











Special features

- **──** Wide power supply range from 90-270V AC/DC
- ONLY Earth Leakage Relays with 30 steps of setting resolution with range of 30mA to 30A
- User Selectable Dual Time Delay Range of 0.1-1S & 1-10S
- Designed using latest Micro controllers with Dynamic BAR Graph Indicator
- True RMS Measurement
- Only ELR with user selectable 2 Set point in 2C/O.
- User Selectable Auto & Manual REST Facility with TEST Function
- RS 232/485 output-(Optional)
- 0-5V Analog output-(Optional)

Technical Specifications

INPUTS

Aux Supply Voltage 90-270V AC/DC (STD) Permissible range

Burden 5VA

from Protime CBCT Signal Input

Output

Relay contacts 1 C/O - 2 C/O User Configurable Alarm + Fault relay in 2 C/O

Switching Duty 6A @ 230V AC or 24V DC

Electrical Life 10⁵ Operation @ design switching capacity

Relay Status De-Energised in Normal condition

Mode of Reset Auto / Manual

Range

X: 30mA -30A Resolution of setting = 30mA-300mA * 1X / 10X /100X - 30 Steps **Tripping Range**

Time Delay Range 0.1-1.0 Sec / 1-10 Secs

Measurement Accuracy Class III

Mechanical

96MM X 96mm X 80MM(D) **Dimensions**

92MM X 92MM Cutout - Door Mounting Mounting

Approximate Weight 180 gms Type of Enclosure ABS

Conductor cross section - Flexible 2.5 Sq.mm Conductor cross section - Solid 4.0 Sq.mm Screw Tightning Torque 0.6 Nm

Environmental

Operating Temperature & RH -10°C, +55°C up to 80% Storage Temperature & RH -25°C, + 70°C up t0 95%

000000000

------0000000

(Earth Leakage Relay)

Operation:

PROTIME's latest N96-ELR-X/i Earth Fault Relay senses Earth Leakage current for any equipment like L.T Panels Switch boards, Generators, Motors, Transformers, etc. The Fault current if goes above the selected range on the current dial, the relay energies after the time delay selected on the Time dial. The CBCT is to be connected externally as per connection details below.

The N96 series is most easy with 3 levels 30 steps to set the fault current threshold (Trip) level from 30mA to 30A & Trip Time delay range. It is one of the most user friendly & flexible ELR having Easy Setting of Auto or Manual RESET & better time delay setting resolution due to dual range on same dial. The N96-ELR-2C/i has an advance feature of 2 set points (ALARM & TRIP set point) Where in ALM set point is in % of TRIP set point & is user configurable from 75% to 100% OF Trip set point, If selected at 100% the relay function shall be like 2 C/O ELR with Settable Hystersis from 5% to 50% as per user's application.

The 'Test' button provides facility to stimulate the fault condition & thus checks the system tripping.

The 'Reset' button provides manually resetting the relay. When link between A/M terminals is connected. Provision for EXT RESET push button is also provided.

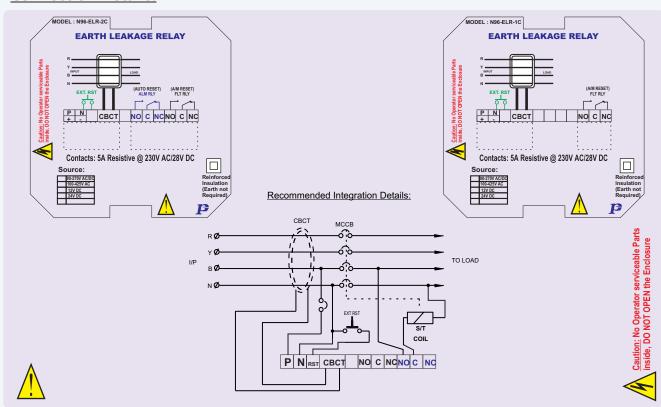
Auto/ Manual Reset:

User can configure Auto or Manual RESET in N96-ELR-1C/i model by entering Configuration mode.

N96-ELR-2C/i comes with by default Manual RESET mode. Facility to connect External RESET button is provided in both the models.

A dynamic BAR Graph indicator is provided to show fault current status in % of set TRIP level.

Connection Details:



How to Order:

Series	Type of Relay	Variant	Range	Aux Supply	System Supply	Time Delay	Optionals
N96	ELR	1C/i	X: 30mA-30A	1: 110V AC	C:100-750V AC	10S	-COM
		2C/i		2: 230V AC			
				3: 90-270V AC/DC			
				4: 415V AC			
				5: 12V DC			
				6: 24V DC			

For Example: N96-ELR-1C/i-X-3-C-10S is N96 Series Earth Leakage Relay with 1 C/O output having Aux supply of 90-270V AC/DC & System Supply of 100-750V AC

* COM= with RS-485 output

V1:04102024