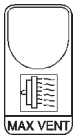
PRESET PROGRAMS



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 **MAX VENT** key and keep it pressed giving power on: ***boot*** message will be displayed (release now **MAX VENT** key).

°C VENT=*25.0*° MIN VENT=*0* MAX VENT=*4*

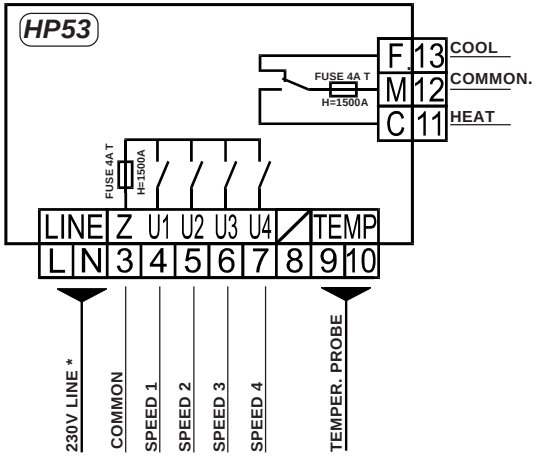
The **COSt** values are shown in **COSt** paragraphs.

INSTALLATION

How to connect the sensors
Connect the temperature probe provided as shown in the diagram. For remote connections use a standard 0.5-square millimeter 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 220V line on terminals **L-N**.

How to connect the contacts
Connect terminals **3-7** / **...11-13** on the terminal block (contacts up to 4AMP.AC1). Output contacts are N.O. (Normally Opened and free of voltage) on wich is aplliable a 4AMP AC1 maximum load.
3-4= Speed 1 contact.
3-5= Speed 2 contact.
3-6= Speed 3 contatc.
3-7= Speed 4 contact.
11-12= Heat contact.
12-13= Cool contact



***** Other power voltage if you required

POLA® CE 19.07.06

HP53

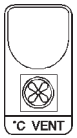
SL 2.0

Steps-Controller

Handbook

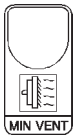
MAIN SETTINGS (Run Mode)

VENTILATION TEMPERATURE SETTING.



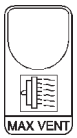
Press **°C VENT**:
This message will be displayed instead of the °*Set Ventilation temperature value (start first speed)*.
Press **+** or **-** to modify, press **°C VENT** to confirm.

MINIMUM SPEED SETTING.



Press **MIN VENT**:
This message will be displayed instead of the *Minimum Ventilation Speed.*
Press **+** or **-** to modify, press **MIN** to confirm.

MAXIMUM SPEED SETTING.

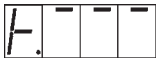


Press **MAX VENT**:
This message will be displayed instead of the *Maximum Ventilation Speed.*
Press **+** or **-** to modify, press **MAX** to confirm.

AMBIENT TEMPERATURE VIEWING

In normal condition ambient temperature is displayed and in setting coindition flashing message appear.
The normal condition become again after exit from setting mode (auto-exit is performed after 5 seconds from last key stroke in setting condition).

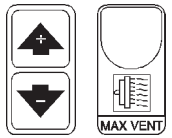
VIEWING TEMPERATURE RECORDING

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.

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.t.*** will be displayed.
Press than repeatly **MAX VENT** 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 **MAX VENT** to confirm.
The next system constant will then appear. You can press **MAX VENT** for a least two second to escape and return to the *Run Mode*.

Mess.	Value	Meaning	Note
ProP	**3.0°**	° Ventilation proportional band	***1)**
r.HEA	**-0.5°**	° HEAT setting referring to °C VENT	***2)**
d.HEA	**0.2°**	° HEAT differential	***2)**
tEnP	**=1**	Temperature representation	***3)**
Ad.tE	**0.0°**	° input sensor temperature correction	***4)**
tYPE	**=1**	Start ventilation actioning mode	***5)**

1)** From lower value ventilators starts at speed n°1 at temperature setted on **°C VENT** key and reach speed n°4 at temperature ***°C VENT + ProP.

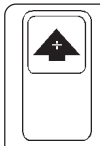
***2)** This set is a relative set reffered to temperature setted on**°C VENT** key.
For example if is setted ***°C VENT=25.0°*** and ***r.HEA=-0.5°*** heating command (HEAT) will start at 24.5° (25.0°-0.5°).
Heating will be OFF after 0.2° (value ***d.HEA***).

3)** ***tEnP =0 : **°C** Temperature range.
tEnP =1 : **°F** Temperature range.

***4)** You can correct the readings on the sensor (**+** or **-**).

***5)** Different mode of ventilator initial start-up optionally settable (step from **0** to **1** speed).
tYPE= 1 : 0 to 1 step become in normal mode.
tYPE= 2 : 0 to 1 step become with a momentary **10** seconds at speed **2**.
tYPE= 3 : 0 to 1 step become with a momentary **5** seconds at speed **3**.
tYPE= 4 : 0 to 1 step become with a momentary **5** seconds at speed **4**.
tYPE=13 : Heating mode ventilation.
tYPE=14 : Progressive speed (On-Off regulation type).
*Options **2, 3 , 4** permits to make an easy opening of shutter models ventilators.*
*Option **13** permits Heater mode ventilation (low temperature = hight speed; in other options high temperature= high speed).*
*Option **14** permits On-Off regulation speed (in other condition regulation is for variable speed control).*

"HAND MODE"



In some start-up conditions may be useful to work in "hand" mode.
Power off theprocessor, 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 "**N° Relay**") and push **MAX VENT** for activing relay.
Pushing again **+** for increase relay number previous relay is disactivated. You can press **MAX VENT** for a least two seconds to escape and return to the *Run Mode.*

STATUS INDICATION LAMPS

The lights situated at the bottom of the display show the state of the various relays as set out below.

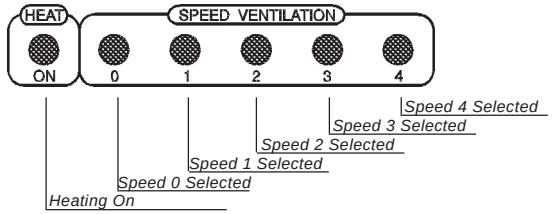


Table of relay Outputs with *tYPE= 1-2-3-4-9* (Variable speed control)

Lamp.	Output relay						N° Relay
	HEAT	**0**	**1**	**2**	**3**	**4**	
HEAT	**1**	0	0	0	0	0	**5**
VENT 1	0	0	**1**	0	0	0	**1**
VENT 2	0	0	0	**1**	0	0	**2**
VENT 3	0	0	0	0	**1**	0	**3**
VENT 4	0	0	0	0	0	**1**	**4**

Table of relay Outputs with *tYPE = 14* (On-Off regulation type)

Lamp.	Output relays with *tYPE = 14* (see COSt)						N° Relay
	HEAT	**0**	**1**	**2**	**3**	**4**	
HEAT	**1**	0	0	0	0	0	**5**
VENT 1	0	0	**1**	0	0	0	**1**
VENT 2	0	0	**1**	**1**	0	0	**2**
VENT 3	0	0	**1**	**1**	**1**	0	**3**
VENT 4	0	0	**1**	**1**	**1**	**1**	**4**

OPERATING DIAGRAM