Doepke



DATA SHEET

residual current circuit-breaker DFS 2 016-2/0,30-A KV Twin puls- und wechselstromsensitiv Typ A, kurzzeitverzögert, unterbrechungsfreie Prüfung Article number 09116009

10000 🖂 🕸 KV G

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. The twin design is a combination of two complete RCCBs, which allows for a function test to be performed on every single sub-RCCB without switching off the load circuit. It provides complete residual current protection during the function test, in which each of the RCCBs working in parallel can carry the full rated short-circuit current. The continual flow of current during the test procedure is achieved through parallel switching of the switching contacts of both sub-RCCBs, i.e. when both RCCBs are switched on, one of the two sub-switches can be tripped using its test key, while the second switch takes on the power supply. If the function test shows that a faulty RCCB does not trip, the effectiveness of the protection can be restored by switching on the intact RCCB. A faulty device can be secured against switching on again in this case with the restart interlock WES 2 mounted at the factory. 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 OVE 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.

Features

function test for residual current circuit-breaker without interrupting power, residual current protection complies with standard even during testing procedure, no costs during system downtime, high system availability, high immunity against surge currents and mainsvoltage-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"

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, The twin design allows regularly prescribed function tests to be performed without disconnecting the power, 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.

Notes

WES 2 restart interlock mounted at factory

Accessories

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

Doepke

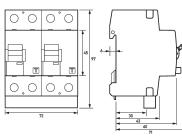
Technical Data

Series DFS 2 A KV Twin Number of poles 2 Residual current type A Rated residual current tAC) 16 A Rated residual current tAD 0.3 A Short-time delayed true Selective false min. Operating voltage range of 100 V text circuit 10 ms max. Operating voltage range of 250 V text circuit 10 ms Non trip time 10 and msvit Specification load disconnect contact Number 2 min. Contact opening 4 mm Rated short-icuit current 10 kA Surge current strength 3 kA max. Total rated switching 500 A capacity 50 H2 Current heat loss per current 0.18 W path 16 A Short-icincit backup-fuse SCPD 16 A Short-icincit backup-	Technical Data	DFS 2 016-2/0,30-A KV Twin
Number of poles 2 Residual current type A Rated current t(AC) 36 A Rated current t(AC) 36 A Rated current t(AC) 0.3 A Short-time delayed true Selective false min. Operating voltage range of test circuit 200 V nax. Operating voltage range of test circuit 200 V Non-trip time 10 ams Non-trip time 10 ams Specification load disconnect contact Number 2 min. Contact opening 4 mm Rated disconnect contact Number action contact opening 4 mm Rated voltage (AC) 230 V Rated urrent (AC) 10 kA Surge current strength 3 kA max. Total rated switching 500 A capacity 50 HZ Current heat loss per current path 0.18 W path 0 Back-up fuse CPD 16 A Short-circuit backup-fuse COPD 16 A Short-circuit backup-fuse COPD<		
Residual current type A Rated current (AC) 16 A Rated residual current (AC) 0.3 A Short-time delayed true Selective false min. Operating voltage range of test circuit 100 V max. Operating voltage range of test circuit 250 V Non-trip time 10 ms Specification load disconnect contact Number 2 min. Contact opening 4 mm Rated solutage (AC) 230 V Rated solutage (AC) 200 V Surge current strength 3 kA max. Total rated switching capacity 500 A capacity 50 Hz Current heat loss per current 0.18 W path 0 Define (Figure 2) 26 A Short-tircuit backup-fuse SCPD 100 A Back-up fuse type gG Gomettion C_A Maximum	Number of poles	2
Rated current (AC) 16 A Rated residual current IΔn 0.3 A Short-time delayed true Selective false min. Operating voltage range of test circuit 100 V max. Operating voltage range of test circuit 250 V Specification 10 and disconnect contact Number 2 min. Contact opening 4 mm Rated voltage (AC) 230 V Rated voltage (AC) 320 V Rated voltage (AC) 30 V Rated short-circuit current 10 kA Surge current Ke(C) 16 A Rated short-circuit current 3 kA max. Total rated switching capacity 500 A Rated frequency 50 Hz Current heat loss per current path 0 A Thermal Backup fuse OCPD 16 A Short-circuit backup-fuse SCPD 100 A Back-up fuse type gG Connectin C L Maximum 2 (conductors fame type and cross section) reterninal		Α
Short-time delayed true Selective false min. Operating voltage range of test circuit 250 V Non-trip time 100 or ms load circuit Specification Specification load disconnect contact Number 2 min. Contact opening 4 mm Rated voltage (AC) 230 V Rated voltage (AC) 230 V Rated short-circuit current 10 kA Surge current strength 3 kA max. Total rated switching 500 A capacity 500 A Rated frequency 50 Hz Current heat loss per current 0.18 W Back-up fuse type 9G Short-circuit backup-fuse OCPD 16 A Short-circuit backup-fuse OCPD 16 A Short-circuit backup-fuse OCPD 100 A Back-up fuse type 9G Connection Conductors per terminal top and bottom (load circuit) Neutral conductor position left or right Protection against direct contact DGUV 3/, VDE ödöc-54, finger and back-of-hand proof Connecting capacity flexible 1-wire: 1.5 mm ² 50 mm ² , 2		16 A
Short-time delayed true Selective false min. Operating voltage range of test circuit 100 V max. Operating voltage range of test circuit 250 V Non-trip time 10 and circuit Specification load disconnect contact Number 2 min. Contact opening 4 mm Rated voltage (AC) 230 V Rated voltage (AC) 230 V Rated voltage (AC) 350 V Rated short-circuit current 10 kA Surge current trength 3 kA max. Total rated switching capacity 500 A Rated inpulse withstand voltage 4 kV Rated inpulse withstand voltage	Rated residual current I∆n	0.3 A
Selective false min. Operating voltage range of test circuit 100 V max. Operating voltage range of test circuit 250 V max. Operating voltage range of test circuit 250 V Specification 10ad disconnet contact Number 2 min. Contact opening 4 mm Rated voltage (AC) 230 V Rated short-circuit current 10 kA Surge current strength 3 kA max. Total rated switching capacity 500 A Capacity 50 H2 Current heat loss per current path 0.3 W Detart circuit backup-fuse CCPD 16 A Short-circuit backup-fuse SCPD 100 A Back-up fuse type gG Screw-type terminal top and bottom (load circuit) Number of conductors per terminal 2 conductors of same type and cross-section) Connecting capacity flexible 1-wire: 1.	Short-time delayed	
test circuit max. Operating voltage range of test circuit Non-trip time Ioad circuit Specification Ioad circuit Ioad circuit Ioad circuit Specification Ioad circuit Ioad circuit Ioad circuit Specification Ioad circuit Ioad cir		false
test circuit 10 m5 Non-trip time 10 ad dircuit Specification load disconnect contact Number 2 min. Contact opening 4 mm Rated voltage (AC) 230 V Rated current (AC) 16 A Rated short-circuit current 10 kA Surge current strength 3 kA max. Total rated switching 500 A capacity 2 Current heat loss per current 0.18 W path 0.18 C Thermal Backup-fuse SCPD 16 A Back-up fuse type gG 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 o660-514, finger and back-of-hand proof Connection C1 Maximum 2 (conductors fame type and cross-section) Consection Scient standed 1-wire: 1.5 mm ² 50 mm ² , 2-wire: 1.5 mm ² 16 mm ² Cross section standed 1-wire: 1.5 mm ² 50 mm ² , 2-wire: 1.5 mm ² 16 mm ² Cross section AWG, sloil 15 1 Cross section AWG, flexible 15 1		100 V
Ioad circuit Specification Ioad disconnect contact Number 2 min. Contact opening 4 mm Rated voltage (AC) 230 V Rated current (AC) 16 A Rated short-circuit current 10 kA Surge current strength 3 kA max. Total rated switching 500 A capacity 50 HZ Rated impulse withstand voltage 4 kV Rated frequency 50 HZ Current heat loss per current 0.18 W path 0.18 W Current heat loss per current 0.18 W Path 0.100 A Back-up fuse type gG Concection classes CPD 100 A Back-up fuse type gC Connection classit direct contact DGUV V3, VDE of60-514, finger and back-of-hand proof Connection Clastarum		250 V
SpecificationIoad disconnect contactNumber2min. Contact opening4 mmRated voltage (AC)230 VRated current (AC)16 ARated short-circuit current10 kASurge current strength3 kAmax. Total rated switching capacity500 ARated frequency50 HzCurrent heat loss per current path0.38 WThermal Backup-fuse OCPD16 AShort-circuit backup-fuse SCPD100 ABackup fuse typegGconcertion Cast additionleft or rightProtection against direct contactDGUV V3, VDE o660-514, finger and back-of-hand proofConsection Sper terminal2 (conductors of same type and cross-section)umber of conductors per terminal2 (conductors of same type and cross-section)Cross section AWG, solid1-wire: 1.5 mm² 50 mm²; 2-wire: 1.5 mm² 16 mm²Cross section AWG, solid15 1Cross section AWG, flexible15 1Cross section AWG, flexible15 1Tightening torque2.5 Nm 3 Nm	Non-trip time	10 ms
Number2min. Contact opening4 mmRated voltage (AC)230 VRated voltage (AC)16 ARated short-circuit current10 kASurge current strength3 kAmax. Total rated switching500 Acapacity50 HZCurrent heat loss per current0.18 Wpath16 AShort-circuit backup-fuse OCPD16 AShort-circuit backup-fuse SCPD100 ABack-up fuse typegGConnection Capacity2 (conductors positionInternal Backup-fuse OCPD16 AShort-circuit backup-fuse SCPD100 ABack-up fuse typegGConnection Capacity flexible1-wire: 1.5 mm²16 mm²Connection Capacity flexible1-wire: 1.5 mm²50 mm²; 2-wire: 1.5 mm²16 mm²Cross section solid1-wire: 1.5 mm²50 mm²; 2-wire: 1.5 mm²16 mm²Cross section AWG, Stranded15 1Cross section AWG, flexible15 1Cross section AWG, flexible15 1Cross section AWG, flexible15 1Tightening torque2.5 Nm 3 Nm		load circuit
min. Contact opening 4 mm Rated voltage (AC) 230 V Rated voltage (AC) 16 A Rated short-circuit current 10 kA Surge current strength 3 kA max. Total rated switching 500 A capacity 30 kA Rated impulse withstand voltage 4 kV Rated frequency 50 Hz Current heat loss per current 0.18 W path 0 Thermal Backup-fuse OCPD 16 A Short-circuit backup-fuse OCPD 100 A Back-up fuse type gG Understream 2 (conductor position Neutral conductor position left or right 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) umber of conductors per terminal 2 (conductors of same type and cross-section) Cross section solid 1-wire: 1.5 mm ² 50 mm ² ; 2-wire: 1.5 mm ² 16 mm ² Cross section stranded 1-wire: 1.5 mm ² 50 mm ² ; 2-wire: 1.5 mm ² 16 mm ² Cross section AWG, solid 15 1 Cross section AWG, flexible 15 1 </td <td>Specification</td> <td>load disconnect contact</td>	Specification	load disconnect contact
Rated voltage (AC) 230 V Rated current (AC) 16 A Rated short-circuit current 10 kA Surge current strength 3 kA max. Total rated switching 500 A capacity 50 Hz Rated frequency 50 Hz Current heat loss per current path 10 kA Thermal Backup-fuse OCPD 16 A 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 o660-514, finger and back-of-hand proof Connecting Capacity flexible 1-wire: 1.5 mm ² 50 mm ² ; 2-wire: 1.5 mm ² 16 mm ² Cross section solid 1-wire: 1.5 mm ² 50 mm ² ; 2-wire: 1.5 mm ² 16 mm ² Cross section AWG, solid 15 1 Cross section AWG, flexible 15 1 Cross section AWG, flexible with ferrule 15 1 Cross section AWG, flexible with ferrule 15 1		2
Rated voltage (AC) 230 V Rated current (AC) 16 A Rated short-circuit current 10 kA Surge current strength 3 kA max. Total rated switching 500 A capacity 50 Hz Rated frequency 50 Hz Current heat loss per current path 10 kA Thermal Backup-fuse OCPD 16 A 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 o660-514, finger and back-of-hand proof Connecting Capacity flexible 1-wire: 1.5 mm ² 50 mm ² ; 2-wire: 1.5 mm ² 16 mm ² Cross section solid 1-wire: 1.5 mm ² 50 mm ² ; 2-wire: 1.5 mm ² 16 mm ² Cross section AWG, solid 15 1 Cross section AWG, flexible 15 1 Cross section AWG, flexible with ferrule 15 1 Cross section AWG, flexible with ferrule 15 1	min. Contact opening	4 mm
Rated short-circuit current 10 kA Surge current strength 3 kA max. Total rated switching 500 A capacity Soo A Rated impulse withstand voltage 4 kV Rated frequency 50 Hz Current heat loss per current 0.18 W path 0 Thermal Backup-fuse OCPD 16 A 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 C1 Maximum 2 (conductors of same type and cross-section) number of conductors per terminal 1-wire: 1.5 mm ² 50 mm ² , 2-wire: 1.5 mm ² 16 mm ² Connecting capacity flexible 1-wire: 1.5 mm ² 50 mm ² , 2-wire: 1.5 mm ² 16 mm ² Cross section solid 1-wire: 1.5 mm ² 50 mm ² , 2-wire: 1.5 mm ² 16 mm ² Cross section AWG, solid 15 1 Cross section AWG, flexible 15 1 Cross section AWG, flexible with ferrule 15 1 Cross section AWG, flexible with ferrule 15 1 <td></td> <td>230 V</td>		230 V
Surge current strength3 kAmax. Total rated switching capacity500 ARated impulse withstand voltage4 kVRated frequency50 HzCurrent heat loss per current path0.18 WThermal Backup-fuse OCPD16 AShort-circuit backup-fuse SCPD100 ABack-up fuse typegGVertral 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 mm²Cross section solid1-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 ferrule15 1Tightening torque2.5 Nm 3 Nm	Rated current (AC)	16 A
max. Total rated switching capacity500 ÅRated impulse withstand voltage4 kVRated frequency50 HzCurrent heat loss per current path0.18 WThermal Backup-fuse OCPD16 ÅShort-circuit backup-fuse SCPD100 ÅBack-up fuse typegGShort-circuit backup-fuse SCPD100 ÅBack-up fuse typegGConnection C1 Maximum number of conductors per terminal2 (conductors of same type and bottom (load circuit)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 mm²Cross section AWG, solid15 1Cross section AWG, flexible15 1Cross section AWG, flexible15 1Cross section AWG, flexible with ferrule15 1Cross section AWG, flexible with ferrule15 1	Rated short-circuit current	10 kA
capacityRated impulse withstand voltage4 kVRated impulse withstand voltage4 kVRated frequency50 HzCurrent heat loss per current path0.18 WDath0.18 WBackup-fuse OCPD16 AShort-circuit backup-fuse SCPD100 ABack-up fuse typegGScrew-type terminal top and bottom (load circuit)Neutral conductor positionleft or rightProtection against direct contactDGUV V3, VDE 0660-514, 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 AWG, solid15 1Cross section AWG, flexible15 1Cross section AWG, flexible15 1Tightening torque2.5 Nm 3 Nm	Surge current strength	3 kA
Rated frequency 50 Hz Current heat loss per current path 0.18 W Thermal Backup-fuse OCPD 16 A 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 o660-514, 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 ² 50 mm ² ; 2-wire: 1.5 mm ² 16 mm ² Cross section solid 1-wire: 1.5 mm ² 50 mm ² ; 2-wire: 1.5 mm ² 16 mm ² Cross section solid 1-wire: 1.5 mm ² 50 mm ² ; 2-wire: 1.5 mm ² 16 mm ² Cross section solid 1-wire: 1.5 mm ² 50 mm ² ; 2-wire: 1.5 mm ² 16 mm ² Cross section stranded 1-wire: 1.5 mm ² 50 mm ² ; 2-wire: 1.5 mm ² 16 mm ² 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	5	500 A
Current heat loss per current path0.18 WThermal Backup-fuse OCPD16 AShort-circuit backup-fuse SCPD100 ABack-up fuse typegGScrew-type terminal top and bottom (load circuit)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 mm²Cross section solid1-wire: 1.5 mm² 50 mm²; 2-wire: 1.5 mm² 16 mm²Cross section AWG, solid1-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 1Tightening torque2.5 Nm 3 Nm	Rated impulse withstand voltage	4 KV
pathThermal Backup-fuse OCPD16 AShort-circuit backup-fuse SCPD100 ABack-up fuse typegGgGscrew-type terminal top and bottom (load circuit)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 mm²Cross section solid1-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, flexible15 1Cross section AWG, flexible15 1Cross section AWG, flexible with ferrule15 1Tightening torque2.5 Nm 3 Nm	Rated frequency	50 Hz
Short-circuit backup-fuse SCPD100 ABack-up fuse typegGBack-up fuse typegGNeutral 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 stranded1-wire: 1.5 mm² 50 mm²; 2-wire: 1.5 mm² 16 mm²Cross section AWG, solid15 1Cross section AWG, flexible15 1		0.18 W
Back-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 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 stranded1-wire: 1.5 mm² 50 mm²; 2-wire: 1.5 mm² 16 mm²Cross section AWG, solid15 1Cross section AWG, flexible15 1Cross section AWG, flexible15 1Cross section AWG, flexible with ferrule15 1Tightening torque2.5 Nm 3 Nm	Thermal Backup-fuse OCPD	16 A
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 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, flexible with ferrule15 1Tightening torque2.5 Nm 3 Nm	Short-circuit backup-fuse SCPD	100 A
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 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 stranded1-wire: 1.5 mm² 50 mm²; 2-wire: 1.5 mm² 16 mm²Cross section AWG, solid15 1Cross section AWG, solid15 1Cross section AWG, flexible15 1Cross section AWG, flexible with ferrule15 1	Back-up fuse type	gG
Protection 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, flexible with ferrule15 1Tightening torque2.5 Nm 3 Nm		screw-type terminal top and bottom (load circuit)
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 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, flexible with ferrule15 1Tightening torque2.5 Nm 3 Nm	Neutral conductor position	left or right
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 1	Protection against direct contact	DGUV V3, VDE 0660-514, finger and back-of-hand proof
Connecting 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, flexible with ferrule15 1Tightening torque2.5 Nm 3 Nm	number of conductors per	2 (conductors of same type and cross-section)
Cross 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, flexible with ferrule15 1Tightening torque2.5 Nm 3 Nm	Cross section solid	1-wire: 1.5 mm ² 50 mm ² ; 2-wire: 1.5 mm ² 16 mm ²
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	Connecting capacity flexible	1-wire: 1.5 mm ² 50 mm ² ; 2-wire: 1.5 mm ² 16 mm ²
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	Cross section stranded	1-wire: 1.5 mm ² 50 mm ² ; 2-wire: 1.5 mm ² 16 mm ²
Cross section AWG, flexible 15 1 Cross section AWG, flexible with ferrule 15 1 Tightening torque 2.5 Nm 3 Nm	Cross section AWG, solid	15 1
Cross section AWG, flexible with ferrule 15 1 Tightening torque 2.5 Nm 3 Nm	Cross section AWG, stranded	15 1
ferrule Tightening torque 2.5 Nm 3 Nm	Cross section AWG, flexible	15 1
		15 1
General data	Tightening torque	2.5 Nm 3 Nm
		General data
Operating position optional	Operating position	optional
max. Operating altitude above 2000 m MSL		2000 M
Mechanical endurance min. 5000 cycles	Mechanical endurance	min. 5000 cycles
Electrical endurance min. 2000 cycles	Electrical endurance	min. 2000 cycles

Doepke

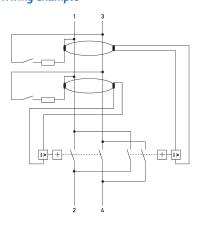
Technical Data	DFS 2 016-2/0,30-A KV Twin
Storage temperature	-35 °C 75 °C
Ambient temperature	-25 °C 40 °C
Climate resistance	according to IEC 60068-2-30: humid heat / cyclic (25 °C / 55 °C; 93 % / 97 % RH)
Shock resistance	20 g / 20 ms Duration
Fatigue limit	> 5 g (f \leq 80 Hz, duration > 30 min.)
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	97 mm
Depth	77 mm
Installation depth	69 mm
Module widths	4
Weight	0.54 kg
Design requirements/Standards	VDE 0664-10, DIN EN 61008-1
Degree of pollution	2

Dimensions



Dimensional drawing Group view

Wiring example



Wiring diagram