



**BLAST CHILLERS**

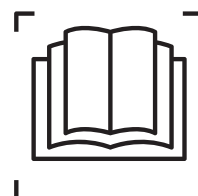
## INSTALLATION AND OPERATING INSTRUCTIONS



**SHFN 0311 / 0511 / 1011 / 1511**



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# English

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# Overall terms

## 1- GENERAL INFORMATIONS

The information in this documentation provide important notions about the safety, the use and the maintenance of the equipment. To always maximize the safety, the hygiene and the functionality of the machinery, it is advisable to carefully keep all the documentation near the appliance and to deliver it to the technicians and operators responsible of its use. The choice of the materials and the products construction comply with the CE safety directives, also a 100% testing of each machineries guarantee the quality of this equipment.

The observation of the recommendations contained in this manual is essential for the safety of the installation / commissioning of the machine and of the final user. The manufacturer, the dealer and the authorized service centers are available to clarify any questions on the use and installation of the equipment. The manufacturer reserves the right to make changes without notice in order to achieve the improvements deemed necessary.

FAILURE TO OBSERVE THE PROVIDED INSTRUCTIONS MAY AFFECT THE SAFETY OF THE EQUIPMENT AND IMMEDIATELY VOID THE WARRANTY.

ALL THE ELECTRIC APPLIANCES CAN BE HAZARDOUS TO YOUR HEALTH. REGULATIONS AND LAWS MUST BE RESPECTED DURING THE INSTALLATION AND THE USE OF SUCH EQUIPMENTS.

ALL THE INSTALLATION OPERATIONS, MAINTENANCE, ADJUSTMENT AND REPAIRS MUST BE PERFORMED BY QUALIFIED SERVICE PERSONNEL.

THE PROPER OPERATION AND THE DURATION OF THE EQUIPMENT DEPEND ON PROPER PREVENTIVE MAINTENANCE PERFORMED EVERY 4 MONTHS BY QUALIFIED SERVICE PERSONNEL.

This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance.

This manual is an integral part of machinery and as such must be preserved for the whole life of the unit.

The manufacturer is relieved from any liability in the following cases:

- Improper use of the machine;
- Improper installation, without following the procedures contained herein;
- Power supply defects;
- Serious shortcomings in the planned maintenance;
- Unauthorized modifications or interventions;
- Use of spare parts non original or non suitable for the model;
- Total or partial disregard of the instructions.

## 1.1 - RISK ANALYSIS

### Hazards list:

- Electrical components
- Sharp parts
- Machinery handling
- Fans in motion
- Refrigerant gases
- Air Flow
- Non-potable water
- Food contamination
- Not accessible gas pipes
- Cold environments
- Flammable Gas

### Warnings related to the danger of electrical components. Risk of electric shock, burns, or fire:

- Access to the electrical components must be performed only by qualified technicians.
- Do not touch the machinery with damp or wet hands or feet.
- Do not operate the machinery when barefoot.
- Do not insert fingers, objects or tools through the louvers or vents.
- Do not pull the power cord.
- Do not wash the machine with water jets or steam.
- Before carrying out any maintenance or cleaning operation, disconnect the machinery from the main power supply by turning off the main switch and unplugging the power cord.
- If the room where the machinery is located becomes flooded, contact an authorized service center for repair before using the machinery again.
- If the machinery is not used, disconnect it from the main power supply.
- The electrical installations have been designed in accordance with CEI EN 60335-1. Stickers indicating 'high voltage' identify areas with electrical hazards.
- Do not use mechanical devices or other means to accelerate the defrosting process, other than those recommended by the manufacturer (IEC 60335-2-89)
- Do not damage the refrigerant circuit (IEC 60335-2-89)
- Do not use electrical appliances inside the food storage compartments of the appliance, unless they are of the type recommended by the manufacturer (IEC 60335-2-89).
- Do not store explosive substances such as aerosol cans with a flammable propellant in this appliance.
- In order to reduce flammability hazards the installation of this appliance must only be carried out by a suitably qualified person.

### Warnings related to general hazards. Risk of injury:

- Presence of sharp edges. For operations on the machinery use suitable protective gloves.
- The handling of the machinery must be safely performed with means and attention such as to prevent damage to people and property.
- Presence of moving fans. Do not remove the protective grids.
- Read in the machinery identification plate the type of refrigerant gas, it could be a flammable gas.
- In case of flammable gas leaks from the cooling system of the machinery, unplug the power cord, open the windows to ventilate the room and call for service immediately.
- If the refrigerant gas leaks, do not touch or inhale the leaked gas.
- After the first installation or any repair operations of the machinery, always check that there is no refrigeration gas leakage.
- Presence of air flows. Do not directly expose people to cold or warm air flows.
- Do not block the inlet or outlet of the air flow.
- Presence of non-potable water. Do not drink the water drained from the machine.
- To prevent the contamination of food, the latter must not come into direct contact with the machinery but placed in appropriate containers.
- Presence of gas pipes with high or low temperatures. Before touching the pipes make sure what is their temperature. Use suitable protective gloves.
- Presence of parts in plexyglass. Do not hit those parts.
- In case of noise, odors or smoke unusually coming from the machinery, unplug the power cord and contact your authorized service center.
- Do not install the machinery in places directly exposed to sea air or under direct sunlight.

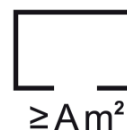
## 1.2 - MACHINERY PLACEMENT and UNPACKING

The Machines must be installed, tested and maintained in full compliance with safety laws, the enforced laws and regulations. The installer is required to check any restrictions imposed by local authorities.

For the placement of the cabinet within the room, please refer to the label on the cabinet (if present), indicates the minimum air volume of the room where the equipment is to be installed.

### Things to avoid :

- Places exposed to direct sunlight.
- Closed sites with high temperatures and poor air exchange.



Remove the protective film from all sides.

For a good installation of the machinery with air-cooled condenser built into the motor compartment, you must ensure that in the installation area nothing is obstructing the air vents necessary for the proper functioning of the machinery or of the premises itself. Keep a minimum distance of 50 cm from the air inlet and outlet sides.

The machinery must be installed and leveled by adjusting the support feet, so as to ensure stability; any other different installation solutions must be agreed and approved by the manufacturer. For the leveling of the heavy machinery, use special lifters.

If the equipment is not leveled, its operation and the flow of condensated water can be compromised.

If the cabinet is supplied on wheels, place it on a level surface and block them before switching on the equipment.

If the machine is of modular type of cell with bottom panel placed on the floor, it is necessary to fix the bottom panel to the floor with appropriate brackets ( not supplied ) and to seal it using specific silicone.

If the machine is of modular type of cell with bottom panel built-in in the floor, it is necessary to provide and guarantee the air flow under and at the edges of the floor to avoid the formation of condensation water.

For the movement of the machinery, it is not recommended to incline it or to recline it. If for any reason this operation is necessary, wait 24 hours after positioning the machine before starting it up, thus allowing the oil to return to the compressor and preventing it from breaking.

Before removing the packaging, check that it is intact, disputing and writing on the delivery note of the forwarding agent any damage noted before signing it. After removing the packaging, check that the machinery is intact; in the event that it is damaged, immediately notify the dealer by fax or registered mail with proof of delivery and if the damage is likely to jeopardize the safety of the machine, do not proceed with the installation until the intervention of a qualified technician.

All packaging (plastic bags, cardboard, nails, etc.) must not be left within reach of children and pets as a source of potential danger.

## 1.3 - INTENDED USE

Blast chillers and shock freezing units are appliances needed to cool down the food quickly, to avoid the proliferation of bacteria in the food and to maintain the quality and flavor of the foods to be cooled.

These machineries are used in two different modes:

- +3°C (blast chilling ) to bring the food temperature to +3°C.
- -40°C (shock freezing) to bring the food temperature to -20°C.

The blast chiller user can set the more appropriate working cycle in relation to the operations he wants to perform.

Blast chillers and shock freezing machineries, at the end of each cycle, can also preserve the food at a specific and constant temperature, but only for a limited time, not longer than 2 days.

In fact, these machineries are not intended as a temperature storing up appliances.

## 1.4 - ELECTRICAL CONNECTION

THE EQUIPMENT IN THE 400V 3 PHASE POWER SUPPLY VERSION IS PROVIDED WITHOUT THE PLUG TO BE CONNECTED TO THE POWER LINE.

THE PRODUCER DISCLAIMS ANY RECOURSE IN CASE THE CONNECTIONS ARE MADE BY THE USER OR BY NOT QUALIFIED PERSONNEL.

- Verify the integrity of the power cord, if it is damaged, have it replaced by qualified personnel.
- The power supply must be compatible with the indications given in the wiring diagram of the machine.
- There must be available, for the connection, an all-pole type main switch which cuts off all contacts including neutral, with a distance between the open contacts of at least 3 mm, with circuit safety braker and coupled to fuses, to be sized or calibrated in according to the power indicated on the machinery identification plate.
- The main power switch must be on the electric line near the installation and must serve exclusively one apparatus at a time.
- There must be already available and in use, an efficient GROUNDING system to which connect the machine.
- The use of adapters, multiple sockets, wires with a not suitable section or with extension connections not complying with the specific law requirements, it is forbidden.
- For any details on the electrical operation for the machinery, consult the electrical diagram attached to the machinery.
- The power cord can not be put into traction or crushed during normal operation or the ordinary maintenance.

To be noted that the models listed below can only be installed in rooms whose electrical system has maximum impedance values as shown in the table:

FASTER 15T	$Z_{max} = 0,40 \Omega$
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ATTENTION: In order to avoid any danger deriving from an automatic reset of the thermal protection of the compressor, the equipment must not be powered by switching devices such as switches, relays, timers or connected to circuits that are open and closed regularly by hand.

## 1.5 - APPLICATIONS

- Do not overlap the food you want to blast chill or freeze.
- Do not place trays or pots directly on the bottom of the cell and not even on the worktop of models produced in steelpet
- Do not exceed the declared maximum allowed weights for each shelf, but distribute the product in trays in a uniform manner.
- Blast chilling and freezing times always refer to products maximum 40 mm thick.
- Always blast chill one type of food per time, different food have different densities and therefore the cycle timing and output can change.
- Maximum load allowed for each shelf: 5 Kg
- The food probe must be placed correctly in the middle of the largest food type and the tip should never exit the food and/or touch the pan.
- To avoid the probe breaking, do not insert it in food with a temperature higher than 100°C.
- The food probe must always be cleaned after each use or malfunctioning.
- Do not cover the food with lids or other means, the more you isolate the food, the longer the cycle time will be.
- If you insert foods at temperatures above 70°C there is a risk of overloading the machine, increasing the cycle time and the power consumption.
- Do not block the fans vents.
- The water discharge pot contained in the chiller cell must be placed under the equipment in its rails
- Be careful that the drain tube has to be placed inside the container and free from any obstructions.
- The pot must be emptied out regularly; to perform this operation, you just have to remove the pot from its rails, empty it and then place it back on the rails
- Maximum allowed load on each shelf is 20 Kg.
- For climate class 5 compliance testing to EN 60335-2-89 (chapters 10,11,13) are made at an ambient temperature of  $43^{\circ}\text{C} \pm 2^{\circ}\text{C}$ . For climate class 4 compliance testing are made at  $32^{\circ}\text{C} \pm 2^{\circ}\text{C}$ .
- The machineries with incorporated condensing unit are not built-in devices.
- Do not store explosives, such as pressurized containers with flammable propellant in this device.
- The model 3T complies with EN 61000-3-3 standard.
- When the equipment is no longer in use, clean and dry the interior, leave the door ajar to promote air circulation.

# BLAST CHILLER - SHOCK FREEZER

Below is the table showing the energy consumption of the various models of blast chillers and freezers.

BRAND	MODEL	Nr. trays / chilling according to EN 17032	Nr. trays / freezing according to EN 17032	Test trays	Climate class according to EN 60335-2-89	Multifunction	Cooling capacity according to EN 17032			Power consumption according to EN 17032				Gas
							Cycle chilling from +65°C to +10°C freezing from +65°C to -18°C	Chilling full load capacity	Freezing full load capacity	Chilling	Freezing	Chilling	Freezing	
							Chilling [minutes]	Freezing [minutes]	[kg]	[kg]	[kWh/cycle]	[kWh/cycle/kg]		
AFINOX	INFINITY-X 5	5	2	GN, EN	3, 4, 5	YES, NOT	95	257	25	10	1,44	0,06	0,31	R290 GWP 0,02
AFINOX	INFINITY-X 10	8	4	GN	5	YES	92	270	40	20	2,44	0,06	0,29	R290 GWP 0,02
AFINOX	INFINITY-X 15	14	6	GN	5	YES	86	182	70	30	4,78	0,07	0,25	R290 GWP 0,02
AFINOX	INFINITY-X 10 2/1	10	4	GN	5	YES	120	270	50	20	4,48	0,09	0,40	R290 GWP 0,02
AFINOX	FASTER-e 3	2	1	GN	4	NOT	90	249	10	5	1,12	0,11	0,55	R290 GWP 0,02
AFINOX	SMALL-e 5	2	1	GN	5	NOT	80	238	10	5	1,18	0,12	0,59	R290 GWP 0,02
AFINOX	FASTER-e 5	3	1	GN	5	NOT	96	192	15	5	1,74	0,12	0,53	R290 GWP 0,02
AFINOX	FASTER-e 10	6	2	GN	5	NOT	100	243	30	10	2,59	0,09	0,48	R290 GWP 0,02
AFINOX	FASTER-e 15	8	3	GN	5	NOT	97	234	40	15	3,66	0,09	0,46	R290 GWP 0,02

## Cycle test:

Manual chilling: minutes 300 / temperature -20°C / ventilation 10

Manual freezing: minutes 300 / temperature -40°C / ventilation 10

## 1.6 - TECHNICAL ASSISTANCE

The after-sales technical assistance is guaranteed by the manufacturer through its network of resellers - dealers and installers. For technical assistance, contact an authorized dealer, providing the identification data, available on the identification plate.

## 1.7 - IDENTIFICATION & BRANDING

MOD. ....							
CODICE CODE .....				MATR. S/N .....			
ALIMENTAZIONE RATED VOLTAGE	.....	(V)	.....	(Hz)	.....	(W)	..... (A)
SBRINAMENTO (W) DEFROSTING	.....						
REFRIGERANTE COOLING GAS	.....	MASSA (Kg) QUANTITY		.....			
CLASSE CLIMATICA CLIMATIC CLASS						Max Pressure Gas	
GAS ISOLAMENTO FOAMING GAS	HFO-1234ze / CO2 / 245fa					25 BAR	
ORDINE CONFIRM NR. ....				ANNO YEAR .....			

Figure 1 - Example of a nameplate applied to the machine.

For a correct consultation of this manual, identify the model in your possession through the informations on the identification label.

The machine is identified by the following parameters:

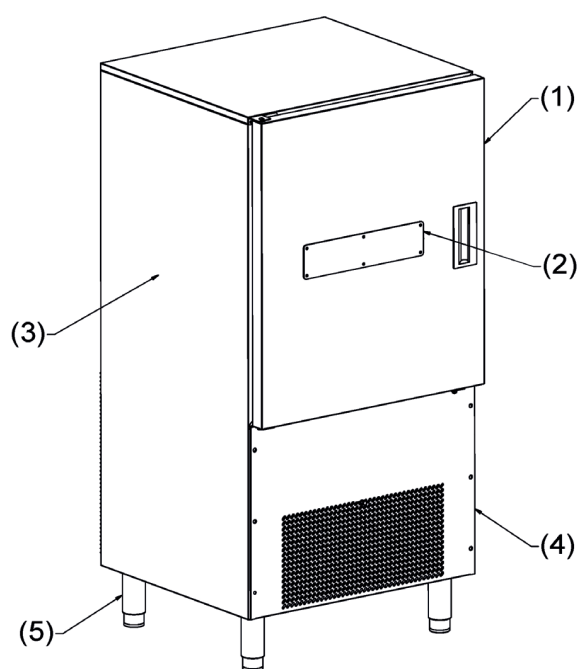
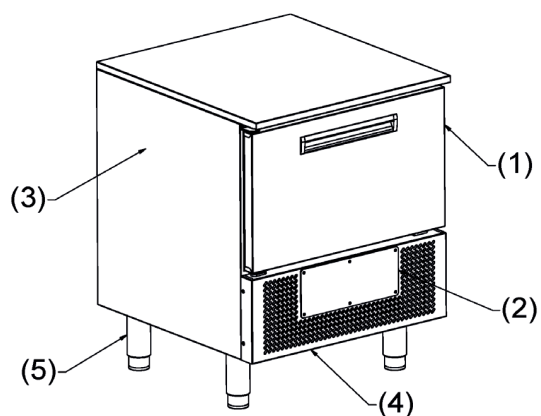
**Serial number**

**Technical specifications**

**Production year**

The installation and the use of the machinery must comply with the nameplate data and indications on the technical data sheets.

## 1.8 - COMPONENTS IDENTIFICATION



(1) DOOR	(4) MOTOR COMPARTMENT
(2) CONTROL PANEL	(5) FEET/CASTORS
(3) REFRIGERATED COMPARTMENT	

## 1.9 - CLEANING

DO NOT USE WATER JETS EVEN PRESSURIZED OR STEAM.

### CLEANING THE EXTERNAL MODULE

It must be performed with a damp cloth with a solution of water and bicarbonate, or other neutral cleaners, dry with a soft cloth.

### CLEANING THE DISPLAY: "GLASS"

It must be performed using a clean soft cloth (free from dust and slag), moistened with soap and water or water and alcohol at 10% max. Other cleaners or cloths not wetted or soiled, could ruin the material. Dry it with a clean soft cloth.

### CLEANING THE INNER CELL

Remove the pans, grids and guides can be cleaned as the interior, clean with a damp cloth with a solution of water and bicarbonate, or other neutral cleaners, dry with a soft cloth.

### CLEANING OF THE FOOD PROBE

After each blast chiller cycle in which the core probe has been used, you must clean it with a damp sponge with a solution of water and bicarbonate.

### CLEANING THE CONDENSER (MAINTENANCE)

For a correct operation of the machinery it is necessary that the condenser is kept clean to allow free circulation of air. This operation has to be done every 120 days at the most. It must be done with a soft bristle brush to remove all dust and fluffs that are deposited on the fins of the condenser.

It would be even better to use a vacuum cleaner to avoid the release in the environment of the removed dust.

In presence of greasy deposits, you may want to remove them using a brush dipped in alcohol.

## 1.10 - MACHINERY DISPOSAL

The scrapping and the final disposal of the machinery must be made following the regulations in force in the country of installation, especially with regards to the refrigerant gas and the lubricating oil of the compressor.

Materials used in the construction of the machinery:

Stainless steel: Construction of the appliance

Plastic parts: Construction of various parts

Refrigerant gas: in the refrigerant circuit

Compressor oil: in the refrigerant circuit

Copper: electrical system and the cooling circuit.



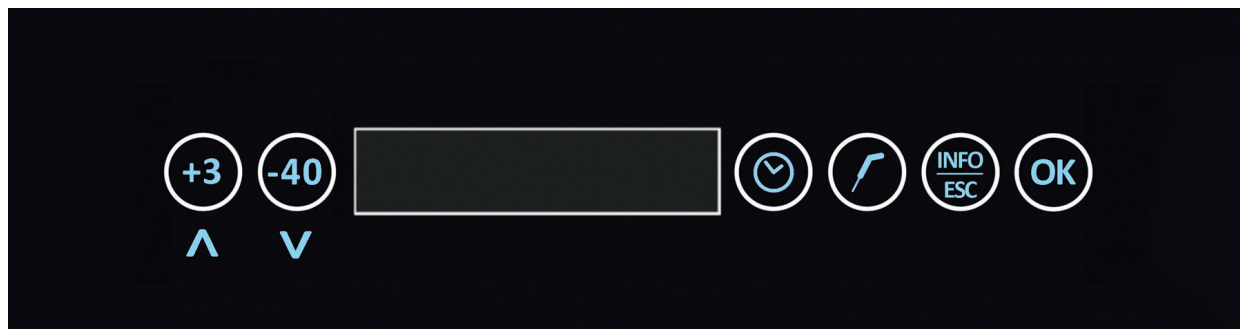
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Below are the information for the user for the correct handling of electric and electronic devices (WEEE):

- There is an obligation not to dispose WEEE devices as unsorted municipal waste and to have for such waste a separate collection;
  - For the disposal, you should use only public or private waste collection systems defined by the local legislation. It is possible to return to the distributor the equipment at the end of its working life only when buying a new equipment;
  - This equipment may contain hazardous substances: the improper use or incorrect disposal may have negative effects on human health and on the environment;
- The symbol (crossed out waste bin) shown on the product and in the above picture indicates that the equipment has been introduced onto the market after 13 August 2005 and must be disposed of separately;
- In the event of illegal disposal of electrical and electronic waste, the fines are specified by the local regulations regarding disposal.

# Operating Instructions

## 2 - HUMAN INTERFACE and CYCLES



The models have a “Compact” power electronics board and “Glass” mechanical display. The user interface has a 6-digit LED scrolling display and 6 buttons:



**(+3) and (-40) buttons:** buttons to select the machinery cycles:

- 1- +3°C cycle (blast chilling)
- 2- -40°C cycle (shock freezing)



**Cycle buttons :** buttons to select the options for the manual cycles : time or temperature  
Furthermore, the “Clock” button, when the machinery is signalling the end of a cycle or an alarm, if pressed, it ends the Buzzer



**INFO-ESC button :** button to select the settings menu, to end a cycle and to save the configuration parameters:

- 1- I/O ( also displayed during a cycle )
- 2- Active alarms ( also displayed during a cycle )
- 3- Language
- 4- Time
- 5- Alarms list
- 6- S/N
- 7- Parameters
- 8- Software
- 9- Scanner
- 10- Reset



**CONFIRMATION button :** button to confirm the selections, start a cycle and exit from the finished cycle, machinery start up and shutdown.

## 3 - FOOD PROBE

The food probe or hat pin probe, has a resolution of 0.1 °C and an operating range from -49.9 °C to + 99.9 °C. The temperature detection is carried out on a single point in correspondence of the central part of the probe body. To ensure proper operation and accurate detection of the temperature for the management of cycles, the probe must be inserted up to the product core.



## 4 - OPERATING CYLCES

The blast chiller can manage the following operating cycles :

- 1- +3°C (blast chilling)
- 2- -40°C (shock freezing)

Please note that the +3°C or the -40°C cycles are designed to rapidly cool the food and the difference between the two cycles is determined by the final temperature you want to obtain to the heart of food:

- +3°C (blast chilling ) = final positive temperature in the around of +3°C
- -40°C (shock freezing) = final negative temperature in the around of -20°C

The machinery has an innovative cell **PRE-COOLING** function, with an indeterminate duration at the discretion of the user who will decide when to start the blast chilling or the shock freezing cycles; during this phase, the cell temperature is brought down to -30 ° C, this data is not shown on the display therefore remember that the **CYCLE** is actually active when the display indicates **BLAST CHILLING** or **BLAST FREEZING** in progress. Bringing the cell air temperature to a much lower temperature than the surrounding environment before starting any cycle, allows not only to reduce the total cycle time, but also to obtain a correct and uniform micro-crystallization of the food resulting in a reduced product weight loss and guaranteeing the organoleptic characteristics similar to the fresh product.

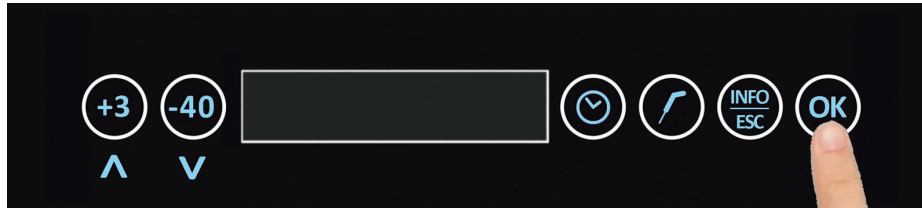
Following are the main characteristics for each single operating cycle:

- 1- +3°C cycle ( blast chilling )** : Manual cycle adjustable for the following values:
- time : cycle duration and cell air temperature
  - temperature : product final temperature and cell air temperature
- 2- -40°C cycle ( shock freezing )** : Manual cycle adjustable for the following values:
- time : cycle duration and cell air temperature
  - temperature : product final temperature and cell air temperature

## 4.1 - START UP

After connecting the machinery to the power supply, the display will show the STAND-BY writing, that writing indicates that the machinery is at rest, which means that it is not possible to access the selection menu.

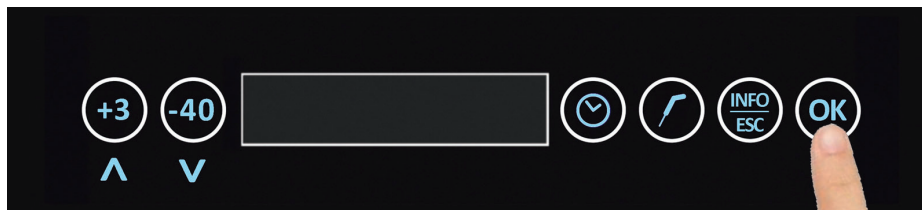
To turn on the blast chiller keep pressed the CONFIRMATION button for at least 3 seconds.



The display will then show the message READY which indicates : Machinery waiting for the cycle selection.

## 4.2 - SHUTDOWN

Keep pressing the CONFIRMATION button for at least 3 seconds to enter the STAND-BY mode.

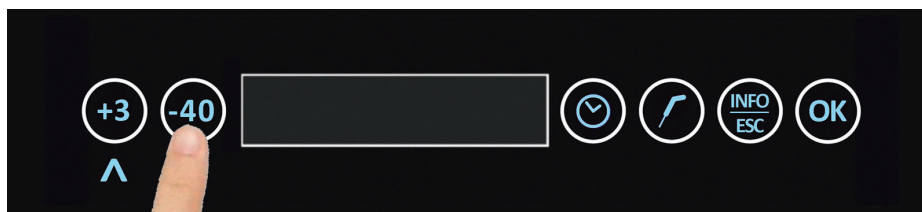


## 4.3 - +3°C CYCLE ( blast chilling )

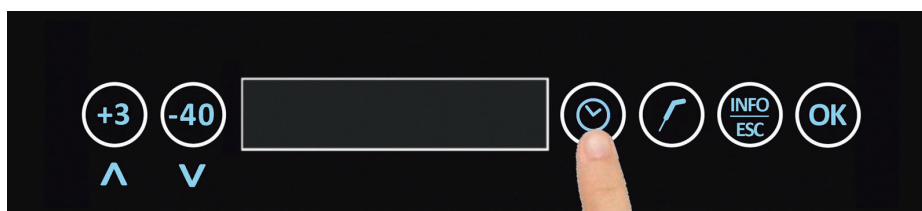
The +3°C cycle (blast-chilling) is a manual cycle. Choose whether to run it in timed mode, by setting the duration of the cycle, or in probe mode, by setting the food temperature.

### A - Time manual cycle :

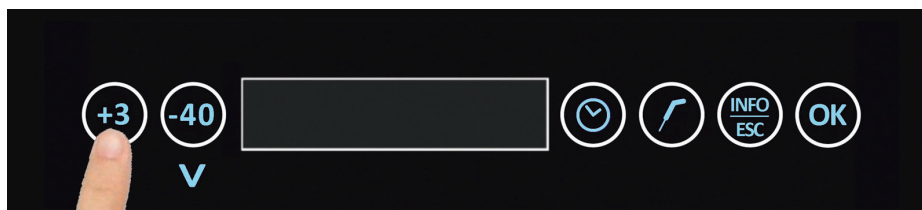
With the machinery in READY mode :



Press the (+3) and (-40) buttons to select the **+3°C** cycle



To choose this cycle, press the CLOCK button



Set the time value with the (+3) and (-40) buttons

# BLAST CHILLER - SHOCK FREEZER



Press the CONFIRMATION button to start the cycle

The cycle starts and the display will show the message BLAST CHILLING IN PROGRESS.

The cycle will finish at the end of the set time. The cycle end is notified with a buzzer that emits a sound. Press the time cycle button to end the buzzer.

Once the cycle is finished, the machinery will start the PRESERVATION mode.

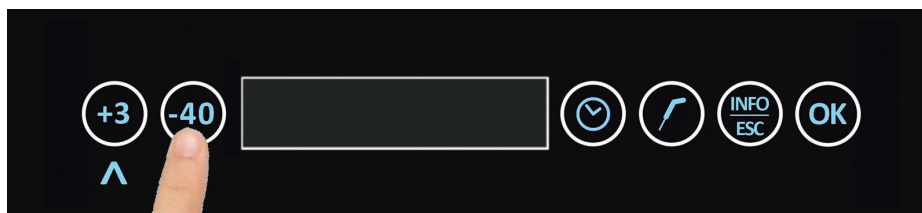
To be noticed that this phase can be maintained for a suggested maximum duration of 8 hours.

If necessary, it is possible to interrupt the cycle before the time has elapsed or the set temperature is reached. To do this, press the confirmation key, right arrow. The display will then show STOP.

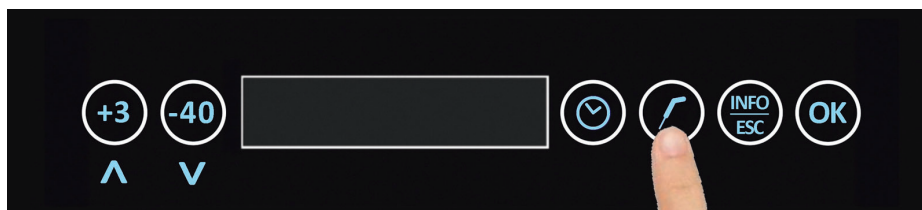
# BLAST CHILLER - SHOCK FREEZER

## B - Temperature manual cycle :

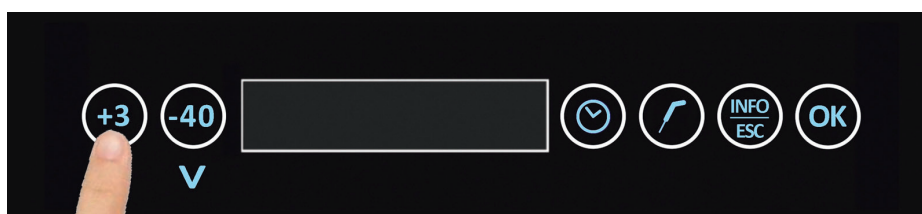
With the machinery in READY mode :



Press the (+3) and (-40) buttons to select the **+3°C** cycle

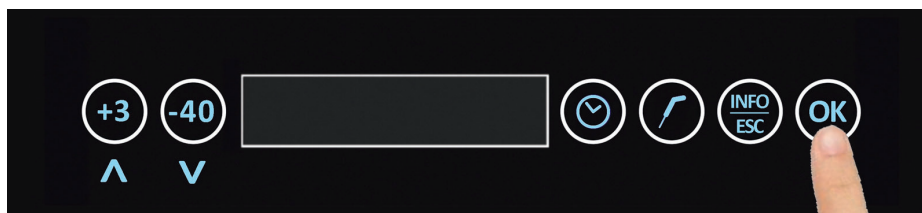


To select this cycle, press the PROBE button



Set the temperature value with the (+3) and (-40) buttons

## BLAST CHILLER - SHOCK FREEZER



After pressing the CONFIRMATION button you will be requested to insert the food probe



Once you have inserted the food probe and after that the machinery has detected the actual insertion of the probe, the cycle will start and the display will show BLAST CHILLING IN PROGRESS. The cycle will end only when the temperature measured at the core will be lower or equal to the set value. The cycle end is communicated with a buzzer that emits a sound and the time cycle button which flashes. By pressing this button, you can end the buzzer.

Once the cycle is finished, the machinery will start the PRESERVATION mode.

To be noticed that this phase can be maintained for a suggested maximum duration of 8 hours.

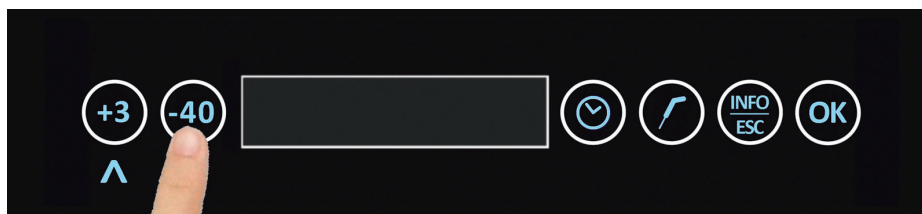
If necessary, it is possible to interrupt the cycle before the time has elapsed or the set temperature is reached. To do this, press the confirmation key, right arrow. The display will then show STOP.

## 4.4 - -40°C CYCLE (shock freezing )

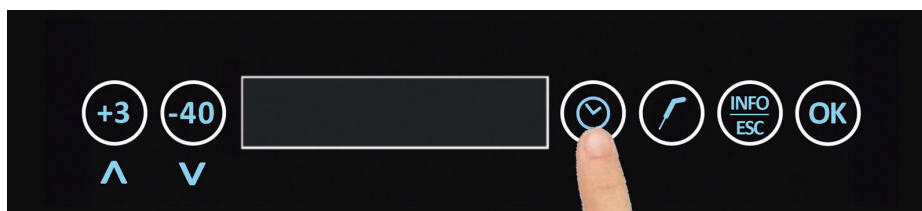
The -40°C cycle (shock freezing) is a manual cycle. Choose whether to run it in timed mode, by setting the duration of the cycle, or in temperature mode, by setting the food temperature.

### A - Time manual cycle :

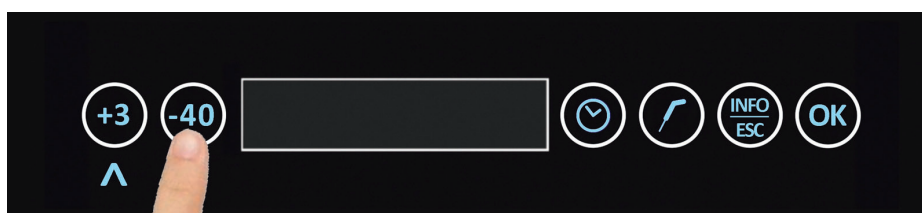
With the machinery in READY mode :



Press the (+3) and (-40) buttons to select the **-40°C** cycle



To choose this cycle, press the CLOCK button



Set the time value with the (+3) and (-40) buttons

# BLAST CHILLER - SHOCK FREEZER



Press the CONFIRMATION button to start the cycle

The cycle starts and the display will show the message SHOCK FREEZING IN PROGRESS.

The cycle will finish at the end of the set time. The cycle end is notified with a buzzer that emits a sound. Press the time cycle button to end the buzzer.

Once the cycle is finished, the machinery will start the PRESERVATION mode.

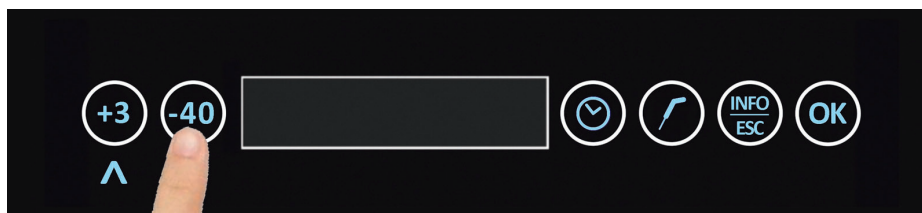
To be noticed that this phase can be maintained for a suggested maximum duration of 8 hours.

If necessary, it is possible to interrupt the cycle before the time has elapsed or the set temperature is reached. To do this, press the confirmation key, right arrow. The display will then show STOP.

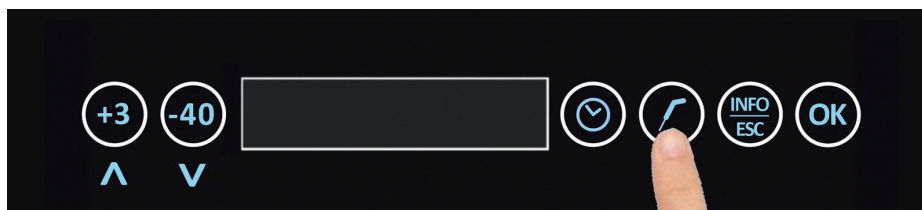
# BLAST CHILLER - SHOCK FREEZER

## B - Temperature manual cycle :

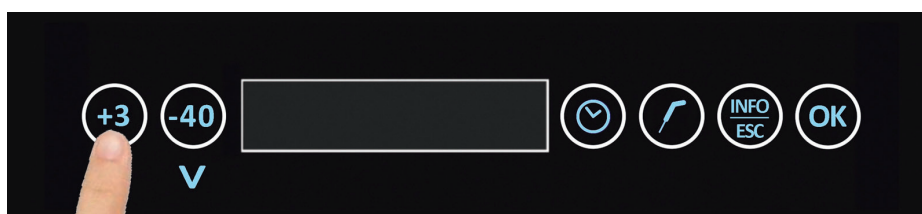
With the machinery in READY mode :



Press the (+3) and (-40) buttons to select the **-40°C** cycle

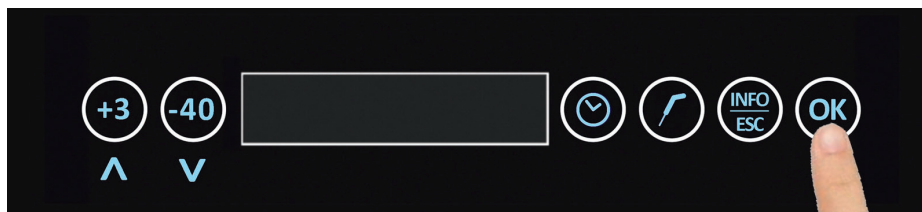


To select this cycle, press the PROBE button



Set the temperature value with the (+3) and (-40) buttons

## BLAST CHILLER - SHOCK FREEZER



After pressing the CONFIRMATION button you will be requested to insert the food probe



Once you have inserted the food probe and after that the machinery has detected the actual insertion of the probe, the cycle will start and the display will show SHOCK FREEZING IN PROGRESS.

The cycle will end only when the temperature measured at the core will be lower or equal to the set value.

The cycle end is communicated with a buzzer that emits a sound and the time cycle button which flashes. By pressing this button, you can end the buzzer.

Once the cycle is finished, the machinery will start the PRESERVATION mode.

To be noticed that this phase can be maintained for a suggested maximum duration of 8 hours.

If necessary, it is possible to interrupt the cycle before the time has elapsed or the set temperature is reached. To do this, press the confirmation key, right arrow. The display will then show STOP.

## 5 - MENU' INFO-ESC

The machinery has a second menu available which you can access by pressing the button

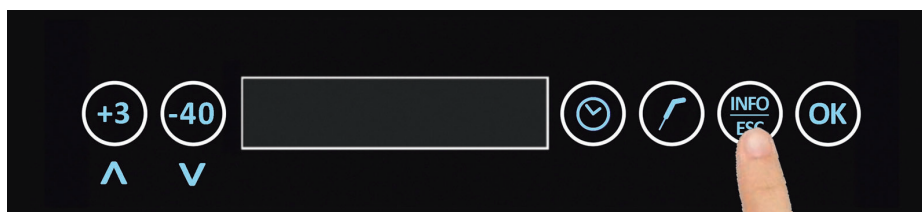


Once you have pressed that button, with the (+3) and (-40) buttons you can visualize the following menu:

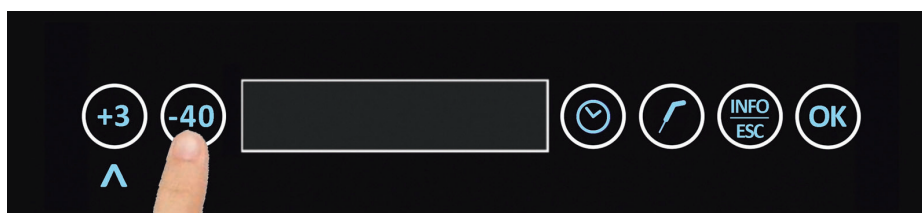
1- I/O	( also displayed during a cycle )	read only
2- Active alarms	( also displayed during a cycle )	write only
3- Language		read and write
4- Time		read and write
5- Alarms list		read only
6- S/N		only authorized personnel
7- Parameters		only authorized personnel
8- Software		only authorized personnel
9- Scanner		only authorized personnel
10- Reset		only authorized personnel

Some of the menu as shown in the description above, are accessible after entering the password.

The password is provided by the technical service to qualified technicians only because any changes, especially in the parameters section, radically alter the functioning of machinery. The read-only data are rather informative and those without password are setting for the end user.



With the machinery in READY mode, press the Info-ESC button

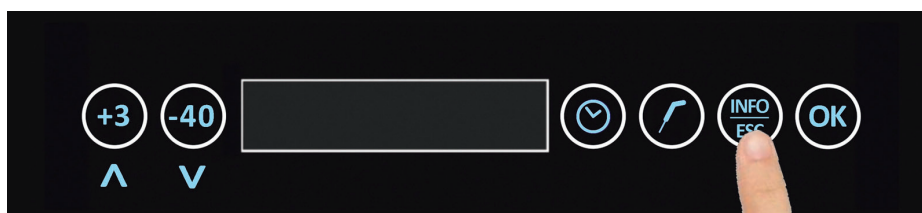


Pressing the (+3) or (-40) buttons you can scroll the whole menu

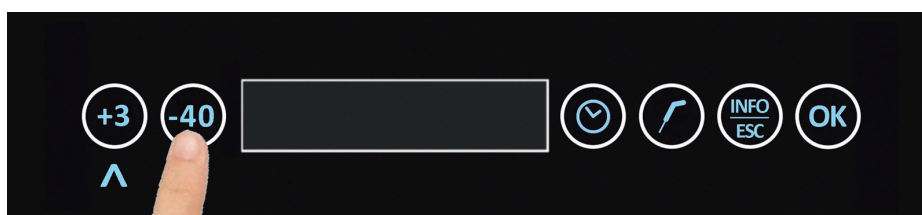
## 5.1 - I/O

The I/O submenu, also displayed during a duty cycle, allows the display of the following information:

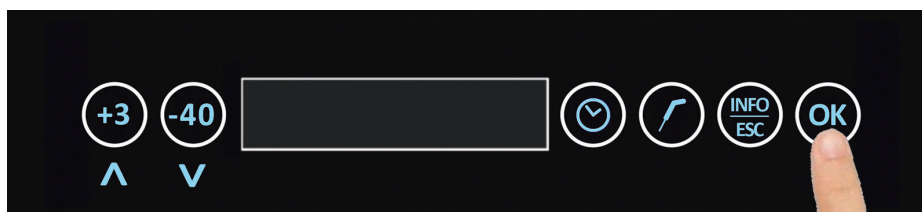
- Air probe temperature : value expressed in °C
- Evaporator probe temperature: value expressed in °C
- Condenser probe temperature: value expressed in °C
- Food probe temperature: value expressed in °C
- D1 Door micro switch 1 : With value 1 active, with value 0 not active
- D2 Magnetothermic : With value 1 active, with value 0 not active
- U1 Compressor: With value 1 active, with value 0 not active
- U2 Fans: With value 1 active, with value 0 not active
- U3 Door frame resistor: With value 1 active, with value 0 not active
- U4 Sterilizer/Led/Alarm: With value 1 active, with value 0 not active



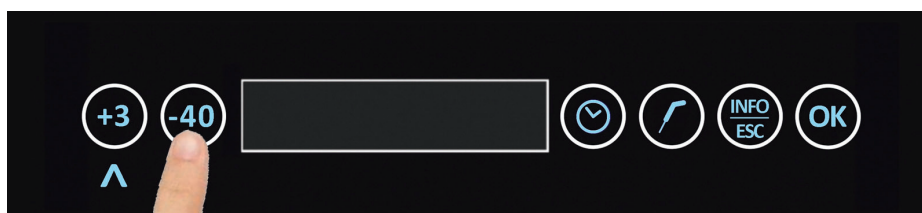
With the machinery in READY mode, press the Info-ESC button



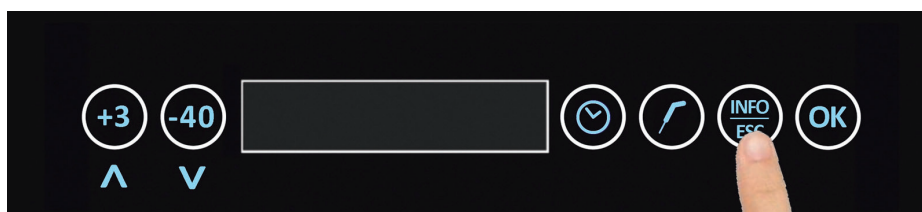
Select the submenu 1 with the (+3) and (-40) buttons



Press the CONFIRMATION button



Scroll with the (+3) and (-40) buttons to display all the values

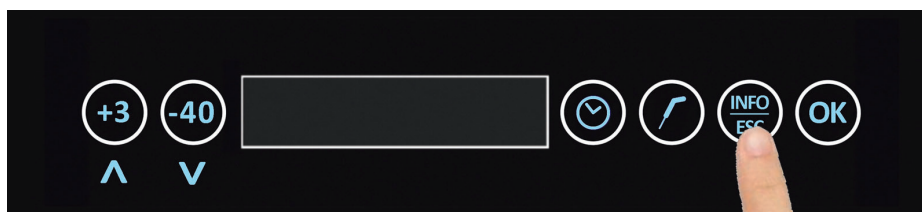


Press the INFO-ESC button to go back to READY mode.

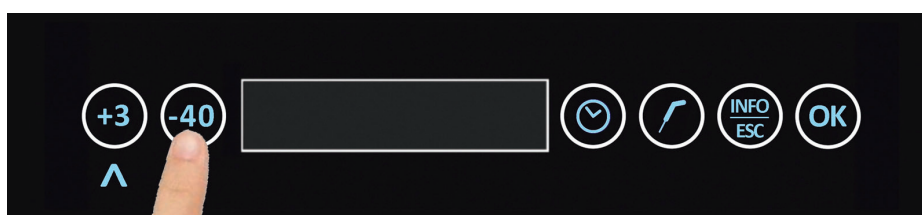
## 5.2 - ACTIVE ALARMS

The ACTIVE ALARMS submenu, also displayed during a cycle, allows to display a list of the alarms that are in progress during a cycle. If there are no alarms, the display will show NO ALARMS.

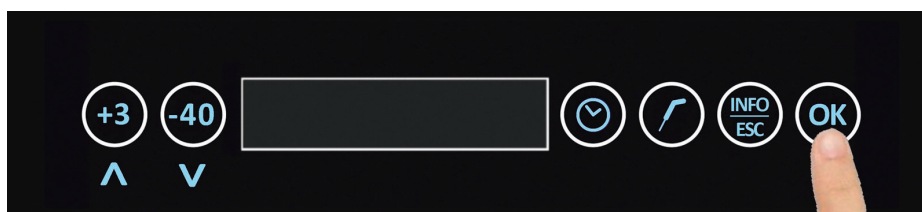
To be noted that the maintenance alarm, the food probe not inserted alarm and the preservation alarm are not available in this list.



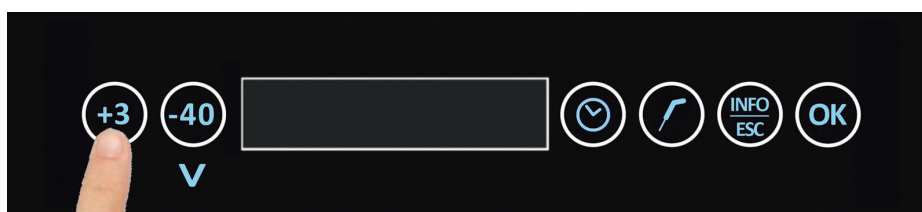
With the machinery in READY mode, press the Info-ESC button



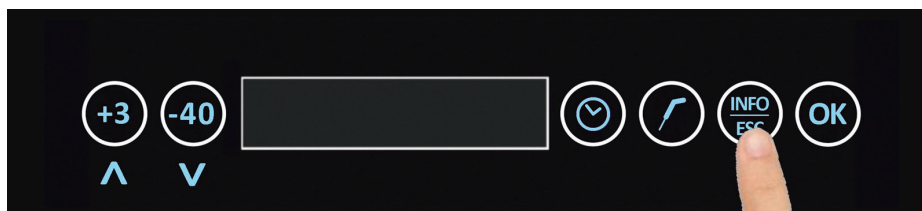
Select the submenu 2 with the (+3) and (-40) buttons



Press the CONFIRMATION button



Scroll with the (+3) and (-40) buttons to display all the alarms



Press the INFO-ESC button to go back to READY mode.

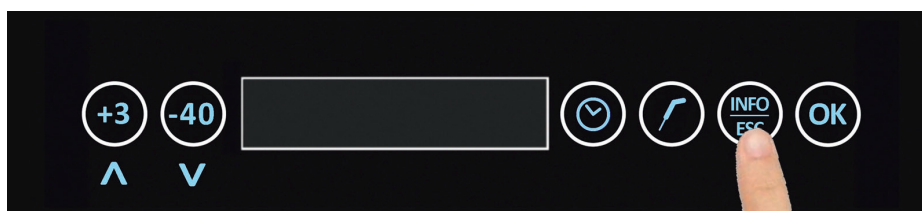
## 5.3 - LANGUAGE

The LANGUAGE submenu, allows the user to set the menu language. Depending on the installed firmware, the available languages are the following:

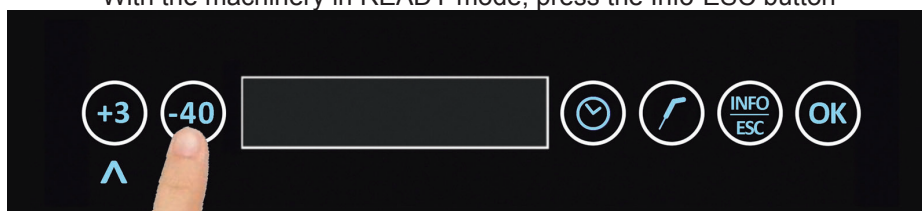
FW 1) ITALIAN - ENGLISH - FRENCH - SPANISH - GERMAN

FW 2) ITALIAN - CZECH - DUTCH - POLISH - SWEDISH

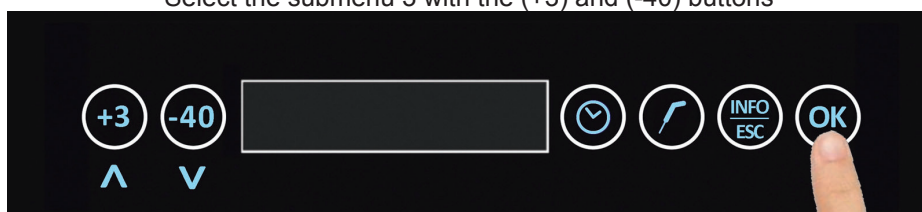
Once you have selected the language, the buzzer will emit a sound and the display will show the READY writing.



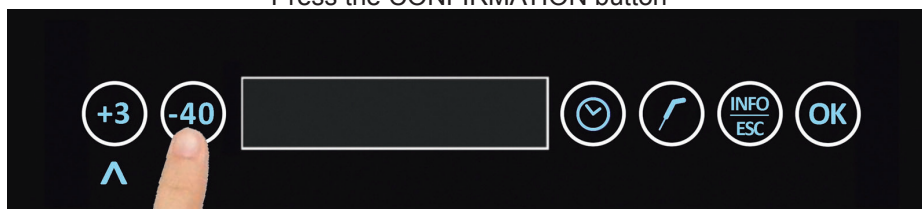
With the machinery in READY mode, press the Info-ESC button



Select the submenu 3 with the (+3) and (-40) buttons



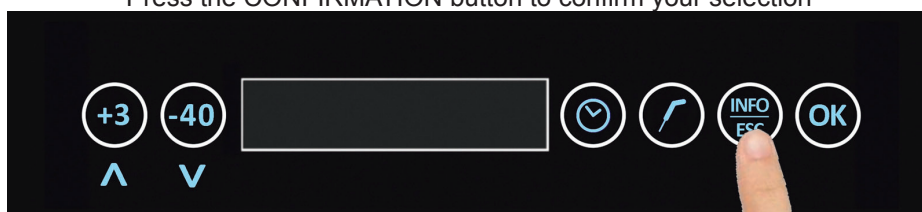
Press the CONFIRMATION button



Scroll with the (+3) and (-40) buttons to choose the desired language



Press the CONFIRMATION button to confirm your selection



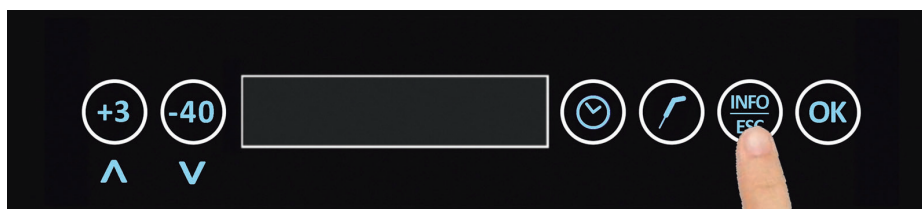
After emitting a sound to confirm your choice, the display will show the READY writing.

## 5.4 - TIME

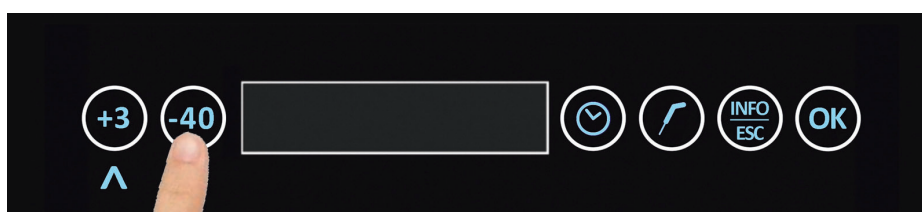
The TIME submenu, allows the user to set the date and system clock.

The date has the format DD-MM-YY

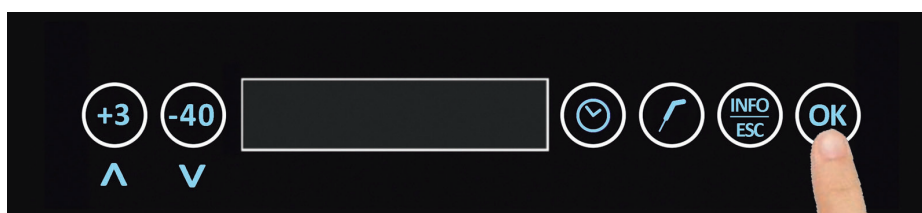
The time has the format HH: MM



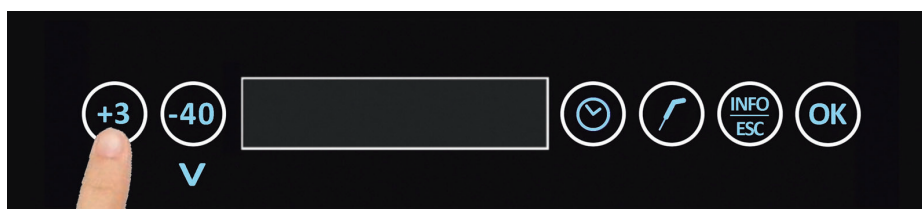
With the machinery in READY mode, press the Info-ESC button



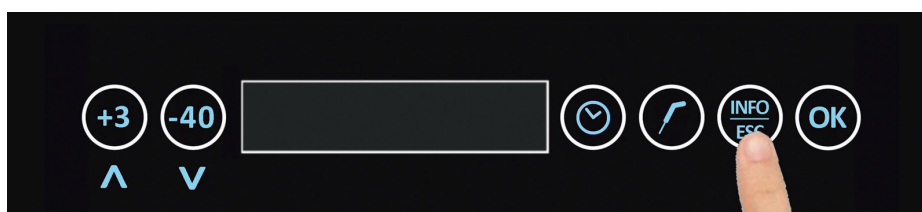
Select the submenu 4 with the (+3) and (-40) buttons



Press the CONFIRMATION button



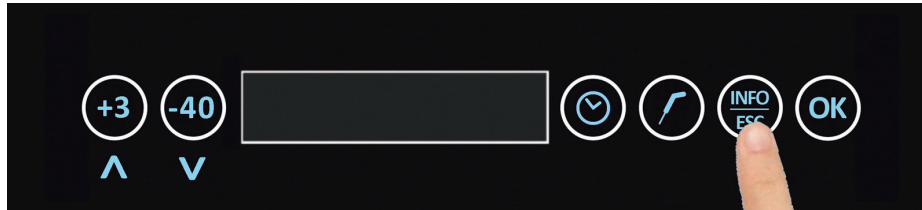
Scroll with the (+3) and (-40) buttons to set the correct value.  
To pass on the following datum press the CONFIRMATION button



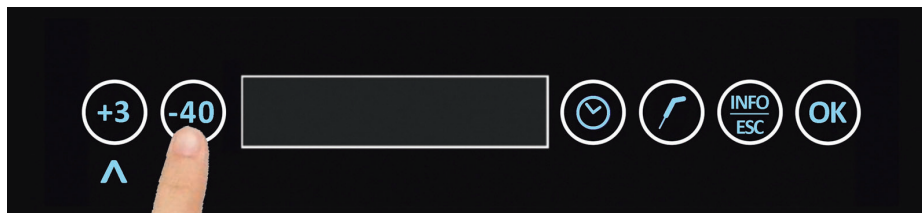
Press the INFO-ESC button to go back to READY mode

## 5.5 - ALARMS LIST

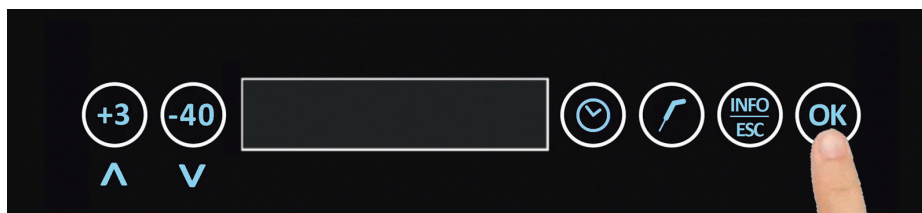
The ALARMS LIST submenu allows to display in sequence the last 32 alarms occurred with date and start time. To be noted that the maintenance alarm, the food probe not inserted alarm and the preservation alarm are not available in this list.



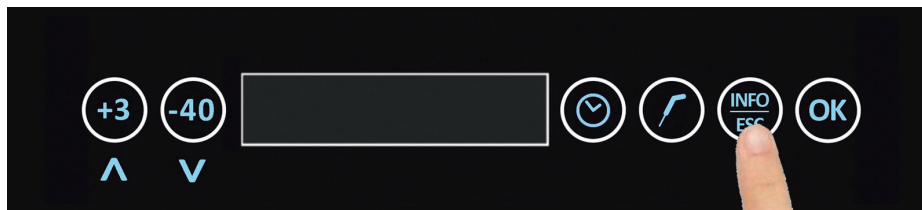
With the machinery in READY mode, press the Info-ESC button



Select the submenu 5 with the (+3) and (-40) buttons



Press the CONFIRMATION button  
If any alarm is recorded, then the display will start from number 01



Press the INFO-ESC button to go back to READY mode

# Troubleshooting

## 6- ALARMS CHART

In case there is a malfunction, the machinery warns the user with a buzzer sound which can be muted by pressing the INFO / ESC key.

The alarm state continues until the cause of the alarm is removed.

Below is the chart with the expected alarms in case of malfunction of the machinery:

ERROR MESSAGE	DESCRIPTION	POSSIBLE ROOT CAUSE	USER SOLUTION
PRESERVATION IN PROGRESS	Warning that the preservation cycle is in progress, maximum suggested duration 8 hours	Cycle completed correctly	Remove the food from the blast chiller and stop the cycle
FOOD PROBE NOT INSERT	The food probe is not inserted	Probe not inserted or malfunctioning.	Insert the food probe. If the problem persists, contact a qualified technician.
DOOR OPEN	The door has been left open	Door open	Close the door. If the problem persists, contact a qualified technician.
HIGH CONDENSER	Not enough heat dissipation at the condenser	High room temperature, high condenser temperature, condenser fan not working	Ventilate the room, clean the condenser and do not block the air vents. If the problem persists, contact a qualified technician.
BLACKOUT	Failure of the power supply during one cycle	Failure of the power supply during one cycle	Restore the machinery power supply
MAGNETOTHERMIC	Opening of the magnetothermic switch contact	Failure or overload of the compressor	Contact a qualified technician
AIR PROBE	Malfunction or breakdown of the air probe	Malfunction or breakdown of the air probe	Contact a qualified technician
EVAPORATOR PROBE	Malfunction or breakdown of the evaporator probe	Malfunction or breakdown of the evaporator probe	Contact a qualified technician
CONDENSER PROBE	Malfunction or breakdown of the condenser probe	Malfunction or breakdown of the condenser probe	Contact a qualified technician
FOOD PROBE	Malfunction or breakdown of the food probe	Malfunction or breakdown of the food probe	Contact a qualified technician
NO DATA	HACCP data not available	No cycle has been performed or the data have been erased	Operate the machinery in order to have the HACCP available

## BLAST CHILLER - SHOCK FREEZER

ERROR MESSAGE	DESCRIPTION	POSSIBLE ROOT CAUSE	USER SOLUTION
HIGH TEMPERATURE	HACCP alarm : air temperature in the cell is higher than the set limits	Refrigerant gas leak. Faulty reading of probes, condenser fan blocked, compressor in block	Shutdown the machinery, turn it on again. If the problem persists, contact a qualified technician.
LOW TEMPERATURE	HACCP alarm : air temperature in the cell is lower than the set limits	Frozen evaporator, the compressor works continuously, the compressor relay contact is broken, faulty reading of probes.	Shutdown the machinery, turn it on again and eventually perform a defrosting cycle. If the problem persists, contact a qualified technician.

When calling for a qualified technician, it is mandatory to provide the following informations:

Error message

Serial number of the machinery

To delete an alarm, place the machinery in STAND-BY mode



#### List of service organizations:

**CZ: RM GASTRO CZ s.r.o.**, Náchodská 818/16, Praha 9

Tel.: +420 281 926 604, [info@rmgastro.cz](mailto:info@rmgastro.cz), [www.rmgastro.com](http://www.rmgastro.com)

**SK: RM Gastro Slovakia**, Rybárska 1, Nové Město nad Váhom

Tel.: +421 32 7717061, [obchod@rmgastro.sk](mailto:obchod@rmgastro.sk), [www.rmgastro.sk](http://www.rmgastro.sk)

**PL: RM GASTRO Polska Sp.z o.o.**, ul. Skoczowska 94, 43-450 Ustroń

Tel.: +33 854 73 26, [www.rmgastro.pl](http://www.rmgastro.pl)