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XB887D - CONTROLLER FOR BLAST CHILLERS

Dixell introduces the new controller for Blast Chiller and Freezer with power relay and graphic Touch interface.



XB8870D is the innovative controller for the optimized management of **blast chillers**. Designed to better manage blast chilling, freezing and food storing, it is characterized by its configurability and easiness of use of the chilling cycles. The **highly customizable user interface** and the high performances are just some of the features that allow the controller to fully satisfy even the most demanding customers.

The strong points of this device are the relays with higher capacity suited to directly drive the loads and the connections with screw disconnectable connectors.

The controller is available in **10 DIN Rail** size, and, thanks to **Visotouch graphic display**, it allows the user to instantly obtain complete information on the status of the machine (room temperature, product temperature, remaining cycle time, etc...).



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1 MAIN APPLICATIONS

Thanks to the hardware completeness and the optimization of its many functions, the new XB887D is the ideal solution for all types of blast chillers used in restaurants, hotels, bakeries, pizzerias, supermarkets and canteens.



2 MAIN FEATURES

2.1 CHILL AND FREEZE CYCLES

Cycles can be split into two categories:

CHILL: when it is necessary to reduce the temperature with immediate impact, below 10°C (from 35°C to 65°C is the critical temperature zone for the higher bacterial proliferation).

FREEZE: normally preceded by a CHILL cycle, it is used to freeze food in a faster way in order to preserve its organoleptic properties and to avoid icing inside of it.

	12/01	
SOFT CHILL	SOFT FREEZE	(A) HACCP
HARD CHILL	HARD FREEZE	Room Temp.





2.2 FUNCTIONING

The cycles can be set according to **TIME** or **TEMPERATURE**. If the cycle is set by **time**, its duration will be the selected time (the food temperature is not considered); if the cycle is set by **temperature**, it will finish once the product (through the needle probe) will reach the selected temperature. In both cases the temperature of the room is controlled by the room probe, which is also used for the compressor control. Cycles can be **SOFT** or **HARD**.

SOFT CHILL cycles: the blast chiller works with a room temperature that usually is positive.

HARD CHILL cycles: the blast chiller works with different room temperatures; usually the first one is negative while the second one is positive.

SOFT FREEZE cycle: the blast chiller works at different room temperatures. Usually the first is positive (around 0° C), while the second is negative (usually around -35°C)

HARD FREEZE cycle: the chiller works at a room temperature that is usually around -35 °C.

2.3 COMPLETE CONTROL OF THE BLAST CHILLER



	Pb1= Needle, Pb2= Room, Pb3= Evaporator, Pb4= Condenser
Probes	
	Other available configurations: Room2, Room3,
	Needle2, Needle3, Multipoint Needle 1÷3
	DI1= Door Switch
Digital	Other eveilable configurationer Low Pressure, Ligh
Inputs	Prossure Defrost Enablement Defrost Cycle External
	alarm
	LD1(16A)= Alarm, LD2(8A)= Condenser Fan, LD3(8A)=
	Door Frames Resistances, LD4 (8A)= Evaporator Fan,
	LD5(16A) =Cell light, LD6(16A) = Defrosting Resistance,
	LD7(16A)=Compressor, LD8(16A)= Heated Probe
Relais	Resistance
	Other available configurations: Compressor 2 11/
	Lamp Auxiliary Output 2° Evaporator Fan Speed 2°
	Condenser Fan Speed





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3 BENEFITS



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3.1 LANGUAGES

There are 7 standard languages available, but additional ones can be implemented according to customer needs.

3.2 DEFAULT BLAST CHILLING CYCLE AND FREEZING PROCESS



The blast chilling (+3°C) and quick-freezing (-18°C) phases can be Soft or Hard. At the end of the cycle, the controller automatically switches to the preservation mode (+2°C for blast chilling, -20°C for quick-freezing).

3.3 CYCLES CUSTOMIZATION



Every cycle can be customized depending on the user needs; product or room temperature can be modified before and during the cycle execution in order to optimize and reduce working times. Each cycle can be split into 3 different phases in order to ensure the best results.

3.4 SPECIAL CYCLES

In addition to the standard cycles there are 3 special cycles for particular conditions:



- CONTINUOUS CYCLE: for the cooling of the room before inserting the food;
- FISH CYCLE: to kill the bacteria present in raw fish;
- UV CYCLE: designed for sanitizing the cell before inserting the food.

3.5 MULTIPOINT INSERT PROBE



The application was designed to work with standard needle probes, but it can also work with multipoint probes (3 points) for a more accurate product temperature measurement.







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3.6 HEATED PROBE



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The application allows the management of a heated probe. The heating can be activated through a dedicated key, according to a preset temperature or to timeout; the deactivation is automatic or manual.

3.7 HIGH FOOD QUALITY (HACCP)



The HACCP reports can be easily consulted for a complete and immediate control on the food status. The internal database ensures the storage of the events data such as the high temperature alarms, the lack of tension and the exceeding of the maximum cycle time. The alarms can be viewed directly on VISOTOUCH or downloaded in .txt format on a USB pen.

HACCP LOG FILE START Chill +3 C by temperature Soft Date:16/05/2016 Time:16:57 Start Phase 1, 16:57 Needle Probe:19.5C Room Probe:44.4C Probes report, 16:57 Meedle Probe:19.5C Room Probe:44.4C End Fhase 1, 16:59 Needle Probe:30.6C Duration:0mins END Chill +3 C by temperature Soft Duration:1mins by temperature	USB
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3.8 CONDENSER TEMPERATURE ALARM



It is possible to manage the high-temperature and low-temperature alarm of the condenser through the signal on the display or, for a higher safety, by enabling the blocking function of the compressor.

3.9 SIMPLIFIED PARAMETER MANAGEMENT



Thanks to the **WIZMATE** software it is now possible to manage the parameters map from PC. In addition, all parameters, protected by password, can be changed directly on VISOTOUCH.

3.10 REMOTE ACCESSIBILITY



It is possible to connect the controllers to the XWEB monitoring systems. In this way all functioning data of the blast chiller will be accessible from remote.





4 TECHNICAL DATA

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Housing:	Self extinguishing ABS, white, 10DIN, 175x110x59.5mm (WxHxD)
Mounting:	DIN rail
Connections:	Screw disconnectable connectors
Power supply:	24 Vac
Power absorption:	20VA (for applications with unipolar electronic valve: 40VA)
Analog Inputs:	5 x NTC, PTC, PT1000 2 x NTC, PTC, PT1000, 4÷20mA, 0÷10V
Digital Input:	6 x free contact
Digital Output:	4x 16(8)A, 1x 16A In-Rush (for led lights), 3x 8(5)A
Analog Output:	1x 0÷10V, 4÷20mA o PWM 2x 0÷10V o 4÷20mA
Other:	RS485 Slave USB ETHERNET (by converter USB-ETH-CONV) Connection for remote Touch keyboard Internal Clock

4.1 **DIMENSIONS**







4.2 CONNECTIONS

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5 MAIN ACCESSORIES

	XJ485USB-KIT USB to RS485 serial converter (2-wires) that allows to monitor one or more controllers networked to a computer equipped with an USB port and with WIZMATE software
	USB-ETH-CONV USB-ETHERNET adapter
	TF20D Transformer with of 20VA power and it is available in 230/24Vac and 110/24Vac versions
Num DMERCOM max	VTIPB - 00000B TOUCH V4.3" P.O. Touch screen graphic interface
AND REAL PROPERTY.	IP-FCXB800 Connector kit





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6 NEEDLE PROBES

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	SPC10PS	PTC sensor, plastic handle, inox steel cap dimension Ø3,5x100mm, 3m silicone cable, temperature range -38÷80°C
	NPC10PS	NTC sensor, plastic handle, inox steel cap dimension Ø3,5x100mm, 3m silicone cable, temperature range -30÷80°C
	SPC10IS	PTC sensor, plastic handle, inox steel cap dimension Ø3,5x100mm, 3m silicone cable, temperature range -50÷120°C
	NPC10IS	NTC sensor, plastic handle, inox steel cap dimension Ø3,5x100mm, 3m silicone cable, temperature range -50÷120°C
	SPC10IA	PTC sensor, plastic handle, inox steel cap dimension Ø3,5x100mm, 3m silicone cable for use with food, temperature range -50÷120°C
	NPC10IA	NTC sensor, plastic handle, inox steel cap dimension Ø3,5x100mm, 3m silicone cable for use with food, temperature range -50÷120°C
	NRC10PR	90° Multipoint insert probe, 3 points, NTC sensor, plastic handle, inox steel cap dimension Ø3,5x100mm, 3m silicone cable for use with food, temperature range -50÷90°C
	SOC12IR	Probe 90°, PTC sensor, plastic handle, inox steel cap dimension Ø4x120mm, 3m cable for use with food, temperature range -50÷200°C, with extension
	On request, 90° heated probes with NTC sensor	



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7 HOW TO ORDER

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X B 8 8 7 D – <mark>1 B C D 0</mark>

	В	С		D	
An	alogue output	le output Serial port		EEV driver	
0	Not present	0	LAN	0	No
1	PWM/0÷10vDC/4÷20mA	1	RS485 master	1	Yes

8 PRICES

Contact our sales department for prices and further information.

9 AVAILABILITY and ORDERS

XB887D is available; please contact our sales department for delivery time.

