

**ELD series**

**EARTH LEAKAGE DETECTOR UNITS**

A range of versatile and economical earth leakage detection relays. Each unit is housed in a robust, glass filled nylon case: an aperture in the casing allows the installation cabling to be passed through the integral core balance transformer.

The electronic circuitry combines a stable amplification of the transformer output with an ability to give high sensitivity and fast operating speeds. Detection of an earth fault results in the energisation and latching of the unit's SPCO relay. The unit is reset by momentarily removing the auxiliary supply.

Protection from excessive fault current and supply transients are fitted as standard, as is filtering to allow use with chopped waveform and variable drive applications. A 'test' facility is supplied in the form of a button, either pre-fitted into the unit's front facia or connected remotely.

Electrical connection on standard units is by a colour coded, 6 way flying lead, with terminal blocks available as an option. Each unit may be mounted on a front panel or back-plate using two 3mm threaded inserts; an optional mounting assembly (part no. EMA) is also available for front access back-plate mounting.

**Standard units include:**

- ELD2** Basic unit, with 20mS typical trip time. Fast response to earth leakage faults.
- ELD4** As ELD2, but with longer trip delays, 80mS to 5 secs. Prevents nuisance tripping in motor protection circuits and allows time discrimination in distribution networks.
- ELD5** As ELD4, but with an adjustable trip delay. Available in various time ranges up to 2 seconds.

**With options:-**

- 'VS' Adjustable trip current (via front facia potentiometer.)
- 'HT' High temperature specification (to +60°C ambient).
- 'TB' Screw terminal connectors instead of flying leads.
- 'RC' Special calibration and 1m wiring for use with remote CTs (for RTCs of >125mA).

Variations on our standard units and options are also available: please call with your requirements.

**When ordering, please specify:-**

- a) Product type number (ELD2, ELD5, etc.)
- b) Auxiliary supply voltage
- c) Trip current (fixed, or variable range for VS option)
- d) System frequency (50, 60 or 400 Hz.)
- e) Trip delay time (fixed or variable, according to model)
- f) Additional options, if required.

**Accessories:-**

**EMA** Mounting assembly for ELD series.

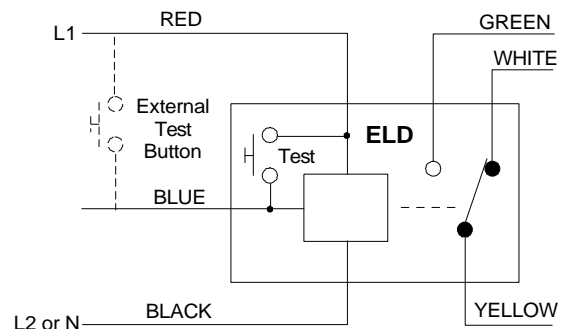
**Remote CTs** A range of remote core balance/current transformers, enabling specially calibrated ELD units to be used with larger cables. Available in a range of sizes, with or without a magnetic screen (see sheet M060101 for full details).



**Product Specification**

<b>Power supply:</b>	
operating voltages (ranges) <i>(all for 50/60Hz.)</i>	110V AC (100 – 120 V) 230 V AC (200 – 250 V) 415 V AC (380 – 440 V)
power consumption	< 100mA
<b>Control:</b>	
trip levels trip point accuracy	fixed and variable, 10mA to 30A to BS4293
<b>Relay output:</b> <i>(ratings for resistive load)</i>	
	SPCO contacts, rated 3A @ 250V AC/30V DC, 1A @ 440V AC
<b>Physical:</b>	
operating temperature	standard unit: -25 to +40°C 'HT' spec.: -25 to +60°C
weight (with EMA)	approx. 330 g

**Connection (standard unit)**



**Dimensions (mm)**

