

ELR101

Earth Leakage Relay

Safe and Simple Earth Leakage Protection for Motor Control



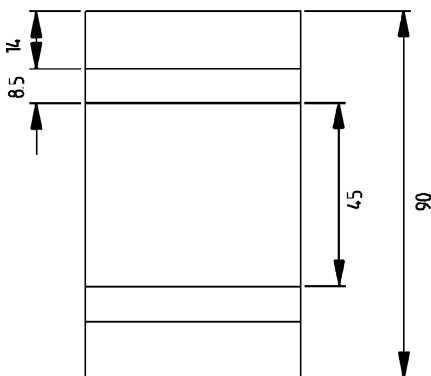
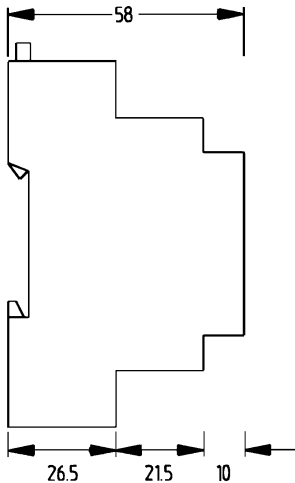
- **Safe to Reset**
 No power necessary for a Reset - Can be carried out on a totally isolated panel
- **Fail-Safe operation**
 Alarm condition flagged in the event of Power Loss
- **Wide Trip Range and Trip Delay**
 30mA to 36 Amp. 0.1 second to 10 seconds
- **Protected against False Reset**
 Alarm condition is latched and cannot be cleared by a Power Loss

ELR101 is an earth leakage trip relay designed to give a simple system of protection for motor control gear.

It operates from one of a dedicated range of special core balanced current transformers which, combined with the sensitivity control, give an overall trip range from 30mA to 36 Amps. A trip delay is settable between 0.1 and 10 seconds. These two user controls cater for a wide range of installations. In the event of a trip occurring, **the reset operation may be carried out with the panel totally isolated - with no auxiliary supply to the ELR101.** The trip condition is signalled on isolated, double pole, changeover relay contacts.

A test push button provides a method of checking for correct operation, a green LED indicates the relay is powered, while a red LED shows a trip condition. The relays are "Fail Safe", alarm conditions are flagged in the event of power loss.

All transformers have a test winding, allowing simple testing of the whole system - Relay & Transformer.



SPECIFICATION ELR101

| | |
|-------------------------|---|
| Auxiliary Supply | 230 or 115VAC (±15%) 50-60Hz 5VA Internal Fuse 50mA (T) |
| CT Input | 6mA Nominal FS |
| Relay Contacts | Double Pole Changeover 5A, 230VAC, 120W Resistive 2.5A, 230VAC, 75W Inductive |
| Isolation | 2.5kV, 1 minute (CT/Relay/Supply) |
| Terminals | 4mm ² max. Cable Size |
| Trip Delay | 100ms to 10 seconds |
| Accuracy | ±5% of preset value |
| Trip Current | 30% to 120% of CT Sensitivity |
| Accuracy | ±10% of preset value |
| Enclosure | DIN 43880, 3 modules Wide Noryl UL94VO |
| Rail | DIN EN 50022 - 35mm |
| Environment | |
| Operating | -10°C - 60°C <75% Non Condensing |
| Storage | -25°C - 70°C < 85% Non Condensing |

Core Balance Current Transformers

| Part No | Trip Range | Internal Diam | Max FLC. |
|---------|---------------|---------------|----------|
| K1029 | 30 to 120mA | N/A | 5A |
| K1028 | 100 to 360mA | N/A | 15A |
| K1027 | 0.3 to 1.2A | N/A | 25A |
| K1025 | 0.3 to 1.2A | 23mm | N/A |
| K1024 | 1.0 to 3.6A | 37mm | N/A |
| K1023 | 3.0 to 12.0A | 55mm | N/A |
| K1022 | 10.0 to 36.0A | 100mm | N/A |
| K1021 | 10.0 to 36.0A | 72x290mm | N/A |
| K1020 | 3.0 to 12.0A | 72X290mm | N/A |

NOTE

The ELR101 and its associated CTs are designed to protect against fire hazard on electric motors **AND MUST NOT BE USED FOR LIFE PROTECTION**

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