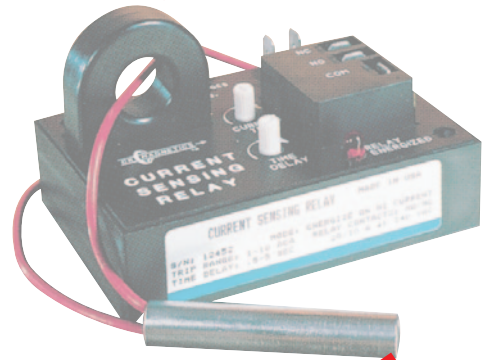
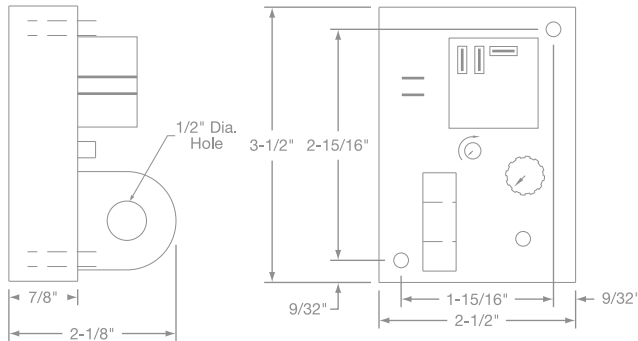


### Current Sensing Relay for Heater Monitoring



#### Specifications

**Mounting:** 2-3/16" dia. clearance holes on 1-15/16" by 2-15/16" centers  
**Environmental:**

Operating Temperature: -30°C to +60°C  
 Storage Temperature: -55°C to +125°C

**Power-On Delay:** 100 ms max.

**Hysteresis:** 5% max.

**Input Power Supply:** 120 or 240Vac, 24 Vdc (Tolerance ±10%)

**Input Terminals:** 2-1/4" Male Quick Connect

**Operating Class:** 600 V

**Sensed Current:**

Max. Continuous: 200% Full Scale  
 Frequency: 60-400 Hz

**Output Relay:**

Arrangement: 1 Form C (SPDT)  
 Terminals: 3-1/4" Male Quick Connect  
 Contact Rating: NO-120/240 Vac: 20A, NC-120/240 Vac: 10A

#### Common Configurations

(with Calibrated Dial & Standard Relay)

Part Number	Trip Status	Supply Voltage	Trip Range (Amps)	Delay (Sec)
CTR00201	LC	120	1 to 10	2 to 25
CTR00202	LC-Latch	120	1 to 10	2 to 25
CTR00203	LC	240	3 to 30	2 to 25
CTR00204	LC-Latch	240	3 to 30	2 to 25
CTR00205	LC	240	10 to 100	2 to 25
CTR00206	LC-Latch	240	10 to 100	2 to 25

The TEMPCO series of **Current Sensing Relays** provides an effective and highly stable method for monitoring electrical current. The current-carrying wire is routed through the opening extending from the top of the case. When current reaches the level set by the trip point adjustment, the electromechanical relay is energized. An adjustable timer is provided to delay activation of the relay. A precision voltage reference circuit ensures a highly repeatable trip point. Design of the power-on delay circuitry allows the supply power to be repeatedly cycled on and off without affecting the stability of the current sensing operation.

#### Design Features

- \* Variable Trip Point and Time Delay
- \* Monitor Currents from 10 mA to 100 AC Amps
- \* Output Relay Rated Up to 20 Amps
- \* LED Relay Status Indicator
- \* Dead Band Prevents Relay Chatter
- \* Calibrated Dial
- \* Electrical Isolation Between Circuits

#### Typical Applications

- Monitor Electrical Heater Elements
- Sense Motor Over/Under Loads
- Detect Lamp Burnout
- Indicate Phase Loss

Ordering Code: CTR -



#### Relay Trip Status BOX 1

- 1 = Relay Energized on High Current (above trip point)
- 2 = Relay Energized on Low Current (below trip point)
- 3 = Latch on High Current
- 4 = Latch on Low Current

**NOTE:** For 3 and 4 relay remains latched until supply power is removed

#### Supply Voltage BOX 2

- 1 = 120 Vac
- 2 = 240 Vac
- 3 = 24 Vdc

#### Trip Ranges BOX 3

- 3 = 1.0 to 10 AC Amps
- 4 = 3.0 to 30 AC Amps
- 5 = 6.0 to 60 AC Amps
- 6 = 10 to 100 AC Amps

#### Time-On Delay BOX 4

- A = .5 to 6 Sec.
- B = 2 to 25 Sec.
- C = .1 to 1 Sec.
- X = None

#### Trip Point Dial BOX 5

- CD = Calibrated Dial
- FP = Fixed Setpoint (specify required value)

#### Output Options BOX 6

- R = Standard Relay
- N = Isolated NPN Transistor
- T = Isolated Triac

### Ordering Information

**Current Relays** are offered with the options listed in the worksheet above. Create an ordering code by filling in the boxes with the appropriate number and/or letter designation for your requirements and a part number will be assigned, or choose a common configuration. **Standard lead time is stock to 3 weeks.**

**⚠ WARNING:** Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

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