# Temperature Controllers



# Model TEC-704 Specifications (3/16 DIN)

### **Power Input**

Standard: 90 - 264 VAC, 50/60 Hz, 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**

Relay Rating: 240 VAC, 5 Amp

SSR drive: Pulsed DC, 20 V at 20 mA maximum Current: 4 - 20 mA, 0 - 20 mA, 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 volt-

age output, 0.02 second for linear current or voltage

output

Control Action: Reverse Action

# **Approval Standards**

Safety Standards: EN61326

Protective Class: Front panel: IP 30

**Housing and Terminals**: IP 20

**Setpoint**: Single turn wirewound potentiometer **Manual Reset**: Adjustable up to 2.6% of span

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

Type: Deviation ± 10% of span Relay: 2A / 240 VAC

### **Display**

**Process Indicator**: 3-1/2 digit, 0.4" / 10 mm red LED display

Output Status Indicator: Red LED L Alarm Status Indicator: Red LE

### Environmental and Physical

**Operating Temperature:** ∠to 12≥ Humidity: 0 to 90% RV non-coden

Dielectric Strength 200 V/2, 50/60 Hz for 1 minute

Vibration: 10 - 55 H. amp rude 1

**Shock**:  $200 \text{ m/s}^2$  (20g)

27/32 × 2: 7/32 × 3" (72 × 72 × 78 mm) H×W×D th behin panel: 2-9/16" (65 mm) Dimensions:

× 2-11/16" (68 × 68 mm) H×W Panel Cutou

(240 grams)

### **Connections** 8 OUTPUT 9 3 10 4 11 5 12 Alarm N/O 6 13 7 14

# Stock and Common Part Numbers (Power Input: 90-264 VAC, Proportional mode)

Part	Signal	D	0	Alama
Number	Input	Range	Output	Alarm
TEC43401	J tc	50-850°F	relay	none
TEC43402	J tc	50-550°F	relay	none
TEC43403	K tc	50-850°F	relay	none
TEC43404	K tc	50-550°F	relay	none
TEC43405	J tc	50-850°F	relay	relay
TEC43406	K tc	50-850°F	relay	relay
TEC43407	RTD	50-550°F	relay	none
TEC43408	RTD	50-550°F	relay	relay
TEC43409	J tc	0-300°C	relay	none
TEC43410	J tc	0-600°C	relay	none
TEC43411	J tc	0-300°C	relay	relay
TEC43412	K tc	0-300°C	relay	none
TEC43413	K tc	0-600°C	relay	relay
TEC43414	RTD	0-300°C	relay	none
TEC43415	RTD	0-600°C	relay	relay



Note: TEC-704 has been discontinued. Refer to TEC-7100 (pages 13-30 & 13-31) for replacement controllers or contact Tempco.