KEPmLINE

mL-TCR4
TEMPERATURE CONTROLLER

FEATURES

- 4 digits display
- Temperature sensor input (TC / RTD)
- Adjustable Process Offset Value
- Programmable ON/OFF, P, PI, PD & PID control types
- Adaptation of PID coefficients to the system by Auto Tune/Self Tune
- Programmable control and alarm functions for control outputs

DESCRIPTION

The mL-TCR4 temperature controllers are designed for measuring and controlling a temperature value in industry. They can be used in many applications with their TC and RTD temperature measurement input, multi-function control outputs, programmable control and alarm functions. They are mainly used in glass, plastic, petrol-chemistry, textile, automotive and machine production industries. Accurate and advanced controlling is performed with selectable ON-OFF, P, PI, PD, PID, Self Tune PID, Auto Tune PID functions.

SPECIFICATIONS

INPUT

Process Input: TC/RTD
Thermocouple (TC): J, K, R, S, T and L (IEC584.1)(ITS90)
Thermo-resistance (RTD): Cu-50 and Pt100 (IEC 751) (ITS90)
Measurement Range: Please refer to parameter in parameters section.
Accuracy: ± 0.25% of scale for thermocouple and thermo-resistance.
Cold Junction Compensation: Automatically ±0.1°C/1°C
Line Compensation: Maximum 10 Ohm
Sensor Break Protection: Upscale
Sampling Cycle: 0.1 second

CONTROL

Control Forms: ON/OFF, P, PI, PD or PID (Control form can be programmed by the user.)

OUTPUT

Process Output: Relay(7A@250VV at resistive load) or
SSR Driver Output (Maximum 10mA, Max. 17VZ)
Alarm Output: Relay (7A@250VV at resistive load)

SUPPLY VOLTAGE

115VV (±15%)   50/60Hz - 3VA

DISPLAY

Temperature Display: 16 mm Red 4 digits LED Display
Led Indicators: O1 (Relay Process Output Status LED), O2 (SSR Process Output Status LED), P(Programming Mode LED), S(Set Value LED),°C, °F LEDs

ENVIRONMENTAL RATINGS & PHYSICAL SPECIFICATIONS

Operating Temperature: 0...50ºC
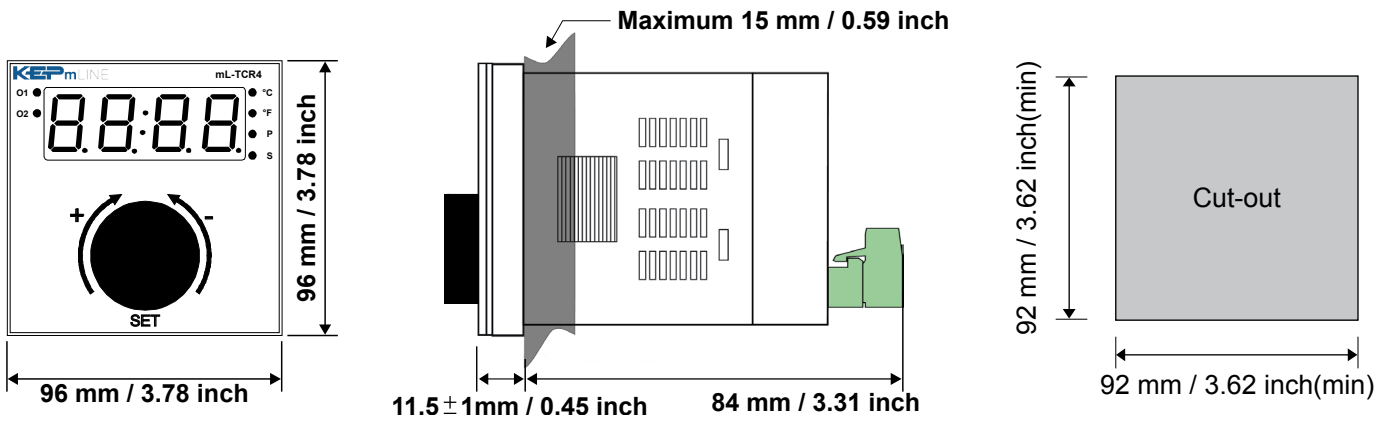Humidity : 0-90%RH (none condensing)
Protection Class: IP65 at front , IP20 at rear
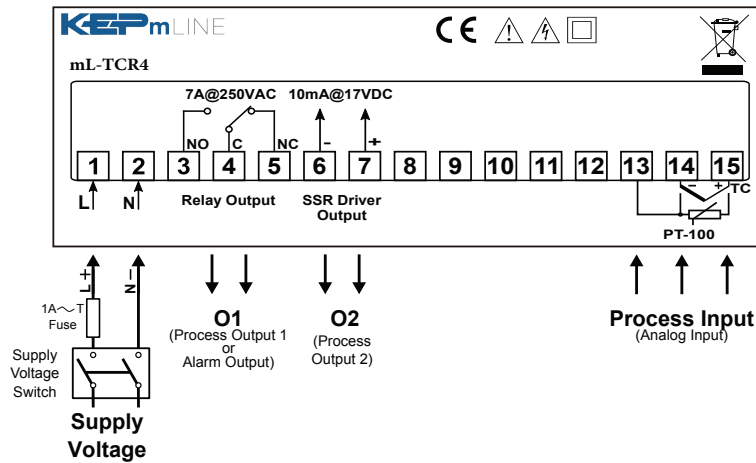Weight: 350 gr.
Dimension: 96 x 96 mm, Depth: 100 mm
Panel CutOut: 92 x 92 mm

DIMENSIONS

Maximum 15 mm / 0.59 inch

96 mm / 3.78 inch

96 mm / 3.78 inch

11.5±1mm / 0.45 inch

84 mm / 3.31 inch

92 mm / 3.62 inch(min)

92 mm / 3.62 inch(min)

Cut-out

WIRING

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

ORDERING INFORMATION	
Model Number	Description
mL-TCR4	Temperature Controller 1/4 DIN Case 115 VAC (±15%) 50/60Hz 1 Form C Relay Output (7A @ 250VAC with Resistive Load) (NO, NC, C) 1 SSR Driver Output (Max. 10mA, 17VDC)