

Parts Manual

PM

Group: Chiller
Part Number: CLIM LC PM
Date: 6 June 2023

CLIM LC Series Water Cooling Unit

Model

7.5 to 62.5 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 Clima Flex CLIM LC 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 de-energize 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 Clima 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 ⚠

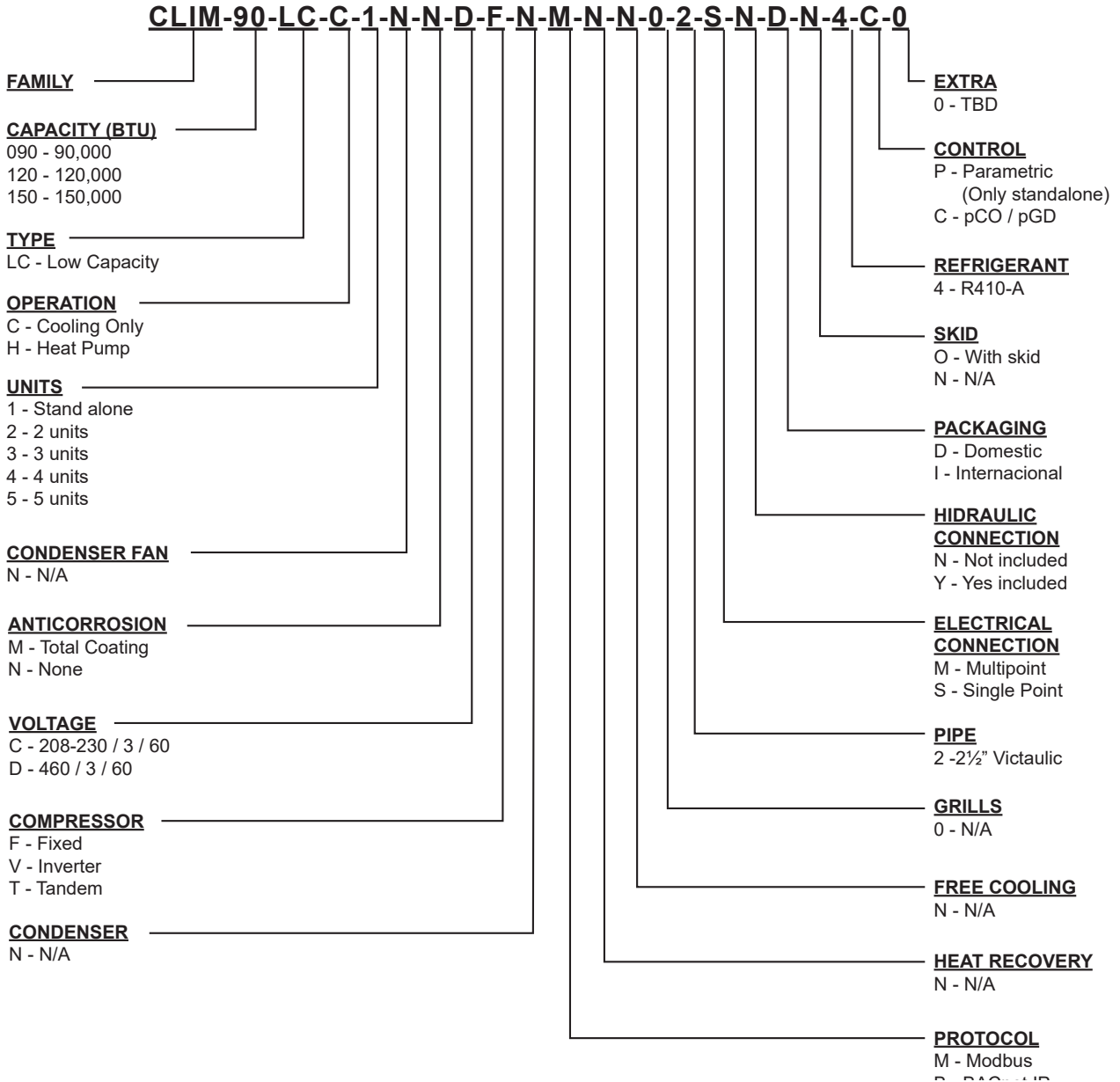
Caution indicates a potentially dangerous situation which may result in minor injury or equipment damage if not avoided.

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

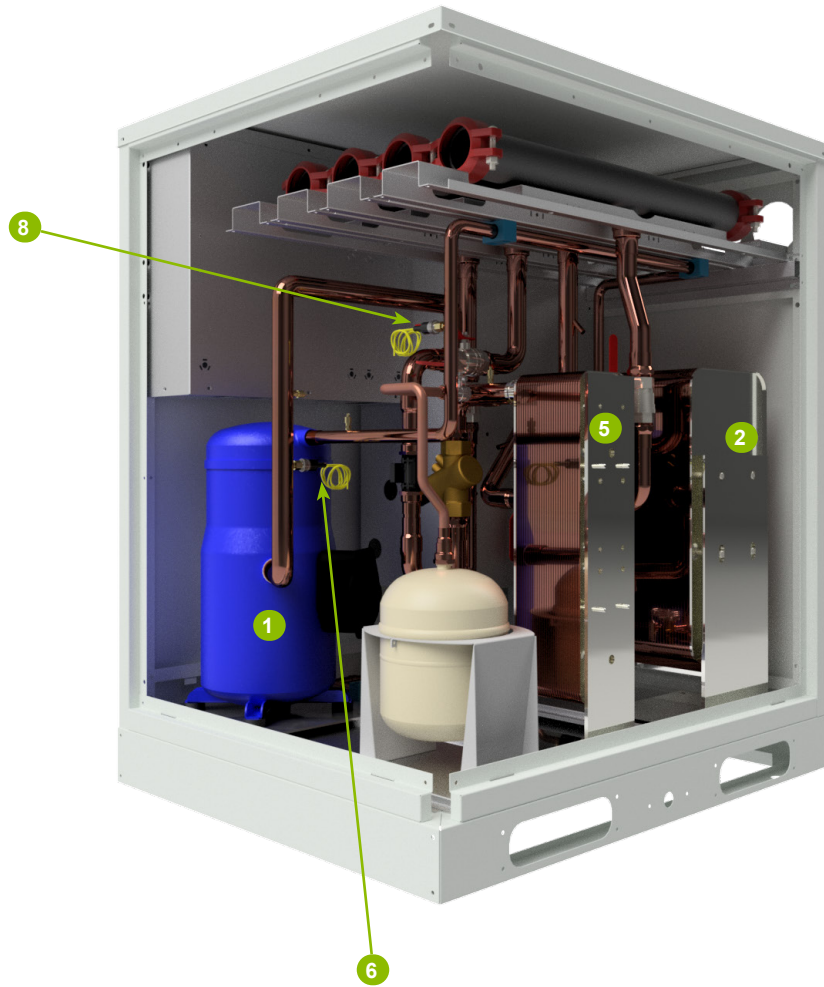
Our units are designed to effectively meet the HVAC needs of any project. Our units feature controls, logic routines and digital sensors that continuously monitor the system to adapt its operation

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



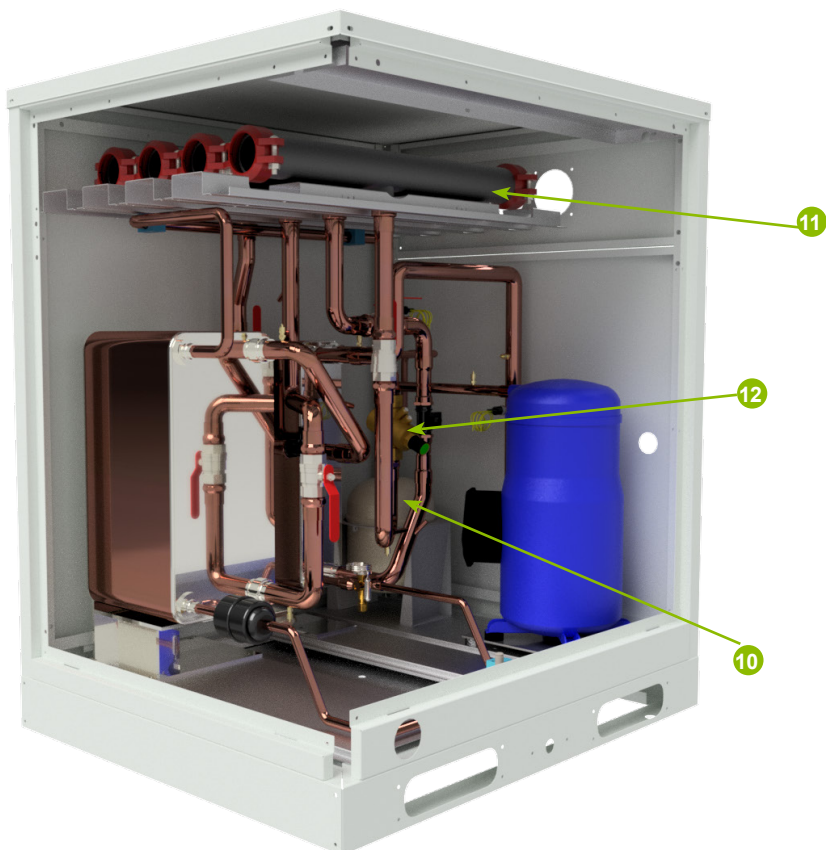
SERVICE PARTS - REFRIGERATION



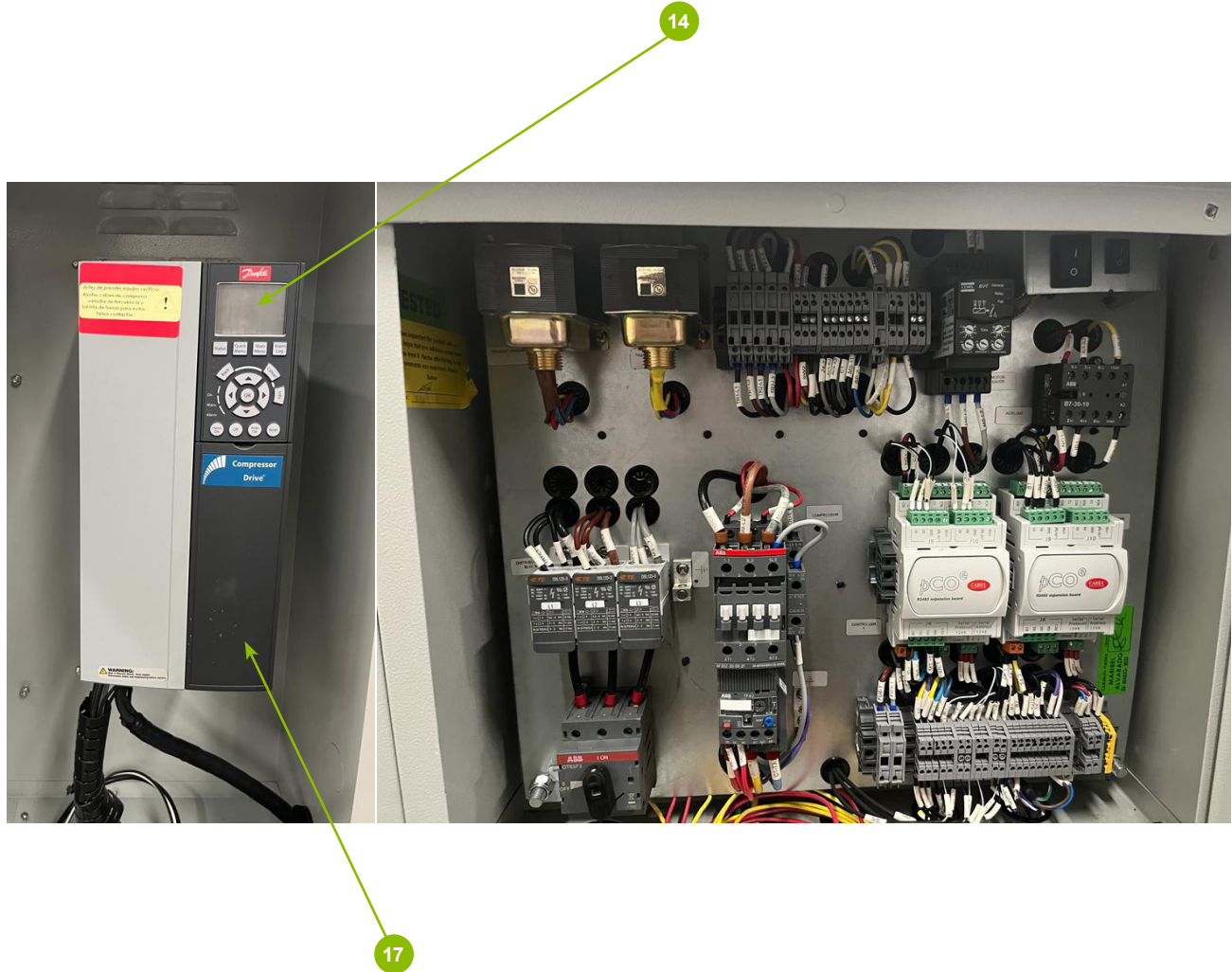


| COMPONENT | QTY | UM | PART NUMBER | | | | | | PART NUMBER | | | | | | |
|-----------|------------------------------|----|------------------|---------|---------|---------|---------|---------|--------------|---------|---------|---------|---------|---------|---------|
| | | | 208-230 / 3 / 60 | | | | | | 460 / 3 / 60 | | | | | | |
| | | | 7.5 TR | | 10 TR | | 12.5 TR | | 7.5 TR | | 10 TR | | 12.5 TR | | |
| | | | M | H | M | H | M | H | M | H | M | H | M | H | |
| 1 | COMPRESSOR | 1 | PC | 3000383 | 3000409 | 3000383 | 3000159 | 3005104 | 3010464 | 3000093 | 3000457 | 3000445 | 3000071 | 3000498 | 3008588 |
| 2 | CONDENSER | 1 | PC | 3002096 | 3002096 | 3000502 | 3000502 | 3000486 | 3000486 | 3002096 | 3002096 | 3000502 | 3000502 | 3000486 | 3000486 |
| 3 | SOLENOID VALVE (LIQUID LINE) | 1 | PC | 1000031 | 1000031 | 1000031 | 1000031 | 1000031 | 1000031 | 1000031 | 1000031 | 1000031 | 1000031 | 1000031 | 1000031 |
| 4 | EXPANSION VALVE | 1 | PC | 1000615 | 1000615 | 1000047 | 1000047 | 1000047 | 1000047 | 1000615 | 1000615 | 1000047 | 1000047 | 1000047 | 1000047 |
| 5 | EVAPORATOR | 1 | PC | 3002092 | 3002092 | 3000501 | 3000501 | 3000503 | 3000503 | 3002092 | 3002092 | 3000501 | 3000501 | 3000503 | 3000503 |
| 6 | LOW PRESSURE SWITCH | 1 | PC | 1036389 | 1036389 | 1036389 | 1036389 | 1036389 | 1036389 | 1036389 | 1036389 | 1036389 | 1036389 | 1036389 | 1036389 |
| 7 | FILTER 5/8" ODF 023Z5033 | 1 | PC | 1000027 | 1000027 | 1000027 | 1000027 | 1000027 | 1000027 | 1000027 | 1000027 | 1000027 | 1000027 | 1000027 | 1000027 |
| 8 | HIGH PRESSURE SWITCH | 1 | PC | 1001249 | 1001249 | 1001249 | 1001249 | 1001249 | 1001249 | 1001249 | 1001249 | 1001249 | 1001249 | 1001249 | 1001249 |

SERVICE PARTS - PLUMBING



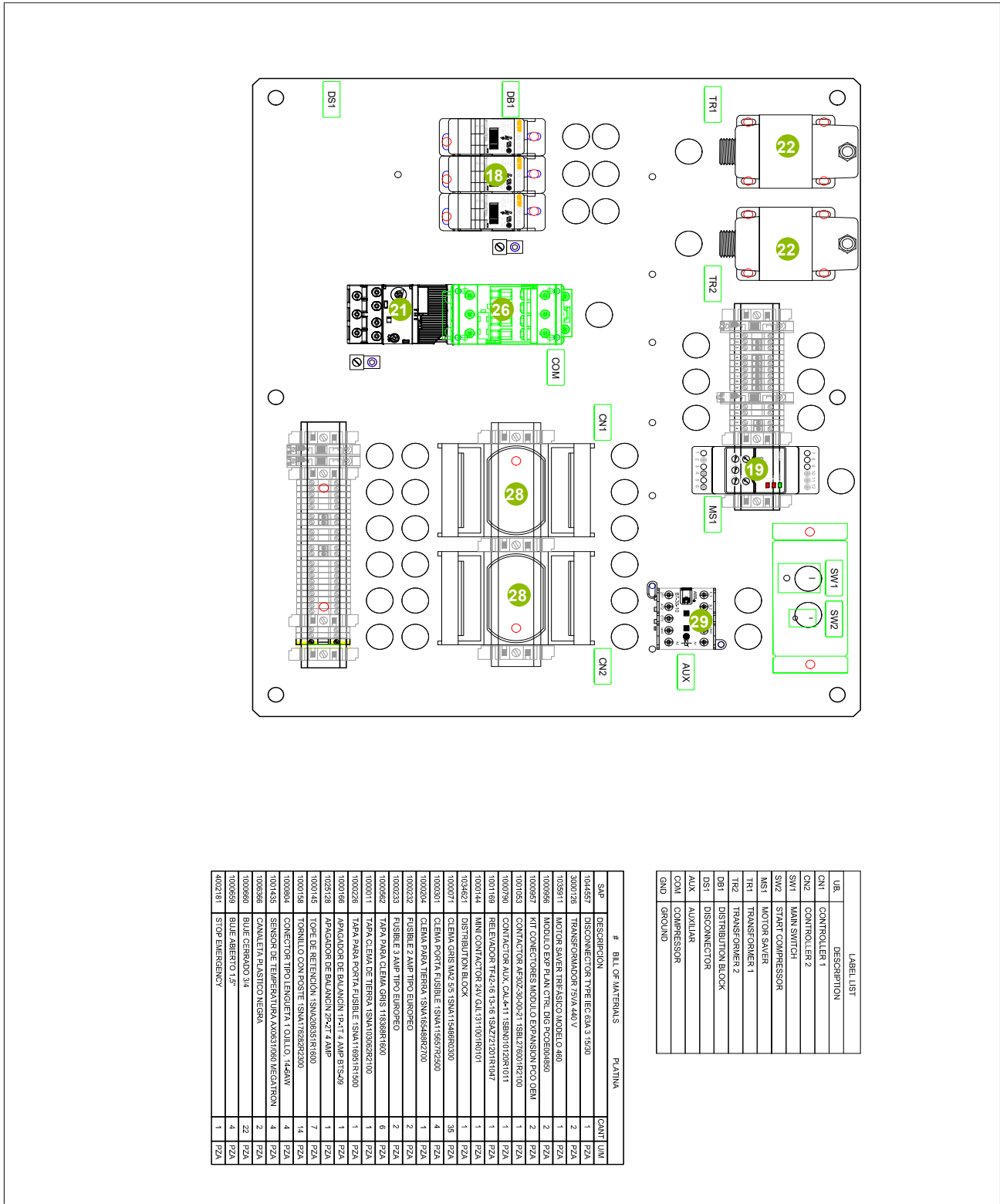
| COMPONENT | QTY | UM | PART NUMBER | | | | | | PART NUMBER | | | | | | | | | | | |
|-----------|--|----|------------------|---------|---------|---------|---------|---------|-------------|---------|---------|---------|---------|---------|--------------|--|--|--|--|--|
| | | | 208-230 / 3 / 60 | | | | | | | | | | | | 460 / 3 / 60 | | | | | |
| | | | 7.5 TR | | 10 TR | | 12.5 TR | | 7.5 TR | | 10 TR | | 12.5 TR | | | | | | | |
| | | | M | H | M | H | M | H | M | H | M | H | M | H | | | | | | |
| 9 | SENSOR FLUJO VVX251E | 2 | PC | 1001087 | 1001087 | 1001087 | 1001087 | 1001087 | 1001087 | 1001087 | 1001087 | 1001087 | 1001087 | 1001087 | 1001087 | | | | | |
| 10 | TANQUE DE EXPANSIÓN | 1 | PC | 3000352 | 3000352 | 3000352 | 3000352 | 3000352 | 3000352 | 3000352 | 3000352 | 3000352 | 3000352 | 3000352 | 3000352 | | | | | |
| 11 | NIPLÉ VITAUÍCO 2 ½" x 27 ½" | 4 | PC | 1001277 | 1001277 | 1001277 | 1001277 | 1001277 | 1001277 | 1001277 | 1001277 | 1001277 | 1001277 | 1001277 | 1001277 | | | | | |
| 12 | FLOWCON AB32PNYGE(E- JUST2YG); 1 1/4" | 1 | PC | 1001105 | 1001105 | 1001105 | 1001105 | 1001105 | 1001105 | 1001105 | 1001105 | 1001105 | 1001105 | 1001105 | 1001105 | | | | | |



| COMPONENT | QTY | UM | PART NUMBER | | | | | | | | PART NUMBER | | | | | |
|-----------|-----|----|------------------|---------|---------|---------|---------|---------|---------|---------|--------------|---------|---------|---------|--|--|
| | | | 208-230 / 3 / 60 | | | | | | | | 460 / 3 / 60 | | | | | |
| | | | 7.5 TR | | 10 TR | | 12.5 TR | | 7.5 TR | | 10 TR | | 12.5 TR | | | |
| | | | M | H | M | H | M | H | M | H | M | H | M | H | | |
| 13 | 1 | PC | 1050206 | NA | 1050206 | NA | 1050206 | NA | 1050206 | NA | 1050206 | NA | 1050206 | NA | | |
| 14 | 1 | PC | 3000384 | NA | 3000384 | NA | 3000384 | NA | 3000384 | NA | 3000384 | NA | 3000384 | NA | | |
| 15 | 1 | PC | 1000646 | 1000646 | 1000646 | 1000646 | 1000646 | 1000646 | 1000646 | 1000646 | 1000646 | 1000646 | 1000646 | 1000646 | | |
| 16 | 1 | PC | 3000386 | NA | 3000386 | NA | 3000386 | NA | 3000386 | NA | 3000386 | NA | 3000386 | NA | | |
| 17 | 1 | PC | 3000382 | NA | 3001885 | NA | 3000160 | NA | 3001888 | NA | 3001889 | NA | 3001889 | NA | | |

SERVICE PARTS - ELECTRICAL 2

Figure 1. Schematic diagram 7.5 TR son 440V



| LAB. LIST |
|-----------|
| TR1 |
| TR2 |
| MS1 |
| AUX |
| COM |
| DB1 |
| DB2 |
| CN1 |
| CN2 |
| SW1 |
| SW2 |

| LAB. LIST | DESCRIPTION | QTY | UM |
|-----------|--------------------|-----|-----|
| CN1 | CONTROLLER 1 | 1 | PZA |
| CN2 | CONTROLLER 2 | 1 | PZA |
| SW1 | MAIN SWITCH | 1 | PZA |
| SW2 | START COMPRESSOR | 1 | PZA |
| MS1 | MOTOR SAVER | 1 | PZA |
| TR1 | TRANSFORMER 1 | 1 | PZA |
| TR2 | TRANSFORMER 2 | 1 | PZA |
| DB1 | DISTRIBUTION BLOCK | 1 | PZA |
| DB2 | DISTRIBUTION BLOCK | 1 | PZA |
| AUX | AUXILIAR | 1 | PZA |
| COM | COMPRESSOR | 1 | PZA |
| GRD | GROUND | 1 | PZA |

| COMPONENT | QTY | UM | PART NUMBER | | | | | | PART NUMBER | | | | | | |
|-----------|--|----|------------------|-------------------|-------------------|-------------------|-------------------|-------------------|--------------|-------------------|---------|-------------------|-------------------|-------------------|-------------------|
| | | | 208-230 / 3 / 60 | | | | | | 460 / 3 / 60 | | | | | | |
| | | | 7.5 TR | | 10 TR | | 12.5 TR | | 7.5 TR | | 10 TR | | 12.5 TR | | |
| | | | M | H | M | H | M | H | M | H | M | H | M | H | |
| 18 | DISTRIBUTION BLOCK | 1 | PC | 1034621 | 1034621 | 1034621 | 1034621 | 1034621 | 1034621 | 1034621 | 1034621 | 1034621 | 1034621 | 1034621 | 1034621 |
| 19 | MOTOR SAVER | 1 | PC | 1000086 | 1000086 | 1035911 | 1000086 | 1000086 | 1000086 | 1000086 | 1035911 | 1035911 | 1000086 | 1035911 | 1000086 |
| 20 | MINIATURE CONTACTOR | 1 | PC | 1000144 (3 pc) | 1000144 | 1000144 (3 pc) | 1000144 | 1000144 (3 pc) | 1000144 | 1000144 (3 pc) | 1000144 | 1000144 (3 pc) | 1000144 | 1000144 (3 pc) | 1000144 |
| 21 | COMP RELAY | 1 | PC | 1001169 | 1001196 | 1001196 | 1001196 | 1000065 | 1001196 | 1001196 | 1001169 | 1001196 | 1001196 | 1001196 | 1001196 |
| 21 | TRANSFORMER | 1 | PC | 3000041 | 3000126 | 3000042 | 3000126 | 3000126 | 3000126 | 3000126 | 3000126 | 3000126 | 3000126 | 3000126 | 3000126 |
| 23 | DIGITAL CONTROLLER | 1 | PC | 1000961 | NA | 1000961 | NA | 1000961 | NA | 1000961 | NA | 1000961 | NA | 1000961 | NA |
| 24 | CONNECTOR KIT CONTROLLER | 2 | PC | 1000954 (1 pc) | 1000957 | 1000954 | 1000957 | 1000954 (1 pc) | 1000957 | 1000954 (1 pc) | 1000957 | 1000954 | 1000957 | 1000954 | 1000957 |
| 25 | 3 AMP FUSE | 1 | PC | 1000232 | 1000232 | 1000232 | 1000232 | 1000232 | 1000232 | 1000232 | 1000232 | 1000232 | 1000232 | 1000232 | 1000232 |
| 26 | COMPRESSOR CONTACTOR (Sons Only) | 1 | PC | NA | 1001201 | NA | 1001201 | NA | 1001201 | NA | 1001053 | NA | 1001201 | NA | 1001201 |
| 27 | TEMPERATURE SENSOR AX0631/060 | 4 | PC | 1001435 (5 pc) | 1001435 (5 pc) | 1001435 | 1001435 (5 pc) | 1001435 | 1001435 | 1001435 (5 pc) | 1001435 | 1001435 (5 pc) | 1001435 (5 pc) | 1001435 (5 pc) | 1001435 (5 pc) |
| 28 | EXPANSION MODULE | 2 | PC | NA | 1000956 | NA | 1000956 | NA | 10000956 | NA | 1000956 | NA | 1000956 | NA | 1000956 |
| 29 | AUXILIAR CONTACTOR | 1 | PC | NA | 1000790 | NA | 1000790 | NA | 1000790 | NA | 1000790 | NA | 1000790 | NA | 1000790 |
| 30 | SWITCHING | 1 | PC | 1034404 | 1034404 | 1034404 | 1034404 | 1034404 | 1034404 | 1034404 | 1034404 | 1034404 | 1034404 | 1034404 | 1034404 |
| 41 | 1 A 25VAC FUSE | 1 | PC | 1034404 | 1034404 | 1034404 | 1034404 | 1034404 | 1034404 | 1034404 | 1034404 | 1034404 | 1034404 | 1034404 | 1034404 |

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