### INSTALLATION

### How to connect the sensors

Connect the provided sensor 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.

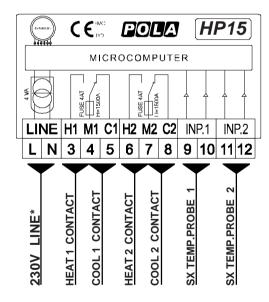
## How to connect the line

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





**HP15** 

Double single-level thermostat

# Handbook



# MAIN SETTINGS (Run Mode).

# **SET 1 TEMPERATURE SETTING.**

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

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

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





# **SET 2 TEMPERATURE SETTING.**

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

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

Press + or - to modify. Press SET 2 to confirm.



# MINIMUM AND MAXIMUM AMBIENT TEMPERATURES RECORDING.

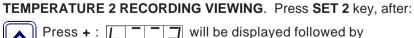
# **TEMPERATURE 1 RECORDING VIEWING.** Press **SET 1** key, after:

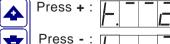
4	Press +	:	H.	1	1	-
<b>T</b>	Press -	:	ı			- 1

will be displayed followed by

°Maximum Temperature 1 Recording. will be displayed followed by

°Minimum Temperature 1 Recording.





°Maximum Temperature 2 Recording.

will be displayed followed by °Minimum Temperature 2 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.

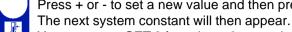
# COSt PROGRAMMING (System constants)



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 **SET 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 **SET 2** to confirm.



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

Mess.	Value	Meaning	Note
diF.1	0.2°	° SET 1 differential	*1)
diF.2	0.2 °	° SET 2 differential	*1)
tEnP	=1	Temperature representation (=1 °C, =2 °F)	*2)
Ad.t1	0.0°	° Zone 1 input temperature sensor correction (+ or -)	*3)
Ad.t2	0.0°	° Zone 2 input temperature sensor correction (+ or -)	*3)

\*1) For more details see Operating Diagrams.

\*2) tEnP =1: °C Temperature range.

tEnP =2: °F Temperature range.

\*3) You can correct the readings on the various sensors (+ or -).

## MANUAL MODE



In some start-up conditions may be useful to work in "manual" 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 *State indication lamps*) and push **SET 2** for activing relay.

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

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

### STATE INDICATION LAMPS

The light situated at the bottom of the display shows the state of the controller:

Lamp.	State	N ° Relay	Contacts
HEAT (1)	HEAT 1 Output On	1	3-4
COOL (1)	COOL 1 Output On	1	4-5
HEAT (2)	HEAT 2 Output On	2	6-7
COOL (2)	COOL 2 Output On	2	7-8

# 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 **SET 2** key and keep it pressed giving power on: **boot** message will be displayed (release now **SET 2** key).

 $SEt.1 = 25.0^{\circ}$   $SEt.2 = 25.0^{\circ}$ 

The **COSt** values are shown in **COSt** paragraphs.

## **OPERATIVE DIAGRAMS**

