

# **Blast Chiller**

**Instruction manual**

**THERMOCool**

**Models:**

**THC-BFS3, THC-BFS5  
& THC-BFS10**

## **Safety Tips**

- Position on a flat, stable surface.
- A service agent/qualified technician should carry out installation and any repairs if required. Do not remove any components or service panels on this product.
- Consult Local and National Standards to comply with the following:
  - Health and Safety at Work Legislation
  - Fire Precautions
  - Wiring Regulations
  - Building Regulations
- DO NOT use jet/pressure washers to clean the appliance.
- DO NOT use the appliance outside.
- DO NOT use this appliance to store medical supplies.
- DO NOT use electrical appliances inside the appliance (e.g. heaters, ice cream makers, etc.)
- DO NOT allow oil or fat to come into contact with the plastic components or door seal. Clean immediately if contact occurs.
- Always carry, store and handle the appliance in a vertical position and move by holding the base of the appliance.
- Always switch off and disconnect the power supply to the unit before cleaning.
- Keep all packaging away from children. Dispose of the packaging in accordance with the regulations of local authorities.
- If the power cord is damaged, it must be replaced by an agent or a recommended qualified technician in order to avoid a hazard.

- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience or knowledge, unless they have been given supervision or instruction concerning the use of the appliance by a person responsible for their safety.
- Children should be supervised to ensure that they do not play with the appliance.
- It is recommended that this appliance should be periodically tested (at least annually) by a Competent Person. Testing should include, but not be limited to: Visual Inspection, Polarity Test, Earth Continuity, Insulation Continuity and Functional Testing.

### Caution Risk of Fire

- Do not store explosive substances such as aerosol cans with a flammable propellant in this appliance.



**Warning: Keep all ventilation openings clear of obstruction. Unit should not be boxed in without adequate ventilation.**

- **Warning:** Do not use mechanical devices or other means to accelerate the defrosting process, other than those recommended by the manufacturer.
- **Warning:** Do not damage the refrigerant circuit.
- **Warning:** Do not use electrical appliances inside the food storage compartments of the appliance, unless they are the type recommended by the manufacturer.

## Product Description

**THC-BFS3** - Thermocool Blast Chiller Touch screen Controller (3x1/1GN)

**THC-BFS5** - Thermocool Blast Chiller Touch screen Controller (5 x 1/1GN)

**THC-BFS10** - Thermocool Blast Chiller Touch screen Controller (10 x 1/1GN)

## Introduction

Please take a few moments to carefully read through this manual. Correct maintenance and operation of this machine will provide the best possible performance from your Thermocool product.

## Pack Contents

The following is included:

- Thermocool Blast Chiller
- Instruction manual

Thermocool prides itself on quality and service, ensuring that at the time of packaging the contents are supplied fully functional and free of damage.

Should you find any damage as a result of transit, please contact your dealer immediately.

## Installation



**Note: If the unit has not been stored or moved in an upright position, let it stand upright for approximately 12 hours before operation. If in doubt allow to stand.**

1. Remove the appliance from the packaging. Make sure that all protective plastic film and coatings are thoroughly removed from all surfaces.
2. Maintain a distance of 20cm (7 inches) between the unit and walls or other objects for ventilation. **NEVER LOCATE NEXT TO OR NEAR A HEAT SOURCE.**



**Note: Before using the appliance for the first time, clean the interior with soapy water.**

3. Set the brakes on the castors to keep the appliance in position.

## Operation

### Storing Food

To get the best results from your appliance, follow these instructions:

- It is important that food entering the Blast Chiller/Freezer does not exceed a temperature of 90°C.

- It is recommended that metal containers / trays are used as other materials such as plastic or polystyrene containers will act as an insulator and extend blast chilling times.
- Sufficient space must be left between products in order to guarantee a sufficient flow of cold air. Ensure product is not in contact with the internal walls of the unit, and leave sufficient gaps between trays.
- Never obstruct the inlet of the evaporator fans.
- Products that are more difficult to chill because of their composition and size should be placed in the centre of the unit.
- Blast chilling data refers to standard products (low fat content) with a thickness below 50 mm: therefore avoid overlaying products on trays or the insertion of pieces with a much higher thickness, as this will lead to an extension of blast chilling times. Always distribute the product well on the trays and in the case of thick pieces decrease the amount to blast chill.
- Limit the number of times and the duration of time the doors are opened.
- The chiller should be used for storage for short periods only.
- When removing product that has undergone blast chilling/shock freezing, always wear gloves to protect hands from cold burns.

### Insert the food probe

- Before selecting which cycle to use, the probe must be inserted into the food. This allows the internal temperature of the food to be measured.
- It is important that the probe is correctly connected to the unit, or an alarm will activate and the appliance will not function.



**Note: To prevent bacterial contamination or contamination of any other biological nature, the needle probe must be disinfected after use.**

# User interface

## Initial information

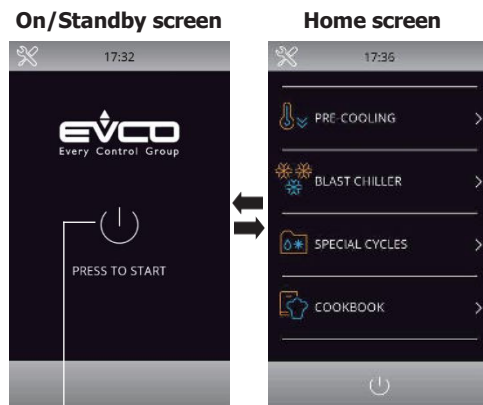
The interface has the following operating modes:

- **Off:** No power to the device
- **Stand-by:** The device is powered but switched off
- **On:** The device is powered, switched on and awaiting start-up of an operating cycle
- **Run:** The device is powered, switched on and running an operating cycle

## Initial switch-on

Connect the appliance to the mains power supply. The appliance will show the loading screen. When loading completed, the display will show:

- the Home screen if pressing the central area in the On/Standby screen
- the Home screen directly



Press this central area to switch on


Press this bottom area to switch off

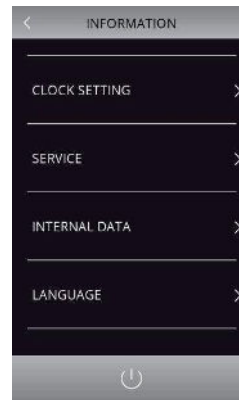
### Notes:

- "Switch on the device" means moving from "Stand-by" to "On" mode;
- "Switch off the device" means moving from "On" to "Stand-by" mode.
- If the power supply fails during "stand-by" or "on" mode, when power is restored the device will return to the mode set before the failure.

**Note: If the power supply has been cut off long enough to cause a clock error (RTC code), it will be necessary to reset the date and time. The date and time can be set from the settings screen (For details, please see "Section 12.1" in the controller manual supplied with the appliance).**

## Selecting the screen language

1. While in the Home screen, press the set key  on the left top.
2. The display will show the Setting menu as below:



3. Press "LANGUAGE" to display the language menu:
4. Press the desired language to confirm (Note: The default language is English).


## Unlock keypad

If the keypad is locked, a menu will pop up when it is touched. Slide the finger rightward to unlock.

## Silencing the buzzer

Press any key while buzzer sounding to cease.

## Door-open signal

When the door is opened, the signal  will appear on the display. Press any area on the display to remove this signal.



# Selecting the operating mode

The operating functions can be accessed from the Home screen by selecting the desired area.

**Note:**  
**For the use of the appliance, please follow the screen indications for instant operations. Or alternatively you can refer to the controller manual supplier with the appliance for details.**



	<p>Press this area to select a cabinet pre-cooling cycle. (For details, see Section 10 in the controller manual supplied with the appliance.)</p>
	<p>Blast chilling mode. Under this mode, you can select/set a standard blast chilling/blast-freezing cycle, a multi-needle probe or multi-timer cycle. (For details, see Section 7 in the controller manual supplied with the appliance.)</p>
	<p>Special cycles mode: Under this mode, only the probe heating function is supported. (For details, see Sections 6.2 and 8.6 in the controller manual supplied with the appliance.)</p>
	<p>Makes it possible to access the recipe book mode, where pre-saved recipes are available for selection. (For details, see Section 9 in the controller manual supplied with the appliance.)</p>
	<p>This area will appear if an alarm is activated.</p>
	<p>Press this area to see the historical data stored during operation. (For details, see Sections 7.6.2 and 12.2 in the controller manual supplied with the appliance.)</p>

# Cleaning, Care & Maintenance



**Switch off and disconnect from the power supply before cleaning.**

- Clean the interior of the appliance as often as possible.
- Do not use abrasive cleaning agents. These can leave harmful residues.
- Clean the door seal with water only.
- Always wipe dry after cleaning.
- Do not allow water used in cleaning to run through the drain hole into the evaporation pan.
- Take care when cleaning the rear of the appliance. Sharp edges can cut.
- An agent or qualified technician must carry out repairs if required.

## Stainless Steel Care

To maintain the stainless steel exterior of your item, please consider the following information: Never:

- Use abrasive Scourers or scrubbing pads, etc.
- Use Chlorinated or acidic detergents
- Allow anything e.g. food, dirt, cleaning chemicals to remain on the surface for longer than necessary, clean them off right away.
- Allow the surface to remain wet.

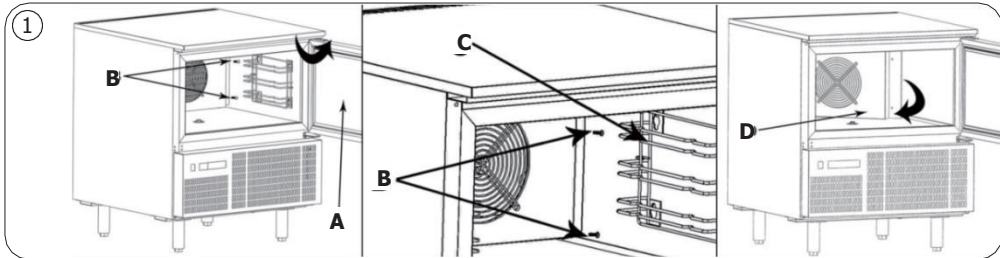
Do:

- Clean often.
- Use soft Cloths or plastic Scourers.
- Rub with the grain of the metal, rather than across it.
- Use detergents and polish designed for cleaning Stainless Steel.
- Ensure that the cleaning products are washed off fully and that the steel is left dry.



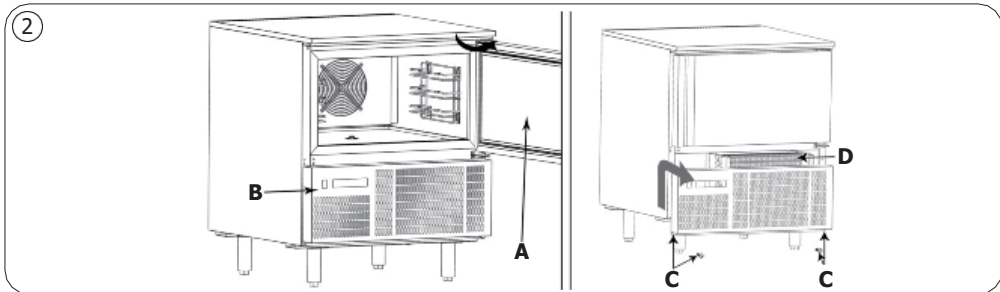
## Cleaning the evaporator

- Clean the evaporator periodically.
  - As the fins of the evaporator are very sharp. Always wear protective gloves.
  - Only a brush can be used for cleaning. Do not use jets of liquid or sharp instruments.
  - To access the evaporator proceed as follows:
1. Open the door (A) of the appliance.
  2. Loosen the two screws (B) on the right of the deflector.
  3. Remove the runner (C).
  4. Turn the deflector (D) to the left.



## Cleaning the condenser

- Clean the condenser periodically.
  - As the fins of the condenser are very sharp, always wear protective gloves.
  - Use protective masks and glasses in the presence of dust.
  - Whenever the condenser has a deposit of dust in correspondence with the fins, this can be removed using a suction device or with a brush applied, using a vertical movement along the direction of the fins.
  - No other instruments must be used, which may deform the fins and therefore the efficiency of the appliance.
  - To clean, proceed as follows:
1. Open the door (A) of the appliances.
  2. Remove the lower panel (B). To do this, remove the screw fasteners (C).
  3. It is now possible to clean the finned part of the condenser (D) using suitable tools and protection devices.
  4. After cleaning, close the control panel and fix it with the screws removed beforehand.



# Troubleshooting

If your appliance develops a fault, please check the following table before contacting your dealer.

<b>Fault</b>	<b>Probable Cause</b>	<b>Solution</b>
The appliance is not working	The unit is not switched on	Check the unit is plugged in correctly and switched on
	Plug and lead are damaged	Call agent or qualified Technician
	Fuse in the plug has blown	Replace the fuse
	Power supply	Check power supply
	Internal wiring fault	Call agent or qualified Technician
The appliance is leaking water	The appliance is not properly levelled	Adjust the screw feet to level the appliance (if applicable)
	The drain is blocked	Clear the discharge outlet
	Movement of water to the drain is obstructed	Clear the floor of the appliance (if applicable)
	The water container is damaged if water is leaking from back of container	Call agent
The appliance is unusually loud	The appliance has not been installed in a level or stable position	Check installation position and change if necessary
	Loose nut/screw	Check and tighten all nuts and screws
The appliance is not chilling	Wrong program	Change program – see controller manual
	The filter is blocked	Clean filters
Temperature of food is not being detected	The food probe is broken	Purchase a new food probe from your Distributor
Food has freezer burns after removing from unit	The selected cycle is not suitable for the food	Change cycle from hard freeze to soft freeze (Selecting the operating mode)
The appliance is beeping and there is a message appearing on the control panel	There is a problem with the unit being indicated by the control alarm signal	See table below →

Control panel message/code	Meaning	Required action
RTC	Clock error	Re-set date and time. For details, see "Section 12.1: Service" in the controller manual supplied with the appliance
CABINET PROBE	Cabinet probe error	<ul style="list-style-type: none"> <li>• Check that the probe is undamaged</li> <li>• Check the device-probe connection</li> <li>• Check the cabinet temperature</li> <li>• If problem persists, Call agent or qualified technician.</li> </ul>
EVAPORATOR PROBE	Evaporator probe error	Same as for the cabinet probe error but with reference to the evaporator probe
CONDENSER PROBE	Condenser probe error	Same as for the cabinet probe error but with reference to the condenser probe
NEEDLE PROBE SENSOR 1/2/3	Needle probe/sensor 1/2/3 error	Same as for the cabinet probe error but with reference to needle probe 1/2/3
NEEDLE PROBE	Needle probe alarm (all the needle probe sensors enabled are in alarm status)	Same as for the cabinet probe error but with reference to all the needle probes
NEEDLE PROBE INSERTION	Needle probe not inserted alarm	Check that the needle probes have been correctly inserted
DOOR OPEN	Door open alarm	Check the door status
HIGH TEMPERATURE	Maximum temperature alarm (HACCP alarm)	<ul style="list-style-type: none"> <li>• Check the cabinet temperature</li> </ul>
LOW TEMPERATURE	Minimum temperature alarm (HACCP alarm)	<ul style="list-style-type: none"> <li>• Check the cabinet temperature</li> </ul>
POWER FAILURE	Power failure alarm (HACCP alarm)	Check the device-power supply connection
<b>Note: This table just lists very basic alarms. For more detailed alarm information, please see "Section 16 Alarms" in the controller manual.</b>		

## Technical Specifications

Model	Voltage	Power	Capacity	Weight (kg)	Temperature range	Refrigerant	Dimensions H x W x D
<b>THC-BFS-3</b>	220-240V~ 50Hz	700W	3 x GN1/1	104	+5°C ~ -35°C	R290	965 x 804 x 826
<b>THC-BFS-5</b>	220-240V~ 50Hz	720W	5 x GN1/1	116	+5°C ~ -35°C	R290	1035 x 804 x 826
<b>THC-BFS-10</b>	220-240V~ 50Hz	900W	10 x GN1/1	150	+5°C ~ -35°C	R290	1885 x 800 x 815

## Electrical Wiring

The plug is to be connected to a suitable mains socket. The appliance is wired as follows:

- Live wire (coloured brown) to terminal marked L
- Neutral wire (coloured blue) to terminal marked N
- Earth wire (coloured green/yellow) to terminal marked E

These appliances must be earthed.



If in doubt consult a qualified electrician.

Electrical isolation points must be kept clear of any obstructions. In the event of any emergency disconnection being required they must be readily accessible.