

Installing and Operating Instructions

Blast Chiller - Quick Chill and Hold Function

XB350C - XB370C - XB570C

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GENERAL WARNING

⚠ Please read before using this manual

◆ This manual is part of the product and should be kept near the instrument for easy and quick reference.

◆ The instrument shall not be used for purposes different from those described here-under. It cannot be used as a safety device.

◆ Check the application limits before proceeding.

⚠ Safety Precautions

◆ Check the supply voltage is correct before connecting the instrument.

◆ Do not expose to water or moisture: use the controller only within the operating limits avoiding sudden temperature changes with high atmospheric humidity to prevent formation of condensation

◆ Warning: disconnect all electrical connections before any kind of maintenance.

◆ The instrument must not be opened.

◆ In case of failure or faulty operation send the instrument back to the distributor or to "Dixell s.r.l." (see address) with a detailed description of the fault.

◆ Consider the maximum current which can be applied to each relay (see Technical Data).

◆ Ensure that the wires for probes, loads and the power supply are separated and far enough from each other, without crossing or intertwining.

◆ Fit the probe where it is not accessible by the end user.

◆ In case of applications in industrial environments, the use of mains filters (our mod. FT1) in parallel with inductive loads could be useful.

General Features

The series XB has been created for fast chilling or freezing goods according to international food safety standards.

There are FOUR types of cycles:

◆ The CYCLES: Cy1, Cy2, Cy3, Cy4 are pre-set according to the most common cycles used in food - safety applications; the user can select one of them according to his own requirements and modify it as he wants.

◆ Any cycle can be terminated before the normal end by using the same activation key

◆ Any cycle can use the third probe like an "insert probe", it measures the internal temperature of the product.

◆ During the Cycle there are no defrosts and the fans are always on, a defrost cycle can be done before any freezing cycle.

◆ The cycle is divided up to 3 phases completely configurable by the user.

MOUNTING & INSTALLATION

Models XB350C, XB370C and XB570C are panel mounted, hole dims 29x71 mm, and fixed with the supplied clips. The ambient working temperature range should be between 0÷60°C. Avoid locations subject to heavy vibration, corrosive gases or excessive dirt. The same applies to the probes. Ensure ventilation around the instrument.

ELECTRICAL CONNECTIONS

The instruments are provided with a screw terminal block to connect cables with a cross section up to 2,5 mm². Before connecting cables make sure the power supply complies with the instrument's requirements. Separate the input connection cables from the power supply cables, from the outputs and the power connections. **Do not exceed the maximum current allowed on each relay**, in case of heavier loads use a suitable external relay.

Probes connection

The probes shall be mounted with the bulb upwards to prevent damages due to casual liquid infiltration. It is recommended to place the thermostat probe away from air streams to correctly measure the average room temperature. Place the defrost termination probe among the evaporator fins in the coldest place, where most ice is formed, far from heaters and from the warmest place during defrost, to prevent premature defrost termination.

Connections

15

16

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20

21

Digital Input

Insert Probe

Ambient Probe

Remote Display

XB350C

8(3)A

5(2)A

8(3)A/250Vac

Line

Comp

Fan

N.O. Alarm/ AUX

Power Supply 12Vdc/dc

TTL (RS485)

15

16

17

18

19

20

21

Digital Input

Evap. Probe

Insert Probe

Ambient Probe

Remote Display

XB370C

8(3)A

8(3)A

5(2)A

8(3)A/250Vac

Line

Comp Def.

Fan

N.O. Alarm/ AUX

Power Supply 12Vdc/dc

TTL (RS485)

15

16

17

18

19

20

21

Digital Input

Evap. Probe

Insert Probe

Ambient Probe

Remote Display

XB570C

8(3)A

8(3)A

5(2)A

8(3)A/250Vac

Line

Comp Def.

Fan

N.O. Alarm/ AUX

Power Supply 12Vdc/dc

TTL (RS485)

Frontal panel

Meaning of the LEDs'

A series of light points on the front panels is used to monitor the loads controlled by the instrument. Each LED function is described in the following table.

LED	MODE	Function
✱	ON	Compressor enabled
✱	Flashing	- Programming Phase (flashing with LED ✿) - Anti-short cycle delay enabled
✿	ON	- Fan enabled
✿	Flashing	- Programming Phase (flashing with LED ✱) - Fan delay after defrost in progress
✱✱	ON	- Defrost in progress
✱✱	Flashing	- Drip time in progress
C	ON	- Freezing cycle or hold mode in progress
C	Flashing	- Instrument temporary stop
🔊	ON	- ALARM signalling - In "Pr2" indicates the parameter is also present in "Pr1"
AUX	ON	- IV relay enabled

Front Panel Commands

WHEN A CYCLE IS NOT IN PROGRESS.

SET: TO DISPLAY SET POINT OF HOLD MODE: by pressing and releasing this key when a freezing cycle is not in progress the set point of the "Hold mode" is displayed for 5s.

TO MODIFY SET POINT OF HOLD MODE: by holding the key pressed for at least 2s set point change mode is entered: the set point is displayed and the LEDs of the first and third digits blink. To change the value use the "UP" and "DOWN" keys. The new value can be stored either by pressing the "SET" key (the instrument restores temperature display) or by waiting the exit time-out to expire (15s).

TO CONFIRM A CYCLE: when the Selection Cycle Menu is entered, by pressing the SET key the displayed cycle is memorised.

▲ (UP): in programming mode or in "Function Menu" it browses the parameter codes or increases the value of the displayed variable. Hold pressed for a faster change.

TO SELECT A CYCLE: when a cycle is not in progress, by holding it pressed for 3s the Cycle Menu is entered.

▼ (DOWN): in programming mode or in "Function Menu" it browses the parameter codes or decreases the value of the displayed variable. Hold pressed for a faster change.

TO ACTIVE THE AUX RELAY: by holding the key pressed for 3 sec the AUX relay is activated. (The activation time depends on the related parameter)

🕒 TO START A CYCLE: by pressing it the shown cycle is started

KEY COMBINATIONS:

▲ + ▼ TO UNLOCK THE KEYBOARD: when held pressed for 3s the keyboard is unlocked (see "LOC" function).

SET + ▼ TO ENTER THE FUNCTION MENU OR TO GO BACK TO THE PREVIOUSLY MENU: when a cycle is not in progress, by holding these keys pressed for 3s the Function Menu is entered.

Once entered in the Function Menu or in some sub-menu, the same keys can be used to go to the previously menu.

WHEN A CYCLE IS IN PROGRESS

SET: TO DISPLAY SET POINTS AND THE DURATION OF THE CURRENT PHASE: by pressing and releasing this key when a cycle is in progress the message "rPS" room Probe Set is displayed followed by the flashing set point of the room. While the set point is flashing press again the key and the message "iPS" (insert Probe Set) will be displayed followed by the value of the end phase temperature. Press again the SET key and the remaining time of the phase will be displayed.

How To Select A Cycle.

Assure that none cycle is in progress: the LED of the C symbol is OFF.

1. Hold press the UP key until the cycle Cy1 or Cy2 or Cy3 or Cy4 or HLD will be displayed.

2. Select one of the following cycle by means of the UP or DOWN keys:

Cy1: for fast chilling and conservation of foods (hard +soft chill).

Cy2: for chilling and fast freezing of foods (hard +soft + freezing cycle).

Cy3: for direct fast freezing (only fast freezing cycle)

Cy4: for fast freezing avoiding ice skin (hard chill + freezing cycle)

HLD: hold mode function

dEF: for starting a manual defrost

3. By using the UP or DOWN keys select the cycle.

4. Confirm the selected cycle by pressing the SET key (the displayed cycle will flash for few seconds).

Now the cycle is memorised and can be activated.

How To Start The Selected Cycle

1. Press the 🕒 key, the memorised cycle will be displayed.

2. If it is the cycle you require, hold pressed the 🕒 key until the compressor will start.

If you require another cycle, release the 🕒 key, select the right cycle as described in the previous paragraph and then start it by hold press the 🕒 key.

How To Temporary Stop The Running Cycle

1. Press and release the 🕒 key.

2. The compressor and the fan will be stopped and the flashing message "Stb" will be displayed.

3. To restart the cycle press and release the 🕒 key, the cycle will restart from the some point at which it was interrupted.

How To Definitively Stop The Cycle

1. Press the 🕒 key, the cycle in progress will be displayed.

2. Hold pressed the 🕒 key until "End" message will be displayed and the buzzer will be enabled.

3. Press a key to reset the buzzer and the message on the display.

4. The instrument is now placed in stand by mode.

How To Modify The Set Point Of The Hold Mode

When a cycle is not in progress by holding the key pressed for at least 2s set point change mode is entered: the set point of the hold mode is displayed and the LEDs of the first and third digits blink. To change the value use the "UP" and "DOWN" keys. The new value can be stored either by pressing the "SET" key (the instrument restores temperature display) or by waiting the exit time-out to expire (15s).

How A Cycle Is Made

The "FCy" item of the Funcions Menu contains the parameters used to control a complete quick chill cycle.

Cy1

dbC

iS1

rS1

Pd1

iS2

rS2

Pd2

iS3

rS3

Pd3

dbH

HdS

Cy2

dbC

iS1

rS1

Pd1

iS2

rS2

Pd2

iS3

rS3

Pd3

dbH

HdS

Cy3

dbC

iS1

rS1

Pd1

iS2

rS2

Pd2

iS3

rS3

Pd3

dbH

HdS

Cy4

dbC

iS1

rS1

Pd1

iS2

rS2

Pd2

iS3

rS3

Pd3

dbH

HdS

dbc Defrost before the cycle (yes/no).

iS1 Insert Probe Set point (-50÷50°C; res. 1°C/1°F) when the temperature measured by the third probe reaches this value the first phase is ended.

rS1 Room probe Set point for the first phase: (-50÷50°C; res. 1°C/1°F) it prevents temperature from reaching a too low value during the hard cycle.

Pd1 Maximum time for first phase (OFF÷4.0h; res. 10 min)

iS2 Insert probe set point to end the second phase: (-50÷50; res. 1°C/1°F) when the temperature measured by the third probe reaches this value the second phase is ended.

rS2 Room probe Set point for the second phase: (-50÷50; res. 1°C/1°F) it prevents temperature from reaching a too low value during the second phase.

Pd2 Maximum time for second phase: (OFF÷4.0h; res. 10 min)

iS3 Insert Probe Set point to stop the third (and last) phase:(-50÷50; res. 1°C/1°F)

“**FCy**”The FCy menu contains the Cy1, Cy2, Cy3, Cy4 submenu. Each submenu contains all the configurable parameter of the cycle as shown in the following drawing.

“**ALr**” :This function displays any alarm messages.

“**Prt**” :This menu is used for the management of the printer. It contains the parameters :
PrP printer presence: (Yes/no) Enabling or disabling the printer
itP: printing interval: (0.0÷30.0 min) It sets the interval of printing.
PbP: Which probe print: (**iP**: Only the Insert probe; **rP**: Only the room probe; **irP**: The Insert and the room probe; **irE**: All the probe)
PtH: (yes/no) it enables or disables the printing during the holding phase.

“**tSt**” : it starts the instrument self test.

“**Out**” : exits from menu.

List Of Parameters REGULATION

Hy Intervention differential for set point: (0.1÷12.0; res. 0.1°C/1°F), always positive. It is used during the hold phase. Compressor cut IN is Set Point Plus Differential (Hy). Compressor cut OUT is when the temperature reaches the set point.

AC Anti-short cycle delay: (0÷30 min) minimum interval between the compressor stop and the following restart.

rPO Thermostat probe calibration (-12.0 ÷ 12.0; res. 0.1 °C /1°F)
EPP Evaporator probe presence (not present in the XB350C): (no / YES) **no**: not present (timed defrost); **YES**: present (end defrost) no / YES

EPO Evaporator probe calibration (not present in the XB350C): (-12.0 ÷ 12.0; res. 0.1 °C /1°F)

iPP Insert probe presence no / YES

iPO Insert probe calibration (-12.0 ÷ 12.0; res. 0.1 °C /1°F)

CF Temperature measurement unit: °C =Celsius; °F =Fahrenheit

rES Resolution (for °C): **in**: integer; **de**: with decimal point

PAU Time of stand by: (0 ÷ 60min) after this time the controller restart the cycle
PfT Maximum acceptable duration of power failure: (0 ÷ 250 min) if power failure duration is less than PfT, the cycle restarts from the same point at which it was stopped otherwise the cycle restarts from the beginning of the current phase.

iPd Temperature difference for the automatic recognition of the insert probe: (0 ÷ 30; ris.1 °C/1°F) if the difference of temperature between the insert probe and the thermostat probe is less than iPd, the selected cycle is made by time.

iPt Time delay for the automatic recognition of the insert probe: (0÷255sec, with 0 only timed cycles are made) time between the start of a cycle and the comparison of the temperature of the thermostat probe and the insert probe to recognising if the insert probe is used.

Con Compressor ON time with faulty probe: (0÷ 255 min) time during which the compressor is active in case of faulty thermostat probe. With COn=0 compressor is always OFF

COF Compressor OFF time with faulty probe: (0÷255 min) time during which the compressor is off in case of faulty thermostat probe. With COF=0 compressor is always active

diC Digital input operating mode (EAL, bAL, dor)

EAL: external alarm; **bAL**: serious alarm; **dor**: door open function

diP Digital input polarity: (OP÷CL)select if the digital input is activated by opening or closing the contact.

did Digital input delay (0÷255 min) for configurable or door opened alarm.

OAC AUX output configuration: (AL, Li, UL, Ip, AA, rE, dF)

AL alarm output; **Li**: light of the cabinet; **UL**: for the ultra-violet light (It is actionable only when the controller is in OFF position); **Ip**: to extract the insert probe **AA**: anti - condensation; **rE**: the IV relay works as a thermostat, with direct action (cooling) (OAH>0), and inverse actions (heating) (OAH<0); **dF**: the IV relay is enabling during the defrost, at the end of the defrost it remains ON for the OAt time.

OAP AUX output polarity (OP ÷ CL) **OP**= normally open; if it is ON the terminals 6-8 are closed. **CL**= normally closed; if it is ON the terminals 6-7 are closed.

OAt AUX output timer: (0÷255 min) time in which the AUX output stays ON. It is enabled when OAC = Li or UL or Ip or AA or dF.

OAS Set point for AUX output (-50÷50; ris.1 °C/ 1°F)

OAH Differential for AUX output: (-12.0÷12.0; ris.0.1°C/1°F, always >0) Intervention differential for the set point of the auxiliary, with OAH<0 the action is for heating, with OAH>0 it is for cooling. **COOLING**: AUX cut IN is OAS Plus Differential (OAH>0). AUX cut OUT is when the temperature reaches the set point OAS.

HEATING: AUX cut IN is OAS Plus Differential (OAH<0). AUX cut OUT is when the temperature reaches the set point OAS.

OAi Probe selection for the AUX output (rP, EP, iP) rP = thermostat probe, EP = evaporator probe; iP = insert probe

DEFROST

tdF Defrost type (not present in the XB350C): (rE= electrical heater; in = hot gas)

dPO Defrost before the holding: **no**= no defrost; **YES**= defrost at the start of a holding cycle.

ldF Interval between defrost cycles: (0.1÷ 24.0; res. 10 min) Determines the time interval between the beginning of two defrost cycles. (with 0.0 the defrost is disabled)

dtE Defrost termination temperature (not present in the XB350C): (-50÷50 °C/°F) Sets the temperature measured by the evaporator probe, which terminates the defrost.

MdF Maximum length for defrost: (0÷255 min) When EPP = no (timed defrost) it sets the defrost duration, when EPP = YES (defrost termination based on temperature) it sets the maximum length for defrost.

dFd Temperature displayed during defrost: (rt , it, SEt, dEF) **rt**: real temperature; **it**: temperature at the start of defrost; **SEt**: set point; **dEF**: 'dEF' message

Fdt Drip time (not present in the XB350C): (0 ÷ 60 min) Time interval between reaching defrost termination temperature and the restoring of the controllers' normal operation. This time allows the evaporator to eliminate water drops that might have formed during defrost.

FANS

FnC Fan operating mode during the holding phase: (CP; On) **CP**= with the compressor; **On**: continuous mode: fans are on if the temperature detected by the evaporator probe is below FSt parameter.

FSt Fan stop temperature: (-50÷50°C/°F; res. 1°C/1°F) if the temperature, detected by the evaporator probe is above FSt fans are stopped. It serves to avoid blowing warm air around the room.

AFH Differential for the stop temperature and for the alarm(0.1 ÷ 25.0 °C; ris.0.1°C/1°F) Fans carry on working when the temperature reaches the FSt-AFH value, the temperature alarm recovers when the temperature is AFH degrees below the alarm set.

FOn Fan ON time during defrost: (0 ÷ 15min) with Fon=0 the fans are always OFF. With FOn=FOF=0 the fans are always OFF.

FOF Fan OFF time during defrost (0 ÷ 15min) with FOF=0 the fans are always ON

Fnd Fan delay after defrost: (0 ÷ 255 min) The time interval between end of defrost and evaporator fans start.

ALARM

ALU MAXIMUM temperature alarm: (1 ÷ 50 °C/°F) When the “SET+ALU” temperature is reached the alarm is enabled, (possibly after the “Ald” delay time)

ALL Minimum temperature alarm: (1÷50°C/1°F) When the “SET-ALL” temperature is reached the alarm is enabled, (possibly after the “Ald” delay time).

ALD Temperature alarm delay: (0÷255 min) time interval between the detection of an alarm condition and alarm signalling.

EdA Temperature alarm delay at the end of defrost: (0 ÷ 255 min) Time interval between the detection of the temperature alarm condition at the end of defrost and alarm signalling.

tbA Silencing alarm relay: (Yes= silencing buzzer and alarm relay, no= only buzzer silencing).

OTHER

Ad1...Ad2 Addresses for RS485: (0 ÷ 94)

Lod Local display: (rP, EP, iP, nr) select which probe is displayed by the instrument: **rP**: thermostat probe; **EP**: evaporator probe; **iP**: insert probe, **nr**: during a temperature cycle the insert probe is displayed, during the holding phase the room probe is displayed; if the cycle is made by time the time remaining is displayed (in minutes).

rEd Remote display: (rP, EP, Ip) select which probe is displayed by the XR REP: **rP**: thermostat probe; **EP**: evaporator probe; **iP**: insert probe.

Loc Set point of the holding phase lock (no - YES) It locks the set point of the holding phase.

PAS Security code set up: (0 ÷ 999)

tPb Type of probe: it displays the probe used by the controller (NTC or PTC)

rEL Release code (readable only)

Ptb Parameter code (readable only)

PARAMETERS RELATIONS

Par	Value	Hide	Display
EPP	no	EPO - dtE - FSt	- -
	YES	- -	EPO - dtE - FSt
IPP	no	iPO -iPd -iPt	- -
	YES	- -	iPO -iPd -iPt
CF	°F	rES	- -
	°C	- -	rES
OAC	AL	OAt, OAS, OAH, OAi	- -
	Li, UL, iP, AA, dF	OAS, OAH, OAi	OAt
	rE	OAt	OAS, OAH, OAi

Printer Management (XB570C only)

The instrument XB570C can drive the **serial printer** XB05PR by means of the RS232 output. So temperatures measured during a freezing cycle can be printed. Time reference is provided by the internal Real Time clock of the instrument.

The “Prt” functions manages the printer by means of the following parameters:

Prt: printer presence: (Yes/no) it enables or disables the printer.

itP: printing interval: (0.0÷30.0 min).

PbP: Probes selection: (**iP**: Only the insert probe; **rP**: Only the thermostat probe; **irP**: Insert and thermostat probes; **irE**: All the probes.

PtH: Printing during the holding phase (YES, no) **yES** = Printing enabled during the holding phase; **no**= Printing disabled during the holding phase.

IV Configurable Relay

The IV relay configurable will be activated by means of the DOWN key pressed FOR 3s. The relay remains activated for the time set in the OAt parameter or until the DOWN key is repressed. The relay can be used for

OAC=AL: for remote alarm

the IV relay is switched ON when an alarm happens.

OAC=Li: light

The light is switched on pressing the DOWN key or when the door is opened (if diC=dor). It stays on for the OAt time. It can be switched off before the OAt time by pressing the DOWN key or by closing the door. NOTE: with OAt=0 it can be switched off only by pressing the DOWN key or by closing the door.

OAC=UL: UV light for a sterilisation cycle

It is used for a sterilisation cycle of the machine. It can be enabled **ONLY WHEN THE CONTROLLER IS NOT WORKING** or when a manual defrost is running.

The ultra violet light stays on for the OAt time. It can be switched off before the OAt time by pressing the DOWN key.

NOTE: with OAt=0 it can be switched off only by pressing the DOWN key.

OAC=AA: to enable the resistor of anti condensation

It can be enabled by pressing the DOWN key. The resistor stays on for the OAt time. It can be switched off before the OAt time by pressing the DOWN key.

NOTE: with OAt=0 it can be switched off only by pressing the DOWN key.

OAC=iP to extract the insert probe

It can be enabled **ONLY WHEN THE CONTROLLER IS NOT WORKING**. To extract the insert probe press the DOWN key for few seconds. The resistor stays on for the OAt time. To switch it OFF before the OAt time, press the DOWN key for few seconds. NOTE: with OAt=0 it can be switched off only by pressing the DOWN key.

OAC=rE thermostat function

The IV relay works as a thermostat with the set point OAS and the differential OAH. In this case the probe used for the regulation is selected by the OAi parameter. E.G. with OAi = rP; OAH>0

Digital Configurable Input

The configurable input has 3 functions, selectable by means of the diC parameter

diC=EAL Signal a **external alarm** (after the dld time): buzzer enabled, “EA” message on the display.

diC=bAL Signal a **external serious alarm**(after the dld time): buzzer enabled, all the loads are switched OFF and the cycle is stopped, “CA” message on the display. When the alarm recovers the controller is placed in the OFF position.

diC=dor: “door switch” input: the compressor and the fans are stopped; if OAC=Li the light is switched on; after the **dld** time the buzzer is enabled and the **da** message is displayed.

Alarm Signals

“**EE**” **Data or memory failure:** Alarm output ON; Other outputs unchanged
“**rPF**” **Thermostat Probe failure:** Alarm output ON; Compressor output according to parameters “**COn**” and “**COF**”

“**EPF**” **Evaporator Probe failure:** Alarm output ON; Defrost termination is timed; No temperature control on fans.

“**iPF**” **Insert probe failure:** Alarm output ON; Other outputs unchanged; The cycle is made by time

“**rtF**” **Real Time Clock failure:**Alarm output ON; Other outputs unchanged; The date and the duration of the cycle are not available.

“**HA**” **Maximum temperature alarm:**Alarm output ON; Other outputs unchanged.

“**LA**” **Minimum temperature alarm:** Alarm output ON; Other outputs unchanged.

“**FF**” **Fast freezing interrupted by short power failure:**Alarm output ON; The freezing cycle restart from the same point at which was interrupted.

“**PFA**” **Fast freezing interrupted by long power failure:** Alarm output ON; The freezing cycle restart from the current phase.

“**OCF**” **Max duration of the cycle is expired:** Alarm output ON; Other outputs unchanged. In any case the cycle ends when the final temperature is reached

“**EA**” **External alarm:** Alarm output ON; Other outputs unchanged.

“**CA**” **Serious external alarm** Alarm output ON; Other outputs OFF.

“**da**” **Door open alarm** : Alarm output ON; Other outputs unchanged.

Technical Data

Housing: self extinguishing ABS.

Case: frontal 32x74 mm; depth 70mm;

Mounting: panel mounting in a 71x29mm panel cut-out

Frontal protection: IP65

Connections: Screw terminal block ≤ 2,5mm² wiring.

Power supply: 12Vac/dc, -10% +15%.

Power absorption: 3VA max.

Display: 3 digits, red LED, 14,2 mm high.

Inputs: **XB350C:** 2 PTC probes; **XB370C, XB570C:** 3 PTC probes

Relay outputs:

compressor: relay SPST 8(3)A, 250Vac

defrost: **XB370C, XB570C:** relay 8(3)A, 250Vac

fans: relay SPST 5(2)A, 250Vac

IV relay: relay SPDT 8(3)A, 250Vac

Serial output: XB350C, XB370C: TTL output for external serial module XJRS485

XB570C: RS232 serial output for printer connection

Data storing: on the non-volatile memory (EEPROM).

Operating temperature: 0÷60 °C.

Storage temperature: -30÷85 °C.

Relative humidity: 20÷85% (no condensing)

Measuring range: -55÷50 °C

Resolution: 0.1 °C or 1 °F (selectable).

Accuracy of the controller at 25°C: ±0,3 °C ±1 digit

Value Of The Cycles

Regulation			
Hy	Differential	2/4	2/4 2/4
AC	Anti-short cycle delay	1	1 1
rPO	Thermostat probe calibration	0	0 0
EPP	Evaporator probe presence	—	yes yes
EPO	Evaporator probe calibration	—	0 0
iPP	Insert probe presence	y	y y
iPO	Insert probe calibration	0	0 0
CF	Temperature measurement unit	°C/°F	°C/°F °C/°F
rES	Resolution (for °C):	de	de de
PAU	Time of stand by	0	0 0
PfT	Maximum acceptable duration of power failure	15	15 15
iPd	Temperature difference for the automatic recognition of the Ins pr.	3/6	3/6 3/6
iPt	Time delay for the automatic recognition of the insert probe	60	60 60
Con	Compressor ON time with faulty probe	15	15 15
COF	Compressor OFF time with faulty probe	10	10 10
diC	Digital input operating mode	EAL	EAL EAL
diP	Digital input polarity	CL	CL CL
did	Digital input delay	5	5 5
OAC	AUX output configuration	AL	AL AL
OAP	AUX output polarity	CL	CL CL
OAt	AUX output timer	0	0 0
OAS	Set point for AUX output	0/32	0/32 0/32
OAH	Differential for AUX output	2/4	2/4 2/4
OAi	Probe selection for the AUX output	rP	rP rP
Defrost			
tdF	Defrost type	—	rE rE
dPO	Defrost before holding cycle	no	no no
ldF	Interval between defrost cycles	8.0	6.0 6.0
dtE	Defrost termination temperature	—	8/46 8/46
MdF	Maximum length for defrost	20	20 20
dFd	Temperature displayed during defrost	rt	rt rt
Fdt	Drip time	—	0 0
Fans			
FnC	Fan operating mode	CP	CP CP
FSt	Fan stop temperature	—	30 30
AFH	Differential for the stop temperature and for the alarm	2/4	2/4 2/4
Fon	Fan ON time during defrost	0	0 0
FoF	Fan OFF time during defrost	5	5 5
Fnd	Fan delay after defrost	2	2 2
Alarm			
ALU	MAXIMUM temperature alarm	30/60	30/60 30/60
ALL	Minimum temperature alarm	30/60	30/60 30/60
ALd	Temperature alarm delay	15	15 15
tbA	Silencing alarm relay	y	y y
Others			
Ad1	Address 1 for RS485:	0	0 0
Ad2	Address 2 for RS485	1	1 1
Lod	Local display	rP	rP rP
rEd	Remote display	iP	iP iP
LOC	Keypad LOCK	no	no no
PAS	Security code set up	321	321 321
tPb	Type of probe	PTC	PTC PTC
rEL	Release code (readable only)	—	— —
Ptb	Parameter code (readable only)	—	— —

Installation and Operating Instructions

GB

BLAST CHILLER - QUICK CHILL AND HOLD FUNCTION

XB350C
XB370C
XB570C

Dixell®

cod. 15920060000 rel. 1.0 30/05/01

Cy1: for fast chilling and conservation of foods at positive temperature

dbC = no	iS2 = 5°C (41°F)	rS3= -2°C (28°F)
iS1 = 20°C (68°F)	rS2= -2°C (28°F)	Pd3 = OFF
rS1= -10°C (14°F)	Pd2= 2.0 h	dbH = yes
Pd1 = 2.0 h	iS3 = 3°C (37°F)	HdS = 3°C (37°F)

Cy2: for chilling and fast freezing of foods with holding

dbC = no	iS2 = 5°C (41°F)	rS3= -30°C (-22°F)
iS1 = 10°C (50°F)	rS2= -2°C (28°F)	Pd3 = 2.0 h
rS1 = -10°C (14°F)	Pd2= 2.0 h	dbH = YES
Pd1 = 2.0 h	iS3= -18°C (0°F)	HdS = -18°C (0°F)

Cy3: direct fast freezing with holding

dbC = no	iS2= -18°C (0°F)	rS3= -30°C (-22°F)
iS1 = -18°C (0°F)	rS2= -30°C (-22°F)	Pd3 = OFF
rS1= -30°C (-22°F)	Pd2=OFF	dbH = yes
Pd1 = 4.0	iS3 = -18°C (0°F)	HdS = -18°C (0°F)

Cy4: direct fast freezing without holding

dbC = no	iS2= -18°C (0°F)	rS3= -30°C (-22°F)
iS1 = -18°C (0°F)	rS2= -30°C (-22°F)	Pd3 = OFF
rS1= -30°C (-22°F)	Pd2=OFF	dbH = no
Pd1 = 4.0	iS3= -18°C (0°F)	HdS = OFF

Dixell s.r.l.