

Type: ELR-IF-0030, 0100 & 0300

Earth Leakage Relay with Integral Toroid (Fixed) - Type A

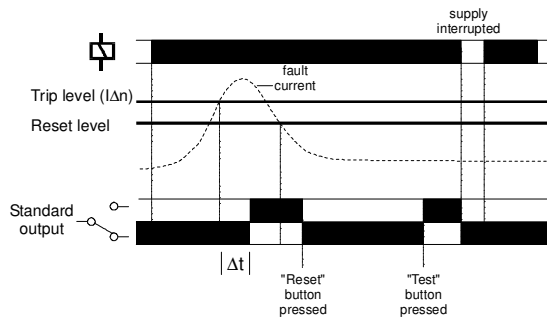
- DIN Rail or Surface mount enclosure
- Integral toroid - 25mm Ø
- Designed to monitor and detect true RMS earth fault currents
- Protected against nuisance tripping
- Microprocessor controlled
- Three versions available - 30mA (instantaneous), 100mA (100mS) or 300mA (100mS)*
- Separate "Test" and "Reset" push buttons
- SPDT relay output 5A
- Green LED indicates presence of power supply
- Red LED indicates fault current is >50% of IΔn if flashing, or relay has tripped if permanently illuminated

Dims:
W. 70mm
H. 110mm
D. 37mm



Terminal Protection to IP20

FUNCTION DIAGRAM



INSTALLATION

- **BEFORE INSTALLATION, ISOLATE THE SUPPLY.** Installation work must be carried out by qualified personnel.
- Connect the unit as shown in the diagram below.
- **DO NOT** install the unit in close proximity to equipment generating high magnetic fields.
- Ensure the conductors that pass through the aperture are straight, and as central as possible. Ensure the conductors do not cause any undue stress on the unit itself.

Applying power

- Ensure the voltage to be applied to terminals "a" and "b" corresponds with the voltage marked on the unit itself.
- Apply power, the green "supply on" LED will illuminate. The output relay will remain de-energised and red "tripped" LED extinguished. If the fault current is >50% of IΔn, then the red LED will flash to provide early indication that a fault current is present. When the fault current exceeds the fixed trip level (IΔn), the output relay will energise and red LED illuminate after the fixed delay (Δt).
- The relay will now remain in a latched condition until reset.

Fault simulation (Test mode)

- The unit can be placed into a fault condition by pressing the "Test" button on the unit. The output relay will energise.
- Press the "Reset" button on the front of the unit to reset the unit. The output relay will de-energise.
- The unit can also be reset by interrupting the power supply.
- To satisfy regulations, it is recommended that the device be tested periodically to ensure correct operation.

Troubleshooting

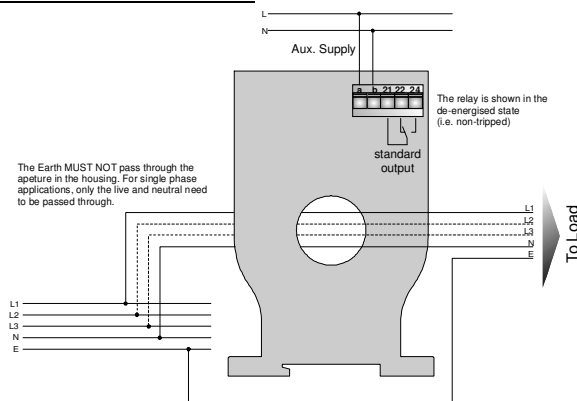
- If the unit fails to operate correctly check that all wiring and connections are good.

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 Δn . This unit will also satisfy the requirements for Type AC devices which only need to detect residual alternating currents.

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

CONNECTION DIAGRAM



MOUNTING DETAILS

