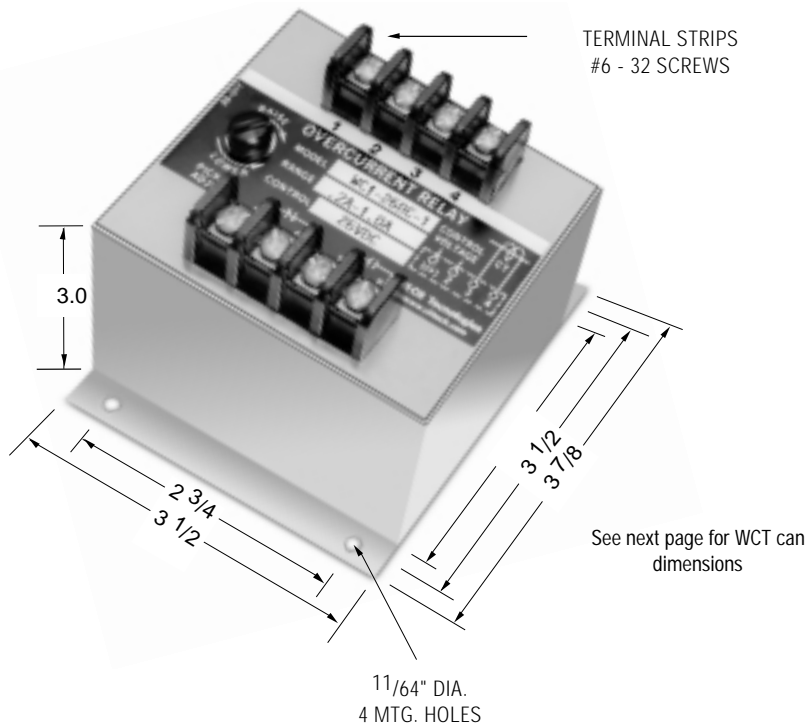


**WILMART™ Protective Relays – WC1 & WCT1 Series, Overcurrent**

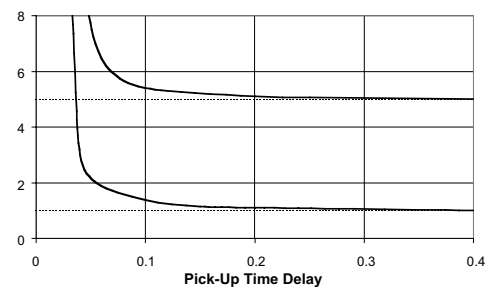
**Function:** 50/51

- ANSI/IEEE C37.90-1978
- UL file No. E58048
- CSA file No. LR61158

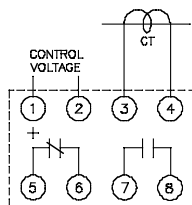


Current sensitive relays are available for single and three phase applications. Voltage controlled overcurrent relays protect generators against fault currents below the full rated value, when the fault produces a voltage drop as in the case of short circuits or grounds. Phase balance relays are available 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.

**Typical Curves (WC1 Series)**



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



**Time Delay**

**Standard Time Delay (WC1 Series)**

A fixed inverse time delay is incorporated in all overcurrent relays and is represented by the typical curves shown.

**Adjustable Time Delay (WCT1 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**

Part Number	WC1 & WCT1
Line Current .....	Single Phase, AC current, 50-400 Hz Direct or from CT
Control Voltage .....	See Part Number Selection
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 C37.90B ANSI/IEEE
Operating Temperature .....	-40°C to +70°C
Temperature Drift .....	± .05%
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 28 VDC

**PART NUMBER SELECTION**

Sample Part No. WCT1-48DC-5-B  
 Type: \_\_\_\_\_  
 WC1 = Per Time Curves  
 WCT1 = 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

See next pages for 3-phase types and consult factory for additional models.

**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 WCT1 only) will increase the time delay.

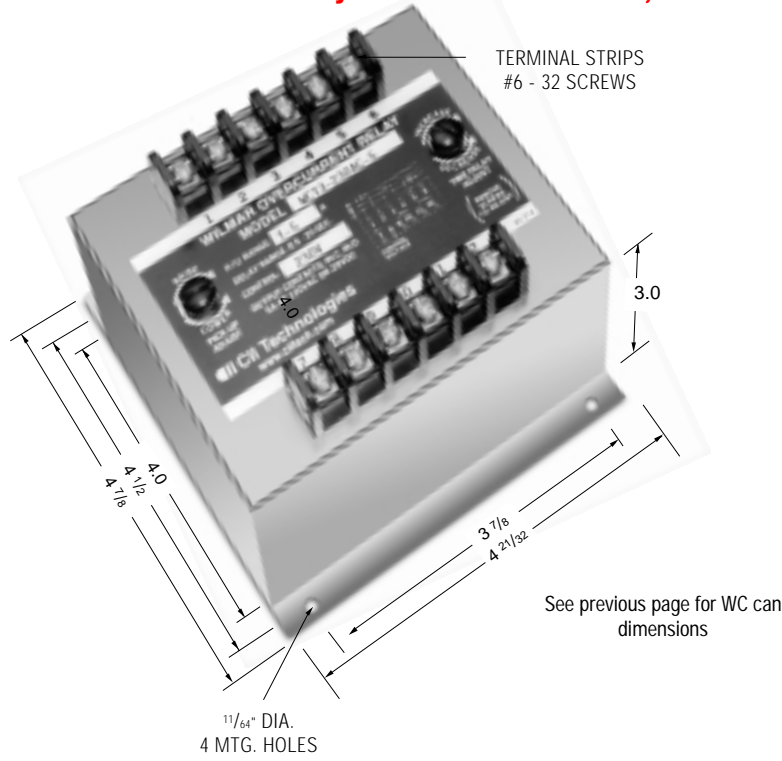
**WILMART™ Protective Relays – WC3 & WCT3 Series, Overcurrent**

**Function:** 50/51

- ANSI/IEEE C37.90-1978
- UL file No. E58048
- CSA file No. LR61158

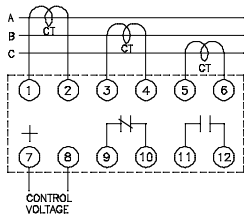


Current sensitive relays are available for single and three phase applications. Voltage controlled overcurrent relays protect generators against fault currents below the full rated value, when the fault produces a voltage drop as in the case of short circuits or grounds. Phase balance relays are available 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.



See previous page for WC can dimensions

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



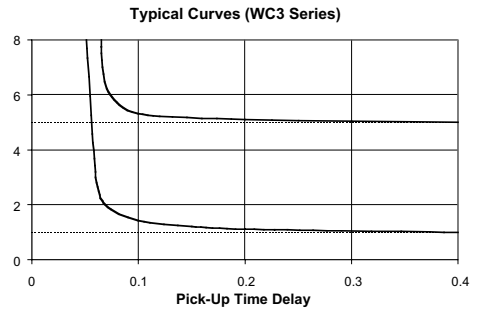
**Time Delay**

**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	
Part Number	WC3 & WCT3
Line Current .....	Three Phase, AC current, 50-400 Hz Direct or from CT
Control Voltage .....	See Part Number Selection
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

PART NUMBER SELECTION	
Sample Part No.	WCT3-48DC-5A
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 to 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

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

**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.