Installation, Operating and Servicing Instructions

BLAST CHILLER FREEZER
BGBF-5P, BGBF-10

Please make a note of your product details for future use:

Date Purchased:_____

Model Number:_____

Serial Number:_____

Dealer:_____

_____

CONTENTS

IMPORTANT INFORMATION

Read these instructions carefully before using this product, paying particular attention to all sections that carry warning symbols, caution symbols and notices. Ensure that these are understood at all times.

WARNING!
This symbol is used whenever there is a risk of personal injury.

CAUTION!
This symbol isused whenever there is a risk of damaging your Lincat product.

NOTE:
This symbol isused to provide additional information, hints and tips.

KEEP THIS MANUAL FOR FUTURE REFERENCE

WARNINGS AND PRECAUTIONS

1.1 TESTING AND INTENDED USE

This equipment is tested in compliance with established regulations and then shipped ready for use.

"If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired."

1.2 INTRODUCTION

This manual provides all instructions required for the correct use of the equipment and to keep it in optimal condition. It also contains important user safety information. The following professional roles are explained in order to define individual responsibilities:

Installer: a qualified technician who installs the equipment in accordance with these instructions.

User: the person who, after having read this manual carefully, uses the equipment in accordancewith the intended specification of use described in this manual. User's responsibilities: ensure that the product is kept at suitable temperatures in an ambient environment less than +40°C (104°F); be aware of the regulations governing the conservation of products to refrigerate and to observe any whatsoever hygiene indications that may be applicable. The user is obliged to carefully read the manual and refer to its information at all times. Particular attention must be paid to safety warnings (refer to Section 1.5).

Routine maintenance technician: qualified operator able to perform routine maintenance of theequipment by following the instructions in this manual.

Service engineer: qualified technician, authorized by the manufacturer to perform extraordinarymaintenance of the equipment.

The symbol ⚠ appears at certain points in the manual to draw the reader's attention to important safety information.
The manufacturer declines any responsibility in case of improper use of the equipment deviating from the reasonably construed intended use, and for all operations carried out that are not in compliance with the instructions reported in the manual.
This manual must be stored in an accessible and known place for all operators (installer, user, routine maintenance technician, service engineer).

1.3 PRODUCT DESCRIPTION

The equipment comprises a single body with paneling in various materials and insulation with expanded polyurethane foam. The equipment instruments are located on the front panel where the electrical wiring is housed. The interior parts are fitted with suitable supports for shelves. The doors are fitted with an automatic return device and magnetic seal elements. During the design and construction stage all measures have been adopted to implement total safety including radius interior corners, funnel-shaped base panel to

convey condensate to exterior, no rough surfaces, fixed guards protecting moving or potentially dangerous parts.

1.4 GENERAL SAFETY REGULATIONS

Read this manual carefully and follow the instructions contained herein.

The user assumes full responsibility in case of operations carried out without observing the instructions in the manual.

Do not use this product with flammable gases or flammable solvents.

Do not store flammable gases, flammable liquids or flammable solids in these units.

Primary general safety regulations:

- Do not touch the unit with wet hands and/or feet. Do not use the equipment with bare feet;
- Do not insert screwdrivers or other pointed objects between guards or moving parts of the equipment;
- Do not pull the power cord to disconnect the equipment from the electrical mains Make sure that the equipment is not used by unsuitably qualified persons;
- Before performing any cleaning or maintenance on the equipment disconnect it from the electrical mains by switching off the main switch and extracting the plug;
- **Never** use any metallic scouring pads, brushes, abrasive cleaners or strong alkaline solution on any surface.
- The relocation of the unit must be performed by qualified personnel. Do not shift the refrigerator from side to side as this may create leakage point across the cooling unit piping.
- In case of faults or malfunctions, switch off the equipment and do not attempt to repair it by yourself as doing so may void the warranty. All service and repair operations must be performed exclusively by a manufacture's authorized engineer. (Authorized service technician, trained service personnel, authorized service personnel)
- This application, like any other appliance, must have access to fresh air/oxygen;
- Keep clear of obstruction all ventilation openings in the appliance enclosure or in the structure for building-in.
- 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.**

Do not use FLAME to check for gas leak.

Do not under any circumstances try to modify or repair valves, regulator, connectors, controls or any other appliance. Doing so creates the risk of a gas leak.

1.5 CUSTOMER'S RESPONSIBILITIES

The customer is required to:

- Execute the electrical connection of the equipment Prepare the place of installation;

- Provide consumable materials for cleaning Perform routine maintenance;
- In the case of power failures or malfunctions do not open the doors, in order to maintain the internal temperature for as long as possible. If the problem persists for more than a few hours, move the contents to a more suitable place.

1.6 CUSTOMER SERVICE REQUESTS

- For all technical problems and any requests for technical service, refer exclusively to the manufacturer's authorized personnel;

1.7 ORDERING OF SPARE PARTS

- Orders of spare parts should be made by consulting the part reference code and the serial number of your unit. Consult your dealer.

1.8 PRODUCT CONFIGURATION

- Blast chillers and shock freezers are machines used to rapidly cool food, both to prevent the spread of food bacteria and to maintain the qualities, flavour, aromas and texture of chilled food.These machines are used in three distinct ways:
    - Temperature reduction of food down to +3°C
    - Freezing of food down to -18°C.
    - Thawing of food up to max +10°C.

PRODUCTS MUST BE STORED IN ORDER TO ENSURE EFFICIENT AIR CIRCULATION INSIDE THE UNIT AND SHALL NOT COME OUT OF THE SHELF PERIMETER.

1.9 RULES OF USAGE

- Do not stack foods that need to be blast chilled and/or frozen.
- Do not exceed the declared number of kilograms and distribute the product evenly in the trays.
- Blast chilling and shock freezing times always refer to products with a maximum thickness of 40 mm.
- Cool the chamber before performing a blast chilling cycle.
- Blast chill only one type of food at a time; different foods have different densities and therefore cycle executiontimes may vary.
- The core probe must be correctly positioned at the centre of the largest piece of the product, and thetip must never exit the product and/or touch the tray.
- To prevent the core probe from breaking, do not insert it into foods characterised by a temperature higher than 100°C.
- The core probe must always be cleaned after use to avoid malfunctioning.
- Do not cover foods with a lid or other object; the more isolated the product is, the more time will beneeded for blast chilling
- If foods are inserted with a temperature greater than 70°C, the machine may be overloaded, increasingblast chilling times and power consumption.
- Do not obstruct the ventilation air inlets.
- The water drip tray in the blast cell must be positioned under the equipment in the dedicated tracks.
- Make sure the drain pipe is positioned inside the drip tray and free it from any obstructions.

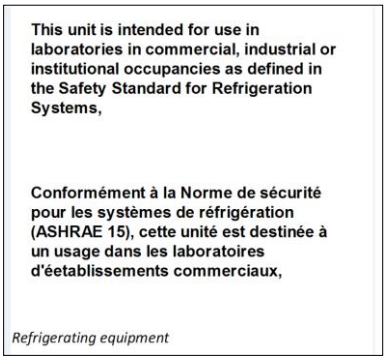
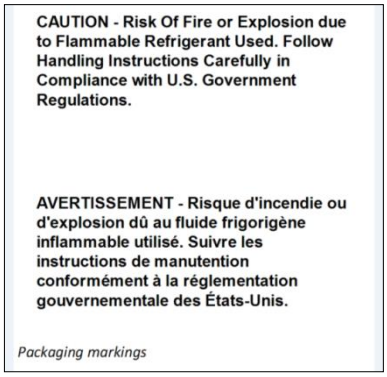
- The drip tray must be regularly emptied; to do so, simply extract the tray from the tracks, empty it and re-insert it back into the tracks.
- Do not store explosive substances, such as pressurised containers with flammable propellants, in this device.

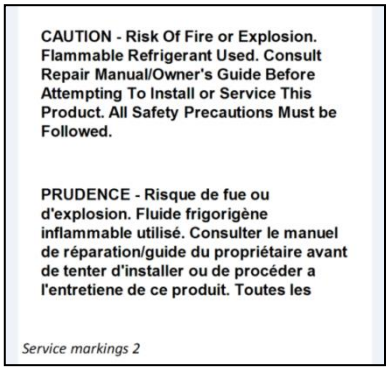
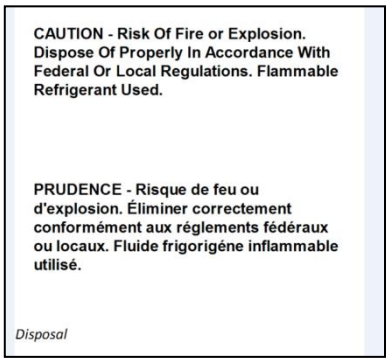
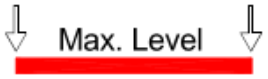
1.10 MATERIALS AND REFRIGERANTS

- Materials in contact or potentially in contact with products are in compliance with the relevant directives. The equipments designed and built so that contact parts can be cleaned before each use. The refrigerants utilized comply with established regulations.

1.11 WARNING LABELS

Electrical Shock	LABEL A
	Use of this equipment involves power supplies which convert line voltage to low voltage power. Do not modify or use power supplies other than OEM equipment. Connection of the power supply may require a properly grounded receptacle. Potential for electrical shock or equipment damage exists if precautions are not followed.
Hot Surface	LABEL B
	Avoid contact with the hot surfaces potential for skin's burns.
Cold Surface	LABEL C
	Avoid contact with cold freezer surfaces potential for cold burns or skin sticking to cold surfaces.
Safety Alert	LABEL D
	Important operating instructions. To reduce the risk of injury or poor performance of the unit read the user manual before putting the equipment into operation.
Warning	
	Indicates an immediately hazardous situation, which if not avoided, will result in death or serious injury.
Caution	
	Indicates an immediately hazardous situation, which if not avoided, may result in minor to moderate injury
Battery	LABEL E

	Indicates the location of the back-up battery
Risk of fire	LABEL F
	Risk of fire or explosion. Flammable refrigerant used. Follow handling instruction carefully. To be repaired only by trained service Personnel. Do not puncture Refrigerant Tubing.
	Refrigerating Equipment intended for laboratory use.
	Packaging markings *(Label attached upon the cartoon box)*
	Service markings. *(Label located near the cooling unit compartment)*

	Service markings *(Label located near the cooling unit compartment*
	Disposal *(Marking attached upon the exterior of the cabinet)*
	Max high load

TECHNICAL DATA

Environmental Operating Conditions

-Nominal environmental operating condition: ***Climatic class 5*** (40°C, HR%=40%);
- Ambient temperature operating range: **10°C~40°C**;
- Humidity: **60% maximum, non-condensing**;
-Electrical supply: **110~127V/60Hz; 220~230V/50Hz; 220V/60Hz;**
-Altitude: **2000 meters MSL** (Mean Sea Level);
- Usage: **This product is intended for use indoors only**.

Below is the table showing the technical data of the various models of blast chillers and freezers.

- Soft blast chilling cycle: Manual with Air set at 0°C
- Hard blast chilling cycle:
  - First step air set at 0°C
  - Second step air set at -20°C
- Shock freezing cycle: Manual with Air set at -40°C

Model	Blast chilling power consumption [kW]	Shock freezing power consumption [kW]	Blast chilling yield [Kg]	Shock freezing yield [Kg]	Gas charge R452A [Kg]	Blast chilling cycle time (+90°C ÷ +3°C)	Shock freezing cycle time (+90°C ÷ -18°C)
BGBF-5P	1,1	0,6	14	8	1,0	90	270
BGBF-10	2,7	1,3	30	20	2,0	90	270

Note: All relevant data referring to these products can be found on the data label visible either on the rear part of the cabinet or inside the cooled compartment . Here is an example of the label:

How to read the Serial Number:

YY	POP	XXXXXX
Last two numbers of the production		*Progressive serial number of 6 digits*

year

INSTALLATION AND COMMISSIONING

3.1 TRANSPORTATION AND HANDLING

The equipment must be transported and handled exclusively in upright position, in observance of the instructions printed on the packing.

This precaution is necessary to avoid contamination of the refrigerant circuit with compressor lube oil with resulting valve and heat exchanger coil failure and problems starting the electric motor or the risk of a gas leak. The manufacturer is not responsible for any problems due to transport executed in conditions other than those specified herewith.

The equipment is secured to a wooden pallet base, wrapped in a plastic film and packaged into a three waves carton box..

The equipment must be handled using a fork lift truck or a pallet truck with suitable forks (fork length at least equal to 2/3 length of unit).

3.2 POSITIONING

Incorrect positioning can cause damage to the equipment and generate hazardous conditions for personnel. The installer must therefore observe the following general regulations:

- Make sure you maintain a minimum of 11,8" (30cm). clearance from the walls and 19,7" (50 cm) from the sides where the air inlets and outlets are located.. The room must be well ventilated.
- Keep well away from sources of heat. Avoid direct sunlight
- Remove packing material.
- Remove accessories from inside the unit.
- Cartoon box or Wood base removal: using a hammer, tilt the cabinet to one side and loosen the two thread-forming screws, drag the cabinet from the back side holding the base still until the four castors have gone out from the containing holes, slightly tilt the cabinet backward and take the base away pulling it from the front side.

Use gloves when handling the 3 Waves cartoon box or the wooden base to protect the hands from splinters.

- Position the equipment with the help of a level. Remove the protective PVC film from the external surfaces of the unit.

Wait 24 hours after positioning the machine before starting it up, thus allowing the oil to return to the compressor and preventing it from breaking.

3.3 WIRING AND ELECTRICAL HOOK-UP

Receptacle installation and electrical wiring operations must be performed by a qualified electrician. For safety reasons adhere to the following indications:

- Check that the electrical plant is suitably sized for the absorbed power of the unit.
- If the electrical socket and the plug on the equipment power cord are incompatible, call technical service or your local distributor.

The power cord must be rated for the product and for the voltage and current marked on the product's electrical ratings label. The voltage and current rating of the cord should be greater than the voltage and current rating marked on the product.

- Do not use reductions or multi-way adapters

It is important to connect the equipment correctly to an efficient earth system executed in compliance with the relevant legislation.

- The equipment must be positioned so that plug can be easily reached

If the SUPPLY CORD is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.

3.4 SET UP OPERATIONS

To avoid errors and accidents, perform a series of checks for possible damage sustained during transport, installation and hook-up operations before starting up the unit.

PRELIMINARY CHECKS

- Check the condition of the power cord (no cut or chaffing). Check that the door hinges and shelf support are stable.
- Check the door seal is not damaged (broken or scratched) and that the door closes and seals properly.
- Make sure all copper tubing, unions are in perfect condition.

FOR OPTIMAL PERFORMANCE

- Do not block the motor compartment air vents. Do not lay objects on the top of the equipment
- Arrange the products on suitable shelves or in containers. Do not place products directly on the base or against the walls, doors or fixed guards of the unit.
- Make sure doors are kept closed.
- Keep the defrost water drain outlet clear.
- Limit the frequency and duration of opening; each time the door is opened the internal temperature will alter.
- Load products at ambient temperature gradually to allow correct refrigeration. Perform routine maintenance regularly.

3.5 RE- INSTALLATION

Observe the following procedure:

- Disconnect the power cord from the electrical outlet.
- Handle the equipment in accordance with the instructions in Section 3.1.
- Follow the instructions in Section 3.2 for positioning and hook-ups in the new location.

3.6 SCRAPPING AND DISPOSAL

These units may contain materials, which at the end of the working life of the apparatus, must be disposed at one of the recycling centres nominated by your Local National Health Department or as specified by the law in force. Scrapping and disposal of the equipment must be carried out in full observance of established legislation in your country.

In particular, the apparatus may contain the following materials:

- Iron
- Copper
- Aluminium
- Non-biodegradable plastics
- Fibre glass for printed circuits
- Ferrite
- Batteries
- CFC-free refrigeration gas
- Electrical and electronic equipment (WEEE)

The manufacturer shall not be chargeable for any disposal of the apparatus at the end of its working life.

In line with EU Directive 2002/96/EC for waste electrical and electronic equipment (WEEE), this electrical product must not be disposed of as unsorted municipal waste. Please dispose of this product by returning it to your local municipal collection point for recycling.

PROGRAMMING AND OPERATING INSTRUCTIONS

Please read these instructions carefully prior to installation and use this appliance, and follow all the precautions for installation and electrical connections; keep these instructions available for future consultation.

The device must be disposed of in accordance with local regulations pertaining to the collection of electrical and electronic appliances.

4.1 PRELIMINARY INFORMATION

The device has the following operational states:

•"on" (the device is switched on and an operating cycle is running)

•"stand-by" (the device is switched on and no operating cycle is running, but it is possible to select one)
•"off" (the device is switched off and no operating cycle is running, and it is not possible to select any).

If power is interrupted while in the "on" mode, when power is restored the device will be in the same state and the operational cycle will be restarted from the point reached when the power interruption occurred.

If power is interrupted while in "stand-by" or "off" mode, when power is restored the device will be in the same state.

4.2 SWITCHING THE DEVICE ON/OFF ("off"/"stand-by")

Ensure no procedures are running

•press **B1**  for 5 s
The displays will blink for few seconds than the upper display will show the actual air temperature inside the cavity.
In order to switch off the controller, press and hold the **B1**key for 5 secs, the upper display will show the **OFF**label.

4.3 STARTING/STOPPING AN OPERATIONAL CYCLE ("on"/ "stand-by")

In order to stop an ongoing cycle

•press **B1**  and release
the controller will switch into the stand-by mode.
The regulators are switched off while in "stand-by" mode.

4.4 THE DISPLAY

In the "on" state, during normal operation, display **DY1** shows:

•the temperature measured by the needle probe if a set-temperature chilling or freezing cycle is ongoing

•the temperature of the cabinet if a set-temperature chilling, or timed freezing or a storage cycle is ongoing.

Display **DY2** shows:

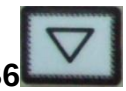
•the elapsed time for a blast chill or freezing cycle, if these are ongoing

While in "stand-by" mode, display **DY1** shows the cabinet temperature and display **DY2** shows "- - -".
While in "off" mode, display **DY1** shows "OFF" and display **DY2** is off.

4.5 DISPLAYING THE TEMPERATURES DETECTED BY THE PROBES

•Ensure the device is in "off" mode and no procedures are running

•press and hold**B2**  + **B4**  for 5 s: display **DY1** will show the message "**Pr1**" and display **DY2** will show the cabinet temperature

•press **B4**  or **B6**  to select one of the labels shown in the table below.

CODE	MEANING
Pr1	cabinet probe
Pr2	needle probe
Pr3	evaporator probe
Pr4	condenser probe

To quit the procedure:

•press **B1** 

If there is no condenser probe (parameter P3 = 0), label "**Pr4**" will not be displayed.

4.6 STARTING/STOPPING MANUAL DEFROSTING

To start defrosting in manual mode:

•ensure the device is in "off" mode and no procedures are running

•press **B11**  , the display **DY1** will show “dEF”.

If the evaporator temperature is above the value set by parameter **P23**(8 mins from factory), defrosting will not be activated.

To stop defrosting in manual mode:

•press **B11** 

4.7 SWITCHING ON THE UV LIGHT (cabinet sterilisation)

•Ensure that the device is in "stand-by" mode, that no procedures are running and that the micro port input is not active

•press **B10** 

The UV light is turned on for the period of time established by parameter **P46**(5 mins from factory) or until **B10**  is pressed once more.

4.8 HEATING THE NEEDLE PROBE

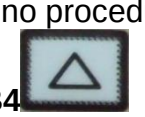
•Ensure that the device is in "stand-by" mode, that no procedures are running and that the micro port input is not active

•press and hold**B2**  for 5 s: the needle probe will be heated until it reaches the temperature set by parameter **P47**(45°C from factory) or at most for the period of time set by parameter **P48**(15mins from factory).

If the temperature detected by the needle probe is above the value set by parameter **P47**, heating will not be started.
The micro-port input alarm will not be reported during needle probe heating process.

4.9 BUZZER MUTE

•Ensure no procedures are running

•press **B4** 

After the period of time established by parameter **P56**(15 mins from factory) has elapsed, the buzzer is automatically muted.

4.10 OPERATIONAL CYCLES

The device has the following operational cycles:

•hard set-temperature chilling and storage
•normal set-temperature chilling and storage
•set-temperature freezing and storage
•hard timed chilling and storage
•timed normal chilling and storage
•timed freezing and storage.

Set-temperature cycles are preceded by a test to check correct needle probe insertion (see parameters **P14**(0°C from factory) and **P15**(60secs from factory); if the result of the test is negative, cycles will be started in timed mode.

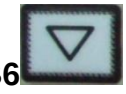
4.10.1 Hard set-temperature chilling and storage cycle

To select the cycle:

•ensure the device is in "off" mode and no procedures are running

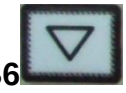
•press **B7**  : display DY1 will show the operational set point and LED B7 will switch on.

To adjust the first step operational setpoint:

•press **B4**  or **B6** 

To alter the second step operational setpoint:

•press **B7**  for 5 s: LED B7 will flash

•press **B4**  or **B6** 

These settings remain active until another cycle is selected. Also, it is possible to set the first step operational setpoint by means of parameter **P6**(-20°C from factory) and the second step operational setpoint by means of parameter **P4**(0°C from factory); the hard chill process progresses from the first step tothe second when the temperature detected by the needle probe reaches the value set by parameter **P12**(20°C from factory)**.**
To start the cycle:

•press **B1** 

When the temperature detected by the needle probe reaches the value set by parameter **P10**(3°C from factory), the buzzer will be activated for the length of time set by parameter **P55**(3 mins from factory) and the device switches to storage mode.
To interrupt the cycle:

•press **B1** 

4.10.2 Normal set-temperature chilling and storage cycle

To select the cycle:

•ensure the device is in "off" mode and no procedures are running

•press **B8**  : display **DY1** will show the operational setpoint and LED B8 will switch on.

To adjust the operational setpoint:

•press **B4**  or **B6** 

These settings remain active until another cycle is selected. It is also possible to set the operational setpoint by means of parameter **P4**.
To start the cycle:

•press **B1** 

When the temperature detected by the needle probe reaches the value set by parameter **P10**, the buzzer is activated for the length of time set by parameter **P55** and the device switches to storage mode.
To interrupt the cycle:

•press **B1** 

4.10.3 Set-temperature freezing and storage cycle

To select the cycle:

•ensure the device is in "off" mode and no procedures are running

•press **B9**  : display **DY1** will show the operational setpoint and LED **B9** will switch on.

To adjust the operational set point:

•press **B4**  or **B6** 

These settings remain active until another cycle is selected. It is also possible to set the operational set point by means of parameter **P5**(-40°C from factory).
To start the cycle:

•press **B1** 

When the temperature detected by the needle probe reaches the value set by parameter **P11**(-18°C from factory), the buzzer is activated for the length of time set by parameter **P55** and the device switches to storage mode.
To interrupt the cycle:

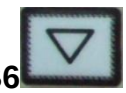
•press **B1** 

4.10.4 Hard timed blast chilling and storage cycle
To select the cycle:

•ensure the device is in "off" mode and no procedures are running

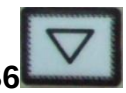
•press **B7**  : display **DY1** will show the operational set point and LED **L7** will switch on.

To adjust the first step operational set point:

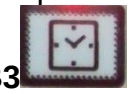
•press **B4**  or **B6** 

To alter the second step operational set point:

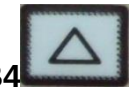
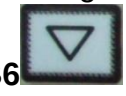
•press **B7**  per 5 s: LED **L7** will flash

•press **B4**  or **B6** 

It is also possible to set the first step operational set point by means of parameter **P6** and the second step operational set point by means of parameter **P4**.

•press **B3**  : display **DY2** will show the duration of the chilling step and LED **L3** will be switched on.

To adjust the duration of the chilling step:

•press **B4**  or **B6** 

It is also possible to set the chill duration time by means of parameter **P16**(90mins from factory).

These settings remain active until another cycle is selected. The hard chill process switches from the first step to the second step once the period of time established by parameter **P18**(45mins from factory) has elapsed.
To start the cycle:

•press **B1** 

When the chill duration time has elapsed, the buzzer is activated for the length of time set by parameter **P55** and the device switches to storage mode.
To interrupt the cycle:

•press **B1** 

4.10.5 Normal timed chilling and storage cycle
To select the cycle:

ensure the device is in "off" mode and no procedures are running

•press **B8**  : display **DY1** will show the operational setpoint and LED **L8** will switch on.

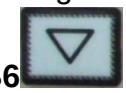
To adjust the operational setpoint:

•press **B4**  or **B6** 

It is also possible to set the operational setpoint by means of parameter P4.

•press **B3**  : display **DY2** will show the duration of the chilling step and LED **L3** will be switched on.

To alter the duration of the chilling step:

•press **B4**  or **B6** 

It is also possible to set the chill duration time by means of parameter **P16**.
These settings remain active until another cycle is selected.
To start the cycle:

•press **B1** 

When the chill duration time has elapsed, the buzzer is activated for the length of time set by parameter **P55** and the device switches to storage mode.
To interrupt the cycle:

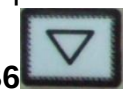
•press **B1** 

4.10.6 Timed freezing and storage cycle
To select the cycle:

•ensure the device is in "off" mode and no procedures are running

•press **B9**  : display **DY1** will show the operational set point and LED **L9** will switch on.

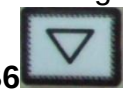
To adjust the operational set point:

•press **B4**  or **B6** 

It is also possible to set the operational set point by means of parameter **P5**.

•press **B3**  :

display **DY2** will show the duration of the freezing step LED **L3** will be switched on.
To adjust the duration of the freezing step:

•press **B4**  or **B6** 

It is also possible to set the freeze duration time by means of parameter **P17**(270 mins from factory).
These settings remain active until another cycle is selected.
To start the cycle:

•press **B1** 

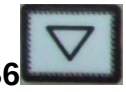
When the freezing step duration time has elapsed, the buzzer is activated for the length of time set by parameter **P55** and the device switches to storage mode.
To interrupt the cycle:

•press **B1** 

4.10.7 Storage, selection and starting a program
The device allows storage of operation cycle settings in programs; up to 99 programs can be stored.
To store a program:

•proceed as described in the last paragraphs without starting the cycle

•press **B12**  for 5 s: display **DY1** will show the label of the first unused program

•press **B4**  or **B6**  to select another label

•press **B12**  for 5 s: the device will store the program and exit from the procedure (any programs with the same label will be overwritten).

To select and start a stored program:

•ensure the device is in "stand-by" mode and no procedures are running

•press**B12**  : display **DY1** will show the label of the first program

•press **B4**  or **B6**  to select a program

•press **B1** 

To display the label of the current program:

•press **B12** 

4.10.8 Additional functions accessible during operational cycles

To display the cabinet temperature during a set-temperature chilling step or during a set-temperature freezing step:

•press the key related to the current cycle: display **DY1** displays the cabinet temperature for 5 s.

To display the temperature detected by the needle probe during a timed chilling step, timed freezing step or during storage:

•press **B2**  : display **DY1** shows the temperature measured by the needle probe for 5s.

To display the time elapsed since starting a chilling or freezing step:

•press **B4**  : display **DY2** shows the elapsed time for 5 s.

If the key is pressed during the storage phase, display **DY2** will show the effective duration of the chilling or freezing cycle.

4.11 SETTINGS

4.11.1 Setting the date and time

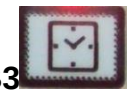
To access the procedure:

•ensure the device is in "off" mode and no procedures are running

To adjust the date and time:

•press **B3**  for 5 s: display **DY1** will show "YY" and display **DY2** will show the last two digits corresponding to the year

•press **B4**  or **B6**  to change the year

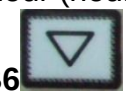
•press **B3**  : display **DY1** will show "NN" and display **DY2** will show the digits corresponding to the month (the month is displayed in 12 month format)

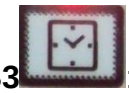
•press **B4**  or **B6**  to change the month

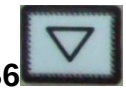
•press **B3**  : display **DY1** will show "dd" and display **DY2** will show the digits corresponding to the day (days are displayed in 31 day format)

•press **B4**  or **B6**  to change the day

•press **B3**  : display **DY1** will show "hh" and display **DY2** will show the digits corresponding to the hour (hours are displayed in 24 hour format)

•press **B4**  or **B6**  to change the hour

•press **B3**  : display **DY1** will show "nn" and display **DY2** will show the digits corresponding to the minutes

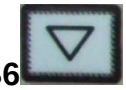
•press **B4**  or **B6**  to change the minutes

•press **B3**  : the device will exit the procedure.

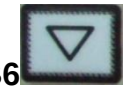
4.11.2 Setting the configuration parameters

To access the procedure:

•ensure the device is in "off" mode and no procedures are running

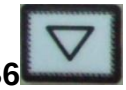
•press **B4**  + **B6**  for 5 s: display **DY1** will show "PA" and display **DY2** will show the corresponding value.

To select a parameter:

•press **B4**  or **B6** 

To modify a parameter:

•press **B3**  : LED **L3** will be switched on

•press **B4**  or **B6**  within 60 s

•press **B3** 

To exit the procedure:

•press **B4**  + **B6**  for 5s.

4.12 HACCP

The device is capable of storing up to 10 HACCP alarms, after which the most recent alarm will overwrite the oldest.

The device can furnish the following information:

•the critical value
•the date and time at which the alarm occurred
•the alarm duration (from 1 minute to 999 minutes, " - - -" if the alarm is ongoing).

CODE	ALARM TYPE (AND CRITICAL VALUE)
Er0	*Cabinet probe error* (the temperature of the cabinet when the alarm condition occurred)
Er1	*Evaporator probe alarm* (the maximum cabinet temperature during the alarm condition)
Er3	*Needle probe alarm* (the maximum cabinet temperature during the alarm condition)
Er4	*Condenser probe alarm* (the maximum cabinet temperature during the alarm condition)
AL	*Minimum cabinet temperature alarm* (the minimum cabinet temperature during the alarm condition)
AH	*Maximum cabinet temperature alarm* (the maximum cabinet temperature during the alarm condition)
Ht	*Condenser temperature alarm* (the maximum cabinet temperature during the alarm condition)
d - r	*Micro port input alarm* (the maximum cabinet temperature during the alarm condition)
HP	*High pressure input alarm* (the maximum cabinet temperature during the alarm condition)
LP	*Low pressure input alarm* (the maximum cabinet temperature during the alarm condition)
HA	*Compressor thermal protection input alarm* (the maximum cabinet temperature during the alarm condition)
PF	*Power failure alarm* (the cabinet temperature on restoration of power)

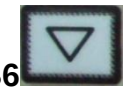
4.13 VIEWING HACCP ALARM INFORMATION

Viewing HACCP alarm information:

•ensure the device is in "off" mode and no procedures are running

•press **B12**  for 5 s: display DY1 will show "Prt".

To select an alarm:

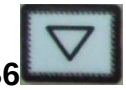
•press **B4**  or **B6**  display **DY1** will show the number of the alarm (for example "n03") and display DY2 will show the relevant code (for example "AH", or one of the codes
reported in the table in section 5.1; the lower the number, the older the alarm itself).

To display the information relating to the alarm:

•press **B3**  repeatedly: the display will show the following information in sequence (for example):

INFO	MEANING
St **y07**	on display DY1 on display DY2 The alarm occurred in 2007 (continued ...)
M03 **d26**	on display DY1 on display DY2 The alarm occurred on 26 March 2007
h16 **d30**	on display DY1 on display DY2 The alarm occurred at 4:30pm
t **8**	on display DY1 on display DY2 The critical value is 8 °C/8 °F
dur **75**	on display DY1 on display DY2 The alarm has lasted for 75 minutes
DY1 **AH**	on display DY1 on display DY2 The selected alarm

LED **L13** provides information relating to the status of the HACCP alarm memory; please refer to section 7.1.
To exit the information series:

•press **B4**  or **B6**  display **DY1** will show the number of another alarm and display **DY2** will show the corresponding code.

To exit the procedure:

•press **B12**  for 5 s.

MAINTENANCE AND CLEANING

Maintenance and repair must be carried out by qualified personnel authorized by the manufacturer.

The manufacturer declines any responsibility for jobs carried out by unauthorized personnel or the use of non-original spare parts.

5.1 ROUTINE MAINTENANCE

Prohibited to remove the guards and safety devices: It's strictly forbidden to remove guards or safety devices when performing routine maintenance operation. The manufacturer disclaims all liability that may arise this regulation is not observed.
In case of FIRE:
- Disconnect the unit from the electrical power socket.
- Do not use water to extinguish the fire.

- Use powder or foam extinguishers.

Cleaning the interior and exterior of the appliance

The appliance is designed for the products storage so it is important to keep it clean. The equipment is thoroughly cleaned at the factory before being shipped. We recommend, however, to clean the interior cabinet before the first start up of the appliance. ***Before attempt any cleaning operation make sure the power cord is disconnected.***

-Cleaning product: use soft clean cloth wet with water and neutral detergent only.**Do not use solvent or bleach.**

-Rinsing: use a soft cloth or sponge soaked with fresh clean water. **Do not use water jet.**

-Wipe with a soft, clean towel to prevent water spotting**.**

Stainless door panels, handles and frames can discolor when exposed to chlorine gas, pool chemicals, saltwater or cleaners with bleach.

Keep your stainless unit looking new by cleaning with a good quality all-in-one stainless steel cleaner and polish monthly. Some installation may require cleaning weekly.

Do not clean with steel wool pads.

Do not use cleaners not specifically intended for stainless steel on stainless steel surfaces.

Condenser cleaning

The condenser is a heat exchanger. If it is dirty or clogged the air cannot circulate freely through the same, it cannot discharge heat properly so reducing proportionally the performance and the efficiency of the refrigeration system.

FOR THOSE REASONS IT IS IMPORTANT TO KEEP CLEAN THE CONDENSER COIL, TYPICALLY MONTHLY.

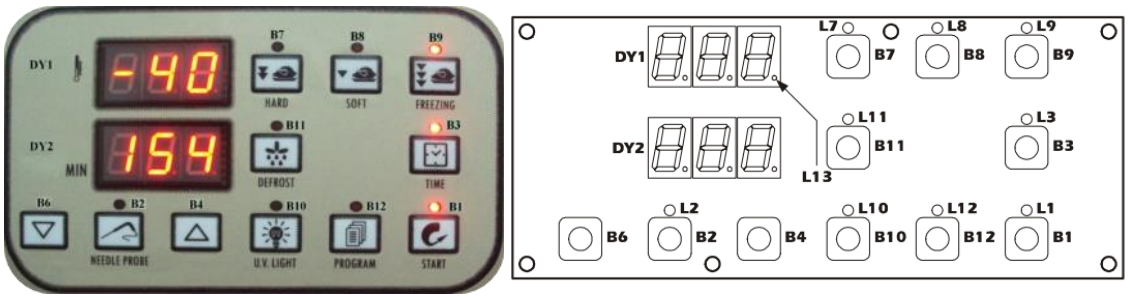
⚠ **Always switch off the unit and disconnect power cord before cleaning, it is dangerous to do it with power ON: fan may start suddenly at any time.**

Use a convenient ladder to reach the condenser. Use an air jet or vacuum with a soft dry brush if necessary and remove any dust or fluff from the heat exchanger fins.

After cleaning, start the equipment.

⚠ During the cleaning operation wear gloves and safety glasses to protect yourself from any injury

MESSAGES AND INDICATIONS



6.1 MESSAGES

L1	"On"/"Stand-by" LED -if permantly ON, a chilling or freezing operation is ongoing -if flashing, a storage operation is ongoing	**L2**	Needle probe LED -if permanently ON, the temperature measured by the needle probe is being displayed -if flashing, then the result of the test to

			verify correct needle probe insertion was negative; the cycle will be started in timed mode and the buzzer will emit 5 beeps every 10s
L3	Timed operation cycle LED -if permanently on, a timed operation cycle will have been selected (or is ongoing	**L7**	hard chill LED -if permanently ON: ·a hard chill operation will have been selected ·the first step of a hard chill operation is ongoing ·modification of the hard chill first step operational setpoint is underway -if flashing: •modification of the hard chill second step operational setpoint is underway •the second step of a hard chill operation is in progress
L8	Normal chilling LED -if permanently on, a normal chill operation has been selected (or is ongoing)	**L9**	Freezing LED -if permanently on, a freezing operation has been selected (or is ongoing)
L10	UV light (cabinet sterilisation) LED -if permanently on, the UV light is on (a cabinet sterilisation operation is ongoing)	**L11**	Defrosting LED -if permanently on, defrosting is ongoing
L12	Program LED -if permanently on, program storing, selection or execution is ongoing	**L13**	HACCP LED if permanently on, program storing, selection or execution is ongoing

6.2 INDICATIONS

dEF	-if permanently on, defrosting is ongoing -if flashing: drip-draining is ongoing

ALARMS AND INTERNAL DIAGNOSTICS

7.1 ALARMS

AL	Minimum cabinet temperature alarm *-Remedies*: •check the cabinet temperature •see parameters P64 and P66 *-Consequences*: •the alarm output will be activated	**AH**	Maximum cabinet temperature alarm *-Remedies*: •check the cabinet temperature •see parameters P65 and P67 *-Consequences*: •the alarm output will be activated
Ht	Condenser temperature alarm *-Remedies*: •check the condenser temperature •see parameter P62 *-Consequences*: •the operational cycle will be interrupted •it will not be possible to start any operational cycles •the condenser fan will be switched on •the alarm output will be activated	**d-r**	Micro-port input alarm *Remedies*: •check the causes of the input activation •see parameter P38 *-Consequences* if the alarm occurs while in "on" mode: •the compressor will be shut down •if parameter P37 is set to 1, the evaporator fan will be switched off •if parameter P59 is set to 0, the cabinet light

			will be switched on •the condenser fan will be switched off •if the UV light is on (i.e. if cabinet sterilisation is ongoing), the UV light will be switched off
PH	<u>High pressure input alarm</u> *-Remedies*: •check the causes of the input activation •see parameter P40 *-Consequences:* •the operational cycle will be interrupted •the loads will be switched off •it will not be possible to start any operational cycles •the alarm output will be activated	**LP**	<u>Low pressure input alarm</u> *-Remedies:* •check the causes of the input activation •see parameter P42 *-Consequences*: •the operational cycle will be interrupted •the loads will be switched off •it will not be possible to start any operational
HA	<u>Compressor thermal protection input alarm</u> *-Remedies*: •check the causes of the input activation •see parameter P44 *Consequences:* •the operational cycle will be interrupted •the loads will be switched off •it will not be possible to start any operational cycles •the alarm output will be activated	**rES**	<u>Power failure during an operational cycle</u> *-Remedies:* •check the causes of the input activation *-Consequences:* •the operational cycle will be restored from the point where the power failure occurred

When the cause that triggered the alarm has been resolved, the device restores normal operation

7.2 INTERNAL DIAGNOSTICS

Er0	<u>Cabinet probe error</u> *-Remedies*: •see parameter P60 •check probe integrity •check probe-device connection •check the cabinet temperature *-Consequences*: •the operational cycle will be interrupted •the loads will be switched off •it will not be possible to start any operational cycles •the alarm output will be activated	**Er1**	<u>Evaporator probe error</u> *-Remedies*: •the same as for the previous case, but in relation to the evaporator probe *-Consequences:* •defrosting will last for the length of time set by parameter P24 •the evaporator fan will be switched off during storage •the alarm output will be activated
Er3	<u>Needle probe error</u> *-Remedies:* •the same as for the previous case, but in relation to the needle probe *-Consequences:* •if a set-temperature chilling or freezing operation is ongoing, the operational cycle will be interrupted	**Er4**	<u>Condenser probe error</u> *-Remedies:* •the same as for the previous case, but in relation to the condenser probe *-Consequences:* •the condenser fan will operate in parallel with the compressor, except when set by

	•it will not be possible to start any set-temperature operational cycles •the alarm output will be activated	parameter P54 •the alarm output will be activated
Err	<u>User interface-module communication error</u> *-Remedies*: •check the user interface-module connection *-Consequences*: •if an operational cycle is ongoing, the device will continue to function normally •it will not be possible to start any operational cycles	

When the cause that triggered the alarm has been resolved, the device restores normal operation.

CONFIGURATION PARAMETERS

Parameter	Description	Factory value
P0	Unit of Temperature measurements **0**=°F **1**=°C	1
P1	Cabinet probe offset	2
P2	Evaporator probe offset	0
P3	Needle probe offset	0
	MAIN CONTROLLER PARAMETERS	
P4	Operational setpoint during Hard chill cycle second step; also operation setpoint during normal chilling (with reference to the cabinet probe)	0
P5	Operational setpoint during freezing cycle (with reference to the cabinet probe)	-40
P6	Operational setpoint during Hard chill cycle first step (with reference to the cabinet probe)	-20
P7	Operational setpoint of storage mode after chilling cycle (with reference to the cabinet probe)	3
P8	Operational setpion of storage model after freezing cycle (with reference to the cabinet probe)	-20
P9	P4, P5, P6, P7 and P8 differential	1
P10	Set Chilling cycle end temperature (with reference to the needle probe)	3
P11	Set Freezing cycle end temperature (with reference to the needle probe)	-18
P12	Temperature at which the Hard cycle switches from the first step to the second step (with reference to the needle probe)	20
P13	Temperature above which it is not possible to start a set-temperature operational cycle (with reference to the needle probe)	99
P14	Needle probe and the cabinet temperature for verification of correct needle probe insertion (3) **0** = the test will not be performed	0
P15	Duration of the second test to check correct needle probe insertion; see also P14 (4)	60

P16	Maximum set temperature chill duration; also timed chill duration	90
P17	Maximum set temperature freeze duration; also timed freeze duration	240
P18	Duration of the Hard chilling cycle first step in time-set mode	45
COMPRESSOR PROTECTION PARAMETERS		
P19	Compressor activation delay from device power on (from restoration of power)	0
P20	Minimum elapsed time period between two consecutive compressor start-up operations	1
P21	Minimum compressor shut-down time	1
DEFROST PARAMETERS		
P22	Defrost type (5) **0** = electric (defrost on relay) **1** = hot gas (defrost compressor and relay on) **2** = air (evaporator fan on)	1
P23	defrost end temperature (with reference to the evaporator probe)	8
P24	Maximum defrost duration	10
P25	Defrost interval during storage; see also P26 **0** = intervalled defrosting will never be activated (only the first will be activated)	6
P26	First defrost delay from start of storage mode; see also P25	1
P27	Defrosting at start of chilling and freezing 1 = YES	0
P28	Drip-drain step duration	2
P29	Resetting of compressor protections at start of defrosting (only **if P22 = 1**) **1** = YES	0
P30	Elapsed time between the defrost request and switching on the compressor (only **if P22 = 1** and providing that the compressor is off when the defrost is requested); see also P31 (7) (8)	30
P31	Elapsed time between the defrost request and activation of the solenoid valve (only **if P22 = 1** and on condition that the compressor is off when defrosting is requested); see also P30 (7) (8)	0
EVAPORATOR FAN PARAMETERS		
P32	Temperature above which the evaporator fan is switched off during storage mode (with reference to the evaporator probe)	3
P33	P32 differential	1
P34	Evaporator fan activity during defrosting (only if **P22 = 0 or 1**) **0** = on **1** = off	0
P35	Evaporator fan activity during defrosting (only **if P22 = 0 or 1**)	3
P36	Temperature above which the evaporator fan is switched off (with reference to the cabinet probe)	90
P37	Effect caused by activation of microport input on evaporator fan **0** = no effect **1** = the evaporator fan will be switched off	1
DIGITAL INPUTS PARAMETERS		
P38	Microport input contact type **0** = NA (input active with contact closed) **1** = NC (input active with contact open)	1
P39	Micro port input alarm delay (9)	0
P40	High pressure input alarm delay	1

	0 = NA (input active with contact closed) **1** = NC (input active with contact open)	
P41	High pressure input alarm delay	120
P42	Low pressure input contact type **0** = NA (input active with contact closed) **1** = NC (input active with contact open)	0
P43	Low pressure input alarm delay	0
P44	Compressor thermal protection input contact type **0** = NA (input active with contact closed) **1** = NC (input active with contact open) compressor thermal protection input alarm	0
P45	Compressor thermal protection input alarm delay	0
STERILIZATION CYCLE PARAMETERS		
P46	UV light on duration (duration of cabinet sterilisation cycle)	5
NEEDLE PROBE HEATING CYCLE		
P47	Needle probe heating end temperature (with reference to the needle probe)	45
P48	Maximum duration of needle probe heating	15
DOOR FRAME HEATER PARAMETERS		
P49	The temperature, below which the door frame heater elements are switched on (with reference to the cabinet probe)	5
P50	P49 differential	2
CONDENSER FAN PARAMETERS		
P51	Condenser fan activity in the absence of the condenser probe (P61 = 0) **0** = in parallel with compressor **1** = on	1
P52	The temperature below which the condenser fan is switched off in the presence of the condenser probe (P61 = 1) and on condition that the compressor is on (with reference to the condenser probe); see also P54	20
P53	P52 differential	5
P54	condenser fan switch off delay on switching off the compressor in the presence of the condenser probe (P61 = 1); see also P52	30
OTHER FUNCTIONS PARAMETERS		
P55	Chill and freeze cycle completion buzzer duration	3
P56	maximum buzzer duration during an alarm state	15
P57	Elapsed time between switching on the compressor and pump down valve activation (pump down in power up); also elapsed time between deactivation of the pump down valve and switching off the compressor (pump down in power down)	3
P58	Defrost parameter units of measurement **0** = P25 h, P24, P26, P28 and P35 min **1** = P25 min, P24, P26, P28 and P35 s	0
P59	Reserved (no use)	0
P60	Probe type **0** = NTC **1** = PTC	0
P61	Condenser probe enabling **1** = YES	0
CONDENSER HIGH TEMPERATURE PARAMETERS		
P62	The temperature above which the condenser temperature alarm is activated (with reference to the condenser probe)	70
P63	P62 differential	10

TEMPERATURE ALARMS PARAMETERS		
P64	Temperature below which the minimum temperature alarm is activated during post-chill storage, with relation to P7, i.e. "P7 + P64" (with reference to the cabinet probe) **0** = no alarm	0
P65	Temperature above which the maximum temperature alarm is activated during post-chill storage, with relation to P7, i.e. "P7 + P65" (with reference to the cabinet probe) **0** = no alarm	0
P66	Temperature below which the minimum temperature alarm is activated during post-freezing storage, with relation to P8, i.e. "P8 + P66" (with reference to the cabinet probe) **0** = no alarm	0
P67	Temperature above which the maximum temperature alarm is activated during post-freezing storage, with relation to P8, i.e. "P8 + P67" (with reference to the cabinet probe) **0** = no alarm	0
P68	P64, P65, P66 and P67 differential	2
P69	Storage operation start-up temperature alarm delay	0
P70	Temperature alarm delay	0
DATA PRINTING PARAMETERS		
P71	Enable printing 1 = YES	0
P72	Print interval	5
P73	HACCP alarm list deletion **1** = YES (10)	0
P74	Reserved	2
P75	Reserved	2
P76	Reserved	1

CAUTION! The modification of the operational parameters without authorization of the manufacturer causes the lost of guarantee.

NOTE:

(1) Altering parameter P0 effects all parameters where the unit of measurement is degrees Celsius or degrees Fahrenheit

(2) The unit of measurement depends on parameter P0

(3) The test result is positive if the difference between the temperature measured by the needle probe and the cabinet temperature is greater than the value set by parameter P14 at least 3 times out of 5 (checking is every 10 s); if the test result is negative a second test is initiated (se parameter P15)

(4) The result of the second test is positive if the difference between the temperature measured by the needle probe and the cabinet temperature increases by at least 1_C/1_F with respect to the previous check at least 6 times out of 8 (checking occurs every P15/8 s); if parameter P15 is set to a value of less than 5 s, the second test will not be executed

(5) If parameter P22 is set to 2, micro port input activation will not be signalled

(6) The unit of measurement depends on parameter P58

(7) Defrosting will be activated on conclusion of the time which is greatest between those set by parameters P30 and P31

(8) If defrosting is requested when the compressor is on and the time set by parameter P30 is less than the value set by parameter P31, the compressor will remain on and the solenoid valve and defrosting will be activated after the time "P31 - P30" has elapsed since the defrost request; vice versa, if defrosting is requested when the compressor is on and the time set by parameter P30 is greater than that set by parameter P31, when defrosting is

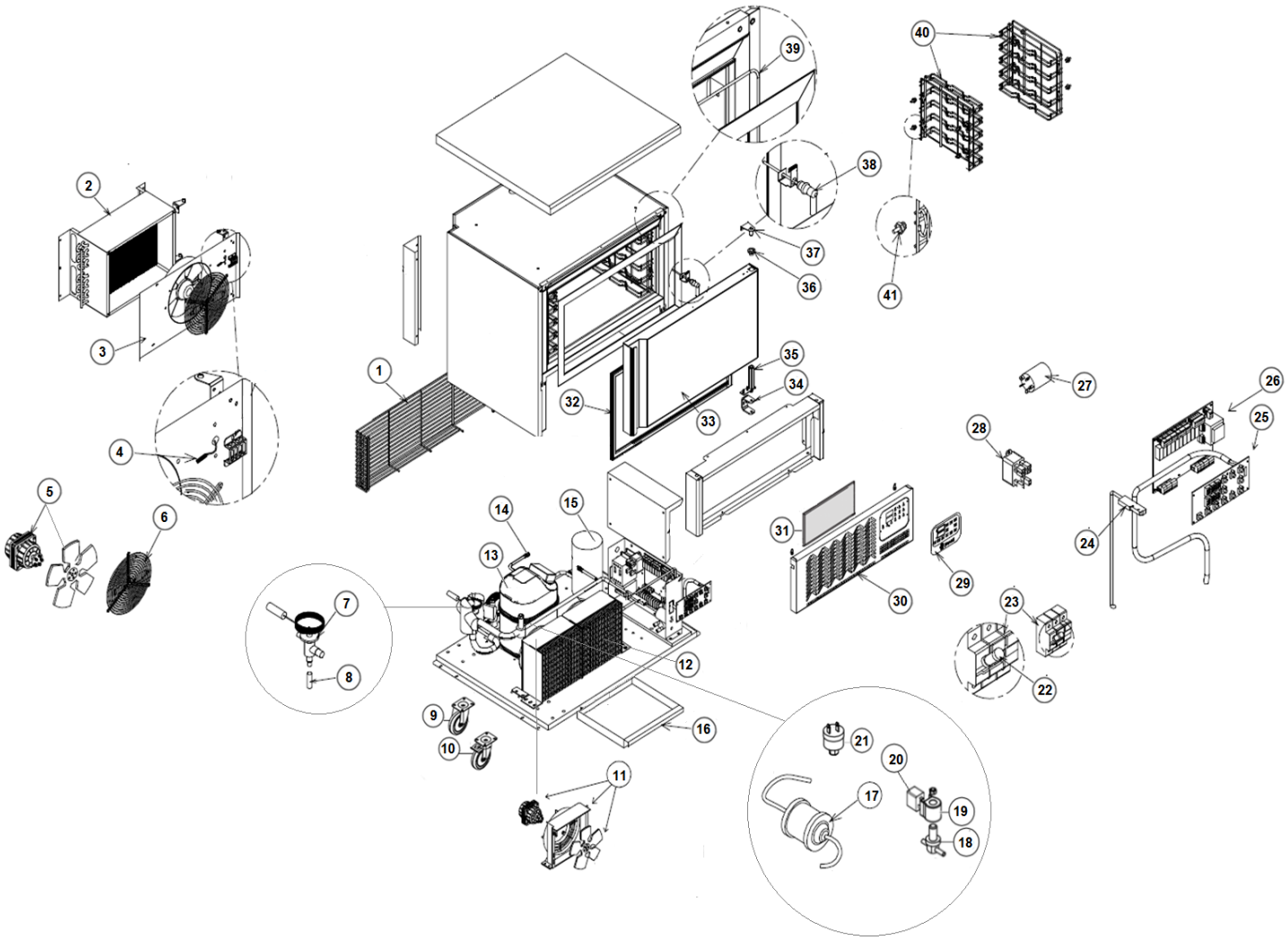
requested the compressor will be switched off for the greater of the times between those set by parameters P19, P20 and P21 after which the compressor and defrosting will be activated (the solenoid valve will be activated "P30 - P31" s prior to activation of defrosting)

(9) Parameter P39 has no effect during UV light switch on (cabinet sterilisation)

(10) Altering parameter P73 is effective on exiting the configuration parameter setting procedure; as soon as you will quit the configuration parameters setting procedure, parameter P73 will automatically get
Value 0.

SPARE PARTS LIST

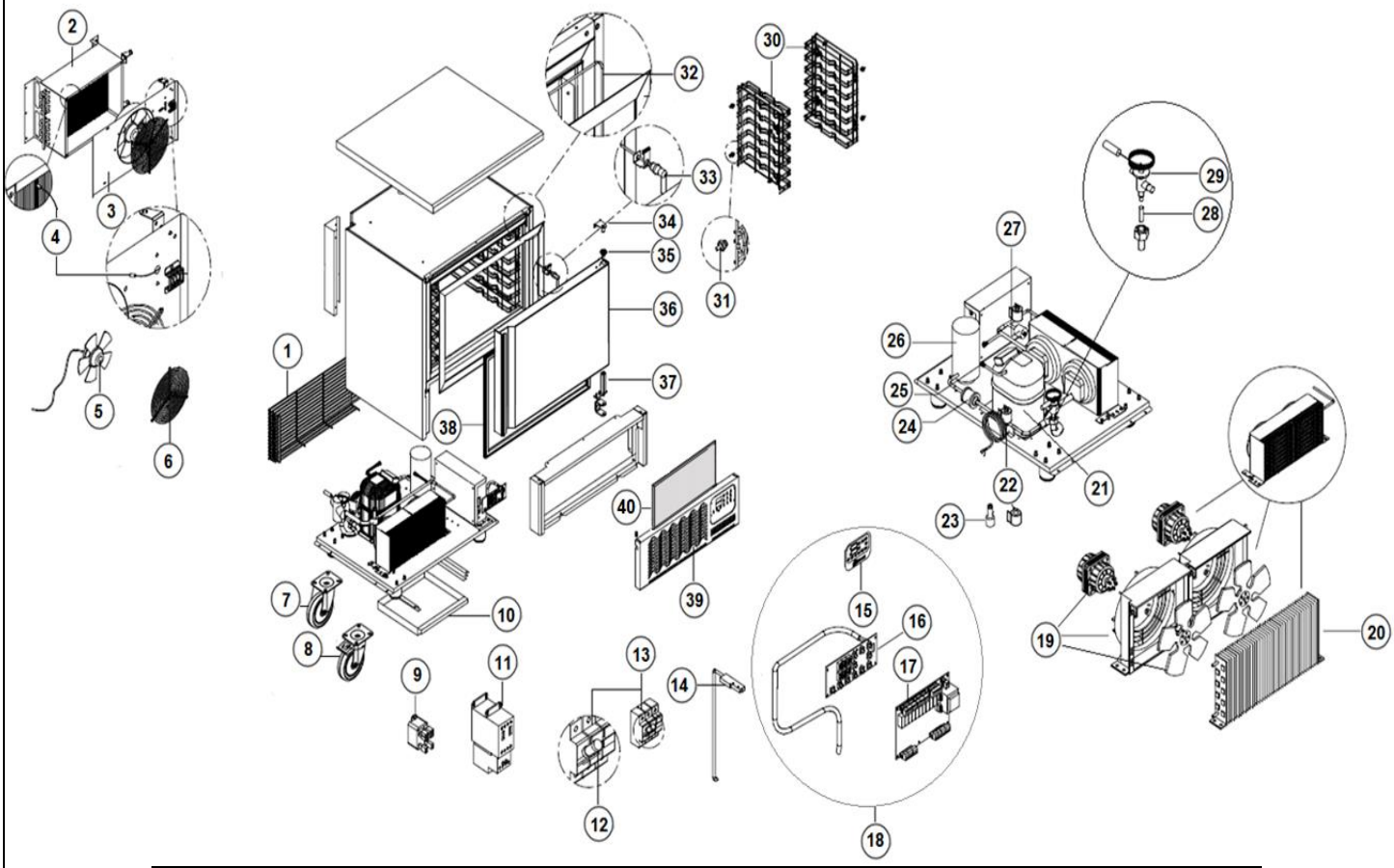
BGBF-5P



Item n.	Descriptiom
1	MOTOR COMPARTMENT REAR PLASTIC COATED GRID
2	EVAPORATOR COIL
3	SS EVAPORATOR COVER W/FAN HOLDER
4	NTC TEMPERATURE PROBE
5	EVAPORATOR FAN MOTOR
6	EVAPORATOR FAN GRID Φ=250mm
7	TX EXPANSION VALVE

Item n.	Descriptiom
8	TX ORIFICE
9	SWIVEL CASTOR W/OUT BRAKE
10	SWIVEL CASTOR W/BRAKE
11	-NOT USED-
12	CONDENSER ASSY
13	COMPRESSOR
14	PRESSURE SCHRADER VALVE
15	LIQUID RECEIVER
16	CONDENSATE PAN MOD. GBF-5
17	FILTER DRIER
18	HOT GAS DEFROST SOLENOID VALVE BODY
19	SOLENOID VALVE COIL
20	SOLENOID VALVE COIL SUPPLY CABLE
21	HIGH PRESSURE SWITCH
22	FUSE 500V 10,3x38 16A
23	FUSE HOLDER 10,3x38 (UL)
24	MAGNETIC DOOR SWITCH
25	DISPLAY KEYBOARD MOD. 2D
26	CONTROLLER POWER BOARD
27	NET FILTER
28	COMPRESSOR POWER RELAY
29	DISPLAY STICKER DESMON BRANDED
30	FRONT PANEL MOD. GBF-5G/P
31	CONDENSER HONEYCOMB AIR FILTER
32	DOOR GASKET
33	DOOR FOAMED PANEL MOD. GBF-5P
34	DOOR BOTTOM BRACKET
35	DOOR SPRING HINGE KIT
36	DOOR UPPER HINGE BUSH ϕ=32 Φi=14,2
37	UPPER R/L HINGE MOD. GBF-5G/P
38	NEEDLE PROBE SINGLE CORE NTC 10kOhm
39	DOOR FRAME HEATER 19,8W 230W Length=3980mm
40	SS RACK MOD. 5PANS
41	SHELVE RACK HOOK

BGBF-10



Item n.	Descriptiom
1	MOTOR COMPARTMENT BACK PRTCN GRID
2	EVAPORATOR COIL
3	EVAPORATOR COVER AND FAN HOLDER MOD. GBF-10
4	NTC TEMPERATURE PROBE
5	EVAPORATOR FAN
6	EVAPORATOR FAN GRID PRTCN 120x120mm Φ=300mm
7	CASTOR W/OUT BRAKE
8	SWIVEL CASTOR W/BRAKE
9	-NOT USED-
10	CONDENSATE TRAY
11	CONTACTOR
12	FUSE 10,3x38 500Vac 20A
13	FUSE HOLDER 10,3x38(UL)
14	MAGNETIC DOOR SWITCH
15	BLAST CHILLER KEYPAD STICKER MOD. DESMON BRANDED
16	DISPLAY KEYBOARD MOD. 2D
17	CNTRL POWERBOARD
18	BLAST CHILLER CONTROLLER KIT
19	CONDENSER FAN ASSY
20	CONDENSER COIL
21	COMPRESSOR
22	HOT GAS DEFROST SOLENOID VALVE COIL
23	HOT GAS DEFROST SOLENOID VALVE BODY

Item n.	Descriptiom
24	FILTER DRIER
25	HIGH PRESSURE SWITCH
26	LIQUID RECEIVER
27	SCHRADER PRESSURE VALVE 1/4" 6x300mm
28	TX VALVE ORIFICE
29	TX EXPANSION VALVE
30	SHELVE RACK MOD. GBF-10
31	INOX SHELF RACK HOOK
32	FRAME HEATER 44W 220V L4400
33	NEEDLE PROBE 10kOhm NTC SINGLE CORE
34	R/L DOOR UPPER HINGE W/PIVOT
35	DOOR UPPER HINGE BUSH ϕ=32 Φi=14,2
36	DOOR FOAMED PANEL MOD. GBF-10
37	DOOR SPRING HINGE KIT
38	DOOR GASKET
39	MOTOR COMPARTMENT FRONT PANEL MOD. GBF-10
40	HONEYCOMB CONDENSER FILTER

SERVICE INFORMATION

For help with the installation, maintenance and use of your **Lincat** equipment, please contact our service department:

☎UK: 01522 875520

For non-UK customers, please contact your local Lincat dealer

All service work, other than routine cleaning should be carried out by one of our authorised service agents. We cannot accept responsibility for work carried out by other persons.

To ensure your service enquiry is handled as efficiently as possible, please tell us:

- Brief details of the problem
- Product code
- Type number
- Serial number

} All available on serial plate

Lincat reserve the right to carry out any work under warranty, given reasonable access to the appliance, during normal working hours, Monday to Friday, 08:30 to 17:00.

GUARANTEE

This unit carries a comprehensive UK mainland 2 year warranty. The guarantee is in addition to, and does not diminish your statutory or legal rights.

The guarantee does not cover:

- Accidental damage, misuse or use not in accordance with the manufacturer's instructions
- Consumable items (such as filters, glass, bulbs, slot toaster elements and door seals.)
- Damage due to incorrect installation, modification, unauthorised service work or damage due to scale, food debris build-up, etc.

The manufacturer disclaims any liability for incidental, or consequential damages.
Attendance is based on reasonable access to the appliance to allow the authorised technician to carry out the warranty work.

Service calls to equipment under warranty will be carried out in accordance with the conditions of sale.