PROTIME®

EARTH FAULT RELAY

# N96 Digital Relays

**N96-DEFR**

## Special Features

- Programmable Digital Power Protection Relays with LCD displays
- Wide Time delay ranges with precise settings
- Designed using latest 12 bit Micro controllers
- True RMS Measurement
- 2 selectable tripping ranges
- C.B.C.T. Open/No signal fault indication
- RS 232/485 output-(Optional)
- 0-5V Analog output-(Optional)
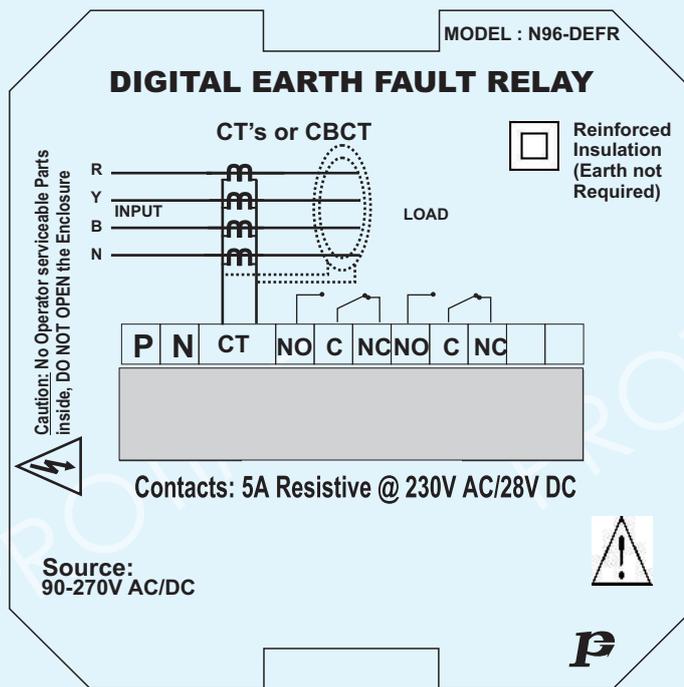- Wide power supply range from 90-270V AC/DC

## Technical Data

1) Supply Voltage - 90-270V AC/DC
2) Output Contacts - Two change over (potential free)
3) Switching duty - 6A resistive at 250V AC or 24V DC
4) Electrical Life - $10^6$ operation at designed switching duty
5) Relay Status - Normal - De-energised in normal conditions
   Fail Safe - De-energised in fault conditions
6) Signal - From CBCT
7) Range - A = 10-100%
   - B = 50-100%
8) Time Delays - Trip 0 - 10 Sec in steps of 100ms
9) Mode of operation - Under & Over current
10) Reset - User selectable Auto/Manual Reset
11) Mounting - Panel Mounting (Flush) CUTOUT=92 X 92mm
12) Approximate Weight - 200gm
13) Dimension - 96mm(W) X 96(H) X 80mm(D)

## OPERATION

The Digital Earth Fault relay monitors the current flowing through the circuit continuously through secondary of CT / CBCT which is in the current path. When current signal goes out of the range selected , the relay status will change .The relay checks CT/CBCT for its healthiness first & then starts monitoring fault current. The relays are provided with time delays . The C. T./CBCT is connected in earth fault current path. For e. g. Cable connected between Alternator neutral &ground, or Neutral of the circuit, or if CBCT is used it is connected to pass all 3/4 wires to pass through it to measure fault current. Digital EFR has a facility for user to program AUTO/MANUAL RESET and NORMAL/FAIL SAFE TRIPPING of relays. Also it has connectivity of RS232/485 as an additional option.

## Connection Details

MODEL : N96-DEFR

### DIGITAL EARTH FAULT RELAY

CT's or CBCT

Reinforced Insulation (Earth not Required)

Caution: No Operator serviceable Parts inside, DO NOT OPEN the Enclosure

R
Y
B
N

INPUT                LOAD

| P | N | CT | NO | C | NC | NO | C | NC |

Contacts: 5A Resistive @ 230V AC/28V DC

Source:
90-270V AC/DC

## HOW TO ORDER ?

**Ordering Pattern** (example)-  **N96-DEFR-1**

N96-DEFR   -   1

Code        *Tripping Range*
            A-10-100%
            B- 50-100%