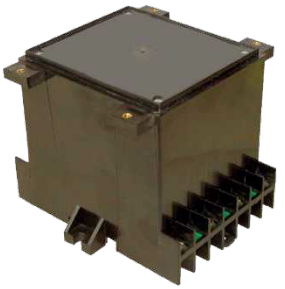
Grid Solutions

MODEL CTDA-6

Capacitor Trip Device



REGULATORY AGENCY APPROVALS

LISTED IND. CONT. EQUIP C 103039

Application

Provides a source of energy for circuit breaker in the event of a power loss.

Tripping power is available immediately upon energization before capacitors charged.

Normal Input

120/240 Volts ac.

Specifications

Max. Input Voltage:
2 Va burden continuous
2 Va burden continuous

Available Energy:
CTDA-6-120: 64 joules
CTDA-6-240: 57 joules

Normal Output Voltage:
CTDA-6120: 169 Vdc
CTDA-6-240: 340 Vdc

Capacitance:
CTDA-6-120: 4,500 uF +20 %
CTDA-6-240: 990 uF+ 20 %

Approx charge time to 90 % at 60 Hz is 8 seconds.

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

The Capacitor Trip Device (CTDA-6) is used to trip circuit breakers and lock out relay when a battery standby source is not available to provide circuit breaker trip power. The CTDA-6 converts ac buss voltage to dc voltage and stores enough energy to operate a lock out relay or trip a circuit breaker. Voltage is available from the ac power supply for tripping immediately upon ac power up. The capacitors charge time is approximately 8 seconds, but full wave bridge rectifier power from the ac line is available immediately for use. Capacitor charge current is limited to protect the control power system from a large current in rush. This feature allows the use of many CTDA-6 units from the same control power voltage source without coordination problems. Additionally, the CTDA-6 is self-protected from short circuit damage on the output. Nominal ac voltage is applied across terminals #8 and # 10. This voltage is full wave bridge rectified and applied across the trip capacitors producing a steady state output trip voltage. The charge stored in theses capacitors is available across terminals #12 (positive) and # 14 (negative).Charging time: 8 seconds, 0 to 90% of nominal output voltage, 60 Hertz. Operating temperature: -30°C to +60°C* Electrical specifications are 25°C.

Notice: AC power must be applied continually for minimum of 2 hours before the CTDA-6 is capable of developing full charge on the output capacitors with sustained interruption in ac input. The CTDA-6 capacitor trip device is not intended for ac dc power supply. The selfprotecting feature of the unit will severely limit the continuous output current and voltage.

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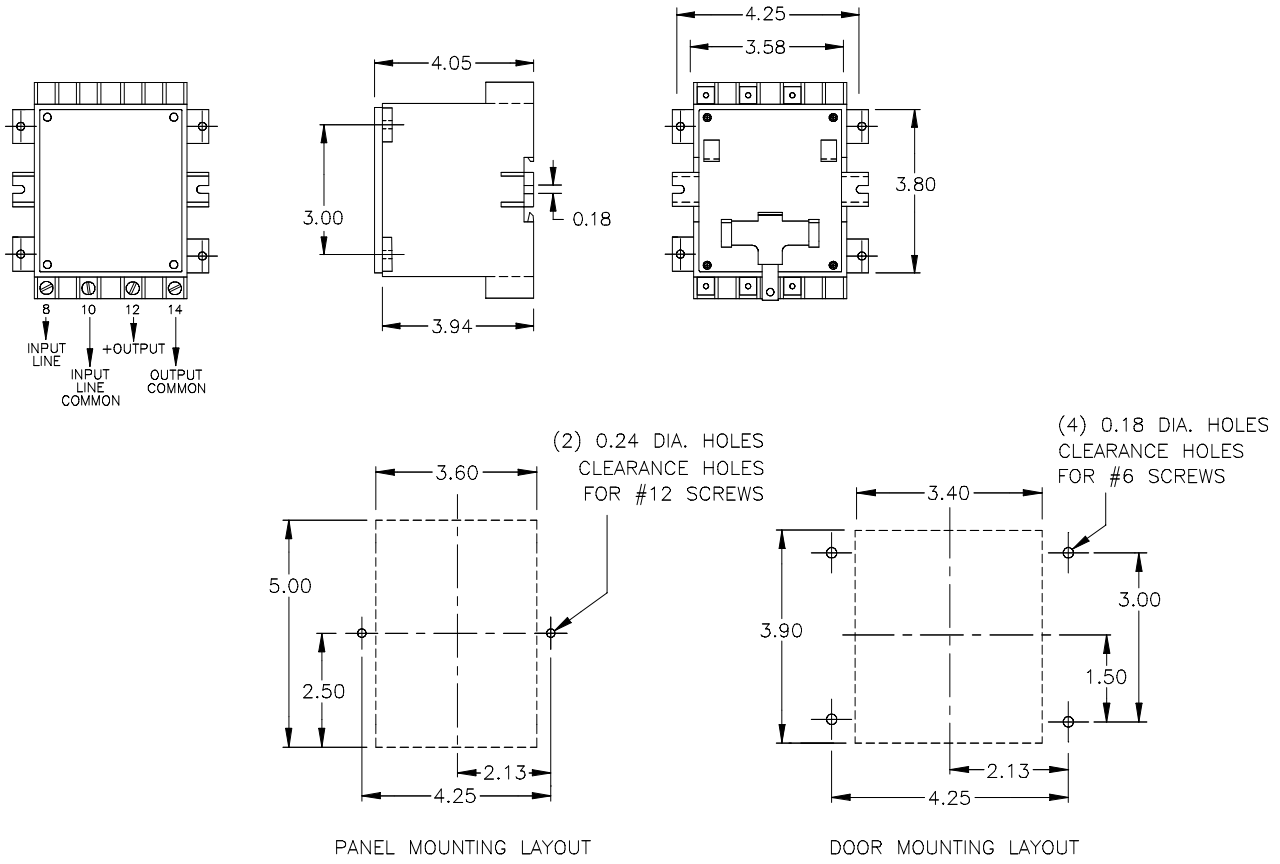

Servicing:

1. Remove the AC control voltage.
2. Discharge the Capacitor trip device. (A5-watt resistor of approximately 1000 across Terminal #12 and #14 can be used for this purpose)

Danger!
Lethal voltages are present. Only qualified persons should install, operate, and service this device.

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

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