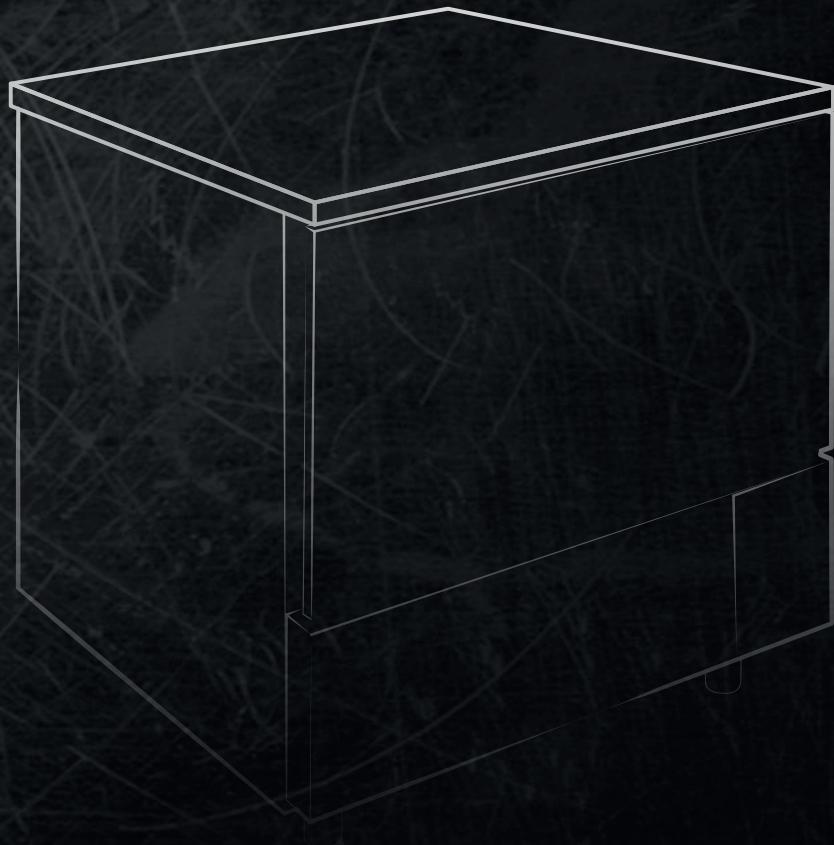


BLAST CHILLER

**SFP3**  
**SFP5**  
**SFP10**



TRANSLATION OF THE  
ORIGINAL INSTRUCTIONS

INSTALLATION AND OPERATION MANUAL

# INTRODUCTION

The purpose of this manual is to provide information on how to use and service the machine correctly. Before any operation, carefully read the instructions contained in this manual. They provide essential indications about the state of safety of the appliances.

This manual refers to the BT blast chiller, which quickly lowers the temperature of food, whether fresh or cooked.

SYMBOLS USED .....	4
SAFETY PRECAUTIONS .....	5
SAFETY INFORMATION FOR INSTALLING THE APPLIANCE .....	5
SAFETY INFORMATION FOR USING THE APPLIANCE .....	6
R290 REFRIGERANT GAS WARNINGS .....	10
INSTALLATION .....	12
PACKAGING DISPOSAL .....	13
REMOVING THE FILM FROM THE APPLIANCE .....	13
INSTALLATION ROOM FEATURES .....	14
INSTALLATION ON A COUNTER .....	14
CLEARANCE DISTANCES .....	15
ADJUSTING THE FEET .....	15
INSTALLING THE WHEELS .....	16
ELECTRICAL CONNECTIONS .....	16
DRAIN TRAY .....	17
ID PLATE .....	17
GETTING FAMILIAR WITH THE APPLIANCE AND THE DISPLAY .....	18
MACHINE DESCRIPTION .....	18
GETTING FAMILIAR WITH THE DISPLAY .....	19
BASIC CONCEPTS .....	20
LOADING THE APPLIANCE CORRECTLY .....	20
DURING WORK CYCLES .....	20
HOW TO USE THE CORE PROBE .....	21
TURNING THE APPLIANCE ON AND OFF INITIAL SETTINGS .....	22
BEFORE USING THE APPLIANCE .....	22
TURNING THE APPLIANCE ON AND OFF .....	22
INITIAL SETTINGS .....	23
COOKBOOK .....	24
PRE-COOLING .....	26
POSITIVE BLAST CHILLING   NEGATIVE BLAST CHILLING (SHOCK FREEZING) .....	27
CONTINUOUS .....	31
MANUAL .....	33
SPECIAL CYCLES .....	34
ALARMS AND HACCP .....	36
SETTINGS .....	37
CLEANING AND MAINTENANCE .....	38
WHAT TO DO WHEN THE APPLIANCE IS NOT USED FOR A LONG TIME .....	39
ALARMS .....	40
TECHNICAL SHEET .....	41
AFTER-SALES SERVICE .....	42
DISPOSAL .....	43

# SYMBOLS USED

The following symbols provide essential indications.

symbol applied to the appliance	symbol used in the manual
	<p>not present</p> <p><b>DANGER:</b> immediate risk that can cause immediate death or severe and permanent damage to health if not prevented.</p> <p><b>CAUTION:</b> possible risk that can cause death or serious damage to health if not prevented.</p> <p><b>WARNING:</b> possible risk that can cause minor damage if not prevented.</p>
	
	
	<p>This symbol indicates that the marked surfaces may be very hot or very cold and should be touched with caution, using personal protective equipment (PPE), such as gloves.</p> <p>This symbol indicates that the marked operations may involve thermal hazards such as burns or cold burns.</p> <p>Operations must be carried out:</p> <ul style="list-style-type: none"><li>• With caution</li><li>• Wearing personal protective equipment (PPE) e.g. gloves.</li></ul>
	<p>If present, this symbol is placed on the refrigeration unit and indicates gas flammability.</p> <p>This symbol indicates that the marked operations may cause fire and/or explosions.</p> <p>Operations must be carried out:</p> <ul style="list-style-type: none"><li>• With caution</li><li>• Wearing personal protective equipment (PPE) such as gloves.</li></ul>
	<p>The symbol indicates that the marked guards prevent contact with high-voltage parts.</p> <p>Do not remove or modify these guards: risk of electrocution.</p> <p>This symbol indicates that the marked operations may involve electrical hazards such as electrocution.</p> <p>Operations must be carried out:</p> <p>Only after disconnecting the appliance from the power supply</p> <ul style="list-style-type: none"><li>• With caution</li><li>• Wearing personal protective equipment (PPE) e.g. gloves.</li></ul>
	<p>not present</p> <p>The symbol indicates that you should read the manual carefully before installing, operating or servicing the machine.</p>

# SAFETY PRECAUTIONS

- The term "machine" refers to the following appliances: SFP3 | SFP5 | SFP10
- Safety instructions and warnings apply to any model unless otherwise specified.

## SAFETY INFORMATION FOR INSTALLING THE APPLIANCE

- DANGER** Failure to comply with the following requirements may result in damage, serious injury or death and will invalidate the warranty.
- DANGER** The manufacturer is not responsible for operations performed on the machine without following the instructions provided in this manual. Non-compliant installation or maintenance may cause damage, injury or fatal accidents.
- DANGER** Unauthorised and non-conforming interventions, modifications and tampering may result in damage, serious injury or death and will invalidate the warranty.
- DANGER** Before installing or servicing the machine, read this manual carefully and keep it for future reference.
- DANGER** Installation and special maintenance must:
  - Be carried out by specialised and authorised technical personnel with adequate knowledge of refrigeration and electrical systems
  - In compliance with the regulations in force in the country of use, including work safety regulations.
- DANGER** RISK OF FIRE AND FLAMMABLE MATERIALS If the machine uses R290 coolant, take all precautions to prevent hazards related to gas flammability.
- DANGER** During installation, it is mandatory to use Personal Protective Equipment (PPE). The employer, workplace manager or service technician is responsible for identifying and choosing adequate PPE. Below is the main list of PPE to be used in various situations:

OPERATION	SAFETY FOOTWEAR	GLOVES	GLASSES	HELMET
Transport and handling	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Unpacking	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
Assembly	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
Special cleaning	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Maintenance	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
Disassembly	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
Scraping	<input checked="" type="checkbox"/>	<input type="checkbox"/>		

Required Personal Protective Equipment (PPE)  
 Personal protective equipment (PPE) to be used if necessary

- CAUTION** Check that the voltage and frequency correspond to what is indicated on the rating plate, then connect the machine to the mains.
- DANGER** Disconnect the machine from the mains (turn the main switch to OFF and remove the plug) before cleaning or servicing the machine.
- DANGER** THIS MACHINE IS NOT DESIGNED TO BE INSTALLED IN EXPLOSIVE ATMOSPHERES.
- DANGER** RISK OF FIRE AND EXPLOSION Do not store explosive substances, such as pressurised containers with flammable propellants, inside this machine.
- DANGER** Before installation, check that:
  - Take place in food-grade rooms
  - That the systems respect the regulations in the country where the appliance is used and with the serial plate
  - That the machine is connected to a high sensitivity (30 mA) differential thermal magnetic circuit breaker
  - That an earthed socket complying with those used in the machine's country is provided near the equipment

- That the machine's supporting surface is flat, especially if it is equipped with wheels
- **DANGER** During machine installation:
  - Transiting or standing near the work area is not permitted to unauthorised persons
  - Use Personal Protective Equipment (e.g. gloves, accident-prevention shoes, etc.)
  - Comply with the rules relating to safety at work (e.g. do not touch electrical parts with wet or bare hands)
- **CAUTION** THE USE OF ORIGINAL SPARE PARTS IS RECOMMENDED. The manufacturer declines all responsibility for the use of non-original spare parts.
- **DANGER** The packaging material is potentially dangerous. It must be kept out of the reach of children and animals, and correctly disposed of in compliance with local regulations.
- The machine is delivered only after it has passed visual, electrical and functional tests.
- **CAUTION** The installation room must have a minimum illumination of 150 lux.

## SAFETY INFORMATION FOR USING THE APPLIANCE

- **!** Failure to comply with the following requirements may result in damage, serious injury or death and will invalidate the warranty.
- **DANGER** Using and cleaning the machine in ways other than what is set out in this manual is considered improper and may cause damage, serious injury or fatal accidents. This would invalidate the warranty and release the manufacturer from any liability.
- The machine is intended for use by children only where aged 8 and older, as well as by individuals with reduced physical, sensory or mental abilities, or those lacking the necessary experience or knowledge, only where supervised, after receiving proper instructions on how to use the machine safely, and if they have understood the associated risks.

- **DANGER** Children must not play with the machine. Children must not carry out cleaning and maintenance without supervision.
- **DANGER** RISK OF FIRE AND FLAMMABLE MATERIALS If the machine uses R290 coolant, take all precautions to prevent hazards related to gas flammability.
- **DANGER** RISK OF FIRE AND FLAMMABLE MATERIALS If the machine uses R290 coolant, take all precautions to prevent hazards related to this gas.
- **DANGER** Do not tamper with or remove installed safety devices (protective grilles, warning stickers, etc.). The manufacturer declines all responsibility in the event of non-compliance with these requirements.
- **CAUTION** Do not insert screwdrivers or other objects between the guards (fans, evaporators, etc.). To ensure correct operation of the compressor and evaporator unit, do not obstruct the ventilation openings.
- **DANGER** Personal protective equipment (PPE) must be worn during use. The employer or the workplace manager is responsible for identifying and choosing adequate PPE. The selected PPE must be worn by the operators. During ordinary use, gloves protect the hands from contact with the cold tray.
- Below is the main list of PPE to be used in various situations:

OPERATION	PROTECTIVE CLOTHING	SAFETY FOOTWEAR	GLOVES	GLASSES	HELMET
Normal use	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
Routine cleaning		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

- Required Personal Protective Equipment (PPE)
- Personal protective equipment (PPE) to be used if necessary

- **⚠ CAUTION** Keep all ventilation openings of the machine enclosure or integration structure clear of obstructions.
- **⚠ CAUTION** Do not use mechanical devices or other methods to accelerate defrosting, except those recommended by the manufacturer.
- **⚠ CAUTION** Do not damage the coolant circuit.
- **⚠ CAUTION** Do not use electrical appliances inside food storage compartments unless approved and authorised by the manufacturer.

## Correct use of the machine

- This machine is classified as an agri-food machine (EC Regulation No. 1935/2004), intended for food processing in commercial and professional kitchens (e.g. restaurants, canteens, hospitals, bakeries, or butcher shops) but not for continuous mass production of food.
- Specifically, this machine is a blast chiller (+70/+3°C) (+70/-18°C), i.e., a machine suitable for:
  - Rapidly lowering the temperature of fresh or cooked food to preserve its organoleptic properties
  - Special cycles (e.g. sanitisation, sterilisation, etc.)
- This machine must not be used longer than 8 hours, after which manual defrosting is necessary.
- This machine is NOT suitable for storing and processing pharmaceutical, chemical or any other non-food products.
- Before starting and using the machine, clean the interior surfaces thoroughly.
  - Follow these guidelines to get the best performance from the machine:
  - Do not put hot food, uncovered liquids, live animals, various objects or corrosive products inside
  - Wrap or protect food, especially if it contains flavourings or spices
  - Arrange food without obstructing air circulation and do not cover grills with paper, cardboard, cutting boards, etc.
  - Do not open doors frequently and for a prolonged time

- After opening and closing the door, wait a few moments before opening it again
- These refrigeration machines include precautions to guarantee users' health and safety. They have no dangerous edges, sharp surfaces or elements protruding from the overall dimensions.
- **⚠ CAUTION** Machine stability is guaranteed even with the door open. Hanging from doors is forbidden.
- **⚠ CAUTION** During machine use, the installation room must have a minimum illumination of 150 lux.
- **⚠ CAUTION** The maximum load allowed per shelf is 5 kg for all models. However, the maximum load must never exceed the kg indicated in the technical sheet included in this manual. Do not exceed the indicated weight to prevent damage to the machine and poor cycle performance.
- **⚠ DANGER** The machine has an IP22 (Ingress Protection) rating. The code indicates that the machine is protected against the entrance of solid bodies larger than 12.5 mm (e.g. fingers) and water dripping vertically or at an angle of up to 15 degrees.
- The machine falls within Class I. It is mandatory to connect it to the protective conductor (earth – yellow/green) of the fixed electrical installation.

## Reasonably foreseeable misuse of the machine

- **⚠ DANGER** Any use other than that indicated in this manual is considered incorrect and may harm users and damage the machine.
- Examples of reasonably foreseeable misuse:
  - Lack of maintenance, cleaning and periodic machine checks
  - Structural modifications or alterations to the operating logic
  - Tampering with guards or safety devices
  - Installers, operators, specialised personnel and maintenance personnel who fail to use personal protective equipment (PPE)
  - Using unsuitable accessories (e.g. unsuitable equipment or ladders)

- Storing combustible, flammable, non-compatible or non-machining-related materials in the machine's vicinity
- Incorrect installation of the machine
- Inserting incompatible objects or materials that may damage the machine, put people in danger or pollute the environment
- Climbing on the machine or hanging on the doors
- Not complying with the instructions related to the intended use of the machine
- Leaving doors or drawers open or partially open due to forgetfulness or negligence
- Placing foodstuffs in such a way as to obstruct air circulation or prevent the doors and drawers from closing properly
- Exceed the maximum permissible load for each shelf or drawer.

### Risks associated with using the machine

-  **RISKS ASSOCIATED WITH WHEELED DISPLACEMENT:**
  - If the machine is fitted with wheels, do not push it vigorously to prevent tipping and damage. Pay attention to uneven parts of the sliding surface
  - The equipment fitted with wheels cannot be levelled; therefore, make sure that the support surface is perfectly horizontal and flat
  - Always secure the wheels with their retainers.
-  **RISK OF SLIPPING** The area surrounding the machine may be slippery due to the presence of water patches. To reduce the risk, keep the floor near the machine clean and dry.
-  **TIPPING HAZARD:** Do not open more than one drawer or shelf (if any) at the same time to prevent tipping.
-  **RISKS DUE TO MOVING PARTS:** The only movable part of the machine is the fan, which poses no risk as it is protected by a grille secured with screws.
-  **RISKS DUE TO LOW/HIGH TEMPERATURES:** We have applied temperature warning stickers in areas subject to low or high temperatures.

-  **RISKS DUE TO ELECTRICITY:**
  - Electrical risks were addressed by designing the electrical systems in compliance with the IEC EN 60335-1 standard.
  - Risk zones are marked with 'High Voltage' stickers.
  - The machine has a noise emission rating lower than 70 dB.

### Emergency situations

-  **In case of fire**, do not use water. Use a CO<sub>2</sub> (carbon dioxide) fire extinguisher and quickly cool the motor compartment area.

### In case of machine malfunction

-  If the machine does not work or shows functional or structural anomalies, disconnect it from the power supply and contact an authorised service centre. **DO NOT** repair the machine yourself.
-  Repairs must be carried out using original spare parts. The manufacturer declines all responsibility for the use of non-original spare parts.
- To ensure optimal operating conditions and safety, we recommend carrying out maintenance and inspection at least once a year at an authorised service centre.

### Residual risks

- The machine's design and the installation of appropriate guards do not fully eliminate risks to the operator. This manual lists the required Personal Protective Equipment (PPE). During installation, sufficient space must be provided to reduce risks. To maintain these conditions, the areas around the machine must remain clean, dry, well lit and free of obstacles. Below is a list of residual risks related to the machine.

Residual risks related to the machine	Description
Slipping or falling	The operator may slip due to water, oil or dirt on the floor.
Burn or abrasion	The operator may, intentionally or unintentionally, touch internal machine components (such as cold trays, fins and cooling circuit tubes) without wearing protective gloves.
Electrocution	Contact with live electric parts during maintenance carried out without disconnecting the machine from the power supply.
Falling	The operator uses inappropriate tools to access the upper part of the machine.
Injuries	Specialised personnel may not properly secure the upper control panel, which may detach and fall off.
Tipping	<p>Risk of tipping when handling the machine and the packaging using inappropriate lifting or handling systems or with an unbalanced load.</p> <p>Do not open more than one drawer or shelf (if any) at the same time to prevent tipping.</p>
Refrigerant gas	<p>Inhalation of refrigerant gas.</p> <p>The type of refrigerant gas is indicated on the machine's rating plate.</p>

## R290 REFRIGERANT GAS WARNINGS

- The room where the machine is positioned must be larger than one cubic metre to allow gas dispersion.

- propane: chemical formula: C3H8
- Global Warming Potential (GWP) = 3.
- Ozone Depletion Potential (ODP) = 0.
- Safety classification: A3. Non-toxic but extremely flammable.
- The substance is regulated by the Montreal Protocol (1992 revision).

### Hazard identification

- Do not smoke or inhale.
- Gas is **highly flammable**. Keep it away from heat sources, hot surfaces, sparks, open flames or other ignition sources.
-  Low concentrations can cause narcotic effects with possible loss of consciousness, coordination, dizziness, headache, and nausea. High concentrations can cause asphyxiation due to the reduced oxygen content in the atmosphere. Extremely high concentrations can cause abnormal heart rhythms and even sudden death. Sprayed or splashed product can cause skin burns and serious eye injuries. It is unlikely to be dangerous by skin absorption. Repeated or prolonged contact can cause the removal of skin fat, resulting in dryness, chapping and dermatitis. Do not smoke or inhale.

### First aid measures

-  If the person is unconscious, lie them on their side in a stable position and consult a doctor. Do not administer anything to unconscious persons. Administer artificial respiration in the event of irregular breathing or respiratory arrest. If symptoms persist, consult a doctor.
- **Inhalation:** wear self-contained breathing apparatus to protect the injured person from further exposure. Then transport them to a warm location and keep them lying down. If necessary, administer artificial respiration, oxygen or perform cardiac massage. Seek immediate medical attention.
- **Contact with skin:** thaw the relevant areas with water. Remove contaminated clothing as it can stick to the skin in case of frost burns. Immediately wash the affected areas with lukewarm water. Get medical attention in case of skin irritation or blistering.
- **Contact with eyes:** check if the injured person wears contact lenses. If so, remove them, wash immediately with clean water, holding the eyelids open for at least 15 minutes. Do not apply ointments or oil. Request medical assistance.
- **Ingestion:** do not induce vomiting! If the victim is conscious, ask them to rinse their mouth with water and drink 200-300 ml of water. Seek immediate medical attention.
- **Further medical treatment:** symptomatic treatment and supportive therapy when indicated. Do not administer adrenaline or similar sympathomimetic drugs following exposure due to the risk of cardiac arrhythmia with possible cardiac arrest.

### • **Poison control centres across the country (24-hour service)**

- Pavia Poison Control Centre 0382 24444 (CAV IRCCS Fondazione Maugeri - Pavia)
- Milan Poison Control Centre 02 66101029 (CAV Niguarda Ca' Grande Hospital - Milan)
- Bergamo Poison Control Centre 800 883300 (CAV Ospedali Riuniti - Bergamo)
- Florence Poison Control Centre 055 7947819 (CAV Ospedale Careggi - Florence)
- Rome Poison Control Centre 06 3054343 (CAV Gemelli Hospital - Rome)
- Rome Poison Control Centre 06 49978000 (CAV Policlinico Umberto I - Rome)
- Naples Poison Control Centre 081 7472870 (CAV Cardarelli Hospital - Naples)

## Fire-fighting measures

- Highly flammable gas.
-  Keep persons not wearing PPE away and evacuate to safe areas.
-  In case of fire, always use self-contained breathing apparatus and suitable protective clothing (e.g. gloves and goggles).
- Incomplete thermal decomposition causes the emission of very toxic and corrosive vapours (carbon monoxide).
- Cool the motor compartment as quickly as possible.
- There is a risk of explosive re-ignition. Put out all surrounding flames.
- If it is safe, move any combustible objects away from the fire.
- **What to use to extinguish fire:** alcohol, dust, and CO<sub>2</sub> carbon dioxide resistant foam, water spray to reduce fumes.
- **What NOT to use to extinguish fire:** strong water jets

## Accidental spills

-  Keep persons not wearing PPE away and evacuate them to safe areas.
  - Immediately ventilate the area based on the local safety plan.
  - Do not touch or inhale the leaked gas.
- Disconnect the power cable of the equipment the gas is leaking from.
-  To handle gas leaks, wear suitable respiratory protective devices with an air supply, and protective gloves and goggles. Do not inhale vapours. Atmospheric concentrations must be kept to a minimum as far as is reasonably possible, below the occupational exposure limit.
- The vapours are heavier than air, therefore high concentrations may form near the ground where general ventilation is poor.
- Avoid contact with naked flames and hot surfaces, as irritating and toxic decomposition products may form, or explosions or fire in case of flammable gas (R290).
- The leaked gas must be disposed of in authorised and qualified centres.
- In case of doubts, contact local bodies.
- Once the emergency is over, contact technical support to repair the machine.

- Minor spills: do not stop the gas from escaping.
- Major leaks: contain the spilled material using sand, soil, or other absorbing material. Prevent liquid from entering drains, sewers, basements and work pits, because the vapours may create a suffocating atmosphere. **Consider that R290 gas is highly flammable.**

## Disposal

- Discharging this refrigerant into the atmosphere is strictly prohibited. It must be retrieved, treated, or disposed of according to legal procedures by qualified and authorised personnel. In case of doubts, contact local bodies. The best solution is to recover and recycle the product. If this is not possible, destruction must take place in an authorised system equipped to absorb and neutralise acid gases and other toxic processing products.

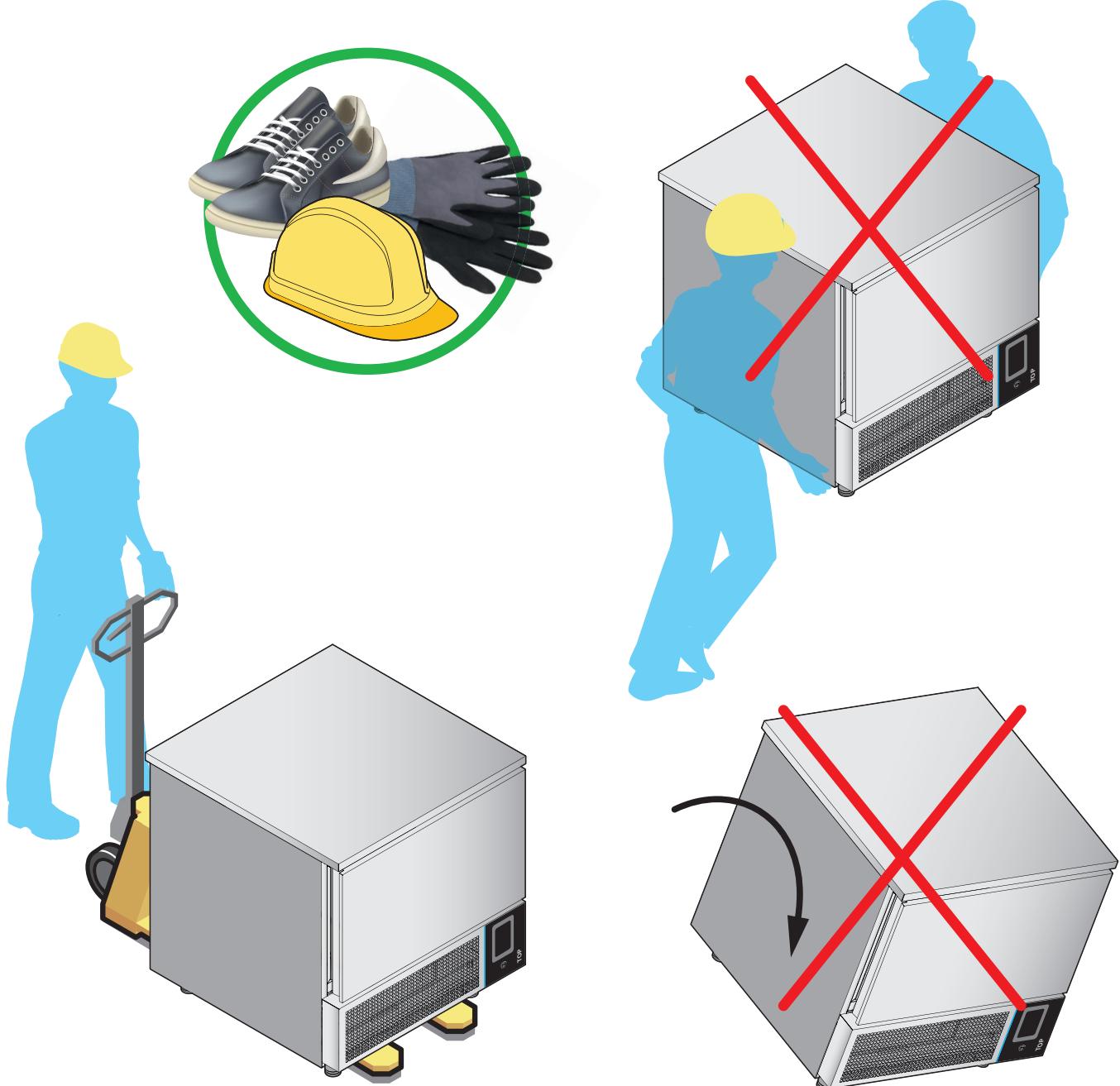
# INSTALLATION

The machine must be moved maintaining the position indicated in the packaging.

This precaution aims at preventing the compressor's oil from circulating, which could damage the valves and cause problems when starting the electric motor.

After removing the packaging, do not push or drag the machine to prevent it from tipping over or damaging fragile parts, such as the feet.

Never tilt the machine from the door side.



## PACKAGING DISPOSAL

Dispose of the packaging in compliance with the regulations in force in the country where the appliance is installed.

 Risk of choking! Packaging left unattended may be dangerous for children and pets.

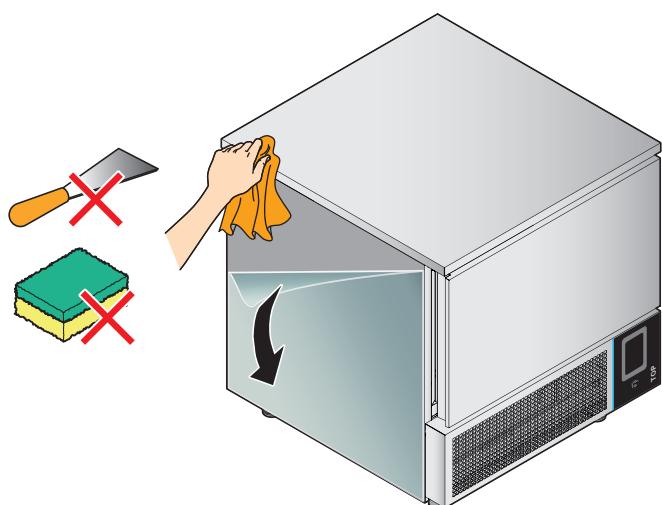
 Risk of hindrance! Packaging left unattended may be of hindrance to vehicles and installers during assembly operations.



Material	Packaging	Code	Recycling
Corrugated cardboard	Boxes	PAP 20	Paper
Pallets	pallets and wooden parts	FOR 50	Unsorted waste
Strapping	Strapping	PP 05	Plastic
Low-density polyethylene	bubble wrap, plastic stretch wrap, film	LDPE 4	Plastic

## REMOVING FILMS FROM THE APPLIANCE

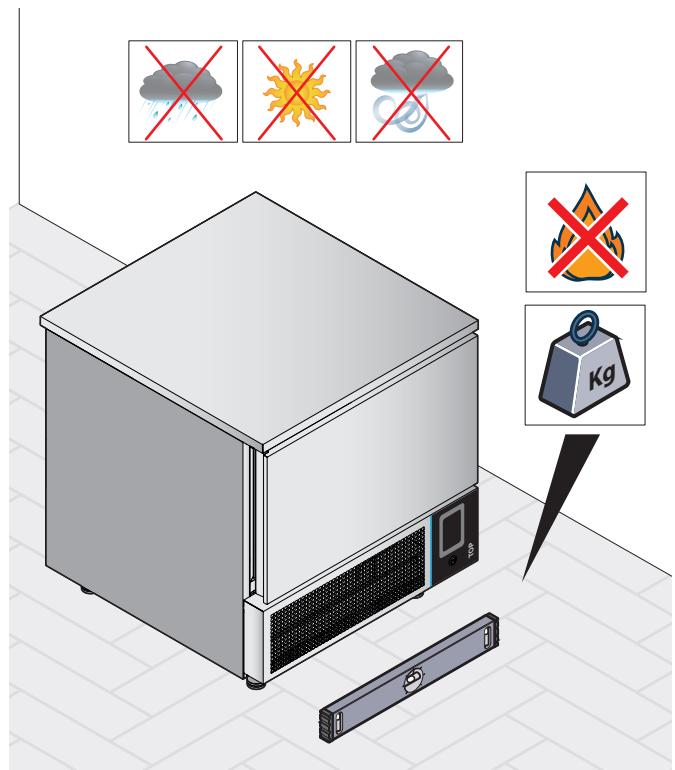
Remove all protection films from the machine. Clean the surfaces if necessary using a soft cloth dampened in water and mild soap.



## INSTALLATION ROOM FEATURES

Before installing the machine, make sure that:

- it is not exposed to harsh weather conditions
- it is not exposed to direct sunlight
- it is not exposed to wind
- the floor is fireproof
- the floor can withstand the machine's weight
- the floor is levelled
- the installation room's temperatures range between +10°C (50 °F) to +40°C (104 °F);
- the installation room's humidity does not exceed 70%
- the installation room has a compliant electrical system
- the installation room is suitably illuminated and complies with all hygiene and sanitary requirements.

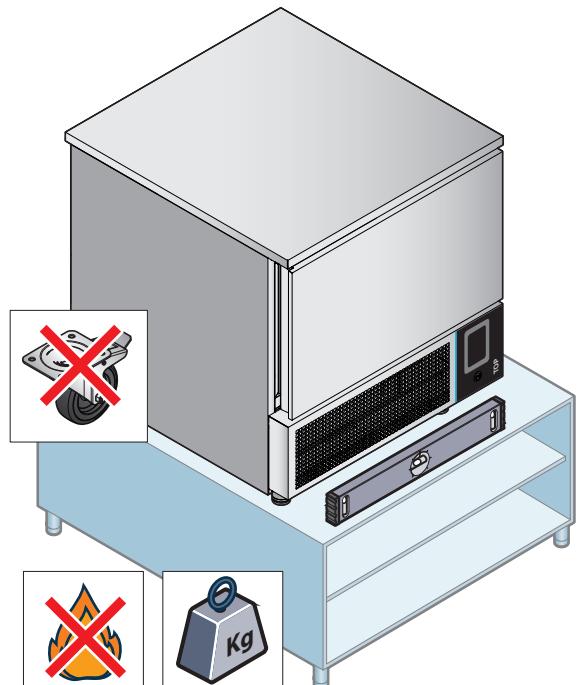


## INSTALLATION ON A COUNTER

The machine can be installed on a counter (SFP3 only).

Make sure that the counter

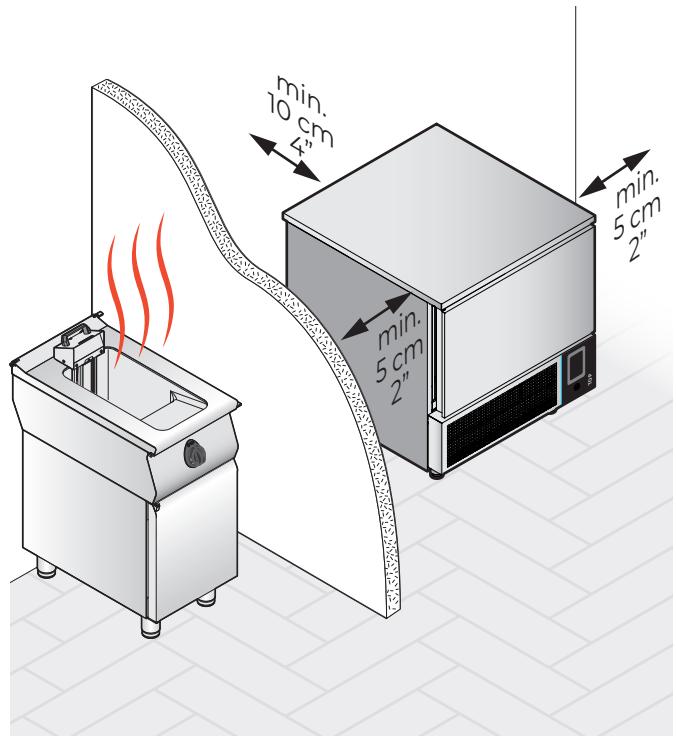
- is levelled
- is fireproof
- can withstand the machine's weight



## CLEARANCE DISTANCES

Install the machine respecting the distances indicated in the drawing.

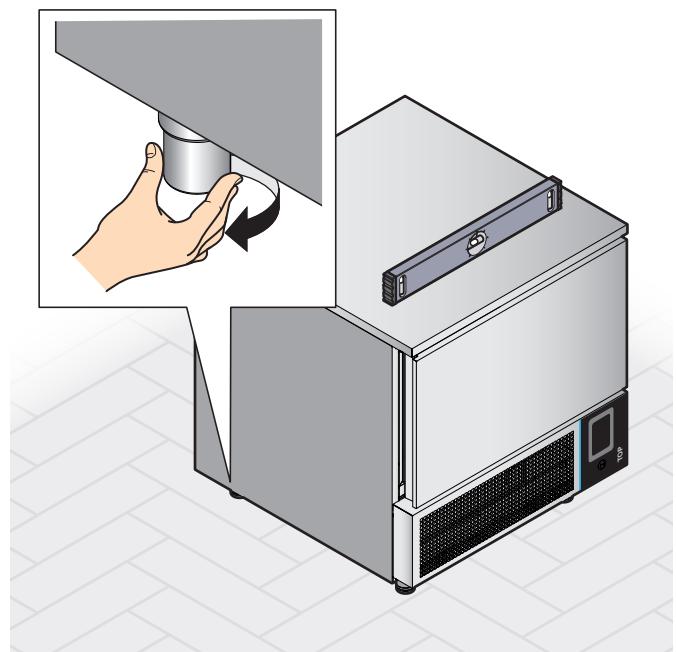
If the machine is installed next to a device that generates heat, provide a fireproof divider that can also resist high temperatures



## ADJUSTING THE FEET

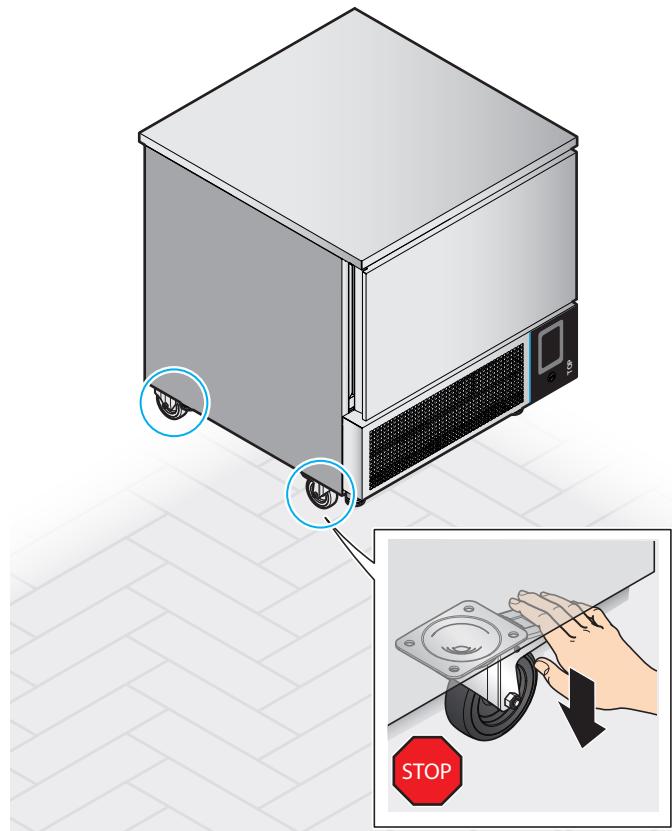
Before installing the machine, make sure that is perfectly levelled.

If necessary, adjust the feet, rotating them to level the machine.



## INSTALLING THE WHEELS

Wheels can replace the adjustable feet.  
Make sure to activate the wheels' brake/lock once the machine is positioned.

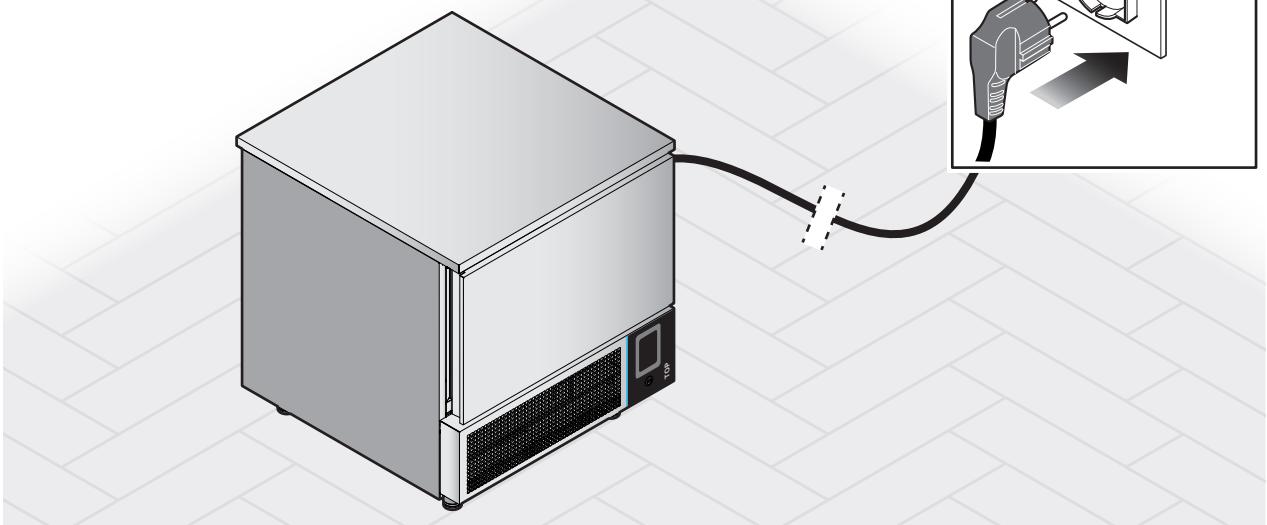
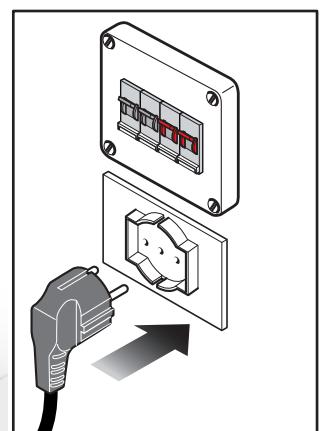


## ELECTRICAL CONNECTIONS

The machine comes with a cable and a plug.

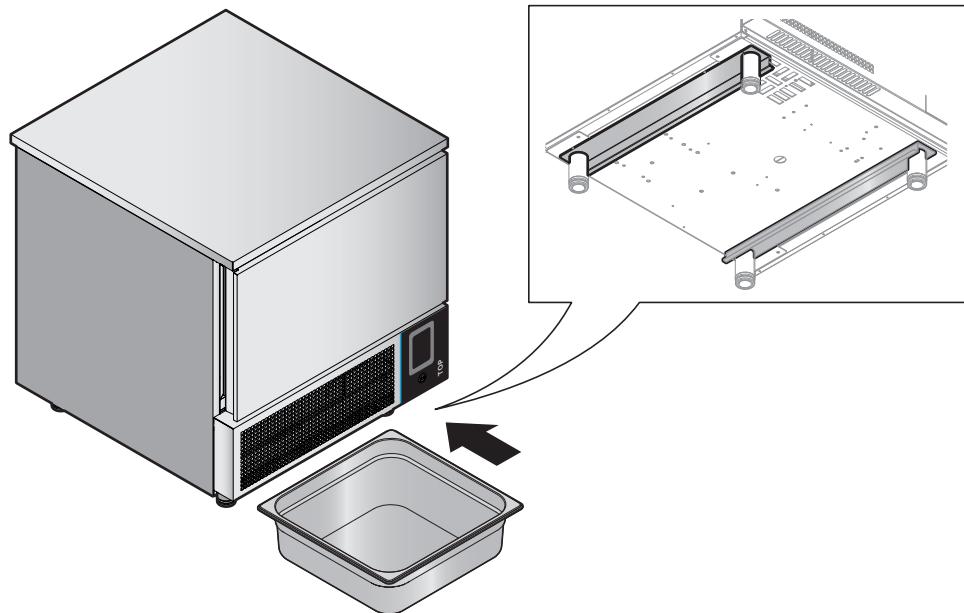
To connect it electrically, insert the plug into the socket, making sure:

- that an earthed socket complying with those used in the machine's country is provided near the equipment
- that voltage and frequency match what is indicated on the rating plate
- that the machine is connected to a high sensitivity differential thermal magnetic circuit breaker (30 mA)
- that an earthed socket complying with those used in the machine's country is provided.



## DRAIN TRAY

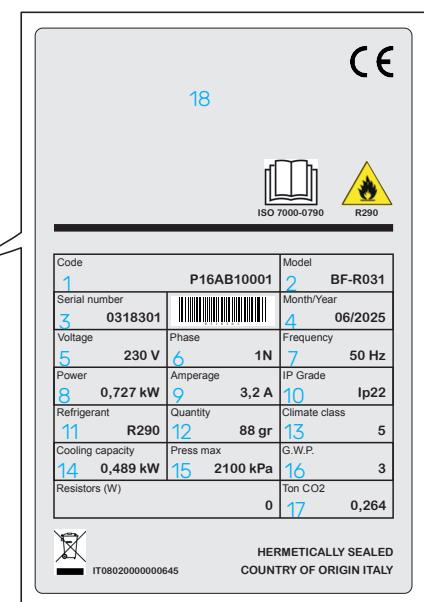
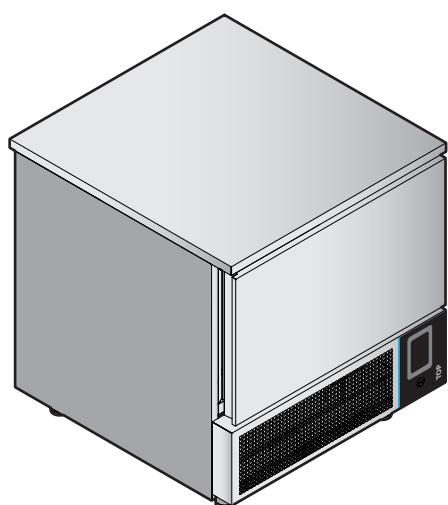
Once the machine is installed and connected, install the drain tray as shown.



## ID PLATE

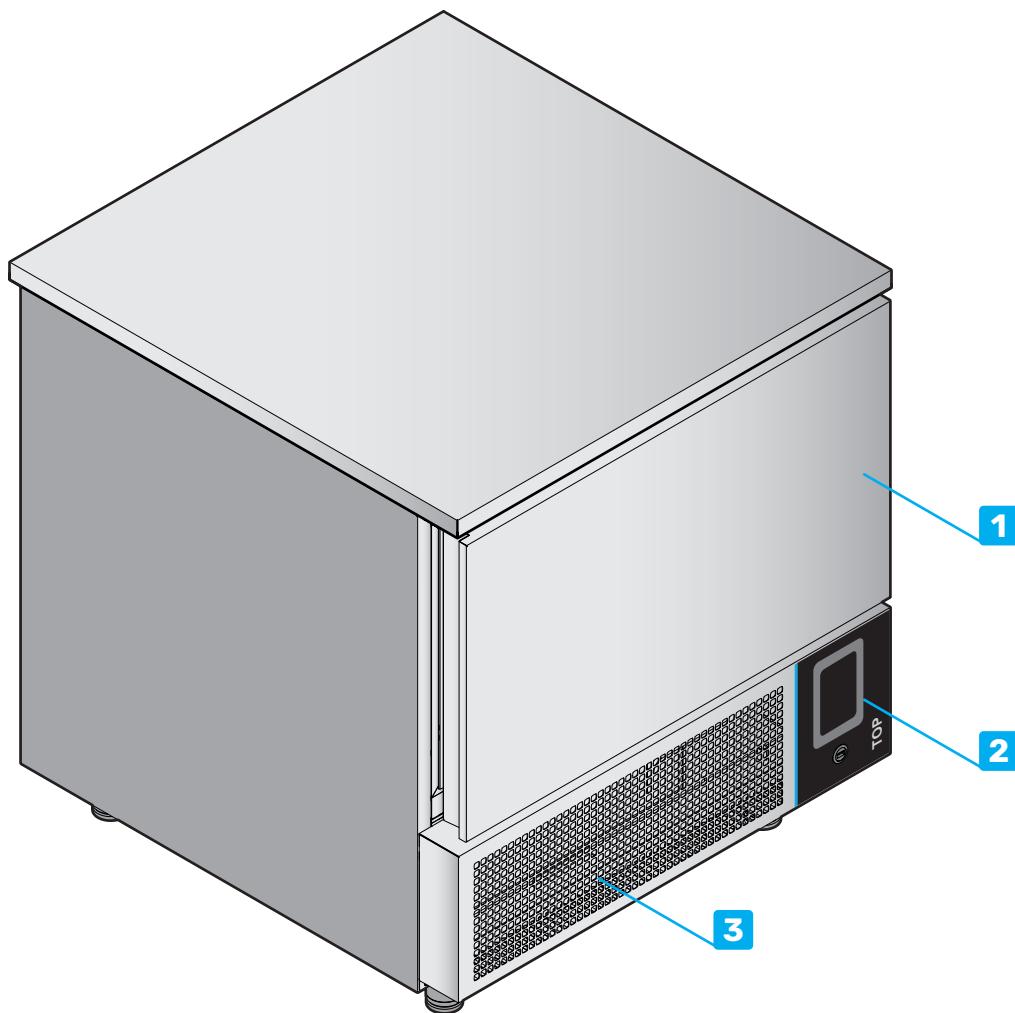
The ID plate provides important information about the machine. Do not remove or tamper with it.

1. Code
2. Model
3. Serial number
4. Month/year of manufacture
5. Voltage
6. Phase
7. Frequency
8. Power
9. Amperage
10. IP protection rating
11. Refrigerant
12. Quantity
13. Climate class
14. Cooling capacity
15. Maximum pressure
16. G.W.P.
17. CO<sub>2</sub>
18. Manufacturer's address



# GETTING FAMILIAR WITH THE APPLIANCE AND THE DISPLAY

## MACHINE DESCRIPTION



The BT blast chiller is suitable for:

- Rapidly lowering the temperature of fresh or cooked food to preserve its organoleptic properties
- Special cycles (e.g. sanitisation, sterilisation, etc.)

Below is a list of its parts:

- 1- door
- 2- display
- 3- ventilation grid

## THE DISPLAY

SETTINGS section - page 23 and page 37

PRE-COOLING key - page 26

BLAST CHILLING/SHOCK FREEZING SESSION - page 27

SPECIAL CYCLES section - page 34

COOKBOOK section - page 24

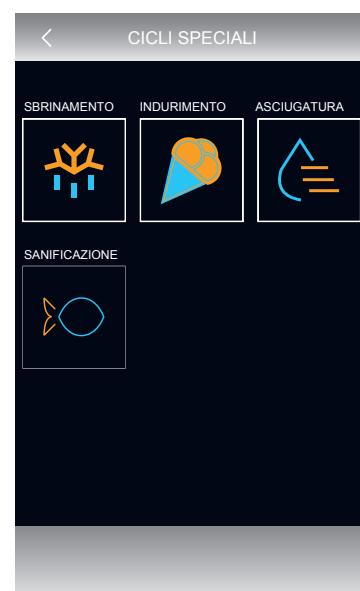
HACCP ALARM IN PROGRESS - page 36

ALARM IN PROGRESS - page 36

ON/OFF key



MAIN screen



SPECIAL CYCLES screen

## GETTING FAMILIAR WITH THE MACHINE

### What is a blast chiller used for?

This **blast chiller** processes fresh or cooked food, bringing their temperature to positive values 3°C (positive blast chilling) or negative values -18°C (shock freezing). This process stops or slows down the growth of microorganisms, preserves the organoleptic qualities of the food, its flavour, colour, texture and nutritional values. When food is just cooked or fresh, it is of the highest quality. However, if it is not eaten immediately, it may lose these characteristics over time, developing bacteria and microorganisms, and thus becoming unhealthy. Thanks to the blast chiller, food's temperature drops quickly, reducing microbiological risks and extending storage time safely.

**Positive blast chilling** is used when a product (prepared or cooked) is not eaten immediately. This process consists in rapidly cooling the food, bringing the core temperature to +3°C in 90 minutes. After this step, food must be stored in the fridge at a temperature ranging between 0°C and +3°C. In these conditions, food maintains its characteristics up to 5 days, ensuring safety and freshness.

**Negative blast chilling (shock freezing)** is used to preserve the organoleptic characteristics of food (taste, colour, and texture) over time.

This process consists in rapidly cooling the food, bringing the core temperature to -18°C in 240 minutes. After shock freezing, food must be stored in a freezer at a constant temperature of -20°C. In these conditions, food can be stored from 3 days to 18 months, depending on the product and provided that the cold chain is not interrupted during all storage and transport stages.

### Soft cycle

This **gentle** cycle is ideal to maintain the organoleptic characteristics of delicate food.

It gradually reduces the temperature in a controlled way, avoiding fluctuations that may alter the product's texture or appearance.

This cycle is suitable for:

- Delicate products that do not tolerate temperature fluctuations (e.g. desserts, small fish, fresh pasta, or light preparations).

The soft cycle can be set with both **POSITIVE** or **NEGATIVE** blast chilling (see "Positive blast chilling | negative blast chilling (shock freezing)" page 27)

### Hard cycle

This **intense** cycle rapidly reaches safety temperatures to stop bacteria from proliferating.

This cycle is suitable for:

- Non-delicate products that well tolerate temperature fluctuations (e.g. meat, soup, fresh ready-made dishes)
- When large volumes must be processed.

The soft cycle can be set with **NEGATIVE blast chilling (shock freezing)** (see "NEGATIVE BLAST CHILLING (SHOCK FREEZING) AND HOLDING" page 25)

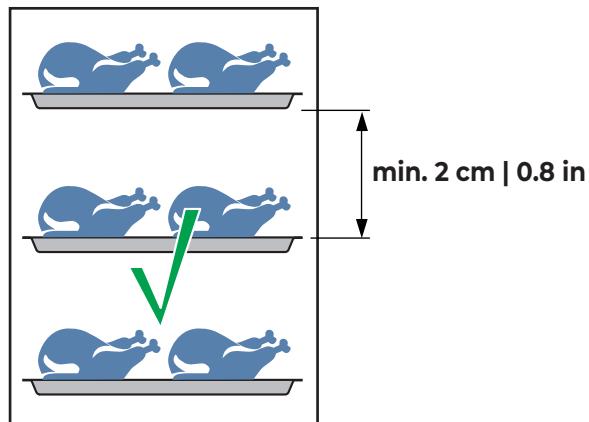
# BASIC CONCEPTS

## LOADING THE APPLIANCE CORRECTLY

### Which containers/trays to use

Dishes should be arranged, in a single layer, in containers or trays that are:

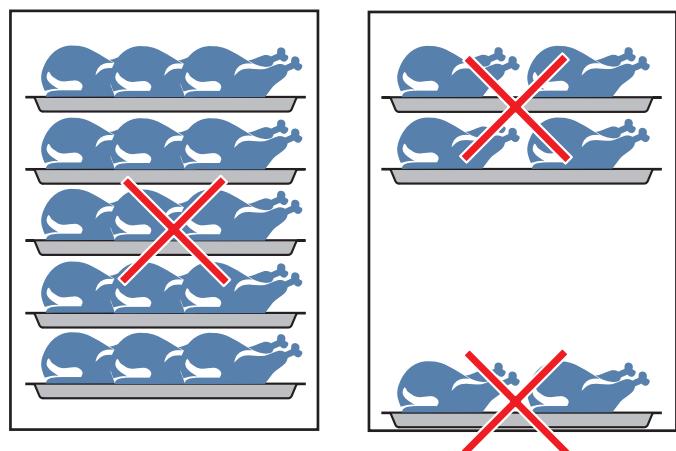
- Lid-less: lids or insulating films may extend blast chilling or low temperature cooking times
- Suitable for food use
- Resistant to temperatures reached by blast chilling cycles (+3°C) or shock freezing cycles (-18°C).
- With edges smaller than 4 cm. Higher edges can obstruct the airflow
- Divide the product to be prepared into as many pieces as possible to reduce blast chilling or shock freezing times
- Use all of the available tray surface, spacing the products out appropriately.



### How to arrange the containers/trays inside the cabinet

Arrange the containers or trays evenly inside the cabinet to allow air to circulate inside it.

- Leave at least 2 cm between one tray and the other
- Do NOT obstruct the ventilation fans with the containers
- Do NOT load the machine beyond the indicated capacity: 5 kg per shelf
- Do NOT place hot containers or trays directly on the bottom of the cabinet.



## DURING WORK CYCLES

- Keep the air vents clean from dust and clear from objects.
- Arrange the food correctly. See chapter "[LOADING THE APPLIANCE CORRECTLY](#)" on page 20
- Keep the water drain clean and clear
- Do not open the door during operation (except for the special **DEFROSTING** cycle).
- Perform routine maintenance regularly.
- Do NOT use easily flammable liquids (e.g. alcohol) while cooking at low temperature
- Do not salt food directly inside the cabinet.
- To blast chill food with temperatures exceeding 100°C, run a pre-cooling cycle before inserting it into the cabinet. *See section "[PRE-COOLING](#)" on page 26*
- Do not keep cooked food to be blast chilled at room temperature for too long. Start the blast chilling or shock freezing function once food is cooked. This step prevents food from dehydrating and lose its softness and juiciness.

After processing the food:

- Insert it inside airtight food containers
- Label the container, specifying content, preparation and expiry dates

Store it in the fridge at a temperature ranging between 0°C and +3°C or in the freezer at a constant temperature of -20°C.

## HOW TO USE THE CORE PROBE

The core probe detects the core temperature of food. To use the core probe operating mode, the cycle ends automatically when the probe detects that the set temperature has been reached or set for the chosen function (e.g. 3°C).

This way, you can be sure that the food has been correctly processed even at its innermost point.

The core probe must be inserted into the centre of the largest piece of product, ensuring that the tip neither emerges from the other side nor touches the tray.

The core probe is sharp. Handle it with care.

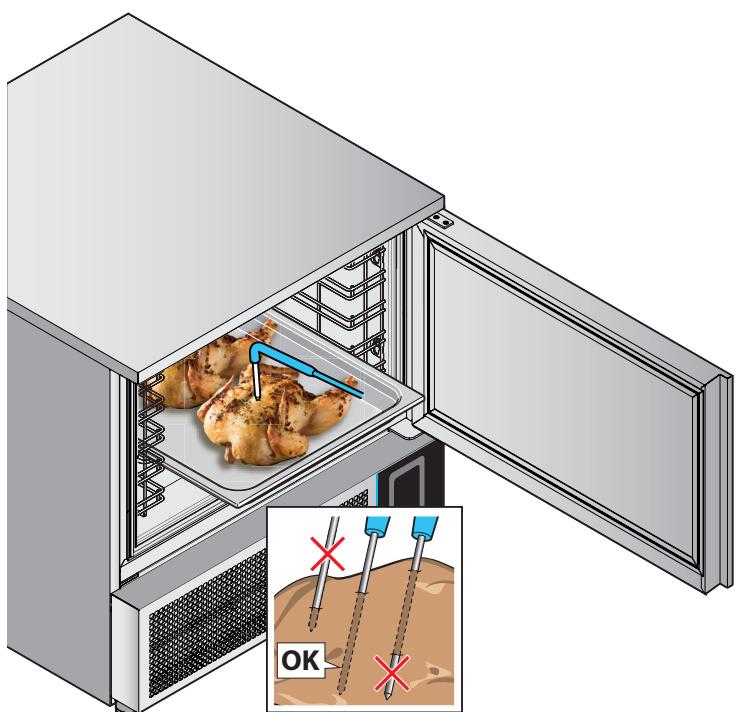
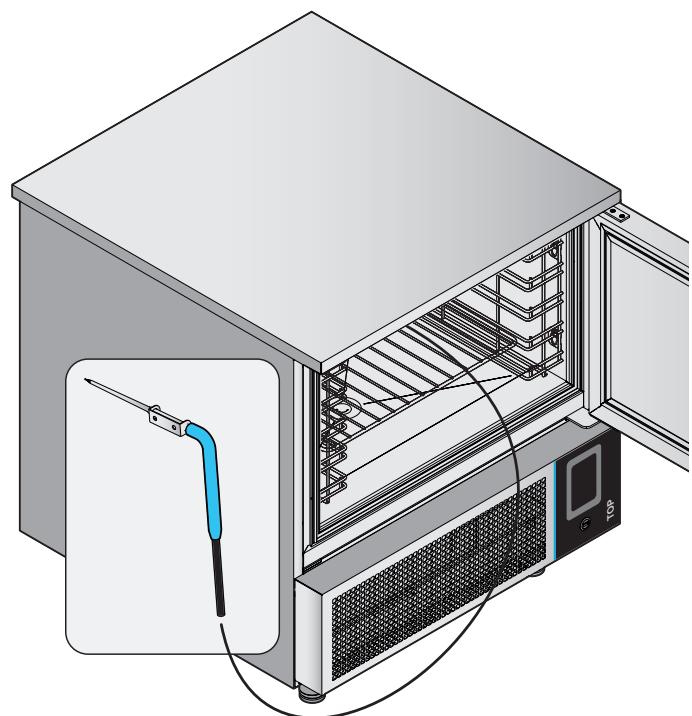


When each cycle is complete, the probe must be removed using a soft cloth and warm water. This step prevents unwanted contamination.

The slightly conical shape of the probe facilitates its removal, especially if the food is frozen.

If you find it difficult, move it slightly to the right and left before removing it.

Do not leave the core probe hanging outside the machine's door.



# TURNING THE APPLIANCE ON AND OFF

## INITIAL SETTINGS

### BEFORE USING THE APPLIANCE

 Before using the appliance, carefully read chapter "SAFETY INFORMATION FOR USING THE APPLIANCE" on page 6.

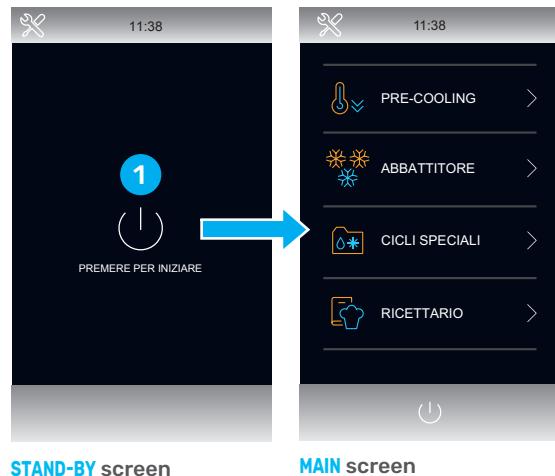
Make sure to know all safety regulations in force in the country of use.

### TURNING THE APPLIANCE ON AND OFF

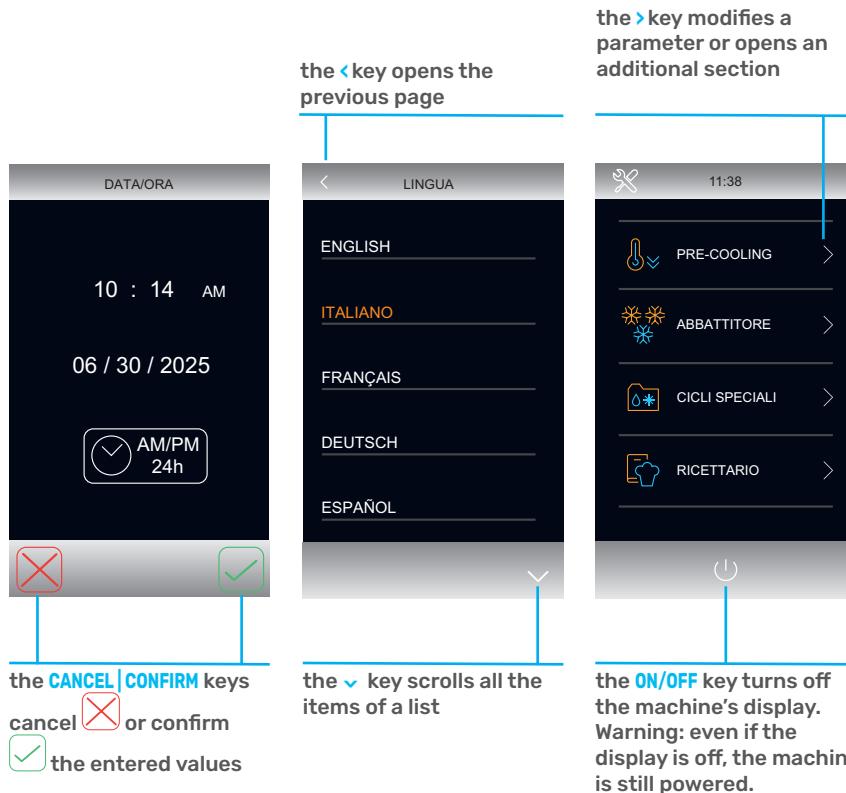
To **turn on** the machine, insert its plug into the socket or turn the electrical panel's omnipolar switch to ON | 1. After a few seconds, a data-loading screen appears followed by the **STAND-BY** screen.

1 To open the **MAIN** screen, hold the **ON/OFF** key for a few seconds.

To **turn off** the machine, remove its plug from the socket or turn the electrical panel's omnipolar switch to OFF | 0.



### Browsing the pages



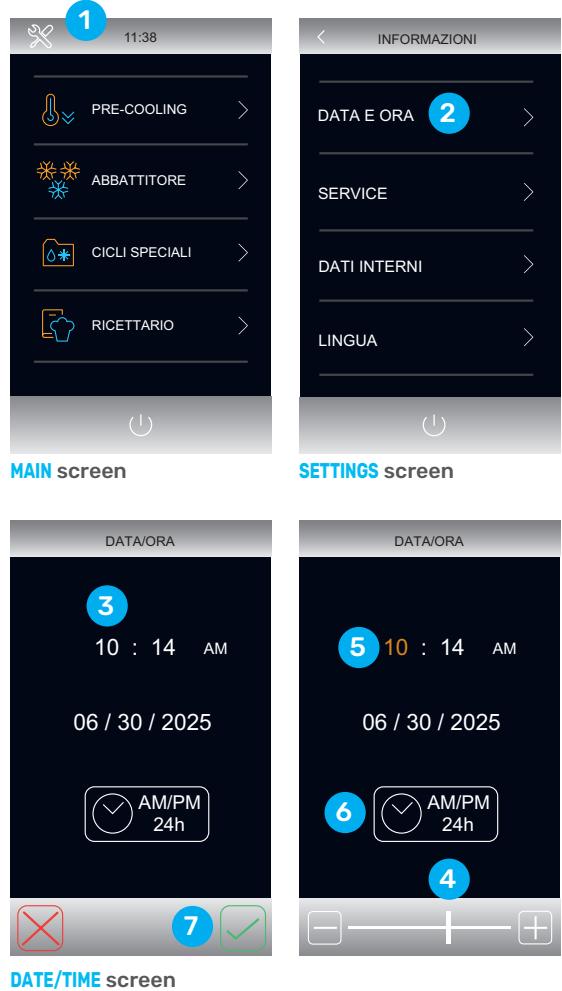
## INITIAL SETTINGS

Before using the machine, set the following:

- **Date and time**
- **The language**.

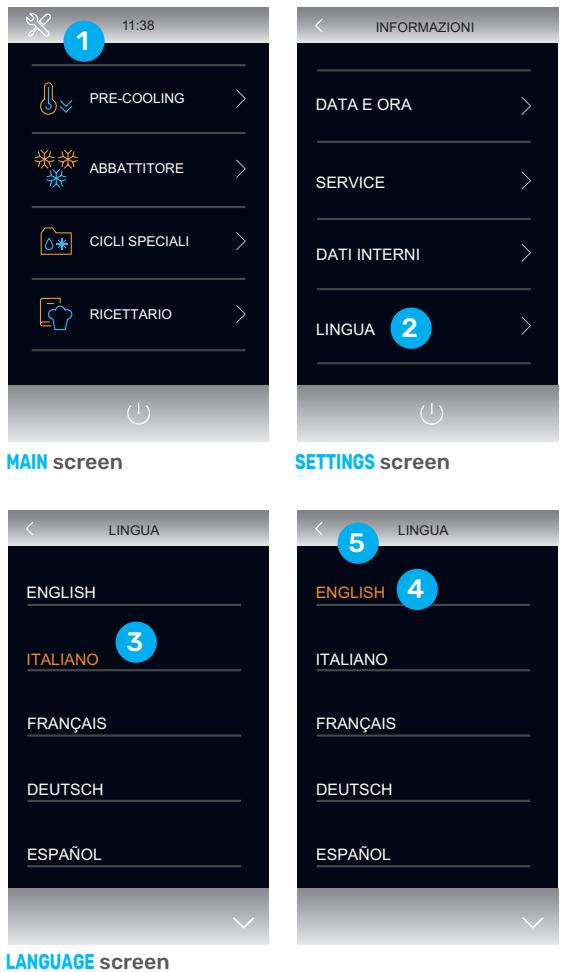
### Setting the date and time

- 1 Tap the **SETTINGS** key
- 2 Tap **DATE AND TIME**
- 3 Tap the parameter you want to change (e.g. "10", i.e., hours), which turns orange
- 4 Set the desired value by dragging the slider to the right or left
- 5 To confirm the set value, tap the parameter, which turns white again
- 6 Set whether you want to view the time in AM| PM mode or 24h mode.  
For example, 3:00 in the afternoon:
  - AM/PM = 3:00 PM
  - 24h = 15:00
- 7 Confirm the set values with  or cancel with 



### Setting the language

- 1 Tap the **SETTINGS** key
- 2 Tap "**LANGUAGE**"
- 3 A list of available languages pops up. The current language is highlighted in orange (in the example ITALIAN). The  key on the bottom right side scrolls all the available languages.
- 4 Tap the language you want, which turns orange (in the example: ENGLISH)
- 5 Tap  to return to the previous page and confirm the selected language.



## COOKBOOK

The **COOKBOOK** is a collection of factory-tested and saved recipes. , white meat, creams, etc.

The recipes:

- Are **ready to start** (by tapping **START**)

or

- **Can be modified** to adapt them to the operator's needs. The changes made have immediate effect on the recipe to be started but are **temporary**. This means that the work parameters of the original recipe are NOT changed permanently (the next time you restart the recipe, it will resume its original parameters). To not lose the changes, you can save the original recipe under a different name, creating a custom recipe. *Need more information on how to save a recipe? See page 30*

**!** Operators who modify a recipe are responsible for setting its parameters and results. Pay special attention to the changes applied to the recipes involving the blast chilling of fish and white meat.

### Setting and starting a recipe

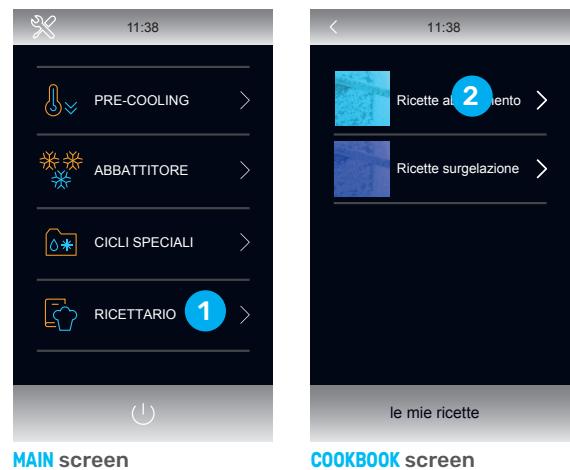
- 1 Tap the **COOKBOOK** key
- 2 Tap **BLAST CHILLING RECIPES** or **SHOCK FREEZING RECIPES**
- 3 Select the relevant category (e.g. white meat).
- 4 A sum-up screen pops up. If necessary, **change\* the work parameters**: tap the phase you want to change (e.g. phase 1) and follow the steps from **5a** to **5c** on page 27.
- 5 Choose one of the two options:
  - 5a Tap **START** to start the recipe. The changes made have immediate effect on the recipe to be started but are **temporary**. This means that the work parameters of the original recipe are NOT changed permanently (the next time you restart the recipe, it will resume its original parameters).
  - 5b Tap the **SAVE** key. To not lose the changes, you can save the original recipe under a different name, creating a custom recipe. Then, you can start the saved custom recipe. *Need more information? See page 30.*

### End of a recipe

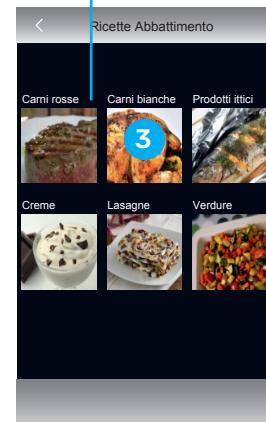
Depending on the operating mode, a recipe ends:

- When the set time expires
- or
- When the core probe detects that the temperature set has been reached
- or
- By holding down the **STOP** key.

When a recipe ends, the machine starts a final **holding phase**, which lasts indefinitely. This phase maintains the temperature of the processed products until they are removed from the cabinet, which must happen as soon as possible.



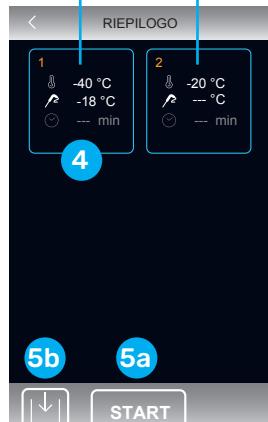
categories available for the selected cycle (e.g. blast chilling)



the **SAVE** key allows you to save the changed recipe under a new name.

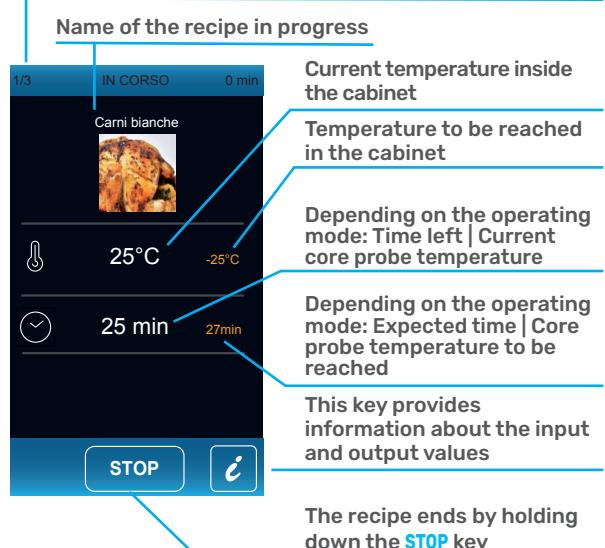
the **START** key starts the selected recipe

by tapping the phase, you can change the recipe temporarily



### RECIPE in progress screen

Phase in progress (in this example, phase 1 of the 3 planned phases is currently running)



## Blast chilling recipe table

recipe name	Work phase 1		Work phase 2		Work phase 3		Holding phase	
Red meat	thermometer icon	-25°C	thermometer icon	-5°C	-	-	checked circle icon	5°C INF
	fork and knife icon	20°C	fork and knife icon	3°C	-	-		
White meat	thermometer icon	-25°C	thermometer icon	-5°C	-	-	checked circle icon	2°C INF
	fork and knife icon	27°C	checked circle icon	63 min	-	-		
Fish products	thermometer icon	-25°C	thermometer icon	-5°C	-	-	checked circle icon	2°C INF
	fork and knife icon	27°C	checked circle icon	63 min	-	-		
Creams	thermometer icon	-5°C	-	-	-	-	checked circle icon	2°C INF
	checked circle icon	63 min	-	-	-	-		
Lasagna	thermometer icon	-5°C	-	-	-	-	checked circle icon	2°C INF
	checked circle icon	90 min	-	-	-	-		
Vegetables	thermometer icon	-5°C	-	-	-	-	checked circle icon	2°C INF
	checked circle icon	90 min	-	-	-	-		

## Notes

## Negative blast chilling (shock freezing) recipe table

## Custom recipe table

recipe name	Work phase 1	Work phase 2	Work phase 3	Holding phase
	  	  	  	
	  	  	  	
	  	  	  	
	  	  	  	
	  	  	  	

## PRE-COOLING

The **PRE-COOLING** cycle is used to:

- prepare the machine's cabinet for the subsequent functions. For example, to blast chill food with temperatures exceeding 100°C, we recommend running a pre-cooling cycle before inserting it into the cabinet
- Process a large amount of food introduced into the machine all at once (always comply with the load capacity allowed: 5 kg per shelf)

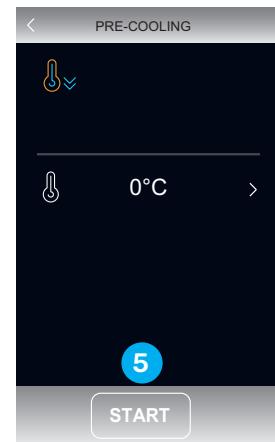
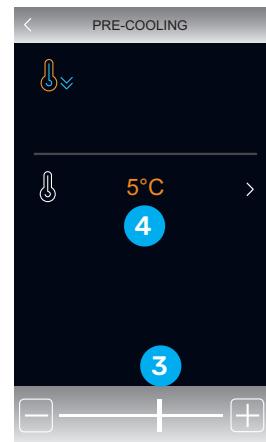
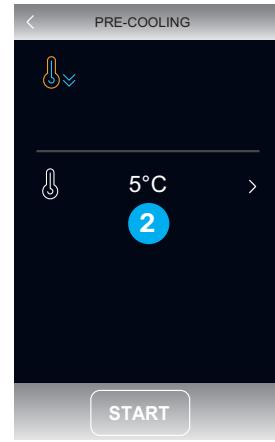
### Selecting and starting a pre-cooling cycle

- 1 Tap the **PRE-COOLING** key
- 2 Tap the temperature (in the example, 5°C): the value turns orange
- 3 Set the desired value by dragging the slider to the right or left
- 4 To confirm the set value, tap the temperature, which turns white again
- 5 Tap **START** to start the **PRE-COOLING** function.

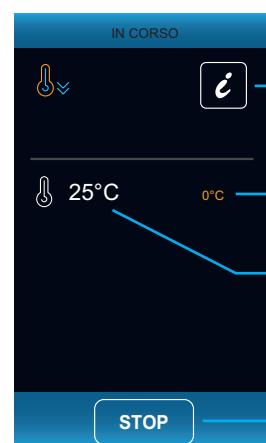
### End of the pre-cooling cycle

A cycle ends:

- When the set time expires
- or
- By holding down the **STOP** key.



### PRE-COOLING in progress screen



This key provides information about the input and output values

Temperature to be reached in the cabinet

Current temperature inside the cabinet

The pre-cooling cycle ends by holding down the **STOP** key

## POSITIVE BLAST CHILLING | NEGATIVE BLAST CHILLING (SHOCK FREEZING)

Positive and negative blast chilling (shock freezing) cycles consist of two phases:

- **Positive blast chilling or negative blast chilling (shock freezing) phase**
- Final **holding** phase

For optimal results, the **positive or negative blast chilling (shock freezing) phase** is divided into several work phases with different parameters.

An example, a negative blast chilling (shock freezing) phase:

- Work phase 1: duration: 40 min | cell temperature: -3°C
- Work phase 2: duration: 200 min | cabinet temperature: -18°C

The machine switches from one work phase to another and controls the parameters automatically.

The final **holding** phase:

- Starts automatically at the end of the positive or negative blast chilling (shock freezing) cycle
- This phase maintains the temperature of the processed products until they are removed from the cabinet
- It ends only when you remove the processed food from the cabinet.

### Setting the positive blast chilling or negative blast chilling (shock freezing) cycle

- 1 From the main screen, tap **BLAST CHILLER**
- 2 **Select** positive or negative blast chilling (shock freezing)
- 3 Select the **timed or core probe mode**:  
**Timed**: The cycle ends when the set time is reached  
**With core probe**: The cycle ends when the core probe detects that the temperature set has been reached.  
If you select the core probe mode, remember to insert it inside the product to be processed.
- 4 Choose whether the cycle must run in **HARD** or **SOFT** mode.
- 5 If necessary, **change\*** the work parameters: cabinet temperature, function duration, or core probe temperature, depending on the selected mode.
  - 5a Tap the parameter you want to change, which turns orange
  - 5b Set the desired value by dragging the slider to the right or left
  - 5c To confirm the set value, tap the parameter, which turns white again.



Note: the **EXPERT** key allows you to set the holding phase temperature.

- 6 Tap the **ARROW**: a page **SUMMING UP** the parameters of the selected cycle appears.



note: the **EXPERT** key allows you to set the holding phase temperature

Need more information about the core probe? See page 19

Need more information about the two modes? See page "Soft cycle" page 19

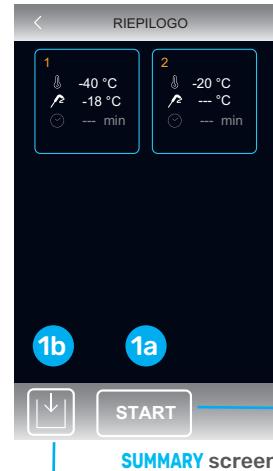


\* Operators who modify a cycle are responsible for setting its parameters and results. Pay special attention to the changes applied to the cycles involving the blast chilling of fish and white meat.

## Starting a positive or negative blast chilling (shock freezing) cycle

Choose one of the two options:

- 1a Tap **START** to start the cycle. The changes made have immediate effect on the cycle in progress but are **temporary**. This means that the work parameters of the original cycle are NOT changed permanently (the next time you restart the cycle, it will resume its original parameters).
- 1b Tap the **SAVE** key. To not lose the changes, you can save the original cycle under a different name, creating a custom recipe. Then, you can start the saved custom recipe. *Need more information? See page 30*



**START** key: starts the cycle. The changes made have immediate effect on the cycle in progress but are temporary.

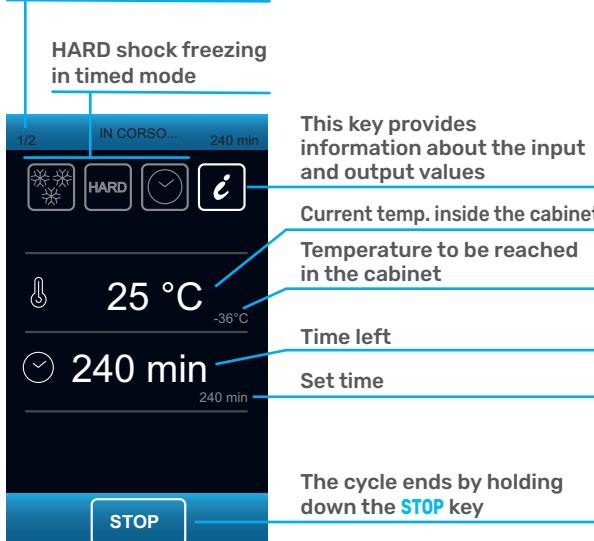
the **SAVE** key allows you to save the settings made. See page 30

## Cycle in progress

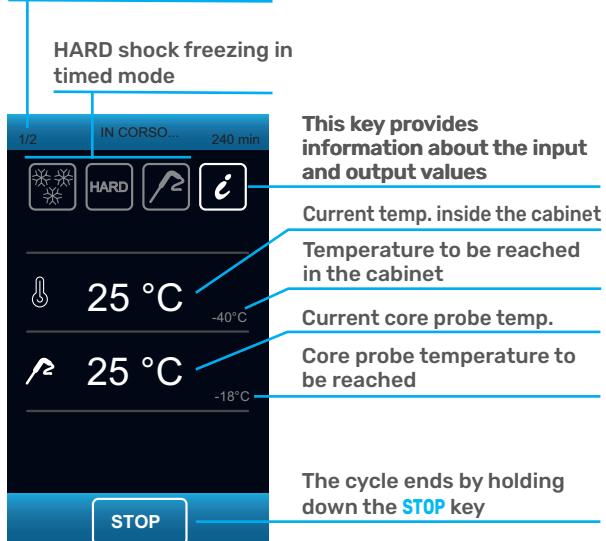
Two screens appear depending on the selected mode (timed or core probe).

The phase work parameters can be changed even when a cycle is in progress - *see page 29*.

Phase in progress (in this example, phase 1 of the 2 planned phases is currently running)



Phase in progress (in this example, phase 1 of the 2 planned phases is currently running)



**CYCLE** in progress in **timed** mode (example)

**CYCLE** in progress in **core probe** mode (example)

## Modifying the work parameters of the cycle in progress

The phase work parameters can be changed even when a cycle is in progress -(for example, you can change the cabinet temperature from -40°C to -36°C).

 Operators who modify a cycle are responsible for setting its parameters and results. Pay special attention to the changes applied to the cycles involving the blast chilling of fish and white meat.

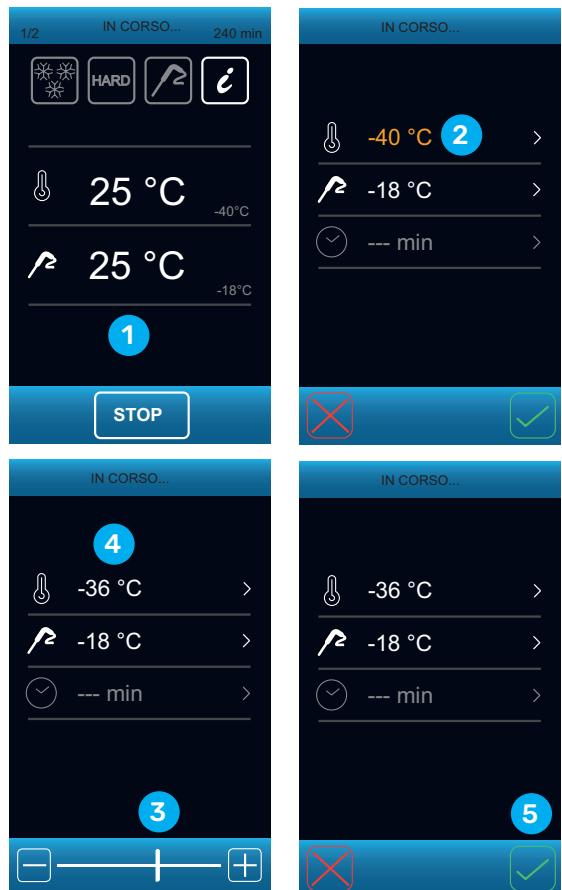
To change the parameters:

- 1 Tap any spot of the screen
- 2 Tap the work parameter you want to change (e.g. -40°C - cabinet temperature): the parameter turns orange
- 3 Set the desired value by dragging the slider to the right or left
- 4 To confirm the set value, tap the parameter, which turns white again
- 5 Confirm the set value with  or cancel with 

The changes made have immediate effect on the cycle in progress but are **temporary**. This means that the work parameters of the original cycle are NOT changed permanently (the next time you restart the cycle, it will resume its original parameters).

To not lose the changes, you can save the original cycle under a different name, creating a custom recipe.

*Need more information? See page 30*



## End of the positive blast chilling or negative blast chilling (shock freezing) cycle

Depending on the operating mode, a cycle ends:

- When the set time expires
- or
- When the core probe detects that the temperature set has been reached
- or
- By holding down the **STOP** key.

When a positive or negative blast chilling (shock freezing) cycle ends, the machine starts a final **holding phase**, which lasts indefinitely.

This phase maintains the temperature of the processed products until they are removed from the cabinet, which must happen as soon as possible.

When the holding phase is activated, the display turns **orange**.



## Saving a cycle or recipe after applying modifications

This machine comes with:

- Some **cycles** (section **BLAST CHILLER**)
- Some **recipes** (section **COOKBOOK**).

Both categories provide tested work parameters to obtain **safe and excellent results**.

However, you can adapt the work parameters based on your needs. In this case, the operator is responsible for setting the parameters and of the results. Pay special attention to the changes applied to the cycles involving the blast chilling of fish and white meat.

Modifications can be made before or during a cycle or recipe, but these are **temporary**. This means that the work parameters of the original cycle or recipe are NOT changed permanently (the next time you restart a cycle or a recipe, it will resume its original parameters).

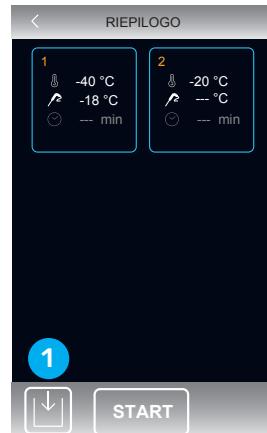
To not lose the changes, you must save the original recipe or cycle under a different name, creating a **custom recipe**.

This way, you will have two recipes:

- **original cycle or recipe** with factory-set parameters. The original cycles or recipes:
  - CANNOT be **deleted**
  - They can be **modified** temporarily but not permanently (the next time you restart the recipe/cycle, it will resume its original parameters)
- **custom recipe** with modified parameters. Custom cycles:
  - Can be **deleted**
  - Can be **modified** temporarily or permanently (overwriting the cycle with the same name)
  - You can find them in section **COOKBOOK -> MY RECIPES**.

### Modifying a cycle or recipe

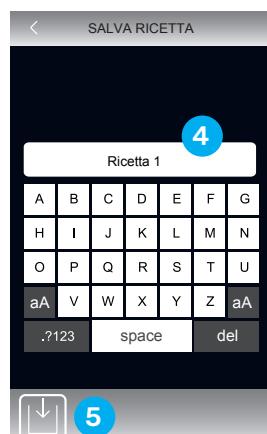
- 1 From the **SUMMARY** screen, tap **SAVE**
- 2 Tap the position where you want to save the custom recipe (e.g. position P01). If a position is already taken, you will be asked to confirm before overwriting it.
- 3 Confirm with  or cancel with
- 4 Enter the recipe name (e.g. "Recipe 1")
- 5 Tap the **SAVE** key: the custom recipe is now saved in the chosen position
- 6 Now you can:
  - 6a Tap < to exit the screen
  - 6b Tap the **START** icon to start the saved recipe.



the **SAVE** key allows you to save the changed recipe under a new name.

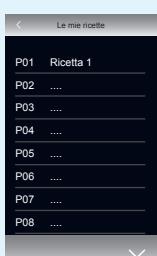
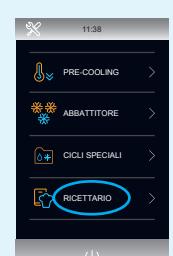


the **▼** key scrolls all the positions available



the saved recipe appears in **COOKBOOK -> MY RECIPES**

You can find them in section **COOKBOOK -> MY RECIPES**.



## CONTINUOUS

**Continuous cycles** (positive or negative blast chilling) last until you hold down the **STOP** key.

During continuous cycles, you can set:

- **The cabinet temperature** during the positive or negative blast chilling (shock freezing) phase
- **The cabinet temperature** during the final holding phase
- **Up to 4 timers** with different durations (optional). Each timer can be associated with a food.

For example:

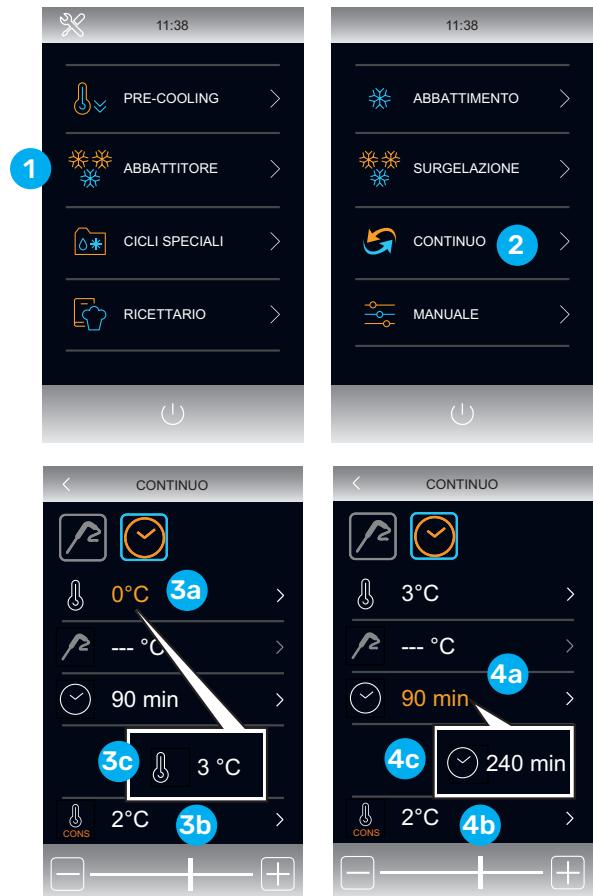
- timer 1: **fillet** – **duration 240 min**
- timer 2: lasagna – duration 300 min
- timer 3: braised meat – duration 280 min
- timer 4: chicken – duration 250 min

When the timer expires:

- An acoustic signal will warn you (tap the display to disable it)
- The expired timer turns green
- This means that the associated food has been processed. In the example, timer 1 expires 240 minutes after pressing **START** – the one that starts less: remove the fillet. The operator is responsible for setting the duration of the Positive or negative blast chilling (shock freezing) cycles and relative results. Pay special attention to the settings of the cycles involving the blast chilling of fish and white meat.
- **Do NOT stop** the continuous cycle. If:
  - there are other timers, it continues their countdown
  - NO other timers are enabled, the machine keeps running with the temperature set by the operator.

## Selecting and starting the continuous cycle

- 1 From the main screen, tap **BLAST CHILLER**
- 2 Tap **CONTINUOUS**
- 3 (Optional) If necessary, **change the operating temperature** provided:
  - 3a Tap the parameter you want to change, which turns orange
  - 3b Set the desired value by dragging the slider to the right or left
  - 3c To confirm the set value, tap the parameter, which turns white again.
- 4 (Optional) Tap the time value (e.g. 90 minutes): the parameter turns orange
  - 4a Tap the parameter you want to change, which turns orange
  - 4b Set the desired value by dragging the slider to the right or left
  - 4c To confirm the set value, tap the parameter, which turns white again.
- 6 Tap **START**: the countdown of the first timer starts.

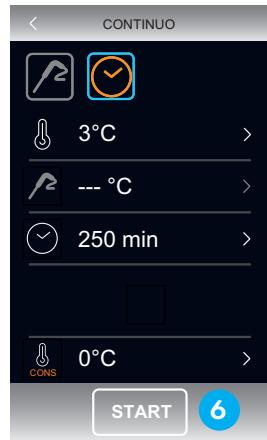
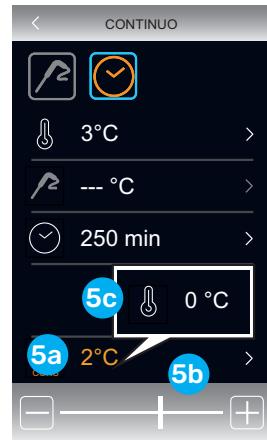


**5** (Optional) If necessary, **change the finale holding temperature** provided:

- 5a** Tap the parameter you want to change, which turns orange
- 5b** Set the desired value by dragging the slider to the right or left
- 5c** To confirm the set value, tap the parameter, which turns white again.

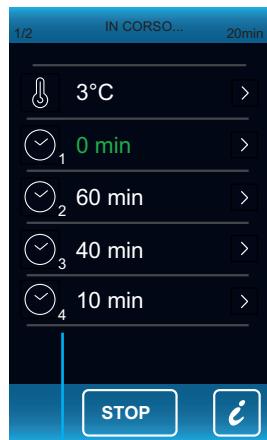
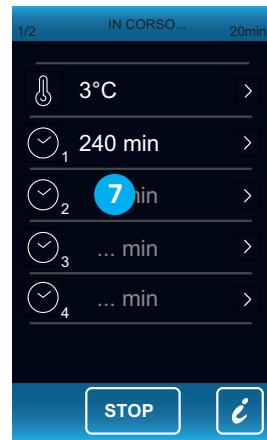
**6** Tap **START** to start the cycle.

**7** (Optional) to set the subsequent timers, if necessary, tap the timer needed and repeat steps from **4a** to **4c**.



## End of continuous cycle

If a continuous cycle has started, the machine runs indefinitely. The cycle ends only by holding down the **STOP** key.



The continuous cycle ends by holding down the **STOP** key

This key provides information about the input and output values

## MANUAL

A **manual cycle** (positive or negative blast chilling) ensures flexible settings.

The operator must set all the work parameters regarding both positive and negative blast chilling (shock freezing) and holding phases. Pay special attention to the changes applied to the cycles involving the blast chilling of fish and white meat. If necessary, the operator can set up to two positive or negative blast chilling (shock freezing) phases.

For example:

### • Positive blast chilling or negative blast chilling (shock freezing) phase

- Work phase 1: duration: 40 min | cabinet temperature: -3°C
- Work phase 2: duration: 200 min | cabinet temperature: -18°C
- Final **holding** phase.

### Setting and starting a manual positive or negative blast chilling (shock freezing) cycle

1 From the main screen, tap **BLAST CHILLER**

2 Tap "**MANUAL**"

3 Select the **timed or core probe mode**:

**Timed:** The cycle ends when the set time is reached

**With core probe:** The cycle ends when the core probe detects that the temperature set (-18°C) has been reached.

If you select the core probe mode, remember to insert it inside the product to be processed.

*Need more information about the core probe? See page 19*

4 If necessary, **change the work parameters:** cabinet temperature, function duration, or core probe temperature, depending on the selected mode.

4a Tap the parameter you want to change, which turns orange

4b Set the desired value by dragging the slider to the right or left

4c To confirm the set value, tap the parameter, which turns white again.

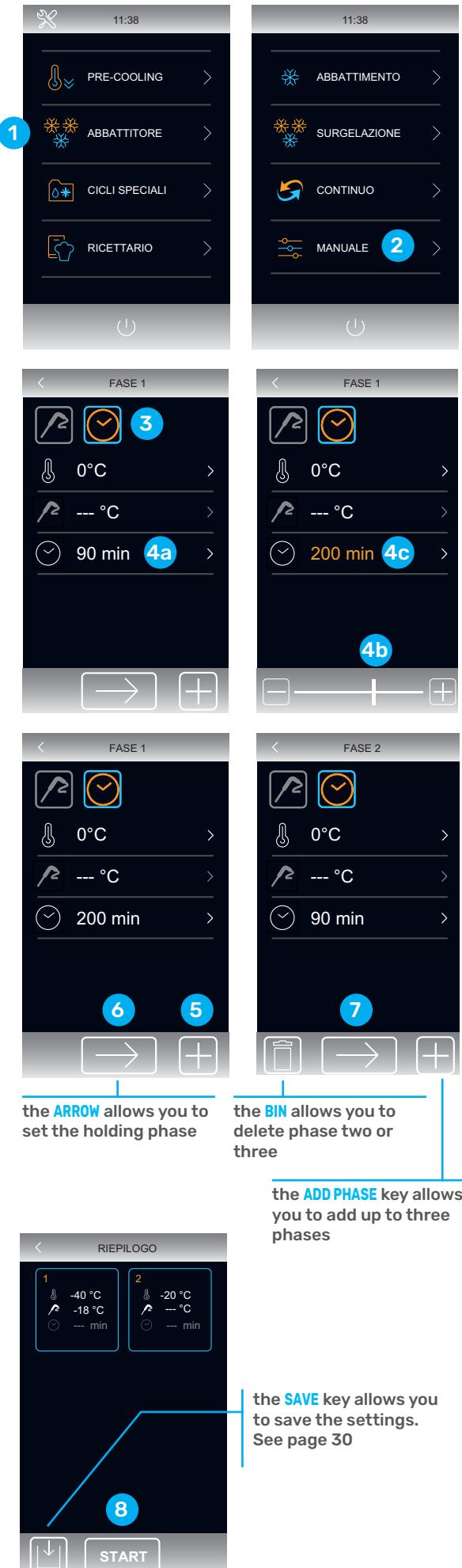
Now you can:

5 Tap **ADD PHASE** to switch to a **second and third work phase**, if necessary. This phase is set following the above steps. The **BIN** key allows you to remove phase two or three (not the first one). A cycle must include at least one work phase.

6 By tapping the **ARROW**, you switch to the **holding phase** (the only parameter that can be set is the cabinet temperature)

7 From the holding screen, tap the **ARROW**: a page **SUMMING UP** the parameters of the set cycle appears. If you want, you can tap **SAVE**, to save the set cycle, see page 30 for further information.

8 Start a cycle by tapping **START**.



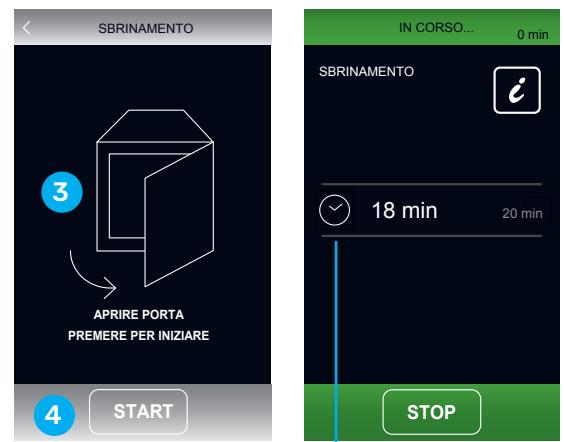
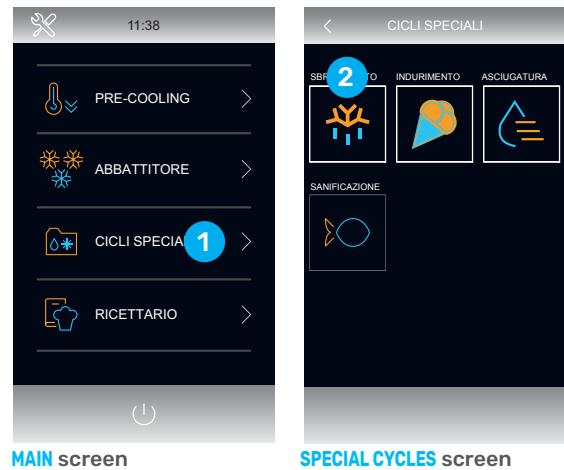
## SPECIAL CYCLES

### Defrosting

Ice on the evaporator may form after a few consecutive negative blast chilling (shock freezing) cycles. The special **DEFROSTING** cycles removes the ice from the evaporator.

- 1 Tap **SPECIAL CYCLES**
- 2 Tap **DEFROSTING**
- 3 Open the machine's door
- 4 Tap **START** to start the defrosting cycle.

The special **DEFROSTING** cycle ends automatically. **HOWEVER**, you can end it in advance by holding down the **STOP** key.



**DEFROSTING** in progress screen: time left till the end of the defrosting cycle

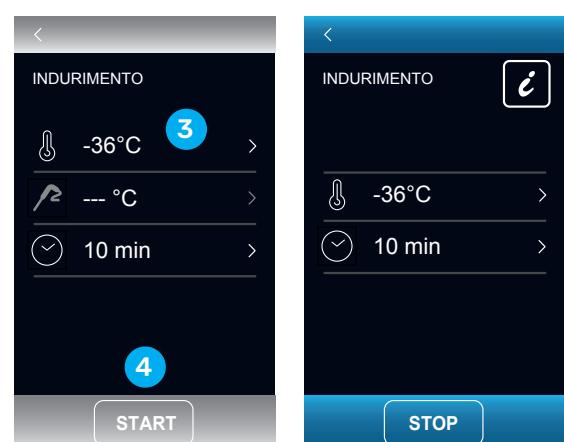
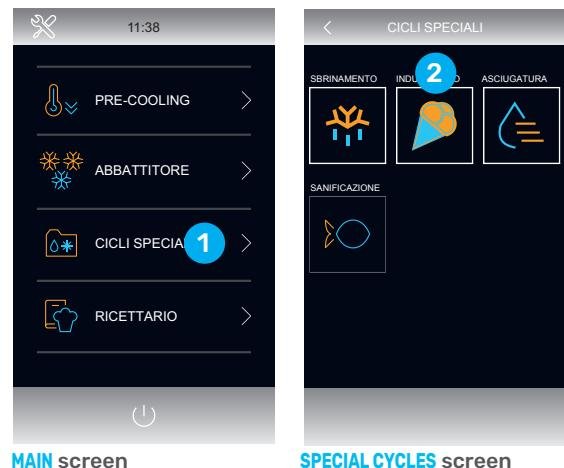
### Ice cream hardening

The negative blast chilling (shock freezing) cycle is mainly used in ice cream parlours and patisseries to give the processed products a "thermal shock".

- 1 Tap **SPECIAL CYCLES**
- 2 Tap **HARDENING**
- 3 If necessary, **change the work parameters**: cabinet temperature, function duration, or core probe temperature (follow the steps from **5a** to **5c** on page 27).
- 4 Start a cycle by tapping **START**.

The special **ICE CREAM HARDENING** cycle ends

- When the set time expires
- or
- By holding down the **STOP** key.

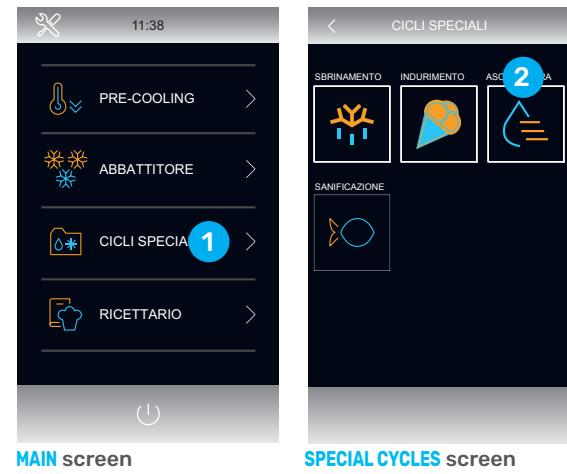


## Drying

We recommend running the **DRYING** cycle before blast chilling or shock freezing, which need a dry environment. This function also dries the cabinet after a manual washing cycle.

- 1 Tap **SPECIAL CYCLES**
- 2 Tap **DRYING**
- 3 Tap **START** to start the defrosting cycle.

The special **DEFROSTING** cycle ends automatically. **HOWEVER**, you can end it in advance by holding down the **STOP** key.



**DRYING** in progress screen: time left till the end of the drying cycle

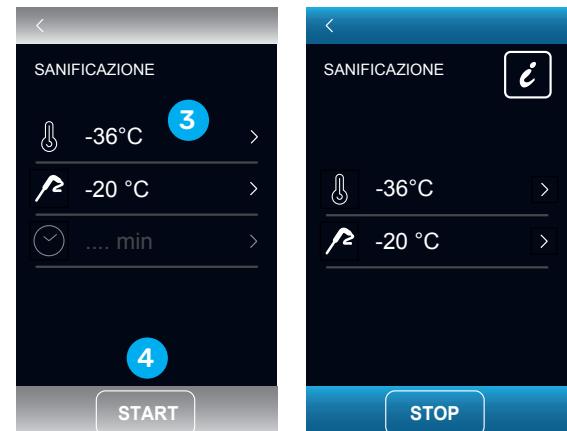
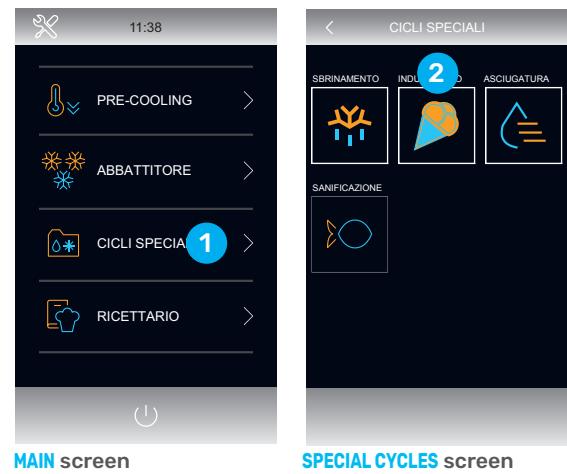
## Sanitizing

The special **SANITIZING** cycle remove risks related to the contamination of products from pathogens, ensuring the utmost hygiene.

- 1 Tap **SPECIAL CYCLES**
- 2 Tap **SANITIZING**
- 3 If necessary, **change the work parameters**: cabinet temperature or core probe temperature (follow the steps from **5a** to **5c** on page 27).
- 4 Start a cycle by tapping **START**.

The special **SANITIZING** cycle ends

- When the core probe detects that the temperature set has been reached
- or
- By holding down the **STOP** key.



**⚠** Fish (especially if raw or undercooked) must undergo a negative blast chilling (shock freezing) cycle before it is consumed to remove risks related to bacterial and parasitic contamination, in particular Anisakis simplex larvae. The larvae penetrating the gastric or intestinal mucosa cause violent abdominal pain, nausea, vomiting, diarrhoea, fever, or even intestinal perforation.

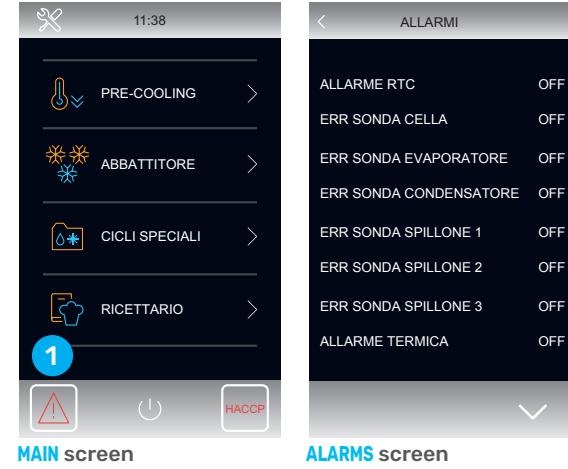
## ALARMS AND HACCP

If alarms are triggered or HACCP anomalies occur during machine operation, they are indicated on the display with these two symbols  .

### HACCP alarms

An HACCP alarm indicates that something has occurred during a cycle that may jeopardise the cycle.

For example, one of the most common causes of failure is due to a black-out, i.e. a power failure during a cycle. In this case, if the power outage is brief, the cycle will continue from where it stopped once the power comes back on.



### Alarms

To know exactly the alarm or anomaly occurred, tap the symbol of reference:

OFF: no alarm

ON: alarm triggered

Based on the triggered alarm, the machine can be blocked in whole or in part. Consult the table before contacting technical support

**HACCP:** The HACCP (Hazard Analysis and Critical Control Points) procedure supervises food safety to identify, assess, and check hazards that can compromise the wholesomeness of food.

This blast chiller continuously checks every event that can compromise food wholesomeness, i.e., a blackout occurred during a work cycle, the machine's door that opens too frequently, or a cycle with a core probe that lasts too long (due to machine overload).

## SETTINGS

**Date/time:** *see page 23*

**Service:** This section is password-protected and reserved to maintenance personnel

**Language:** *see page 23*

**Internal data:**

Alarms: *see page 36*

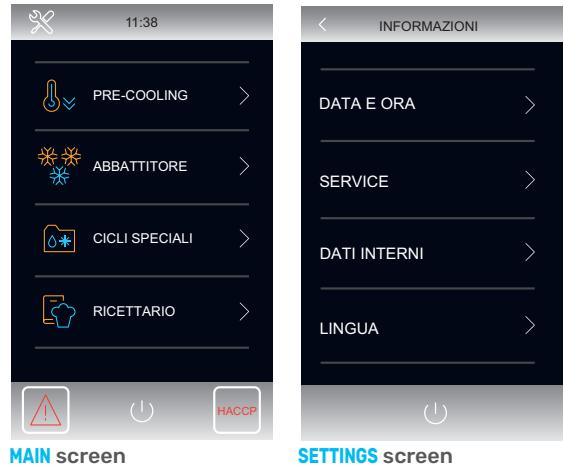
Inputs/outputs: view the status of the inputs/outputs (useful information for the technician).

Compressor's operating hours from machine start up. In case you replace the compressor, the technician must reset the operating hours.

HACCP data selection: in this section, you can indicate which data must be considered during HACCP monitoring:

- ON: monitored data
- OFF: non-monitored data

**Internal data reset:** This section is password-protected and reserved to maintenance personnel



## CLEANING AND MAINTENANCE

**!** Disconnect the machine from the power supply before cleaning and servicing the machine.

**!** Every component must be cleaned when the oven and all its parts have reached the room temperature, always wearing PPE (gloves, etc.).

**!** When cleaning any component or accessory NEVER use:

abrasive or powder detergents  
aggressive or corrosive detergents (e.g. hydrochloric/muriatic or sulphuric acid, caustic soda). Never use these substances when cleaning the appliance substructure or the floor under the machine or the base  
abrasive or pointed tools (e.g. abrasive sponges, scrapers, steel brushes, etc.)  
steam or pressurised water jets.

**!** The machine must be cleaned with products having PH values higher than 7.0. It is preferable to use NSF-certified products.

**!** To ensure the device is safe and in perfect condition for use, we recommend at least a yearly service by a specialised technician.

Before cleaning the machine, disconnect it from the power supply (act on the system's switch) and wear suitable PPE (e.g. gloves, etc.).

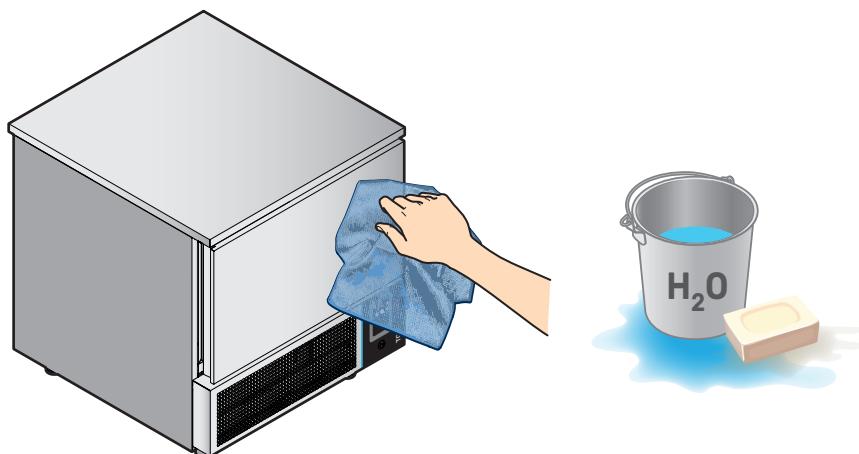
The user must only carry out standard maintenance work. For non-standard maintenance work, please contact an authorised specialist technician. The manufacturer does not accept under warranty any damage caused by lack of maintenance work or incorrect cleaning (e.g. use of unsuitable cleaning products).

### Daily:

- Clean all parts using a cloth soaked in warm soapy water. Then, rinse and dry accurately.
- Clean the display using a soft cloth and little gentle detergent. Do not use large amounts of product, since infiltrations may seriously damage the display.
- Do not use excessively aggressive detergents, which can damage the display's construction material (polycarbonate).
- The user is responsible for maintenance.
- Remove and wash the trays
- PIN PROBE: After every use, we recommend cleaning the pin probe accurately. When not used, it must be stored in place with its rubber cap on.

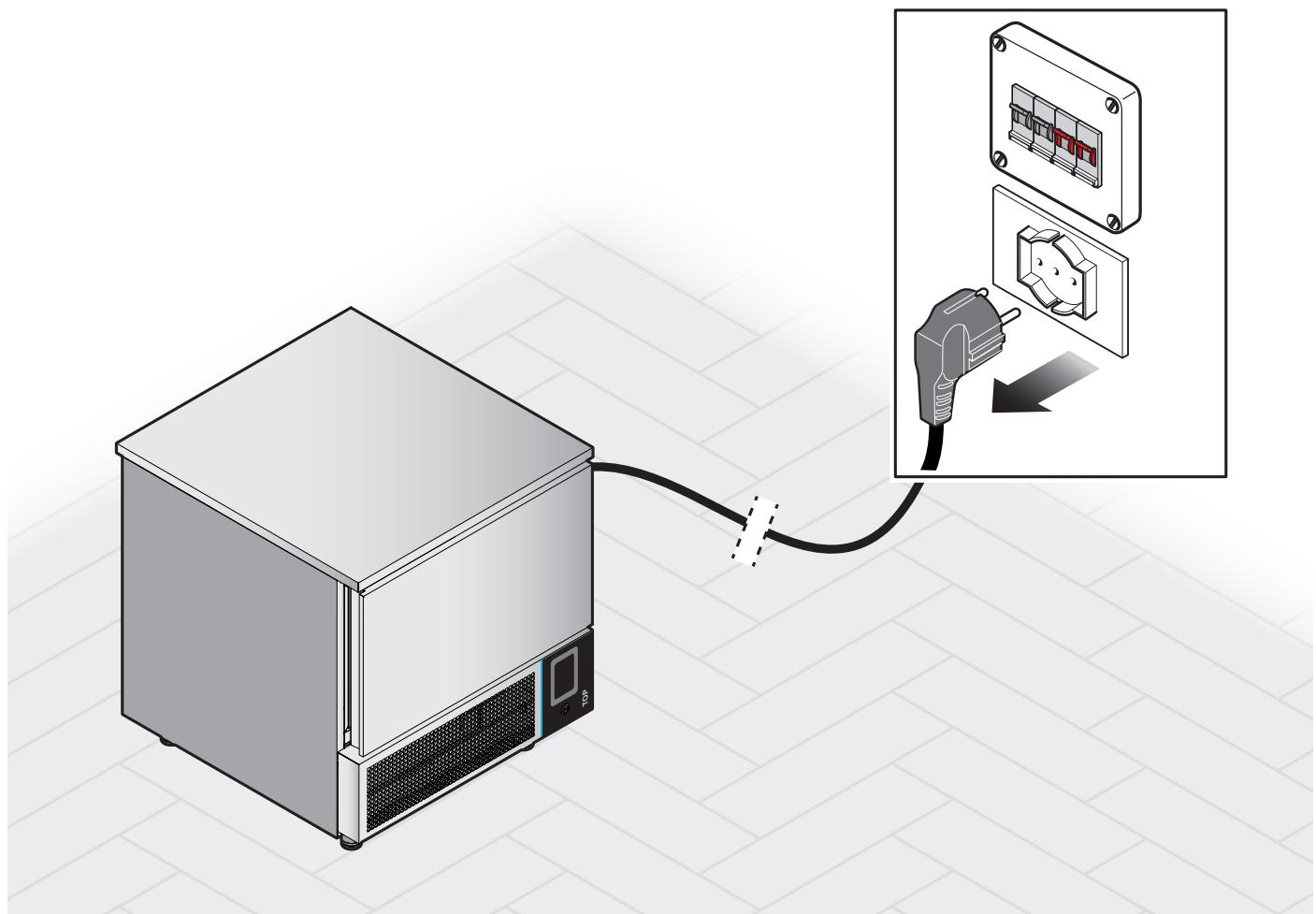
### Monthly:

- Check the condition of the condenser and remove dust.
  1. Loosen the screws under the control panel.
  2. Remove the control panel downwards and lay it gently to prevent damage.
  3. Wear protective gloves, since the condenser's fins are sharp.
  4. Clean the condenser using a soft bristle brush or use a vacuum cleaner equipped with an extension cord and suitable nozzles.
  5. Do not bend the fins. Avoid impacts or pressure that can deform them.
  6. Do not use water, acids, or other cleaning products, unless specifically indicated in the manual.



## WHAT TO DO WHEN THE APPLIANCE IS NOT USED FOR A LONG TIME

During periods of inactivity, disconnect the power supply and close the gas shut-off valve.  
Protect the external steel parts of the machine by wiping them with a soft cloth doused in Vaseline oil.  
Before using the equipment again:  
• thoroughly clean the machine and accessories  
• reconnect the machine to the power supply  
• inspect the machine before using it again.



## ALARMS

CODE	DESCRIPTION	POSSIBLE CAUSES	SOLUTION
RTC	WATCH ERROR	The board has lost the day and time settings	Set the day and time again
CABINET PROBE	CABINET PROBE ERROR	The board does not read the cabinet probe	Disconnected cabinet probe / Probe failure / Board failure
HIGH PRESSURE	HIGH PRESSURE ALARM	Pressure inside the refrigeration system is too high	Check the product operating temperature. Check the amount and temperature of the food. Check the operation of the refrigeration system
DOOR OPEN	DOOR OPEN ALARM	Door open / Door sensor fault	Make sure the door closes correctly. Check the operation of the micro door
HIGH TEMPERATURE	MAXIMUM TEMPERATURE ALARM (HACCP alarm)	During the holding phase, the temperature has raised for 30 minutes above the holding temperature	Check the operation of the refrigeration system
LOW TEMPERATURE	MINIMUM TEMPERATURE ALARM (HACCP alarm)	During the holding phase, the temperature has dropped for 30 minutes below the holding temperature	Check the operation of the refrigeration system
CYCLE DURATION	ALARM: TEMPERATURE BLAST CHILLING OR SHOCK FREEZING NOT COMPLETED WITHIN THE MAXIMUM DURATION ALLOWED (HACCP alarm)	The cycle lasted longer than expected	Check the product operating temperature. Check the amount and temperature of the food. Check the operation of the refrigeration system
BASIC COMMUNICATION	COMMUNICATION ERROR BETWEEN BOARDS	Boards are disconnected	Check the electrical connection of the boards
BASIC COMMUNICATION	COMPATIBILITY ERROR BETWEEN BOARDS	Boards are not compatible	Check the boards' compatibility
POWER FAILURE	POWER FAILURE ALARM (HACCP alarm)	The product power supply was interrupted during a work cycle	Check the cause
INS SANITIZING PIN PROBE	SANITIZING ALARM	The pin probe was not inserted correctly during the sanitizing cycle.	Position the pin probe correctly. Check the pin probe reading. Check the cabinet probe reading.

SANITIZING CYCLE DURATION	ALARM: SANITIZING CYCLE NOT COMPLETED (alarm HACCP)	The sanitizing cycle lasted longer than expected	Check the product operating temperature. Check the amount and temperature of the food. Check the operation of the refrigeration system
BLOCKED COMP	ALARM: BLOCKED COMPRESSOR	Faulty compressor	Check the compressor's operation
PIN PROBE INS	ALARM: PIN PROBE NOT INSERTED	The pin probe was not inserted correctly	Position the pin probe correctly. Check the pin probe reading. Check the cabinet probe reading.

## TECHNICAL SHEET

	SFP3	SFP5	SFP10	
EXTERNAL DIMENSIONS WxDxH (mm)	620x670x670	820x850x910	820x850x1660	-
INTERNAL DIMENSIONS WxDxH (mm)	355x550x280	700x460x380	700x460x770	-
WEIGHT (kg)	60	95	145	-
BLAST CHILLER PERFORMANCE +65°C +3°C (kg)	12	18	36	-
FAST FREEZER PERFORMANCE +65°C -18°C (kg)	8	12	25	-
TYPE OF GAS	R290	R290	R290	-
GWP	3	3	3	-
AMOUNT OF GAS (gr)	112	112	128+128	-
CLIMATE CLASS	5	5	5	-
REFRIGERANT POWER - EN12900 (W)	593	897	897+897	-
PROTECTION RATING	IP22	IP22	IP22	-
POWER VOLTAGE (V/Ph/Hz)	230/1/50	230/1/50	230/1/50	-
FLI (kW)	0.504	1.363	2.726	-
FLA (A)	2.19	5.92	11.84	-

# AFTER-SALES SERVICE

## **Spare parts / Maintenance**

To request spare parts, please contact your local dealer. Always quote the details from the data plate on the side of the product (model, serial number, etc.) and the spare part code shown on the spare parts exploded view.

To request special maintenance, repairs and/or replacements, contact solely the authorised local dealer where the product was purchased, and/or a specialised technician in possession of the technical-professional requirements provided for by the regulations in force.

---

The company declines any liability for printing or transcription errors and reserves the right to make any changes it deems appropriate without prior notice.

Full or partial reproduction of this manual is prohibited without the consent of the Manufacturer. The measurements provided are approximate and not binding.

The original language of this manual is Italian. The manufacturer is not liable for any printing, translation/interpretative errors.

# DISPOSAL

 To prevent unauthorised use and risks related to it, before disposing of the machine, make sure that it is no longer possible to use it: the power cable must be cut or removed (the appliance must be disconnected from the power supply).

## Machine disposal

 Pursuant to article 13 of Italian Legislative Decree no. 49 of 2014 "Implementation of the WEEE Directive 2012/19/EU on electrical and electronic equipment waste", the crossed-out wheeled bin symbol indicates that the product was placed on the market after 13 August 2005 and that, at the end of its useful life, it should not be disposed of with other waste, but must be collected separately. All appliances are made with recyclable metals (stainless steel, iron, aluminium, galvanized steel, copper, etc.) in percentages above 90% by weight. At the end of its useful life, the product must be disposed of in such a way as to reduce any negative impact on the environment and make efficient use of available resources. Prefer prevention, preparation for reuse, recycling and reclamation, and remember "the polluter pays". Please remember that illegal or incorrect disposal of the product incurs penalties, as provided for by current legislation.

## Information on disposal in Italy

In Italy, WEEE appliances must be delivered to:

- Recycling Centres (also known as waste disposal sites/facilities)
- the dealer from whom the new machine is purchased, who is required to collect them free of charge ("one-for-one" collection).

## Information on disposal in European Union countries

The EU Directive on WEEE appliances has been implemented differently by each country. Therefore, if you want to dispose of this machine, we recommend you contact your local authority or dealer for information on the correct disposal method.



GGM Gastro International GmbH  
Weinerpark 16  
D-48607 Ochtrup

[www.ggm gastro.com](http://www.ggm gastro.com)      [info@ggm gastro.com](mailto:info@ggm gastro.com)  
+49 2553 7220 0