

CVT500/501 series

Current and Voltage Trip Relays



- **General purpose signal monitoring**
- **Wide selection of DC and AC input ranges**
- **Compact DIN rail/surface mount unit**

Description

The CVT500/501 is a range of general purpose signal monitoring and trip relays. The units may be configured for use with a wide variety of sources and sensors. Applications include the monitoring of voltage and current levels, pressure and fluid level transmitters, thermocouples and earth leakage signals.

The CVT500 is designed to monitor DC input signals, while the CVT501 accepts AC inputs. When powered up, the CVT compares the measured input signal with the trip value (as set by the user on a front facia potentiometer) and operates its trip relay accordingly. The CVT may be supplied so that the relay de-energises when the input signal is high or low (when compared to the set trip point).

The trip point potentiometer is screwdriver adjustable. Each pot. has 0 - 100% scale, representing a customer specified range: common ranges include 0–5mA, 4–20mA, 0–250mA, 0–5V and 0–10V. The CVT500 may also be configured for use with J or K type thermocouple inputs, with trip ranges of 0–200°C, 300°C, 400°C and 800°C.

The output on standard, single input units is by volt free, two-pole change-over relay contacts. A front facia LED indicates when the relay is energised.

Dual versions of the CVT are also available (the CVT500-2 and CVT501-2). These comprise two independent CVT circuit boards in one standard DIN case, each with its own trip point adjustment and LED indicator. The outputs on dual units are via single pole change-over relays.

Specification

| | CVT500 | CVT500-2 | CVT501 | CVT501-2 |
|-------------------------------|--|----------|-----------------|----------|
| Power supply: | | | | |
| operating voltage | 100 – 125 VAC or 200 – 250 VAC | | | |
| power consumption | < 4 VA | < 8 VA | < 4 VA | < 8 VA |
| Input: | | | | |
| signal/trip ranges | various scales in the ranges: | | | |
| | 5 mV to 150 V DC | | 5 V to 200 V AC | |
| | 1 mA to 5 A DC | | 1 mA to 5A AC | |
| sensitivity | 0.05 mV | | 50 mV | |
| Relay output contacts: | DPDT | 2 x SPDT | DPDT | 2 x SPDT |
| | all contacts rated 5 A max. @ 240 VAC (resistive load), 2 x 10 ⁵ operations | | | |
| General: | | | | |
| operating temp. | –10 to +55 °C | | | |
| approximate weight | 202 g | 370 g | 202 g | 370 g |

All units are powered from an auxiliary AC supply, nominal voltage 110 or 230 VAC (please specify). The CVT series is housed in a compact polycarbonate case, designed for DIN rail or surface mounting.

Warranty

A two year limited warranty on materials and workmanship is given with this Murphy product. Details are available on request and are packed with each unit.



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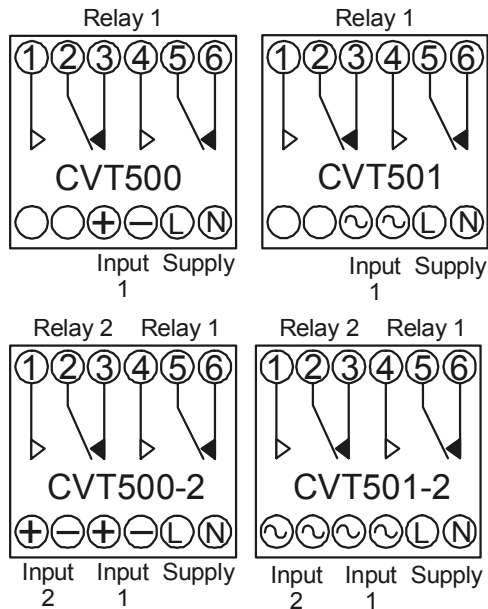
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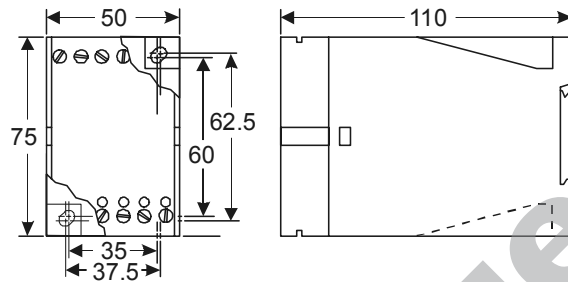
USA - ISO9001:2000 FM 28221
UK - ISO9001:2000 FM 29422

Electrical connection



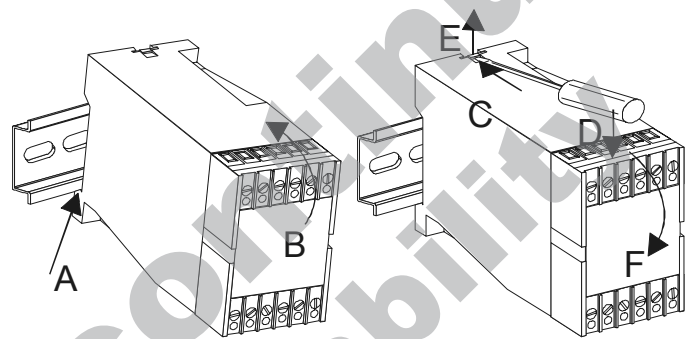
Dimensions and fixing

Overall and surface fixing dimensions



DIN rail fixing

Removal



How to order

Base Models:-

- CVT500** DC input signals, 1 x DPDT relay output
- CVT500-2** Dual version of above, SPDT relay output for each input channel
- CVT501** AC input trip relay, 1 x DPDT relay output
- CVT501-2** Dual version of above, SPDT relay output for each input channel

When ordering, please specify:

- Base model reference (CVT500 or CVT501)
- Power supply voltage (110 VAC or 230 VAC)
- Input signal voltage or current range, or thermocouple type and temperature range
- Relay de-energisation on high or low input

Related products:-

Model / Description

UVR, OVR and PFR series - AC voltage relays, single and 3 phase

See bulletin

ms6261



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In order to consistently bring you the highest quality, full featured products, we reserve the right to change our specifications and designs at any time.