Temperature Controllers



Models TEC-4500 & TEC-9500 Specifications

Output 5 BOX 7

0 = None

3 = Retransmission 4-20mA / 0-20 mA **4** = Retransmission 1-5V / 0-5V/0-10V

7 = Isolated 20V @ 25 mA DC, Output Power Supply 8 = Isolated 12V @ 40 mA DC, Output Power Supply A = Isolated 5V @ 80 mA DC, Output Power Supply

D = Isolated RS-485 interfaceE = Isolated RS-232 interface

Power Input

Standard: 90-250 VAC, 47-63 Hz, 12 VA, 5W maximum **Optional**: 11-26 VAC / VDC, 12 VA, 5W maximum

Signal Input

Resolution: 18 bits Sampling Rate: 5 samples / second

Accuracy: ±.24% of span typical

Maximum Rating: -2 VDC minimum, 12 VDC maximum (1 minute

for mA input)

Temperature Effect: $\pm 1.5 \,\mu\text{V} / ^{\circ}\text{C}$ for all inputs except mA

input $\pm 3.0 \,\mu\text{V}$ / °C for mA input

Sensor Lead Resistance Effect: T/C: 0.2µV/ohm 3-wire RTD:

2.6°C/ohm of resistance difference

of two leads

Burn-out Current: 200nA

Common Mode Rejection Ratio (CMRR): 120 dB Normal Mode Rejection Ratio (NMRR): 55 dB

Sensor Break Detection: Sensor open for TC, RTD and mV inputs;

Sensor short for RTD input; Below 1 mA for 4-20 mA input; Below 0.25V for 1-5V input; Unavailable for other inputs

Sensor Break Response Time: Within 4 seconds for TC, RTD and

mV inputs; 0.1 second for 4-20 mA

and 1-5 V inputs

TEC-4500 Stock and Common Part Numbers (Power Input: 90-250 VAC)

Part Number	Signal Input	Out 1	Out 2	Out 3
TEC58001	TC	relay	none	relay
TEC58002	TC	relay	relay	none
TEC58003	TC	relay	relay	relay
TEC58004	TC	4-20 mA	none	none
TEC58005	TC	4-20 mA	none	relay
TEC58006	TC	5VDC pulse	none	none
TEC58007	TC	5VDC pulse	none	relay

TEC-4500 1/4 DIN Rear Terminal Connections

Case Options BOX 8

0 = Panel mount standard

1 = Panel mount with NEMA 4X/IP65 front panel

2 = DIN rail mount adapter (TEC-9500 only)

Recipe

Number of recipes: 9

Number of Segments per recipe:

Recipe 1, 2, 3, 4: 16 Recipe 5, 6, 7: 32 Recipe 8, 9: 64

Event Outputs: 3

Environmental and Physical

Operating Temperature: 14 to 122°F (-10 to 50°C) **Storage Temperature**: -40 to 140°F (-40 to 60°C)

Humidity: 0 to 90% RH, non-condensing

Dielectric Strength: 2000 VAC, 50/60 Hz for 1 minute

Dimensions:

TEC-4500: $3-3/4 \times 3-3/4 \times 2-9/16$ " (96 × 96 × 65 mm) H×W×D

Depth behind panel: 2" (53 mm)

Panel Cutout: 3-5/8" × 3-5/8" (92 × 92 mm) H×W

Weight: .55 lb. (250 grams)

TEC-9500: 1-7/8 × 1-7/8 × 4-9/16" (48 × 48 × 116 mm) H×W×D

Depth behind panel: 4-1/8" (104.8 mm)

Panel Cutout: 1-25/32" × 1-25/32" (45 × 45 mm) H×W

Weight: .33 lb. (150 grams)

Approval Standards

Safety: UL61010C-1

EN61010-1 (IEC1010-1)

Protective Class: IP30 front panel, indoor use,

IP65 front panel with option

EMC: EN61326

TEC-9500 Stock and Common Part Numbers (Power Input: 90-250 VAC)

Part Number	Signal Input	Out 1	Out 2	Out 3		
TEC18001	TC	relay	none	none		
TEC18002	TC	relay	relay	none		
TEC18003	TC	4-20 mA	none	none		
TEC18004	TC	4-20 mA	relay	none		
TEC18005	TC	5VDC pulse	none	none		
TEC18006	TC	5VDC pulse		none /		

TEC-9500 1/16 DIN Rear Terminal Connections

