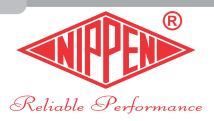
### **EARTH LEAKAGE RELAY**



# **ELR 96**



# **DIN Rail**



- 3 digits standard LED red display.
- Detection of Earth leakage.
- Manual and remote reset.
- 2 pole relay contacts.













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### EARTH LEAKAGE RELAY - ELR

Nippen earth leakage relay model has a high performance microcontroller based 3 digit 7 segment led display. It detects leakage cuurent well before it crosses threshold limits and isolates the supply instantly with the help of MCCB/ACB/OCB and contactor. The unit of ELR consists of two parts,



a) Basic relay b) Core balance current transformer(CBCT).

Nippen ELRs have the unique feature of a led display, we provide 2 model of relay - Din rail and panel mountable.

#### **Features**

Monitors True RMS earth fault currents.

1 rows of (14.2mm)7 segment led 3 digit bright red display.

Bar graph to indicate leakage current as in percentage.

Test and reset function.

CBCT open circuit detection.

Led indication for Mili amps, Amps, Trip.

#### **Electrical Specification**

Auxiliary supply: 230VAC default (+20%) 50Hz.

Burden: < 3VA max on Auxiliary supply.

Overload: x2 continuously, x10 for 3secs as per BS6253.

Current: CBCT secondary.

Alarm relay output: 50% of set value.

trip relay output: 80% to 90% of set value.

Relay status: normally energised.

Built in relay contact 5 Ampere.

User set-able wide time delay range.

0, 0.06, 0.15, 0.25, 0.5, 0.8, 1, 2.5, 5, 10 seconds.

Leakage current range in ampere with CT ratio of 1000:1.

0.03, 0.1, 0.5, 1, 3, 5, 10, 20, 30.

Trip Relay rating: 8Amps 250Vac.

Fail safe Relay rating: 3Amps 250Vac.

#### Relevant Standard

EMC: IEC 61326 / Immunity: IEC 61000-4-3 / Safety: IEC 61010-1-2001

Protection: Ip52 Front / Ip20 Terminal block.

#### **Applications**

Control and relay panels.

Generator Control panels.

Protection systems

#### User set-able parameters

Current range, Delay.

#### **Environment**

Ambient: -10° C to 55° C.

Storage: -20° C to 70° C.

Humidity: <95% RH ...... Non condensing

#### **Mechanical Dimensions**

Front: 96mm x 96mm / Depth 54mm. weight 295 gm.

Panel Cut Out: 91mm x 91mm ± 0.1mm

Din rail: Width 45 x Height 90 x depth 75mm. weight 245 gm.

Connector: ABS & Pcb terminal block.

Casing: Flame retardant ABS.

#### Available model of CBCT

NCB 35mm, NCB 70mm, NCB 120mm.

NCB 210mm optional on request.

#### **CBCT Specifications**

System voltage: 720 max.

Insulation voltage: 3 KV for 1 minute.

System frequncy: 50Hz......60Hz.

Maximum load: 1KA continuous, 5KA for 1.5 seconds

Terminal conductor :  $\leq 2.5$ mm.

Current ratio: 1: 1000 (any other CT ratio on request).

Distance between toroid and relay: < 50 metres.

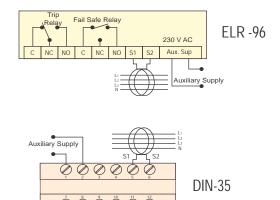
Operating temperature : -20 C to + 70 C

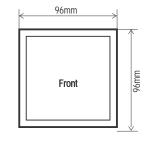
Enclosure: Flame ratardant ABS...

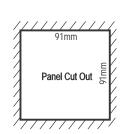
Complaince with: IEC 44-1 and IEC 185.

Mounting: Four fixing slots.

#### Typical Diagram









Earth Leakage Relay Reliable Performance