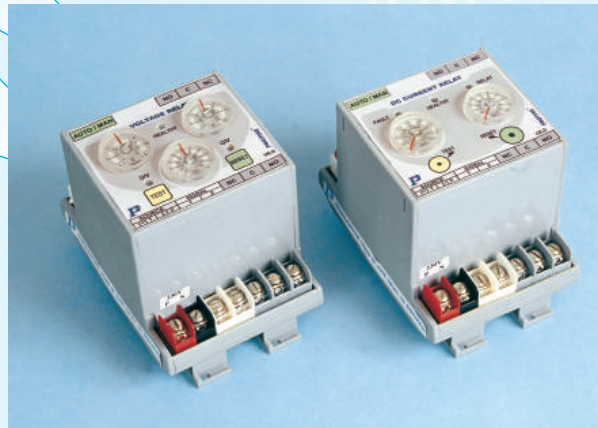


PROTIME[®]



CR-1 Series Current Relays

CR-1
CR-3
CR-1D

Special Features

- Relays with Auto/Manual Reset, & test facility.
- Wireless interiors makes it highly rugged & error proof.
- Possible to use with DC aux. supply for protection systems.
- High accuracy standards calibrated with +/-5% Accuracy.
- Wide range available.
- Over current or Under Current Relays

Technical Data

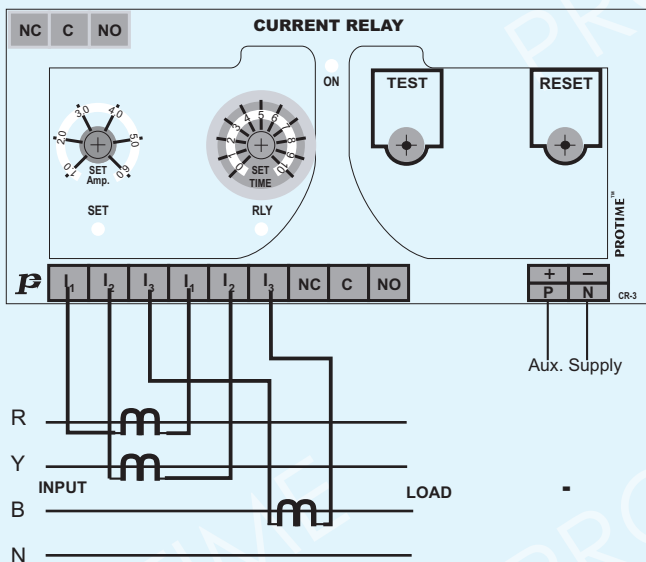
- | | |
|-------------------------------|---|
| 1) supply Voltage | - AC-110V,230V,380V,415V @50Hz
DC-12V,24V |
| 2) Permissible supply Voltage | - + 15% |
| 3) Output Contacts | - 2 C/O Relay (potential free) |
| 4) Switching duty | - 6A resistive at 250V AC or 24V DC |
| 5) Electrical Life | - 10 ⁵ operation at designed switching duty |
| 6) Relay Status | - De-energised in normal conditions |
| 7) Signal | - From CT- 5A Secondary/Shunt (for DC), CATIII |
| 8) Range | - 20% to 120% = (1A to 6A) For 5A C.T.Secondary |
| 9) Time Delay | - 0 - 10Sec (Settable) |
| 10) Mounting | - on any standard mounting channel |
| 11) Reset | - User selectable Auto/Manual Reset |
| 12) Approximate Weight | - For CR-1= 150gm
For CR-3= 350gm |
| 13) Dimension | - CR-1:- 77mm(W) x 55mm(H) X 110mm(D)
CR-3:- 112mm(W) x 55mm(H) X 110mm(D) |

OPERATION

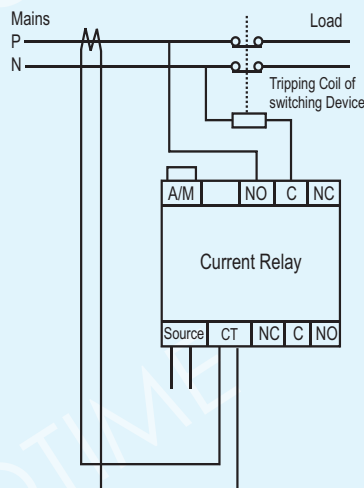
The current relay monitors the current flowing through the circuit continuously through secondary of C. T which is in the current path. For 1 phase only one C. T. is required & for 3 phase one C.T. Per phase is required. When current signal goes out of the range selected on the dial, the relay status will change. In case of 3 phase current relay, each phase current is sensed separately to provide protection. The relays are provided with time delays. For DC Current relays the signal is taken from Shunt connected in (preferably Negative path) circuit.

Connection Details

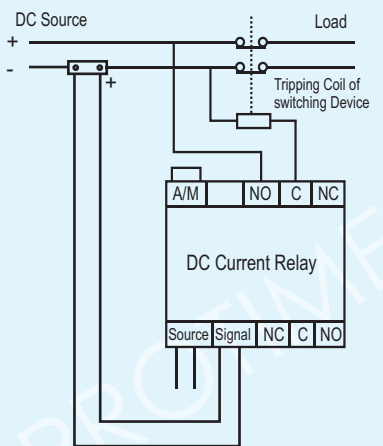
CR-3 in 3-phase circuit



CR in Single Phase System



CR in DC System



How To Order CR?

Ordering Pattern-

CR-3 - S - C - 30S - 5

Series

CR-3: Current Relays for 3-Phase Applications
 CR-1: Current Relays for 1-Phase Applications
 CR-1D: Current Relays for DC Applications

Terminals

S - Screw type terminals
 C - Cage type terminals (Screwless)

Current Range

A-10 to 100%
 B-50% to 100%
 C-20% to 120%

Time Range

10s-upto-10 secs.
 30s- " -30 secs.
 60s- " -60 secs.

Supply

1-110V AC
 2-230V AC
 3-380V AC
 4-415V AC
 5-12 V DC
 6-24V DC