Type: ELRF

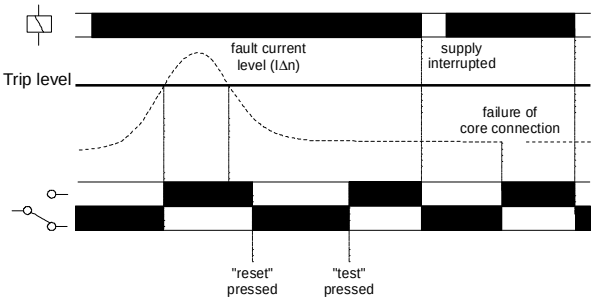
Earth Leakage Relay (Fixed) - Type A

- **Designed to monitor and detect earth fault currents using separate toroid**
- **Fixed sensitivity of 30mA, 100mA or 300mA***
- **"Test" button for simulation of a fault condition**
- **"Reset" button for clearing of fault condition**
- **SPDT relay output**
- **LED indication of fault condition after unit has tripped**

Dims:
W. 70mm

Terminal Protection to IP20

FUNCTION DIAGRAM



INSTALLATION AND SETTING

- BEFORE INSTALLATION, ISOLATE THE SUPPLY.
- Connect the unit as shown in the diagram below.
- Apply power. The output relay will remain de-energised.
- The output relay will energise if:
  - a, the fault current level exceeds the fixed trip level (IΔn)
  - b, there is a failure of the connection between the relay and the toroid
- A "fault" or "tripped" condition is indicated by the red LED illuminating.

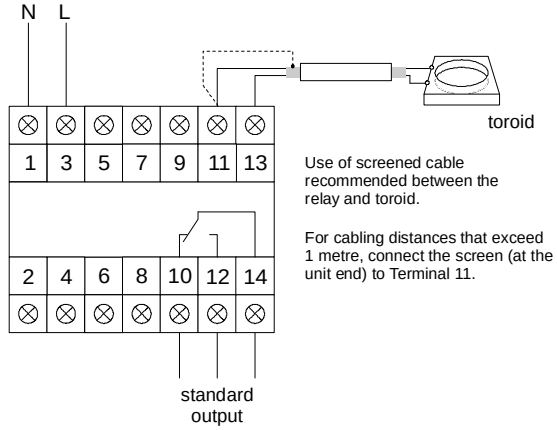
Fault Simulation

- Pressing the "test" button allows a fault to be simulated. The output relay will operate accordingly.
- Pressing the "reset" button after a fault has occurred restores the unit back to its normal operation. (Note that the relay can also be reset by removing then re-applying the supply).

Note:
The operating function of this unit is classed as a Type A ⩙ for which tripping is ensured for residual sinusoidal alternating currents and residual pulsating direct currents, whether applied suddenly or slowly rising. Additionally, this unit is protected against nuisance tripping ⎍.

This unit should be installed in conjunction with the latest wiring regulations and practices (IEE, etc).

CONNECTION DIAGRAM



TECHNICAL SPECIFICATION

Supply voltage Un:	220/240V AC 50/60Hz
Residual voltage:	500V AC max.
Supply variation:	90 - 110% of Un
Isolation:	Over voltage cat. III
Power consumption:	≈ 5 VA
*Sensitivity IΔn:	30, 100 or 300mA (see below)
Time delay:	instantaneous
Memory:	storage of the leakage fault and reset with "reset" button
Toroid withstand capacity:	50kA for 200mS
Distance between toroid and relay:	50 metres (max.)
Ambient temp:	-5 to +60°C
	-5 to +40°C (in accordance with IEC 60755)
Relative humidity:	+95%
Output:	SPDT relay
Output rating:	AC 1 250V AC 8A (2000VA)
	AC 15 250V AC 2.5A
	DC 1 25V DC 8A (200W)
Electrical life:	≥ 150,000 ops at rated load
Housing:	Grey flame retardant Lexan UL94 VO
Weight:	≈ 190g
Mounting option:	On to 35mm symmetric DIN rail to BS5584:1978 (EN50 002, DIN 46277-3)
Terminal conductor size:	≤ 2.5mm² stranded
	≤ 4mm² solid
Approvals:	Conforms to IEC 60755, 50081-1, 50081-2, 50082-1 & 50082-2. CE Compliant

ORDERING

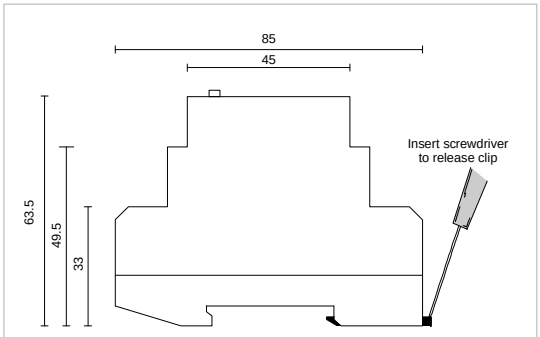
*Please state sensitivity when ordering. The suffix which should follow ELRF is 0030 (30mA), 0100 (100mA) or 0300 (300mA) .
E.g. ELRF-0300

ACCESSORIES

Toroids: BZCT035 - 35mm
BZCT070 - 70mm
BZCT120 - 120mm
For more information see separate data sheet

Note: The 120mm toroid IS NOT suitable for use with 30 and 100mA units.

MOUNTING DETAILS



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