INSTALLATION

How to connect the sensors

Connect the sensor provided as shown in the diagram. **For remote connections use a standard 0.5-square millimeter two-pole wire**, 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.
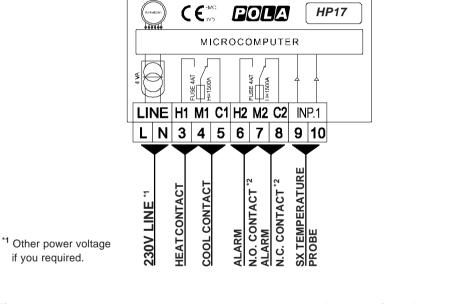
How to connect the line

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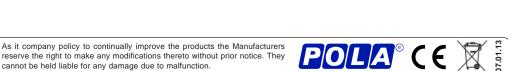Protect supply with adequate fuse.

How to connect the contacts

Connect terminals on the terminal block (contacts up to 4AMP.AC1).

| LINE | | H1 | M1 | C1 | H2 | M2 | C2 | INP.1 | |
| L | N | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

*1 230V LINE *1
HEAT CONTACT
COOL CONTACT
ALARM N.O. CONTACT *2
ALARM N.C. CONTACT *2
SX TEMPERATURE PROBE

*1 Other power voltage if you required.

*2 Alarm relay de excited or excited in normal condition referring to Cost, function **rY.AL**.

POLA® CE 07.01.13

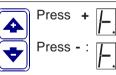---

HP17
SL 3.1
Thermostat with alarm

Handbook

MAIN SETTING *(Run Mode)*

TEMPERATURE SETTING
Press **TEMP** (key lamp flashes): this message will be displayed instead of the ° *Set temperature value* .
Press **+** or **-** to modify, press **SET** to escape.

`t.SEt`

MINIMUM ALARM TEMPERATURE
Press **MIN ALARM** (key lamp flashes): this message will be displayed instead of the ° *Set Minimum temperature value* .
Press **+** or **-** to modify (*), press **ALARM MIN** to escape.

`AL._ _`

TEMPERATURE SETTING
Press **MAX ALARM** (key lamp flashes): this message will be displayed instead of the ° *Set Maximum temperature value* .
Press **+** or **-** to modify (*), press **ALARM MAX** to escape.

`AL.⁻ ⁻`

* If option **o.ALA=1** (see **COSt**) the **c.AL_** or **c.AL-** message appears on display.
  If option **o.ALA=2** (see **COSt**) the **r.AL_** or **r.AL-** message appears on display.

VIEWING TEMPERATURE RECORDING

Press **+** `t.⁻ ⁻ ⁻` : will be displayed followed by °*Maximum Temperature Recording.*

Press **-** : `t._ _ _` will be displayed followed by °*Minimum Temperature 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.

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 MAX** key and keep it pressed giving power on: release **ALARM MAX** key when on the screen *boot* message appears. **t.SEt** = 25.0° **AL _ _** = 10.0° **AL - -** = 30.0°
The COSt values are shown in *COSt Programming.*

COSt PROGRAMMING (System constants)

These settings refer to the mode operation of the system and must be made
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 MAX** 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 MAX** to confirm.
The next system constant will then appear.
You can press **SET 2** for at least 2 seconds to exit and return to the *Run Mode.*

Mess.	Value	Meaning	Note
diFF	0.2 °	°C differential	***1)**
o.ALA	=0	Alarm setting mode	***2)**
C.AL_	0.0 °	°C Set temperature minimum alarm	***3)**
C.AL-	40.0 °	°C Set temperature maximum alarm	***3)**
tEnP	=1	Temperature representation (=1 °C, =2 °F)	***4)**
Ad.tE	0.0 °	°C Input temperature sensor correction (+ or -)	***5)**
rY.AL	=0	Alarm relay exctitation in normal condition	***6)**

*1) For more details see *Operative Diagrams.*

*2) o.ALA = 0 : Minimum and maximum alarm sets user settable (see **ALARM** keys).
   o.ALA = 1 : Minimum and maximum alarm absoloute sets (see **COST *3**).
   o.ALA = 2 : Minimum and maximum alarm relative sets (see **COST *3**).

*3) If **o.ALA = 1** : Minimum or maximum absolute alarm set value.
   If **o.ALA = 2** : Minimum or maximum relative alarm set value.
   For more details see *Operative Diagrams.*

*4) :**=1** : **°C** Temperature range.
   =2 : **°F** Temperature range.

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

*6) **rY.AL =0** : Relay de excited in normal condition
   rY.AL =1 : Relay excited in normal condition.

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

STATE INDICATION LAMPS

The light situuayed 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
COOL	Cool On	1	4-5
AL.MIN	Minimum Alarm On	2	6-7-8
AL.MAX	Maximum Alarm On	2	6-7-8

OPERATIVE DIAGRAMS

o.ALA = 0

o.ALA = 1

o.ALA = 2