Temperature Controllers



Models TEC-404 & TEC-405 Specifications

Power Input

Standard: 90 - 264 VAC, 50/60 Hz, 5VA

Optional: 20 - 32 VAC 50/60 Hz, 20 - 32 VDC, 5VA

Signal Input

Accuracy: ±1.0% of full scale at 77°F/25°C

Thermocouple: Type J or K
RTD: 3-wire Pt100 DIN or JIS
Sampling Rate: 3 samples per 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: 5 Amp, 240 VAC

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

Current Loop: 4 - 20 mA, 0 - 20 mA, maximum load: 500Ω

Voltage: 0 - 10 VDC, minimum load 500 K Ω

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

EN61326

Protective Class: Front panel: IP 30

Housing and Terminals: IP 20

Adjustment

Setpoint: Single turn wirewound potentiometer (TEC-404)

Setpoint Resolution: 0.2% of span
Accuracy of Setpoint: ±2% of span
Repeatability of Setpoint: ±0.1% of span
Setpoint: 3-digit or 4-digit pushwheel switch (TEC-405)

Manual Reset: Adjustable up to 2.6% of span Setpoint Resolution: ± 1 Least Significant Digit

Accuracy of Setpoint: ±1% of span

Repeatability of Setpoint: ±1 % of span

Repeatability of Setpoint: ± 1 Least Significant Digit

Display

Single 4-digit LED Display: 0.56" (14 mm) Red

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/s2 (20g)

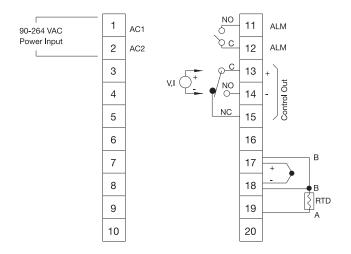
Dimensions: $3-3/4 \times 3-3/4 \times 2-9/16$ " (96 × 96 × 65 mm) H×W×D

Depth behind panel: 2" (53 mm)

Panel Cutout: 3-5/8" × 3-5/8" (92 × 92 mm) H×W

Weight: 0.55 lb. (250 grams)

Rear Terminal Connections



Potentiometer Setpoint TEC-404 Stock and Common Part Numbers (Power Input: 90-264 VAC, Proportional Mode)

Part Number	Signal Input	Range	Output	Alarm
TEC57401	J tc	50-850°F	relay	none
TEC57402	J tc	50-550°F	relay	none
TEC57403	K tc	50-850°F	relay	none
TEC57404	K tc	50-550°F	relay	relay
TEC57405	RTD	50-550°F	relay	none
TEC57406	J tc	0-300°C	relay	none
TEC57407	J tc	0-600°C	relay	none
TEC57408	K tc	0-300°C	relay	none
TEC57409	K tc	0-600°C	relay	none