



# DC Earth Leakage Relays

ELR-1D

## **Special Features**

Available with Auto/Manual Reset & test facility .

- Compact & smart design to fit on any standard mounting channel.
- **Total Wireless interiors makes it highly rugged & error proof.**

Choice of Self powered Relays

Calibrated scale with ± 5% Accuracy & Indications for Healthy, Faulty & Relay ' ON'.

#### <u>Technical Data</u>

- 1) Supply Voltage
- 2) Output Contacts
- 3) Switching duty
- 4) Signal
- 5) Time delay (optional)
- 6) Reset
- 7) Setting Accuracy
- 8) Mounting
- 9) Dimension

- 90-270V AC/DC or 12 / 24V/48V DC.
- Two change over (Potential Free)
- 6A resistive at 24V DC or 240V AC.
- From Battery Terminals & Earth (12V,24V,48V,110V,220V,300VMax.)
- 0-10 secs. Settable
- Auto/Manual reseting facility.
- ±5 % of Full Scale.
- On any standard mounting channel.
- 77mm(W) X 90mm(H) X 110mm(D).

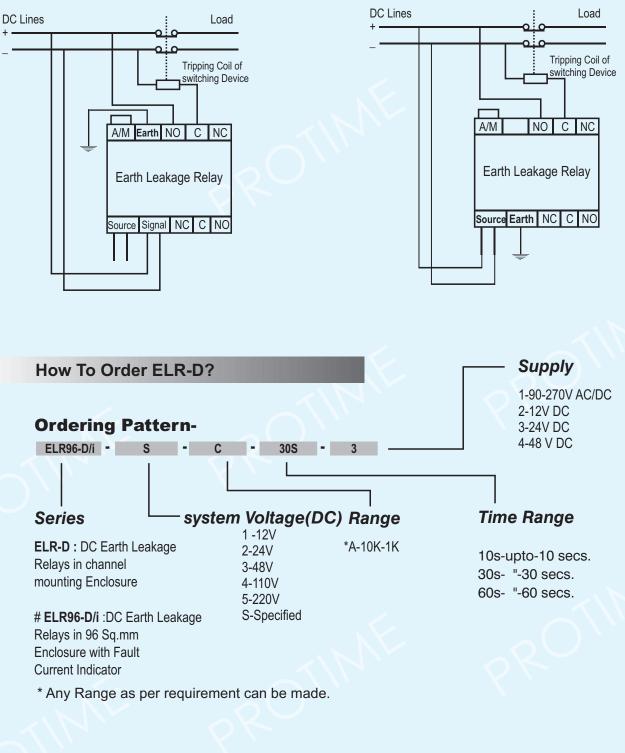
#### **OPERATION**

The relay senses the DC Earth leakage current for any equipments like Switch boards, Rectifiers, Battery Chargers by sensing Resistance between Positive- Negative Terminals of DC System & earth. Thus leakage current if any will be dependent on the resistance value between respective terminals, Higher the resistance, lower is the leakage current & vice versa. Lower resistance results in to loss of life or damage to equipment. PROTIME's Earth leakage relay senses leakage current through Resistor Bridge & energizes relay when Resistance value goes out of the range selected on the dial. The Relays are provided with user settable (0-10Sec) time delay.

## Protech Engineering & Controls Pvt. Ltd. Mumbai

#### **Connection Details**

## ELR in DC System with AC Auxiliary Supply



ELR in DC System with self Supply (12V/24V)

# Under development

Note:- Design & specification may change to our continuous developmental efforts