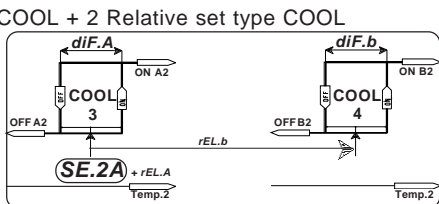
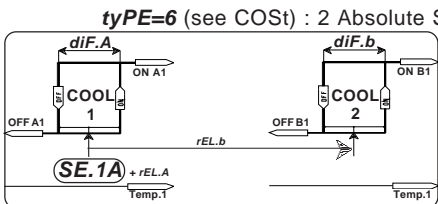
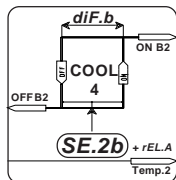
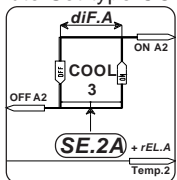
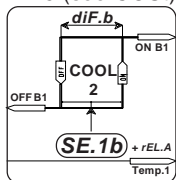
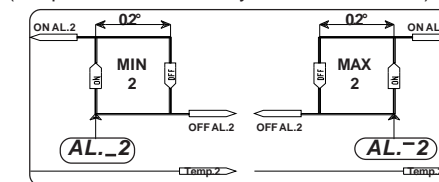
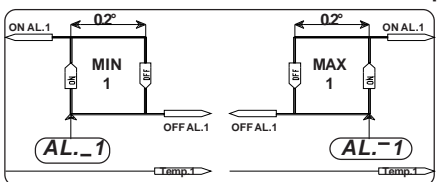


tyPE=5 (see COST) : 4 Absolute Set type COOL



Minimum and Maximum Alarm Temperature (Outputs available only with HPAL slot)



## INSTALLATION

### How to connect the sensors

Connect the sensors provided as shown in the diagram.

For remote connections use a standard 0.5-square millimeter 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.

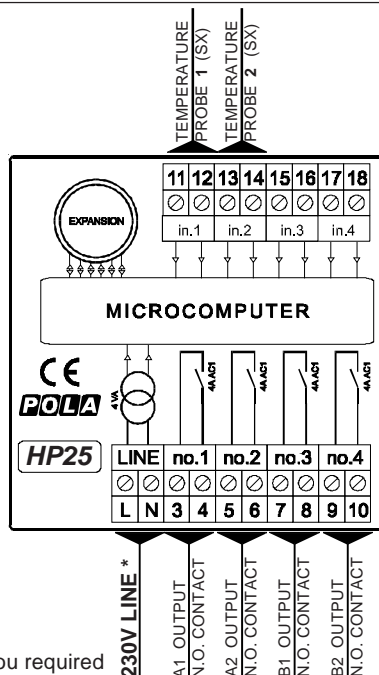
### How to connect the line

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.

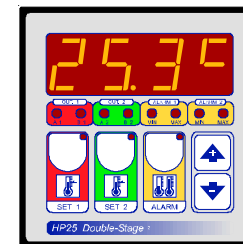


# HP25

SL 3.0

Double double-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 1A temperature value.  
Press + or - to modify. Press **SET 1** to confirm.

SE.1A

At this point: this message will be displayed instead of the °Set 1B temperature value.  
Press + or - to modify, press **SET 1** to escape.

SE.1B

### SET 2 TEMPERATURE SETTING.



Press **SET 2** (key lamp flashes):  
This message will be displayed instead of the °Set 2 A temperature value.  
Press + or - to modify. Press **SET 2** to confirm.

SE.2A

At this point: this message will be displayed instead of the °Set 2 B temperature value.  
Press + or - to modify, press **SET 2** to escape.

SE.2B

### ALARM TEMPERATURE SETTING.



Press **ALARM** (key lamp flashes):  
This message will be displayed instead of the °Set Zone 1 Minimum Alarm temperature value.  
Press + or - to modify. Press **ALARM** to confirm.

AL.-1

At this point: this message will be displayed instead of the °Set Zone 1 Maximum Alarm temperature value.  
Press + or - to modify. Press **ALARM** to confirm.

AL.-1

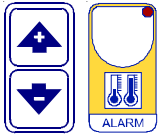
At this point: this message will be displayed instead of the °Set Zone 2 Minimum Alarm temperature value.  
Press + or - to modify. Press **ALARM** to confirm.

AL.-2

At this point: this message will be displayed instead of the °Set Zone 2 Maximum Alarm temperature value.  
Press + or - to modify. Press **ALARM** to escape.

AL.-2

## 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 than repeatedly **ALARM** 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 **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
diF.A	0.2 °	°C Outputs A differential (Out1/Out2)	*1
rEL.A	0.0 °	°C setting shift referring to SET.A (1 and 2)	*1
t.on.A	0"	On outputs A minimum time in seconds	*2
t.of.A	0"	Off outputs A minimum time in seconds	*2
diF.b	0.2 °	°C Outputs B differential (Out1/Out2)	*1
rEL.b	0.0 °	°C setting shift referring to SET.b (1 and 2)	*1
t.on.b	0"	On outputs B minimum time in seconds	*2
t.of.b	0"	Off outputs B minimum time in seconds	*2
tYPE	= 1	Actioning type	*3
tEnP	= 1	Temperature representation (=1 °C, =2 °F)	
Ad.t1	0.0 °	°C Zone 1 input sensor temperature correction (+ or -)	
Ad.t2	0.0 °	°C Zone 2 input sensor temperature correction (+ or -)	

\*1) For more details see *Operating Diagrams*.

\*2) This Sets permit to determinate both On and Off delay actioning time. Relative light flash during delay time.

\*3) HP25 can be configured in these different actioning type:

- =1 : 4 absolute Sets type HEAT
- =2 : 2 Absolute Set type HEAT + 2 Relative set type HEAT
- =3 : 4 Absolute Set type NEUTRAL BAND (2 Zones HEAT+COOL)
- =4 : 2 Absolute Set + 4 Relative set type NEUTRAL BAND (2 HEAT+COOL)
- =5 : 4 absolute Sets type COOL
- =6 : 2 Absolute Set type COOL + 2 Relative set type COOL

For more details see *Operative diagrams*.

\*4) tEnP =1 : °C Temperature range.

tEnP =2 : °F Temperature range.

\*5) You can correct the readings on the various sensors (+ or -).

## 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	Contacts
A1 (OUT1)	Output A1 On	1	3-4
B1 (OUT1)	Output B1 On	2	5-6
A2 (OUT2)	Output A2 On	3	7-8
B2 (OUT2)	Output B2 On	4	9-10
MIN (AL.1)	Minimum Alarm 1 On	EXT2 (*)	6-7-8
MAX (AL.1)	Maximum Alarm 1 On	EXT2 (*)	6-7-8
MIN (AL.2)	Minimum Alarm 2 On	EXT2 (*)	6-7-8
MAX (AL.2)	Maximum Alarm 2 On	EXT2 (*)	6-7-8
	Or Logic relay 1-2-3-4		

\* Available only with HPAL slot.

## PRESET PROGRAMS (Bootstrap)



At delivery this processor is programmed with the following (variable) settings. To return to these settings at any time.

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

SEt.1=70.0H SEt.2=80.0H.

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 **ALARM** for activating relay.

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

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

## OPERATIVE DIAGRAMS

