

# Temperature Controllers

Model TEC-8400 & -8450 1/8 DIN



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

### Agency Approvals:



- \* RoHS
- \* REACH
- \* WEEE

File #: E244198



### 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

### Hardware Code:



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 = 90-250 VAC
- 5 = 11-40 VDC / 20-28 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
- 5 = 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
- 5 = 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



**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.

### 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: 2A / 240 VAC, Retransmit: 4-20 mA / 0-20 mA & Remote Setpoint
- 5 = Alarm 4 Relay: 2A / 240 VAC, Retransmit: 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

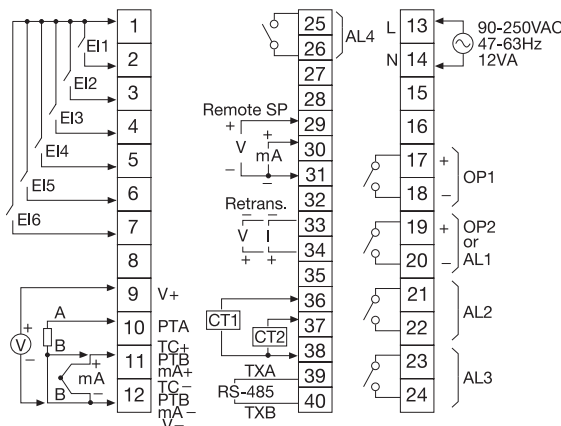
### Transformer for Heater Break Alarm

(0-50 Amp current)

Part Number: TEC99998

Specifications on page 13-47

### TEC-8400 Rear Terminal Connections



### TEC-8450 Rear Terminal Connections

