



HR500



HR510



HR520



HR440



HR441

### **Earth Fault Relays**

#### Characteristics

- Provides monitoring of earth fault currents. When the fault current rises above the selected level, the output contacts of the
- Depending on the relay selected, it can have either fixed or adjustable sensitivity. A time delay is also available for selectivity purposes. The relays are linked with detection torroids, available in circular and rectangular variants.
- Positive safety: the relay trips in the event of a break in the relay/torroid link.
   Positive reset required after a fault is detected.
- Test button for simulation of a fault.
- Protected against nuisance tripping from transients.
- Conforms to BS EN 61008.

### **Technical Data**

# - Type A RCD protection. - Output: 1 C/O contact, 250V a.c. 5/6A AC1. - Visual display of fault by red LED. Specific device features of HR525 & HR534.

- Display of fault current before it triggers the relay (5% to 75%).
- Extra output contact (250V 0.1A max.) to enable remote indication if fault currents over 50% of Inn.
- Remote test and reset (opto-coupled).

### Connection capacity

- Relay 1.5 to 6mm<sup>2</sup>
  Relay torroid link: 2 wires, 25m max.
  Test and remote reset link: 3 wires, 20m max.
- For enclosure selection, please consult us.

Description	Characteristics	Width	Cat ref.	
Earth Fault Relay with Separate Detection Torroids				
Earth fault relay C/O contact 5A a.c.1	Instant trip, fixed sensitivity $I_{\Delta n} = 30\text{mA}$	1 Mod	HR500	
Earth fault relay C/O contact 5A a.c.1	Instant trip, fixed sensitivity $I_{\Delta n} = 300 \text{mA}$	1 Mod	HR502	
Earth fault relay C/O contact 6A a.c.1	Adjustable sensitivity $I_{\Delta\Pi}=30\text{mA},\ 100\text{mA},\ 300\text{mA}$ 500mA, 1A, 3A, 10A Instant trip or time delay 0.1 - 0.3 - 0.4 - 0.5 - 1 - 3 secs	3 Mod	HR510	
Earth fault relay C/O contact 6A a.c.1	Adjustable sensitivity $I_{\Delta \Pi} = 30$ mA, 100mA, 300mA 500mA, 1A, 3A, 10A LED optical scale Instant trip or time delay 0.1 - 0.3 - 0.4 - 0.5 - 1 - 3 secs	3 Mod	HR520	
Earth fault relay C/O contact 6A a.c.1	Adjustable sensitivity I <sub>∆n</sub> = 30mA, 100mA, 300mA 500mA, 1A, 3A, 10A LED optical scale Instant trip or time delay 0.1 - 0.2 - 0.25 - 0.3 - 0.4 - 0.5 secs	3 Mod	HR522	
Earth fault relay C/O contact 6A a.c.1	Adjustable sensitivity $I_{\Delta n} = 500$ mA, 1A, 3A, 5A, 10A, 20A & 30A LED optical scale Instant trip or time delay 0.1 - 0.2 - 0.25 - 0.3 - 0.4 - 0.5 secs	3 Mod	HR523	
Earth fault relay C/O contact 6A a.c.1 Trip / reclose input feature	Adjustable sensitivity $I_{\Delta n}=30$ mA, 100mA, 300mA, 500mA, 1A, 3A, 5A, 10A & 30A LCD Display Instant trip or time delay 0.02 - 0.1 - 0.3 - 0.4 - 0.5 - 1 - 3 - 5 - 10 secs	3 Mod	HR525	
Earth fault relay C/O contact 6A a.c.1 Solid State relay output Trip / reclose input feature	Adjustable sensitivity I <sub>An</sub> = 30mA, 100mA, 300mA, 500mA, 1A, 3A, 5A, 10A & 30A LCD Display Instant trip or time delay 0.02 - 0.1 - 0.3 - 0.4 - 0.5 - 1 - 3 - 5 - 10 secs	3 Mod	HR534	

## Earth Fault Relay with Integral Torroids

Earth fault relay with integral	Adjustable sensitivity	4 Mod	HR440
torroid adjustable sensitivity	I <sub>Δn</sub> - 30mA, 100mA, 300mA,		
25mm <sup>2</sup> max. cable size	500mA, 1A & 3A		
	Instant trip or time delay		
	0.1 - 0.3 - 0.5 - 0.75 - 1 secs		
Earth fault relay with integral	Adjustable sensitivity	6 Mod	HR441
torroid adjustable sensitivity	I <sub>An</sub> - 30mA, 100mA, 300mA,		
35mm² max. cable size	500mA, 1A & 3A		
	Instant trip or time delay		
	01-03-05-075-1 secs		