



Instructions for MCCBs and
MCCBs with earth leakage devices (RCBOs)
Issue 130814

These systems are fully tested before leaving switchgear systems

The installer is responsible for ensuring that the installation conforms to the requirements of BS 7671 (Wiring regulations) and best safe working practice.

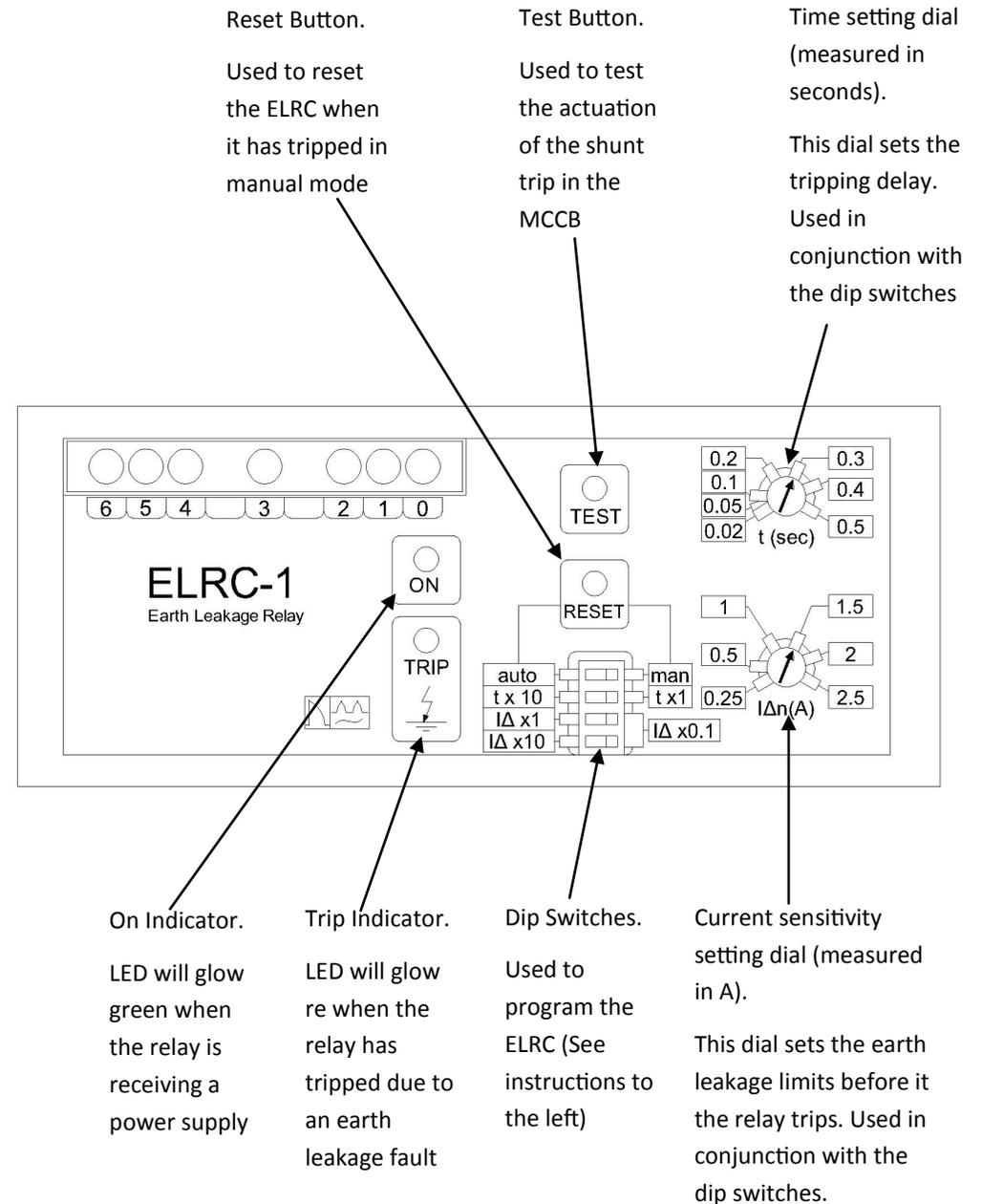
Panel Features

Enclosed MCCBs:-

- ◆ Fully load rates ABB TMAX Breakers.
- ◆ BSEN60947-2, IEC 60439-1 conformity.
- ◆ Settable overload and short circuit tripping limits.
- ◆ Door interlocked padlockable handle.

Enclosed RCBOs also feature:-

- ◆ Variable tripping current 0.025A - 25A.
- ◆ Adjustable time delay 0.02 - 5 sec.
- ◆ Auto or manual trip reset



*All Information was correct at time of publication. For full details please visit the Terasaki website - www.terasaki.co.uk

The Earth Leakage Relay Device (ELRC-1)

**Where fitted*

All Incoming supply cables must pass through the bore in the ELRC unit for the device to function.

The function for the dip switches are as follows (starting from the top)

- The first dip switch sets the ELRC into manual or auto reset (note auto does not reset the main switch, only the relay)
- The second dip switch sets the time multiplier. This works in conjunction with the top dial labelled 't (sec)' and multiplies the dial increments by either 1 or 10
- The bottom two dip switches set the current sensitivity multiplier. This works in conjunction with the bottom dial labelled ' $I\Delta n(A)$ ' and multiplies the dial increments by either 0.1, 1 or 10. E.G setting the dial to 0.5 will cause the relay to act on 50mA if both of these dip switches are to the right, 500mA if the bottom dip switch is set right and the second from bottom is set left and 5A if both of these dip switches are set to the left.

Pressing the test button will actuate the shunt trip and trip the MCCB in the panel.

Pressing the reset button is required any time the ELRC trips and is set into manual mode

The control wires have been made long enough and additional holes are provided in the back plate so the ELRC unit can be moved up the plate depending on whether you require more room to spread cables near the gland or near the switch terminals.

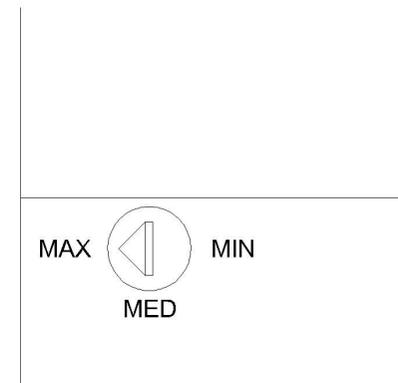
MCCBs with Thermomagnetic trips

**Where fitted*

MCCBs with thermo magnetic trips are identified by the dial to the bottom left of the device.

This dial can be turned to adjust the overload limit of the device.

- At MAX the device will operate at the nominal rating of the switch.
- At MED the switch will operate at the rating shown to the right of the dial (normally 85% of the switches nominal rating)
- At MIN the switch will operate at the rating shown to the right of the dial (normally 70% of the switches nominal rating)



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MCCBs with electromagnetic trips (LS/I)

**Where fitted*

L - The first panel (L) sets the protection against overload with long inverse time delay trip. The first set of dip switches sets the current limit (from the switches nominal rating down to 0.4 of the switches nominal rating) i.e, when in the 'up' position each dip switch will add the indicated increment to the minimum limit of 0.4 up to a max of 1. The second set of dip switches sets the time delay on tripping from 6-24 seconds

S/I - The second panel sets the short circuit protection. The first dip switch selects either 'S' which protects against short-circuit with inverse short time delay trip or 'I' which protects against short-circuit with instantaneous trip. The second set of dip switches sets the maximum overload limit in a similar way to those in 'L' up to a maximum of 10 times the switches nominal rating. The next dip switch sets the time delay for tripping from 0.1- 0.25 seconds.

The last two dip switches set the tripping parameters on the N pole. Sensitivity can be switched OFF or ON with either 50% or 100% of the LS/I limits.

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