## INSTALLATION

## How to connect the sensors

Connect the sensors provided 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.

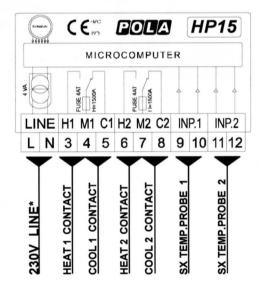
## How to connect the line

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



# **HP15**

Double single-level thermostat

Handbook



MAIN SETTINGS (Run Mode)

SET 1	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.	5 E F
SET 2	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.	[] [] [] [] Example SEt.2 = 25.0°

MINIMUM AND MAXIMUM AMBIENT TEMPERATURES RECORDING.
TEMPERATURE 1 RECORDING VIEWING. Press SET 1 key, after:
Press + : will be displayed followed by  "Maximum Temperature 1 Recording."  Will be displayed followed by  "Minimum Temperature 1 Recording."
TEMPERATURE 2 RECORDING VIEWING. Press SET 2 key, after:
Press + : will be displayed followed by  °Maximum Temperature 2 Recording.  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.

## **COSt PROGRAMMING** (System constants)



These settings refer to the mode operation of the system and must be made on initial start-up.



Press -/+ together for at least one second the message C.O.S.t. will be displayed.



Press than repeatly SET 2 until interested variable's message is displayed (see table below): variable value and related message will be displayed.



Press + or - to set a new value and then SET 2 to confirm.

The next system constant will then appear.

You can press SET 2 for a least two second to escape 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 -).

# 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 SET 2 key and keep it pressed giving power on: release SET 2 key when on the screen appear boot message.

SEt.1 = 25.0° SEt.2 = 25.0°

The COSt values are shown in COSt paragraphs.

## HAND 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 SET 2 for activing relay.

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

You can press SET 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		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

#### **OPERATIVE DIAGRAMS**

