

MODEL CTD-3

Capacitor Trip Device



REGULATORY AGENCY APPROVALS



Application

Provides a source of energy for circuit breaker and switch trip coil operation during a loss of AC control voltage.

Normal Input

240 Volts ac

Frequency

25 to 400 Hz.

Ambient Temperature Range

-30°C to +60°C

Specifications

Normal Input Voltage: 240 Vac

Max. Input Voltage: 280 Vac

Capacitance:

330 uF, CTD-1 \pm 20% @ 25°C

Temp. Influence on cap.:

-10% @ -30°C/ \pm 5% @ +60°C

Available energy trip capacitor fully charged at normal input voltage: 19 joules + 20% @ 25°C

- These devices are protected against inadvertent output short circuit, inductive kickback from the trip coil, and input line voltage surges. Nominal 240 Volts ac, is applied between the 'AC' and 'COM' terminals.

This voltage is half wave rectified and applied across the trip capacitor, giving an output trip voltage. The charge stored in this capacitor (330 uF) is available between the '+' and 'COM' terminals for breaker trip coil operation. The half wave rectification circuitry provides the advantage of maintaining a common neutral connection from input while still maintaining the charge in the the trip capacitor after control power is lost.

The capacitor is continuously charged when control power is available, providing energy for normal trip coil operation. Because mechanical relays are not involved, energy for the trip coil operation is immediately available with the loss of control power. When the control power returns, the capacitor automatically charges to supply energy for the next trip coil.

Normal Output Voltage:

338 Volts DC

Approx. charge time to 90% at 60 Hz and 25°C:

350 mS

Operating Temperature Range:

-30°C to 60°C

Storage Temp Range:

-50°C to 80°C

Short Circuit Protection:

Continuous

Mounting:

Vertical or horizontal

Input Surge Protection:

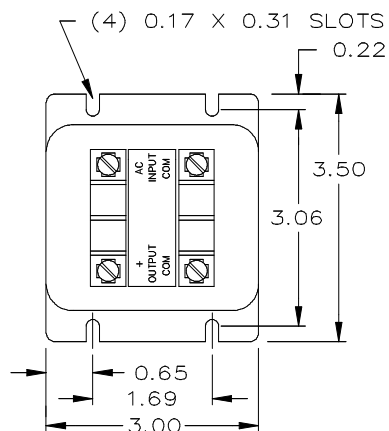
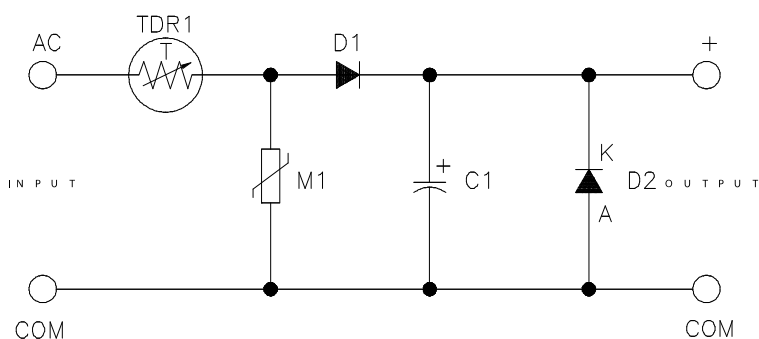
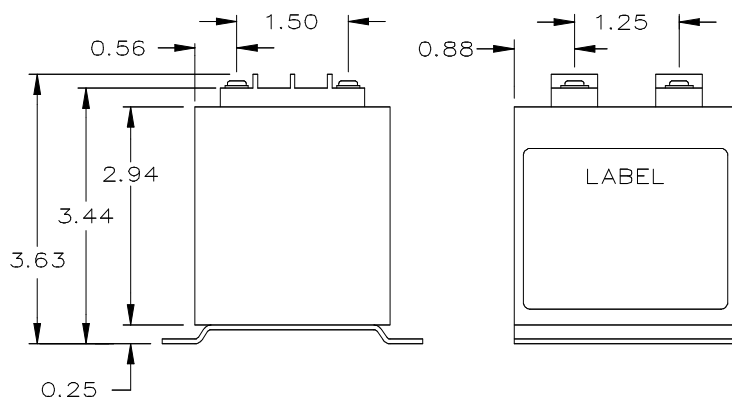
MOV protected to 65 joules pulse surge



GE VERNOVA



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* Charge time from full discharge to 90% of max. capacitor voltage at 25°C.
 ** Trip capacitor fully charged to nominal ac input voltage.

For more information, visit
gevernova.com/grid-solutions

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