

INSTALLATION

How to connect the sensors

Connect the sensors provided as shown in the diagram (see following page). 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.

How to connect response potentiometer :

Connect the response potentiometer of any value (max 10.000 ohm) and connect the terminals 7-8.

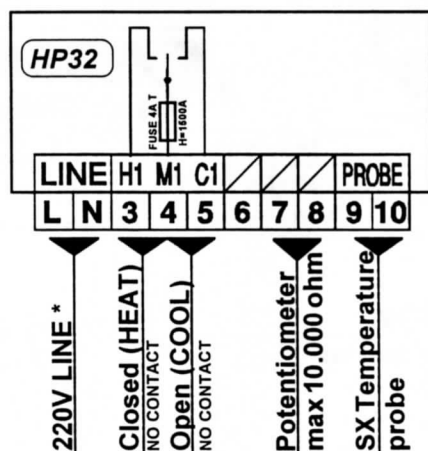
For remote connections use a standard 0.5-square millimetre two-pole wire for each sensor, taking great care over the connections, by insulating and sealing the joins carefully.

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) to the loads as shown in the diagram).



* Other power voltage if you required.

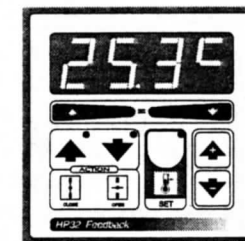
recommended 1 Kohm type

HP32

SL 2.0

Proportional feedback

Handbook



MAIN SETTINGS (Run Mode).

These settings are only concerning the user:

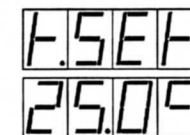
SETTING.



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

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

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



Example t.SET = 25.0°C

At this point this message will be displayed instead of the Position minimum opening % value.

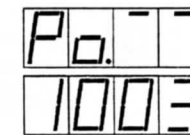
Press + or - to modify. Press **SET** to confirm.



Example Po. = 0%

At this point this message will be displayed instead of the Position maximum opening % value.

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



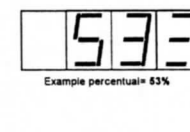
Example Po. = 100%

POSITION VIEWING



Press **SET** for at least one second (and not more 5 seconds, because than an *Init* procedure is issued):

This message will be displayed instead of the % position.



Example percentual = 53%

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.

FLAP POTENTIOMETER INITIALIZATION PROCEDURE (Init)



A response potentiometer of any value (max. 10.000 ohm) must be applied to the flap motor.

Having done this, proceed as follows to record the potentiometer values.

Press **SET** key for at least 5 second:

When *Init* message will be displayed for more one second release **SET** key: the processor closed the flap (light **CLOSED** flashes) and the potentiometer resistance value is displayed.

When the flap have completely closed, press **SET** key to record the value.

at this point the processor open the flap (light **OPEN** flashes) and the potentiometer resistance value is displayed.

When the flap have completely opened, press **SET** key to record the value.

The processor then returns automatically 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 than repeatly **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.	Valore	Significato	Note
<i>ProP</i>	4.0°	° Proportional range	*1)
<i>Pct.1</i>	0	% position to SET	*2)
<i>Pcn.1</i>	5	% neutral range	*3)
<i>Po.CL</i>	0 r	Potentiometer resistor in Flap closed position	*4)
<i>Po.OP</i>	9999	Potentiometer resistor in Flap open position	*4)
<i>tEnP</i>	=1	Temperature representation (=1 °C, =2 °F)	*5)
<i>Ad.tE</i>	0.0°	° Input temperature sensor correction (+ o -)	*6)

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

*2) Reached SET temperature (**SET** key in *Run Mode*) flap position is that value (0 is fully closed).

*3) If swing occurs when searching for the position during operation (due to mechanical gearmotors hysteresis), raise the neutral range setting value until it is eliminated.

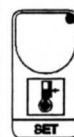
*4) That values can be entered in handly mode or are automatically setted by *Init* procedure (see *Init* procedure).

*5) *tEnP* =1 : °C Temperature range.

tEnP =1 : °F Temperature range.

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

PRESET PROGRAMS



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° *Po. _ _* = 0 *Po. - -* = 100

The **COST** values are shown in **COST** paragraphs.

"HAND" MODE



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

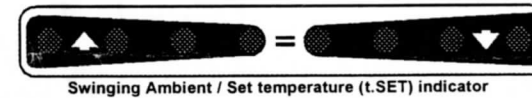
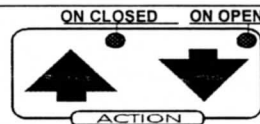
Power off the processor, press **+** key and keep it pressed giving power on: **Hand** message will be displayed (release now **+** key).

Push **+** until is displayed number required to be handed (see table relays) and push **SET** for activating relay.

Pushing again **+** for increase relay number previous relay is deactivated.

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

STATE INDICATION LAMPS



Lamp.	Meaning	N° Relay	Contactts
CLOSE	Close (Heat) On	1	3-4
OPEN	Open (Cool) On	2	4-5

OPERATIVE DIAGRAM

