

12/2021

Mod: MAX/50AV-R2

Production code: KP8G-5028865

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SAFETY INFORMATION

WARNING: This device contains hydrocarbon refrigerant (R290).

DANGER: Risk of fire or explosion. Flammable refrigerant used. Do not use mechanical devices to defrost refrigerator. Do not puncture refrigerant tubing.

DANGER: Risk of fire or explosion. Flammable refrigerant used. To be repaired only by trained service personnel. Do not puncture refrigerant tubing.

CAUTION: Risk of fire or explosion. Flammable refrigerant used. Consult repair manual/owner's guide before attempting to service this product. All safety precautions must be followed.

CAUTION: Risk of fire or explosion. Dispose of properly in accordance with federal or local regulations. Flammable refrigerant used.

CAUTION: Risk of fire or explosion due to puncture of refrigerant tubing; follow handling instructions carefully. Flammable refrigerant used.

CAUTION: Keep clear of obstruction all ventilation openings in the appliance enclosure or in the structure for building-in.

CAUTION: See to the arrangement of the food products to be conserved inside in such a manner that they do not extend beyond the shelves so as to not interrupt the flow of air inside the unit. Do not obstruct fan intake area.

CAUTION: On the shelves the maximum distributed weight is not to exceed 12 kg.



Signal warning of flammability due to the presence of flammable refrigerant (R290).

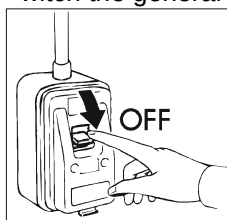
Instructions are available on the website www.sagispa.it

SAFETY PRESCRIPTIONS

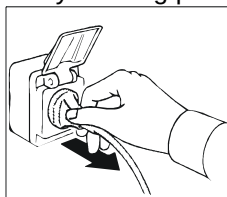
The appliances are equipped with a power cable with plug.

WARNING: before any maintenance or cleaning operation the machine must be insulated from the current:

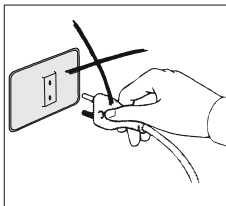
- switch the general cut-out in OFF position;



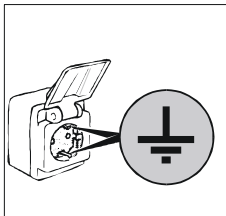
- remove the plug. The removal of the plug must be such that the operator can check its disconnection from every working point.



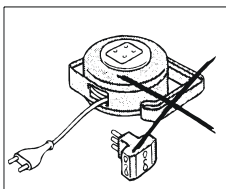
WARNING: do not use current taps or plugs not provided with grounding.



The socket must be provided with GROUNDING.



WARNING: do not use adapters or patch cords for the connection to the electric line.



WARNING: if the power supply cable is damaged, it must be replaced using an original spare part, by an assistance service or by qualified personnel.

The cleaning and maintenance of the refrigerating engine and the compressor area needs the intervention of a skilled technician, therefore it cannot be done by other persons. For a maintenance intervention or in case of anomaly disconnect completely the machine; ask for the TECHNICAL SERVICE to an entitled center and the use of original spare parts. Failure to comply with what is written above may compromise the safety of the units.



WARNING: after commissioning, wait for a time necessary to reach the set temperature before inserting the food to be stored.

WARNING: do not put hot foods or drinks into the unit.

WARNING: see to the arrangement of the food products to be conserved inside in such a manner that they do not extend beyond the shelves so as to not interrupt the flow of air inside the unit. Do not obstruct fan intake area.

WARNING: do not carry out cleaning activities in the area around the unit with its door open.

Do not wash the appliance by spraying high-pressure water on the machine.

WARNING: not use chlorine based or otherwise toxic substances (bleach, muriatic acid, etc.) for cleaning the unit or the areas directly adjacent to it.

Do not place any objects on the bottom of the unit. Use the proper shelves.

On the shelves the maximum distributed weight is not to exceed **12 kg**.

WARNING: glass Breaking Hazard: Close or open the door VERY GENTLY AND NEVER ABRUPTLY OR WITH VIOLENCE and do not lean on the door itself.

WARNING: Do not use mechanical devices nor other means to speed up the thawing process other than those recommended by the manufacturer.

WARNING: Do not use electrical appliances inside compartments of the appliances unless they are of the type recommended by the manufacturer.

The equipment is designed for a sound pressure level lower than 70db (A)

MACHINE DESCRIPTION

This equipment has the purpose of use for the **temporary** display and storage of food.
Cabinet for sensitive foodstuff non suitable for multiple layer stacking.
Any other use is to be considered improper.

ATTENTION: the appliances are not suitable for installation outdoors or in environments subject to the action of the elements. Do not use in environments with potentially explosive atmospheres.
The manufacturer cannot be held liable for improper use of its products.

The units are equipped with a finned evaporator protected against oxidation, a hermetic compressor, a copper aluminium condenser and a digital electronic data card.

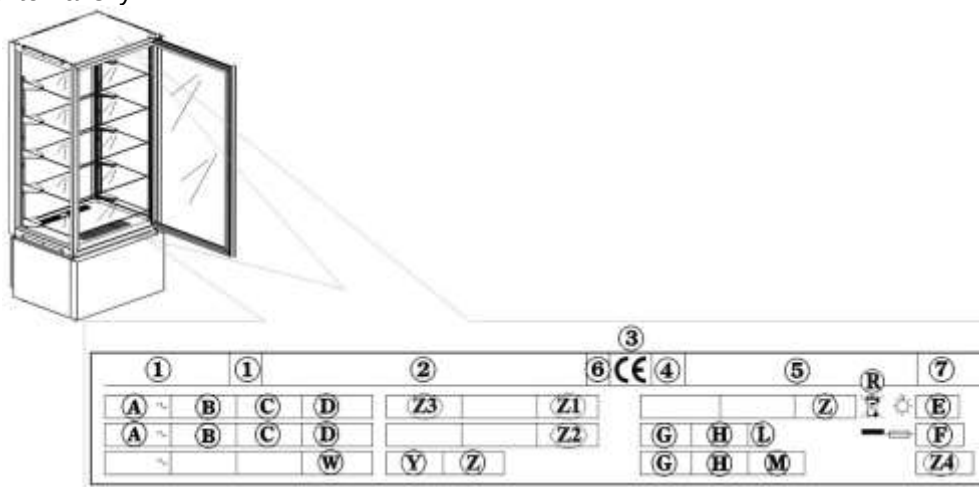
Do not use in environments with potentially explosive atmospheres.

The units are equipped with removable shelves, except for the Gelateria -25°C/-15° C, model in which they are fixed.

An HC refrigerant fluid, approved by current legislation, is used in the refrigerating units.

IDENTIFICATION TAG

For any communication with the manufacturer, always mention the MODEL and the SERIAL NUMBER of the appliance which are reported on the technical feature plate, placed both on the dashboard under the door and on the external sky.



Refrigerator rating plate containing the following ratings

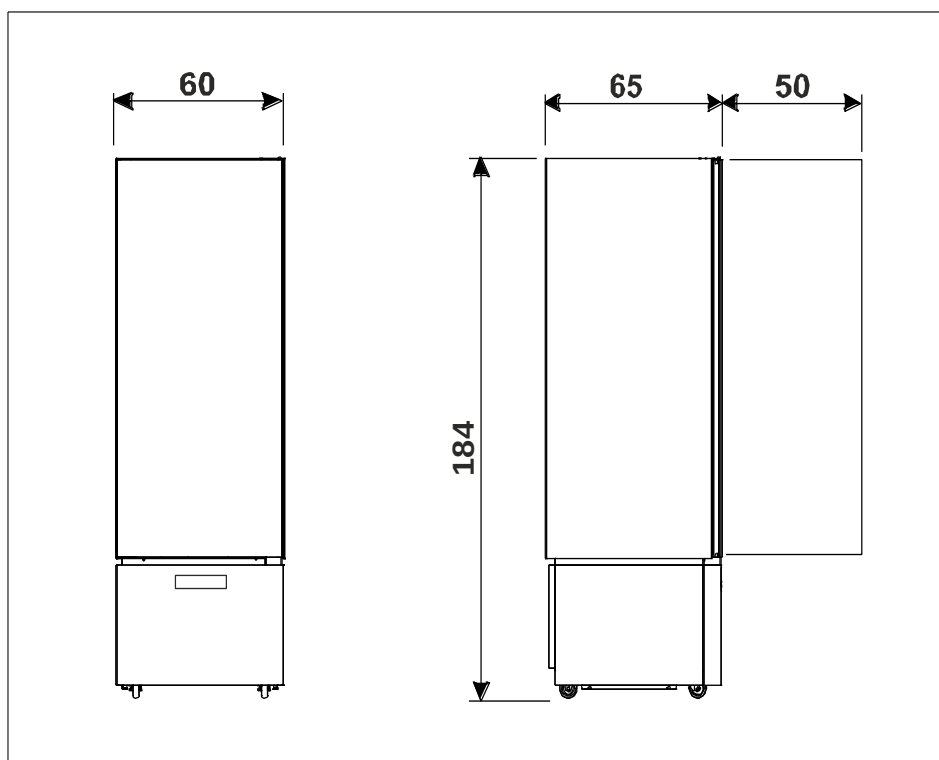
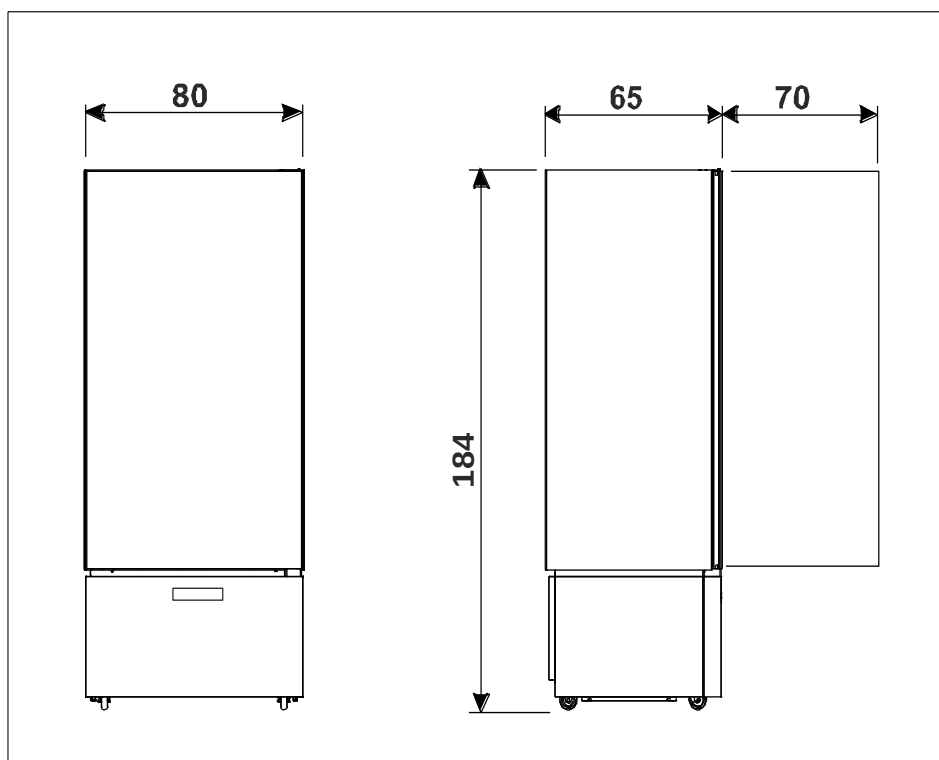
- | | |
|------------------------------------|---------------------------------|
| 1) MODEL | E) TOTAL LAMP POWER |
| 2) MANUFACTURER'S NAME AND ADDRESS | F) FUSIBLE CURRENT |
| 3) CE MARK | G) REFRIGERATING FLUID TYPE |
| 4) YEAR OF MAKE | H) REFRIGERATING FLUID QUANTITY |
| 5) SERIAL NUMBER | L) AMBIENT TEMPERATURE |
| 6) ELECTRIC INSULATING GRADE | R) WEEE SYMBOL |
| 7) ELECTRIC PROTECTION GRADE | W) HEATING SECTION POWER |
| A) POWER SUPPLY VOLTAGE | Z1) RATED STORAGE VOLUME (RSV) |
| B) ELECTRIC CURRENT RATE | Z2) FLUID FOAMING |
| C) POWER SUPPLY FREQUENCY | Z3) TEMPERATURE RANGE |
| D) RATED POWER | Z4) GWP |

TECHNICAL FEATURES

The technical data are shown on the last page of the manual.

TECHNICAL SPECIFICATIONS

The dimensions of the units are found below.



IMPLEMENTATION AND INSTALLATION

The units are always shipped on pallets and protected by cardboard boxes.

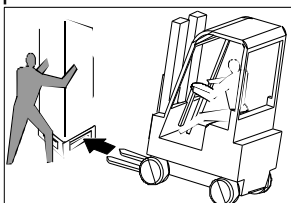
On receiving and after having unpacked in case of damages or missing pieces act as described in the chapter "GENERAL NOTES BY THE DELIVERY".

All setting up and starting operations are to be carried out by skilled staff.

WARNING: package parts (plastic bags, polystyrene foam, nails and the like) are dangerous for children and must not be left within their reach.

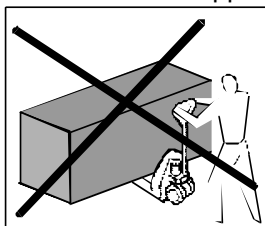
Lift the unit with a forklift and move it to its place of installation paying close attention that the load is well balanced.

WARNING: overturning hazard: Never tilt the unit. During handling make sure that it is stabilised by qualified personnel.



WARNING: never transport the unit in a horizontal position; such an operation could cause damage to the structure and or to the operational plant.

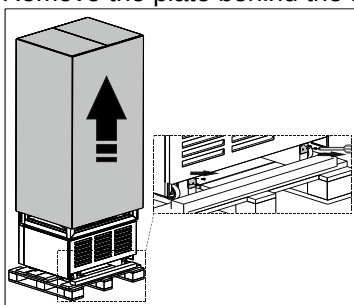
WARNING: this appliance must not be installed in rooms with a volume lower than 30 m³.



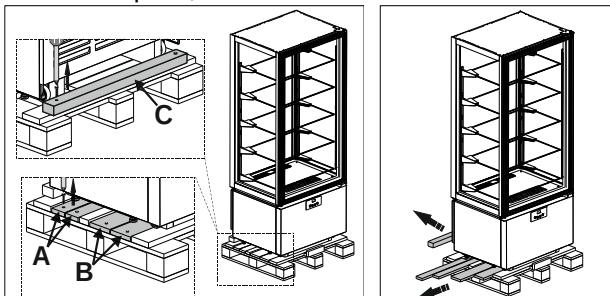
Once on the installation site, proceed as follows.

Remove the packing box, adhesive tape and any styrofoam pieces.

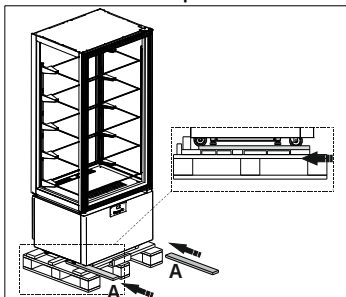
Remove the plate behind the appliance.



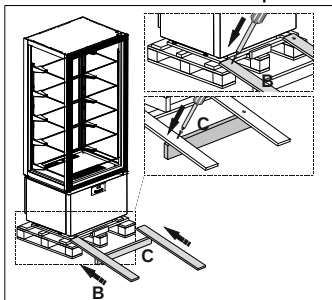
Pull out strips **A**, **B** and **C** located at the base of the package, removing the fixing screws first.



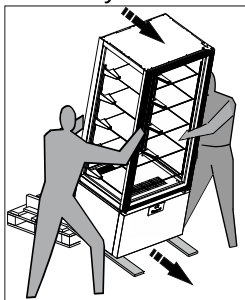
Insert the **A** strips under the wheels of the appliance.



Place the **B** and **C** strips in front of the package base and secure them.



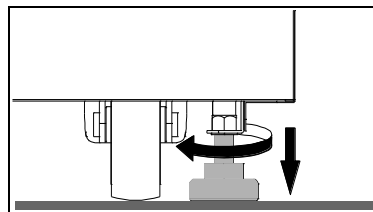
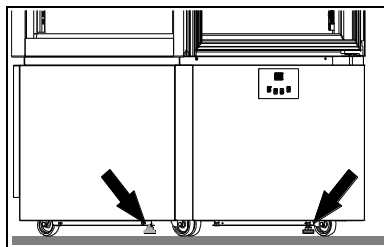
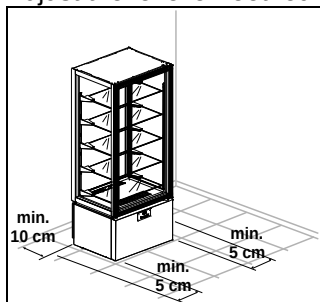
Delicately slide the display window to the ground. This operation must be performed by at least two people.



Place the unit in its permanent location.

WARNING: Position the unit at least 10 cm away from the rear wall. It is possible to place units side by side, yet in any case there must be at least 5 cm space between one unit and another.

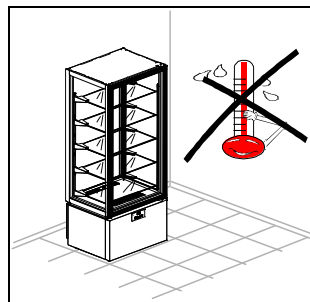
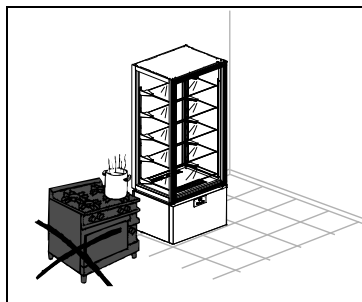
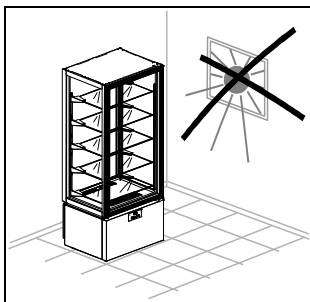
Adjust the leveller feet found under the unit so that it does not shift or rock.



WARNING: If the device is not properly levelled the performance and condensate drain may be hampered.

WARNING: Make sure that the unit is not exposed to direct sunlight, or any other sources of heat nor placed in environments with high temperatures; any of these would cause the unit to wear more quickly and perform poorly. The units have been declared to be in the 4 ($T = 30^{\circ}\text{C}$ U.R. = 55%) climate class.

Do not place the equipment in environments with temperatures above the declared climatic class.

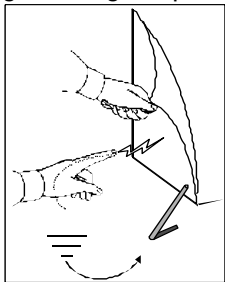


Climate class	Room temperature	Relative humidity
3	+25°C	60%
4	+30°C	55%
5	+40°C	40%
7	+35°C	75%

Remove protective film from product.

This may cause unpleasant static electricity discharge which, however, is not dangerous.

The inconvenience is reduced or prevented by continuously holding the refrigerator with one hand or grounding the package.

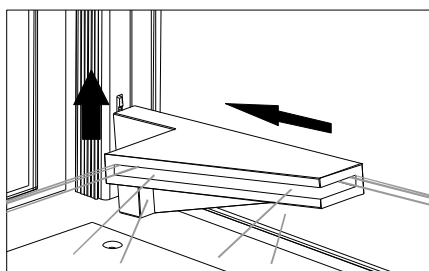
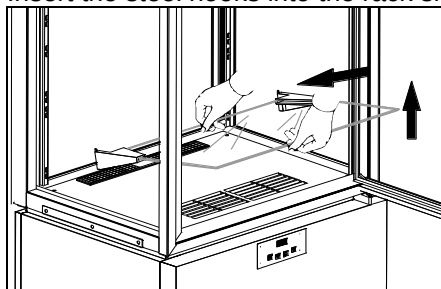


Gently remove the shelves paying great attention to not damage them.

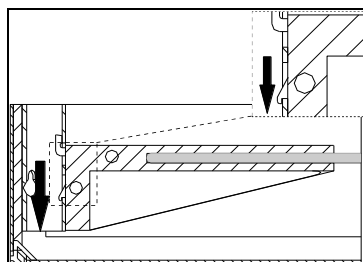
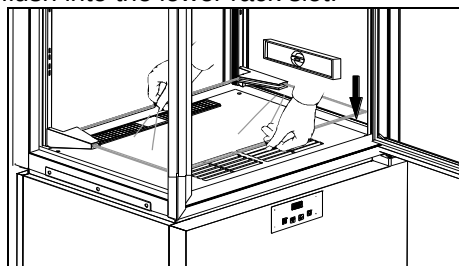
Clean the unit and the shelves as described in the Chapter "DAILY CLEANING". After having cleaned it, leave the door open at least 72 hours before putting the unit into operation.

To install the shelves, follow what is indicated below:

- Beginning from the lowest shelf, grasp the shelf with both hands.
- Insert the steel hooks into the rack slots holding the shelf slight tilted upwards.



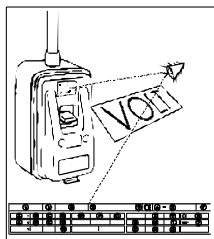
- Lower the shelf bringing it back to a horizontal position making sure that the lower hook is inserted flush into the lower rack slot.



WARNING: respect for this point is very important to insure the necessary stability of the shelf.

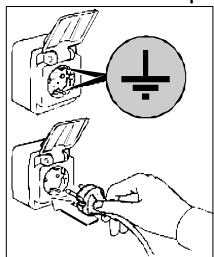
- To unhook the shelf follow the previous directions in reverse order.

Check and verify that the line voltage corresponds to that found on the technical specifications plaque on the unit. The manufacturer recommends that a sole use circuit be dedicated for the unit.



WARNING: An omnipolar switch is to be installed before the appliance, in compliance with the current regulations applied in the country where the appliance is installed
Also recommended to install a differential switch.

Then insert the plug into the current tap.



Now the installation has come to end.

GENERAL CLEANING AND MAINTENANCE

For regular and constant service of the unit it would be well to regularly carry out general cleaning and maintenance operations.

WARNING: The cleaning and maintenance of the refrigerating engine and the compressor area needs the intervention of a skilled technician, therefore it cannot be done by other persons.

The air condenser should be kept clean to ensure the device performance and efficiency, as air should circulate inside the device without barrier.

WARNING: The condenser should therefore be cleaned every 30 days or as needed

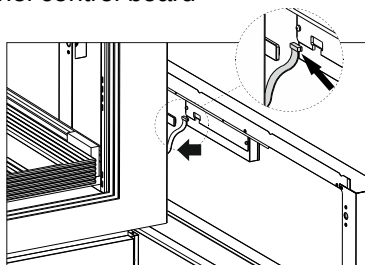
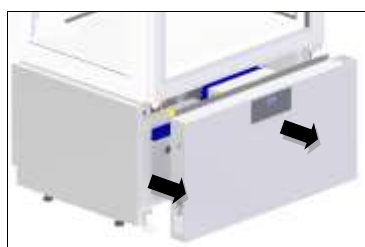
A dirty Condenser can result in NON-WARRANTED part & Compressor Failures, Product Loss.

Before to begin with the operations proceed as following:

- set the general cut-out in OFF position;
- remove the plug from the socket and wait till the complete entfrothing of the unit.

To access the condenser it is necessary to remove the front dashboard:

1. Remove the lower instrument panel, grasping it on the side, freeing it from the four retaining bolts
2. Remove the cable from the panel control board



Accurately clean the condenser in the refrigerating unit and the inner evaporator with either a vacuum cleaner, a bristle brush or a non-wire brush after removing the protections.
Clean the external and internal surfaces with water and neutral soap or detergent; a little vinegar in the water will remove eventual bad smells. Rinse abundantly with pure water and dry up accurately.

The cleaning and maintenance operations have now come to end.

DAILY CLEANING

To guarantee perfect hygiene and conservation of the unit it is well to carry out regular and/or daily cleaning operations.

Avoid using abrasive creams or stainless steel wool pads, acetone, chlorylene or ammonia.

Use only a solution of water and bicarbonate.

Any food stains or residue on the outside surface should be removed with water before they harden.

If residues are already hardened use a sponge soaked in a solution of water and bicarbonate.

Daily cleaning of all inside surfaces of the appliance is recommended.

Clean the shelves and the interior of the unit with a lightly dampened cloth.

The space around and under the refrigerator must also be cleaned and held in perfect hygiene.

Clean using water and neutral soap or detergent.

WASTE DISPOSAL AND DEMOLITION

WASTE STORAGE

At the end of the product life, avoid release to the environment. The doors should be removed before disposal.

Temporary storage of special waste is permitted while waiting for disposal by treatment and/or final collection. Dispose of special waste in accordance with the laws in force with regard to protection of the environment in the country of the user.

PROCEDURE FOR ROUGH DISMANTLING THE APPLIANCE

All countries have different legislation; provision laid down by the laws and the authorised bodies of the countries where the demolition takes place are therefore to be observed.

A general rule is to deliver the appliance to specialised collection and demolition centres. Dismantle the refrigerator grouping together the components according to their chemical nature. The compressor contains lubricating oil and refrigerant, which may be recycled. The refrigerator components are considered special waste, which can be assimilated with domestic waste.

Make the appliance totally unusable by removing the power cable and any door locking mechanisms in order to avoid the risk of anyone being trapped inside.

DISMANTLING OPERATIONS SHOULD BE CARRIED OUT BY QUALIFIED PERSONNEL.

THE SAFE DISPOSAL OF WASTE FROM ELECTRICAL AND ELECTRONIC EQUIPMENT (WEEE DIRECTIVE 2002/96/EC)

Do not dump pollutant material in the environment. Dispose of it in compliance with the relevant laws.

Under the WEEE (Waste Electrical and Electronic Equipment) Directive 2002/96/EC, when scrapping equipment the user must dispose of it at the specific authorised disposal centres, or reassign it, still installed, to the original seller on purchase of new equipment.

All equipment which must be disposed of in accordance with the WEEE Directive 2002/96/EC is marked with

a special symbol .

The improper disposal of Waste Electrical and Electronic Equipment is liable to punishment under the relevant laws in the countries where the offence is committed.

Waste electrical and Electronic Equipment may contain hazardous substances with potential harmful effects on the environment and human health. You are urged to dispose of them properly.

GENERAL NOTES BY THE DELIVERY

At the delivery inspect that the packing is not injured and that it has not been damaged during the transport.

After having unpacked the unit check and verify that all of the parts and components have been included and that its characteristics and condition correspond to the specifics of the order that you made.

Otherwise contact immediately the retailer.

While complementing you on your excellent choice we hope that you will be able to fully utilise our equipment following the necessary directions and precautions contained in this manual.

But, remember that any reproduction of this manual is forbidden and that due to a constant pursuit of innovation and technological quality, the features hereby presented could change without notice.

CONTROL PANNELLS

The devices have one of the following commands:

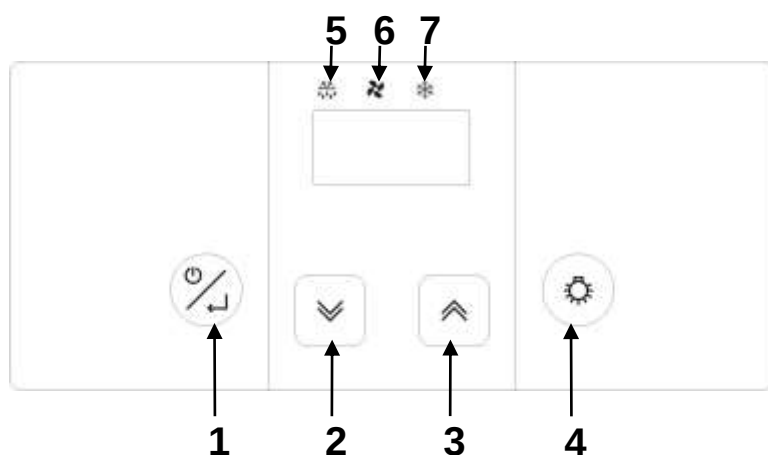
Electronic control board



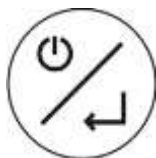
Electronic control board "touch"



ELECTRONIC CONTROL BOARD



POS	DESCRIZIONE
1	Tasto ON/SBY/ENTER
2	Tasto DOWN
3	Tasto UP
4	Tasto LUCE
5	Icona SBRINAMENTO
6	Icona VENTOLA
7	Icona COMPRESSORE

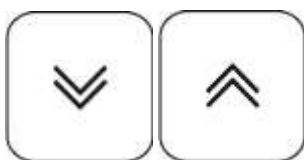


ON/SBY/ENTER key

Press and release this key to check/change the appliance temperature setpoint.

Press this key for 3 seconds and release it as the display shows the [Sby] to set the appliance to the stand-by mode.

When holding device in stand-by pressed [the display shows **Sby**], the controller turns on.



UP and DOWN keys

These keys allow to increase or decrease the value of the parameter to be changed.

Press these keys to display the min and max temperature recorded (if available) and any alarm activated.

Pushed simultaneously these disable the keyboard blocking function.

The UP button, held down for a period exceeding 3 seconds, activates/deactivates the manual defrost function.

The DOWN button, held down for a period exceeding 3 seconds, allows the modification of the chamber humidity settings.



LIGHT key

Pushed and released allows the activation or the deactivation of the unit's interior illumination.

UNITS +14 °C / +16 °C

Pushed and held down for over 3 seconds allows the temporary visualisation of the humidity sensor reading, for 5 seconds, in a fixed display mode.

	DEFROST ICON <i>Led on:</i> defrost in progress <i>Led blinking:</i> defrost activation delay or dripping in progress <i>Led blinking at high frequency:</i> alarm memorized
	FAN ICON <i>Led on:</i> room fans activated <i>Flashing LED:</i> ventilator activation delay
	COMPRESSOR ICON <i>Led on:</i> compressor activated <i>Led blinking:</i> compressor activation delay

TEMPERATURE SETPOINT SETTING/VARIATION

	Press and release the key <u>on/sby/enter</u> : the current setpoint blinks on the display for 5 seconds. After 5 seconds, the displays shows the room temperature again
	While the display is blinking, use the <u>up</u> and <u>down</u> keys to increase or decrease the temperature setpoint
	Press the <u>on/sby/enter</u> button again to confirm the new set point

SMART FUNCTIONS – Quick-access functions

Forced manual defrost

	Push the <u>up</u> button, hold <u>down</u> for more than 3 seconds to access the manual defrost functions.
---	---

Change in relative humidity +2°C/+10°C and -22°C/+5°C

	Push the <u>down</u> button, hold down for more than 3 seconds to modify the percentage of relative humidity in the chamber. The temporary flashing confirmation label [F_C] corresponds to a too low relative humidity (fans in parallel with the compressor). The flashing temporary confirmation label [F_] corresponds to a too high relative humidity (fans independent). The relative humidity that blinks on the temporary label [FtE] is programmed by the manufacturer.
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Change in relative humidity +14°C/+16°C

	Push the <u>down</u> button and hold down for more than 3 seconds: the display visualises the current humidity setpoint for 5 seconds in a flashing modality. Once that time has elapsed the display returns to the indication of the temperature in the cell. During the flashing mode on the display use the   buttons to increase or decrease the humidity setpoint desired.
	Push the <u>on/sby/enter</u> button to confirm the new setpoint: the acquisition of the new value is signalled by an acoustic emission of 3 short consecutive beeps. After 2 seconds the display returns to the indication of the temperature in the cell.

BLOCKIEREN DER TASTATUR

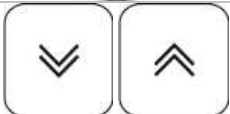
 	Push the <u>up</u> and <u>down</u> buttons simultaneously and hold down for more than 3 seconds. The label [Loc] is visualised.
	Push the <u>on/sby/enter</u> to confirm the choice and activate the function. <i>After 30 seconds if not confirmed the program exits the function.</i> To unblock the keyboard push the   buttons simultaneously and hold down for more than 5 seconds: to confirm this operation the [UnL] will flash on the display. When the keyboard is blocked the label [Loc] will appear on the display when any key is pressed.

PROBE READING MANUAL PRINTING: Coupled with the TSP print terminal (only on -25° C / -15° C and -22° C / + 5° C units)

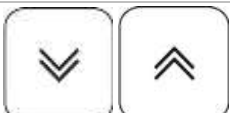
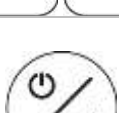
 	Push the <u>up</u> and <u>down</u> buttons simultaneously and hold down for more than 3 seconds. The label [Loc] is visualised.
	Utilise the <u>up</u> button to visualise the [Prt] function.
	Push the <u>on/sby/enter</u> to confirm the choice and activate the function. <i>After 30 seconds, if not confirmed, the program exits the function.</i>

PARAMETER CONFIGURATION

 	Push the <u>up</u> and <u>down</u> buttons simultaneously and hold down for more than 3 seconds. The label [Loc] is visualised.
 	Use the <u>up</u> and <u>down</u> keys to display the function [PAR].
	Press the <u>on/sby/enter</u> key to enter the parameter configuration mode. <i>After 30 seconds if not confirmed the program exits the function.</i> Enter the password to gain access. The display shows the password setting mode [00]
 	Use the <u>up</u> and <u>down</u> keys to select the password "65"
	Press the <u>on/sby/enter</u> key to confirm your selection. If the password is correct, the display shows the first parameter in the configuration list.
 	Use the <u>up</u> and <u>down</u> keys to scroll the controller parameters

	Press the <u>on/sby/enter</u> key to confirm your selection.
	Use the keys <u>up</u> and <u>down</u> to select the new value
	Press the <u>on/sby/enter</u> key to confirm your selection.

USER PARAMETER CONFIGURATION - PROBE READING

	Push the <u>up</u> and <u>down</u> buttons simultaneously and hold down for more than 3 seconds. The label [Loc] is visualised.
	Utilise the <u>up</u> and <u>down</u> buttons to scroll the sensor probe readings and the user parameters.
	Press the <u>on/sby/enter</u> key to confirm your selection and enter the mode for reading probes or changing parameters. The current value blinks on the display. Use the keys  to select the new value, applicable to parameters only.
	Press the <u>on/sby/enter</u> key to exit or confirm the selection of the parameter new value; the setting stops blinking.

DEFAULT PARAMETER RECOVERY

Information accessible to qualified staff only.

	On starting the appliance, a "LAMPTEST" phase will start. If you press the <u>on/sby/enter</u> key 3 times consecutively during this phase, all default parameters will be reset. The display shows [rLd] indicating the reset of the values pre-set by the manufacturer.
---	--

ATTENTION: the default values in memory refer to the configurations (**tn**, **bts**, **btv**) exclusively.

ALARMS

UNIT WITH BROKEN SENSOR PROBES DURING CONSERVATION

Room probe error

If the room probe is broken or the relevant connection interrupted, the display shows the label [**E0**].

The appliance keeps operating in storing according to the values given to parameters **C5** and **C6**.

The inner fan keeps operating according to the value given to "**F3**"

Evaporator fan error (only on -22°C / +5°C units)

If the room probe is broken or the relevant connection interrupted, the display shows the label [**E1**].

The inner fan operates according to the value given to parameter “F3”.

If the three probes are broken or disconnected, E0, E1, and E2 alternate on the display.

Humidity sensor Error (only on +14°C/+16°C units)

In the event that the humidity sensor is broken or its connection is interrupted on the display the label [E8], is visualised; the humidity control device is automatically deactivated.

Condenser probe error

If the condenser probe is broken or the relevant connection interrupted, the display shows the label [E2].

The condenser fan keeps operating according to the value given to parameter “F8”.

If the three probes are broken or disconnected, E0, E1, and E2 alternate on the display.

UNIT WITH BROKEN SENSOR PROBES DURING DEFROST

Room probe error

In the event that the chamber sensor probe is broken or the respective connection has been interrupted during the defrost phase the function will be completed normally.

The string set with the parameter “d6” and the label [E0] will be visualised alternatively on the display.

Evaporator fan error (only on -22°C / +5°C units)

In the event that the evaporator sensor probe is broken or the respective connection has been interrupted during the defrost phase the function will be completed through time out.

The evaporator fan will continue to operate according to the value assigned with the “F4” parameter.

The melting times “d7” and the internal fan activation delay “F5” will be observed in any case.

A display viene visualizzata alternativamente la stringa settata con il parametro “d6” e la label [E1].

If the three probes are broken or disconnected, E0, E1, and E2 alternate on the display.

Humidity sensor Error (only on +14°C/+16°C units)

In the event that the humidity sensor is broken or its connection is interrupted on the display the label [E8], is visualised; the humidity control device is automatically deactivated.

Condenser probe error

If the condenser probe is broken or the relevant connection interrupted, the display shows the label [E2].

The condenser fan keeps operating according to the value given to parameter “F8”.

If the three probes are broken or disconnected, E0, E1, and E2 alternate on the display.

DOORFRAME SECTIONS ANTICONDENSATION RESISTANCE HEATER MANAGEMENT (only on -25°C / -15°C and -22°C /+ 5°C units)

In the event that the chamber sensor probe is broken or its respective connection interrupted, the machine will continue to operate managing the activation/deactivation of the door resistance heater in parallel with the activation/deactivation of the compressor relay.

HIGH TEMPERATURE ALARM



If the room temperature exceeds the setpoint, the label [AH] and the temperature reached alternate on the display.

Press up to display the duration of the event causing the alarm.

The buzzer can be turned off by pressing the key

The visual alarm signal stays on until the temperature returns within the normal range.

LOW TEMPERATURE ALARM

	If the room temperature is below the setpoint, the label [AL] and the temperature reached alternate on the display. The buzzer sounds. Press <u>down</u> to display the duration of the event causing the alarm.
---	--

The buzzer can be turned off by pressing the key .

The visual alarm signal stays on until the temperature returns within the normal range.

HIGH AND LOW TEMPERATURE ALARMS MEMORIZED

	The defrost led blinking at high frequency indicates high or low temperature alarm.
	Pushing the <u>on/sby/enter</u> button the type of alarm recorded will be visualised on the flashing display.
	Pushing the <u>on/sby/enter</u> button the critical temperature recorded will be visualised on the flashing display.
	Pushing the <u>on/sby/enter</u> button the time duration of alarm event, expressed in minutes, will be visualised on the flashing display.
	Pushing the <u>on/sby/enter</u> button the operation of the defrost LED will be reset to its normal state. The display shows [rES] after the abnormal event.

In the event that another alarm event were to occur, for high or low temperature, if the information relative to the preceding anomaly hasn't been visualised by the operator, this latter will be overwritten by the more recent data.

If the high temperature alarm is on, the compressor keeps working; if the low temperature alarm is on, the compressor stops.

! If the card is set to the stand-by mode, the min. / max. temperature memorized and any alarms will not be saved.

BLACKOUT ALARM

	The defrost led blinking at high frequency indicates a blackout
	Pushing the <u>on/sby/enter</u> button the [bLO] label will be visualised on the display.
	Pushing the <u>on/sby/enter</u> button the maximum temperature recorded in the chamber will be visualised on the display.
	Pushing the <u>on/sby/enter</u> button the defrost led is reset to standard operation. The display shows [rES] after the abnormal event.

OPEN DOOR ALARM

In the event of a door open the display will visualise the [dA] label alternating with the current visualisation while the buzzer, if present, will signal the event acoustically with a beep of the duration of 5 seconds repeated every 10 seconds.

The alarm will reset upon the closure of the door and is registered in memory (high frequency flashing defrost LED).

HIGH CONDENSATION TEMPERATURE ALARM

If the condensation temperature is too high, due to dirty condenser, the label [HtC] and the room temperature alternate on the display.
The buzzer sounds.

The buzzer can be turned off by pressing the key .
The visual warning signal stays on until the condensation temperature returns to normal range.

HIGH CONDENSATION TEMPERATURE ALARM (only on -25°C / -15°C and -22°C /+ 5°C units)

If the condensation temperature is high because the condenser is dirty, the label [HtC] alternating with the cell temperature will be shown on the display. A buzzer is also activated.

The buzzer can be turned off by pressing the key .
The visual warning signal stays on until the condensation temperature returns to normal range.

CONDENSER DIRTY ALARM (only on -25°C / -15°C and -22°C /+ 5°C units)

If the condensation temperature is too high because the condenser is very dirty, the label [dCA] alternating with the cell temperature will be shown on the display. A buzzer is also activated.

The buzzer can be turned off by pressing the key .
The visual warning signal stays on until the condensation temperature returns to normal range.

In parallel, the operating set point of the device changes automatically to safeguard plant conditions.

The new setting remains until the condensation temperature returns within the normal range.

HIGH PRESSURE ALARM

If the refrigerating appliance pressure is above the specified limit, the label [HP] and the room temperature alternate on the display.
The buzzer sounds.

The buzzer can be turned off by pressing the key .
The visual warning signal stays on until the card is set to stand-by.

! If the problem causing the alarm reoccurs on restarting the system, the signal [HP] will be displayed again.

In this case, all the relay outputs are de-activated except the condenser fan output.

LOW EVAPORATION TEMPERATURE ALARM (only on -25°C / -15°C and -22°C /+ 5°C units)

If the evaporation temperature is too low because of the packaged evaporator, the label [Lte] alternating with the cell temperature will be shown on the display. A buzzer is also activated.

The buzzer can be turned off by pressing the key .
The visual alarm signal remains until the evaporation temperature returns within the normal range.
If this does not occur, the machine carries out automatic defrosting.

LOW PRESSURE ALARM (only on -25°C / -15°C and -22°C /+ 5°C units)

If a refrigeration system pressure is detected that is lower than the limit values, the label [LP] alternating with the cell temperature will be shown on the display. A buzzer is also activated.

The buzzer can be turned off by pressing the key .
The visual warning signal stays on until the card is set to stand-by.
! If the problem causing the alarm reoccurs on restarting the system, the signal [LP] will be displayed again.

All relay outputs will be deactivated during this event.

ALARM FOR END OF DEFROSTING ENDING DUE TO TIMEOUT (only on -25°C / -15°C and -22°C / +5°C units)

In the event that the evaporator probe has not reached the pre-set value at the end of defrosting, the label [tOd] alternating with the cell temperature will be shown on the display.

The buzzer can be turned off by pressing the key . Pressing the next key  resets the alarm.

DEFROSTING

Defrost may be either **manual** type or **automatic** type.

Manual defrost

Models +2°C / +10°C, -22°C / +5°C, +14°C / +16°C



Push the button up for 4 sec seconds to immediately activate the defrost cycle.
Just before the defrosting process begins, the temperature of the blocked cell is displayed.

The defrosting process can be stopped manually by pressing the “up” key again for 4 seconds. When the process is stopped, a signal blinks on the label display [ndF].

Models -25°C / -15°C

In the -25°C / -15°C models, the defrost function must be activated by the user whenever a thick layer of frost accumulates upon the shelves. In order to defrost the unit, turn it off by setting the panel to stand-by mode, then open the door and remove the products. Remove the cap on the bottom and wait for all the frost to melt. Use a sponge to direct all the water on the bottom into the drain hole. Clean the unit's interior surfaces with a dry cloth and replace the cap on the bottom.

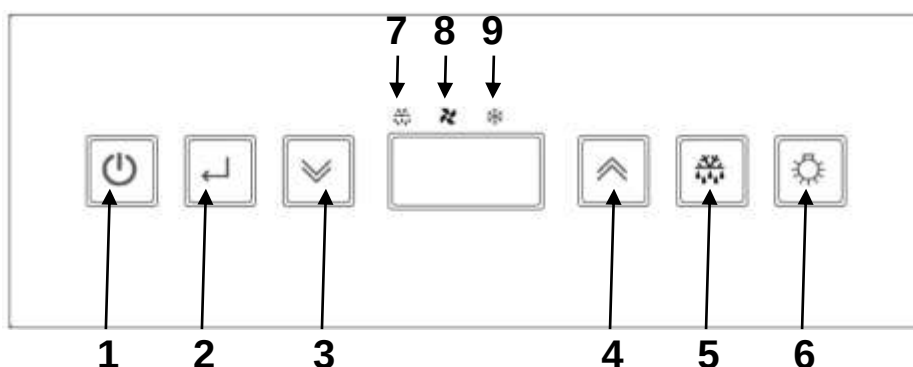
Automatic defrost

Automatic defrost is started during the conservation phase and is regulated by the card set-up.

The defrost operation can be manually interrupted by pressing the up button for 4 seconds: the deactivation of the function will be indicated by the [ndF] label flashing on the display.

On the +14 °C / +16 °C and -25°C / -15°C units there is no automatic defrost".

ELECTRONIC CONTROL BOARD "TOUCH"



POS	DESCRIPTION
1	ON/SBY key
2	ENTER key
3	DOWN key
4	UP key
5	DEFROST key
6	LIGHT key
7	DEFROST ICON
8	FAN ICON
9	COMPRESSOR ICON



ON/SBY key

Press this key for 3 seconds and release it as the display shows the [Sby] to set the appliance to the stand-by mode (Backlighting activated).

When holding device in stand-by pressed [the display shows **Sby**], the controller turns on (Backlighting deactivated).



ENTER key

Press and release this key to check/change the appliance temperature setpoint; during operations the above mentioned backlighting is flashing.



UP and DOWN keys

These keys allow to increase or decrease the value of the parameter to be changed (the backlighting is flashing during these operations).

Pressed and released enable the visualisation of the minimum and maximum temperatures recorded (if available) and any active alarms (the backlighting is flashing during these operations)

The  button, held down for a period exceeding 3 seconds, allows the modification of the chamber humidity settings (backlighting flashing).

Pressed at the same time for a time greater than 3 seconds enables the selection of the keyboard lock or entry into parameter configuration by way of the confirmation with the  button.



DEFROST key

Pressed for a time greater than 3 seconds activates / deactivates the manual defrost (the backlighting is activated during these operations)



LIGHT key

Pushed and released allows the activation or the deactivation of the unit's interior illumination (backlighting ON with light ON, backlighting OFF with light OFF), independent of the status in which the  button might be.



DEFROST ICON

Led on: defrost in progress

Led blinking: defrost activation delay or dripping in progress

Led blinking at high frequency: alarm memorized



FAN ICON

Led on: room fans activated

Flashing LED: ventilator activation delay

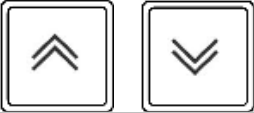


COMPRESSOR ICON

Led on: compressor activated

Led blinking: compressor activation delay

TEMPERATURE SETPOINT SETTING/VARIATION

	Press and release the key <u>enter</u> : the current setpoint blinks on the display for 5 seconds. After 5 seconds, the displays shows the room temperature again
	While the display is blinking, use the <u>up</u> and <u>down</u> keys to increase or decrease the temperature setpoint
	Press the <u>enter</u> button again to confirm the new set point: the acquisition of the new value is signalled by an acoustic emission of 3 short consecutive beeps. The display returns to the indication of the temperature in the cell.

SMART FUNCTIONS – Quick-access functions

Forced manual defrost

	Push the <u>defrost</u> button for more than 3 seconds to access the manual defrost functions. With the defrost in progress press the button again for a period greater than 3 seconds to end the defrost phase.
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Change in relative humidity +2°C/+10°C and -22°C/+5°C

	Push the <u>down</u> button, hold down for more than 3 seconds to modify the percentage of relative humidity in the chamber. The temporary flashing confirmation label [F_C] corresponds to a too low relative humidity (fans in parallel with the compressor). The flashing temporary confirmation label [F_] corresponds to a too high relative humidity (fans independent). The relative humidity that blinks on the temporary label [FtE] is programmed by the manufacturer.
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Change in relative humidity +14°C/+16°C

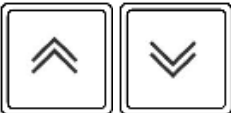
	Push the <u>down</u> button and hold down for more than 3 seconds: the display visualises the current humidity setpoint for 5 seconds in a flashing modality. Once that time has elapsed the display returns to the indication of the temperature in the cell. During the flashing mode on the display use the   buttons to increase or decrease the humidity setpoint desired.
	Push the <u>enter</u> button to confirm the new setpoint: the acquisition of the new value is signalled by an acoustic emission of 3 short consecutive beeps. After 2 seconds the display returns to the indication of the temperature in the cell.

BLOCKIEREN DER TASTATUR

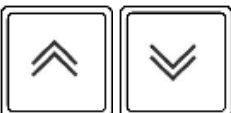
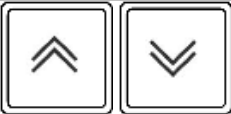
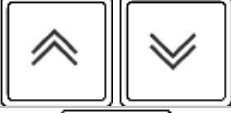
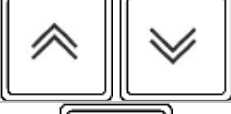
	Push the <u>up</u> and <u>down</u> buttons simultaneously and hold down for more than 3 seconds. The label [Loc] is visualised.
	Push the <u>enter</u> to confirm the choice and activate the function. After 30 seconds if not confirmed the program exits the function. To unlock the keyboard it is necessary to press the   buttons simultaneously for

	more than 3 seconds: in confirmation of the operation on the display the message [UnL] appears, flashing, accompanied by 3 short beeps of the buzzer. Immediately afterwards, the display returns to the indication of the temperature in the cell. With the keyboard locked, pressing any button, the instrument emits a long beep indicating the [Loc] message on the display.
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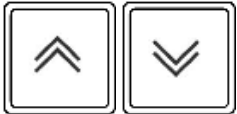
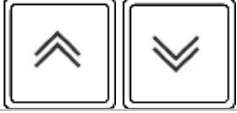
PROBE READING MANUAL PRINTING: Coupled with the TSP print terminal

	Push the <u>up</u> and <u>down</u> buttons simultaneously and hold down for more than 3 seconds. The label [Loc] is visualised.
	Use the <u>up</u> and <u>down</u> buttons to visualise the [Prt] function.
	Push the <u>enter</u> to confirm the choice and activate the function. After 30 seconds, if not confirmed, the program exits the function.

PARAMETER CONFIGURATION

	Push the <u>up</u> and <u>down</u> buttons simultaneously and hold down for more than 3 seconds. The label [Loc] is visualised.
	Use the <u>up</u> and <u>down</u> keys to display the function [PAr].
	Press the <u>enter</u> key to enter the parameter configuration mode. After 30 seconds if not confirmed the program exits the function. Enter the password to gain access. The display shows the password setting mode [00]
	Use the <u>up</u> and <u>down</u> keys to select the password "65"
	Press the <u>enter</u> key to confirm your selection. If the password is correct, the display shows the first parameter in the configuration list.
	Use the <u>up</u> and <u>down</u> keys to scroll the controller parameters
	Press the <u>enter</u> key to confirm your selection. The current value of the parameter selected in flashing mode is visualised.
	Use the keys <u>up</u> and <u>down</u> to select the new value
	Press the <u>enter</u> key to confirm your selection.

USER PARAMETER CONFIGURATION - PROBE READING

	Push the <u>up</u> and <u>down</u> buttons simultaneously and hold down for more than 3 seconds. The label [Loc] is visualised.
	Utilise the <u>up</u> and <u>down</u> buttons to scroll the sensor probe readings and the user parameters.
	Press the <u>enter</u> key to confirm your selection and enter the mode for reading probes or changing parameters. The current value blinks on the display. Use the keys   to select the new value, applicable to parameters only.
	Press the <u>enter</u> key to exit or confirm the selection of the parameter new value; the setting stops blinking.

DEFAULT PARAMETER RECOVERY

Information accessible to qualified staff only.

	On starting the appliance, a "LAMPTEST" phase will start. If you press the <u>enter</u> key 3 times consecutively during this phase, all default parameters will be reset. The display shows [rLd] indicating the reset of the values pre-set by the manufacturer.
--	---

ATTENTION: the default values in memory refer to the configurations (**tn**, **bts**, **bvt**, **PrA**) exclusively.

ALARMS

UNIT WITH BROKEN SENSOR PROBES DURING CONSERVATION

Room probe error

If the room probe is broken or the relevant connection interrupted, the display shows the label [**E0**].

The appliance keeps operating in storing according to the values given to parameters **C5** and **C6**.

The inner fan keeps operating according to the value given to "**F3**".

Evaporator fan error (only on -22°C / +5°C units)

If the room probe is broken or the relevant connection interrupted, the display shows the label [**E1**].

The inner fan operates according to the value given to parameter "**F3**".

*If the three probes are broken or disconnected, **E0**, **E1**, and **E2** alternate on the display.*

Humidity sensor Error (only on +14°C/+16°C units)

In the event that the humidity sensor is broken or its connection is interrupted on the display the label [**E8**], is visualised; the humidity control device is automatically deactivated.

Condenser probe error

If the condenser probe is broken or the relevant connection interrupted, the display shows the label [**E2**].

The condenser fan keeps operating according to the value given to parameter "**F8**".

*If the three probes are broken or disconnected, **E0**, **E1**, and **E2** alternate on the display.*

UNIT WITH BROKEN SENSOR PROBES DURING DEFROST

Room probe error

In the event that the chamber sensor probe is broken or the respective connection has been interrupted during the defrost phase the function will be completed normally.

The string set with the parameter “d6” and the label [E0] will be visualised alternatively on the display.

Humidity sensor Error

In the event that the humidity sensor is broken or its connection is interrupted on the display the label [E8], is visualised; the humidity control device is automatically deactivated.

Condenser probe error

If the condenser probe is broken or the relevant connection interrupted, the display shows the label [E2].

The condenser fan keeps operating according to the value given to parameter “F8”.

If the three probes are broken or disconnected, E0, E1, and E2 alternate on the display.

HIGH TEMPERATURE ALARM



If the room temperature exceeds the setpoint, the label [AH] and the temperature reached alternate on the display.

Press up to display the duration of the event causing the alarm.

The buzzer may be silenced by pressing the button

The visual alarm signal stays on until the temperature returns within the normal range.

LOW TEMPERATURE ALARM



If the room temperature is below the setpoint, the label [AL] and the temperature reached alternate on the display. The buzzer sounds.

Press down to display the duration of the event causing the alarm.

The buzzer may be silenced by pressing the button

The visual alarm signal stays on until the temperature returns within the normal range.

HIGH AND LOW TEMPERATURE ALARMS MEMORIZED



The defrost led blinking at high frequency indicates high or low temperature alarm.



Pushing the enter button the type of alarm recorded will be visualised on the flashing display.



Pushing the enter button the critical temperature recorded will be visualised on the flashing display.



Pushing the enter button the time duration of alarm event, expressed in minutes, will be visualised on the flashing display.



Pushing the enter button the operation of the defrost LED will be reset to its normal state.
The display shows [rES] after the abnormal event.

In the event that another alarm event were to occur, for high or low temperature, if the information relative to the preceding anomaly hasn't been visualised by the operator, this latter will be overwritten by the more recent data.

If the high temperature alarm is on, the compressor keeps working; if the low temperature alarm is on, the compressor stops.

! If the card is set to the stand-by mode, the min. / max. temperature memorized and any alarms will not be saved.

BLACKOUT ALARM

	The defrost led blinking at high frequency indicates a blackout
	Pushing the <u>enter</u> button the [bLO] label will be visualised on the display.
	Pushing the <u>enter</u> button the maximum temperature recorded in the chamber will be visualised on the display.
	Pushing the <u>enter</u> button the defrost led is reset to standard operation. The display shows [rES] after the abnormal event.

OPEN DOOR ALARM

In case of door open the display visualises the message [dA] alternating with the current visualisation whilst the buzzer sounds the event with a beep of five seconds repeated every 10.

The alarm will reset upon the closure of the door and is registered in memory (high frequency flashing defrost LED).

HIGH CONDENSATION TEMPERATURE ALARM

If the condensation temperature is too high, due to dirty condenser, the label [HtC] and the room temperature alternate on the display.
The buzzer sounds.

The buzzer can be turned off by pressing the key 

The visual warning signal stays on until the condensation temperature returns to normal range.

HIGH CONDENSATION TEMPERATURE ALARM (only on -25°C / -15°C and -22°C /+ 5°C units)

If the condensation temperature is high because the condenser is dirty, the label [HtC] alternating with the cell temperature will be shown on the display. A buzzer is also activated.

The buzzer can be turned off by pressing the key 

The visual warning signal stays on until the condensation temperature returns to normal range.

CONDENSER DIRTY ALARM (only on -25°C / -15°C and -22°C /+ 5°C units)

If the condensation temperature is too high because the condenser is very dirty, the label [dCA] alternating with the cell temperature will be shown on the display. A buzzer is also activated.

The buzzer can be turned off by pressing the key 

The visual warning signal stays on until the condensation temperature returns to normal range.

In parallel, the operating set point of the device changes automatically to safeguard plant conditions.

The new setting remains until the condensation temperature returns within the normal range.

HIGH PRESSURE ALARM

If the refrigerating appliance pressure is above the specified limit, the label [HP] and the room temperature alternate on the display.
The buzzer sounds.

The buzzer can be turned off by pressing the key .

The visual warning signal stays on until the card is set to stand-by.

! If the problem causing the alarm reoccurs on restarting the system, the signal [HP] will be displayed again.

In this case, all the relay outputs are de-activated except the condenser fan output.

LOW EVAPORATION TEMPERATURE ALARM (only on -25°C / -15°C and -22°C / + 5°C units)

If the evaporation temperature is too low because of the packaged evaporator, the label [LtE] alternating with the cell temperature will be shown on the display. A buzzer is also activated.

The buzzer can be turned off by pressing the key .

The visual alarm signal remains until the evaporation temperature returns within the normal range.

If this does not occur, the machine carries out automatic defrosting.

LOW PRESSURE ALARM (only on -25°C / -15°C and -22°C / + 5°C units)

If a refrigeration system pressure is detected that is lower than the limit values, the label [LP] alternating with the cell temperature will be shown on the display. A buzzer is also activated.

The buzzer can be turned off by pressing the key .

The visual warning signal stays on until the card is set to stand-by.

! If the problem causing the alarm reoccurs on restarting the system, the signal [LP] will be displayed again.

All relay outputs will be deactivated during this event.

ALARM FOR END OF DEFROSTING ENDING DUE TO TIMEOUT (only on -25°C / -15°C and -22°C / + 5°C units)

In the event that the evaporator probe has not reached the pre-set value at the end of defrosting, the label [tOd] alternating with the cell temperature will be shown on the display.

The buzzer can be turned off by pressing the key . Pressing the next key  resets the alarm

DEFROSTING

Defrost may be either **manual** type or **automatic** type.

Manual defrost

Models +2°C / +10°C, -22°C / +5°C, +14°C / +16°C



Push the button defrost for 4 sec seconds to immediately activate the defrost cycle. Just before the defrosting process begins, the temperature of the blocked cell is displayed.

The defrosting process can be stopped manually by pressing the  key again for 4 seconds. When the process is stopped, a signal blinks on the label display [ndF].

Models -25°C / -15°C

In the -25°C / -15°C models, the defrost function must be activated by the user whenever a thick layer of frost accumulates upon the shelves. In order to defrost the unit, turn it off by setting the panel to stand-by mode, then open the door and remove the products. Remove the cap on the bottom and wait for all the frost to melt. Use a sponge to direct all the water on the bottom into the drain hole. Clean the unit's interior surfaces with a dry cloth and replace the cap on the bottom.

Automatic defrost

Automatic defrost is started during the conservation phase and is regulated by the card set-up.

The defrost operation can be manually interrupted by pressing the up button for 4 seconds: the deactivation of the function will be indicated by the [ndF] label flashing on the display.

On the +14 °C / +16 °C and -25°C / -15°C units there is no automatic defrost".

STOPPING

Press this key  for 3 seconds and release it as the display shows the [Sby] to set the appliance to the stand-by mode.

WARNING: the main switch  DOES NOT insulate the machine from the electric current.

Set the general cut-out in OFF position.

To isolate the unit from electrical tension disconnect its plug from the outlet.

WORKING IRREGULARITIES

In case of working irregularities, before to call the technical service in zone verify that:

- the main switch  is lighting and the current is present;
- the regulated temperature is the wished one;
- that the door is perfectly closed;
- the machine is not near heat sources;
- the condenser is clean and the fan works regularly;
- an excess of hoarfrost does not cover the evaporating pannel.

In case of negative result, contact the nearest service centre indicating the model and the serial number shown on the rating placed on the appliance instrument panel.

USAGE INTERRUPTIONS

In case of longer inactivity of the refrigerator and for maintaining it in the best state act as following:

- set the general cut-out in OFF position.
- remove the plug from the socket.
- empty the refrigerator and clean it as described In the chapter "CLEANING".
- let the door open to avoid the forming of bad smell.

MALFUNCTIONING

Malfunctioning during operation is often due to banal causes , whitch may nearly all be resolved without the help of a specialised technician. Consequently, before getting in touch with a service centre, check the following:

PROBLEM	POSSIBLE CAUSES
The appliance does not start	Check that the plug is properly inserted into the socket.
	Check that there is voltage at the socket
The internal temperature is too high	Check the electronic card adjustment
	Check for a heat source in the vicinity
	Check that the door closes properly

The appliance is excessively noisy	Check that the appliance is standing level. A lopsided appliance could set off vibrations
	Check that the appliance is not touching other appliances or parts which could resonate
Some condensation is produced on the appliance	Room humidity is very high
	The door is not closed properly

Upon completion of the above checks, if the fault persists, contact an authorised service centre. Always indicate:

- the nature of the fault
- the model and the serial number of the unit can be found on the electrical specifications plaque, located on the unit's instrument panel.

REFRIGERANT MATERIAL SAFETY DATA SHEET

R290

GWP = 3

ODP = 0

❖ Hazards identification

Liquefied gas - Extremely flammable

❖ First aid measures

• Inhalation:

In high concentrations may cause asphyxiation. Symptoms may include loss of mobility and/or consciousness. Victims may not be aware of asphyxiation. In low concentrations, may cause narcotic effects. Symptoms may include dizziness, headache, nausea and loss of coordination. Remove victim to an uncontaminated area wearing self contained breathing apparatus. Keep the patient relaxed and warm. Call a physician. Apply artificial respiration if breathing stops..

• Contact with skin and eyes:

In case of spillage, rinse thoroughly with water for at least 15 minutes

• Ingestion:

Route of exposure unlikely

❖ Ecological information

No known ecological damage caused by this product

WIRING DIAGRAM

The instruction handbook contains a wiring diagram on the last page.

Pos	DESCRIPTION	Pos	DESCRIPTION
1	COMPRESSOR	44	RELAY COMPRESSOR
2	COMPRESSOR FAN	69	GROUNDING TERMINAL
3	GENERAL TERMINAL BOARD	70	COLD DELIVERY SOLENOID VALVE
8	PLUG	70A	WARM DELIVERY SOLENOID VALVE
9	EVAPORATOR FUN	76	MAGNETIC MICRO-SVITCH
12	SOLENOID VALVE DEFROSTING	103	HUMIDITY SENSOR
20	DOOR ANTICONDENSING RESISTOR	119	TN DISPLAY CASE ELECTRONIC DATA CARD
20A	SIDE GLASS ANTICONDENSATION RESISTANCE HEATER	120	BT DISPLAY CASE ELECTRONIC DATA CARD
20B	SIDE GLASS ANTICONDENSATION RESISTANCE HEATER	121	LED SWITCHING POWER SUPPLY
20C	REAR GLASS ANTICONDENSATION RESISTANCE HEATER	122	LED LAMPS
20D	SECTION ANTICONDENSATION RESISTANCE HEATER	122A	TOP LED LAMPS
22	RESISTANCE FOUND BASIN	125	ELECTRONIC DATA CARD PRALINERY DISPLAY CASE
22A	RESISTANCE HEATER EXHAUST PIPE	126	CAPACITIVE BUTTONS DISPLAY BOARD