

## WC3 & WCT3 Series, Overcurrent

### Product Facts

- Function 50/51
- ANSI/IEEE C37.90-1978
- UL File No. E58048
- CSA File No. LR61158

Current sensitive relays are available for single and three phase applications. Voltage controlled overcurrent relays protect generators against fault currents below the full rated value, when the fault produces a voltage drop as in the case of short circuits or grounds. Phase balance relays are available to sense and control unbalanced current flow in three phase systems. Current differential relays operate when the differential between two currents exceeds preset values. Over/under current phase-band relays are also available.



**Note:** Dimensions in inches. Multiply values by 25.4 for dimensions in mm.



### Time Delay

**Standard Time Delay (WC3 Series)** — A fixed inverse time delay is incorporated in all overcurrent relays and is represented by the typical curves shown.

**Adjustable Time Delay (WCT3 Series)** — The time delay is field adjustable. The standard time delay can be increased by any value between 0.5 and 20 seconds.

### Product Specifications

**Line Current** — Three Phase, AC current, 50-400 Hz Direct or from CT

**Control Voltage** — See Ordering Information

**Trip Point** — Screwdriver adjustable. Adjustment range in accordance with ordering information.

**Pick-Up to Drop-Out Differential** — Approximately 0.1 amp

**Overcurrent Allowance** — Maximum of 500% for 0.25 seconds

**Surge Withstand Capability** — In compliance with the requirements of ANSI/IEEE

**Operating Temperature** — -40°C to +70°C

**Temperature Drift** — ± 0.05%/°C

**Burden** — Current input — 1.2 VA, Control voltage — 2.5 VA

**Contact Ratings** — One set, N.O., One set N.C. 5 amp resistive at 120 VAC or 28VDC

### Notes:

1. Remove black screws for access to the current pick-up and the time delay adjustment.
2. Clockwise rotation of the pick-up adjustment will raise the current trip point.
3. Clockwise rotation of the time delay adjustment, (Type WCT3 only) will increase the time delay.

### Ordering Information

**Sample Part Number** ▶ **WCT3 -48DC -5 A**

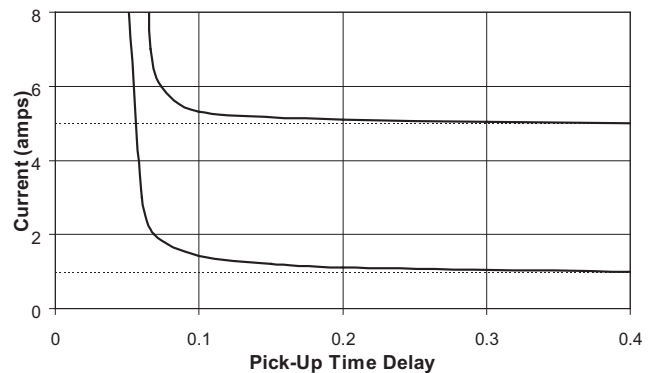
**Type:** \_\_\_\_\_  
 WC3 = Per Time Curves  
 WCT3 = Adjustable Time Delay

**Control Voltage (± 15%)** \_\_\_\_\_  
 26 DC  
 48 DC  
 125 DC  
 120 AC  
 230 AC  
 380 AC  
 460 AC

**Trip Adjustment Range** \_\_\_\_\_  
 1 = .2 amp - 1 amp  
 5 = 1 amp to 5 amp  
 10 = 2 amp to 10 amp

**Other Options** \_\_\_\_\_  
 A = Two normally open contacts  
 B = Two normally closed contacts

Typical Curves (WC3 Series)



See previous page for 1-phase models and consult factory for additional models.