

PROTIME



# N96 Digital Earth Monitoring Relays

N96-DEMR

## **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
- RS 232/485 output-(Optional)
- 0-5V Analog output-(Optional)
- Wide power supply range from 90-270V AC/DC

### **Technical Data**

- 1) Supply Voltage
- 2) Output Contacts
- 3) Switching duty
- 4) Electrical Life
- 5) Relay Status
- 6) Signal
- 7) Range
- 8) Time Delays
- 9) Mode of operation
- 10) Reset
- 11) Mounting
- 12) Approximate Weight
- 13) Dimension

- 90-270V AC/DC
- Two change over (potential free)
- 6A resistive at 250V AC or 24V DC
- 10 operation at designed switching duty
- Normal De-energised in normal conditions
  Fail Safe De-energised in fault conditions
- From Neutral & Earth
- -A = 0-10V
- Trip 0 10 Sec in steps of 100ms
- Under & Over current
- User selectable Auto/Manual Reset
  - Panel Mounting (Flush) CUTOUT=92 X 92mm
- 200gm
- 96mm(W) X 96(H) X 80mm(D)



#### **OPERATION**

A common feature of all computers & other electronic equipment is the sensitivity to supply Voltage fluctuations like Spikes etc. These may damage the hardware or corrupt the data on software. To ensure clean supply, computers are frequently installed on dedicated clean circuits. They also have inbuilt suppression & filtering circuitry. These Filters leak the unwanted components of electric supply to earth. In a facility/installation, Wher computers & simillar Equipments are an appreciable part of electrical load, the earthing is required to carry a significant amount of continuous leakage current. Any break in earth connection will mean that the isolated section will rise to potentially lethal voltage. This will also render the filter circuits ineffective making the computers prone to failures due to voltage spikes. Therefore as recommended in IS 3043(Section 39.2.4.2), It is necessary to provide a protective device to monitor the continuity of the protective earth connection & provide means of automatic disconnection in case of failure or at least give an audio alarm to user. PROTIME's N96-Digital EMR senses the rise in voltage between earth & Neutral Conductor to detect the integrity of the earthing connection. It is advisable to install such relays at the UPS supply points & couple of user points. Digital EMR 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**



