# **Temperature Controllers**



# Models TEC-901 & TEC-902 Specifications

## **Power Input**

**100 - 130 VAC**, 50/60 Hz, 5VA **200 - 240 VAC**, 50/60 Hz, 5VA

## **Signal Input**

Accuracy: ±2.0% of full scale at 77°F/25°C

**Thermocouple:** Type J or K **RTD:** 3-wire Pt100 DIN or JIS **Sampling Rate:** 3 samples / second

Cold Junction Compensation: ±0.1°C / 1°C Common Mode Rejection Ratio (CMRR): 120 dB Normal Mode Rejection Ratio (NMRR): 60 dB

Sensor Break Protection: Upscale

#### **Output 1**

Relay Rating: 240 VAC, 5 Amp

SSR drive: Pulsed DC, 20 V at 20 mA maximum

Current Loop:  $4 - 20 \text{ mA}, 0 - 20 \text{ mA}, \text{maximum load: } 500\Omega$ 

**Voltage**: 0 - 10 VDC, minimum load 500K $\Omega$ 

#### **Control**

**Proportional Band**: 2.2% of span **ON-OFF Hysteresis**: 1% of span

Cycle time: 20 seconds for relay output, 1 second for pulsed voltage

output, 0.02 second for linear current or voltage output

Control Action: Reverse Action

#### **Approval Standards**

Safety Standard: UL3121-1

Protective Class: Front panel: IP 30

**Housing and Terminals**: IP 20

EMC: EN61326

# **Adjustment**

Setpoint: Single turn wirewound potentiometer

**Setpoint Resolution:** 0.2% of span **Accuracy of Setpoint:** ±2% of span **Repeatability of Setpoint:** ±0.1% of span

#### **Display**

Process Indicator: TEC-902: Hi/Lo LED indicators

TEC-901: None

Status Indicator: ON (red) LED lamp, OFF (green) LED lamp

# **Environmental and Physical**

**Operating Temperature**: 32 to 122°F (0 to 50°C)

**Humidity**: 0 to 90% RH, non-condensing

Dielectric Strength: 2000 VAC, 50/60 Hz for 1 minute

Vibration: 10 - 55 Hz, amplitude 1 mm

**Shock**: 200 m/s<sup>2</sup> (20g)

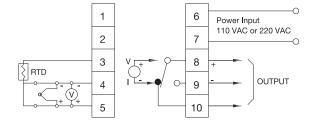
**Dimensions**:  $1-7/8 \times 1-7/8 \times 3-3/4$ " (48 × 48 × 94 mm) H×W×D

Depth behind panel: 3-3/8" (86 mm)

**Panel Cutout**: 1-25/32" × 1-25/32" (45 × 45 mm) H×W

Weight: 0.42 lb. (190 grams)

# **Rear Terminal Connections**



# Non-Indicating TEC-901 Stock and Common Part Numbers (Power Input: 200-240 VAC, Proportional mode)

Part Number	Signal Input	Range	Output
TEC17101	J tc	50-850°F	relay
TEC17102	J tc	50-550°F	relay
TEC17103	K tc	50-850°F	relay
TEC17104	K tc	50-550°F	relay
TEC17105	RTD	50-550°F	relay
TEC17106	J tc	0-300°C	relay
TEC17107	J tc	0-600°C	relay
TEC17108	K tc	0-300°C	relay /
TEC17109	K tc	0-600°C	relay