



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 ET1413A NTC FAN CONTROL THERMOSTAT

Thank you for choosing ENDA ET1413A temperature controller

- \* 35 x 77mm sized.
- \* 4 digits display.
- \* Decimal display feature.
- \* 3 contact outputs for the fan and air condition control.
- \* For air-condition, on-off cooling control.
- \* Fan and air-condition is done manually on the front panel keys.
- \* CE marked according to European Norms.



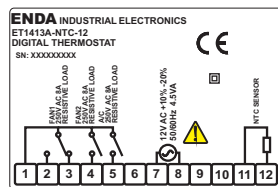
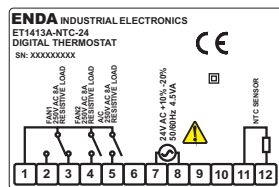
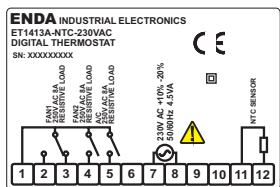
Order Code : ET1413A-NTC-□□□□□□

1  
Supply Voltage  
230VAC...230V AC  
24.....24V AC/DC  
12.....12V AC/DC

### Connection Diagram



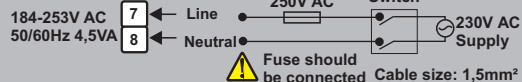
ENDA ET1413A is intended for installation in control panels. Make sure that the device is used only for intended purpose. The electrical connections must be carried out by a qualified staff and must be according to the relevant locally applicable regulations. During an installation, all of the cables 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.



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
Protection class	According to EN 60529 Front panel : IP65 Rare panel : IP20
Height	Max. 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. 4.5VA
Connection	2.5mm² screw-terminal connections
Scale	-50 ... +110°C
Sensitivity/Accuracy	0.1°C / ±1°C
Indicator	4 digits, 12.5mm, 7 segment yellow 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)

OUTPUTS	
A/C (Air-condition output)	Relay: 250V AC, 8A (for resistive load), NO+NC; 1/2 HP 240V AC Cosφ = 0.4 (for inductive load)
Fan 1	Relay: 250V AC, 8A (for resistive load), NO; 1/2 HP 240V AC Cosφ = 0.4 (for inductive load)
Fan 2	Relay: 250V AC, 8A (for resistive load), NO; 1/2 HP 240V AC Cosφ = 0.4 (for inductive load)
Life expectancy for relay	Without load 30.000.000 switching; 250V AC, 8A resistive load 100.000 switching.

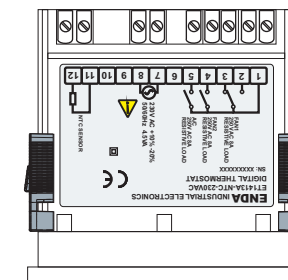
CONTROL	
Control type	Single-setpoint control
Control algorithm	On-Off control
Hysteresis	0.5°C.

HOUSING	
Housing type	Suitable for flush-panel mounting.
Dimensions	W77xH35xD71mm
Weight	Approx.223g (After packing)
Enclosure material	Self extinguishing plastics



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

### Dimensions



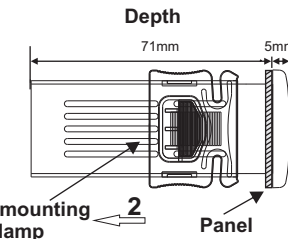
Flush mounting clamp

Panel cut-out

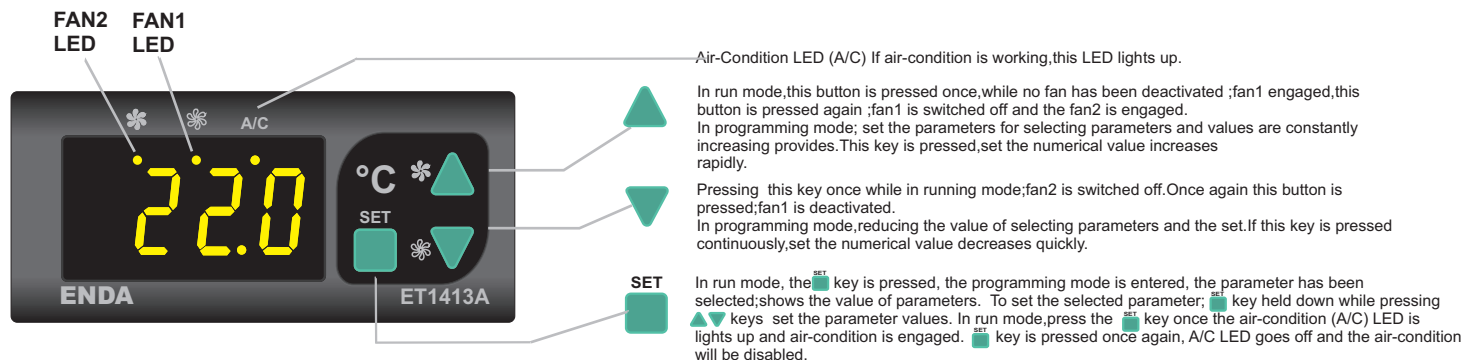
- Note:
- 1) Panel thickness should be maximum 7 mm.
  - 2) If there is no 60mm free space at the back side of the device, it would be difficult to remove it from the panel.

For removing mounting clamps:

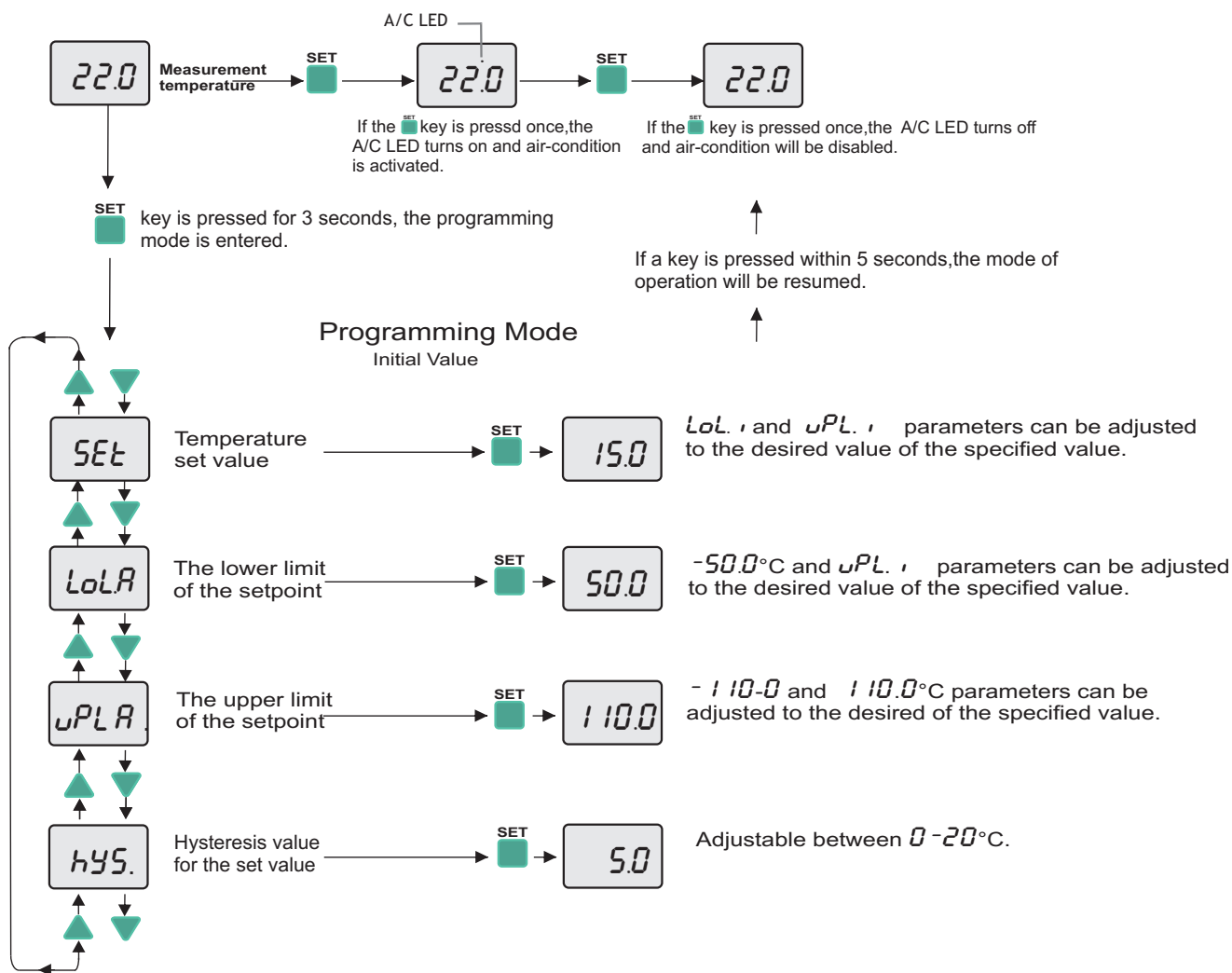
Push the flush-mounting clamp in direction 1 as shown in the figure below. Then, pull out the clamp in direction 2.



# Terms

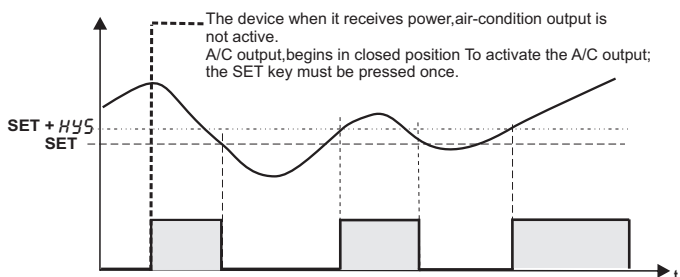


## Run Mode



## Output Table

### A/C Output (air-condition output)



### Error Messages

<b>PSC</b>	Means, thermostat probe is short-circuit.
<b>PFR</b>	Means, thermostat probe is broken.
---	Temperature value is higher than the scale.
---	Temperature value is lower than the scale.