

## Parts Manual

## PM

Group: Chiller  
Part Number: PM CLII  
Date: 30 May 2023

## CLII Series Water Cooling Unit

### Model

30 RT to 300 RT

Refrigerant HFC-410A

50/60 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 CLII 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.

### ⚠ 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/CPCV 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 ⚠

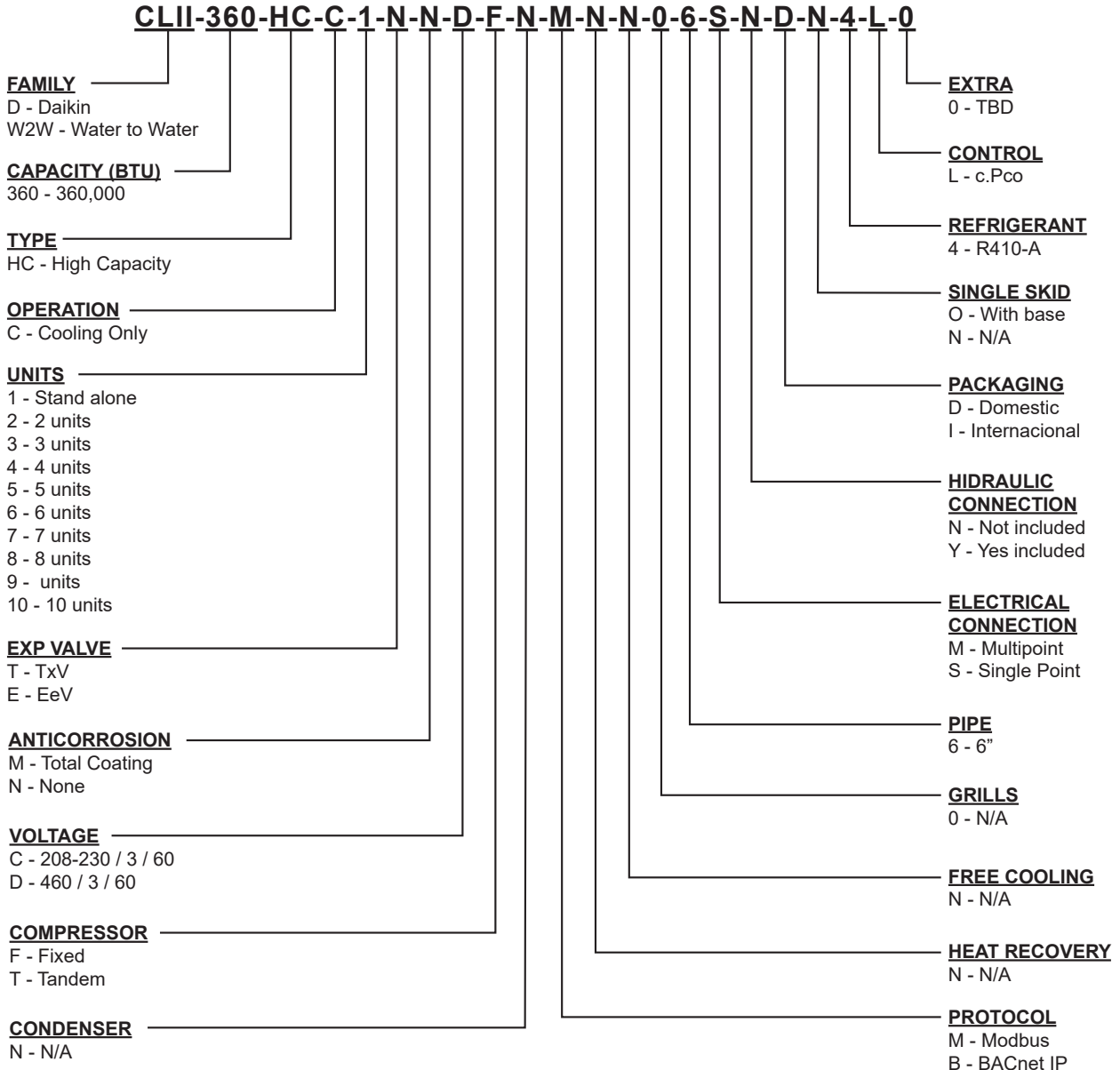
Caution indicates a potentially dangerous situation which may result in minor injury or equipment damage if not avoided.

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

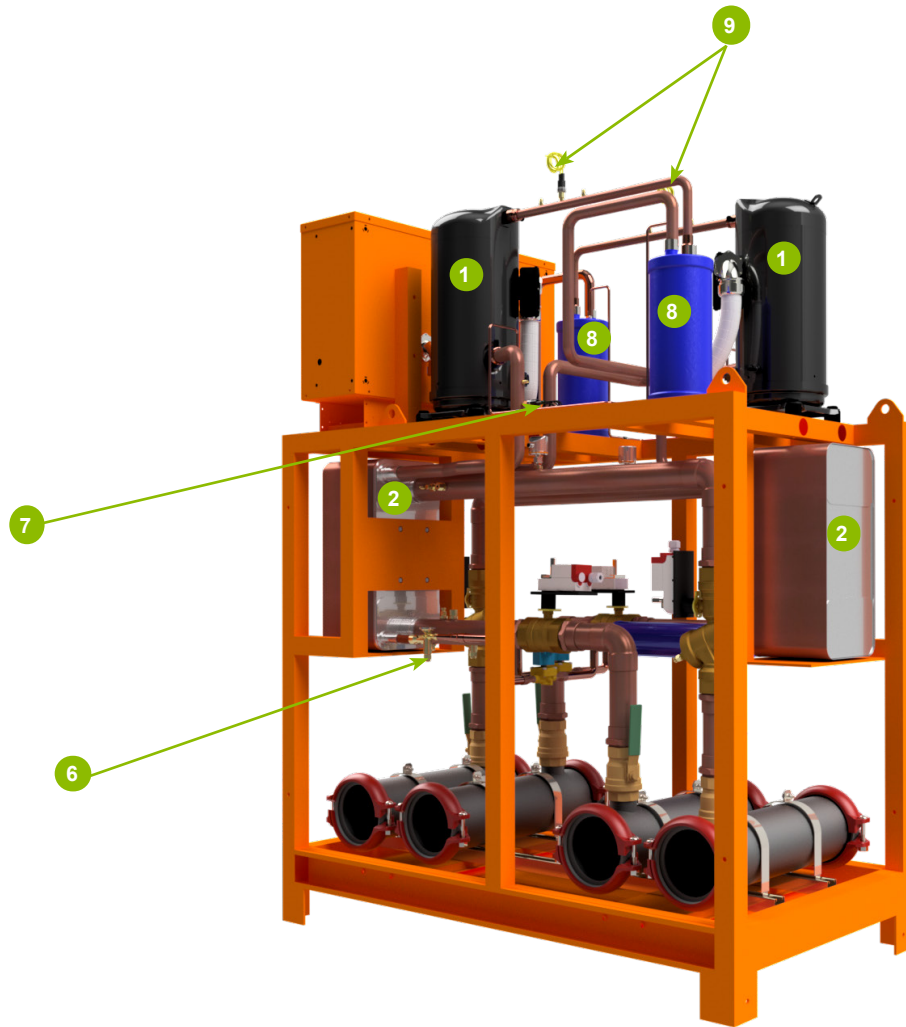
Our units are designed to efficiently meet the air conditioning needs of any project. Our units have controls, logic routines and digital sensors that continuously monitor the system to adapt

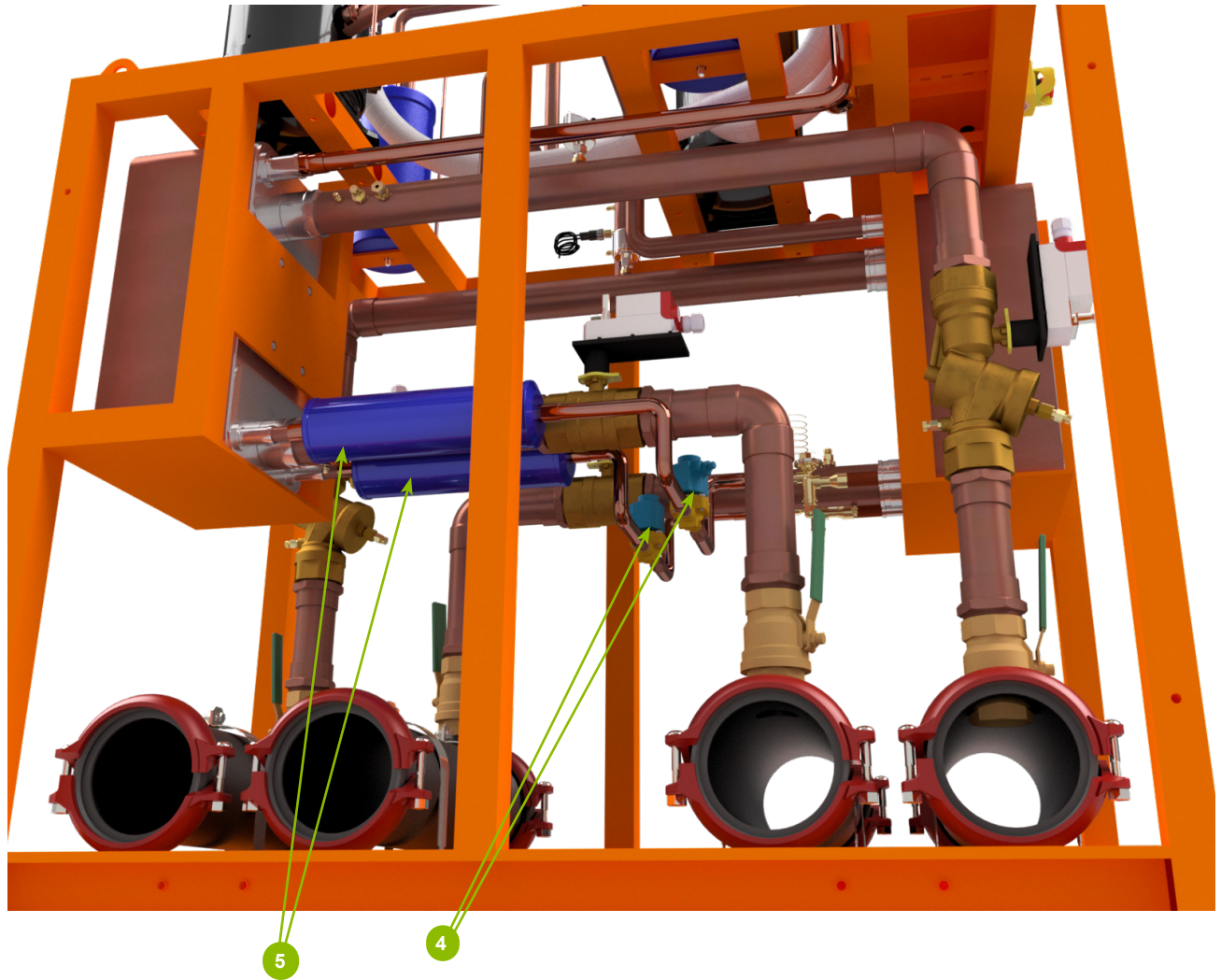
its operation to the level necessary to maintain optimal system conditions at all times, thus achieving maximum performance and energy savings in a system that is simple to operate and maintain.

### NOMENCLATURE



## SERVICE PARTS - REFRIGERATION



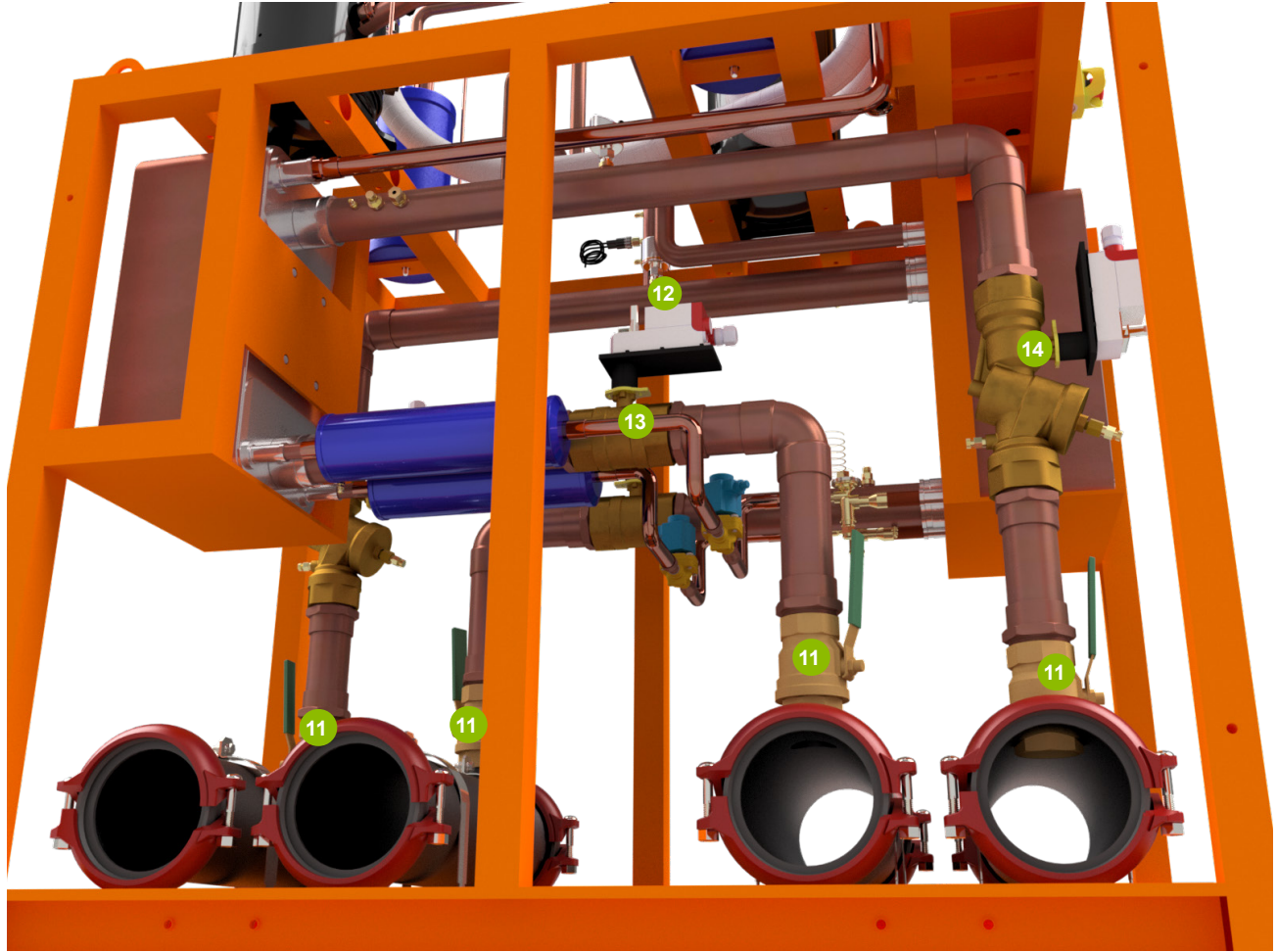


## SERVICE PARTS - REFRIGERATION

THERMOSTATIC MODEL							
COMPONENT	QTY	UM	PART NUMBER		PART NUMBER		
			208-230 / 3 / 60		460 / 3 / 60		
			Mother	Son	Mother	Son	
1	COMPRESSOR	2	PC	3015036	3015036	3017177	3017177
2	PLATE HEAT EXCHANGER	2	PC	3018154	3018154	3018154	3018154
3	POLYESTER OIL SW-32	0.75	L	1033850	1033850	1033850	1033850
4	SOLENOID VALVE ( <i>Liquid Line</i> )	2	PC	1001247	1001247	1001247	1001247
5	FILTER DRIER	2	PC	1026170	1026170	1026170	1026170
5	BIDIRECTIONAL FILTER ( <i>Heat Pump</i> )	2	PC	1006900	1006900	1006900	1006900
6	EXPANSION VALVE THERM 15TR TGE 067N3010	2	PC	1042090	1042090	1042090	1042090
6	4-WAY VALVE ( <i>Heat Pump</i> )	2	PC	1031233	1031233	1031233	1031233
7	LOW PRESSURE SWITCH	2	PC	1036389	1036389	1036389	1036389
8	OIL SEPARATOR	2	PC	1030095	1030095	1030095	1030095
9	HIGH PRESSURE SWITCH	2	PC	1001249	1001249	1001249	1001249
10	PRESSURE SENSOR	2	PC	1030128	1030128	1030128	1030128

ELECTRONIC MODEL							
COMPONENT	QTY	UM	PART NUMBER		PART NUMBER		
			208-230 / 3 / 60		460 / 3 / 60		
			Mother	Son	Mother	Son	
1	COMPRESSOR	2	PC	3015036	3015036	3017177	3017177
2	PLATE HEAT EXCHANGER	2	PC	3018154	3018154	3018154	3018154
3	POLYESTER OIL SW-32	0.75	L	1033850	1033850	1033850	1033850
4	SOLENOID VALVE ( <i>Liquid Line</i> )	2	PC	1001247	1001247	1001247	1001247
5	FILTER DRIER	2	PC	1026170	1026170	1026170	1026170
5	BIDIRECTIONAL FILTER ( <i>Heat Pump</i> )	2	PC	1006900	1006900	1006900	1006900
6	TWO-POLE ELECTRONIC EXPANSION VALVE	2	PC	1031209	1031209	1031209	1031209
6	4-WAY VALVE ( <i>Heat Pump</i> )	2	PC	1031233	1031233	1031233	1031233
7	LOW PRESSURE SWITCH	2	PC	1036389	1036389	1036389	1036389
8	OIL SEPARATOR	2	PC	1030095	1030095	1030095	1030095
9	HIGH PRESSURE SWITCH	2	PC	1001249	1001249	1001249	1001249
10	PRESSURE SENSOR	4	PC	1030128	1030128	1030128	1030128



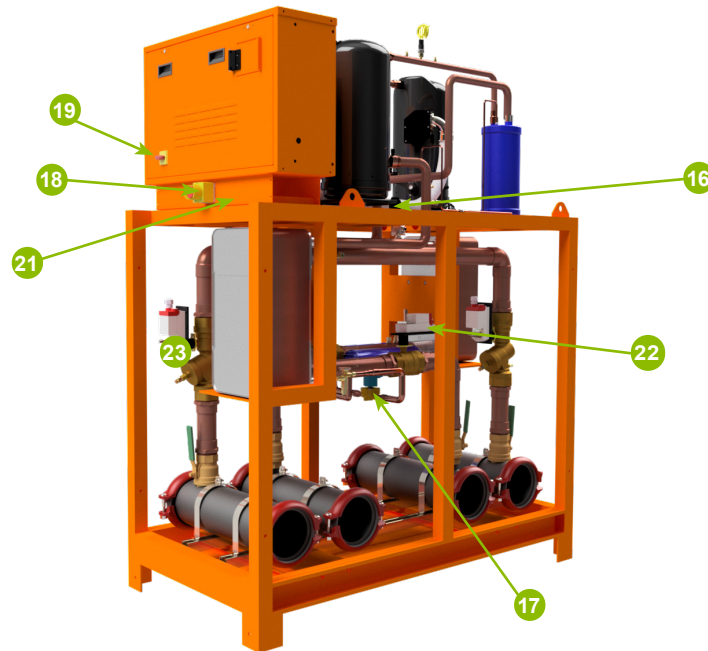


THERMOSTATIC MODEL							
COMPONENT	QTY	UM	PART NUMBER		PART NUMBER		
			208-230 / 3 / 60		460 / 3 / 60		
			Mother	Son	Mother	Son	
11	2 1/2" BALL VALVE NIBCO	4	PC	1036391	1036391	1036391	1036391
12	FLOW SENSOR IFM S10558	2	PC	3014528	3014528	3014528	3014528
13	VALVE - VRN2G095.00PX	1	PC	1037254	1037254	1037254	1037254
14	VALVE - VRN2G075.00PX	1	PC	1037256	1037256	1037256	1037256

ELECTRONIC MODEL							
COMPONENT	QTY	UM	PART NUMBER		PART NUMBER		
			208-230 / 3 / 60		460 / 3 / 60		
			Mother	Son	Mother	Son	
11	2 1/2" BALL VALVE NIBCO	4	PC	1036391	1036391	1036391	1036391
12	FLOW SENSOR IFM S10558	2	PC	3014528	3014528	3014528	3014528
13	VALVE - VRN2G095.00PX	1	PC	1037254	1037254	1037254	1037254
14	VALVE - VRN2G075.00PX	1	PC	1037256	1037256	1037256	1037256
15	VALVE - VBN2G202.00PX	2	PC	1037252	1037252	1037252	1037252



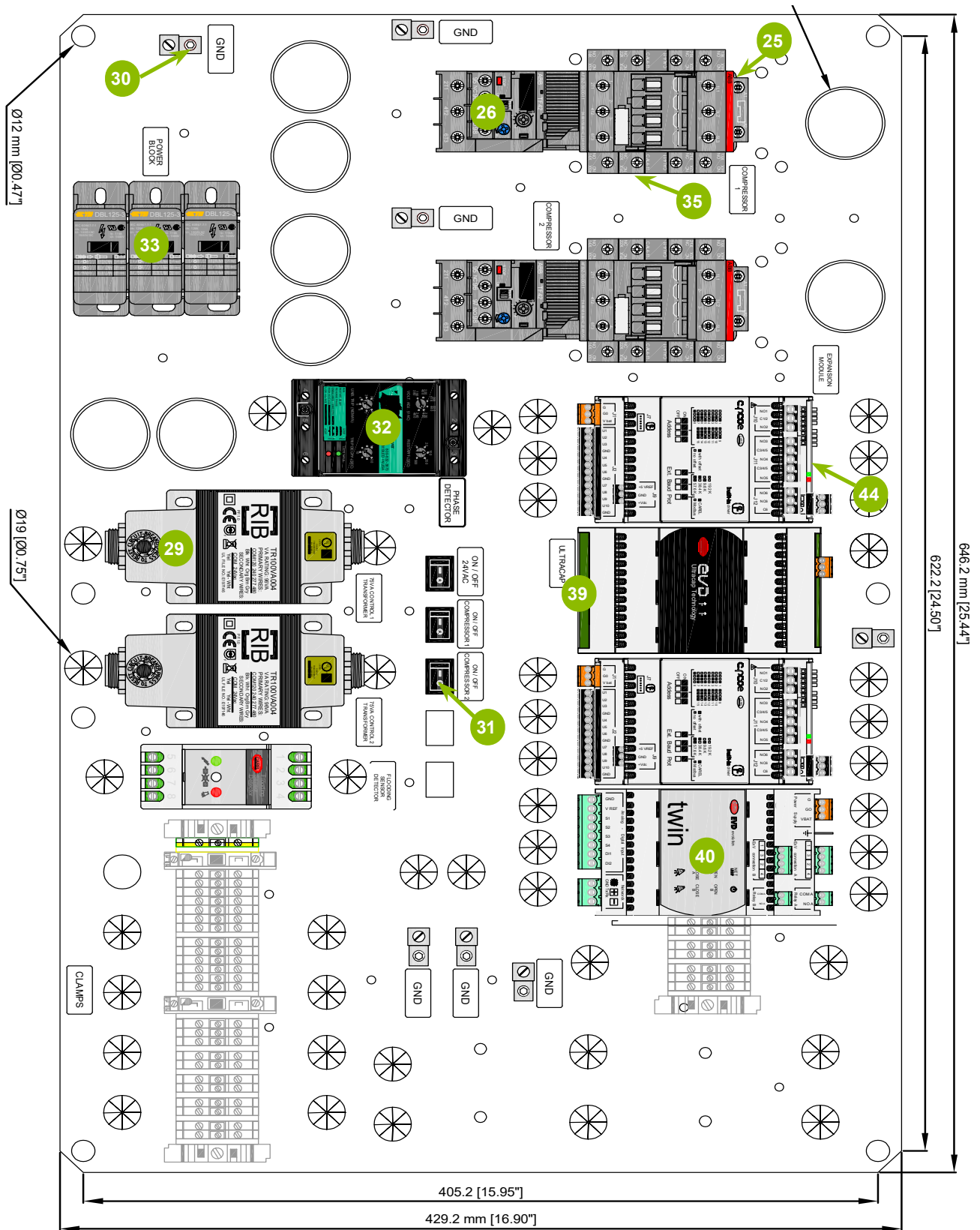
## SERVICE PARTS - ELECTRICAL 1



THERMOSTATIC MODEL							
COMPONENT	QTY	UM	PART NUMBER		PART NUMBER		
			208-230 / 3 / 60		460 / 3 / 60		
			Mother	Son	Mother	Son	
16	COMPRESSOR RESISTOR	2	PC	1000098	1000098	1000099	1000099
17	SOLENOID COIL A 24V 018F6265	2	PC	1000646	1000646	1000646	1000646
18	RED SPIN BUTTON 1SFA619550R1041	1	PC	1042254	NA	1042254	NA
19	SELECTOR TYPE HANDLE - OHYS3AH	1	PC	1042145	1042145	1042145	1042145
20	METAL ROD FOR SELECTOR-OXS6X120	1	PC	1042146	1042146	1042146	1042146
21	YELLOW BOX ONE HOLE/ 1SFA611821R1000	1	PC	1044632	NA	1044632	NA
22	ACTUATOR - MN7505A2001/U	1	PC	NA	1037255	NA	1037255

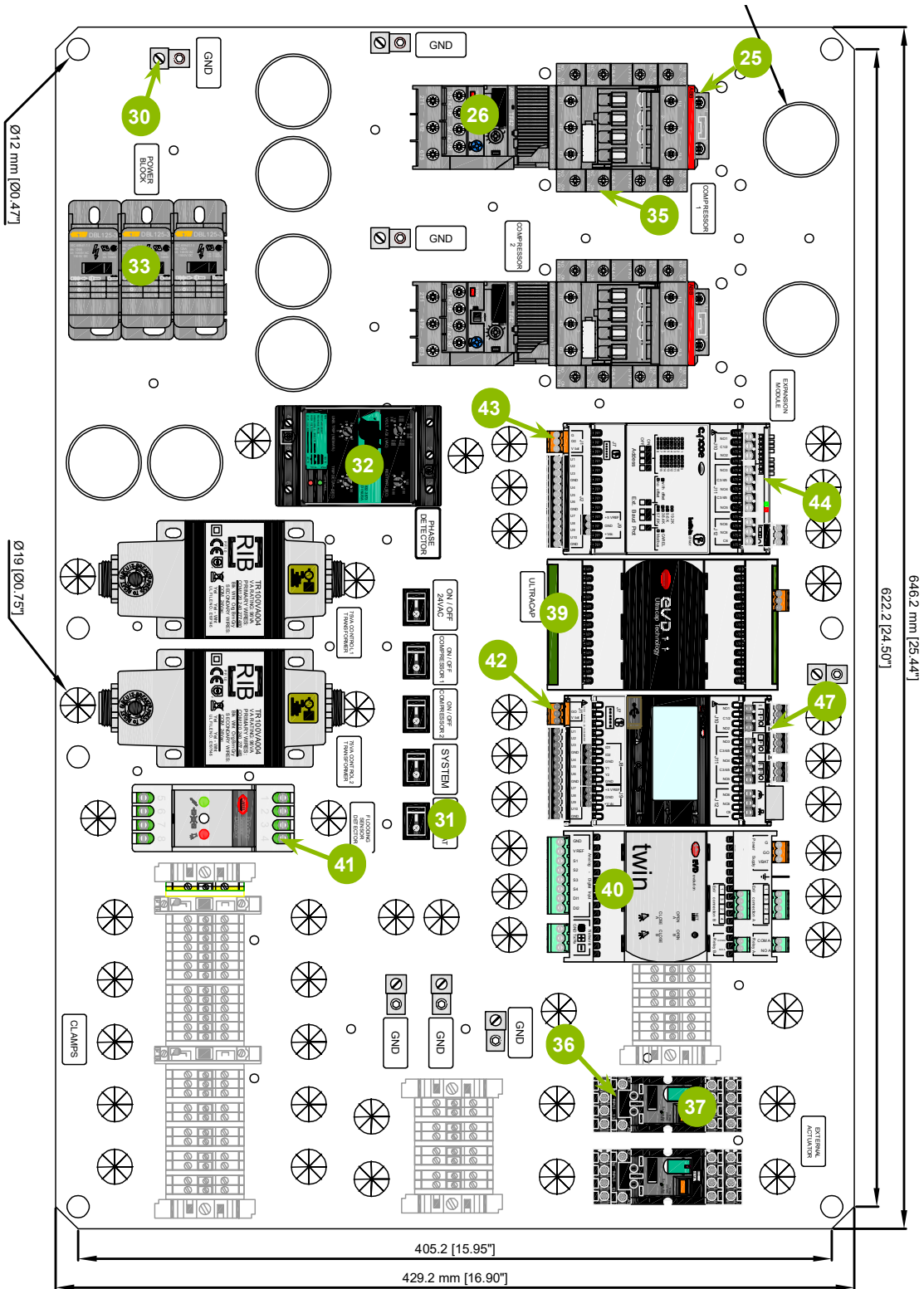
ELECTRONIC MODEL							
COMPONENT	QTY	UM	PART NUMBER		PART NUMBER		
			208-230 / 3 / 60		460 / 3 / 60		
			Mother	Son	Mother	Son	
16	COMPRESSOR RESISTOR	2	PC	1000098	1000098	1000099	1000099
17	SOLENOID COIL A 24V 018F6265	2	PC	1000646	1000646	1000646	1000646
18	RED SPIN BUTTON 1SFA619550R1041	1	PC	1042254	NA	1042254	NA
19	SELECTOR TYPE HANDLE - OHYS3AH	1	PC	1042145	1042145	1042145	1042145
20	METAL ROD FOR SELECTOR-OXS6X120	1	PC	1042146	1042146	1042146	1042146
21	YELLOW BOX ONE HOLE/ 1SFA611821R1000	1	PC	1044632	NA	1044632	NA
22	ACTUATOR - MN7505A2001/U	2	PC	NA	NA	1037255	1037255
23	ACTUATOR - MN6105A1011	2	PC	NA	NA	1037253	1037253
24	FLOOD DETECTOR FLOS000000	1	PC	1032843	1032843	1032843	1032843

Figure 1. Schematic slave platen 220-440v electronic model



## SERVICE PARTS - ELECTRICAL 2

Figure 2. Schematic master platen 220-440v electronic model



ELECTRONIC MODEL							
QTY	COMPONENT	UM	PART NUMBER		PART NUMBER		
			208-230 / 3 / 60		460 / 3 / 60		
			Mother	Son	Mother	Son	
25	CONTACTOR AF80-30-00 1SBL397001R1100	2	PC	1001320	1001320	1001201	1001201
26	RELAY TF96-78 65-78 1SAZ911201R1004	2	PC	1001321	1001321	1001196	1001196
27	NTC060WF00- TEMPERATURE SENSOR	2	PC	1030130	1030130	1030130	1030130
28	SPKC005310 TRANSDUCER CABLE ( <i>For Son 460v 3 Pc</i> )	4	PC	1030129	1030129	1030129	1030129
29	TRANSFORMER	2	PC	3016726	3016726	3016726	3016726
30	1 EYELET TONGUE TYPE CONNECTOR 14-6AW	5	PC	1000804	1000804	NA	NA
31	SWITCH ROCKER ARM 1P-1T 4 AMP BTS-09] ( <i>For Son 4 Pc</i> )	5	PC	1000166	1000166	1000166	1000166
32	THREE-PHASE SAVER MOTOR	1	PC	1035910	1035910	1035911	1035911
33	DISTRIBUTION BLOCK. TRIPO 3P 1SNL312530R0000	1	PC	1034621	1034621	1034621	1034621
34	FUSE 3 AMPS	2	PC	1000233	1000233	1000233	1000233
35	AUX CONTACTOR. CAL4-11 1SBN010120R1011	4	PC	1000790	1000790	1000790	1000790
36	RELAY BASE RXZE2M114M	2	PC	1022114	1022114	1022114	NA
37	MINIATURE ENCAPSULATED RELAY RXM4B1B7	2	PC	1022582	1022582	1022582	NA
38	TEMPERATURE SENSOR AX0631/060	6	PC	1001435	1001435	1001435	1001435
39	EVD0000UC0 ULTRA CAP MODULE	1	PC	1030126	1030126	1030126	1030126
40	EVD0000T50 TWIN FOR ELECTRONIC EXPANSION VALVES	1	PC	1031363	1031363	1031363	1031363
41	SENSOR FLOOD DETECTOR	1	PC	1031889	1031889	1031889	1031889
42	C.PCO MINI VERSION DIN	1	PC	1031886	NA	1031886	NA
43	CONNECTOR KIT REMOVIB P/ C.PCO MINI	1	PC	1031888	NA	1031888	1031888
44	MODULE EXPANSION C.POe ( <i>For Son 2 Pcs</i> )	1	PC	1031887	1031887	1031887	1031887
45	E2VCABS600 BILIND CABLE AND EXV CONNECTOR	2	PC	1030837	NA	1030837	1030837
46	EVC002 - ACCESSORY CONX/S10558	2	PC	NA	NA	1030274	1030274
47	P+D0CON0B0 - CONNECTOR KIT FOR CPCO ( <i>For Mother 1 Pc</i> )	2	PC	1031569	1029701	1031569	NA
48	FLOOD DETECTOR FLOS000000	1	PC	NA	1032843	NA	NA
49	DISCONNECTER TYPE IEC 125A 3POLE 30/50HP	1	PC	NA	NA	1042202	1042202

## SERVICE PARTS - ELECTRICAL 2

Figure 3. Schematic platen thermostatic model

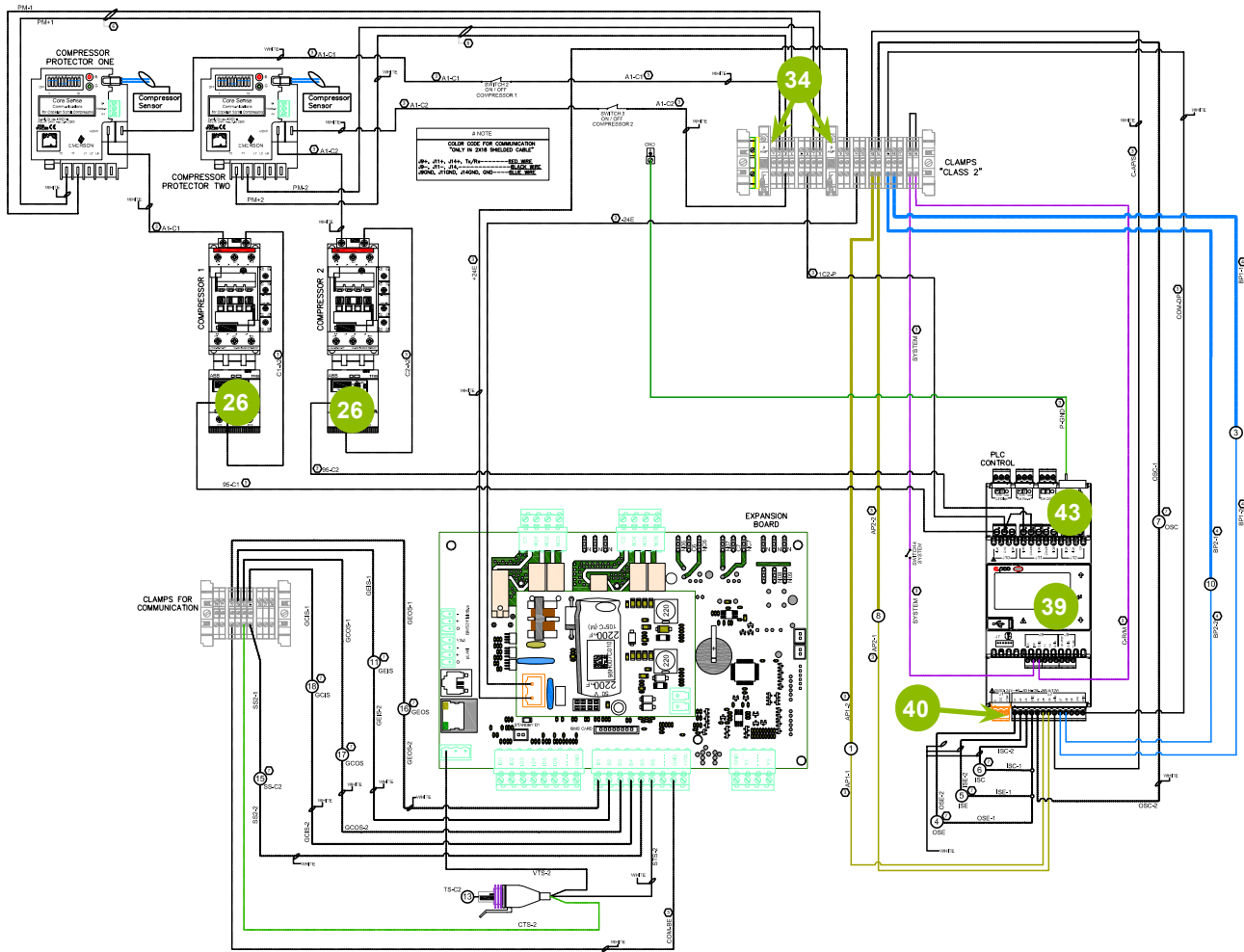
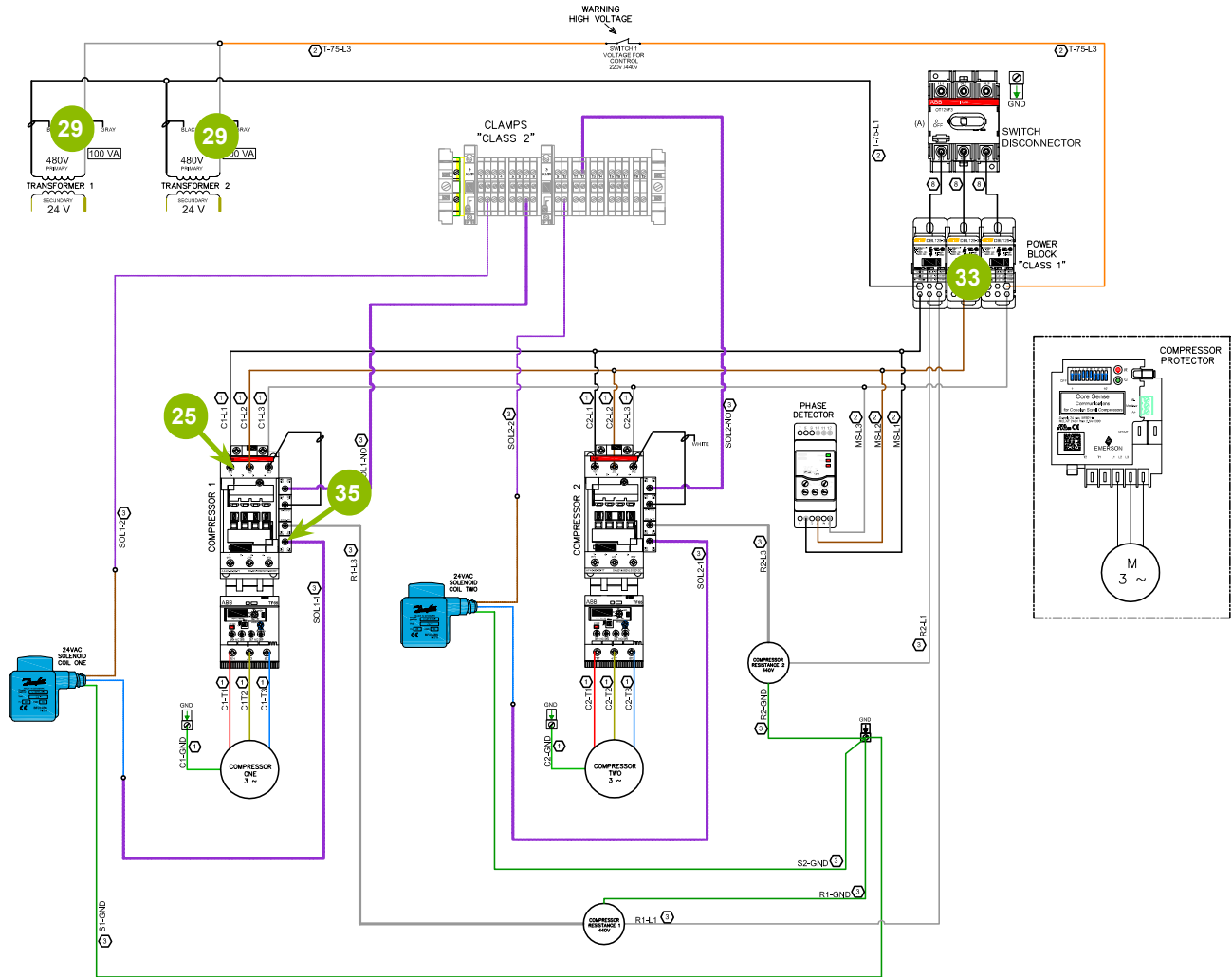


Figure 4. Schematic platen thermostatic model



## SERVICE PARTS - ELECTRICAL 2

THERMOSTATIC MODEL							
COMPONENT		QTY	UM	PART NUMBER		PART NUMBER	
				208-230 / 3 / 60		460 / 3 / 60	
				Mother	Son	Mother	Son
25	CONTACTOR AF30Z-30-00-21 1SBL276001R2100	2	PC	1001053	1001053	1001053	1001053
26	RELAY TF42-24 20-24 1SAZ721201R1051	2	PC	1001172	1001172	1001172	1001172
27	NTC060WF00- TEMPERATURE SENSOR	2	PC	1030130	1030130	1030130	1030130
28	SPKC005310 TRANSDUCER CABLE	2	PC	1030129	1030129	1030129	1030129
29	TRANSFORMER 100 VA / TR100VA004	2	PC	3016726	3016726	3016726	3016726
30	1 EYELET TONGUE TYPE CONNECTOR 14-6AW	6	PC	1000804	1000804	1000804	1000804
31	SWITCH ROCKER ARM 1P-1T 4 AMP BTS-09	4	PC	1000166	1000166	1000166	1000166
32	THREE-PHASE SAVER MOTOR	1	PC	1035910	1035910	1035911	1035911
33	DISTRIBUTION BLOCK. TRIPO 3P 1SNL312530R0000	1	PC	1034621	1034621	1034621	1034621
34	FUSE 3 AMPS	2	PC	1000233	1000233	1000233	1000233
35	AUX CONTACTOR. CAL4-11 1SBN010120R1011	2	PC	1000790	1000790	1000790	1000790
36	RELAY BASE RXZE2M114M	2	PC	1022114	NA	1022114	NA
37	MINIATURE ENCAPSULATED RELAY RXM4B1B7	2	PC	1022582	NA	1022582	NA
38	TEMPERATURE SENSOR AX0631/060	8	PC	1001435	1001435	1001435	1001435
39	C.PCO MINI VERSION DIN	1	PC	1031886	NA	1031886	NA
40	P+D0CON0E0 CPCO CONNECTION KIT	1	PC	1031569	NA	1031569	NA
41	EVC002 - ACCESSORY CONX/S10558	2	PC	1030274	1030274	1030274	1030274
42	LOYTEC CONTROLLER LI0B-585	1	PC	1037839	NA	1037839	NA
43	POWER SUPPLY LOYTEC POW-2415B	1	PC	1037840	NA	1037840	NA
44	CONTROLLER MICROPC	1	PC	1033585	1033585	1033585	1033585
45	CONNECTOR KIT - MICROPC	1	PC	1033586	1033586	1033586	1033586
46	DISCONNECTER TYPE IEC 125A 3POLOS 30/50HP	1	PC	1042202	1042202	1042202	1042202



