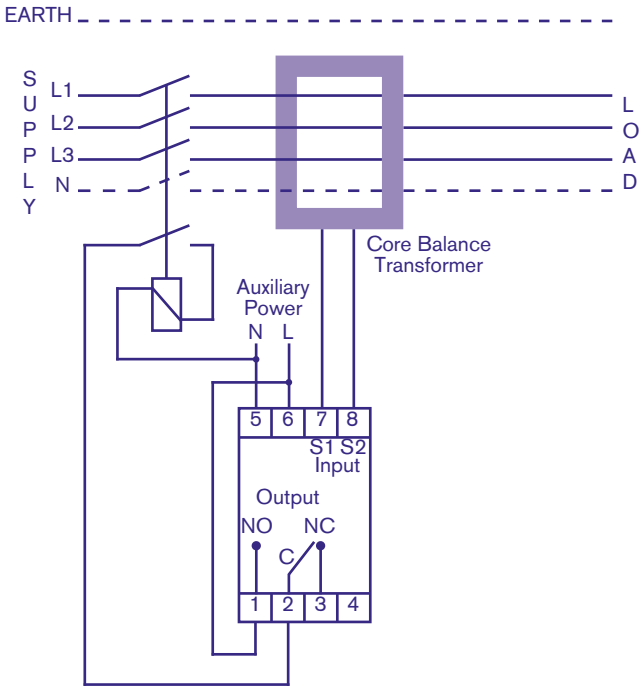
ELTIME CONTROLS

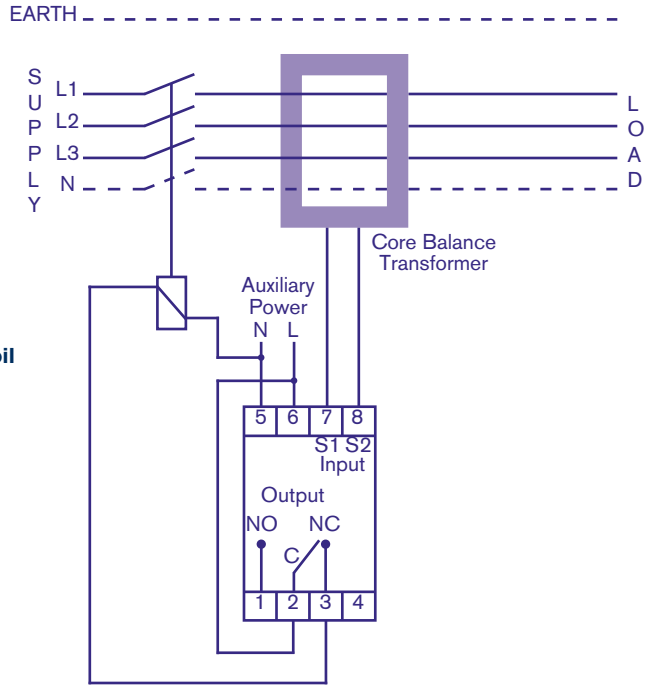
EARTH LEAKAGE RELAY - RN SERIES

Connections

Wiring connections for general MCB with shunt trip coil



Wiring connections for general MCB with undervoltage opening coil



Specification (Relay)

Trip Point, *In*:
- 30mA (RN-0.03), 300mA (RN-0.3)
- 30mA to 5A (RN-R) - see table
- Reset value < 50%*In*

Accuracy:
- < 2%

Time Delay:
- RN-0.03 & RN-0.3 Instant (<40ms)
- RN-R 0.02 to 5 seconds - see table

LED Indication:
- Green: 'On', Red: 'Trip'

Test Circuit:
- Manual push button

Relay Output:
- Single pole changeover contact
- 5A at 250Vac (cosØ=1) or 30Vdc
- 3A at 250Vac (cosØ=0.4)

Isolation:
- 2.5kV rms 50Hz for 1 minute between input / output / auxiliary

Power Supply:
- 110 or 230Vac ±10% (4VA)

Operating Temperature:
- -5°C to 50°C

Enclosure:
- Mount: 35mm DIN rail (DIN-EN 50022)
- Screw type terminals (4mm² entry)

Weight:
- 200g

Markings:
- CE marked

Specification (Core Balance Trans.)

Maximum Operating Voltage:
- 720Vac

Test Voltage:
- 3kV rms 50Hz for 1 minute

Calibration Temperature:
- 20°C ± 5°C

Operating Temperature:
- -5 to 50°C

Weight:
- See table

Markings:
- CE marked

Specification subject to change without notice.

RN-R Switch Settings

Trip Point, In (Amps)	Time Delay (seconds)
0.03 (30mA)	0.02 (20ms)
0.1 (100mA)	0.1 (100ms)
0.3 (300mA)	0.3 (300ms)
0.5 (500mA)	0.5 (500ms)
1	1
3	3
5	5

LED Indication

Power LED	Trip LED	Indication
On	Off	System OK
Blinking	On	Transformer continuity failure
On	On	Relay tripped - earth fault
On	Blinking every 2 sec	Current 25-50% of trip level (RN-R only)
On	Blinking every 1 sec	Current 50-75% of trip level (RN-R only)
On	Blinking every 0.5 sec	Current 75-100% of trip level (RN-R only)