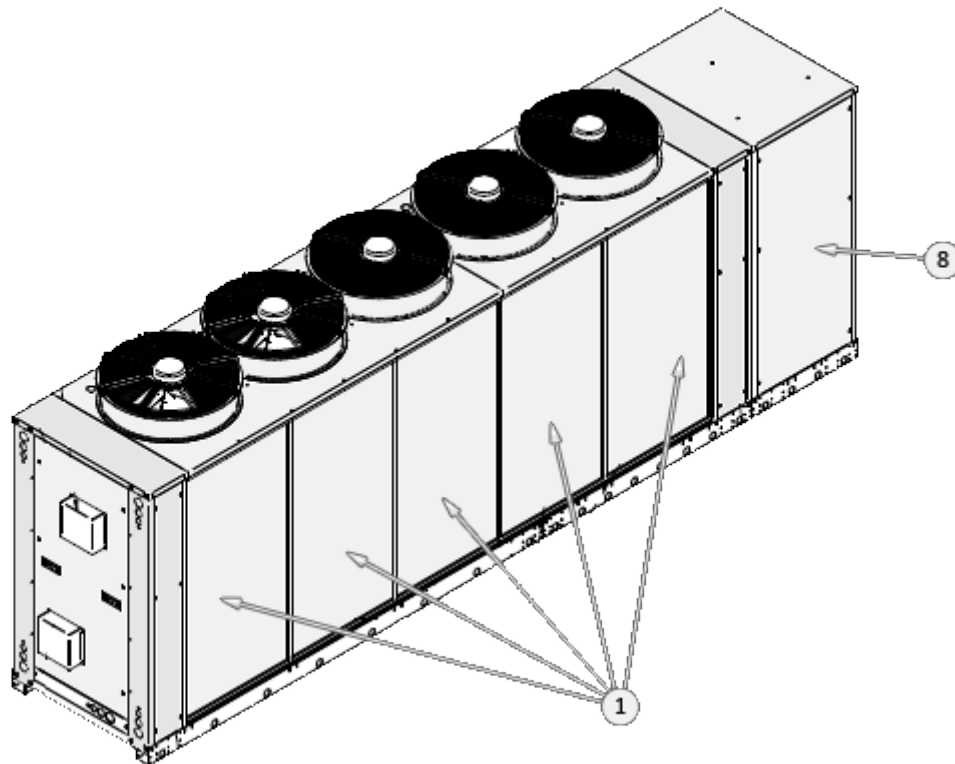
Item	Part Number	Description	Model Number	Quantity
2	147945S	COMP/SCR.ZP182-KCE TFD455 R410	FG0080	1
	147970S	COMP/SCR.ZP154-KCE TFD455 R410	FG0052	1
3	147947S	COMP/SCR.ZP295-KCE TWD522 R410	FG0080/FB0110	1
	147948S	COMP/SCR.ZP385-KCE TWD522 R410	FB0110	1
4	348021HPC	INDICATOR KSGST11 1.3/8° PARK	FG0080/FB0110	1
	348022HPC	INDICATOR KSGST9 1.1/8° PARK	FG0052	1

5. EC Fan Section



Item	Part Number	Description	Quantity
1	381789	FAN EBM A3G910-AV02-01 ECF	1

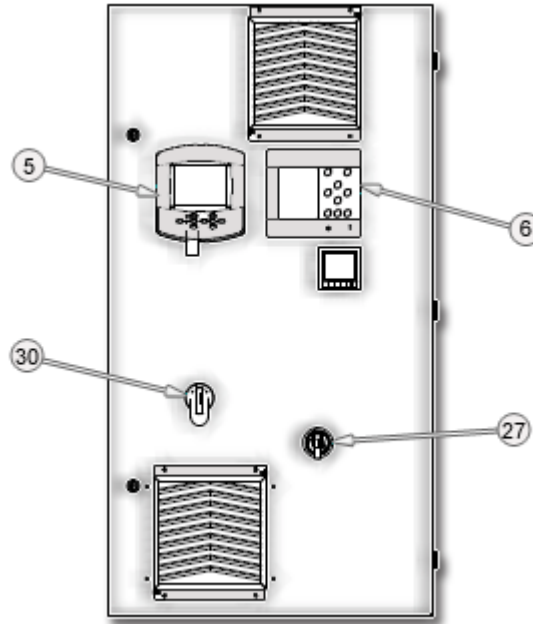
6. Exterior Section



Item	Part Number	Description	Quantity
1	210388HPC	FILTER MET.999X2015 MATRIX-M	5
8	127173HPC	EXT.LATERAL PANEL MATRIX-M	2

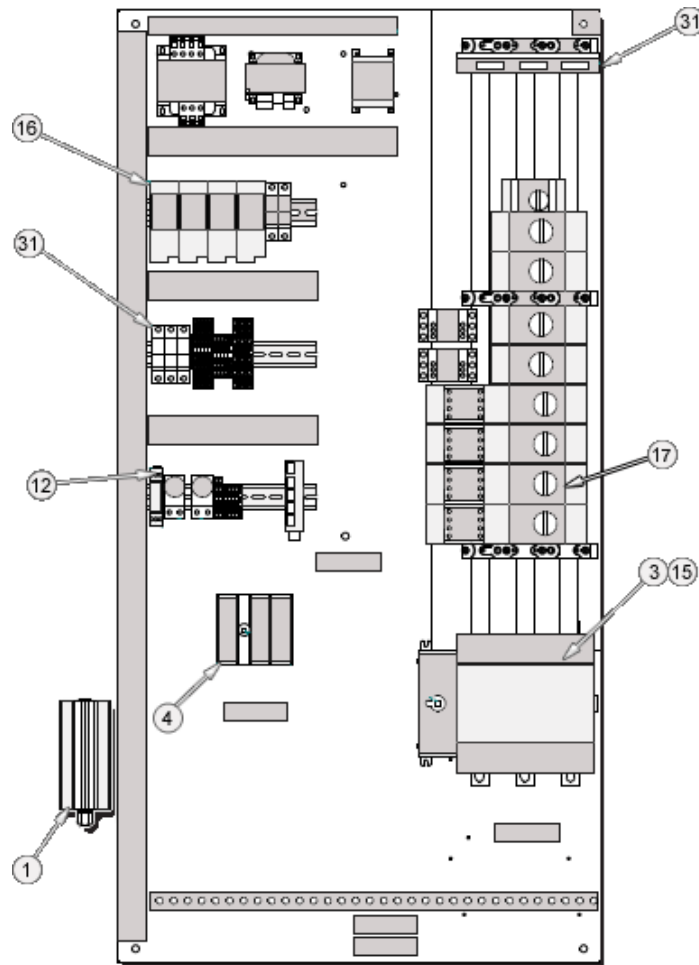
7. Electrical Section

7.1. Control Panel



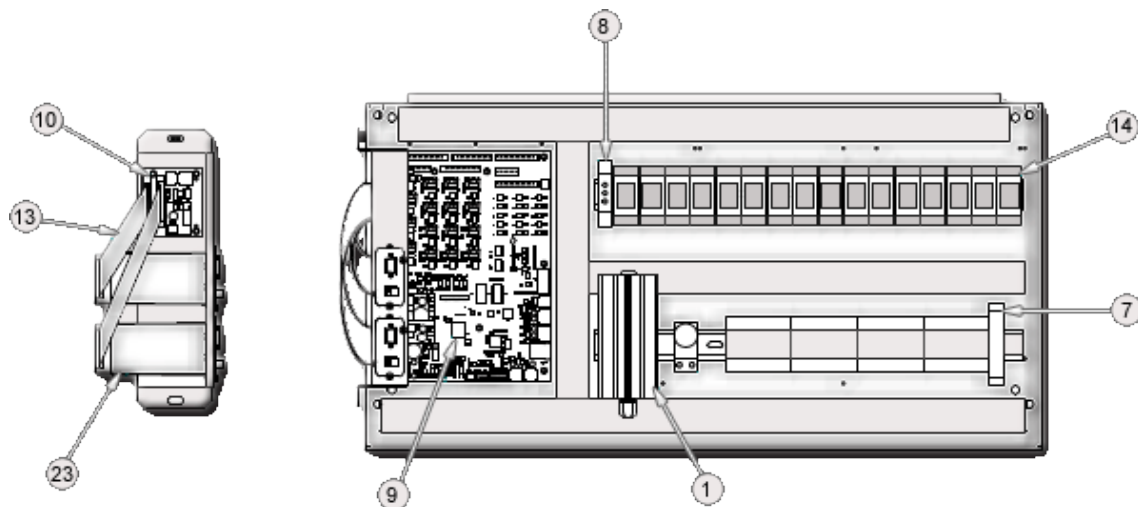
Item	Part Number	Description	Quantity
5	180632G6	ICOM CDL DISPLAY	1
6	276831HPC	BOARD PUMP INVERTER GRUN.CU352 (EP)	1
27	318248P1	HANDLE MAIN SWITCH	1
30	11300	HANDLE UPS SWITCH	1

7.2. High Voltage



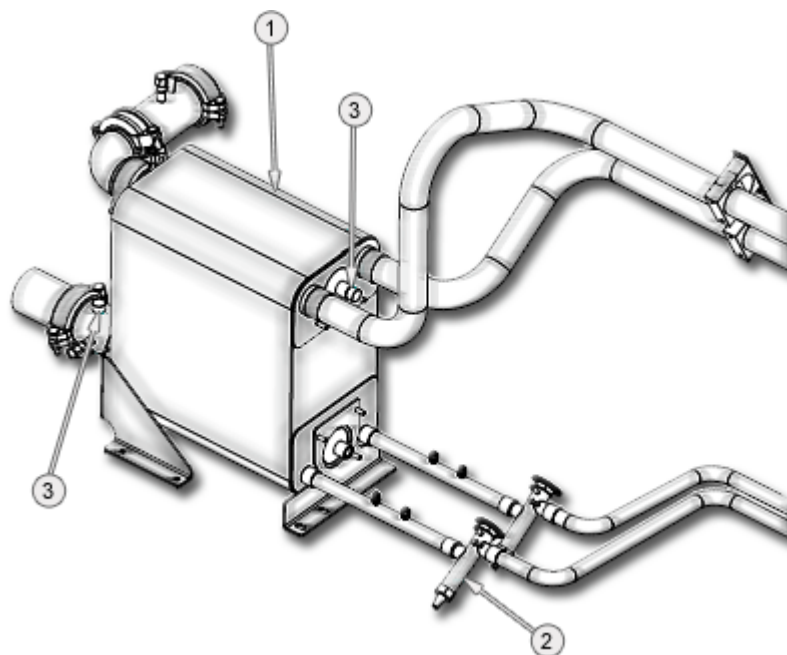
Item	Part Number	Description	Quantity
1	317893P1	HEATER ELECTRICAL PANEL	1
3	303398P4	MAIN SWITCH	1
	303398P8	MAIN SWITCH	1
	303398P4A	LUGS MAIN SWITCH 200	1
	303398P8A	LUGS MAIN SWITCH 400	1
	303398P9	SHROUD MAIN SWITCH 400	1
12	317907P1	KSEQ	1
15	12-749458-35	MAIN FUSE	1
16	136821P2	FUSES	1
17	321512P1	CONTACTOR GV3P65 W/LC1D65AB7	1
31	127977P7	FUSES	1
	127977P8	FUSES	1
	127977P3	FUSES	1
	511885P4	FUSES	1

7.3. Low Voltage



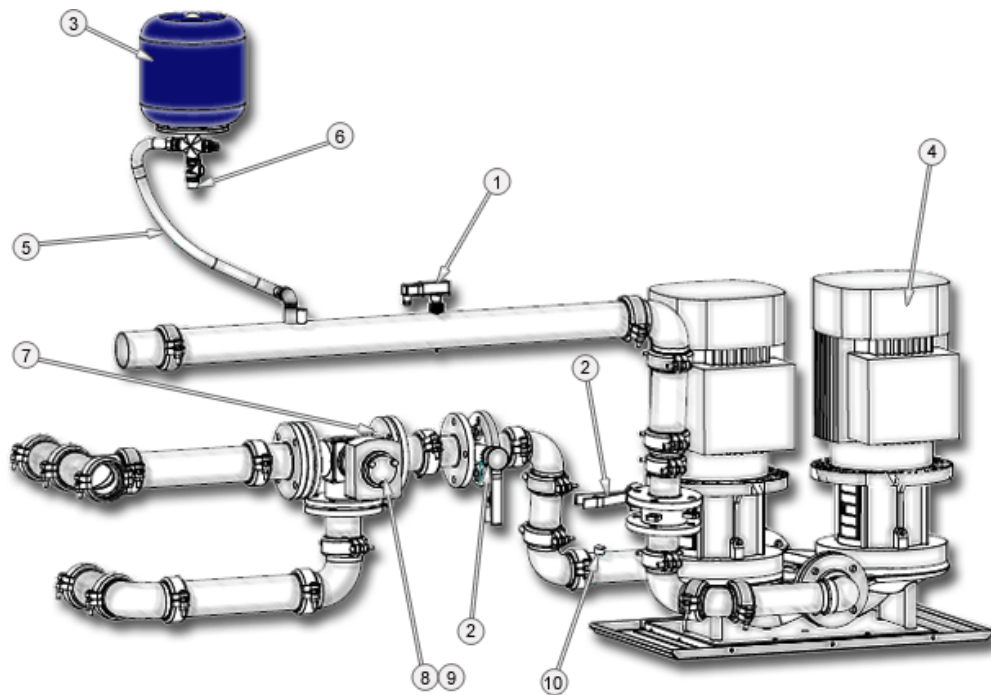
Item	Part Number	Description	Quantity
1	317893P1	HEATER ELECTRICAL PANEL	1
7	257402P1	A11 OPTOISOLATORE	1
8	317894P1	TIMER	1
9	416761G3	ICOM I/O CONTROL LARG.416761G3	1
10	276588HPC	ICOM INTELLISLOT POWER SUP. AC	1
13	276699HPC	ICOM RIBBON CABLE L=0,5MT	1
14	311981P1	AUXILIARY RELAYS	1
23	IS-485EXI	LIEBERT SITESCAN WEB 4.0 CARD	1
	IS-485L	INTELLISLOT LIEBERT 485 CARD-L	1
	IS-IPBML	INTELLISLOT MODBUS IP/BACNET	1
	IS-WEBL	INTELLISLOT LIEBERT WEB CARD-L	

8. Heat Exchanger



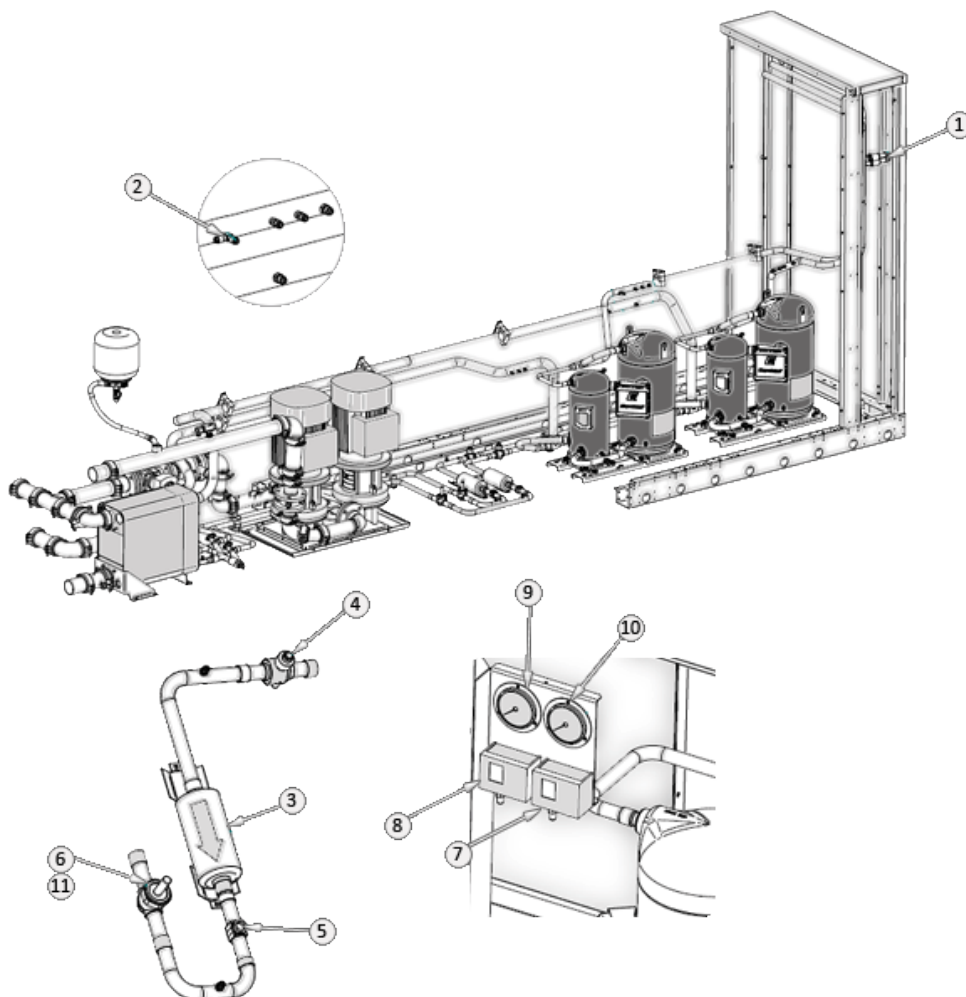
Item	Part Number	Description	Model Number	Quantity
1	186056S	HEAT EXCH.AL ACH-230DQ250HF UL	FB0110	1
	186057S	HEAT EXCH.AL.ACH-230DQ114HF UL	FG0052	1
	186059S	HEAT EXCH.AL ACH-230DQ198HF UL	FG0080	1
2	378696HPC	VALVE EXPANS. OZE50 11/8-11/8	FG0052	1
	378697HPC	VALVE EXPANS. OZE50 11/8-11/8	FG0080	1
	378698HPC	VALVE EXPANS. OZE60 11/8-11/8	FB0110	1
3	276731HPC	PROBE NTC WATER ICOM HPC L=3,5		1
	276732HPC	PROBE NTC WATER ICOM HPC L=10		1

9. Piping – Water



Item	Part Number	Description	Model Number	Quantity
1	P354395HPC	FLWSWITCH SIKA VK309M		1
2	334358HPC	WATER VALVE SOCLA DN65		1
3	271415HPC	EXPANSION TANK 12LT. PED		1
4	303386HPC	PUMP GRUND.TPD65-480/2 11K	FG0080/FB0110	1
	303387HPC	PUMP GRUND.TPD65-390/2 7,5KW	ALL	1
	303388HPC	PUMP GRUND. TP65-340/2 5,5KW	FG0052	1
	303389HPC	PUMP GRUND. TP65-390/2 7,5KW	ALL	1
	303390HPC	PUMP GRUND.TP65-480/2 11 KW	FG0080/FB0110	1
	303391HPC	PUMP GRUND.TPE65-390/2 7,5KW	FG0052	1
	303392HPC	PUMPGRUND. TPE65-480/2 11KW	FG0080/FB0110	1
	303393HPC	PUMP GRUND.TPD65-340/2 5,5KW	FG0052	1
5	221072HPC	HOSE L 600 3/4°G. FM		1
6	378332HPC	VALVE SAF.1/2° 6 BARG ART.312		1
7	378324HPC	VALVE 3W CZ3.80 PN6 3°		1
8	278007HPC	ACTUATOR SIEMENS SAL81.00T10		1
9	278356HPC	ACCESSORY ASK31N PER VBF21.. (MOUNTING FOR ACTUATOR)		1
10	276731HPC	PROBE NTC WATER ICOM HPC L=3,5		1
	276732HPC	PROBE NTC WATER ICOM HPCL=10		1

10. Piping Refrigerant



Item	Part Number	Description	Model Number	Quantity
1	P378387HPC	VALVE S.1/2°A002-G14/S 45B. CE		1
2	354352HPC	TRANSDUCER SPKT 0-45 BAR RAZ.		1
3	206317HPC	FILTER FREON PARKER C-307S D22	FG0052	1
	206318HPC	FILTER FREON PARKER C-419-S	FG0080	1
	135365P1	FILTER FREON PARKER C-609-S	FB0110	1
4	334124HPC	VALVE BALL D.7/8X22 806738 UL		1
5	P05-1050	SIGHT GLASS SA-17S PARK. D=7/8	FG0052	1
	135319P2	SIGHT GLASS SA-19S PARK.D=11/8	FG0080/FB0110	1
6	183008HPC	VALVE PARK.E25S290-HP 1.1/8°SA	FG0080/FB0110	1
	183009HPC	VALVE PARKER E25S270-HP 7/8°SA	FG0052	1
7	354115HPC	PR/SWITCH KP2 060.509566		1
8	354113HPC	PR/SWITCH KP6B 060-519166PED		1
9	354023HPC	PRESS.GAUGE DN63 -30/+760 R410		1
10	354024HPC	PRESS.GAUGE DN63 -30/+550 R410		1
11	183008HPC	VALVE PARK.E25S290-HP 1.1/8°SA		1

	183009HPC	VALVE PARKER E25S270-HP 7/8"SA		1
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11. Parts Gallery

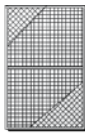
Compressor Section

			
147945S	147947S	348021HPC	

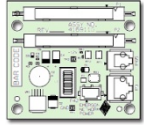
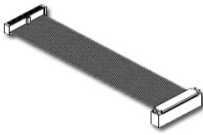
EC Fan Section

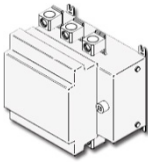
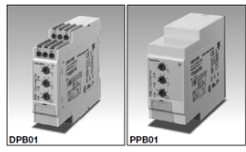
			
381789			

Exterior Section

			
210388HPC			

Electrical Section

			
210388HPC	311981P1	11300	127977P7
			
136821P2	180632G6	257402P1	276588HPC
			

276699HPC	276831HPC	303398P4A-303398P8	303398P8
			
303398P1	317893P1	317894P1	317907P1
			
318248P1	416761G3	IS-485EXI	

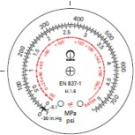
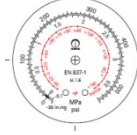
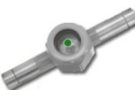
Heat Exchanger

			
186056S	378696HPC		

Piping - Water

			
271415HPC	278007HPC	278356HPC	334358HPC
			
303387HPC	303388HPC	303391HPC	378324HPC
			
378332HPC	P354395HPC		

Piping - Refrigerant

			
183008HPC	206317HPC	254058HPC	334124HPC
			
354023HPC	354024HPC	354352HPC	P05-1050
			
354113HPC / 354115HPC			

12. Revision Page

Version	Revision Date	Modification	Details
01	02/2015	Electrical – High Voltage	Added callout 17 - contactor
00	08/2014	-	Manual Release