



DATA SHEET

residual current operated circuit-breakers with integral overcurrent protection

RCBO 2 B10/0,03/2-A

sensitive to pulsating and alternating currents Type A

Article number 09957302



Function

RCCB/MCB combinations (RCBO) are residual current operated circuit-breakers with integral overcurrent protection for protecting systems in the event of a short-circuit and overload as per the requirements of VDE 0100 Part 430, and for protecting persons, farm animals and material items in the event of earth leakage currents as per VDE 0100 Part 410. Overload tripping occurs at currents in the overload range through a short-time delayed, heat-sensitive bimetal trip and at short-circuit currents through an electromagnetic instantaneous trip. The high-quality residual current operated circuit-breakers with integral overcurrent protection in the RCBO 2 series are independent of the mains voltage and have a high switching capacity of 10 kA. They have a 2-pole design. The residual current tripping indicator allows for a quick overview of the operating status of the devices. Two features make mounting and removal easier: terminal protection against wires being lodged behind them and the bi-stable snap-in slider. Type A residual current circuit-breakers are sensitive to pulsating and alternating currents. This function is independent of the mains voltage. RCBOs with characteristic B ensure standard protection for lighting and socket circuits. As their short-circuit trip is three to five times the rated current, they should not be used to fuse-protect load circuits with high inrush currents. Devices in standard design are intended for monitoring circuits with a rated voltage of 230 V or 400 V and a rated frequency of 50 Hz.

Features

Mains-voltage-independent tripping, compact design for all rated currents, high short-circuit resistance, Residual current tripping indicator, Strain-relief clamps with protection against wires being lodged behind them and wide terminal cross-section range for rail and line wiring on both connection sides, Use of conventional wiring rails possible, Neutral conductor right, bi-stable snap-in slider for easy mounting and removal

Mounting

quick fastening to mounting rail, any installation position, supply as desired

Applications

Power supplies to residential and purpose-built buildings as well as industrial facilities with TN-S, TT and TN-C-S networks. In IT networks, the RCBOs of this series can be set to switch off in the event of a second fault, Not permitted for use in TN-C networks and for protecting systems in which electronic equipment may cause pulsating or smooth DC residual currents or residual currents with frequencies not equal to 50 Hz. Comprehensive protection is not provided with an RCCB type AC. For these applications we recommend our residual current operated circuit-breakers with integral overcurrent protection Type A or our AC-DC sensitive RCBO Type B.

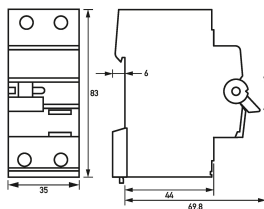
Technical Data

| Technical Data | RCBO 2 B10/0,03/2-A |
|--|---------------------|
| Series | RCBO 2 |
| Number of poles | 2 |
| Residual current type | A |
| Rated current (AC) | 10 A |
| Rated residual current I Δ n | 0.03 A |
| Short-time delayed | false |
| Selective | false |
| min. Operating voltage range of test circuit | 200 V |
| max. Operating voltage range of test circuit | 250 V |

Subject to technical changes

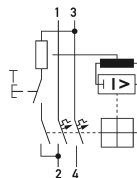
| Technical Data | RCBO 2 B10/0,03/2-A |
|---|---|
| Tripping characteristic | B |
| | load circuit |
| Specification | load disconnect contact |
| Rated voltage (AC) | 230 V |
| Rated current (AC) | 10 A |
| Rated short-circuit current | 6 kA |
| Surge current strength | 0.25 kA |
| max. Total rated switching capacity | 10 kA |
| Rated frequency | 50 Hz |
| Current heat loss per current path | 2.8 W |
| Back-up fuse type | gG |
| | screw-type terminal top, bottom (load circuit) |
| Clamping area | 1.5 mm ² ... 25 mm ² |
| Connection C1 Maximum number of conductors per terminal | 2 (conductors of same type and cross-section) |
| Tightening torque | 2 Nm ... 2.5 Nm |
| | General data |
| Mechanical endurance | min. 2000 switching cycles |
| Electrical endurance | min. 2000 switching cycles |
| Ambient temperature | -25 °C ... 40 °C |
| Housing type | distribution board housing |
| Installation type | Mounting rail (35 mm) |
| Housing material | thermoplastic |
| Protection class | IP20 (installed: IP40) |
| Width | 35 mm |
| Height | 83 mm |
| Depth | 73 mm |
| Installation depth | 65 mm |
| Module widths | 2 |
| Weight | 0.23 kg |
| Design requirements/Standards | EN 61009, IEC 1009 |
| Power limitation category | 3 |

Dimensions



Dimensional drawing Group view

Wiring example



Wiring diagram

Subject to technical changes

