**Model TEC-704 3/16 DIN Temperature Controller**

**Design Features**
- 3/16 DIN size – 72 mm × 72 mm
- Laser trimmed ASIC components
- Short panel depth – only 2-9/16” (65 mm) required
- On-off or time proportional selection
- Digital display, 0.4” (10 mm) red LEDs
- Wide selection of output options
- High precision wire wound dial/potentiometer setpoint
- Sensor break protection
- Good performance at a very low price

**Agency Approval:**

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**Simple Setpoint and Display!**

**Hardware Code:** TEC-704-

A Part Number based on the hardware code and any software pre-programming will be issued at time of order.

**Standard lead time is stock to 2 weeks.**

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**Power Input**

**Box 1**

4 = 90-264 VAC 50/60 Hz

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**Signal Input**

**Box 2**

1 = Thermocouple: Type J
2 = Thermocouple: Type K
3 = RTD: 100 ohm Pt, DIN 0.00385
4 = RTD: 100 ohm Pt, JIS 0.00392
9 = Other

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**Standard Range Code**

**Box 3**

4 = 0 to 300°C  C = 50 to 550°F
6 = 0 to 600°C  E = 50 to 850°F
F = 50 to 1100°F

**Below available for large volume orders. Consult Tempco for more information.**

2 = 0 to 100°C  A = 50 to 200°F
3 = 0 to 200°C  B = 50 to 400°F
5 = 0 to 400°C  D = 50 to 750°F
7 = 0 to 800°C  G = 50 to 1400°F
8 = 0 to 1200°C  H = 0 to 2200°F
9 = Other

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**Control Mode**

**Box 4**

1 = On - Off
2 = Proportional

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**Output 1**

**Box 5**

1 = Relay: 5A / 240 VAC
2 = Pulse DC for SSR drive: 20 VDC (20 mA max)
3 = 4-20 mA, linear (max load 500 ohms)
4 = 0-20 mA, linear (max load 500 ohms)
5 = 0-10 VDC, linear (min. impedance 500K ohms)
9 = Other

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**Output 2**

**Box 6**

0 = Not Available

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**Alarm**

**Box 7**

0 = None
1 = Relay: 2A / 240 VAC Deviation alarm

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**Communication**

**Box 8**

0 = Not Available

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**View Product Inventory @ www.tempco.com**
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: 500Ω
- Voltage: 0 - 10 VDC, minimum load: 500KΩ

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 Standards: EN61326
- Protective Class: Front panel: IP 30
- Housing and Terminals: IP 20

Adjustment
- 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: ±0.1% of span

Alarm
- 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 lamp
- Alarm Status Indicator: Red 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 1mm
- Shock: 200 m/s² (20g)
- Dimensions: 2.27/32 × 2.27/32 × 3" (72 × 72 × 78 mm) H×W×D
- Depth behind panel: 2-9/16" (65 mm)
- Panel Cutout: 2-11/16" × 2-11/16" (68 × 68 mm) H×W
- Weight: 0.53 lb. (240 grams)

Stock and Common Part Numbers

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<tr>
<th>Part Number</th>
<th>Signal Input</th>
<th>Range</th>
<th>Output</th>
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