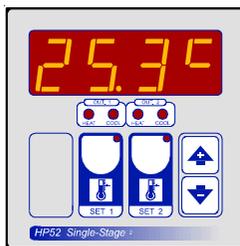


HP52

SL 2.0

Differential thermostat

Handbook



MAIN SETTINGS (Run Mode).

SET 1 TEMPERATURE SETTING (OUTSIDE).

Press **SET 1** (key lamp flashes):
This message will be displayed instead of the °Set 1 temperature value.
Press + or - to modify. Press **SET 1** to confirm.

SET.1

0.0°

Example SET.1 = 0.0°

SET 2 TEMPERATURE SETTING (INSIDE).

Press **SET 2** (key lamp flashes):
This message will be displayed instead of the °Set 2 temperature value.
Press + or - to modify. Press **SET 2** to confirm.

SET.2

6.0°

Example SET.2 = 6.0°

COS_t PROGRAMMING (System constants)

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 then repeatedly **SET 2** 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 **SET 2** 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
SEt.d	3.0°	°SET inside-outside function (OUT 1)	*1)
diF.d	0.2°	°SET 2 in-out differential (OUT 1)	*1)
diF.2	0.2°	°SET 2 inside differential (OUT 2)	*1)
t.oFF	1"	Time of minimum off relay 1 (anti-oscillation)	*1)
tEnP	=1	Temperature representation (=1 °C, =2 °F)	*2)
Ad.t1	0.0°	°C Outside temperature sensor correction (+ or -)	*3)
Ad.t2	0.0°	°C Inside temperature sensor correction (+ or -)	*3)

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

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

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

PRESET PROGRAMS



At delivery this processor is programmed with the following (variable) settings. To return to these settings at any time. Power off the processor, press **SET 2** key and keep it pressed giving power on: release **SET 2** key when on the screen **boot** message appears.
SET.1 = 0.0° SET.2 = 6.0° The **COS_t** values are shown in **COS_t** paragraphs.

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). Press + until is displayed number required to be handed (see table relays "N° Relay") and press **SET 2** for activating relay. Pressing again + for increase relay number previous relay is deactivated. You can press **SET 2** key for a least two seconds to escape and return to the *Run Mode*.

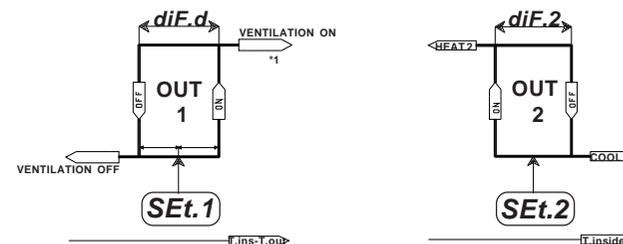
STATE INDICATION LAMPS

The lights situated at the bottom of the display show the state of the relay.

Lamp.	State	N. Relay	Contacts
HEAT (1)		1	4-5
COOL (1)	Ventilation On	1	3-4
HEAT (2)	HEAT 2 Output On	2	6-7
COOL (2)	COOL 2 Output On	2	7-8

OPERATIVE DIAGRAMS

*1) Relay 1 turn off if T.Outside < SEt.1 (COOL 1 lamp flashes) and re-enabled if T.Outside >= SEt.1 for more then t.oFF.



INSTALLATION

How to connect the sensors

Connect the provided sensors as shown in the diagram.

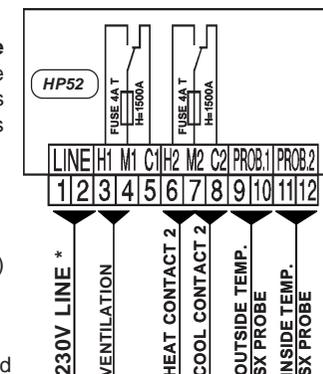
For remote connections use a standard 0.5-square millimetre two-pole wire for each sensor, taking great care over the connections, by insulating and sealing the joins carefully. -O.C.- is displayed when the temperature sensor wiring is open, -S.C.- is displayed when the temperature sensor wiring is short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



* Other power voltage if you required

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.



07.01.13

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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:
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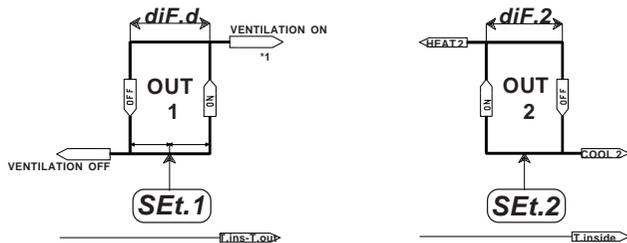
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*1) Relay 1 turn off if $T_{\text{Outside}} < \text{SEt.1}$ (COOL 1 lamp flashes) and re-enabled if $T_{\text{Outside}} \geq \text{SEt.1}$ for more then *t.oFF*.



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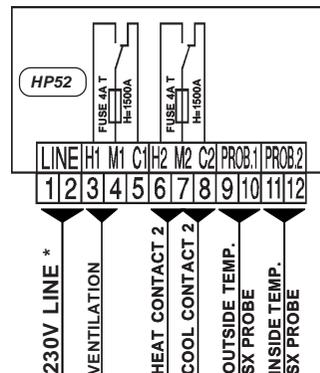
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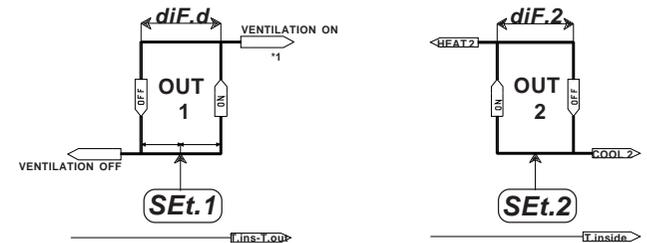
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