Temperature Controllers

Models TEC-402 & TEC-401 Specifications

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

Signal Input
Thermocouple: Type J or K
RTD: 3-wire Pt100  DIN or JIS
Sampling Rate: 3 samples per second
Accuracy: ±2% of span
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: 500 Ω
Voltage: 0 - 10 VDC, minimum load 500 KΩ

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

With Deviation Meter

TEC-402 Stock and Common Part Numbers
(Proportional mode)

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Signal Input</th>
<th>Range</th>
<th>Output</th>
<th>Alarm</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEC57201</td>
<td>J tc</td>
<td>50-850°F</td>
<td>relay</td>
<td>none</td>
</tr>
<tr>
<td>TEC57202</td>
<td>J tc</td>
<td>50-550°F</td>
<td>relay</td>
<td>none</td>
</tr>
<tr>
<td>TEC57203</td>
<td>K tc</td>
<td>50-850°F</td>
<td>relay</td>
<td>none</td>
</tr>
<tr>
<td>TEC57204</td>
<td>K tc</td>
<td>50-550°F</td>
<td>relay</td>
<td>none</td>
</tr>
<tr>
<td>TEC57205</td>
<td>RTD</td>
<td>50-550°F</td>
<td>relay</td>
<td>none</td>
</tr>
<tr>
<td>TEC57206</td>
<td>J tc</td>
<td>0-300°C</td>
<td>relay</td>
<td>none</td>
</tr>
<tr>
<td>TEC57207</td>
<td>J tc</td>
<td>0-600°C</td>
<td>relay</td>
<td>none</td>
</tr>
<tr>
<td>TEC57208</td>
<td>K tc</td>
<td>0-300°C</td>
<td>relay</td>
<td>none</td>
</tr>
<tr>
<td>TEC57209</td>
<td>K tc</td>
<td>0-600°C</td>
<td>relay</td>
<td>none</td>
</tr>
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</table>

Non-Indicating

TEC-401 Stock and Common Part Numbers
(Proportional mode)

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Signal Input</th>
<th>Range</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEC57101</td>
<td>J tc</td>
<td>50-850°F</td>
<td>relay</td>
</tr>
<tr>
<td>TEC57102</td>
<td>J tc</td>
<td>50-550°F</td>
<td>relay</td>
</tr>
<tr>
<td>TEC57103</td>
<td>K tc</td>
<td>50-850°F</td>
<td>relay</td>
</tr>
<tr>
<td>TEC57104</td>
<td>K tc</td>
<td>50-550°F</td>
<td>relay</td>
</tr>
<tr>
<td>TEC57105</td>
<td>RTD</td>
<td>50-550°F</td>
<td>relay</td>
</tr>
<tr>
<td>TEC57106</td>
<td>J tc</td>
<td>0-300°C</td>
<td>relay</td>
</tr>
<tr>
<td>TEC57107</td>
<td>J tc</td>
<td>0-600°C</td>
<td>relay</td>
</tr>
<tr>
<td>TEC57108</td>
<td>K tc</td>
<td>0-300°C</td>
<td>relay</td>
</tr>
<tr>
<td>TEC57109</td>
<td>K tc</td>
<td>0-600°C</td>
<td>relay</td>
</tr>
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</table>

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
Deviation meter: ±10% of scale (TEC-402)
Non-Indicating (TEC-401)

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 × 3-3/4 × 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: 0.79 lb. (360 grams)

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