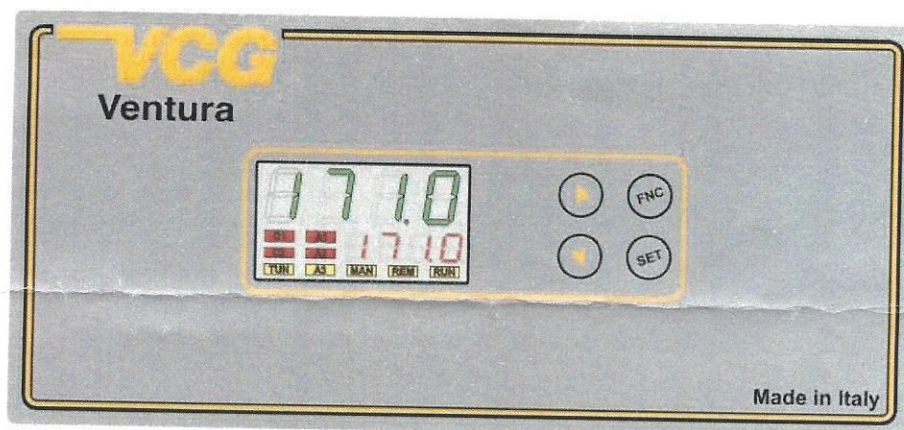


VCG Ventura



**-REGOLATORE
-CONTROLLER**

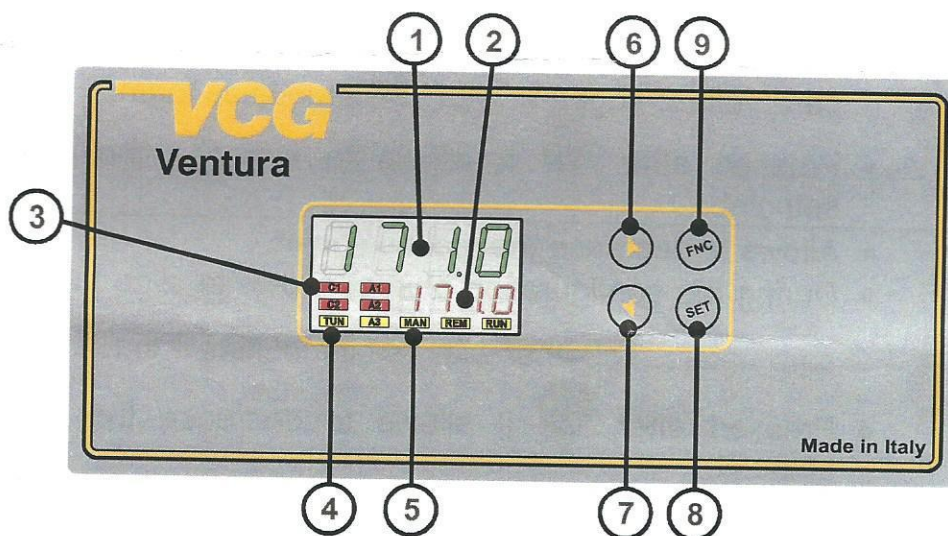
ATR888

**Manuale utente
User manual**

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1 Display and Keys functions



1.1 Numeric indicators (display)

1 1234

Normally visualizes process.

In configuration mode visualizes parameter that is being entered.

2 123.4

Normally visualizes setpoint.

In configuration mode visualizes value of parameter that is being entered.

1.2 Meaning of status lights (led)

3 C1

ON when the output command is active.

For open / close logic: on during valve opening.





4 TUN

ON when the controller is running an "Autotuning" cycle.

5 MAN

ON when the "Manual" function is active.



1.3 Keys

- Allows to increase the main setpoint.
 - During the configuration phase, allows to slide through parameters. Together with  it modifies them.
 - Pressed after  it allows to increase the alarm setpoint.
-
- Allows to decrease the main setpoint.
 - During the configuration phase, allows to slide through parameters. Together with  it modifies them.
 - Pressed after  it allows to decrease the alarm setpoint.
-
- Allows to display the alarm setpoints.
 - Allows to modify the configuration parameters.
-
- Allows to enter Tuning function, automatic/manual selection.
 - Allows to modify the configuration parameters.

2 Controller functions

2.1 Modifying Main Setpoint and Alarm Setpoint Values

Setpoint value can be modified by keyboard as follows:

	Press	Display	Do
1	 or 	Value on display 2 changes	Increases or decreases the main setpoint value


2.2 Auto-tune

Tuning procedure to calculate the regulation parameters can be manual or automatic according to selection on parameter 15 **tunE**.

2.3 Manual Tuning

Manual procedure allows the user a greater flexibility on decide when to update PID algorithm regulation parameters.

This procedure can be activated as follows:


Press  until display 1 shows **tunE** and display 2 shows **OFF**.


Pressing , display 2 shows **on**, led **TUN** switches on and the procedure starts.

2.4 Automatic Tuning

Automatic tuning starts when the controller is switched on or when the setpoint is modified to a value over 35%.

To avoid an overshoot, the threshold where the controller calculates the new PID parameters is determined by the setpoint value minus the "Set Deviation Tune" (see Parameter 16 **SDTU**).

To exit Tuning and leave the PID values unchanged, press  until display 1 shows **tunE** and display 2 shows **on**.

Pressing , display 2 shows **OFF**, led **TUN** switches off and the procedure ends.

3 Table of Anomaly Signals

If installation malfunctions, controller will switch off regulation output and will report the anomaly.

For example, controller will report failure of a connected thermocouple visualizing **E-05** flashing on display.

For other signals see table below.

#	Cause	Do
E-01	Error in E ² PROM cell Programming.	Contact technical service
E-02	Cold junction temperature sensor failure or environment temperature out of range.	Contact technical service
E-04	Incorrect configuration data. Possible loss of instrument calibration.	Verify that configuration parameters are correct.
E-05	Thermocouple open or temperature out of limit.	Control connection with probes and their integrity.
E-08	Missing calibration	Contact technical service