Model TEC-7100 3/16 DIN Temperature Controllers

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

Agency Approvals

Design Features
- 3/16 DIN size – 72 mm × 72 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-485 communications interface
- Bright 0.40” (10 mm) red LED process display
- 0.31” (8 mm) green LED setpoint display
- High performance at a low price

Power Input

Box 1

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

Hardware Code: TEC-7100-

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
0-60mV
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

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

Output 2

Box 4

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

Box 5

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

Communication

Box 6

0 = None
1 = RS-485 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

Box 7

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.