

ELE and HELE series

The ELE and HELE series of single and three-phase RCD protection assemblies comprise of a Blakley ELS series core balance residual current sensor with a sensitivity from 5 mA to 500 mA, working in conjunction with an MCB with shunt-trip, in overcurrent ratings from 1A to 100A (the maximum rating of the ELE is 63A), housed in a surface mounting enclosure. The RCD protection complies with BS EN 60947-2 (annex M), as required by BS7671:2018 (18th Edition IET Wiring Regulations) and the protection provided is classified as Type AC. The overall assemblies meet the requirements of BS EN 61439-2.

The HELE series can incorporate options including: a Remote Trip Facility for connection to emergency stop buttons; a key switch to temporarily disable the RCD protection; a key switch to apply a permanent fault signal so that the assembly cannot be "ON" when the key is removed; power "ON" indicators.

ELE and HELE series assemblies are classified by Network Rail as "DC Immune", making them suitable for installation in "Third Rail" locations. Please see over the page for details of non-standard and multi-way ELE / HELE assemblies.

Enclosure

Surface mounting, sheet steel providing protection to IP30, finished in a White powder coat paint.

Dimensions

ELE, double-pole : 265H x 165W x 75D mm

ELE, TP&N : 265H x 220W x 75D mm

HELE, up to 63A : 375H x 266W x 115D mm

HELE, up to 100A : 440H x 335W x 115D mm

The ELE series incorporates k/os in the top and bottom and the HELE series incorporates removable top and bottom gland plates.

Rated Tripping Currents

The standard sensitivities are: 5 mA, 10 mA, 20 mA, 30 mA, 100 mA, 200 mA, 300 mA and 500 mA.

The point of trip of the RCD is approximately 90% of the Rated Tripping Current i.e. a 30 mA device will trip at 27mA.

Overcurrent Protection

MCBs are manufactured in accordance with BS EN 60947-2; "C" Type trips are fitted as standard. MCBs are available in the following ratings, DP or TP:

ELE : 1A, 2A, 4A, 6A, 10A, 16A, 20A, 25A, 32A, 40A, 50A and 63A

HELE : 10A, 16A, 20A, 32A, 40A, 50A, 63A, 80A and 100A

The HELE series can also incorporate 4P MCBs.

Supply Voltages

230V SP&N or 400V TP&N (400V models require a supply neutral).

110V versions can also be supplied.

Ordering Codes

ELE/##/C###/### and HELE/##/C###/###

At # - Insert 1 for 230V single-phase or 3N for 400V three-phase

At ## - Insert the MCB rating in amps

At ### - Insert the RCD sensitivity in milliamps

Typical ordering codes are:

ELE/1/C32/30 - ELE series, single-phase 230V supply, 32A DP MCB, 30 mA sensitivity

HELE/3N/C100/10 - HELE series, TP&N 400V supply, 100A TP MCB, 10 mA sensitivity

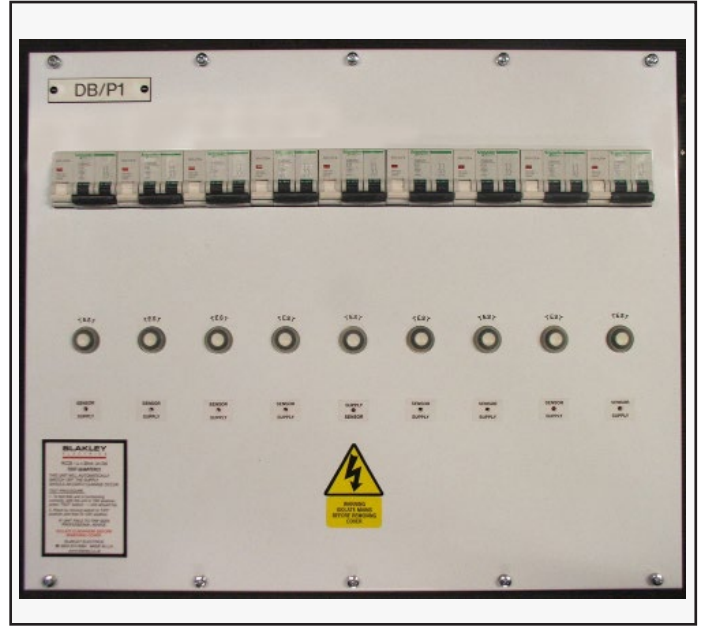


HELE/3N/C100/30



ELE/1/C32/30

Custom Built RCD Protection Assemblies Incorporating ELS series Earth Leakage Sensors



Multiway DC Immune ELE assemblies for Network Rail, available in enclosures rated from IP20 to IP54. Assemblies can be used in place of complete MCB distribution boards (i.e. incorporating a main switch with multiple outgoing DP MCB / 30mA DC Immune RCD protected ways) or each way can receive an unprotected supply from an MCB board and provide DC Immune RCD protection for that circuit.



100A RCD Assembly with key switch to disable the RCD and indicator to show protection status.



16A RCD Assembly with flush mounting 13A socket



100A RCD Assembly rated at IP44 with hinged window over MCB & RCD Test Button