

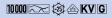
DATA SHEET

residual current circuit-breaker DFS 2 025-2/0,10-A KV



1/3

sensitive to pulsating and alternating currents Type A, increased surgecurrent resistant, short-time delayed, lightning resistant Article number 09125609



Function

Residual current circuit-breakers (RCCBs) are components for implementing protective measure "Automatic disconnection of the power supply" as per VDE o100 part 410 or corresponding international installation regulations. Series DFS 2 devices are compact two-pole residual current circuit-breakers for single-phase networks. In the standard design, they only take up two module-width units of space. In spite of the compact dimensions, a number of different tripping currents and characteristics are available at rated currents, depending on the design, up to 125 A. They also have large two-tier terminals for large conductor cross-sections, a practical multi-functional switch toggle and can be provided with labels using free-of-charge software. Type A residual current circuit-breakers are sensitive to pulsating and alternating currents. This function is independent of the mains voltage. Because they feature a response delay, residual current circuit-breakers in the KV design only respond to residual currents that last longer than a half-period of the power frequency. In contrast to instantaneous breakers, they are significantly less sensitive to brief impulse-like residual currents and facilitate problem-free operation, even when lightning or switching overvoltage in the system causes capacitative surge residual currents or insulation flashovers with a secondary current up to the zero point of the mains voltage. They therefore meet the requirements for lightning-resistant RCCBs as per Austrian standard ÖVE E 8601. The tripping times set out in national and international design regulations for instantaneous RCCBs are also observed by the KV design devices. In principle, therefore, they may be used instead of a standard breaker. Devices in the standard design are intended for monitoring circuits with a rated voltage of 230 V and a rated frequency of 50 Hz.

Features

high immunity against surge currents and mains-voltage-operated secondary current impulses, tripping not dependent on mains and auxiliary voltage, sensitive to AC residual currents and pulsating DC residual currents (type A), compact design for all rated currents, high short-circuit resistance, double-sided two-tier terminals for large conductor cross-section and busbar, switch position indicator, viewing window for labels, multifunction switch toggle with three positions: "on", "off" and "tripped", Neutral conductor position left or right

Mounting

quick fastening to mounting rail, any installation position, supply from any direction

Applications

Power supplies to residential and purpose-built building as well as industrial facilities with TN-S, TT and TN-C-S networks, in which conventional RCCBs trip following transient leakage currents and this is not desired, such as in systems with long cable lengths behind the RCCB, lighting systems with lots of fluorescent lamps (> 20 lamps), computer systems and solar power systems, Excluded is the application in TN-C systems and for the protection of installations in which electronic equipment could generate smooth DC currents or residual currents with frequencies other than 50 Hz. Comprehensive protection is not provided in this case. For these applications we recommend our AC/DC sensitive residual current circuit-breakers (Type B or B+).

Accessories

automatic reclosing devices DFA, terminal caps KA, information stickers HAS, auxiliary switches DHi, restart locks DFS WES, software DBS

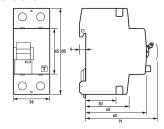
Technical Data

| Technical Data | DFS 2 025-2/0,10-A KV |
|----------------------------|-----------------------|
| Series | DFS 2 A KV |
| Number of poles | 2 |
| Residual current type | A |
| Rated current (AC) | 25 A |
| Rated residual current I∆n | 0.1 A |
| Short-time delayed | true |

| false 100 V 250 V 10 ms load circuit load disconnect contact 4 mm 230 V 25 A 10 kA 3 kA 500 A 400 V 4 kV 50 Hz 0.5 W |
|--|
| 250 V 10 ms load circuit load disconnect contact 4 mm 230 V 25 A 10 kA 3 kA 500 A 400 V 4 kV 50 Hz 0.5 W |
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| 4 mm 230 V 25 A 10 kA 3 kA 500 A 400 V 4 kV 50 Hz 0.5 W |
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| 10 kA 3 kA 500 A 400 V 4 kV 50 Hz 0.5 W |
| 10 kA 3 kA 500 A 400 V 4 kV 50 Hz 0.5 W |
| 500 A 400 V 4 kV 50 Hz 0.5 W 25 A 100 A |
| 400 V 4 kV 50 Hz 0.5 W 25 A 100 A |
| 4 kV 50 Hz 0.5 W 25 A 100 A |
| 50 Hz 0.5 W 25 A 100 A |
| 0.5 W 25 A 100 A |
| 25 A 100 A |
| 100 A |
| |
| |
| gG |
| screw-type terminal top and bottom (load circuit) |
| left or right |
| DGUV V3, VDE o66o-514, finger and back-of-hand proof |
| 2 (conductors of same type and cross-section) |
| 1-wire: 1.5 mm ² 50 mm ² ; 2-wire: 1.5 mm ² 16 mm ² |
| 1-wire: 1.5 mm ² 50 mm ² ; 2-wire: 1.5 mm ² 16 mm ² |
| 1-wire: 1.5 mm ² 50 mm ² ; 2-wire: 1.5 mm ² 16 mm ² |
| 15 1 |
| 15 1 |
| 15 1 |
| 15 1 |
| 2.5 Nm 3 Nm |
| General data |
| optional |
| 2000 M |
| min. 5000 cycles |
| min. 2000 cycles |
| normal environmental conditions |
| -35 °C 75 °C |
| -25 °C 40 °C |
| to IFC CooCO bureid boot / public / 9C / 9C 0/ / 0/ DID |
| to IEC 60068-2-30: humid heat / cyclic (25 °C / 55 °C; 93 % / 97 % RH) |
| 20 g / 20 ms Duration |
| <u> </u> |
| |

| Technical Data | DFS 2 025-2/0,10-A KV |
|-------------------------------|---|
| Housing material | thermoplastic |
| Protection class | IP20 (installed: IP40) |
| sealable | true |
| Width | 36 mm |
| Height | 8 ₅ mm |
| Depth | 75 mm |
| Installation depth | 69 mm |
| Module widths | 2 |
| Weight | o.26 kg |
| Design requirements/Standards | VDE 0664-10, DIN EN 61008-1, ÖVE/ÖNORM E 8601 |
| Degree of pollution | 2 |
| Certifications | VDE |

Dimensions



Wiring example



Dimensional drawing Group view

Wiring diagram