## Doepke



## **DATA SHEET**

residual current circuit-breaker DFS 2 025-2/0,03-AC sensitive to residual currents Type AC Article number 09124602



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### 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 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 the standard design are intended for monitoring circuits with a rated voltage of 230 V and a rated frequency of 50 Hz.

#### Features

tripping not dependent on mains and auxiliary voltage, sensitive to AC residual currents (type AC), 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 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, Not permitted for use in TN-C networks; not permitted for protecting systems in which electronic equipment may cause pulsating or smooth DC residual currents or residual currents with frequencies not equal to 50 Hz. Comprehensive protection is not provided with an RCCB type AC. For these applications we recommend our residual current circuit-breaker type A or our AC/DC sensitive residual current circuit-breaker type B/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 2 025-2/0,03-AC
Series	DFS 2 AC
Number of poles	2
Residual current type	AC
Rated current (AC)	25 A
Rated residual current IAn	0.03 A
Short-time delayed	false
Selective	false
min. Operating voltage range of test circuit	150 V
max. Operating voltage range of test circuit	250 V

Maximum disconnection times         1 · Lôn : ≤ gon ms; 5 · Lôn : ≤ 40 ms           Ioad dircuit         Joad dircuit           Specification         Ioad disconnect contact           min. Contact opening         4 mm           Rated viotage (AC)         230 V           Rated urrent (AC)         35 A           Rated urrent strength         0.25 kA           max. Total rated switching         500 A           capacity         500 A           Rated insulation voltage         4 kV           Rated frequency         50 Hz           Current heat loss per current path         0.5 W           Backup-fuse type         9G           Sont-circuit backup-fuse SCPD         200 A           Backup fuse type         10 GUV V3, VDE of66- staf, finger and back-of-hand proof           Connecting capacity flexible         1- wire: 1.5	Technical Data	DFS 2 025-2/0,03-AC
Ioad circuit           Specification         Ioad disconnect contact           min. Contact opening         4 mm           Rated voltage (AC)         230 V           Rated current (AC)         25 A           Rated short-circuit current         10 kA           Surge current strength         0.55 kA           max. Total rated switching capacity         500 A           capacity         500 A           Rated insulation voltage         4 kV           Rated insulation voltage         4 kV           Rated insulation voltage         4 kV           Rated insulation voltage         6 SHZ           Current heat loss per current         0.5 W           path         0.5 W           Dermal Backup-fuse CCPD         25 A           Short-circuit backup-fuse SCPD         100 A           Back-up fuse type         9G           Stort-circuit backup-fuse SCPD         100 A           Back-up fuse type         9G           Connection C1 Maximum         10 conductors position           Interimal         10 conductors for ame type and cross-section)           Cross section Sdid         1-wire: 1.5 mm², 50 mm², 2-wire: 1.5 mm², 16 mm²           Cross section sdid         1-wire: 1.5 mm², 50 mm², 2-wire: 1.5 mm², .		
Specification         Ioad disconnect contact           min. Contact opening         4 mm           Rated voltage (AC)         230 V           Rated voltage (AC)         230 V           Rated voltage (AC)         25 A           Rated short-circuit current         10 kA           Surge current strength         0.25 kA           max. Total rated switching capacity         500 A           Rated insultation voltage         4 kV           Rated frequency         50 Hz           Current heat loss per current path         0.5 W           Short-circuit backup-fuse CPD         100 A           Back-up fuse type         gG           Stort-circuit backup-fuse SCPD         100 A           Back-up fuse type         gC           Conductor position         left or right           Protection against direct contact         DGUV V3, VDE o660-514, finger and back-of-hand proof           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>3</sup> 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>3</sup> Cross section AWG,		
min. Contact opening 4, mm Rated voltage (AC) 230 V Rated short-circuit current 200 V Rated short-circuit current 100 kA Surge current strength 0.25 kA max. Total rated switching capacity 200 V Rated insulation voltage 400 V Rated insulation voltage 400 V Rated insulation voltage 400 V Rated insulation voltage 4 kV Rated requency 50 kZ Current heat loss per current 200 S kZ Current heat loss per current 200 S kZ Short-circuit backup-fuse SCPD 200 A Back-up fuse SCPD 200 A Short-circuit backup-fuse SCPD 300 A Back-up fuse type 9 G Short-circuit backup-fuse SCPD 300 A Connection C, Maximum 2 (conductors position 100 K k) Neutral conductor position 100 K k) Protection against direct contact DGUV V3, VDE o660-514, finger and back-of-hand proof Connection C, Maximum 2 (conductors fame type and cross-section) number of conductors per terminal Consection C, Maximum 2 (conductors fame type and cross-section) number of conductors per terminal Cross section solid 1wire: 1.5 mm <sup>2</sup> 50 mm <sup>3</sup> , 2wire: 1.5 mm <sup>2</sup> 16 mm <sup>2</sup> Cross section AWG, fixable 1wire: 1.5 mm <sup>2</sup> 50 mm <sup>3</sup> , 2wire: 1.5 mm <sup>2</sup> 16 mm <sup>2</sup> Cross section AWG, fixable 1.5 1 Cross section AWG	Specification	
Rated voltage (AC)       230 V         Rated short-circuit current       10 kA         Surge current strength       0.25 kA         max. Total rated switching capacity       500 A         capacity       500 A         Rated involution voltage       4 kV         Rated involution voltage       6 kV         Rated involution voltage       6 kV         Rated involution voltage       9 kV         Rated involution voltage       9 kV         Rated conductor position       left or right         Protection against direct contact       DGUV V3, VDE o660-514, finger and back-of-hand proof         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 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 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 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>		
Rated current (AC)       25 Å         Rated short-circuit current       10 kÅ         Surge current strength       0.25 kÅ         max. Total rated switching capacity       50 Å         Rated insulation voltage       400 V         Rated insulation voltage       4 kV         Rated insulation voltage       6 S         Current heat loss per current path       0.5 W         Thermal Backup-fuse OCPD       25 Å         Short-circuit backup-fuse SCPD       100 Å         Back-up fuse SCPD       100 Å         Back-up fuse type       gG         Sorrew-type terminal top and bottom (load circuit)         Neutral conductor position       left or right         Protection against direct contact       DGUV 3, VDE o660-514, finger and back-of-hand proof         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 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, stranded       15 1         Cross section AWG, flexible       15 1         Cross section AWG, flexible with       15 1	·	
Rated short-circuit current       10 kA         Surge current strength       0.25 kA         max. Total rated switching       500 A         capacity       500 A         Rated insulation voltage       4 kV         Rated insulation voltage       4 kV         Rated frequency       50 Hz         Current heat loss per current       0.5 W         path       0.5 W         Dhermal Backup-fuse OCPD       25 A         Short-circuit backup-fuse SCPD       100 A         Back-up fuse type       gG         Stort-circuit backup-fuse SCPD       100 A         Back-up fuse type       gG         Stort-circuit backup-fuse SCPD       200 A         Back-up fuse type       gG         Connecting conductors position       left or right         Protection against direct contact       DGUV V3, VDE 0660-514, finger and back-of-hand proof         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 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, flexible       15 1         Cross section AWG, flexible       15 1         Cross section AWG, flexible with       15 1         ferrule		
Surge current strength         0.35 kA           max. Total rated switching capacity         500 A           Rated insulation voltage         4,60 V           Rated insulation voltage         4, kV           Rate insulation voltage         4, kV           Rate insulation voltage         4, kV           Rate insulation voltage         4, kV           Back-up fuse type         9G           Soft-circuit backup-fuse SCPD         100 A           Back-up fuse type         9G           Connection ciscuit backup-fuse type         9G           Connection Calkakinum         10GUV V_3, VDE o660-514, finger and back-of-hand proof           Connection Candactors per terminal         1-wire: 1.5 mm² 50 mm², 2-wire: 1.5 mm² 16 mm²           Cross section solid         1-wire: 1.5 mm² 16 mm²		
max. Total rated switching capacity Rated insulation voltage (400 V Rated insulation voltage) (2000 Current heat loss per current path) Thermal Backup-fuse OCPD) Short-circuit backup-fuse OCPD) (25 A) Short-circuit backup-fuse SCPD) (25 A) Short-circuit backup-fuse SCPD) (25 A) Short-circuit backup-fuse SCPD) (25 A) Short-circuit backup-fuse SCPD) (26 A) Back-up fuse type) (26 A) Short-circuit backup-fuse SCPD) (26 A) Back-up fuse type) (26 A) Short-circuit backup-fuse SCPD) (26 A) Back-up fuse type) (26 C) Short-circuit backup-fuse SCPD) (26 A) Back-up fuse type) (26 A) Short-circuit backup-fuse SCPD) (26 A) Short-circuit backup-fuse SCPD) (27 A) Short-circuit backup-fuse SCPD) (28 A) Short-circuit backup-fuse SCPD) (29 A) Short-circuit backup-fuse SCPD) (29 A) Short-circuit backup-fuse SCPD) (29 A) Short-circuit backup-fuse SCPD) (20 A) Short-circuit backup-fuse SCPD) (29 A) Short-circuit backup-fuse SCPD) (29 A) Short-circuit backup-fuse SCPD) (20 A) Short-circuit backup-fuse SCPD) (20 A) Short-fuse		
capacityRated insulation voltage4 do VRated insulation voltage4 kVRated frequency50 HzCurrent heat loss per current path0.5 WDhermal Backup-fuse OCPD25 AShort-circuit backup-fuse SCPD100 ABack-up fuse typegGNeutral conductor positionleft or rightProtection against direct contactDGUV V3, VDE o660-514, finger and back-of-hand proofConnection C1 Maximum number of conductors per terminal2 (conductors of same type and cross-section)Cross section solid1-wire: 1.5 mm²50 mm²; 2-wire: 1.5 mm²16 mm²Cross section AWG, solid1-wire: 1.5 mm²50 mm²; 2-wire: 1.5 mm²16 mm²Cross section AWG, solid151Cross section AWG, flexible151Cross section AWG, flexible151Cross section AWG, flexible151Cross section AWG, flexible2.5 Nm3 NmCross section AWG, flexible2.00 mTightening torque2.5 Nm3 NmConnecting capacity flexible2000 mMichanical endurancemin. zooo cyclesElectrical endurancemin. zooo cyclesSurrounding atmospherenormal environmental conditionsStorage temperature-2.5 °C, -3.5 °CAmbient temperature-2.5 °C, morterStorage temperature-2.5 °C, morter<		
Rated insulation voltage       4 ov V         Rated inpulse withstand voltage       4 kV         Rated frequency       50 Hz         Current heat loss per current path       0.5 W         Description       25 A         Short-circuit backup-fuse SCPD       100 A         Back-up fuse type       9G         Short-circuit backup-fuse SCPD       100 A         Back-up fuse type       9G         Onnection gainst direct contact       DGUV V3, VDE 0660-514, finger and back-of-hand proof         Connection C1 Maximum number of conductors of same type and cross-section)       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         Cross section standed       1-wire: 1.5 mm² 50 mm²; 2-wire: 1.5 mm² 16 mm²         Cross section AWG, stranded       15 1         Cross section AWG, flexible       15 1         Cross section AWG, flexible with ferule       15 1         Tightening torque       2.5 Nm 3 Nm         General data       Operating position         Operating position       optional         max. Operating altitude above MSL       2.00 m         MSL       15 1         General data       Operating position         Operating p	<u> </u>	30077
Rated frequency       50 Hz         Current heat loss per current path       0.5 W         Dermal Backup-fuse OCPD       25 A         Short-circuit backup-fuse SCPD       100 A         Back-up fuse type       9G         Protection against direct contact       DGUV V3, VDE 6660-514, 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> Consection 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 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 stranded       15 1         Cross section AWG, solid       15 1         Cross section AWG, flexible       15 1         Cross section AWG, flexible with ferrule       15 1         Tightening torque       2.5 Nm 3 Nm         General data       Operating position         Optional       optional         max. Operating altitude above MSL       2000 m         MSL       min. 2000 cycles         Electrical endurance       min. 2000 cycles         Electrical endurance       min. 2000 cycles         Storage temperature <t< td=""><td></td><td>400 V</td></t<>		400 V
Rated frequency       50 Hz         Current heat loss per current path       0.5 W         Dermal Backup-fuse OCPD       25 A         Short-circuit backup-fuse SCPD       100 A         Back-up fuse type       9G         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)         romsel       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> Consection 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> Consection AWG, solid       15 1         Cross section AWG, solid       15 1         Cross section AWG, flexible       15 1         Cross section AWG, flexible       15 1         Cross section AWG, flexible with ferrule       15 1         Tightening torque       2.5 Nm 3 Nm         General data       0perating position         Optional       2000 m         MSL       min. 2000 cycles         Electrical endurance       min. 2000 cycles         Electrical endurance       min. 2000 cycles         Storage temperature       -35 °C 75 °C         Ambient temperature       -25 °C 75 °C         Ambient tempera	Rated impulse withstand voltage	4 kV
Current heat loss per current path       0.5 W         Thermal Backup-fuse OCPD       25 A         Short-circuit backup-fuse SCPD       100 A         Back-up fuse type       gG         Stark-up fuse type       gG         Neutral conductor position       left or right         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 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, flexible       15 1         Cross section AWG, flexible with ferrule       15 1         Tightening torque       2.5 Nm 3 Nm         Mechanical endurance       min. 5000 cycles         Electrical endurance       min. 5000 cycles         Surrounding atmosphere       normal environmental conditions         Storage temperature       -35 °C		
Thermal Backup-fuse OCPD       25 Å         Short-circuit backup-fuse SCPD       100 Å         Back-up fuse type       9G         Short-circuit backup-fuse SCPD       100 Å         Back-up fuse type       9G         Short-circuit backup-fuse SCPD       100 Å         Back-up fuse type       9G         Short-circuit backup-fuse type       9G         Short-circuit backup-fuse type       100 Å         Back-up fuse type       9G         Short-circuit backup-fuse type       100 Å         Short-circuit backup-fuse type       100 Å         Neutral conductor position       left or right         Protection against direct contact       DGUV V3, VDE 0660-514, finger and back-of-hand proof         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> 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> Consection 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, 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, flexible       1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	Current heat loss per current	0.5 W
Short-circuit backup-fuse SCPD       100 A         Back-up fuse type       gG         Screw-type terminal top and bottom (load circuit)         Neutral conductor position       left or right         Protection against direct contact       DGUV V3, VDE 0660-514, finger and back-of-hand proof         Connection C, Maximum       2 (conductors of same type and cross-section)         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, flexible       15 1         Cross section AWG, flexible with ferrule       15 1         Gross section AWG, flexible with ferrule       2.5 Nm 3 Nm         General data       Operating position         Operating position       optional         max. Operating altitude above MSL       2000 m         MsL       min. 5000 cycles         Electrical endurance       min. 5000 cycles         Surget temperature       -35 °C 40 °C         Glimate resistance       accord		25 A
Back-up fuse type         gG           Neutral conductor position         screw-type terminal top and bottom (load circuit)           Neutral conductor position         left or right           Protection against direct contact         DGUV V3, VDE o66o-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, flexible         15 1           Cross section AWG, flexible         15 1           Cross section AWG, flexible         15 1           Cross section AWG, flexible with ferrule         15 1           Cross section AWG, flexible with ferrule         2.5 Nm 3 Nm           General data         Operating position           Max. Operating altitude above MSL         min. 5000 cycles           Mechanical endurance         min. 5000 cycles           Surrounding atmosphere         normal environmental conditions           Storage temperature         -35 °C	•	
screw-type terminal top and bottom (load circuit)Neutral conductor positionleft or rightProtection against direct contactDGUV V3, VDE o66o-514, finger and back-of-hand proofConnection C1 Maximum number of conductors per terminal2 (conductors of same type and cross-section)Cross section solid1-wire: 1.5 mm² 50 mm²; 2-wire: 1.5 mm² 16 mm²Cross section solid1-wire: 1.5 mm² 50 mm²; 2-wire: 1.5 mm² 16 mm²Cross section AWG, flexible1-wire: 1.5 mm² 50 mm²; 2-wire: 1.5 mm² 16 mm²Cross section AWG, solid15 1Cross section AWG, flexible15 1Cross section AWG, flexible with ferrule15 1Cross section AWG, flexible with ferrule2.5 Nm 3 NmConstraing position max. Operating altitude above MSL2000 mMechanical endurancemin. 5000 cyclesElectrical endurancemin. 5000 cyclesSurrounding atmosphere 75 °CSurrounding atmosphere 75 °CClimate resistanceaccording to IEC 60068-2-30: humid heat / cyclic (25 °C / 55 °C; 93 % / 97 % RH)Shock resistance20 g / 20 ms Duration	•	aG
Neutral conductor positionleft or rightProtection against direct contactDGUV V3, VDE o660-514, finger and back-of-hand proofConnection C1 Maximum number of conductors per terminal2 (conductors of same type and cross-section)Cross section solid1-wire: 1.5 mm² 50 mm², 2-wire: 1.5 mm² 16 mm²Connecting capacity flexible1-wire: 1.5 mm² 50 mm², 2-wire: 1.5 mm² 16 mm²Cross section stranded1-wire: 1.5 mm² 50 mm², 2-wire: 1.5 mm² 16 mm²Cross section AWG, solid15 1Cross section AWG, stranded15 1Cross section AWG, flexible15 1Cross section AWG, flexible2.5 Nm 3 NmGeneral dataOperating positionOperating positionoptionalmax. Operating altitude above MSLmin. 5000 cyclesElectrical endurancemin. 2000 cyclesSurrounding atmospherenormal environmental conditionsStorage temperature-35 °C 40 °CClimate resistanceaccording to IEC 60068-2-30: humid heat / cyclic (25 °C / 55 °C; 93 % / 97 % RH)Shock resistance20 g / 20 ms Duration		
Protection against direct contact       DGUV V3, VDE o660-514, finger and back-of-hand proof         Connection C1 Maximum       2 (conductors of same type and cross-section)         number of conductors per terminal       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 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, solid       15 1         Cross section AWG, flexible       15 1         Cross section AWG, flexible with ferrule       15 1         Tightening torque       2.5 Nm 3 Nm         General data       Operating position         MosL       2000 m         MSL       wechanical endurance         Electrical endurance       min. 5000 cycles         Electrical endurance       normal environmental conditions         Storage temperature       -35 °C 75 °C         Ambient temperature       -25 °C 40 °C         Cimate resistance       according to IEC 60068-2-30: humid heat / cyclic (25 °C / 55 °C; 93 % / 97 % RH) <td>Neutral conductor position</td> <td>·· · ·</td>	Neutral conductor position	·· · ·
Connection C1 Maximum number of conductors per terminal2 (conductors of same type and cross-section)Cross section solid1-wire: 1.5 mm² 50 mm²; 2-wire: 1.5 mm² 16 mm²Connecting capacity flexible1-wire: 1.5 mm² 50 mm²; 2-wire: 1.5 mm² 16 mm²Cross section stranded1-wire: 1.5 mm² 50 mm²; 2-wire: 1.5 mm² 16 mm²Cross section AWG, stranded1-wire: 1.5 mm² 50 mm²; 2-wire: 1.5 mm² 16 mm²Cross section AWG, stranded15 1Cross section AWG, flexible15 1Cross section AWG, flexible15 1Cross section AWG, flexible with ferrule15 1Cross section AWG, flexible with ferrule2.5 Nm 3 NmCoperating positionoptionalmax. Operating altitude above MSL2000 mMechanical endurancemin. 5000 cyclesElectrical endurancemin. 2000 cyclesSurrounding atmospherenormal environmental conditionsStorage temperature-35 °C 75 °CAmbient temperature-25 °C 40 °CClimate resistanceaccording to IEC 60068-2-30: humid heat / cyclic (25 °C / 55 °C; 93 % / 97 % RH)Shock resistance20 g / 20 ms Duration		
number of conductors per terminalCross section solid1-wire: 1.5 mm² 50 mm²; 2-wire: 1.5 mm² 16 mm²Connecting capacity flexible1-wire: 1.5 mm² 50 mm²; 2-wire: 1.5 mm² 16 mm²Cross section stranded1-wire: 1.5 mm² 50 mm²; 2-wire: 1.5 mm² 16 mm²Cross section AWG, solid15 1Cross section AWG, stranded15 1Cross section AWG, flexible15 1Cross section AWG, flexible15 1Cross section AWG, flexible15 1Cross section AWG, flexible15 1Cross section AWG, flexible with ferrule15 1Cross section AWG, flexible with ferrule15 1Cross section AWG, flexible with ferrule2.5 Nm 3 NmCross section AWG, flexible with ferrule2.5 Nm 3 NmMethanical endurancemin. 5000 cyclesElectrical endurancemin. 5000 cyclesSurrounding atmospherenormal environmental conditionsStorage temperature-35 °C 75 °CAmbient temperature-25 °C 40 °CClimate resistanceaccording to IEC 60068-2-30: humid heat / cyclic (25 °C / 55 °C; 93 % / 97 % RH)Shock resistance20 g / 20 ms Duration		
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Climate resistanceaccording to IEC 60068-2-30: humid heat / cyclic (25 °C / 55 °C; 93 % / 97 % RH)Shock resistance20 g / 20 ms Duration		
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 36 mm		

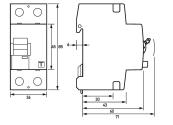
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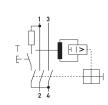
The experts in residual current protection technology

Technical Data	DFS 2 025-2/0,03-AC
Height	85 mm
Depth	75 mm
Installation depth	69 mm
Module widths	2
Weight	0.25 kg
Design requirements/Standards	VDE 0664-10, DIN EN 61008-1
Degree of pollution	2

## Dimensions

## Wiring example





Dimensional drawing Group view

Wiring diagram