

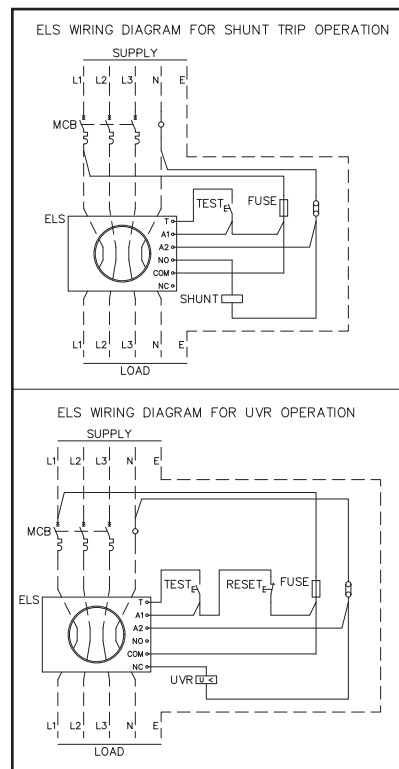
ELS series Earth Leakage Sensors

The ELS series of Modular Residual Current Devices was originally designed for incorporation within our range of Residual Current Protection and Distribution Assemblies, which have found wide usage in industry and education. The many features and benefits of Blakley devices has resulted in their extensive incorporation by panel builders within controlgear and switchgear assemblies, as well as by OEMs making special assemblies for applications ranging from UV Print Drying to medical machinery.

The standard ELS sensor incorporates the following:

- Suitable for load currents up to approximately 200 amps.
- Standard auxiliary voltages of 110 and 230 volts, 50 Hz. Sensors suitable for other voltages and frequencies are available, including for dc and high frequency supplies.
- Sensitivities from 5 mA to 500 mA to provide protection for people and plant.
- A volt free c/o contact to operate a shunt-trip, under volt release, contactor coil or indicator system (audible or visual).
- A 'Supply On' LED indicator
- An integral test button and remote test facility.
- A high level of immunity to the presence of DC current, which has lead to the widespread use of sensor based RCDs within the "Third Rail" areas of the UK rail network. The devices respond to all faults from AC to full wave rectified DC.
- When used in combination with a suitable circuit disconnecter, they provide Type AC RCD protection in accordance with BS EN 60947-2 annex M
- ELS sensors are not damaged by insulation tests at test voltages of up to 1000 volts DC.
- The response time is inversely proportional to the leakage level, which helps reduce spurious tripping due to transient spikes.
- ELS series sensors are set to trip at 90% of their rated tripping current, which helps to minimise nuisance tripping due to over sensitivity (BS EN 60947-2 permits a trip range that is between 50% and 100% of the rated tripping current).
- Load cables pass through the integral aperture of the sensor, which has an internal diameter of 32 mm.
- Sensors are housed within a white ABS enclosure, measuring 148H x 57W x 25D mm.
- Connections are via externally mounted, grab type terminals.

To order an ELS series sensor please specify the auxiliary voltage (110 or 230V, 50Hz) and the sensitivity (5, 10, 20, 30, 100, 200, 300 or 500 mA).



ELS series
Schematic Diagram



ELS series