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 EI1410 NTC TEMPERATURE INDICATOR

Thank you for choosing ENDA EI1410 NTC temperature indicator.

*** 77 x 35mm sized.**
*** 4 digits display.**
*** Easy to use by front panel keypad.**
*** Display can be selected decimal or integer.**
*** Temperature unit can be selected °C or °F.**
*** Maximum and minimum measurement values are registered.**
*** Upper and lower limits of the alarm value can be adjusted**
*** CE marked according to European Norms.**

CE

Order Code : EI1410-NTC-□□□□□□
1

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

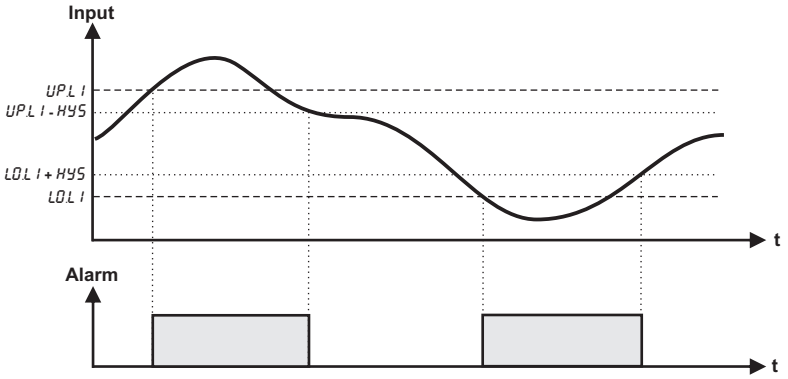
TECHNICAL SPECIFICATIONS

ENVIRONMENTAL CONDITIONS	
Ambient/storage temperature	0 ... +50°C/-25 ... 70°C
Max. relative humidity	80% up to 31 decreasing linearly 50% at 40 .
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 gases.	

ELECTRICAL CHARACTERISTICS		
Supply	230V AC +10% -20%, 50/60Hz or 24V AC⎓DC 10%, 50/60Hz or 12V AC⎓DC 10%, 50/60Hz	
Power consumption	Max. 4 VA	
Wiring	2.5mm² screw-terminal connections	
Scale	Decimal Integer	-60.0°C...150.0°C -60°C...150°C
Sensitivity	0.1°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)	

HOUSING	
Housing type	Suitable for flush-panel mounting.
Dimensions	W77xH35xD71mm
Weight	EI1410-230VAC Approx. 190g (after packing) EI1410-24 and EI1410-12 Approx. 110g (after packing)
Enclosure material	Self extinguishing plastics.
⚠ While cleaning the device, solvents (thinner, benzine, acid etc.) or corrosive materials must not be used.	

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

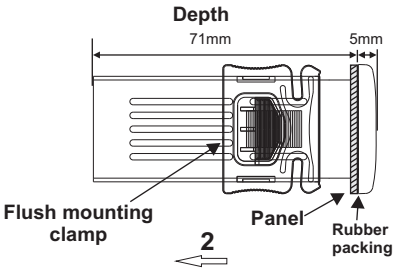


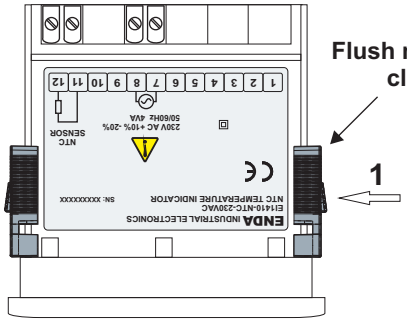
When alarm case happens, process value flashes.

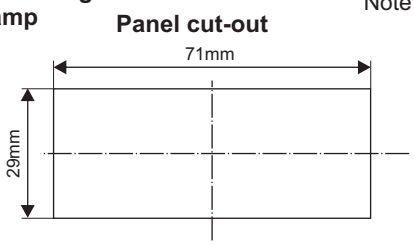
DIMENSIONS

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.**







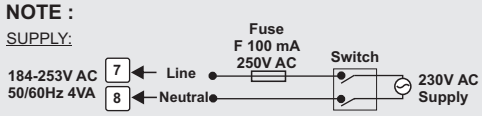
Note : 1) Panel thickness should be maximum 7 mm.
2) If there is no 60mm free space at the back side of the device, it would be difficult to remove it from the Panel.

Equipment is protected througout by DOUBLE INSULATION.

Holding screw 0.4-0.5Nm

NOTE :

SUPPLY:

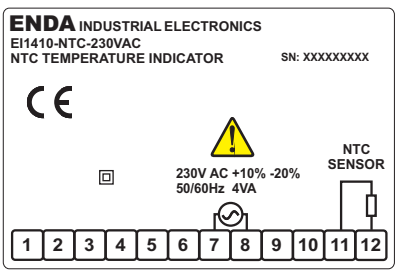


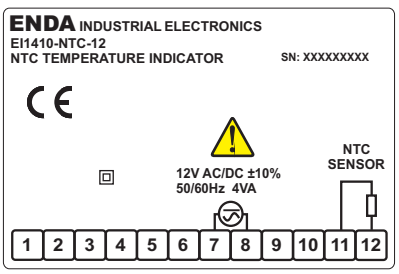
Fuse should be connected. **Cable size: 1,5mm²**

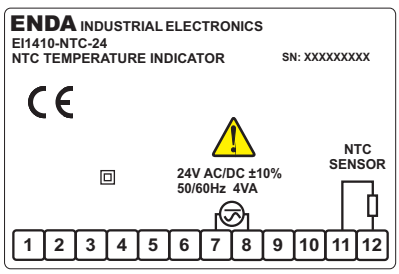
1) Mains supply cords shall meet the requirements of IEC 60227 or IEC 60245.
2) In accordance with the safety regulations, the power supply switch shall bring the identification of the relevant instrument and it should be easily accessible by the operator.

CONNECTION DIAGRAM

ENDA EI1410 is intended for installation in control panels. Make sure that the device is used only for intended purpose. The shielding must be grounded on the instrument side. 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. All input and output lines that are not connected to the supply network must be laid out as shielded and twisted cables. These cables should not be close to the power cables or components. The installation and electrical connections must be carried out by a qualified staff and must be according to the relevant locally applicable regulations.







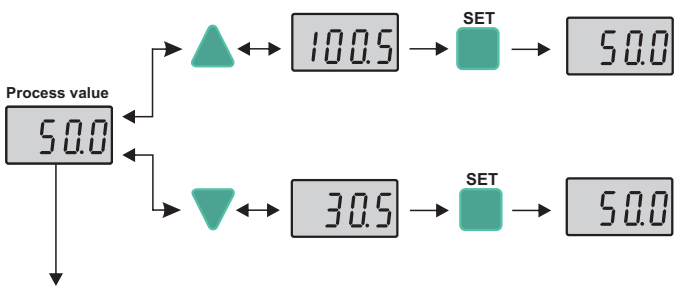
EI1410 PROGRAMMING DIAGRAM

Increment key — Used for changing parameters and increasing the setpoint value. When held down for a few seconds, the change rate accelerates.

Decrement key — Used for changing parameters and decreasing the setpoint value. When held down for a few seconds, the change rate accelerates.

Programming key (SET) — Used for displaying value of the selected parameter and adjusting the selected parameter.

RUN MODE



While holding ▲ key, measured maximum temperature value appears.

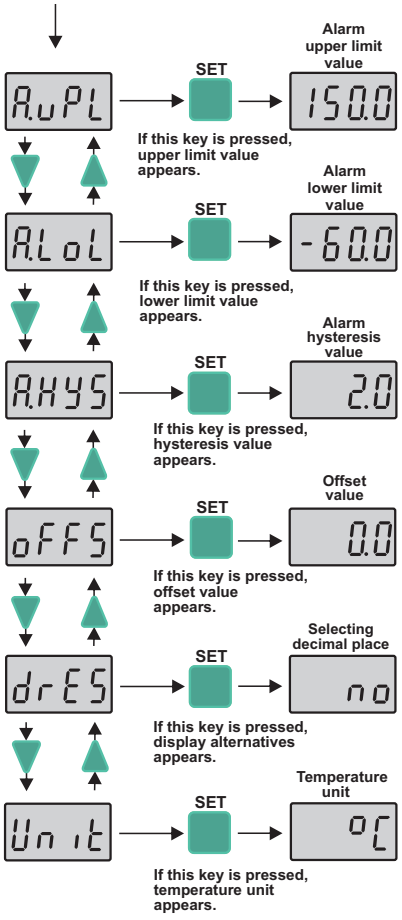
When the device is first enerjized or by pressing SET key, while holding ▲ key, measured maximum temperature value is made equal to process temperature value.

While holding ▼ key, measured minimum temperature value appears.

When the device is first enerjized or by pressing SET key, while holding ▼ key, measured minimum temperature value is made equal to process temperature value.

If both ▲ & ▼ keys are pressed and held for 3 seconds, programming mode is entered or run mode is returned.

PROGRAMMING MODE



Alarm upper limit value. If the process value exceeds A.uPL value, display flashes.

By using ▼ and ▲ keys, while holding SET key, the upper limit can be adjusted to desired value between A.LoL and 150.0°C.

Alarm lower limit value. If the process value falls below A.LoL value, display flashes.

By using ▼ and ▲ keys, while holding SET key, the lower limit can be adjusted to desired value between -60.0°C and A.uPL.

Alarm hysteresis value.

By using ▼ and ▲ keys, while holding SET key, hysteresis value can be adjusted to desired value between 0.0°C and 15.0°C. Maximum value of this parameter must be (A.uPL - A.LoL) / 2.

Offset value.

By using ▼ and ▲ keys, while holding SET key, offset can be adjusted to desired value between -20.0°C ile 20.0°C.

Selecting decimal place.Display can be selectable decimal or integer.

By using ▼ and ▲ keys, while holding SET key, display can be selected decimal or integer.

When YES is selected, decimal case is entered. If no is selected, integer case is entered.
All of other parameters are adjusted according to selection.

Temperature unit.

By using ▼ and ▲ keys, while holding SET key, temperature unit can be selected °C or °F.

If no key is pressed within 20 seconds, the device will time out back to the run mode. Alternatively, re-energizing the device, run mode is entered.

ERROR MESSAGES

PSC — Means, indicator probe is short circuit.

PFA — Means, indicator probe is broken.

- - - - — Means, process value is higher than the scale.

_ _ _ _ — Means, process value is lower than the scale.