

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 current 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.
- 1rows of (14.2mm)7 segment led 3digit 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 frequency : 50Hz.....60Hz.
- Maximum load : 1KA continuous, 5KA for 1.5 seconds
- Terminal conductor : ≤ 2.5mm²
- 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 rataradant ABS..
- Compliance with : IEC 44-1 and IEC 185.
- Mounting : Four fixing slots.

Typical Diagram

