

## Model TEC-9090 1/16 DIN Temperature Controller



*Dual Display, Configurable for 2 Programmable Outputs!*

### Design Features

- \* 1/16 DIN size – 48 mm × 48 mm
- \* Fuzzy Logic PID Autotune heat & cool control
- \* Short panel depth – only 3-7/8" (86 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
- \* Optional relay alarm output
- \* Universal input power 90-264 VAC or 20-32 VAC/VDC
- \* Wide variety of alarm mode selections
- \* Bright 0.40" (10 mm) red LED process display  
0.31" (8 mm) green LED setpoint display
- \* High performance at a low price

Agency Approvals:



**Hardware Code:** TEC-9090- 1 2 3 4 5 6 7 8 9

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

#### Power Input BOX 1

- 4** = 90-264 VAC
- 5** = 20-32 VAC/VDC
- 9** = Other

#### Signal Input – (hardware jumper change between TC & RTD) BOX 2

- 5** = Thermocouple: Universal Configurable:  
J, K, T, E, B, R, S, N (default: Type J)
- 6** = RTD: Universal Configurable: DIN or JIS  
(default: alpha 0.00385/DIN)
- 9** = Other

#### Range code BOX 3

- 1** = Field configurable (default – max per input type)
- 9** = Other

#### Control Mode BOX 4

- 3** = Field Configurable  
(default: PID reverse acting, °F)
- 9** = Other

#### Output 1 BOX 5

- 1** = Relay: 3A / 240 VAC
- 2** = Pulse DC for SSR drive: 20 VDC (20 mA max)
- 3** = 4-20 mA, linear (max load 500Ω)
- 4** = 0-20 mA, linear (max load 500Ω)
- 5** = 0-10 VDC, linear (min. impedance 10 KΩ)
- 6** = Triac-SSR output 1A / 240 VAC
- 9** = Other

#### Output 2 BOX 6

- 0** = None

#### Alarm BOX 7

- 0** = None
- 1** = Relay: 2A / 240 VAC, Field Configurable
- 9** = Other

#### Data Communications BOX 8

- 0** = None

#### Units – °F or °C BOX 9

- 1** = °F on faceplate
- 2** = °C on faceplate



**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.