# Blast Chiller / Freezer Instruction Manual



# **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:
  - o Health and Safety at Work Legislation
  - o Fire Precautions

- o IEE 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.
- The appliance is not to be used by children or persons with reduced physical, sensory or mental capabilities, or lack of experience or knowledge, unless they have been given supervision or instruction
- If the power cord is damaged, it must be replaced by a agent or a recommended qualified technician in order to avoid a hazard.

#### **Product Description**

T3 - Counter Top Blast Chiller /Freezer

#### 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 product.

#### **Pack Contents**

The following is included:

- Blast Chiller /Freezer
- Instruction manual

#### Installation

Note: If the appliance has not been stored or moved in an upright position, let it stand upright for approximately 12 hours before operation. If in doubt allow the appliance 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. Increase the distance of the object is a heat source. Do not block front ventilation grills.

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

#### **Operation**

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

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 the hands from cold burns.

#### Introduction

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 but no operating cycle is running)
- "off" (the device is not switched on).

If power is interrupted during a timed blast chilling operation, when power is restored, chilling will continue from the time point at which the interruption occurred (with a maximum error of 10 minutes).

If power is interrupted during a set-temperature blast chilling operation, when power is restored, chilling will start again from the beginning.

If power is interrupted during a storage operation, when power is restored the storage operation will be reset.

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

#### **Control Panel**

#### **Controller Display**



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

- the amount of time remaining for a timed blast chilling operation, if this is ongoing
- the temperature measured by the pin probe if a set-temperature chilling operation is ongoing
- the temperature of the cabinet, if storage is ongoing.

In "stand-by" mode, during normal operation, the display shows the temperature of the cabinet for  $\frac{1}{2}$  s every 3 s.

# Signals

LED	Message
<b>(3)</b>	<ul> <li>If on and the LED is off, a timed chilling operation is ongoing</li> <li>If on and the LED is also on, a post timed-chilling storage operation is ongoing</li> </ul>
~	<ul> <li>If flashing, a timed chilling and storage cycle will have been selected</li> <li>Set-temperature chilling LED</li> <li>If on and the LED is off, a set-temperature chilling storage operation is ongoing</li> <li>If on and the LED is also on, a post set-temperature chilling storage operation will be ongoing</li> <li>If flashing, a set temperature chilling and storage cycle will have been selected</li> <li>If it's on for ½ second every 3 seconds, the test to verify correct pin probe insertion will be ongoing</li> <li>If flashing and the LED is on, then the test to verify correct pin probe insertion will have had a negative outcome and the cycle will have been started in timed mode</li> <li>If flashing and the LED is on, the chilling stage will have had a negative outcome and so this will continue</li> <li>If flashing and the LEDs and are on, the chilling stage will have had a negative outcome, the device will have switched to storage mode and this will be ongoing</li> </ul>
#	Storage LED  If on, a storage operation will be ongoing  If flashing then the operational set point will be being modified while a storage operation is ongoing
Δ	Alarm LED  • If on, an alarm is ongoing
°C	<ul> <li>Degree Celsius LED</li> <li>If on the unit of measurement for temperature is degrees Celsius</li> </ul>
LED	Message
°F	Degree Fahrenheit LED     If on the unit of measurement for temperature is degrees Fahrenheit
Decimal Point	If flashing, the unit of measurement of magnitude displayed is the minute
Code	Message
d	Defrosting or drip draining is ongoing

#### **OPERATIONAL CYCLES**

The device has the following operational cycles:

- timed positive chilling and storage
- timed negative chilling and storage
- Set-temperature positive chilling and storage
- Set-temperature negative chilling and storage.

Set-temperature cycles are preceded by a test step in order to check correct insertion of the pin probe (see paragraph 3.6).

To re-start using the same settings as the last cycle run:

- ensure that the device is in "stand-by" mode, that no procedures are running and that another cycle has not been selected
- press for 2 seconds. The display will show the label of the last cycle run
- press within 60 seconds: in the case of a timed cycle, the display will show the duration of the blast chilling step (in minutes) or in the case of a set-temperature cycle, the set target temperature
- press or or within 15 seconds to change the value (the setting re-mains active until another cycle is selected, when the value r1, r2, r3 or r4 is restored)
- press within 15 seconds and the cycle will be activated

#### TIMED POSITIVE BLAST CHILLING AND STORAGE CYCLE

#### To start the cycle:

- ensure the device is in "stand-by" mode and no procedures are running
- press to select "PoS" and ensure the LED is flashing
- press within 15 seconds: the display will show the duration of the blast chilling step (in minutes)
- press or or within 15 seconds to change the value (the setting remains active until another cycle is selected, when the value assigned by parameter r1 is restored)
- press : after 2 minutes , run timed positive blast chilling and storage cycle

#### During chilling:

- · the display shows the residual chilling time remaining
- the LED is on
- parameter r1 sets the chilling time duration
- parameter r7 sets the operational set point
- press 🕬 several times to:
  - display the message "PoS"
  - display the cabinet temperature
  - exit the procedure, or leave for 15 seconds.

#### Once the chilling period has elapsed:

- the device switches to storage mode
- the display shows the message "End"
- the buzzer sounds for the period of time set by parameter AA
- press any key to mute the buzzer; press once more to cancel the message "End".

#### **During storage:**

- the display shows the cabinet temperature
- the LEDs and  $\clubsuit$  are on
- the parameter r9 sets the operational set point
- press several times to:
- display the message "PoS"
- exit the procedure, or leave for 15 seconds.

#### To interrupt the cycle:

• press of for 2 seconds.

#### TIMED NEGATIVE CHILLING AND STORAGE CYCLE

#### To start the cycle:

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

- press to select "nEg" and ensure the LED is flashing
- press within 15 seconds: the display will show the duration of the blast chilling step (in minutes)
- press or or within 15 seconds to change the value (the setting remains active until another cycle is selected, when the value assigned by parameter r2 is restored)
- press : after 2 minutes , run timed negative chilling and storage cycle

#### During chilling:

- the display shows the residual chilling time remaining
- the LED is on
- parameter r2 sets the chilling time duration
- parameter r8 sets the operational setpoint
- press 🗥 several times to:
  - display the message "nEg"
  - display the cabinet temperature
  - exit the procedure, or leave for 15 s.

#### Once the chilling period has elapsed:

- the device switches to storage mode
- the display shows the message "End"
- the buzzer sounds for the period of time set by parameter AA
- press any key to mute the buzzer; press once more to cancel the message "End".

#### **During storage**:

- the display shows the cabinet temperature
- the LEDs and # are on
- the parameter rA sets the operational setpoint
- press 🐠 several times to:
  - display the message "nEg"
  - display exit the procedure or leave for 15 seconds

#### To interrupt the cycle:

• press for 2 seconds.

#### SET-TEMPERATURE POSITIVE BLAST CHILLING AND STORAGE CYCLE

#### To start the cycle:

- ensure the device is in "stand-by" mode and no procedures are running
- press to select "PoS" and ensure the LED is flashing
- press or or within 15 Seconds to change the value (the setting remains active until another cycle is selected, when the value assigned by parameter r3 is reset)
- press : after 2 minutes , run set-temperature positive blast chilling and storage cycle

#### Prior to starting the cycle:

- the test is run in order to check correct pin probe insertion
  - if the outcome of the test is positive, the cycle will be started
  - if the outcome of the test is negative, the cycle will be started in timed mode.

#### During chilling:

- the display shows the temperature measured by the pin probe
- the LED is on
- the parameter r3 sets the blast chilling endpoint temperature
- the parameter r5 sets the maximum chilling time duration
- the parameter r7 sets the operational set point
- press several times to:
  - display the maximum residual chilling time remaining
  - display the message "PoS"
  - display the flashing cabinet temperature
  - exit the procedure, or leave for 15 s.

# If the temperature measured by the pin probe reaches the chilling endpoint temperature prior to expiry of the maximum chilling time duration:

- the device will switch to storage mode
- the display will show the message "End"
- the buzzer will sound for the period of time set by parameter AA
- press any key to mute the buzzer; press once more to cancel the message "End".

If the temperature measured by the pin probe does not reach the chilling endpoint temperature prior to expiry of the maximum chilling time duration:

- chilling will continue
- the LED will flash and the LED will be on
- the buzzer will sound
- press several times to:
  - mute the buzzer
  - display the time elapsed since the maximum chilling time expired
  - display the cabinet temperature
  - display the message "PoS"
  - exit the procedure, or leave for 15 seconds

#### When the temperature measured by the pin probe reaches the chilling endpoint temperature:

- the device switches to storage mode
- the LED will continue to flash and the LED will stay on
- the display will show the message "End"
- the buzzer will sound for the period of time set by parameter AA
- press any key to mute the buzzer; press once more to cancel the message "End".

#### **During storage:**

- the display shows the cabinet temperature
- if chilling had a positive outcome, the LEDs and and will be on; if chilling had a negative outcome, the LEDs and will be on and the LED will flash
- the parameter r9 sets the operational set point
- press several times to:
  - display the message "PoS"
  - exit the procedure, or leave for 15 s.

#### To interrupt the cycle:

press for2 seconds.

#### SET-TEMPERATURE NEGATIVE CHILLING AND STORAGE CYCLE

#### To start the cycle:

- ensure the device is in "stand-by" mode and no procedures are running
- press to select "nEg" and ensure the LED is flashing
- press or own within 15 seconds: the display will show the blast chilling end-point temperature
- press or within 15 s to change the value (the setting re-mains active until another cycle is selected, when the value assigned by parameter r4 is restored)
- press : after 2 minutes , run set-temperature negative chilling and storage cycle

#### Prior to starting the cycle:

- the test is run in order to check correct pin probe insertion
  - if the outcome of the test is positive, the cycle will be started
  - if the outcome of the test is positive, the cycle will be started.

#### During chilling:

- the display shows the temperature measured by the pin probe
- the LED is on
- the parameter r4 sets the chilling endpoint temperature
- the parameter r6 sets the maximum chilling time duration
- the parameter r8 sets the operational set point
- press Several times to:
  - display the maximum residual chilling time remaining
  - display the message "nEg"
  - flashing display the cabinet temperature
  - exit the procedure, or leave for 15 seconds

If the temperature measured by the pin probe reaches the chilling endpoint temperature prior to expiry of the maximum chilling time duration:

- the device will switch to storage mode
- the display will show the message "End"
- the buzzer will sound for the period of time set by parameter AA
- press any key to mute the buzzer; press once more to cancel the message "End".

If the temperature measured by the pin probe does not reach the chilling endpoint temperature prior to expiry of the maximum chilling time duration:

- chilling will continue
- the LED will flash and the LED will be on
- the buzzer will sound
- press 🐠 several times to:
  - mute the buzzer
  - display the time elapsed since the maximum chilling time expired
  - display the cabinet temperature
  - display the message "nEg"
  - exit the procedure, or leave for 15 seconds
- when the temperature measured by the pin probe reaches the chilling endpoint temperature:
  - the device will switch to storage mode
  - the LED will continue to flash and the LED will continue to stay on
  - the display will show the message "End"
  - the buzzer will sound for the period of time set by parameter AA
  - press any key to mute the buzzer; press once more to cancel the message "End".

#### **During storage:**

- the display shows the cabinet temperature
- if chilling had a positive outcome, the LEDs and and will be on; if chilling had a negative outcome, the LEDs and will be on and the LED will flash
- the parameter rA sets the operational set point
- press several times to:
  - display the message "nEg"
  - exit the procedure, or leave for 15 seconds.

#### To interrupt the cycle:

• press of for2 seconds

#### **TEST TO CHECK CORRECT PIN PROBE INSERTION**

Set-temperature cycles are preceded by a test step in order to check correct pin probe insertion. The test has two stages:

- if the outcome of the first stage is positive, the second will not be run
- if the outcome of the first stage is negative, the second will be run. The outcome of the first stage is positive if "the temperature measured by the pin probe the temperature of the cabinet" is greater than the value set by parameter rc at least 3 times out of 5 (the comparison is made every 10 s); if parameter rc is set to 0, neither the first nor second stages will be run.

The outcome of the second stage is positive if the difference "temperature measured by the pin probe -temperature of the cabinet" is greater by at least  $1^{\circ}\text{C}/1^{\circ}\text{F}$  (with respect to the previous comparison) at least 6 times out of 8 (the comparison is made every "rd/8 s").

#### If the outcome of the test is positive:

• the cycle will be activated.

#### the cycle will be activated:

- the cycle will be started in timed mode
- the LED will flash.

If power is interrupted during the test, when power is restored, the test will start again from the beginning.

#### SETTING THE CONFIGURATION PARAMETERS

The parameters are arranged on two levels.

To access the first level:

- ensure the device is in "stand-by" mode and no procedures are running
- press and for 4 s: the display will show "PA"

To access the second level:•

access the first level

•	press or to select "PA"
•	press
•	press or within 15 s to set "-19"
•	press or leave for 15 s
•	press and for 4 s: the display will show "CA1
_	

To select a parameter:

• press 💮 or 💁

To modify a parameter:

- . press
- press or within 15 s
- press or leave for 15 s

To exit the procedure:

• press and for 4 s , or leave for 60 s.

Interrupt the device power supply after altering the parameters.

#### **ALARMS**

CODE	MESSAGE
AL	Minimum temperature alarm Remedies:
	noo
	<ul> <li>check the cabinet temperature</li> <li>check parameters A1 and A2</li> </ul>
	·
	Consequences:  • the device will continue to function normally
AH	Maximum temperature alarm
	Remedies:
	• check the cabinet temperature
	• check parameters A3 and A4
	Consequences:
	• the device will continue to function normally
id	Micro-port input alarm (only in "stand-by" mode and if parameter i0 is set to 0 or 1)
	Remedies:
	• check the causes which activated the input
	• check parameters i0 and i1
	Consequences:
	• the outcome set by parameter i0

iA	Compressor protection input alarm (only if parameter i0 is set to 2)
	Remedies:
	• check the causes which activated the input
	• check parameters i0 and i1
	Consequences:
	• the compressor will be shut down

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

### **INTERNAL DIAGNOSTICS**

# **Internal diagnostics**

CODE	MESSAGE							
Pr1	Cabinet probe error							
	Remedies:							
	see P0 parameter							
	check probe integrity							
	check probe-device connection							
	check the cabinet temperature							
	Consequences if the error occurs while in "stand-by" mode:							
	• if parameter C11 is set to 0, it will not be possible to start any of the cycles							
	• if parameter C11 is set to 1, the pin probe will function as the cabinet probe and							
	only timed cycles will be allowed to start							
	Consequences if the error occurs during a timed chilling operation:							
	if parameter C11 is set to 0, the cycle will be interrupted							
	• if parameter C11 is set to 1, the pin probe will function as the cabinet probe and							
	the chilling operation will continue							
	Consequences if the error occurs during a set-temperature chilling operation:							
	if parameter C11 is set to 0, the cycle will be interrupted							
	• if parameter C11 is set to 1, the pin probe will function as both the cabinet probe							
	and pin probe and the chilling operation will continue							
	Consequences if the error occurs during a storage operation:							
	<ul> <li>parameter C11 is set to 0, the compressor activity will depend on parameters C4,</li> <li>C5 and C6</li> </ul>							
	• if parameter C11 is set to 1, the pin probe will function as the cabinet probe and							
	the storage operation will continue							
Pr2	Pin probe error							
	Remedies:							
	<ul> <li>the same as for the previous case, but in relation to the pin probe</li> </ul>							
	Consequences if the error occurs while in "stand-by" mode:							
	<ul> <li>only timed operation cycles will be allowed to start</li> </ul>							
	Consequences if the error occurs during a timed chilling operation:							
	chilling will continue							
	Consequences if the error occurs during a set-temperature chilling operation:							
	chilling will continue in timed mode							
	Consequences if the error occurs during storage mode:							
	storage will continue							

#### **PARAMETERS**

PARAM.	MIN.	MAX.	M.U.	SET.	MAIN CONTROLLER			
r0	0,1	15,0	°C/°F (1)	4,0	parameter r7, r8, r9 and Ra differential			
r1	1	600	min	90	timed positive blast chilling duration			
r2	1	600	min	240	timed negative blast chilling duration			
r3	-99,0	99,0	°C/°F (1)	3,0	positive blast chill end-point temperature (temperature detected by the pin probe)			
r4	-99,0	99,0	°C/°F (1)	-18,0	negative blast chill end-point temperature (temperature detected by the pin probe)			
r5	1	600	min	90	set-temperature positive blast chilling maximum duration			
r6	1	600	min	240	set-temperature negative blast chilling maximum duration			
r7	-99,0	99,0	°C/°F (1)	-2,0	positive blast chilling operational set point (cabinet temperature)			
r8	-99,0	99,0	°C/°F (1)	-28,0	negative blast chilling operational set point (cabinet temperature)			
r9	-99,0	99,0	°C/°F (1)	2,0	post positive blast chill storage operational set point (cabinet temperature)			
rA	-99,0	99,0	°C/°F (1)	-21,0	post negative blast chill storage operational set point (cabinet temperature)			
PARAM.	MIN.	MAX.	M.U.	SET.	SENSOR INPUTS			
CA1	-25,0	25,0	°C/°F (1)	0,0	cabinet probe offset			
CA2	-25,0	25,0	°C/°F (1)	0,0	pin probe offset			
P0	0	1		0	probe type 0 = PTC 1 = NTC			
P1	0	1		0	degree Celsius decimal point (for the quantity displayed during normal operation) 1 = YES			
P2	0	1		0	unit of temperature measurement (2) 0 = °C 1 = °F			
P3	0	1		1	pin probe enabling 1 = YES			
PARAM.	MIN.	MAX.	M.U.	SET.	MAIN CONTROLLER			
r0	0,1	15,0	°C/°F (1)	4,0	parameter r7, r8, r9 and Ra differential			
r1	1	600	min	90	timed positive blast chilling duration			
r2	1	600	min	240	timed negative blast chilling duration			
r3	-99,0	99,0	°C/°F (1)	3,0	positive blast chill end-point temperature (temperature detected by the pin probe)			
r4	-99,0	99,0	°C/°F (1)	-18,0	negative blast chill end-point temperature (temperature detected by the pin probe)			
r5	1	600	min	90	set-temperature positive blast chilling maximum duration			
r6	1	600	min	240	set-temperature negative blast chilling maximum duration			

r7	-99,0	99,0	°C/°F (1)	-2,0	positive blast chilling operational set point (cabinet temperature)					
r8	-99,0	99,0	°C/°F (1)	-28,0	negative blast chilling operational set point (cabinet temperature)					
r9	-99,0	99,0	°C/°F (1)	2,0	post positive blast chill storage operational set point (cabinet temperature)					
rA	-99,0	99,0	°C/°F (1)	-21,0	post negative blast chill storage operational set point (cabinet temperature)					
rb	0	2		1	kind of cycle enabled 0 = positive chilling 1 = positive chilling and negative chilling 2 = negative chilling					
rc	0,0	99,0	°C/°F (1)	5,0	"temperature detected by the pin probe - temperature of the cabinet" difference for the first stage of the test to check correct pin probe insertion (see paragraph 3.6)  0 = test will not be performed (neither the first nor second stages)					
rd	1	9 9	S	6 0	duration of the second stage of the test to check correct pin probe insertion (see paragraph 3.6)					
PARAM.	MIN.	MAX.	M.U.	SET.	COMPRESSOR PROTECTION					
C0	0	240	min	2	operational cycle deferred compressor start-up; deferred compressor power restoration also following a power interruption during an operational cycle					
C1	0	240	min	0	minimum elapsed time period between two consecutive compressor start-up operations					
C2	0	240	min	3	minimum compressor shut-down time					
C3	0	240	S	0	minimum compressor start-up time					
C4	0	240	min	10	storage cabinet probe error compressor shut-down duration; see also C5 and C6 (only if C11 = 0)					
C5	0	240	min	10	positive storage cabinet probe error compressor start-up duration; see also C4 (only if C11 = 0)					
C6	0	240	min	10	negative storage cabinet probe error compressor start-up duration; see also C4 (only if C11 = 0)					
C11	0	1		0	pin probe operation during cabinet probe error  0 = pin probe  IF THE ERROR OCCURS IN "STAND-BY" MODE - it will not be possible to start any of the cycles  IF THE ERROR OCCURS DURING A TIMED OR SET TEMPERATURE BLAST CHILLING OPERATION - the cycle will be interrupted  IF THE ERROR OCCURS DURING A STORAGE OPERATION - compressor activity will depend on parameters C4, C5 and C6  1 = both pin probe and cabinet probe  IF THE ERROR OCCURS WHILE IN "STAND-BY" MODE - the pin probe will operate as a cabinet probe and it will only be possible to start timed cycles  IF THE ERROR OCCURS DURING TIMED BLAST CHILLING - the pin probe will operate as a cabinet probe and chilling will continue  IF THE ERROR OCCURS DURING SET-TEMPERATURE BLAST CHILLING - the pin probe will operate as both a pin probe and as a cabinet probe and chilling will continue; it is recommended to set the iO parameter to 2 (COMPRESSOR PROTECTION)  IF THE ERROR OCCURS DURING A STORAGE OPERATION - the pin probe will operate as a cabinet probe and storage will continue					

PARAM.	MIN.	MAX.	M.U.	SET.	DEFROST			
d0	0	99	h	0	defrost interval (3)			
					0 = regular periodic defrosting will never be enabled defrost duration			
d3	0	99	min	0	0 = defrosting will never be enabled			
d 7	0	15	min	0	drip-drain duration			
PARAM.	MIN.	MAX.	M.U.	SET.	TEMPERATURE ALARMS (4)			
A1	0,0	99,0	°C/°F (1)	0	the temperature below which the minimum temperature alarm is activated; see also A2 (5)			
A2	0	1		1	minimum temperature alarm type 0 = no alarm 1 = depending on parameters r9 and rA (or "r9 - A1" and "rA - A1")			
A 4	0,0	99,0	°C/°F (1)	10,0	the temperature above which the maximum temperature alarm is activated; see also A5 (5)			
A 5	0	1		1	activated; see also A5 (5)  maximum temperature alarm type  0 = no alarm  1 = depending on parameters r9 and rA (or "r9 + A4" and "rA + A4")			
A6	0	240	min	15	storage operation start-up temperature alarm delay			
A7	0	240	min	15	temperature alarm delay			
A8	0	240	min	15	drip-drain end maximum temperature alarm delay (6)			
A9	0	240	min	0	door switch input deactivation maximum temperature alarm delay (onl if $i0 = 0$ or 1) (7)			
АА	0	240	s	5	blast chill completion buzzer duration			
PARAM.	MIN.	MAX.	M.U.	SET.	EVAPORATOR FAN (only if u0 = 1)			
FO	0	2		1	evaporator fan activity during chilling 0 = off 1 = on 2 = in parallel with the compressor			
F2	0	2		2	evaporator fan activity during storage  0 = off  1 = on  2 = in parallel with the compressor			
F8	0	9 9	min	0	evaporator fan start-up delay following defrost cycle start			
PARAM.	MIN.	MAX.	M.U.	SET.	DIGITAL INPUTS			
i O	0	4		3	digital input operation  0 = DOOR SWITCH INPUT - in this case parameters i1, i2 and i3 assusing significance; enabling input will cause the evaporator fan to be shut do (at most for the period of time set by i3 or until input will be disabled)  (9)  1 = DOOR SWITCH INPUT - in this case parameters i1, i2 and i3 assusing if icance; enabling input will cause the compressor and evaporator to be shut down (at most for the period of time set by i3 or until input be disabled)  (8) (9)  2 = COMPRESSOR PROTECTION - in this case, parameters i1 and i7 assusing if icance; the compressor			

					will be shut-down, the display will flash code "iA" and the buzzer will be activated (until the input will be deactivated)			
					3 = DOOR SWITCH INPUT - in this case parameters i1, i2 and i3 assume significance; enabling input will cause the evaporator fan to be shut down (at most for the period of time set by i3 or until input will be disabled) (8) 4 = DOOR SWITCH INPUT - in this case parameters i1, i2 and i3 assume significance; enabling input will cause the compressor and evaporator fan to be shut down (at most for the period of time set by i3 or until input will be disabled) (8) (10)			
i 1	0	2		1	digital input contact type  0 = NA (input active with contact closed)  1 = NC (input active with contact open)  2 = no input			
i 2	- 1	120	min	3 0	door switch input alarm activation delay (solo se i0 = 0 o 1) - 1= the alarm will not sound			
i 3	- 1	120	min	-1	loor switch input activation effect maximum duration (only if i0 = 0 or .)  1= the effect will last until the input will be disabled			
i 7	0	120	min	0	compressor protection deactivation compressor delay (only if i0 = 2)			
PARAM.	MIN.	MAX.	M.U.	SET.	DIGITAL OUTPUTS			
u 0	0	1		1	service controlled by relay K2 (see paragraph 2.3) 0 = defrosting 1 = evaporator fan			
PARAM.	MIN.	MAX.	M.U.	SET	SERIAL NETWORK (MODBUS)			
LA	1	247		247	device address			
Lb	0	3		2	baud rate 0 = 2.400 baud 1 = 4.800 baud 2 = 9.600 baud 3 = 19.200 baud			
LP	0	2		2	parity 0 = none (no parity) 1 = odd 2 = even			
PARAM.	MIN.	MAX.	M.U.	SET.	ENABLING			
EO	0	3		1	quantity modifiable quickly before starting the cycle  0 = no quantity  1 = if you have selected a timed chilling cycle, the chilling duration if you have selected a set-temperature chilling cycle, the chilling end- point temperature  2 = if you have selected a timed chilling cycle, the chilling duration and the chilling operational setpoint if you have selected a set-temperature chilling cycle, the chilling operational setpoint  3 = if you have selected a timed chilling cycle, the chilling duration and the chilling operational setpoint if you have selected a set-temperature chilling cycle, the chilling end- point temperature and the chilling operational setpoint			
E9	0	1		1	reserved			
	l	1	J	1				

- (1) the unit of measurement depends on parameter P2
- (2) set the parameters relating to the controllers appropriately after altering parameter P2
- (3) the device stores the defrost interval count every 30 minutes; altering parameter d0 has effect of concluding the previous defrost interval or manual defrost activation
- (4) the temperature alarm functions are only enabled during storage operations
- (5) the parameter differential is 2.0 °C/4 °F
- **(6)** there are no temperature alarms during defrosting and drip draining, if they occur following defrost activation
- (7) there is no maximum temperature alarm while door switch input is enabled, if occurring after input activation
- (8) the evaporator fan will be shut down providing defrosting is not ongoing
- (9) the compressor and/or ventilator fan are shut down 10 s after input activation
- (10) the compressor is shut down 10 s after input activation.

## **Troubleshooting**

If your appliance develops a fault, please check the following table before making a call to the Helpline or your retailer.

t is not switched on d lead are damaged	Check the unit is plugged in correctly and switched on
d lead are damaged	
u icau aic uainagcu	Call agent or qualified Technician
the plug has blown	Replace the fuse
supply	Check power supply
wiring fault	Call agent or qualified Technician
pliance is not properly leveled	Adjust the screw feet to level the appliance (if applicable)
charge outlet is blocked	Clear the discharge outlet
	Clear the floor of the appliance (if applicable)
ter container is damaged	Call agent or qualified Technician
ut/screw	Check and tighten all nuts and screws
liance has not been installed in	Check installation position and
or stable position	change if necessary
	the plug has blown supply wiring fault bliance is not properly leveled charge outlet is blocked ent of water to the drain is ted ter container is damaged nut/screw bliance has not been installed in or stable position

# **Technical Specifications**

Model	Voltage	Power	Current	Capacity	Dimensions H X W X D (mm)	Weight (Kg)
T3	230v 50Hz	450W	3A	3 x GN 2/3	390 x 600 x 585	42