## Doepke



# **DATA SHEET**

residual current operated circuit-breakers with integral overcurrent protection DRCBO 4 Bo6/0,30/3N-B+ AC/DC sensitive type B+, fire protection according to VDE 0100-420 Article number 09948311



## 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 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

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 4-pole

## Technical Data

Technical Data	DRCBO 4 Bo6/0,30/3N-B+
Series	DRCBO 4
Number of poles	3+N
Residual current type	B+
Rated current (AC)	6 A
Rated residual current IAn	0.3 A
Short-time delayed	true
Selective	false

## Doepke

The experts in residual current protection technology

min. Operating voltage range of test circuit max. Operating voltage range of test circuit max. Operating voltage range of test circuit minimum rated operating voltage (Type AJAC operation) Non-trip time Non-trip	Technical Data	DRCBO 4 Bo6/0,30/3N-B+
text circuit Voltage (Type AIAC operation) Voltage (Type AIAC operation) Voltage (Type AIAC operation) Voltage (Type Oper		
voltage (Type A/AC operation)         50 V AC           Minimum rate doperating         50 V AC           Non-trip time         10 ms           Tripping frequency         0 Hz		254 V
Minimum rated operating voltage (Type B operation)       50 V AC         Non-trip time       10 ms         Tripping frequency       0 Hz       as MHz         Maximum disconnection times       1 · Un × 500 ms; 5 · Un × 540 ms       Tripping characteristic       B         Supply side       up       Operating voltage (AC)       max. 4,40 V       Internal consumption       max. 1,3 W         Internal consumption       max. 1,3 W       Ioad circuit       Specification       Ioad circuit         Specification       Ioad circuit       6 A       Rated voltage (AC)       2 30 V, 400 V         Rated voltage (AC)       2 30 V, 400 V       Rated voltage (AC)       2 30 V, 400 V         Rated voltage (AC)       6 A       Rated voltage (AC)       2 30 V, 400 V         Rated solution circuit current       6 KA       Surge current strength       3 kA         Surge current strength       3 kA       StA       Sta         Rated insulation voltage       4 kV       Rated requency       Go Hz       Go         Current heat loss per current path       2 :1 W       Sta       Sta       Sta         Back-up fuse type       gG       Go       Overolage class       III       Sta       Sta       Sta       Sta       Sta       Sta		o V AC
Non-trip time         10 ms           Tripping frequency         0 Hz to kHz           Maximum disconnection times         1-16m: 53 ooms; 5-16m: 54 oms           Tripping daracteristic         B           Suppity side         up           Operating voltage (AC)         max: 440 V           Internal consumption         max: 43 W           Specification         load direcuit           Rated move withstand voltage         440 V           Rated insulation voltage         440 V           Rated insulation voltage         440	Minimum rated operating	50 V AC
Maximum disconnection times         1 · LAn: ≤ 300 ms; 5 · LAn: ≤ 40 ms           Tripping characteristic         B           Operating voltage (AC)         max. 440 V           Internal consumption         max. 3 W           Specification         load disconnect contact           Rated voltage (AC)         230 V, 400 V           Rated voltage (AC)         230 V, 400 V           Rated voltage (AC)         230 V, 400 V           Rated short-circuit current         6 kA           Surge current strength         3 kA           max. Total rates dwitching         6 kA           Careent strength         3 kA           max. Total rates dwitching         6 kA           Careent strength         3 kA           max. Total rates dwitching         6 kA           Careent basis per current         2.1 W           Rated inpulse withstand voltage         4 kV           Rated inpulse withstand voltage         1 kV           Rated inpulse withstand voltage         1 kV           Rated frequency         50 Hz           Overvoltage class         III           Screw-type terminal top, bottom (load circuit)           number of conductors per terminal top, bottom (load circuit)           Connecting capacity flexible         2-wire:		10 MS
Maximum disconnection times       1-1Δn: 5 goo ms; 5-1Δn: 5 40 ms         Tripping characteristic       B         Operating voltage (AC)       max. 440 V         Internal consumption       max. 440 V         Specification       Ioad disconnect contact         Rated voltage (AC)       230 V, 400 V         Rated voltage (AC)       230 V, 400 V         Rated voltage (AC)       6 A         Rated short-circuit current       6 IA         Surge current strength       3 kA         max. Total rated switching       6 KA         capacity       6 V         Rated insolution voltage       4 kV         Rated insolution voltage       4 kV         Rated insolution voltage       4 kV         Rated frequency       50 Hz         Current heat loss per current path       2.1 W         Back-up fixes type       9G         Overvoltage class       III         Connection CA Maximum       2 (conductors of same type and cross-section)         number of conductors per turrinal       2.1 W         Consecting capacity fixelible       1-wire: 1 mm <sup>2</sup>		o Hz 20 kHz
Tripping characteristic       B         Supply side       up         Operating voltage (AC)       max. 4,a V         Internal Consumption       max. 4,a V         Internal Consumption       max. 4,a V         Internal Consumption       load disconnect contact         Rated voltage (AC)       23 V, 400 V         Rated fournet (AC)       6 A         Rated fournet (AC)       6 A         Rated fournet strength       3 kA         max. Total rated switching capacity       6 kA         capacity       6 kA         Rated insulation voltage       4 kV         Rated inpulse withstand voltage       4 kV         Rated frequency       50 Hz         Current heat loss per current path       2.1 W         pack-up fixe type       9G         Overvoltage class       III         Sconection Cs Maximum number of conductors per terminal top, pottom (load circuit)         number of conductors per terminal top, pottom (load circuit)         Cross section solid       2-wire: 1mm <sup>2</sup>		1 · IΔn: ≤ 300 ms; 5 · IΔn: ≤ 40 ms
Supply side         up           Operating voltage (AC)         max. 4,40 V           Internal consumption         load dircuit           Specification         load dircuit           Specification         load dircuit           Specification         load dircuit           Specification         load dircuit           Stated voltage (AC)         230 V,400 V           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 insulation voltage         4 kV           Rated frequency         50 Hz           Current heat loss per current path         2.1W           Back-up fuse type         gG           Overvoltage class         III           Connection C1 Maximum         2 (conductors of same type and cross-section)           number of conductors per terminal         1-wire: 1 mm <sup>2</sup>	Tripping characteristic	
Operating voltage (AC)         max. 440 V           Internal consumption         max. 1,3 W           Specification         load disconnect contact           Rated voltage (AC)         230 V, 400 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         2.1 W           Back-up fuse type         gG           Overvoltage class         III           mumber of conductors position         right           Connecting capacity flexible         2.1 w           Connecting capacity flexible         2.1 w           Consecting 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> Consecting capacity flexible         2 (conductors of same type and cross-section)           number of conductors per terminal top, bottom (load circuit)         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 -wire: 1 mm <sup>2</sup> 35 mm <sup>2</sup> ; 2 -wire: 1 mm <sup>2</sup> 10 mm <sup>2</sup> Consecti		au
Internal consumption max. 1.3 W Internal consumption load direcuit Specification load disconnect contact Rated voltage (AC) 2.30 V, 400 V Rated current (AC) 6.A Rated short-circuit current 6.kA Surge current strength 3.kA max. Total rated switching 6.kA capacity 2.440 V Rated impulse withstand voltage 4.40 V Rated impulse withstand voltage 4.40 V Rated impulse withstand voltage 4.40 V Rated insplate withstand voltage 9.042 Current heat loss per current 2.1 W path 2.1 W Back-up fuse type 9.050 Hz Connection C1 Maximum number of conductors of same type and cross-section) number of conductors per terminal top, bottom (load circuit) Neutral conductor position right Connection C1 Maximum 2. (conductors of same type and cross-section) number of conductors of same type and cross-section) number of conductors of same type and cross-section) Consection solid 1wire: 1mm <sup>2</sup> 25 mm <sup>2</sup> ; 2.wire: 1 mm <sup>2</sup> 10 mm <sup>2</sup> Connecting capacity flexible 1wire: 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 Electrical endurance mini. 2000 switching cycles Electrical endurance 2.00 (conductors of some type and cross-section) Mechanical endurance mini. 2000 switching cycles Electrical endurance 2.00 (conductors of some cycles 2.2 minitors cycles Electrical endurance 2.00 (conductors of some cycles 2.2 minitors cycles Electrical endurance 2.00 (conductors of some cycles 2.2 minitors cycles Electrical endurance 2.00 (conductors cycles Electrical endurance 2.00 (conductors cycles Ambient temperature -25 °C40 °C Climate resistance 3.00 (conductors cycles Electrical endurance 2.00 (conductors cycles Electrical endurance 2.00 (conductors cycles Shock resistance 3.00 (conductors cycles Shock resistance 3.00 (conductors cycles Electrical endurance 3.00 (conductors cycles Electrical endurance 3.00 (conductors cycles Shock resistance 3.00 (conductors cycles Shock resistance 3.00 (conductors cycles Shock resistance 3.00 (conductors cycles Shock resistance 3.00 (c		
Ioad circuit           Specification         Ioad disconnect contact           Rated violtage (AC)         230 V, 400 V           Rated urrent (AC)         6 A           Rated short-circuit current         6 kA           Surge current strength         3 kA           max. Total rated switching         6 kA           capacity         6 kA           Rated insulation voltage         4 kV           Rated insulation voltage         4 kV           Rated finaulaxi voltage         4 kV           Rated finaulaxi voltage         9 kIz           Current heat loss per current         2.1 W           path         2.1 W           path         9G           Overvoltage class         III           Current heat loss per current         2.1 W           path         2 (conductors position           Connection C1 Maximum         2 (conductors of same type and cross-section)           number of conductors per terminal         10 mm²		
Specification         Ioad disconnect contact           Rated voltage (AC)         230 V, 400 V           Rated short-circuit current         6 A           Surge current strength         3 kA           max. Total rated switching capacity         6 kA           Rated insulation voltage         440 V           Rated insulation voltage         4 kV           Rated fingulacy         6 kA           Current heat loss per current path         9 Hz           Current heat loss per current path         2.1 W           Back-up fuse type         GG           Overvoltage class         III           Connection C. Maximum         2 (conductors of same type and cross-section) number of conductors per terminal           Cross section solid         1-wire: 1 mm <sup>3</sup>		
Rated voltage (AC)       230 V, 400 V         Rated solvade current (AC)       6 A         Rated short-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       4 kV         Rated inpulse withstand voltage       9 kA         Current heat loss per current path       2.1 W         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; 2-wire: 1 mm² 30 mm²         Cross section solid       1-wire: 1 mm² 35 mm²; 2-wire: 1 mm² 30 mm²         Connecting capacity flexible       1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 30 mm²         Cores section solid       1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 30 mm²         Cores section solid       1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 30 mm²         Cores section solid       1-wire: 1 mm² 30 mm²         Conecting c	Specification	
Rated current (AC)       6 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 frequency       50 Hz         Current heat loss per current path       2.1 W         Back-up five type       gG         Overvoltage class       III         Mutral conductor position       right         Connection Ca Maximum number 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> Cross section stranded       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 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>	•	
Rated short-circuit current       6 kA         Surge current strength       3 kA         max. Total rated switching capacity       6 kA         Rated insulation voltage       4 kV         Rated insulation voltage       4 kV         Rated insulation voltage       4 kV         Rated frequency       50 Hz         Current heat loss per current path       2.1 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         Cross section 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         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       2-wire: 1 mm² 26 mm², 2-wire: 1 mm² 10 mm²         Connecting capacity flexible       1-wire: 1 mm² 26		
Surge current strength3 kAmax. Total rated switching capacity6 kARated insulation voltage440 VRated insulation voltage4 kVRated insulation voltage4 kVRated insulation voltage4 kVRated frequency50 HzCurrent heat loss per current path2.1 WBack-up fuse typegGOvervoltage classIIIMettral conductor positionrightConnection C1 Maximum number of conductors per terminal2 (conductors of same type and cross-section)Consection solid1-wire: 1 mm² 35 mm²; 2-wire: 1 mm² 10 mm²Consection solid1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm²Consection solid1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm²Connecting capacity flexible1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm²Connecting capacity flexible1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm²Connecting capacity flexible1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm²Connecting capacity flexible1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm²Connecting capacity flexible1-wire: 1 mm² 26 mm²; 2-wire: 1 mm² 10 mm²Connecting capacity flexible1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm²Connecting capacity flexible1-wire: 1 mm² 26 mm²; 2-wire: 1 mm² 10 mm²Connecting capacity flexible1-wire: 1 mm² 26 mm²; 2-wire: 1 mm² 10 mm²Connecting capacity flexible2 Nm 24, NmGeneral data0Operating position0 ptionalMechanical endurance </td <td></td> <td></td>		
max. Total rated switching       6 kA         capacity       440 V         Rated insulation voltage       4 kV         Rated insulation voltage       4 kV         Rated frequency       50 Hz         Current heat loss per current path       2.1 W         Back-up fuse type       gG         Overvoltage class       III         Overvoltage class       III         Connection C1 Maximum       2 (conductors of same type and cross-section)         number of conductors per terminal       2 (conductors of same type and cross-section)         Consection Suid       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> 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> 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> 25 mm <sup>2</sup> ; 2-wire: 1 mm <sup>2</sup> 10 mm <sup>2</sup> Constenting capacity flexi		
capacityRated insulation voltage440 VRated insulation voltage4 kVRated frequency50 HzCurrent heat loss per current path5.1 WBack-up fuse typeGGOvervoltage classIIICorrent frequency100 classCorrent heat loss per current path2.1 WBack-up fuse typeGGOvervoltage classIIIConnection Ca Maximum number of conductors per terminal2 (conductors of same type and cross-section)Neutral conductor position1-wire: 1 mm² 35 mm²; 2-wire: 1 mm² 10 mm²Consecting capacity flexible1-wire: 1 mm² 35 mm²; 2-wire: 1 mm² 10 mm²Consecting section solid1-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 section stranded1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm²Consecting section stranded1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm²Consecting section stranded1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm²Consecting section stranded2 Nm 2.4 NmConsecting section stranded2 Nm 2.4 NmConsecting collas6Contence30 seconsection secon		
Rated impulse withstand voltage       4 kV         Rated frequency       50 Hz         Current heat loss per current path       2.1 W         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)         Connection solid       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         Consection stranded       1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm²         Tightening torque       2 Nm 2.4 Nm         General data       Optional         Mechanical endurance       min. 2000 switching cycles         Electrical endurance       min. 200 switching cycles         Ambient temperature       -25 °C 40 °C         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       Therroplastic	capacity	
Rated frequency       50 Hz         Current heat loss per current path       2.1 W         Back-up fuse type       gG         Overvoltage class       III         Connection C1 Maximum conductor position         number of conductors per terminal       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       optional         Mechanical endurance       min 2000 switching cycles         Electrical endurance       min 2000 switching cycles         Ambient temperature       -25 °C 40 °C         Climate resistance       20 g / 20 m SDuration         Fatigue limit       >5 g (f ≤ 80 Hz, duration > 30 min.)         Housing type       distribution board housing         Installation type       Mounting rail (35 mm) <td></td> <td></td>		
Current heat loss per current path       2.1 W         Back-up fuse type       gG         Overvoltage class       III         Screw-type terminal top, bottom (load circuit)         Neutral conductor position       right         Connection C1 Maximum or fo conductors per terminal       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> Consection 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> Consection 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         Mechanical endurance       min. 2000 switching cycles         Electrical endurance       min. 2000 switching cycles         Ambient temperature       -25 °C 40 °C         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 <td></td> <td>4 kV</td>		4 kV
path           Back-up fuse type         gG           Overvoltage class         III           Covervoltage class         III           Neutral conductor position         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> 35 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         2 Nm 24 Nm           General data         Operating position           Operating position         Optional           Mechanical endurance         min. 2000 switching cycles           Electrical endurance         min. 2000 switching cycles           Ambient temperature         -25 g °C 40 °C           Climate resistance         20 g / 20 ms Duration           Fatigue limit         >5 g g (f ≤ 80 Hz, duration > 30 min.)           Housing type         distribution board housing           Installation type         Mounting	Rated frequency	50 Hz
Overvoltage class         III           screw-type terminal top, bottom (load circuit)           Neutral conductor position           right           Connection C1 Maximum           a (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> 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> 26 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> Connecting toge           Mechanical endurance           min 2.4 Nm           General data	· ·	2.1 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 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 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 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 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 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 mm²Cross section stranded1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm²Cross section stranded0 potionalMechanical endurancemin. 5000 switching cyclesElectrical endurancemin. 5000 switching cyclesAmbient temperature-25 °C 40 °CClimate resistance20 g / 20 ms DurationFatigue limit> 5 g (f ≤ 80 Hz, duration > 30 min.)Housing typedistribution board housing	Back-up fuse type	gG
Neutral conductor position       right         Connection C1 Maximum       2 (conductors of same type and cross-section)         number of conductors per       2 (conductors of same type and cross-section)         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> 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. 2000 switching cycles         Ambient temperature       -25 °C 40 °C         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)	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 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)		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. 5000 switching cyclesElectrical endurancemin. 2000 switching cyclesClimate 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)	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 additionMechanical 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 materialIP20 (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 positionoptionalMechanical 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 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>
General 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 material1P20 (installed: IP40)	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 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
Mechanical 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)		General data
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Electrical 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 material1P20 (installed: IP40)		
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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)		
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Housing typedistribution board housingInstallation typeMounting rail (35 mm)Housing materialthermoplasticProtection classIP20 (installed: IP40)		
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Housing material     thermoplastic       Protection class     IP20 (installed: IP40)		
Protection class IP20 (installed: IP40)		
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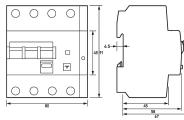
## Doepke

The experts in residual current protection technology

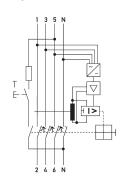
Technical Data	DRCBO 4 Bo6/0,30/3N-B+
Height	91 mm
Depth	73.5 mm
Installation depth	67 mm
Module widths	4.5
Weight	0.323 kg
Design requirements/Standards	VDE 0664-20, VDE 0664-40, VDE 0664-401, EN 61009-1, EN 62423, ÖVE/ÖNORM E 8601
Power limitation category	3
Degree of pollution	2
Certifications	VDE

## Dimensions

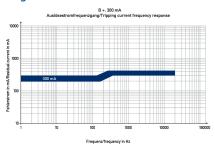
Dimensional drawing Group view



Wiring example



Diagrams



Characteristic B+ 300 mA

Wiring diagram