

DATA SHEET

Article number: 09948476

residual current operated circuit-breakers with integral overcurrent protection DRCBO 4 C25/0,10/3N-PV

AC/DC sensitive, for PV installations, increased surge-current resistant, short-time delayed, lightning resistant, fire prevention up to 20 kHz



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6000 KHZ (25) & KV

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 rated breaking capacity of the DRCBO 4 series is 6#kA. Residual current circuit-breakers of the PV variant have been specially developed for use in PV systems and detect soft continuous residual currents as well as all other residual currents at frequencies of up to 20 kHz. With a short time delay optimised for PV, the AC/DC-sensitive residual current circuit-breaker is resistant to overcurrents. It therefore offers higher system availability due to fewer false trips 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

RCBOs of the PV variant are suitable for private, commercial and industrial installations with TN-S, TT and TN-C-S systems in which photovoltaic systems are installed.

Notes

suitable for use in 50 Hz AC networks, not suitable for use on the output side of controlled electrical equipment such as frequency converters

Accessories

wiring components DRCBO 4-busbars 4-pole

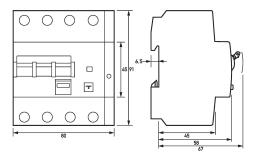
Technical data

Series	DRCBO 4 PV
Number of poles	3+N
Residual current type	B+
Rated current (AC)	25 A
Rated residual current I∆n	0.1 A
Short-time delayed	true
Selective	false
min. Operating voltage range of test circuit	100 V
max. Operating voltage range of test circuit	254 V
Minimum rated operating voltage (Type A/AC	o V AC
operation)	
Minimum rated operating voltage (Type B	50 V AC
operation)	

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15 ms
0 Hz 20 kHz
1 · I∆n: ≤ 300 ms; 5 · I∆n: ≤ 40 ms
С
ир
max. 440 V
max. 1.3 W
load circuit
load disconnect contact
230 V, 400 V
25 A
6 kA
3 kA
6 kA
440 V
4 kV
50 Hz
4.3 W
qG
screw-type terminal top, bottom (load circuit)
right
2 (conductors of same type and cross-section)
2 (conductors of suffic type and cross section)
1-wire: 1 mm ² 35 mm ² ; 2-wire: 1 mm ² 10 mm ²
1-wire: 1 mm ² 25 mm ² ; 2-wire: 1 mm ² 10 mm ²
1-wire: 1 mm ² 25 mm ² ; 2-wire: 1 mm ² 10 mm ²
2 Nm 2.4 Nm
General data
optional
min. 4000 cycles
-40 °C 70 °C
-40 °C 70 °C
<u> </u>
according to IEC 60068-2-30
distribution board housing
Mounting rail (35 mm)
thermoplastic
IP20 (installed: IP40)
80 mm
91 mm
73.5 mm
67 mm
4.5
o.548 kg
VDE 0664-20, VDE 0664-40, VDE 0664-401, EN 61009-1, EN 62423, ÖVE/ÖNORM E 8601
3
2

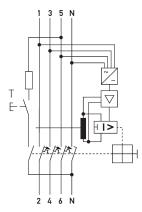
Dimensions



Dimensioned drawing residual current operated circuit-breakers with integral overcurrent protection DRCBO 4 C25/0,10/3N-PV

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Wiring example



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