

# HP30

SL 3.0

Double level+neutral band controller

## Handbook



### MAIN SETTINGS (Run Mode)



#### TEMPERATURE SETTING.

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

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

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

t.SET

20.0°C

Example t.SET = 20.0°



#### NEUTRAL BAND SETTING.

Press **NEUTRAL** (key lamp flashes):

This message will be displayed instead of the °Neutral band temperature value.

Press + or - to modify. Press **NEUTRAL** to confirm.

n.b

0.4°C

Example n.b = 0.4°

### VIEWING 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.

### 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 **NEUTRAL** 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 **NEUTRAL** to confirm.

The next system constant will then appear. You can press **NEUTRAL** for at least 2 seconds to exit and return to the *Run Mode*.

Mess.	Value	Meaning	Note
d.HEA	0.2°	°HEAT differential	*1)
d.COL	0.2°	°COOL differential	*1)
tEnP	=1	temperature representation (=1 °C, =2 °F)	*2)
Ad.tE	0.0°	°Input temperature sensor correction (+ or -)	*3)

\*1) For more details see *Operative Diagram*.

\*2) tEnP = 1 : °C Temperature range.

tEnP = 2 : °F Temperature range.

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

### PRESET PROGRAMS



At delivery this processor is programmed with the following (variable) settings.

To return to these settings at any time.

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

t.SET = 20.0° n.b. = 0.4° 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 **NEUTRAL** for activating relay.

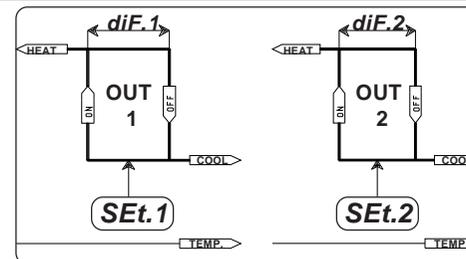
Pushing again + for increase relay number previous relay is deactivated. You can press **NEUTRAL** for a least two seconds to escape and return to the *Run Mode*.

### 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	Contacts
HEAT	HEAT On	1	3-4-5
NEUTRAL	no actioning		
COOL	COOL On	2	6-7-8

### OPERATIVE DIAGRAMS



### 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**.

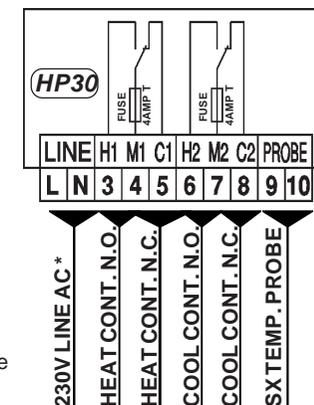
Protect supply with adequate fuse.

#### 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



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