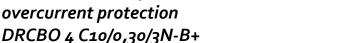


## DATA SHEET

# residual current operated circuit-breakers with integral overcurrent protection



AC/DC sensitive type B+, fire protection according to VDE 0100-420 Article number 09948332





#### **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 ≥ 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

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

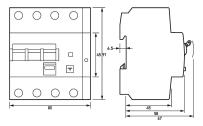
#### Technical Data

Technical Data	DRCBO 4 C10/0,30/3N-B+
Series	DRCBO 4
Number of poles	3+N
Residual current type	B+
Rated current (AC)	10 A
Rated residual current I∆n	o.3 A
Short-time delayed	true
Selective	false

min. Operating voltage range of test circuit contact received to a variety of test contact received to a variety	Technical Data	DRCBO 4 C10/0,30/3N-B+
test circuit  Minimum rated operating voltage range of test circuit  Minimum rated operating voltage (Type AIAC operation)  Voltage (Type AIAC operation)  Minimum rated operating voltage (Type AIAC operation)  Non-trip time  1 oms  Non-trip time  1 oms  Tripping foreovery  Maximum disconnection times  1 · IAn: s gooms 5 · IAn: s 40 ms  Tripping foreacteristic  C  Supply side  up  Operating voltage (AQ  max. 4,6 V  Internal consumption  Max. 1,3 W  Ioad circuit  Specification  Ioad circuit  Io		
test circuit  Minimum rated operating voltage (Type A/AC operation)  Minimum rated operating voltage (Type A/AC operation)  Non-tip time  10 ms  Tripping frequency 0 Hz 20 kHz  Maximum disconnection times 1 i Lân: \$300 ms; 5 i Lân: \$40 ms  Tripping frequency 0 perating voltage (AC)  Operating voltage (AC)  Internal consumption  Internal consumption  Specification  Specification  Specification  Ioad circuit  Specification  Specification  Ioad circuit  Io		100 V
test circuit  Minimum rated operating voltage (Type A/AC operation)  Minimum rated operating voltage (Type A/AC operation)  Non-tip time  10 ms  Tripping frequency 0 Hz 20 kHz  Maximum disconnection times 1 i Lân: \$300 ms; 5 i Lân: \$40 ms  Tripping frequency 0 perating voltage (AC)  Operating voltage (AC)  Internal consumption  Internal consumption  Specification  Specification  Specification  Ioad circuit  Specification  Specification  Ioad circuit  Io	max. Operating voltage range of	254 V
voltage (Type A/AC operation)  Minimum rated operating voltage (Type B operation)  Non-trip time 10 ms  Tripping frequency 0Hz 20 kHz  Maximum disconnection times 1 - 1\Delta : 2 300 ms; 5 - 1\Delta : 2 40 ms  Tripping characteristic C C  Operating voltage (AC) max. 4,40 V  Internal consumption max. 1,3 W  Internal consumption   Internal consumption   Internal consumption    Rated voltage (AC)   230 V, 400 V  Rated ourent (AC)   10 A    Rated voltage (AC)   10 A    Rated voltage (AC)   10 A    Rated voltage (AC)   32 N, 400 V    Rated current (AC)   10 A    Rated short-circuit current   6 kA    Surge current strength   3 kA    max. Total rated switching   6 kA    capacity   440 V    Rated insulation voltage   440 V    Rated insulation voltage   440 V    Rated frequency   50 Hz    Current heat loss per current   1, 4 W    sate frequency   50 Hz    Current heat loss per current   1, 4 W    Neutral conductor position   right    Connection Ca Maximum   2 (conductors of same type and cross-section)    number of Conductors per terminal    Connection Gapacity flexible   1, wire: 1 mm² 25 mm²; 2, wire: 1 mm² 20 mm²    Cross section stranded   1, wire: 1 mm² 25 mm²; 2, wire: 1 mm² 20 mm²    Tightening torque   2, Nm 2, 4, Nm    General data   0 optional    Mechanical endurance   min. 5000 switching cycles    Installation type   distribution board housing    Installation type   distribution board housing    Installation type   Mounting rail (25 mm)    Housing type   distribution board housing    Installation type   Mounting rail (25 mm)    Housing type   Mounting rail (25 mm)    Housing material   Protection class   Pao (installed: IP40)		
Minimum rated operating voltage (Type B operation)  Non-trip time  10 ms  Tripping frequency  0 Hz 20 kHz  Awais and sold sold sold sold sold sold sold sol	Minimum rated operating	o V AC
voltage (Type B operation)  Non-trip time  1 o ms  Tripping frequency  0 Hz 20 kHz  Maximum disconnection times  1 · IAn : 3 300 ms; 5 · IAn : 4 40 ms  Tripping frequency  1 o Hz 20 kHz  Tripping frequency  1 o Hz 20 ms  Tripping dracateristic  C  Supply side  up  Operating voltage (AC)  max. 4,46 V  Internal consumption  max. 13 W  Specification  Ioad circuit  Specification  Ioad disconnect contact  Ioad circuit  Specification  Ioad disconnect contact  Rated voltage (AC)  230 V, 400 V  Rated current (AC)  10 A  Rated short-circuit current  6 kA  Surge current strength  max. Total rated switching  capacity  Rated insulation voltage  4,40 V  Rated insulation voltage  4,40 V  Rated impulse withstand voltage  Rated frequency  50 Hz  Current heat loss per current  path  Back-up fuse type  gG  Overvoltage class  III  Veutral conductor position  General ond discounting  Connection Ca Maximum  number of conductors per  terminal  Connection Ca Maximum  2 (conductors of same type and cross-section)  number of conductors per  terminal  Consesection solid  1 -wire: 1 mm² 35 mm²; 2-wire: 1 mm² 10 mm²  Consection solid  1 -wire: 1 mm² 35 mm²; 2-wire: 1 mm² 10 mm²  Cross section stranded  1 -wire: 1 mm² 35 mm²; 2-wire: 1 mm² 10 mm²  Tightening torque  2 Nm 2, A Nm  General data  Operating position  Operating position  Operating position  General data  Operating position  Operating position  General data  Operating position  Operating position  Operating position  Operating position  Operating torque  2 Nm 2, A Nm  General data  Operating torque  1 - 28 °C 40 °C  Cillimate resistance  1 - 29 °C 40 °C  Ambient temperature  - 25 °C 40 °C  Ambient temperature  - 25 °C 40 °C  Ambient temperature  - 25 °C 40 °C  Housing type  distribution board housing  Installation type  Mounting rail (25 mm)  Housing material  Protection class  IP20 (installation type)		
Non-trip time		50 V AC
Tripping frequency		
Maximum disconnection times         1 · I∆n. ≤ 300 ms; 5 · I∆n. ≤ 40 ms           Tripping characteristic         C           Supply side         up           Operating voltage (AC)         max. 4,40 V           Internal consumption         max. 1,3 W           Specification         load direcuit           Specification         load disconnect contact           Rated voltage (AC)         230 V, 400 V           Rated short-circuit current         6 kA           Surge current strength         3 kA           max. Total rates diswtching         6 kA           Rated insulation voltage         4,40 V           Rated impulse withstand voltage         4,40 V           Rated insulation voltage         4,60 V           Rated impulse withstand voltage         4,60 V      <	· · · · · · · · · · · · · · · · · · ·	
Tripping characteristic C Supply side Up Operating voltage (AC) max. 44 o V Internal consumption max. 1; W Internal consumption load disconnect contact Rated voltage (AC) 23 o V, 40 o V Rated current (AC) 10 A Rated short-circuit current 6 kA Surge current strength 3 kA max. Total rated switching capacity Rated insulation voltage 4 kV Rated insulation voltage 4 kV Rated impulse withstand voltage 4 kV Rated impulse withstand voltage At W Rated insulation voltage 5 GA Rated Surge current 5 GA Rated frequency 5 GA Current have loss per current 1 L4 W Path 1 Sack-up fuse type 9 GA Overvoltage class III  Neutral conductor position 7 GA Connection C1 Maximum 1 C2 (conductors of same type and cross-section) Remain of conductors per terminal top, bottom (load circuit) Ronnection C1 Maximum 1 C2 (conductors of same type and cross-section) Remain of conductors per terminal conductor of same type and cross-section) Remain of conductors per 1 GA Rated Imm <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> 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> 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> 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> 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> 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> 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> C2		
Supply side up Operating voltage (AC) max. 440 V Internal consumption max. 13 W Ioad dircuit Specification Ioad disconnect contact Rated voltage (AC) 230 V, 400 V Rated current (AC) 10 A Rated short-circuit current 6 kA Surge current strength 3 kA max. Total rated switching 6 kA Rated insulation voltage A40 V Rated insulation voltage 4 kV Rated frequency 50 Hz Current heat loss per current path Back-up fuse type 9 gG Overvoltage class III Neutral conductor position right Connection C1 Maximum 10 conductors per terminal Cross section solid 1-wire: 1 mm² 35 mm²; 2-wire: 1 mm² 10 mm² Cross section stranded 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 Cross section stranded 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 Cross section stranded 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 Cross section stranded 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 Cross section stranded 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 Cross section stranded 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 Cross section stranded 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 Cross section stranded 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 Cross section stranded 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 Cross section stranded 1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm² Cross section stranded 1-wire: 1 mm² 25		
Operating voltage (AC) Internal consumption  max. 13 W  load dircuit  Specification  load disconnect contact  Rated voltage (AC)  Rated voltage (AC)  Rated current (AC)  Rated short-circuit current  6 KA  Surge current strength  3 KA  max. Total rated switching  capacity  Rated insulation voltage  440 V  Rated insulation voltage  444 V  Rated frequency  50 HZ  Current heat loss per current  path  Back-up fuse type  gG  Overvoltage class  III  Connection C1 Maximum  number of conductor position  fight  Connection C2 Maximum  number of conductors per terminal  Cross section solid  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 24 Nm  Operating position  Operating position  Mechanical endurance  Ambient temperature  2 cool solid local cool switching cycles  General data  Operating position  Operating position  Mechanical endurance  min. 5000 switching cycles  Ambient temperature  2 cool solid local cool switching cycles  Lelectrical endurance  min. 5000 switching cycles  Ambient temperature  2 cool solid local cool switching cycles  Ambient temperature  2 cool solid local cool switching cycles  Ambient temperature  2 cool solid local cool switching cycles  Bellectrical endurance  min. 5000 switching cycles  Ambient temperature  2 cool switching cycles  Ambient temperature  2 cool switching cycles  Ambient temperature  2 cool switching cycles  Ambient temperature  3 cool switching cycles  Ambient temperature  2 cool switching cycles  Ambient temperature  3	- ' ' '	С
Internal consumption max. 1.3 W load circuit  Specification   Ioad disconnect contact Rated voltage (AC)   230 V, 400 V   Rated current (AC)   10 A   Rated short-circuit current   6 kA   Surge current strength   3 kA   max. Total rated switching   6 kA   capacity   Rated impulse withstand voltage   440 V   Rated impulse withstand voltage   4 kV   Rated impulse withstand voltage   4 kV   Rated impulse withstand voltage   50 Hz   Current heat loss per current   1.4 W   Back-up fuse type   9 G   Overvoltage class   III   Screw-type terminal top, bottom (load circuit)   Neutral conductor position   right   Connection C.1 Maximum   2 (conductors of same type and cross-section)   number of conductors per terminal   Consection solid   1-wire: 1 mm² 35 mm²; 2-wire: 1 mm² 10 mm²   Consection gapacity 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   Cross section stranded   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   Cross section stranded   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   Cross section stranded   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   Cross section stranded   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   Cross section stranded   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   Cross section stranded   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   Cross section stranded   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   C		·
Specification   Specificatio		
Specification   load disconnect contact   Rated voltage (AC)   230 V, 400 V   Rated current (AC)   10 A   Rated short-circuit current   6 kA   Surge current strength   3 kA   max. Total rated switching   6 kA   capacity   Rated insulation voltage   440 V   Rated insulation voltage   440 V   Rated insulation voltage   4 kV   Rated frequency   50 HZ   Current heat loss per current   1.4 W   path   Back-up five type   gG   Overvoltage class   III   Neutral conductor position   right   Connection C1 Maximum   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   Cross section stranded   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   Cross section stranded   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   Cross section stranded   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   Cross section stranded   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   Cross section stranded   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   Cross section stranded   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   Cross section stranded   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   Cross section stranded   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   Cross section stranded   1-wire: 1 mm² 2	Internal consumption	
Rated voltage (AC) Rated current (AC) Rated current (AC) Rated short-circuit current Rated insulation voltage Rate insulation voltage Rated insulation volta		load circuit
Rated current (AC) Rated short-circuit current Rated max. Total rated switching Capacity Rated insulation voltage Rated insulation voltage Rated impulse withstand voltage Rated frequency So Hz Current heat loss per current path Rated path Rated system of the state of th	•	load disconnect contact
Rated short-circuit current  Surge current strength  3 kA  max. Total rated switching capacity/ Rated insulation voltage  Rated insulation voltage  Rated insulation voltage  Rated frequency  Current heat loss per current path  Back-up fuse type  QG  Overvoltage class  III  Screw-type terminal top, bottom (load circuit)  Neutral conductor position  Connection Ca Maximum number of conductors per terminal  Cross section solid  Consection solid  1-wire: 1 mm² 35 mm²; 2-wire: 1 mm² 10 mm²  Consessection 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  Initial conductor position  Mechanical endurance  Ambient temperature  2 s f c 40 °C  Climate resistance  2 og 1 zo ms Duration  Fatigue limit  > 5 g (f s 8 o Hz, duration > 30 min.)  Housing type  Mounting rail (35 mm)  Housing type  Mounting rail (35 mm)  Housing material  Protection class  IP 20 (installed: IP40)	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  Current heat loss per current path  Back-up fuse type  Gerent deard conductor position  Connection Ca Maximum a (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  Cross section stranded  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  Cross section stranded  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  Cross section stranded  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  Cross section stranded  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  Cross section stranded  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  Cross section stranded  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  Cross section stranded  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  Cross section stranded  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  Cross section stranded  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  Cross section stranded  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  Cross section stranded	Rated current (AC)	10 A
max. Total rated switching capacity  Rated insulation voltage Rated frequency So Hz Current heat loss per current path Back-up fuse type  GG Overvoltage class III  Neutral conductor position Screw-type terminal top, bottom (load circuit) right Connection C1 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 Tightening torque 2 Nm 2.4 Nm General data Operating position Operating position Operating position Ambient temperature 1-25 °C 40 °C Climate resistance Ratical endurance Patigue limit S 5 g (f s 80 Hz, duration > 30 min.) Housing type Mounting ratel (15 mm) Housing material Protection class IP 20 (installed: IP 40)	Rated short-circuit current	6 kA
Rated insulation voltage Rated inpulse withstand voltage Rated frequency  Gor Hz  Current heat loss per current path Back-up fuse type  Govervoltage class  III  Neutral conductor position  Fight  Connection C1 Maximum number of conductors per terminal  Cross section solid  1-wire: 1 mm² 35 mm²; 2-wire: 1 mm² 10 mm²  Cross section standed  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  Cross section standed  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  Cross section standed  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  Cross section standed  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  Cross section standed  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  Cross section standed  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  Cross section standed  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  Cross section solid  1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm²  - 10 mm	Surge current strength	3 kA
Rated insulation voltage Rated impulse withstand voltage Rated frequency So Hz Current heat loss per current path Back-up fuse type Govervoltage class III Screw-type terminal top, bottom (load circuit) Neutral conductor position Connection C1 Maximum number of conductors per terminal Connecting capacity flexible Connecting capacity flexible Consection Stranded 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 Rated insulation to position Connecting capacity flexible 1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm² Cross section solid 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 Rated frequency Solta Maximum Connecting capacity flexible Ronsestion stranded 1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm² Ronsestion stranded Rechanical endurance Ronsestion stranded Rochanical endurance Ronsestion switching cycles Rated frequency Roussided Rou	max. Total rated switching	6 kA
Rated impulse withstand voltage Rated frequency So Hz Current heat loss per current path Back-up fuse type Govervoltage class III  Neutral conductor position Connection C1 Maximum number of conductors per terminal Cross section solid Connecting capacity flexible Consection Stranded 1-wire: 1 mm² 35 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 Operating position Operating position Operating position Mechanical endurance Electrical endurance Ambient temperature 2-25 °C 40 °C Climate resistance 3 g / 20 ms Duration Fatigue limit Sos of Rabel Advanced in Sos of Rabel Advanced in Sos of Rabel Sos of Rabel Sos of Rabel Sos of Rabel Mounting type Mounting type Housing type Mounting rail (35 mm) Housing material Protection class IP 20 (installed: IP40)		
Rated frequency  Current heat loss per current path  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  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  Tightening torque  2 Nm 2.4 Nm  General data  Operating position  Mechanical endurance  Iiii 25000 switching cycles  Electrical endurance  Iiii 2000 switching cycles  Ambient temperature  -25 °C 40 °C  Climate resistance  20 g/2 om sDuration  Fatigue limit  > 5 g (f ≤ 80 Hz, duration > 30 min.)  Housing type  Installation type  Mounting rail (35 mm)  Housing material  Protection class  IP20 (installed: IP40)		
Current heat loss per current path Back-up fuse type  QG  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  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  Mechanical endurance  Electrical endurance  Electrical endurance  Ambient temperature  2 og / 20 ms Duration  Fatigue limit  > 5 g (f ≤ 80 Hz, duration > 30 min.)  Housing type  Housing material  Protection class  IP 20 (installed: IP40)		4 kV
path 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 Cross section stranded 1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm² Tightening torque 2 Nm 24 Nm General data Operating position Optional Mechanical endurance Inin. 5000 switching cycles Electrical endurance Electrical endurance 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 Installation type Mounting rail (35 mm) Housing material Protection class IP20 (installed: IP40)		50 Hz
Back-up fuse type 9 gG  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  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  Tightening torque 2 Nm 2.4 Nm  General data  Operating position optional  Mechanical endurance min. 5000 switching cycles  Electrical endurance min. 2000 switching cycles  Ambient temperature 2.5 °C 40 °C  Climate resistance according to IEC 60068-2-30  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 thermoplastic  Protection class		1.4 W
Overvoltage class         But screw-type terminal top, bottom (load circuit)         Neutral conductor position         Fight         Connection C1 Maximum         1 (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         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       optional         Mechanical endurance       min. 5000 switching cycles         Electrical endurance       min. 2000 switching cycles         Ambient temperature       -25 °C 40 °C         Climate resistance       according to IEC 60068-2-30         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       thermoplastic         Protection cla	•	
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     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       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     optional       Mechanical endurance     min. 5000 switching cycles       Electrical endurance     min. 2000 switching cycles       Ambient temperature     -25 °C 40 °C       Climate resistance     according to IEC 60068-2-30       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     thermoplastic       Protection class     IP20 (installed: IP40)		
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  Tightening torque  2 Nm 2.4 Nm  General data  Operating position  Mechanical endurance  Electrical endurance  min. 5000 switching cycles  Ambient temperature  -25 °C 40 °C  Climate resistance  3 cording to IEC 60068-2-30  Shock resistance  2 o g / 20 ms Duration  Fatigue limit  > 5 g (f ≤ 80 Hz, duration > 30 min.)  Housing type  Mounting rail (35 mm)  Housing material  Protection class  IP 20 (installed: IP 40)	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  Tightening torque 2 Nm 2.4 Nm  General data  Operating position optional  Mechanical endurance min. 5000 switching cycles  Electrical endurance min. 2000 switching cycles  Electrical endurance according to IEC 60068-2-30  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 Protection class IP 20 (installed: IP 40)		
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  Tightening torque  2 Nm 2.4 Nm  General data  Operating position  Operating position  Mechanical endurance  Ini. 5000 switching cycles  Electrical endurance  min. 2000 switching cycles  Ambient temperature  -25 °C 40 °C  Climate resistance  3 coording to IEC 60068-2-30  Shock resistance  2 o 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  Protection class	<u> </u>	
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  Tightening torque  2 Nm 2.4 Nm  General data  Operating position  Optional  Mechanical endurance  min. 5000 switching cycles  Electrical endurance  min. 2000 switching cycles  Ambient temperature  -25 °C 40 °C  Climate resistance  3 cacording to IEC 60068-2-30  Shock resistance  2 og / 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  Protection class  IP 20 (installed: IP 40)		2 (conductors of same type and cross-section)
Cross section solid $1\text{-wire: }1\text{mm}^2\dots 35\text{mm}^2;  2\text{-wire: }1\text{mm}^2\dots 10\text{mm}^2$ Connecting capacity flexible $1\text{-wire: }1\text{mm}^2\dots 25\text{mm}^2;  2\text{-wire: }1\text{mm}^2\dots 10\text{mm}^2$ Cross section stranded $1\text{-wire: }1\text{mm}^2\dots 25\text{mm}^2;  2\text{-wire: }1\text{mm}^2\dots 10\text{mm}^2$ Tightening torque $2\text{Nm}\dots 2.4\text{Nm}$ General dataOperating positionoptionalMechanical endurancemin. 5000 switching cyclesElectrical endurancemin. 2000 switching cyclesAmbient temperature $-25^{\circ}\text{C}\dots 40^{\circ}\text{C}$ Climate resistanceaccording to IEC 60068-2-30Shock resistance $20\text{g}/2\text{oms}$ DurationFatigue limit $>5\text{g}$ (f $\le 80\text{Hz}$ , duration $> 30\text{min.}$ )Housing typedistribution board housingInstallation typeMounting rail (35 mm)Housing materialthermoplasticProtection classIP20 (installed: IP40)		
Connecting capacity flexible  1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm²  1-wire: 1 mm² 10 mm²  1-wire: 1 mm² 25 mm²; 2-wire: 1 mm² 10 mm²  1-wire: 1 mm²		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 mm² 25 mm²; 2-wire: 1 mm² 10 mm²         Tightening torque       2 Nm 2.4 Nm         General data       Operating position       optional         Mechanical endurance       min. 5000 switching cycles         Electrical endurance       min. 2000 switching cycles         Ambient temperature       -25 °C 40 °C         Climate resistance       according to IEC 60068-2-30         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       thermoplastic         Protection class       IP20 (installed: IP40)		
Tightening torque  2 Nm 2.4 Nm  General data  Operating position  Optional  Mechanical endurance  Electrical endurance  Ambient temperature  Climate resistance  Shock resistance  Fatigue limit  Fatigue limit  Housing type  Installation type  Mounting rail (35 mm)  Housing material  Protection class  Protection class  Protection class  Optional  Opti		
General data         Operating position       optional         Mechanical endurance       min. 5000 switching cycles         Electrical endurance       min. 2000 switching cycles         Ambient temperature       -25 °C 40 °C         Climate resistance       according to IEC 60068-2-30         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       thermoplastic         Protection class       IP20 (installed: IP40)		
Operating position       optional         Mechanical endurance       min. 5000 switching cycles         Electrical endurance       min. 2000 switching cycles         Ambient temperature       -25 °C 40 °C         Climate resistance       according to IEC 60068-2-30         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       thermoplastic         Protection class       IP20 (installed: IP40)	rightening torque	•
Mechanical endurancemin. 5000 switching cyclesElectrical endurancemin. 2000 switching cyclesAmbient temperature $-25$ °C $40$ °CClimate resistanceaccording to IEC $60068-2-30$ Shock resistance $20$ 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)	Operating position	
Electrical endurance $min. 2000 \text{ switching cycles}$ Ambient temperature $-25 ^{\circ}\text{C} \dots 40 ^{\circ}\text{C}$ Climate resistance $according \text{ to IEC } 60068-2-30$ Shock resistance $20  g  /  20  \text{ms Duration}$ Fatigue limit $> 5  g  (\text{f} \leq 80  \text{Hz},  \text{duration} > 30  \text{min.})$ Housing type $according \text{ distribution board housing}$ Installation type $according \text{ mounting rail } (35  \text{mm})$ Housing material $according \text{ thermoplastic}$ Protection class $according \text{ the properties}$ IP20 (installed: IP40)		· · · · · · · · · · · · · · · · · · ·
Ambient temperature $ -25  ^{\circ}\text{C} \dots 40  ^{\circ}\text{C} $ Climate resistance $ according \text{ to IEC } 60068\text{-}2\text{-}30 $ Shock resistance $ 20  g  /  20  \text{ms Duration} $ Fatigue limit $ > 5  g  (\text{f} \leq 80  \text{Hz, duration} > 30  \text{min.}) $ Housing type $ distribution \text{ board housing} $ Installation type $ Mounting \text{ rail } (35  \text{mm}) $ Housing material $ thermoplastic $ Protection class $ IP20  (\text{installed: IP40}) $		
Climate resistanceaccording to IEC 60068-2-30Shock resistance $20 \text{ g / 20 ms Duration}$ Fatigue limit $> 5 \text{ g (f} \le 80 \text{ Hz, duration} > 30 \text{ min.})$ Housing typedistribution board housingInstallation typeMounting rail (35 mm)Housing materialthermoplasticProtection classIP20 (installed: IP40)		
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       thermoplastic         Protection class       IP20 (installed: IP40)	•	
Fatigue limit $> 5 g$ (f $\le 80$ Hz, duration $> 30$ min.)  Housing type distribution board housing  Installation type Mounting rail (35 mm)  Housing material thermoplastic  Protection class IP20 (installed: IP40)		<del>_</del>
Housing type distribution board housing Installation type Mounting rail (35 mm) Housing material thermoplastic Protection class IP20 (installed: IP40)		
Installation type Mounting rail (35 mm) Housing material thermoplastic Protection class IP20 (installed: IP40)		
Housing material thermoplastic Protection class IP20 (installed: IP40)		
Protection class IP20 (installed: IP40)		<del>_</del>
	-	<u>·</u>
Width 80 mm		· · · · · · · · · · · · · · · · · · ·
	Width	80 mm

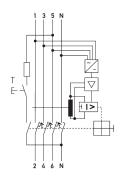
Technical Data	DRCBO 4 C10/0,30/3N-B+
Height	91 mm
Depth	73.5 mm
Installation depth	67 mm
Module widths	4.5
Weight	0.323 kg
Design requirements/Standards	VDE 0664-20, VDE 0664-40, VDE 0664-401, EN 61009-1, EN 62423, ÖVE/ÖNORM E 8601
Power limitation category	3
Degree of pollution	2
Certifications	VDE

### Dimensions

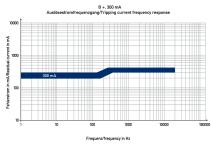


Dimensional drawing Group view

# Wiring example



# Diagrams



Characteristic B+ 300 mA

Wiring diagram