

DATA SHEET

residual current operated circuit-breakers with integral overcurrent protection



DRCBO 4 C32/0,03/3N-A

sensitive to pulsating and alternating currents Type A, characteristic C Article number 09945127



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 DRCBO 4 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 tripping characteristic C are primarily suitable for power circuits with high switch-on or peak currents, as their short-circuit trip value is five to ten times the rated current. 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

pulsating current-sensitive and AC current-sensitive, mains-voltage-independent tripping, compact design for all rated currents, switch position indicator, separate indication of tripping cause, strain-relief clamps with a wide terminal cross-section range on both connection sides, neutral conductor right, labelling area

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

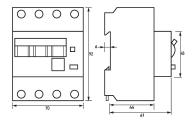
auxiliary switches DRCBO 4 Hi 2, wiring components RCCB and MCB busbars 4-pole

Technical Data

Technical Data	DRCBO 4 C32/0,03/3N-A
Series	DRCBO 4
Number of poles	3+N
Residual current type	A
Rated current (AC)	32 A
Rated residual current I∆n	o.o3 A
Short-time delayed	false
Selective	false
min. Operating voltage range of test circuit	170 V
max. Operating voltage range of test circuit	250 V
Tripping characteristic	С
Operating voltage (AC)	max. 440 V

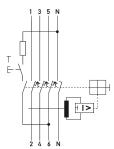
Ioad circuit	Technical Data	DRCBO 4 C32/0,03/3N-A
Rated voltage (AC) Rated current (AC) Rated current (AC) Rated current (AC) Rated short-circuit current Rated switching Rated insulation voltage Rated insulation voltage Rated insulation voltage Rated insulation voltage Rated firequency Spitz, 66 Hz Current heat loss per current path Back-up fuse type GG Vervoltage class III Screw-type terminal top, bottom (load circuit) Reutral conductor position right Connection Cz Maximum 2 (conductors of same type and cross-section) Routral conductors per terminal Connection Cz Maximum 2 (conductors of same type and cross-section) Routral conductors per terminal Connection Cz Maximum Routre: 1 mm² 35 mm²; 2-wire: 1 mm² 10 mm² Connection Cz Maximum Routre: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm² Consection stranded 1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm² Routral grapacity flexible 1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm² Routral grapacity flexible Routral grapacity flexible Poperating position Operating position Operating position Operating position Poperating positio		load circuit
Rated current (AC) Rated short-circuit current 6 kA Surge current strength max. Total rated switching capacity Rated impulse withstand voltage Rated impulse with Rated Rate	Specification	load disconnect contact
Rated short-circuit current Surge current strength Ouzy kA max. Total rated switching capacity Rated insulation voltage Rated insulation voltage Rated insulation voltage Rated frequency So Hz, 60 Hz Current heat loss per current path loss per current path loss per current path loss per current path screw-type terminal top, bottom (load circuit) Neutral conductor position Connection C1 Maximum number of conductors per terminal Cross section solid 1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm² Cross section standed 1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm² General data Operating position Optional Electrical endurance Housing type distribution board housing Installation type Housing material Protection class IP20 (installed: IP40) Width 70 mm Height 92 mm Depth 1-48 Mg Neight 0-48 Mg Power limitation category 3 EN 61009-12, VDE 6664-20 Power limitation category 3	Rated voltage (AC)	230 V, 400 V
Surge current strength max. Total rated switching capacity Rated insulation voltage Rated insulation voltage Rated insulation voltage Rated frequency So Hz, 6o Hz Current heat loss per current path Back-up fuse type Govervoltage class III screw-type terminal top, bottom (load circuit) Neutral conductor position right Connection C. Maximum number of conductors per terminal Cross section solid Consecting capacity flexible 1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm² Cross section stranded 1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm² General data Operating position Departing position Departing position Departing the distribution board housing Installation type Mounting rail (35 mm) Housing material Protection class IP20 (installed: IP40) Width 70 mm Height 92 mm Depth 1-48 mm Module widths 4 Weight Design requirements/Standards EN 61009-1, EN 61009-1-4, VDE 0664-20 Power limitation category 3	Rated current (AC)	32 A
max. Total rated switching capacity Rated insulation voltage Rated impulse withstand voltage Rated impulse withstand voltage Rated impulse withstand voltage Rated insulation voltage Rated insulation voltage Rated impulse withstand voltage Rated frequency 50 Hz, 60 Hz Current heat loss per current path Back-up fuse type 9G Overvoltage class III Screw-type terminal top, bottom (load circuit) Neutral conductor position right Connection Ca Maximum right Connection Ca Maximum 2 (conductors of same type and cross-section) number of conductors per terminal Cross section solid 1-wire: 1 mm² 35 mm², 2-wire: 1 mm² 10 mm² Connecting capacity flexible 1-wire: 1 mm² 25 mm², 2-wire: 1 mm² 10 mm² General data Operating position Operating position General data Operating position Genera	Rated short-circuit current	6 kA
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Rated insulation voltage Rated impulse withstand voltage Rated frequency So Hz, 6o Hz Current heat loss per current path Back-up fuse type Go Overvoltage class III Neutral conductor position right Connection C1 Maximum number of conductors per terminal to public in Impulse	max. Total rated switching	6 kA
Rated impulse withstand voltage Rated frequency 50 Hz, 60 Hz Current heat loss per current path Back-up fuse type Overvoltage class III Neutral conductor position Connection C1 Maximum number of conductors per terminal Cross section solid 1-wire: 1 mm² 35 mm²; 2-wire: 1 mm² 10 mm² Consecting capacity flexible 1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm² General data Operating position Electrical endurance Ambient temperature -25 °C 40 °C Housing type Mounting rail (35 mm) Housing material Protection class IP20 (installed: IP40) Width 70 mm Height 92 mm Depth 174 mm Installation depth Module widths 4 Weight Design requirements/Standards EN 61009-1, EN 61009-1, VDE 0664-20 Power limitation category 3	• •	
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Back-up fuse type Overvoltage class III Screw-type terminal top, bottom (load circuit) Neutral conductor position Connection C1 Maximum number of conductors per terminal Cross section solid 1-wire: 1 mm² 35 mm²; 2-wire: 1 mm² 10 mm² Connecting capacity flexible 1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm² Connecting capacity flexible 1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm² Connecting capacity flexible 1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm² Connecting capacity flexible 1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm² Connecting capacity flexible 1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm² Connecting capacity flexible 1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm² Connecting capacity flexible 1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm² Connecting capacity flexible 1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm² Connecting capacity flexible 1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm² Connecting capacity flexible 1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm² Connecting capacity flexible 1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm² Connecting capacity flexible 1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm² Connecting capacity flexible 1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm² Connecting capacity flexible 1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm² Connecting capacity flexible 1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm² Connecting capacity flexible 1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm² Connecting capacity flexible 1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm² Connecting capacity flexible 1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm² Connecting capacity flexible 1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm² Connecting capacity flexible 1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm² Connecting capacity flexible 1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm² Connecting capacity flexible 1-wire: 1 mm² 25 mm²; 2-wire: 1 mm²	·	5.1 W
Screw-type terminal top, bottom (load circuit) Neutral conductor position right	•	
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Neutral conductor position Connection C1 Maximum number of conductors per terminal Cross section solid 1-wire: 1 mm² 35 mm²; 2-wire: 1 mm² 10 mm² Connecting capacity flexible 1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm² Cross section stranded 1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm² General data Operating position General data Operating position 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 Protection class IP20 (installed: IP40) Width 70 mm Height 92 mm Depth 74 mm Installation depth 68 mm Module widths 4 Weight 0.486 kg Design requirements/Standards EN 61009-1, EN 61009-2-1, VDE 0664-20 Power limitation category 3	Overvoltage class	
Connection C1 Maximum number of conductors per terminal Cross section solid 1-wire: 1 mm² 35 mm²; 2-wire: 1 mm² 10 mm² Connecting capacity flexible 1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm² Cross section stranded 1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm² General data Operating position Electrical endurance Ambient temperature 1-25 °C 40 °C Housing type Installation type Mounting rail (35 mm) Housing material Protection class IP20 (installed: IP40) Width 70 mm Height 92 mm Depth 1stallation depth 68 mm Module widths 4 Weight 0.486 kg Design requirements/Standards EN 61009-1, EN 61009-2-1, VDE 0664-20 Power limitation category 3		
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Cross section solid 1-wire: 1 mm² 35 mm²; 2-wire: 1 mm² 10 mm² Connecting capacity flexible 1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm² Cross section stranded 1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm² General data Operating position Operating position Electrical endurance Ambient temperature -25 °C 40 °C Housing type 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 Module widths 4 Weight O.486 kg Design requirements/Standards EN 61009-1, EN 61009-2-1, VDE 0664-20 Power limitation category 3		
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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 0.486 kg Design requirements/Standards EN 61009-12, EN 61009-2-1, VDE 0664-20 Power limitation category 3	Connecting capacity flexible	1-wire: 1 mm ² 25 mm ² ; 2-wire: 1 mm ² 10 mm ²
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 0.486 kg Design requirements/Standards EN 61009-1, EN 61009-2-1, VDE 0664-20 Power limitation category 3	Cross section stranded	1-wire: 1 mm ² 25 mm ² ; 2-wire: 1 mm ² 10 mm ²
Electrical endurance 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 Design requirements/Standards EN 61009-1, EN 61009-2-1, VDE 0664-20 Power limitation category 3		General data
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 Design requirements/Standards EN 61009-1, EN 61009-2-1, VDE 0664-20 Power limitation category 3	Operating position	optional
Housing type Installation type Mounting rail (35 mm) Housing material Housing material Thermoplastic Protection class IP20 (installed: IP40) Width To mm Height Pepth Ty mm Installation depth Module widths Weight Design requirements/Standards EN 61009-1, EN 61009-2-1, VDE 0664-20 Power limitation category 3	Electrical endurance	min. 2000 switching cycles
Installation type Housing material Protection class IP20 (installed: IP40) Width 70 mm Height 92 mm Depth 74 mm Installation depth Module widths 4 Weight Design requirements/Standards Power limitation category Mounting rail (35 mm) And Installed: IP40) Po mm Fig. 10 F	Ambient temperature	-25 °C 40 °C
Housing material Protection class IP20 (installed: IP40) Width 70 mm Height 92 mm Depth 74 mm Installation depth 68 mm Module widths 4 Weight Design requirements/Standards EN 61009-1, EN 61009-2-1, VDE 0664-20 Power limitation category 3	Housing type	distribution board housing
Protection class IP20 (installed: IP40) Width 70 mm Height 92 mm Depth 74 mm Installation depth 68 mm Module widths 4 Weight 0.486 kg Design requirements/Standards EN 61009-1, EN 61009-2-1, VDE 0664-20 Power limitation category 3	Installation type	Mounting rail (35 mm)
Width 70 mm Height 92 mm Depth 74 mm Installation depth 68 mm Module widths 4 Weight 0.486 kg Design requirements/Standards EN 61009-1, EN 61009-2-1, VDE 0664-20 Power limitation category 3	Housing material	thermoplastic
Height 92 mm Depth 74 mm Installation depth 68 mm Module widths 4 Weight 0.486 kg Design requirements/Standards EN 61009-1, EN 61009-2-1, VDE 0664-20 Power limitation category 3	Protection class	IP20 (installed: IP40)
Depth 74 mm Installation depth 68 mm Module widths 4 Weight 0.486 kg Design requirements/Standards EN 61009-1, EN 61009-2-1, VDE 0664-20 Power limitation category 3	Width	70 mm
Installation depth Module widths 4 Weight 0.486 kg Design requirements/Standards EN 61009-1, EN 61009-2-1, VDE 0664-20 Power limitation category 3	Height	92 mm
Module widths 4 Weight 0.486 kg Design requirements/Standards EN 61009-1, EN 61009-2-1, VDE 0664-20 Power limitation category 3	Depth	74 mm
Weight 0.486 kg Design requirements/Standards EN 61009-1, EN 61009-2-1, VDE 0664-20 Power limitation category 3	Installation depth	68 mm
Weight 0.486 kg Design requirements/Standards EN 61009-1, EN 61009-2-1, VDE 0664-20 Power limitation category 3	Module widths	4
Power limitation category 3	Weight	
	Design requirements/Standards	EN 61009-1, EN 61009-2-1, VDE 0664-20
	Power limitation category	3
	Degree of pollution	

Dimensions



Dimensional drawing Group view

Wiring example



Wiring diagram