symbolic image

DATA SHEET

DFS 2 063-2/0,03-A HD

sensitive to pulsating and alternating currents Type A, for harsh environments:

Article number 09144601HD

Internetlink

Function

Residual current circuit-breakers (RCCBs) are components for implementing protective measure "Automatic disconnection of the power supply" as per VDE 0100 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 multifunctional switch toggle and can be provided with pre-prepared labels using free-of-charge software. Switches with residual current characteristic A allow the mains voltage independent detection of sinusoidal AC currents and pulsating DC residual currents. Any possible additional functions may be voltage-dependent. Devices in the standard design are intended for monitoring circuits with a rated voltage of 230 V/400 V and a rated frequency of 50 Hz. With an airtight, encapsulated tripping mechanism from a special alloy and the stainless steel latch, residual current circuit-breakers in HD design are protected, in particular from corrosion, corrosive gases, moisture and extreme temperature fluctuations.

Features

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 conductors with standard design left, for two-terminal-pair devices type A/AC/F up to 125 A and type B/B+ up to 80 A; N-right available at no extra charge.

Mounting

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

Applications

Power supplies to residential and purpose-built buildings as well as industrial facilities with TN-S, TT and TN-C-S networks. In IT networks, the residual current circuit-breakers of this series can be set to switch off in the event of a second fault, 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, Clamp covers KA, Information stickers HAS, Auxiliary Switches DHi, Software DBS

Technical Data

Technical Data	DFS 2 063-2/0,03-A HD
Series	DFS 2 A HD
Number of poles	2
Residual current type	A
Rated current (AC)	63 A
Rated residual current IΔn	0.03 A
Short-time delayed	false
Selective	false
min. Operating voltage range of test circuit	150 V

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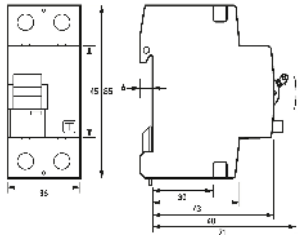
max. Operating voltage range of test circuit	250 V
Maximum disconnection times	1 · IΔn: ≤ 300 ms; 5 · IΔn: ≤ 40 ms
	Load circuit
Specification	Load switch contact
min. Contact opening	4 mm
Rated voltage (AC)	230 V
Rated current (AC)	63 A
Rated short-circuit current	10 kA
Surge current strength	0.25 kA
max. total rated switching capacity	800 A
Rated insulation voltage	400 V
Rated impulse withstand voltage	4 kV
Rated frequency	50 Hz
Current heat loss per current path	2.8 W
thermal Backup-fuse OCPD	63 A
short-circuit backup-fuse SCPD	100 A
Back-up fuse type	gG
	Screw-type terminal top and bottom (Load circuit)
Neutral conductor position	arbitrary
Protection against direct contact	DGUV V3, VDE 0660-514, finger-safe and safe for back-of-hand
Connection C1 Maximum number of conductors per terminal	2 (conductors of same type and cross-section)
Cross section solid	1-wire: 1.5 mm² ... 50 mm²; 2-wire: 1.5 mm² ... 16 mm²
Connecting capacity flexible	1-wire: 1.5 mm² ... 50 mm²; 2-wire: 1.5 mm² ... 16 mm²
Cross section stranded	1-wire: 1.5 mm² ... 50 mm²; 2-wire: 1.5 mm² ... 16 mm²
Tightening torque	2.5 Nm ... 3 Nm
	General data
Operating position	any
max. Operating altitude above MSL	2000 m
Mechanical endurance	min. 5000 cycles
Electrical endurance	min. 2000 cycles
Surrounding atmosphere	harsh environmental conditions
Storage temperature	-35 °C ... 75 °C
Ambient temperature	-25 °C ... 60 °C
Climate resistance	according to IEC 60068-2-30: humid heat / cyclic (25 °C / 55 °C; 93 % / 97 % RH)
Shock resistance	20 g / 20 ms Duration
Fatigue limit	> 5 g (f ≤ 80 Hz, duration > 30 min.)
Housing type	Distributor housing
Mounting type	Mounting rail (35 mm)
Housing material	Thermoplastic resin
Protection class	IP20 (installed: IP40)
sealable	true
Width	36 mm
Height	85 mm
Depth	75 mm
Installation depth	69 mm

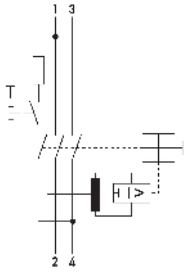
Technical Data	DFS 2 063-2/0,03-A HD
Width (modules)	2
Design requirements/Standards	VDE 0664-10, EN 61008-1
Certifications	VDE
Degree of pollution according to EN 60664	2

Dimensions



Dimensional drawing Group view

Wiring example



Wiring diagram