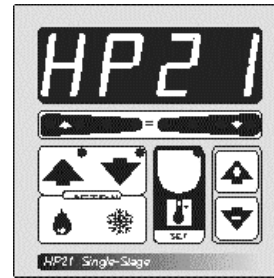


# HP21A

SL 3.0

1,2 or 3-level thermostat / proportional controller



## MAIN SETTING (Run Mode)



Press **SET** (key lamp flashes):  
this message will be displayed instead of the  
° Set temperature value.

SET 1

Press + or - to modify, press **SET** to **modify sets 2 & 3**

25.0°

Example: t.SET = 25.0°

## Default settings

Set.1 (25° C)	Lamp OFF	IN2. = OPEN
Set.2 (35° C)	Lamp FLASH	IN2. = 100Q
Set.3 (80° C)	Lamp ON	IN2. = CLOSED

## 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.

## PRESET PROGRAMS (Bootstrap).



At delivery 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). t.SET = 25.0°

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 processor, press + key and keep it pressed giving power on:

**HAnd** message will be displayed (release now + key).

Press + :  - Press **SET** to activate Relay 1, or :

Press + :  - Press **SET** to activate 0 - 10v out

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

## COST PROGRAMMING (System constants)



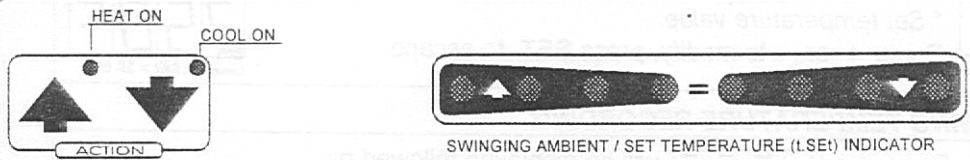
These settings refer to the mode operation of the system and must be made on initial start-up. Press -/+ together for at least one second. the message *C.O.S.t.* will be displayed. Press then repeatedly **SET** until interested variable's message is displayed (see table below) : variable value and related message will be displayed. Press + or - to set a new value and then **SET** to confirm. The next system constant will then appear. You can press **SET** for a least two second to escape and return to the *Run Mode*.

Mess.	Value	Meaning	Note
diFF	3°	Relay out Diff, 0° - 25°	*1)
R.dIF	3°	Relative relay out adjustment, -25° - 25°	*1)
ProP	5°	0-10v out proportional band, 0° - 25°	
R.Pro	0°	Relative 0-10v band adjustment, -25° - 25°	
bArG	6°	Bargraph band, 0° - 25°	
Ad.t1	0°	Adjustment for set 1, -25° - 25°	*2)
Ad.t2	0°	Adjustment for set 2, -25° - 25°	*2)
Ad.t3	0°	Adjustment for set 3, -25° - 25°	*2)
Set.	85°	Maximum Set.1/2/3 value 0° - 150°	
n.SET	=3	Number of sets, =1, =2, =3	

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

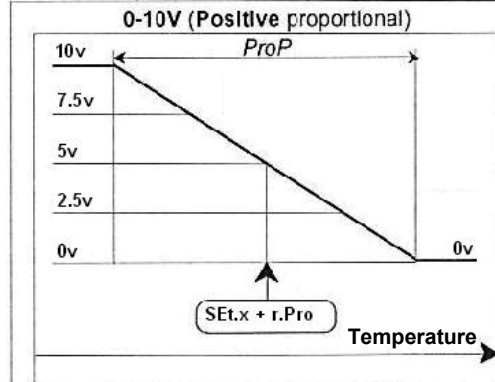
\*2) You can correct the readings on the various sensors (+ or -).

## STATE INDICATION LAMPS

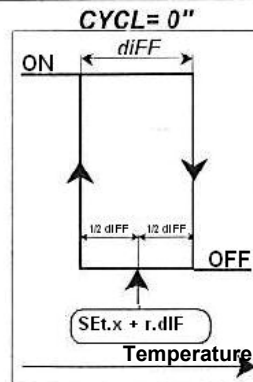


## OPERATIVE DIAGRAMS

### 0-10V Proportional Output



### Relay output



## INSTALLATION

### How to connect the sensors

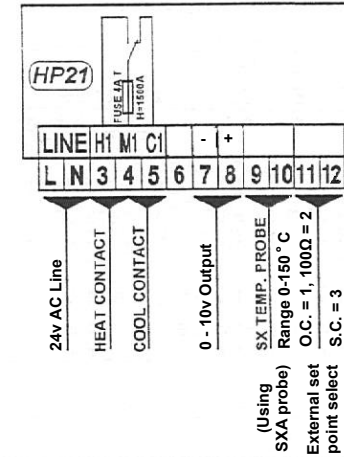
Connect the sensor provided as shown in the diagram. For remote connections use a standard 0.5-square millimeter two-pole wire, taking great care over the connections, by insulating and sealing the joins carefully. -O.C.- is displayed when the temperature sensor wiring is open, -S.C.- is displayed when the temperature sensor wiring is short circuit.

### How to connect the line

Connect line on terminals L-N.

### How to connect the contacts

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



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.

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