

TEMPERATURE CONTROLLER

General Specifications

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- μP based, digital temperature controller with a single output
- Sensor: T/C, Fe-Const, J Type
- ON-OFF Control form
- Adjustable Hysteresis Value
- Adjustable Upper Limit for SET Value
- Displays SET and Process Values
- Cold-junction compensation for T/C
- Excellent linearity with °C/mV look up table
- High accuracy
- EEPROM memory to store settings
- Dimensions: for DT-48E 48x48mm, for DT-36E 36x78mm
- Easy connection with plug-in connectors

Technical Specifications

• Panel Hole Sizes : for DT-48E 46x46mm, for DT-36E 29x71mm

Display : 1x3 Digit 7 Segment display

Measuring Scale : 0 °C....600 °C

• SET Invertal : 0 °C....600 °C (limited with Up.L value)

• Hysteresis Interval : 0 °C....50 °C

Sensor : Fe-Const, J type T/C

• Resolution : ± 1 °C

Accuracy : ± %0.3 (Over full scale)

Control Form : ON-OFF

Out : Relay (NO + NC), 250VAC, 2A, Resistive Load

Supply Voltage : 100....240VAC, 50/60 Hz

Power Cons. : < 6VA

Line Comp.
 ∴ 0 °C....50 °C
 Operating Temp.
 ∴ -20 °C....55 °C

Altitude : < 2000m

• Failure : Out is OFF in case of sensor failure, measurement out of range or hardware fails

to measure input signal.

Error Message

or

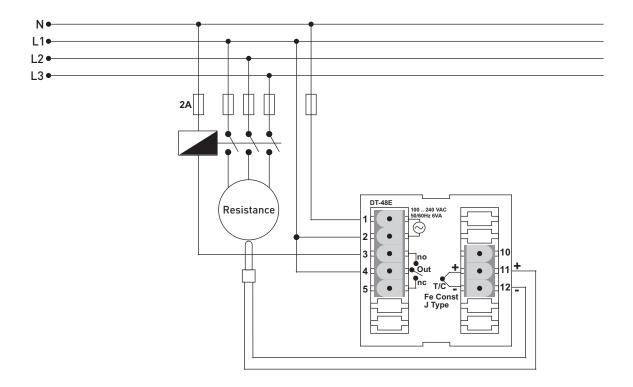
: Displays "or" message in case of sensor failure, measurement out of range or hardware fails to measure input signal

Marning:

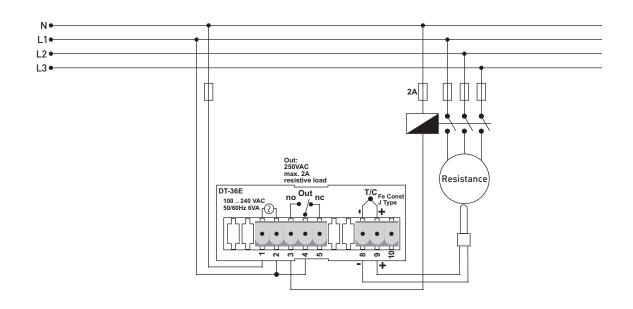
Use shielded and twisted signal cables and connect shield to ground on device side. Use correct compensation cables for

- T/C sensors. Correct T/C cable directly to the device connectors. Keep all signal cables away from circuit breakers, devices/cables emitting electrical noise and power cables.
- Take precauitons against environmental conditions like humidity, vibration, pollution and high/low temperature during installation.
- Use a fuse (slow 250mA 250VAC) on supply input of the device. Use appropriate cables for supply connections. Apply safety regulations during installation.

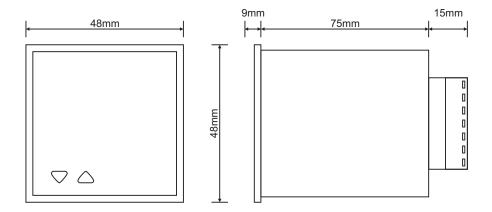
Connection (for DT-48E):



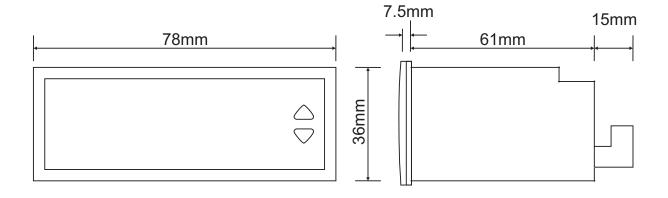
Connection (for DT-36E):



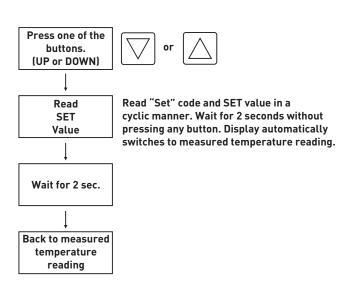
Dimensions (for DT-48E):



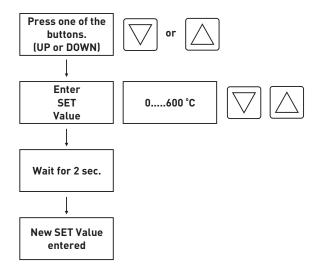
Dimensions (for DT-36E):



Reading SET Value:

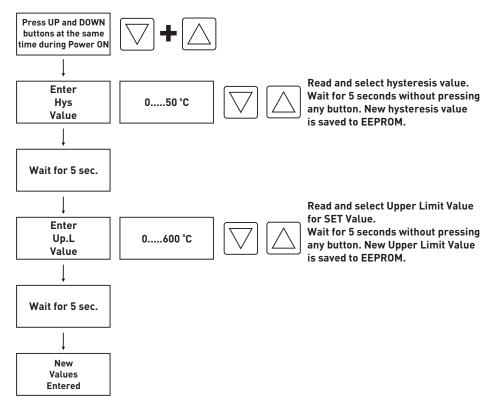


Adjusting SET Value:

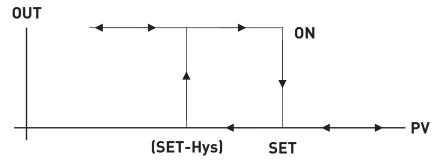


Read "Set" code and SET value in a cyclic manner. Enter new SET Value by usig up and/or down buttons. Wait for 2 seconds without pressing any button. New SET value is entered automatically.

Adjusting Hysteresis and Upper Limit Values



OUT; Control Form (ON-OFF):



OUT relay is OFF when process value (PV) is greater then or equal to SET value.
OUT relay is ON when PV is less then or equal to (SET-Hys) value.