| | | |
|---|---|---|
| Epta | | COQ<br>Project: |

**VALZER KW Service Manual (short version)**

# VALZER KW

## Service Manual

Autori: Serralunga M.

09/11/2022

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# 1. AMOUNT OF REFRIGERANT IN THE EQUIPMENT

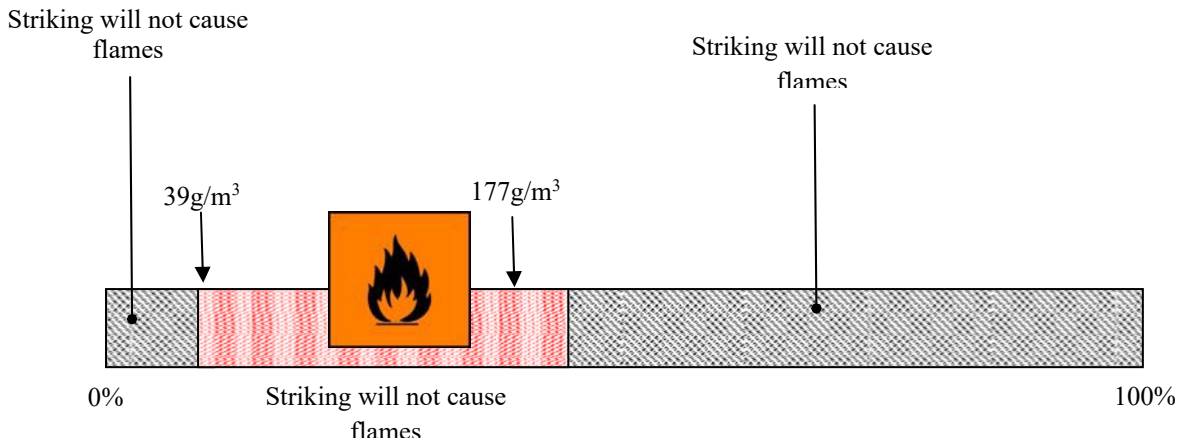
The most prominent feature of the VALZER KW versions is that they use a natural gas: propane (R290).

| MODEL | AMOUNT OF PROPANE* [grams] / [Ounce] |  |
|---|---|---|
| VALZER KW 2D | 150 / 5,29 | |
| VALZER KW 3D | 150 + 150 / 5,29 + 5,29 | |
| VALZER KW 4D | 150 + 150 / 5,29 + 5,29 | |

(*) The propane refrigerant R290 to be used must be technical-gas rated, with purity grade above 99,5%.

## PROPANE IS HEAVIER THAN AIR, WHICH MEANS THAT IT WILL TEND TO CONCENTRATE NEAR THE FLOOR OF THE ROOM.

The flammability limit percentage (in a volume of air) is between 2,2% and 9,2% (at 25°C and 1bar). In mass terms:

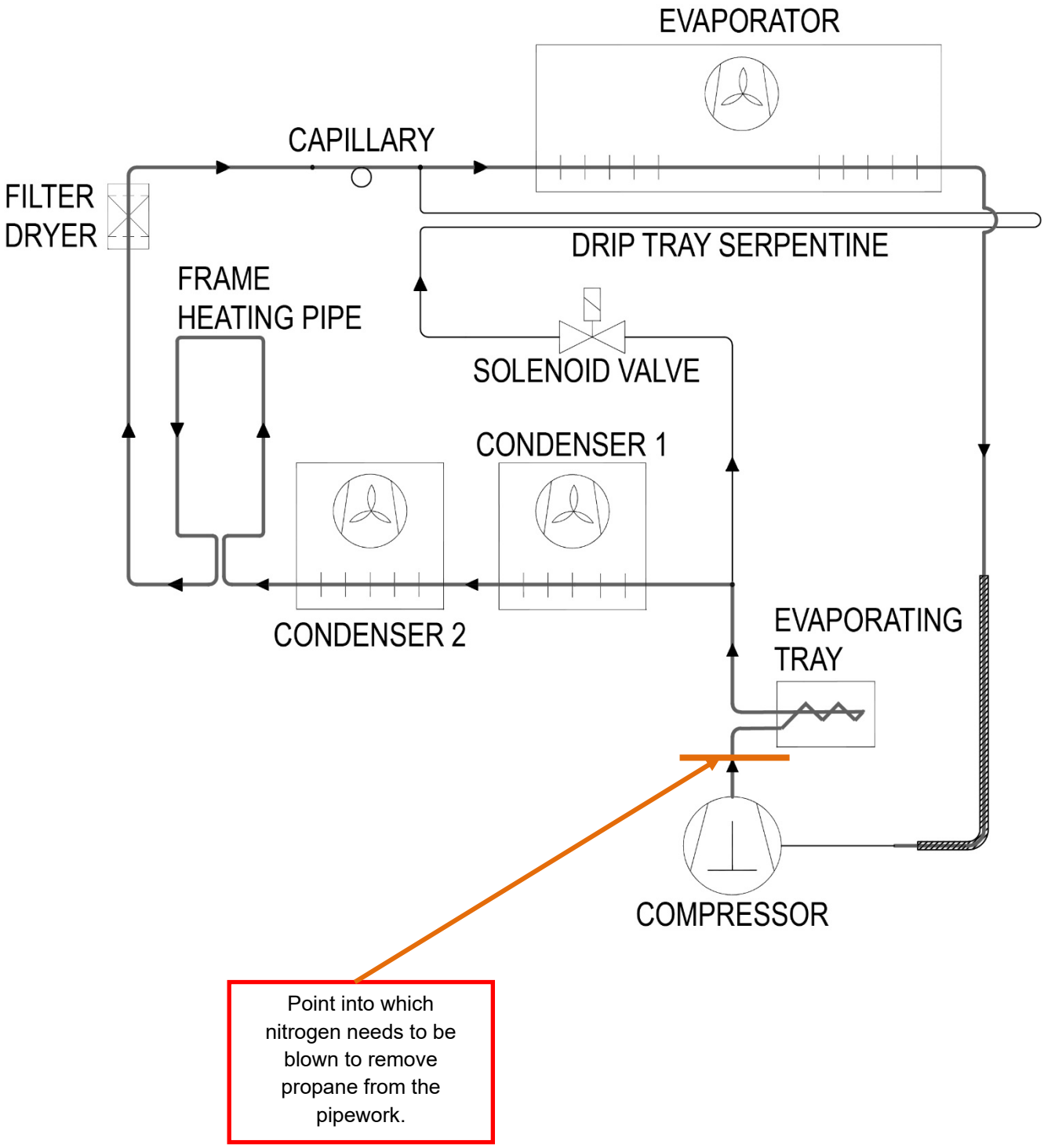



If the entire amount of refrigerant is released in the food compartment of VALZER KW, this would become a flammable zone.

# 2. REFRIGERATION SCHEMATICS FOR THE EQUIPMENT

## *2.1* REFRIGERATION DIAGRAM FOR THE COOLING CYCLE VALZER KW 2D

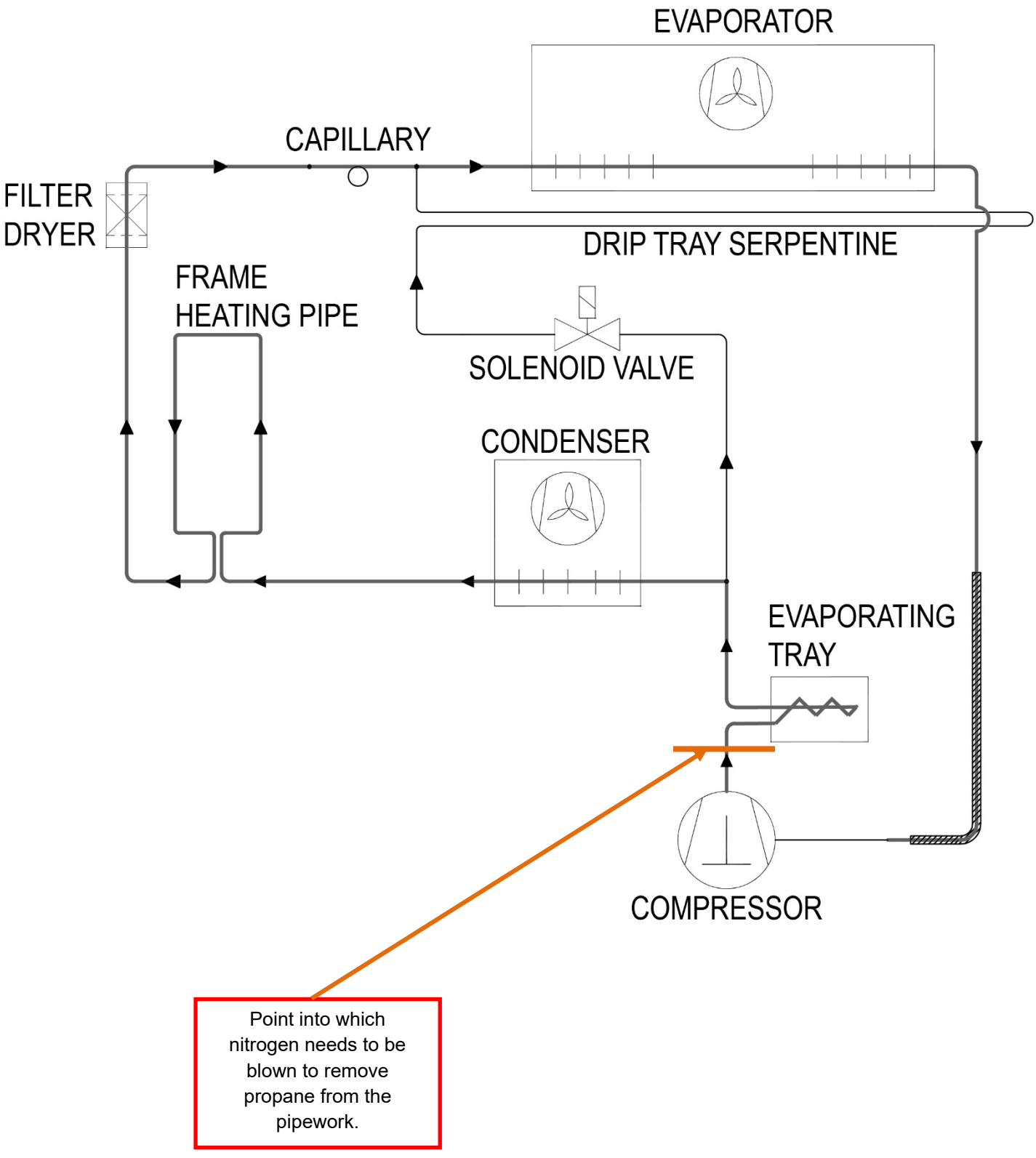
The compressor runs warm gas through evaporating tray, condensers and frame pipe.



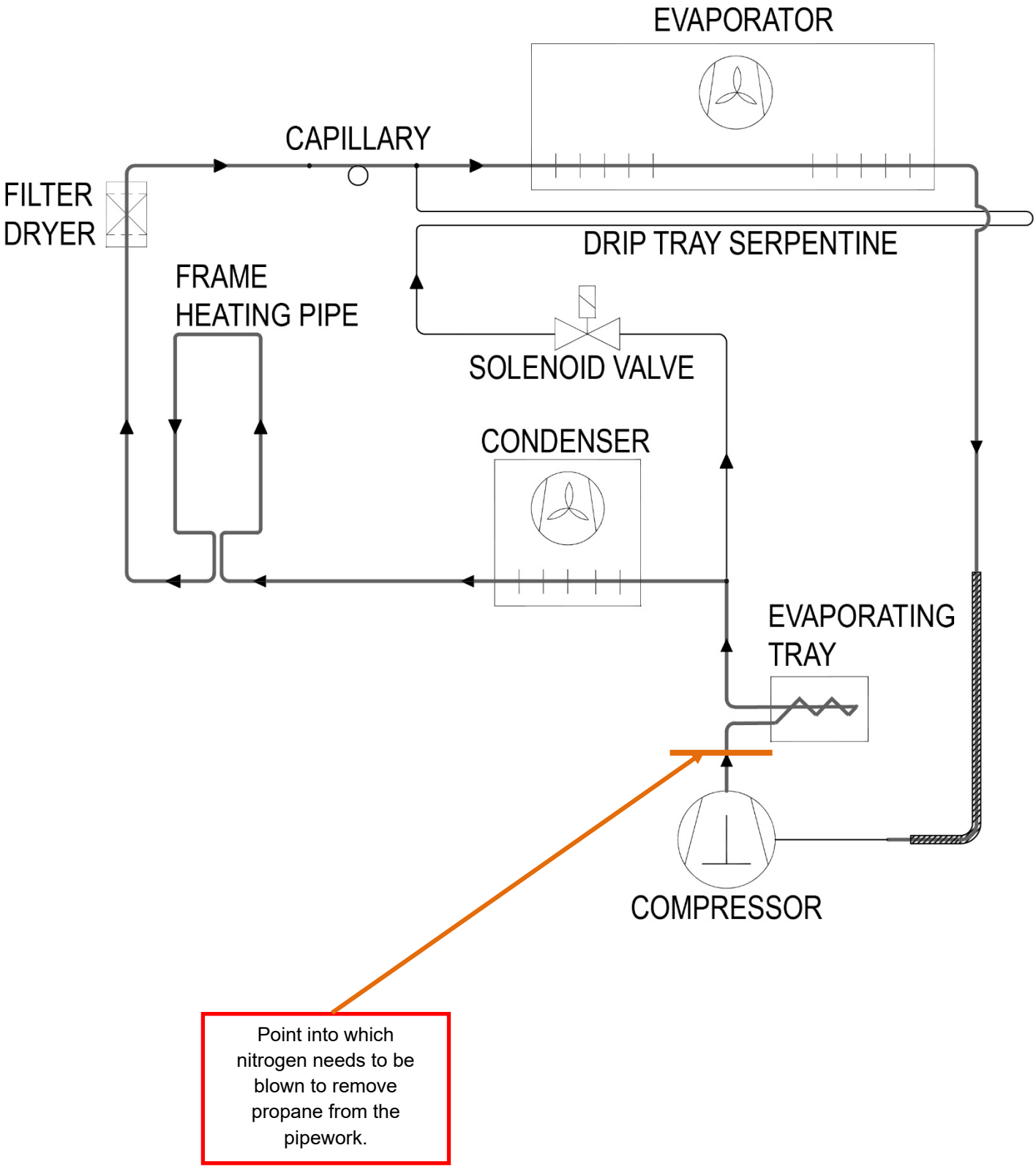
## *2.2* REFRIGERATION DIAGRAM FOR THE COOLING CYCLE VALZER KW 3D

The compressor runs warm gas through evaporating tray, condensers and frame pipe.

# GROUP 1



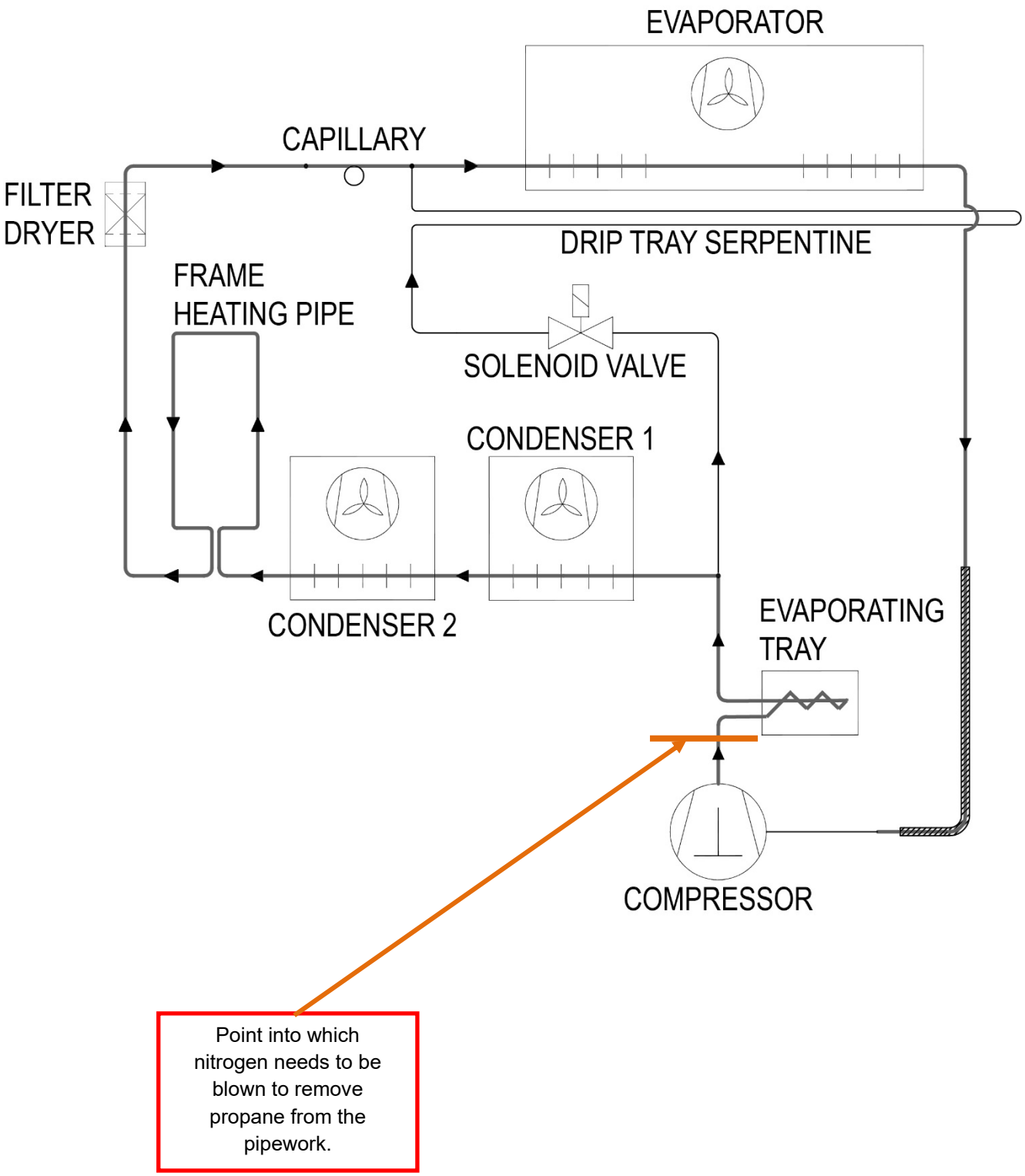
# GROUP 2



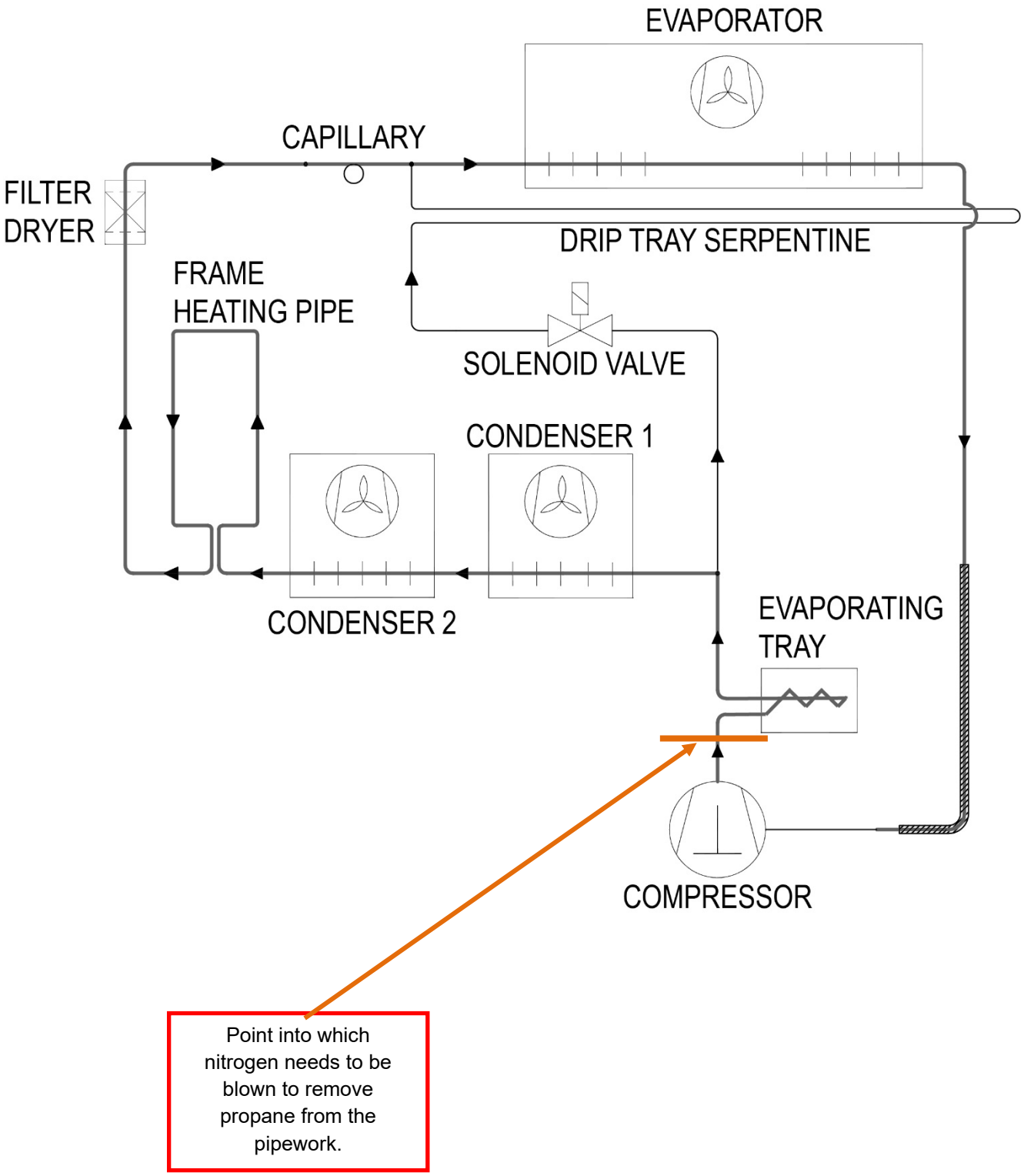
## *2.3* REFRIGERATION DIAGRAM FOR THE COOLING CYCLE VALZER KW 4D

The compressor runs warm gas through evaporating tray, condensers and frame pipe.

# GROUP 1

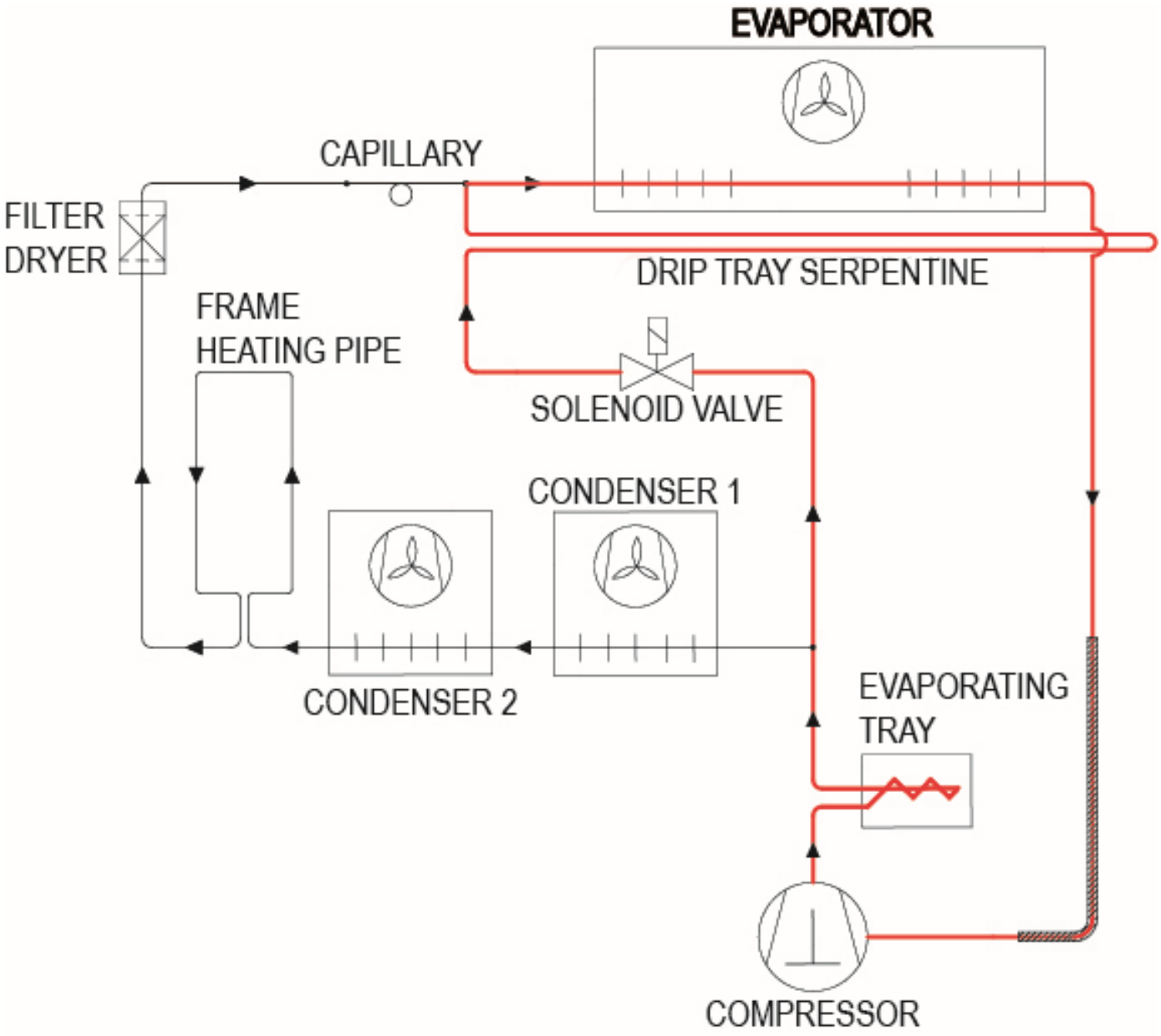


# GROUP 2



## *2.4* REFRIGERATION DIAGRAM FOR THE DEFROST CYCLE VALZER KW 2D

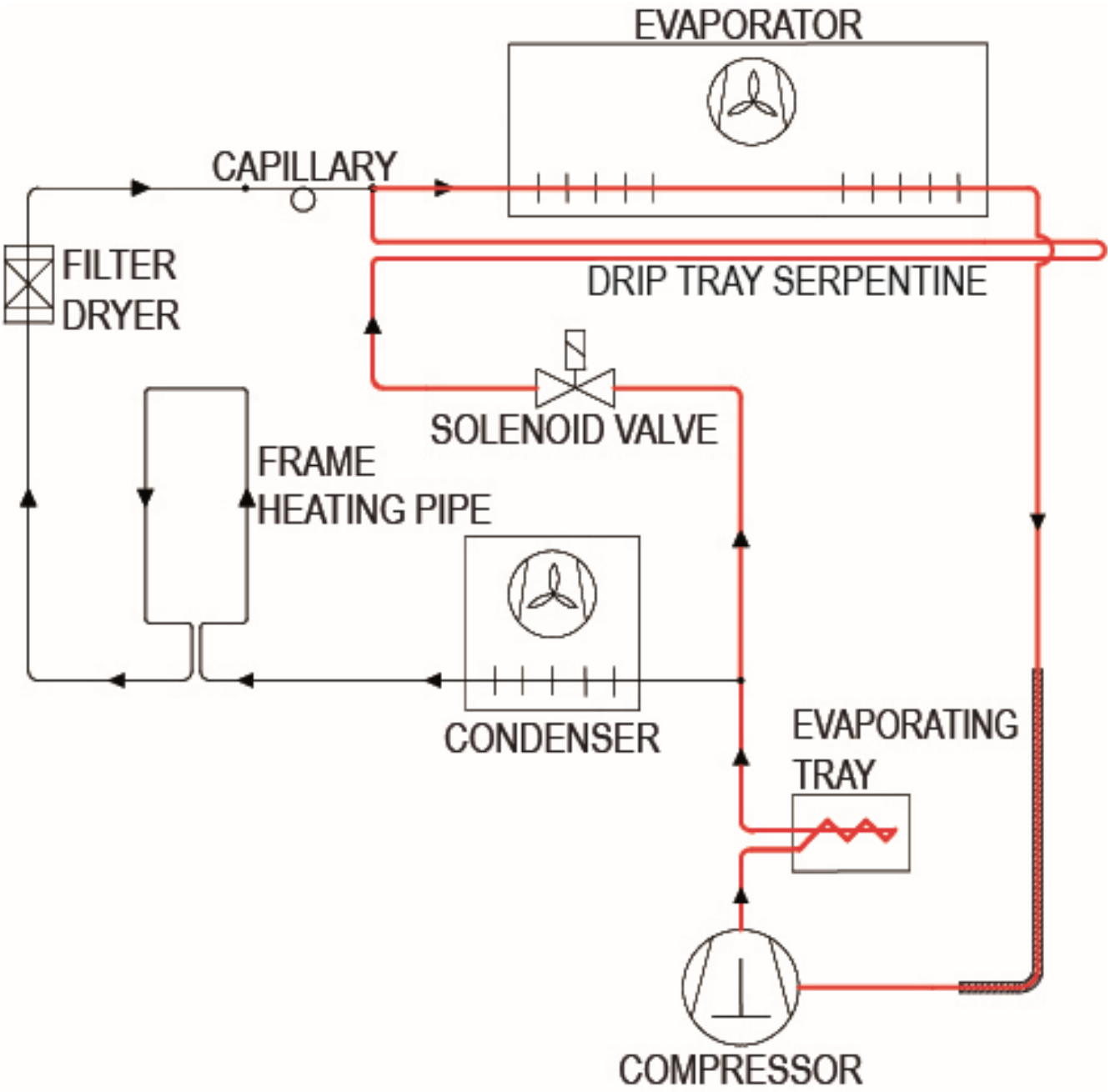
The NC solenoid valve opens and allow gas to run through the drip tray serpentine and then into the evaporator.



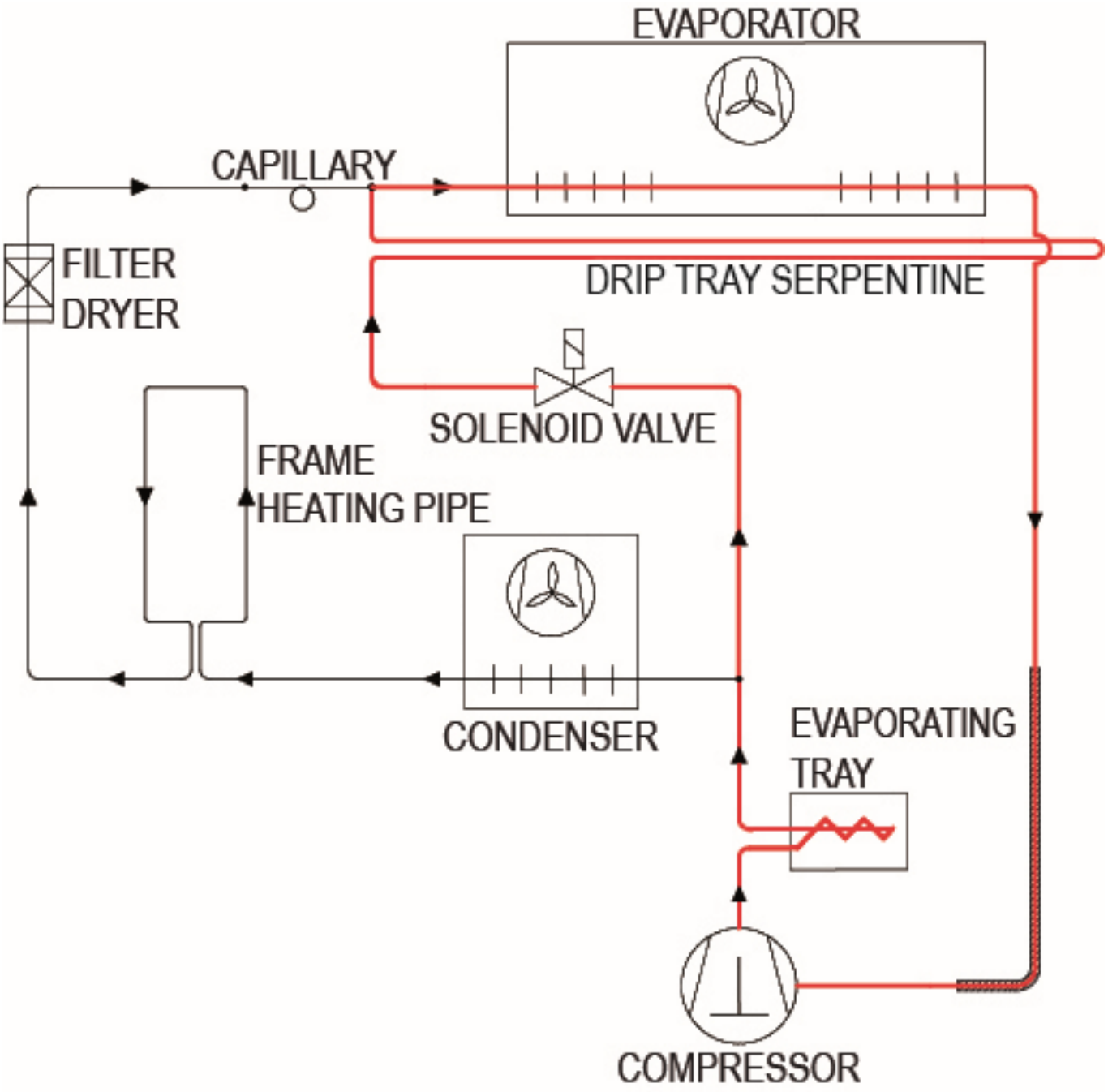
## *2.5* REFRIGERATION DIAGRAM FOR THE DEFROST CYCLE VALZER KW 3D

The NC solenoid valve opens and allow gas to run through the drip tray serpentine and then into the evaporator.

# GROUP 1



# GROUP 2



## *2.6* REFRIGERATION DIAGRAM FOR THE DEFROST CYCLE VALZER KW 4D

The NC solenoid valve opens and allow gas to run through the drip tray serpentine and then into the evaporator.

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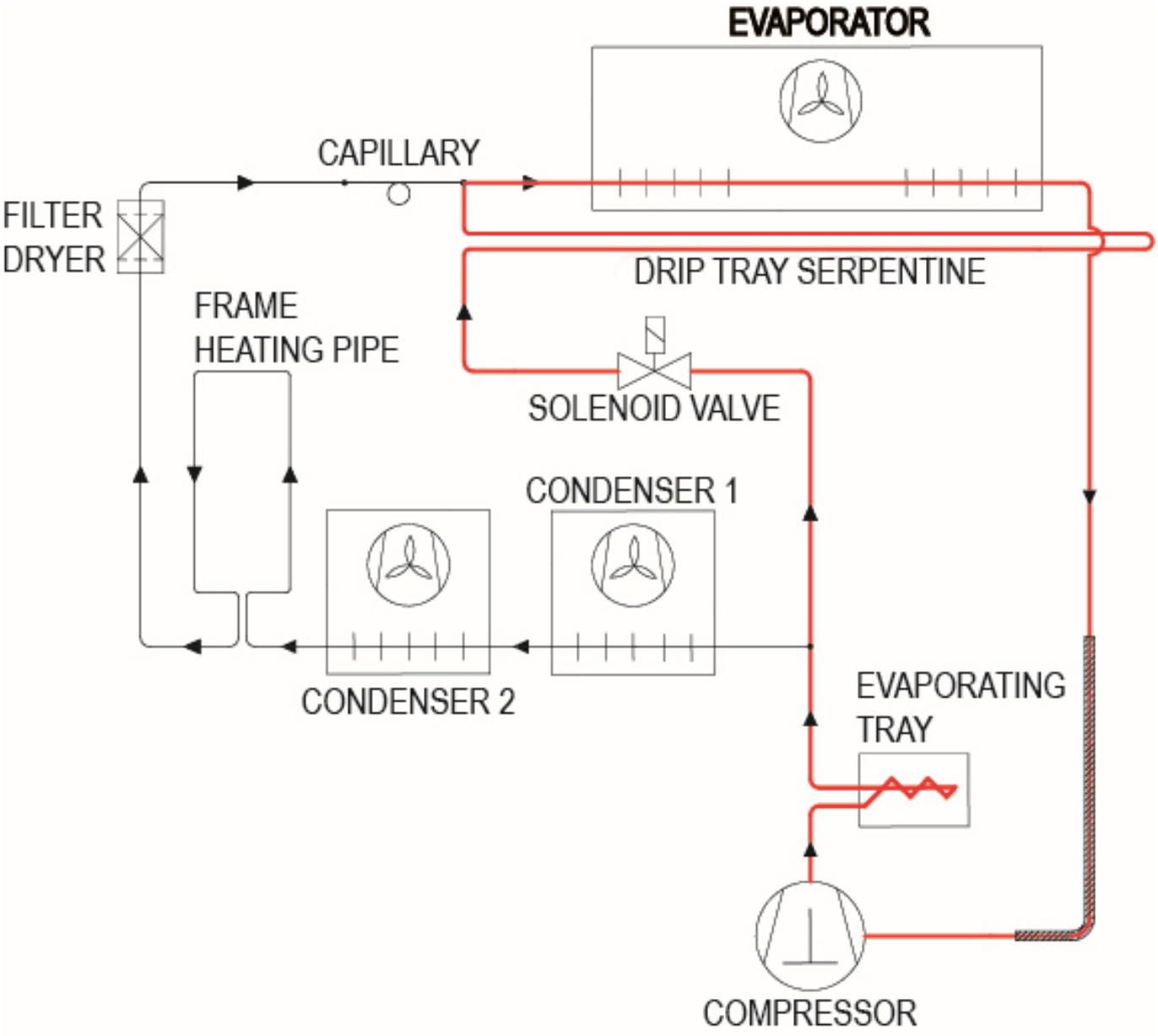
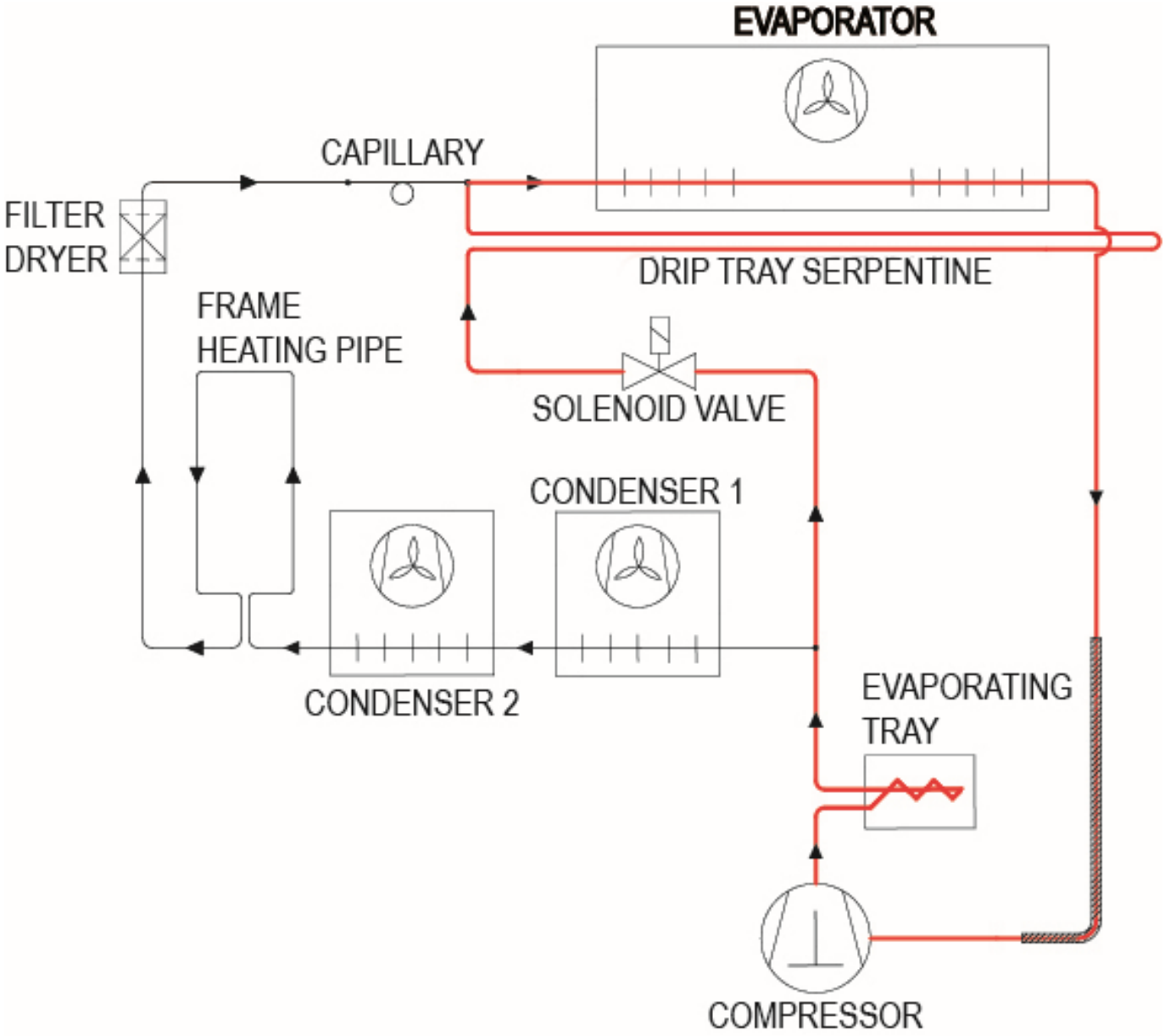
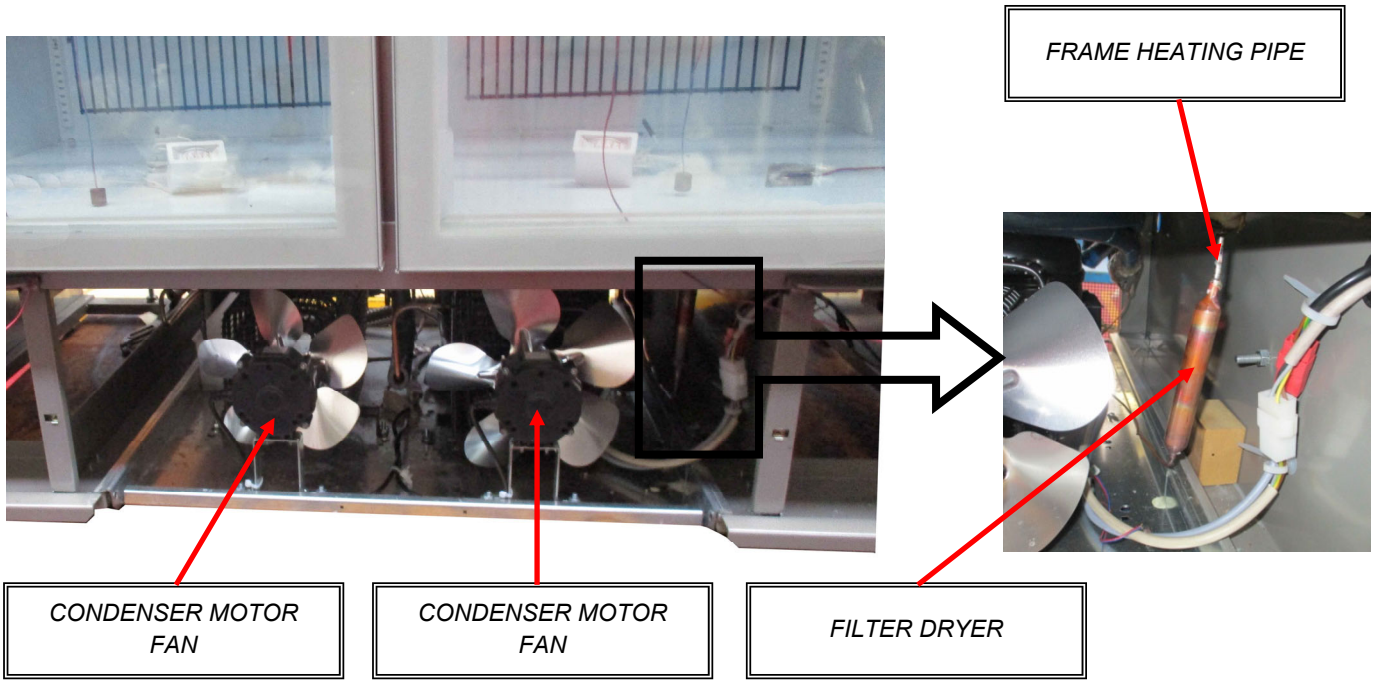


# GROUP 2

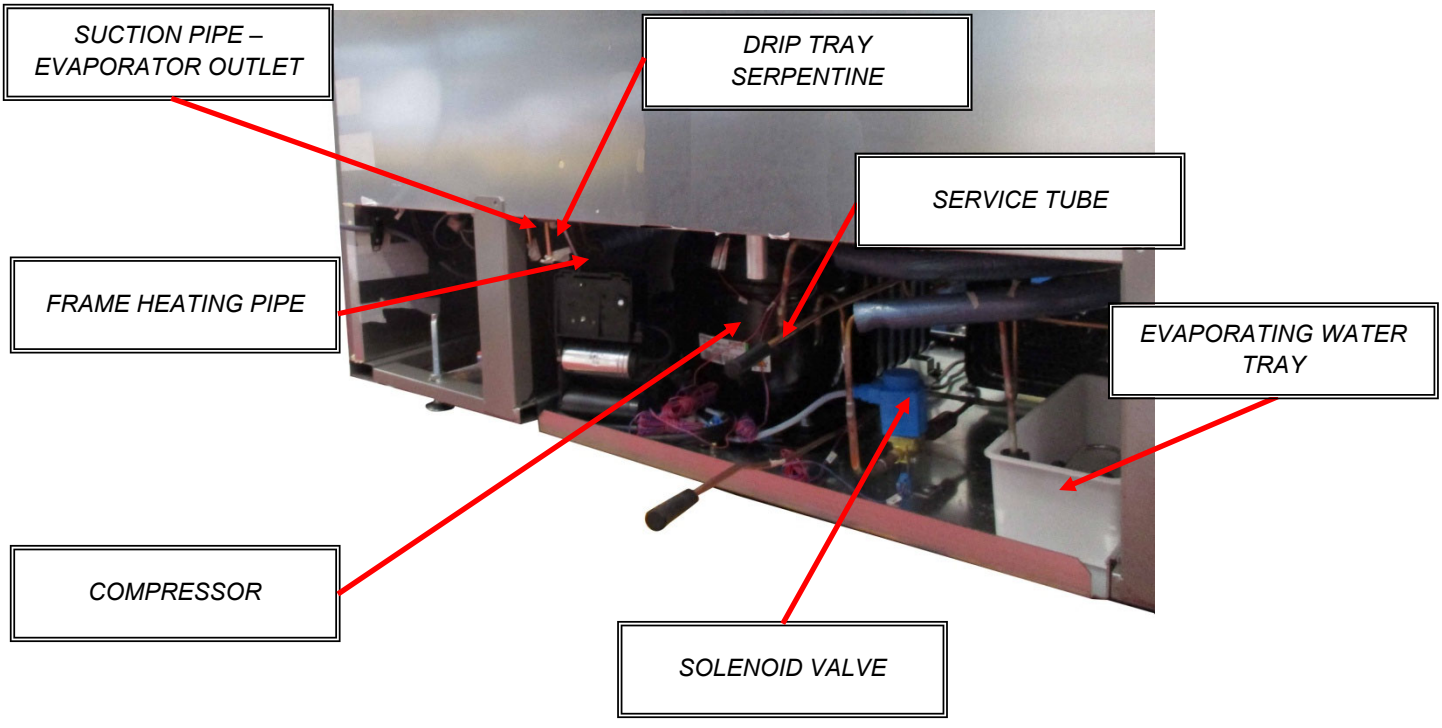


## 2.7 VIEW OF THE MOTOR COMPARTMENT AND RELEVANT PIPEWORK VALZER KW 2D

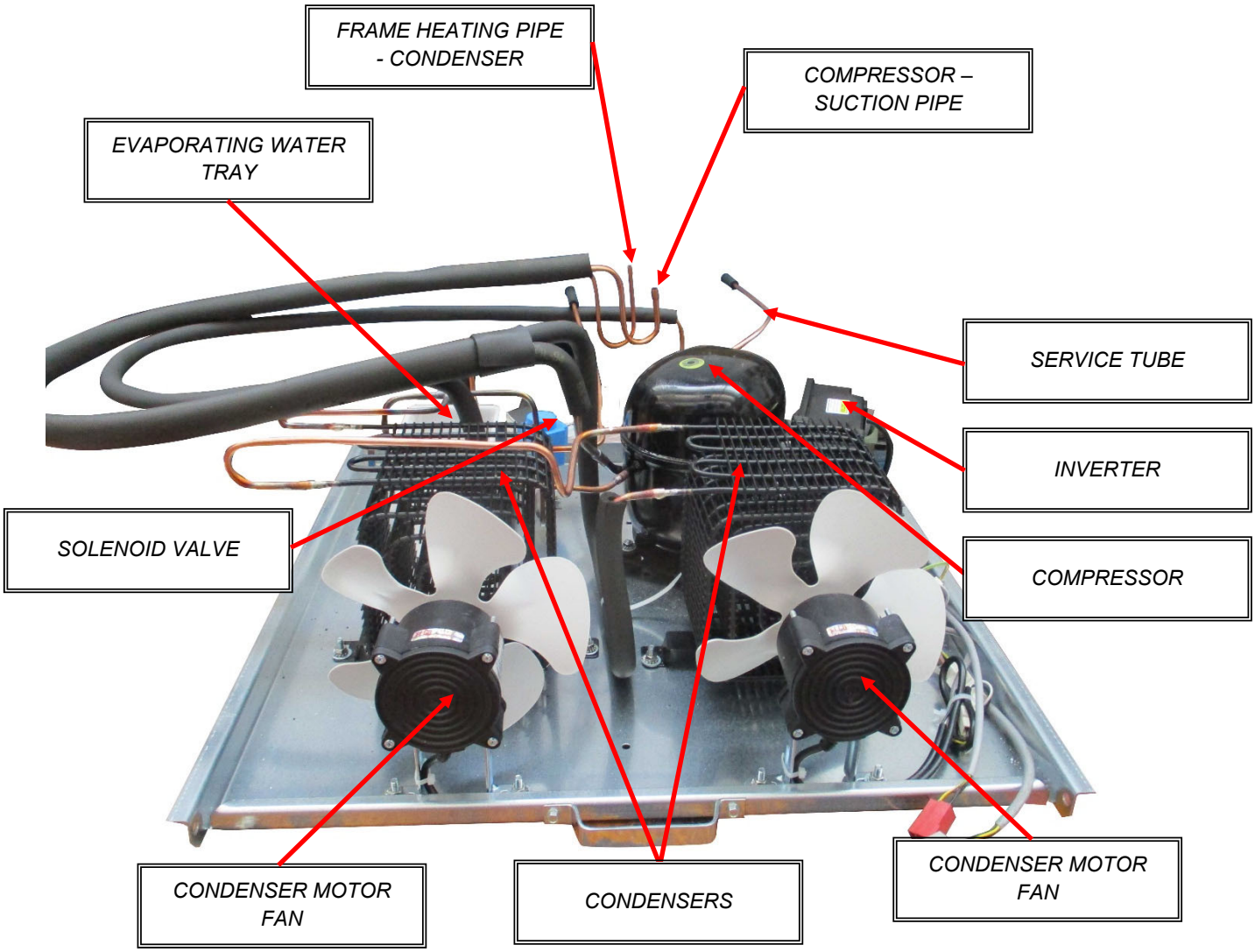
### VIEW OF MOTOR COMPARTMENT – FRONT SIDE




### VIEW OF MOTOR COMPARTMENT – REAR SIDE

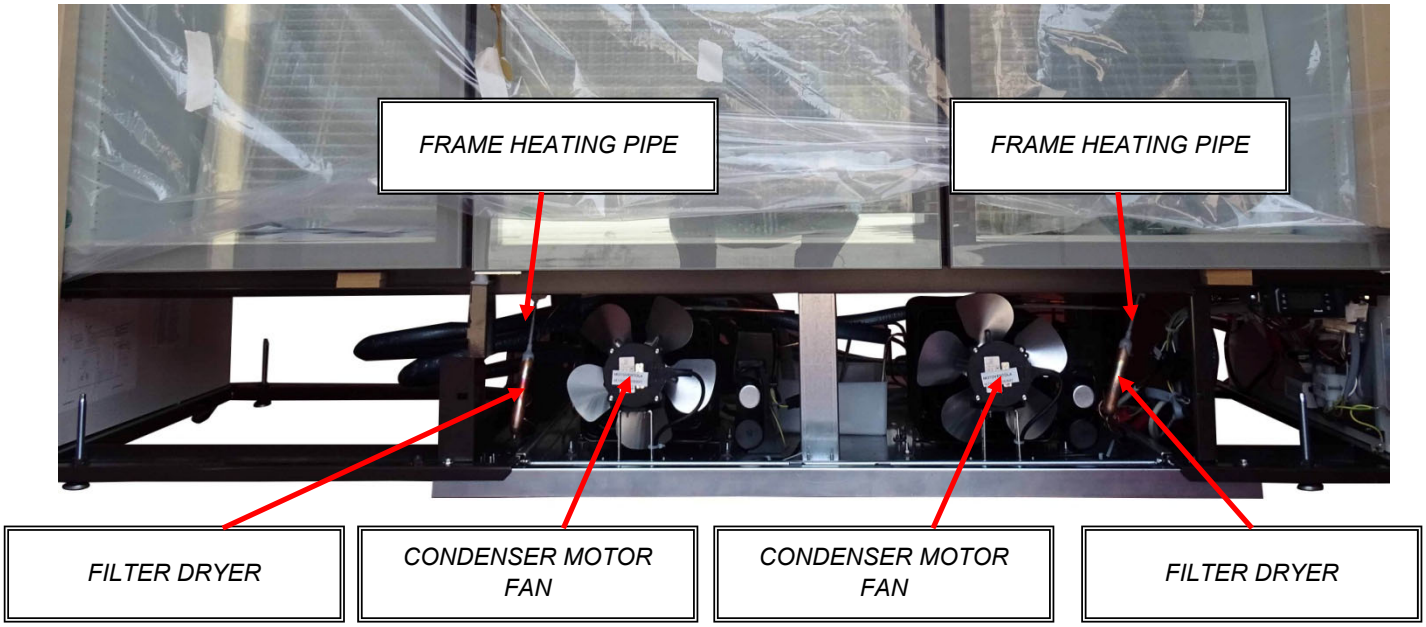


# VIEW OF MOTOR COMPARTMENT – MOTOR HOUSING

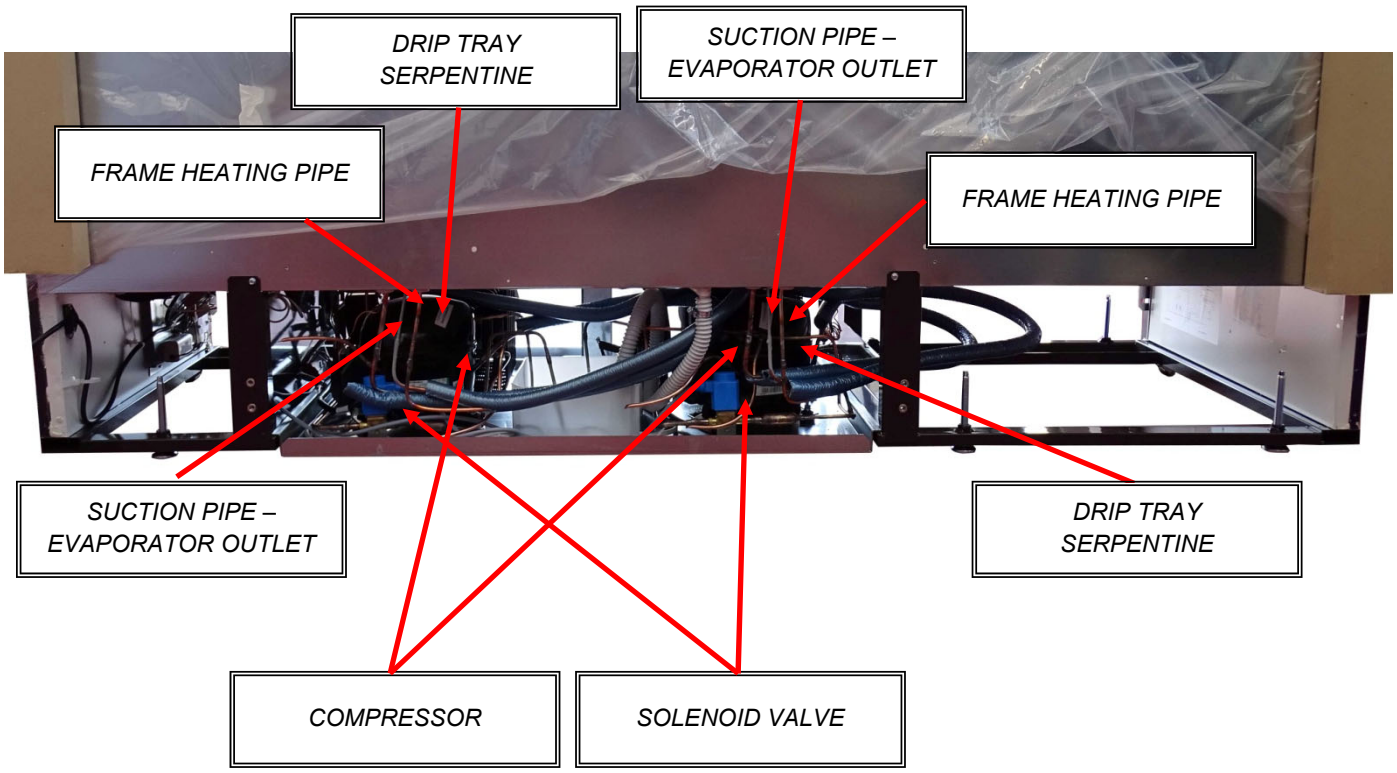


## *2.8* VIEW OF THE MOTOR COMPARTMENT AND RELEVANT PIPEWORK VALZER KW 3D

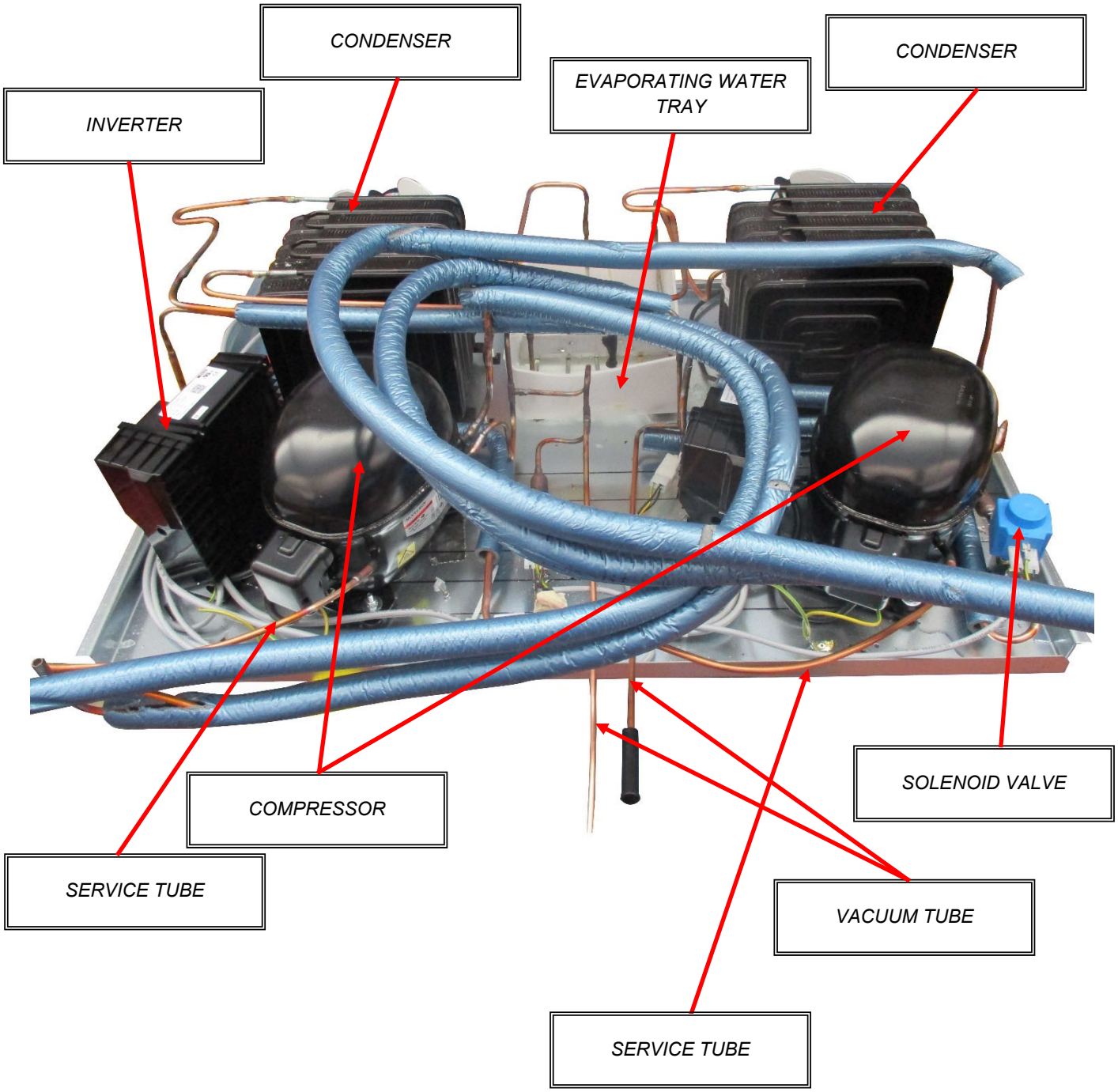
### VIEW OF MOTOR COMPARTMENT – FRONT SIDE




### VIEW OF MOTOR COMPARTMENT – REAR SIDE

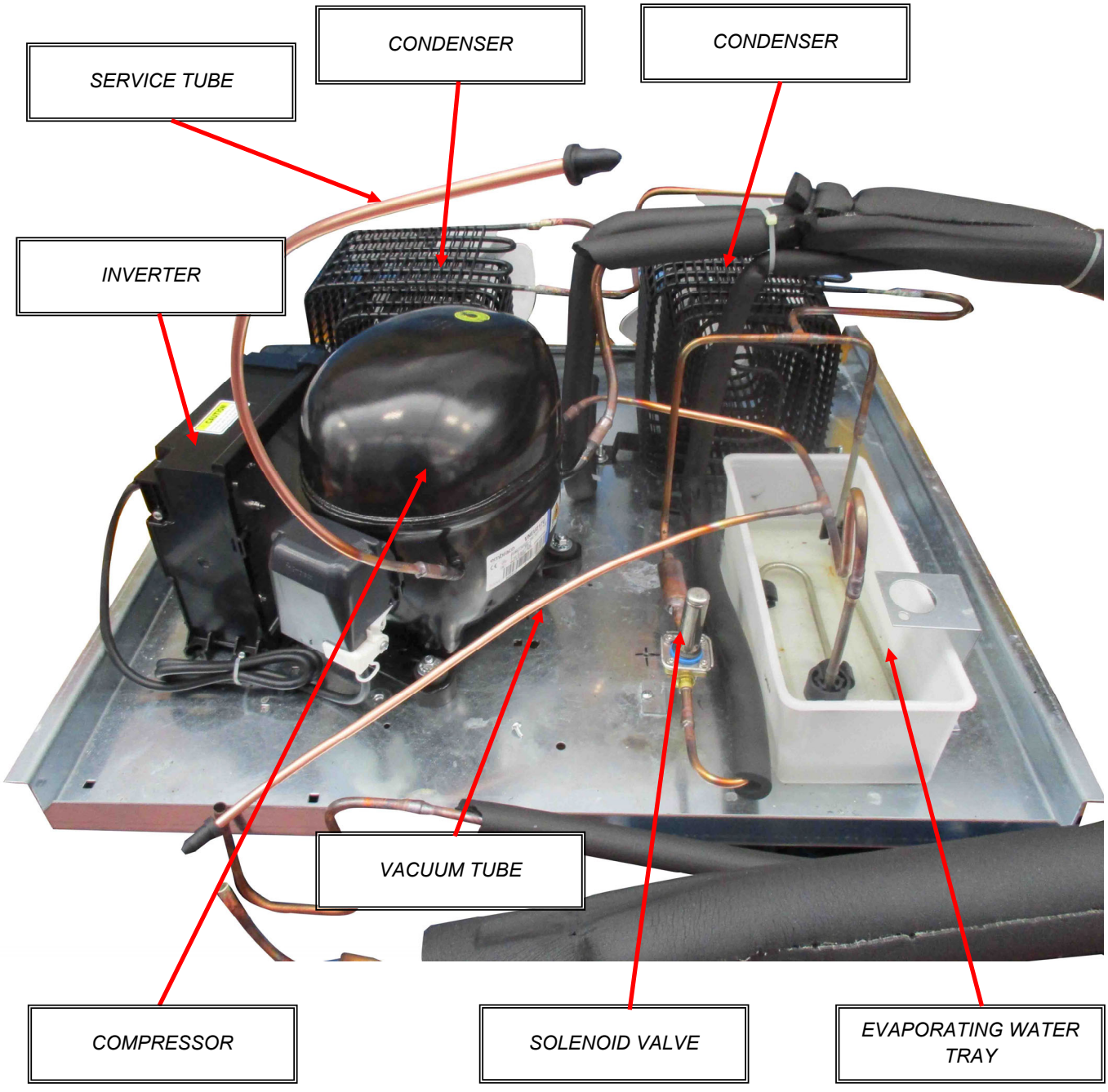


# VIEW OF MOTOR COMPARTMENT – MOTOR HOUSING

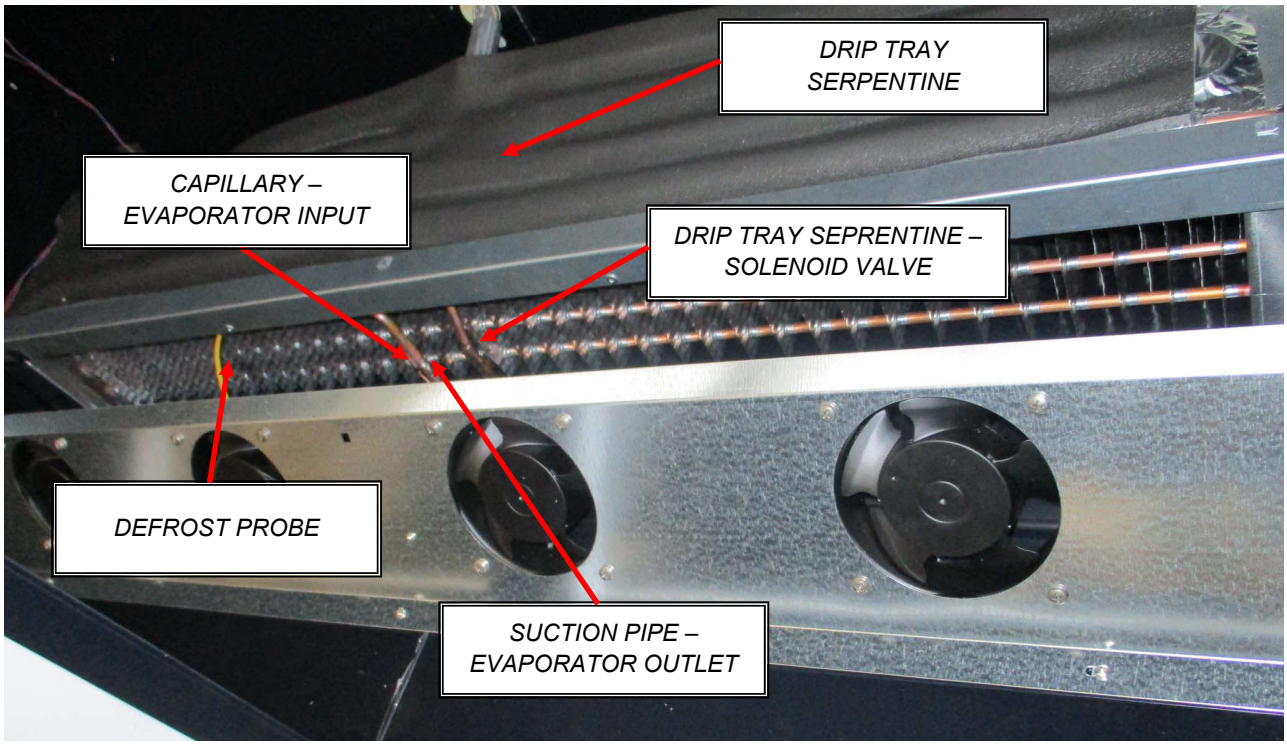


## *2.9* VIEW OF THE MOTOR COMPARTMENT AND RELEVANT PIPEWORK VALZER KW 4D

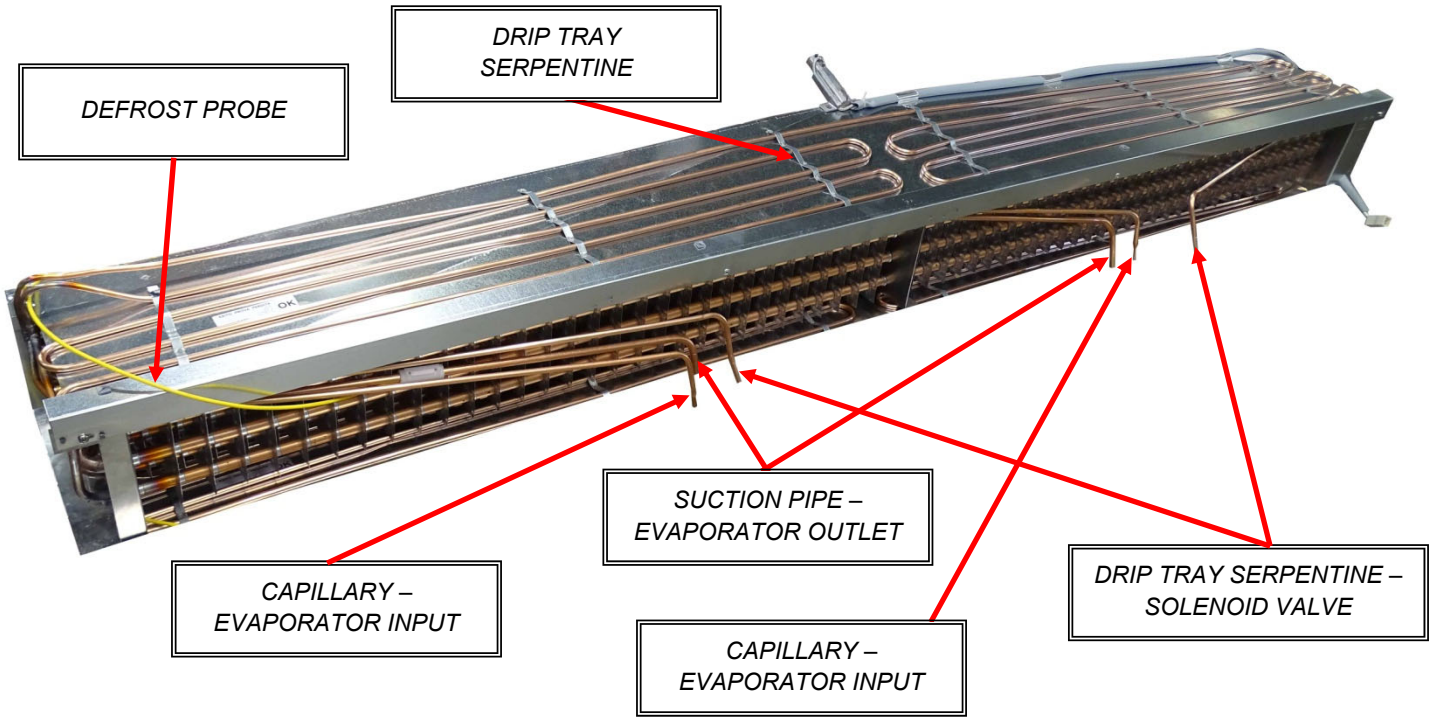
## VIEW OF MOTOR COMPARTMENT – MOTOR HOUSING



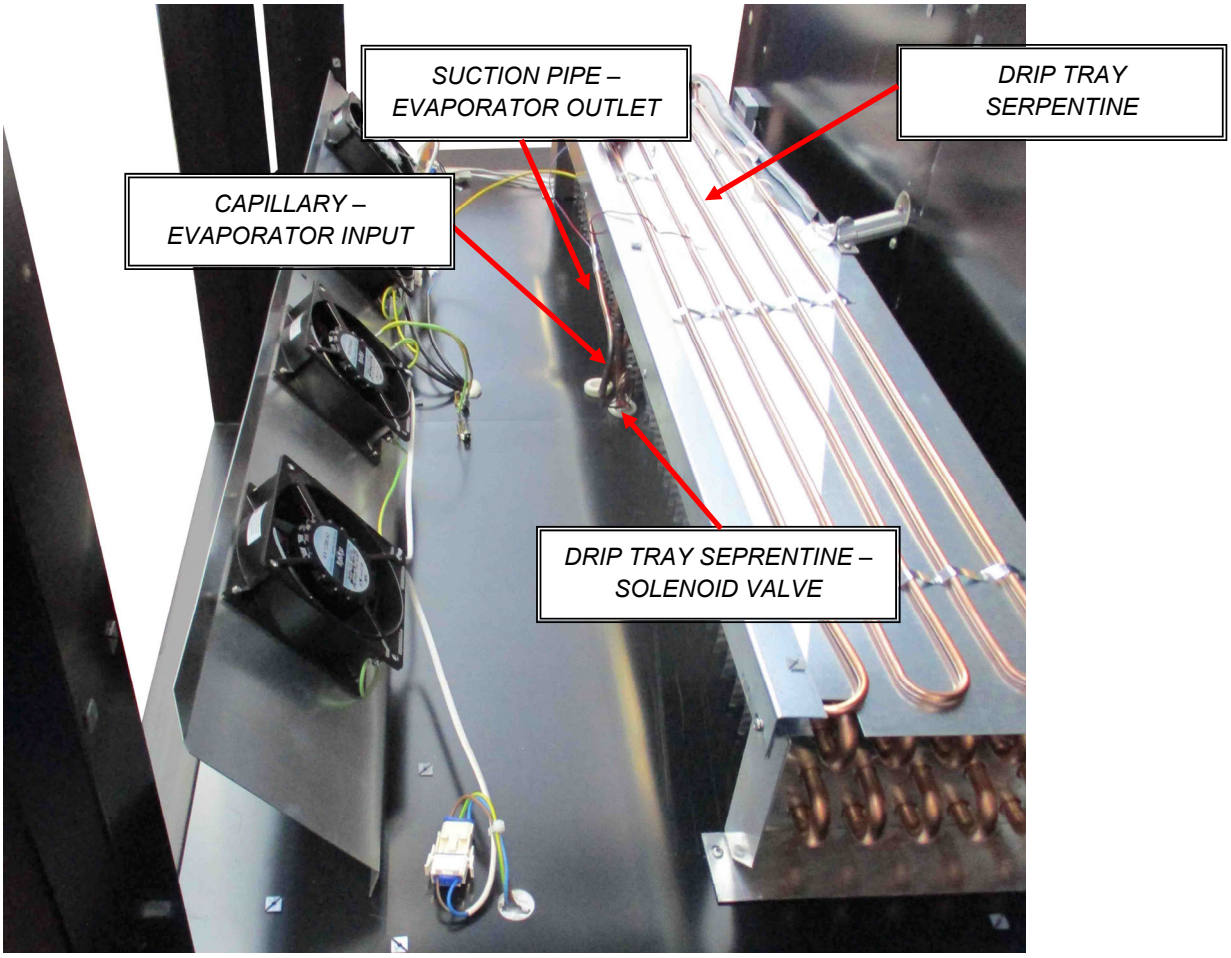
## 2.10 VIEW OF THE EVAPORATOR COMPARTMENT AND RELEVANT PIPEWORK – VALZER KW 2D




## 2.11 VIEW OF THE EVAPORATOR COMPARTMENT AND RELEVANT PIPEWORK – VALZER KW 3D



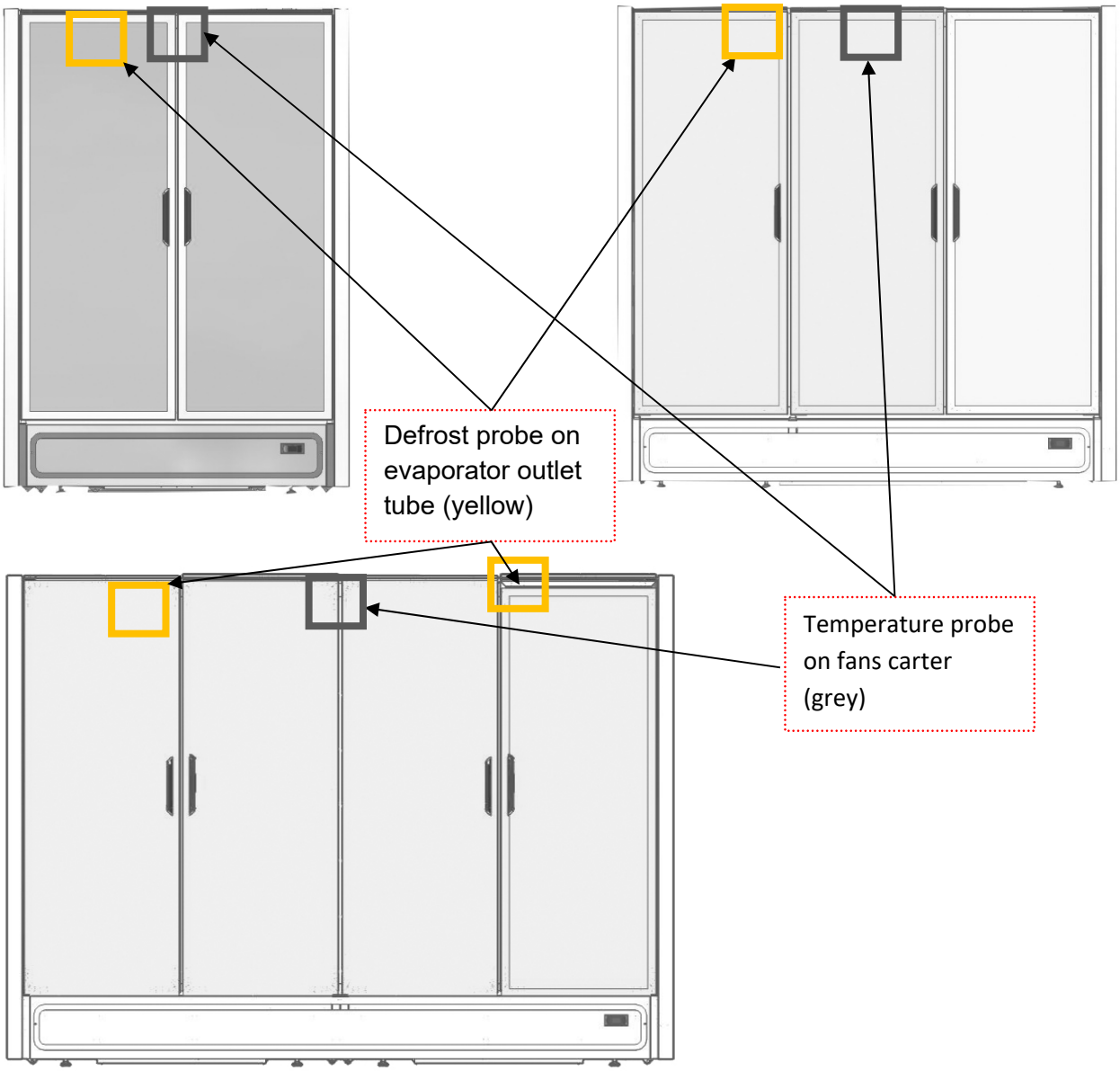
## *2.12* VIEW OF THE EVAPORATOR COMPARTMENT AND RELEVANT PIPEWORK – VALZER KW 4D



# 3. POSITION OF PROBES IN THE CABINET

There are two probes in the VALZER KW 2D, VALZER KW 3D and VALZER KW 4D.

## Front view:




| *Model* | *Position of probe* | Probe Colour | Function | Probe Epta code |
|---|---|---|---|---|
| VALZER KW 2D | Evaporator<br>Tank | Yellow<br>Gray | Defrost end<br>Display - Thermostat | I0205786<br>I0205739 |
| VALZER KW 3D | Evaporator<br>Tank | Yellow<br>Gray | Defrost end<br>Display - Thermostat | I0205786<br>I0205713 |
| VALZER KW 4D | Evaporator<br>Tank | Yellow<br>Gray | Defrost end<br>Display - Thermostat | I0205786<br>I0205739 |

# 4. ALARMS (Dixell Controller)

| ALARM | CAUSE | CONSEQUENCES |
|---|---|---|
| **"P1"** | Temperature probe damaged | Compressor running with fixed on/off periods (parameters "Con" and "CoF") |
| **"P2"** | Evaporator probe damaged | Defrost ended for timeout (parameter "MdF") |

# 5. REPLACEMENT OF COMPONENTS AND REPAIR OF A LEAK

The instructions below, which involve opening the refrigerating circuit, must be performed in a place with sufficient air circulation and not in the sales area.

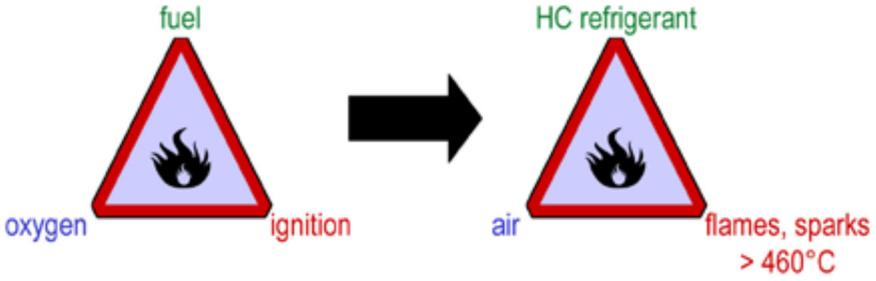
## *5.1* SAFE OPERATING PROCEDURES FOR REFRIGERATION UNITS USING R290

Before carrying out any kind of maintenance operation on the refrigerator, make sure that the machine is disconnected from power (unplugged).

R290 (Propane CH3CH2CH3) is a flammable natural refrigerant (Hydrocarbon HC) having lower explosive limit ( LEL %V/V) = 1.7.

The very low quantity of refrigerant used and the safe design (possible ignition sources far from the potential explosive areas) make this unit totally safe in use. Caution must be used during servicing and with this respect it is essential to understand the basic concept of flammability.

Three ingredients are needed for a fire: a fuel at the right concentration, a supply of oxygen (normally from air) and a source of ignition. The common way of illustrating this is by means of the fire triangle.




Eliminating at least one but preferably two of these ingredients fire can be prevented.
In order to achieve this, three general guidelines should be followed during servicing:
F1. Containment of the substance;
F2. Avoidance of ignition sources;
F3. Use of ventilation.

### F1. Containment

The flammable substances must be kept within a suitably designed and constructed "container", be it a suitable cylinder or a refrigeration system. If the substance leaks, it should be prevented from spreading to other areas.

### F2. Ignition sources

Ensure that all the obvious and unobvious ignition sources have been removed from the equipment and handling areas. Ignition sources can vary greatly and may include sparks from electrical equipment or welding and cutting tools, hot surfaces, open flames from heating equipment, smoking materials, etc.

## F3. Ventilation

There should be adequate airflow where flammable substances are stored and used.
Good ventilation will mean that any vapor arising from a leak or a release will be rapidly dispersed. In case one of the components of the refrigerating hermetic circuit (compressor, dryer, condenser, evaporator, capillary) needs to be serviced, the basic safe guideline must be always followed:

**NEVER USE FLAMES OR HEAT SOURCES IF FLAMMABLE REFRIGERANT IS PRESENT INSIDE THE REFRIGERATING CIRCUIT**

Flames can be used only when there is evidence that no flammable substance is still inside the circuit or the circuits; IN CASE OF MULTIPLE CIRCUITS NONE OF THEM MUST CONTAIN FLAMMABLE SUBSTANCES in case heat sources are to be used: all circuits need to be emptied and absence of flammable substances must be proved.

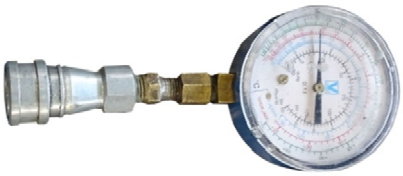
**IMPORTANT**
Provisions for all jobs involving the opening of the refrigerating circuit:

- SHUT DOWN THE POWER SUPPLY
- MANDATORILY WEAR GLOVES AND GLASSES
- DO NOT WORK WITH OPEN FLAMES BEFORE THE PIPEWORK HAS BEEN CUT!
- REMOVE ALL SPARK SOURCES FROM THE WORKING AREA (LIGHTERS, LAMPS, CIGARETTES).

## *5.2* PROTECTION TOOLS AND DEVICES FOR SERVICEMENT

### Protection tools:

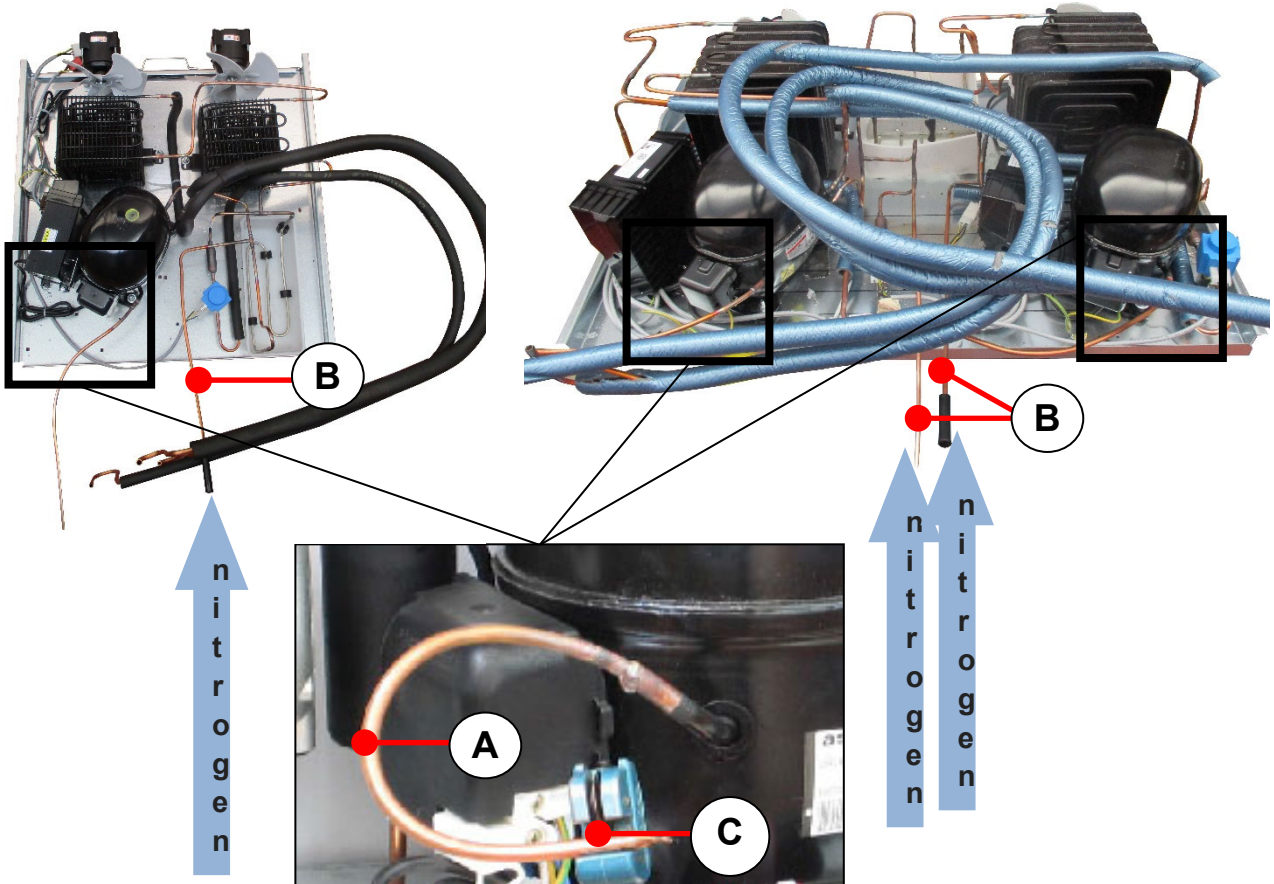
## Devices for service personnel:

| | |
|---|---|
|  | **LOW PRESSURE SUCTION GAUGE** |
|  | **REFRIGERANT PLIER** |
|  | **ELECTRONIC LEAK DETECTOR** |
|  | **REFRIGERANT JUNCTIONS** |
|  | **LOKRING JOINT PLIER** |
|  | **LOKRING CAP** |
|  | **REFRIGERANT GAS CONTAINER** |
|  | **NITROGEN GAS BOTTLE** |

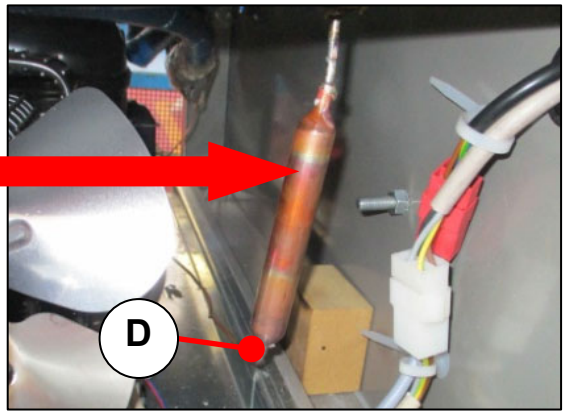
| | |
|---|---|
|  | **REFRIGERANT SCALE** |
|  | **VACUUM PUMP** |
|   | **LOKPREP SEALANT** |
|  | **ORBITAL CUTTER** |
|  | **SCREWDRIVER** |
|  | **WRENCH n°10** |

## *5.3* HOW TO EMPTY THE COOLING CIRCUIT AND TEST IT BEFORE SERVICING

The refrigerating unit has a double servicing pipe, on the low (**A**) and on the high (**B**) pressure sides: in order to totally remove the flammable refrigerant from the refrigerating circuit both pipes are to be opened by using an orbital cutter (**C**).
Cut the capillary tube (**D**) exiting the filter dryer.
When the inside pressure is equalized with the ambient pressure, blow nitrogen at 10 bars in the circuit through the service pipe on high pressure side (**B**) and check that it flows out through the other service pipe on the low pressure side; continue to blow nitrogen for at least 5 minutes.
At the end of this procedure **NO FLAMMABLE REFRIGERANT CAN REMAIN INSIDE THE CIRCUIT IN SUCH A QUANTITY TO BE DANGEROUS WHEN FLAMES OR HEAT SOURCES ARE USED**.




Also cut the pipe entering the filter and replace the filter dryer with a new one.



## *5.4* COMPRESSOR REPLACEMENT


***VALZER KW 2D***
***Epta code:*** 21848070
***Model:*** EMBRACO VNEU217U

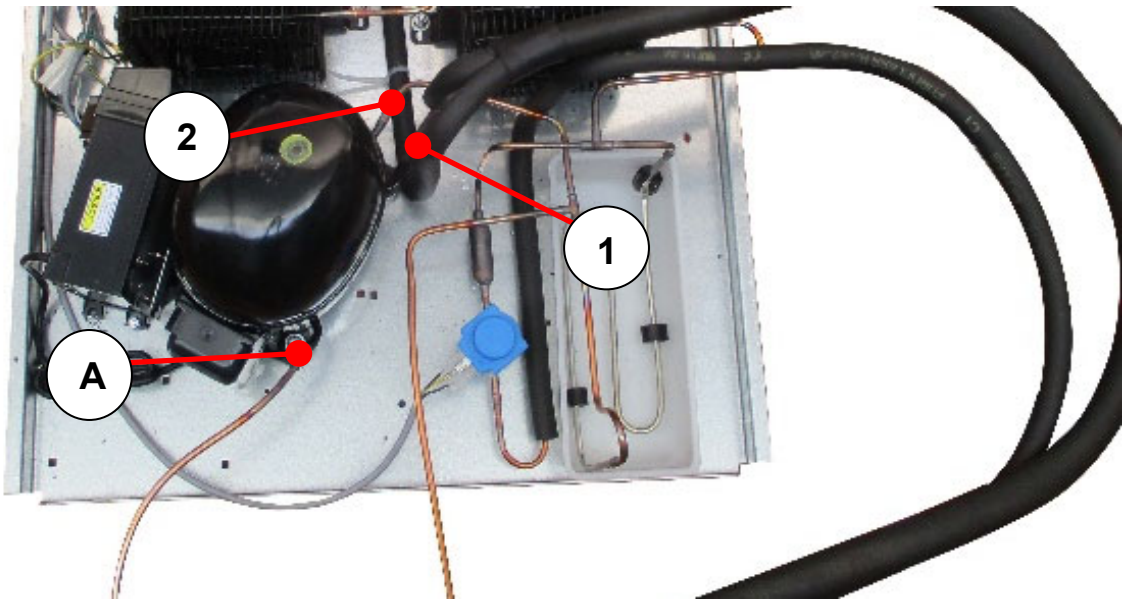
***VALZER KW 3D***
***Epta code:*** 45911034
***Model:*** SECOP NLV12.6CN

***VALZER KW 4D***
***Epta code:*** 21848070 (2 Pc)
***Model:*** EMBRACO VNEU217U

***Epta code for filter:*** 78729000
***Model:*** Filter UL gr 12 – Holes 5-3,2
**Note: when the compressor is replaced the filter drier must be replaced too**

## *5.5* UNSOLDER COPPER PIPE TUBE

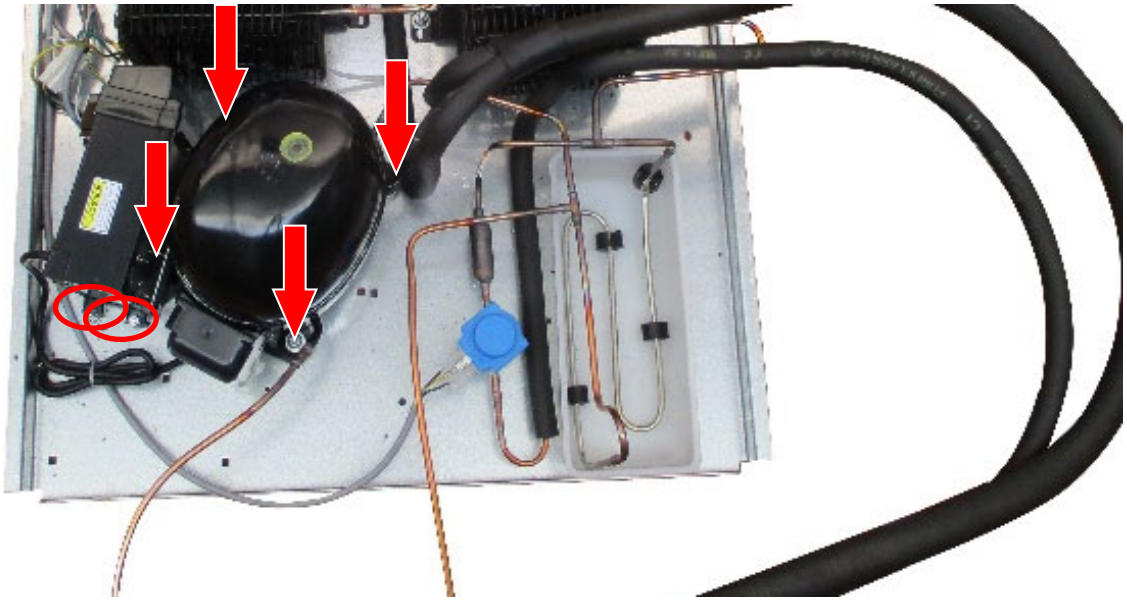
When no more refrigerant gas is inside the thermodynamic circuit, unsolder from compressor the charge pipe (**A**), the suction pipe (**1**) and the discharge pipe (**2**).




## *5.6* COMPRESSOR REMOVING

Unscrew the 4 compressor screws by using a wrench n°10.

Use a screwdriver to remove the inverter.



## *5.7* NEW COMPRESSOR INSERTION

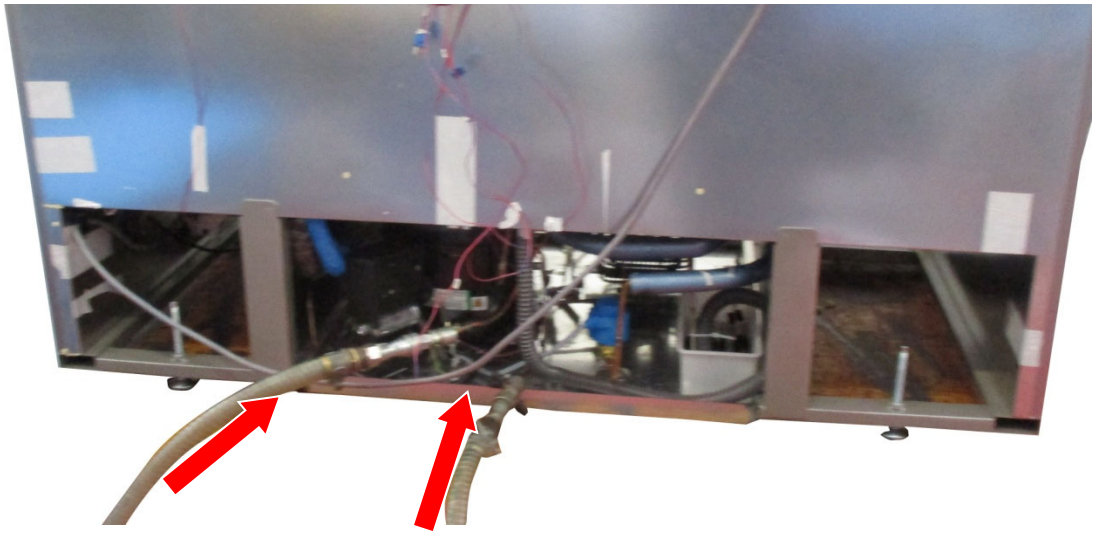
Fix the new compressor to the motor plate with 4 screws (wrench n°10) and then fix the inverter (screwdriver).

After securing the compressor to the plate, braze the discharge and suction pipes, then cut the capillary terminal by a 45° diagonal cut, insert it into the filter outlet (max 3cm) and braze it. Braze the pipe exiting the condenser to the filter inlet.

When the circuit is closed, charge the circuit with helium/nitrogen up to a pressure of 8 bar; check for possible leakages on brazing points.

Connect the vacuum pump to the compressor service tube and to the high pressure pipe and hold the vacuum for a period of 30-40minutes (check vacuum pump characteristics and manual for the correct procedure). The vacuum degree to be achieved is below 15 Pa (0,15 mbar).

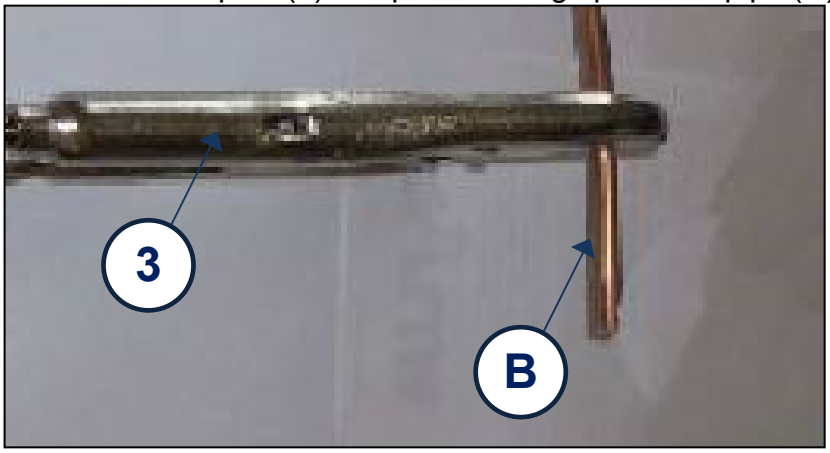
***WARNING! Wrong vacuum execution may cause problems on the refrigerator performances.***



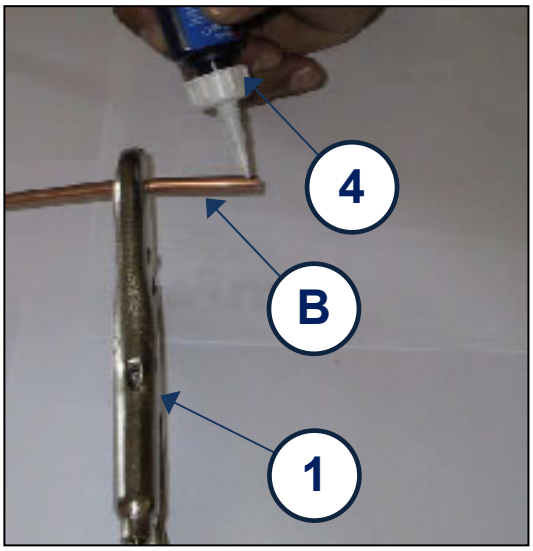
## *5.8* HIGH PRESSURE PIPE CLOSING

After 30-40 minutes of vacuum, disconnect the vacuum pump only on the high pressure pipe (**B**).

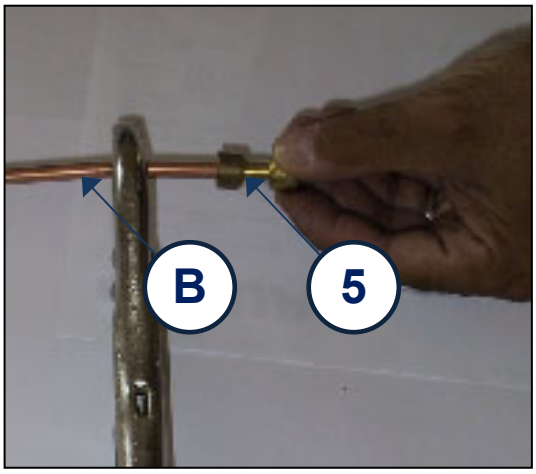
- Take the plier (**3**) and pinch the high pressure pipe (**B**), then remove refrigerant junction.



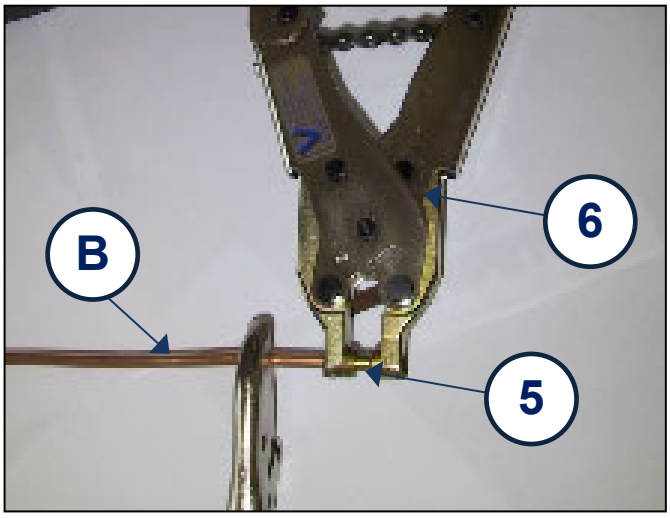
- Put a drop of Lokprep sealant (**4**) on the high pressure pipe terminal (**B**).




- Insert a Lokring cap (**5**) on the high pressure pipe (**B**). Rotate the cap (**5**) for correctly distribute the sealant (**4**).



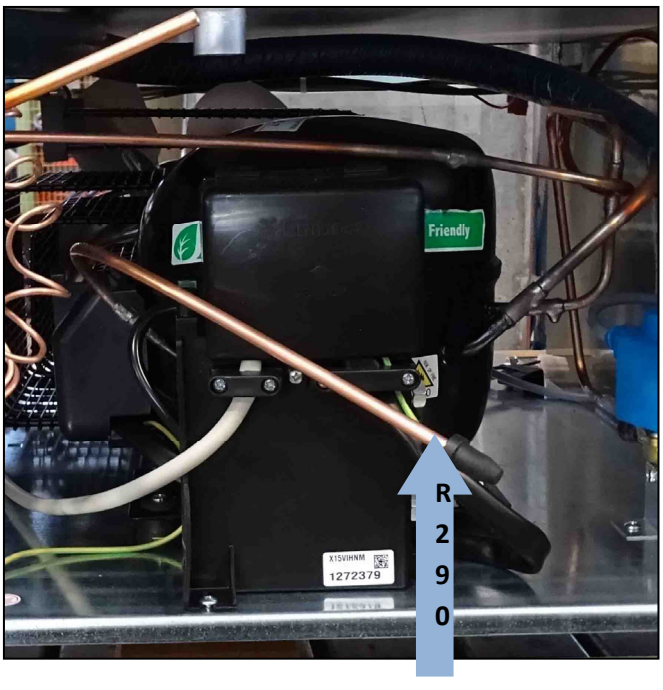

- By using the Lokring plier (**6**) fix the cap (**5**) on the copper pipe (**B**).



## *5.9* REFRIGERANT GAS CHARGING AND THERMODYNAMIC CIRCUIT CLOSING.

Check the nominal refrigerant gas charge on the data label of the cabinet (in g / oz).
Using a scale (**7**) with an adequate precision (±1g / ±0.01oz), verify the quantity of refrigerant gas in the gas container (**8**).


Disconnect the vacuum pump from the compressor service tube (**A**); connect the gas container (**8**) to the circuit, and measure the amount of refrigerant gas introduced in the circuit.



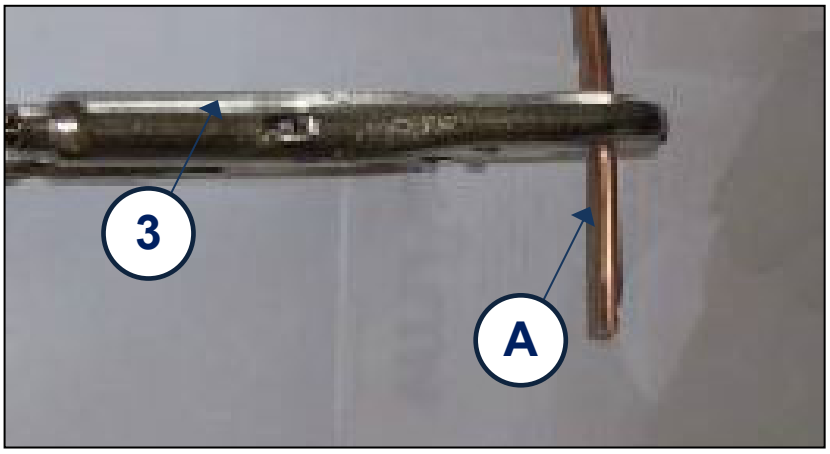

Picture example
of compressor

If necessary, switch on the refrigerator, in order to introduce further refrigerant gas; the final charge should be the nominal value with a tolerance of ±3% in mass.

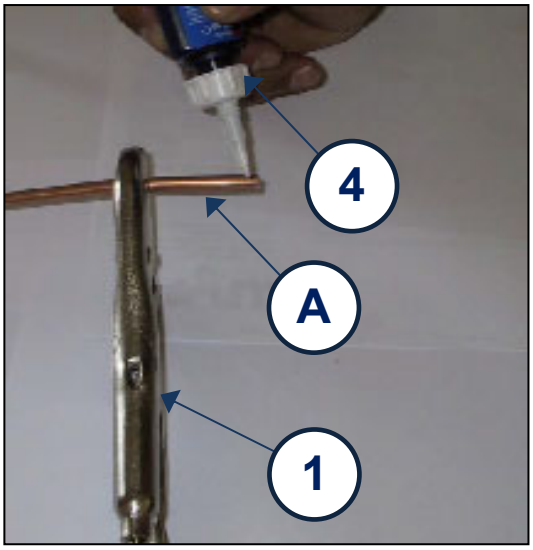
**WARING! In order to avoid damages to the thermodynamic system components, do not switch on the refrigerator without any refrigerant gas inside the circuit.**

Disconnect the refrigerant container from the circuit at the end of the charging process, then keep the refrigerator on for 5-6 minutes. Switch off and disconnect from the power supply.

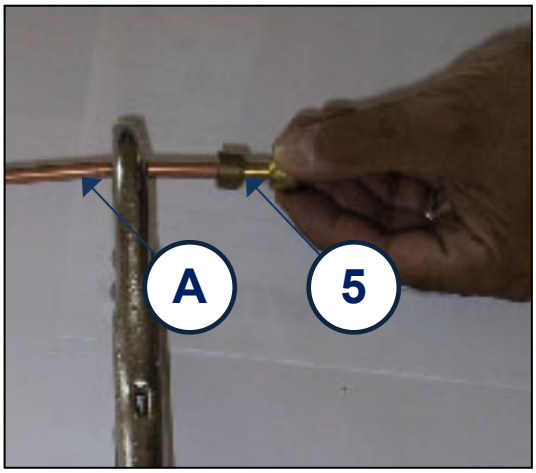
- Take the plier (**3**) and pinch the compressor service tube (**A**), then remove refrigerant junction.



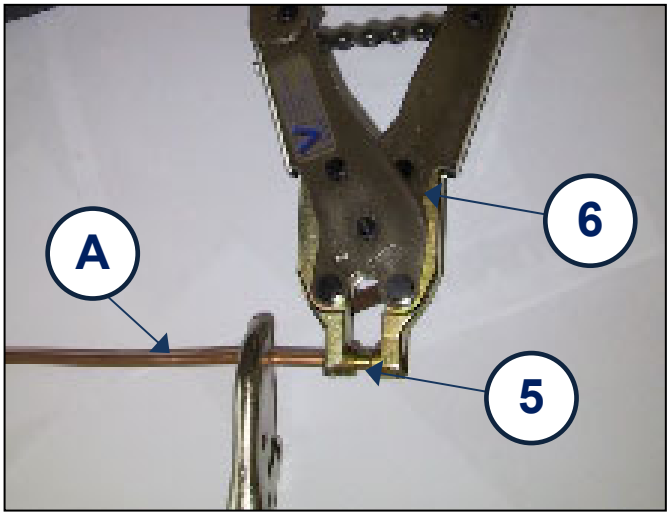

- Put a drop of Lokprep sealant (**4**) on the compressor service tube terminal (**A**).



- Insert Lokring cap (**5**) on the compressor service tube (**A**). Rotate the cap (**5**) for correctly distribute the sealant (**4**).



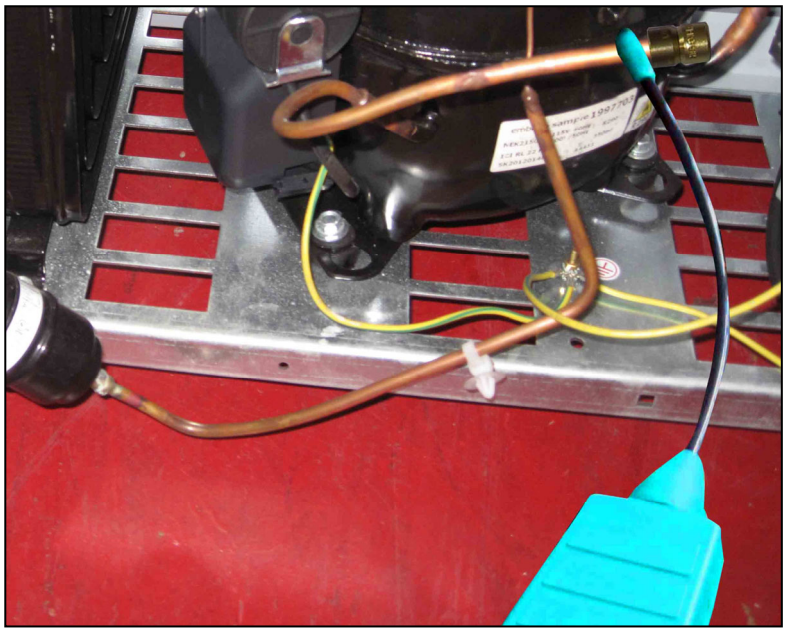

- By using the Lokring plier (**6**) fix cap (**5**) on the tube (**A**).



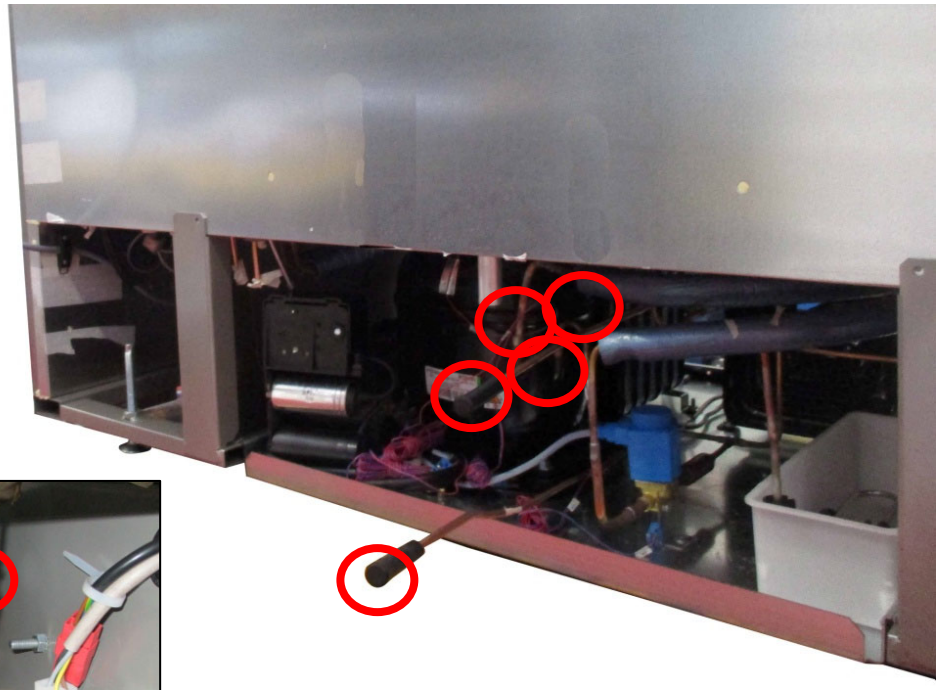
## *5.10* LEAKAGES CHECK

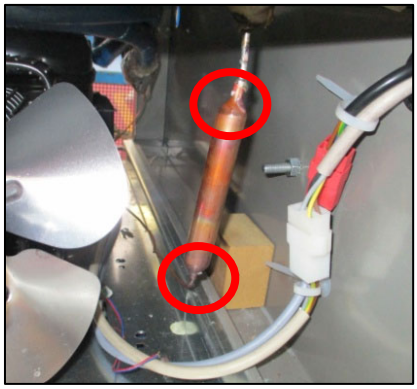
Use the electronic leak detector (**9**) in order to check for refrigerant gas leakages; adjust the sensitivity of the detector (when available) and test each brazing point and the two Lokring caps.

- Compressor service tube (Lokring cap).
- High pressure tube (Lokring cap).
- Suction pipe welding.
- Charge pipe welding.
- Discharge pipe welding.

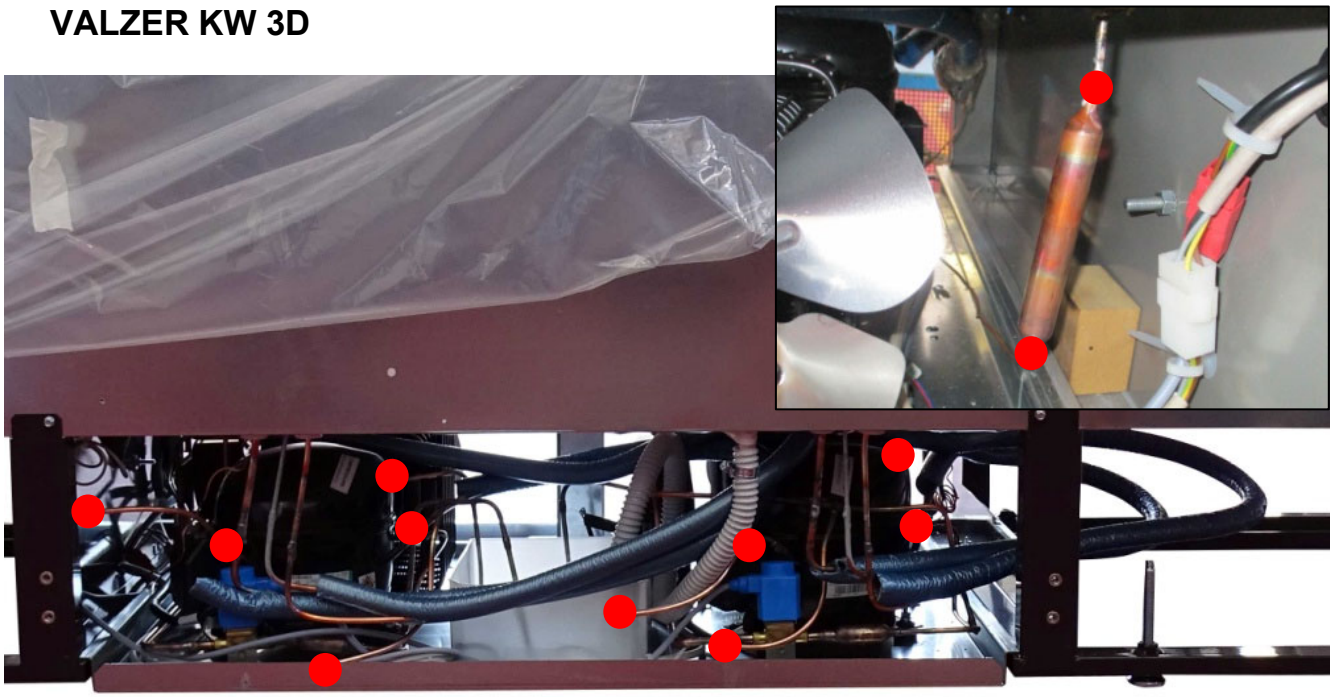


**VALZER KW 2D**

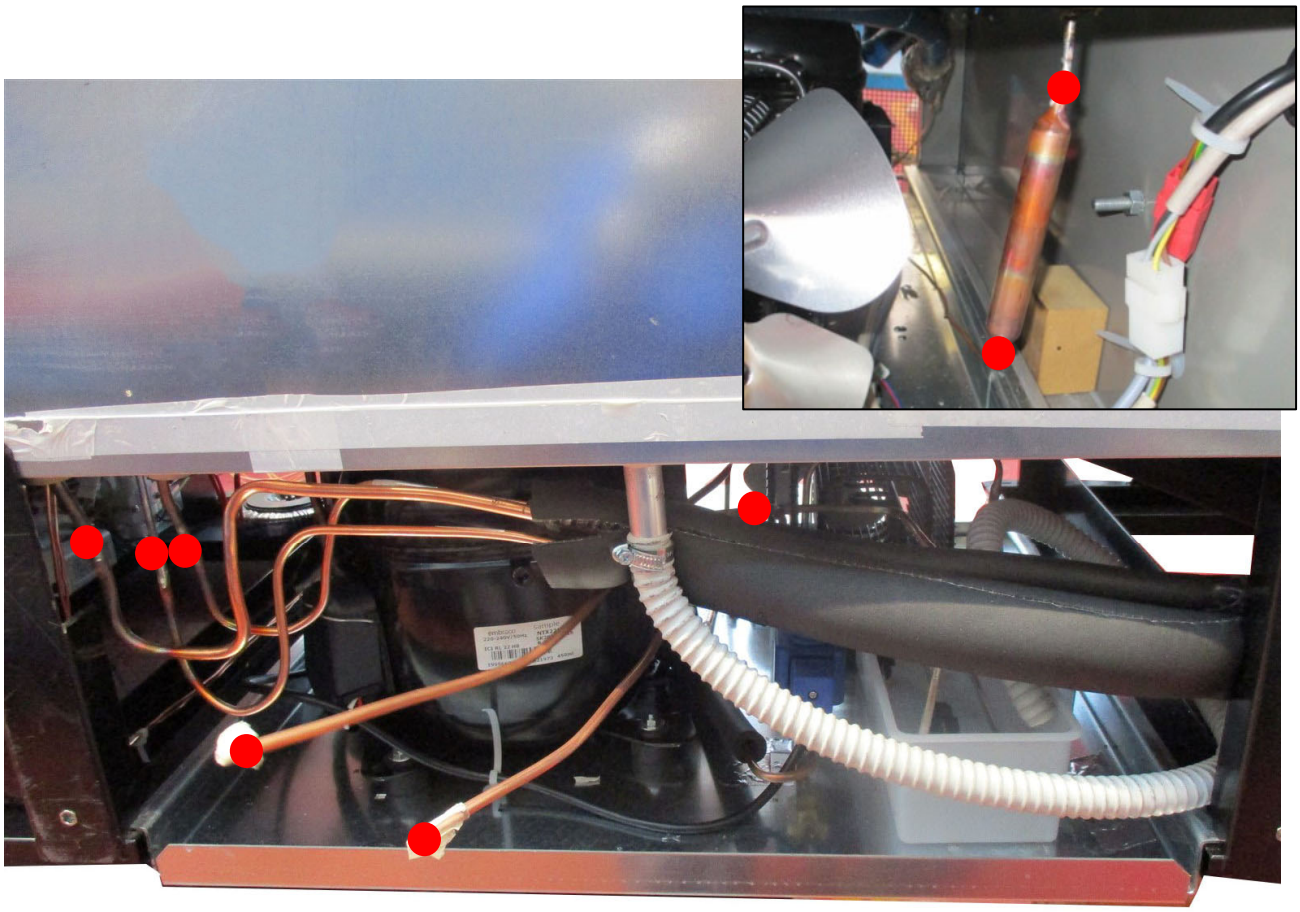




## VALZER KW 3D



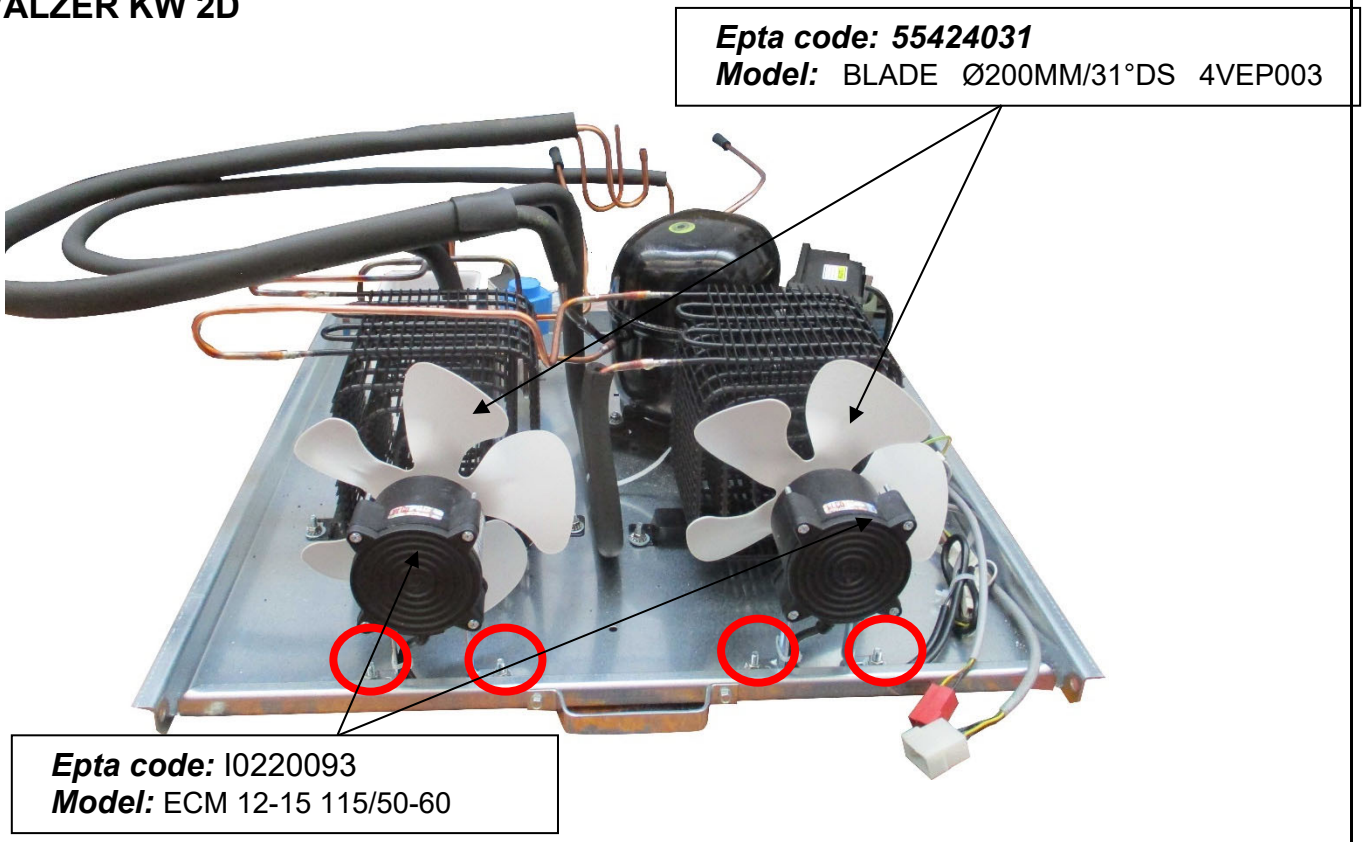
## VALZER KW 4D



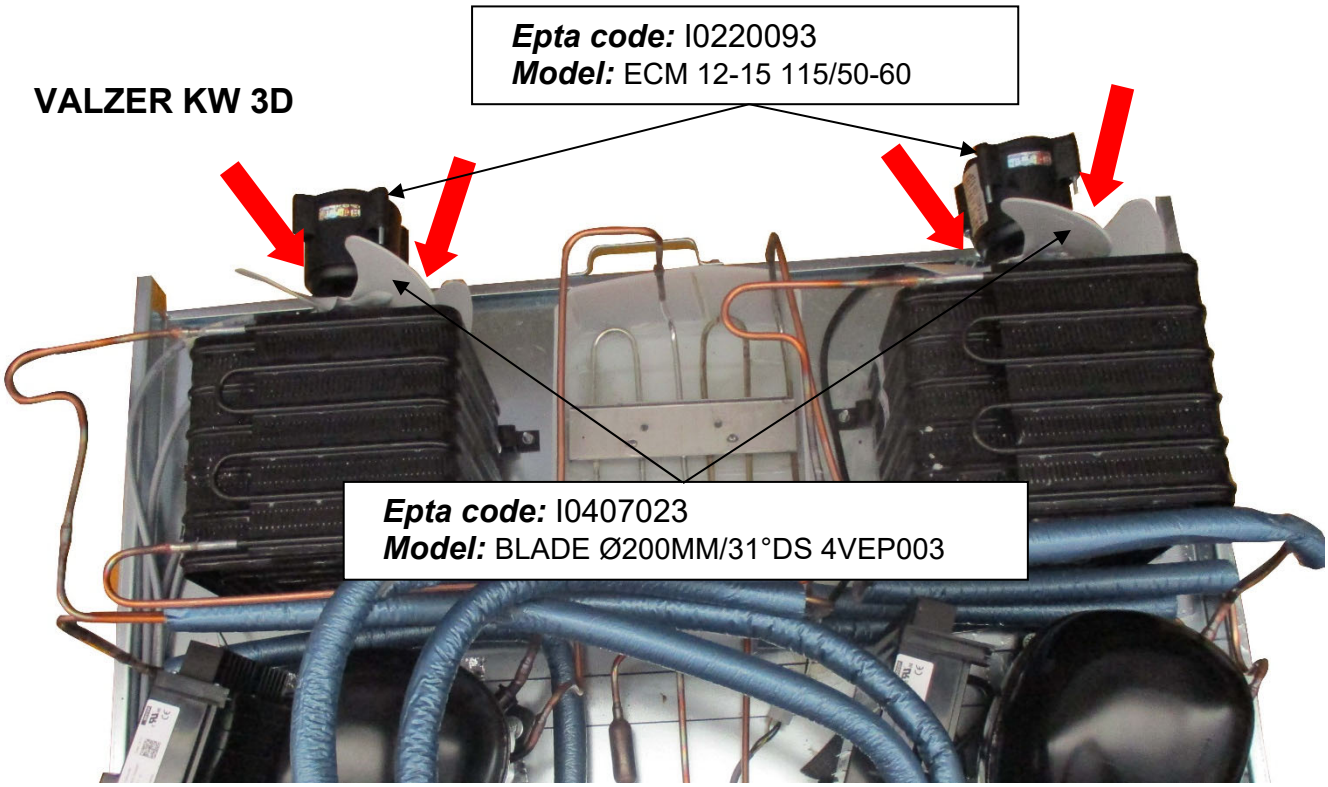
## *5.11* REPLACEMENT OF CONDENSER MOTOR FAN

1 – Disconnect the motor fan terminal connector and release the cable from the plastic tie.
2 – Unscrew the hexagonal-head screws and remove the motor fan from the motor plate.
3 – Unscrew the hexagonal-head screw fixing the fan blade and remove the screws fastening the motor to its bracket.

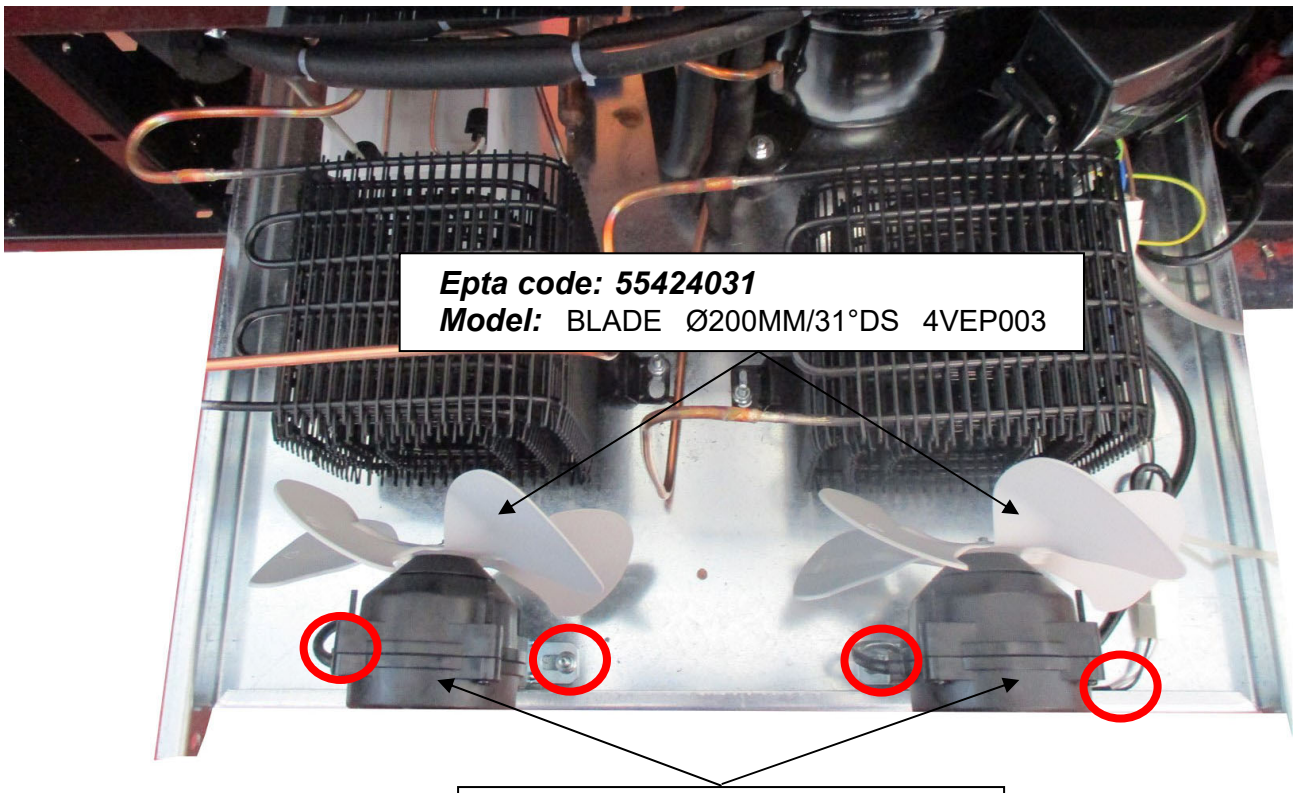
### VALZER KW 2D




### VALZER KW 3D



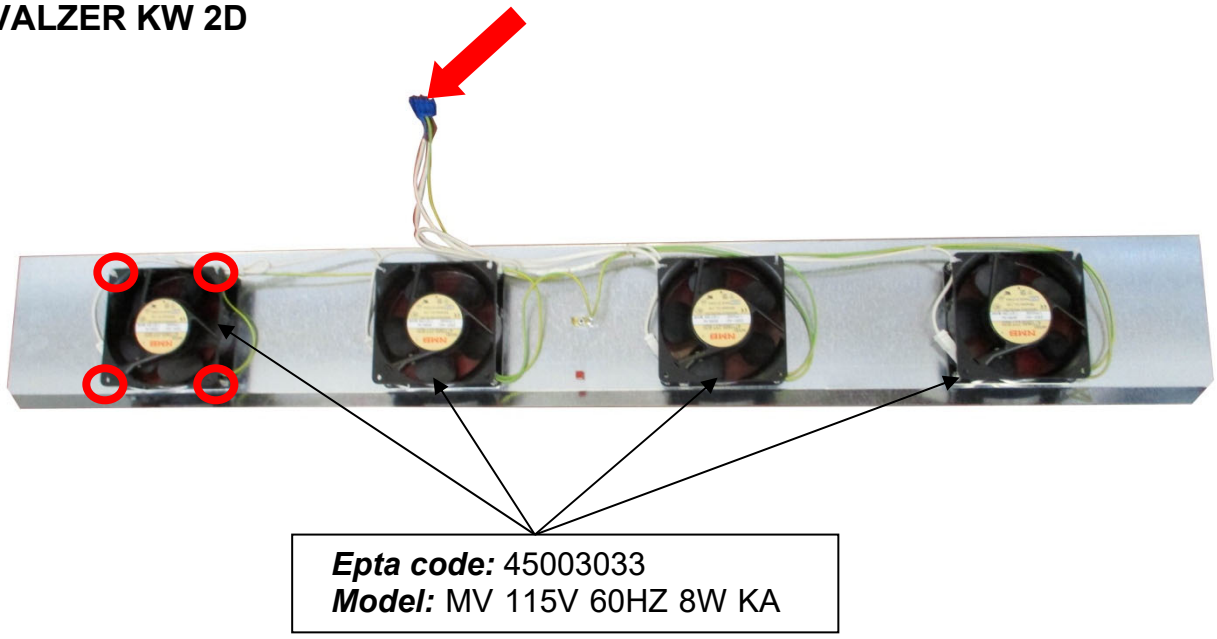
## VALZER KW 4D



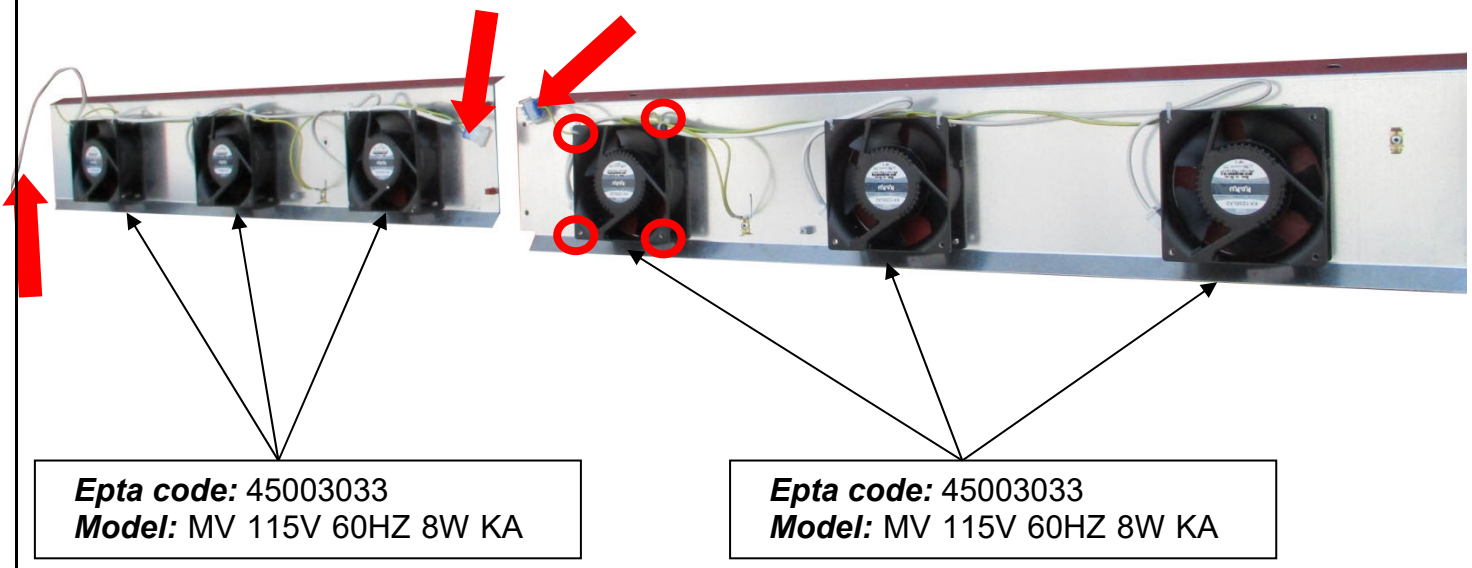

## *5.12* REPLACEMENT OF EVAPORATOR MOTOR FAN

1 – Unscrew and remove evaporator plastic cover.
2 – Disconnect the motor fan connectors.
3 – Unscrew and remove the motor fan.

## VALZER KW 2D



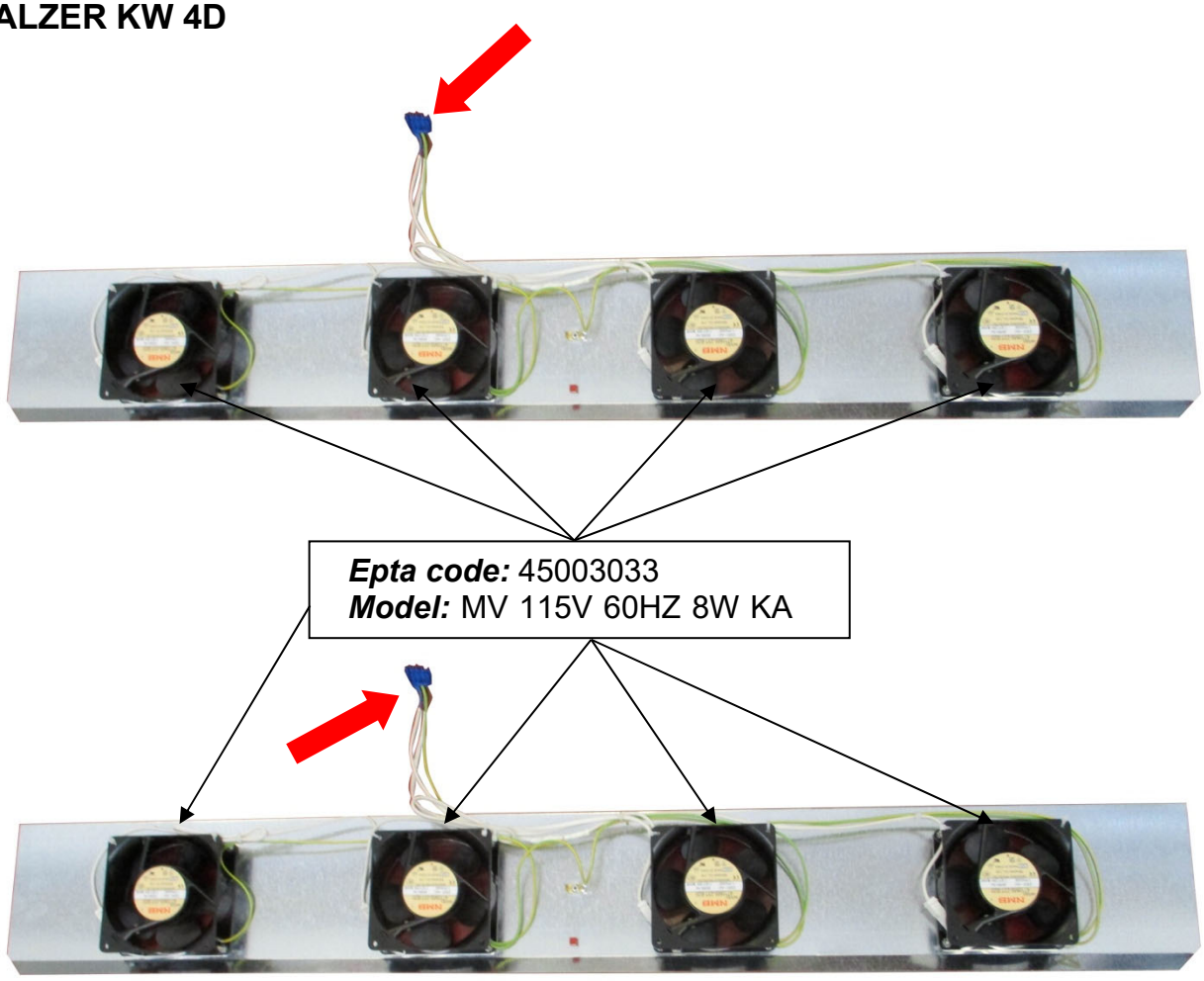
## VALZER KW 3D



***Epta code:*** 45003033
***Model:*** MV 115V 60HZ 8W KA

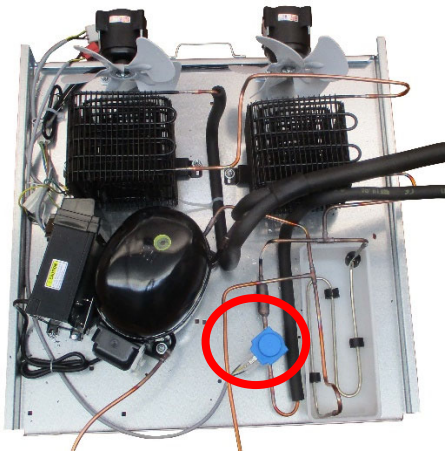
***Epta code:*** 45003033
***Model:*** MV 115V 60HZ 8W KA

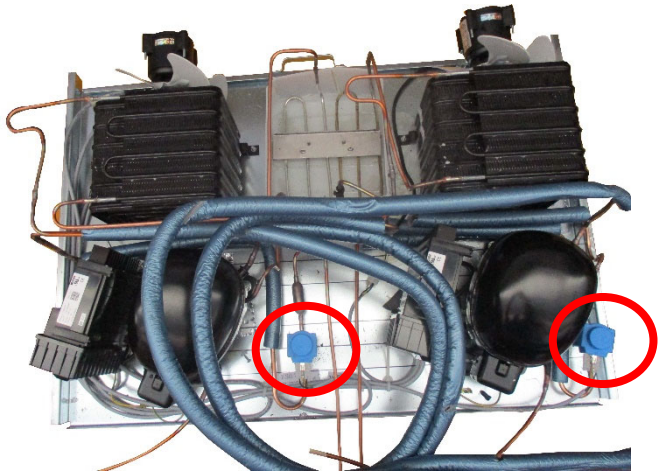
## VALZER KW 4D



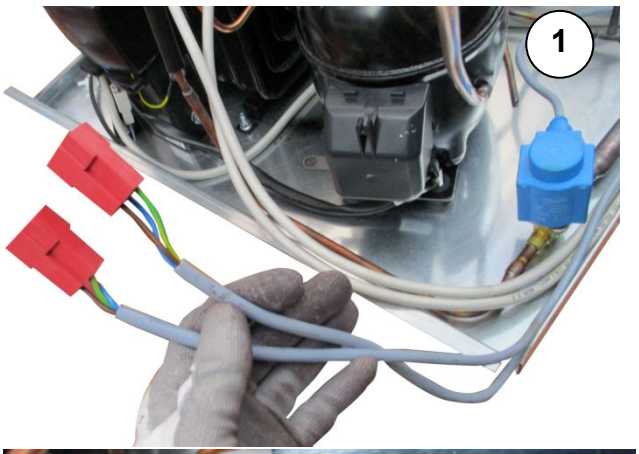
***Epta code:*** 45003033
***Model:*** MV 115V 60HZ 8W KA

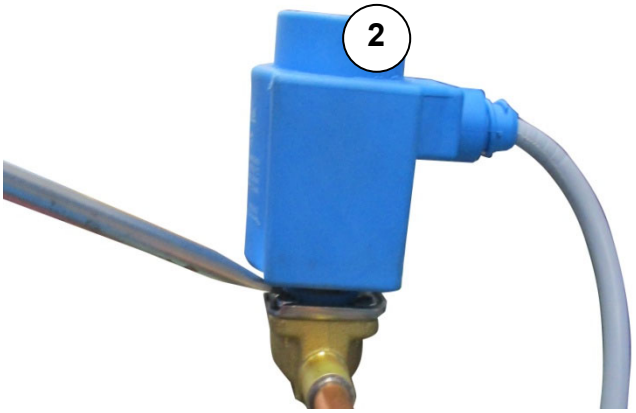
## *5.13* REPLACEMENT OF SOLENOID VALVE

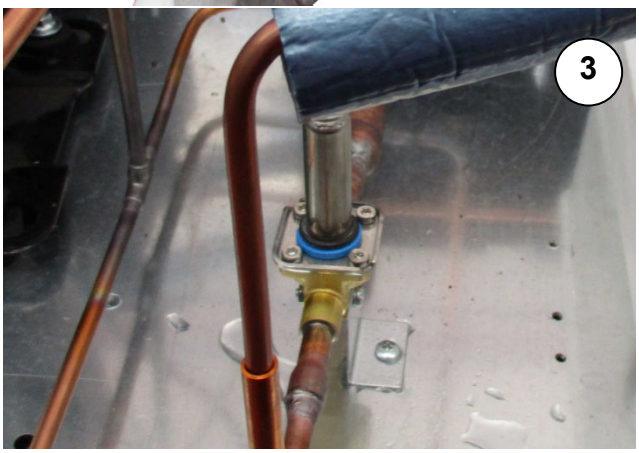


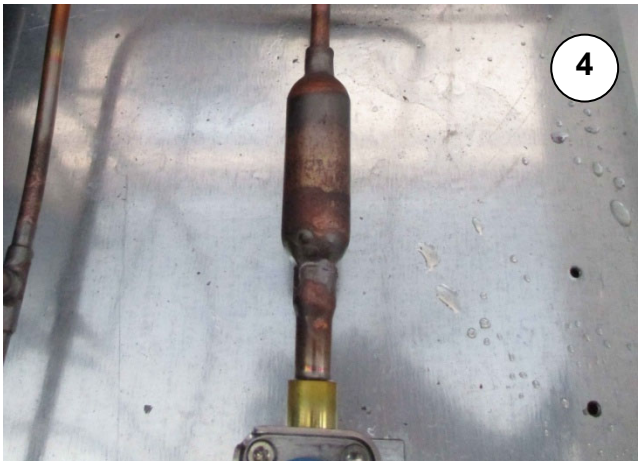


1) Disconnect the valve connector.
2) By using the screwdriver, remove the valve coil.
3) Open the circuit according to previous paragraph, then remove the solenoid valve.
4) Unsolder and replace the mechanic filter.



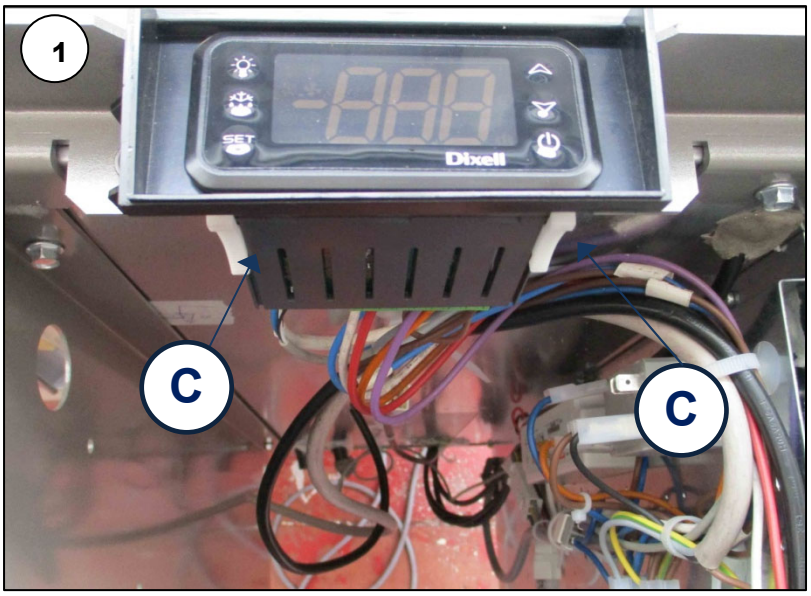

***Epta code Solenoid Valve:*** I0189033 ***Model:*** SOLENOID VALVE EVR3 115/60 U.L.

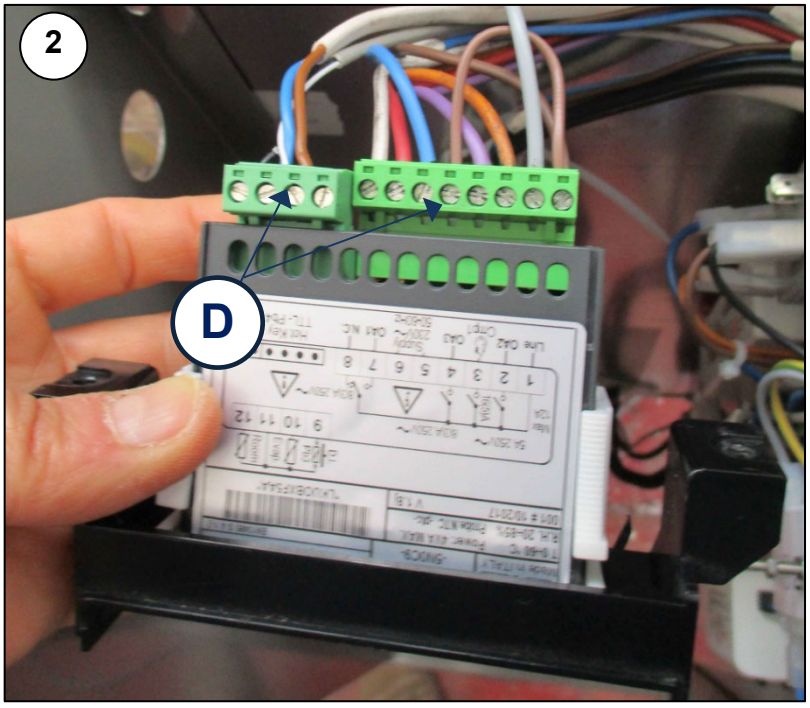
***Epta code Coil:*** I3304601 ***Model:*** COIL EVR3 115/60 U.L.

***Epta code Mechanic filter:*** I0145001 ***Model:*** MECHANIC FILTER D.MM17X74

## *5.14* REPLACEMENT OF ELECTRONIC CONTROLLER

1 – Remove the frontal grid to access to electrical components.
1 – Remove the controller lateral clips (**C**).
2 – Disconnect the rear connector (**D**).
3 – Remove the electronic controller.




***Epta code Electronic controller:*** 52997031
***Model:*** ELECTRONIC CONTROL DIXELL XR72CH 4N0F9 120VAC

## *5.15* REPLACEMENT OF LED BARS

**LED POWER SUPPLY VALZER KW 2D**

- ***Epta code***: I3305249
- ***Model*** : LPV 35-24

- ***Epta code*** : I3305723
- ***Model*** : APV 16-24

**LED POWER SUPPLY VALZER KW 3D**

- ***Epta code***: I3305249
- ***Model*** : LPV 35-24

- ***Epta code*** : I3305248
- ***Model*** : LPV 20-24

**LED POWER SUPPLY VALZER KW 4D**

- ***Epta code***: I3305249
- ***Model*** : LPV 35-24

- ***Epta code***: I3305249
- ***Model*** : LPV 35-24

**LED BARS VALZER KW 2D**

- ***Epta code for LED lamp***: 50915002– LED LAMP 8W 1573 24V 4000K WHITE (2 Pc)
- ***Epta code for LED lamp***: 50916002 – LED LAMP 8W 1573 24V 4000K WHITE (2 Pc)

**LED BARS VALZER KW 3D**

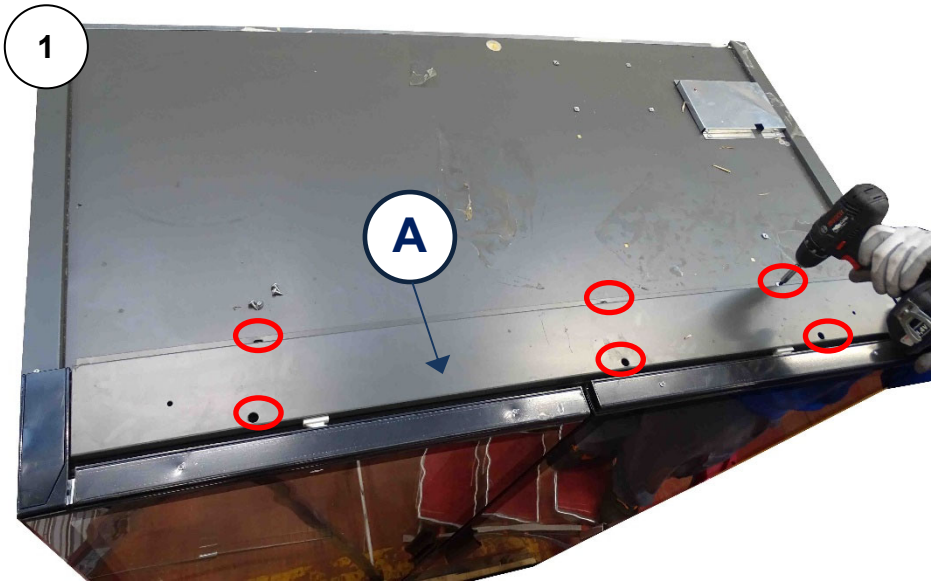
- ***Epta code for LED lamp***: 50915002– LED LAMP 8W 1573 24V 4000K WHITE (3 Pc)
- ***Epta code for LED lamp***: 50916002 – LED LAMP 8W 1573 24V 4000K WHITE (3 Pc)

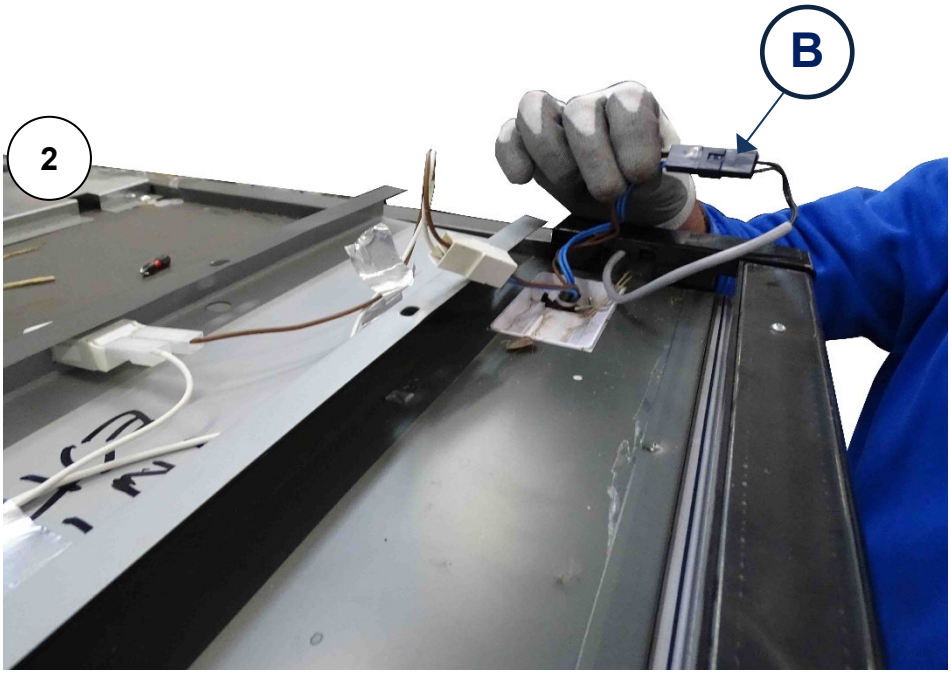
**LED BARS VALZER KW 4D**

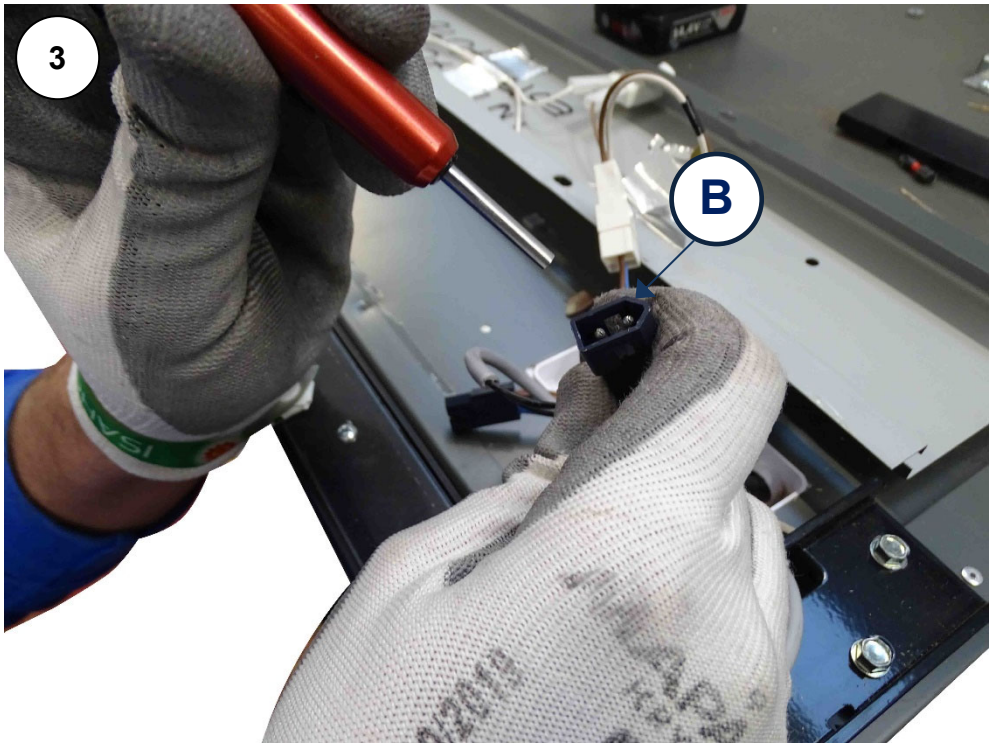
- ***Epta code for LED lamp***: 50915002– LED LAMP 8W 1573 24V 4000K WHITE (4 Pc)
- ***Epta code for LED lamp***: 50916002 – LED LAMP 8W 1573 24V 4000K WHITE (4 Pc)

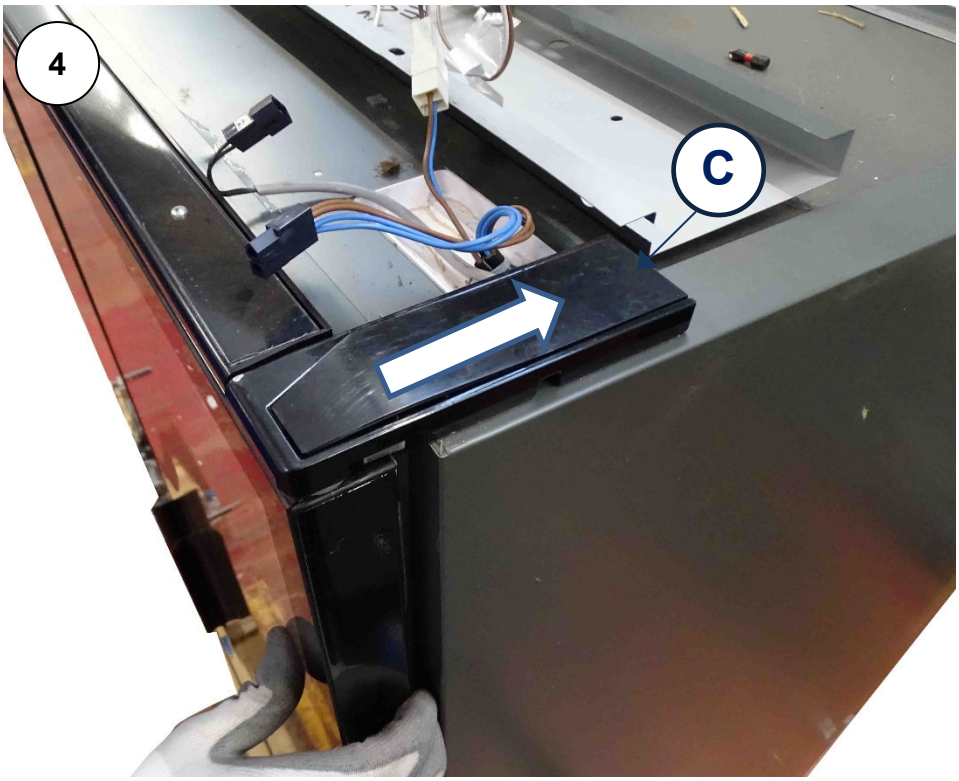
## *5.16* DOOR REPLACEMENT

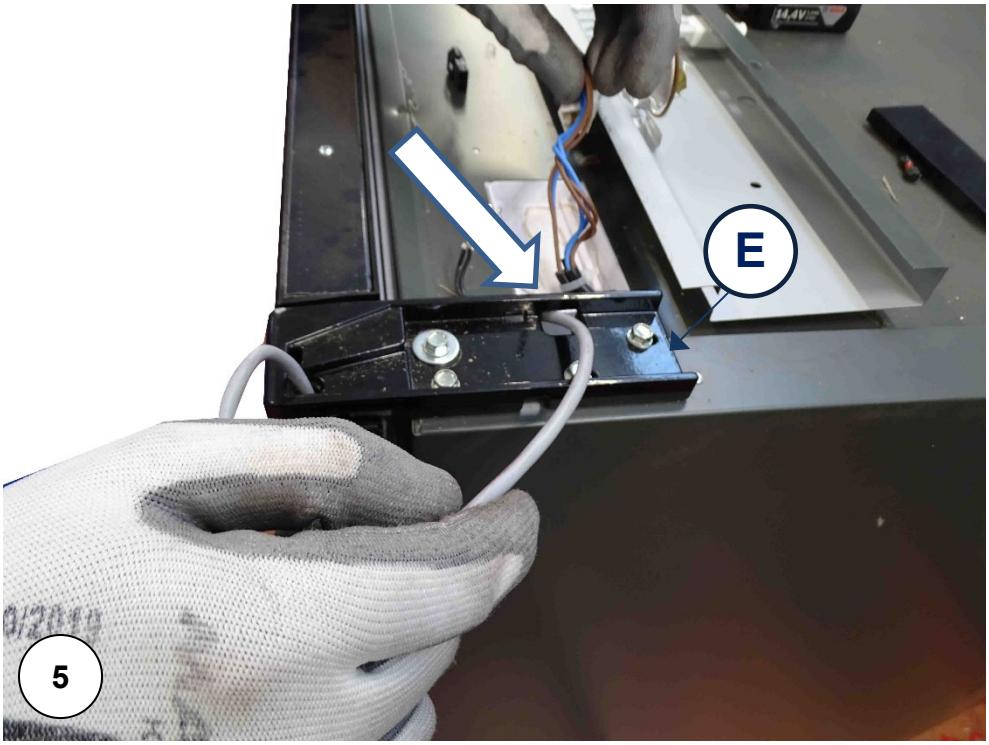
1 – Unscrew and remove the Upper Cover (**A**).
2 – Disconnect the connector (**B**).
3 – Remove the connector (**B**).
4 – Remove the plastic cover (**C**).
5 – Pass the resistance wire from the upper door support (**E**).
6 – Unscrew the upper door hinge (**E**).
7 – Remove the door.
8 – Insert the new door, pay attention to insert the lower hinge (**D**); the lower hinge must be perfectly aligned with the motor housing (**F**).
9 – Repeat the operations starting from point 6 up to point 1 for restore the cabinet.

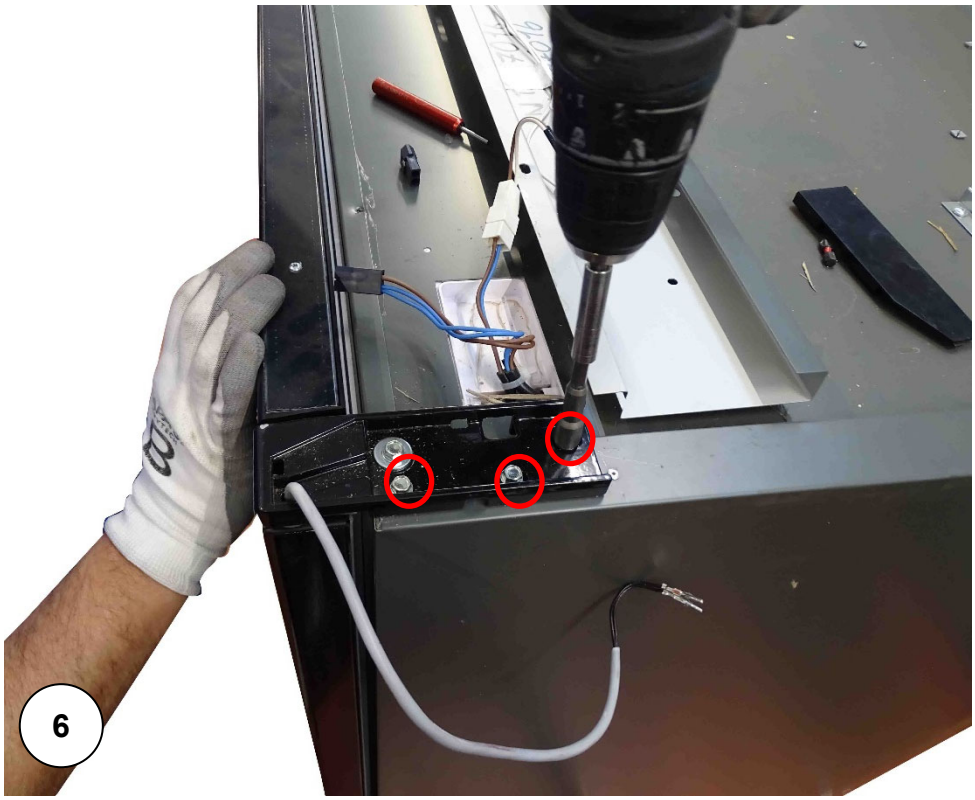


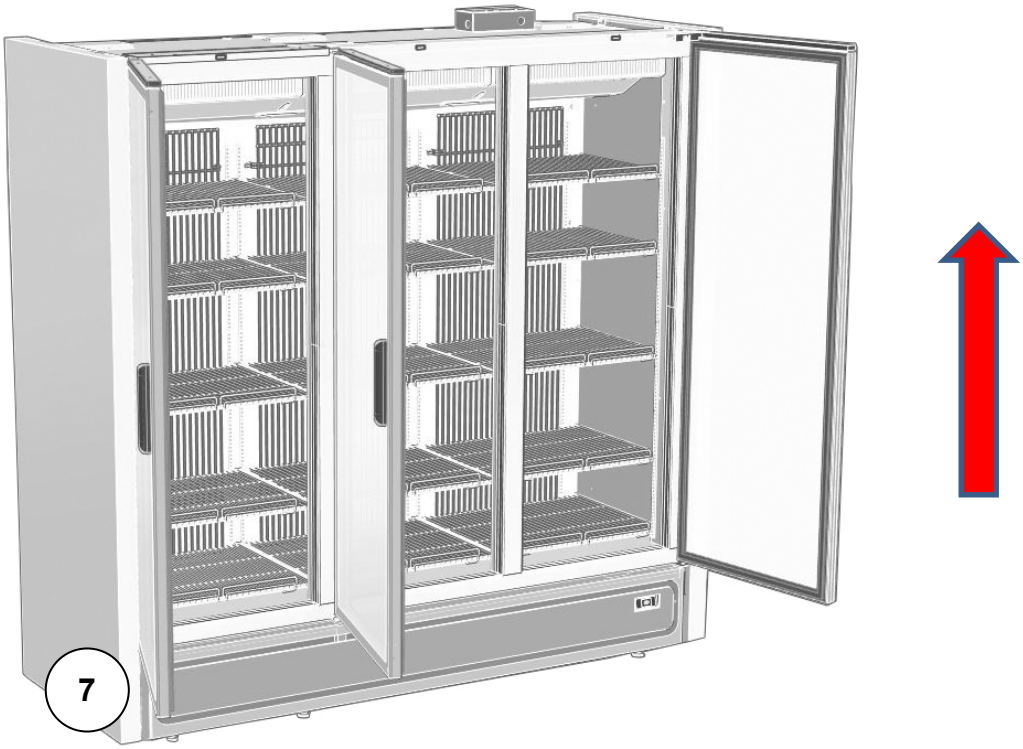



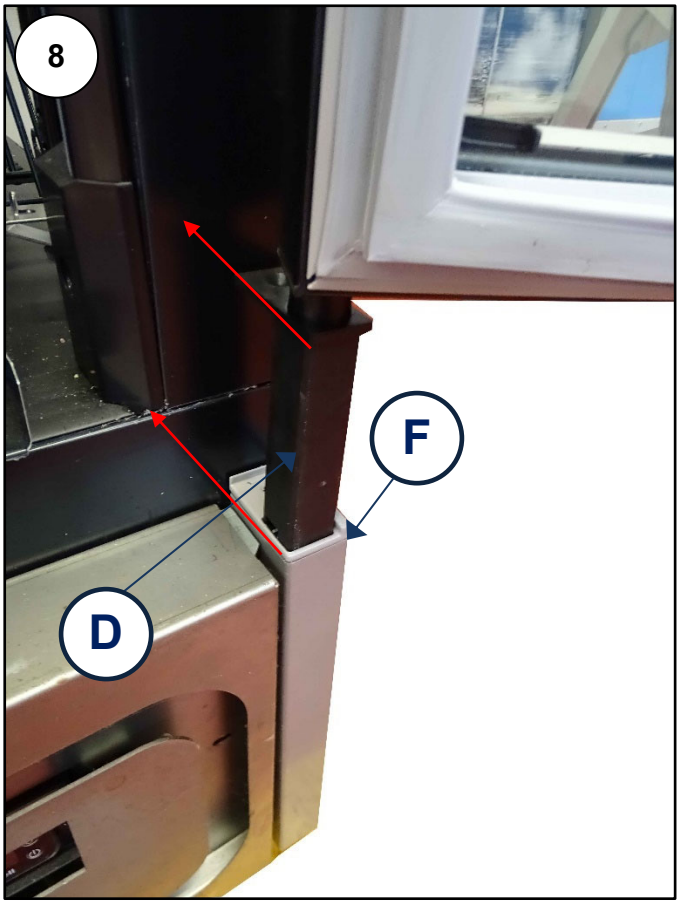






# 6. INVERTER INFORMATIONS

## *6.1* LED INDICATION

| LED STATUS | PERIOD | COLOR | DESCRIPTION |
|---|---|---|---|
| 1 Flash | 30 seconds | Green | Normal Operation |
| 2 Flashes | 5 seconds | Green | Communication problem |
| 3 Flashes | 5 seconds | Red | Inverter Problem |
| 4 Flashes | 5 seconds | Orange | Compressor Problem |
| No Flash | - | - | No imput power / Damaged inverter |

## *6.2* INVERTER TROUBLESHOOTING

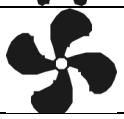
| COMPRESSOR DOESN'T START | |
|---|---|
| ***PROBLEM*** | ***ACTION*** |
| Compressor disconnected from the inverter. | Verify compressor cable connection. |
| No AC power supply; or wrong voltage/terminals connected. | Verify AC input cable connection and measure AC input voltage. |
| No control signal input or bad connection. | Verify control input cable connection and measure the signal from the thermostat. |
| Blown fuse (due to previous major failure). | Return the unit to manufacturer, replacing it by new one. |
| Open compressor motor winding. | Measure winding for open circuit between all pair of pins on the hermetic terminal. If any winding is open, return compressor to manufacturer. |
| Compressor with locked rotor (due to mechanical damage). | Replace compressor by new one and test for confirmation. Return damage unit to manufacturer. |
| Dropped, damaged, burnt inverter. | Replace by new one and test for confirmation. Return damaged unit to manufacturer. |
| Inverter on waiting time after failed start. | Wait the necessary time or reset the inverter disconnecting it from the AC power supply. The reset time is about 50s. |
| Demagnetized rotor (only if compressor was previously connected directly to the AC power supply). | Replace compressor by a new one and test for confirmation. Return damaged unit to manufacturer. |
| Unequaled pressures between discharge and suction pressures in the refrigerating system. | Allow the inverter to equalize pressure between suction and discharge sides. |
| Low input voltage supplied to the inverter. | Measure AC voltage to confirm. |

# 7. MAIN CABINET FUNCTIONS

## *7.1* DISPLAY UNIT AND MAIN PARAMETERS


1. Light switch
2. Manual defrost
3. *Show set point (longer pressure to modify value)*
4. *Decrease set point*
5. *Increase set point*

## *7.2* USE OF LEDS

| LED | MODE | MEANING |
|---|---|---|
|  | ON | Compressor enabled |
| | FLASHING | Anti-short cycle delay enabled |
|  | ON | Defrost enabled |
| | FLASHING | Drip time in progress |
|  | ON | Fans enabled |
| | FLASHING | Fans delay after defrost in pregress |
|  | ON | An alarm is occurring |
|  | ON | Continuous cycle is running |
| ECO | ON | Energy saving enebled |
|  | ON | Light Auxiliary replay on |
| AUX | ON | Auxiliary relay on |
| °C/°F | ON | Measurement unit |
| | FLASHING | Programming phase |

## *7.3* TEMPERATURE SETTING

Each refrigerating appliance is provided with an electronic control factory programmed to maintain the temperature inside the tank in its operating range.

**Parameters should not be modified by end users; only skilled personnel is authorized to enter in programming mode.**

If the average internal temperature is too cold or too warm, set-point can be modified in an allowed range with the following steps:

- **Press the (*Set*) key for a few seconds** in order to see on display the temperature set point.
- **Press the (⮝) key or the (⮟) key** in order to increment or decrement the temperature set point.
- **Press the (*Set*) key in order to store the new temperature set point.**

## 7.4 VALZER KW 2D PARAMETERS

| DIXELL Model : XR72CH - 230V - NTC/PTC - COD. IARP I3306764 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| IA5-22 2D KW- COPY CARD COD. 73989000 Release 01_21 | | | | | | | | | |
| Date : 08/02/2021 | | | | | | | | | |
| Firmware: 1,8 | | | | | | | | | |
| U.M TEMPERATURA: F° | | | | | | | | | |
| **Group** | **Parameter** | **Description** | **COPYCARD** | **Original** | **Visibility** | **Min** | **Max** | **Unity** | **Comment** |
| Probe | ot | Probe P1 calibration | 0 | 0 | Pr1 | -12 | 12 | °C | |
| Probe | P2P | Probe P2 presence | Yes | Yes | Pr1 | | | | |
| Probe | oE | Probe P2 calibration | 0 | 0 | Pr2 | -12 | 12 | °C | |
| Probe | P3P | Probe P3 presence | no | no | Pr2 | | | | |
| Probe | o3 | Probe P3 calibration | 0 | 0 | Pr2 | -12 | 12 | °C | |
| Probe | P4P | Probe P4 presence | no | no | Pr2 | | | | |
| Probe | o4 | Probe P4 calibration | 0 | 0 | Pr2 | -12 | 12 | °C | |
| | | | | | | | | | |
| Regulation | SEt | Set point | -6 | -20 | | -55 | 25 | °C | |
| Regulation | Hy | Compressor regulation hysteresis | 4 | 1 | Pr1 | 1 | 25 | °C | |
| Regulation | LS | Set Point min | -22 | -55 | Pr2 | -55 | -20 | °C | |
| Regulation | US | Set Point max | 14 | 25 | Pr2 | -20 | 150 | °C | |
| Regulation | odS | Output delay at start up | 1 | 0 | Pr2 | 0 | 255 | min | |
| Regulation | AC | Anti-short cycle delay | 3 | 3 | Pr1 | 0 | 50 | min | |
| Regulation | Ac1 | Starting delay 2nd compressor | 1 | 0 | Pr1 | 0 | 255 | sec | |
| Regulation | rtr | P1-P2 percentage for regulation | 100 | 100 | Pr2 | 0 | 100 | | |
| Regulation | CCt | Continuous cycle duration | 00:00 | 00:00 | Pr2 | | | hour | |
| Regulation | CCS | Set point for continuous cycle | 23 | -5 | Pr2 | -55 | 150 | °C | |
| Regulation | Con | Compressor ON time with faulty probe | 8 | 8 | Pr2 | 0 | 255 | min | |
| Regulation | CoF | Compressor OFF time with faulty probe | 6 | 6 | Pr2 | 0 | 255 | min | |
| Regulation | CF | Temperature measurement unit | °F | °C | Pr2 | | | | |
| Regulation | rES | Resolution (per °C) : decimal , integer | dE | in | Pr1 | | | | |
| Regulation | Lod | Local dispaly : default display | P1 | P1 | Pr2 | | | | |
| Regulation | dLy | Display temperature delay | 00:03 | 00:00 | Pr1 | | | min | |
| Regulation | dtr | P1-P2 percentage for display | 99 | 99 | Pr2 | 1 | 99 | | |
| | | | | | | | | | |
| Defrost | tdF | Defrost type : resistance , invertion | in | in | Pr1 | | | | |
| Defrost | dFP | Probe 1 selection for defrost | P2 | P2 | Pr2 | | | | |
| Defrost | dSP | Probe 2 selection for defrost | np | nP | Pr2 | | | | |
| Defrost | dtE | Defrost termination temperature | 59 | 15 | Pr1 | -55 | 50.0 | °C | |
| Defrost | dtS | 2nd Defrost termination temperature | 59 | 8 | Pr2 | -55 | 50.0 | °C | |
| Defrost | idF | Interval between defrost cycles | 6 | 6 | Pr1 | 0 | 120 | hour | |
| Defrost | MdF | Maximum length for defrost | 30 | 20 | Pr1 | 0 | 255 | min | |
| Defrost | MdS | Maximum length for 2nd defrost | 0 | 0 | Pr2 | 0 | 255 | min | |
| Defrost | dSd | Start defrost delay | 0 | 0 | Pr2 | 0 | 255 | min | |
| Defrost | dFd | Displaying during defrost | dEF | dEF | Pr2 | | | | |
| Defrost | dAd | MAX display delay after defrost | 15 | 30 | Pr2 | 0 | 255 | min | |
| Defrost | Fdt | Draining time | 3 | 3 | Pr2 | 0 | 255 | min | |
| Defrost | dPo | First defrost after start-up | no | no | Pr2 | | | | |
| Defrost | dAF | Defrost delay after fast freezing | 00:00 | 00:00 | Pr2 | | | hour | |
| | | | | | | | | | |
| Fans | FnC | Fan operating mode | O-n | O-n | Pr1 | | | | |
| Fans | Fnd | Fan delay after defrost | 7 | 7 | Pr1 | 0 | 255 | min | |
| Fans | FCt | Differential of temperature for forced activation of fans | 0 | 0 | Pr2 | 0 | 50 | °C | |
| Fans | FSt | Fan stop temperature | 122 | 50 | Pr1 | -55 | 50.0 | °C | |
| Fans | Fon | Fan on time with compressor off | 0 | 0 | Pr2 | 0 | 15 | min | |
| Fans | FoF | Fan off time with compressor off | 0 | 0 | Pr2 | 0 | 15 | min | |
| Fans | FAP | Probe selection for fan management | P2 | P2 | Pr2 | | | | |
| | | | | | | | | | |
| Ausiliary | ACH | Type of action ausialiary regulator | cL | cL | Pr2 | | | | |
| Ausiliary | SAA | Set point ausialiary regulator | 0 | 0 | Pr2 | -55 | 150 | °C | |
| Ausiliary | SHy | Differential for ausialiary regulator | 4 | 2 | Pr2 | 1 | 25 | °C | |
| Ausiliary | ArP | Select probe for ausialiary regulator | nP | nP | Pr2 | | | | |
| Ausiliary | Sdd | Block regolator AUX during defrost | no | no | Pr2 | | | | |
| | | | | | | | | | |
| Alarm | ALC | Configuration alarms : relative / absolute | Ab | Ab | Pr2 | | | | |
| Alarm | ALU | Maximum alarm temperature 1 | 122 | 50 | Pr1 | -50 | 150 | °C | |
| Alarm | ALL | Low temperature alarm | -58 | -50 | Pr1 | -55 | 50 | °C | |
| Alarm | AFH | Differential for temperat. alarm recovery 1 | 4 | 2 | Pr2 | 1 | 25 | °C | |
| Alarm | ALd | Temperature alarm delay 1 | 60 | 60 | Pr2 | 0 | 255 | min | |
| Alarm | dAo | Delay of temperature alarm at start up 1 | 02:00 | 03:00 | Pr2 | | | hour | |
| Alarm | AP2 | Probe for temperat. alarm of condenser 2 | nP | nP | Pr2 | | | | |
| Alarm | AL2 | Alarm threshold of low temperature probe 2 | -67 | -55 | Pr2 | -55 | 150 | °C | |
| Alarm | AU2 | Alarm threshold of high temperature probe 2 | 230 | 110 | Pr2 | -55 | 150 | °C | |
| Alarm | AH2 | Differential for temperature alarm probe 2 | 10 | 5 | Pr2 | 1 | 25 | °C | |
| Alarm | Ad2 | Delay alarm temperature probe 2 | 120 | 120 | Pr2 | 0 | 255 | min | |
| Alarm | dA2 | exclusion alarm temperature at power-on | 02:00 | 02:00 | Pr2 | | | hour | |
| Alarm | bLL | Compressor block for per low temperature alarm 2 | no | no | Pr2 | | | | |
| Alarm | AC2 | Compressor block for per high temperature alarm 2 | no | no | Pr2 | | | | |
| | | | | | | | | | |
| Configuration | oA1 | Configuration function exit AUX1 | dEF | dEF | Pr2 | | | | |
| Configuration | oA2 | Configuration function exit AUX2 | Fan | FAn | Pr2 | | | | |
| Configuration | oA3 | Configuration function exit AUX3 | LiG | LiG | Pr2 | | | | |
| | | | | | | | | | |
| Digital input | i1P | Polarity digital input | cL | cL | Pr1 | | | | |
| Digital input | i1F | Function digital in | dor | dor | Pr1 | | | | |
| Digital input | did | Alarm delay from digital configurable in | 255 | 255 | Pr1 | 0 | 255 | min | |
| Digital input | nPS | Numbers of action of preassure switch | 15 | 15 | Pr2 | 0 | 15 | | |
| Digital input | Odc | Open door control : fans and compressor | no | no | Pr2 | | | | |
| | | | | | | | | | |
| Alarm | rrd | Restart regulation with open door alarm | Yes | Yes | Pr2 | | | | |
| Energy Saving | HES | Temperature increasing at Energy Saving | 0 | 0 | Pr2 | -30 | 30 | °C | |
| Other | Adr | Serial address | 1 | 1 | Pr2 | 1 | 247 | | |
| Probe | pbC | Select probe type | ntC | ntC | Pr1 | | | | |
| Configuration | onF | Configuration button OFF | no | no | Pr2 | | | | |
| Configuration | LPC | Configuration LIGHT function button | Lig | Lig | Pr2 | | | | |
| | | | | | | | | | |
| Other | dP1 | Display probe P1 | 0 | 0 | Pr2 | | | | |
| Other | dP2 | Display probe P2 | 0 | 0 | Pr2 | | | | |
| Other | dP3 | Display probe P3 | 0 | 0 | Pr2 | | | | |
| Other | dP4 | Display probe P4 | 0 | 0 | Pr2 | | | | |
| Other | rSE | Display regulation set (SET + ES + SETd) | 0 | 0 | Pr2 | | | | |
| Other | rEL | Release firmware code (read only) | 0 | 0 | Pr2 | | | | |
| Other | Ptb | Identify EEPROM map | 1 | 106 | Pr2 | 0 | 65535 | | |

## 7.5 VALZER KW 3D PARAMETERS

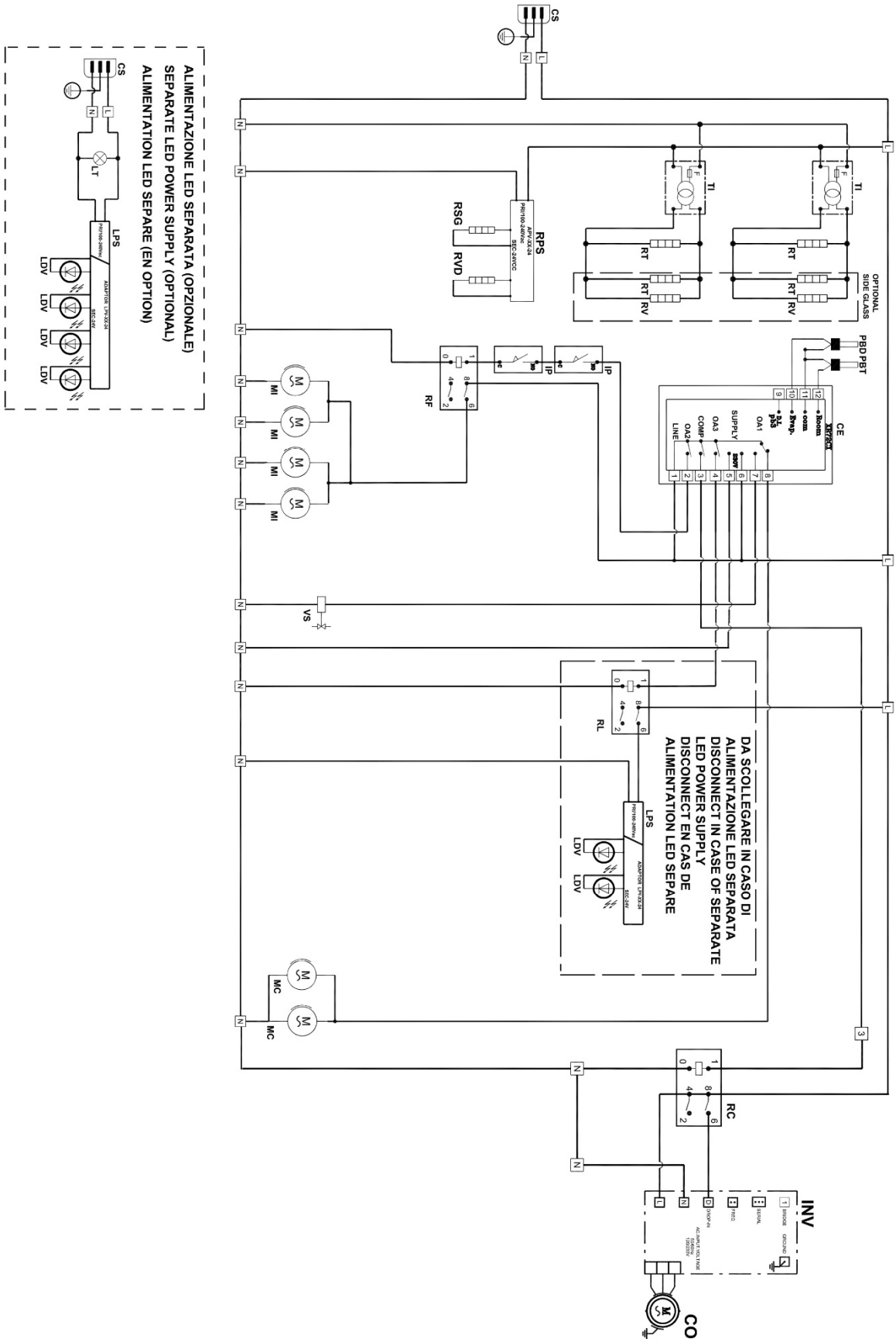
| DIXELL Model : XR72CH - 120V - NTC/PTC - COD. IARP 52997031 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| IA5-22 3D KW- COPY CARD COD. 74025000 Release_A | | | | | | | | | |
| Date : 08/02/2021 | | | | | | | | | |
| Firmware: 1,8 | | | | | | | | | |
| U.M TEMPERATURA: F° | | | | | | | | | |
| **Group** | **Parameter** | **Description** | **COPYCARD** | **Original** | **Visibility** | **Min** | **Max** | **Unity** | **Comment** |
| Probe | ot | Probe P1 calibration | 0 | 0 | Pr1 | -12 | 12 | °C | |
| Probe | P2P | Probe P2 presence | Yes | Yes | Pr1 | | | | |
| Probe | oE | Probe P2 calibration | 0 | 0 | Pr2 | -12 | 12 | °C | |
| Probe | P3P | Probe P3 presence | no | no | Pr2 | | | | |
| Probe | o3 | Probe P3 calibration | 0 | 0 | Pr2 | -12 | 12 | °C | |
| Probe | P4P | Probe P4 presence | no | no | Pr2 | | | | |
| Probe | o4 | Probe P4 calibration | 0 | 0 | Pr2 | -12 | 12 | °C | |
| | | | | | | | | | |
| Regulation | SEt | Set point | -4 | -20 | | -55 | 25 | °C | |
| Regulation | Hy | Compressor regulation hysteresis | 3 | 1 | Pr1 | 1 | 25 | °C | |
| Regulation | LS | Set Point min | -22 | -55 | Pr2 | -55 | -20 | °C | |
| Regulation | US | Set Point max | 14 | 25 | Pr2 | -20 | 150 | °C | |
| Regulation | odS | Output delay at start up | 1 | 0 | Pr2 | 0 | 255 | min | |
| Regulation | AC | Anti-short cycle delay | 3 | 3 | Pr1 | 0 | 50 | min | |
| Regulation | Ac1 | Starting delay 2nd compressor | 1 | 0 | Pr1 | 0 | 255 | sec | |
| Regulation | rtr | P1-P2 percentage for regulation | 100 | 100 | Pr2 | 0 | 100 | | |
| Regulation | CCt | Continuous cycle duration | 00:00 | 00:00 | Pr2 | | | hour | |
| Regulation | CCS | Set point for continuous cycle | 23 | -5 | Pr2 | -55 | 150 | °C | |
| Regulation | Con | Compressor ON time with faulty probe | 8 | 8 | Pr2 | 0 | 255 | min | |
| Regulation | CoF | Compressor OFF time with faulty probe | 6 | 6 | Pr2 | 0 | 255 | min | |
| Regulation | CF | Temperature measurement unit | °F | °C | Pr2 | | | | |
| Regulation | rES | Resolution (per °C) : decimal , integer | dE | in | Pr1 | | | | |
| Regulation | Lod | Local dispaly : default display | P1 | P1 | Pr2 | | | | |
| Regulation | dLy | Display temperature delay | 03:00 | 00:00 | Pr1 | | | min | |
| Regulation | dtr | P1-P2 percentage for display | 99 | 99 | Pr2 | 1 | 99 | | |
| | | | | | | | | | |
| Defrost | tdF | Defrost type : resistance , invertion | in | in | Pr1 | | | | |
| Defrost | dFP | Probe 1 selection for defrost | P2 | P2 | Pr2 | | | | |
| Defrost | dSP | Probe 2 selection for defrost | np | nP | Pr2 | | | | |
| Defrost | dtE | Defrost termination temperature | 59 | 15 | Pr1 | -55 | 50.0 | °C | |
| Defrost | dtS | 2nd Defrost termination temperature | 59 | 8 | Pr2 | -55 | 50.0 | °C | |
| Defrost | idF | Interval between defrost cycles | 6 | 6 | Pr1 | 0 | 120 | hour | |
| Defrost | MdF | Maximum length for defrost | 30 | 20 | Pr1 | 0 | 255 | min | |
| Defrost | MdS | Maximum length for 2nd defrost | 0 | 0 | Pr2 | 0 | 255 | min | |
| Defrost | dSd | Start defrost delay | 0 | 0 | Pr2 | 0 | 255 | min | |
| Defrost | dFd | Displaying during defrost | dEF | dEF | Pr2 | | | | |
| Defrost | dAd | MAX display delay after defrost | 15 | 30 | Pr2 | 0 | 255 | min | |
| Defrost | Fdt | Draining time | 3 | 3 | Pr2 | 0 | 255 | min | |
| Defrost | dPo | First defrost after start-up | no | no | Pr2 | | | | |
| Defrost | dAF | Defrost delay after fast freezing | 00:00 | 00:00 | Pr2 | | | hour | |
| | | | | | | | | | |
| Fans | FnC | Fan operating mode | O-n | O-n | Pr1 | | | | |
| Fans | Fnd | Fan delay after defrost | 7 | 7 | Pr1 | 0 | 255 | min | |
| Fans | FCt | Differential of temperature for forced activation of fans | 0 | 0 | Pr2 | 0 | 50 | °C | |
| Fans | FSt | Fan stop temperature | 122 | 50 | Pr1 | -55 | 50.0 | °C | |
| Fans | Fon | Fan on time with compressor off | 0 | 0 | Pr2 | 0 | 15 | min | |
| Fans | FoF | Fan off time with compressor off | 0 | 0 | Pr2 | 0 | 15 | min | |
| Fans | FAP | Probe selection for fan management | P2 | P2 | Pr2 | | | | |
| | | | | | | | | | |
| Ausiliary | ACH | Type of action ausialiary regulator | cL | cL | Pr2 | | | | |
| Ausiliary | SAA | Set point ausialiary regulator | 0 | 0 | Pr2 | -55 | 150 | °C | |
| Ausiliary | SHy | Differential for ausialiary regulator | 4 | 2 | Pr2 | 1 | 25 | °C | |
| Ausiliary | ArP | Select probe for ausialiary regulator | nP | nP | Pr2 | | | | |
| Ausiliary | Sdd | Block regolator AUX during defrost | no | no | Pr2 | | | | |
| | | | | | | | | | |
| Alarm | ALC | Configuration alarms : relative / absolute | Ab | Ab | Pr2 | | | | |
| Alarm | ALU | Maximum alarm temperature 1 | 122 | 50 | Pr1 | -50 | 150 | °C | |
| Alarm | ALL | Low temperature alarm | -58 | -50 | Pr1 | -55 | 50 | °C | |
| Alarm | AFH | Differential for temperat. alarm recovery 1 | 4 | 2 | Pr2 | 1 | 25 | °C | |
| Alarm | ALd | Temperature alarm delay 1 | 60 | 60 | Pr2 | 0 | 255 | min | |
| Alarm | dAo | Delay of temperature alarm at start up 1 | 02:00 | 03:00 | Pr2 | | | hour | |
| Alarm | AP2 | Probe for temperat. alarm of condenser 2 | nP | nP | Pr2 | | | | |
| Alarm | AL2 | Alarm threshold of low temperature probe 2 | -67 | -55 | Pr2 | -55 | 150 | °C | |
| Alarm | AU2 | Alarm threshold of high temperature probe 2 | 230 | 110 | Pr2 | -55 | 150 | °C | |
| Alarm | AH2 | Differential for temperature alarm probe 2 | 10 | 5 | Pr2 | 1 | 25 | °C | |
| Alarm | Ad2 | Delay alarm temperature probe 2 | 120 | 120 | Pr2 | 0 | 255 | min | |
| Alarm | dA2 | exclusion alarm temperature at power-on | 02:00 | 02:00 | Pr2 | | | hour | |
| Alarm | bLL | Compressor block for per low temperature alarm 2 | no | no | Pr2 | | | | |
| Alarm | AC2 | Compressor block for per high temperature alarm 2 | no | no | Pr2 | | | | |
| | | | | | | | | | |
| Configuration | oA1 | Configuration function exit AUX1 | dEF | dEF | Pr2 | | | | |
| Configuration | oA2 | Configuration function exit AUX2 | Fan | FAn | Pr2 | | | | |
| Configuration | oA3 | Configuration function exit AUX3 | LiG | LiG | Pr2 | | | | |
| | | | | | | | | | |
| Digital input | i1P | Polarity digital input | cL | cL | Pr1 | | | | |
| Digital input | i1F | Function digital in | dor | dor | Pr1 | | | | |
| Digital input | did | Alarm delay from digital configurable in | 255 | 255 | Pr1 | 0 | 255 | min | |
| Digital input | nPS | Numbers of action of preassure switch | 15 | 15 | Pr2 | 0 | 15 | | |
| Digital input | Odc | Open door control : fans and compressor | no | no | Pr2 | | | | |
| | | | | | | | | | |
| Alarm | rrd | Restart regulation with open door alarm | Yes | Yes | Pr2 | | | | |
| Energy Saving | HES | Temperature increasing at Energy Saving | 0 | 0 | Pr2 | -30 | 30 | °C | |
| Other | Adr | Serial address | 1 | 1 | Pr2 | 1 | 247 | | |
| Probe | pbC | Select probe type | ntC | ntC | Pr1 | | | | |
| Configuration | onF | Configuration button OFF | no | no | Pr2 | | | | |
| Configuration | LPC | Configuration LIGHT function button | Lig | Lig | Pr2 | | | | |
| | | | | | | | | | |
| Other | dP1 | Display probe P1 | 0 | 0 | Pr2 | | | | |
| Other | dP2 | Display probe P2 | 0 | 0 | Pr2 | | | | |
| Other | dP3 | Display probe P3 | 0 | 0 | Pr2 | | | | |
| Other | dP4 | Display probe P4 | 0 | 0 | Pr2 | | | | |
| Other | rSE | Display regulation set (SET + ES + SETd) | 0 | 0 | Pr2 | | | | |
| Other | rEL | Release firmware code (read only) | 0 | 0 | Pr2 | | | | |
| Other | Ptb | Identify EEPROM map | 1 | 106 | Pr2 | 0 | 65535 | | |

## 7.6 VALZER KW 4D PARAMETERS

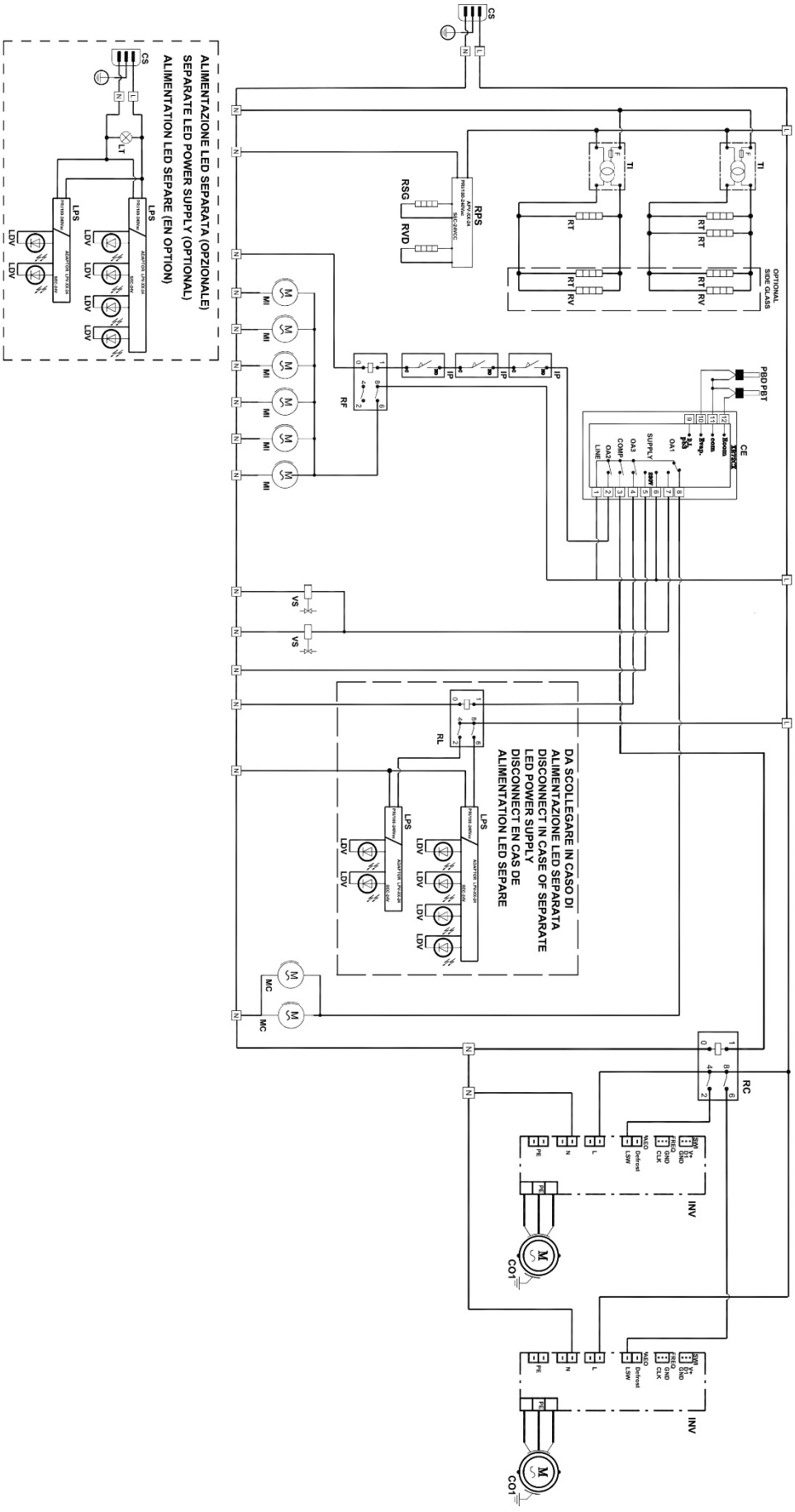
| DIXELL Model : XR72CH - 120V - NTC/PTC - COD. IARP 52997031 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| IA5-22 4D KW- COPY CARD COD. 74053000 Release_A | | | | | | | | | |
| Date : 08/02/2021 | | | | | | | | | |
| Firmware: 1,8 | | | | | | | | | |
| U.M TEMPERATURA: F° | | | | | | | | | |
| **Group** | **Parameter** | **Description** | **COPYCARD** | **Original** | **Visibility** | **Min** | **Max** | **Unity** | **Comment** |
| Probe | ot | Probe P1 calibration | 0 | 0 | Pr1 | -12 | 12 | °C | |
| Probe | P2P | Probe P2 presence | Yes | Yes | Pr1 | | | | |
| Probe | oE | Probe P2 calibration | 0 | 0 | Pr2 | -12 | 12 | °C | |
| Probe | P3P | Probe P3 presence | Yes | no | Pr2 | | | | |
| Probe | o3 | Probe P3 calibration | 0 | 0 | Pr2 | -12 | 12 | °C | |
| Probe | P4P | Probe P4 presence | no | no | Pr2 | | | | |
| Probe | o4 | Probe P4 calibration | 0 | 0 | Pr2 | -12 | 12 | °C | |
| | | | | | | | | | |
| Regulation | SEt | Set point | -9 | -20 | | -55 | 25 | °C | |
| Regulation | Hy | Compressor regulation hysteresis | 2 | 1 | Pr1 | 1 | 25 | °C | |
| Regulation | LS | Set Point min | -22 | -55 | Pr2 | -55 | -20 | °C | |
| Regulation | US | Set Point max | 14 | 25 | Pr2 | -20 | 150 | °C | |
| Regulation | odS | Output delay at start up | 1 | 0 | Pr2 | 0 | 255 | min | |
| Regulation | AC | Anti-short cycle delay | 3 | 3 | Pr1 | 0 | 50 | min | |
| Regulation | Ac1 | Starting delay 2nd compressor | 1 | 0 | Pr1 | 0 | 255 | sec | |
| Regulation | rtr | P1-P2 percentage for regulation | 100 | 100 | Pr2 | 0 | 100 | | |
| Regulation | CCt | Continuous cycle duration | 00:00 | 00:00 | Pr2 | | | hour | |
| Regulation | CCS | Set point for continuous cycle | 23 | -5 | Pr2 | -55 | 150 | °C | |
| Regulation | Con | Compressor ON time with faulty probe | 8 | 8 | Pr2 | 0 | 255 | min | |
| Regulation | CoF | Compressor OFF time with faulty probe | 6 | 6 | Pr2 | 0 | 255 | min | |
| Regulation | CF | Temperature measurement unit | °F | °C | Pr2 | | | | |
| Regulation | rES | Resolution (per °C) : decimal , integer | dE | in | Pr1 | | | | |
| Regulation | Lod | Local dispaly : default display | P1 | P1 | Pr2 | | | | |
| Regulation | dLy | Display temperature delay | 03:00 | 00:00 | Pr1 | | | min | |
| Regulation | dtr | P1-P2 percentage for display | 99 | 99 | Pr2 | 1 | 99 | | |
| | | | | | | | | | |
| Defrost | tdF | Defrost type : resistance , invertion | in | in | Pr1 | | | | |
| Defrost | dFP | Probe 1 selection for defrost | P2 | P2 | Pr2 | | | | |
| Defrost | dSP | Probe 2 selection for defrost | P3 | nP | Pr2 | | | | |
| Defrost | dtE | Defrost termination temperature | 59 | 15 | Pr1 | -55 | 50.0 | °C | |
| Defrost | dtS | 2nd Defrost termination temperature | 59 | 8 | Pr2 | -55 | 50.0 | °C | |
| Defrost | idF | Interval between defrost cycles | 6 | 6 | Pr1 | 0 | 120 | hour | |
| Defrost | MdF | Maximum length for defrost | 30 | 20 | Pr1 | 0 | 255 | min | |
| Defrost | MdS | Maximum length for 2nd defrost | 0 | 0 | Pr2 | 0 | 255 | min | |
| Defrost | dSd | Start defrost delay | 0 | 0 | Pr2 | 0 | 255 | min | |
| Defrost | dFd | Displaying during defrost | dEF | dEF | Pr2 | | | | |
| Defrost | dAd | MAX display delay after defrost | 15 | 30 | Pr2 | 0 | 255 | min | |
| Defrost | Fdt | Draining time | 3 | 3 | Pr2 | 0 | 255 | min | |
| Defrost | dPo | First defrost after start-up | no | no | Pr2 | | | | |
| Defrost | dAF | Defrost delay after fast freezing | 00:00 | 00:00 | Pr2 | | | hour | |
| | | | | | | | | | |
| Fans | FnC | Fan operating mode | O-n | O-n | Pr1 | | | | |
| Fans | Fnd | Fan delay after defrost | 7 | 7 | Pr1 | 0 | 255 | min | |
| Fans | FCt | Differential of temperature for forced activation of fans | 0 | 0 | Pr2 | 0 | 50 | °C | |
| Fans | FSt | Fan stop temperature | 122 | 50 | Pr1 | -55 | 50.0 | °C | |
| Fans | Fon | Fan on time with compressor off | 0 | 0 | Pr2 | 0 | 15 | min | |
| Fans | FoF | Fan off time with compressor off | 0 | 0 | Pr2 | 0 | 15 | min | |
| Fans | FAP | Probe selection for fan management | P2 | P2 | Pr2 | | | | |
| | | | | | | | | | |
| Ausiliary | ACH | Type of action ausialiary regulator | cL | cL | Pr2 | | | | |
| Ausiliary | SAA | Set point ausialiary regulator | 0 | 0 | Pr2 | -55 | 150 | °C | |
| Ausiliary | SHy | Differential for ausialiary regulator | 4 | 2 | Pr2 | 1 | 25 | °C | |
| Ausiliary | ArP | Select probe for ausialiary regulator | nP | nP | Pr2 | | | | |
| Ausiliary | Sdd | Block regolator AUX during defrost | no | no | Pr2 | | | | |
| | | | | | | | | | |
| Alarm | ALC | Configuration alarms : relative / absolute | Ab | Ab | Pr2 | | | | |
| Alarm | ALU | Maximum alarm temperature 1 | 122 | 50 | Pr1 | -50 | 150 | °C | |
| Alarm | ALL | Low temperature alarm | -58 | -50 | Pr1 | -55 | 50 | °C | |
| Alarm | AFH | Differential for temperat. alarm recovery 1 | 4 | 2 | Pr2 | 1 | 25 | °C | |
| Alarm | ALd | Temperature alarm delay 1 | 60 | 60 | Pr2 | 0 | 255 | min | |
| Alarm | dAo | Delay of temperature alarm at start up 1 | 02:00 | 03:00 | Pr2 | | | hour | |
| Alarm | AP2 | Probe for temperat. alarm of condenser 2 | nP | nP | Pr2 | | | | |
| Alarm | AL2 | Alarm threshold of low temperature probe 2 | -67 | -55 | Pr2 | -55 | 150 | °C | |
| Alarm | AU2 | Alarm threshold of high temperature probe 2 | 230 | 110 | Pr2 | -55 | 150 | °C | |
| Alarm | AH2 | Differential for temperature alarm probe 2 | 10 | 5 | Pr2 | 1 | 25 | °C | |
| Alarm | Ad2 | Delay alarm temperature probe 2 | 120 | 120 | Pr2 | 0 | 255 | min | |
| Alarm | dA2 | exclusion alarm temperature at power-on | 02:00 | 02:00 | Pr2 | | | hour | |
| Alarm | bLL | Compressor block for per low temperature alarm 2 | no | no | Pr2 | | | | |
| Alarm | AC2 | Compressor block for per high temperature alarm 2 | no | no | Pr2 | | | | |
| | | | | | | | | | |
| Configuration | oA1 | Configuration function exit AUX1 | dEF | dEF | Pr2 | | | | |
| Configuration | oA2 | Configuration function exit AUX2 | Fan | FAn | Pr2 | | | | |
| Configuration | oA3 | Configuration function exit AUX3 | LiG | LiG | Pr2 | | | | |
| | | | | | | | | | |
| Digital input | i1P | Polarity digital input | cL | cL | Pr1 | | | | |
| Digital input | i1F | Function digital in | dor | dor | Pr1 | | | | |
| Digital input | did | Alarm delay from digital configurable in | 255 | 255 | Pr1 | 0 | 255 | min | |
| Digital input | nPS | Numbers of action of preassure switch | 15 | 15 | Pr2 | 0 | 15 | | |
| Digital input | Odc | Open door control : fans and compressor | no | no | Pr2 | | | | |
| | | | | | | | | | |
| Alarm | rrd | Restart regulation with open door alarm | Yes | Yes | Pr2 | | | | |
| Energy Saving | HES | Temperature increasing at Energy Saving | 0 | 0 | Pr2 | -30 | 30 | °C | |
| Other | Adr | Serial address | 1 | 1 | Pr2 | 1 | 247 | | |
| Probe | pbC | Select probe type | ntC | ntC | Pr1 | | | | |
| Configuration | onF | Configuration button OFF | no | no | Pr2 | | | | |
| Configuration | LPC | Configuration LIGHT function button | Lig | Lig | Pr2 | | | | |
| | | | | | | | | | |
| Other | dP1 | Display probe P1 | 0 | 0 | Pr2 | | | | |
| Other | dP2 | Display probe P2 | 0 | 0 | Pr2 | | | | |
| Other | dP3 | Display probe P3 | 0 | 0 | Pr2 | | | | |
| Other | dP4 | Display probe P4 | 0 | 0 | Pr2 | | | | |
| Other | rSE | Display regulation set (SET + ES + SETd) | 0 | 0 | Pr2 | | | | |
| Other | rEL | Release firmware code (read only) | 0 | 0 | Pr2 | | | | |
| Other | Ptb | Identify EEPROM map | 1 | 106 | Pr2 | 0 | 65535 | | |

# 8. WIRING DIAGRAM

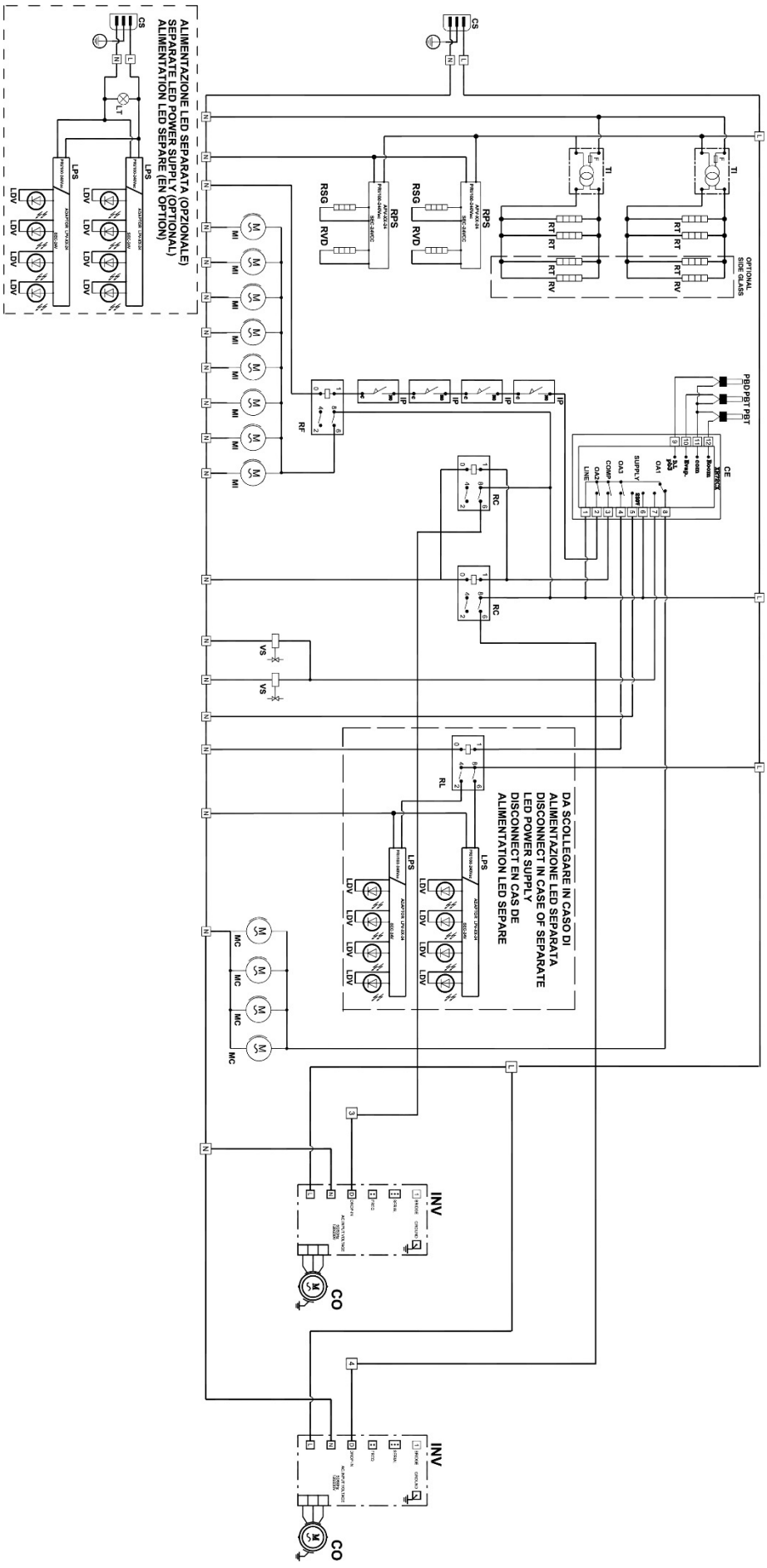
## *8.1* VALZER KW 2D WIRING DIAGRAM



## *8.2* VALZER KW 3D WIRING DIAGRAM



## *8.3* VALZER KW 4D WIRING DIAGRAM



## *8.4* WIRING DIAGRAM LEGEND

| REF | DEVICE |
|---|---|
| CE | ELECTRONIC CONTROL |
| CO | COMPRESSOR |
| CS | PLUG CABLE |
| F | TRANSFORMER FUSE |
| INV | LIGHT SWITCH |
| IP | INTERNAL MOTOR FAN MICROSWITCH |
| LDV | TANK INNER LED LIGHT |
| LPS | LED POWER SUPPLY UNIT |
| LT | SUPPLY LINE LED ALIGHT |
| MC | CONDENSER MOTOR FAN |
| MI | INNER MOTORISED FAN |
| PBD | DEFROST END PROBE |
| PBT | TEMPERATURE PROBE |
| RC | COMPRESSOR RELAY |
| RF | FAN RELAY |
| RL | LED RELAY |
| RPS | RESISTOR POWER SUPPLY UNIT |
| RSG | WATER DRAINAGE RESISTOR |
| RRC | RETARDED COMPRESSOR RELAY |
| RT | DOOR RESISTOR |
| RV | GLASS RESISTOR |
| RVD | DECOMPRESSION VALVE RESISTANCE |
| TI | ISOLATION TRANSFORMER |
| VS | DEFROST VALVE |