

HP22

SL 1.3

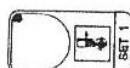
Double-level thermostat

Handbook

MAIN SETTING (Run Mode).

These settings are only concerning the user.

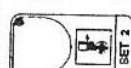
TEMPERATURE 1 SETTING



Press SET 1 (key lamp flashes):
this message will be displayed instead of the
° Set temperature 1 value.
Press + or - to modify, press SET 1 to escape.

5 E F . 1

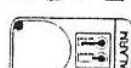
TEMPERATURE 2 SETTING



Press SET 2 (key lamp flashes):
this message will be displayed instead of the
° Set temperature 2 value.
Press + or - to modify, press SET 2 to escape.

5 E F . 2

ALARM PARAMETER SETTING



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

A L - -

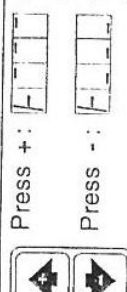
At this point:

this message will be displayed instead of the
° Set Maximum alarm temperature value.
Press + or - to modify, press ALARM to escape.

A L - -

Alarm outputs are available only with HPAL optional slot.

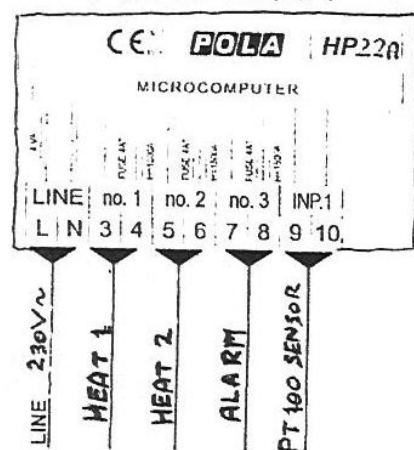
VIEWING TEMPERATURE RECORDING



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 + key for more than 3 seconds.
CLEA message will be composed on display before clearing operation.

connections:



PT100 READING TYPICALS (-100°C ÷ 300°C)

PRECISION : 0,5%
LINEARITY : 1,5°C
INTERNAL RESOLUTION : 0,5°C
PT100 EXCITATION (@0°C) : 30mW
ABSOLUTE RANGE : -200 ÷ 600°C

I = 16mA , NO DEGRADATION OF
RELIABILITY , TYP. LESS THAN
1°C OVERHEATING IN LIQUID.

POLA

COST Programming

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.t.** will be displayed.

Then Press **ALARM** repeatedly until interested variable's message is displayed (see table below) : variable values and related messages 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*.

Mess. Value	Meaning
dif. 1 2.0	differential of SETPOINT 1 (0 to 50 Deg.C)
dif. 2 2.0	differential of SETPOINT 2 (0 to 50 Deg.C)
t. on.H 5.0"	Time delay in seconds of relay 1 & 2(0 to 999 seconds)
AL. 0	Low alarm setting (0 to 199 Deg.C)
AL. 190	High alarm setting (0 to 199 Deg.C)
t. on 0	Time delay of Low alarm (0 to 999 seconds)
t. on 0	Time delay of High alarm (0 to 999 seconds)
RY.AL 0	Alarm relay status 0 = N.O. 1 = N.C.
TEMP 1	temperature representation (=1 °C, =2 °F)
Ad.te 0	Display Calibration (-50 to 50 Deg.C)

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

To return to these settings at any time:

Power off the control, press **ALARM** key and keep it pressed put power on.

: boot message will be displayed (release now **ALARM** key).

Set.1=165° Set2=175° AL.---=0.0° AL.---=190.0°

The COST values are shown in COST Programming

"HAND MODE

In some start-up conditions may be useful to work in "hand" mode:

Power off the control, press + key and keep it pressed put power on

Hand message will be displayed (release now + key).

Push + until is displayed number required to be manually controlled (see table relays) push **ALARM** to activate relay.

Pushing again + for increase relay number previous relay is deactivated

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

STATE INDICATION LAMPS

The light situated at the bottom of the display show the state of the various relays set out below:

Lamp.	Meaning	N° Relay	Contacts
HEAT (1)	Heat 1 On	1	3-4
HEAT (2)	Heat 2 On	2	5-6
ALARM (1)	ALARM	3	7-8

HP22A

3.0

15/4/2001

TO: PROTHERM (GB)

Sets list:

SEL.1 165°
SEL.2 175° } RANGE 0° ÷ 180°

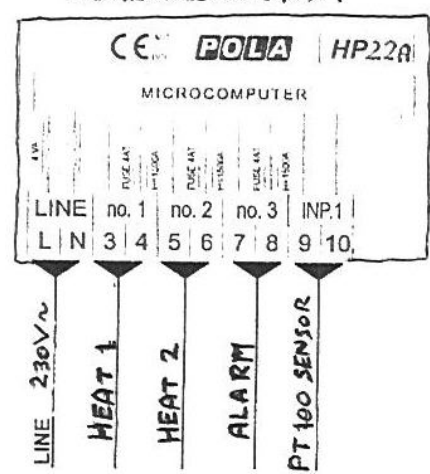
AL.---, AL.-- VIEWABLE BUT NOT CHANGEABLE (SEE COST)

Cost list: (PROGRAM)

RANGE: TO ENTER PRESS & HOLD Δ+▽ KEYS FOR 3 SECONDS. PRESS ALARM KEY TO MOVE DOWN COST LIST. PRESS & HOLD ALARM KEY TO EXIT.

dIF.1	2°	(0° ÷ 50°)	DIFFERENTIAL OF SET 1
dIF.2	2°	"	" " SET 2
t.on.H	5"	(0" ÷ 999")	TIME DELAY IN SECONDS OF RELAY 1 & 2
AL.---	0°	(0° ÷ 190°)	LOW ALARM SETTING
AL.--	190°	"	HIGH ALARM SETTING
t.on.-	0"	(0" ÷ 999")	TIME DELAY IN SECONDS LOW ALARM
t.on.-	0"	"	" " " " HIGH ALARM
rY.AL	= 0	N.O. ; = 1 N.C.	ALARM RELAY STATUS 0=NO 1=NC
Ad.tE	0°	(-50° ÷ 50°)	CALIBRATION
tEnP	= 1	; °C ; = 2: °F	°C OR °F DISPLAY

connections:



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ABSOLUTE RANGE : -200 ÷ 600°

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