



symbolic image

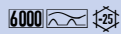
DATA SHEET

residual current operated circuit-breakers with integral overcurrent protection

RCBO 2 B20/0,03/2-A

sensitive to pulsating and alternating currents Type A

Article number 09957305



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.

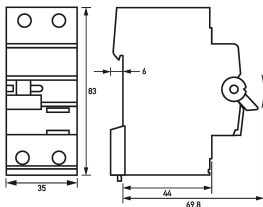
Technical Data

Technical Data	RCBO 2 B20/0,03/2-A
Series	RCBO 2
Number of poles	2
Residual current type	A
Rated current (AC)	20 A
Rated residual current I _{Δn}	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

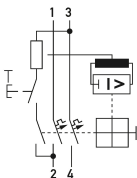
Technical Data		RCBO 2 B20/0,03/2-A	
Tripping characteristic		B	
		load circuit	
Specification		load disconnect contact	
Rated voltage (AC)		230 V	
Rated current (AC)		20 A	
Rated short-circuit current		6 kA	
Surge current strength		0.25 kA	
max. Total rated switching capacity		10 kA	
Rated frequency		50 Hz	
Current heat loss per current path		4.1 W	
Back-up fuse type		gG	
		screw-type terminal top, bottom (load circuit)	
Clamping area		1.5 mm² ... 25 mm²	
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		0.226 kg	
Design requirements/Standards		EN 61009, IEC 1009	
Power limitation category		3	

Dimensions



Dimensional drawing Group view

Wiring example



Wiring diagram

