## Doepke



# **DATA SHEET**

residual current operated circuit-breakers with integral overcurrent protection DRCBO 4 C16/0,03/1N-B+ AC/DC sensitive type B+, fire protection according to VDE 0100-420 Article number 09949324



6000 🖂 🔜 🗤 kHz 🕸 🕾 KV G

## 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 B+ residual current circuit-breakers detect smooth DC residual currents and all other residual currents at frequencies up to 20,000 Hz. The operating voltage required for this is taken from the mains supply. Correct power supply is ensured when the voltage between the mains conductors is  $\geq$  50 V. Pulsating and AC residual currents are detected 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**

AC/DC sensitive for residual currents with frequencies of o Hz (smooth direct current) up to 20,000 Hz, mains-voltage-independent tripping when type A residual currents occur, 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 preferably from above

### **Applications**

commercial and industrial installations with TT, TN-S and TN-C-S systems, where power electronics equipment is used without galvanic isolation from the mains, e.g. frequency converters, switching power supplies, high-frequency converters, photovoltaic installations and UPS equipment with frequency converters without transformers, Type B+ and type B RCBOs with characteristic curve NK should be used where fire protection is legally required.

#### Notes

suitable for use in 50 Hz AC networks, RCBOs are also available for other frequencies upon request, not designed for use in direct current networks or on the output side of controlled electrical equipment such as frequency converters

### Accessories

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

## Technical Data

Technical Data	DRCBO 4 C16/0,03/1N-B+
Series	DRCBO 4
Number of poles	1+N
Residual current type	B+
Rated current (AC)	16 A
Rated residual current IAn	0.03 A
Short-time delayed	true
Selective	false

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The experts in residual current protection technology

min. Operating voltage range of test circuit max. Operating voltage range of test circuit Minimum rated operating voltage (Type A/AC operation) Non trip time Tripping fracted operation you A/AC voltage (Type B operation) Non trip time Tripping fracted operating you A/AC operation Tripping fracted operating you A/AC operation Tripping fracted operation you A/AC operation Tripping fracted operating you A/AC operation Tripping fracted operating you A/AC operation Tripping fracted operation you A/AC operation Tripping fracted source Supply side up Operating voltage (A/C) Rated voltage (A/C) Rated voltage (A/C) Rated voltage (A/C) Rated voltage (A/C) Rated source uncert G IA/A Surge current strength Surge current strength Rated insulation voltage (A/AV Rated finguency So Hz Current heat loss per current path Rated insulation voltage (A/AV Rated finguency So Hz Current heat loss per current path Rated myslew withstand voltage (A/AV Rated finguency So Hz Current heat loss per current path Rated myslew withstand voltage (A/AV Rated finguency So Hz Current heat loss per current path Rated myslew withstand voltage (A/AV Rated finguency So Hz Current heat loss per current path Rated myslew sections (III) Neutral conductors per terminal Cross section solid Consection C, I Maximum number of conductors per terminal Consection C, I Maximum Number o	Technical Data	DRCBO 4 C16/0,03/1N-B+
text circuit Winimum rated operating voltage (Type A/AC operation) Minimum rated operating voltage (Type Boration) Non-trip time Do voltage (Type Boration) Non-trip time Do voltage (Type Boration) Non-trip time Do voltage (Type A/AC Tripping fequency C Supply side Departing voltage (AC) C Specification Departing voltage (AC) Departing voltage (AC) Departing voltage (AC) Departing voltage (AC) Specification Dead disconnect contact Rated voltage (AC) Specification Rated unrent (AC) Rated unrent (AC) Surge current strength Surge current strength Surge current strength Surge current strength Rated insultion voltage Akad Capacity Specification voltage Current heat loss per current Dead voltage (AC) Specification voltage Current heat loss per current Dead voltage (Dead Dead voltage voltage (		
voltage (Type A/AC operation) Minimum rated operating Voltage (Type B operation) Non-trip time  So VAC Voltage (Type B operation) Non-trip time  LoomS  Tripping frequency OH:L20 kHz Maximum disconnection times  1-Lân: \$ 300 ms; 5-Lân: \$ 40 ms  Tripping frequency Operating voltage (AC) C Opera		250 V
Minimum rated operation)       \$0 VAC         voltage (Type B operation)       10 ms         Tripping frequency       0 HZ 20 kHz         Maintum disconction times       1.14n: 5 gooms; 5: 14n: 5 gooms;         Tripping characteristic       C         Supply side       up         Operating voltage (AC)       max. 1.3 W         Internal consumption       max. 1.3 W         Specification       load dircuit         Specification       load disconnect contact         Rated voltage (AC)       230 V         Rated voltage (AC)       230 V         Rated voltage (AC)       36 A         Specification       load disconnect contact         Rated voltage (AC)       36 A         Syste current strength       3 kA         max. Total rated soluticing capacity       6 kA         Capacity       50 HZ         Current heat loss per current path       2.3 W         Back-up fuse type       gG         Overvoltage class       III         Connection C1 Maximum number of conductors per under solutions       right         Connection C2 Maximum number of conductors per under solutions       2 (conductors of same type and cross-section) number of conductors per under solutions         Consection solid       1-		o V AC
Non-trip time       10 ms         Tripping frequency       0 Hz 20 kHz         Maximum disconnection times       1-16n: 500 ms; 5-16n: 540 ms         Tripping characteristic       C         Supply side       up         Operating voltage (AC)       max. 233 V         Internal consumption       max. 233 V         Specification       load dircuit         Specification       load disconnect contact         Rated voltage (AC)       230 V         Rated source circuit corrent       6 kA         Surge current strength       3 kA         max. Total rated switching       6 kA         Capacity       50 Hz         Current strength       3 kA         max. Total rated switching       6 kA         Capacity       50 Hz         Current heat loss per current path       2.3 W         Back-up fuse type       gG         Overvoltage class       III         Connection CL Maximum       2.0 conductors of same type and cross-section)         number of conductor position       right         Connection CL Maximum       2 wrire: 1 mm² 25 mm², 2-wrire: 1 mm² 10 mm²         Cross section solid       1-wrire: 1 mm²	Minimum rated operating	50 V AC
Tripping frequency       0 HZ 30 kHz         Maximum disconnection times       1.1Δn s goo ms g - 1Δn s goo ms g -		10 MS
Maximum disconnection times       1 · Lân: ≤ 300 ms; 5 · Lân: ≤ 40 ms         Tripping characteristic       C         Supply side       up         Operating voltage (AC)       max. 253 V         Internal consumption       max. 13 W         Specification       load dircuit         Specification       load dircuit         Specification       load disconnect contact         Rated voltage (AC)       230 V         Rated sourt-circuit current       6 kA         Surge current strength       3 kA         max. Total rated switching capacity       6 kA         capacity       20 Hz         Current heat loss per current path       2.3 W         Rated fineuloxy       50 Hz         Current heat loss per current path       2.3 W         path       2.3 W         Back-up fuse type       gG         Overvoltage class       III         Neutral conductor position       right         Connecting capacity fissible       1-wire: 1 mm² 35 mm²; 2-wire: 1 mm² 10 mm²         Cross section solid       1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm²         Consecting capacity fissible       1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm²         Cross section solid       1-wire: 1 mm² 25 mm²; 2		o Hz 20 kHz
Tripping characteristic       C         Supply side       up         Operating voltage (AC)       max. 3:3 V         Internal consumption       max. 1:3 W         Specification       load disconnect contact         Rated voltage (AC)       2:30 V         Rated durrent (AC)       2:30 V         Rated sourceix current       6 kA         Surge current strength       3 kA         max. Total rated switching capacity       6 kA         Surge current strength       3 kA         Rated insulation voltage       4 kV         Rated finupluse withstand voltage       4 kV         Rated finupluse withstand voltage       6 kA         Dack-up fuse type       9G         Overvoltage class       111         Surge vuerent strength       2:3 W         Back-up fuse type       9G         Overvoltage class       111         Current heat loss per current path       2 (conductors of same type and cross-section)         number of conductor position       right         Connection C1 Maximum number of conductors per turrent and train 2: strengt 2: write: 1 mm <sup>2</sup> 25 mm <sup>2</sup> ; 2-write: 1 mm <sup>2</sup> 20 mm <sup>2</sup> Cross section solid       1-write: 1 mm <sup>2</sup> 25 mm <sup>2</sup> ; 2-write: 1 mm <sup>2</sup> 10 mm <sup>2</sup> Connecting capacity flexibl		1 · IΔn: ≤ 300 ms; 5 · IΔn: ≤ 40 ms
Supply side         up           Operating voltage (AC)         max. 253 V           Internal consumption         max. 13 W           Specification         load disconnect contact           Rated voltage (AC)         230 V           Rated voltage (AC)         16 A           Rated voltage (AC)         16 A           Rated stort.circuit current         6 kA           Surge current strength         3 kA           max. Total rated switching         6 kA           capacity         6 kA           Rated insulation voltage         4 ko V           Rated insulation voltage         4 kV           Rated frequency         50 Hz           Current heat loss per current path         2.3 W           Back-up fuse type         gG           Overvoltage class         III           Toumber of conductors per terminal top, bottom (load circuit)           number of conductors per terminal         2 (conductors of same type and cross-section)           Cross section solid         1-wire: 1 mm <sup>2</sup>	Tripping characteristic	
Operating voltage (AC)         max. 253 V           Internal consumption         max. 13 W           Specification         load dircuit           Specification         load disconnect contact           Rated voltage (AC)         230 V           Rated short-circuit current         6 kA           Surge current strength         3 kA           max. Total rated switching capacity         6 kA           Capacity         6 kA           Rated insulation voltage         4 kV           Rated insulation voltage         4 kV           Rated finequency         50 HZ           Current heat loss per current path         2.3 W           Back-up fuse type         gG           Overvoltage class         III           Connection C1 Maximum         2 (conductors of same type and cross-section)           Nutrie: 1 mm <sup>2</sup>		
Internal consumption max. 1.3 W load circuit Specification load disconnect contact Rated voltage (AC) 2.30 V Rated current (AC) 1.6 A Rated short-circuit current 6.4 A Surge current strength 3.4 A max. Total rated switching 6.4 A capacity 6.4 A Rated inpulse withstand voltage 4.40 V Rated inpulse withstand voltage 4.4V Rated frequency 5.0 Hz Current heat loss per current 2.3 W path 2.3 W Back-up fuse type 0.000 Hz Conrection C1 Maximum number of conductors of same type and cross-section) number of conductors per terminal 2.5 mm <sup>2</sup> , 2.5 mm <sup>2</sup> , 2.5 mm <sup>2</sup> , 2.5 mm <sup>2</sup> , 2.5 mm <sup>2</sup> Connection stranded 1wire: 1.mm <sup>2</sup> 35 mm <sup>2</sup> , 2.5 mm <sup>2</sup> ,		· · · · · · · · · · · · · · · · · · ·
Ioad circuit           Specification         Ioad disconnect contact           Rated voltage (AC)         230 V           Rated current (AC)         16 A           Rated short-circuit current         6 kA           Surge current strength         3 kA           max. Total rated switching         6 kA           capacity         6 kA           Rated insulation voltage         440 V           Rated fingulax withstand voltage         4 kV           Rated fingulax withstand voltage         4 kV           Rated fingulax withstand voltage         9 d kV           Back-up fuse type         9 G           Overvoltage class         III           Neutral conductor position         right           Connection C1 Maximum         2 (conductors of same type and cross-section)           number of conductors per turminal         1-wire: 1 mm <sup>2</sup>		
Specification         Ioad disconnect contact           Rated voltage (AC)         230 V           Rated voltage (AC)         16 A           Rated short-circuit current         6 kA           Surge current strength         3 kA           max. Total rated switching capacity         6 kA           Rated insulation voltage         440 V           Rated insulation voltage         4 kV           Rated insulation voltage         4 kV           Rated insulation voltage         6 kA           Current heat loss per current path         2.3 W           Back-up fuse type         gG           Overvoltage class         III           Screw-type terminal top, bottom (load circuit)           number of conductors per terminal         right           Connecting Ca Maximum number of conductors per terminal         1-wire: 1 mm <sup>2</sup> 35 mm <sup>2</sup> ; 2-wire: 1 mm <sup>2</sup> 10 mm <sup>2</sup> Connecting capacity flexible         1-wire: 1 mm <sup>2</sup> 35 mm <sup>2</sup> ; 2-wire: 1 mm <sup>2</sup> 10 mm <sup>2</sup> Consection standed         1-wire: 1 mm <sup>2</sup> 35 mm <sup>2</sup> ; 2-wire: 1 mm <sup>2</sup> 10 mm <sup>2</sup> Consecting capacity flexible         2 Nm 2.4 Nm           General data         Operating position           Opticnal         Mechanical endurance           Min		
Rated voltage (AC)       230 V         Rated solvade (AC)       16 A         Rated solvat-circuit current       6 kA         Surge current strength       3 kA         max. Total rated switching capacity       6 kA         Rated inpulse withstand voltage       440 V         Rated inpulse withstand voltage       4 kV         Rated inpulse withstand voltage       3 kA         Current heat loss per current path       2.3 W         Back-up fuse type       gG         Overvoltage class       III         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 mm <sup>2</sup> 35 mm <sup>2</sup> ; 2-wire: 1 mm <sup>2</sup> 10 mm <sup>2</sup> Consecting capacity flexible       1-wire: 1 mm <sup>2</sup> 25 mm <sup>2</sup> ; 2-wire: 1 mm <sup>3</sup> 10 mm <sup>2</sup> Consecting copacity flexible       1-wire: 1 mm <sup>2</sup> 25 mm <sup>3</sup> ; 2-wire: 1 mm <sup>3</sup> 10 mm <sup>2</sup> Tightening torque       2 Nm 2.4 Nm         General data       Operating position         Mechanical endurance       min 2000 switching cycles         Electrical endurance       min 200 switching cycles         Electrical endurance       20 g/ 2 om SDuration         Fatigue limit       > 5 g (f ≤ 80 Hz,	Specification	
Rated current (AC)       16 A         Rated short-circuit current       6 kA         Surge current strength       3 kA         max. Total rated switching capacity       6 kA         Rated insulation voltage       4 40 V         Rated insulation voltage       4 kV         Rated insulation voltage       4 kV         Rated frequency       50 Hz         Current heat loss per current path       2.3 W         Back-up fuse type       9G         Overvoltage class       III         Neutral conductor position       right         Connection C1 Maximum number of conductors of same type and cross-section)       2 (conductors of same type and cross-section)         Cross section solid       1-wire: 1 mm <sup>2</sup> 35 mm <sup>2</sup> ; 2-wire: 1 mm <sup>2</sup> 10 mm <sup>2</sup> Consecting capacity flexible       1-wire: 1 mm <sup>2</sup> 25 mm <sup>2</sup> ; 2-wire: 1 mm <sup>2</sup> 10 mm <sup>2</sup> Cross section stranded       1-wire: 1 mm <sup>2</sup> 25 mm <sup>2</sup> ; 2-wire: 1 mm <sup>2</sup> 10 mm <sup>2</sup> Consecting capacity flexible       1-wire: 1 mm <sup>2</sup> 25 mm <sup>2</sup> ; 2-wire: 1 mm <sup>2</sup> 10 mm <sup>2</sup> Consecting capacity flexible       1-wire: 1 mm <sup>2</sup> 25 mm <sup>2</sup> ; 2-wire: 1 mm <sup>2</sup> 10 mm <sup>2</sup> Consecting capacity flexible       1-wire: 1 mm <sup>2</sup> 25 mm <sup>2</sup> ; 2-wire: 1 mm <sup>2</sup> 10 mm <sup>2</sup> Consecting capacity flexible       1-wire: 1 mm <sup>2</sup> 26 mm <sup>2</sup> ; 2-wire: 1 mm <sup>2</sup> 10 mm <sup>2</sup> <td>•</td> <td></td>	•	
Rated short-circuit current       6 kA         Surge current strength       3 kA         max. Total rated switching capacity       6 kA         Rated insulation voltage       4 k0 V         Rated insulation voltage       4 kV         Rated insulation voltage       4 kV         Rated frequency       50 Hz         Current heat loss per current path       2.3 W         Back-up fuse type       9G         Overvoltage class       III         Screw-type terminal top, bottom (load circuit)         number of conductors per terminal       right         Connection C1 Maximum number of conductors per terminal       2 (conductors of same type and cross-section)         Cross section solid       1-wire: 1 mm <sup>2</sup> 35 mm <sup>2</sup> ; 2-wire: 1 mm <sup>2</sup> 10 mm <sup>2</sup> Cross section solid       1-wire: 1 mm <sup>2</sup> 25 mm <sup>2</sup> ; 2-wire: 1 mm <sup>2</sup> 10 mm <sup>2</sup> Cross section solid       1-wire: 1 mm <sup>2</sup> 25 mm <sup>2</sup> ; 2-wire: 1 mm <sup>2</sup> 10 mm <sup>2</sup> Cross section solid       1-wire: 1 mm <sup>2</sup> 25 mm <sup>2</sup> ; 2-wire: 1 mm <sup>2</sup> 10 mm <sup>2</sup> Cross section solid       1-wire: 1 mm <sup>2</sup> 25 mm <sup>2</sup> ; 2-wire: 1 mm <sup>2</sup> 10 mm <sup>2</sup> Cross section stranded       1-wire: 1 mm <sup>2</sup> 25 mm <sup>2</sup> ; 2-wire: 1 mm <sup>2</sup> 10 mm <sup>2</sup> Cross section stranded       1-wire: 1 mm <sup>2</sup> 26 mm <sup>2</sup> ; 2-wire: 1 mm <sup>2</sup> 10 mm <sup>2</sup> Cross section s		
Surge current strength         3 kA           max. Total rated switching capacity         6 kA           Rated insulation voltage         440 V           Rated insulation voltage         4 kV           Rated insulation voltage         90 Hz           Current heat loss per current path         2.3 W           Back-up fuse type         9G           Overvoltage class         III           Neutral conductor position         right           Connection C1 Maximum number of conductors per terminal         2 (conductors of same type and cross-section)           Connecting capacity flexible         1-wire: 1 mm² 35 mm²; 2-wire: 1 mm² 10 mm²           Connecting capacity flexible         1-wire: 2 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           Consection stranded         1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm²		
max. Total rated switching capacity       6 kA         Rated insulation voltage       440 V         Rated insulation voltage       4 kV         Rated inguise withstand voltage       6 kA         Rated frequency       50 Hz         Current heat loss per current path       2.3 W         Back-up fuse type       gG         Overvoltage class       III         Neutral conductor position       right         Connection C1 Maximum number of conductors per terminal       2 (conductors of same type and cross-section)         Connection c3 Maximum number of conductors per terminal       1-wire: 1 mm <sup>2</sup> 35 mm <sup>2</sup> ; 2-wire: 1 mm <sup>2</sup> 10 mm <sup>2</sup> Connecting capacity flexible       1-wire: 1 mm <sup>2</sup> 25 mm <sup>2</sup> ; 2-wire: 1 mm <sup>2</sup> 10 mm <sup>2</sup> Connecting capacity flexible       1-wire: 1 mm <sup>2</sup> 25 mm <sup>2</sup> ; 2-wire: 1 mm <sup>2</sup> 10 mm <sup>2</sup> Connecting capacity flexible       1-wire: 1 mm <sup>2</sup>		
capacityRated insulation voltageRated insulation voltageRated insulation voltageRated frequencyCurrent heat loss per current pathBack-up fuse typeOvervoltage classIIICorrent heat loss per current pathScrew-type terminal top, bottom (load circuit)Neutral conductor positionrightConnection C1 Maximum number of conductors per terminalCross section solid1-wire: 1 mm² 35 mm²; 2-wire: 1 mm² 10 mm²Consecting capacity flexible1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm²Consecting capacity flexible1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm²Consecting section stranded1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm²Consecting capacity flexible1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm²Consecting capacity flexible1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm²Consecting capacity flexible1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm²Consecting capacity flexible1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm²Consecting section stranded1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm²Consecting capacity flexible1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm²Consecting capacity flexible1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm²Consecting section stranded1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm²Consecting capacity flexibleConsecting capacity flexibleConsec		
Rated impulse withstand voltage       4 kV         Rated frequency       50 Hz         Current heat loss per current path       2.3 W         Back-up fuse type       9G         Overvoltage class       III         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 mm <sup>2</sup> 35 mm <sup>2</sup> ; 2-wire: 1 mm <sup>2</sup> 10 mm <sup>2</sup> Connecting capacity flexible       1-wire: 1 mm <sup>2</sup> 25 mm <sup>2</sup> ; 2-wire: 1 mm <sup>2</sup> 10 mm <sup>2</sup> Cross section solid       1-wire: 1 mm <sup>2</sup> 25 mm <sup>2</sup> ; 2-wire: 1 mm <sup>2</sup> 10 mm <sup>2</sup> Connecting capacity flexible       1-wire: 1 mm <sup>2</sup> 25 mm <sup>2</sup> ; 2-wire: 1 mm <sup>2</sup> 10 mm <sup>2</sup> Consecting section stranded       1-wire: 1 mm <sup>2</sup> 25 mm <sup>2</sup> ; 2-wire: 1 mm <sup>2</sup> 10 mm <sup>2</sup> Consecting section stranded       1-wire: 1 mm <sup>2</sup> 25 mm <sup>2</sup> ; 2-wire: 1 mm <sup>2</sup> 10 mm <sup>2</sup> Consecting section stranded       1-wire: 1 mm <sup>2</sup> 25 mm <sup>2</sup> ; 2-wire: 1 mm <sup>2</sup> 10 mm <sup>2</sup> Consecting section stranded       1-wire: 1 mm <sup>2</sup> 25 mm <sup>2</sup> ; 2-wire: 1 mm <sup>2</sup> 10 mm <sup>2</sup> Consecting section stranded       1-wire: 1 mm <sup>2</sup> 25 mm <sup>2</sup> ; 2-wire: 1 mm <sup>2</sup> 10 mm <sup>2</sup> Consecting section stranded       1-wire: 1 mm <sup>2</sup> 25 mm <sup>2</sup> ; 2-wire: 1 mm <sup>2</sup> 10 mm <sup>2</sup> Coperating position       optional	capacity	
Rated frequency       50 Hz         Current heat loss per current path       2.3 W         Back-up fuse type       gG         Overvoltage class       III         Method is a screw-type terminal top, bottom (load circuit)         Neutral conductor position       right         Connection C1 Maximum per of conductors per terminal       2 (conductors of same type and cross-section) number of conductors per terminal         Cross section solid       1-wire: 1 mm <sup>2</sup> 35 mm <sup>2</sup> ; 2-wire: 1 mm <sup>2</sup> 10 mm <sup>2</sup> Connecting capacity flexible       1-wire: 1 mm <sup>2</sup> 25 mm <sup>2</sup> ; 2-wire: 1 mm <sup>2</sup> 10 mm <sup>2</sup> Cross section stranded       1-wire: 1 mm <sup>2</sup> 25 mm <sup>2</sup> ; 2-wire: 1 mm <sup>2</sup> 10 mm <sup>2</sup> Operating pacity flexible       1-wire: 1 mm <sup>2</sup> 25 mm <sup>2</sup> ; 2-wire: 1 mm <sup>2</sup> 10 mm <sup>2</sup> Cross section stranded       1-wire: 1 mm <sup>2</sup> 25 mm <sup>2</sup> ; 2-wire: 1 mm <sup>2</sup> 10 mm <sup>2</sup> Operating position       Optical         General data       Operating position         Operating position       Optical         Mechanical endurance       min. 5000 switching cycles         Electrical endurance       min. 200 switching cycles         Climate resistance       20 g / 20 ms Duration         S g (f ≤ 80 Hz, duration > 30 min.)       Housing type         Housing type       Mountting rail (35 mm)	=	
Current heat loss per current path       2.3 W         Back-up fuse type       gG         Overvoltage class       III         Neutral conductor position       right         Connection C1 Maximum number of conductors per terminal       2 (conductors of same type and cross-section)         number of conductors per terminal       1-wire: 1 mm² 35 mm²; 2-wire: 1 mm² 10 mm²         Consection solid       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         Cross section stranded       1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm²         Tightening torque       2 Nm 2.4 Nm         General data       Operating position         Operating position       optional         Mechanical endurance       min. 5000 switching cycles         Electrical endurance       min. 2000 switching cycles         Climate resistance       20 g / 20 ms Duration         Fatigue limit       > 5 g (f ≤ 80 Hz, duration > 30 min.)         Housing type       distribution board housing         Installation type       Mounting rail (35 mm)         Housing material       thermoplastic         Protection class       IP20 (installed: IP40)		4 kV
path       gG         Back-up fuse type       gG         Overvoltage class       III         III       screw-type terminal top, bottom (load circuit)         Neutral conductor position       right         Connection C1 Maximum       2 (conductors of same type and cross-section)         number of conductors per terminal       2 (conductors of same type and cross-section)         Cross section solid       1-wire: 1 mm <sup>2</sup> 35 mm <sup>2</sup> ; 2-wire: 1 mm <sup>2</sup> 10 mm <sup>2</sup> Consecting capacity flexible       1-wire: 1 mm <sup>2</sup> 25 mm <sup>2</sup> ; 2-wire: 1 mm <sup>2</sup> 10 mm <sup>2</sup> Cross section stranded       1-wire: 1 mm <sup>2</sup> 25 mm <sup>2</sup> ; 2-wire: 1 mm <sup>2</sup> 10 mm <sup>2</sup> Cross section stranded       1-wire: 1 mm <sup>2</sup> 25 mm <sup>2</sup> ; 2-wire: 1 mm <sup>2</sup> 10 mm <sup>2</sup> Cross section stranded       1-wire: 1 mm <sup>2</sup> 25 mm <sup>2</sup> ; 2-wire: 1 mm <sup>2</sup> 10 mm <sup>2</sup> Cross section stranded       1-wire: 1 mm <sup>2</sup> 25 mm <sup>2</sup> ; 2-wire: 1 mm <sup>2</sup> 10 mm <sup>2</sup> Cross section stranded       1-wire: 1 mm <sup>2</sup> 25 mm <sup>2</sup> ; 2-wire: 1 mm <sup>2</sup> 10 mm <sup>2</sup> Cross section stranded       1-wire: 1 mm <sup>2</sup> 25 mm <sup>2</sup> ; 2-wire: 1 mm <sup>2</sup> 10 mm <sup>2</sup> Cross section stranded       1-wire: 1 mm <sup>2</sup> 25 mm <sup>2</sup> ; 2-wire: 1 mm <sup>2</sup> 10 mm <sup>2</sup> Connecting capacity flexible       2 Nm 2.4 Nm         General data       Operating position         Optrating position       optional	Rated frequency	50 Hz
Overvoltage class       III         screw-type terminal top, bottom (load circuit)         Neutral conductor position       right         Connection C1 Maximum       2 (conductors of same type and cross-section)         number of conductors per terminal       2 (conductors of same type and cross-section)         Cross section solid       1-wire: 1 mm <sup>2</sup> 35 mm <sup>2</sup> ; 2-wire: 1 mm <sup>2</sup> 10 mm <sup>2</sup> Connecting capacity flexible       1-wire: 1 mm <sup>2</sup> 25 mm <sup>2</sup> ; 2-wire: 1 mm <sup>2</sup> 10 mm <sup>2</sup> Cross section stranded       1-wire: 1 mm <sup>2</sup> 25 mm <sup>2</sup> ; 2-wire: 1 mm <sup>2</sup> 10 mm <sup>2</sup> Cross section stranded       1-wire: 1 mm <sup>2</sup> 25 mm <sup>2</sup> ; 2-wire: 1 mm <sup>2</sup> 10 mm <sup>2</sup> Tightening torque       2 Nm 2.4 Nm         General data       Operating position         Operating position       optional         Mechanical endurance       min. 5000 switching cycles         Electrical endurance       min. 2.000 switching cycles         Ambient temperature       -25 °C 40 °C         Climate resistance       20 g / 20 ms Duration         Shock resistance       20 g / 20 ms Duration         Fatigue limit       > 5 g (f ≤ 80 Hz, duration > 30 min.)         Housing type       distribution board housing         Installation type       Mounting rail (35 mm)         Housing material <td< td=""><td>•</td><td>2.3 W</td></td<>	•	2.3 W
screw-type terminal top, bottom (load circuit)Neutral conductor positionrightConnection C1 Maximum number of conductors per terminal2 (conductors of same type and cross-section)Cross section solid1-wire: 1 mm <sup>2</sup> 35 mm <sup>2</sup> ; 2-wire: 1 mm <sup>2</sup> 10 mm <sup>2</sup> Connecting capacity flexible1-wire: 1 mm <sup>2</sup> 25 mm <sup>2</sup> ; 2-wire: 1 mm <sup>2</sup> 10 mm <sup>2</sup> Cross section stranded1-wire: 1 mm <sup>2</sup> 25 mm <sup>2</sup> ; 2-wire: 1 mm <sup>2</sup> 10 mm <sup>2</sup> Tightening torque2 Nm 2.4 NmGeneral dataOperating positionOperating positionoptionalMechanical endurancemin. 5000 switching cyclesElectrical endurancemin. 200 switching cyclesClimate resistance2 o g / 20 ms DurationFatigue limit> 5 g (f ≤ 80 Hz, duration > 30 min.)Housing typedistribution board housingInstallation typeMounting rail (35 mm)Housing material1P20 (installed: IP40)	Back-up fuse type	gG
Neutral conductor positionrightConnection C1 Maximum number of conductors per terminal2 (conductors of same type and cross-section)Cross section solid1-wire: 1 mm² 35 mm²; 2-wire: 1 mm² 10 mm²Connecting capacity flexible1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm²Cross section stranded1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm²Tightening torque2 Nm 2.4 NmGeneral dataOperating positionOperating positionoptionalMechanical endurancemin. 5000 switching cyclesElectrical endurancemin. 2000 switching cyclesClimate resistance3 condition to get on so monthShock resistance2 o g / 20 ms DurationFatigue limit> 5 g (f ≤ 80 Hz, duration > 30 min.)Housing typeMounting rail (35 mm)Housing materialThermoplasticProtection classIP20 (installed: IP40)	Overvoltage class	III
Connection C1 Maximum number of conductors per terminal2 (conductors of same type and cross-section)Cross section solid1-wire: 1 mm² 35 mm²; 2-wire: 1 mm² 10 mm²Connecting capacity flexible1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm²Cross section stranded1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm²Tightening torque2 Nm 2.4 NmGeneral dataOperating positionOperating positionoptionalMechanical endurancemin. 5000 switching cyclesElectrical endurancemin. 2000 switching cyclesClimate resistance2 or y cShock resistance2 or y cShock resistance2 or y cFatigue limit> 5 g (f ≤ 80 Hz, duration > 30 min.)Housing typedistribution board housingInstallation typeMounting rail (35 mm)Housing materialIP20 (installed: IP40)		screw-type terminal top, bottom (load circuit)
number of conductors per terminalCross section solid1-wire: 1 mm² 35 mm²; 2-wire: 1 mm² 10 mm²Connecting capacity flexible1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm²Cross section stranded1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm²Cross section stranded1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm²Tightening torque2 Nm 2.4 NmGeneral dataOperating positionOperating positionoptionalMechanical endurancemin. 500 switching cyclesElectrical endurancemin. 2000 switching cyclesClimate resistance3 ccording to IEC 60068-2-30Shock resistance20 g / 20 ms DurationFatigue limit> 5 g (f ≤ 80 Hz, duration > 30 min.)Housing typedistribution board housingInstallation typeMounting rail (35 mm)Housing materialThermoplasticProtection classIP20 (installed: IP40)	Neutral conductor position	right
Connecting capacity flexible1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm²Cross section stranded1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm²Tightening torque2 Nm 2.4 NmCoperating positionOperating and the coperation optionalMechanical endurancemin. 5000 switching cyclesElectrical endurancemin. 2000 switching cyclesClimate resistanceaccording to IEC 60068-2-30Shock resistance20 g / 20 ms DurationFatigue limit> 5 g (f ≤ 80 Hz, duration > 30 min.)Housing typeMounting rail (35 mm)Housing materialThermoplasticProtection classIP20 (installed: IP40)	number of conductors per	2 (conductors of same type and cross-section)
Cross section stranded1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm²Tightening torque2 Nm 2.4 NmGeneral dataOperating positionOperating positionoptionalMechanical endurancemin. 5000 switching cyclesElectrical endurancemin. 2000 switching cyclesClimate resistance-25 °C 40 °CClimate resistance20 g / 20 ms DurationFatigue limit> 5 g (f ≤ 80 Hz, duration > 30 min.)Housing typedistribution board housingInstallation typeMounting rail (35 mm)Housing materialIP20 (installed: IP40)	Cross section solid	1-wire: 1 mm <sup>2</sup> 35 mm <sup>2</sup> ; 2-wire: 1 mm <sup>2</sup> 10 mm <sup>2</sup>
Tightening torque2 Nm 2.4 NmGeneral dataOperating positionoptionalMechanical endurancemin. 5000 switching cyclesElectrical endurancemin. 2000 switching cyclesAmbient temperature-25 °C 40 °CClimate resistanceaccording to IEC 60068-2-30Shock resistance20 g / 20 ms DurationFatigue limit> 5 g (f ≤ 80 Hz, duration > 30 min.)Housing typedistribution board housingInstallation typeMounting rail (35 mm)Housing materialIP20 (installed: IP40)	Connecting capacity flexible	1-wire: 1 mm <sup>2</sup> 25 mm <sup>2</sup> ; 2-wire: 1 mm <sup>2</sup> 10 mm <sup>2</sup>
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Operating positionoptionalMechanical endurancemin. 5000 switching cyclesElectrical endurancemin. 2000 switching cyclesAmbient temperature-25 °C 40 °CClimate resistanceaccording to IEC 60068-2-30Shock resistance20 g / 20 ms DurationFatigue limit> 5 g (f ≤ 80 Hz, duration > 30 min.)Housing typedistribution board housingInstallation typeMounting rail (35 mm)Housing materialIP20 (installed: IP40)	Tightening torque	2 Nm 2.4 Nm
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Shock resistance20 g / 20 ms DurationFatigue limit> 5 g (f ≤ 80 Hz, duration > 30 min.)Housing typedistribution board housingInstallation typeMounting rail (35 mm)Housing materialthermoplasticProtection classIP20 (installed: IP40)		
Fatigue limit       > 5 g (f ≤ 80 Hz, duration > 30 min.)         Housing type       distribution board housing         Installation type       Mounting rail (35 mm)         Housing material       thermoplastic         Protection class       IP20 (installed: IP40)		
Housing typedistribution board housingInstallation typeMounting rail (35 mm)Housing materialthermoplasticProtection classIP20 (installed: IP40)		
Installation type     Mounting rail (35 mm)       Housing material     thermoplastic       Protection class     IP20 (installed: IP40)		
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Protection class IP20 (installed: IP40)		-
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44 1111	wideli	44 mm

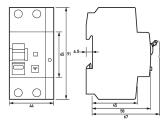
# Doepke

The experts in residual current protection technology

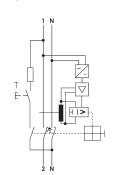
Technical Data	DRCBO 4 C16/0,03/1N-B+
Height	91 mm
Depth	73.5 mm
Installation depth	67 mm
Module widths	2.5
Weight	0.278 kg
Design requirements/Standards	VDE 0664-20, VDE 0664-40, VDE 0664-401, EN 61009-1, EN 62423, ÖVE/ÖNORM E 8601
Power limitation category	3
Degree of pollution	2
Certifications	VDE

## Dimensions

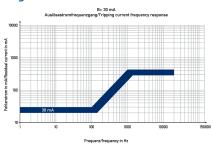
Dimensional drawing Group view



Wiring example



Diagrams



Characteristic B+ 30 mA

Wiring diagram