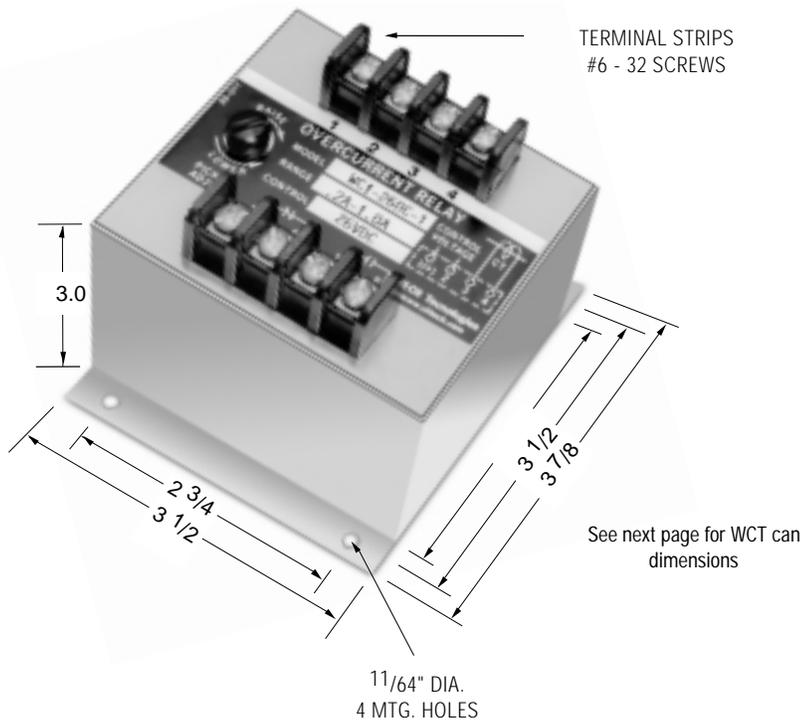


WILMART™ Protective Relays – WC1 & WCT1 Series, Overcurrent

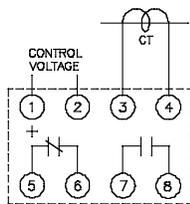
Function: 50/51

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



See next page for WCT can dimensions

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



Time Delay

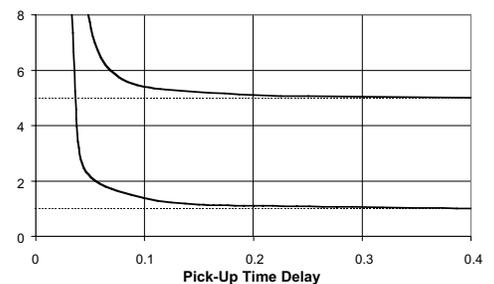
Standard Time Delay (WC1 Series)

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.

Typical Curves (WC1 Series)



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.

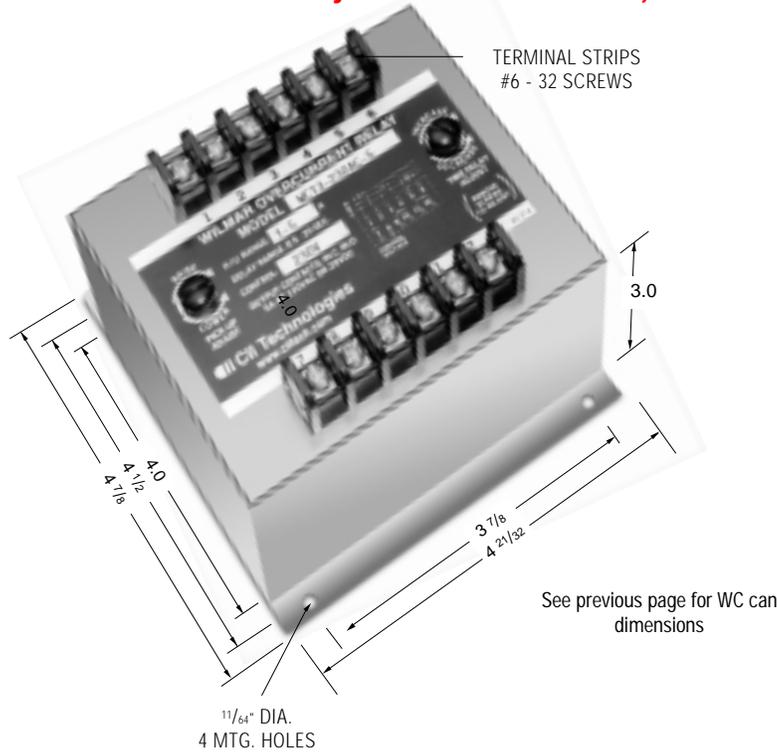
WILMART™ Protective Relays – WC3 & WCT3 Series, Overcurrent

Function: 50/51

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

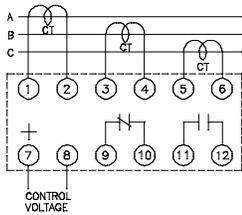


Current sensitive relays are available for single and three phase applications. Voltage controlled overcurrent relays protect generators against fault currents below the full rated value, when the fault produces a voltage drop as in the case of short circuits or grounds. Phase balance relays are available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



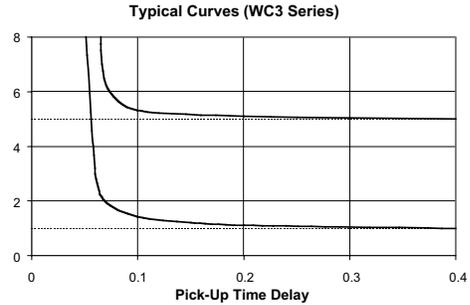
Time Delay

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.

THREE PHASE OVERCURRENT RELAYS ORDERING INFORMATION

TYPE OF OPERATION

CONTROL VOLTAGE

AC CURRENT RANGE

TYPE	CODE
PER TIME CURVES	WC3
ADJUSTABLE TIME DELAY	WCT3

VOLTAGE $\pm 15\%$	CODE
26 VDC	26 DC
48 VDC	48 DC
125 VDC	125 DC
120 VAC	120 AC
230 VAC	230 AC
380 VAC	380 AC
460 VAC	460 AC

TRIP ADJUST RANGE	CODE
.2 AMP — 1 AMP	1
1 AMP — 5 AMP	5
2 AMP — 10 AMP	10

EXAMPLE: WCT3-120AC-5

This indicates an Overcurrent Relay with an adjustable time delay up to 20 seconds. The control voltage is 120VAC, and the current trip point is adjustable from 1.0 amp to 5.0 amp.

STANDARD TIME DELAY (WC3 SERIES)

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

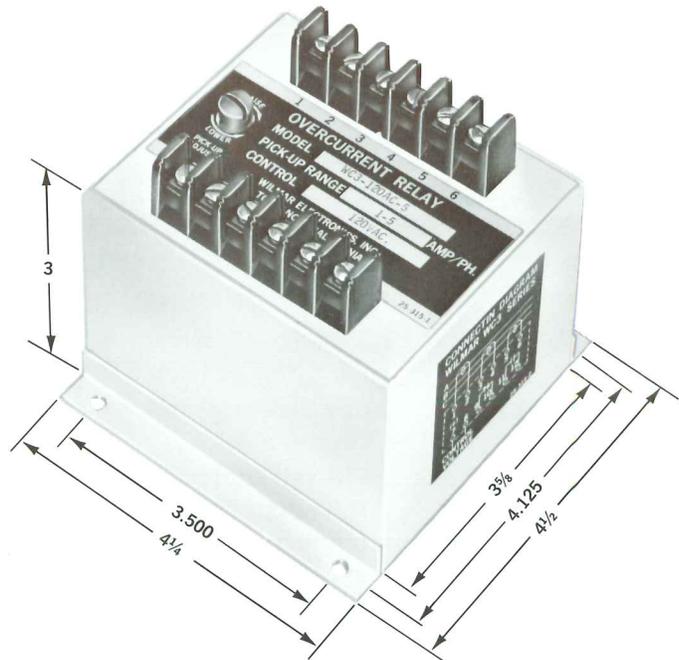
ADJUSTABLE TIME DELAY (WCT3 SERIES)

The time delay is field adjustable. The standard time delay can be increased by any value between 0.5 and 20 seconds.

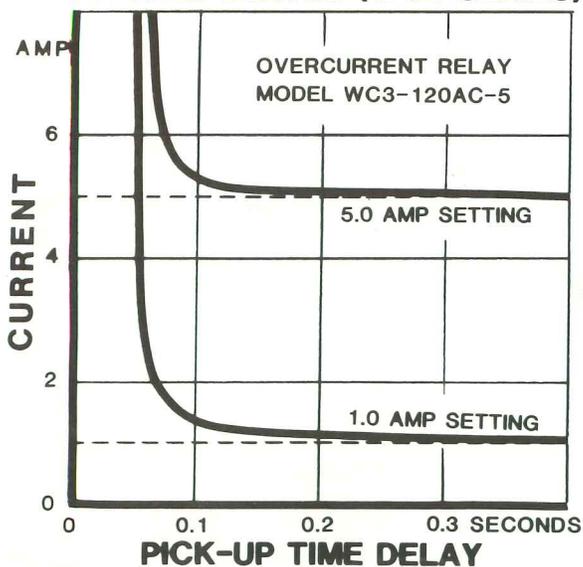
OUTPUT CONTACT OPTIONS

1. Two normally open (Add -A to model number)
2. Two normally closed (Add -B to model number)

MODEL WC3-120AC-5
(Std. Time Delay)



TYPICAL CURVES (WC3 SERIES)



CONNECTION DIAGRAM

