MANUAL MODE

In some start-up conditions may be useful to work in "hand" mode.
Power off theprocessor, press **+** key and keep it pressed giving power on:
 HAnd message will be displayed (release now **+** key).
Push **+** until is displayed number required to be handed:
1 = HEAT relay, **2** = Alarm relay, **3** = VENTILATION 0-10V output, and push **ALARM** for activing relay (or to pass from 0V to 10V on ventilation output).
Pushing again **+** for increase relay number previous relay is disactivated.
You can press **ALARM** for a least two seconds to escape and return to the *Run Mode.*

PRESET PROGRAMS *(Bootstrap)*

This processor is already programmed with the following (variable) settings.
To return to these settings at any time you may:
Power off the processor, press **MAX VENT** key and keep it pressed giving power on: *boot* message will be displayed (release now **MAX VENT** key).

HEAt = 20.0°   **vEnt** = 25.0°   **SP._ _= 0   SP.- - = 100   AL._ _= 10.0°   AL.- - = 40.0°**
COST value are shown in **COST** paragraph.

INSTALLATION
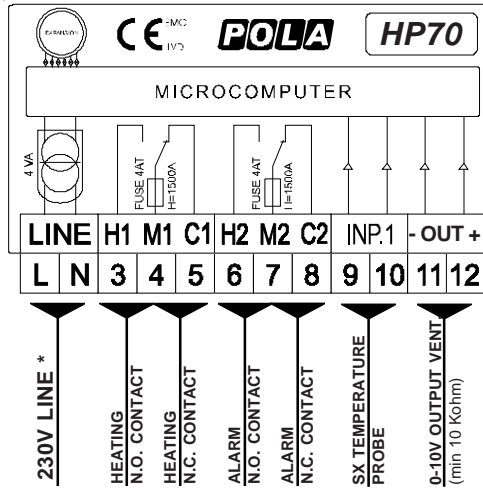
How to connect the line
Connect line on terminals **L-N**; protect supply with adequate fuse.

How to connect the sensors
Connect the sensor provided as shown in the diagram. **For remote connections use a standard 0.5-square millimeter two-pole wire** , taking great care over the connections, by insulating and sealing the joins carefully. **- O.C.-** is displayed when the temperature sensor wiring is open, **-S.C.-** is displayed when the temperature sensor wiring is short circuit.

How to connect the contacts
Connect terminals on the terminal block (contacts up to 4AMP.AC1) to the loads as shown in the diagram.
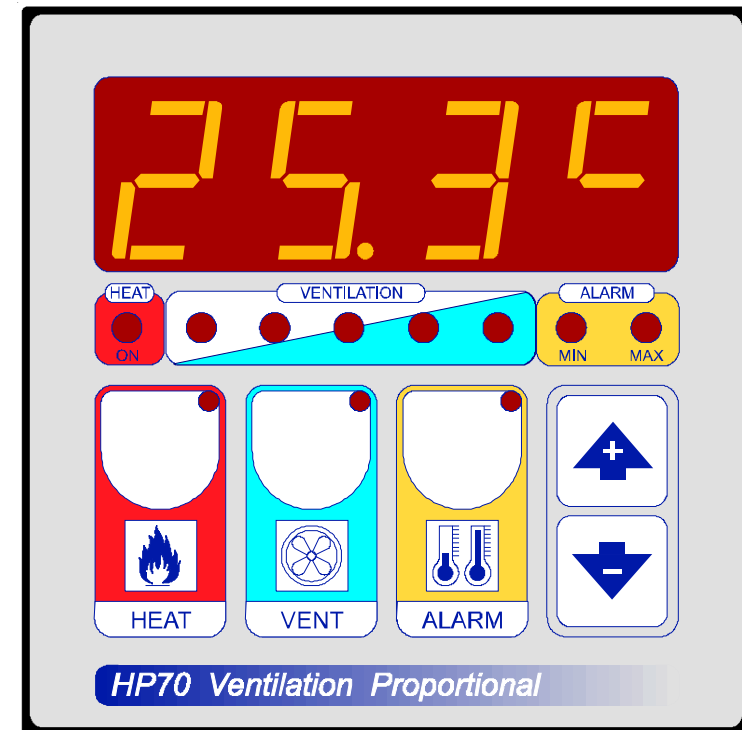

CE EMC IVD   POLA   HP70

MICROCOMPUTER

4 VA   FUSE 4AT H=1500A   FUSE 4AT I=1500A

LINE		H1	M1	C1	H2	M2	C2	INP.1		- OUT +	
L	N	3	4	5	6	7	8	9	10	11	12

230V LINE *   HEATING N.O. CONTACT   HEATING N.C. CONTACT   ALARM N.O. CONTACT   ALARM N.C. CONTACT   SX TEMPERATURE PROBE   0-10V OUTPUT VENT (min 10 Kohm)

* Other power voltage if you required

POLA®   CE   10.01.13

HP70
SL 3.0
Ventilation proportional 0-10V

Handbook

HEAT   VENTILATION   ALARM
ON   MIN   MAX

HEAT   VENT   ALARM

HP70 Ventilation Proportional

MAIN SETTINGS (Run Mode)
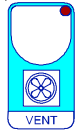
HEAT TEMPERATURE SETTING.
Press **HEAT**:
This message will be displayed instead of the *°Set Heat temperature value* .
Press **+** or **-** to modify, press **HEAT** to exit.

`HEAt`

VENTILATION TEMPERATURE SETTING.
Press **°C VENT** :
This message will be displayed instead of the *°Set Ventilation temperature value (start first speed)*.
Press **+** or **-** to modify, press **VENT** to confirm.

`uEnt`

At this point: this message will be displayed instead of the *Minimum Ventilation Speed* %.
Press **+** or **-** to modify, press **VENT** to confirm.

`SP.__`

At this point: this message will be displayed instead of the *Maximum Ventilation Speed %.*
Press **+** or **-** to modify, press **VENT** to confirm.

`SP.⁻⁻`

ALARM PARAMETER SETTING.
Press **ALARM**:
This message will be displayed instead of the *°Set Minimum Alarm temperature value* .
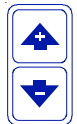Press **+** or **-** to modify, press **ALARM** to confirm.

`AL.__`

At this point: this message will be displayed instead of the *°Set Maximum Alarm temperature value* .
Press **+** or **-** to modify, press **ALARM** to exit.

`AL.⁻⁻`

COSt PROGRAMMING (System constants)

These settings refer to the operation mode of the system and must be made on initial startup. Press - / + at the same time for at least one second: the message *C.O.S.t*. will be displayed.
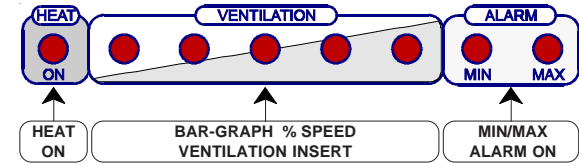Press than repeatedly **ALARM** until the message regarding the chosen variable is displayed (see table below) : value of variable and message will be displayed.
Press **+** or **-** to set a new value and then press **ALARM** to confirm.
The next system constant will then appear.
You can press **ALARM** for at least 2 seconds to exit and return to the Run Mode.

Mess.	Value	Meaning	Note
d.HEA	0.2 °	°C HEAT differential	
ProP	3.0 °	°C VENTILATION proportional band	
tEnP	= 1	temperature representation (=1 °C, =2 °F)	
Ad.tE	0.0 °	° Input sensor temperature correction (+ or -)	

STATE INDICATIONS LAMP

HEAT ON — BAR-GRAPH % SPEED VENTILATION INSERT — MIN/MAX ALARM ON

In normal condition (not in programming) press **VENT** key for at least 1 second to display % speed insert.

VIEWING AMBIENT TEMPERATURE RECORDING

Press **+** : `⌐.⁻⁻⁻` will be displayed followed by *°Maximum Temperature Recording.*

Press **-** : `⌐.___` : will be displayed followed by *°Minimum Temperature Recording.*

Values are permanently stored in the memory: for deleting all values in the memory keep pushed **+** key for more than 3 seconds: **CLEA** message will appear on display before clearing operation.

OPERATIVE DIAGRAMS