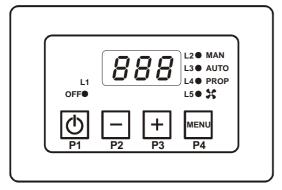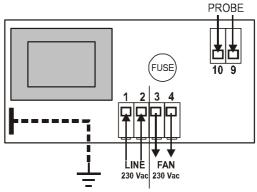# FC 810_v01   User Manual

GB

fig.1: **External aspect and electrical connections**

PRODUCT COMPOSITION
- Boxed temperature controller 3 module
- Cover Plate
- Inbox box
- Temperature Probe
- Accessories
- Instructions

FUNCTIONING

❖ **ON/OFF:**

The On/Off of the controller is pushing the button **P1**

The state OFF is signaled through the led **L1**

❖ **FUNCTIONING Modality**
- **MANUAL:** advice signal **MAN**

  The fan is at the set speed independently by the Probe's temperature
- **AUTOMATIC:** advice signal **AUT**

  The Fan starts at the set up speed when the probe's temperature is higher than the setted Thermostat **SET**
- **PROPORTIONAL:** advice signal **PROP**

  The fan increases automatically its speed according to the probe's temperature in the range **SET ÷ SET+DEL**

❖ **STANDBY Function:** if parameter **Stb =1**

If the device is OFF,

if the probe's temperature is higher than the value of thermostat **TSI**
- The device goes in ON automatically

❖ **SAFETY Function:** if the parameter **SIC = 1**

If the probe's temperature is higher than value of thermostat **TSI**

And the fan is OFF in MANUAL Modality
- The device goes automatically in the Proportional Modality waiting 10 seconds.

❖ **SAFETY FAN Function:** if the parameter **SAF = 1**

If the probe's temperature is higher than value of thermostat **TSA**
- The Fan is OFF

❖ **ALARM Function:**

If probe's temperature is higher than the value of thermostat **TAL** and the parameter **Enb = 1**
- The acoustic signal is activated
- This signaling can be deactivated for 5 minutes by pushing a button
- After 5 minutes, if there's again the condition of alarm, it is activated again.

MAIN Menu:

❖ **FUNCTIONING Modality Selection**
- Press **P4** key to see the current modality: it's signaled by the display and the led
- Pressing again the **P4** key, you can select cyclically one of three functioning modality signaled on the display and by the led
- The setting is automatically memorized after 4 seconds
- The **L5** shows the status of the Fan

❖ **Functioning Speed Selection**
- Pressing **P2 or P3** keys the setting of the current fan speed is visualized or modified

  P0= Off (only manual); **P1** = Minimum Speed; **P10**= Maximum Speed
- This function is not available in the PROPORTIONAL Modality
- In the AUTOMATIC Modality the speeds that can be set are **P1 ÷ P10**

GB FAILURE OR ALARM SIGNALS

The controller can signal the failure of the probe.

Blinking message for the failure signal:

- **Lo**: indicates a low temperature   (temperature under 0°C):   **Probe Open or Disconnected**
- **Hi**: indicates a high temperature   (temperature over 180°C):   **Probe in Short Circuit**

⚠ ATTENTION

- Avoid join together the probe's cables with power's cables.
- Provide the system's feeding with a bipolar switch according to the actual rules and with opening distance of the contacts of at least 3 mm for each pole.
- Installation and the electrical connection of the device have to be made by experienced personal and with appropriate equipping.
- Before the connection be aware that the electrical feeding is not connected.

SECONDARY Menu:

It allows to modify the functioning parameters of the controller.

- To enter the MENU push <u>together</u> buttons **P2** and **P3** for about 5 seconds.
- To scroll the code list use the button **P2** or **P3**
- To show the parameter's value push the button **P4**
- To modify the parameter's value push the buttons **P2** or **P3**
- To visualize again the code list and memorize push the button **P4**
- To exit and memorize wait for about 10 seconds.

The parameters are described in the following table

MAIN Menu Parameters	Code	Min	Default	Max
Functioning Modality **Man / Aut / PrP**			**Man**	
Fan Regulation Speed		00	XX	10
SECONDARY Menu Parameters	**Code**	**Min**	**Default**	**Max**
Temperature Fan Activation	**SET**	40°	**45°**	99°
Temperature Fan Activation Hysteresis	**iSt**	1°	**2°**	35°
ALARM Temperature Activation	**TAL**	100°	**120°**	180°
SAFETY Temperature Activation	**TSI**	80°	**100°**	140°
SAFETY FAN Temperature Activation	**TSA**	100°	**135°**	180°
SAFETY Function Enable	**SIC**	0 [off]	**1 [on]**	1 [on]
SAFETY FAN Function Enable	**SAF**	0 [off]	**0 [off]**	1 [on]
STANDBY Function Enable	**Stb**	0 [off]	**1 [on]**	1 [on]
BUZZER Function Enable	**Enb**	0 [off]	**1 [on]**	1 [on]
➢ Fan Speed **P01**	**U01**	00	**16**	99
➢ Fan Speed **P09**	**U09**	00	**70**	100
➢ Fan Speed **P10**	**U10**	00	**100**	100
Temperature Range of Regulation for Proportional Modality	**DEL**	20°	**20°**	100°
Table 1 – **Menu Parameters**				

➢ **P01 / P09 / P10 Speed REGULATION (parameters U01 / U09 / U10)**

- Enter in SECONDARY Menu
- Select the parameter to verify/modify : the fan works automatically at the set speed
- Modify the value until the desired value : in this way it is possible to control the speed directly.
- Memorize by pushing button **P4**
- Eventually repeat the operation for the other speeds/parameters
- To exit, wait about 10 seconds.

Supply:	230 Vac ±10%~ 50HZ: **EMI** filter on side	TiEmme elettronica
Protection:	Internal Fuse	
Temperature Probe:	Working Temperature: -50°C / 250 °C	
	Range of Measure: 0 – 180 °C: ± 1°C	CE
Output:	FAN: 230 Vac Imax: 0,8A/*1,5A high power version*	
Dimensions:	Inbox Controller 120 x 80 x 50 [mm]	
Applied Rules:	EN 60730-1 50081-1 EN 60730-1 A1 50081-2	

Table 2 – **Technical characteristics**