Temperature Controllers

Models TEC-4500 & TEC-9500 Specifications

Output 5 BOX 7
0 = None
3 = Retransmission 4-20mA / 0-20 mA
4 = Retransmission 1-5V / 0-5V/0-10V
7 = Isolated 20V @ 25 mA DC, Output Power Supply
8 = Isolated 12V @ 40 mA DC, Output Power Supply
A = Isolated 5V @ 80 mA DC, Output Power Supply
D = Isolated RS-485 interface
E = Isolated RS-232 interface

Power Input
Standard: 90-250 VAC, 47-63 Hz, 12 VA, 5W maximum
Optional: 11-26 VAC / VDC, 12 VA, 5W maximum

Signal Input
Resolution: 18 bits
Accuracy: ±2.5% of span typical
Maximum Rating: ±2 VDC minimum, 12 VDC maximum (1 minute for mA input)
Temperature Effect: ±1.5 μV / °C for all inputs except mA input
Sensor Lead Resistance Effect:
T/C: 0.2 μV/°C
3-wire RTD: 2.6°C/ohm of resistance difference of two leads
Burn-out Current: 200nA
Common Mode Rejection Ratio (CMRR): 120 dB
Normal Mode Rejection Ratio (NMRM): 55 dB
Sensor Break Detection: Sensor open for TC, RTD and mV inputs;
Sensor short for RTD input;
Below 1 mA for 4-20 mA input;
Below 0.25V for 1-5V input;
Unavailable for other inputs
Sensor Break Response Time: Within 4 seconds for TC, RTD and mV inputs; 0.1 second for 4-20 mA and 1 V input

Recipe
Number of recipes: 9
Number of Segments per recipe: Recipe 1, 2, 3, 4: 16
Recipe 5, 6, 7: 32
Recipe 8, 9: 64
Event Outputs: 3

Environmental and Physical
Operating Temperature: 14 to 122°F (-10 to 50°C)
Storage Temperature: -40 to 140°F (-40 to 60°C)
Humidity: 0 to 90% RH, non-condensing
Dielectric Strength: 2000 VAC, 50/60 Hz for 1 minute

Dimensions:
TEC-4500: 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: .55 lb. (250 grams)

TEC-9500: 1-7/8 × 1-7/8 × 4-9/16" (48 × 48 × 116 mm) H × W × D
Depth behind panel: 4-1/8" (104.8 mm)
Panel Cutout: 1-25/32 × 1-25/32" (45 × 45 mm) H × W
Weight: .33 lb. (150 grams)

Approval Standards
Safety: UL61010C-1
CSA: C22.2 No. 24-93
EN61010-1 (IEC1010-1)
Protective Class: IP30 front panel, indoor use,
IP65 front panel with option
EMC: EN61326

TEC-4500 Stock and Common Part Numbers
(Power Input: 90-250 VAC)

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Signal Input</th>
<th>Out 1</th>
<th>Out 2</th>
<th>Out 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEC58001</td>
<td>TC</td>
<td>relay</td>
<td>none</td>
<td>relay</td>
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<tr>
<td>TEC58002</td>
<td>TC</td>
<td>relay</td>
<td>relay</td>
<td>none</td>
</tr>
<tr>
<td>TEC58003</td>
<td>TC</td>
<td>relay</td>
<td>relay</td>
<td>relay</td>
</tr>
<tr>
<td>TEC58004</td>
<td>TC</td>
<td>4-20 mA</td>
<td>none</td>
<td>none</td>
</tr>
<tr>
<td>TEC58005</td>
<td>TC</td>
<td>4-20 mA</td>
<td>none</td>
<td>relay</td>
</tr>
<tr>
<td>TEC58006</td>
<td>TC</td>
<td>5VDC pulse</td>
<td>none</td>
<td>none</td>
</tr>
<tr>
<td>TEC58007</td>
<td>TC</td>
<td>5VDC pulse</td>
<td>none</td>
<td>relay</td>
</tr>
</tbody>
</table>

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(Power Input: 90-250 VAC)

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<th>Out 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEC18001</td>
<td>TC</td>
<td>relay</td>
<td>none</td>
<td>none</td>
</tr>
<tr>
<td>TEC18002</td>
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<td>none</td>
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<td>TEC18003</td>
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<td>4-20 mA</td>
<td>rela</td>
<td>none</td>
</tr>
<tr>
<td>TEC18004</td>
<td>TC</td>
<td>4-20 mA</td>
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<td>none</td>
</tr>
<tr>
<td>TEC18005</td>
<td>TC</td>
<td>5VDC pulse</td>
<td>none</td>
<td>none</td>
</tr>
<tr>
<td>TEC18006</td>
<td>TC</td>
<td>5VDC pulse</td>
<td>none</td>
<td>none</td>
</tr>
</tbody>
</table>

TEC-4500 1/4 DIN Rear Terminal Connections

Use copper conductors, except on T/C input.

TEC-9500 1/16 DIN Rear Terminal Connections

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