



Read this document carefully before using this device. The guarantee will be expired by damaging of the device if you don't attend to the directions in the user manual. Also we don't accept any compensations for personal injury, material damage or capital disadvantages.

ENDA ETC1311 DIGITAL THERMOSTAT

Thank you for choosing ENDA ETC1311 temperature controller.

- * 35 x 77mm sized.
- * On-Off control.
- * TC Typ "J" or "K" or Pt100 input.
- * Temperature compensation.
- * In the case of probe failure, heating can be selected on, off or periodical running.
- * Upper and lower limits of the setpoint can be adjusted.
- * Set value can be adjusted by using single key.
- * Having CE mark according to European Norms.



Order Code : ETC1311- - - - - -

1 - Input

- FE.....Fe-Const (J)
- RT.....Pt100
- K.....NiCr-Ni (K)

2 - Supply Voltage

- 230VAC.....230V AC
- 24VAC.....24V AC
- 12VAC.....12V AC
- SM.....9-30V DC / 7-24V AC

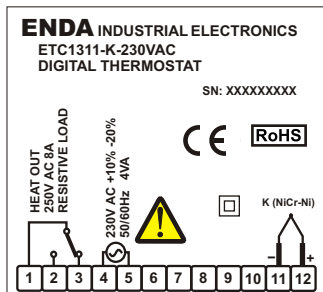
3 - Output

- P..... Relay-16A
- None...Relay-8A
- SSR....Logic output

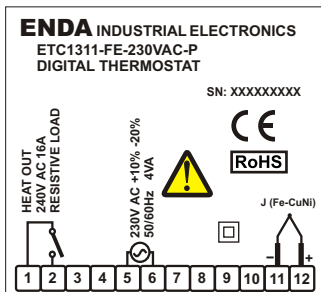
Attention !



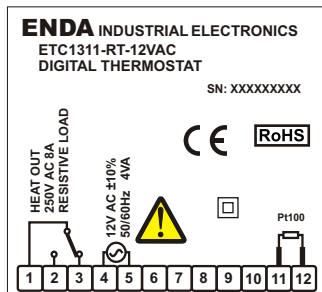
ENDA ETC1311 is intended for installation in control panels. Make sure that the device is used only for intended purpose. The electrical connections must be carried on by a qualified staff and must be according to the relevant locally applicable regulations. During an installation, all of the cables that are connected to the device must be free of energy. 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.



Equipment is protected throughout by DOUBLE INSULATION.



Holding screw 0.4-0.5Nm



NOTE: SUPPLY:



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 : IP65 Rear panel : IP20
Height	Max. 2000m

! Do not use the device in locations subject to corrosive and flammable gasses.

ELECTRICAL CHARACTERISTICS	
Supply voltage /	230VAC +10%/-20%, 50/60Hz, 24VAC±10%,50/60Hz or 24Vac/dc (9-30Vdc or 7-24Vac)
Power consumption	Max. 4VA
Wiring	2.5mm² screw-terminal connections.
Scale	TE Typ "J" or "K": 0 ... +600°C / Pt100: -100...600°C
Sensitivity/Accuracy	± 0.5% (of full scale) / ±1 digit
Indicator	3 digits, 14mm, 7 parts red LED
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)

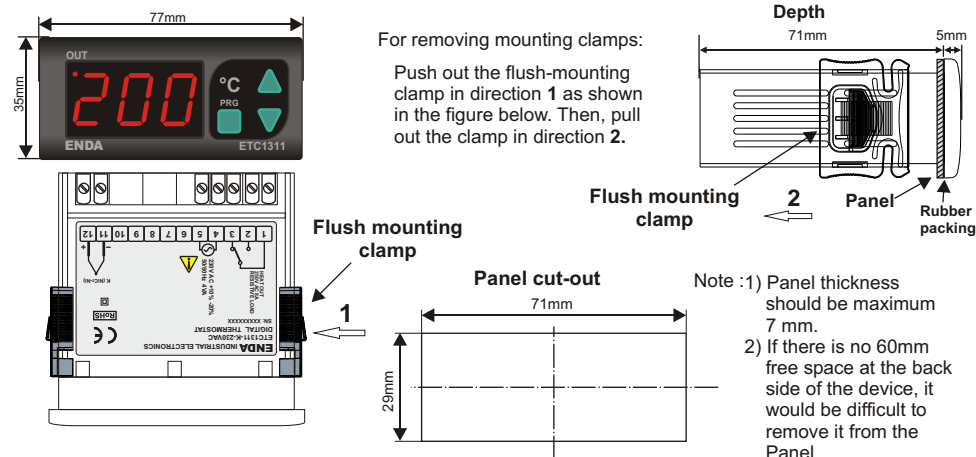
OUTPUT	
HEAT OUT	For ETC1311-XX ; Relay: 250V AC, 8A(for resistive load), NO+NC. For ETC1311-XXP ; Relay: 250V AC, 16A(for resistive load), NO.
Life expectancy for relay	For ETC1311-XX ; Mechanical 30.000.000; Electrical 100.000 operation. For ETC1311-XXP ; Mechanical 30.000.000; Electrical 30.000 operation.

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	W77xH35xD71mm
Weight	Approx. 250g (after packing the device and a probe)
Enclosure material	Self extinguishing plastics

! While cleaning the device, solvents (thinner, benzene, acid etc.) or corrosive materials must not be used.

Dimensions



up to date: 03072010, modification reserved and can be change any time previous notice !

HEATING OUT
LED



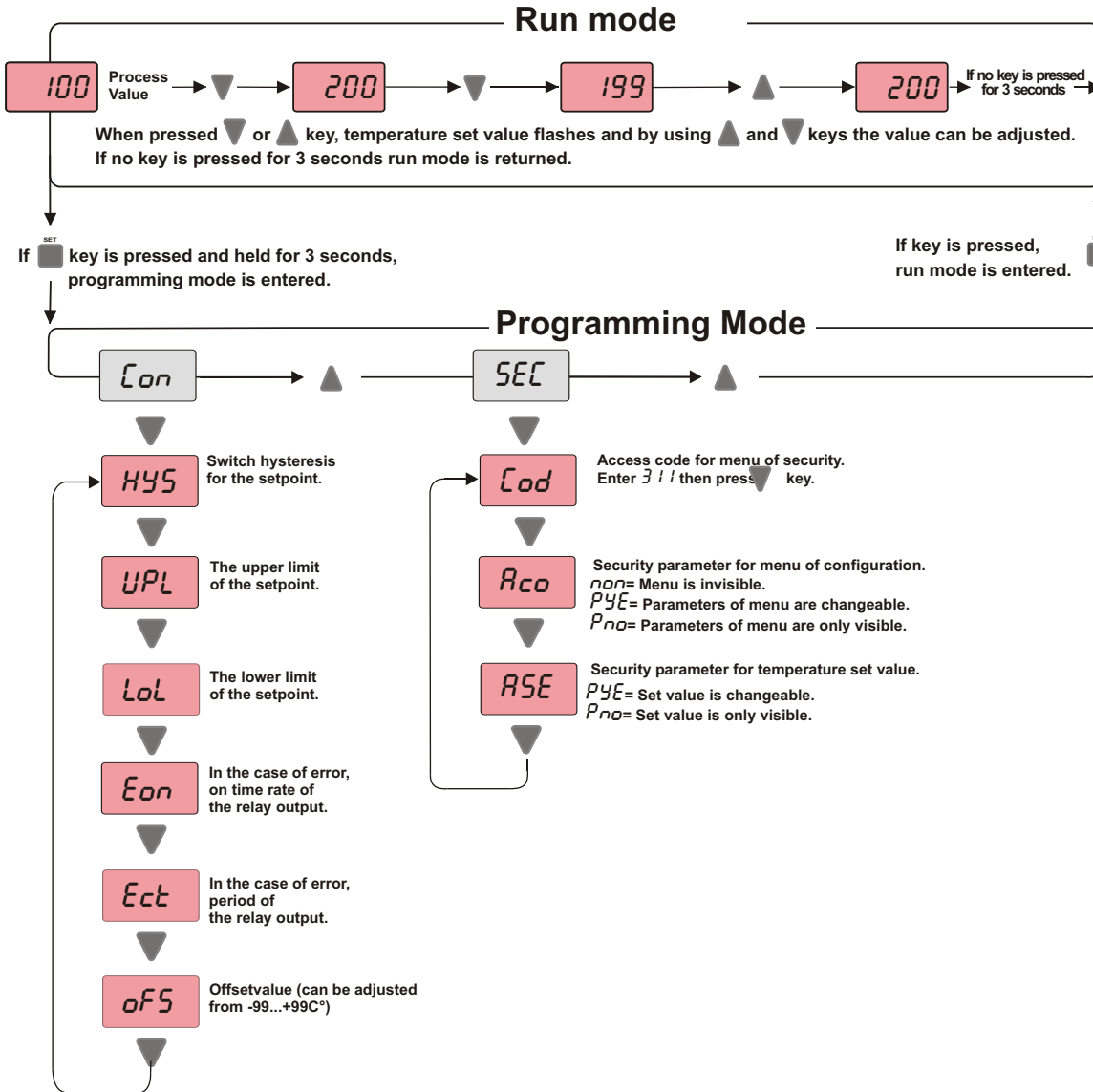
Displayed process value in the run mode, parameter name or value in programming mode.

Used for selecting menu and increasing setpoint value of the parameters in the programming mode and for increasing the setpoint value in the run mode. When held down for a few seconds, the change rate accelerates.

Used for selecting parameters and decreasing the setpoint value in the programming mode and for decreasing the setpoint value in the run mode. When held down for a few seconds, the change rate accelerates.

Used for adjusting the value of the setpoint in the run mode and for adjusting the selected parameter in the programming mode.

While holding **SET** key, setpoint value of the selected parameter appears and by using **▲** and **▼** keys the value can be adjusted.



PARAMETER TABLE					
Con		Menu of Configuration parameters			
		MIN	MAX	UNIT	DEF.SET
HYS	Switch hysteresis for the setpoint. (When temperature falls to SET-HYS, output relay becomes active.)	1	20	°C	1
UPL	The upper limit of the setpoint.	LoL	600	°C	600
LoL	The lower limit of the setpoint.	0	UPL	°C	0
Eon	In the case of error, on time rate of the relay output.	0	100	% Ect	0
Ect	In the case of error, period of the relay output.	10	250	sec	30
oFS	Offsetvalue (can be adjusted from -99...+99C° to a desired value)				
SEC		Menu of Parameter security			
Rco	Security parameter for menu of configuration. non= Menu is invisible. PYE= Parameters of menu are changeable. Pno= Parameters of menu are only visible.				
RSE	Security parameter for temperature set value. PYE= Set value is changeable. Pno= Set value is only visible.				

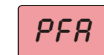
Error Messages



Means, temperature value is higher than the scale.



Means, temperature value is lower than the scale.



Means, temperature sensor is broken or over temperature.