Model TEC-8100 1/8 DIN Temperature Controller

**Design Features**
- 1/8 DIN size – 96 mm × 48 mm
- Fuzzy Logic PID Autotune heat and cool control
- Short panel depth – only 2-9/16" (65 mm) required
- Universal input, field configurable (Type J/TC default, PT100, mA, V) with high accuracy 18-bit D-A
- Highly versatile – 6 types of inputs available
- Output 2 can be used for cooling function
- Universal input power – 90-250 VAC or 11-26 VAC/VDC
- Optional NEMA 4X/IP65 front panel
- Bumpless transfer to manual mode during sensor failure
- Wide variety of alarm mode selections
- Optional RS-232 or RS-485 communications interface
- Bright 0.40" (10 mm) red LED process display, 0.31" (8 mm) green LED setpoint display
- High performance at a very low price

**Configuration Options**

### Power Input

- 4 = 90-250 VAC
- 5 = 11-26 VAC / VDC
- 9 = Other

### Hardware Code: TEC-8100-

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.**

### Signal Input

- Universal, can be programmed in the field for item 5 or 6
- 5 = Thermocouple: *J, K, T, E, B, R, S, N, L
- 6 = RTD: *PT100 DIN, PT100 JIS
- 7 = 0-1 VDC
- 8 = 0-5, 1-5 VDC
- A = 0-10 VDC
- B = *-4-20, 0-20 mA
- 9 = Other

* indicates default value

### Output 1

- 1 = Relay: 2A / 240 VAC
- 2 = Pulse DC for SSR drive: 5 VDC (30 mA max)
- 3 = Isolated, 4-20 mA (default), 0-20 mA
- 4 = Isolated VDC, 1-5 (default), 0-5, 0-1
- 5 = Isolated VDC, 0-10
- 6 = Triac-SSR output 1A / 240 VAC
- C = Pulse DC for SSR drive: 14 VDC (40 mA max)
- 9 = Other

### Output 2

- 0 = None
- 1 = Relay: 2A / 240 VAC
- 2 = Pulse DC for SSR drive: 5 VDC (30 mA max)
- 3 = Isolated, 4-20 mA (default), 0-20 mA
- 4 = Isolated VDC, 1-5 (default), 0-5, 0-1
- 5 = Isolated VDC, 0-10
- 6 = Triac-SSR output 1A / 240 VAC
- 7 = Isolated 20V @ 25 mA DC, Output Power Supply
- 8 = Isolated 12V @ 40 mA DC, Output Power Supply
- 9 = Isolated 5V @ 80 mA DC, Output Power Supply
- C = Pulse DC for SSR drive: 14 VDC (40 mA max)
- A = Other

### Alarm

- 0 = None
- 1 = Relay: 2A / 240 VAC, SPDT
- 9 = Other

### Communication

- 0 = None
- 1 = RS-485 Interface
- 2 = RS-232 Interface
- 3 = Retransmission 4-20 mA (default), 0-20 mA
- 4 = Retransmission 1-5 VDC (default), 0-5 VDC
- 5 = Retransmission 0-10 VDC
- 9 = Other

### NEMA 4X / IP65

- 0 = No
- 1 = Yes

**Note:** Detailed information on features common to digital microprocessor-based TEC temperature controls and the complete Table of Input Range and Accuracy can be found on page 13-46.

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