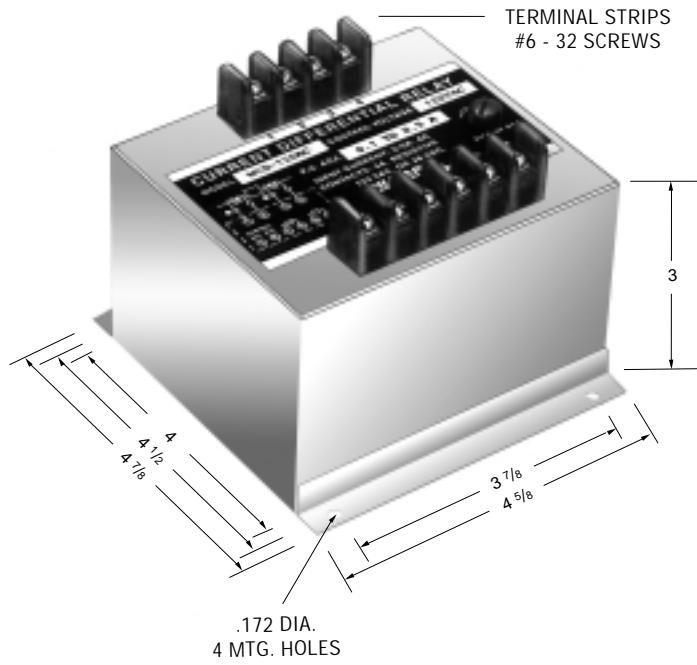


WILMAR™ Protective Relays – WCD Series



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

Function: 87

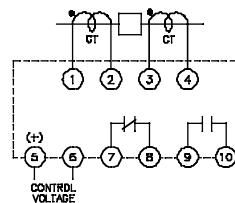
- ANSI/IEEE C37.90-1978

Current Differential Relays are used for the protection of transformers, motors and generators, by comparing the magnitude of the current entering and leaving the protected circuit. On a given phase winding, any difference between the two currents will indicate an internal fault; the relay will sense the vectorial difference between the two currents of the protected section and will initiate a quick disconnection of the unit, to prevent disastrous consequences.

The relay may also be used to protect internal faults on transformers, such as: ground faults, shorted winding, leakage between primary and secondary, etc. It will sense and compare primary vs. secondary currents, once the turns ratio has been taken into consideration.

Operation:

With control voltage applied, the output contacts (shown in the de-energized position) will remain de-energized as long as the difference between the two input currents remains below the preset trip value. The contact will transfer to the energized position when the current difference exceeds the trip value.



PART NUMBER SELECTION

Sample Part No. WCD-230AC-1-A

Type: WCD - Close Differential

Control Voltage VAC & VDC

120AC 25DC

208AC 48DC

230AC 125DC

380AC

416AC

460AC

525AC

575AC

Trip Adjustment Range

.5 = 0.1 amp to 0.5 amp

1 = 0.2 amp to 1.0 amp

2 = 0.4 amp to 2.0 amp

Options

A = Two normally open contacts

B = Two normally closed contacts

H = Contacts rated 3 amp at 125 VDC

P = Transient protection is provided in compliance with ANSI/IEEE C37.90-1978

Consult factory for additional models.

Notes:

- Remove black screws for access to the trip adjustments.
- Clockwise rotation of the adjustment potentiometer will raise the current differential trip point.
- The output contacts are shown de-energized.