

XT11S

Electronic Digital Thermometer with maximum / minimum temperature log

1. GENERAL WARNING

⚠ PLEASE READ BEFORE USING THIS MANUAL

- This manual is part of the product and shall be kept near the device for easy and quick reference.
- Check the application limits before proceeding.

SAFETY PRECAUTIONS

- Always ensure that the probe is connected to the instrument before the power supply is connected and turned ON.
- Check the supply voltage is correct before connecting the instrument.
- **The probe is under NO extra low safety voltage for models with 230V or 110V power supply.**
- The instrument is designed for panel mounting and electrical connections must be positioned inside a properly protected board/panel.
- Do not expose to water or moisture: use the instrument only within the operating limits avoiding sudden temperature changes with high atmospheric humidity to prevent condense formation.
- Warning: disconnect all electrical connections before any kind of maintenance.
- The instrument shall never be opened.
- In case of failure or faulty operation send the instrument back to the retailer or to "Dixell s.r.l." (see address) with a detailed description of the fault.
- Assure that the wires for probes and for power supply are separated and far enough from each other, without crossings and spirals.

2. GENERAL DESCRIPTION

The XT11S is a new electronic digital thermometer which displays the current temperature and also logs the maximum and minimum temperatures experienced. These max. / min. temperatures can be displayed at the touch of a button and reset if required.

3. INSTALLATION - 230V OR 115V VERSION (FIG.1)

The instrument is equipped with fast-on type spade terminals with probe connections separated from the power supply connections. To install the instrument proceed as follow:

1. Make a 59x25,5 mm (1.01x2.32 inch) hole in a panel with max. thickness 2.7mm.
2. Take the instrument from the box and place it in the hole until the side flaps click, which means they are locked.
3. ⚠ **Disconnect the power supply from the board by means of the panel switch (P1 in Fig.1)**
4. Place the probe where it has to measure the temperature.
5. Connect the probe terminals to the 2.8mm. fast-ons as indicated.
6. Connect the power supply cables to the 6.3mm. fast-ons.
7. If possible, the manufacturer suggests connecting the phase (L) to the fast-on on the right and neutral (N) to the fast-on on the left as indicated.
8. At this stage the board can be connected to the power supply once more.

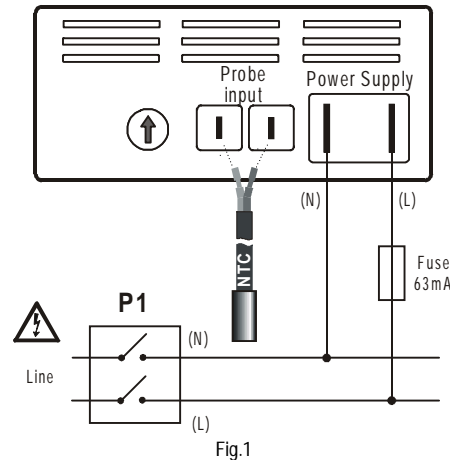


Fig.1

4. DISCONNECTION AND PROBE SUBSTITUTION (FIG.1)

1. ⚠ **Disconnect the power supply on the board where the instrument is positioned, by means of the panel switch (P1 in Fig.1)**
2. Remove the power supply spade-on.
3. Disconnect the instrument and the probe.

5. EXTERNAL PUSH-BUTTON CONNECTION (FIG.2)

In order to display the maximum and minimum values on the instrument, use the S1 Class II approved type push button, normally open. (NOT SUPPLIED).

1. Before carrying out the connections, disconnect the power supply on the board where the instrument is positioned.
2. Connect the push button in parallel with the probe as shown in Fig.2.

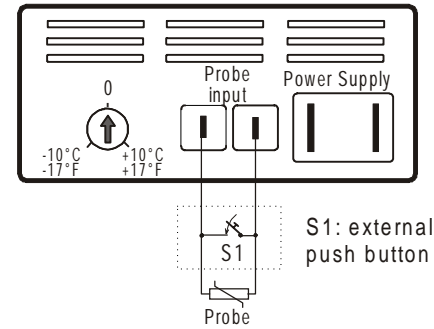


Fig.2

6. DISPLAY OF MIN. AND MAX. TEMPERATURES LOGGED

Once the button for min. & max. temperatures has been connected, proceed as follows:

Maximum temperature display:

1. Press and hold the push button (S1) until the display reads "HI".
2. Release S1 and the highest temperature recorded since the last reset will be displayed for 3 seconds.

Minimum temperature display:

1. Press and hold the push button (S1) until the display reads "LO".
2. Release S1 and the lowest temperature recorded since the last reset will be displayed for 3 seconds.

Probe offset value display:

1. Press and hold the push button (S1) until the display reads "PO".
2. Release S1 and the probe offset value will be displayed for 3 seconds.

Maximum /minimum temperature reset:

1. Press and hold the push button (S1) until the display reads "rE".
2. Release S1 and the display will flash "rE" for 5 seconds.
3. While the display is flashing press the push button and the max&min temperature will be erased..

Power on and power failure warning:

When the power supply is turned on and after any power failure, when the max. and min. set values are visualised, the display flashes. This is to warn the user that there has been an interruption to the power supply.

To restore normal operation, follow the same procedure that is used for re-setting the maximum/minimum memory. (see

Maximum /minimum temperature reset).

7. MAINTENANCE AND CLEANING

Instruments do not require particular maintenance. To clean frontal, just use a soft moist cloth and avoid using any strong detergent or solvent.

8. TECHNICAL DATA

Case: 64x31mm, depth: 19.5mm; self extinguishing polycarbonate (ULV2)

Mounting: only for panel mounting; 25,5x59mm panel cut out (1.01x2.32inc.)

Frontal protection: IP65

Electrical connections: fast-on type spade terminals with probe connections (2.8mm) separated from power supply connections (6.3mm).

Power supply: 230Vac $\pm 10\%$ 50/60Hz or 110Vac $\pm 10\%$ 50/60Hz or 12Vac/dc or 24Vac/dc

Max. Absorbed current: 42mA (nominal 35mA)

Probe: NTC with double isolation for 230Vac or 110Vac version.

Display and measurement units:

- 50.0 ÷ 99.9 °C ⇒ 100 to 110 °C; -40 ÷ 230 °F

NTC standard probe: -30 ÷ 105 °C (-22 ÷ 220 °F)

Display update delay times (optional) when the temperature increases: fixed at 1 or 3 minutes depending on model specified at time of order.

Operating temperature: T60°C/32 ÷ 140°F

Storage temperature: -30 ÷ 75 °C / -22 ÷ 167 °F.

Relative humidity: 20-85% (no condensing)

Maximum working height: 2000m a. s. l.

Installation category III; Transitory over-voltage: 4000V;

Pollution degree: 2 according to IEC 664.

Offset: $\pm 10^{\circ}\text{C}$ ($\pm 17^{\circ}\text{F}$)

Accuracy: from -30 to -10 °C (-22 ÷ 14 °F): 1 °C (2 °F) ± 1 digit
rom -10 to 110 °C (14 ÷ 230 °F): 0.5 °C (1 °F) ± 1 digit



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