

# Temperature Controllers



Model TEC-7400 3/16 DIN

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### Design Features

- \* 3/16 DIN size – 72 mm × 72 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

Agency Approvals:



RoHS, REACH, WEEE

Hardware Code: TEC-7400 - 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 = 90-250 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 and 3: Relays: 2A / 240 VAC

#### Event Inputs BOX 5

- 0 = None
- 1 = 6 Event Inputs

#### Option 1 BOX 6

- 0 = None
- 1 = RS-485 Interface & Remote Setpoint

#### Option 2 BOX 7

- 0 = None
- 1 = 1 CT Input and Remote Setpoint
- 2 = 2 CT Inputs and Remote Setpoint

#### Option 3 BOX 8

- 0 = None
- 1 = Retransmit: 4-20 mA / 0-20 mA and Remote Setpoint
- 2 = Retransmit: 0-10 VDC and Remote Setpoint
- 3 = Alarm 4 Relay: 2A / 240 VAC and Remote Setpoint

#### Option 4 BOX 9

- 0 = None
- 1 = Terminal Covers
- 2 = Ramp and Soak Firmware
- 3 = Terminal Covers and Ramp and Soak Firmware



**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.

#### Transformer for Heater Break Alarm

(0-50 Amp current)

Part Number: TEC99998

Specifications on page 13-47

### Stock and Common Part Numbers

(All Stock Part Numbers Include Terminal Covers)  
(Default Type "J" Thermocouple Input)

Part Number	Output 1	Out 2/ Alm 1	Option 1
TEC45001	Relay	None	None
TEC45002	Relay	Relay	None
TEC45003	Relay	Relay	(2) Relays
TEC45004	Pulse DC	None	None
TEC45005	Pulse DC	Relay	None
TEC45006	Pulse DC	Relay	(2) Relays
TEC45007	4-20mA	None	None
TEC45008	4-20mA	Relay	(2) Relays