



Please read this document carefully before using this product. The guarantee will be invalidated if the device is damaged by not following instructions detailed in the manual. The company shall not be responsible for any damage or losses however caused, which may be experienced as a result of the installation or use of this product.

ENDA ET1311 DIGITAL THERMOSTAT

Thank you for choosing ENDA ET1311 temperature controller.

- * 34 x 77mm sized.
- * On-Off control.
- * PTC or NTC sensor.
- * Adjustable offset for sensor.
- * Selectable cooling or heating control.
- * The maximum and minimum values of the setpoint can be limited.
- * Output state can be selected On or Off in the case of probe failure.
- * CE marked according to European Norms.



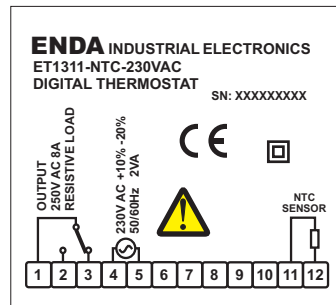
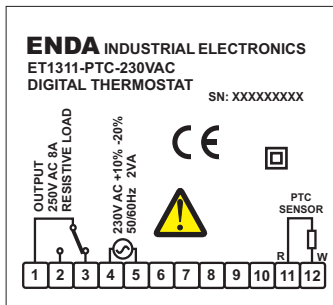
Order Code : ET1311-□□□□-□□□□□□

- | | |
|-------------------|--------------------|
| 1 - Probe Type | 2 - Supply Voltage |
| NTC.....NTC Probe | 230VAC...230V AC |
| PTC.....PTC Probe | 24.....24V AC/DC |
| | 12.....12V AC/DC |

Connection Diagram



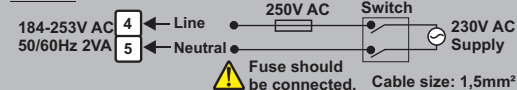
ENDA ET1311 is intended for installation in control panels. Make sure that the device is used only for intended purpose. The electrical connections must be carried out by a qualified staff and must be according to the relevant locally applicable regulations. During an installation, all of the cables that are connected to the device must be free of electrical power. The device must be protected against inadmissible humidity, vibrations, severe soiling and make sure that the operation temperature is not exceeded. The cables should not be close to the power cables or components.



Holding screw 0.4-0.5Nm

Equipment is protected throughout by DOUBLE INSULATION.

NOTE : SUPPLY:



SENSOR INPUT:

Pay attention to the color of the PTC probe cables while connecting them to the PTC SENSOR input of the device.

Note:

- 1) Mains supply cords shall meet the requirements of IEC 60227 or IEC 60245.
- 2) In accordance with the safety regulations, the power supply switch shall bring the identification of the relevant instrument and it should be easily accessible by the operator.

Technical Specifications

ENVIRONMENTAL CONDITIONS	
Ambient/storage temperature	0 ... +50°C/-25 ... +70°C (with no icing)
Max. relative humidity	80%, up to 31°C decreasing linearly 50% at 40°C
Rated pollution degree	According to EN 60529 Front panel : IP60 Rear panel : IP20
Height	Maximum 2000m
Do not use the device in locations subject to corrosive and flammable gasses.	

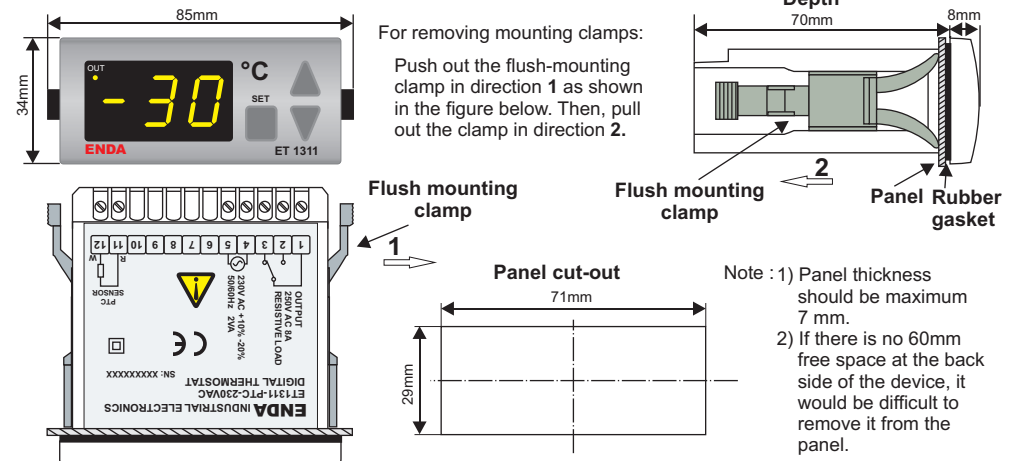
ELECTRICAL CHARACTERISTICS	
Supply voltage	230V AC +10% -20%, 50/60Hz or 24V AC/DC ±10%, 50/60Hz or 12V AC/DC ±10%, 50/60Hz
Power consumption	Max. 2VA
Wiring	2.5mm ² screw-terminal connections.
Scale	-50...+100°C for NTC, -50...+150°C for PTC.
Sensitivity	1°C
Accuracy	±1°C
EMC	EN 61326-1: 1997, A1: 1998, A2: 2001 (Performance criterion B is satisfied for EMC tests. The device is designed to operate in controlled electromagnetic environment)
Safety requirements	EN 61010-1: 2001 (Pollution degree 2, overvoltage category II)

OUTPUT	
Control output	Relay: 250V AC, 8A (for resistive load), NO+NC or 12V DC, 10mA logic output.
Life expectancy for relay	Mechanical 30.000.000 operation; Electrical 100.000 operation.
Control output state	While control output is energized, OUT LED is On.
Note: The relay contacts are suitable for in-line switching of compressors up to 0,5 HP at 240V AC or 1/4 HP at 110V AC.	

CONTROL	
Control type	Single-setpoint control
Control algorithm	On-Off control
Hysteresis	Adjustable between 1 ... 20°C.

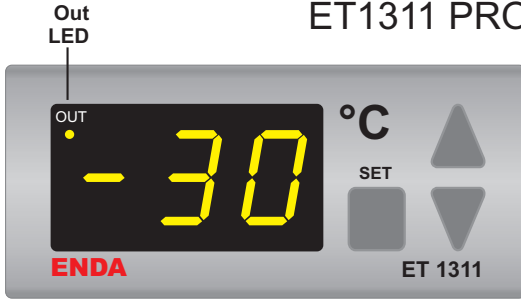
HOUSING	
Housing type	Suitable for flush-panel mounting.
Dimensions	W77xH34xD70mm
Weight	ET1311-230 : Approx. 202g (After packing) ET1311-12 : Approx. 122g (After packing)
Enclosure material	Self extinguishing plastics
While cleaning the device, solvents (thinner, benzine, acid etc.) or corrosive materials must not be used.	

Dimensions



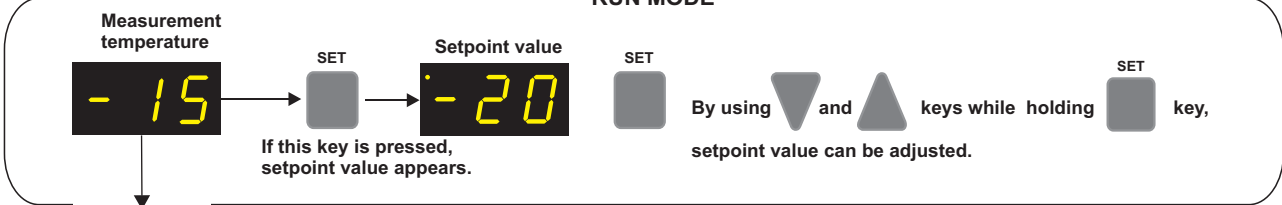
SİSEL MÜHENDİSLİK ELEKTRONİK SAN. VE TİC. A.Ş.
Yukarı Dudullu Barbaros Cad. Kutup Sok. No:20 34775 - ÜMRANIYE/İSTANBUL/TÜRKİYE
Tel : +90 216 499 46 64 Pbx. Fax : +90 216 365 74 01
url : www.enda.com.tr

ET1311 PROGRAMMING DIAGRAM



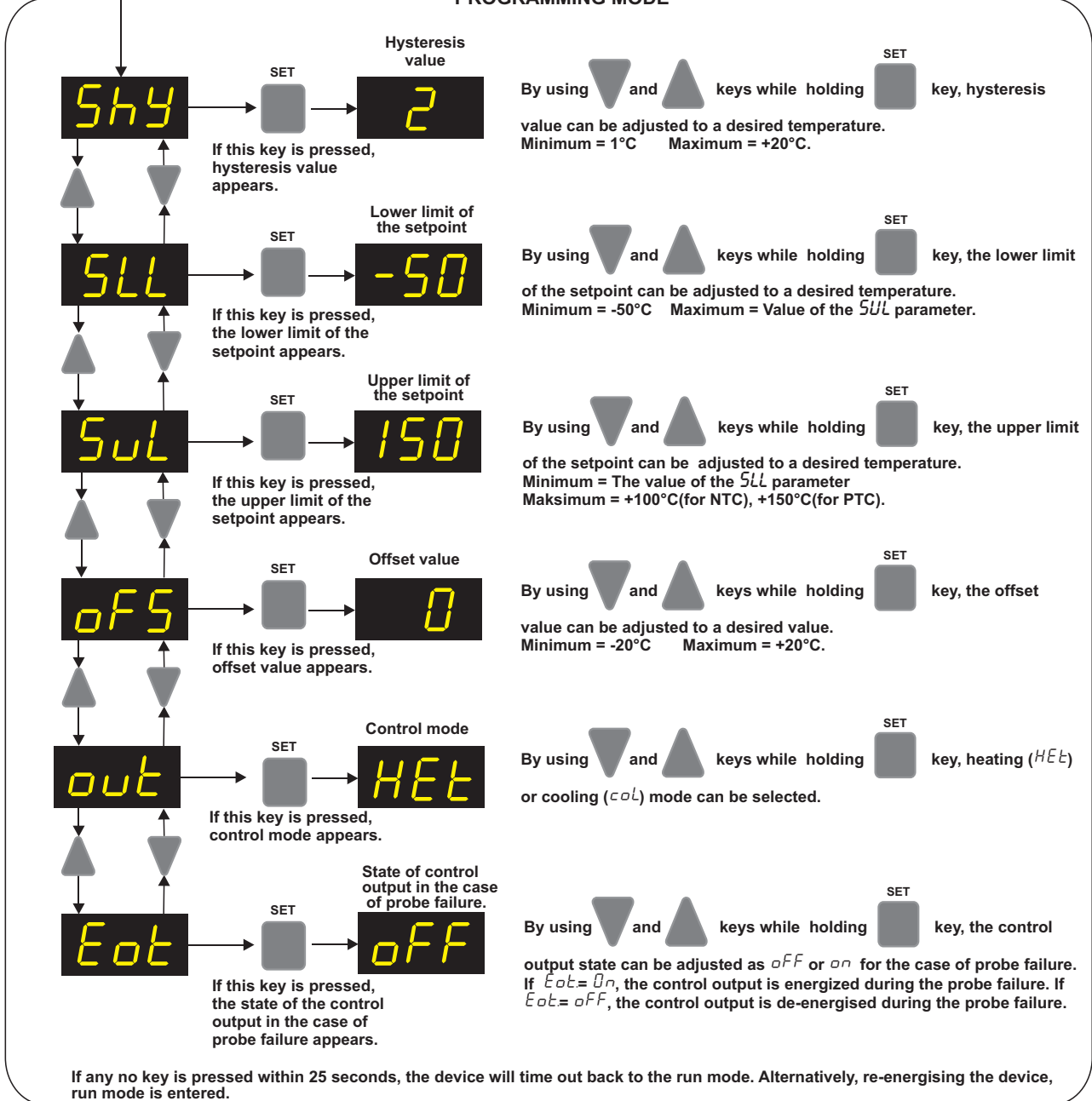
- Increment key** Used for increasing the setpoint value, as well as the parameter when in programming. When held down for a few seconds, the change rate accelerates.
- Decrement key** Used for decreasing the setpoint value, as well as the parameter when in programming. When held down for a few seconds, the change rate accelerates.
- Programming key** Used for adjusting the value of the setpoint in the run mode and for adjusting the selected parameter in the programming mode.

RUN MODE



If both & keys are pressed and held for 5 seconds, programming mode is entered.

PROGRAMMING MODE



ERROR MESSAGE

Means the temperature sensor is broken or the temperature is out of the scale range.