



### Power Input

**Standard:** (TEC-410) 90-250 VAC, 47-63 Hz, 10 VA, 5W maximum  
(TEC-910) 90-264 VAC, 47-63 Hz, 10 VA, 5W maximum  
**Optional:** 11-26 VAC / VDC, 10 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:** ±1.5  $\mu\text{V} / ^\circ\text{C}$  for all inputs except mA input  
input ±3.0  $\mu\text{V} / ^\circ\text{C}$  for mA input  
**Sensor Lead Resistance Effect:** T/C: 0.2 $\mu\text{V}/\text{ohm}$   
**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 inputs  
**Sensor Break Response Time:** Within 4 seconds for TC and mV inputs; 0.1 second for 4-20 mA and 1-5 V inputs

### Output 1 / Output 2

**Relay Rating:** 240 VAC, 2 Amp  
**Solid State Relay (Triac) Output**  
**Rating:** 1A / 240 VAC    **Inrush Current:** 20A for 1 cycle  
**Min. Load Current:** 50 mA rms  
**Max. Off-state Leakage:** 3 mA rms  
**Max. On-state Voltage:** 1.5 VAC rms  
**Insulation Resistance:** 1000 Megohms minimum at 500 VDC  
**Dielectric Strength:** 2500 VAC for 1 minute  
**VDC Voltage Supply (Output 2 only)**  
20 VDC, ±0.5V, at 25 mA  
12 VDC, ±0.3V, at 40 mA  
5 VDC, ±0.15V, at 80 mA

**Event Input (standard TEC-410, optional TEC-910)**  
**Resolution:** 18 bits  
**Logic Low:** -10 VDC minimum, 0.8 VDC maximum  
**Logic High:** 2 VDC minimum, 10 VDC maximum  
**Functions:** Remote reset, remote lockout

### TEC-410 Stock and Common Part Numbers (Power Input: 90-250 VAC)

Part Number	Signal Input	Out 1	Out 2
TEC51001	tc	relay	none
TEC51002	tc	relay	relay
TEC51005	tc	SSR-1A	none
TEC51006	tc	SSR-1A	relay

### TEC-910 Stock and Common Part Numbers (Power Input: 90-264 VAC)

Part Number	Signal Input	Out 1	Prog. I/O
TEC16001	tc	relay	event input
TEC16003	tc	SSR-1A	event input
TEC16004	tc	relay	none
TEC16006	tc	SSR-1A	none

**NOTE:** See page 13-46 for features common to TEC digital microprocessor-based temperature controls and the complete Table of Input Range and Accuracy.

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### Limit Control

**Modes available:** High Limit, Low Limit and High/Low Limit

### Data Communications

**Interface:** RS-485 (up to 247 units), RS-232, *TEC-410 only*  
**Protocol:** Modbus Protocol – RTU mode  
**Address:** 1-247    **Baud Rate:** 0.3 - 38.4 Kbits/sec  
**Data Bits:** 8 bits    **Parity Bit:** None, Even or Odd  
**Stop Bit:** 1 or 2 bits    **Communication Buffer:** 50 bytes

### User Interface

**Single 4-digit LED Displays:** 0.4" / 10 mm  
**Keypad:** 4 keys  
**Programming Port:** For automatic setup, calibration and testing

### Environmental and Physical

**Operating Temperature:** 14 to 122°F (-10 to 50°C)  
**Humidity:** 0 to 90% RH, non-condensing  
**Dielectric Strength:** 2000 VAC, 50/60 Hz for 1 minute

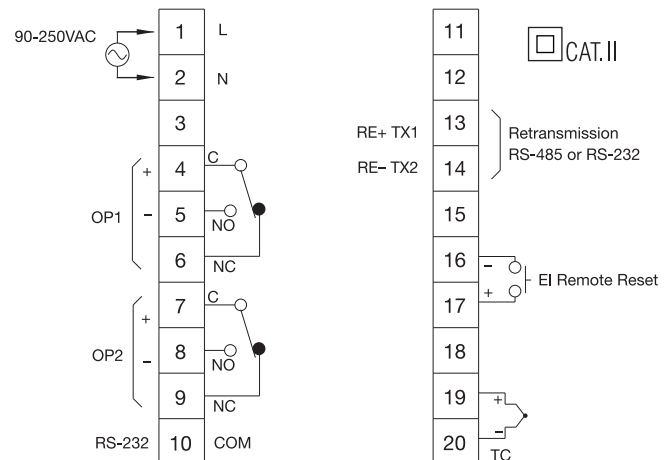
### Dimensions:

**TEC-410:** 3-3/4 × 3-3/4 × 2-9/16" (96 × 96 × 65 mm) H×W×D  
**Depth behind panel:** 2" (53 mm)  
**Panel Cutout:** 3-21/32" × 3-21/32" (93 × 93 mm) H×W  
**Weight:** 0.55 lb. (250 grams)  
**TEC-910:** 1-7/8 × 1-7/8 × 3-3/4" (48 × 48 × 94 mm) H×W×D  
**Depth behind panel:** 3-3/8" (86 mm)  
**Panel Cutout:** 1-25/32" × 1-25/32" (45 × 45 mm) H×W  
**Weight:** 0.33 lb. (150 grams)

### Approval Standards

**Safety:** FM Class 3545 (OCT. 1998)  
CSA: C22.2 No. 24-93  
EN61010-1 (IEC1010-1)  
TEC-410: UL61010C-1  
TEC-910: UL873  
**Protective Class:** IP30 front panel, indoor use,  
IP20 housing and terminals (with protective cover)  
**EMC:** EN61326

### TEC-410 1/4 DIN Rear Terminal Connections



### TEC-910 1/16 DIN Rear Terminal Connections

