

# mL-PIDTC

## PID TEMPERATURE CONTROLLER WITH 2 RELAYS



### SPECIFICATIONS

Process Input:	TC, RTD Thermocouple (TC): J, K, R, S, T and L (IEC584.1)(ITS90) Thermoresistance (RTD): Cu-50 and PT-100 (IEC751)(ITS90)
Measurement Range:	Please refer to process input type selection in process menu parameters section.
Accuracy:	Thermocouple (TC): ( ± 0.25% of full scale or ± 3°C, which one is greater) ±1 digit max. Thermoresistance (RTD): ( ± 0.25% of full scale or ± 2°C, which one is greater) ±1 digit max.
Cold Junction Compensation:	Automatically ±0.1°C/1°C
Line Compensation:	Maximum 10 Ohm
Sensor Break Protection:	Upscale
Sampling Cycle:	0.1 second
Input Filter:	Programmable
Control Form:	ON/OFF, P, PI, PD or PID (Control form can be programmed by the user)
Process Output:	Relay (5A@250VV at resistive load) or SSR Driver Output (Maximum 10mA, Max. 12VZ )
Alarm Output:	Relay (5A@250VV at resistive load)
Supply Voltage:	115VV (±15%) 50/60Hz - 2VA
Process Display:	16 mm Red 3 digit LED Display
Set Value Display:	9 mm Orange 4 digit LED Display
Led Indicators:	PO1 (SSR Process Output Status Led), PO2 (Relay Process Output Status Led), AL1, AL2 (Alarm Output Status Leds), °C, °F LEDs
Operating Temperature:	0...50°C
Humidity:	0-90%RH (none condensing)
Protection Class:	IP65 at front, IP20 at rear
Weight:	150 gr.
Dimension:	48 x 48 mm, Depth: 86,5 mm
Panel CutOut:	46 x 46 mm

### FEATURES

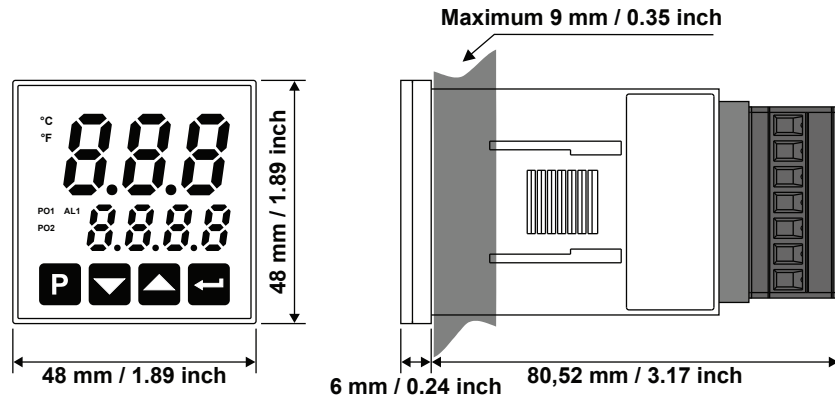
- 3 digit process (PV) and 4 digit set (SV) display
- Temperature sensor input (TC,RTD)
- Programmable ON/OFF, P, PI, PD & PID control forms
- Adaptation of PID Coefficients to the system with Self-Tune and Auto-Tune
- Programmable Heating or Cooling Functions for Control Output
- Selectable Alarm Functions for Alarm Output
- Serial RS485 Communication (optional)

### DESCRIPTION

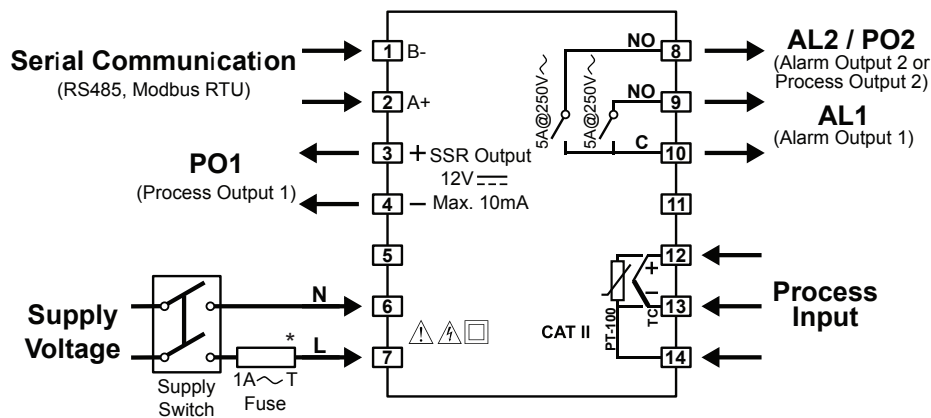
The mL-PIDTC series temperature controllers are designed for measuring and controlling a temperature value. They can be used in many applications with their TC and RTD temperature measurement input, multi-function control outputs, selectable alarm functions.

They are mainly used in glass, plastic, petro-chemistry, textile, automotive and machine production industries. Accurate and advanced controlling is performed with selectable ON-OFF, P, PI, PD, PID and Self Tune/Auto Tune PID functions.

## DIMENSIONS



## WIRING



To reduce the effect of electrical noise on device, low voltage line (especially sensor input cable) wiring must be separately from high current and voltage line. If possible, use shielded cable and shield must be connected to ground only one side.

\* External Fuse is recommended (1A T)

## ORDERING INFORMATION

Model Number	Description
mL-PIDTC	ON / OFF Temperature Controller 1/16 DIN Case 115VAC Supply Voltage ( $\pm 15\%$ ) 50/60Hz TC, RTD Sensor Input 2 Relay Outputs (5A @ 250VAC with Resistive Load) (NO, NO, C) SSR Driver Output (Max. 10mA, Max 12VDC) RS-485 Serial Communication with Modbus RTU Protocol