

use and  
maintenance manual

# ECT-F PLUS

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## Please read this user manual carefully



Failure to read or any interpretation misunderstanding of the instructions contained in this manual may cause irreversible damage to the appliance, as well as be a source of danger for the user and significantly decrease the performance of the device.  
The manufacturer declines all responsibility for uses other than those indicated below.



Any maintenance operations must be carried out exclusively by personnel authorized by the manufacturer FIOCCHETTI.



Do not modify any system component.  
Defective parts may only be replaced with original or conform parts supplied from the manufacturer.



Do not power the device before or during the performing of any electrical or mechanical servicing, as some components would be powered



In the event of non-compliant use and/or maintenance of the equipment with respect to what is specified by the manufacturer FIOCCHETTI, warranty would immediately become void.



The content of this manual is for informational purposes only. The content of the manual and of the product itself may be subject to change without prior notice. Under no circumstances may the manufacturer FIOCCHETTI be held responsible for any damage attributable to the use of this manual.



To request technical assistance from FIOCCHETTI, all the information regarding the operation of the device being tested/verified must be provided.



All models are equipped with the environmentally friendly refrigerant R290, in accordance with EU Regulation 2024/573.

Do not damage the refrigerant circuit ducts.

The installation room must have, in compliance with EN 378, a volume of 1m<sup>3</sup> for every 8 g of R290 refrigerant contained in the circuit. The information on the amount of refrigerant is shown on the data plate attached within the appliance.

Revision	Date	Description
D	31/08/2023	Company name update and warning symbology
E	15/02/2025	Update of safety regulations
F	24/11/2025	Battery strip inclusion

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# 1 GENERAL INFORMATION

## CERTIFICATION

All refrigerated cabinets are manufactured in compliance with the relevant EU directives applicable at the time of its placing on the market. The refrigerated cabinets are certified according to directives 2006/42/EC, 2014/30/EC, 2014/35/EC and subsequent additions, built according to the safety requirements for electrical appliances for use in laboratories (IEC EN 61010-1 and 61010-2-011).

## TESTING AND WARRANTY

The machine is tested at our factory in compliance with current regulations and shipped ready for use. Warranty is valid for 12 months from the date of delivery and entitles you to repair/replace parts that are defective, except for electrical and electronic parts. Apparent defects and any discrepancies from the orders must be communicated to the manufacturer within 5 days of receipt of the goods, under penalty of forfeiture. Any other defect (not apparent) must be reported within 5 days of discovery, and in any case no later than 6 months from receipt of the goods. The customer will only be entitled to the repair or the replacement of goods, with the absolute exclusion of any direct or indirect damage compensation of any kind. In any case, the right to repair or to replace materials must be exercised within the maximum time limit given by the warranty, considering time limits contractually reduced with respect to those established by law. Repair or replacement of defective materials will take place at the manufacturer's factory. Faulty parts must be returned on freight prepaid basis; the manufacturer will then return them on ex-works basis.

## CONTENT AND RECIPIENTS OF THE MANUAL

This manual has been issued to provide the necessary instructions for the correct use of the machine and for its maintenance in perfect condition, with special regard to user's safety. The following professional figures should be defined to identify tasks and responsibilities:

**Installer:** A qualified technician who carries out the positioning and commissioning of the machine in accordance with the instructions in this manual.

**User:** the person who, after carefully reading the manual, uses the machine for its specific and permitted use. It is mandatory for the user to read the manual carefully and always refer to it.

**Ordinary maintenance technician:** qualified technician able to carry out routine maintenance work on the machine, following the instructions contained in this manual.

**Extraordinary maintenance technician:** qualified technician authorized by the manufacturer, able to carry out extraordinary maintenance work on the machine.

The manufacturer declines any responsibility for improper and unreasonably intended use of the machine, and for all those operations carried out on it without neglecting the instructions given in this manual.

The manual must be kept in a place accessible and known to all operators (installer, user, ordinary maintenance technician, extraordinary maintenance technician).

No part of this manual may be reproduced and/or disseminated by any means or in any form.

## ARRANGEMENTS TO BE MADE BY THE CUSTOMER

The following arrangements are the responsibility of the customer:

- The electrical connection of the machine,
- The preparation of the installation site
- Routine maintenance
- Cleaning the refrigerator and the products used for it

## REQUEST FOR TECHNICAL INTERVENTION

For technical problems and for any requests for technical assistance, it is necessary to provide all the information regarding the equipment and its operation.

In this regard, we ask you to send to one of the following addresses all the data requested by the form available at the end of this manual.

<b>Technical support</b>	<a href="mailto:assistenza@fiocchetti.it">assistenza@fiocchetti.it</a>
<b>Commercial support</b>	<a href="mailto:commerciale@fiocchetti.it">commerciale@fiocchetti.it</a>
<b>Support Request</b>	<a href="http://www.fiocchetti.it/it/tecnico-frigo.asp">http://www.fiocchetti.it/it/tecnico-frigo.asp</a>
<b>Manual request</b>	<a href="http://www.fiocchetti.it/it/manuali-frigoriferi-congelatori-emoteche.asp">http://www.fiocchetti.it/it/manuali-frigoriferi-congelatori-emoteche.asp</a>
<b>Tel.</b>	+39 0522 976232

Manufacturer’s Technical Assistance Department can provide all the information necessary for the correct operation of the equipment and can connect you with the nearest authorized service centre.

# 2 SAFETY

## GENERAL SAFETY RULES



Read the manual carefully and follow the instructions contained therein. Do not use the equipment for any other purpose than the one it was designed for.

The user is responsible for operations carried out neglecting the instructions in this manual.



The main safety rules to be respected are the following:

- Do not touch the machine with damp or wet hands or feet

- Do not insert screwdrivers or anything else between guards or moving parts
- Do not pull on the power cord to disconnect the machine from the mains power supply
- Do not allow the machine to be used by unauthorized users
- Before carrying out any cleaning or maintenance operation, disconnect the unit from the mains power supply, switch it off and unplug it.
- In the event of a fault and/or malfunction, switch off the machine and refrain from any attempt at repair it or any direct intervention. Turn to qualified personnel only.
- Components and parts may only be replaced with original components purchased from the manufacturer or with identical components.

## SAFETY AND ACCIDENT PREVENTION

The machine has been built with appropriate precautions to guarantee the safety and health of the user.

The measures taken to protect against mechanical hazards are listed below:

- Stability: The machine has been designed and built to ensure stability in all expected operating conditions, even with grids/drawers pulled out, without the risk of overturning, falling or sudden displacement. Read carefully the paragraph dedicated to placement operations
- Surfaces, edges, corners: within the limits permitted by their functions, the accessible parts of the machine are free of sharp corners and sharp edges, as well as rough surfaces that could cause injury
- Moving elements: All movable elements have been designed, constructed and arranged in such a way as to avoid risks. Some parts are also equipped with fixed protections to prevent contact and injury risks.

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

- Electricity: the machine has been designed, built and equipped in such a way as to prevent the risks deriving from electricity, in compliance with the specific regulations in force.
- Noise: the machine has been designed and built in such a way as to minimise the risks of noise pollution (always less than 70 dB).

### **It is absolutely forbidden:**

- tamper with or remove the evaporator cover, which protects the user from any risk of cuts due to the evaporator fins

- Remove the data plates attached to the inner edge of the engine compartment, showing the technical characteristics and earthing warnings
- Remove the nameplate attached to the evaporator guard and near the electrical wiring inside the engine compartment, which warns you to shut power off before working on the appliance.
- Replace the power cord of the device without installing a suitable strain relief clamp.

**The manufacturer declines the responsibility for the safety of the equipment if the above warnings are not observed.**

## CONTRAINDICATIONS FOR USE

The equipment must not be used:

- Exposed to weathering
- Connected to adapters or extension cords
- In an explosive atmosphere or at risk of fire
- Near heat sources (radiators, etc)

## REFRIGERANT WARNINGS

The product contains flammable gas (R290 refrigerant) and the following label is attached to the compressor:



Therefore, some special precautions must be taken:

1. Place the product in an environment of adequate size, considering that, according to the EN 378 standard, a volume of 1m<sup>3</sup> is required for every 8 g of R290 refrigerant. The information on the amount of refrigerant is shown on the plate located inside the appliance.
2. Do not use the product if it shows signs of damage.

3. To avoid damaging the refrigerant circuit, do not use mechanical tools to speed up the defrosting process.
4. Make sure that the ventilation openings on the equipment are always open and free from obstructions.
5. In the event of a refrigerant spill, avoid using open flames, remove any flammable objects from the product and ventilate the room immediately.
6. Do not store potentially explosive substances (e.g. aerosol cans containing flammable gases) inside the equipment.
7. Do not use electrical appliances inside the refrigerated compartment unless it is ATEX certified according to 60079-1.

In the event of a malfunction, disconnect the power to the appliance.



Non-routine maintenance operations must be carried out exclusively by professionally qualified personnel authorised by the manufacturer, and only using original or similar components.

## 3 PRODUCT DESCRIPTION

### TECHNICAL DESCRIPTION

The equipment covered by this manual produces cold by vaporizing a liquid refrigerant at low pressure inside a heat exchanger (evaporator). The vapour thus obtained is returned to the liquid state by mechanical compression at higher pressure (by means of a compressor), followed by cooling in another heat exchanger (condenser). The correct and uniform distribution of air inside the cabinet is guaranteed by one or more fan motors, depending on the model.

The machine consists of a modular monocoque covered with different materials and insulated with polyurethane foam with a density of 43 kg/m<sup>3</sup>.

The instrumentation is grouped on the front panel; In some models, it closes the engine compartment at the front, where the condensing unit and the electrical wiring can be housed.

Internally, the machine is equipped with racks suitable for supporting either shelves (grids), pull-out drawers and/or steel baskets.

The doors of all machines are equipped with a closing device with automatic return and door stop, and magnetic gaskets for a perfect seal, which can be easily replaced. During the design and construction phases, measures are taken to obtain a machine that complies with safety requirements, such as rounded internal corners, condensate drainage, absence of rough surfaces, fixed protections on moving or dangerous components, etc.

For all models covered by this user manual, the maximum capacity of shelves and drawers is 20 Kg, with evenly distributed weight.

Some models will need to be fixed to the wall to ensure stability.



**All models are for indoor use: outdoor installation is not permitted. Incorrect operation caused by installation in unsuitable environments will void the warranty of the equipment.**

### INTENDED USE

The equipment covered by this manual is a storage machine, so it is therefore necessary to introduce only products that have already been refrigerated or frozen (depending on the model).

It is stated that any use outside of those permitted will be considered "improper use" and will therefore void the warranty.

### LABORATORY DEVICES

Laboratory devices are suitable for:

- Storage of properly packaged drugs, vaccines and reagents, which are not liquids or body tissues intended for administration or introduction into the body
- Storage of other substances or materials of general use in a hospital, laboratory, or in a pharmaceutical environment non-flammable nor explosive
- They are not intended for the storage of blood, fluids, or body tissues

This category includes models in the series:

MODEL	ADJUSTABLE SET POINT	FACTORY SET POINT
MEDIKA	+2°C to +15°C or +21°C to +23°C	+5°C or +22°C
MEDIKA 2T (Compartment A / Compartment B)	+2°C to +15°C / +2°C to +15°C	+5°C / +5°C
LABOR	+2°C to +15°C	+5°C
LABOR 2T (Compartment A / Compartment B)	+2°C to +15°C / -10°C to -25°C	+5°C / -20°C
VISION	-10°C to -20°C	-20°C
VISION 2T (Compartment A / Compartment B)	+2°C to +15°C / -10°C to -20°C	+5 / -20°C
FREEZER	-10°C to -25°C	-20°C
SUPERARTIC	-20°C to -40°C	-35°C
SUPERARTIC 2T (Compartment A / Compartment B)	+2°C to +15°C / -20°C to -40°C	+5°C / -30°C
TER	+15°C to +30°C	+22°C
SPARK PROOF	From +2°C to +15°C	+5°C

## GENERAL FEATURES OF THE DEVICE

<b>Power supply voltage</b>	See supply voltage on the product identification label on the back of this manual.
<b>Power supply Frequency</b>	See power frequency on the product rating plate on the back of this manual.
<b>Phase</b>	1 ph
<b>Ambient temperature of use</b>	See climate class on the product identification plate on the back of this manual
<b>Permissible ambient humidity</b>	Maximum relative humidity 60%, non-condensing
<b>Environment of use</b>	For indoor use only. Violation of this requirement will void the warranty terms.
<b>Overvoltage category</b>	Category II

<b>IP Grade</b>	IPX0
<b>Altitude</b>	Up to 2,000 m
<b>Degree of pollution of the environment of use</b>	2
<b>Cooling</b>	See refrigerant gas type on the product rating plate on the back of this manual.
<b>Refrigerant quantity</b>	See refrigerant quantity on the product rating plate on the back of this manual.
<b>Maximum pressure rating</b>	High side: 22 bar Low side: 14 bar
<b>Storage temperature</b>	See table in the previous paragraph according to the model.
<b>Current rating</b>	See product rating plate on the back of this manual
<b>Display</b>	LCD display in 5 languages with 4 membrane keys

<b>Display resolution</b>	0.1°C, accuracy +/- 0.3°C
<b>Noise level</b>	≤ 70 dB
<b>Shelves load capacity</b>	30 kg evenly distributed
<b>rawer load capacity</b>	30 kg evenly distributed
<b>Insulation</b>	Polyurethane foam with a density of 43 kg/m <sup>3</sup> .
<b>General Fuse</b>	See detail at following paragraph and on the product rating plate on the back of this manual.
<b>Electronic Board Fuse</b>	T500mA 250V, 5x20 mm
<b>Interior lighting</b>	Full LED if present
<b>Defrosting</b>	Automatic
<b>Alarm system</b>	Yes

## GENERAL FUSES

General fuses ratings may vary based on the model, are always detailed on the device data plate placed on the back of this user manual and on the device itself.

On most of the models, ratings are T10A 250V 6,3x32 mm, except for following models:

MODEL	GENEAL FUSES RATINGS
<b>MEDIKA/LABOR 100</b>	T10A 250V, 5x20 mm
<b>MEDIKA/LABOR 140</b>	T10A 250V, 5x20 mm
<b>FREEZER 140</b>	T10A 250V, 5x20 mm
<b>TER 140</b>	T10A 250V, 5x20 mm
<b>MEDIKA/LABOR 2T 280</b>	T10A 250V, 5x20 mm
<b>FREEZER 1500</b>	T15A 250V, 6,3x32 mm
<b>SUPERARTIC 250</b>	T16A 500V, 10x38 mm
<b>SUPERARTIC 400</b>	T16A 500V, 10x38 mm

**SUPERARTIC 700** T16A 500V, 10x38 mm

Fuses are replaceable by operators, except for models SUPERARTIC 250, SUPERARTIC 400 and SUPERARTIC 700, in which they are located inside technical box.

## CLIMATE CLASS

The device identification plate (see chapter 9) shows the climatic class to which it belongs, i.e. the ambient temperature range in which the refrigerator must be installed so that it works properly. Below is a table showing the symbols with the corresponding ambient operating temperatures

SYMBOL	OPERATING RANGE °T
<b>SN</b>	+10°C to +32°C
<b>N</b>	+16°C to +32°C
<b>ST</b>	+18°C to +38°C
<b>C</b>	+10°C to +25°C



The climate class shown on the plate refers to the factory set point.

## 4 DEVICE INSTALLATION

### TRANSPORT AND HANDLING

The appliance must be transported and handled in a vertical position only, following the instructions on the packaging.

The accessories supplied with the appliance (runners, grids, drawers, baskets, etc.) are placed inside the cabinet. The appliance is fixed to a wooden base by means of screws, and packaged with polyethylene, cardboard, cage or wooden crate packaging.

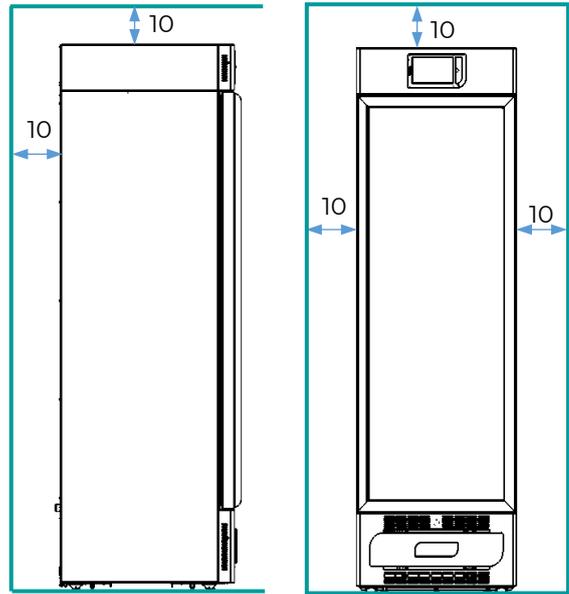
The appliance must be handled using a lifting or trans-pallet trolley, equipped with suitable forks (with a length of at least 2/3 of the equipment).

If it's necessary to temporarily lay the appliance down to transport it inside the rooms of destination, it will be essential to wait at least 6 hours before putting it into operation. The manufacturer declines any responsibility for problems due to transport carried out under conditions other than those specified.

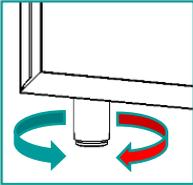
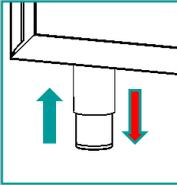
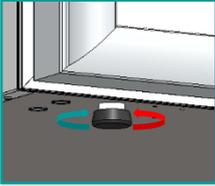
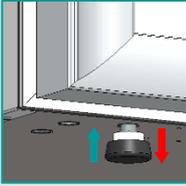
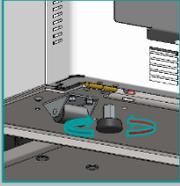
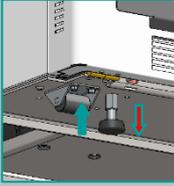
### POSITIONING OPERATIONS

Since an incorrect positioning of the appliance can result in a damage for the appliance and in risks for users, the installer must comply with the following general rules:

- Position the appliance keeping a minimum distance of 10 cm from any wall; in case of installation embedded in furniture, the correct ventilation of the condensing unit (compressor/fan motor) must always be granted.



- Install the appliance in a sufficiently ventilated environment
- Install the appliance far from heat sources
- Install the machine far from sources of electromagnetic interference (such as motors, generators, infrared rays, telephones) that may have adverse effects on the operation of the equipment
- Avoid direct sun exposure and air conditioning flow
- Remove the supplied accessories and the wooden pallet
- Do not position the device in a way, such as to make the disconnection of the power cord difficult
- Position the machine using a spirit level and eventually level the feet (in models equipped with adjustable feet, see images below).

VERSION	ROTATION	MOVEMENT
1		
2		
3		

## CLEANING OPERATIONS

The machine has already been cleaned at the factory. However, it is suggested to carry out a further cleaning following the instructions below:

- remove the PVC film applied to protect the external surfaces of the machine
- Wipe the inside of the chamber with an alcohol cloth to remove protective oils.

The glass door must be cleaned



using a cloth dampened with water

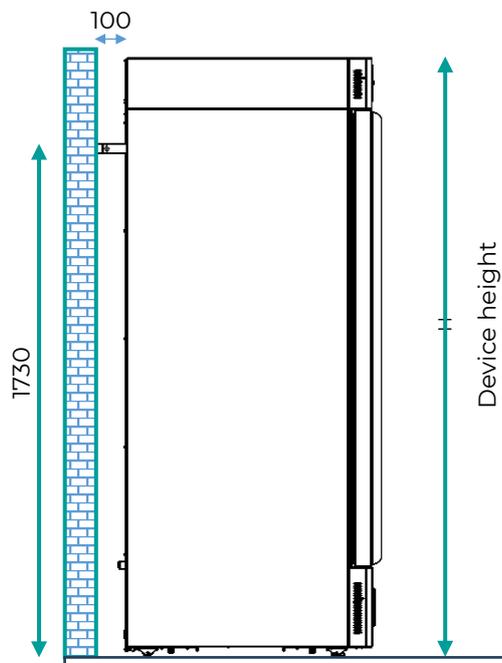


Never use chemicals for internal cleaning



For models with a height of more than 1.5 m, installation with wall mounting brackets is required.

\*: To clean the device, please also refer to the dedicated chapter of this manual



## WIRING AND ELECTRICAL CONNECTION

The installation and electrical connection must be carried out by qualified personnel.

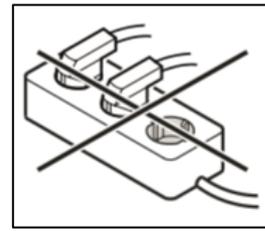
For safety purposes, the following information must be observed:

- The power cord is the primary means of disconnection for devices covered by this user manual. To remove power from the device, unplug the power cord.



- check that the sizing of the system is adequate for the power absorbed by the machine

- correctly connect the equipment to an effective earthing system carried out in accordance with the law, as required by current provisions
- In the event of incompatibility between the socket and the plug of the machine, replace the socket with another of a suitable type, if it complies with the law.
- If the power cord is damaged, it must only be replaced by qualified personnel to prevent any risk
- The socket must not be positioned behind the appliance and must be within easy reach. If the appliance is supplied without a plug, connect it directly to the electrical panel.
- If it is necessary to replace the power cord, the operation may only be carried out by qualified personnel authorized by the manufacturer, with components supplied by the manufacturer including the cable clamp.
- Do not plug the appliance using an extension cord or a multiple socket (See figure below).



- Do not use inverters for off-grid systems (conversion of direct current to alternating current or three-phase current) or energy-saving connectors, as they may cause damage to the electronics.



- For SUPERARTIC model, special attention must be paid to the electrical connection, as the power consumption is high. Prepare cables with a cross-section of at least 2.5 mm<sup>2</sup> and limited length.

## ELECTRICAL PROTECTIONS

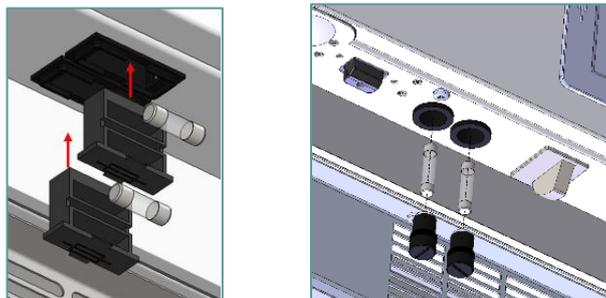
According to safety regulations, the devices are equipped with n.2 (phase and neutral) general safety fuses for integral protection against electric shocks, short circuits and overvoltage. In most models, the general fuses are replaceable by the operator and are accessible from the front: by opening the refrigerator door, they are located below the front panel. If this is not the case, contact technical support.

The general fuses which can be replaced by the operator and are accessible from the outside of the unit have a size **of 6.3 x 32 mm T10A**, except for the following models:

MODEL	GENERAL FUSES RATINGS
<b>MEDIKA/LABOR 100</b>	T10A 250V, 5x20 mm
<b>MEDIKA/LABOR 140</b>	T10A 250V, 5x20 mm
<b>FREEZER 140</b>	T10A 250V, 5x20 mm
<b>TER 140</b>	T10A 250V, 5x20 mm
<b>MEDIKA/LABOR 2T 280</b>	T10A 250V, 5x20 mm
<b>FREEZER 1500</b>	T15A 250V, 6,3x32 mm
<b>SUPERARTIC 250</b>	T16A 500V, 10x38 mm

<b>SUPERARTIC 400</b>	T16A 500V, 10x38 mm
<b>SUPERARTIC 700</b>	T16A 500V, 10x38 mm

The fuse rating for a specific appliance can be found on the product data plate, which is attached on the back of this manual, or within the chamber of the device itself.



In some models, however, the main fuse is not accessible by the operator, since it is installed inside the electrical box. In this case, the fuses are 10 x 38 mm in size; the breaking current is declared on the product data plate attached to the back of this manual or within the chamber of the device itself.

In any case, the fuses on the electronic controller cannot be replaced by the operator but can only be accessed by qualified personnel.

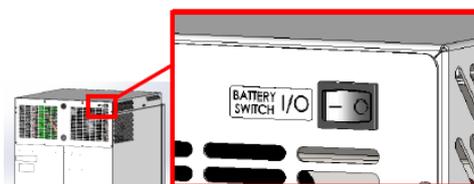
## TUNING OPERATIONS

Before starting the equipment, please check that no damage occurred during transport, handling and installation operations.

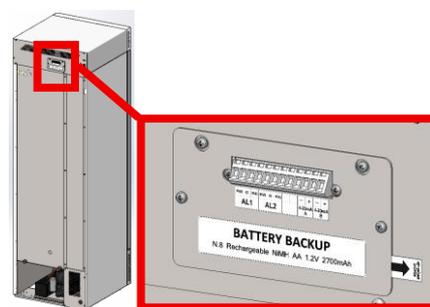
- check the integrity of the packaging (it must not have dents and/or breaks)
- check the integrity of the external parts of the appliance body (they must not have dents and/or breaks)
- check the integrity of the power cord (it must not have suffered abrasions or cuts)
- check the solidity of the feet and/or wheels
- check that the door is correctly opening and that it closes tightly
- check the door gaskets: they must show no cuts and/or abrasions

- Check the user interface (display) for scratches or cracks.
- Remove the protective strip from the backup battery pack or set the switch on the back of the device to "I".

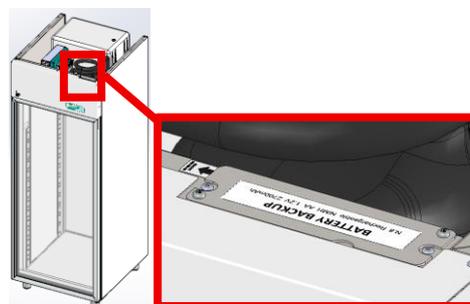
- o Locate the batteries:
  - Models 100-140: on the back



- Models with cooling unit on the lower part: on the back.



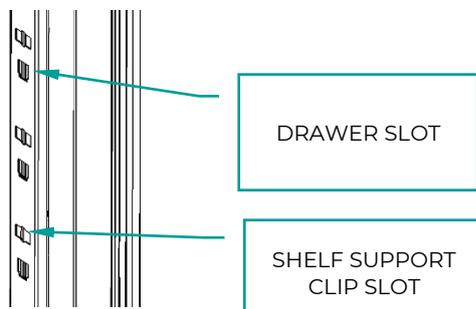
- Models 700-1500: on top



- o Remove the protective strip from the backup battery pack or set the switch on the back of the device to "I"

## USE OF THE INTERIOR AND MATERIAL STORAGE

The stainless-steel rack system allows the insertion of shelves (grids) and/or drawers that can be completely removed on telescopic guides (non-telescopic for SUPERARTIC and PLASMA SUPERARTIC models) with the possibility of having a perfectly interchangeable drawer/grid set-up.

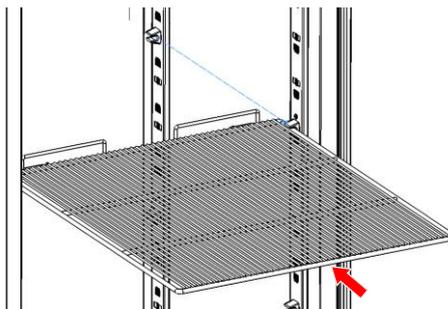


### INSTALLING THE SHELVES (GRIDS)

Place the supports for the grids on the racks in the most suitable position for use, insert them into the appropriate slots, and turn them 90° to lock them. At this point it is possible to insert the grids.

SEQUENCE	IMAGE
1	<p>A diagram showing a shelf support clip being inserted into the 'SHELF SUPPORT CLIP SLOT' of the rack. A red line indicates the path of the clip from the rack to the separate clip component.</p>
2	<p>A diagram showing the shelf support clip being rotated 90 degrees, as indicated by a red curved arrow and the text '90°'. The clip is now locked into the slot.</p>
3	<p>A diagram showing a shelf (grid) being inserted into the rack. The shelf is supported by the previously installed shelf support clips.</p>

4

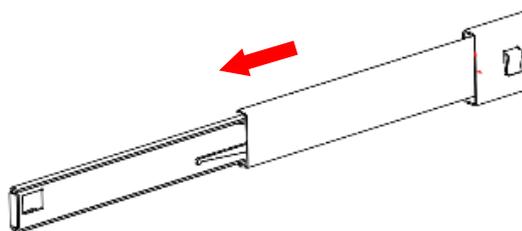


## DRAWER INSTALLATION

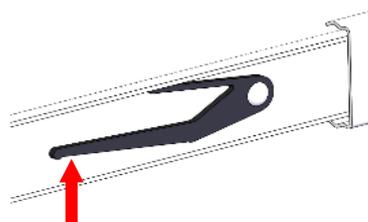
Insert the guides into the appropriate rack slots and remove the telescopic guides by pressing on the black lever, mount them on the drawer and insert the drawer on the guides on the racks.

**SEQUENCE****FIGURE**

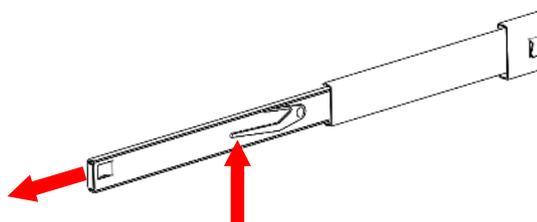
1



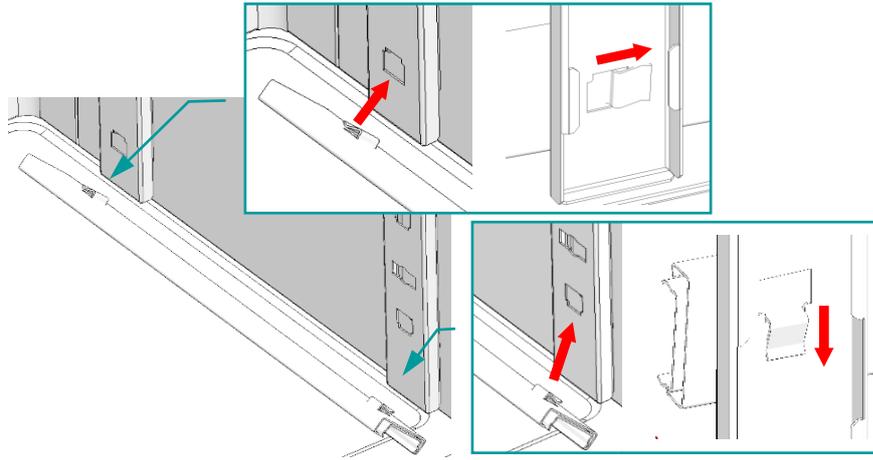
2



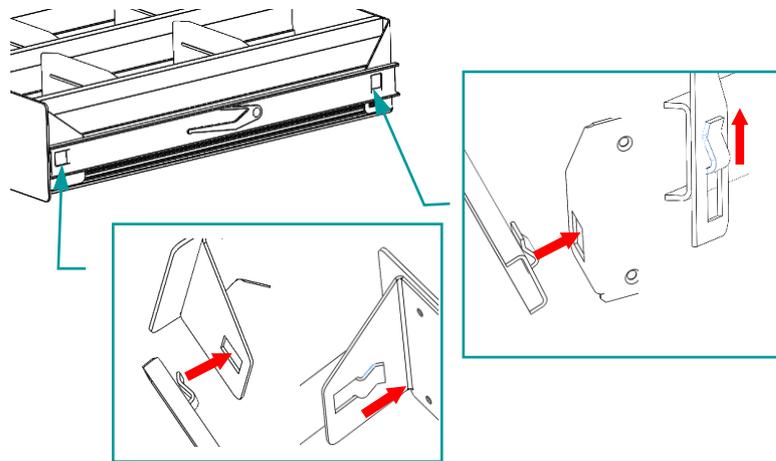
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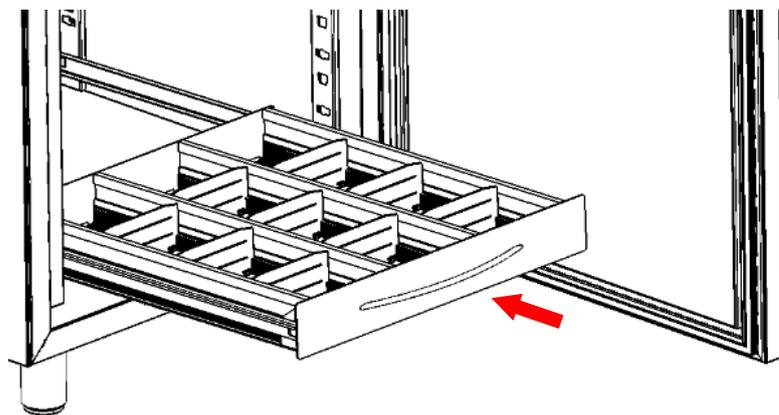
4



5



6



## STORING MATERIAL INSIDE THE COMPARTMENT

To avoid malfunctions and to allow an air flow such as to guarantee temperature uniformity inside the refrigerated compartment, it is necessary to pay attention to the loading operations of the material.

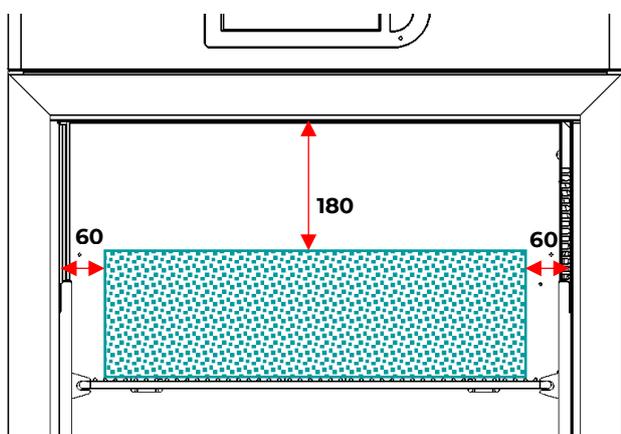
Follow these steps:

Do not place material above the indicator label of the maximum permissible level.

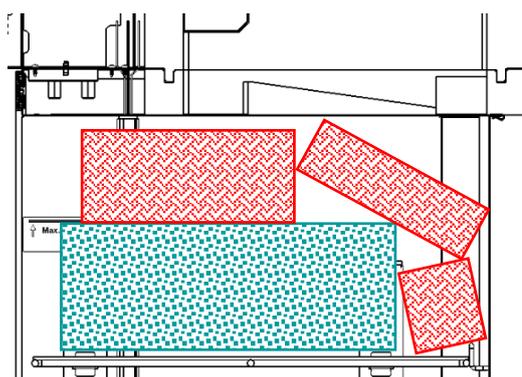
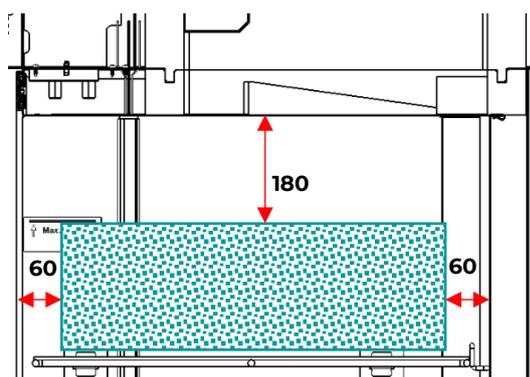
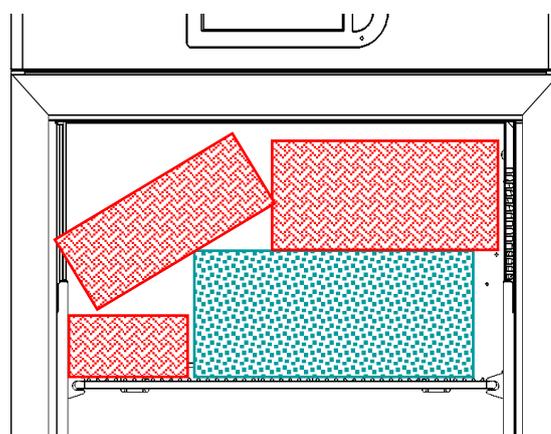


Always store the material leaving a distance of at least 6 cm from the walls of at least 18 cm from the top of the compartment.

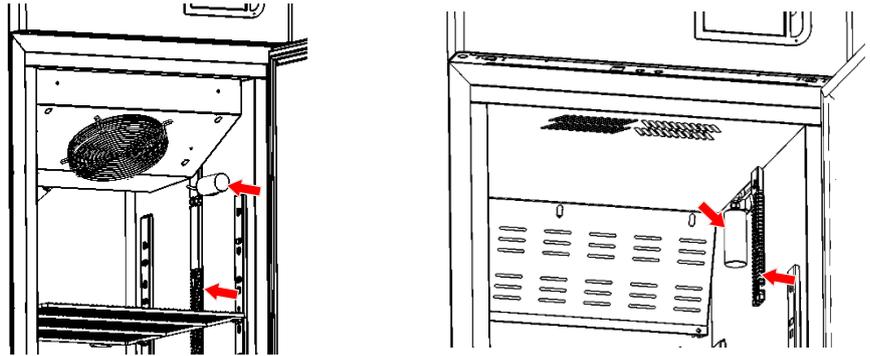
**CORRECT**



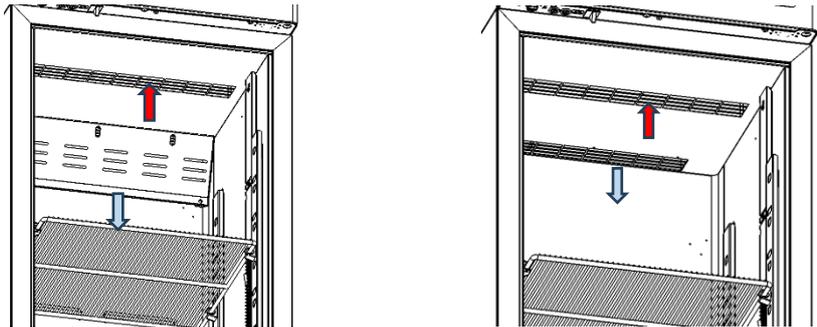
**INCORRECT**



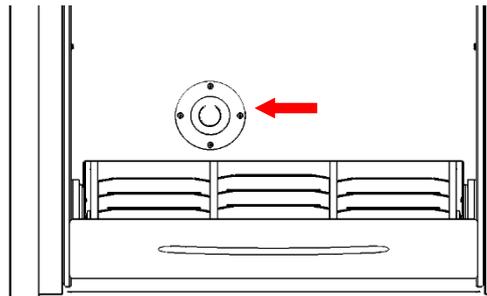
Do not place material in contact with or near the temperature probes.



Do not block the air vents



Do not block the equalization valve in SUPERARTIC models



## INDICATIONS FOR OPTIMAL USE

Following indications must be followed to grant the best operating performance of the machine:

- The supply voltage must be as indicated on the rating plate (+/- 10%)
- The equipment has been designed and manufactured to operate according to the range of temperatures stated in the climatic class declared on the technical data plate, and relative humidity of 60%.
- Do not block the air intakes of the engine compartment
- gradually insert the stored material at room temperature to allow proper refrigeration
- arrange the material to be stored on the appropriate shelves (or drawers). Do not place it directly on the bottom of the chamber, nor in touch with walls, doors or fixed protections
- Close the doors carefully
- limit, as far as possible, the frequency and duration of opening doors.
- Always keep the defrost water drain hole clear
- follow a regular maintenance schedule (see chapter 6)



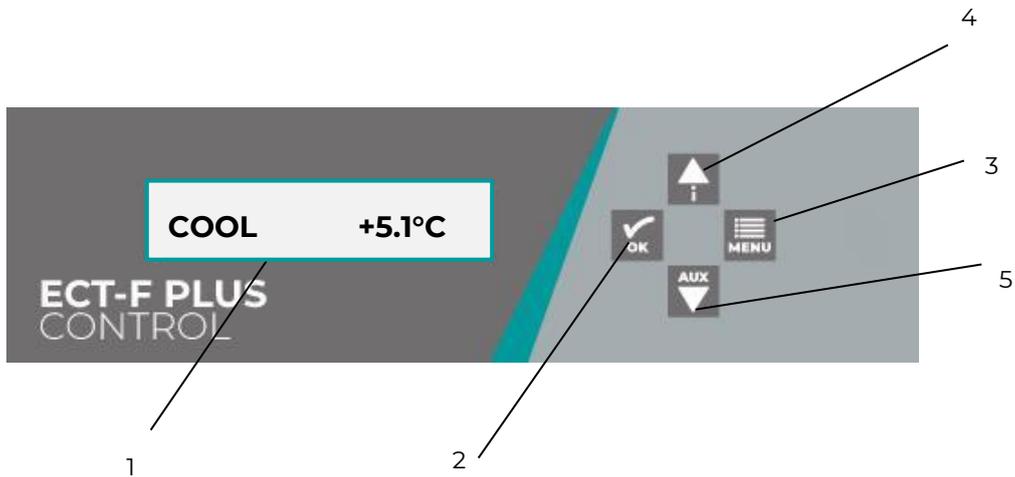
All freezers are designed to accommodate already frozen material, especially the SUPERARTIC models.

The stored material turnover cannot exceed 5% of the total volume of stored goods

## 5 USER INTERFACE OPERATION

The refrigerator is equipped with a latest generation Electronic Controller with alphanumeric LCD display, that displays temperature and operating status with a resolution of 0.1°C. The instrument guarantees maximum safety in the event of alarm and fault reports, promptly indicating the critical condition and recording every event.

### COMMAND PANEL



1	/	Backlit LCD alphanumeric display
2		To confirm your selected choice
3		To access the main menu and Esc function from all menus
4		Value increment button, menu scrolling and DOCTOR VIEW function
5		Decrease value key, menu scrolling. On/off glass door light

## ECT-F PLUS OPERATION

### TURNING ON

To turn on the refrigerator for the first time, follow the instructions below.

- 1 Connect the appliance plug to the power outlet



- 2 The word "STAND-BY" appears on the display, indicating the appliance is powered

STAND-BY

- 3 Turn on the equipment by pressing and holding the OK button on the keypad



COOL +5.1°C

Mode 1

S: +5.0°C +5.1°C

Mode 2

12:44 26/02/2025

Mode 3

56% Rh +5.1°C

Mode 4 (humidity probe available as an accessory)

- 4 With the controller switched on, configure the display by pressing the "OK" button until the desired mode is displayed

### DISPLAY CONFIGURATION AND READING

The LCD display can be configured in four different

display modes by pressing the button



COOL +5.1°C

Mode 1 shows the functional status of the device and the current temperature.

S: +5.0°C +5.1°C

Mode 2 shows the set temperature (S) and the current temperature.

12:44 26/02/2025

Mode 3 shows the time and date previously set

56% Rh +5.1°C

Mode 4 shows the current relative humidity and the current temperature. (the humidity probe is available as optional accessory)

In "Mode 1" you can see the following action strings

STRING	CURRENT STATUS
PAUSE	The compressor is turned off as it is not operative
COOL	The compressor is switched on to reach the set temperature.
DEFROST	The fridge is defrosting.
DRIPPING	Intermediate phase following defrosting.
RECOVERY	The compressor is switched on after a defrost to recover the temperature.
DOOR	Open door
HEATING	The heating function is active.

## ECT-F PLUS MENU FUNCTIONS

The button  will take you to the list of available functions.

The Menu is scrolled using the  and  buttons.

Important: To exit the menus, press the key  until the display homepage is reached

FUNCTION	DESCRIPTION
<b>TURN OFF</b> m1	Turns off the refrigerator and puts the controller in Stand-by. It interrupts the temperature control
<b>CHANGE SET</b> m2	Allows you to change the setpoint.
<b>MIN/MAX S1</b> m3	Displays the minimum and maximum temperature values saved since the last function reset.
<b>DEFROST</b> m4	Allows you to force manual defrosting
<b>ALARM LIST</b> m5	View the history of temperature alarm events
<b>LANGUAGE</b> m6	Allows you to change the language of text strings
<b>PASSWORD</b> m7	Allows you to set a user password to access the menu

**SERVICE MENU** m8

Allows access to functions dedicated to service and technical assistance

**CLOCK SET** m9

Allows you to set the date and time of the controller

## SWITCHING OFF

After pressing  the display shows the string **TURN OFF** m1. Press the button  to confirm.

At this point you are asked for further confirmation of the command: **<<Confirm Esc>>**.

To confirm, press the button again ; to cancel the operation and return to the main menu, press the  button.

## CHANGE SETPOINT

Press  and access to the string **CHANGE SET** m2 using the  or  buttons.

When you confirm with the button , the display shows the flashing value of the current Set Point **SETPOINT +5.0°C**.

This can be changed using  or  buttons. The setting resolution is 0.1°C.

By confirming with the button , the display requests for a further confirmation or to exit from the

Menu by means of the message

**<<Confirm Esc>>**

Confirm again using the button ; the display will show the message **>>CONFIRMED<<** and the controller will start working with the new set temperature value.

Pressing the button  will cancel the operation and return to the previous menu.

## MIN/MAX S1

The minimum and maximum values of the temperature detected by the S1 room probe are continuously monitored and stored in memory, to be then displayed in the section dedicated to the MIN/MAX function.

Press the key  and access to the string **MIN/MAX S1 m3** using the  or  keys.

By confirming with the button , the display shows the values recorded up to present time.

**+2.8°C / +7.5°C**

Press the button  to reset the function and start monitoring again **RESET MIN/MAX?**

Confirm again with the button , the display shows the flashing message **>>CONFIRMED<<** and the controller starts monitoring again.

The detection of minimum and maximum temperatures begins after the first set temperature

is reached, and the display is continuously updated during normal operation of the equipment.



NOTE: During a door opening, and for 240 seconds after the door is closed, or if the setpoint is reached, the minimum and maximum values are not updated. The same happens during a defrost, during the dripping phase+ and throughout the recovery phase.

## MANUAL DEFROSTING

Fiocchetti equipment is equipped with automatic defrosting which takes place only if deemed necessary by the controller. The number of daily defrosts is therefore significantly reduced, resulting in considerable energy savings.

However, manual defrosting may sometimes be necessary; This function can be activated by following the procedure below.

Press the key  and reach for the string **DEFROST m4** using the  or  keys.

By confirming with the button , the display shows the message of further confirmation or of exit from the Menu with the message

**<<Confirm Esc>>**

After further confirming with , the controller acquires the defrost order and the message appears on the display **DEFROST +5.3°C**.

If manual defrosting cannot be activated because the conditions necessary for its execution are not detected, this message will appear

**ACCESS DENIED**

If, on the other hand, defrosting is postponed by the controller due to certain pre-set parameters, the words **WAITING DEFROST** will appear.

Defrosting is followed by **DRIPPING +5.6°C** and **RECOVERY +5.5°C** phases, until the setpoint is reached.

### ALARM HISTORY

The controller reports four types of temperature alarms and records the last 16 events in the

appropriate **ALARM LIST m6**.

These are divided into:

CODE	ALARM DESCRIPTION
H	HIGH TEMPERATURE
M	HIGH TEMPERATURE DURING POWER FAILURE (with batteries installed)
B	POWER FAILURE (without batteries installed)
L	LOW TEMPERATURE

Press the key **MENU** and reach for the string **ALARM LIST m5** using the **i** or **AUX** keys.

Confirming with **OK**, the display shows the total number of alarms stored the memory up to that

point → **DETECTED N.7**.

If there is no alarm in memory, the string will show

**NO EVENT**.

If there are alarms to be displayed, pressing the **i** button will display the details of the last

recorded event. Using the key **AUX** you can scroll back to the first event in memory



- A08**: Progressive number of registered alarms.
- H**: Alarm identification code:
  - H**= high temperature
  - L**= low temperature
  - M**= High temperature during power failure (with batteries installed)
  - B**= Power failure (without batteries installed)
- +19°C**: Critical temperature reached during the alarm period.
- 199'**: Alarm duration in minutes.

The available information is described by the following scheme.

Pressing the button repeatedly **OK** displays the start date/time (S) **S 14:10 2/22/2025**

and the end (E) of the alarm

**E 14:34 22/02/2025**

### LANGUAGE SETTING

Press the key **MENU** and reach for the string **LANGUAGE m6** using the **i** or **AUX** keys.

By moving with the or arrows **i** **AUX** and

confirming with **OK**, you can select the desired language from:

LINGUA ITALIANA

ENGLISH LANGUAGE

LANGUE FRANCAIS

IDIOMA ESPANOL

DEUTSCHE SPRACHE

## USER PASSWORD

This menu allows you to set a user password to protect the controller switching on and off and the setpoint parameters.

Press the key  and reach the string

PASSWORD m7

using the  or  keys.

After pressing , the password currently in use is asked (if no password is set, no password is required), and the password change is possible.

Select the password in use with   and

confirm with . If entered correctly, the change

is allowed. Set a new value and confirm with .

The password = 00 disables password protection.

If you forget your password, you must contact technical support to recover it.

## SERVICE MENU

Restricted Menu that can only be access by technical support.

## SETTING THE DATE AND TIME

Press  and reach the string

CLOCK SET m9

using the  or .

After confirming with , the display will flash and show the date and time. Adjust with  or  keys and confirm , up to the last two digits of the year.

If the time setting is lost (due to low battery level) the display shows the flashing frame **h00 m00:00**

## DOCTOR VIEW TEST

Pressing the  button for a few seconds will start the DOCTOR-VIEW function.

This function activates the buzzer for 5 sec (TEST BUZZER); then, the set SETPOINT, the EVAPORATOR temperature, the CONDENSER temperature, the low/high temperature limit and the alarm delay time, the DOOR alarm delay are displayed in sequence. Pressing any key will end the test.

## ALARM AND FAULT REPORTING

### ONGOING FAULT

In the event of any system anomaly, an acoustic and visual alarm to inform the user is immediately activated and consists into a flashing display and by a buzzer sound.

In the event of a temperature alarm, the alternating string with the selected display mode is also shown

on the display . At any time, you can silence the buzzer by pressing any button.

The anomalies that the controller can detect are the following:

MESSAGE	TYPE OF ALARM/ FAULT IN PROGRESS
HIGH TEMP.	High temperature inside the chamber

<b>LOW TEMP.</b>	Low temperature inside the chamber
<b>MAINS FAILURE</b>	Mains failure alarm
<b>POWER FAIL &lt;HT&gt;</b>	High temperature alarm for power failure
<b>DOOR</b>	Open door
<b>PROBE S1</b>	Faulty control probe (call Service)
<b>PROBE S2</b>	Evaporator probe faulty (call Service)
<b>PROBE S3</b>	Condenser probe (call service)
<b>LOW EVAPORAT</b>	Low evaporation temperature reached (call Service)
<b>HIGH CONDENS</b>	High condensing temperature reached (call Service)
<b>HT EVAPORATOR</b>	High temperature reached on the evaporator (call service)
<b>h00:m00</b>	Loss of clock data (call service)
<b>DEFROST TIME</b>	Insufficient defrost time (call service)
<b>COMPRES. WORK</b>	Maximum percentage of compressor continuous operation in 24 hours reached (call Service)

<b>I2C</b>	Failure on memory events or strings (call Service)
<b>CLEAN COND.</b>	Insufficient heat exchange: it is recommended to clean or not to obstruct the condenser
<b>NO BATTERY</b>	Backup battery disconnected (check battery status)
<b>BATTERY FAILURE</b>	Faulty or worn battery (check battery status)
<b>NOTICED ALARM</b>	A temperature alarm has occurred in the presence or absence of mains. Press  to access the list.

### END OF ANOMALY

When the alarm is over, until the Alarm list is visualized, the display alternates between the message ALARM DETECTED and the main display.

During this phase, pressing  will directly display the recorded alarms list, and the message NOTICED ALARM will stop being displayed, even if

you exit the menu using .

## BACKUP BATTERY FOR POWER FAILURE ALARM (OPTIONAL)

A backup battery, which can be added as an optional accessory, allows the controller to grant a power failure alarm for about 48 hours.



The same controller recharges the battery, keeping it charged and ensures its availability when needed.



## SHORT TERM POWER FAILURE

The controller detects the presence or absence of the network.

In the event of a power failure, the message POWER FAILURE appears on the display alternating with the main display frame, the buzzer is active and the display flashes.

The buzzer is silenced by pressing any button.

Any relay configured as a remote alarm is not activated in the event of a brief power failure to avoid alarmism.

## LONG TERM POWER FAILURE

In the event of prolonged mains failure (more than 2 minutes), the message MAINS FAILURE appears on the display, alternating with the chosen mode frame. The buzzer is active and the display flashes for 5 minutes, and then resumes after additional 15 minutes, unless silenced from the keyboard.

## BATTERY PACK FAILURE

If the battery is disconnected, this message appears on the display **NO BATTERY** and the connection must be checked.

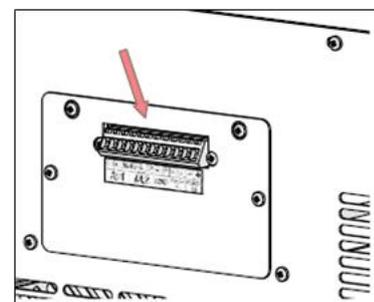
If  $V_{batt} < 7.0$  Volt is detected, this message appears on the display **BATTERY FAILURE** and batteries must be replaced.

The location of the battery pack is shown on the label below

## EXTERNAL TERMINAL BLOCK FOR CONNECTION TO ALARM RELAYS (OPTIONAL)

If this accessory is present on the back of the device or in the upper part, it is possible to connect to a centralized alarm system via the AL1 output for compartment A and AL2 for compartment B.

The contact commutes when an alarm/fault related to the ECT-F Plus controller occurs



**AL1** Dry Contact 1 to remote alarms/faults.

**AL2** (if present) Dry Contact 2 to remote alarms/faults.

The external circuit must have the following characteristics: max 48V, max 600 mA, double insulation or reinforced insulation

# 6 ORDINARY AND SCHEDULED MAINTENANCE

The information contained in this chapter is intended for both the user (non-specialized personnel) and the Ordinary Maintenance Technician.

## PROHIBITION OF REMOVAL OF SAFETY DEVICES

It is absolutely forbidden to remove the safety protections without turning off the refrigerator and disconnecting it from the mains.

The manufacturer shall not be liable for accidents resulting from non-compliance with this obligation.



Do not remove the cord strain relief clamp

Do not replace the power cord without replacing the strain relief clamp supplied by the manufacturer along with the original power cord.

## CLEANING THE INTERIOR AND EXTERIOR CABINET

**ATTENTION:**



**ALWAYS DISCONNECT THE POWER SUPPLY BEFORE CARRYING OUT THE OPERATION.**

For this purpose, the following products are suggested:

### CLEANING PRODUCTS

The following industrial detergents have been successfully used on white coated sheet metal (SANISTEEL)

TRADE NAME	DILUTION IN WATER
<b>P3 OXONIA</b>	At 5%
<b>P3 TOPACTIVE 200</b>	At 5%
<b>P3 TOPAX 66</b>	At 5%
<b>P3 TOPAX 990</b>	At 3%

The choice of detergents available on the market is endless, not to mention the mix of their components; however, you may refer to the labels showing the composition of the detergents as guide.

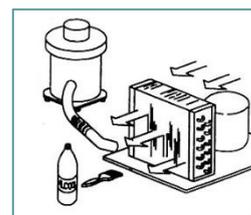
If you are not sure about the product, you can use water and neutral NON-AGGRESSIVE detergents. **DO NOT USE SOLVENTS AND THINNERS**

- CLEANING METHODS: wash the internal and external parts with a NON-ABRASIVE cloth or sponge
- DISINFECTION: avoid substances that can alter the organoleptic characteristics of the products
- RINSING: cloth or sponge soaked in water. **DO NOT USE WATER JETS**
- FREQUENCY: at least twice a year, or at different intervals depending on the type of product stored.

## CLEANING THE CONDENSER

Failure to clean the condenser may cause the equipment to malfunction. Cleaning must be carried out every 2-3 months, even in the cleanest environments.

It is necessary to access the condensing coil, located in all models in the technical compartment near the compressor, and clean it with one of the following elements:



- Long-bristled brush
- Vacuum cleaner
- Compressed air



DO NOT USE WIRE BRUSHES NOT TO BEND THE CONDENSER FINS

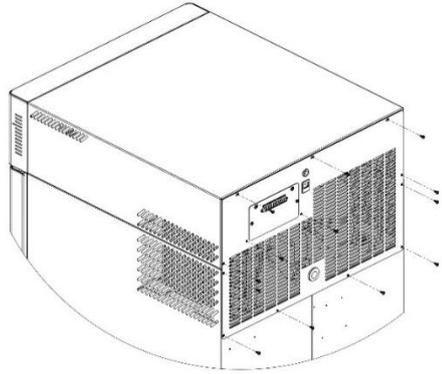
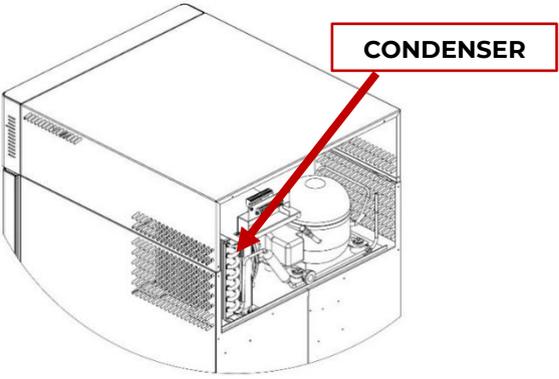
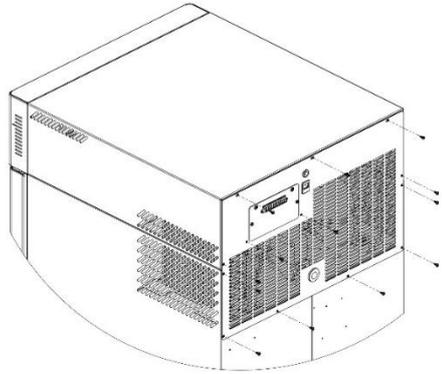


ALWAYS DISCONNECT THE POWER SUPPLY BEFORE CARRYING OUT THE OPERATION.

To ensure the correct operation of the appliance, it is essential to follow the manufacturer's instructions and have periodic maintenance carried out by professionally qualified personnel.

Depending on the model purchased, follow the following instructions for cleaning the condenser

## MODEL 100-140-280 2T

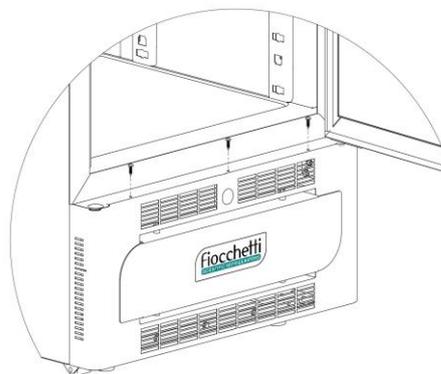
DESCRIPTION	IMAGE
<p>Remove the rear cover using a Phillips screwdriver (if the battery pack cover is present, do not remove the screws on the right and left of the terminal block and the screws securing the cover itself) For the 280 2T model, the rear channel covering the electrical wiring must also be removed</p>	
<p>Using a vacuum cleaner or air jet, remove all dust from the condenser fins.</p>	
<p>Perform the reverse procedure to restore the correct connection of the back cover.</p>	

## MODEL 130-170-200-250-300-600 2T-400-500 (1T &amp; 2T)

## DESCRIPTION

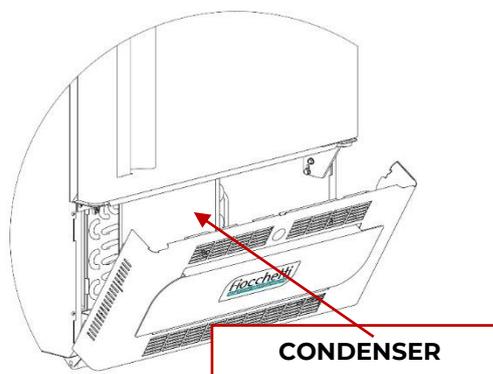
## IMAGE

Unscrew the guard using a Phillips screwdriver (3 screws).

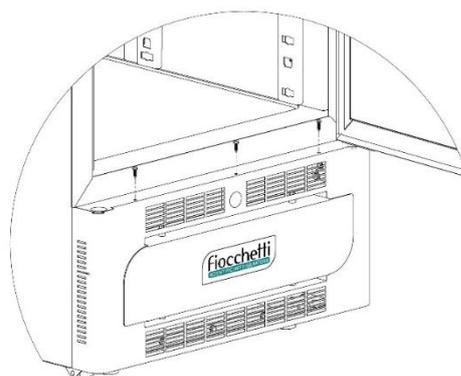


Rotate and pull down the lower panel

Using a vacuum cleaner or air jet, remove all dust from the condenser fins.



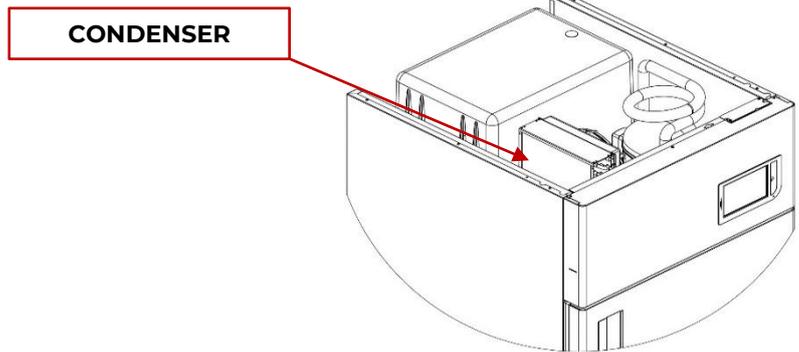
Perform the reverse procedure to restore the correct attachment of the front cover.



MODEL 700-1500

DESCRIPTION	IMAGE
<p>In models with a ceiling type cooling unit, the condenser is accessible directly from the outside, using a ladder.</p>	

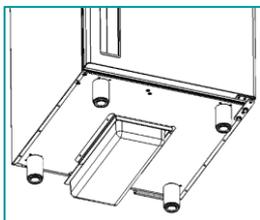
Use a vacuum cleaner, air blast, or long-bristled brush and remove all dust from the condenser fins.



## CONDENSATE WATER DISPOSAL

Defrosting causes the formation of condensate water. In models with ceiling type cooling units, the water evaporates automatically; in other models the water is collected in a provided tray which must be placed under the cabinet and inserted in the appropriate guides.

This tray must be emptied periodically.



As an option, models with ceiling type cooling units (see list below) have, as optional, a drip tray for the automatic evaporation of condensate water.

MODEL	SERIES
<b>SUPERARTIC</b>	700
<b>SUPERARTIC 2T</b>	700
<b>LABOR 2T</b>	700
<b>VISION 2T</b>	700

## COMPLETE DEFROSTING OF FREEZERS

For the following models, it is recommended to perform a complete defrosting at least once a year to eliminate ice residues that could affect the performance of the devices. To do this, remove the goods from the appliance and leave the fridge switched off for at least 24 hours with the door open. Afterwards, dry the cabinet completely and empty the condensation water drip tray if necessary (models indicated in the previous paragraph).

The models subject to this procedure are:

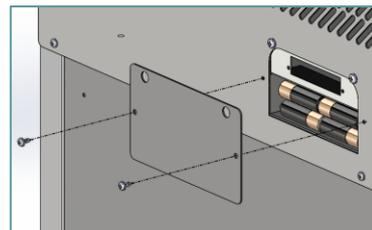
MODEL	°T factory set point
VISION	-20°C
VISION 2T (Compartment B)	-20°C
FREEZER	-20°C
LABOR 2T(Compartment B)	-20°C
SUPERARTIC	-40°C
SUPERARTIC 2T (Compartment B)	-30°C

## REPLACEMENT OF BUFFER BATTERIES

To ensure maximum efficiency, the batteries of the acoustic and visual blackout alarm must be replaced periodically, at least every 2 years. This operation can

be carried out by the user, easily accessing the slot located:

- on the back of the device
- on the top of the device (on top motor models)
- under the top cover (for 100-140 and 280 2T models)



## 7 DEMOLITION

This appliance is marked in accordance with the European Directive 2012/19/EU (WEEE).



The symbol  on the product indicates that this product should not be treated as household waste but should be handed over to the appropriate collection point for the recycling of electrical and electronic equipment.

When disposing of the appliance, make it unusable by cutting the power cord, removing the doors, shelves or drawers so that children cannot access the inside of the equipment. Do not leave it unattended even for a few days.

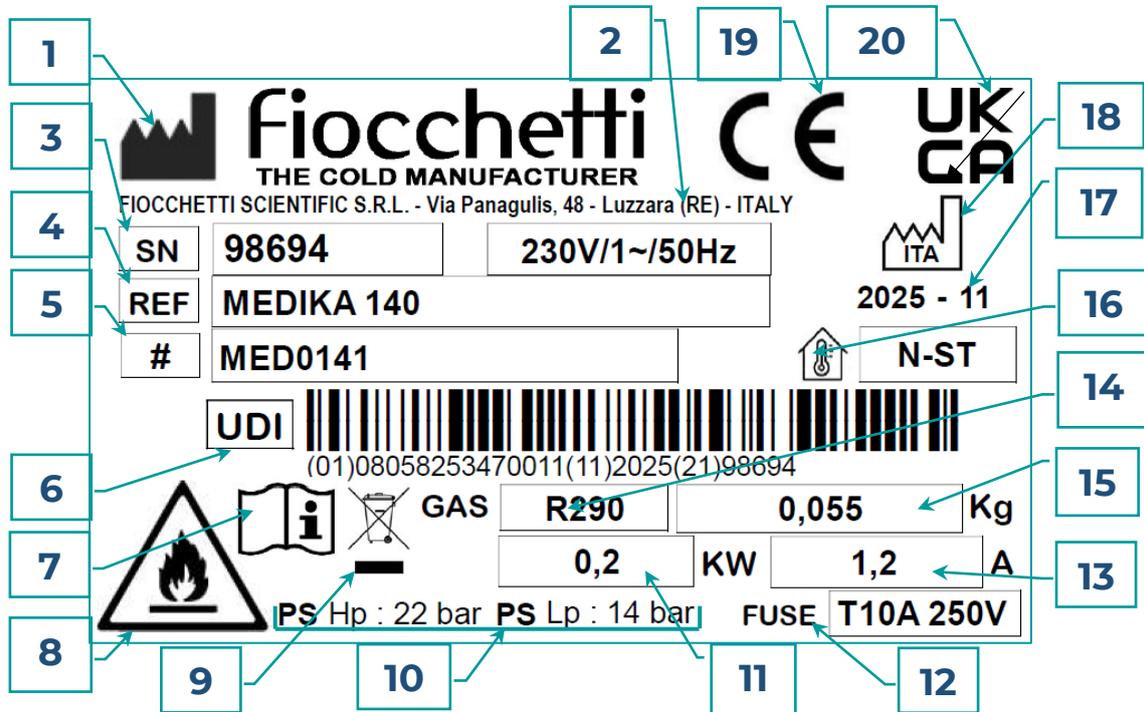
For more information on how to dispose, reuse and recycling of this product, please contact your local office, household waste collection service, or distributor.

Comply with current regulations.

The gas present in the system must be extracted by authorized personnel.

# 8 LABELLING

## DATAPLATE OF THE MACHINE



#	SYMBOL	DESCRIPTION	NORM	REF.	ISO/IEC numberID
1		Indicates the manufacturer of the medical device	ISO 15223-1:2021	5.1.1	ISO 7000-3082
2		Registered office address	ISO 15223-1:2021	5.1.7	ISO 7000 - 2493
3	<b>SN</b>	Indicates the serial number	ISO 15223-1:2021	5.1.7	ISO 7000-2493
4	<b>REF</b>	Indicates the commercial name listed in the catalog	ISO 15223-1:2021	5.1.6	ISO 7000-2493
5	<b>#</b>	Indicates the model number	ISO 15223-1:2021	5.1.10	IEC 60417-6050
6	<b>UDI</b>	Unique identification code. The symbol is accompanied by the barcode and the numeric code identifying the device (see explanation below).	ISO 15223-1:2021	5.7.10	N.A.
7		Indicates "Consult the instructions for use."	ISO 15223-1:2021	5.4.3	ISO 7000-1641
8		Indicates that the refrigerant gas is flammable	ISO 7010:2012		ISO 7010-W021

9		The symbol indicates the separate collection of electrical and electronic equipment in accordance with Article 28 of Directive 2012/19/EU (WEEE)..	ANNEX IX Directive 2012/19/UE (RAEE)		
10		Maximum allowable pressure on the high-pressure side and low-pressure side.			
11		Energy consumption			
12	<b>FUSE</b>	Fuse type; followed by the type of fuse installed on the equipment.	N.A.	N.A.	N.A.
13		Inrush current			
14		Type of refrigerant			
15		Quantity of refrigerant			
16		Indicates the climate class.	N.A.	N.A.	N.A.
17		Year - month of manufacture. Ambient operating temperature of the device			
18		Indicates the country of manufacture and is followed by the year of manufacture	ISO 15223-1:2021 ISO3166-1	5.1.11	IEC 60417- 6049
19	<b>CE</b>	Product marking indicating compliance with European Community regulatory requirements			
20	<b>UK CA</b>	Product marking indicating compliance with UK regulatory requirements			

## OTHER LABELLING



General hazard (ISO 7010-W012)



Electrical hazard (ISO 7010-W012)

Remove electrical power before removing protections



Earth Symbol



WARNING: Risk of fire



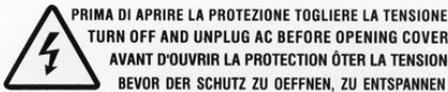
Heat Hazard  
High Temperature Parts



Warning and obligation to read this manual



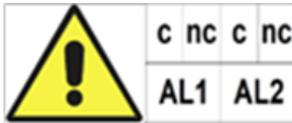
WEEE symbol



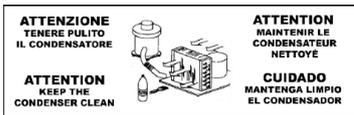
Disconnect the power before removing protections



Avvertenza e classificazione della batteria di backup



Indication for connection to clean contact



Periodic condenser cleaning



Glass door cleaning for Vision models



Do not exceed the indicated level



Fuse ratings label



I/O battery switch



**DANGER - RISK Of Fire Or Explosion. FLAMMABLE REFRIGERANT Used. To Be Repaired Only By Trained Service Personnel. Do Not Puncture REFRIGERANT Tubing**  
 This equipment is intended for use in commercial, industrial, or institutional occupancies as defined in the Safety Standard for Refrigeration Systems, ANSI/ASHRAE 15  
**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. FLAMMABLE REFRIGERANT Used. Consult Repair Manual/Owner's Guide Before Attempting To Install Or Service This Equipment. All Safety Precautions Must be Followed**

**AVERTISSEMENT - Risque d'incendie ou d'explosion. RÉFRIGÉRANT INFLAMMABLE utilisé.** L'appareil doit être réparé uniquement par du personnel qualifié. Ne pas percer le tuyau de réfrigérant.  
 Cette unité est destinée à être utilisée dans des établissements commerciaux, industriels ou institutionnels tels que définis dans la norme de Sécurité des Systèmes de Réfrigération, ANSI/ASHRAE 15.  
**AVERTISSEMENT - Risque d'incendie ou d'explosion. Éliminer correctement conformément aux règlements fédéraux ou locaux. RÉFRIGÉRANT INFLAMMABLE utilisé.**  
**DANGER - Risque d'incendie ou d'explosion. RÉFRIGÉRANT INFLAMMABLE utilisé.** Consultez le manuel de réparation/guide du propriétaire avant d'essayer d'installer ou de réparer ce produit. Toutes les précautions de sécurité doivent être suivies

Service, disposal and laboratory use marking

## 9 ATTACHMENTS

The following documents are attached:

- Declaration of conformity to DIRECTIVE 2006/42/EC
- Declaration of conformity to DIRECTIVE 2014/30/EC
- Declaration of conformity to DIRECTIVE 2014/35/EC
- Declaration of conformity to DIRECTIVE 2011/65/EC (RoHS) (on request)
- Electrical safety test slip (printed on request)
- Wiring diagram

## 10 CONSUMABLES

CODE	TPOLOGY	APPLICATION	IMAGE
BAT004	BATTERY Lithium button 3V type CR 1220	Clock board battery	
BAT005	No. 8 AA rechargeable NiMH 1.2 V BATTERIES 2.6 Ah	Acoustic and visual power failure alarm	

# 11 DRAWBACKS AND REMEDIES

The following table shows the indications for identifying the causes and solving the most frequent anomalies, which do not automatically give rise to technical interventions.

Work on the electrical system can also be carried out by your trusted electrician.

INCONVENIENCE	POSSIBLE CAUSE	REMEDY
<b>The equipment does not turn on</b>	<ul style="list-style-type: none"> <li>• Controller in "Stand-By"</li> </ul>	<ul style="list-style-type: none"> <li>• Turn on the controller</li> </ul>
	<ul style="list-style-type: none"> <li>• No mains</li> </ul>	<ul style="list-style-type: none"> <li>• Check plug, fuses, and power line</li> </ul>
	<ul style="list-style-type: none"> <li>• Power plug not connected to electrical outlet</li> </ul>	<ul style="list-style-type: none"> <li>• Connect plug to electrical outlet</li> </ul>
	<ul style="list-style-type: none"> <li>• Control panel failure</li> </ul>	<ul style="list-style-type: none"> <li>• Contact Technical Support</li> </ul>
<b>The appliance does not reach the set temperature</b>	<ul style="list-style-type: none"> <li>• Too much material has been introduced into the compartment</li> </ul>	<ul style="list-style-type: none"> <li>• Reduce the amount of material and leave space between the grids and the walls</li> <li>• Place the products in the compartment little by little after the temperature is stabilized.</li> </ul>
	<ul style="list-style-type: none"> <li>• Material at room temperature (e.g. +25°C) has been placed in the freezer area</li> </ul>	<ul style="list-style-type: none"> <li>• Insert only properly frozen material</li> </ul>
	<ul style="list-style-type: none"> <li>• Prolonged and too frequent door openings</li> </ul>	<ul style="list-style-type: none"> <li>• Reduce the number of openings and hasten to close the door.</li> </ul>
	<ul style="list-style-type: none"> <li>• Ambient temperature too high</li> </ul>	<ul style="list-style-type: none"> <li>• Air Condition the environment</li> </ul>
	<ul style="list-style-type: none"> <li>• Condenser clogged with dust or dirt</li> </ul>	<ul style="list-style-type: none"> <li>• Perform condenser cleaning</li> </ul>
	<ul style="list-style-type: none"> <li>• Electronic controller malfunction</li> </ul>	<ul style="list-style-type: none"> <li>• Contact Technical Support</li> </ul>
	<ul style="list-style-type: none"> <li>• Refrigerant system malfunction</li> </ul>	<ul style="list-style-type: none"> <li>• Contact Technical Support</li> </ul>
<b>The equipment is noisy</b>	<ul style="list-style-type: none"> <li>• Appliance instability</li> </ul>	<ul style="list-style-type: none"> <li>• Check the stability of the equipment by adjusting the feet if necessary</li> </ul>
	<ul style="list-style-type: none"> <li>• Contact with foreign bodies (e.g. metal, cardboard, polystyrene or other)</li> </ul>	<ul style="list-style-type: none"> <li>• Move and/or remove foreign objects touching the equipment</li> </ul>

INCONVENIENCE	POSSIBLE CAUSE	REMEDY
<b>Repeated alarm or fault or alarm detected signals</b>	<ul style="list-style-type: none"> <li>The equipment has detected an alarm</li> </ul>	<ul style="list-style-type: none"> <li>View alarm list</li> </ul>
<b>Wet products</b>	<ul style="list-style-type: none"> <li>Ice formation in the evaporator or sudden thawing</li> </ul>	<ul style="list-style-type: none"> <li>Contact Technical Support</li> </ul>
	<ul style="list-style-type: none"> <li>High humidity in the environment</li> </ul>	<ul style="list-style-type: none"> <li>Conditioning the environment or ventilating the environment</li> </ul>
<b>Wet glass door</b>	<ul style="list-style-type: none"> <li>High humidity in the environment</li> </ul>	<ul style="list-style-type: none"> <li>Conditioning the environment or ventilating the environment</li> </ul>

## 12 DIAGNOSTIC

The following table give directions for identifying the causes and solving the most frequent anomalies, which do not automatically require technical interventions.

Work on the electrical system can also be carried out by your trusted electrician.

VISUAL AND ACOUSTIC SIGNALLING	REMEDY
<p><b>LOW EVAPORAT</b></p>	<ul style="list-style-type: none"> <li>● Turn off the refrigerator from the keyboard. Unplug the power cord, wait a few seconds and plug it back in. Switch the refrigerator on from the keypad, and once the temperature is displayed press "OK" to make the audible and visual alarm disappear.</li> <li>● Check that the door is properly and fully closed</li> <li>● If the message appears several times, contact service</li> </ul>
<p><b>HIGH CONDENS</b></p>	<ul style="list-style-type: none"> <li>● Turn off the refrigerator from the keyboard. Unplug the power cord, wait a few seconds and plug it back in. Switch the refrigerator on from the keypad, and once the temperature is displayed press "OK" to make the audible and visual alarm disappear.</li> <li>● Air condition the environment</li> <li>● Check that the installation has been carried out correctly</li> <li>● Perform condenser cleaning</li> <li>● If the message appears several times, contact service</li> </ul>
<p><b>COMPRES WORK.</b></p>	<ul style="list-style-type: none"> <li>● Air condition the environment</li> <li>● Perform condenser cleaning</li> <li>● Check that the installation has been carried out correctly</li> <li>● Turn off the refrigerator using the keyboard and then turn it back on.</li> <li>● Check that the door is properly and fully closed</li> </ul>
<p><b>DEFROST TIME</b></p>	<ul style="list-style-type: none"> <li>● Turn off the refrigerator using the keyboard and then turn it back on.</li> <li>● Check the installation environment (not too hot nor cold)</li> <li>● Check that the installation has been carried out correctly</li> </ul>

VISUAL AND ACOUSTIC SIGNALLING	REMEDY
	<ul style="list-style-type: none"> <li>• If the message reappears, contact Technical Support</li> </ul>
<b>HIGH TEMP alarm</b>	<ul style="list-style-type: none"> <li>• Check that the positioning of the products inside the compartment has been carried out correctly</li> <li>• Check the installation environment (not too hot nor cold)</li> <li>• Perform condenser cleaning</li> <li>• Check that the door is properly and fully closed</li> <li>• Air condition the environment</li> </ul>
<b>LOW TEMP alarm</b>	<ul style="list-style-type: none"> <li>• Contact Technical Support</li> </ul>
<b>MAINS FAILURE</b>	<ul style="list-style-type: none"> <li>• Check electrical system or accidental disconnection of the plug</li> </ul>
<b>POWER FAIL HT</b>	<ul style="list-style-type: none"> <li>• Check alarm list</li> <li>• Check electrical system or accidental disconnection of the plug</li> </ul>
<b>H 00: m00</b>	<ul style="list-style-type: none"> <li>• Replace the button battery located on the electronic board</li> </ul>
<b>PROBE S1-S2-S3-S4</b>	<ul style="list-style-type: none"> <li>• Contact Technical Support. The operation of the equipment is still guaranteed</li> </ul>
<b>NO BATTERY</b>	<ul style="list-style-type: none"> <li>• Replace the battery</li> </ul>
<b>BATTERY FAILURE</b>	<ul style="list-style-type: none"> <li>• Replace the battery</li> </ul>

## REQUEST FOR TECHNICAL SUPPORT

### TECHNICAL SUPPORT REQUEST FORM

Please fill in the form below to provide all the necessary data for Technical Assistance intervention. If possible, let the refrigerator run for 1 hour or even better 24 hours to allow the controller collecting a full set of information

<i>APPLICANT:</i>	
<i>TO BE CARRIED OUT AT*:</i>	
<i>REFERENCE:</i>	<i>TEL</i>
<i>MODEL:</i>	<i>S/N</i>
Traceable from the CE plate on the back of the manual or on the cabinet	

<b>The equipment:</b>	<b>YES</b>	<b>NO</b>
Does not cool		
Does not reach the set temperature		
Won't turn on		
Built-in equipment		
Power cord connected to multiple or adapters on the power outlet		
The refrigeration unit is noisy		
Display is off		
Periodic cleaning of the condenser has been carried out as per the use and maintenance manual		
State the date of the last performed cleaning and who performed it		
Have you checked the problems according to what is reported in the use and maintenance manual?		
Display the indicated message or tick one of the following options		

The display indicates:	YES	NO
LOW EVAPORAT		
HIGH CONDENS		
NO BATTERY		
BATTERY FAILURE		
COMPRES WORK.		

POSTED ON:	SIGNATURE: (legible)
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Send by fax to 0522-976028 or by email to [assistenza@fiocchetti.it](mailto:assistenza@fiocchetti.it) or [commerciale@fiocchetti.it](mailto:commerciale@fiocchetti.it)

**NB.: failure to send the duly completed request (\* mandatory fields) will result in the failure to open the intervention with the consequent delay in the time to resolve the problems**

## SERVICE DATA FOR TECHNICAL ASSISTANCE

Access the service section **SERVICE MENU m8** , confirm with  and enter the password 255. Access the menu with **STATUS DATA S1** , scroll through the sub menus and fill in the values in the table below

ENTRY	VALUE	U.M.
KEYPAD ON		n
POWER ON		n
RESET		h
ECT-F		h
COMP		h
COMP%		%
COMP%		%

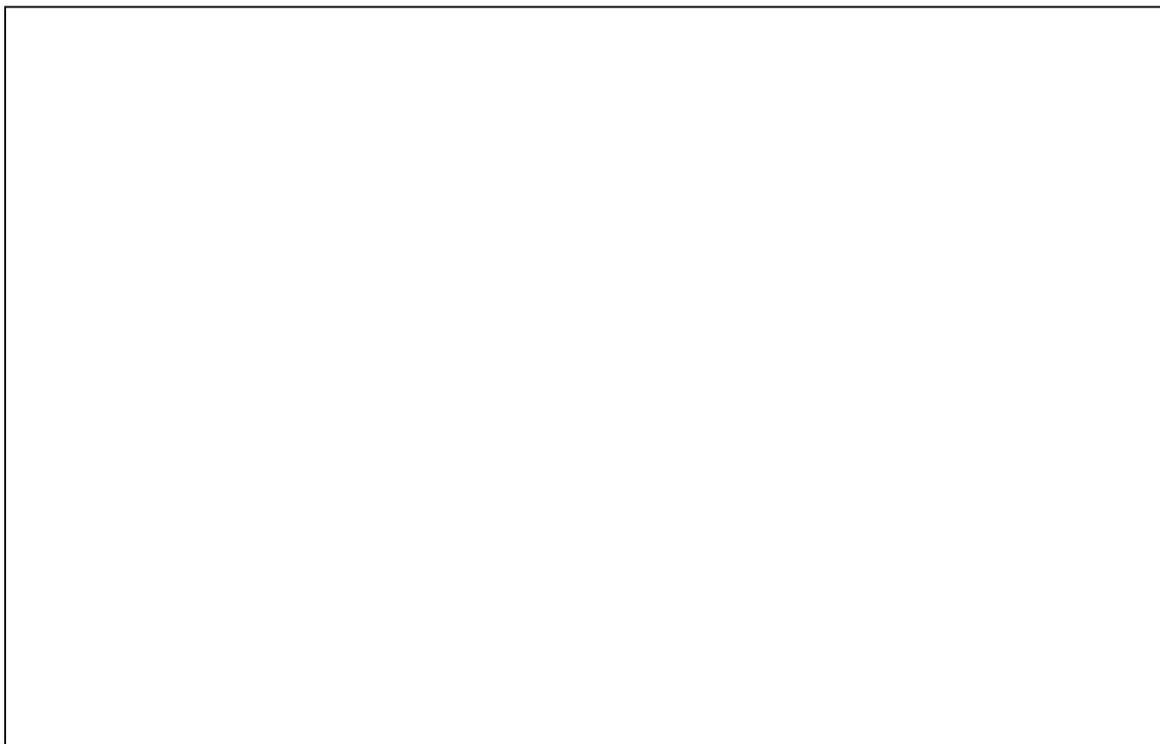
COMP ON	"
COMP OFF	"
MAX EVAP	°C
MIN EVAP	°C
DTM COND	°C
MAX COND	°C
MIN COND	°C

Then exit with  2 times and scroll down  to **FAULT LIST s2**  and access with 

N.	TYPE OF FAULT	DATE/TIME
F01		
F02		
F03		
F04		
F05		
F06		
F07		
F08		
F09		



Dataplate



Reseller stamp



**fiocchetti**  
**THE COLD MANUFACTURER**

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