Model TEC-8400 & Model TEC-8450 1/8 DIN Temperature Controllers

**Design Features**

- **1/8 DIN size – 48 mm × 96 mm, horizontal: 96 mm × 48 mm**
- **Fuzzy Logic PID Autotune heat and cool control**
- **Universal input, field configurable (Type J T/C default, PT100, mA, V)** with high accuracy 18-bit D-A
- **Countdown display**
- **RS - 485 and Analog Retransmission Available**
- **Micro USB Programming Port**
- **Fast sampling rate (200 msec)**
- **Manual control & auto-tune function**
- **Wide range of alarm mode selection**
- **Lockout protection**
- **Bumpless transfer during failure mode**
- **Soft-start ramp & dwell timer**
- **Bright LCD display using NFPA/IEC standard colors**
- **High performance with low cost**

**Event Inputs**

- **BOX 5**
  - 0 = None
  - 1 = 6 Event Inputs

**Alarm 2 and 3**

- **BOX 4**
  - 0 = None
  - 1 = Alarm 2: Relay: 2A / 240 VAC
  - 2 = Alarm 2 & 3: Relays: 2A / 240 VAC

**Output 1**

- **BOX 2**
  - 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, 0-10 scalable
  - C = Pulse DC for SSR drive: 14 VDC (40 mA max)

**Output 2 / Alarm 1**

- **BOX 3**
  - 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, 0-10 scalable
  - C = Pulse DC for SSR drive: 14 VDC (40 mA max)

**Option 1**

- **BOX 6**
  - 0 = None
  - 1 = RS-485 Interface & Remote Setpoint

**Option 2**

- **BOX 7**
  - 0 = None
  - 1 = 1 CT Input & Remote Setpoint
  - 2 = 2 CT Inputs & Remote Setpoint

**Option 3**

- **BOX 8**
  - 0 = None
  - 1 = Retransmit: 4-20 mA / 0-20 mA & Remote Setpoint
  - 2 = Retransmit: 0-10 VDC & Remote Setpoint
  - 3 = Alarm 4 Relay: 2A / 240 VAC & Remote Setpoint
  - 4 = Alarm 4 Relay: 4-20 mA / 0-20 mA & Remote Setpoint
  - 5 = Alarm 4 Relay: 0-10 VDC & Remote Setpoint

**Option 4**

- **BOX 9**
  - 0 = None
  - 1 = Terminal Covers
  - 2 = 2 Programs each with 8 Segments of Ramp & Soak
  - 3 = Terminal Covers and Ramp & Soak Firmware

**Transformer for Heater Break Alarm**

(0-50 Amp current)

Part Number: TEC99998

Specifications on page 13-47

**Power Input**

- **BOX 1**
  - 4 = 90-250 VAC
  - 5 = 11-40 VDC / 20-28 VAC

**Output 2 / Alarm 1**

- **BOX 3**
  - 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, 0-10 scalable
  - C = Pulse DC for SSR drive: 14 VDC (40 mA max)

**Output 1**

- **BOX 2**
  - 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, 0-10 scalable
  - C = Pulse DC for SSR drive: 14 VDC (40 mA max)

**Alarm 2 and 3**

- **BOX 4**
  - 0 = None
  - 1 = Alarm 2: Relay: 2A / 240 VAC
  - 2 = Alarm 2 & 3: Relays: 2A / 240 VAC

**Event Inputs**

- **BOX 5**
  - 0 = None
  - 1 = 6 Event Inputs

**Hardware Code:**

TEC-8400 -

TEC-8450 -

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.

Standard lead time is stock to 2 weeks.

**Agency Approvals:**

UL LISTED

RoHS, REACH, WEEE

**Rev 2 (2-20)**