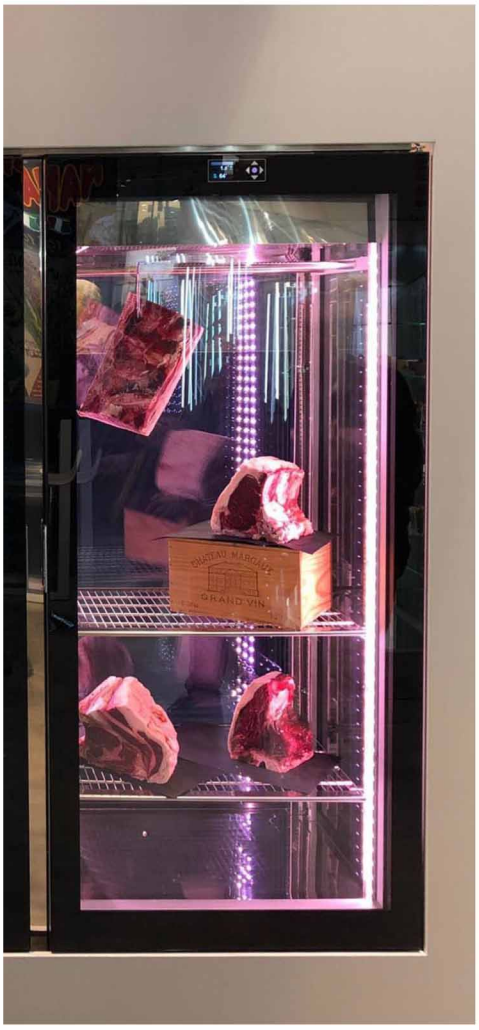
User manual

VISION DRY-AGED MEAT

Pure transparent refrigeration technology



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1. GENERAL INFORMATION

1.1

We recommend that you follow the instructions contained herein to increase the durability of your new refrigerator.

1.2 SERVICE CENTER

(Sales, Assistance, Spare parts and Sales Rep)

RETAILER STAMP

For further assistance regarding use and maintenance of the refrigerator or request for spare parts, please contact your dealer, indicating the identification data stated on the label plates (model, serial number, etc.)

	See Label A at paragraph 4.6

1.3 CERTIFICATIONS

Our refrigerated display cases and air-condensed refrigerator units are manufactured in conformity with ETL for UL and NSF and the relevant UE Directives applicable at the moment these products are released into the market. Since the refrigerator under consideration is not covered by ATTACHMENT IV of Directive 98/37/EEC, it is up to the manufacturer to provide the CE marking self-certification.

1.4 WARRANTY

The new apparatus is covered by WARRANTY.

The Warranty Card is packed with each product and comes with this manual. In case the warranty card is missing, please request it from your supplier, indicating the following data:

- Model and Serial Number
- Purchase date

1.5 PREARRANGEMENTS BORNE BY THE CLIENT

The Client is in charge of carrying out the installation work described in this manual.
Unless different contractual agreements have been specifically made, the Client is usually in charge of :

- Prearranging the premises where the apparatus is to be installed, as well as any building work and or /ducts (if required);
- Installing a power supply system in conformity with the regulations in force in the Country where the apparatus is being used
- Detergents for cleaning the refrigerator

1.6 STRUCTURE OF THE MANUAL

The Client must carefully read the information contained in this Manual, in that proper prearrangements and correct installation and use of the refrigerator are the basis of a profitable Client - Manufacturer relationship.

1.6.1 SCOPE AND CONTENT

The purpose of this Manual is to provide all the necessary information to enable the client to use and manage the apparatus in the most safe and autonomous manner possible. This manual contains exhaustive information related to technical aspects, such as functioning, shut–down and maintenance, as well as spare parts and safety issues.

Before performing any operation on the apparatus, the operators and qualified technicians must carefully read the instructions contained in this user and maintenance manual.

Please refer to your dealer to clarify any doubts you may have with regards to the proper interpretation of the instructions.

1.6.2 INTENDED READERS

This manual is intended for use by dealers, users and authorized maintenance staff.

End users are strictly forbidden from performing any operations that are exclusively assigned to maintenance staff or qualified technicians. The manufacturer shall not be held liable for any damage due to non-compliance with the foregoing restriction.

1.6.3 CONSERVATION OF THE MANUAL

1.6.4 SYMBOLS USED

SYMBOL	MEANING	NOTE:
 **A…**	WARNING	Indicates a warning or a note regarding key functions or useful information. Pay special **attention** to blocks of text marked with this symbol.
 **C…**	CONSULTATION	Consult the instruction manual before performing a specific operation.

2. DESCRIPTION AND FUNCTIONING

2.1 DESCRIPTION

The display cases are fitted with air - condensed refrigerator units composed of the following parts (as regards the electrical system):

- Condenser unit (outside of the cell)
- Evaporator unit (inside of the cell)
- Control and command panel located at the top part of the door (see attachment 13.2.3).
- Automatic defrost
- Condensation achieved by air-flow

2.2 FUNCTIONING

The refrigerated display case is fitted with an airtight refrigerator compressor, fed by a single-phase power line. The refrigerant liquid used is type R404A.

Refrigeration cycle working principle

A sequence of thermodynamic processes causing a change in the status of a given substance (for example, liquid refrigerant) is known as the refrigeration cycle. When the refrigerant enters the evaporator, it is transformed into a gas (evaporation) by means of an endothermic process where heat is required and absorbed – when needed - from the air with which the evaporator is in contact. As a result, when the refrigerant exits the evaporator, the vapours are absorbed by a compressor and sent to the condenser. If the latter, along with the heat that the gaseous refrigerant accumulates during the evaporation process (evaporation enthalpy) also absorbs the calorific equivalent released during the compression process, the refrigerant returns to a liquid state. Given that liquefaction is an endothermic process, heat is produced and then dissipated by air–flow. After exiting the condenser, the liquid refrigerant flows through an expansion element and then returns to the evaporator, thus completing the refrigeration cycle.

3. PREARRANGEMENTS

3.1 LIGHTING

The refrigerator must be located in a well-lit area, according to the regulations currently in force in the country where it is being installed. The lighting system must guarantee optimal visibility from all directions, with no hazardous reflections, and also enable clear visibility and readability of the control panel icons.

3.2 VIBRATIONS

If the apparatus is operated in accordance with the instructions, vibrations are unlikely to cause the rising of hazardous situations.

3.3 NOISE EMISSIONS

The refrigeration unit is designed and manufactured in such a way as to reduce noise at source (see attachment 13.2.2).

3.3.1 SUPPLIES UPON REQUEST

It is understood that modifications and/or addition of components are subject to manufacturer's approval and must be made by the manufacturer himself.

 A...	**WARNING**	Operators/and or maintenance staff are expressly forbidden from making any odification or alteration to the refrigerator due to the safety risks involved. The manufacturer shall not be held responsible for any unauthorized modification and consequences arising therefrom.

3.4 ELECTROMAGNETIC ENVIRONMENT

The refrigerator is designed to operate correctly within an electromagnetic environment of industrial type, as it falls within the Electromagnetic Emissions & Immunity limits provided for by the Harmonised standards given below:

- EN 50081-2 Electromagnetic compatibility - Generic emission standard - Part 2 -Industrial environment (1993).
- EN 50082-2 Electromagnetic compatibility - Generic immunity standard -Part 2 - Industrial environment (1995).

4. SAFETY

4.1 GENERAL WARNINGS

The operator must carefully read the information contained in this manual, giving special attention to the safety precautions listed in this chapter.

The User must also follow the safety guidelines listed hereunder:

- *Always keep the display case clean and tidy;*
- *Do not remove or modify the label plates affixed by the manufacturer;*
- *Do not remove or ignore safety devices;*
- *Do not touch the apparatus when hands or feet are wet or damp;*
- *Do not touch the apparatus when barefoot;*
- *Do not introduce screw drivers or any other object in between guards or parts in motion;*
- *Do not disconnect the apparatus by pulling the supply cable out from the outlet;*
- ***Before performing any cleaning and /or maintenance work, disconnect the apparatus from the power line. To do this, turn off the master switch and disconnect the plug.***

4.2 RECOMMENDED USE

The refrigerated display case is designed and intended for use by Communities, Restaurants, Hotels, etc.

4.3 CONTRAINDICATIONS AND PRECAUTIONS FOR USE

The refrigerated display case must not be used:

- for any purpose other than for the purposes specifically indicated under paragraph 4.2.
- in explosive or harsh environments or in the presence of high concentration of dust particles or oily substances suspended in the air;
- in potentially fire-hazardous environments;
- if exposed to weather elements;
- with adaptors, multiple - outlet sockets and/or electric extension cables;

4.4 HAZARDOUS AREAS

The refrigerated display case is fitted with all the necessary safety devices and can be used in potentially hazardous atmospheres. Before carrying out any maintenance and /or repair work, **remove the guards after disconnecting all power sources.**

To this end :

- Deactivate the electrical system by turning off the master switch and disconnecting the power supply cable from the power line.
- **It is absolutely mandatory to put the guards back into place upon completion of the maintenance and/or repair work.**

4.5 SHUT - DOWN PROCEDURE

To shut down the refrigerator, proceed as follows:

- Turn off the master switch.

- Unplug the power supply cable.

4.6 LABEL PLATES

Modello/Model **: 6314-L** Matricola/Series N. **: 00A00A0000** Gas **: R404a - gr 490 -** Cap. **: 450 l** Volt **: 220** - Hz **: 50** - Watt: **550** - Classe: **N**

5. SHIPPING AND HANDLING

PLEASE READ THE INFORMATION CONTAINED IN THIS MANUAL VERY CAREFULLY AS IT PROVIDES IMPORTANT GUIDELINES FOR SAFE INSTALLATION, USE AND MAINTENANCE OF THE APPARATUS

BE SURE TO STORE THIS MANUAL IN A SAFE PLACE FOR ANY FUTURE REFERENCE.

5.1 SHIPPING AND HANDLING

The refrigerated display case must be kept in an upright position during shipping and handling operations, in accordance with the instructions (if present) printed on the package.

Shipping must be carried out by professional and qualified staff only.

The display case must be handled in such a way as to avoid unnecessary damage to any of its parts. Depending on the transport method, the display case must be protected from accidental bumping and stress.

Before shipping, the refrigerator may either be packaged or not, according to the means of transportation used.
The refrigerator is packaged in cardboard boxes.

The refrigerator must be handled with forklift truck or a trans-pallet fitted with adequate forks (length should be equal to at least 2/3 of that of the refrigerator).

	Any damage occurring to the display case during shipping or handling is not covered by WARRANTY. Repairs or replacement of damaged parts are borne by the Client.

5.2 STORAGE

If a long period of inactivity is foreseen, the refrigerator must be stored with the precautions related to the storage site and storage period.

In this respect:

- Store the display case in a secluded place;
- Make sure it is protected against accidental bumping and stress;
- Keep it protected from moisture and extreme thermal excursions;
- Make sure it does not come into contact with toxic substances.

5.3 CHECKS AND INSPECTIONS

Before putting the refrigerator into service, a series of checks and inspections must be carried out to prevent errors or accidents occurring during start-up.

- Make sure no damage has occurred to the refrigerator during installation.
- Carefully check the integrity of electric cables and tubing.
- Check accuracy of all connections to external power sources.
- Make sure all movable parts are able to rotate and move freely.

6. INSTALLATION

To achieve optimal functionality of your refrigerated display case, it should be placed in a well-ventilated spot, as far as possible from heat sources and direct sunlight.

6.1 COMMISSIONING

- Carefully remove the refrigerator from the cardboard packaging (Fig. 1);
- Remove the transparent protections and cardboard angles (provided by the manufacturer to reduce shipping damage to a minimum) (Fig.2);
- Remove the glass shelves placed on top of the refrigerator (Fig. 3);
- Use a forklift to remove the wooden base (Fig. 4);
- Place the refrigerator on a flat surface.

Fig.1

Fig.2

Fig.3

Fig.4

Before putting the refrigerator into operation, wipe down all its parts with a clean, soft cloth, or spray it with an all-purpose cleaner. Use very little water as it contains suspended mineral matter, that needs to be wiped off almost immediately as it may leave traces that are difficult to remove.

- Wash the reservoir and all interior parts with an anti-bacterial detergent (easy to find at any store);
- Wash away the detergent with a soft sponge soaked with water and dry with a soft, clean cloth.

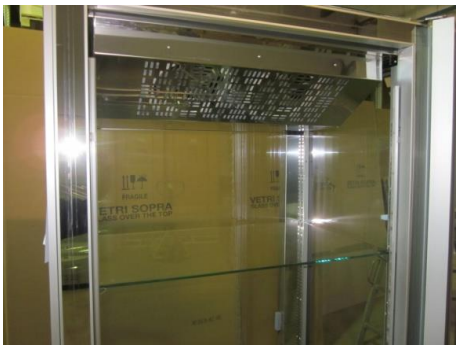
Do not use abrasive cleaners and/or powders that may dull the surface finishes.

When carrying out the operations above, be careful not to use too much water as it may damage electric parts; a sponge soaked in water will be enough.

- installing the glass shelve supports (Fig.4) on the lateral brackets.
- Position the glass shelve on the side brackets (Fig.6).

Fig.4

Fig.6



6.2 PREARRANGEMENTS

- Make sure the cable sections and the plug are suitable for the power absorbed by the apparatus.
  IT IS FORBIDDEN TO USE CABLE EXTENSIONS, ADAPTORS AND MULTIPLE - OUTLET SOCKETS
- Be careful not to install the refrigerator near to heat sources, such as ovens, radiators, direct sunlight, etc.
- Leave at least a 75 mm space (3 inches) between back of cabinet and wall (if this is the case), to prevent formation of condensation.
- Keep the engine compartment clear of any obstacle that may impede or limit air-flow through the condensing unit located in the refrigerator front lower part.
- Make sure the area where the refrigerator is installed is adequately ventilated to guarantee proper cooling of the condenser and compressor unit.
- To ensure effective performance and operation of the refrigerator, make sure the temperature of the area where it is installed will not exceed 30° C (86 F).

Failure to comply with the foregoing conditions may be detrimental to the refrigerator's overall performance, and cause premature wear and tear and abnormally high power usage.

	Also see the information under paragraph 1.5

6.3 CONNECTIONS

To avoid any kind of problem during start up, follow the procedures described below.

6.3.1 ELECTRICAL CONNECTIONS

The Client is in charge of making the necessary electrical connections. Connections to the power line must be made in compliance with the regulations in force in the country where the refrigerator is being installed.

- Make sure the power supply voltage corresponds exactly to the indications stated on the label plate affixed to the refrigerator (see Label Plate A).
- Make sure the socket is in conformity with the relevant regulations in force.
- Carefully check for any bare wires.

GROUNDING OF THE REFRIGERATOR IS A MANDATORY SAFETY REQUIRMENT (see Label Plate C).

In case multiple devices need to be aligned, each one must be powered separately.

In order to protect the refrigerator's electrical system from power overload or short-circuit, an overload switch with adequate breaking power must be installed upstream of the refrigerator socket (see Label Plate D).

7. FUNCTIONING

7.1 OPERATORS

Staff in charge of operating and installing the refrigerator must have (or have acquired through appropriate schooling and training course) the qualifications listed below and must also be acquainted with this manual and all safety related information contained therein:

- General and technical culture at sufficient level to understand the contents of this manual.
- Knowledge of the most important standards related to hygiene in the workplace, accident - prevention and technology.

7.2 PUTTING INTO OPERATION

In case the refrigerator was shipped in a horizontal position, leave it upright for 2 hours or so before putting it into operation.

7.3 START UP AND CONTROL PANEL

Tools needed:

- Screwdriver (Philips Head)

- Use the screwdriver to remove the 4 screws located on the rear panel (Fig. 7).
- Run the power supply cable underneath the refrigerator and close the rear panel again (8).
- Connect the plug to the relevant socket.

Fig.7

7.3.1 CONTROL PANEL FUNCTIONS

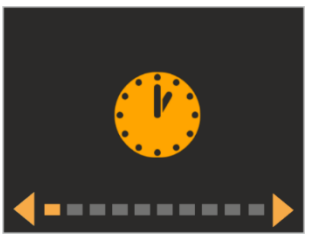
- A self-test on the touch instrumentation integrated in the refrigerator door will automatically run as soon as the plug is inserted. Once the test is completed, the the cenrtal red button shall remain lit, and from this point on, the refrigerated display case can be switched on. (Fig. 9).

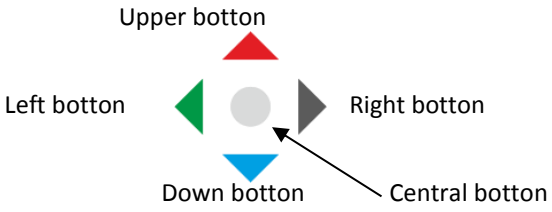
Fig.9

- Press the left botton to shitch on the light. Light

- To turn on the display refrigerated cabinet hold the center red for a few seconds.

- If the internal battery it will be discharge, clock icon appears, to adjust the date and time follow these instructions:

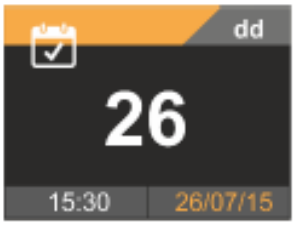




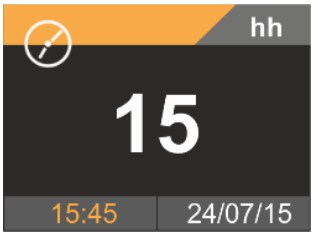
1. Press the central botton .

2. Press the upper botton to increase the value , and down botton to decrease, press the right botton to move to the month.

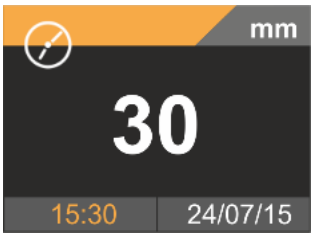
3. Press the upper botton to increase the value , the down botton to decrease, press the right botton to move to the day.



4. Press the upper botton to increase the value , the down botton to decrease, press the right botton to move to the hour.

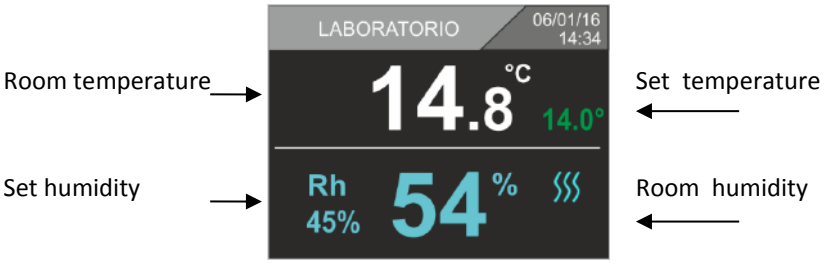


5. Press the upper botton to increase the value , the down botton to decrease, press the right botton to move to the minutes.



6. Press for four second the central botton until conferm the values.

KEYBOARD

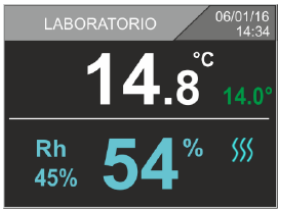


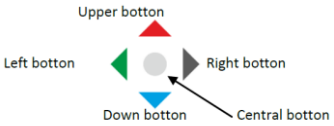
AZIONI	ICONA
Freddo	
Sbrinamento	
Umidificazione	
Deumidificazione	

- **7.4 TEMPERATURE AND HUMIDITY ADJUSTAMENT**

<u>To set the temperature, proceed as follows :</u>

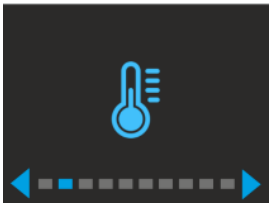
- Press the central button until appared the Home Page.





Home page

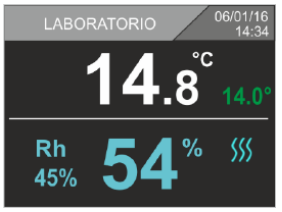
- Press two time the botton right until appared the temperature icon.

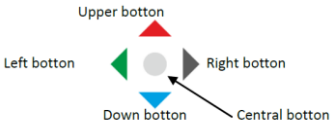


- Press the central botton, the set point temperature appared, adjust the temperature with the button UPPER AND DOWN , press the central botton until conferm the value.

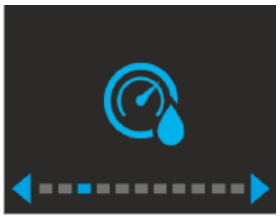
To set the humidity, proceed as follows:

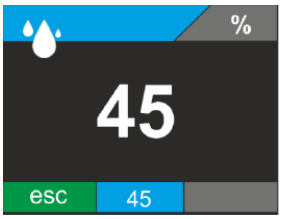
- Press the central button until appared the Home Page.





- Press three time thr botton right until appared thr humidity icon.





- Press the central botton, the set point humidity appared, adjust the humidity with the Button Upper and Down, press the central botton until conferm the value.

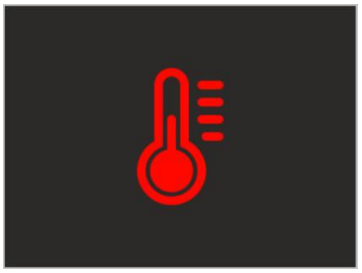
SWITCH OFF REFRIGERATED CABINET

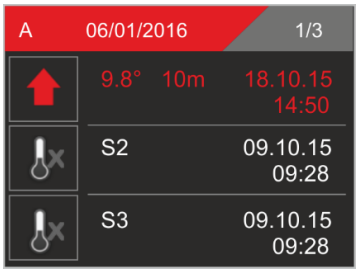
Press the central botton the home page appared, press one time the right botton the OFF icon appared , press the central botton until the refrigerated cabinet switch off.

7.4.3 ALLARM

- When there is temperature alarm, the alarm icon appared and the central botton flasing .

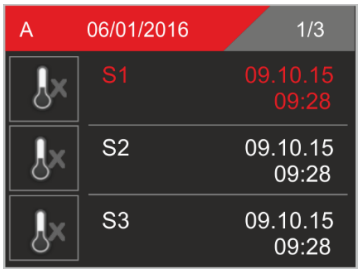
  Press the central botton and the alarm list appared.





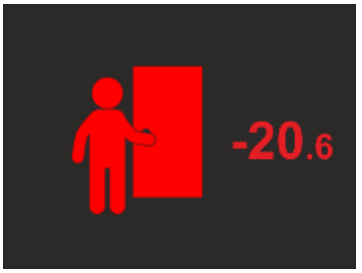
- If there is a failure the failure icon appared and the central botton flashing. Press the

  Central botton the the failure list appared.



- When alarm ends ,red envelope appared, pressing the central botton to check the allarm type and cancel the red envelope.

- Open door :



- ***7.5.1 ALLARM LIST***

BATTERIA
GUASTA

GUASTO
SONDA

TIME-OUT
DEFROST

ALTA
PRESSIONE

ALTA
TEMPERATURA

ALTA TEMP
PORTA APERTA

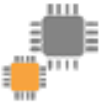
ALTA TEMP
GUASTO RETE

BASSA
TEMPERATURA

ALTA
CONDENSAZIONE

BASSA
EVAPORAZIONE

GUASTO
SWITCH-PORTA



ASSENZA
COM LOGICHE

GUASTO
RETE

GUASTO
UNITA RIDONDATA

ALTA TEMP
SCHEDA

MICROSD
GUASTA O ASSENTE

GUASTO
CARICHI

GUASTO
RELE' U1

GUASTO
RELE' U2

GUASTO
RELE' Ux

7.6 STORAGE OF FOOD ITEMS

To achieve the best performance from your refrigerator, please follow the advice below;

- Do not introduce hot foods or uncovered liquids into the refrigerator;
- Provide additional protection/packaging to foods, in particular those that contain strong aromas or cream;
- Do not pack the overpack the refrigerator as this can stop cool air from circulating freely
- Open the refrigerator door as little as possible and do not leave open for too long. After closing the door, wait a few seconds before reopening it.

7.6 PRESERVATION OF FOOD ITEMS

One of the major causes of degradation of food and organic substances in general is caused by the multiplication of bacteria that are found inside the cells of food items. Such bacterial proliferation may be delayed considerably by lowering the temperature of the food. As a matter of fact, food items - according to their organoleptic properties - require specific temperatures and environmental conditions for optimal preservation.

To achieve the best performance and efficiency from your newly-purchased refrigerator, we recommend that you pay special attention to:

- The freezing point
- Characteristics and data related to the preservation of certain types of frozen products.

8. ORDINARY AND SCHEDULED MAINTENANCE

The information contained in this chapter are destined for both the End Users (non-specialised staff) and staff in charge of Ordinary Maintenance.

8.1 SAFETY STANDARD REGULATIONS

e performing any kind of maintenance work, shut down the refrigerator and disconnect the plug from the outlet.

8.1.1 PROHIBITION AGAINST REMOVAL OF SAFETY DEVICES

It is strictly forbidden to remove the guards for carrying out ordinary maintenance works

T nufacturer shall not be held liable for any accident due to non-fulfilment of the foregoing requirement.

8.1.2 GUIDELINES FOR FIRE-FIGHTING EMERGENCY RESPONSE

- Unplug the refrigerator or turn off the power supply master switch;
- Do not use water jets;
- Use dry powder or foam extinguishers.

8.1.3 CLEANING OF INTERNAL PARTS

In this respect, guidelines are provided below:

- Cleaning products: water or neutral, non-abrasive detergents (DO NOT USE SOLVENTS);
- Cleaning methods: wash with soft cloth or sponge;
- Cleaning should be performed on a weekly schedule.

8.1.4 CLEANING OF THE CONDENSER

Tools needed:

- Screwdriver (Philips Head)

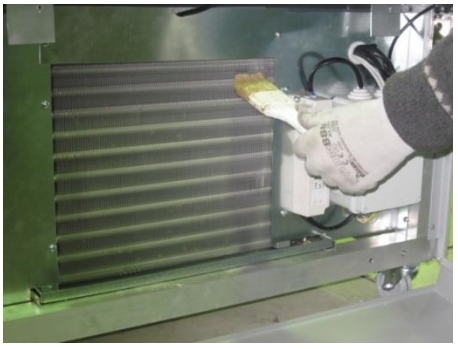
A clogged condenser may compromise the overall performance of the condenser unit, and for this reason, it should be cleaned on a weekly basis. Proceed as described below:

- Shut down and unplug the refrigerator
- Open the refrigerator door and use the screwdriver to remove the two screws from the front grille (Fig. 10).
- Lower the front grille and, with the aid of jet of air (Fig. 11) or a dry paintbrush or a brush with rigid bristles, remove dust or lint from the flaps in a vertical movement (Fig. 12).
- In case of oily sediments, use a paintbrush soaked in ethyl alcohol or any other similar substance. Once the operation is completed, close the front grille and restart the refrigerator.

Fig. 10

Fig. 11

Fig. 12



8.1.5 PERIODICAL CHECKS AND INSPECTIONS

The integrity of the electric cables and appliances should be checked on a periodical basis.

9. SPECIAL MAINTENANCE AND REPAIRS

Extraordinary maintenance and repair works must be carried out exclusively by specialized staff and only prior to manufacturer's authorization. We shall not be held liable for any damage resulting from improper interventions carried out by the user or unauthorized staff, or from use of non original spare parts.

10. TROUBLESHOOTING

The table below describes the most common faults, possible causes and troubleshooting suggestions.

FAILURE DESCRIPTION	POSSIBLE CAUSE	SOLUTION
The apparatus fails to turn on	Master switch is set to" OFF" Voltage absent Other causes	Master switch is set to" ON" Check plug, outlet, fuses, power line Contact technical support for assistance
Refrigerator unit fails to start up	Temperature set point reached Failure of control panel Other causes	Set new temperature value Contact technical support Contact technical support
Refrigeration unit runs continuously but fails to reach temperature set point	Excessively warm room Clogged condenser No air vent present on the upper part of the display case Display case exposed to direct sunlight Insufficient refrigerant	Add more ventilation to the room Clean the condenser Move display case to another spot Move display case to another spot Contact technical support
Block of ice on evaporator coil	Refrigerator door left open inadvertently Failure of temperature probe Failure of control panel Failure of electrical resistance of water	Shut down apparatus for 12 hours and then restart Contact technical support Contact technical support Contact technical support
Display case makes too much noise	Extraneous parts clashing into each other Loose screws and bolts Other causes	Check tubing and fan blades to make sure they are not in direct contact with external parts Tighten bolts down Contact technical support
Alarms	See attachment 13.2.7	See attachment 13.2.7
Error messages	See attachment 13.2.1	See attachment 13.2.1

TO ENSURE THE EFFICIENT OPERATION OF THE REFRIGERATOR, IT IS IMPORTANT TO FOLLOW THE MANUFACTURER'S INSTRUCTIONS. ALSO, PERIODIC MAINTENANCE SHOULD BE CARRIED OUT BY QUALIFIED STAFF ONLY.

(PERIODICAL STANDARDS REGARDING PREVENTION OF WORK-RELATED INJURIES WHEN INSTALLING AND WIRING APPARATUSES).

COMPLIANCE WITH THE CURRENT LAW PROVISIONS ON PREVENTION OF WORK-RELATED INJURIES IS MANDATORY.

11. SPARE PARTS

11.1 SUPPLY OF ORIGINAL SPARE PARTS

Any replacement part can be purchased at our authorized centres. When making your request, the following information must be provided:

- . Model and Serial N° (See label plate A);
- . Component identification number (see attachment 13.2.3)

Any malfunction due to use of non-original spare parts will not be recognized by our technicians and will cause the warranty to be null.

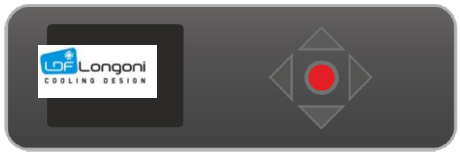
12. DISMANTLING

The gas present in the system must be removed by authorized staff only. As regards the metal body, it is sufficient to separate steel parts from other materials before sending them to recycling companies.

PROCEDURE CHANGE SETTINGS THERMOSTAT

1. CONNECT THE PLUG TO THE ELECTRIC SOCKET,THE DISPLAY WILL SHOW AS FIG.1.

FIG.1



2. PRESS THE CENTRAL RED BUTTON UNTILL POWER ON FIG.2.

FIG.2

3. PUSH THE CENTRAL BUTTON TO ENTER IN THE MENU'FIG.3.

FIG.3

4. PRESS THE BLUE RIGHT BUTTON MANY TIME UNTILL APPARED THE MENU' SERVICE FIG.4.

FIG.4

5. PRESS ONE TIME THE CENTRAL BOTTON , AND WITH THE UPPER BOTTON ENTER THE PASSOWRD 1, PRESS CENTRAL BOTTON FIG.5/6/7.

FIG. 5

FIG.6

FIG.7

6. PRESS ONE TIME THE CENTRAL BOTTON APPARED THE FIRST PARAMETERS PAGE, WITH THE UPPER BOTTOM SHOW THE PARAMETERS PAGE WITH THE RIGHT BOTTOM MOVE IN THE PAGE FIG.8.

FIG.8

7. PRESS THE CENTRAL BOTTON TO SHOW THE PARAMETER, CHANGE THE VALUE WITH UPPER OR LOWER BOTTON, CONFERME THE VALUE PRESSING THE CENTRAL BOTTON FIG.9/10.

FIG.9

FIG.10

8. FOR EXIT TO THE PARAMETERS PROGRAM PRESS THE GREEN LOWER BOTTON UNTIL SHOW THE TEMPERATURE FIG.11.

FIG.11

- **PARAMETERS** : THERE ARE TWO KIND OF PARAMETERS, ONE SETTING THE TERMOSTAT FOR A TYPE OF REFRIGERATION (VENTILATED NEGATIVE, VENTILATED POSITIVE, STATIC NEGATIVE, STATIC POSITIVE) AND ONE FOR CHANGE THE VALUE.

PAR	DESCRIZIONE DEL PARAMETRO	MIN	MAX	U	DEFAULT
ADR	Indirizzo controllore	1	4	num	**1**
EVO	Configurazione display	0	255	num	**0**
IS1	Configurazione ingressi	0	255	num	**0**
IS2	Configurazione ingressi	0	255	num	**0**
OS1	Configurazione uscite	0	255	num	**0**
OS2	Configurazione uscite	0	255	num	**0**
FOP	Configurazione ventole	0	255	num	**0**
DOP	Configurazione sbrinamenti	0	255	num	**0**

	INGLESE	NO FROST +5-20	STATICA NEG.-15-24	STATICA POS +2 +10	SOFT AIR -2 +20	PRALINE +8 +20	WINE WALL +4 +20	DRY AGED -2+6
ADR	ADDRESS	1	1	1	1	1	1	1
EVO	DISPLAY OPTION	770	258	770	770	266	770	266
IS1	INPUTS SETUP	63	5	5	63	63	3	63
IS2	INPUTS SETUP	4	4	4	4	36	4	44
OS1	OUTPUTS SETUP	2	0	0	2	2	0	2
OS2	OUTPUTS SETUP	128	0	0	128	16	128	16
FOP	FANS SETUP	19	0	0	19	1	3	3
DOP	DEFROST SETUP	7	0	5	5	0	5	192
ALH	UPPER ALARM LIMIT	10	0	20	15	25	22	25
ALL	LOWER ALARM LIMIT	-30	-35	-5	-5	5	-2	-4
ALD	ALARM DELAY	20	20	20	20	10	20	10
ADS	ALARM DELAY AT POWER-ON	120	120	120	60	120	120	120
ADF	ALARM DELAY AFTER DEFROST	25	15	60	15	15	15	15
BUR	TIME BUZZER REPLAY	20	20	20	20	20	20	20
BUF	TIME BUZZER OFF	2	2	2	2	2	2	2
HYH	UPPER DIFFERENTIAL COOLING ACTION	2	2	2	2	1	2	2
HYL	LOWER DIFFERENTIAL COOLING ACTION	0	0	0	0	0	0	0
HYC	DIFFERENTIAL HEATING ACTION	0	0	0	0	3	0	1
DAC	COMPRESSOR OFF DELAY	4	4	4	4	4	4	4
ADL	MINIMUM DURATION COMPRESSOR SWITCH-OFF	30	30	30	30	30	30	30
CDE	COMPRESSOR 2 DELAY AT POWER-ON	0	0	0	0	0	0	0
ASS	COMPRESSOR DELAY AT POWER-ON	0	0	0	0	0	0	0
CON	COMPRESSOR ON IN FAILURE PROBE	6	6	6	6	4	6	4
COF	COMPRESSOR OFF IN FAILURE PROBE	2	2	6	2	4	2	4
CPH	MAX COMPRESSOR USAGE	90	90	90	90	90	99	90
FAS	SET EVAPORATOR FANS	-2	8	8	2	10	2	4
HFF	DIFFERENTIAL FAN EVAPORATOR	1	5	5	1	4	1	4
FAD	FAN DELAY IN FAILURE PROBE OR DISABLED	30	30	30	30	30	30	30
FSD	FAN SETPOINT DURING DEFROST	-2	-2	-2	2	-2	-2	-2
LBT	MINIMUM EVAPORATOR TEMPERATURE	-40	-12	-12	-40	-40	-40	-40
DOO	ALARM DELAY DOOR	45	40	40	45	40	45	40
FCE	SET CONDENSER FANS	25	25	25	25	10	25	20
HYF	DIFFERENTIAL FAN CONDENSER	5	5	5	5	5	5	5
MCT	MAXIMUM CONDENSER TEMPERATURE	60	60	60	60	60	60	60
DCN	CLOGGED CONDENSER THRESHOLD	20	20	20	20	20	20	20

	INGLESE	NO FROST +5-20	STATICA NEG.-15-24	STATICA POS +2 +10	SOFT AIR -2 +20	PRALINE +8 +20	WINE WALL +4 +20	DRY AGED -2+6
DCR	RESET DIFFERENTIAL TEMPERATURE IN HIGHT CONDENSING	25	25	25	25	20	25	10
RMT	RESET TIME IN HIGHT CONDENSING	5	5	5	5	5	5	10
PMT	MAX NUMBER ACTION PRESSURE	50	50	50	50	50	50	3
TPB	DELAY WORK PRESSURE	20	20	20	20	20	20	30
DE1	TEMPERATURE DEFROSTING 1 END	10	3	3	15	3	8	8
DT1	TIME DEFROSTING 1 END	15	10	30	15	10	10	10
ITD	DEFROST INTERVAL	6	8	3	3	8	3	8
DRP	DRIPPING TIME	0	0	0	0	0	0	0
DE2	TEMPERATURE DEFROSTING 2 END	3	3	3	3	3	3	3
DT2	TIME DEFROST 2 END	10	10	30	10	10	10	10
DRE	NR OF DEFROST 1 BEFORE DEFROST 2	3	3	3	3	3	3	3
DCD	DEFROST DRAIN RESISTOR TIME	12	0	10	0	10	0	10
SDT	THRESHOLD ICE DETECTION EVAPORATOR IN AUTOMATIC DEFROST	1,5	1,5	1,5	1,5	1,5	1,5	1.5
DPR	TIME DEFROST PROTECTION WITH TUNING	30	30	30	30	30	30	30
DPS	TIME DEFROST PROTECTION WITHOUT TUNING	60	60	60	60	60	60	60
SD1	1ST DAILY DEFROST TIME	0	0	0	0	0	0	0
SD2	2ND DAILY DEFROST TIME	0	0	0	0	0	0	0
SD3	3RD DAILY DEFROST TIME	0	0	0	0	0	0	0
SD4	4TH DAILY DEFROST TIME	0	0	0	0	0	0	0
HOF	HUMIDITY PROBE OFFSET	0	0	0	0	5	0	0
RHU	HUMIDITY SETPOINT	0	0	0	0	0	0	45
HRH	UPPER DIFFERENTIAL DRY ACTION	0	0	0	0	1	0	2
HRL	LOWER DIFFERENTIAL WARM ACTION	0	0	0	0	5	0	2
CPM	MAX % COMPRESSOR TO START AUTO ECOMODE	80	80	80	80	80	80	80
AES	DELAY TO START AUTO ECOMODE	4	4	4	4	4	4	4
SPI	SETPOINT INCREASE DURING ECOMODE	0	0	0	0	0	0	0
NDS	ECOMODE TIME START	0	0	0	0	0	0	0
CLO	PUBLIC HOLIDAY	0	0	0	0	0	0	0
NDD	ECOMODE DURATION	0	0	0	0	0	0	0
LGH	LIGHT SETUP	3	2	2	3	3	2	3
SPX	SET DOOR RESISTOR	-14	-10	3	5	3	5	3

	INGLESE	NO FROST +5-20	STATICA NEG.-15-24	STATICA POS +2 +10	SOFT AIR -2 +20	PRALINE +8 +20	WINE WALL +4 +20	DRY AGED -2+6
SPU	USER SETPOINT	-20	-22	4	2	15	6	2
OF1	PROBE S1 OFFSET	-2	-1	0	0	1	0	0
OF2	PROBE S2 OFFSET	0	0	0	0	0	0	0
OF3	PROBE S3 OFFSET	0	0	0	0	0	0	0
SLL	SETPOINT LIMIT LOW	-20	-24	2	-2	2	4	-2
SLH	SETPOINT LIMIT HIGH	5	-15	10	10	20	20	10
RL1	RELAIS U1 ACTION	1	1	1	1	1	1	1
RL2	RELAIS U2 ACTION	2	0	0	0	3	0	3
RL3	RELAIS U3 ACTION	3	0	0	3	5	3	5
RL4	RELAIS U4 ACTION	5	5	5	5	6	5	7
RL5	RELAIS U5 ACTION	7	7	0	7	4	7	24
RL6	RELAIS U6 ACTION	8	0	2	2	0	2	2
DLT	LIGHT TIMER	0	0	0	0	0	0	0
DXO	ALARM TEMPERATURE DELAY FOR DOOR OPENED	2	2	2	2	2	2	2
K1T	ELECRTIC-KEY ON	10	10	10	10	10	10	10
OCD	TWIN MODE	10	10	10	10	10	10	10
TBO	MAXIMUM BOARD TEMPERATURE	70	70	70	70	70	70	70

TECNICAL MANUAL THERMOSTAT

1. CONNECT THE PLUG TO THE ELECTRIC SOCKET,THE DISPLAY WILL SHOW AS FIG.1.

FIG.1

2. PRESS THE CENTRAL RED KEY UNTILL POWER ON FIG.2.

FIG.2

3. PUSH THE CENTRAL KEY TO ENTER IN THE MENU FIG.3.

FIG.3

1. PRESS ONE TIME THE BLUE RIGHT KEY, THE ON/OFF FARME WILL APPARED.PRESSING MANY TIME THE RIGHT KEY TO SEE ALL THE FRAMES.
   FIG.4.

FIG.4

- FRAMES USER MENU

ON/OFF

SETTING TEMPERATURE

SETTING HUMIDITY

UP &DOWN ALLARMS LIMIT

MANUAL DEFROST

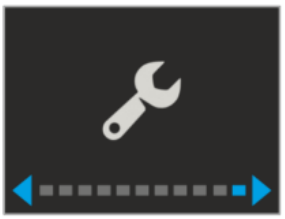
ALLARM EVENTS

ECOMODE

HISTORYCAL GRAFIC

TEST ALLARMS

SETTING MENU



SERVICE MENU

OPERATING MODE

ON/OFF FRAME

- KEEPING PRESS THE CENTRAL KEY TO SWITCH OFF THE REFRIGERATOR CABINET.

FRAME SETTING TEMPERATURE

- PRESS ONE TIME THE CENTRAL KEY, THE SET TEMPERATURE APPARED . PRESS THE UPPER OR LOWER KEY TO CHANGE THE VALUE. KEEPING THE CENTRAL KEY UNTIL CONFERMED.

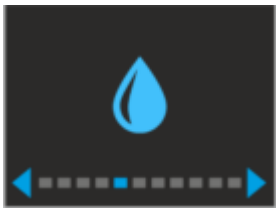
FRAME SETTING HUMIDITY

- PRESS ONE TIME THE CENTRAL KEY, THE SET HUMIDITY APPARED . PRESS THE UPPER OR LOWER KEY TO CHANGE THE VALUE. KEEPING THE CENTRAL KEY UNTIL CONFERMED.

FRAME UP&DOWN ALLARM LIMIT

- PRESS ONE TIME THE CENTRAL KEY, THE UPPER AND LOWER LIMIT ALLARMS APPARED , PRESS THE UPPER AND LOWER KEY FOR CHANGE THE VALUE. PRESS THE RIGHT KEY FOR ALARM DELAY TIME . KEEPING PRESS THE GREEN KEY TO RETURN TO THE PREVIUS FRAME.

FRAME DEFROST



- KEEPING PRESS THE CENTRAL KEY UNTIL THE DEFROST STARTING (IF THE CONDITIONS ALLOW IT) .

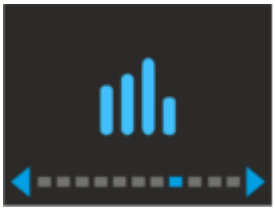
ALLARM EVENTS

- PRESS THE CENTRAL KEY TO SEE THE ALARMS LIST , KEEPING PRESS THE GREEN KEY TO RETURN TO THE PREVIUS FRAME.

SIMBOLO ECOMODE

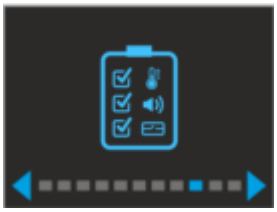
- PRESS THE CENTRAL KEY TO ENTER IN THE ECOMODE MENU (NOT ACTIVE).

HISTORYCAL GRAFIC



- IF THE SD CARD IS PRESENT PRESS THE CENTRAL KEY TO SEE THE RECORD REPORT TEMPERATURE KEEPING PRESS THE GREEN KEY TO RETURN TO THE PREVIUS FRAME.

FRAME ALARM TEST

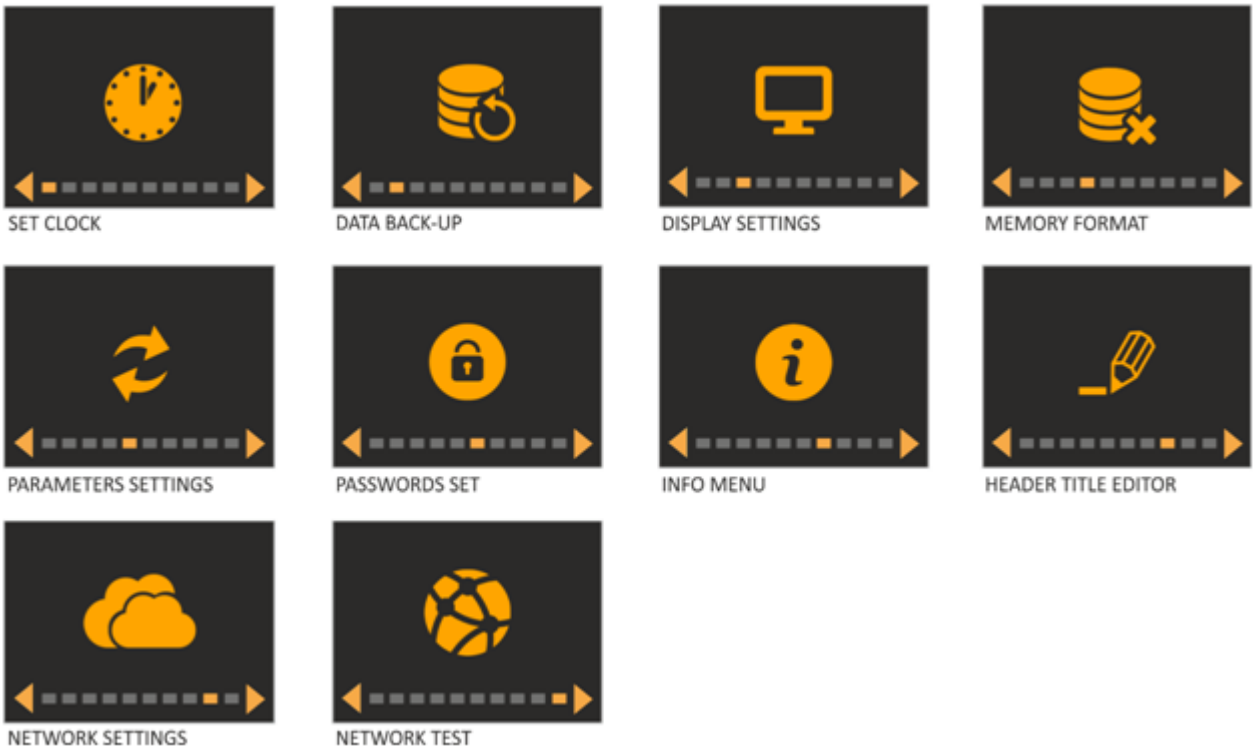


- PRESS THE CENTRAL KEY TO START THE ALARM TEST.

Frame setting menu

- PRESS THE CENTRAL KEY TO SEE THE SETTING MENU.

FRAME SETTING MENU



SET CLOCK

Access is provided with **USER** password if different from zero. Pressing the *ENTER* accesses the system date/time setting menu. The *DX* key displays the next value confirming the previous. In the two boxes at the bottom of the setting frame appears the date and time being set, with the value being modified highlighted in orange. If the date/time is lost, the display automatically sets on this menu. The prolonged navigation inactivity returns the display to the Home Page.

IMPORTANT NOTES

A date/time change does not allow recalling the temperature graphs of the current day from 00:00h to date change time; however, the temperature values are saved in the backup data and can be recalled by the application STUDIOGRAPH

The system clock does not automatically manage the Summer time.

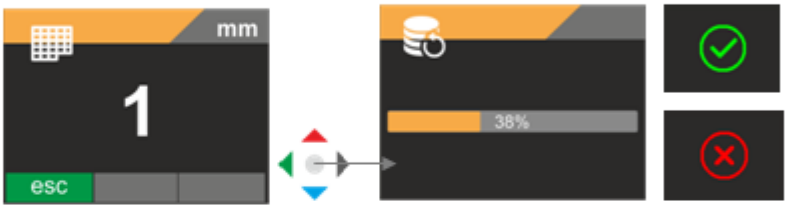
The connection towards the Cloud refers to the transparent UTC at the nation time conventions.

The navigation on the Cloud refers to the zone time conventions if the device used foresees its automatic management.

BACK-UP

Pressing the *ENTER* key with this frame selected, accesses the Backup menu that displays the USB pen drive insertion request frame. After insertion, the display shows the Fig.1 frame to set the months to download. To change the no. of months press the *UP/DW* keys otherwise confirm by pressing and holding the *ENTER* key for at least one second. The setting and confirmation of the **no. of months** activates the download of data with progress bar. After the download, the display shows the result of the operation. **Go back to the Home Page by pressing the DW key and removing the USB pen drive.**

Fig.1 Time-out 30 sec

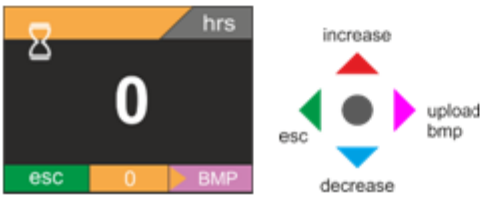


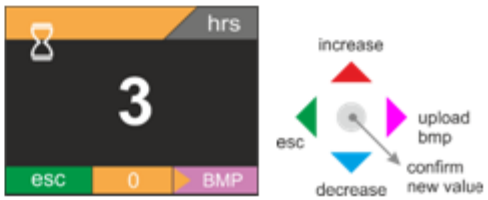
Progress-bar Result frames

13.3 SCREENSAVER SETTINGS, LOGO AND QR CODE

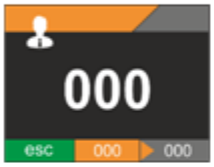
Pressing the *ENTER* accesses the setting menu of the screensaver intervention time. The remaining time for displaying the screensaver is loaded on the Home Page and is reactivated whenever the keys are pressed. The occurrence of an alarm, warning or fault involves exiting the screensaver. The setting limits are **0 - 9** hours, where the value 0 disables the screensaver.

Through USB pen drive and pressing the BMP key, you can insert a **customised logo (logo.bmp)** and a **QR CODE (qr.bmp)** in uncompressed format of 320x240 pixels inserted in the VLX/PAR folder of the USB pen drive. The long pressure of the green *SX* key takes the display to the SETTINGS MENU level.

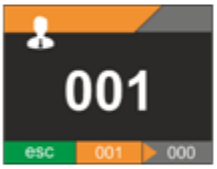




PRESET WITH PSW=0



SET PSW ADMIN



DEFINED PSW ADMIN

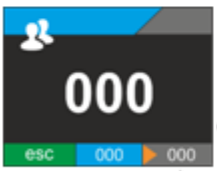
PASSWORD SETTING

Pressing the *ENTER* key, with this frame selected, access the setup menu of passwords. The access credentials are so defined: The ADMIN password allows you to set the **USER** password and access the menus:

- SETTINGS / FORMAT
- SERVICE / EDITOR MODEL
- SERVICE / SERIAL NUMBER EDITOR

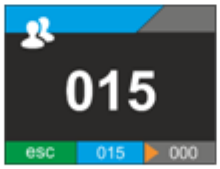
On first entry, the value zero and thus the value that will be set using the *UP/DW* and confirmed using the *ENTER* key will define the **ADMIN** password. Defined password ADMIN, the next input is displayed by three asterisks (Fig.1) and will have to be made by *UP/DW* buttons. Confirming an incorrect value back to SETTINGS MENU otherwise continues for viewing or changing the password or the same password **USER** ADMIN.

The SERVICE password is set independently of other passwords. On first entry, the value is zero and therefore the value that will be set will define the SERVICE password. Called the **SERVICE** password, the next password input is displayed by three asterisks (Fig.2) and will have to be made by *UP DW* buttons. Confirming an incorrect value back to SETTINGS MENU otherwise can be changed with the *UP/DW* buttons confirming the new value with



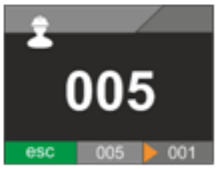
SET PSW USER

NEXT PASSWORD



DEFINED PASSWORD USER

SET PASSWORD SERVICE



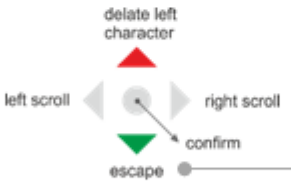
DEFINED PSW SERVICE

Fig.1

Fig.2

HEADER TITLE EDITOR

Pressing the *ENTER* key with this frame selected, accesses the writing menu of the header string [NAME] shown in the Home Page. The prolonged navigation inactivity returns the display to the Home Page.



ENTER: saves the machine name and returns to the menu.
ESC: exits without saving and returns to the menu.

REFRIGERATION UNIT NAME

At the top appears the string formed by a max of 8 characters. The letters scroll 5 by 5 with the central highlighted in black. The set of characters includes letters, numbers and the SPACE character.

INFO MENU

Pressing the *ENTER* key with this frame selected, accesses the tables of the operating variables and the identification data of the connected devices. The frames are selected with the *SX/DX* keys; press the *DW* key to go back to **menu** level. Alternatively, the long pressure of the *DW* key from the EASY Home Page accesses the information menu.

Varaible	DESCRIPTION	PRO 1
SM	PT100 monitor temperature	o
S1	PT100/NTC thermostat temperature	x
S2	NTC evaporator temperature	o
S3	NTC condenser temperature	o
S4	Coldroom humidity percent	x
D123	Inputs digital status	o
K%	Last hour percent compressor usage	o
Em	Low tuning temperature	o
EM	High tuning temperature	o
DT	Condenser differential temperature	o
U1	Relais U1 status	o
U2	Relais U2 status	o
U3	Relais U3 status	o
U4	Relais U4 status	o
U5	Relais U5 status	o
U6	Relais U6 status	o
U7	Relais U7 status	o

O = expected **X** = unexpected

The unexpected values or out of range will be indicated with - - -

Relay active Relay not active

INFO FRAMES

1st: compressor hourly %
2nd: compressor on mm:ss
3rd: compressor off mm:ss

1st: relay life %
2nd: comp hours
3rd: board temperature

1st: power supply voltage
2nd: battery voltage/%
3rd: consumption/mains

microSD: first sample
Panel: configuration file
Controller: configuration files

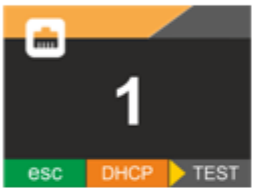
Refrigeration unit: S/n / MODEL
Panel: S/n / REL FW
Controller: S/n / REL FW

FSC MODULE optional
1st: fan speed %
2nd: condenser temperature
3rd: regulation band

QR CODE

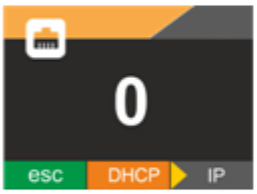
ETHERNET NETWORK CONFIGURATION

Access to the ETHERNET network configuration menu to access the CLOUD is preceded by the request of the **ADMIN** password. Pressing the *ENTER* key with this frame selected, accesses the ETHERNET network configuration frame when the **BRIDGE ETHERNET** device is connected on the CANBUS line. The prolonged navigation inactivity returns the display to the Home Page.

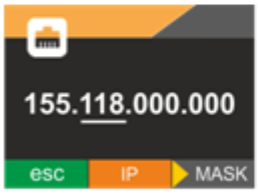


13.7.1 SETTINGS

By default the DHCP is ON [1] so no other setting will be required. From this position you can go back to the SETTINGS MENU via the *SX* key, perform the network test via the *DX* key or set DHCP=0 with the *DW* key.



If the DHCP is set to OFF [0] pressing the *DX* key leads to the configuration of the IP ADDRESS, NETMASK, GATEWAY and DNS for next steps.



The triad selection is done cyclically by pressing *ENTER*. The values are set via the *UP/DW* keys.

The *DX* key selects the various network parameters. At the end you can perform the network test without exiting the menu.

TEST RESULT

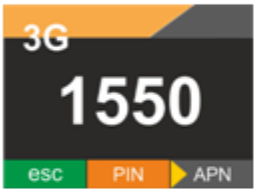
13.8 WI-FI NETWORK CONFIGURATION

Through *.DIS file compiled with the DATA BUILDER application.

3G NETWORK CONFIGURATION

Access to the 3G network configuration menu to access the CLOUD is preceded by the request of the **ADMIN** password. Pressing the *ENTER* key with this frame selected, accesses the 3G network configuration frame when the **BRIDGE 3G** device is connected on the CANBUS line. Access to the menu is preceded by the request of the ADMIN password. If a branded **BRIDGE 3G** is used, once connected in CANBUS network, no configuration is required to access the CLOUD; otherwise, follow the instructions below:

13.9.1 PIN AND APN CONFIGURATION



If the SIM PIN is set different from zero, the display accesses the setting frame of the numerical code via the *UP/DW* keys. Subsequently, by pressing the *DX* key, you access the editing of the APN with the slideout keyboard. Scroll the characters with the keys *SX/DX*, confirm with the *ENTER* key and delete with the *UP* key. Exit with the *DW* key and the confirmation or exit request appears.

The devices are pre-set with APN *internet.wind*

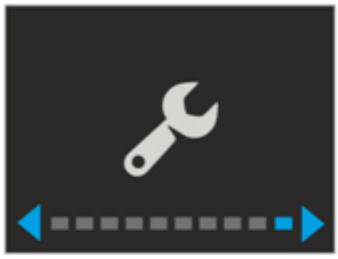
ENTER: saves and returns to the MENU

ESC: exits without saving

13.9.2 NETWORK TEST

Pressing the *ENTER* key accesses the ETHERNET or 3G network test depending on the connected BRIDGE device. Exit with the green *SX* key.

SERVICE MENU



ACCESS TO THE SERVICE MENU

Pressing the *ENTER* key with this frame selected, accesses the **SERVICE** menu via the **SERVICE** password request, displaying as first sub-menu the access to the controller parameters. The navigation inactivity for over 3 min. returns the display to the Home Page.

SERVICE MENU PREVIEW

PARAMETERS SETTINGS

MONITOR PARAMETER SETTINGS

RECOVERY

EVENTS LIST DELATE

OUTPUTS TEST

REFRIGERATOR S/N EDITOR

REFRIGERATIR MODEL EDITOR

DISPLAY REBOOT