Manuale d’uso e manutenzione
Use and maintenance manual

EVERLASTING

ARMADIO REFRIGERATO
REFRIGERATED CABINET

BASIC - QUICK - FISH

ITA

EN

Thank you for choosing this product.

Please read the warnings contained in this manual carefully, as they provide important information regarding safe operation and maintenance.
Make sure to keep this manual for any future reference by the various operators.

In some parts of the manual, the ⚠ symbol appears, indicating an important warning that must be observed for safety purposes.

CHAPTER 1 BOUNDARY CHARACTERISTICS OF OPERATION

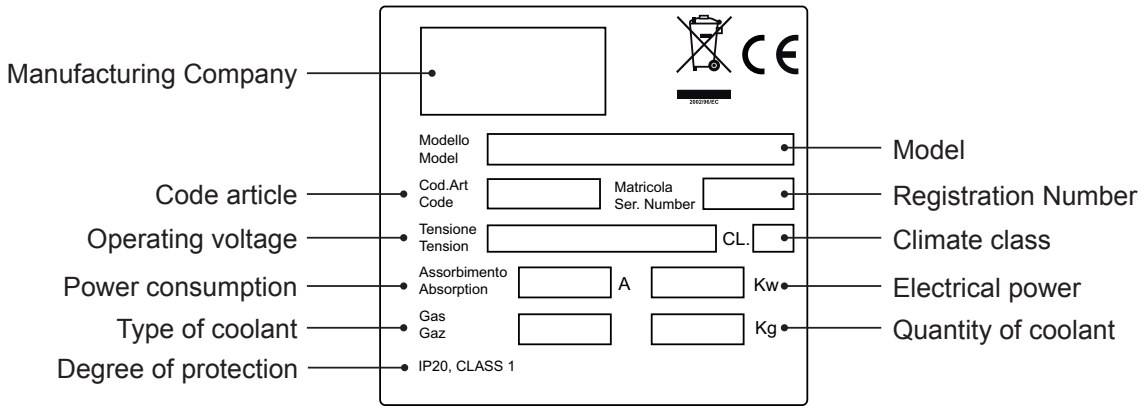
The refrigerated cabinet has been designed and built to operate in optimal conditions at temperatures from +10°C to +43°C (BASIC), +10°C and +38°C (QUICK - FISH), with adequate air circulation. In places with characteristics that are different from the requirements, the stated performance cannot be guaranteed.The supply voltage must be 230V +/- 10% 50Hz as standard, or as indicated on the EC label.

The refrigerated cabinet may only be used within the temperature limits specified by the manufacturer; to identify the correct operating range, read the letters after the last digit of the model shown on the EC label and compare it with the table below:

Serie	Temperature
TNBV	-2° +10°C
BTV	-10° -22°C
TNS	-5° +5°C

The refrigerated cabinet complies with the European directives as described in detail in the Annex **"EC Declaration of Conformity"**

The technical specifications of the refrigerated cabinet are listed on the CE label inside the motor compartment, on the body wall



⚠ **ATTENTION**: any request for intervention, technical support and spare part must refer to the **SERIAL NUMBER** on the CE label, on the manual cover or on the compressor motor. The producer declines any responsibility for any improper or not reasonably foreseen usage of the refrigerated cabinet and for any operation carried out by neglecting the indications listed on the manual.

The main general safety standards are listed below:

- Do not use or place electrical devices inside the refrigerated compartments if they are not of the type recommended by the manufacturer
- Do not touch the refrigerated cabinet with damp or wet hands or feet
- Do not use the refrigerated cabinet barefoot
- Do not insert screwdrivers or other objects between the guards or moving parts
- Do not pull the power cord to unplug the refrigerated cabinet from the electricity network
- The refrigerated cabinet is not intended to be used by persons (including children) with physical or mental problems, or lack of experience and knowledge, unless they are controlled or instructed in using the unit by a person responsible for their safety. Children must be supervised to ensure that they do not play with the appliance.
- Before carrying out any cleaning or maintenance, disconnect the refrigerated cabinet from the mains power supply by turning off the main switch and pulling the plug
- In the event of failure and/or malfunction of the refrigerated cabinet, turn it off and to refrain from any attempt to repair or intervene directly. It is necessary to exclusively contact a qualified technician.

The refrigerated cabinet is composed of a modular single body insulated with expanded polyurethane with 42 kg/m3 density, internally covered in Stainless Steel AISI 304 and externally by different materials.

In the design and construction, all measures have been adopted to ensure a refrigerated cabinet that complies with safety and hygiene requirements, such as: rounded interior corners, deep drawing with drain on the outside for the condensate liquids, no rough surfaces, fixed guards on moving or dangerous parts.

The products must be stored in observance of the load limits given in the table, in order to ensure an efficient circulation of air inside the refrigerated cabinet.

Load limit expressed in Kg.			
Grille 650x530	20	**Stainless Steel Tray GN 1/1**	15
Grille 550x530	20	**Stainless Steel Tray GN 2/1**	20
Grille 480x580	15	**Stainless Steel Basin Inox GN 1/1**	15
Grille 480x480	12	**Stainless Steel Basin Inox GN 2/1**	20
Wire basket 640x530	20	**Plastic Basin GN 1/1**	10
Wire basket 528x530	20	**Plastic Basin for Fish**	10
Drawers 530x610	25	**Stainless Steel Basin for Fish**	15

⚠ The installation must be performed exclusively by a qualified technician

1.1 It is prohibited to remove the guards and safety devices
It is absolutely forbidden to remove safety guards.

The manufacturer disclaims any liability for accidents due to failure to comply with this obligation.

1.2 Information on emergency operations in the event of fire
- disconnect the refrigerated cabinet from the power source or cut off the power supply
- do not use jets of water
- use dry chemical or CO2 extinguishers

CHAPTER 2 CLEANING THE REFRIGERATOR

Since the refrigerated cabinet will be used to store food, cleaning is necessary for hygiene and health protection purposes. The cleaning of the refrigerated cabinet has already been carried out at the factory. It is suggested, however, to carry out an additional cleaning of the internal parts before use, making sure that the power cord is unplugged.

2.1 Cleaning the interior and exterior cabinet
For this purpose the following are indicated
- the cleaning products: water and mild, non-abrasive detergents. DO NOT USE SOLVENTS AND THINNERS
- methods for cleaning: wash the interior and exterior parts with warm water and mild soap or with a cloth or sponge with suitable products
- disinfection: avoid substances that can alter the organoleptic characteristics of the food
- rinsing: cloth or sponge soaked in warm water. DO NOT USE WATER JETS
- frequency: weekly is recommended, the user can set different frequencies depending on the type of food being stored.

⚠ **REMARK :** Clean frequently the door seals.
Some preserved products could release some enzymes that could damage the seals causing its quick deterioration.
For the cleaning, use only specific products for this purposes, available also on request on our sales network.

2.2 Cleaning the condenser
The efficiency of the refrigerated cabinet is compromised by the clogging of the condenser, therefore it is necessary to clean it on a monthly basis. Before carrying out this operation, switch off the refrigerated cabinet, unplug the power cord and proceed as follows:

Motor below - open the front control panel by unscrewing the screws and making it rotate on the hinges located below.

Motor on top - for models with non-folding front panel, climb up on a safe ladder and go directly to the condenser placed on top of the refrigerated cabinet.

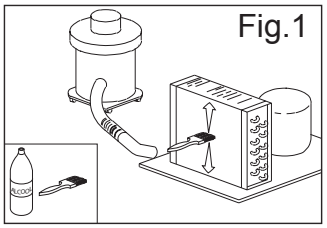


Fig.1

With the aid of a jet of air or dry brush, eliminate, in a vertical movement (Fig. 1), the dust and lint deposited on the fins. In the case of greasy deposits, we recommend using a brush moistened with special cleaning agents. For models with hinged front, loosen the locking screw and rotate the front panel on the hinges located at the top. At this point, proceed to clean as done with the models with fixed front panel. When the operation is completed, restart the refrigerated cabinet. Evaporators installed above the appliances are cartaphoresis-treated to reduce corrosion problems.

⚠ During this operation, use the following personal protective equipment: goggles, respiratory protection mask, chemically resistant gloves (gasoline-alcohol).

CHAPTER 3 PERIODIC CHECKS TO BE CARRIED OUT

The following are the points or units of the refrigerated cabinet that require periodic checks:
- integrity and efficiency of door seals
- integrity of the grilles in contact with food
- integrity of the fixing hinges of the doors
- integrity of the power cord

3.1 PRECAUTIONS IN CASE OF LONG PERIODS OF INACTIVITY

A long period of inactivity is defined as a stoppage of more than 15 days.
It is necessary to proceed as follows:
- switch off the refrigerated cabinet and disconnect it from the power supply
- carry out a thorough cleaning of the interior cabinet, shelves, trays, guides and supports, paying special attention to critical points such as the joints and magnetic gaskets, as indicated in Chapter 2.
- leave the door partly open to prevent air stagnation and residual humidity

CHAPTER 4 PREVENTIVE MAINTENANCE

4.1 Restarting after a long period of inactivity

Restarting after long inactivity is an event that requires preventive maintenance.
It is necessary to perform a thorough cleaning as described in chapter 2.

4.2 Control of the warning and control devices

We recommend that you contact your dealer for a service or maintenance contract that includes:
- cleaning of the condenser
- verification of the coolant load
- verification of the full cycle operation
- electrical safety

⚠ CHAPTER 5 EXTRAORDINARY MAINTENANCE AND REPAIR

All maintenance activities that have not been described in previous chapters are considered “Extraordinary Maintenance.” Extraordinary maintenance and repair are tasks reserved exclusively to the specialist personnel authorized by the manufacturer.
No liability is accepted for actions carried out by the user, by unauthorized personnel, or with the use of non-original replacement parts.

CHAPTER 6 TROUBLESHOOTING

In case of any malfunction or anomaly, check the chart here below before asking for technical assistance.

TROUBLE DESCRIPTION	POSSIBLE CAUSES	HOW TO REPAIR IT
the refrigerated cabinet does not turn on	no power supply	check the plug, socket, fuses, line
	other	contact technical support
the refrigeration unit does not start	the set temperature has been reached	set new temperature
	defrosting in progress	wait until the end of cycle / turn power off and on again
	command panel failed	contact technical support
	other	contact technical support
the refrigeration unit runs continuously but does not reach the set temperature	location is too hot	aerate more
	condenser is dirty	clean the condenser
	insufficient coolant	contact technical support
	stop the condenser fan	contact technical support
	insufficient sealing of doors	check the seals / provision of goods
	evaporator completely frosted	manual defrosting
	other	contact technical support
the refrigeration unit does not stop at the set temperature	command panel failed	contact technical support
	P1 temperature sensor failed	contact technical support
block of ice on the evaporator	misuse	see chapter 1.
	defrost heater fault	contact technical support
	defrost probe P2 damaged	contact technical support
accumulation of water or ice in the drip tray	drain clogged	clean the pipette and the drain
	refrigerated cabinet is not level	check levelling

CHAPTER 7 INSTRUCTIONS FOR REQUESTING ASSISTANCE

For any technical problem and for intervention, assistance and spare-part requests it is necessary to exclusively revert to one's dealer, providing the code and the serial number indicated on the specification label attached to the appliance.

CHAPTER 8 SAFETY AND ACCIDENT PREVENTION

The refrigerated cabinet has been built with suitable measures to ensure the safety and health of the user.
The following are the measures taken to protect against mechanical risks:

- stability: The refrigerated cabinet, even with the grilles removed, has been designed and built in such a way that under the intended operating conditions, its stability is suitable for use without risk of overturning, falling or unexpected movement

- surfaces, edges, corners: the accessible parts of the refrigerated cabinet are, within the limits allowed by their functions, free of sharp angles and sharp edges, as well as rough surfaces likely to cause injury

- moving parts: were designed, constructed and arranged to avoid risks. Certain parts are equipped with fixed guards so as to prevent risks of contact which may result in injury

The following are the measures taken to protect against other risks:

- electricity: The refrigerated cabinet has been designed, built and equipped so as to prevent risks from electricity, in accordance with the specific legislation in force

- noise: The refrigerated cabinet has been designed and built in such a way that risks resulting from the emission of airborne noise are reduced to the minimum level

8.1 safety devices adopted
It is absolutely forbidden (Fig. 2) :
- to tamper with or remove the evaporator housing casing that protects the user against the risk of being cut by the evaporator fins and the movement of the motor fan inside.
- remove the labels applied at the inner edge of the engine compartment, showing the technical specifications (1) and the instructions for grounding (2)
- remove the label applied on the evaporator guard and near the electrical wiring inside the engine compartment, which warns the user to turn off the power supply before working on the unit (3)
- to remove the labels applied inside the engine compartment, indicating grounding (4)
- to remove the label applied on the power cord, indicating the type of power supply (5)
The manufacturer declines any responsibility for the safety of the refrigerated cabinet if this were to happen.

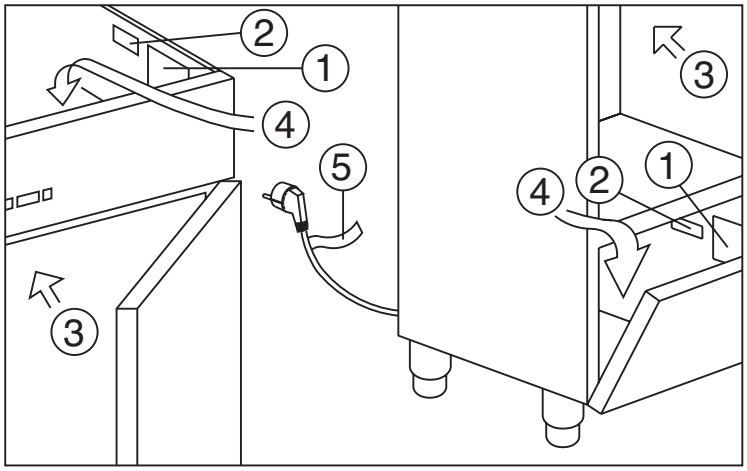


Fig.2

8.2 Indications for optimal operation
- do not obstruct the motor-compartment air intakes (place at minimum 50 cm from ceiling)
- do not insert foods or liquids that are still hot
- place the foodstuffs on the appropriate shelves or containers. Do not place them directly on the bottom, or leaning against the walls, doors or fixed guards
- close the doors carefully
- always keep the defrost water drain hole clear of obstructions
- limit, to the extent possible, the frequency and duration of door opening. Each opening causes a change in the internal temperature
- load the goods on the shelves in a phased manner
- perform periodically current maintenance (see chapter 3)
In case of interruption or failure of the power supply circuit, prevent the opening of the doors in order to maintain a uniform temperature inside the refrigerated cabinet.
If the problem persists longer than a few hours it is recommended to move the material to a suitable place.

CHAPTER 9 CONTROLS

9.1 Description of the controls and buttons (Fig. 3)

The control panel of the refrigerated cabinet is provided with 4 touch keys ① / ② / ⑩ / ⑪ with specific functions:

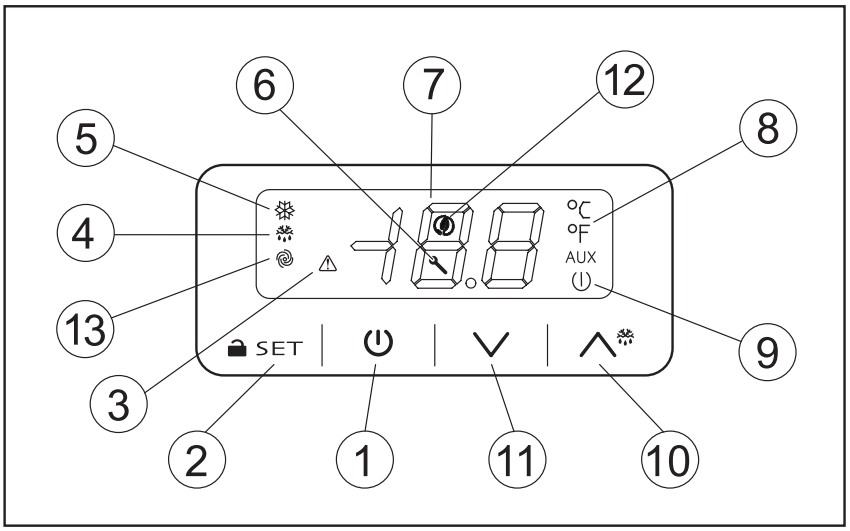


Fig.3

The user interface is composed of:

Display (7)	Displays internal temperature and operation status of the refrigerated cabinet
SET Key (2)	Allows access to SET-point and confirms adjusted parameters. Push for more than 4 seconds to access service menu for qualified technical personnel
ON/OFF Key (1)	Push for more than 4 seconds to turn on and off the refrigerated cabinet
UP Key (10)	Allows increasing the temperature (higher). Push for 4 seconds to activate manual defrosting.
DOWN Key (11)	Allows increasing the temperature (higher). Push for 4 seconds to activate manual defrosting.

After 30 seconds without touching any key, the keyboard automatically locks (LOC); push any key for 4 seconds to unlock it (UNL)

9.2 INSTRUCTIONS FOR USE

☞ 9.2.1 Startup

Before starting up the refrigerated cabinet, make sure that the electrical connections have been carried out as indicated in chapter 13.

Check the presence of current, icon (9) on and display off.

Startup sequence (fig.3).

▸ Push the ON/OFF key (1) for 4 seconds	The display will turn on and show the cabinet temperature

☞ 9.2.2 Shutdown methods (fig.3)

▸ Push the ON/OFF key (1) for 4 seconds	The display will turn off and the current presence icon (9) will turn on.

☞ 9.2.3 Temperature setting (fig.3)

Proceed as follows to set the desired temperature:

▸ Push any key for 4 seconds to unlock the keyboard (LOC-UNL)	LOC (locked keyboard), then UNL (unlocked keyboard) will be displayed.
▸ Quickly push the SET key (2)	The set temperature Setpoint value will be displayed.

To increase the value

Use the UP (10) key; push the SET (2) key or do not operate on any key for 15 seconds to confirm

To decrease the value

Use the DOWN (11) key; push the SET (2) key or do not operate on any key for 15 seconds to confirm

☞ 9.2.4 Automatic and manual defrost (Fig. 3)

The refrigerated cabinet is factory-set to defrost aoutmatically at predetermined intervals, as follows:

- **TNV Range** (normal ventilated temperature) 1 defrost lasting up to 50 minutes every 8 hours.
- **TNBV Range** (low normal temperature, ventilated) 1 defrost lasting up to 30 minutes every 8 hours.
- **BTV Range** (low temperature, ventilated) 1 defrost lasting up to 30 minutes every 6 hours.

Proceed as follows to carry out a manual defrosting according to your needs:

▸ Push any key for 4 seconds to unlock the keyboard (LOC-UNL)	LOC (locked keyboard), then UNL (unlocked keyboard) will be displayed.
Push the UP key (10) for 4 seconds	The cabinet will enter defrost mode, if the evaporator requires it. Icon (4) will turn on.

NB: At the end of the defrosting cycle, the LED (4) will turn off and the refrigerated cabinet will automatically resume the normal cooling cycle

☞ 9.2.5 Keyboard lock (fig.3)

They keyboard locks automatically after 30 seconds without operating on it; LOC will be displayed for one second. Push any key for 4 seconds to unlock the keyboard; UNL will be displayed.

9.2.6 Alarms and signals (fig.3)

Signals:

Current presence Icon (9)	is on and the display is off when the refrigerated cabinet is in stand-by mode
Compressor led (5)	is on when the refrigerated cabinet is working; it flashes when the cabinet is waiting to start
Defrost led (4)	is on during defrosting; it flashes during dripping
Evaporator led (13)	is on when the refrigerated cabinet fan is working; it flashes when it is waiting due to activation delay
Temperature unit of measurement led (8)	indicates if temperature reading is in Centigrades °C or Fahrenheit °F degrees
Service led (6)	is on when maintenance by service is required
Led Energy Saving (12)	This function is inactive and cannot be activated; it does not affect the operation of the refrigerated cabinet
Led Alarm (3)	is on when an alarm is taking place

Alarms:

AL minimum temperature alarm	temperature has exceeded the minimum set value
AH maximum temperature alarm	temperature has exceeded the maximum set value
id doorswitch input alarm	The door has been left open beyond the set time
Pr1 chamber probe error	the internal probe is damaged; the compressor will continue workig with a duty cycle
Pr2 evaporator probe error	The evaporator probe is damaged. Defrost and ventilation will not be adjusted by probe parameters but by a safety program (defrost by maximum time and active ventilation with working compressor).

During an alarm, the display will alternatively visualize the active alarm and the temperature of the refrigerated cabinet until the alarm will pass

CHAPTER 10 NOISE LEVEL

The refrigerated cabinet is designed and constructed so that risks resulting from the emission of airborne noise are reduced to the minimum level (see technical information).

CHAPTER 11 MATERIALS AND FLUID USED

We hereby inform our clients that this product employs an HC (Hydrocarbon) refrigerating gas classified as A3, i.e. flammable.
Devices with flammable refrigerating gases are identified with the following label on the device:

R290

IMPORTANT SAFETY INSTRUCTIONS AND CAUTIONS: Although the gas quantity contained in the device complies with the norms on the subject, more precautions in the management of the device are requested, most of all when works on the refrigerating system have to be carried out:

• The refrigerating circuit must not be damaged to avoid leaks, because the contact between air and gas entails the risk of fires in case of presence of a suitable primer, such as open flame or sparks coming from electrical appliances. If any replacement of components is necessary, demand only original and homologated parts for specific use.
• In case of technical works due to malfunctions, please only contact qualified personnel who can carry them out according to the compulsory safety norms for this kind of gas. The tools used for working on the device must comply to the same rules concerning the refrigerating system components: no electrical appliances nor flames must be used in the presence of flammable gases.
• Specific works regarding vacuum and system charge will have to be carried our with the suitable tools for the type of gas, avoiding the presence of flammables and the contact with flames or sparks.

The symbol  indicates that this product must not be treated as household waste.

To prevent potential negative consequences for the environment and human health, make sure that this product is properly disposed of and recycled. For more information regarding the disposal and recycling of this product, please contact your Distributor, after sale Service, or waste treatment Service.

CHAPTER 12 TRANSPORT AND HANDLING

⚠ The transport and handling of the refrigerated cabinet must only be done while maintaining the vertical position, observing the markings on the packaging.

The manufacturer disclaims any liability for problems resulting from transport performed under conditions other than those specified above.
The accessories of the refrigerated cabinet (guides, grilles, trays) are packaged separately and placed inside the unit.

The refrigerated cabinet is mounted on a wooden base with screws and packaged with polyethylene, carton, crate or boxes.

Regarding the disposal of the packaging it is necessary to refer to current regulations in your country.

⚠ The movement of the refrigerated cabinet shall be performed using a fork lift or pallet trucks equipped with suitable forks (length of at least 2/3 of the unit).
The limits of stackability and the centre of gravity are indicated on the label of the package.

12.1 Positioning operations

Since the incorrect positioning of the refrigerated cabinet can cause damage to the same, jeopardizing its proper functioning and cause risks to the personnel, the installer must comply with the following general rules:
- place the refrigerated cabinet at a minimum distance of 3 cm from any wall and of 50 cm from the ceiling
- the environment must be sufficiently ventilated
- position the refrigerated cabinet away from heat sources
- avoid exposure to direct sunlight
- remove the polyethylene, cardboard or wood packaging

⚠ Polyethylene is dangerous for children

- remove any accessories with external connections

Removing the wooden base (fig. 4): tilt the refrigerated cabinet sideways and unscrew the two self-tapping screws, lift the refrigerated cabinet and remove the base.

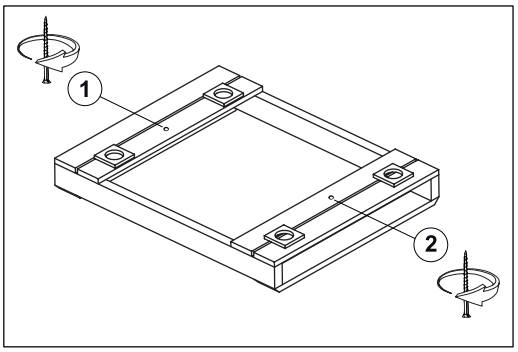


Fig.4

⚠ use protective gloves when handling the wooden packaging and the wooden base.

The presence of splinters may cause damage to your hands
- remove the PVC film applied as a protection to the outer surfaces of the refrigerated cabinet
- position the refrigerated cabinet using a level with possible adjustment of the feet of the metal base (Fig. 5)

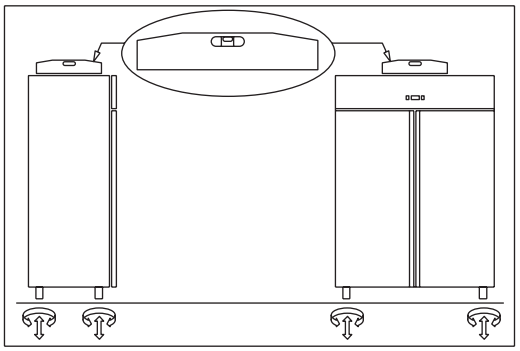


Fig.5

- position the grille holding guide fails in the holes of the racks (Fig. 6)

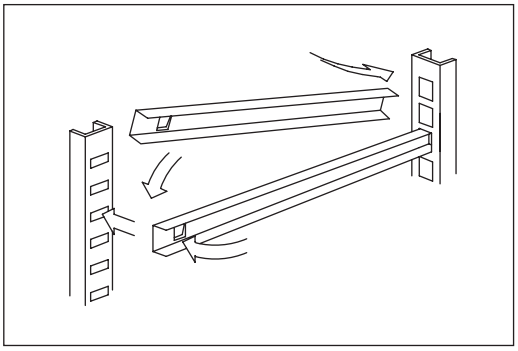


Fig.6

- insert the grilles for food in the special guides
- insert the condensate water drain pan into the special guide rails already fixed under the refrigerated cabinet if provided.

CHAPTER 13 ELECTRICAL WIRING AND CONNECTIONS

The electrical system and connection must be carried out by qualified personnel. Before installation, measure the impedance of the network, the impedance value for the connection to the network must not exceed 0.075 ohm.

For safety reasons you must follow these guidelines:
- verify that the sizing of the electrical system is suitable for the power consumption of the refrigerated cabinet and that it provides for a differential switch (circuit breaker)
- in case of incompatibility between the outlet and the plug of the refrigerated cabinet, replace the outlet with another of a suitable type provided that it is in accordance with regulations
- do not insert adapters and/or reductions (Fig. 8)

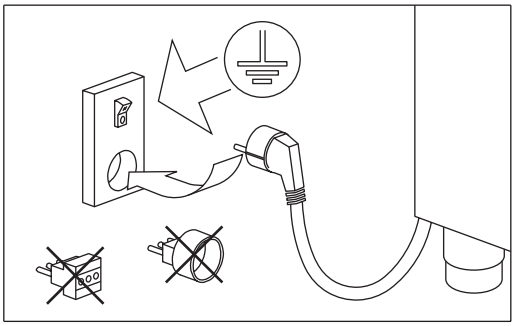


Fig.8

⚠ The power cord has the connection type “Y” and it can be replaced exclusively by the manufacturer or authorized technical service.

⚠ It is essential to correctly connect the refrigerated cabinet to an efficient earthing system carried out as specified by the applicable provisions of law.

CHAPTER 14 INSTALLATION OPERATIONS

It is important, in order to prevent errors and accidents, to perform a series of checks before starting up the refrigerated cabinet in order to identify any damage incurred during transport, handling and connection.

Checks to be performed:
- check the integrity of the power cord (it must not have suffered abrasions or cuts)
- check the solidity of the legs, door hinges, shelf supports
- check the integrity of the internal and external parts (pipes, heating elements, fans, electrical components, etc.) and their fixing
- check that the seals of the doors and drawers have not been damaged (cuts or abrasions) and close with an airtight seal

CHAPTER 15 REINSTALLATION

It is necessary to comply with the following procedure:
- disconnect the power cord from the power outlet
- the handling should be carried out as described in chapter 12
- for a new placement and connection, please refer to par. 12.1

ATTENZIONE!

ISTRUZIONI RISERVATE A PERSONALE TECNICO AUTORIZZATO

Si avvisano gli utenti che qualsiasi intervento eseguito da personale non tecnico o non autorizzato produrrà la decadenza delle condizioni di garanzia.

WARNING!

INSTRUCTIONS STRICTLY RESERVED TO AUTHORIZED TECHNICAL PERSONNEL

Every intervention executed by a non authorized technical personnel implies a warranty decay.

PARAMETER VISUALIZATION AND ADJUSTMENT	
Push any key for 4 seconds to unlock the keyboard	UnL (unlocked) will be displayed
Push the SET key for 4 seconds	PA
Push the SET key	0
Push the DOWN key and set password -19	-19
Push the SET key	SP (first parameter label)
Push the UP key to scroll the parameters	Requested parameter
Push the SET key to display the value	Value
Push the UP or DOWN keys to adjust it	Adjusted value
Push the SET key to confirm the new value	Adjusted parameter label
Push the SET key for 4 seconds or do not operate on any key for 60 seconds to exit the programming mode	

CH VISUALIZATION AND RESET OF THE COMPRESSOR WORKING HOURS FROM THE FIRST STARTING	
Working hours visualization	
Push any key for 4 seconds to unlock the keyboard	UnL (unlocked) will be displayed
Push the DOWN key for 4 seconds	rCH
Push the DOWN key and visualize CH	CH label
Push the SET key to visualize the working hours	Working hours
Push the ON/OFF key or do not operate on any key for 60 seconds to exit the programming mode	

Reset of working hours and maintenance	
Push any key for 4 seconds to unlock the keyboard	UnL (unlocked) will be displayed
Push the DOWN key for 4 seconds	rCH
Push the SET key	0
Push the UP key to set the reset value 149	149
Push the SET key to confirm reset	---
Push the ON/OFF key or do not operate on any key for 60 seconds to exit the programming mode	

Visualization probe temperatures	
Push any key for 4 seconds to unlock the keyboard	UnL (unlocked) will be displayed
Push the DOWN key for 4 seconds	rCH
Push the UP or DOWN keys and visualize Pb1 chamber temperature or Pb2 evaporator temperature	Pb1 or Pb2 label
Push the SET key to visualize the temperature	Temperature
Push the ON/OFF key or do not operate on any key for 60 seconds to exit the programming mode	

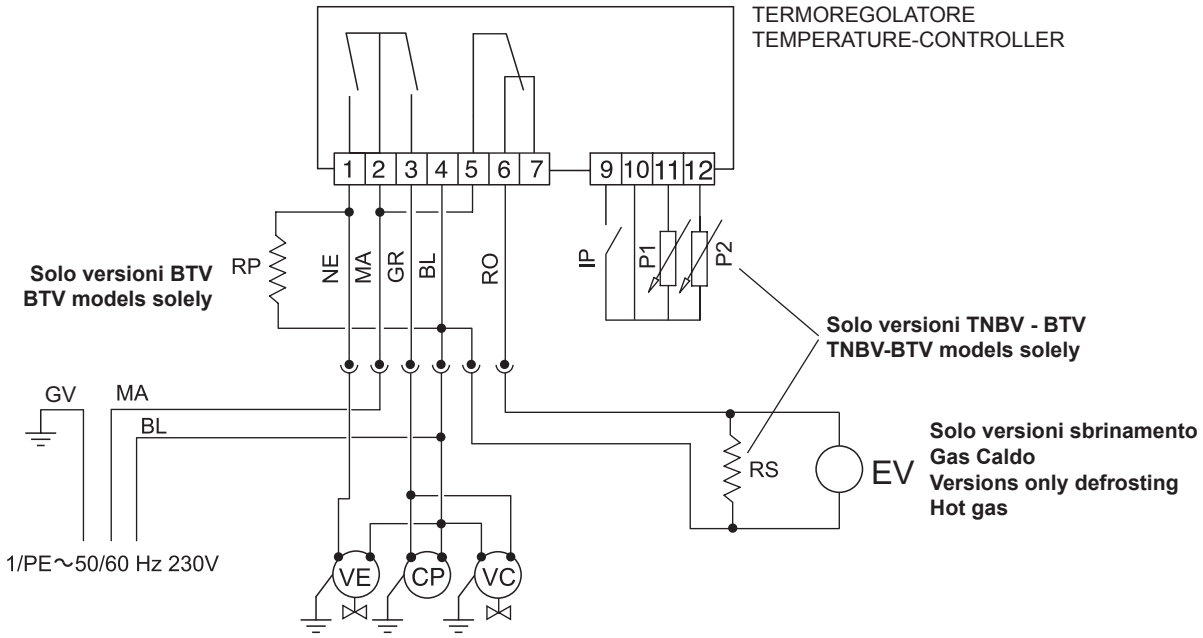
Parameter BASIC / QUICK / FISH

NB only the highlighted parameters can be modified by maintenance service. The other parameters can be modified only after reference/authorization by our technical department.

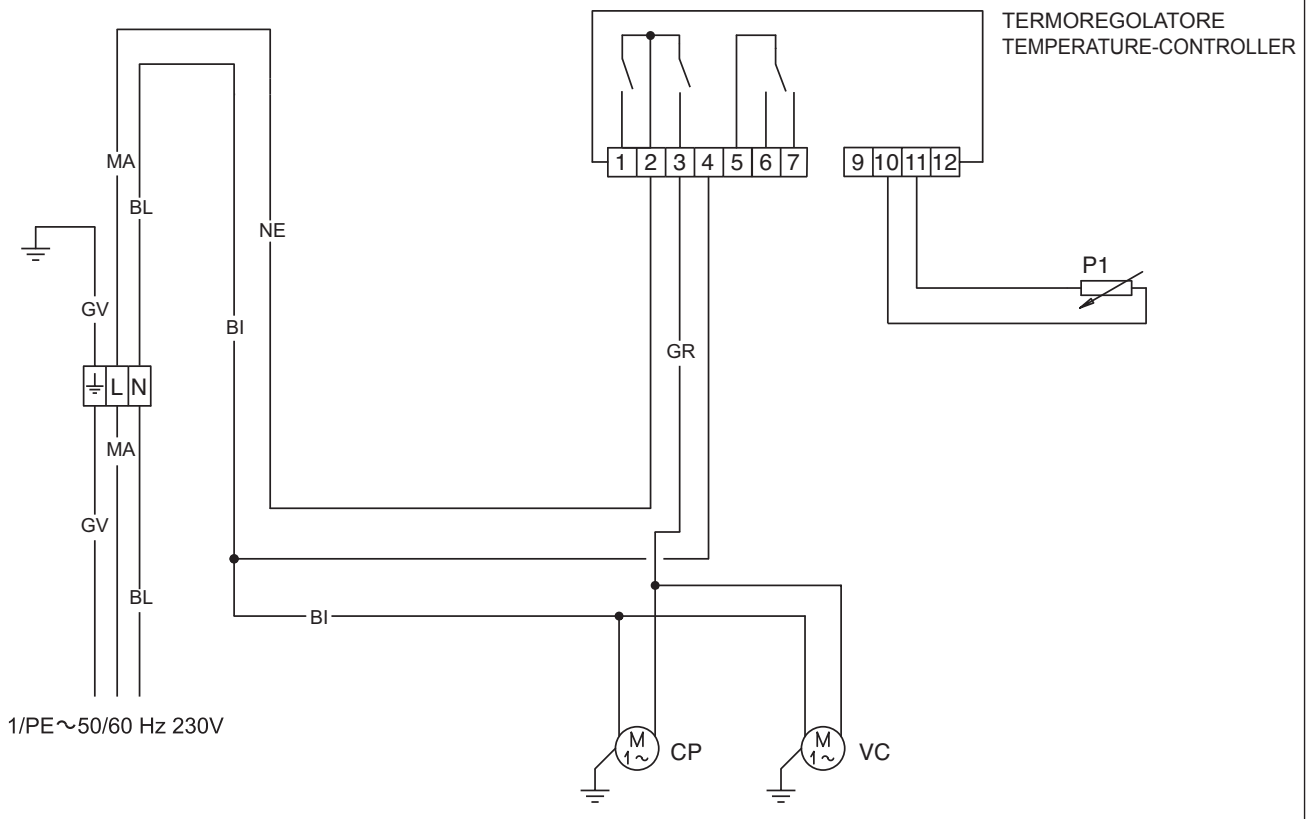
PAR	DESCRIPTION	RANGE	1	2	3
			TNBV	BTV	FISH
SP	Set point temperature	r1;r2 °C	0	-20	-5
	MEASUREMENT INPUTS				
CA1	Chamber probe offset	-25; 25 °C	0	0	0
CA2	Evaporator probe offset	-25; 25 °C	0	0	0
P0	Ptc/ntc probe type	0;1	1	1	1
P1	Decimal point	0; 1	1	1	1
P2	Temperature unit of measurement °C/F	0; 1	0	0	0
P4	Second analog input Function	0; 1; 2;3	1	1	0
P5	Displayed probe	0; 1; 2	0	0	0
P8	Delay displayed temperature change	0; 250 d”	5	5	5
	MAIN CONTROLLER				
r0	Setpoint differential	0,1; 15 °C	2	2	2
r1	Minimum working setpoint	-99; r2 °C	-2	-20	-5
r2	Maximum working setpoint	r1; 99 °C	10	-10	5
r4	Temperature increase in energy saving	0; 99 °C	1	1	0
r5	Working for cold/warm	0; 1	0	0	0
r12	Asymmetrical/Symmetrical setpoint differential type	0;1	0	0	0
	COMPRESSOR PROTECTION				
C0	Compressor delay at startup	0; 240 ‘	0	0	0
C2	Off-on compressor delay	0; 240 ‘	5	5	5
C3	Compressor “on” mimimum duration	0; 240 “	0	0	0
C4	Off time damaged probe	0; 240 ‘	10	10	10
C5	On time damaged probe	0; 240 ‘	10	50	10
C6	Condenser probe alarm temperature	0; 199 °C	80	80	80
C7	Condenser probe temp. for compressor block	0; 199 °C	90	90	90
C8	Blocked compressor alarm delay	0; 15 ‘	1	1	1
C10	“On” compressor hours for service request	0;9999	0	0	0
	DEFROST ADJUSTMENTS				
d0	Defrost interval	0; 99 h	8	6	0
d1	Defrost type	0;1;2	1	1	0
d2	Defrost end temperature	-99; 99 °C	8	8	8
d3	Defrost max duration	0; 99 ‘	30	30	0
d4	Defrost at startup	0; 1	0	0	0
d5	Defrost delay at startup	0; 99 ‘	0	0	0
d6	Visualized temperature in defrost	0; 1	1	1	1
d7	Dripping duration	0; 15 ‘	2	2	2
d8	Defrost interval type	0 ;1 ;2 ;3 ;4	0	0	0
d9	Max evaporator temp. for defrost interval count	-99; 99 °C	0	0	0
d11	Max defrost duration time alarm	0; 1	0	0	0
d15	“On” compressor min duration for hot gas defrost “on”	0; 99 ‘	0	0	0
d18	Adaptive defrost interval	0; 99 ‘	40’	40’	40’
d19	Evaporator temperature for adaptive defrost “on”	0; 40°C	3	3	3
d20	Compressor startup duration for defrost activation	0; 500’	180’	180’	180’
d22	Min evaporator temp. for adaptive defrost activation count	0; 19 °C	2	2	2
	TEMPERATURE ALARMS				
A1	AL minimum temperature alarm	-99; 99 °C	10	10	10

A4	AH maximum temperature alarm	-99; 99 °C	10	10	10
A6	Maximum temperature alarm delay	0; 240 ‘	120	120	120
A7	Minimum temperature alarm delay	0; 240 ‘	30	30	30
A8	Temperature alarm delay for defrost end	0; 240 ‘	60	60	60
A9	Temperature alarm delay for doorswitch “off”	0; 240 ‘	60	60	60
A11	Alarm parameter differential	0; 15 °C	2	2	2
	EVAPORATOR FAN				
F0	Evaporator fan on	0;1;2;3;4	4	4	2
F1	Evaporator temperature	-99; 99 °C	4	40	4
F2	Fans in defrost	0; 1; 2	0	0	1
F3	Fan delay time	0; 15 ‘	2	2	2
F4	Fan OFF duration for energy saving	0; 240 “	0	0	0
F5	ON fan duration for energy saving	0; 240 “	1	1	1
F7	Fan shutdown duration when compressor OFF	0;240”	0	0	0
F8	Fan startup duration when compressor OFF	0;240”	0	0	0
F9	Fan shutdown delay for compressor OFF	0; 240 “	0	0	0
	DIGITAL INPUTS				
i0	On off doorswitch	0;…;5	2	2	0
i1	NA-NC doorswitch contact	0; 1	0	0	0
i2	Doorswitch alarm delay on	-1; 120 ‘	30	30	30
i3	Doorswitch activation maximum duration	-1; 120 ‘	15	15	15
i10	Time for doorswitch reset for Energy Saving activation	0; 999 ‘	180	180	180
i13	Number doorswitch activations for defrost “on”	0; 240’	0’	0’	0’
i14	Doorswitch input activation Minimum duration for defrost “on”	0; 240’	0’	0’	0’
	REAL TIME ENERGY SAVING				
HE2	Energy Saving activation MAXIMUM duration	0; 999’	0	0	0
HE3	Low consumption activation for lack of operations	0; 240’	0	0	0
	GENERAL				
POF	On/Off key activation	0; 1	1	1	1
PAS	Parameter access password	-99; 999	-19	-19	-19

BTV
TNBV



BASIC - QUICK



FISH

Legenda componenti
CP - Moto-compressore
K1 - Relè compressore
LI - Luce interna
MS - Morsettiera alimentazione
RB - Resistenza bacinella
RC - Resistenza scarico
RS - Resistenza sbrinamento
IP - Interruttore porta
RP - Resistenza anticondensa
P1 - Sonda termostato
P2 - Sonda evaporatore
SG - Valvola solenoide
VC - Ventilatore condensatore
VE - Ventilatore evaporatore
UR - Unità remota
EV - Elettrovalvola sbrinamento

Legenda colori
NE - Nero
GR - Grigio
AR - Arancio
RO - Rosso
MA - Marrone
BL - Blu
BI - Bianco
GV - Giallo Verde
RA - Rosa
VI - Viola
AZ - Azzurro chiaro

Components key
CP - Moto-compressor
K1 - Compressor relay
LI - Internal light
MS - Power supply terminal
RB - Basin heater
RC - Drain heater
RS - Defrost heater
IP - Door switch
RP - Anti-condensate heater
P1 - Thermostat probe
P2 - Evaporator probe
SG - Solenoid Valve
VC - Condenser fan
VE - Evaporator fan
UR - Remote unit
EV - Defrost solenoid valve

Colour Key
NE - Black
GR - Grey
AR - Orange
RO - Red
MA - Brown
BL - Blue
BI - White
GV - Yellow Green
RA - Pink
VI - Purple
AZ - Light blue

MAN0000 - REV.00 - 202401

EVERLASTING

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