

"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 + (1 is displayed) and push ALARM for activating relay.
 You can press ALARM for a least two seconds to escape and return to the Run Mode.

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 key and keep it pressed giving power on.
 boot message will be displayed (release now SET key).
 LSET = 37.7° H.SET = 80.0H
 The COSI values are shown in COSI paragraphs.

INSTALLATION

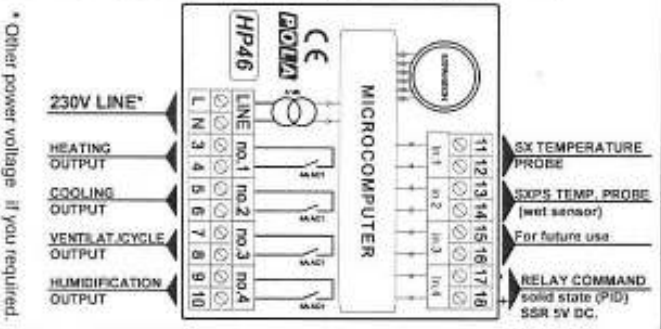
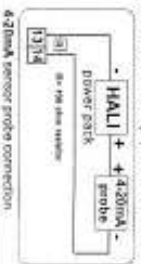
How to connect the line.
 Connect 220V line on terminals L-N.
 Protect supply with adequate fuse.

How to connect the contacts.
 Connect terminals on the terminal block (contacts up to 4AMP AC1) to the loads as shown in the diagram.

How to connect the temperature sensor.
 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 joints carefully. -Q.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 humidity-psychrometer system (wet bulb).
OPtH=1 psychrometer system humidity connection.
SXPS: temperature probe for wet bulb (psychrometric system). Attention: deeply only the terminal side of the wet bulb (psychrometric system), Attention: deeply only the terminal side of the wet bulb (psychrometric system).
 This water-container is not an item of our production.

How to connect 4-20mA electronic humidity probe.
OPtH=2 electronic humidity probe connection.



* Other power voltage if you required.



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 TEMP to confirm.

A.5.5E1-

HUMIDITY SETTING.

Press HUM (key lamp flashes);
 this message will be displayed instead of the
 %RH Set Humidity value.
 Press + or - to modify, press HUM to confirm.

A.5.5E1-

VIEW OF ALARM SETTINGS.

The settings of alarm temperatures can be only see on display, to obtain this press ALARM (key lamp flashes);
 this message will be displayed instead of the
 Set Minimum alarm temperature value.

A.L.L.-

Press ALARM : at this point this message will be displayed instead of the "Set Maximum alarm temperature value."
 Press ALARM to exit.

A.L.L.-

AMBIENT TEMPERATURE AND HUMIDITY VIEWING

With TEMP key lamp light (press TEMP key) ambient temperature is displayed. With HUM key lamp light (press HUM) ambient humidity is displayed (if the humidity is obtained with "wet bulb", pressing HUM for more than 1 second on display will appear the message t.WET in turn of obtained value of temperature probe "wet bulb".

VIEWING TEMPERATURE RECORDING

Press + : will be displayed followed by
 Maximum Temperature Recording.
 Press - : 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.

All containing policy is central, you refer to the products in the structures receive the right to make any modifications without prior notice. They cannot be held liable for any damage due to malfunction.

POLLA CE

COST PROGRAMMING (System constants)



These settings refer to the mode of operation of the system and must be made on initial start-up. Press - / + together for at least one second: the message **C.O.S.I.** will be displayed.

Press then repeatedly **ALARM** 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 **ALARM** to confirm.

The next system constant will then appear.

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

r.HEA	-0.2°	°C HEAT setting shift referring to t.SET .	*1
r.VEN	0.2°	°C VENT setting shift referring to t.SET .	*1
r.COL	0.4°	°C COOL setting shift referring to t.SET .	*1
d.HEA	0.2°	°C HEAT differential.	*1
d.VEN	0.2°	°C VENT differential.	*1
d.COL	0.2°	°C COOL differential.	*1
r.AL₋	-0.5°	°C MIN ALARM setting shift referring to t.SET .	*1
r.AL₊	0.3°	°C MAX ALARM setting shift referring to t.SET .	*1
CYCL	0	Number of daily cycles/VENT exclusion	*2
dur₁	0°	Minutes ON duration of daily cycles	*2
Prop	1.0°	°C HEAT PID proportional band.	*3
IntE	8.0°	Time seconds of cycle and of PID integration.	*3
der₁	4.0°	Time seconds of PID derivative.	*3
SELF	=1	Autotuning (=0 disable, =1 enable).	*4
b.Hum	2.0H	%RH humidification proportional band	*4
CYCH.H	0°	Seconds of humidification cycle.	*4
SEI₋	35.0°	°C minimum set (t.SET) imposition.	*5
SEI₊	38.2°	°C maximum set (t.SET) imposition.	*5
OPt.H	=1	Humidity sensor type	*6
TEMP	=1	Temperature representation (=1 °C, =2 °F).	*7
AdtE	0.0°	°C Input temperature sensor correction (+ or -).	*7
AdtU	0.0°	°C Input temperature wet sensor correction (+ or -).	*7
AdtRH	0.0H	%Rh input humidity sensor correction (+ or -).	*7

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

*2) If **CYCL=0** relay N.3 works as **VENTILATION** output (indicated by **VENT** lamp). If **CYCL=1** (1 cycle/day) to **CYCL=1720** (period cycle 2 minutes) **VENTILATION** operations are excluded and **CYCLE** timer lamps lights indicating status of relay N.3 (closed during ON duration). **CYCLE** timer is timer in order to continue counting after line blackout.

*3) PID function with exit on -17-18 terminals to control of one solid-state relay (SSR).

*4) Referred to PID function. The correction of autotuning is set every 16 x **IntE**.

*5) The temperature setting that can be programmed with **TEMP** key must be included among these values.

*6) **OPt.H = 1**: psychrometric system (wet bulb): to call for a **SXPS** probe.

*7) **OPt.H = 2**: 4-20mA sensor: to call for a **HALL** power pack.

The psychrometer-system obtained value can be recognized with the classic curve.

STATE INDICATION LAMPS

The light 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 output	1	3-4
COOL	COOL output	2	5-6
VENT	VENT ON output	3 ¹⁾	7-8
HUM	HUM ON output	4	9-10
MIN ALARM	MIN ALARM ON output	6 ²⁾	3-4-5 *
MAX ALARM	MAX ALARM ON output	7 ²⁾	6-7-8 *
CYCLE OFF	CYCLE OFF output	3 ¹⁾	7-8
CYCLE ON	CYCLE ON output	3 ¹⁾	7-8

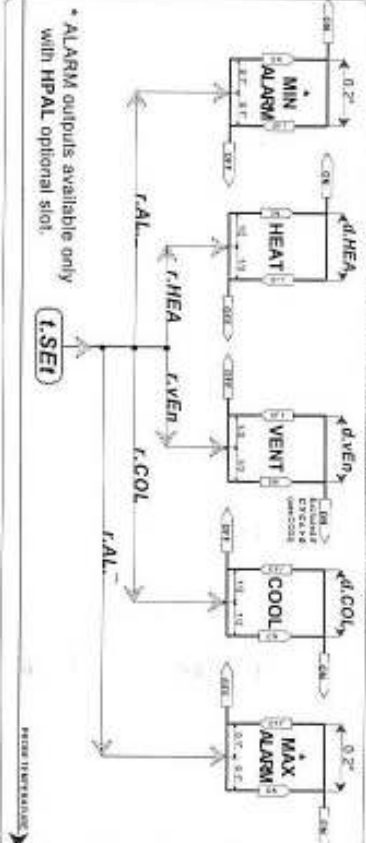
*1) If **CYCL=0** (see **COSI**) relay N.3 works as **VENTILATION** output (indicated by **VENT** lamp).

If **CYCL=1** (1 cycle/day) to **CYCL=1720** (period cycle 2 minutes) **VENTILATION** operations are excluded and **CYCLE** timer lamps lights indicating status of relay N.3 (closed during ON duration). **CYCLE** timer is saved in order to continue counting after line blackout.

*2) Available only with **HPAL** optional slot.

OPERATIVE DIAGRAMS

Function on the ground of the temperature.



Function on the ground of the humidity.

