

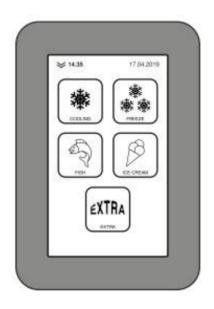
# MOD: CBT101/NT

Production code: BE-910C-DP/DI

$$f(x)=t_{anx}$$

EN BLAST CHILLERS INSTRUCTIONS FOR THE INSTALLATION, USE AND MAINTENANCE





CBT31/NT CBT50/NT CBT51/NT CBT101/NT CBT151/NT



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#### **FOREWORD**

The contents of this manual are generic and not all the functions described may be available on your product.

The manufacturer declines all responsibility for possible inaccuracies contained in this pamphlet, due to printing or copy errors. We reserve the right to make on our own products those changes to be considered necessary or useful, without jeopardizing the essential characteristics.

Read the instructions for use very carefully paying particular attention to the rules concerning safety devices.

This appliance must only be used for what it has been designed for and built for.

# **DECLARATION OF CONFORMITY**

The Manufacturer declares that the appliances conform to the EEC norms.

They must be installed in accordance with current standards, especially regarding aeration of the premises and the exhaust gas evacuation system.

Note: The Manufacturer declines all and every responsibility for any direct damages caused by: an incorrect use, wrong installation or bad maintenance.

# EUROPEAN DIRECTIVE ROHS 2012/19/UE

This appliance is marked according to the European directive 2012/19/UE on Waste Electrical and Electronic Equipment (WEEE).



By ensuring this product is disposed correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product.

The symbol on the product, or on the documents accompanying the product, indicates that this appliance may not be treated as household waste.

Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment.

Disposal must be carried out in accordance with local environmental regulations for waste disposal.

#### 1. WARNINGS

# 1.1. GENERAL WARNINGS

This manual has been prepared to enable a correct installation, regulation and maintenance of the appliance. It is therefore of basic importance that the warnings contained in this booklet are carefully read as they supply essential indications regarding the safety of the installation, use and maintenance.

This manual and the wiring diagram must be stored with care and made available to the operator for any future consultation. The appliance must be installed, tested and serviced by qualified personnel in possession of the legal qualifications. The constructor declines all responsibility with invalidity of the warranty in the event of electrical and/or mechanical modifications.

Any adjustment whatsoever not expressly authorised and in disrespect of this manual invalidate the warranty. Observe all existing local regulations at the time of installation. Check that the characteristics of the electric grid correspond to the data given on the serial plate of the appliance. The packing materials (plastic bags, polystyrene, nails, etc.) as potential hazards, must be kept out of the reach of children and properly recycled according to the existing local regulations.

The appliance has been designed and constructed for the blast chilling and freezing of foodstuffs and should therefore be destined to this sole purpose for which it has been expressly conceived. Any use besides this specific purpose does not commit the constructor in any way. Shutdown the appliance in the event of breakdown or malfunctions. For eventual repairs contact exclusively the authorised service centres and request the use of original spare parts. If in doubt do not use the appliance and contact professionally qualified personnel. The disrespect of the above conditions could risk the safety of the appliance.

# 1.2. TECHNICAL WARNINGS

The appliance must be used by qualified personnel. Keep off the children from the appliance above all if it is in function. Every appliance has a serial plate on the right side.

# 1.3. USE WARNINGS

Remove from the room any stranger material as manual, plastic bags, polystyrene, nails, etc before start operating with the equipment. Clean the inside and outside surfaces only with warm water and soap or a neutral detergent. Rinse with plenty of water and dry thoroughly.

Don't use abrasive brushes or other damaging materials for the appliance's surfaces.

At the end of the working day, clean the inside (above all) and outside of the machine, to ensure smooth operation of the appliance and prolong its useful life. Do not use high pressure water jets when cleaning the appliance.

Never stretch the power cable. Place the machine in a ventilated room. When using the appliance, never obstruct the air inlet when the appliance in on , so as not to compromise its performance and safety.

For the final disposal of this appliance, comply with local regulations in force.



# 2. GENERAL TECHNICAL FEATURES

## 2.1. DATA SHEET

Model	Cooling capacity	Voltage	Gas	Cooling pow.	Tot. pow.	Packed vol.	Gross Weight
3 x 1/1 GN	12 Kg (+3 °C) 8 Kg (-18 °C)	230 V 1N 50 Hz	R452A	645 W	670	0.36 m³	75 kg
5 x 1/1 GN	18 Kg (+3 °C) 12 Kg (-18 °C)	230 V 1N 50 Hz	R452A	792 W	875	0.59 m³	103 kg
5 x 1/1 GN + 60x40	18 Kg (+3 °C) 12 Kg (-18 °C)	230 V 1N 50 Hz	R452A	792 W	875	0.67 m <sup>3</sup>	116 kg
10 x 1/1 GN + 60x40	36 Kg (+3 °C) 25 Kg (-18 °C)	230 V 1N 50 Hz	R452A	1486 W	1060	1.16 m³	170 kg
15 x 1/1 GN + 60x40	48 Kg (+3 °C) 32 Kg (-18 °C)	400 V 3N 50 Hz	R452A	2303 W	1360	1.32 m³	190 kg

#### 3. INSTRUCTIONS FOR THE INSTALLER

Read carefully all the instructions in this manual, because they give important suggestions about the right installation and use of the appliance.

#### 3.1. CONTROLS AT RECEPTION

The appliance are shipped in appropriate protective packing.

On arrival, check that the appliance has not incurred in transport damage and that it is complete according to the order. In the event of visible damage immediately note the damage on the transport documents with the following wording: "RECEIVED WITH RESERVE FOR EVIDENT DAMAGE OF PACKING".

#### 3.2. HANDLING AND PLACING

IMPORTANT: All the operations indicated below must be performed in respect of the existing safety regulations, both for the equipment in use and for the operating procedures.

ATTENTION: Before beginning handling operations ensure that the lifting capacity is enough for the appliance in question.

Handling with fork lift or similar (A); Insert the forks into the side or back of the wooden pallet supplied with the appliance, begin lifting checking that the appliance is in stable equilibrium.

When insert the lifting device, pay attention to the power supply cable and the position of the feet.

ATTENTION: during handling do not tip or turn over.

WARNING: the respect of the recommendations printed on the outside of the packing is a guarantee of a sound physical and operating condition of the appliance, all to the advantage of the end-user.

## THEREFORE THE FOLLOWING IS RECOMMENDED:

- HANDLE WITH CARE
- KEEP DRY
- STACKING OF OTHER OBJECTS ON THE APPLIANCE MUST BE ABSOLUTELY AVOIDED
- DO NOT COMPRESS SIDEWAYS
- DO NOT TURN UPSIDE DOWN
- STACKING OF BLAST CHILLERS IS PERMITTED: READ CAREFULLY THE MAXIMUM PIECES' NUMBER INDICATED ON THE EMBALLAGE.

Lift the appliance to separate it from the pallet.

Remove the packing (B) and the protective film avoid using abrasive brushes or other damaging materials for the appliance's surfaces (C).

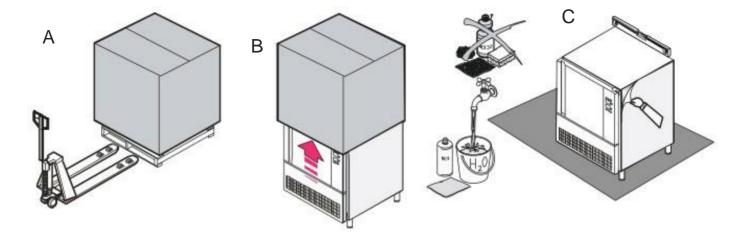
Check that the appliance is perfectly levelled.

Regulate the adjustable feet if necessary. Place the appliance away from heat sources and in a ventilated room.

When using the appliance, never obstruct the air inlet when the appliance in on, so as not to compromise its performance and safety.

Placing the appliance in a site easy to join, so every type of maintenance, control and repair may be done easily.





# 3.3. UNPACKING AND DISPOSAL OF IT

Place the appliance on the ground in its chosen position.

Check that the serial number corresponds to the transport documents. Check for visible damages. Keep the packing out of the reach of children, as it could be a danger hazard. Discharge the packing products to the specialised collection or recycling points in respect of the existing regulations.

#### 3.4. DISPOSAL OF UNIT

Before scrapping the appliance, keep it inoperative by removing the power cable, eliminating all parts of the appliance that could constitute an hazard and invalidate locks, hinges and any other closing devices to avoid that children playing could be trapped inside or injured.

IMPORTANT: COMPLY WITH LOCAL REGULATIONS IN FORCE CONCERNING THE FINAL DISPOSAL OF THIS TYPE OF EQUIPMENT

#### 4. START-UP

Before connecting the appliance check that the data on the serial plate correspond to the actual electrical supply.

The serial plate giving the electrical data required in the installation is placed in the right side.

The installation must be made according to the instructions given in this section, by professionally qualified personnel.

THE ELECTRICAL SAFETY OF THIS APPLIANCE IS GUARANTEED ONLY WHEN IT IS CONNECTED TO AN EFFICIENT EARTHING PLANT AS PRESCRIBED BY EXISTING ELECTRICAL SAFETY REGULATIONS.

THIS BASIC SAFETY REQUIREMENT MUST BE VERIFIED AND, IF IN DOUBT, REQUEST A CAREFUL CONTROL OF THE PLANT BY PROFESSIONALLY QUALIFIED PERSONNEL.

THE CONSTRUCTOR DECLINES ALL RESPONSIBILITY FOR DAMAGES CAUSED BY THE DISRESPECT OF AN EFFICIENT EARTHING OF THE PLANT.

Check that the appliance is perfectly levelled.

Regulate the adjustable feet if necessary.

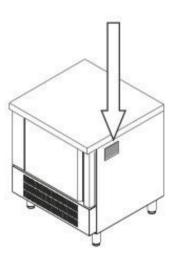
Check that the plastic protective coating is removed from all external surfaces.

Check that the interior is washed with warm water and a neutral soap.

Check that the appliance is positioned as far as possible from heat sources.

Check that the free air circulation around the motor compartment is not obstructed.

Control the voltage and frequency of the mains distribution, they must fall within the given values: 230 V  $\pm$  10%; 50 Hz / 400 V  $\pm$  10%; 50 Hz





#### 5. CONTROL PANEL

#### 5.1 MAIN SCREEN

When the blast chiller is electrically powered, the screen displays the main screen (shown below) from which it is possible to access various blast chilling or freezing modes.

The main screen icons are:



BLAST CHILLING icon.

Pressing this icon gives access to the different chilling modes at +3 °C.



DEEP FREEZING icon.

Pressing this icon gives access to the different freezing modes at -18  $^{\circ}$ C.



FISH SANIFICATION icon.

For this function only the probe control is provided.



ICE CREAM HARDENING icon.

Pressing this icon gives access to the 2 different ice cream hardening modes; *ICE SOFT* and *ICE HARD*.



EXTRA icon.

Pressing this icon gives access to complementary (defrost and pre-cooling) or specific functions (bottle cooling or chamber sterilization).



# 5.2 BLAST CHILLING AND CONSERVATION



Pressing the BLAST CHILLING icon on the main screen, the system shows the screen on the side. In this screen it is possible to select the type of blast chilling control between:

- Blast chilling with probe control
- Blast chilling with time control.



In both cases, at the end of the chilling phase the blast chiller automatically switches to a conservation phase for an indefinite time.

The system proposes chilling with probe control by default (the probe icon is highlighted).

The system also proposes the choice between:



- Soft blast chilling (proposed by default)
- Hard blast chilling

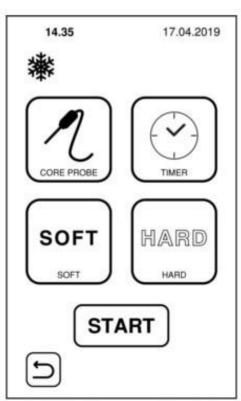
The soft cycle is divided into the following phases:



- blast chilling
- conservation

The hard cycle is divided into the following phases:

- hard blast chilling
- blast chilling
- conservation





At this point, to start the cycle press the START icon.

To stop the cycle, press the START icon again.

If the temperature detected by the probe reaches the blast chilling end value within the maximum expected duration, the cycle will be considered correct and the blast chiller will automatically go to the conservation phase

When switching from blast chilling to conservation phase, the buzzer is activated for a set time.

If the temperature detected by the probe does not reach the blast chilling end value within the maximum expected duration, blast chilling will not be completed correctly but will continue.

The buzzer will be activated.

If the temperature control has been selected, the system starts a test to verify the correct insertion of the probe.

If the test is successfully completed the cooling cycle will start; otherwise a time-controlled cooling cycle will be started (in this case, the *probe* icon is deactivated and the *time* icon is activated).

# 5.3 DEEP FREEZING AND CONSERVATION



Pressing the *DEEP FREEZING* icon on the main screen, the system shows the screen on the side.

The options are the same as on the BLAST CHILL screen:

- Deep freezing with probe control
- Deep freezing with time control.



In both cases, at the end of the deep freezing phase the blast chiller automatically switches to a conservation phase for an indefinite time.

The system also proposes the choice between:



SOFT

- Hard deep freezing (proposed by default)
- Soft deep freezing

The hard cycle is divided into the following phases:

- deep freezing
- conservation



The soft cycle is divided into the following phases:

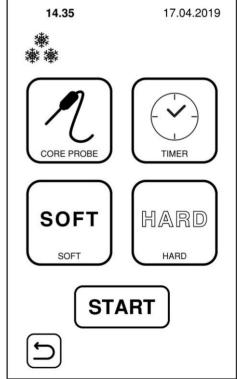
- soft deep freezing
- · deep freezing
- conservation

At this point, to start the cycle press the START icon.

To stop the cycle, press the START icon again.

If the temperature control has been selected, the system starts a test to verify the correct insertion of the probe.

If the test is successfully completed the cooling cycle will start; otherwise a time-controlled cooling cycle will be started (in this case, the *probe* icon is deactivated and the *time* icon is activated).





# 5.4 STARTING A BLAST CHILLING OR DEEP FREEZING CYCLE

After selecting a blast chilling or a deep freezing cycle and pressing *START* to start it, a screen like the one on the side is displayed.

In the example shown, a soft blast chilling with probe has been selected.

The indications provided in the screen are:

Type of cycle: blast chilling (icon 🏶 ) soft

Control: probe (icon 1)

Chamber temperature at the top right.

Value detected by the probe (28° large in the middle of the screen)

End of cycle value (3° smaller)

The set value can be changed by pressing the probe icon.

STOP button to interrupt the cycle.



In this other example the indications are:

Type of cycle: deep freezing (icon \*\*) hard

Control: probe (icon  $\mathcal{L}$ )

Active phase **()** (we remind you that a hard cycle consists of a hard deep freezing phase, a deep freezing phase and a conservation phase).

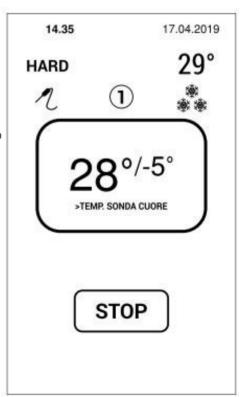
Chamber temperature at the top right.

Value detected by the probe (28° large in the middle of the screen)

End of phase value (-5° smaller)

The set value can be changed by pressing the probe icon.

STOP button to interrupt the cycle.





Finally, in the last example the indications are:

Type of cycle: blast chilling (icon \*\*) soft

Control: time (icon

Chamber temperature at the top right.

Time remaining to the end of the cycle (00:04 large in the middle of the screen)

Estimated time of cycle end (14:39 smaller in the middle of the screen)

The cycle duration can be changed by pressing the time icon.

STOP button to interrupt the cycle.



# 5.5 FISH SANIFICATION



Pressing the FISH SANIFICATION icon gives access to the deep freezing cycle designed specifically to carry out the reclamation treatment against the anisakis, foreseen by the EC regulation 853/2004.

The EC Regulation 853/2004 provides that fish products administered without having undergone a cooking in which the heart of the product reaches a temperature of 60 °C for at least one minute, must be subjected to a preventive freezing, which guarantees a temperature of -20 °C at the heart of the product for 24 hours.

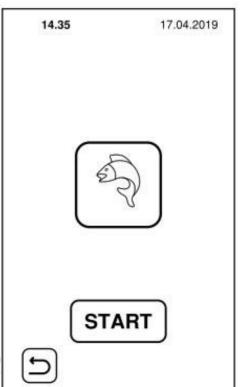
The FISH SANIFICATION program is divided into the following phases:

- Deep freezing with probe (chamber -40 °C and probe -20 °C max. 5 hours)
- Timed deep freezing 20 °C time 24 H
- Conservation at -20 °C

## **VERY IMPORTANT:**

After pressing *START*, the system starts a test to verify the correct insertion of the probe. If the probe recognition is not successfully completed, the cycle is interrupted.

If in the first phase the probe does not reach -20 ° C within the maximum time established (5 hours), the cycle continues but the central icon becomes with a flashing red border and sanification cannot be considered completed in compliance with the EC regulation 853 / 2004.





#### 5.6 ICE CREAM HARDENING



Pressing the ICE CREAM icon in the main screen gives access to the freezing cycle which serves to bring the ice cream temperature from -8/-10  $^{\circ}$ C (which is the ice cream temperature when it leaves the machine) to about -20  $^{\circ}$ C which is the temperature with which it is normally placed in the display case.

This cycle also serves to freeze the residual water in microcrystals instead of macrocrystals as would occur without this freezing.

This cycle includes 2 modes: SOFT (with chamber set at -25 °C) or HARD (with set at -40 °C).

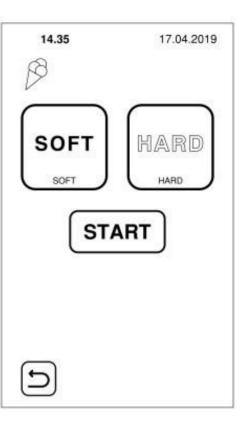
The control is only timed (the use of the probe is not foreseen) and can be modified to increase or decrease the temperature of the ice cream at the end of the cycle.

The ICE CREAM HARDENING program is divided into the following phases:

- · Pre-cooling
- · Timed deep freezing
- Conservation

After pressing *START*, wait for the pre-cooling end before introducing the ice cream into the blast chiller.

Door re-closure starts the freezing phase.



# 5.8 EXTRA FUNCTIONS



Pressing the *EXTRA* icon gives access to complementary (defrost and pre-cooling) or specific functions (bottle cooling or chamber sterilization).



# DEFROST function.

This function, which serves to defrost the blast chiller cell, can be activated either automatically (at the end of a freezing cycle) or manually (by selecting the function in the *EXTRA* menu and pressing *START*.



# PRE-COOLING function.

This function cools the cell to +5 °C.

If with pre-cooling in progress a blast chilling or freezing cycle is selected and started, the system stops pre-cooling and starts the selected cycle.

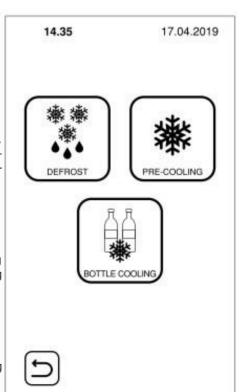


# BOTTLE COOLING function.

This function cools the cell to +2 °C.

The temperature can be changed using the keypad, setting values higher than +2 °C.

This cooling cycle is with indefinitely time.





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#### 5.9 STERILIZATION



This function is an optional to be requested at the blast chiller order.

Only if the optional is installed, the STERILIZATION icon appears in the EXTRA menu.

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LUMINOSITÀ

# 6.0 COMPLEMENTARY FUNCTIONS



By scrolling down the icon shown at the side (located in the upper left corner of the screen), the management screen for complementary functions opens.

In order, these icons are:



#### SETTINGS

This icon gives access to the parameters that manage the operation of the blast chiller. Access is password protected. Depending on whether the password is that of the user or that of the Technical Service, the number of editable parameters will be different.



# **CALENDAR**

This function allows you to select date, time, time zone ...



# DFMO

This icon activates the DEMO mode.

To be used in fairs or showrooms to be able to show the functioning of the software without activating cooling or ventilation.



# TECHNICAL SERVICE

This icon allows access (password protected) to the area reserved for the technical service.



#### UPDATE

It allows you to install software updates using the USB connection.



#### **ALARMS**

In this folder all the alarm activation screens are saved, with activation date and time. Images can be sent to the technical service or the manufacturer to provide detailed information regarding the malfunctioning.



## **MANUFACTURER**

This icon allows access (password protected) to the area reserved for the manufacturer.



Pressing this icon displays the installed software version.



#### LANGUAGES

It allows you to choose between the various languages available.



#### 8. CLEANING AND MAINTENANCE

This section has been dedicated to the end-user and is extremely important for the appliance to work correctly in the long-term.

A few simple operations conscientiously carried out at set periods can avoid the need of servicing by specialised personnel.

The operations to be made do not require any particular technical knowledge and can be summarised in simple controls of the appliance components.

BEFORE BEGINNING ANY TYPE OF MAINTENANCE OR CLEANING WORK ON THE APPLIANCE DISCONNECT THE MAINS POWER SUPPLY

DO NOT WASH THE APPLIANCE DIRECTLY WITH HIGH PRESSURE WATER JETS. AVOID

SPRAYING WATER DIRECTLY ONTO ELECTRICAL PARTS.

APPLIANCE Check that the bodywork is clean.

Pay particular attention to the sections in steel.

Clean the inside and outside surfaces only with warm water and soap or a neutral detergent.

Rinse with plenty of water and dry thoroughly.

If the appliance is inactive for long periods of time proceed as follows: turn the main switch to the OFF position. Remove the plug from its socket.

Empty the appliance and clean.

Leave the door half-open to avoid creation of bad smells.

Protect the compressor group from dust.

CORE PROBE Clean well the edge for the first use of it, and after every use.

If it's not in use, after cleaning, cover with its rubber cap and place it in the proper side, within the appliance's chamber.

CONDENSING COIL It is important that the coil is capable of offering the maximum possible heat exchange.

It is therefore important that its surface be always free of dirt or dust that may be deposited by the effect of the fan's operation.

Use a vacuum cleaner and soft bristled brush to remove all the impurities such as paper or dust that may have deposited on the coil.

Check that the aluminium fins have not been damaged or bent; if this is the case "comb" the coil with the appropriate tool until the original condition is regained to optimise the air flux.

POWER CABLE Check that the power cable that connects the appliance to the mains socket is not cut, cracked or altered in such a way as to compromise the insulation.

Contact your authorised service centre if this requires maintenance.