

## DATA SHEET

residual current circuit-breaker
DFS 4 100-4/0,50-B SK
AC/DC sensitive type B
Article number 09167998





#### **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 fourpole 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. Type B residual current circuitbreakers detect smooth DC residual currents and all other residual currents at frequencies up to 150,000 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. For residual current circuit-breakers with characteristic curve SK, the frequency response of the tripping current is designed so that residual currents with high frequencies, such as in the clock frequency range for frequency converters, as opposed to the rated frequency are detected with significantly reduced sensitivity. Undesired trips caused by leakage currents can therefore be widely avoided. However, fire protection depending on the rated residual current of the switch (0.03 A, 0.1 A or 0.3 A) is only provided for residual currents with frequencies up to 1 kHz, 300 Hz or 100 Hz, while the devices with tripping current frequency response B+ or NK offer protection over the entire tripping frequency range up to 20 kHz or 150 kHz, respectively. 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.

#### **Features**

High level of immunity against leakage and residual currents due to operational conditions from frequency 1 kHz and higher, AC/DC sensitive for residual currents with frequencies and mixed frequencies of o Hz (smooth direct current) up to 150 kHz, high availability even of voltage-independent detection of smooth DC residual current and AC residual current with frequencies not equal to 50/60 Hz thanks to full functional compatibility with mains voltages from at least 50 V AC on any two active conductors, mains-voltage-independent tripping when type A residual currents occur, 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

#### Mounting

quick fastening to mounting rail, any installation position, supply preferably from above

#### **Applications**

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.

#### Notes

suitable for use in 50 Hz AC networks, RCCBs for other frequencies available upon request, Not designed for use in direct current networks or on the output side of controlled electrical equipment such as frequency converters.

#### Accessories

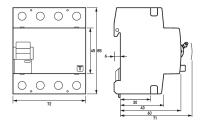
automatic reclosing devices DFA, terminal caps KA, information stickers HAS, auxiliary switches DHi, restart locks DFS WES, software DBS

## Technical Data

Series   DFS 4 B SK     Number of poles   4	Technical Data	DFS 4 100-4/0,50-B SK
Number of poles Residual current type Residual current type Rated current (AC) Rated current (AC) Rated current (AC) Robot-time delayed True Selective False Incorporating voltage range of test circuit Minimum rated operating voltage (Type A)AC operation) Non-trip time In oms Tripping frequency Internal consumption Internal Consumpt		i i i i i i i i i i i i i i i i i i i
Residual current type Tripping characteristic curve SK Rated current (AC) 100 A Rated residual current (La) Selective False Selective False Min. Operating voltage range of test circuit max. Operating voltage range of test circuit max. Operating voltage range of test circuit max. Operating voltage range of test circuit Minimum rated operating voltage (Type A/AC operation)  Non-trip time 10 ms  Tripping frequency 10 Atz		
Tripping characteristic curve Rated current (AC) Rated current (AC) Rated current (AC) Rated residual current lan  0.5 A  Short-time delayed  false min. Operating voltage range of test circuit  Minimum rated operating voltage (Type A/AC operation) Minimum rated operating voltage (Type A/AC operation) Minimum rated operating voltage (Type A/AC operation) Non-trip time  10 ms  10 ms  10 ms  11 lbn: s goo ms; 5; lbn: s 40 ms  internal consumption  max. 2.2 W  Maximum disconnection times  11 lbn: s goo ms; 5; lbn: s 40 ms  internal consumption  10 ad disconnect contact  min. Contact opening Rated voltage (AC) Rated current (AC) Rated current (AC) Rated current (AC) Rated short-circuit current  10 kA  Surge current strength Rated insulation voltage Rated insulation	·	
Rated current (AC) Rated residual current Idn Rated residual resid		
Rated residual current IΔn Short-time delayed Short-time delayed Thus Thus Short-time delayed Thus Thus Thus Short-time delayed Thus Thus Thus Thus Thus Thus Thus Thus		
Short-time delayed true Selective false min. Operating voltage range of test circuit max. Operating voltage range of test circuit Minimum rated operating voltage range of test circuit Minimum rated operating voltage range of test circuit Minimum rated operating voltage (Type A/AC operation) Minimum rated operating voltage (Type A/AC operation) Minimum rated operating voltage (Type A/AC operation) Minimum rated operating voltage (Type B operation) Non-trip time 10 ms 10 Ms 150 MHz Maximum disconnection times 11 Ms 150 MHz Maximum disconnection times Internal consumption 10 max. 2.2 W Ioad directiv Specification 10 load directiv Specification 10 load disconnect contact min. Contact opening 4 mm Rated voltage (AC) 230 V, 400 V Rated short-circuit current 10 kA Surge current strength 3 kA		
Selective min. Operating voltage range of tests circuit max. Operating voltage range of test circuit max. Operating voltage range of test circuit with minimum rated operating voltage (Type A/AC operation) voltage (Type A/AC operation) voltage (Type Boperation) voltage voltage voltage voltage (Type Boperation) voltage volta		
min. Operating voltage range of test circuit  max. Operating voltage range of test circuit  Minimum rated operating voltage range of test circuit  Minimum rated operating voltage (Type A/AC operation)  Minimum rated operating solve A/AC operation)  Minimum rated operating solve A/AC operation)  Non-trip time	•	
test circuit  Minimum rated operating voltage (Type A/AC operation)  Minimum rated operating voltage (Type B operation)  Non-trip time  10 ms  Tripping frequency  0 Hz 150 kHz  Maximum disconnection times  1 · 1Δn · 2 go ms; 5 · 1Δn · 2 40 ms  Internal consumption  Rax · 2 z W  Internal consumption  Ioad disconnect contact  min. Contact opening Rated voltage (AC)  2 go V, 400 V  Rated current (AC) Rated short-circuit current  10 kA  Surge current strength  3 kA  max. Total rated switching capacity Rated impulse withstand voltage Rated insulation voltage Rate	min. Operating voltage range of	
woltage (Type A/AC operation)         Minimum rated operating voltage (Type B operation)         Non-trip time       10 ms         Tripping frequency       0 Hz 150 kHz         Maximum disconnection times       1 · IAn's 300 ms; 5 · IAn's 40 ms         Internal consumption       max. 2.2 W         Specification       load disconnect contact         min. Contact opening       4 mm         Rated voltage (AC)       230 V, 400 V         Rated voltage (AC)       100 A         Rated sort-circuit current       10 kA         Surge current strength       3 kA         max. Total rated switching       1000 A         capacity       4 kV         Rated impulse withstand voltage       4 kV         Rated impulse withstand voltage       4 kV         Rated impulse withstand voltage       4 kV         Rated requency       50 Hz         Current heat loss per current       7.5 W         path       7.5 W         back-up fuse OCPD       80 A         Back-up fuse type       gG         Serew-type terminal top and bottom (load circuit)         Neutral conductor position       left         Protection against direct contact       DGUV V3, VDE 660-514, finger and back-of-hand proof		440 V
voltage (Type B operation)       10 ms         Non-trip time       10 ms         Tripping frequency       0 Hz 150 kHz         Maximum disconnection times       1 · I∆n: ≤ 300 ms; 5 · I∆n: ≤ 40 ms         Internal consumption       max. 2.2 W         Specification       load disconnect contact         min. Contact opening       4 mm         Rated voltage (AC)       230 V, 400 V         Rated current (AC)       100 A         Rated short-circuit current       10 kA         Surge current strength       3 kA         max. Total rated switching       1000 A         Rated insulation voltage       4 kV         Rated insulation voltage       4 kV         Rated frequency       50 Hz         Current heat loss per current       7.5 W         path       7.5 W         Phort-circuit backup-fuse OCPD       80 A         Short-circuit backup-fuse SCPD       125 A         Back-up fuse type       gG         Screw-type terminal top and bottom (load circuit)         Neutral conductor position       left         Protection against direct contact       DGUV V3, VDE 060-514, finger and back-of-hand proof         Connection C1 Maximum       2 (conductors of same type and cross-section)		o V AC
Tripping frequency  Maximum disconnection times  1 · I \( \text{IAn} : \sigma \text{ so ms}; \) 5 · I \( \text{IAn} : \sigma \text{ so ms}; \)  Internal consumption  max. 2. 2 W    Oad directive		50 V AC
Maximum disconnection times  1 · I∆n: ≤ 300 ms; 5 · I∆n: ≤ 40 ms  Internal consumption  max. 2.2 W    load circuit   Specification   load disconnect contact   min. Contact opening   4 mm   Rated voltage (AC)   Rated voltage (AC)   Rated current (AC)   100 A   Rated short-circuit current   10 kA   Surge current strength   3 kA   max. Total rated switching   capacity   Rated insulation voltage   Rated insulation voltage   Rated insulation voltage   Rated insulation voltage   A volume view of the view of the volume view of the	Non-trip time	10 ms
Internal consumption max. 2.2 W    load circuit	Tripping frequency	o Hz 150 kHz
Specification   Iload disconnect contact	Maximum disconnection times	1 · I∆n: ≤ 300 ms; 5 · I∆n: ≤ 40 ms
Specification load disconnect contact min. Contact opening Rated voltage (AC) Rated voltage (AC) Rated current (AC) Rated short-circuit current 10 kA Surge current strength 3 kA max. Total rated switching capacity Rated insulation voltage Rated insulation voltage Rated frequency 50 HZ Current heat loss per current path Thermal Backup-fuse OCPD 80 A Short-circuit backup-fuse SCPD 96 Screw-type terminal top and bottom (load circuit) Neutral conductor position 10 GUV V3, VDE 0660-514, finger and back-of-hand proof Connection C1 Maximum number of conductors per terminal Cross section solid 1-wire: 1.5 mm² 50 mm²; 2-wire: 1.5 mm² 16 mm² Cross section AWG, solid 15 1 Cross section AWG, stranded 15 1	Internal consumption	max. 2.2 W
min. Contact opening Rated voltage (AC) Rated current (AC) Rated current (AC) Rated short-circuit current 10 kA Surge current strength 3 kA max. Total rated switching capacity Rated insulation voltage Rated insulation voltage Rated impulse withstand voltage Rated impulse withstand voltage Rated frequency 50 HZ Current heat loss per current path Thermal Backup-fuse OCPD 80 A Short-circuit backup-fuse SCPD 9G Screw-type terminal top and bottom (load circuit) Neutral conductor position Protection against direct contact DGUV V3, VDE 0660-514, finger and back-of-hand proof Connection C1 Maximum 10 Cross section solid 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 Cross section AWG, solid 15 1 Cross section AWG, stranded 15 1		load circuit
Rated voltage (AC)  Rated current (AC)  Rated current (AC)  Rated short-circuit current  10 kA  Surge current strength  3 kA  max. Total rated switching capacity  Rated insulation voltage  Rated insulation voltage  Rated impulse withstand voltage  Rated impulse withstand voltage  Rated impulse withstand voltage  Rated frequency  50 Hz  Current heat loss per current path  Thermal Backup-fuse OCPD  80 A  Short-circuit backup-fuse SCPD  3crew-type terminal top and bottom (load circuit)  Neutral conductor position  Protection against direct contact  DGUV V3, VDE 0660-514, finger and back-of-hand proof  Connection C1 Maximum number of conductors per terminal  Cross section solid  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  Cross section AWG, solid  15 1  Cross section AWG, stranded	Specification	load disconnect contact
Rated current (AC) Rated short-circuit current  10 kA  Surge current strength 3 kA  max. Total rated switching capacity  Rated insulation voltage Rated insulation voltage  Rated impulse withstand voltage  Rated impulse withstand voltage  Rated frequency  50 Hz  Current heat loss per current path  Thermal Backup-fuse OCPD  80 A  Short-circuit backup-fuse SCPD  125 A  Back-up fuse type  9G  screw-type terminal top and bottom (load circuit)  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  Cross section solid  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  Cross section AWG, solid  15 1  Cross section AWG, stranded	min. Contact opening	4 mm
Rated short-circuit current  Surge current strength  Max. Total rated switching capacity  Rated insulation voltage  Rated impulse withstand voltage  Rated impulse withstand voltage  Rated frequency  Current heat loss per current path  Thermal Backup-fuse OCPD  Back-up fuse type  GG  Screw-type terminal top and bottom (load circuit)  Neutral conductor position  Protection against direct contact  DGUV V3, VDE o66o-514, finger and back-of-hand proof  Connection C1 Maximum number of conductors per terminal  Cross section solid  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  Cross section AWG, solid  15 1  Cross section AWG, stranded	Rated voltage (AC)	230 V, 400 V
Surge current strength  max. Total rated switching capacity  Rated insulation voltage  Rated impulse withstand voltage  Rated frequency  Current heat loss per current path  Thermal Backup-fuse OCPD  8o A  Short-circuit backup-fuse SCPD  Back-up fuse type  gG  screw-type terminal top and bottom (load circuit)  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  Cross section solid  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  Cross section AWG, solid  15 1  Cross section AWG, stranded  15 1	Rated current (AC)	100 A
max. Total rated switching capacity  Rated insulation voltage Rated impulse withstand voltage Rated impulse withstand voltage Rated impulse withstand voltage Rated frequency 50 Hz  Current heat loss per current path Thermal Backup-fuse OCPD 80 A Short-circuit backup-fuse SCPD 125 A Back-up fuse type gG  screw-type terminal top and bottom (load circuit) 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 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 Cross section AWG, solid 15 1 Cross section AWG, stranded	Rated short-circuit current	10 kA
capacity  Rated insulation voltage  Rated impulse withstand voltage  Rated impulse withstand voltage  Rated frequency  So Hz  Current heat loss per current path  Thermal Backup-fuse OCPD  8o A  Short-circuit backup-fuse SCPD  Back-up fuse type  GG  screw-type terminal top and bottom (load circuit)  Neutral conductor position  Protection against direct contact  DGUV V3, VDE 0660-514, finger and back-of-hand proof  Connection C1 Maximum number of conductors per terminal  Cross section solid  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  Cross section AWG, solid  15 1  Cross section AWG, stranded	Surge current strength	3 kA
Rated impulse withstand voltage Rated frequency So Hz  Current heat loss per current path  Thermal Backup-fuse OCPD 80 A  Short-circuit backup-fuse SCPD 125 A  Back-up fuse type gG  screw-type terminal top and bottom (load circuit)  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  Cross section solid 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  Cross section stranded 1-wire: 1.5 mm² 50 mm²; 2-wire: 1.5 mm² 16 mm²  Cross section AWG, solid 15 1  Cross section AWG, stranded		1000 Å
Rated frequency  Current heat loss per current path  Thermal Backup-fuse OCPD  8o A  Short-circuit backup-fuse SCPD  Back-up fuse type  gG  screw-type terminal top and bottom (load circuit)  Neutral conductor position  Neutral conductor position  Protection against direct contact  DGUV V3, VDE o660-514, finger and back-of-hand proof  Connection C1 Maximum number of conductors per terminal  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  Cross section AWG, solid  15 1  Cross section AWG, solid	Rated insulation voltage	400 V
Current heat loss per current path  Thermal Backup-fuse OCPD  80 A  Short-circuit backup-fuse SCPD  125 A  Back-up fuse type  gG  screw-type terminal top and bottom (load circuit)  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  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  Cross section AWG, solid  15 1  Cross section AWG, stranded	Rated impulse withstand voltage	4 kV
path Thermal Backup-fuse OCPD  80 A  Short-circuit backup-fuse SCPD  125 A  Back-up fuse type  gG  screw-type terminal top and bottom (load circuit)  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  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  Cross section AWG, solid  15 1  Cross section AWG, stranded	Rated frequency	50 Hz
Short-circuit backup-fuse SCPD  Back-up fuse type  gG  screw-type terminal top and bottom (load circuit)  Neutral conductor position  left  Protection against direct contact  DGUV V3, VDE o660-514, finger and back-of-hand proof  Connection C1 Maximum  number of conductors per terminal  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  Cross section AWG, solid  15 1  Cross section AWG, stranded  15 1		7.5 W
Back-up fuse type  gG  screw-type terminal top and bottom (load circuit)  Neutral conductor position  left  Protection against direct contact  DGUV V3, VDE o66o-514, finger and back-of-hand proof  2 (conductors of same type and cross-section)  number of conductors per terminal  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  Cross section AWG, solid  15 1  Cross section AWG, stranded	Thermal Backup-fuse OCPD	8o A
Screw-type terminal top and bottom (load circuit)  Neutral conductor position  left  Protection against direct contact  Connection C1 Maximum  number of conductors per terminal  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  Cross section AWG, solid  15 1  Cross section AWG, stranded  15 1	Short-circuit backup-fuse SCPD	125 A
Neutral conductor position    left	Back-up fuse type	gG
Protection against direct contact  DGUV V3, VDE 0660-514, finger and back-of-hand proof  2 (conductors of same type and cross-section)  number of conductors per terminal  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  Cross section AWG, solid  15 1  Cross section AWG, stranded  15 1		screw-type terminal top and bottom (load circuit)
Connection C1 Maximum number of conductors per terminal  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  Cross section stranded  1-wire: 1.5 mm² 50 mm²; 2-wire: 1.5 mm² 16 mm²  Cross section AWG, solid  15 1  Cross section AWG, stranded  15 1	Neutral conductor position	left
number of conductors per terminal  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  Cross section AWG, solid  15 1  Cross section AWG, stranded  15 1		<del>-</del>
Cross section AWG, solid  1-wire: 1.5 mm² 50 mm²; 2-wire: 1.5 mm² 16 mm²  1-wire: 1.5 mm² 50 mm²; 2-wire: 1.5 mm² 16 mm²  1-wire: 1.5 mm² 50 mm²; 2-wire: 1.5 mm² 16 mm²  15 1  Cross section AWG, stranded  15 1	number of conductors per	2 (conductors of same type and cross-section)
Cross section stranded  1-wire: 1.5 mm² 50 mm²; 2-wire: 1.5 mm² 16 mm²  Cross section AWG, solid  15 1  Cross section AWG, stranded  15 1	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>
Cross section AWG, solid 15 1 Cross section AWG, stranded 15 1	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 AWG, stranded 15 1	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, flexible 15 1	Cross section AWG, stranded	15 1
	Cross section AWG, flexible	15 1

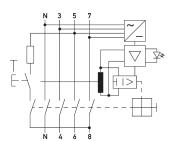
Technical Data	DFS 4 100-4/0,50-B SK
Cross section AWG, flexible with ferrule	15 1
Tightening torque	2.5 Nm 3 Nm
	General data
Operating position	optional
max. Operating altitude above MSL	2000 m
Mechanical endurance	min. 5000 cycles
Electrical endurance	min. 2000 cycles
Surrounding atmosphere	normal 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 ≤ 8o 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	o.499 kg
Design requirements/Standards	VDE 0664-10, VDE 0664-40, ÖVE/ÖNORM E 8601, DIN EN 61008-1, EN 62423
Degree of pollution	2
Certifications	VDE

## **Dimensions**

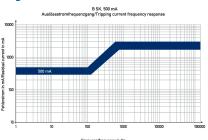


Dimensional drawing Group view

# Wiring example



# Diagrams



Characteristic B SK 500 mA

Wiring diagram