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DATA SHEET

residual current operated circuit-breakers with integral overcurrent protection

FIB 06/0,30/3+N-A

sensitive to pulsating and alternating currents Type A, characteristic B

Article number 09955111

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. FIB/FIC of this series have a rated switching capacity of 6 kA. They provide a labelling area in addition to the tripping indicator. 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, switch position indicator, separate indication of fault cause, strain-relief clamps with a wide terminal cross-section range on both connection sides, Neutral conductor right, high electromagnetic compatibility (immunity to interference for industrial applications)

Mounting

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

Applications

Protection of circuits in residential and purpose-built buildings as well as industrial facilities with TN-S, TT and TN-C-S networks. In IT networks, the RCCB/MCBs can be set to switch off in the event of a second earth fault, Not permitted for use in systems with TN-C networks; not permitted for protecting circuits in which the power electronics equipment may cause smooth DC residual currents or residual currents with frequencies not equal to 50/60 Hz.

Accessories

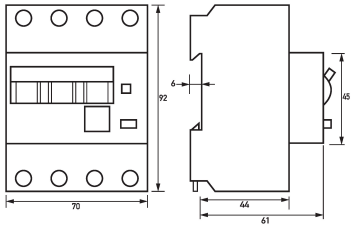
auxiliary switches DRCBO 4 Hi 1

Technical Data

Technical Data	FIB 06/0,30/3+N-A
Series	FIB
Number of poles	3+N
Residual current type	A
Rated current (AC)	6 A
Rated residual current IΔn	0.3 A
Short-time delayed	false
Selective	false
min. Operating voltage range of test circuit	100 V
max. Operating voltage range of test circuit	254 V
Tripping characteristic	B
Operating voltage (AC)	max. 440 V

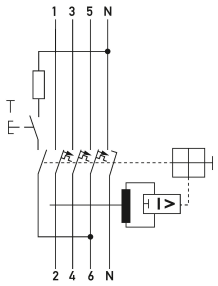
Technical Data	FIB 06/0,30/3+N-A
	load circuit
Specification	load disconnect contact
Rated voltage (AC)	230 V, 400 V
Rated current (AC)	6 A
Rated short-circuit current	6 kA
Surge current strength	0.25 kA
max. Total rated switching capacity	6 kA
Rated insulation voltage	440 V
Rated impulse withstand voltage	4 kV
Rated frequency	50 Hz, 60 Hz
Current heat loss per current path	2.1 W
Short-circuit backup-fuse SCPD	100 A
Back-up fuse type	gG
Overvoltage class	III
	screw-type terminal top, bottom (load circuit)
Neutral conductor position	right
Connection C1 Maximum number of conductors per terminal	2 (conductors of same type and cross-section)
Cross section solid	1-wire: 1 mm² ... 35 mm²
Connecting capacity flexible	1-wire: 1 mm² ... 25 mm²
Cross section stranded	1-wire: 1 mm² ... 25 mm²; 2-wire: 1 mm² ... 10 mm²
	General data
Operating position	optional
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	70 mm
Height	92 mm
Depth	74 mm
Installation depth	68 mm
Module widths	4
Weight	0.497 kg
Design requirements/Standards	EN 61009-1, EN 61009-2-1, VDE 0664-20
Power limitation category	3
Degree of pollution	2

Dimensions



Dimensional drawing Group view

Wiring example



Wiring diagram