

EWBC 800

Controllers for blast chillers - User interface

eliwell

by Schneider Electric

DESCRIPTION

The user interface is a capacitive touch keypad with display, combined with an electronics board controlling the basic functions of a blast chiller, called the base.

The display features 3 white digits for viewing menus, operating variables, values and parameter labels, as well as 8 icons for indicating load status, programs in progress and alarm conditions.

The keypad consists of 8 keys for menu navigation, program setting, parameter configuration, alarm acknowledgment, etc. and 12 LED for displaying the status of the blast chiller and the programs in progress, symbols.



DISPLAY: ICONS

	Permanently on	Compressor on
	Switched off	Compressor off
	Permanently on	Defrost in progress
	Blinking	Defrost required but not in progress (in progress at the next useful event)
	Switched off	Defrost off
	Permanently on	Evaporator room fan on
	Switched off	Evaporator room fan off
	Permanently on	Manual program in progress, a time is shown on the display
	Switched off	Manual program off
	Permanently on	Alarm present
	Switched off	Alarm absent
	Permanently on	Automatic program in progress, a temperature in °F (degrees Fahrenheit) is shown on the display
	Reserved	Reserved
	Permanently on	Automatic program in progress, a temperature in °C (degrees Centigrade) is shown on the display














If the keypad is locked, **EWBC 800** ignores the pressing of any of its keys.

To unlock the keypad, press and hold any key for 7 sec.

The first time it is switched on, the display and the LEDs on the keypad are all switched off, except the LED for the (START/STOP) key.

Every time it is switched on subsequently, or after the power supply has been restored, the user interface carries out a lamp-test (all segments, icons and LEDs blink for a few seconds).

KEYPAD: KEYS AND LEDs

TEMP key 	Single press	<ul style="list-style-type: none"> In stop status, positive ❄️ (parameter tp) or negative ❄️❄️❄️ (parameter tn) blast chilling cycle selection, alternately. The corresponding LED comes on in accordance with the selected cycle. While the blast chilling cycle is in progress, displays the current target value. While a storage phase is in progress, displays the current storage set point value.
TARGET key 	Single press	<p>In stop status, manual 🕒 or automatic 🖱️ blast chilling cycle selection, alternately. The corresponding LED comes on in accordance with the selected cycle.</p>
MODE key 	Single press	<p>In stop status, soft 🖱️ or hard 🖱️ blast chilling cycle mode selection, alternately. The corresponding LED comes on in accordance with the selected mode.</p>
DOWN key 	Single press	<ul style="list-style-type: none"> Buzzer acknowledgment. In parameter configuration, scroll through parameters. Decreases values.
UP key 	Single press	<ul style="list-style-type: none"> In parameter configuration, scroll through parameters. Increases values.
AUX/SET key 	Single press	<ul style="list-style-type: none"> In stop status, special sterilization function  or needle probe heating selection , alternately. The corresponding LED comes on in accordance with the selected program. In parameter configuration, display parameter or confirm displayed parameter value.
	Press and hold	In stop status, deselects all special functions selected and switched off the corresponding LED.
ESC key 	Single press	<ul style="list-style-type: none"> In stop status, selection of optional functions: <ul style="list-style-type: none"> - defrost - manual storage - room light - food unfreezing (EWBC 875 only) - pre-cooking (EWBC 875 only) - combined cycle unfreeze and pre-cooking (EWBC 875 only) - clock setting (EWBC 875 only - with HCE = 1) - HACCP alarm display (EWBC 875 only - with HCE = 1) alternately and LED activation. In parameter configuration, confirm the value of the displayed parameter, exit parameter configuration or return to previous level
	Press and hold	In stop status, deselects all special functions selected and switched off the corresponding LED.
START/STOP key 	Single press	Start or stop the selected program or function, alternately.
	Press and hold	<ul style="list-style-type: none"> In stop status, switch to stand-by status with LED activation. In stand-by status, switch to stop status with LED activation.
DOWN + UP key 	Press and hold (2 s)	In stop status, simultaneously press the DOWN and UP keys for 2 seconds to access the configuration parameters.
TIMEOUT LED 	/	In automatic blast chilling cycle, lit and blinking indicates positive (parameter t1) or negative (parameter t2) timeout reached without the target temperature being reached (continues to blink during the following storage phase).
RUNNING LED 	/	If lit, indicates defrost program in progress.

TECHNICAL DATA

Power supply:	12 Vdc (provided by EWBC 800 base board)
Classe di isolamento:	2
Temperature:	operating: -5 ... 55 °C (23 ... 131 °F) - storage: -30 ... 85 °C (-22 ... 185 °F)
Ambient humidity:	operating / storage: 10 ... 90 % (non-condensing)
Base-Keypad connectors:	BASE BOARD: Screw-type terminal block for cables with a cross-section up to 2.5 mm ² (13 AWG) KEYPAD: JST 3-way quick connector
Keypad dimensions:	296x64 mm (11.65x2.52 in.)

MECHANICAL INSTALLATION AND DIMENSIONS

Care must be taken to avoid damage from electrostatic sources when handling this device.

In particular exposed connectors and, in some cases, exposed printed circuit boards are exceptionally vulnerable to electrostatic discharge.

⚠ WARNING

UNINTENDED EQUIPMENT OPERATION DUE TO ELECTROSTATIC DISCHARGE DAMAGE

- Keep device in the protective conductive packaging until you are ready to install the equipment.
- Only install device in approved enclosures and / or locations that prevent casual access and provide electrostatic discharge protection as defined by IEC 1000-4-2.
- Use a conductive wrist strap or equivalent field force protective device attached to an earth ground when handling sensitive device.
- Always discharge yourself by touching a grounded surface or approved antistatic mat before handling the device.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

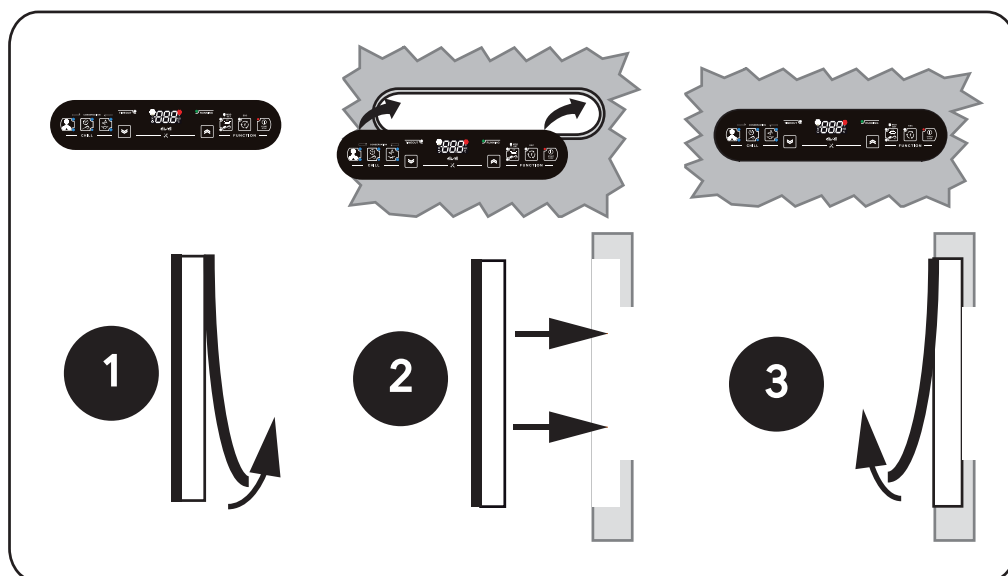
Do not install **EWBC 800** in places subject to high humidity and/or dirt; it is intended for use in sites with ordinary or normal levels of pollution. Keep the area around the blast chiller cooling slots adequately ventilated. The user interface dimensions are:



The user interface should be fitted to a drilled and suitably outlined surface on the blast chiller.

To install the user interface, proceed as follows:

1. clean the surface to remove any greasy, dusty or dirty residues;
2. remove the double-sided tape protection strip from the back of the user interface;
3. stick the user interface onto the drilled surface on the blast chiller;
4. remove the protective film from the front of the user interface.



⚡ ⚠ DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION OR ARC FLASH

- Disconnect all power from all equipment including connected devices, prior to removing any covers or doors, or installing or removing any accessories, hardware, cables, or wires.
- Always use a properly rated voltage sensing device to confirm the power is off where and when indicated.
- Replace and secure all covers, accessories, hardware, cables and wires before applying power to the device.
- For all the devices where this is provided, confirm that a proper ground connection exists before applying power to the unit.
- Use only the specified voltage when operating this equipment and any associated products.

Failure to follow these instructions will result in death or serious injury.

⚠ DANGER

POTENTIAL FOR EXPLOSION

Install and use this equipment in non-hazardous locations only.

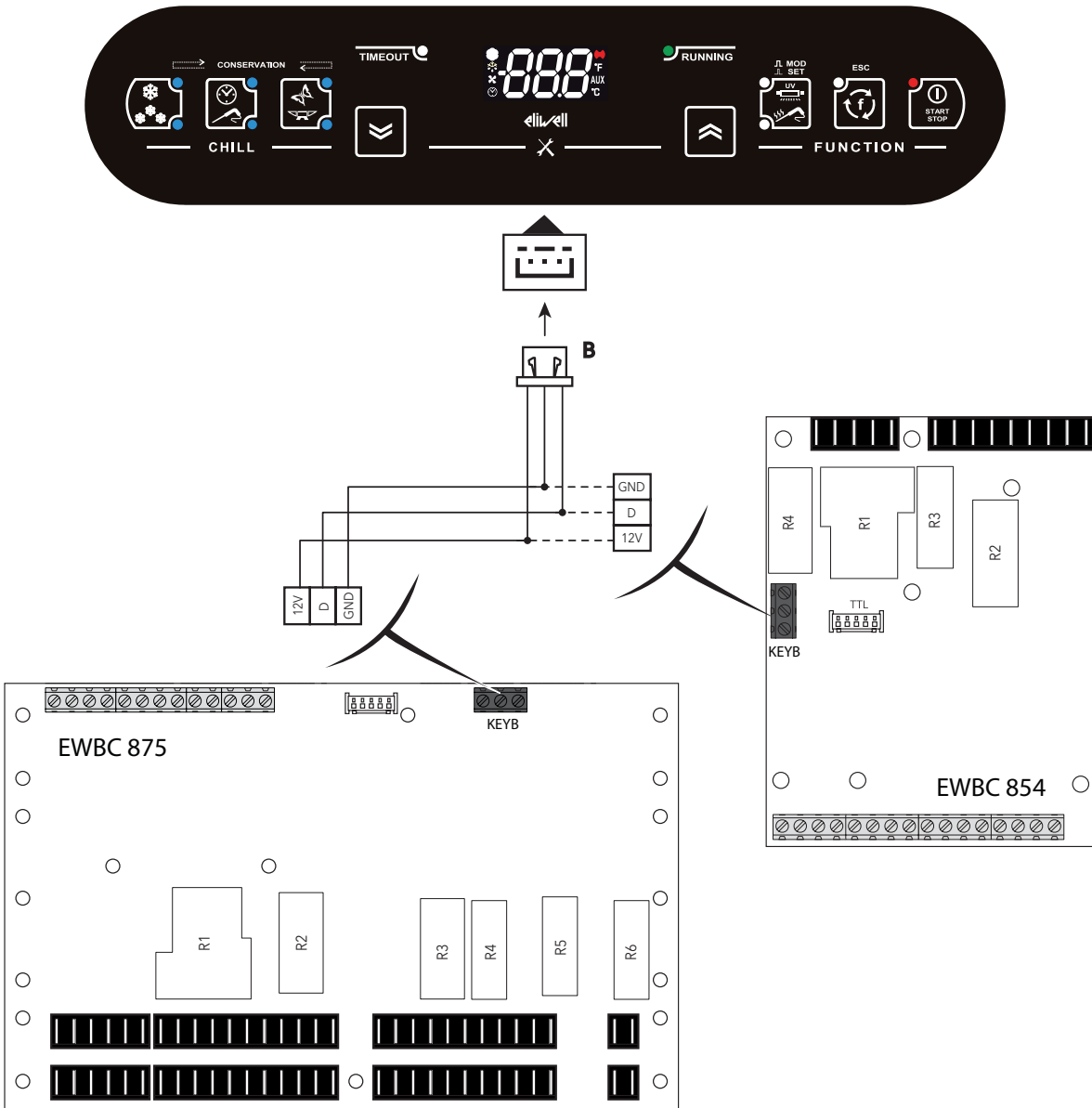
Failure to follow these instructions will result in death or serious injury.

Electrical equipment should be installed, operated, serviced, and maintained only by qualified personnel.

No responsibility is assumed by Eliwell for any consequences arising out of the use of this material.

The maximum distance of the electrical connection between the base and the user interface is 15 m.





The base can only be connected to one user interface, via the polarised connector (B) for connection to that base by means of a serial port (COM2).

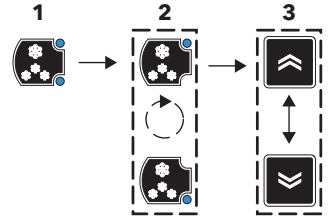






SELECTING AND STARTING A PROGRAM

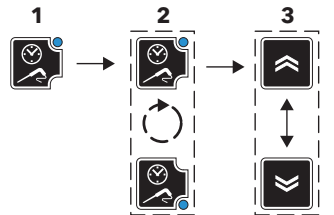
A program consists of a blast chilling cycle, automatically followed by a storage phase.



To select a blast chilling cycle, set the following three criteria:

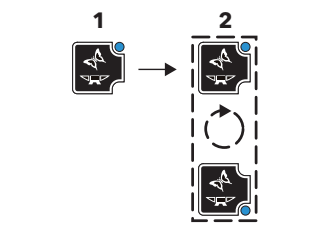
BLAST CHILLING CYCLE TARGET VALUE	
1	press  (TEMP) key until one of the tP and tn parameter values is displayed.
2	pressing the  (TEMP) key repeatedly (at consecutive intervals of less than 3 seconds) changes the displayed data alternately, from the value set for the positive blast chilling cycle to the value set for the negative blast chilling cycle.
3	press  (UP) and/or  (DOWN) keys within 3 seconds if you want to change the temperature.



BLAST CHILLING CYCLE TARGET TYPE	
1	press  (TARGET) until you select one of the blast chilling cycle target types: manual or automatic.
2	pressing the  (TARGET) key repeatedly (at consecutive intervals of less than 3 seconds) changes the displayed data alternately, from the value set for the manual target type to the value set for the automatic target type.
3	press  (UP) and/or  (DOWN) keys within 3 seconds if you want to change the timeout period.













BLAST CHILLING MODES	
1	press  (MODE) key until you select one of the blast chilling cycle modes: Hard or Soft.
2	pressing the  (MODE) key repeatedly (at consecutive intervals of less than 3 seconds) changes the displayed data alternately, from the string 'Hrd' (Hard blast chilling mode) to the string 'SFT' (Soft blast chilling mode).



To start a program, press  (**START/STOP**) key: **EWBC 800** emits a short beep and the LED  **RUNNING** comes on.
Once the blast chilling cycle has finished, **EWBC 800** emits a beep lasting 2 seconds and automatically starts the storage phase.

VISIBLE PARAMETERS CONFIGURATION

To change the value of a visible parameter, proceed as described below:

1	to view the list of parameters, press and hold  (UP) and  (DOWN) keys simultaneously for at least 2 seconds.	
2	press  (UP) or  (DOWN) keys until the display shows the name of the parameter to be changed.	
3	press  (AUX/SET) key to view the value of the parameter.	
4	press  (UP) or  (DOWN) keys within 10 sec to increase or decrease the value of the parameter respectively.	
5	to confirm the change in parameter value: <ul style="list-style-type: none"> press  (AUX/SET) key, or press  (ESC) key, or wait for 10 seconds. 	
6	to exit the list of parameters view: <ul style="list-style-type: none"> press  (ESC) key twice, or wait for 10 seconds. 	

DISCLAIMER

This document is the exclusive property of Eliwell Controls srl and may not be reproduced or circulated unless expressly authorised by Eliwell Controls srl itself. Every care has been taken in the preparation of this manual; however Eliwell Controls srl and any person or company involved in its creation and writing cannot accept any liability arising from the use thereof. Eliwell Controls srl reserves the right to make changes or improvements at any time without notice

RESPONSIBILITY AND RESIDUAL RISKS

Eliwell Controls srl declines any liability for damage due to:

- unspecified installation/use and, in particular, in contravention of the safety requirements of the legislation in force in the Country of installation and/or specified in this document;
- use on blast chillers which do not provide adequate protection against electrocution, water and dust in the actual installation conditions;
- use on blast chillers allowing access to dangerous parts without having to use tools;
- tampering with and/or modification of the product;
- installation/use on blast chillers that do not comply with the regulations in force in the Country of installation.

CONDITIONS OF USE

PERMITTED USE

This product should be used to control professional blast chillers. For safety reasons, the product must be installed and used in accordance with the instructions provided. In particular, parts carrying dangerous voltages must not be accessible under normal conditions. It must be adequately protected from water and dust according to the application, and must be accessible only using a tool. The product is suitable for use in a blast chiller for professional refrigeration appliances and has been tested for safety aspects in accordance with the harmonized European reference standards.

PROHIBITED USE

Any use other than that expressly permitted is prohibited. The relay contacts provided are mechanical and subject to failure: any protection devices required by reference standards, or suggested by good practice in view of obvious safety requirements, must be installed externally of the product.

DISPOSAL



The equipment (or product) must be subjected to separate waste collection in compliance with the local legislation on waste disposal.

Eliwell Controls s.r.l.

Via dell'Industria, 15 • Z.I. Paludi
32010 Pieve d'Alpago (BL) - ITALY

T: +39 0437 986 111

F: +39 0437 989 066

www.eliwell.com

Sales:

T: +39 0437 986 100 (Italy)

T: +39 0437 986 200 (other countries)

E: saleseliwell@schneider-electric.com

Customer's Technical Support:

T: +39 0437 986 300

E: Techsuppeliwell@schneider-electric.com

MADE IN ITALY



ISO 9001



cod. 9IS24354-1 • Keyboard EWBC 800 • rel.06/16 • EN

© Copyright Eliwell Controls s.r.l. 2016 • All right reserved.