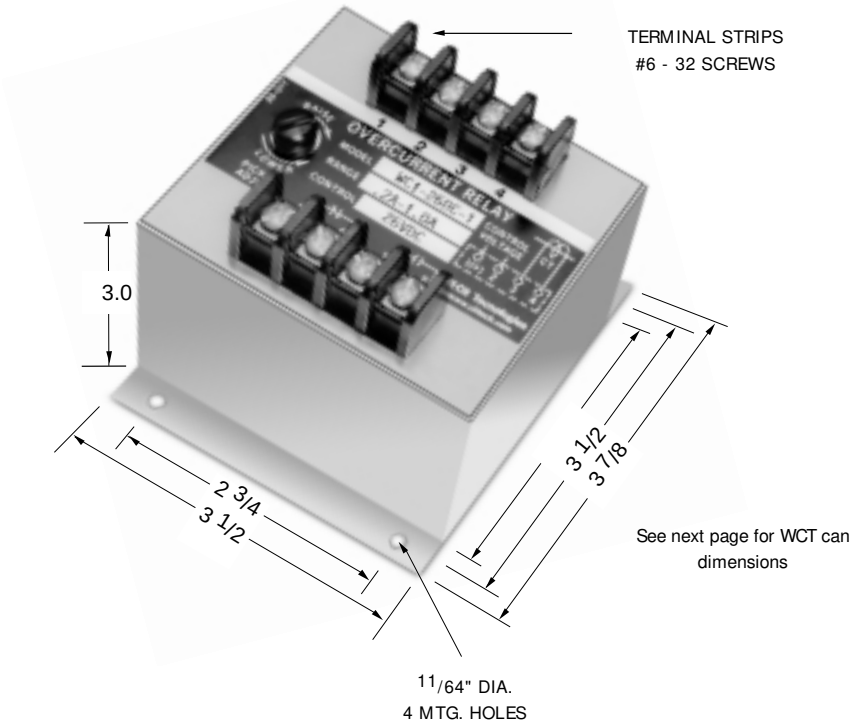
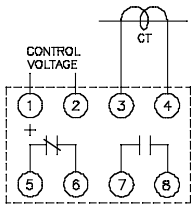
WILMAR™ Protective Relays – WC1 & WCT1 Series, Overcurrent



See next page for WCT can dimensions

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



Time Delay

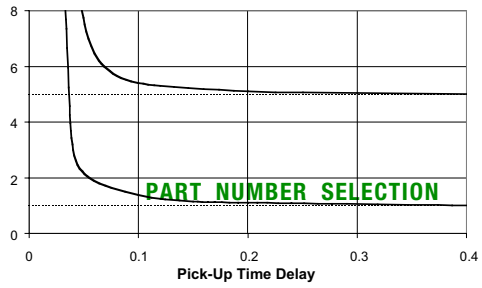
Standard Time Delay (WC1 Series)
A fixed inverse time delay is incorporated in all overcurrent relays and is represented by the typical curves shown.
Adjustable Time Delay (WCT1 Series)
The time delay is field adjustable. The standard time delay can be increased by any value between 0.5 and 20 seconds.

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)



PRODUCT SPECIFICATIONS

Part Number	WC1 & WCT1

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.

PART NUMBER SELECTION

Sample Part No. WCT1-48DC-5-B

Type:
- WC1 = Per Time Curves
- WCT1 = Adjustable Time Delay

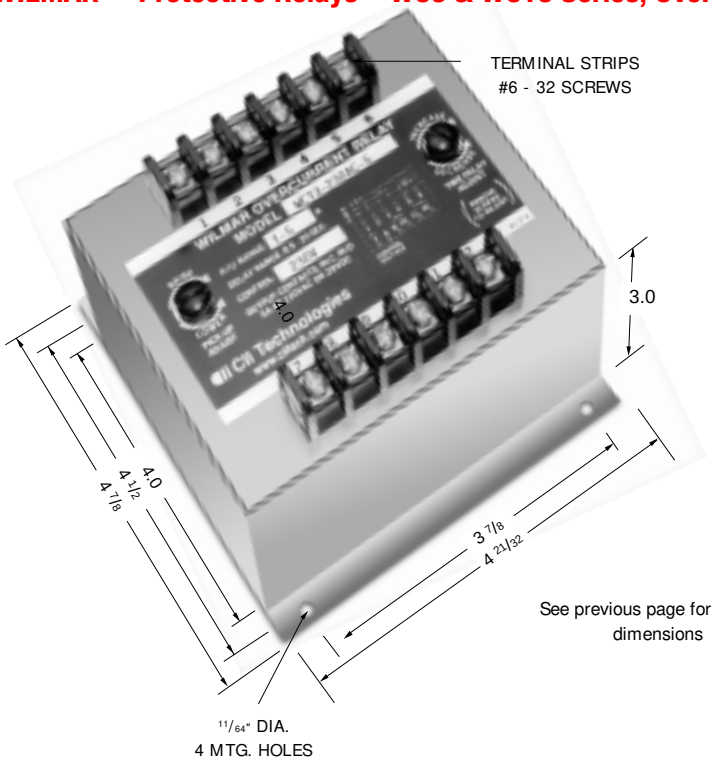
Control Voltage (+/- 15%)
- 26 DC
- 48 DC
- 125 DC
- 120 AC
- 230 AC
- 380 AC
- 460 AC

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

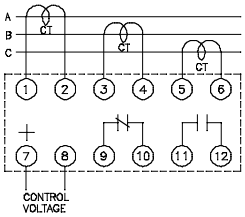
See next pages for 3-phase types and consult factory for additional models.

WILMAR™ Protective Relays – WC3 & WCT3 Series, Overcurrent



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

Notes:

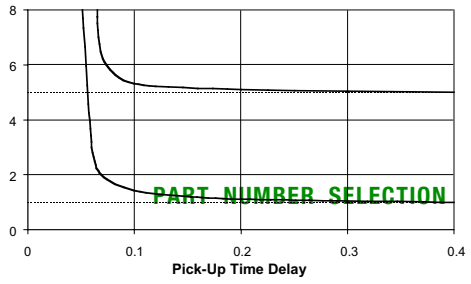
1. Remove black screws for access to the current pick-up and the time delay adjustment.
2. Clockwise rotation of the pick-up adjustment will raise the current trip point.
3. Clockwise rotation of the time delay adjustment, (Type WCT3 only) will increase the time delay.

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 (WC3 Series)



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.

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 ±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

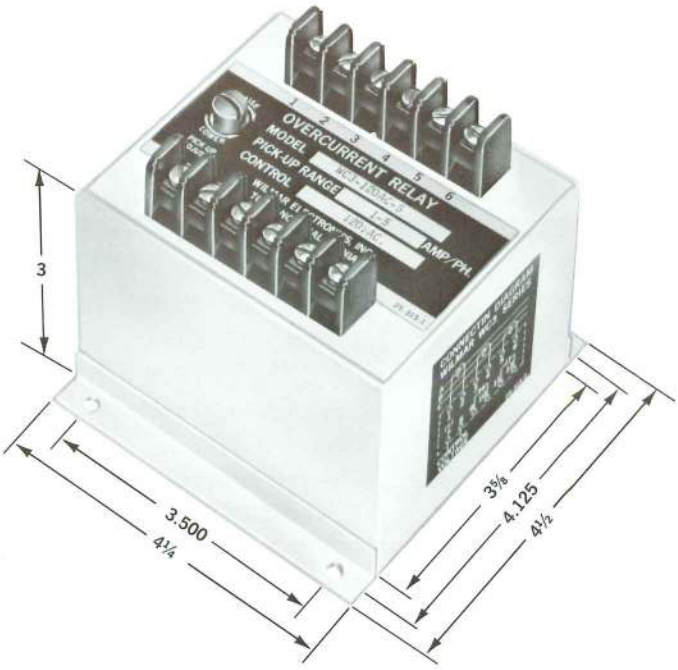
EXAMPLE: WCT3-120AC-5
This indicates an Overcurrent Relay with an adjustable time delay up to 20 seconds. The control voltage is 120VAC, and the current trip point is adjustable from 1.0 amp to 5.0 amp.

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.

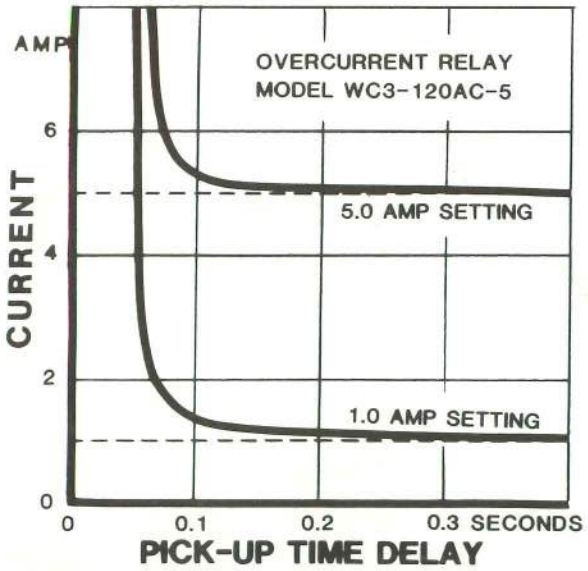
ADJUSTABLE TIME DELAY (WCT3 SERIES)
The time delay is field adjustable. The standard time delay can be increased by any value between 0.5 and 20 seconds.

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