# GE Grid Solutions

# Model OCP

### **Open Circuit Protectors**

#### Application

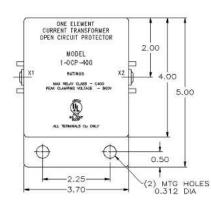
Open circuit protection for relay classes through C800 and all metering classes

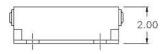
#### Frequency

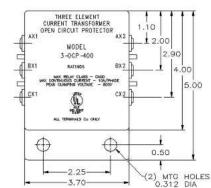
50-400 Hz.

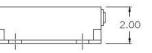
#### Ambient Temperature Range

-30 °C to +55 °C









# 1 Element Open Circuit Protection

Model Number	Recommended CT Relaying Class	Clamping Peak Voltage Limit (V peak nom)	Standard Relay Burden (Ω)
1-OCP-100	Thru C100	200	1
1-0CP-200	C200	400	2
1-OCP-400	C400	800	4
* 1-OCP-800	C800	1,500	8

\* Not U.L. listed, Single Element Only

#### Normal Secondary Current

5 Amps. ac.

#### Short Time Overcurrent

100 Amps for 2 Sec.

#### Max. Continuous Current

10 Amps through one element or 7.5 Amps through all three independent elements.



## Terminals

Copper with brass slotted pan head screws, No.8-32  $\times$  1/4, with cupped washers.

Weight 1.2 lbs.

#### REGULATORY AGENCY APPROVALS

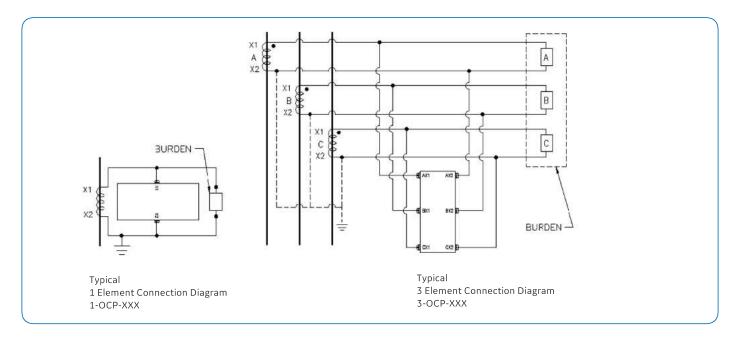


#### 3 Element Open Circuit Protection

Model Number	Recommended CT Relaying Class	Clamping Peak Voltage Limit (V peak nom)	Standard Relay Burden (Ω)
3-OCP-100	Thru C100	200	1
3-0CP-200	C200	400	2
3-OCP-400	C400	800	4



#### Model OCP



A Current Transformer secondary should never be open circuited while the Current Transformer primary circuit is energized. If this situation should occur there is a possibility of developing extremely high voltages which could be dangerous to personnel or cause an insulation breakdown.

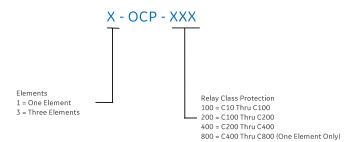
The OCP series of Open circuit Protectors are voltage sensing devices using high speed shorting SCR switches. When the secondary peak voltages exceeds the clamping voltage value, the SCR operates, shorting the C.T. secondary and reducing the voltage to about 2 volts in less than 1/4 cycle. This process repeats each current polarity reversal. The protection is activated each half cycle.

The three element Open Circuit Protector is provided with six terminals for connection across the secondary of the C.T's and in parallel with the burden. It can also be connected across the current terminals of a protective relay, meter, or other current operated device without affecting the operation of the device. Secondary polarity of the C.T's is not critical to the OCP.

The OCP also provides protection against high secondary voltage transients, which may damage the burden or secondary winding. If the transient voltage exceeds the voltage clamping limit, the Open Circuit Protector will trigger. After triggering, the voltage will fall to about 2 volts and remain there until the next zero crossing of the current waveform at which time the device resets and the cycle repeats as necessary. In the transient mode of protection, triggering will occur only on the half cycle where the transient appears.

The leakage current of the OCP is insignificant and will not cause a ratio or phase angle error in the Current Transformer accuracy. Metering class C.T.'s with a rating factor of 2 could operate up to 10 amps on a continuos basis. Relaying class C.T.'s are designed to withstand short time overloads up to 20 times normal (100 amps RMS) for 2 seconds. The OCP is designed to tolerate both of these conditions if the burden accidentally opens.

#### How to Order Open Circuit Protectors



#### GEGridSolutions.com

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