Temperature Controllers

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Model **TEC-8100** 1/8 DIN

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Configurable for 4 Programmable Outputs and optional NEMA 4X/IP65 Front Panel!
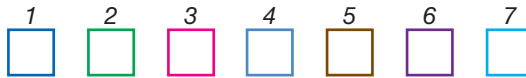
Agency Approvals:

UL ® CE

File #: E244198

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 T/C 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*

Power Input *BOX 1*

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

Hardware Code: TEC-8100-☐☐☐☐☐☐☐

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

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

Signal Input — Universal, can be programmed in the field for item 5 or 6   *BOX 2*

5 = Thermocouple: *J, K, T, E, B, R, S, N, L 0-60 mV
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

Alarm *BOX 5*

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

Communication *BOX 6*

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

Output 1 *BOX 3*

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

NEMA 4X / IP65 *BOX 7*

0 = No
1 = Yes

Output 2 *BOX 4*

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

⚠️ *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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