

Parts Manual

PM

Group: Wall Mounted Package
Part Number: CLIWP PM
Date: 29 May 2023

CLIWP Series Direct Expansion Unit with Scroll Compressor

Model

3 RT / 5 RT

Refrigerant HFC-410A

60 Hz



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Manufactured in an ISO 9001 certified facility



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SAFETY WARNING

This manual provides service parts information for the Comfort Flex CLIWP series.

NOTES: Installation and maintenance must be performed only by qualified personnel who are familiar with local codes and regulations and who have experience with this type of equipment.

⚠ DANGER ⚠

LOCK OUT/LABEL all power sources before starting, pressurizing, depressurizing or shutting down the chiller.

Disconnect electrical power before servicing equipment. More than one disconnection may be required to deenergize the unit. Failure to follow this warning to the letter can result in serious injury or death. Be sure to read and understand the installation, operating and service instructions in this manual.

⚠ WARNING ⚠

Electric shock danger. Improper handling of this equipment can cause personal injury or equipment damage. This equipment must be properly grounded. Control panel connections and maintenance should be performed only by personnel knowledgeable in the operation of the equipment being controlled. Disconnect electrical power before servicing equipment. Be sure to install a earth leakage breaker. Failure to install a earth leakage breaker may result in electric shock or fire.

⚠ CAUTION ⚠

Static sensitive components. Static discharge during handling of the electronic circuit board can cause damage to components. Use a static strap before performing any service work. Never unplug any cables, circuit board terminal blocks, or power plugs while power is applied to the panel.

⚠ CAUTION ⚠

When moving refrigerant to/from the cooler using an auxiliary tank, a grounding strap should be used. An electrical charge builds up when halo-carbon refrigerant travels in a rubber hose. A grounding strap should be used between the auxiliary refrigerant tank and the cooler end sheet (ground to ground), which will safely carry the charge to ground. Failure to follow this procedure may result in damage to sensitive electronic components.

⚠ WARNING ⚠

If refrigerant leaks from the unit, there is a potential choking danger as the refrigerant will displace air in the immediate area. Be sure to follow all applicable published industry-related standards and local, state, and federal statutes, regulations, and codes if refrigerant is produced. Avoid exposing refrigerant to an open flame or other ignition source.

⚠ WARNING ⚠

Polyolester oil, commonly referred to as POE oil, is a synthetic oil used in many refrigeration systems and may be present in this Comfort Flex product. POE oil, if it ever comes in contact with PCV/CPVC, will coat the inside wall of the PVC/CPVC pipe and cause environmental stress fractures. Although there is no PCV/CPVC pipe in this product, keep this in mind when selecting piping materials for your application, as system failure and property damage could occur. Consult the pipe manufacturer's recommendations to determine appropriate pipe applications.

DANGER IDENTIFICATION INFORMATION

⚠ DANGER ⚠

Danger indicates a dangerous situation which, if not avoided, will result in death or serious injury.

⚠ WARNING ⚠

Warning indicates a potentially dangerous situation which may result in property damage, personal injury or death if not avoided

⚠ CAUTION ⚠

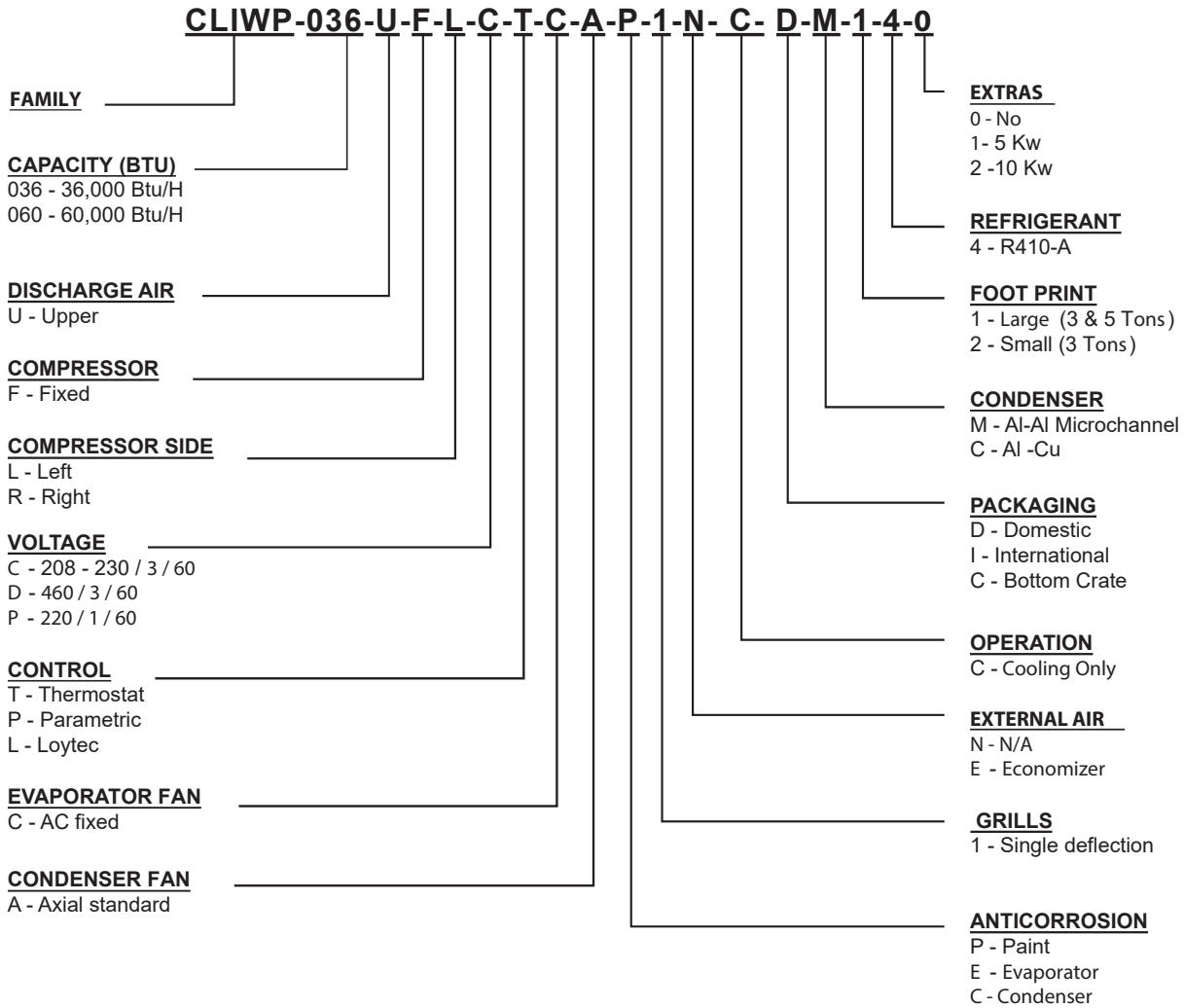
Caution indicates a potentially dangerous situation which may result in minor injury or equipment damage if not avoided.

Notes: Indicate important details or clarifying statements for the information presented.

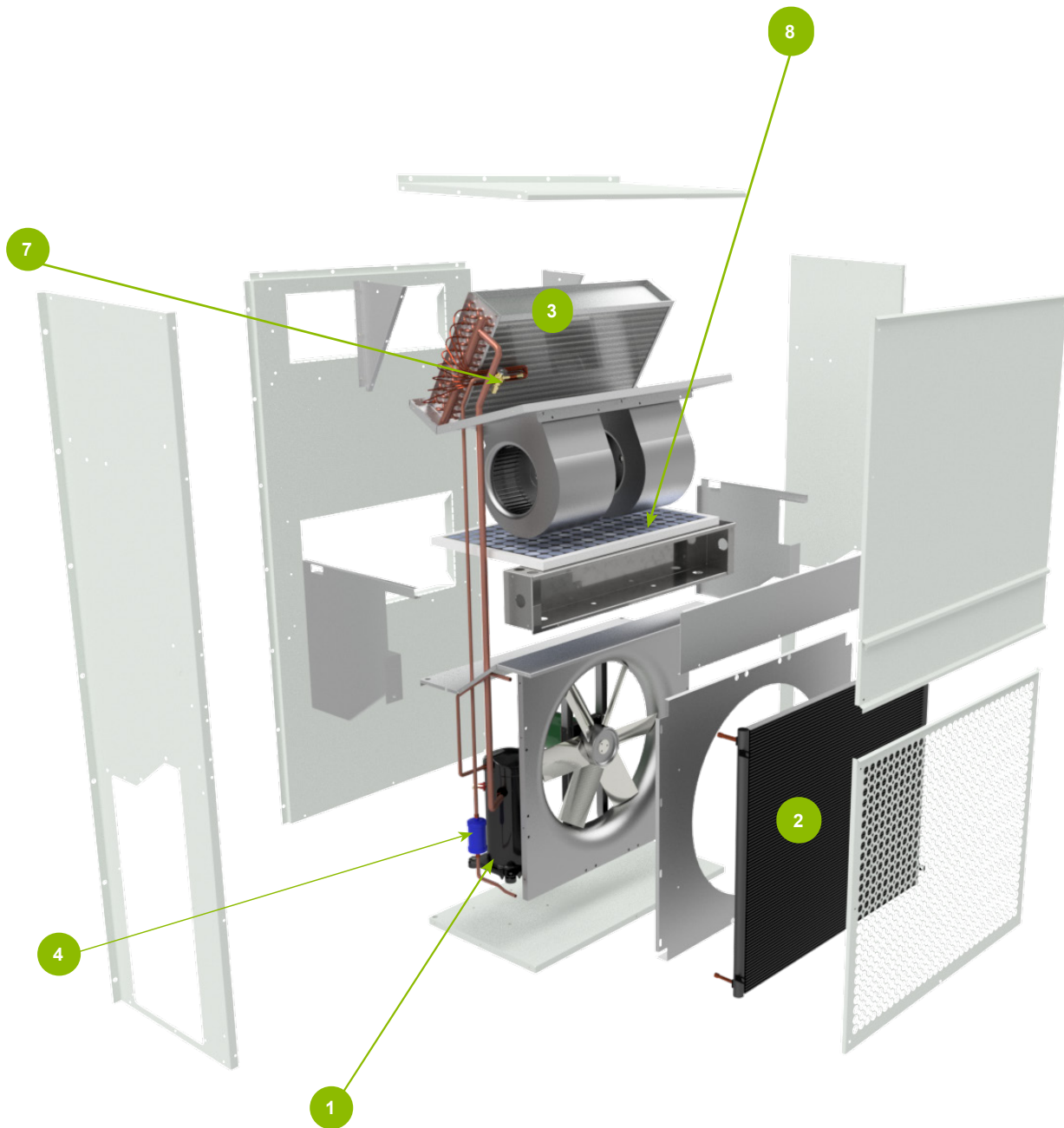
Comfort Flex 's CLIWP series direct expansion wall-mounted package cooling systems are complete, self-contained, automatic chillers designed for outdoor installation. The package units are fully assembled, factory wired, charged and tested.

The electrical control center includes all operating controls and equipment protection necessary for reliable automatic operation. Components housed in a weatherproof control panel.

NOMENCLATURE



SERVICE PARTS - REFRIGERATION



THERMOSTATIC									
COMPONENT	QYT	UM	PART NUMBER						
			208-230 / 1 / 60		208-230 / 3 / 60		460 / 3 / 60		
			3 RT	5 RT	3 RT	5 RT	3 RT	5 RT	
1	COMPRESSOR	1	PC	3000305	3024289	3002997	3021956	3003007	3024290
2	CONDENSER (*Anticorrosion)	1	PC	3018222 4001928	3018222 4001928	3018222 4001928	3018222 4001928	3018222 4001928	3018222 4001928
3	EVAPORATOR	1	PC	4001915	4002145	4001915	4002145	4001915	4002145
4	FILTER DRIER 3/8 "ODF	1	PC	1013127	1013127	1013127	1013127	1013127	1013127
5	HIGH PRESSURE CONTROL	1	PC	1001249	1001249	1001249	1001249	1001249	1001249
6	LOW PRESSURE CONTROL	1	PC	1036389	1036389	1036389	1036389	1036389	1036389
7	EXPANSION VALVE	1	PC	1037906	1013125	1031364	1013125	1031364	1013125
8	AIR FILTER	1	PC	1049799	1037980	1049799	1037980	1049799	1037980

ELECTRONIC						
COMPONENT	QYT	UM	PART NUMBER			
			208-230 / 60 / 1	208-230 / 60 / 3	460 / 60 / 3	
			5 RT	5 RT	5 RT	
1	COMPRESSOR	1	PC	3024289	3021956	3024290
2	CONDENSER (*Anticorrosion)	1	PC	3018222 4001928	3018222 4001928	3018222 4001928
3	EVAPORATOR	1	PC	4002145	4002145	4002145
4	FILTER DRIER 3/8 "ODF	1	PC	1013127	1013127	1013127
5	HIGH PRESSURE CONTROL	1	PC	1001249	1001249	1001249
6	LOW PRESSURE CONTROL	1	PC	1036389	1036389	1036389
7	EXPANSION VALVE	1	PC	1050424	1050424	1050424
8	AIR FILTER	1	PC	1037980	1037980	1037980
9	TRANSDUCER	1	PZA	1030128	1030128	1030128

SERVICE PARTS - ELECTRICAL

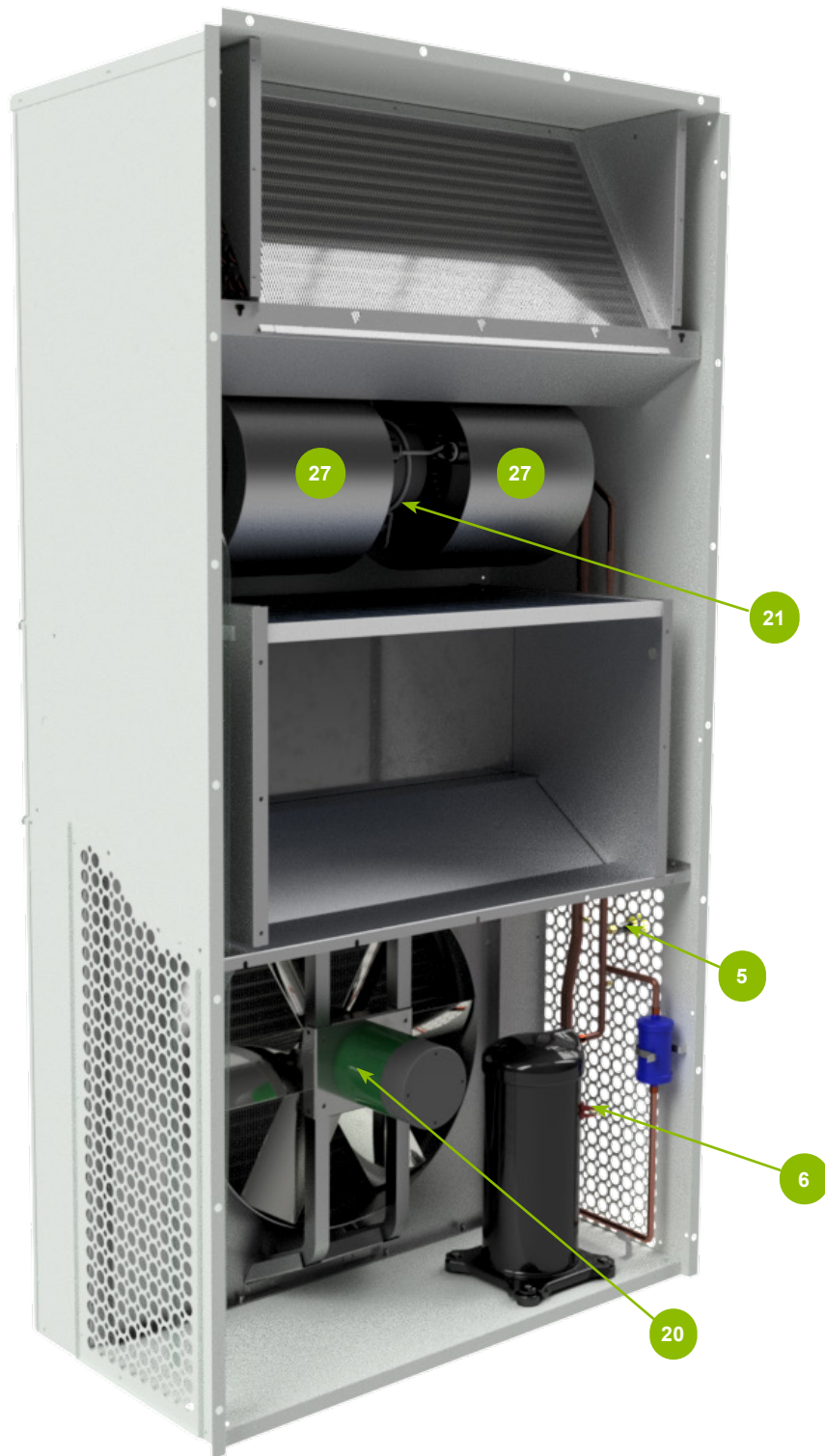
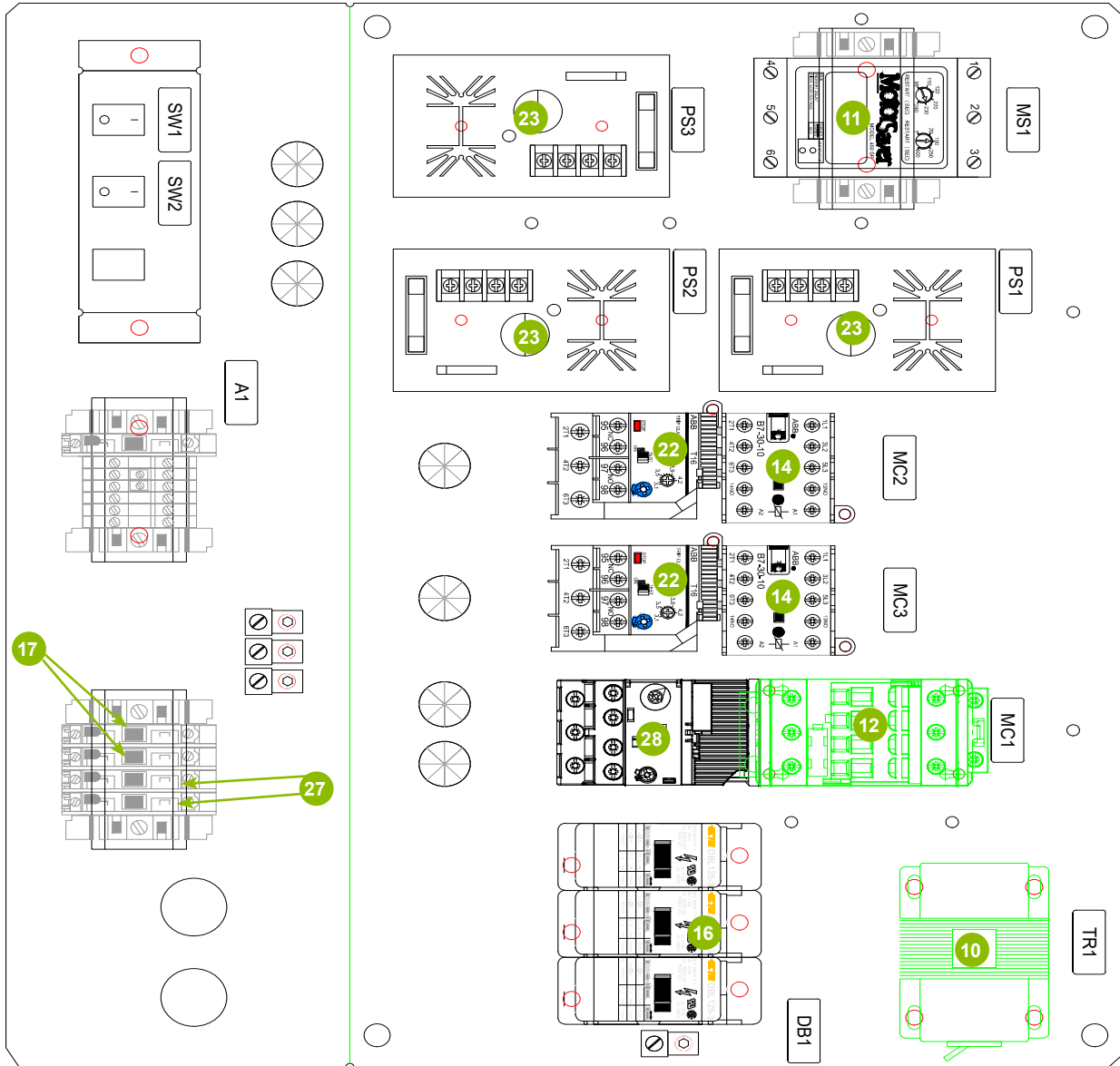


Figure 1. Schematic Plate 3 TR 208-230 / 60 / 3 Thermostatic

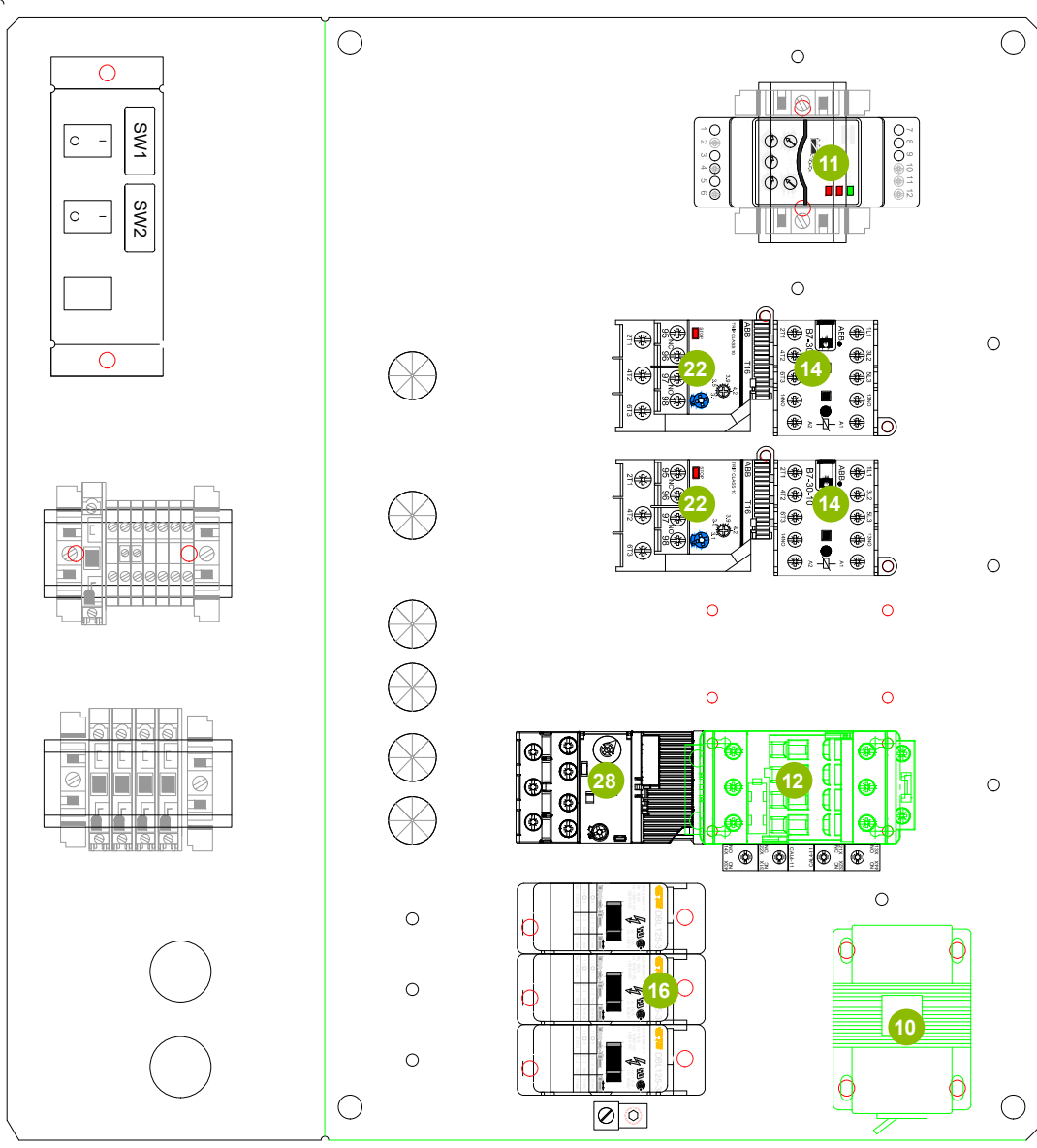


WP SFP 220VAC-1

UB.	DESCRIPTION
	LABEL LIST
SW1	MAIN SWITCH
SW2	START COMPRESSOR
A1	TERMINAL BLOCK
MS1	MOTOR SAVER
TR1	TRANSFORMER
DB1	DISTRIBUTION BLOCK
MC1	COMPRESSOR
MC2	CENTRIFUGAL FAN
MC3	AXIAL FAN
PS1	POWER SUPPLY 1
PS2	POWER SUPPLY 2
PS3	POWER SUPPLY 3
GND	GROUND

SERVICE PARTS - ELECTRICAL

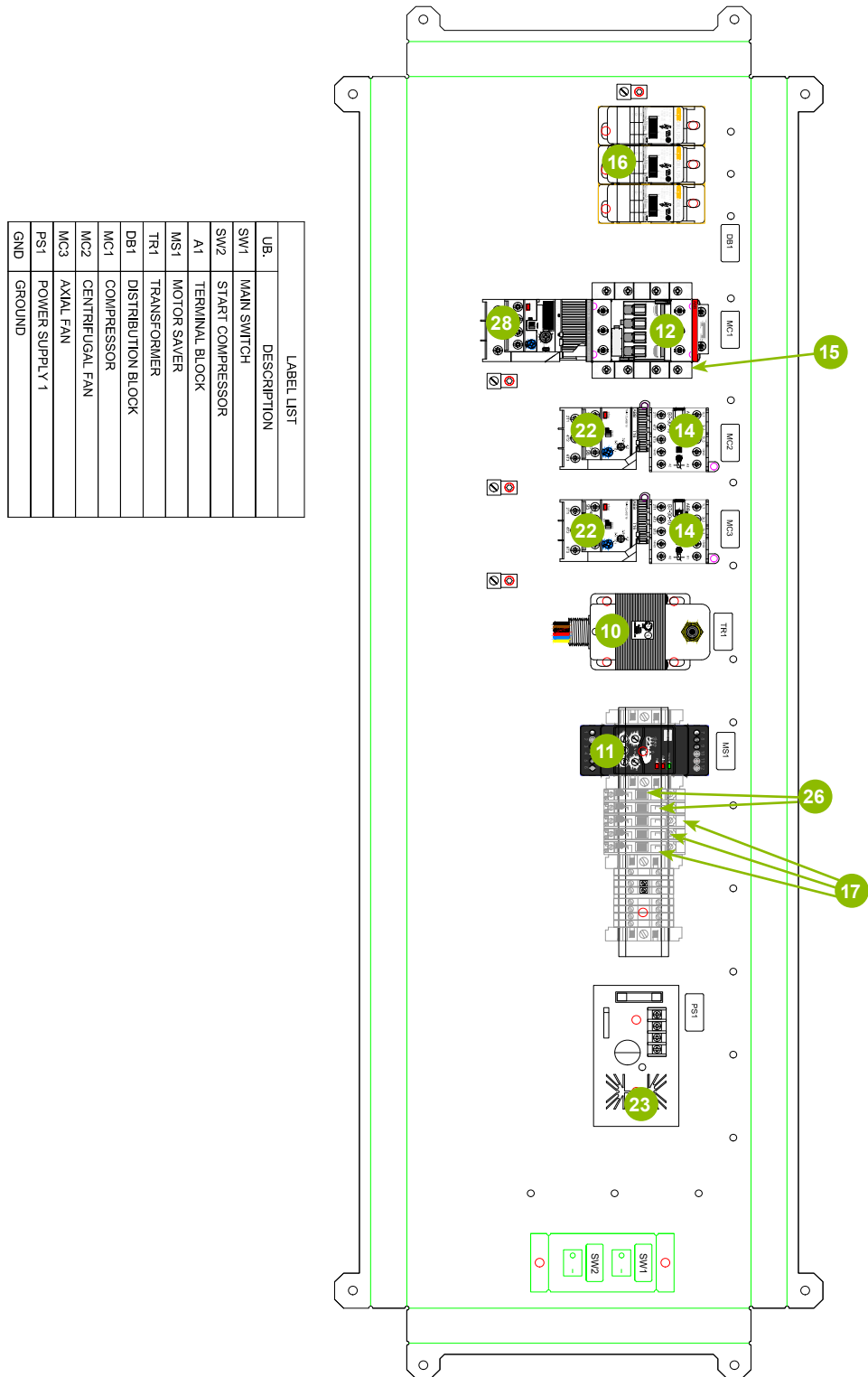
Figure 2. Schematic Plate 3 TR 460 / 60 / 3 Thermostatic



WP-SFP-440V

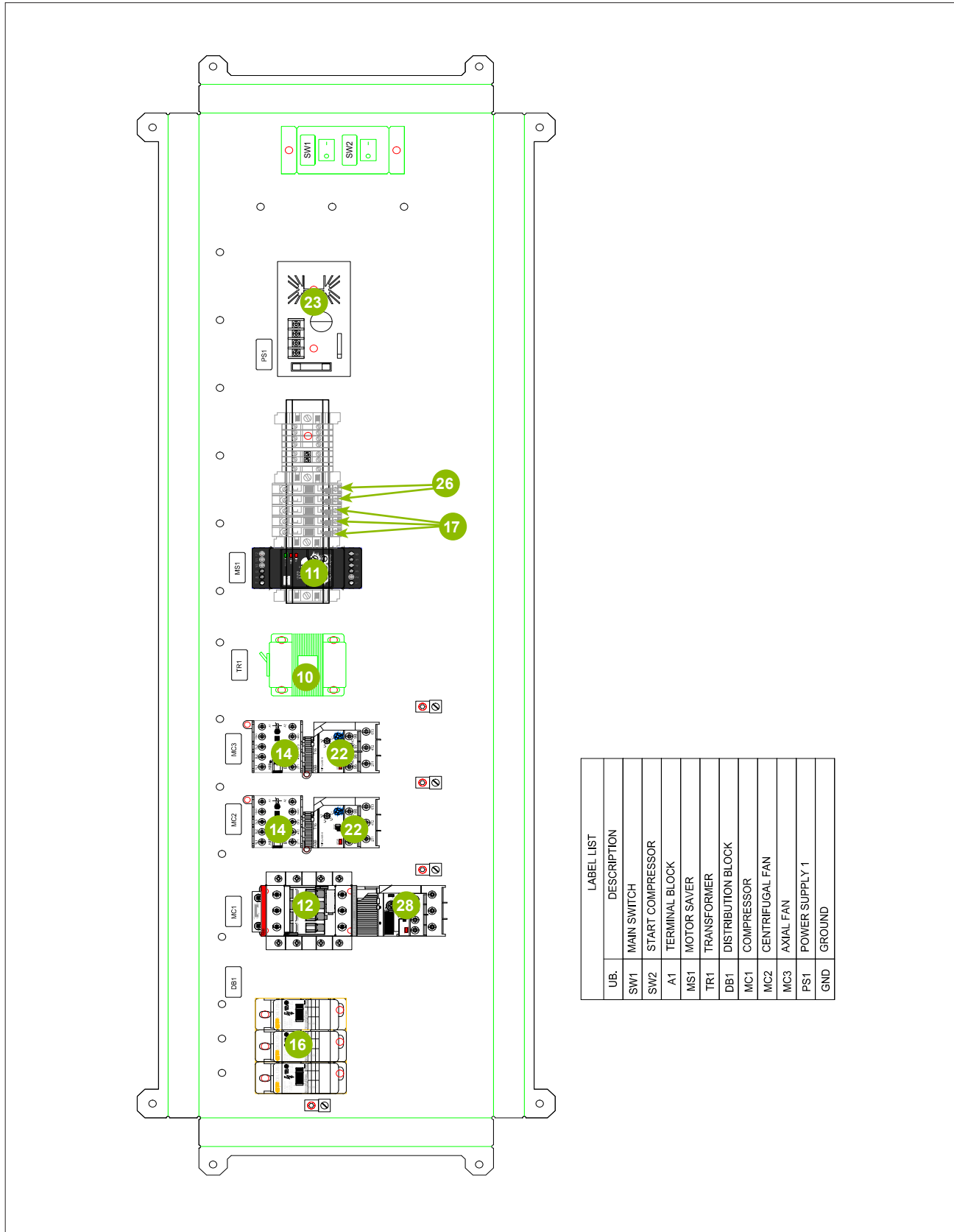
LABEL LIST	
UB.	DESCRIPTION
SW1	MAIN SWITCH
SW2	START COMPRESSOR
A1	TERMINAL BLOCK
MS1	MOTOR SAVER
TR1	TRANSFORMER
DB1	DISTRIBUTION BLOCK
MC1	COMPRESSOR
MC2	CENTRIFUGAL FAN
MC3	AXIAL FAN
GND	GROUND

Figure 3. Schematic Plate 5 TR 2208-230 / 60 / 1 Thermostatic



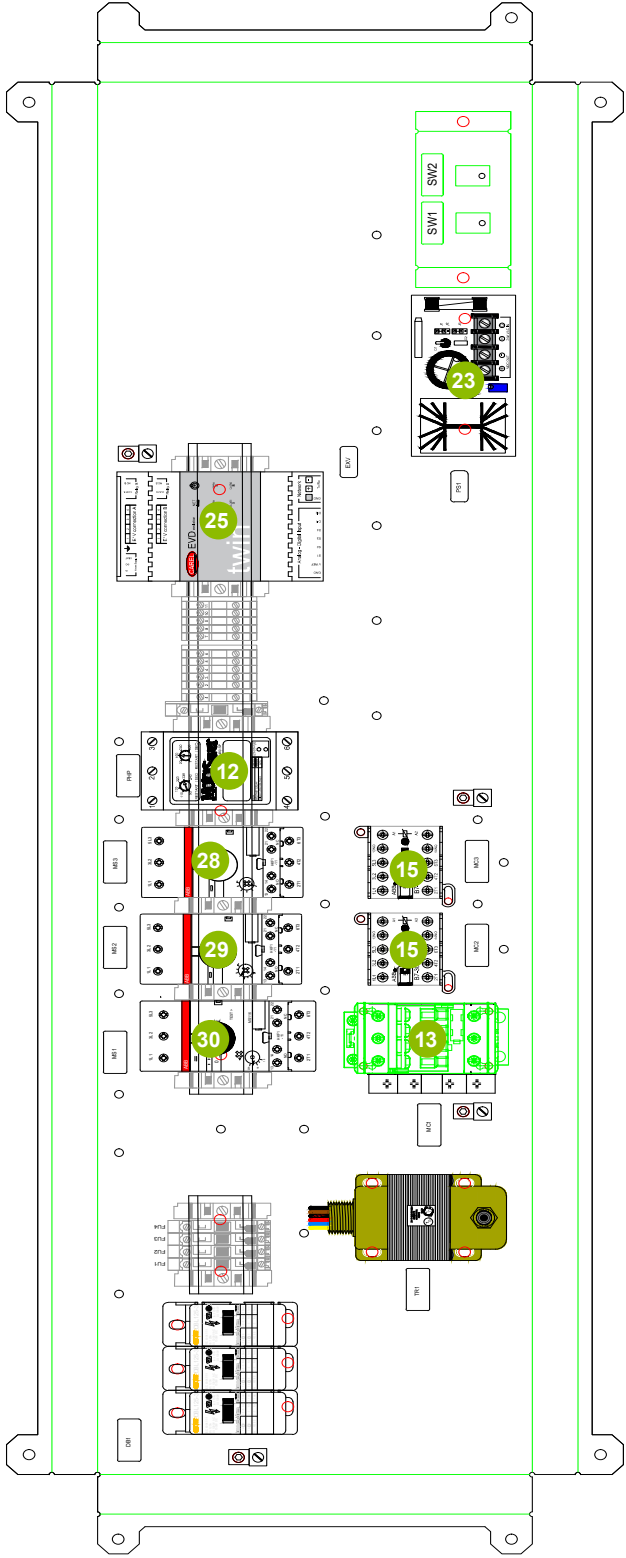
SERVICE PARTS - ELECTRICAL

Figure 4. Schematic Plate 5 TR 460 / 60 / 3 Thermostatic



LABEL LIST	
UB.	DESCRIPTION
SW1	MAIN SWITCH
SW2	START COMPRESSOR
A1	TERMINAL BLOCK
MS1	MOTOR SAVER
TR1	TRANSFORMER
DB1	DISTRIBUTION BLOCK
MC1	COMPRESSOR
MC2	CENTRIFUGAL FAN
MC3	AXIAL FAN
PS1	POWER SUPPLY 1
GND	GROUND

Figure 5. Schematic Plate 5 TR 208-230 / 60 / 1 Electronic



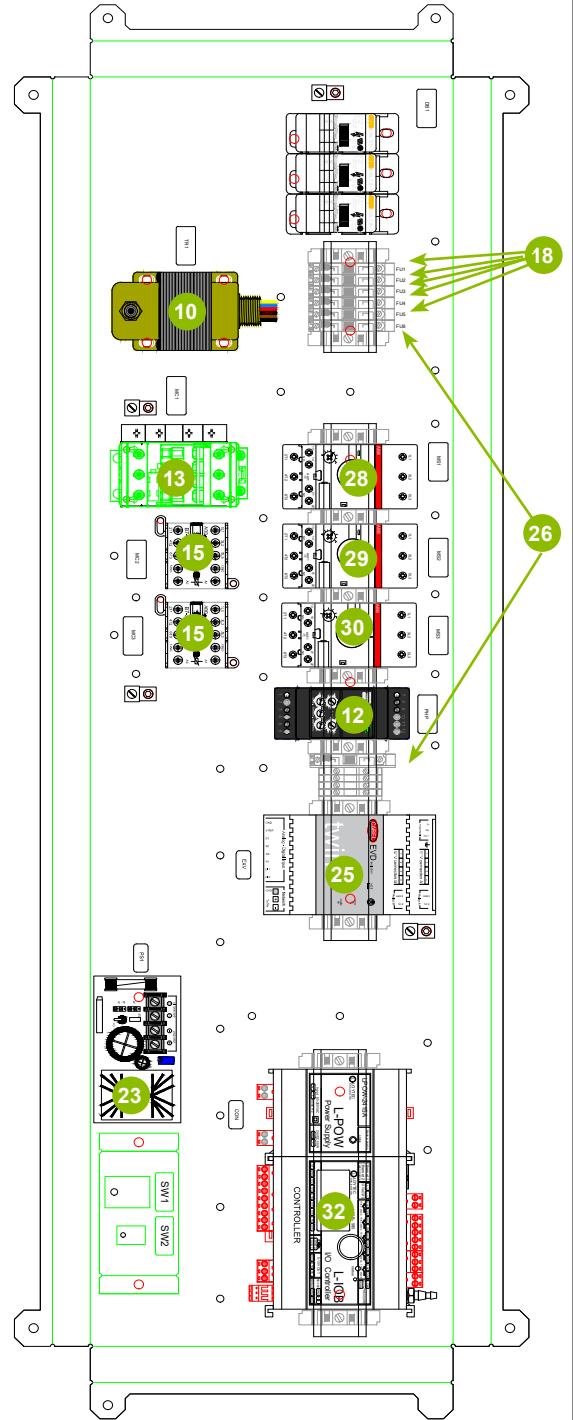
DWP 2201/60 5TR

SAP	#	LIST OF CONTROL PANEL COMPONENTS	QTY	U/M
3000042	1	TRANSFORMADOR 75VA 220-480 V AT175F1031	1	PZA
1005907	1	MOTOR SAVER MONOFASICO 460-200 SP	1	PZA
1000144	2	MINI CONTACTOR 24V G.L1311001R0101	2	PZA
1001053	1	CONTACTOR AF30Z-30-00-21 1SBL276001R2100	1	PZA
1034621	1	BLOQUE DISTRIB. TRIPO 3P 1SNL312530R0000	1	PZA
1000071	11	CLEMA GRIS MA2 5/5 1SNA115486R0300	11	PZA
1000301	5	CLEMA PORTA FUSIBLE 1SNA115657R2500	5	PZA
1000145	9	TOPE DE RETENCION 1SNA206351R1600	9	PZA
1000166	2	APAGADOR DE BALANCIN 1P-1T 4 AMP BTS-09	2	PZA
1000233	3	FUSIBLE 3 AMP	3	PZA
1000804	4	CONECTOR TIPO LENGUETA 1 OJILLO, 14-6AW	4	PZA
1000652	3	TAPA PARA CLEMA GRIS 116366R1600	3	PZA
1000226	2	TAPA PARA PORTA FUSIBLE 1SNA116951R1500	2	PZA
1001435	1	SENSOR DE TEMPERATURA AX0631060	1	PZA
1034404	2	FUSIBLE 1 AMP	2	PZA
1022112	1	FUENTE DE ALIMENTACION LPS-015	1	PZA
1050724	1	GUARDAMOTOR 1SAM25000R1010	1	PZA
1050725	1	GUARDAMOTOR 1SAM25000R1009	1	PZA
1050726	1	GUARDAMOTOR 1SAM25000R1013	1	PZA
1050727	3	HKF1-11 BLOQUE DE CONTACTOS AUXILIARES	3	PZA
1031363	1	EVD0080750 TWIN PARA VAL EXP ELECTRONICA	1	PZA
1030129	1	SPK005310 CABLE TRANSDUCTOR	1	PZA
1030837	1	E2V/CABS900 Cable bilind y conector EXV	1	PZA

UB.	DESCRIPTION
SW1	MAIN SWITCH
SW2	START COMPRESSOR
EXV	ELECTRONIC EXPANSION VALVE
PHP	PHASE PROTECTOR
TR1	TRANSFORMER
DB1	DISTRIBUTION BLOCK
MS1	COMPRESSOR
MS2	AXIAL FAN
MS3	CENTRIFUGAL FAN
PS1	POWER SUPPLY
GND	GROUND
MC1	CONTACTOR 1
MC2	CONTACTOR 2
MC3	CONTACTOR 3

SERVICE PARTS - ELECTRICAL

Figure 6. Schematic Plate 5 TR 460 / 60 / 3 Free Cooling Electronic



DWP LOYTEC 440VAC

UB.	DESCRIPTION
CON	CONTROLLER
SW1	MAIN SWITCH
SW2	START COMPRESSOR
EVV	ELECTRONIC EXPANSION VALVE
PHP	PHASE PROTECTOR
TR1	TRANSFORMER
DB1	DISTRIBUTION BLOCK
MS1	COMPRESSOR
MS2	AXIAL FAN
MS3	CENTRIFUGAL FAN
PS1	POWER SUPPLY
GND	GROUND
MC1	CONTACTOR 1
MC2	CONTACTOR 2
MC3	CONTACTOR 3

#	LIST OF CONTROL PANEL COMPONENTS	QTY	UM
3000042	TRANSFORMADOR 75VA 220-480 V A1175F-1031	1	PZA
1036911	MOTOR SAVER TRIFASICO MODELO BV7044dv	1	PZA
1001044	MINI CONTACTOR 24V G.L1311001R0101	2	PZA
1001033	CONTACTOR AF302-240/0-21 ISBL27607R2100	1	PZA
1034621	BILOCUE DISTREB. TIPO 3P ISNL31253R0000	1	PZA
1000071	OLENA GHS M42 5/6 ISNA11546R0300	4	PZA
1000301	OLENA PORTIA FISIBLE ISNA11565R2500	7	PZA
1000145	TOPE DE RETENCION ISMA226351R1800	11	PZA
1000166	APAGADOR DE BALANCON IP-11 4 AMP BT-549	1	PZA
1025128	APAGADOR DE BALANCON 2P-2T	1	PZA
1000233	FUSIBLE 3 AMP	5	PZA
1000804	CONECTOR TIPO LENGUETA 1 OJILLO 1444W	4	PZA
1000562	TAPA PARA OLENA GHS 11836R1900	1	PZA
1000226	TAPA PARA OLENA GHS 11836R1900	1	PZA
1001435	SENSOR DE TEMPERATURA AX08317080	1	PZA
1034404	FUSIBLE 1AMP	2	PZA
1037839	CONTROLADOR LOYTEC LI0B-585	1	PZA
1037840	FUENTE DE ALIMENT. LOYTEC L-POW-24158	1	PZA
1037841	TERMOSTATO LOYTEC LST41-400A34.1	1	PZA
1023112	FUENTE DE ALIMENTACION BRS-015	1	PZA
1067024	GUARDAMOTOR ISMA259000R1010	1	PZA
1067065	GUARDAMOTOR ISMA259000R1008	1	PZA
1067066	GUARDAMOTOR ISMA259000R1007	1	PZA
1067027	HKF1-11 BLOCQUE DE CONTACTOS AUXILIARES	3	PZA
1031363	EVZ0000750 TWIN PARA VAL EXIP ELECTRONICA	1	PZA

THERMOSTATIC									
COMPONENT	QTY	UM	PART NUMBER						
			208-230 / 1 / 60		208-230 / 3 / 60		460/ 3 / 60		
			3 RT	5 RT	3 RT	5 RT	3 RT	5 RT	
9	TEMPERATURE SENSOR	1	PC	1001435	1001435	1001435	1001435	1001435	1001435
10	TRANSFORMER	1	PC	3000042	3000042	3000042	3000042	3000126	3000126
11	MOTOR SAVER	1	PC	1005907	1005907	1035910	1035910	1035911	1035911
12	CONTACTOR AF30Z-30-00-21	1	PC	1001053	1001053	1001053	1001053	1001053	1001053
13	THERMOSTAT	1	PC	1049996	1049996	1049996	1049996	1049996	1049996
14	MINIATURE CONTACTOR 24V	2	PC	1000144	1000144	1000144	1000144	1000144	1000144
15	AUXILIAR CONTACTOR	1	PC	1000790	1000790	1000790	1000790	1000790	1000790
16	DISTRIBUTION BLOCK	1	PC	1034621	1034621	1034621	1034621	1034621	1034621
17	3 AMP FUSE	3	PC	1000233 (2 Pc)	1000233	1000233 (2 Pc)	1000233	1000233	1000233
18	MOLDED PLUG	1	PC	1000271	1000271	1000271	1000271	1000271	1000271
19	CRANKCASE COMPRESSOR	1	PC	1000900	1001048	1000900	1001048	1001152	1000903
20	CONDENSER FAN	1	PC	3000349	1045332	3000349	1045332	3000349	4002240
21	EVAPORATOR MOTOR	2	PC	1033654	1049570	1033654	1048570	1049323 (3 Pc)	1050450
22	FAN RELAY	2	PC	1022112	1001175	1001175	1001175	1001175	1000586
23	POWER SUPPLY	3	PC	1001219	1022112	1022112	1022112 (1 Pc)	N/A	N/A
24	CAPACITOR DE ACEITE	3	PC	1031364	1001217	N/A	N/A	1038067	N/A
25	TWIN ELEC. EXP VALVE DRIVER	1	PC	N/A	1031363	N/A	1031063	N/A	1031063
26	1 A 250 VCA FUSE	2	PC	N/A	1034404	1034404	1034404	1034404	1034404
27	TURBINE	2	PC	N/A	1044758 (L) 1044757 (R)	N/A	1044758 (L) 1044757 (R)	1031204	1044758 (L) 1044757 (R)
28	COMPRESSOR RELAY	1	PC	N/A	1000785	1001172	1001172	1001166	1001172

NOTE: L= LEFT TURBINE, R= RIGHT TURBIN

SERVICE PARTS - ELECTRICAL

ELECTRONIC						
QTY	COMPONENT	UM	PART NUMBER			
			208-230 / 60 / 1	208-230 / 60 / 3	460 / 60 / 3	
			5 RT	5 RT	5 RT	
10	TEMPERATURE SENSOR	1	PC	1001435	1001435	1001435
11	TRANSFORMER	1	PC	3000042	3000042	3000126
12	MOTOR SAVER	1	PC	1005907	1035911	1035911
13	CONTACTOR AF30Z-30-00-21	1	PC	1001053	1001053	1001053
14	THERMOSTAT	1	PC	1049996	1049996	1037841 1049996
15	MINIATURE CONTACTOR 24V	2	PC	1000144	1000144	1000144
16	AUXILIAR CONTACTOR	1	PC	1000790	1000790	1000790
17	DISTRIBUTION BLOCK	1	PC	1034621	1034621	1034621
18	3 AMP FUSE	3	PC	1000233 (3 Pza)	1000233	1000233 (5 Pza)
19	MOLDED PLUG	1	PC	1000271	1000271	1000271
20	CRANKCASE COMPRESSOR	1	PC	1001048	1001048	1000903
21	CONDENSER FAN	1	PC	1045332	1045332	4002240
22	EVAPORATOR MOTOR	1	PC	1049570	1048570	1050450
23	FAN RELAY	1	PC	1022112	1022112	1022112 1037841
24	POWER SUPPLY	3	PC	1001217	N/A	N/A
25	CAPACITOR DE ACEITE	1	PC	1031363	1031063	1031063
26	TWIN ELEC. EXP VALVE DRIVER	2	PC	1034404	1034404	1034404
27	1 A 250 VCA FUSE	2	PC	1044758 (L) 1044757 (R)	1044758 (L) 1044757 (R)	1044758 (L) 1044757 (R)
28	TURBINE	1	PC	1050724	1050724	1050724
29	COMPRESSOR RELAY	1	PC	1050725	1050725	1050765
30	GUARDAMOTOR 1SAM250000R10013	1	PC	1050726	1050726	1050766
31	BLOQUE DE CONTACTO AUXILIAR	3	PC	1050727	1050727	1050727
32	CONTROLLER	1	PC	N/A	N/A	1037839
33	ELECTRONIC ACTUATOR	1	PC	N/A	N/A	1037771
34	ESTATOR	1	PC	1050425	1050425	1050425
35	TRANSDUCER CABLE	1	PC	1030129	1030129	1030129

NOTE: L= LEFT TURBINE, R= RIGHT TURBIN

