

## INSTALLATION

### How to connect the sensors

Connect the provided sensors as shown in the diagram.

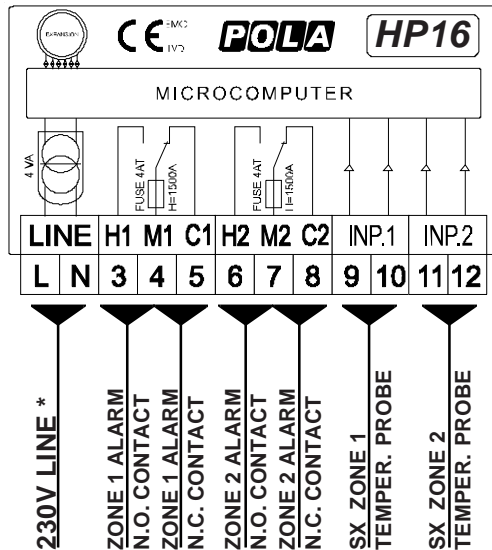
**For remote connections use a standard 0.5-square millimetre two-pole wire for each sensor**, taking great care over the connections, by insulating and sealing the joins carefully. **-O.C.-** is displayed when the temperature sensor wiring is open, **-S.C.-** is displayed when the temperature sensor wiring is short circuit.

### How to connect the line

Connect 230V line on terminals **L-N**.  
Protect supply with adequate fuse.

### How to connect the contacts

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



\* Other power voltage if you required

As it company policy to continually improve the products the Manufacturers reserve the right to make any modifications thereto without prior notice. They cannot be held liable for any damage due to malfunction.

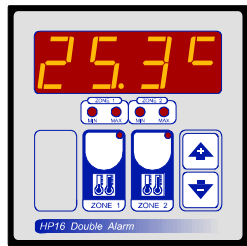


# HP16

## SL 3.0

### Double double-level alarm

### Handbook



## MAIN SETTINGS (Run Mode)



### ZONE 1 ALARM TEMPERATURE SETTING.

Press **ZONE 1** (key lamp flashes):

This message will be displayed instead of the *Zone 1 °Set Minimum temperature value*.

Press + or - to modify. Press **ZONE 1** to confirm.

AL.1

At this point: this message will be displayed instead of the *Zone 1 °Set Maximum temperature value*.

Press + or - to modify, press **ZONE 1** to confirm.

AL.1



### ZONE 2 ALARM TEMPERATURE SETTING.

Press **ZONE 2** (key lamp flashes):

This message will be displayed instead of the *Zone 2 °Set Minimum temperature value*.

Press + or - to modify. Press **ZONE 2** to confirm.

AL.2

At this point: this message will be displayed instead of the *Zone 2 °Set Maximum temperature value*.

Press + or - to modify, press **ZONE 2** to confirm.

AL.2

## SWITCH-OFF ALARM.



### ZONE 1

Press **ZONE 1** for more than 2 seconds: this message will be displayed.

Press **ZONE 1** to switch-on the alarm: the probe temperature will be displayed.

-oF.1



### ZONE 2

Press **ZONE 2** for more than 2 seconds: this message will be displayed.

Press **ZONE 2** to switch-on the alarm: the probe temperature will be displayed.

-oF.2

## MINIMUM AND MAXIMUM AMBIENT TEMPERATURES RECORDING.

**TEMPERATURE 1 RECORDING VIEWING.** Press **ZONE 1** key, after:



Press + : will be displayed followed by °Maximum Temperature 1 Recording.



Press - : will be displayed followed by °Minimum Temperature 1 Recording.

**TEMPERATURE 2 RECORDING VIEWING.** Press **ZONE 2** key, after:



Press + : will be displayed followed by °Maximum Temperature 2 Recording.



Press - : will be displayed followed by °Minimum Temperature 2 Recording.

Values recorder are memory permanent stored: for memory clear keep pushed + keys for more than 3 seconds: **CLEA** message will be composed on display before clearing operation.

## COS<sub>t</sub> 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 then repeatedly **ZONE 2** until the message regarding the chosen variable is displayed (see table below): variable's value and message will be displayed. Press + or - to set a new value and then press **ZONE 2** to confirm.



The next system constant will then appear.

You can press **ZONE 2** for at least 2 seconds to exit and return to the *Run Mode*.

Mess.	Value	Meaning	Note
<b>tEnP</b>	=1	Temperature representation	*1
<b>Ad.t1</b>	0.0 °	°C Zone 1 input temperature sensor correction (+ or -)	*2
<b>Ad.t2</b>	0.0 °	°C Zone 2 input temperature sensor correction (+ or -)	*2

\*1) **tEnP =1** : °C Temperature range.  
**tEnP =2** : °F Temperature range.

\*2) You can correct the readings on the various sensors (+ or -).

## PRESET PROGRAMS (Bootstrap)



This processor is ready programmed with the following (variable) settings.

To return to these settings at any time:

Power off the processor, press **ZONE 2** key and keep it pressed giving power on: release **ZONE 2** key when on the screen appear **boot** message.

**AL\_1=15.0° AL-1=35.0° AL\_2=15.0° AL-2=35.0° .**

The **COS<sub>t</sub>** values are shown in **COS<sub>t</sub>** paragraphs.

## MANUAL MODE



In some start-up conditions may be useful to work in "hand" mode.

Power off the processor, 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 (see table relays "**N Relay**") and push **ZONE 2** for activating relay.

Pushing again + for increase relay number previous relay is deactivated.

You can press **ZONE 2** for a least two seconds to escape and return to the *Run Mode*.

## STATE INDICATION LAMPS

The lights situated at the bottom of the display show the state of the various relays as set out below.

Lamp.	State	N° Relay	Contatcts
<b>MIN (1)</b>	Zone 1 minimum alarm on	1	3-4-5
<b>MAX (1)</b>	Zone 1 maximum alarm on	1	3-4-5
<b>MIN (2)</b>	Zone 2 minimum alarm on	2	6-7-8
<b>MAX (2)</b>	Zone 2 maximum alarm on	2	6-7-8

## OPERATIVE DIAGRAMS

