



## DATA SHEET

### residual current circuit-breaker

### DFS 4 063-4/0,03-AC V500 T

sensitive to residual currents Type AC, Rated voltage ≠ 230 V/400 V, for use in mining

Article number 09144948



#### 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 4 devices are compact two or four-pole residual current circuit-breakers. In the standard design, they only take up four module width units of space. Although DFS 4 devices for AC and pulsating DC residual currents are actually designed for three-phase networks, they can also be used in single-phase networks. However, in addition to these, special variants are also available for single or three-phase operation in the form of the AC/DC sensitive designs (type B, type B+). 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. Switches with residual current characteristic AC only detect AC residual currents. They cannot detect pulsating DC residual currents so are not permitted for use as residual current operated protective devices in Germany. They are therefore only available as export models. Devices in design V are made for special voltages.

#### Mounting

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

#### Notes

Other special voltages available upon request

#### 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 4 063-4/0,03-AC V500 T
Series	DFS 4 AC V T
Number of poles	4
Residual current type	AC
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	300 V
max. Operating voltage range of test circuit	550 V
Maximum disconnection times	1 · IΔn: ≤ 100 ms; 5 · IΔn: ≤ 40 ms
	<b>load circuit</b>
Specification	load disconnect contact
min. Contact opening	4 mm
Rated voltage (AC)	290 V, 500 V
Rated current (AC)	63 A

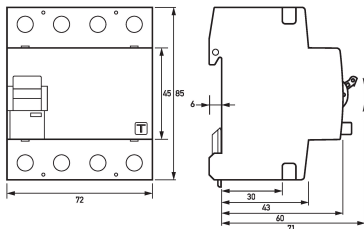
Subject to technical changes

Technical Data	DFS 4 063-4/0,03-AC V500 T
Rated short-circuit current	10 kA
Surge current strength	0.25 kA
max. Total rated switching capacity	630 A
Rated insulation voltage	400 V
Rated impulse withstand voltage	4 kV
Rated frequency	50 Hz
Current heat loss per current path	3.1 W
Thermal Backup-fuse OCPD	63 A
Short-circuit backup-fuse SCPD	100 A
Back-up fuse type	gG
	<b>screw-type terminal top and bottom (load circuit)</b>
Neutral conductor position	left
Protection against direct contact	DGUV V3, VDE 0660-514, finger and back-of-hand proof
Connection C1 Maximum number of conductors per terminal	2 (conductors of same type and cross-section)
Cross section solid	1-wire: 1.5 mm <sup>2</sup> ... 50 mm <sup>2</sup> ; 2-wire: 1.5 mm <sup>2</sup> ... 16 mm <sup>2</sup>
Connecting capacity flexible	1-wire: 1.5 mm <sup>2</sup> ... 50 mm <sup>2</sup> ; 2-wire: 1.5 mm <sup>2</sup> ... 16 mm <sup>2</sup>
Cross section stranded	1-wire: 1.5 mm <sup>2</sup> ... 50 mm <sup>2</sup> ; 2-wire: 1.5 mm <sup>2</sup> ... 16 mm <sup>2</sup>
Cross section AWG, solid	15 ... 1
Cross section AWG, stranded	15 ... 1
Cross section AWG, flexible	15 ... 1
Cross section AWG, flexible with ferrule	15 ... 1
Tightening torque	2.5 Nm ... 3 Nm
	<b>General data</b>
Operating position	optional
max. Operating altitude above MSL	2000 m
Mechanical endurance	min. 5000 cycles
Electrical endurance	min. 2000 cycles
Surrounding atmosphere	normal environmental conditions
Storage temperature	-35 °C ... 75 °C
Ambient temperature	-25 °C ... 40 °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	distribution board housing
Installation type	Mounting rail (35 mm)
Housing material	thermoplastic
Protection class	IP20 (installed: IP40)
sealable	true
Width	72 mm
Height	85 mm
Depth	75 mm
Installation depth	69 mm
Module widths	4
Weight	0.438 kg
Design requirements/Standards	DIN EN 50628 VDE 0118-10:2016-11

Subject to technical changes

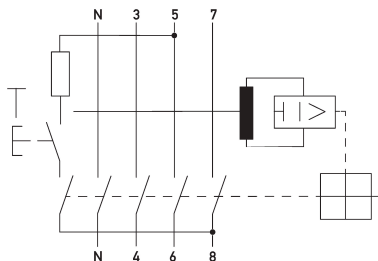
Technical Data	DFS 4 063-4/0,03-AC V500 T
Degree of pollution	2

**Dimensions**



Dimensional drawing Group view

**Wiring example**



Wiring diagram