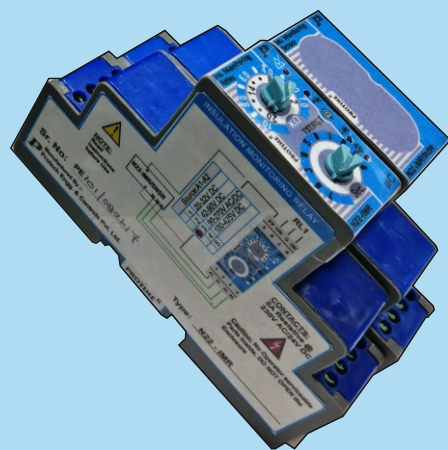


PROTIME[®]



Insulation Monitoring Relays

**For Unearthed Systems*

N22-IMR

Special Features

- Only DC Earth Leakage Solution with option of “Analog External Insulation Resistance Meter”
- Available with Auto/Manual Reset & test facility .
- Only of its kind Compact design IMR(DC ELR) suitable to fit on standard DIN channel
- NO EXTERNAL RESISTANCE REQUIRED
- Choice of Self powered Relays.
- Calibrated scale with $\pm 5\%$ Accuracy & Indications for +ve & -ve Fault, Healthy & Relay
- 4 Wide Ranges to cover most of standard Battery & DC System Voltages.
- Total Wireless interiors makes it highly rugged & error proof.

Technical Data

- | | |
|-----------------------|---|
| 1) Supply Voltage | - 1: 20-32V DC, 2: 42-90V DC, 3: 90-270V AC/DC, 4:100-425V DC |
| 2) Output Contacts | - One change over(Potential Free);Two C/O(N22-IMR/ERM) |
| 3) Switching duty | - 5A/6A resistive at 24V DC or 240V AC. |
| 4) System Supply | - From Battery Terminals
(A=20-40VDC, B= 48-90V, C= 100V-290V DC, D=300-500V DC)
*E=500-1000V DC) |
| 5) Time delay | - 0-10 secs. Settable |
| 6) Setting Range | - A:10K-1K/20K-2K B:50K-5K/100K-10K (Dual Range) |
| 7) Reset | - Auto/Manual Resetting facility. |
| 8) Setting Accuracy | - $\pm 5\%$ of Full Scale. |
| 9) Mounting | - on standard DIN mounting |
| 10) Dimension | - 22.5mm(W) X 80mm(H) X 110mm(D). |
| 11) Weight | - 100gm |
| 12) Enclosure | - ABS- Type: N22 |
| 13)Storage Temp. & RH | - 25°C, + 70°C up to 95% |

OPERATION

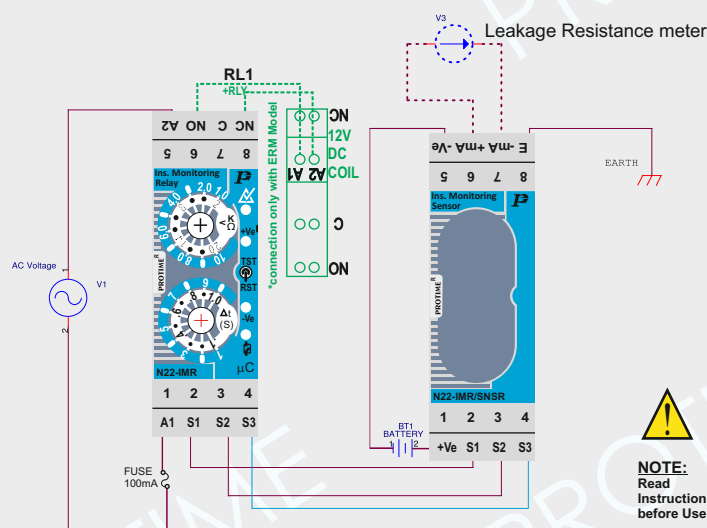
The relay senses the Insulation resistance of any unearthed system, Mostly suitable for DC Earth leakage protection for any equipments like Switch boards, Rectifiers, Battery Chargers. It senses Resistance between Positive & Negative Terminals of DC System & Earth.Cont.

Cont....

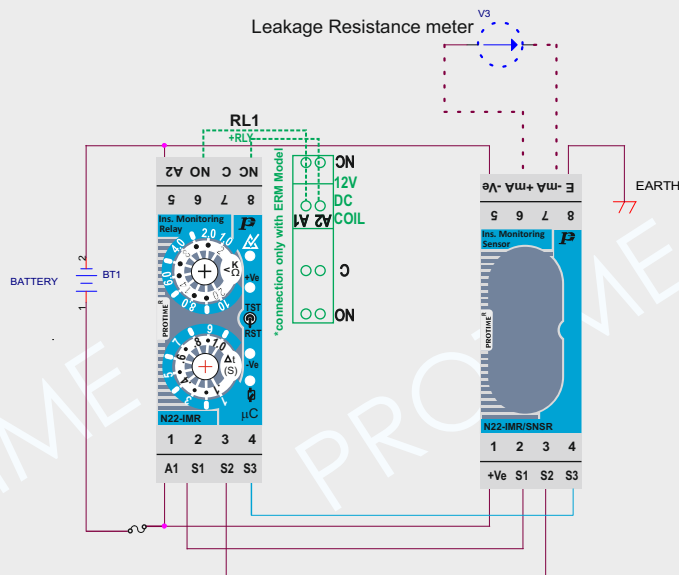
The leakage current if any will be dependent on the Insulation resistance value between respective terminals, Higher the resistance, lower is the leakage current & vice versa. Lower resistance results in to loss of life or damage to equipment. PROTIME's N22-IMR senses insulation resistance using Resistor Bridge principal & energizes relay when Resistance value goes below the value selected on the dial. The Relays are provided with user settable (0-10Sec) time delay. The relay is paired with suitable Sensor as per system voltage, & has a provision of connecting External Leakage resistance meter (Analog). Center infinity meter can be provided with calibrated scale to measure IR.

Connection Details

DC System with Separate Aux Supply



DC System with Self Supply



How To Order N22-IMR?

Ordering Pattern-

N22-IMR - 3 C - A - 10S - AM #ERM

Series
N22-IMR : Insulation Monitoring Relay

N22-IMR/SNSR:
Sensor for IMR

#N22-IMR/ERM:

Use ERM as suffix for 2 C/O (Optional)

Aux. Supply

- 1 20-32V DC
- 2 42-90V DC
- 3 90-270V AC/DC
- 4 100-425V DC
- S Specified

System Voltage(DC)

- A -20-40V
- B-42-90V
- C-100-290V
- D-*300-500V
- E-*500-1000V
- S-Specified

Range

- A-10K-1K/20K-2K
- *B-50K-5K/100K-10K

Time Range
10s-upto-10 secs.

Accessories (Optional)

AM: Analog Meter-calibrated

* Range B for System Voltage "D" & "E"
Ask for non-STD Range.

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