Model TEC-220 1/32 DIN Temperature Controller

### Design Features
- **1/32 DIN size – 24 mm × 48 mm**
- Fuzzy Logic PID Autotune heat and cool control
- Short panel depth – only 3-7/8” (98 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 programmed as output or alarm
- NEMA 4X / IP65 gasketed front panel
- Universal input power, 90-250 VAC or 11-26 VAC/VDC
- Highly accurate universal input with 18 bit analog to digital converter
- Bumpless transfer to manual mode during sensor failure
- Wide variety of alarm mode selections
- RS-485 and RS-232 data communications interface optional
- Bright 0.40” (10 mm) LED display
- High performance at a very low price

### Power Input
- **BOX 1**
  - 1 = 90-250 VAC
  - 5 = 11-26 VAC / VDC
  - 9 = Other

### Signal Input
- **BOX 2**
  - 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 / Alarm 1
- **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
  - 8 = Isolated 20V @ 25 mA DC, Output Power Supply
  - A = 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)
  - B = Other

### Communications
- **BOX 5**
  - 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

### Units — °F or °C
- **BOX 6**
  - 1 = °F on faceplate
  - 2 = °C on faceplate
  - 3 = None (process units)

### 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.