

### Function

Residual current circuit-breakers ensure:

- The control and isolation of electrical circuits
- The protection of persons against direct and indirect contacts
- The protection of installations against insulation faults

They conform to both the residual current device standard BS EN 61008 and to switch standards BS EN 60947-1 and BS EN 60947-3. Residual current circuit-breakers are used in the housing, commercial and industrial sectors.

### AC class

Tripping is ensured for sinusoidal, alternating currents, whether they be quickly applied or slowly increase.

### A class

Tripping is ensured for sinusoidal, alternating residual currents as well as for pulsed DC residual currents, whether they be quickly applied or slowly increase.

Application: loads with electronics, rectifiers, instruments.

### “si” type

Reinforced continuity of supply on disturbed networks with:

- A high risk of nuisance tripping:
  - Successive lightning strokes
  - IT earthing system
  - Variable speed controllers, frequency converters
  - Presence of electronic ballasts
  - Presence of switchgear that incorporates interference filters i.e. lighting, microcomputing, etc
- Sources of blinding:
  - Presence of harmonics or high frequency rejection
  - Presence of DC components: diodes, thyristors, triacs
  - Low temperature

### “SiE” type

The RCCB “SiE” types are particularly suitable for use in humid environments and/or environments polluted by aggressive agents, for example swimming pools, marinas, the food-processing industry, water treatment plants, industrial sites. They also incorporate RCCB “si” functions.

### Instantaneous

It ensures instantaneous tripping (no time-delay).

### Selective <sup>Ⓢ</sup>

Total discrimination can be achieved using a non-selective residual current device placed downstream.

### Description

The residual current trip unit is electromechanical. It functions without an auxiliary source.

### Technical data

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| Voltage rating                             | 230...400 V AC, -15...+10 %  |
| Frequency rating                           | AC and A classes: 50/60 Hz<br>“si” and “SiE” types: 50 Hz  |
| Current rating (I <sub>th</sub> ) at 40 °C | 16...100 A   |
| As in IEC 61008                            | Breaking and making capacity<br>Rated residual (I <sub>Δm</sub> ): 2.5 kA<br>Rated (I <sub>m</sub> ): 1.5 kA   |
| As in IEC 60947-3:                         | Isolation with positive break indication, opening is indicated by a green strip on the device operating handle. This indicator shows that all poles are open.<br>Rated impulse withstand<br>Voltage (U <sub>imp</sub> ): 6 kV<br>Insulation voltage (U <sub>i</sub> ): 440 V<br>Utilization category:<br>AC 23A rating ≤ 63 A<br>AC 22B ratings 80 and 100 A |