



COQ

Project:  
IA27

TANGO KW Service Manual (short version)

**TANGO 125 KW**

**TANGO 188 KW**

**TANGO 250 KW**

**Service Manual**



## TABLE OF CONTENTS

1. AMOUNT OF REFRIGERANT IN THE EQUIPMENT	<b>3</b>
2. REFRIGERATION SCHEMATICS FOR THE EQUIPMENT	<b>4</b>
2.1. REFRIGERATION DIAGRAM TANGO 125 KW	<b>4</b>
2.2. REFRIGERATION DIAGRAM TANGO 188 KW	<b>5</b>
2.3. REFRIGERATION DIAGRAM TANGO 250 KW	<b>6</b>
2.4. VIEW OF THE MOTOR COMPARTMENT – TANGO 125 KW	<b>7</b>
2.5. VIEW OF THE MOTOR COMPARTMENT – TANGO 188 KW	<b>8</b>
2.6. VIEW OF THE MOTOR COMPARTMENT – TANGO 250 KW	<b>9</b>
2.7. VIEW OF THE EVAPORATOR COMPARTMENT AND RELEVANT PIPEWORK	<b>10</b>
3. POSITION OF PROBES IN THE CABINET	<b>13</b>
4. ALARMS FOR TANGO KW (Dixell controller)	<b>14</b>
5. REPLACEMENT OF COMPONENTS AND REPAIR A LEAK	<b>14</b>
5.1. SAFE OPERATING PROCEDURES FOR REFRIGERATION UNITS USING R290	<b>14</b>
5.2. PROTECTION TOOLS AND DEVICES FOR SERVICING	<b>15</b>
5.3. HOW TO EMPTY THE COOLING CIRCUIT AND PROVE IT BEFORE SERVICING	<b>18</b>
5.4. COMPRESSOR REPLACEMENT	<b>19</b>
5.5. UNSOLDER COPPER PIPE TUBE	<b>20</b>
5.6. COMPRESSOR REMOVING	<b>20</b>
5.7. NEW COMPRESSOR INSERTION	<b>21</b>
5.8. HIGH PRESSURE PIPE CLOSING	<b>21</b>
5.9. REFRIGERANT GAS CHARGING AND THERMODYNAMIC CIRCUIT CLOSING	<b>22</b>
5.10. CHECK THE CORRECT CLOSING OF THERMODYNAMIC CIRCUIT	<b>25</b>
5.11. REPLACEMENT OF CONDENSER MOTOR FAN	<b>27</b>
5.12. REPLACEMENT OF EVAPORATOR MOTOR FAN	<b>27</b>
5.13. REPLACEMENT OF POWER CORD REPLACING	<b>28</b>
5.14. REPLACEMENT OF ELECTRONIC CONTROLLER	<b>28</b>
5.15. REPLACEMENT OF LED BARS	<b>29</b>
6. MAIN CABINET FUNCTIONS	<b>31</b>
6.1. DISPLAY UNIT AND MAIN PARAMETERS	<b>31</b>
6.2. USE OF LEDS	<b>31</b>
6.3. TANGO KW PARAMENTERS	<b>32</b>
6.4. TEMPERATURE SETTING	<b>33</b>
7. WIRING DIAGRAM	<b>34</b>
7.1. WIRING DIAGRAM LEGEND	<b>34</b>
7.2. TANGO 125 KW WIRING DIAGRAM	<b>34</b>
7.3. TANGO 188 KW WIRING DIAGRAM	<b>35</b>
7.4. TANGO 250 KW WIRING DIAGRAM	<b>36</b>

# 1. AMOUNT OF REFRIGERANT IN THE EQUIPMENT

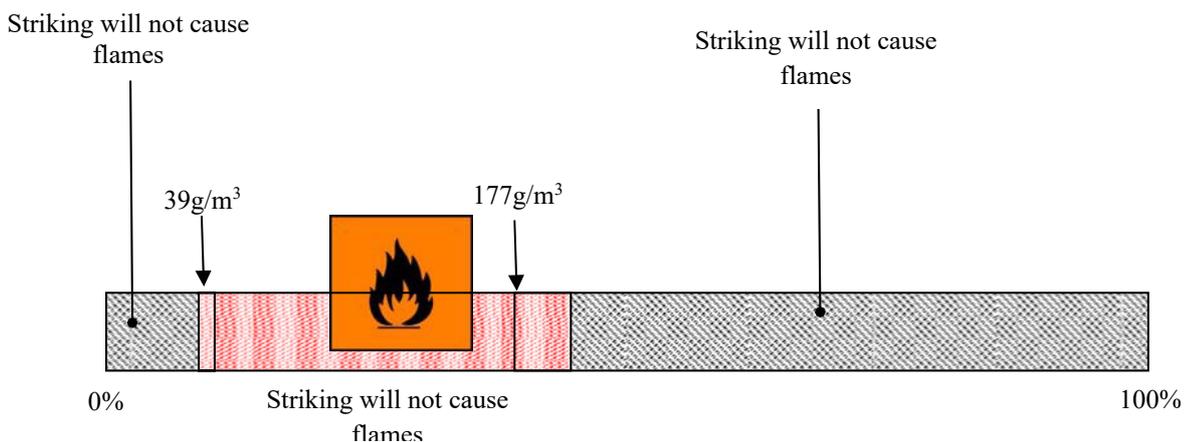
The most prominent feature of the TANGO KW versions is that they use a natural gas: propane (R290).

MODEL	AMOUNT OF PROPANE* [grams]	
TANGO 125 KW	150	
TANGO 188 KW	150	
TANGO 250 KW	300	

(\*) 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.

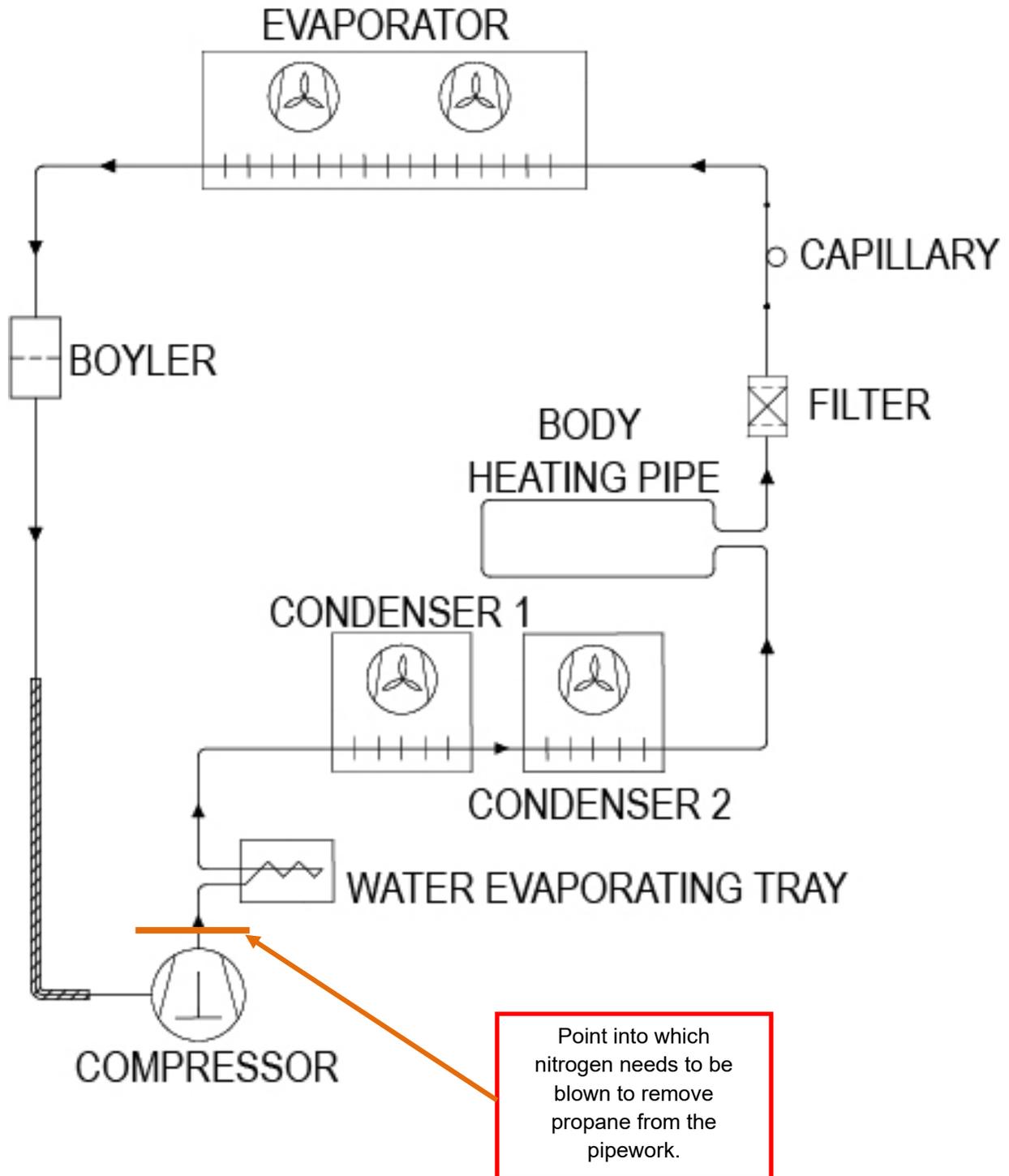
The flammability limit percentage (in a volume of air) is between 2,2% and 9,2% (at 25°C and 1bar).  
In mass terms:



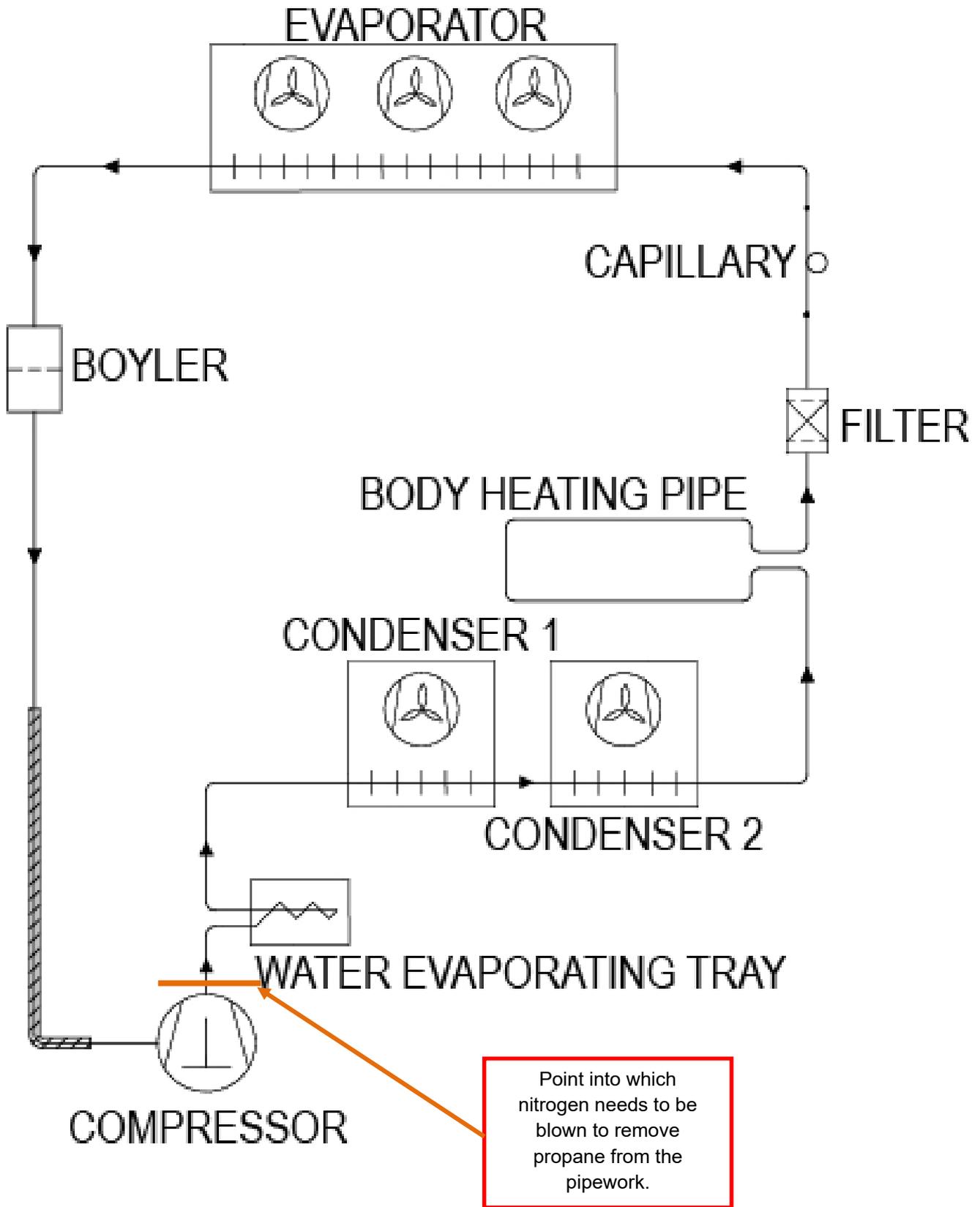
If the entire amount of refrigerant is released in the chest of a TANGO KW, this would be a flammability zone event.

## 2. REFRIGERATION SCHEMATICS FOR THE EQUIPMENT

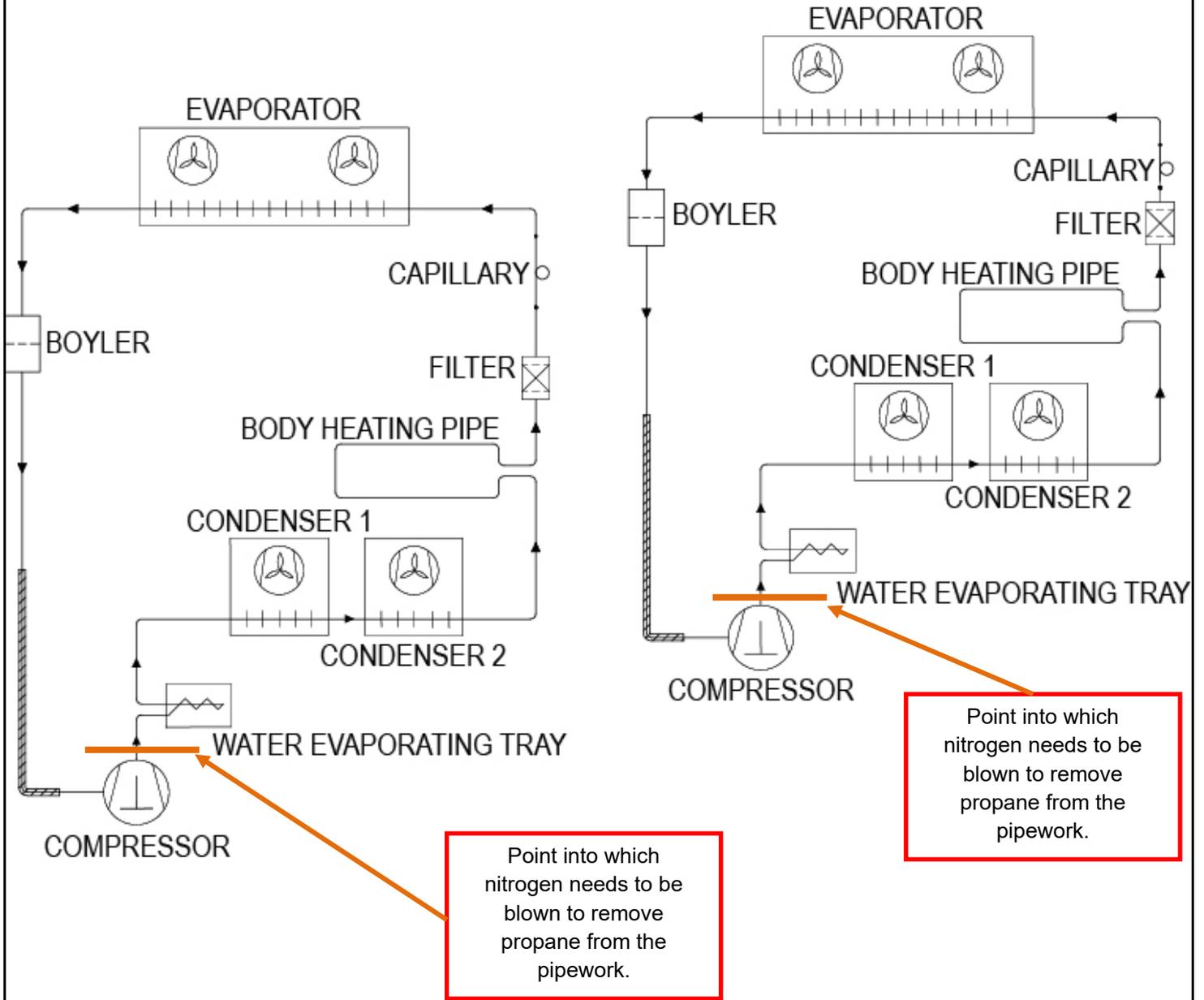
### 2.1 REFRIGERATION DIAGRAM FOR THE COOLING CYCLE TANGO 125 KW



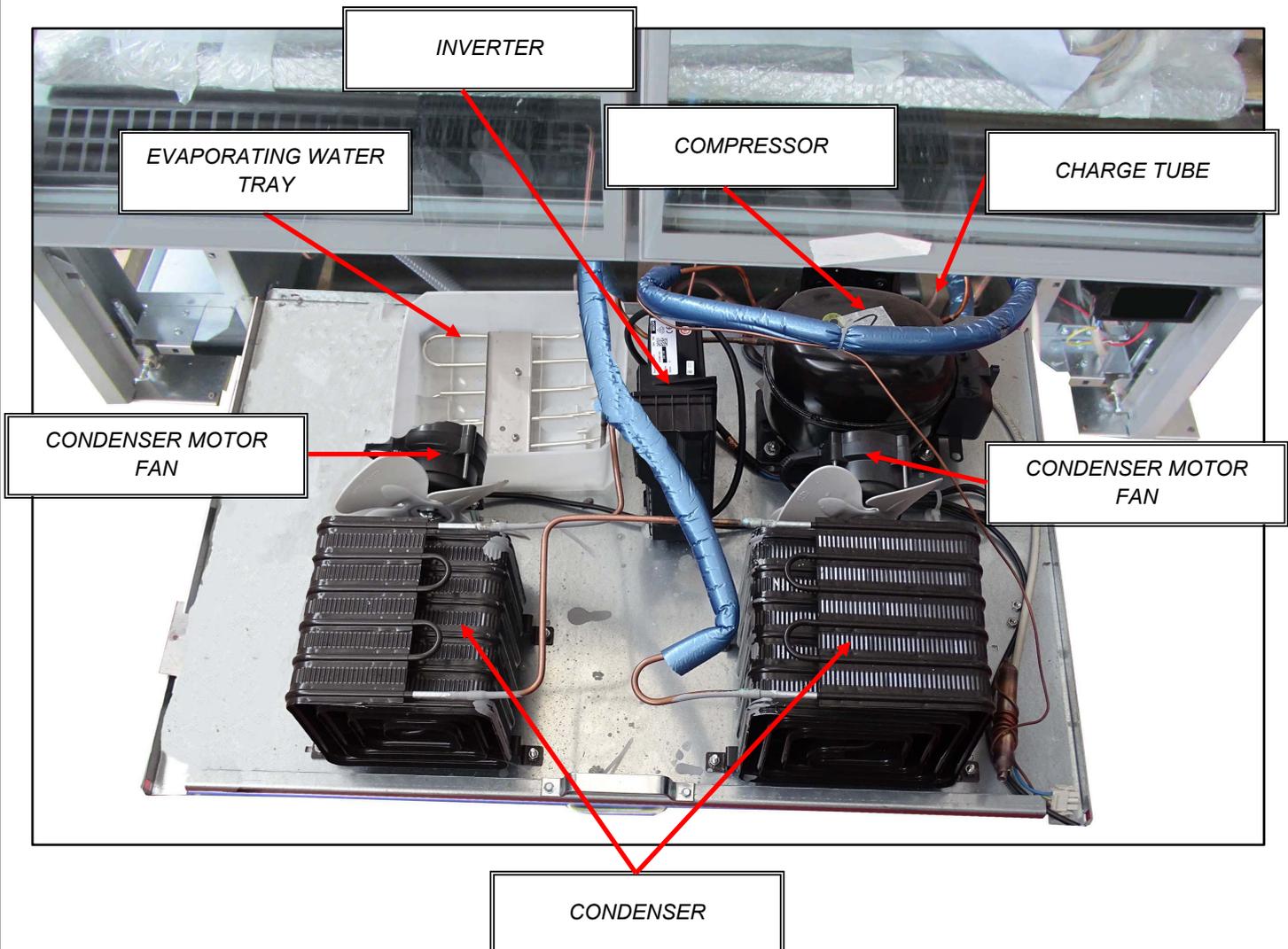
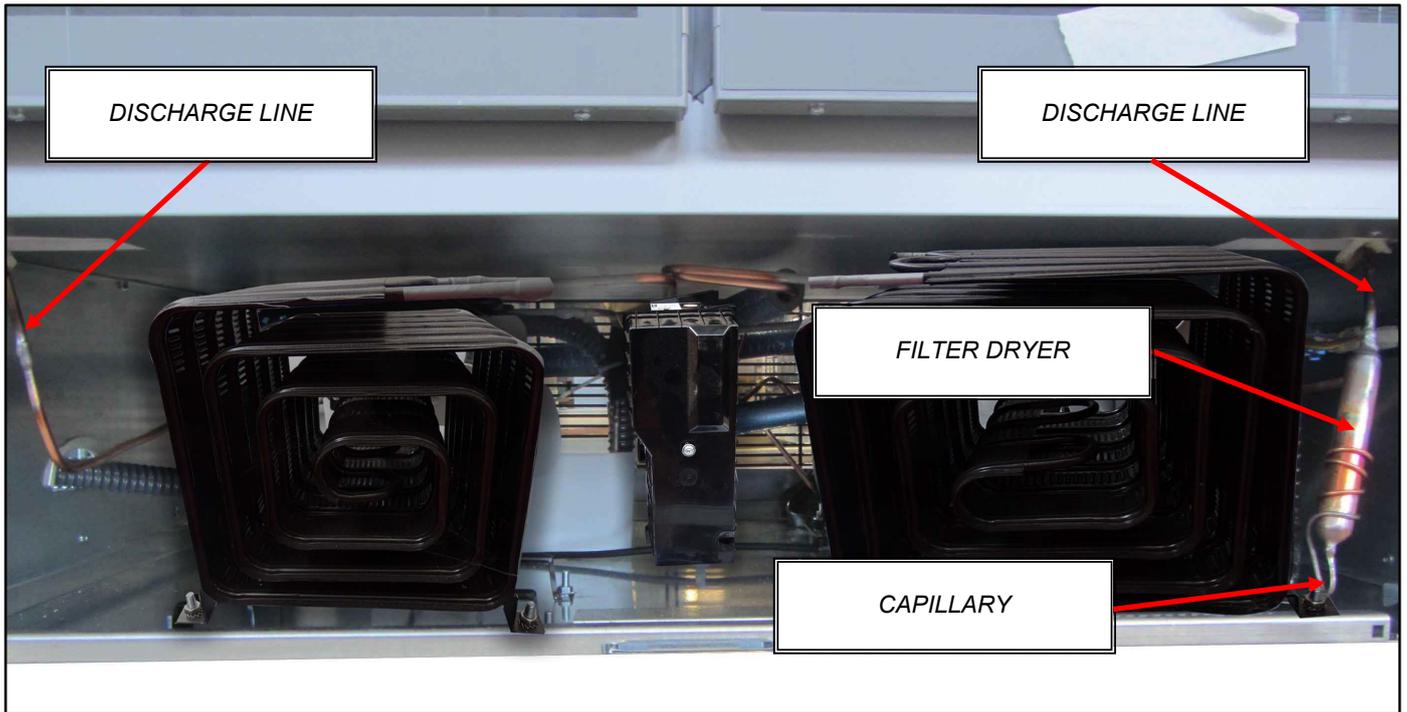
## 2.2 REFRIGERATION DIAGRAM FOR THE COOLING CYCLE TANGO 188 KW



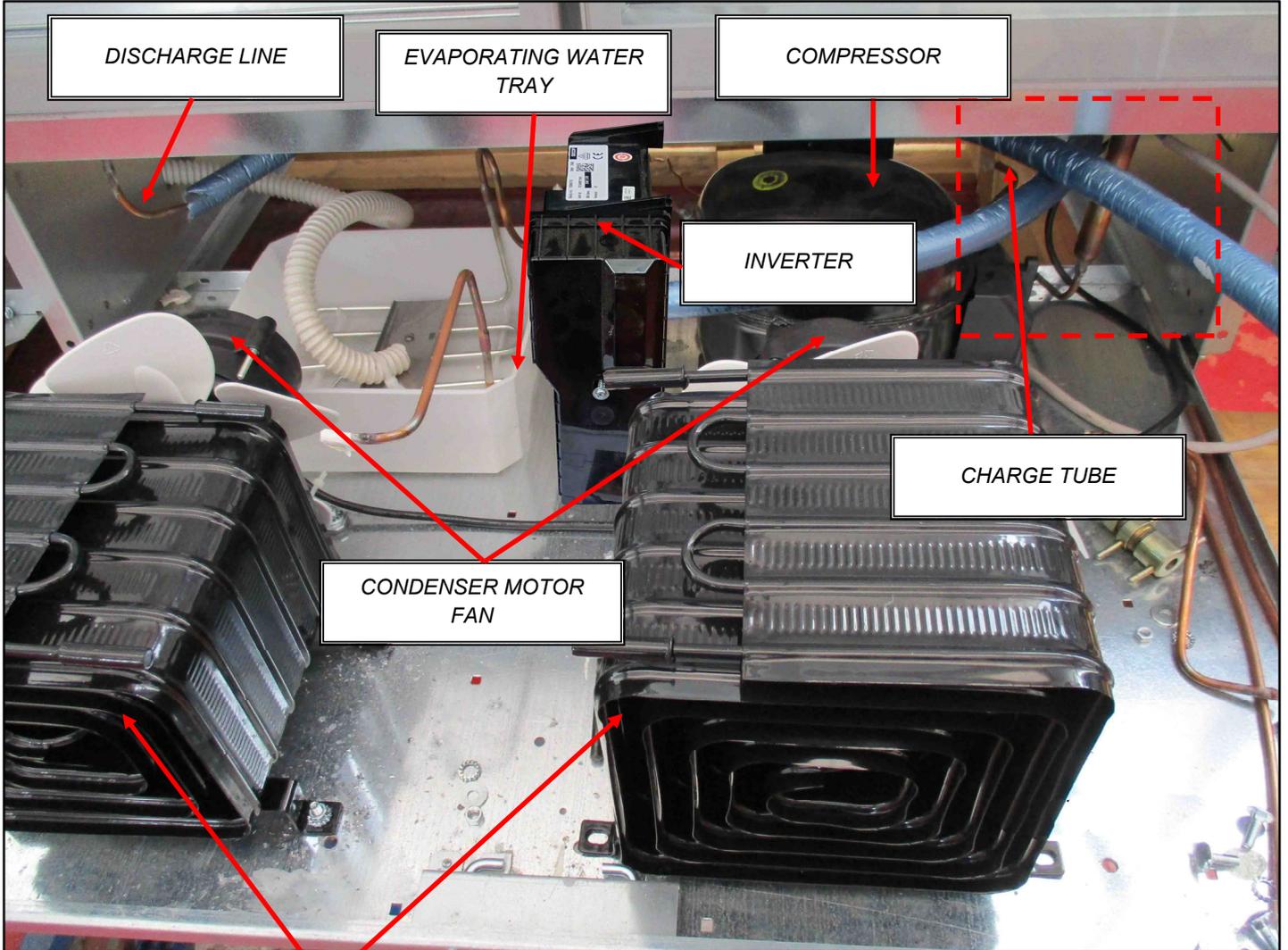
## 2.3 REFRIGERATION DIAGRAM FOR THE COOLING CYCLE TANGO 250 KW



## 2.4 VIEW OF THE MOTOR COMPARTMENT AND RELEVANT PIPEWORK TANGO 125 KW



## 2.5 VIEW OF THE MOTOR COMPARTMENT AND RELEVANT PIPEWORK TANGO 188 KW

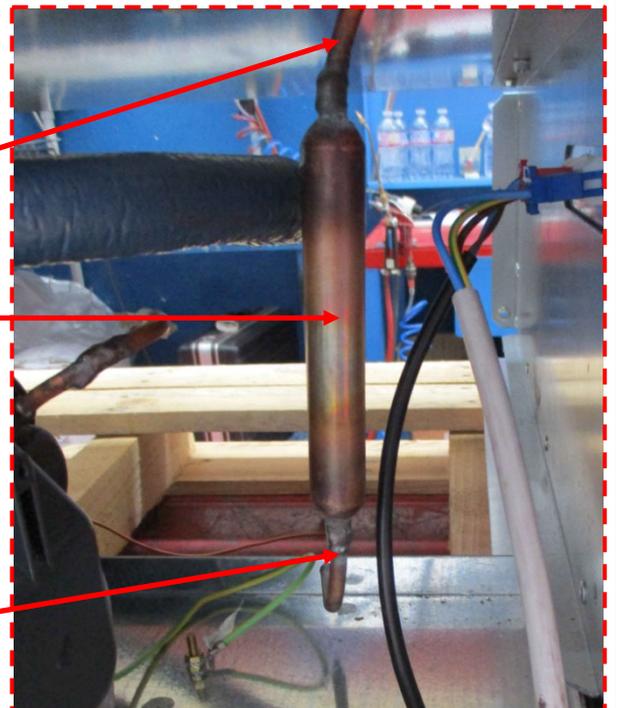


CONDENSER

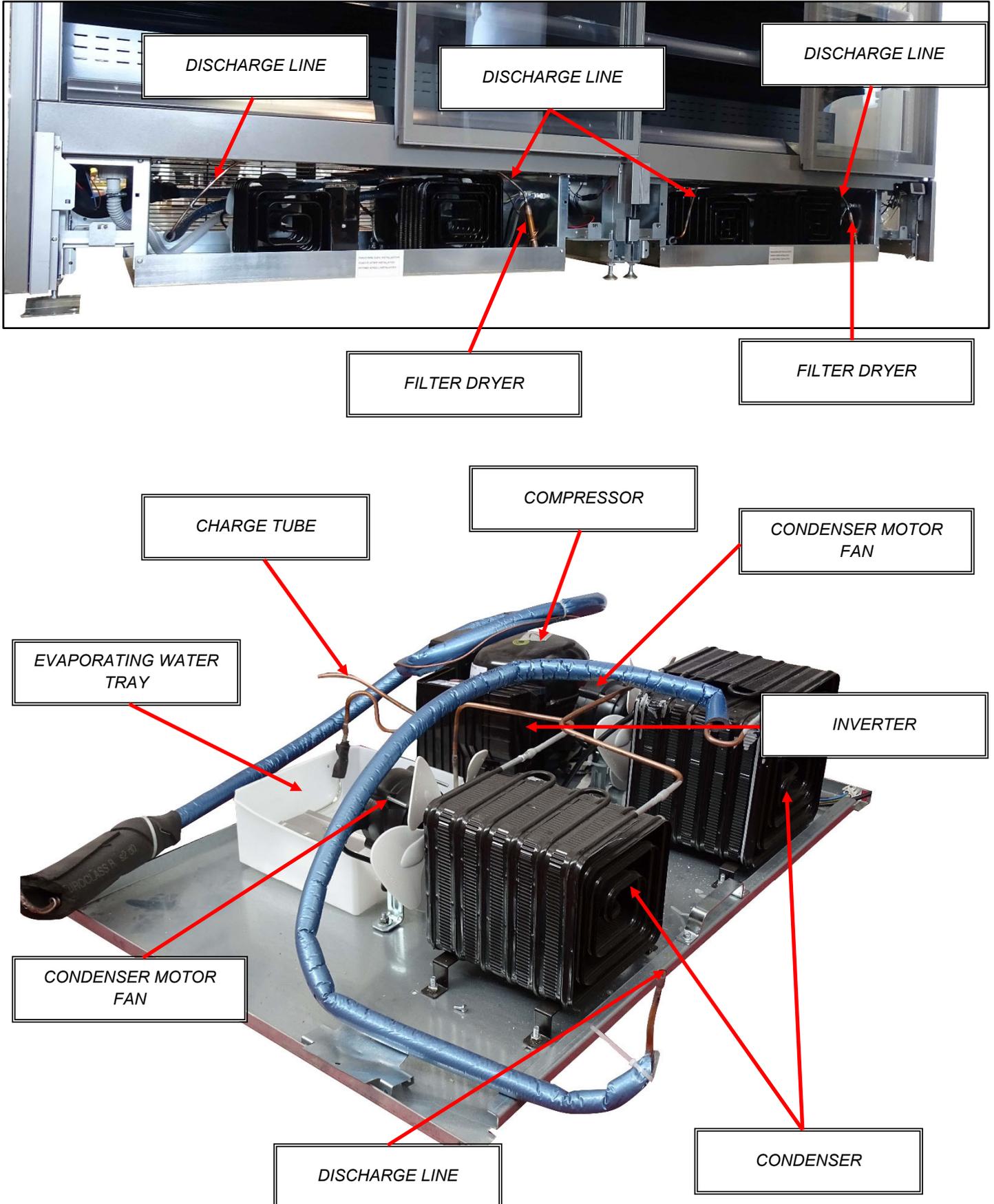
DISCHARGE LINE

FILTER DRYER

CAPILLARY



## 2.6 VIEW OF THE MOTOR COMPARTMENT AND RELEVANT PIPEWORK TANGO 250 KW



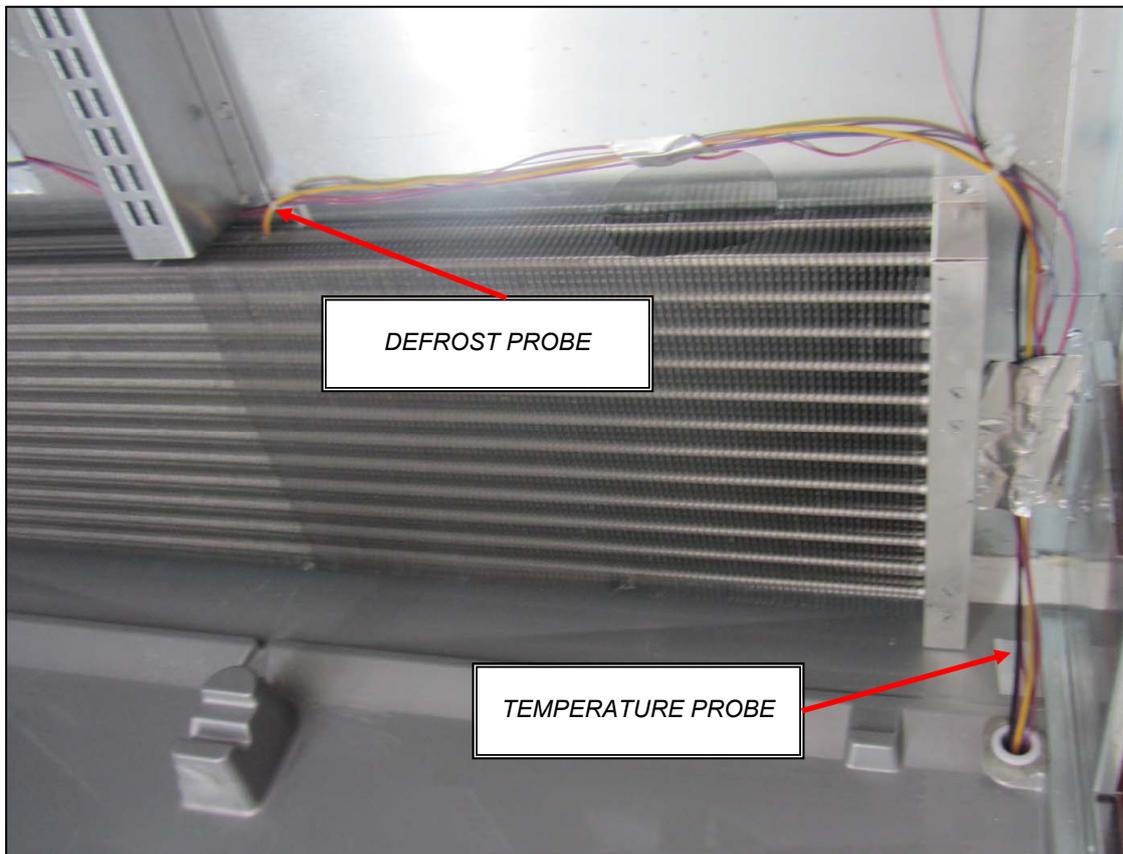
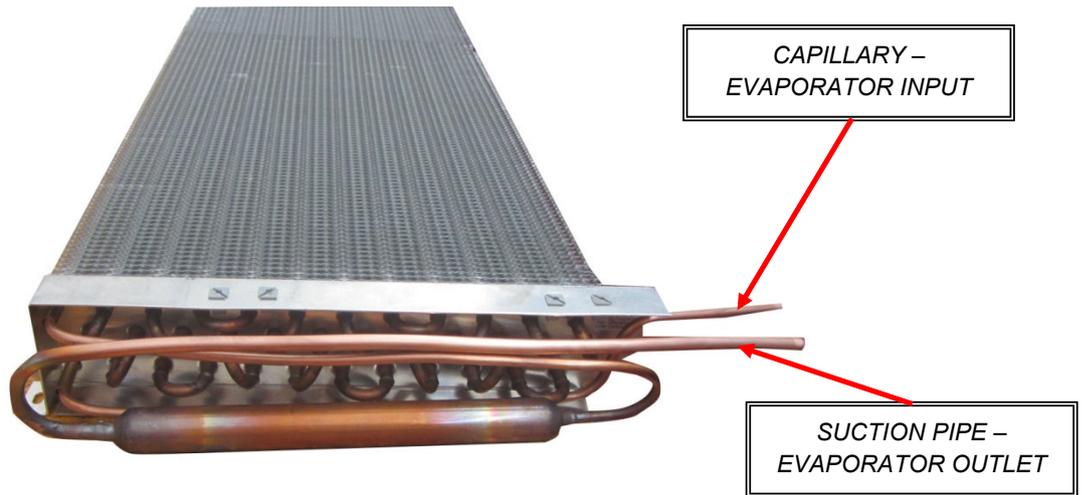
## 2.7 VIEW OF THE EVAPORATOR COMPARTMENT AND RELEVANT PIPEWORK

The refrigerator is supplied of shelves with adjustable stirrup: their position in the tank can be set as desired by moving the shelf supports on the fixed racks inside the tank.

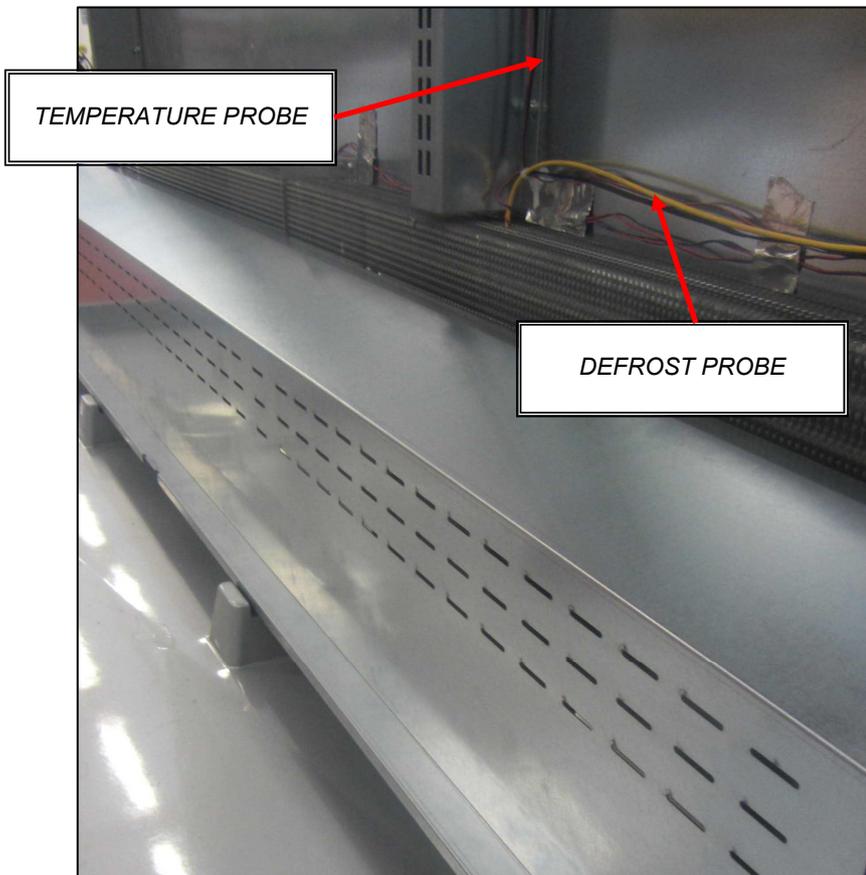
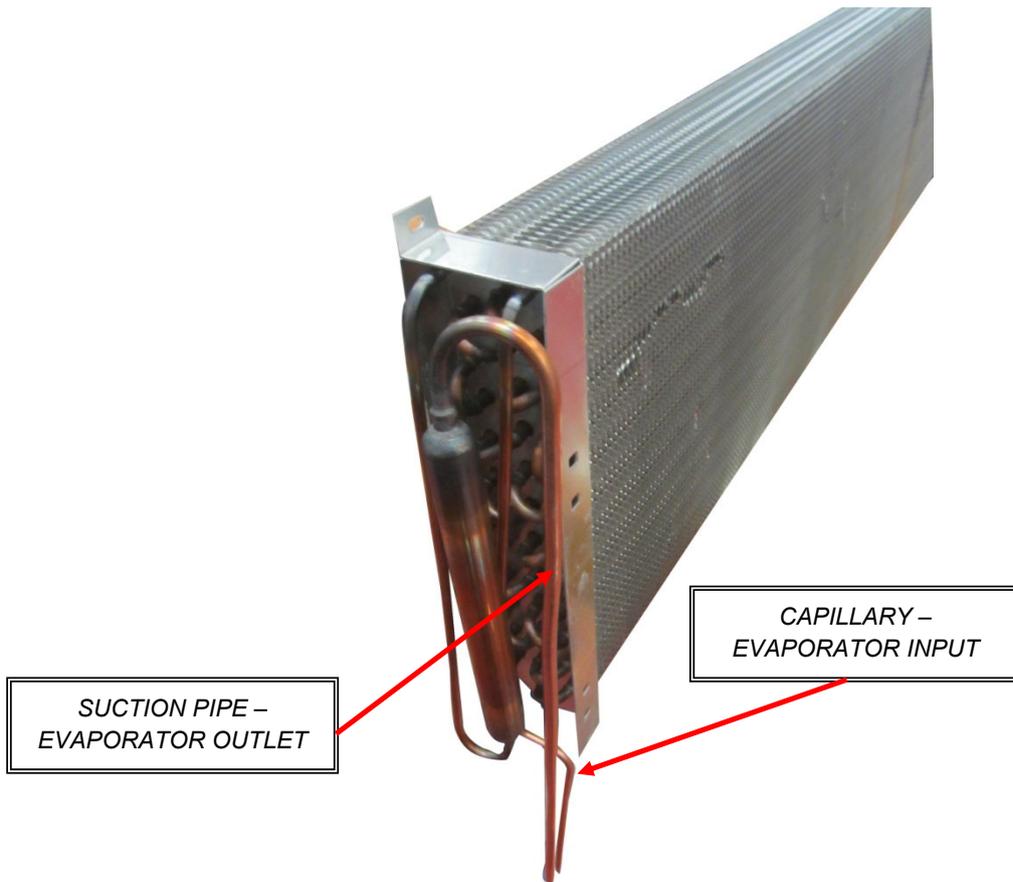
On the bottom of the tank there is the evaporator cover under which the internal motor fans, protection grills is secured.

Under the cover are placed the finned evaporator.

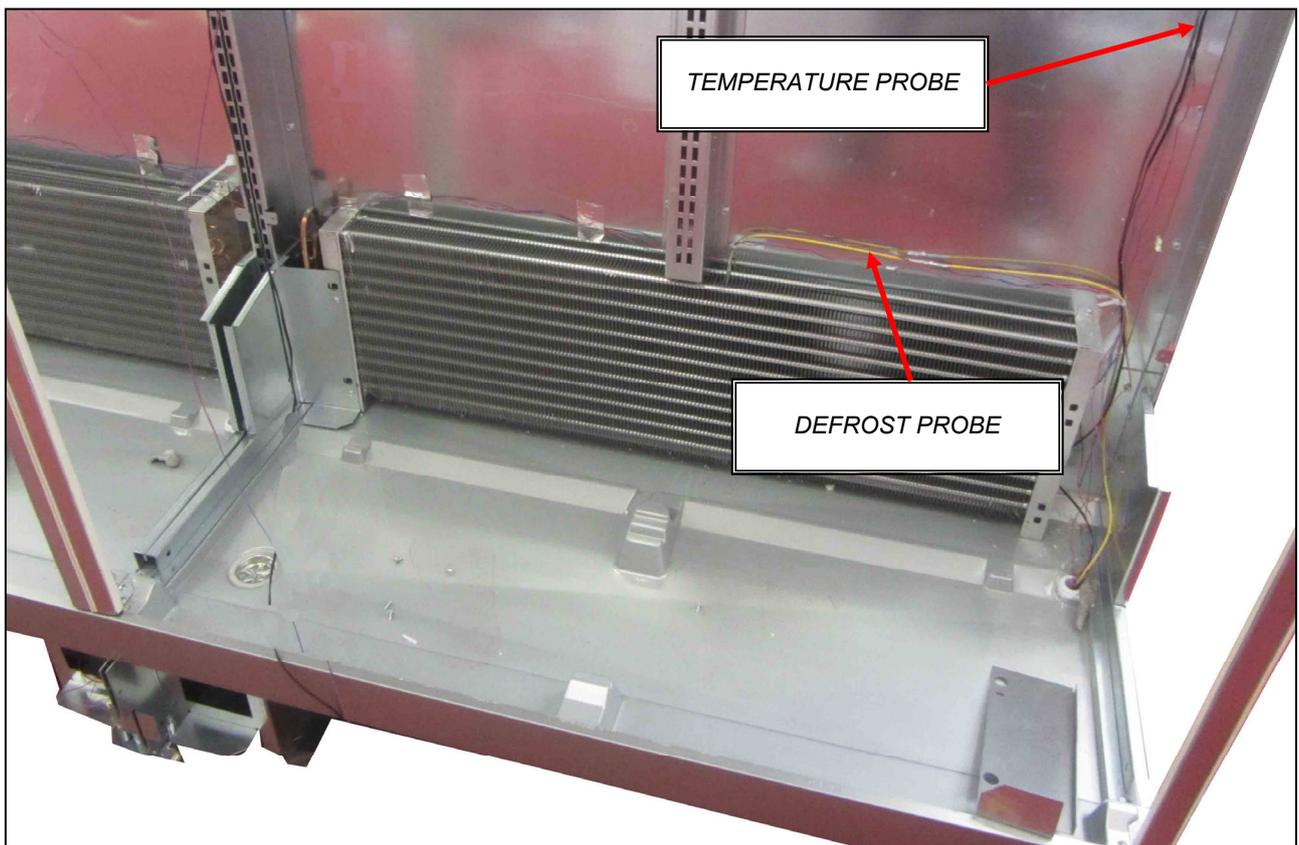
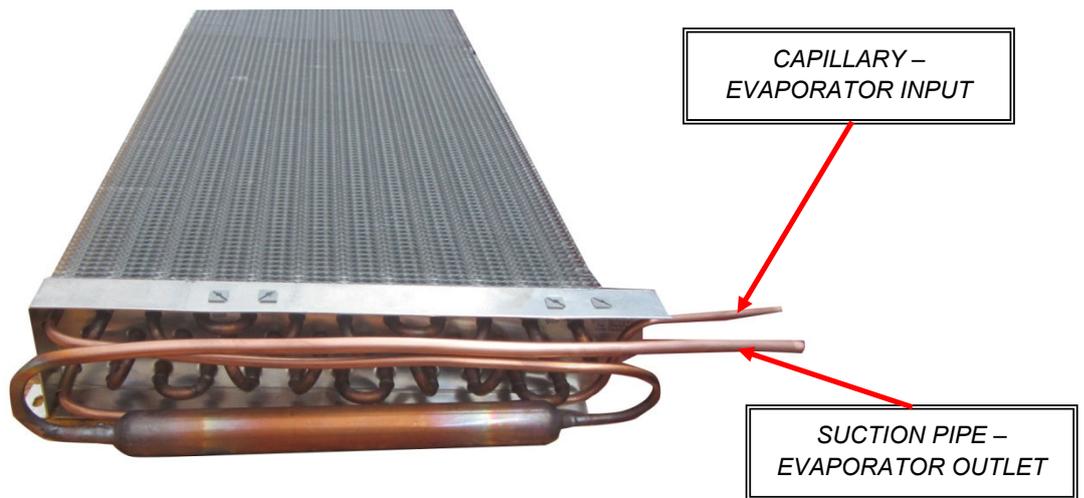
### TANGO 125 KW



# TANGO 188 KW

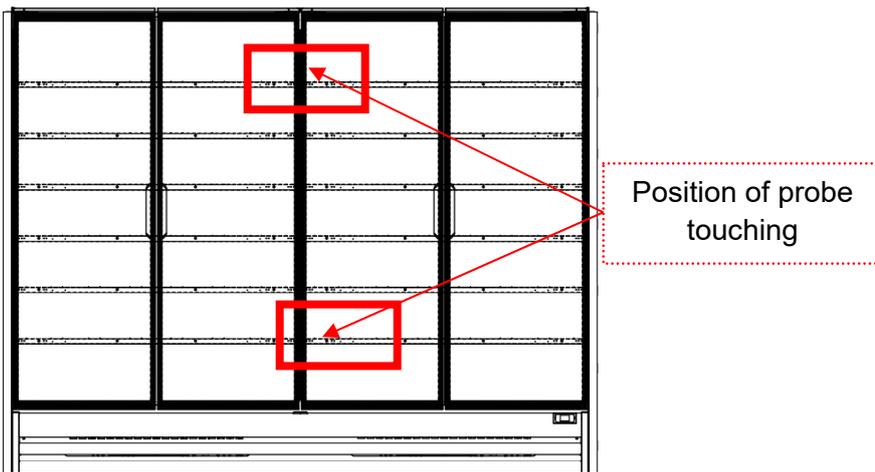
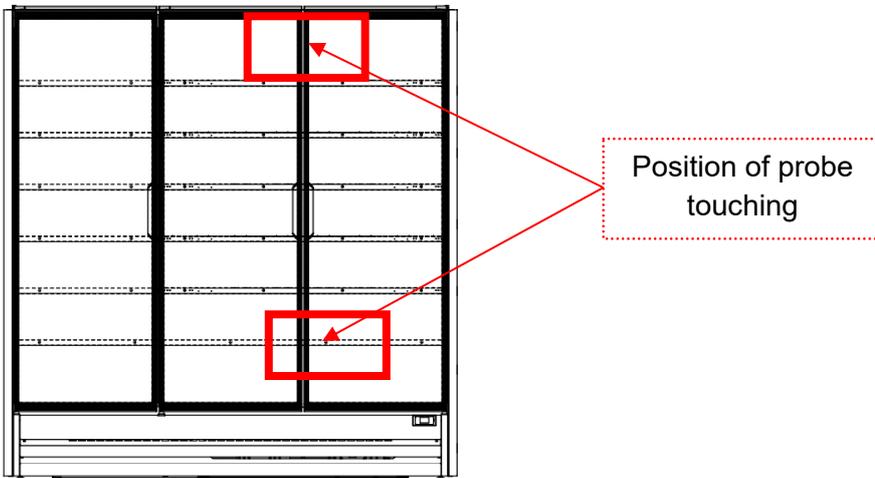
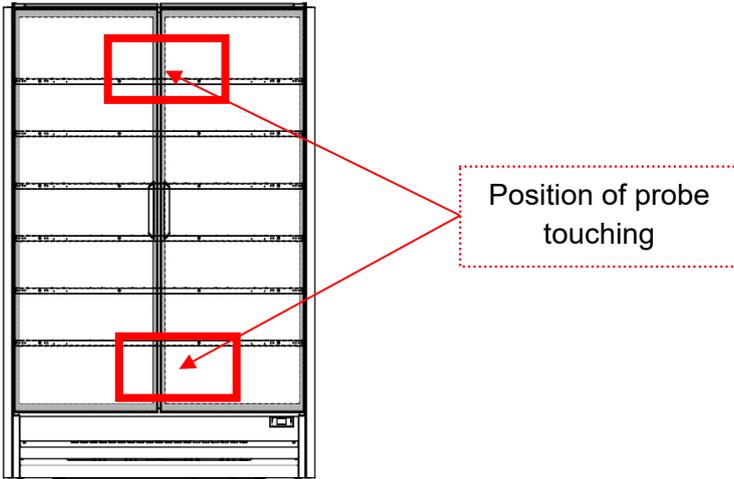


# TANGO 250 KW



### 3. POSITION OF PROBES IN THE CABINET

There are two probes in the TANGO KW models.



<b>Model</b>	<b>Position of probe</b>	<b>Probe Colour</b>	<b>Function</b>	<b>Probe Epta code</b>
TANGO 125 KW TANGO 188 KW	Evaporator Tank	Yellow Black	Defrost Display - Thermostat	10205778 140692
TANGO 250 KW	Evaporator Tank	Yellow Black	Defrost Display - Thermostat	10205780 140692

## 4. ALARMS FOR TANGO KW (Dixell Controller)

ALARM	CAUSE	OUTPUTS
“P1”	Temperature probe damage	“Con” and “COF” compressor outputs.
“P2”	Evaporator probe damage	Timed defrosting

## 5. REPLACEMENT OF COMPONENTS AND REPAIR OF A LEAK

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

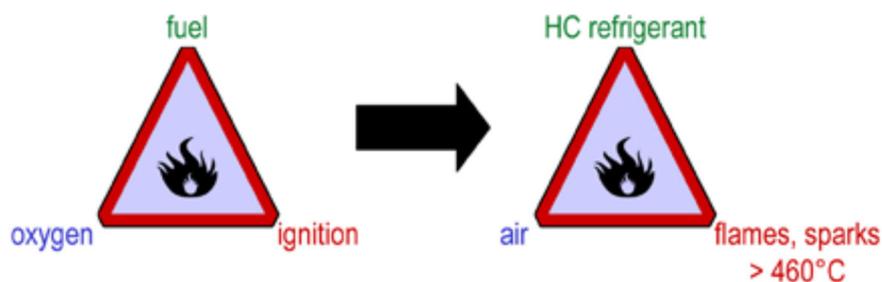
### 5.1 SAFE OPERATING PROCEDURES FOR REFRIGERATION UNITS USING R290

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

R290 (Propane CH<sub>3</sub>CH<sub>2</sub>CH<sub>3</sub>) 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 enclosed in a metal box, 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.



If you control these components, for example, by eliminating at least one but preferably two of these, 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 these sources 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, refrigerant) 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 WORK AREA (LIGHTERS, LAMPS, CIGARETTES).

## 5.2 PROTECTION TOOLS AND DEVICES FOR SERVICING

Protection tools:



**Devices for servicemen:**

	<p><b>LOW PRESSURE SUCTION GAUGE</b></p>
	<p><b>REFRIGERANT PINCH OFF TOOL</b></p>
	<p><b>ELECTRONIC LEAK DETECTOR</b></p>
	<p><b>REFRIGERAT JUNCTIONS</b></p>
	<p><b>LOCKRING JOINT PLIER</b></p>
	<p><b>LOCKRING JOINT WITH CLOSED SIDE</b></p>
	<p><b>REFRIGERANT GAS BOTTLE</b></p>
	<p><b>NITROGEN GAS BOTTLE</b></p>



**REFRIGERANT SCALE**



**VACUUM PUMP**



**LOKPREP SEALANT**



**ORBITAL CUTTER**



**SCREWDRIVER**



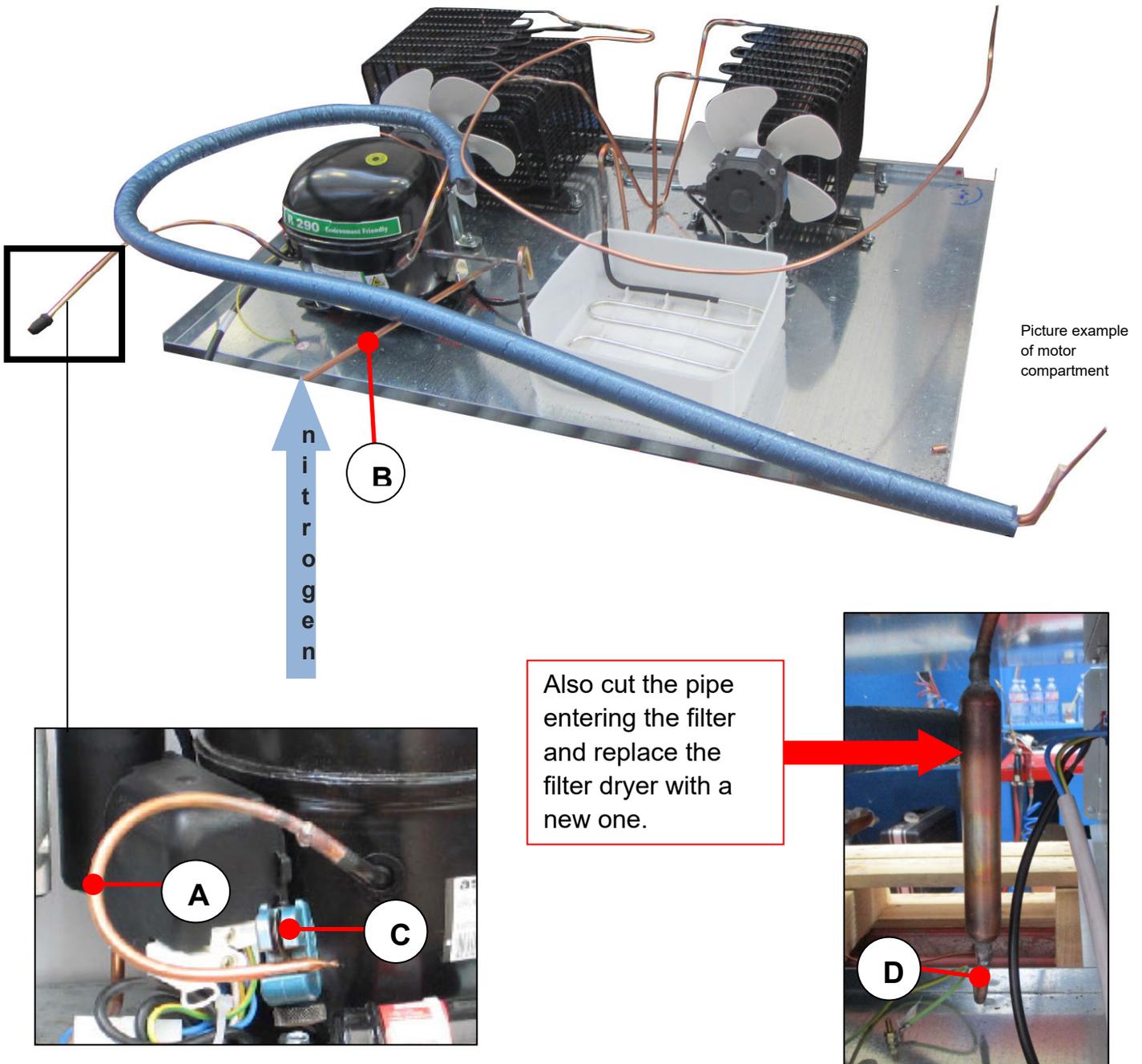
**WRENCH n°10**

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

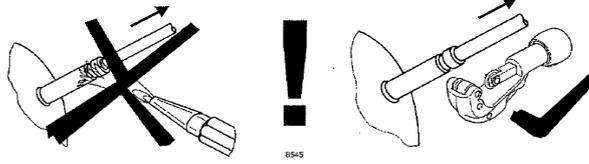
The refrigerating unit has a double servicing pipe, on the low (A) and on the high (B) pressure sides: in order to totally remove the flammable refrigerant from the refrigerating circuit both pipes are to be opened by using an orbital cutter (C).

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.**



### 5.4 COMPRESSOR REPLACEMENT



**TANGO 125 KW**  
**TANGO 188 KW**

**Epta code:** 45911034

**Model:** SECOP NLV12.6CN 198-254V 50/60HZ



**TANGO 250 KW**

**Epta code:** 45911034 (2 Pc)

**Model:** SECOP NLV12.6CN 198-254V 50/60HZ



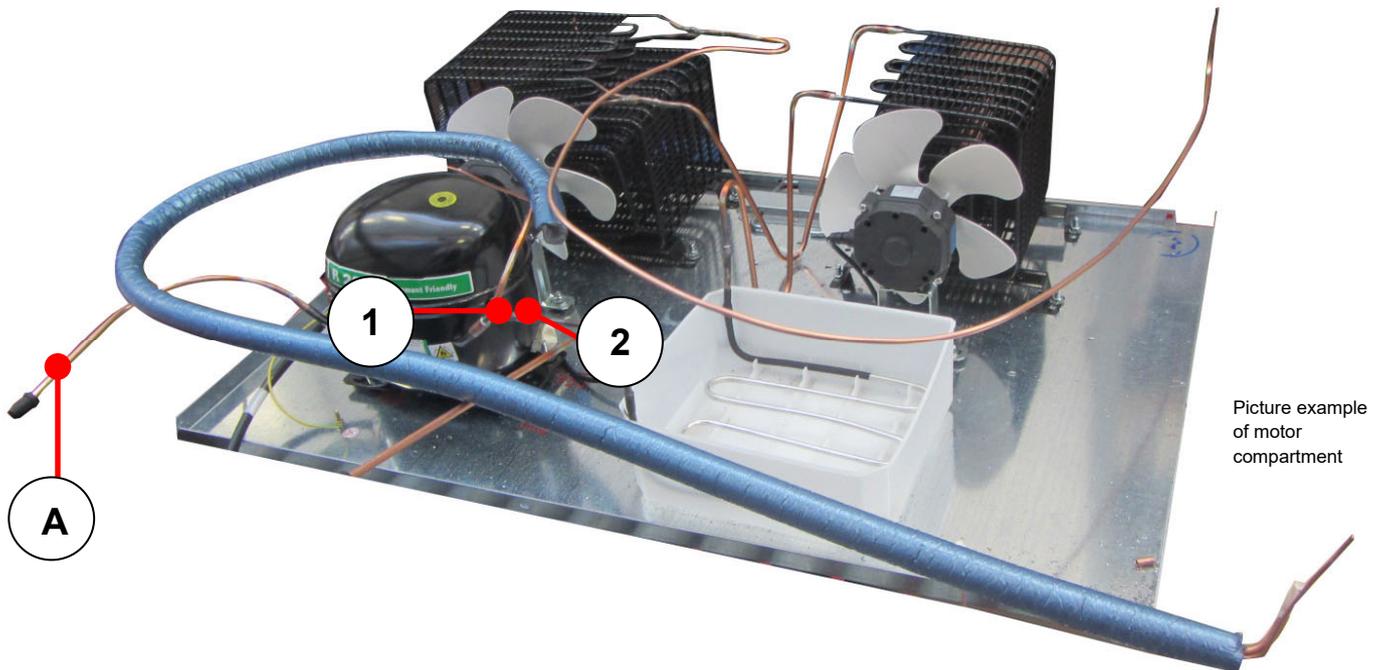
**Epta code for filter:** 46363000

**Model:** Filter gr 20 øi 6.2-3.2

**Note:** when the compressor is replaced the filter drier must be replaced too

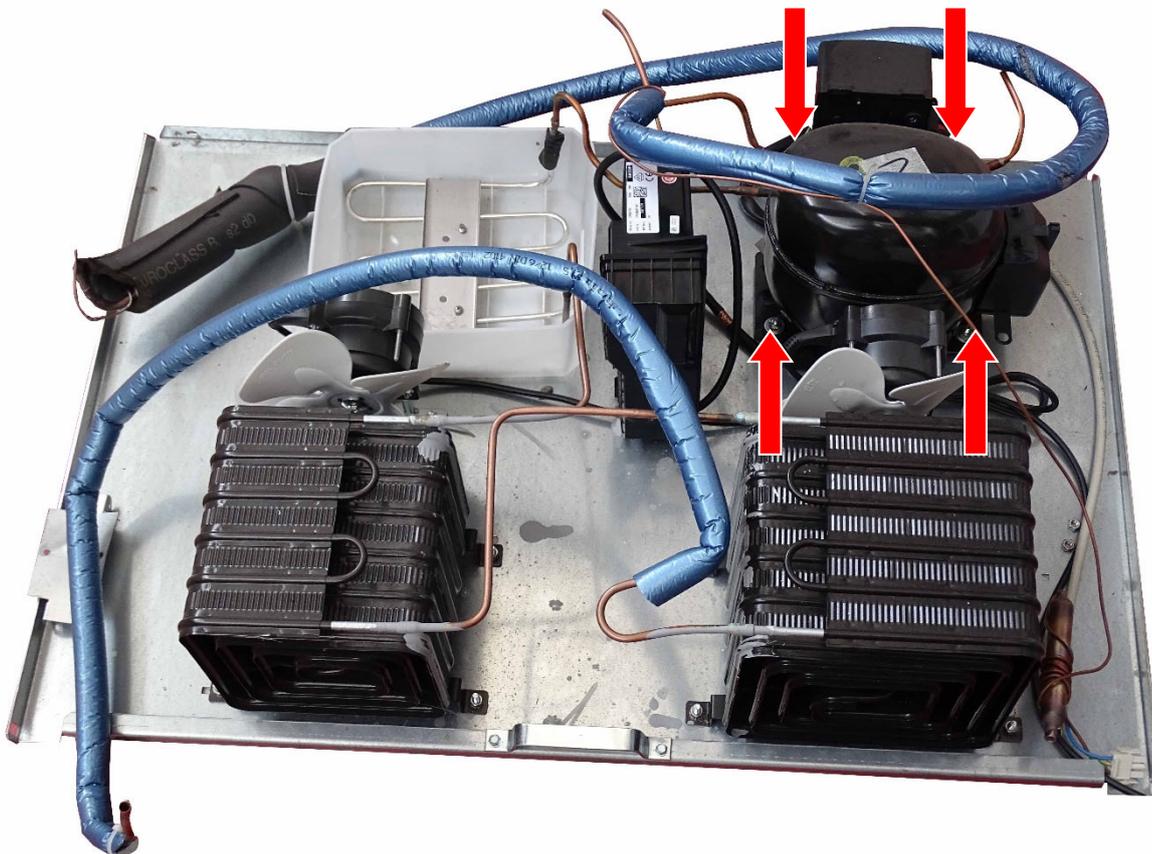
### 5.5 UNSOLDER COPPER PIPE TUBE

After being that 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 screws of compressor by using the wrench n°10.  
Using the screwdriver for unscrew the compressor box (if present).



## 5.7 NEW COMPRESSOR INSERTION

By using 4 screws fix the new compressor to motor base (wrench n°10) and then screw compressor box (screwdriver).

After secure the compressor to the base, solder the discharge and suction piping, then also solder the capillary tube onto the filter after cutting it diagonally and fitting it in by max. 3cm. Solder 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. Close the circuit to hold the pressure in, then search for circuit leaks using a leak detector.

Adjust the sensitivity of the electronic leak detector (when available) and test each and every soldering. The sensor will beep when a leak is found.

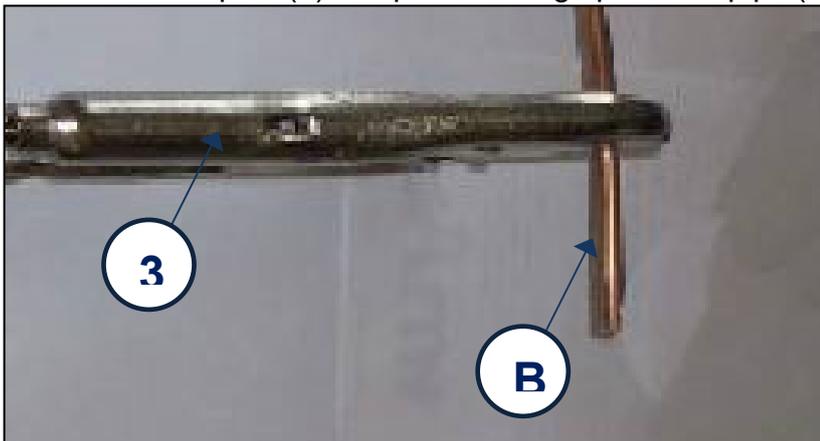
Connect the vacuum pump to the compressor and filter service intakes and hold the vacuum for at least 30-40minutes (value depending on pump features). The vacuum degree to be achieved is below 15 Pa or 0,15 mbar .

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

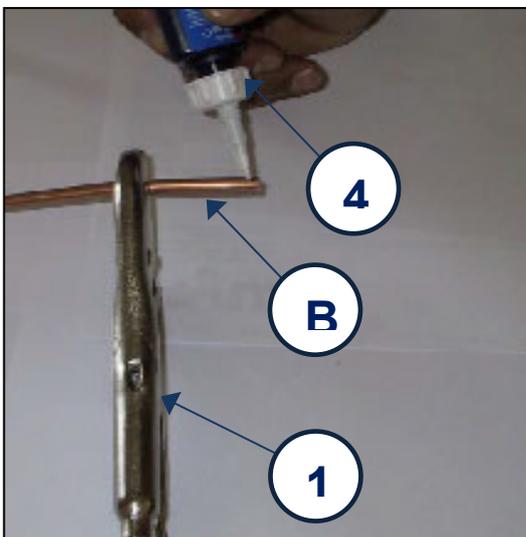
## 5.8 HIGH PRESSURE PIPE CLOSING

After 30-40 minut of vacuum operation, disconnect the vacuum machine only on the high pressure pipe (**B**).

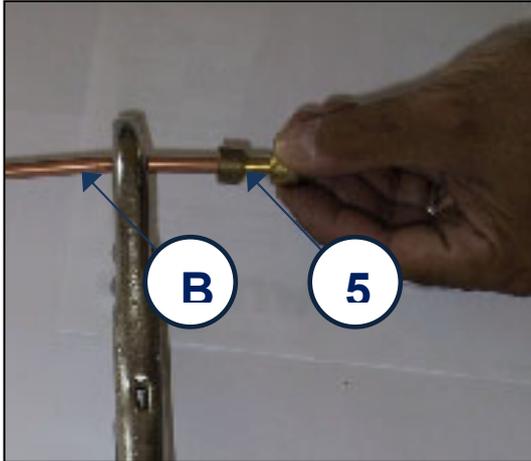
- Take the plier (**3**) and pinch the high pressure pipe (**B**), then remove refrigerant junction.



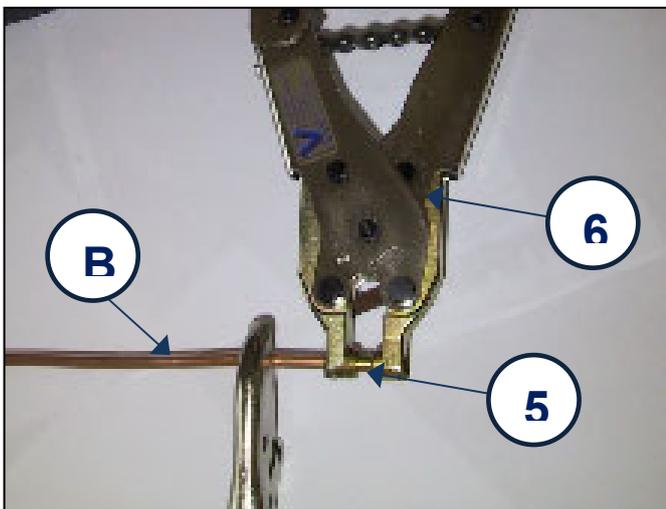
- Put a drop of Lokprep sealant (**4**) on the high pressure pipe (**B**).



- Insert locking joint (5) on the high pressure pipe (B). Rotate the joint (5) for correctly distribute the sealant (4).



- By using the lockring plier (6) fix joint (5) on the copper pipe (B).



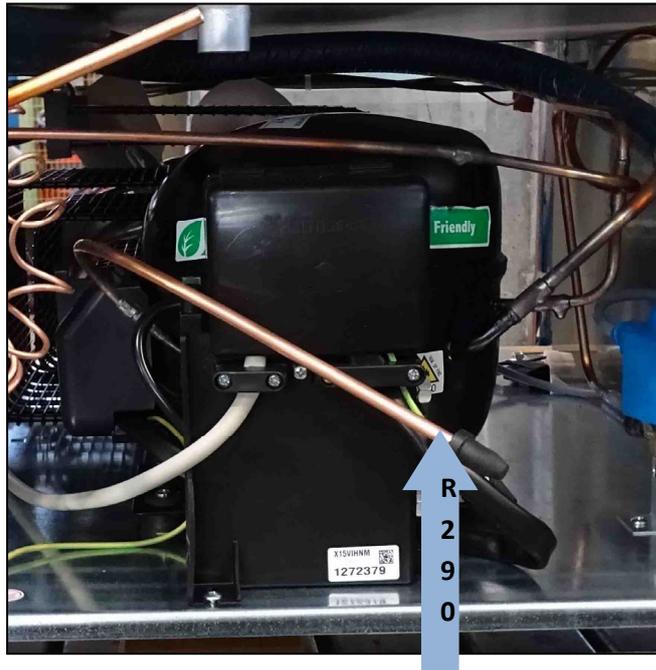
## 5.9 REFRIGERANT GAS CHARGING AND THERMODYNAMIC CIRCUIT CLOSING.

Check the refrigerant charge on the data label inside the cabinet.

Using a balance (7), verify the quantity of refrigerant gas in the gas bottle (8).



Disconnect the vacuum machine from the low pressure pipe (A); connect the gas bottle (8) to the circuit.



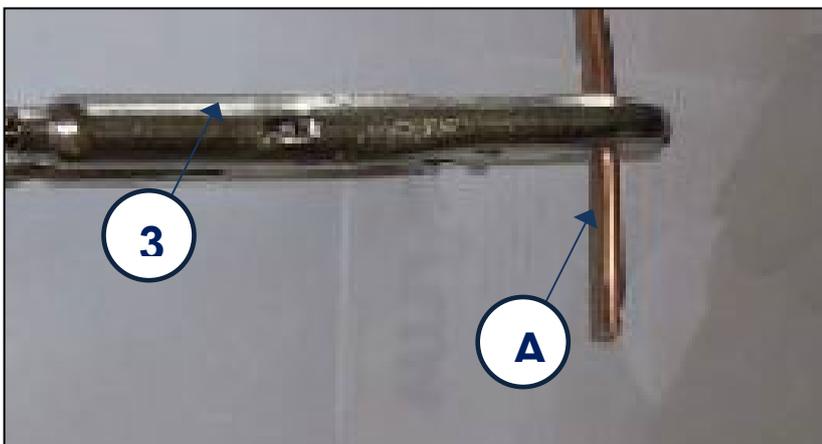
Picture example of compressor

Switch on the refrigerator, in order to insert the refrigerant gas into the circuit.

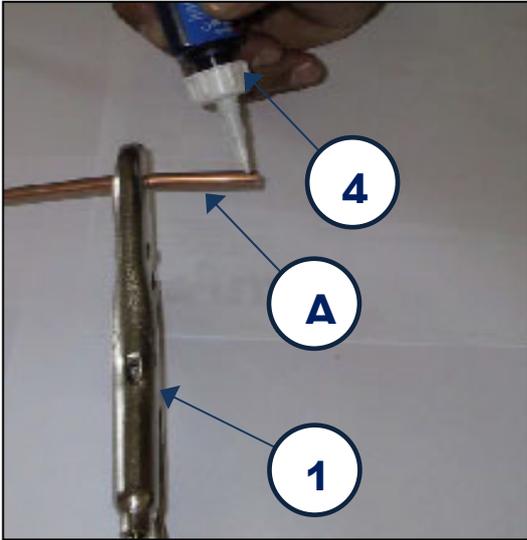
**WARNING!** in order to avoid damages on the thermodynamic system or danger for technical assistant; be sure to have connected the gas bottle to the refrigerator circuit.

The refrigerator must be ON for 5-6 minutes, then disconnect the refrigerator from current.

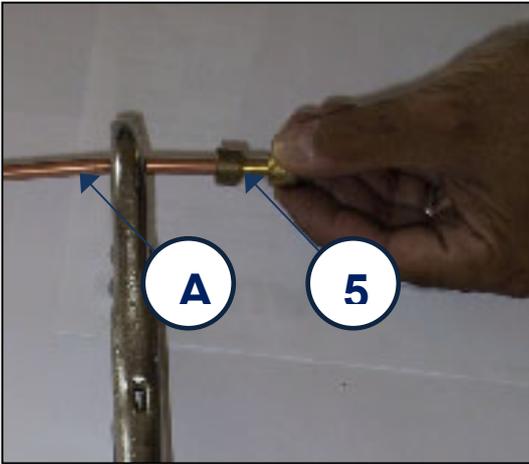
- Take the plier (3) and pinch the low pressure pipe (A), then remove refrigerant junction.



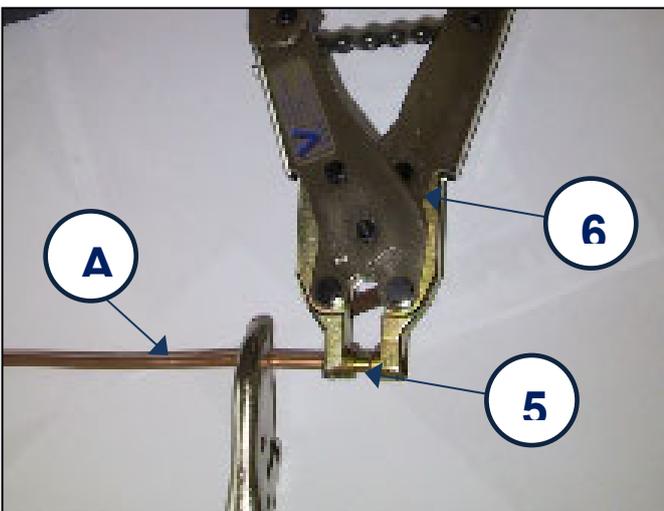
- Put a drop of Lokprep sealant (4) on the low pressure pipe (A).



- Insert locking joint (5) on the low pressure pipe (A). Rotate the joint (5) for correctly distribute the sealant (4).



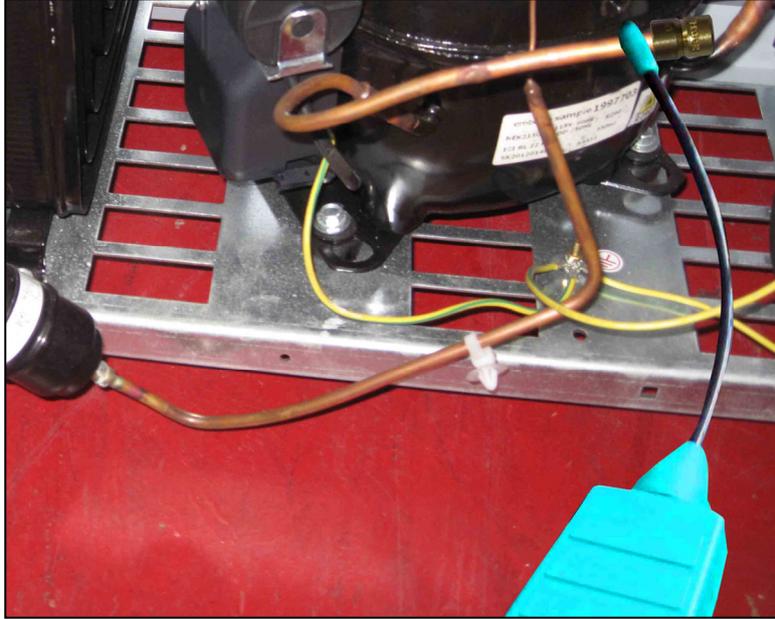
- By using the locking plier (6) fix joint (5) on the copper pipe (A).



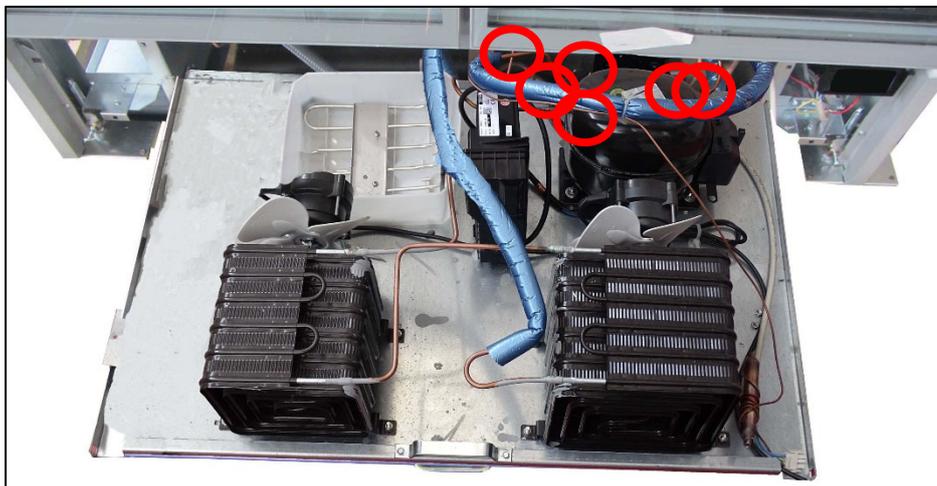
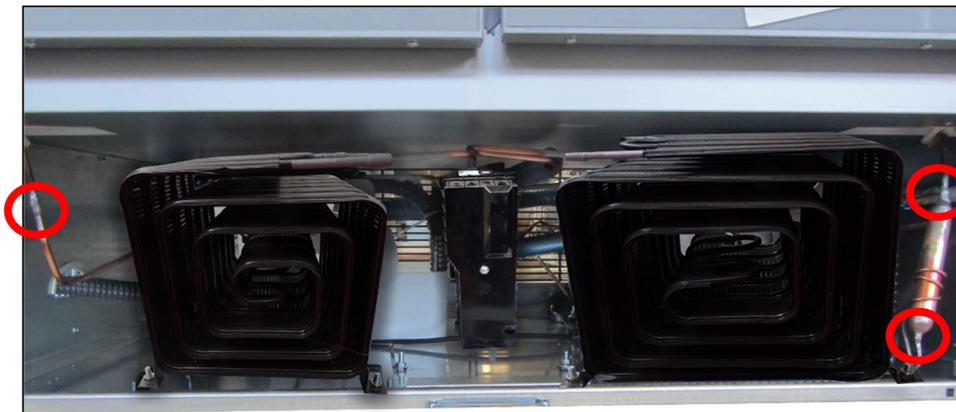
### 5.10 CHECK THE CORRECT CLOSING OF THERMODYNAMIC CIRCUIT

Use the electronic leak detector (9) in order to check if leak of gas are present.

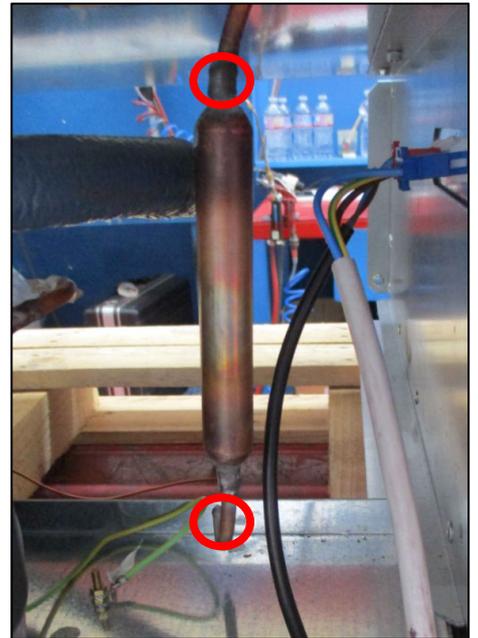
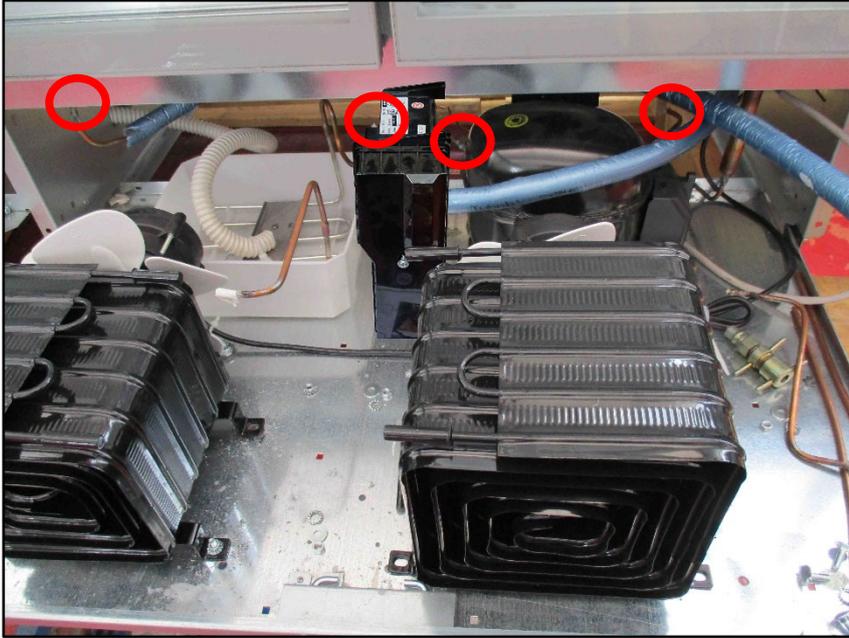
- End of high pressure pipe (lockring joint).
- End of low pressure pipe (lokring joint).
- Suction pipe welding.
- Charge pipe welding.
- Discharge pipe welding.



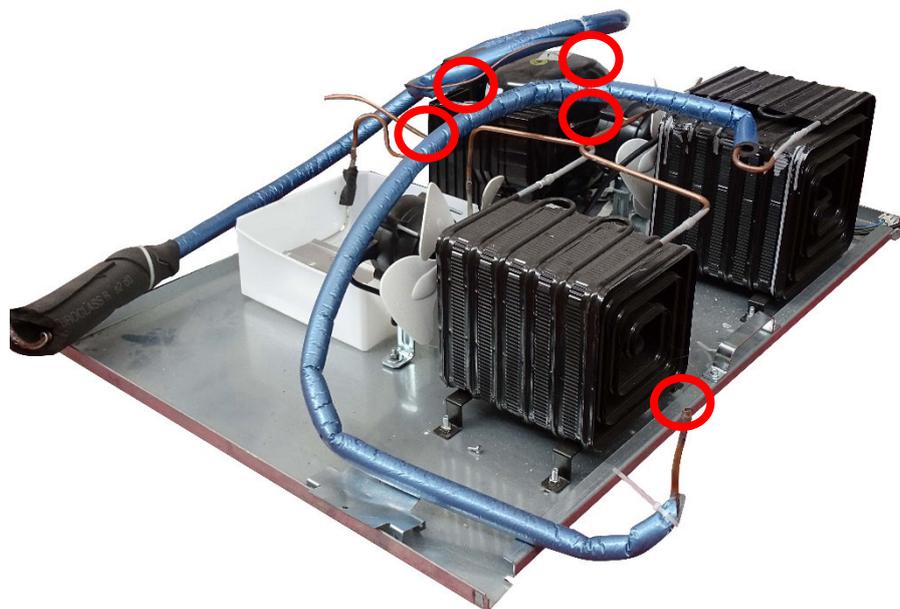
### TANGO 125 KW



### TANGO 188 KW

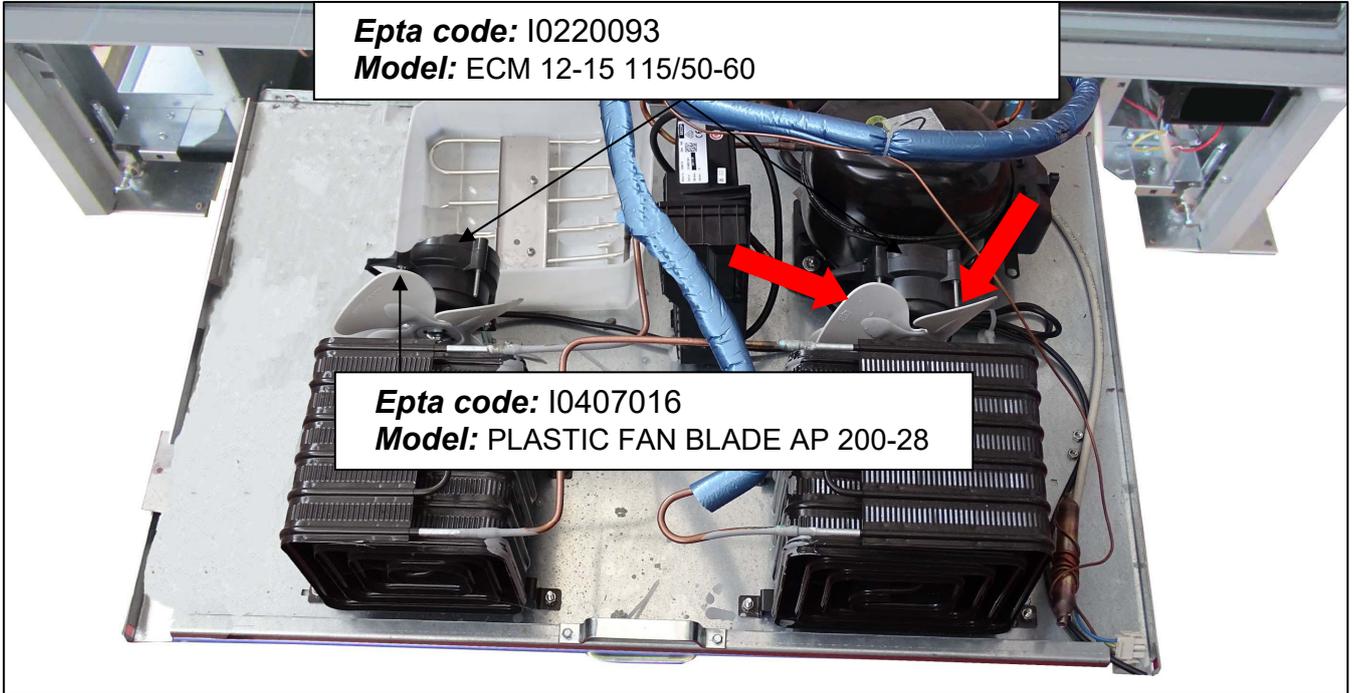


### TANGO 250 KW



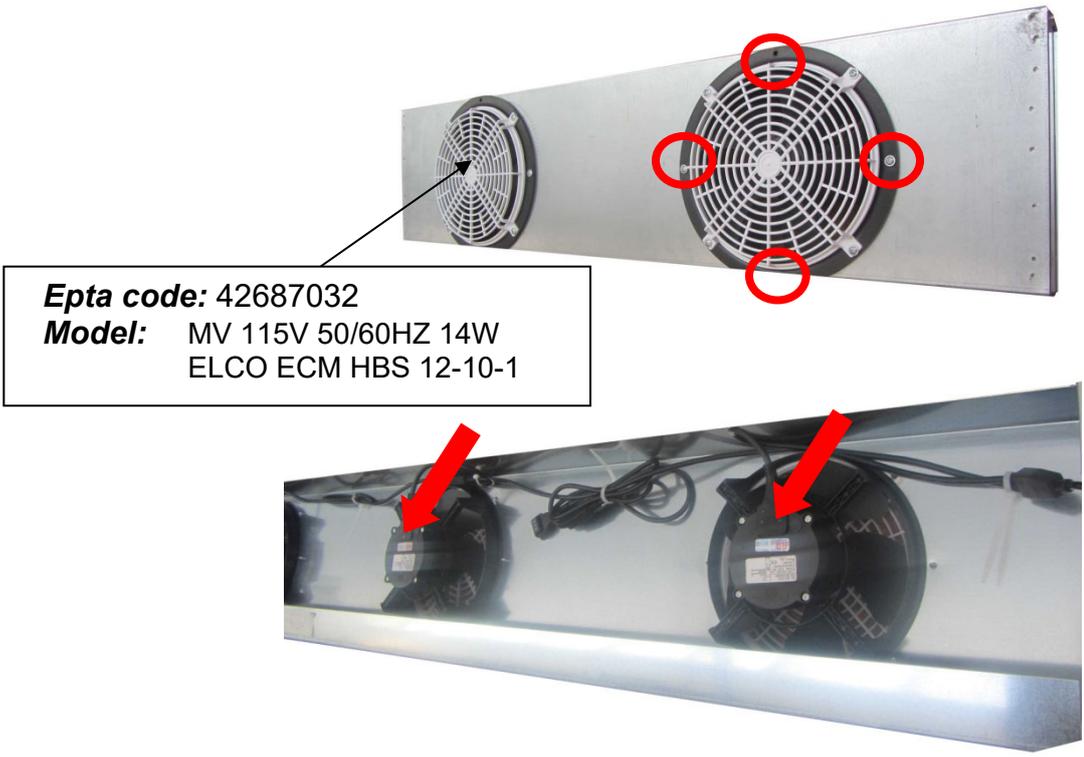
### 5.11 REPLACEMENT OF CONDENSER MOTOR FAN

Disconnect the motor fan by disconnecting the terminal junction shown in figure, releasing wires from cable ties. Remove the hexagonal-head screw, marked in figure; extract the motor fan from compressor compartment; unscrew the hexagonal-head screw fixing the motor fan blade and remove the screws fastening the motor to its metal support.



### 5.12 REPLACEMENT OF EVAPORATOR MOTOR FAN

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

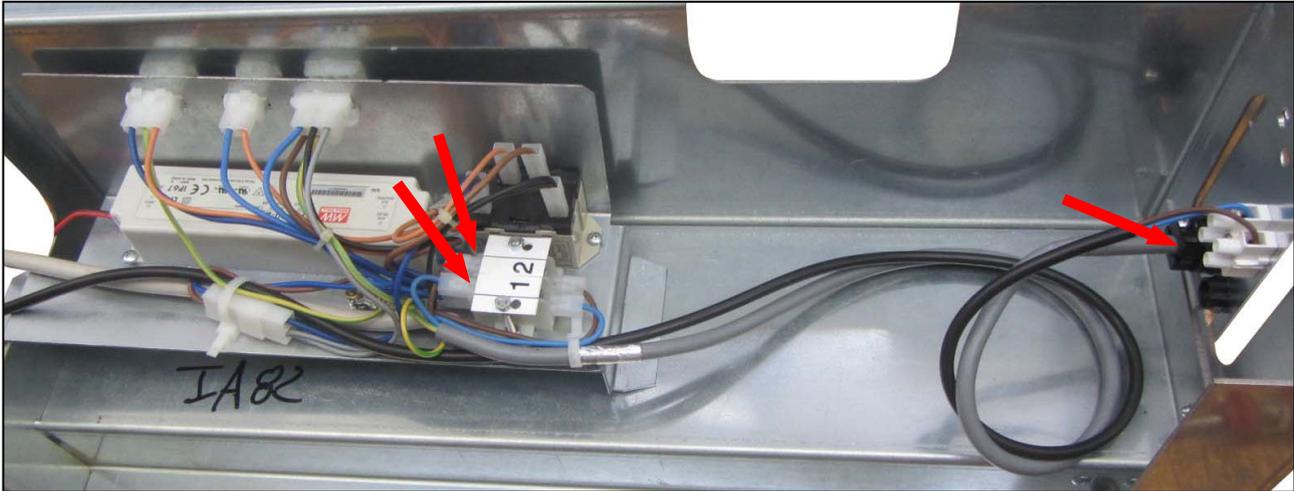


### 5.13 REPLACEMENT OF POWER CORD REPLACING

Disconnect the power cord to the terminal box: blue to "1"; brown to "2".

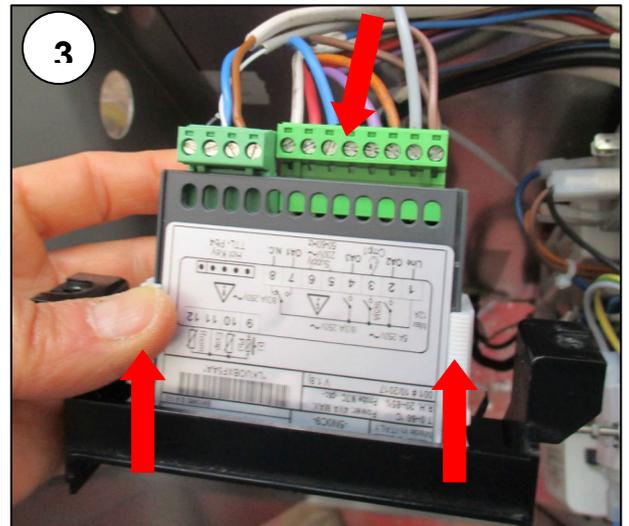
Unscrew the cable clamp screws by mean of a cross-head screwdriver, in order to release the cable itself.

Repeat the above steps backwards to complete the power cord replacements.



### 5.14 REPLACEMENT OF ELECTRONIC CONTROLLER

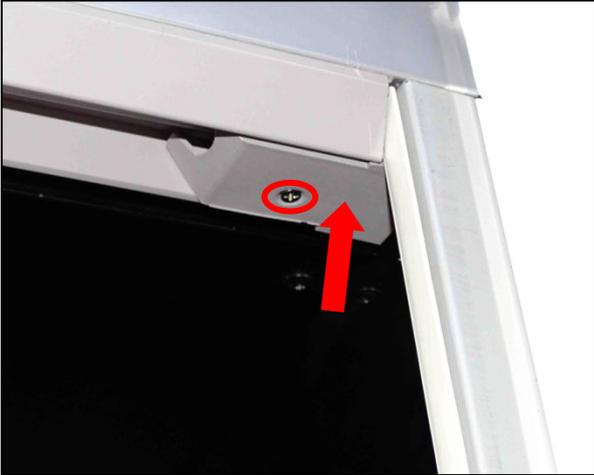
- 1 – Remove the control support panel.
- 2 – Unscrew and remove the electronic control.
- 3 – Remove the lateral clips and disconnect connectors.



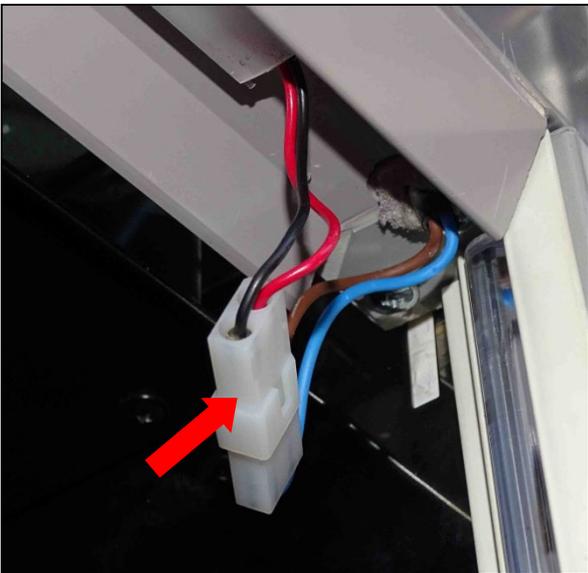
**Epta code Electronic controller:** 74779000  
**Model:** ELECTRONIC CONTROL EVCO EV3224N9RWH C/4RELAY+TTL

## 5.15 REPLACEMENT OF LED BARS

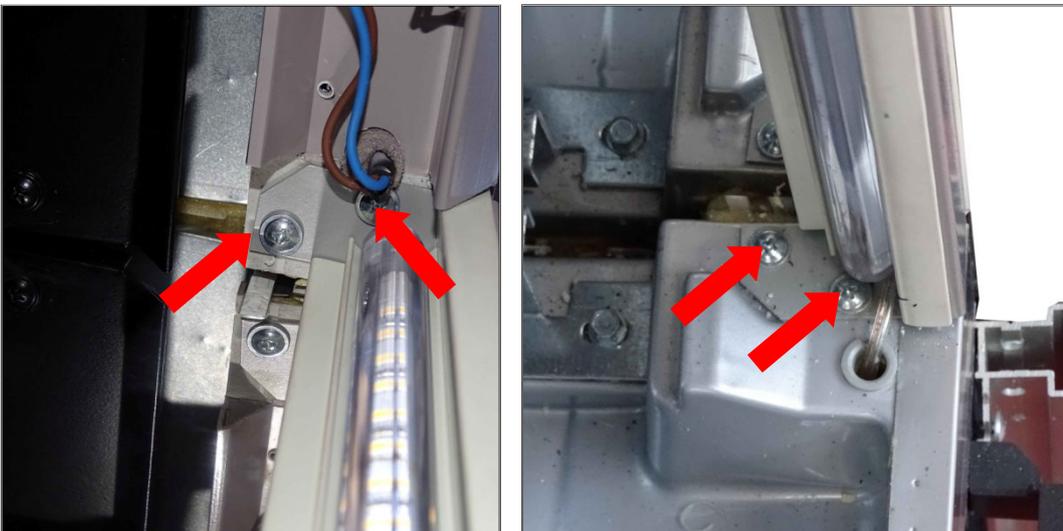
1 – Remove the led cover and wires cover.



2 – Disconnect the led connector.



3 – Unscrew the top and lower screws of led support.



- 4 – Disconnect led bar connector to the motor housing.



- 5 – Remove and replace the led bar.

**ELECTRONIC BALLAST MULTIFRESH PLUS 125-250**

- **Epta code for ballast:** I3305394
- **Model :** EL.BALLAST LPV 60-24

**ELECTRONIC BALLAST MULTIFRESH PLUS 188**

- **Epta code for ballast:** I3305398
- **Model :** EL.BALLAST LPV 100-24

**LED BARS MULTIFRESH PLUS 125**

- **Epta code for LED lamp:** 42838000 – LED LAMP 6.5W 1150X15X6 24VDC
- **Epta code for LED lamp:** 42839000 – LED LAMP 15.5W 1605X15 24VDC
- **Epta code for LED lamp:** 42840000 – LED LAMP 15.5W 1605X15 24VDC-SX

**LED BARS MULTIFRESH PLUS 188**

- **Epta code for LED lamp:** 42838000 – LED LAMP 6.5W 1150X15X6 24VDC
- **Epta code for LED lamp:** 48321000 – LED LAMP 2.5W L=520 24VDC
- **Epta code for LED lamp:** 42839000 – LED LAMP 15.5W 1605X15 24VDC
- **Epta code for LED lamp:** 42840000 – LED LAMP 15.5W 1605X15 24VDC-SX

**LED BARS MULTIFRESH PLUS 125**

- **Epta code for LED lamp:** 42838000 – LED LAMP 6.5W 1150X15X6 24VDC
- **Epta code for LED lamp:** 42839000 – LED LAMP 15.5W 1605X15 24VDC
- **Epta code for LED lamp:** 42840000 – LED LAMP 15.5W 1605X15 24VDC-SX

## 6. MAIN CABINET FUNCTIONS

### 6.1 DISPLAY UNIT AND MAIN PARAMETERS



1. Automatic defrosting button (press for defrosting start)
2. Button to show set temperature
3. Button to decrease temperature
4. Button to increase temperature

### 6.2 USE OF LEDS

SIGNAL	MODE	FUNCTION
	ON	Compressor enabled
	FLASHING	Anti-short cycle delay enabled
	ON	Defrost enabled
	FLASHING.	Drip time in progress
	ON	An allarm is occurring
	ON	Continuous cycle is running
<b>ECO</b>	ON	Energy saving enabled
<b>AUX</b>	ON	Auxiliary relay on
<b>°C/°F</b>	ON	Measurement unit
	FLASHING	Programming phase

**ATTENTION!** Lights are automatically switched off during night-time (10 pm - 6 am).

### 6.3 TANGO KW PARAMETERS

DIXELL Model : XR77CH+RTC - 120V - COD. IARP 77487000									
COPY CARD COD.XXXX Parameter list FOR IA82-1 125 Release 01_20									
COPY CARD COD.XXXX Parameter list FOR IA82-1 188 Release 01_20									
COPY CARD COD.XXXX Parameter list FOR IA82-1 250 Release 01_20									
Date :25/11/2020									
Memo :									
Group	Parameter	Description	COPYCARD	Original	Visibility	Min	Max	Unity	Comments
Probe	ot	Probe P1 calibration	7	0	Pr1	-12	12	°F	
Probe	P2P	Probe P2 presence	Yes	Yes	Pr1				
Probe	oE	Probe P2 calibration	0	0	Pr2	-12	12	°F	
Probe	P3P	Probe P3 presence	no	Yes	Pr1				
Probe	o3	Probe P3 calibration	0	0	Pr2	-12	12	°F	
Probe	P4P	Probe P4 presence	no	Yes	Pr1				
Probe	o4	Probe P4 calibration	0	0	Pr2	-12	12	°F	
Probe	PbC	Probe type selection	ntC	ntC	Pr1				
Regulation	SEt	Set point regulation	38	0		32	45	°F	
Regulation	Hy	Compressor regulation hysteresis	9	10	Pr1	1	25	°F	
Regulation	LS	Set Point min	32	-20	Pr2	-100	-5	°F	
Regulation	US	Set Point max	45	20	Pr2	-5	150	°F	
Regulation	odS	Output delay at start up	0	0	Pr2	0	255	min	
Regulation	AC	Anti-short cycle delay	3	3	Pr1	0	50	min	
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	32	-5	Pr2	-100	150	°F	
Regulation	Con	Compressor ON time with faulty probe	10	60	Pr2	0	255	min	
Regulation	CoF	Compressor OFF time with faulty probe	8	40	Pr2	0	255	min	
Regulation	CF	Temperature measurement unit	°F	°C	Pr2				
Regulation	rES	Resolution (per °C) : decimal , integer	in	in	Pr1				
Regulation	Lod	Local dispaly : default display	P1	P1	Pr2				
Regulation	rED	Display on X-REP	P1	P1					
Regulation	dLy	Display temperature delay	05:00	5	Pr1			min	
Regulation	dtr	P1-P2 percentage for display	99	99	Pr2	1	99		
Defrost	EdF	Defrost Type (rtc-in)	in	rtc	Pr2				
Defrost	tdF	Defrost type : resistance , inversion	EL	EL	Pr1				
Defrost	dFP	Probe selection for defrost termination	P2	P2	Pr2				
Defrost	dSP	Select probe 2nd defrost	nP	nP	Pr2				
Defrost	dtE	Defrost termination temperature	41	10	Pr1	-55	50.0	°F	
Defrost	dtS	Temperature of end 2nd defrost	42	8	Pr2	-55	50.0	°F	
Defrost	ldF	Interval between defrost cycles	4	24	Pr1	0	120	hour	
Defrost	MdF	Maximum length for defrost	100	20	Pr1	0	255	min	
Defrost	MdS	Max duration of 2nd defrost	0	0	Pr2	0	255	min	
Defrost	dSd	Delay in defrost at demanding	0	0	Pr2	0	255	min	
Defrost	dFd	Display during defrost	dEF	dEF	Pr2				
Defrost	dAd	Display delay after defrost	0	30	Pr2	0	255	min	
Defrost	Fdt	Draining time	0	0	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	0	0	Pr1	0	255	min	
Fans	FCt	Differential of temperature for forced activation of fans	50	10	Pr2	0	50	°F	
Fans	FSt	Fan stop temperature	36	2	Pr1	-55	50.0	°F	
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	nP	nP	Pr2				
Ausiliary	ACH	Type action ausiliary regulator	cL	cL	Pr2				
Ausiliary	SAA	Set point ausiliary regulator	0	0	Pr2	-100	150	°F	
Ausiliary	SHy	Differential for ausiliary regulator	2	2	Pr2	1	25	°F	
Ausiliary	ArP	Probe select for ausiliary regulator	nP	nP	Pr2				
Ausiliary	Sdd	Regulator block AUX during defrost	no	no	Pr2				

Alarm	ALP	Select probe for alarm temperature	P1	P1	Pr2				
Alarm	ALC	Alarm config: relative / absolute	Ab	Ab	Pr2				
Alarm	ALU	High temperature alarm	302	10	Pr1	-20	150	°F	
Alarm	ALL	Low temperature alarm	-67	-20	Pr1	-100	10	°F	
Alarm	AFH	Differential for temperature alarm	34	4	Pr2	1	25	°F	
Alarm	ALd	Temperature alarm delay (in normal working mode)	255	60	Pr2	0	255	min	
Alarm	dAo	Exclusion of temperature alarm at power-on	00:00	02:00	Pr2			hour	
Alarm	AP2	Select probe for alarm temperature 2	nP	nP	Pr2				
Alarm	AL2	Low temperature alarm 2	-67	-40	Pr2	-100	150	°F	
Alarm	AU2	High temperature alarm 2	302	110	Pr2	-100	150	°F	
Alarm	AH2	Differential for temperature alarm 2	34	15	Pr2	0	255	°F	
Alarm	Ad2	Temperature alarm 2 delay	255	15	Pr2	0	255	min	
Alarm	Da2	Exclusion of temperature alarm 2 at power-on	00:00	01:30	Pr2			hour	
Alarm	bll	compressor block due to low alarm 2	no	no	Pr2				
Alarm	AC2	compressor block due to high alarm 2	no	no	Pr2				
Alarm	AOP	Alarm output polarity	CL	CL	Pr2				
Alarm	rrd	Restart regulation alarm with open door	Yes	Yes	Pr2				
Configuration	oA1	Configuration output function AUX1	HES	LiG	Pr2				
Configuration	oA2	Configuration output function AUX2	Alr	HES	Pr2				
Configuration	oA3	Configuration output function AUX3	Alr	Alr	Pr2				
Configuration	onF	Configuration function button OFF	nu	nu	Pr2				
Digital input	i1P	Polarity digital input 1	cL	cL	Pr1				
Digital input	i1F	Digital input function 1	dor	dor	Pr1				
Digital input	i2P	Polarity digital input 2	cL	cL	Pr2				
Digital input	i2F	Digital input function 2	dor	dor	Pr2				
Digital input	did	Delay alarm from configurable input	15	15	Pr1	0	255	min	
Digital input	doA	Delay open door alarm	15	15	Pr1	0	255	min	
Digital input	nPS	Num. Digital input Actions for pressure switch alarm	15	15	Pr2	0	15		
Digital input	Odc	Open door control : fans and compressor	no	no	Pr2				
Energy Saving	HES	Increasing of temperature on Energy Saving	0	0	Pr2	-30	30	°C	
	rtC	Display menu			Pr1				
	Hur	current hour			Pr1				
	Min	current minutes			Pr1				
	dAY	current day			Pr1				
	Hd1	First weekly public holiday	nu	nu	Pr1				
	Hd2	SEcond weekly public holiday	nu	nu	Pr1				
	iLE	Energy Saving cycle start time on weekdays	22:00	00:00	Pr1			hour	
	dLE	Energy Saving cycle duration on weekdays	08:00	00:00	Pr1			hour	
	iSE	Energy Saving cycle start time on holidays	22:00	00:00	Pr1			hour	
	dSE	Energy Saving cycle duration on holidays	08:00	00:00	Pr1			hour	
	Ld1	1st weekday defrost start time	nu	nu	Pr1			hour	
	Ld2	2nd weekday defrost start time	nu	nu	Pr1			hour	
	Ld3	3rd weekday defrost start time	nu	nu	Pr1			hour	
	Ld4	4th weekday defrost start time	nu	nu	Pr1			hour	
	Ld5	5th weekday defrost start time	nu	nu	Pr1			hour	
	Ld6	6th weekday defrost start time	nu	nu	Pr1			hour	
	Sd1	1st defrost start time on holiday	nu	nu	Pr1			hour	
	Sd2	2nd defrost start time on holiday	nu	nu	Pr1			hour	
	Sd3	3rd defrost start time on holiday	nu	nu	Pr1			hour	
	Sd4	4th defrost start time on holiday	nu	nu	Pr1			hour	
	Sd5	5th defrost start time on holiday	nu	nu	Pr1			hour	
	Sd6	6th defrost start time on holiday	nu	nu	Pr1			hour	
Other	Adr	Serial address	1	1	Pr2	1	247		
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 map EEPROM	1	1	Pr2	0	65535		

## 6.4 TEMPERATURE SETTING

Each refrigerating appliance is provided with an electronic control for automatic maintenance of the appropriate pre-established temperature inside the tank.

**This temperature adjuster is gauged by the factory and should not be touched by the user.**

Only if the average internal temperature is too cold or not cold you can increment or decrement the temperature:

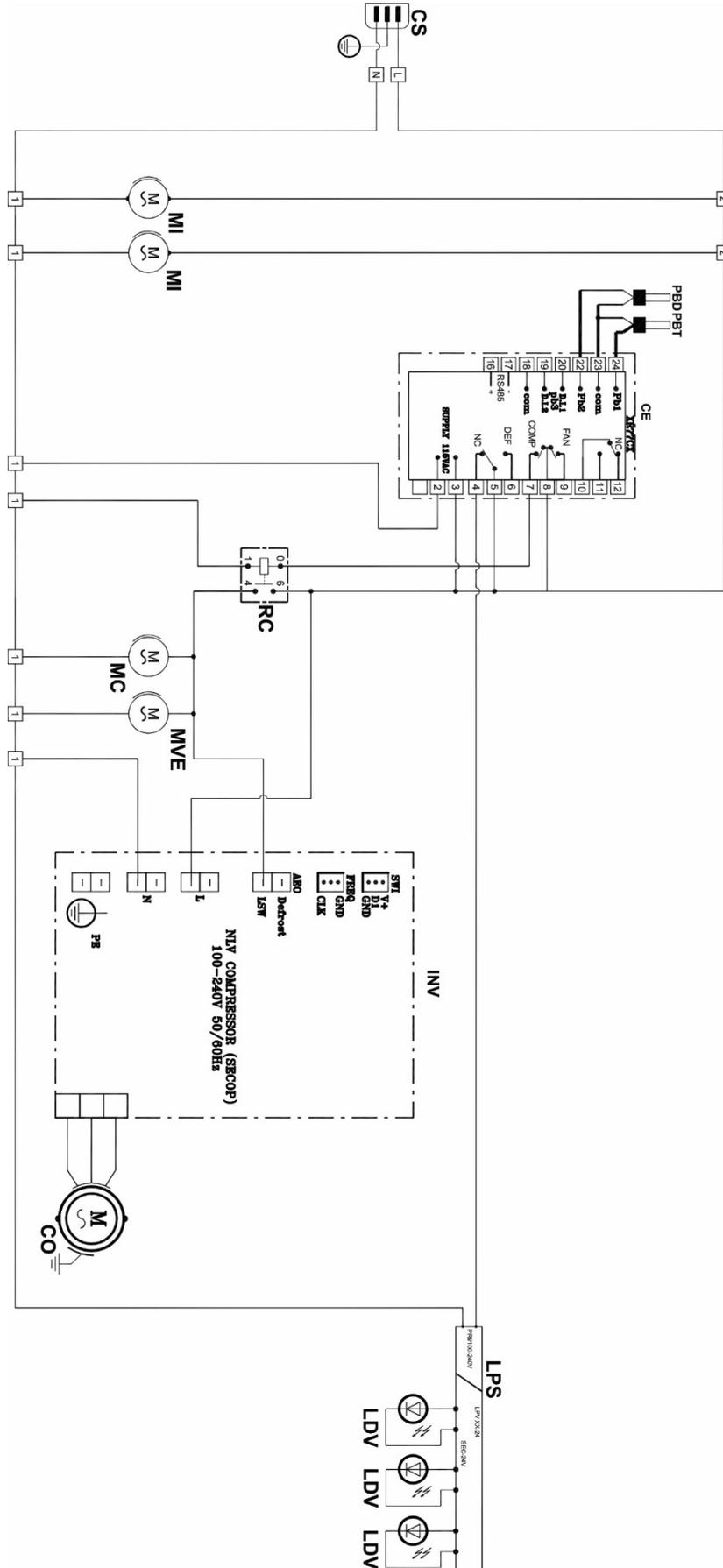
- Press the **(Set) (2 sec.)** key in order to see on display the temperature set point.
- Press the **(▲)** key or the **(▼)** key in order to increment or decrement the temperature set point.
- Press the **(Set)** key in order to store the **new** temperature set point.

## 7. WIRING DIAGRAM

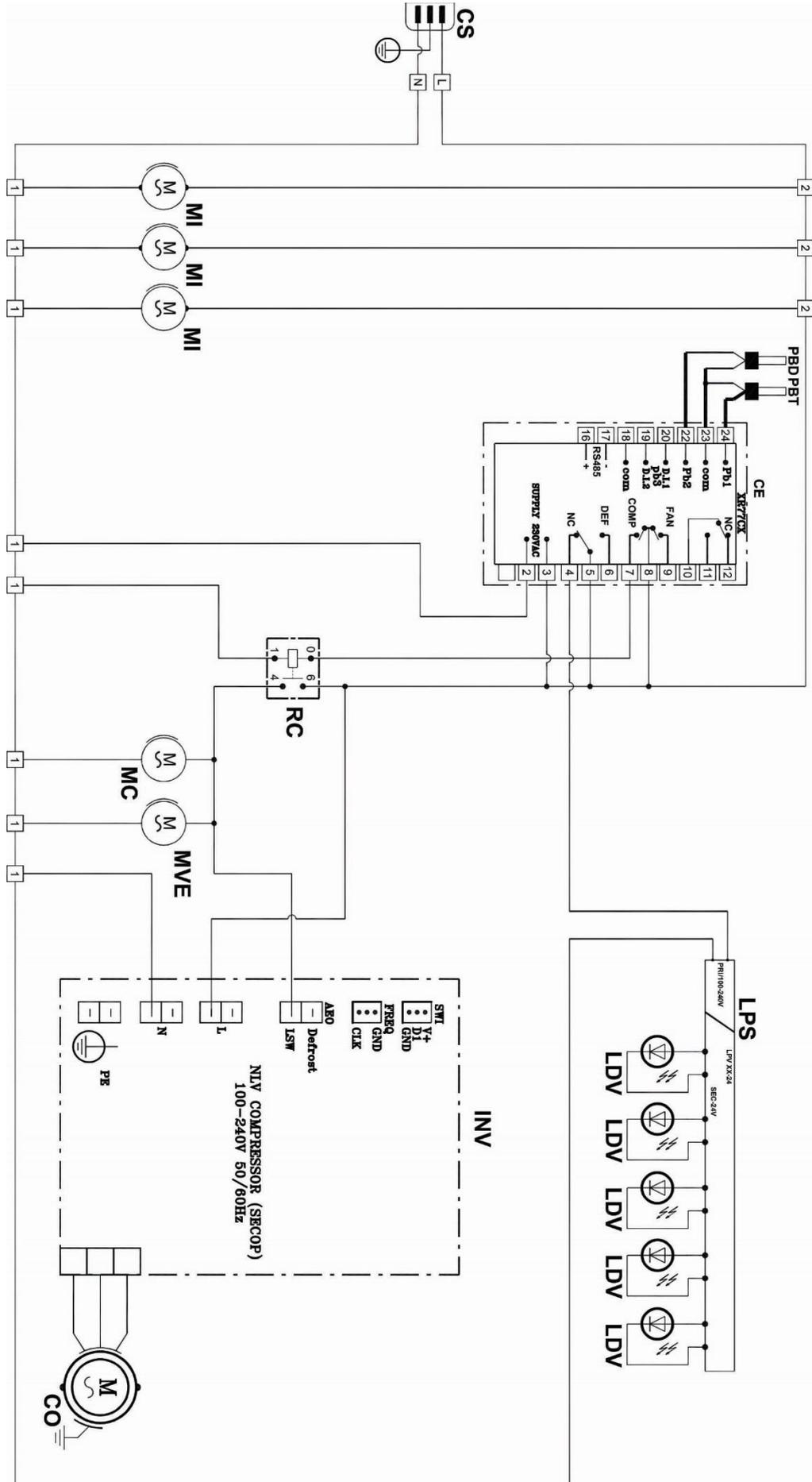
### 7.1 WIRING DIAGRAM LEGEND

REF	DEVICE
CE	ELECTRONIC CONTROL
CO	COMPRESSOR
CS	POWER SUPPLY CORD WITH PLUG
LDV	INNER TANK LAMP LED
LPS	SWITCHING POWER SUPPLY
MC	CONDENSER MOTOR FAN
MI	EVAPORATOR MOTOR FAN
MVE	CONDENSATE TRAY MOTOR FAN
PBD	EVAPORATOR PROBE
PBT	TEMPERATURE PROBE
RC	REPLAY COMPRESSOR
INV	INVERTER

## 7.2 TANGO 125 KW WIRING DIAGRAM



### 7.3 TANGO 188 KW WIRING DIAGRAM



## 7.4 TANGO 250 KW WIRING DIAGRAM

