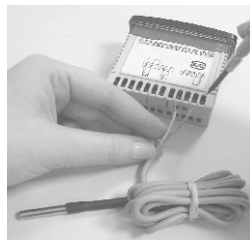
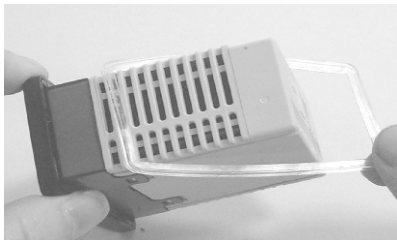
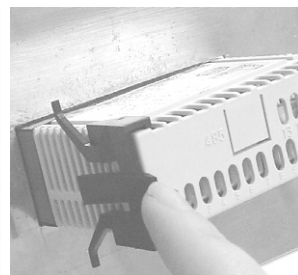
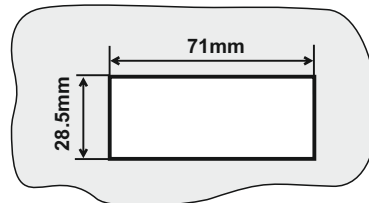


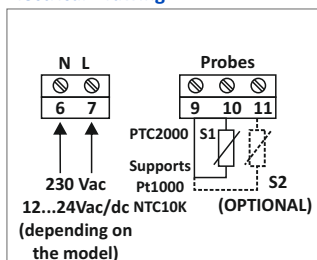
Installation



Measures for Drill to Embed



Electrical Drawing



ASSEMBLY NOTE

Before making any electrical connections, ensure that the control is disconnected from the power supply.

Any manipulation of the control is to be performed only by qualified personnel.



Guarantee Conditions

This appliance has a three-years guarantee limited to replacement of defective parts. Transports not included.

We will not accept any responsibility for damage caused to the appliance by poor handling.

The guarantee does not include:

- Appliances with a damaged, effaced or altered series number.
- Appliances which have not been connected or used following the instructions that accompany it.
- Appliances which have been altered without the prior consent of the manufacturer.
- Appliances damaged by blows of liquid spills or gaseous emissions.

VERY IMPORTANT:

Before opening the box, to access the connection, make sure the voltage switch.

This controller is not a safety device, or can be used as such, it is the responsibility incorporate adequate protection to every type of installation (homologated) installer.

The probe cable must be as far away as possible from other electrical conductors. Its maximum recommended by current regulation length should not exceed 3 meters.

Independent control device mounting, and connection via fixed pipeline.

Reserved the right of modify without prior notice.

Sonder Regulación, S.A.

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(Barcelona) Spain

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Cód: 5503V1 - ING - MAY21

Operation

Double thermometer with tenths & maximum / minimum temperature memory with input for 2 probes (only 1 PTC2000 unit is supplied).

When the appliance is switched on, the display will show "---" and the temperature detected by the PTC2000 probe (included, but the probe inputs also support NTC10K and Pt1000). If you have a second probe connected, the temperatures in display will go alternating. The temperature range displayed will depend on the type of probe connected.

The thermometer keep the maximum and minimum of temperature detected by the probe. To see the maximum temperature push the key **▲** and to see the minimum temperature push the key **▼**. If you push by 5 seconds the key **OK**, you delete the set values of maximum and minimum temperature.

Factory Settings

Function	Description	Adjusted to	Scale
CL1	Calibration probe 1	0°C	-10,0...+10,0°C
CL2	Calibration probe 2	0°C	-10,0...+10,0°C
SEL	Selection values max & min	P12	P12/P1/P2
dSP	Display show probe	ALT	ALT/Fij
dEG	Temperature units	CEL	CEL/FAH
tYP	Type of temperature sensor	PTC	*ntc/Ptc/Pt
tPP	Time to acces to Prog. Parameters	5 seconds	3 to 40 Sec.
PAS	Parameters acces code	0 deactivated	0 to 99

The factory settings are those considered to be the most common for normal use of installations. If they are right for your purposes, your thermometer is ready to control your installation.

If you should need any other settings due to the requirements of your installation, please read this manual carefully.

Description of Parameters

- **Calibration probe 1 (CL1):** This functions allows change the temperature visualized by the sensor 1.

- **Calibration probe 2 (CL2):** This functions allows change the temperature visualized by the sensor 2.

- **Selections of probe to store temperature max & min (SEL):** with this parameter can choose which probe store the max & min temperature.

"P12": Probe 1 & probe 2

"P1" : Only probe 1

"P2" : Only probe 2

- **Display show probe (dSP):** Selection of mode that shows the display the probes temperatures.

ALT: temperature of probe1 & probe2 are alternating every 10 seconds.

Fij: probe temperature fix on the display, push **OK** to fix the other probe (a number & symbol in display indicates which probe are displayed).

- **Temperature units (dEG):** Defines in which units it shows the temperature, degrees Celsius (CEL) or degrees Fahrenheit (FAH).

- **Probe type selection for temperature reading (tYP):** Defines the type of probe (NTC10K, PTC2000, PT1000) for temperature reading. The probe type of each input is independent.

- **Time of acces to programming of parameters (tPP):** it is the time that should be pressing the key **PRG**. to enter in the programming of parameters, either to modify them or to visualize their values. (Time expressed in seconds).

- **Parameters access code (PAS):** Factory setting zero (disabled). Enter parameter programming by pressing and holding down **PRG** for 5 seconds If the code is other than zero, enter parameters as follows:

A.- "PAS" is briefly displayed and then the message "- 0 -"; Use the up or down arrows to select the previously programmed parameters access code.

B.- Press **OK**: If the selected number is the correct one, "diF" appears. If the selected number is incorrect the thermostat will not allow access to programming and "----" appears.

Parameters Programming

1. Press **PRG** during the time settled down in the parameter tPP (of factory 5 s.) & "CL1" appear in the screen. Release the key.
2. pressing **OK** their current value will appear blinking.
3. While value is blinking, press **▲** or **▼** to change the desired value. Press **OK** to store it in memory. The designation of the parameter being programmed reappears.
4. Press **▲** to scroll forward to the next parameter. Repeat N° 3.
5. Press **PRG** to exit the parameters "- - -" appears and then the current temperature detected by the sensor. After 1 minute without pressing any key, the thermostat leaves programming of parameters.

Probe Display

1. The temperature shown belongs to probe 1
2. The temperature shown belongs to probe 2

ERROR Indicators

"ES" Probe Error: Probe 1 and/or probe 2 are disconnected or its wires are cut.

Reset settings to factory defaults

- Disconnect the control power and reconnect, wait until see on the screen the temperature reading.
- Press **OK** until see on the display "- - -" (approx. 40 seconds).
- The settings return to the factory settings if you has the password disabled ("- 0 -").

Technical Specifications

EA 61 Power Supply: 230Vac +10%, -15% 50/60Hz.
EA 101 Power Supply: 12...24Vac/dc 50/60Hz.
2 Inputs: Probe PTC2000 IP65 -40...+140°C. Accuracy 1,5%.
(1 Probe included, the probe 2 you must buy by separate)
Conexión: Without polarity.
Resolution: 0,1°C.
Maximum cable section to connect: 1,5mm².
Environment: Tmin. 0°C, Tmax. 45°C, %H.R. 20 ... 85%.
Storage temperature: maximum 50°C.
Protection degree: IP20.
Pollution degree: 2.
Action type According EN 60730: 1.B.