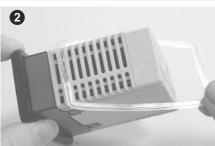
EA51-3, EC55-211V, EC55-311R

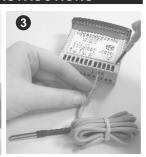
Digital Thermostats and Thermometers

INSTALLATION AND USE INSTRUCTIONS



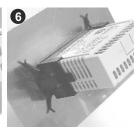


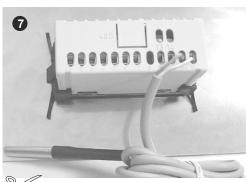














Guarantee conditions

This appliance has a one-year quarantee limited to replacement of defective parts.

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 or liquid spills or gaseous emissions.

EA51-3, EC55-211V, EC55-311R

| USER | INSTALLER | |
|-------------|-------------|--|
| First name: | First name: | |
| Surname(s): | Surname(s): | |
| Address: | | |
| | | |
| Town: | Town: | |
| Postcode: | Postcode: | |
| Tel. no.: | Tel. no.: | |

Installer or store stamp:

Purchase date:

Return this slip to: SONDER REGULACIÓN S.A. Avda. La Llana 93.

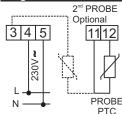
Purchase date:

P.I. "La Llana" 230 08191 RUBÍ (Barcelona) SPAIN FAX 93 588 49 94

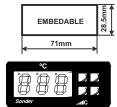
EA51-3 Digital Thermometer

- 1.- When connecting the thermometer, the displays shows the temperatur detected by the probe. In the case of having two probes both temperatures will be shown in a currentent way.
- 2.- To gauge the probe, press _____ Cby 10 s and the display shows **[** 0 To adjust press the key ____ C . In the case of having two probes to come in the following way: press the key 10s and the display shows [] whit the key adjust from -9 to 9 wait 4 sand the display shows 2 11 that it allows to gauge the second probe, with the key adjust from -9 to 9 and after 4 s without press the key the changes are memorized.

Diagram Electric



Drill Dimensions



EC55-211V. EC55-311R Digital Thermostat

OPERATION

- 1.- When connecting the thermostat, the display will show the temperature detected by the probe. Press SET, to view the temperature setpoint.
- 2.-To change the setpoint, hold down SET, and use the ^ keys to increase or decrease the desired temperature. Release SET to store it in memory.

FACTORY SETTINGS

| No. | FUNCTION | VALUE | SCALE |
|---|--|-------|--|
| | | | EC55-211V / EC55-311R |
| | .Temperatura de consigna .Tem. differencial (Hysteresis | | -50 to 99°C / -50 to 130°C 1 to 9°C |
| 1 | Minimum preset limitation | 40 | -50 to 98°C / -50 to 129°C -49 to 99°C / -49 to 130°C |
| 3 | Relay connection delay | 1 | 0 to 99 min. |
| 5 | Probe gauge adjustmentControl type: | rE | -9 to +9°C rE/cA |
| | Defrosting timer | | 1 to 24 h 0 to 99 min. |
| The factory settings are those considered to be the most common | | | |

for normal use. If they are right for your purposes, your thermostat is ready to control and regulate your installation.

- -AUTOMATIC defrosting: By stopping the times indicated in parameter Nº6 and during the period of parameter N°7.
- -MANUAL defrosting: Press 🍑 for around 10 seconds. The cycle with the duration as fixed in parameter 7 starts at display appears "dF". -TO AVOID ANY KIND OF DEFROSTING, program the No 7 to cero.

DESCRIPTION OF PARAMETERS

- 0 Differential: The compressor stops when it reaches the setpoint and restarts at a temperature equal to the setpoint plus the differential.
- 1 Low setpoint and 2 High setpoint: The temperature limits within which the setpoint can be adjusted and set.

- 3 Compressor on delay: Delay time applied when the temperature reaches the setpoint + differential.
- 4 Sensor calibration: This function enables you to change the displayed temperature.
- 5 Control type: "rE" type: The relay disconnects when the temperature falls to the setpoint and will connect when it rises to the setpoint plus differential. "cA" type: it disconnects when the setpoint is reached and will connect when the temperature falls to setpoint minus
- 6 Defrost timer: Interval between the start of two succesive defrosts expressed in hours.
- 7 Time-out defrost finish: After this time has elapsed (in minutes) defrost finishes. Zero indicates defrost disabled.

PARAMETERS PROGRAMMING

- 1. Press A and wat the same time for 5 seconds and "0" will appear on the display. Release the keys.
- 2. Press SET and its current value will be displayed.
- 3. Holding down SET, press ♠ or ✔ to change the desired value. Release SET to store it in memory. The designation of the parameter being programmed reappears.
- 4. Press to scroll forward to the next parameter. Repeat point 3.
- 5. Press to exit the parameters "- -" appears and then the current temperature detected by the sensor.

ERROR INDICATORS

- "ErS" Sensor error: Sensor are disconnected, its wiring cut off or temperature out of limits.
- "888" Memorization error in the parameters table.
- RELAYS FUNCTION in case of anomaly depending on control type: No. 5: rE COOLING: Connect main relay (compressor).
- No. 5: cA HEATING: Disconnect main relay (heater).

ASSEMBLY

Diagram Electric: EC55-211V 11 12 PROBE PTC

Drill Dimension:

EC55-311R (Voltages Free Contacts)

indicate "defrosting" and during this the display indicate "dF".

RELAYS DISPLAY

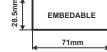
(EC55-311R Only).

timing of parameter 3.

TECHNICAL CHARACTERISTICS

(10) A fixed light spot under the symbol, indicates Display EA51-3/EC55-311R.....3 digit (RED) Display EC55-211V......3 digit (GREEN). that we are in programming of parameters. Input:.....1 Sonda PTC 2000 Ohm. IP67. Resolution: 1°C. Power supply:.....230 Vac +10%, -15%. 50/60Hz. A fixed light spot under the symbol indicates Optional:.....12, 24 V ac/dc and 110 Vac. "RELAY ON" and flashes during the delay Probe wiring:.....without polarity. Relay.....10(4)A 250V ac. Max. Connected wire section:.....1,5mm². ...IP55. External box protection grade:...... Working Temperature:.....-5°C to 45°C. Storage Temperature:.... ...de -20 to 60°C

VERY IMPORTANT!:



The wire of the probe must be far of ofther power electrical wires. The maximum length recomended under actual standard must be less than 3 meters. It is the installer's responsibility to fit electrical protection suitable for the installation (STANDARDIZED). Reserved the right of modify without prior notice.





Sonder Regulación, S.A.; Avda\ La Llana 93. Aptdo.: 230; 08191 RUBÍ (Barcelona) Spain e-mail: info@sonder-regulacion.com; web:www.sonder-regulacion.com ER-0501/1998

A fixed light spot under the symbol will