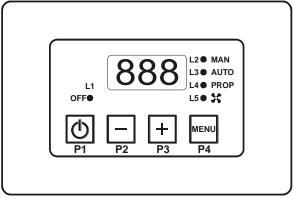
User's Manual FC 810



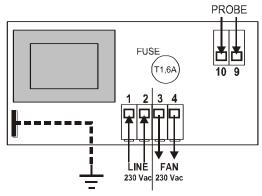


fig.1: External aspect and electrical connections

COMPOSITION OF THE PRODUCT

- Boxed temperature controller 3 module
- Cover Plate
- Inbox box
- Temperature Probe
- 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

Function MANUAL: advice signal MAN

The fan is at the set speed independently by the Probe's temperature

Function AUTOMATIC: advice signal AUT

The Fan start at the set up speed when the probe's temperature is higher than that one set up.

Function PROPORTIONAL: advice signal PROP

The fan increases automatically its speed according to the probe's temperature

in the range $SET \div SET + DEL$

❖ Function STANDBY: 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

❖ Function SECURITY: 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.

***** Function ALARM:

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 the three functioning modality signaled by the display and by the led
- The setting is automatically memorized after 5 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

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/disconnected**
- **Hi**: indicates a high temperature
- (temperature over 180°C): Probe in short circuit

\triangle 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 visualize the parameters 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 parameter's list and memorize push the button P4
- To exit and memorize wait for about 5 seconds.

The parameters are described in the following table

MAIN Menu Parameters	Symbol	Min	Std	Max
Functioning Modality Man / Aut / PrP			Prp	
Fan Regulation Speed		00	XX	10
SECONDARY Menu Parameters	Symbol	Min	Std	Max
Temperature activation Fan	SET	40	45	99
Activation Fan thermostat Hysteresis	iSt	1	2	35
Temperature activation ALARM	TAL	100	120	180
Temperature activation SICURITY	TSI	80	100	140
Function SICURITY	SIC	0 [off]	1 [on]	1 [on]
Function STANDBY	Stb	0 [off]	1 [on]	1 [on]
Function BUZZER	Enb	0 [off]	1 [on]	1 [on]
Fan Speed [for P01]	UUE	00	10	99
Fan Speed [for P09]	UEn	00	70	100
Temperature Range of Regulation for Proportional Modality [°C]	DEL	20	20	50

Table 1 – Menu Description

Direct calibration of the minimum speed: parameter UUE

To regulate the minimum fan speed, follow this procedure:

- Chose MANUAL modality
- Set the fan's speed P01 (minimum speed)
- Enter to SECONDARY Menu following the above procedure
- Select the parameter UUE and modify until the desired value: in this way it is possible to control the speed directly.
- Memorize by pushing button P4
- To exit, wait about 10 seconds

❖ Direct calibration of the speed P09: parameter UEn

To regulate on air the regulation fan speed **P09**, follow this procedure:

- Chose modality MANUAL
- Set the fan's speed P09
- Enter to SECONDARY Menu
- Select the parameter UEn and modify until the desired value: in this way it is possible to control the speed directly.
- Memorize by pushing button P4
- To exit, wait about 10 seconds

Supply:	230 Vac ±10% ~ 50HZ EMI on side
	EMI on side
Protection:	Internal Fuse
Temperature Probe:	Working Temperature: -50°C / 250 °C
	Range of Measure: 0 – 180 °C: ± 1°C
Output:	FAN: 230 Vac 200 W max
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**

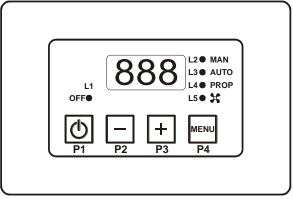


In the view of a constant development of their products, the manufacturer reserves the right for changing technical data and features without prior notice. The consumer is guaranteed against any lack of conformity for 24 months from the delivery time, according to the European Directive 1999/44/EC. The full text of guarantee is available on request from the seller.

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Marsciano (PG) Italy Tel.fax. 075.8743.905 www.tiemmeelettronica.it

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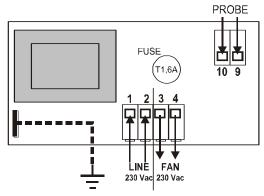


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- Memorize by pushing button P4
- To exit, wait about 10 seconds

❖ Direct calibration of the speed P09: parameter UEn

To regulate on air the regulation fan speed P09, follow this procedure:

- Chose modality MANUAL
- Set the fan's speed **P09**
- Enter to SECONDARY Menu
- Select the parameter UEn and modify until the desired value: in this way it is possible to control the speed directly.
- Memorize by pushing button P4
- To exit, wait about 10 seconds

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