

Feed-through header - DFK-PC 4/10-GF-7,62 - 1840638

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Feed-through connector, nominal current: 20 A, rated voltage (III/2): 630 V, nominal cross section: 4 mm², number of positions: 10, pitch: 7.62 mm, connection method: Screw connection with tension sleeve, color: green, contact surface: Tin, mounting: Direct mounting

The figure shows a 5-pos. version of the product

Your advantages

- Well-known connection principle allows worldwide use
- Low temperature rise, thanks to maximum contact force
- Allows connection of two conductors
- Screwable flange for superior mechanical stability
- Flexible side panels enable convenient wall mounting prewired from the inside



Key Commercial Data

Packing unit	50 pc
GTIN	
GTIN	4017918111786

Technical data

Item properties

Brief article description	Feed-through plug
Plug-in system	POWER COMBICON 4
Type of contact	Male connector
Range of articles	DFK-PC 4/..-GF
Pitch	7.62 mm
Number of positions	10
Connection method	Screw connection with tension sleeve
Screw thread	M3
Mounting type	Direct mounting
Locking	Threaded flange

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Technical data

Item properties

Number of levels	1
Number of connections	10
Number of potentials	10

Electrical parameters

Nominal current	20 A
Nom. voltage	630 V
Rated voltage	400 V
Rated voltage (III/2)	630 V
Rated voltage (II/2)	1000 V
Rated surge voltage (III/3)	6 kV
Rated surge voltage (III/2)	6 kV
Rated surge voltage (II/2)	6 kV

Connection capacity

Connection method	Screw connection with tension sleeve
pluggable	Yes
Conductor cross section solid	0.2 mm ² ... 4 mm ²
Conductor cross section flexible	0.2 mm ² ... 4 mm ²
Conductor cross section AWG / kcmil	24 ... 10
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm ² ... 4 mm ²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm ² ... 4 mm ²
2 conductors with same cross section, solid	0.2 mm ² ... 2.5 mm ²
2 conductors with same cross section, flexible	0.2 mm ² ... 2.5 mm ²
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	0.2 mm ² ... 1.5 mm ²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm ² ... 2.5 mm ²
Stripping length	7 mm
Torque	0.5 Nm ... 0.6 Nm

Material data - contact

Note	WEEE/RoHS-compliant, free of whiskers according to IEC 60068-2-82/ JEDEC JESD 201
Contact material	Cu alloy
Surface characteristics	hot-dip tin-plated
Metal surface terminal point (top layer)	Tin (5 - 7 µm Sn)
Metal surface contact area (top layer)	Tin (5 - 7 µm Sn)

Material data - housing

Housing color	green (6021)
Insulating material	PA
Insulating material group	I
CTI according to IEC 60112	600

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Material data - housing

Flammability rating according to UL 94	V0
Glow wire flammability index GWFI according to EN 60695-2-12	850
Glow wire ignition temperature GWIT according to EN 60695-2-13	775
Temperature for the ball pressure test according to EN 60695-10-2	125 °C

Dimensions for the product

Length [l]	32 mm
Width [w]	97.82 mm
Height [h]	30.5 mm
Pitch	7.62 mm
Height (without solder pin)	30.5 mm

Packaging information

Type of packaging	packed in cardboard
Pieces per package	50
Denomination packing units	Pcs.

Ambient conditions

Ambient temperature (storage/transport)	-40 °C ... 70 °C
Ambient temperature (assembly)	-5 °C ... 100 °C
Ambient temperature (operation)	-40 °C ... 100 °C (dependent on the derating curve)

Termination and connection method

Test for conductor damage and slackening	IEC 60999-1:1999-11
	Test passed

Pull-out test

Pull-out test	IEC 60999-1:1999-11
	Test passed
Conductor cross section / conductor type / tensile force	0.2 mm ² / solid / > 10 N
	0.2 mm ² / flexible / > 10 N
	4 mm ² / solid / > 60 N
	4 mm ² / flexible / > 60 N

Mechanical tests according to standard

Test specification	IEC 61984
Visual inspection	IEC 60512-1-1:2002-02
Dimension check	IEC 60512-1-2:2002-02
Resistance of inscriptions	IEC 60068-2-70:1995-12
Insertion and withdrawal force	IEC 60512-7:1993-08
No. of cycles	25
Insertion strength per pos. approx.	8 N
Withdraw strength per pos. approx.	6 N
Polarization and coding	IEC 60512-7:1993-08 (Polarization)

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Air clearances and creepage distances

Clearances and creepage distances	IEC 60664-1:2007-04
Specification	IEC 60664-1:2007-04
Minimum clearance - inhomogeneous field (III/3)	5.5 mm
Minimum clearance - inhomogeneous field (III/2)	5.5 mm
Minimum clearance - inhomogeneous field (II/2)	5.5 mm
Minimum creepage distance value (III/3)	5.5 mm
Minimum creepage distance value (III/2)	5.5 mm
Minimum creepage distance value (II/2)	5.5 mm

Current carrying capacity / derating curves

Caption	Type: PC 4/...-STF-7,62 with DFK-PC 4/...-GF-7,62
Reduction factor	0.8
Note	Representation based on IEC 60512-5-2:2002-02
	For number of positions, see diagram

Mechanical tests (A)

Test specification	IEC 61984
Insertion strength per pos. approx.	8 N
Withdraw strength per pos. approx.	6 N
Polarization when inserted requirement >20 N	Test passed

Durability tests (B)

Specification	IEC 60512-5:1992-08
Contact resistance R ₁	0.4 mΩ
Insertion/withdrawal cycles	25
Contact resistance R ₂	0.6 mΩ
Impulse withstand voltage at sea level	7.3 kV
Power-frequency withstand voltage	3.31 kV
Insulation resistance, neighboring positions	10 ¹² Ω

Thermal tests (C)

Specification	IEC 60512-5-1:2002-02
Number of positions	12
Conductor cross section	4 mm ²
Test current	20 A
Upper limiting temperature requirements <100 °C	Test passed

Climatic tests (D)

Specification	ISO 6988:1985-02
Cold stress	-40 °C/2 h
Thermal stress	100 °C/168 h
Corrosive stress	KFW 0.2 S/1 cycle
Impulse withstand voltage at sea level	7.3 kV

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Technical data

Climatic tests (D)

Power-frequency withstand voltage	3.31 kV
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Environmental and durability tests (E)

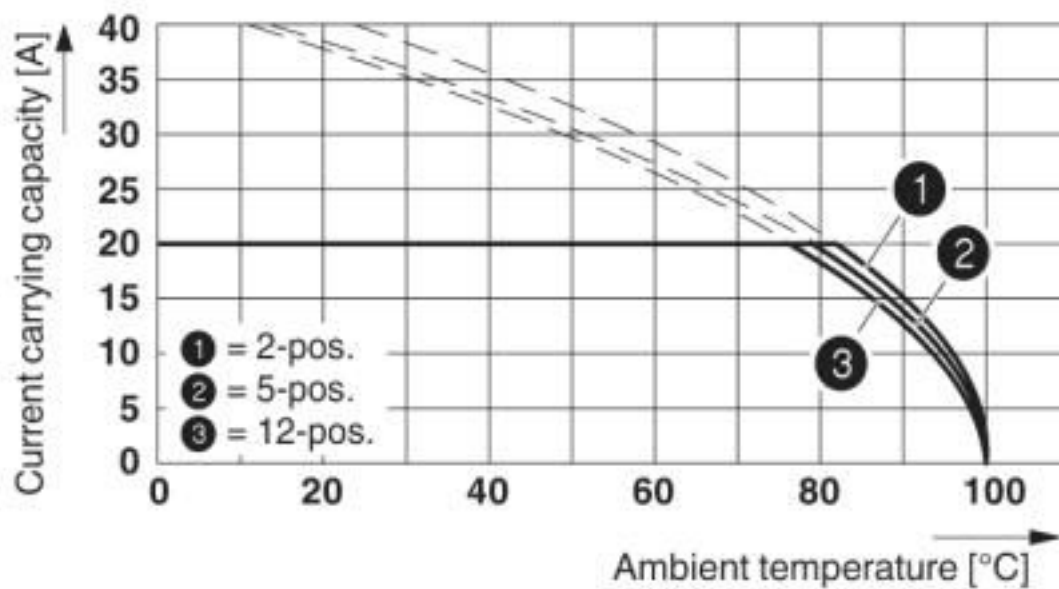
Result, degree of protection, IP code	Finger safety with IP20 test finger
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Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

Drawings

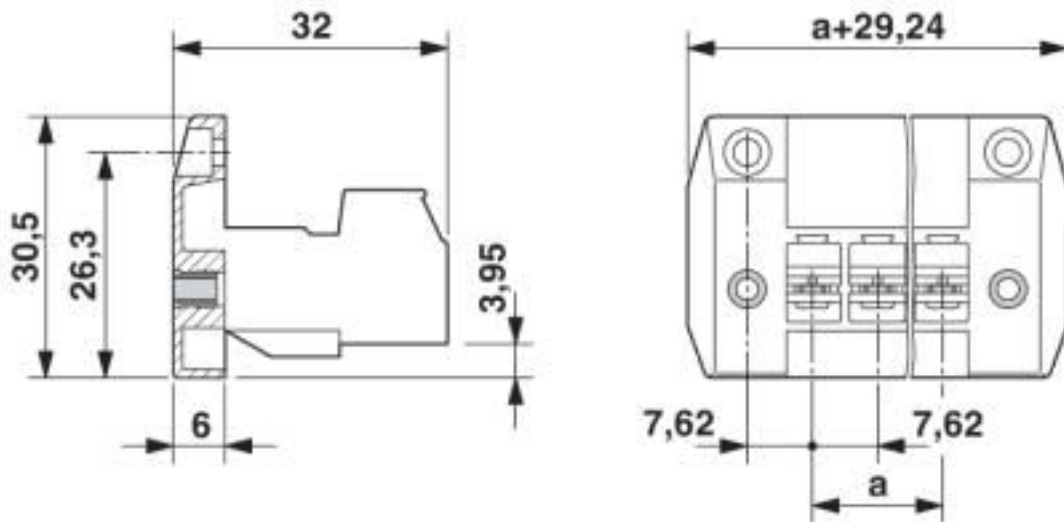
Diagram



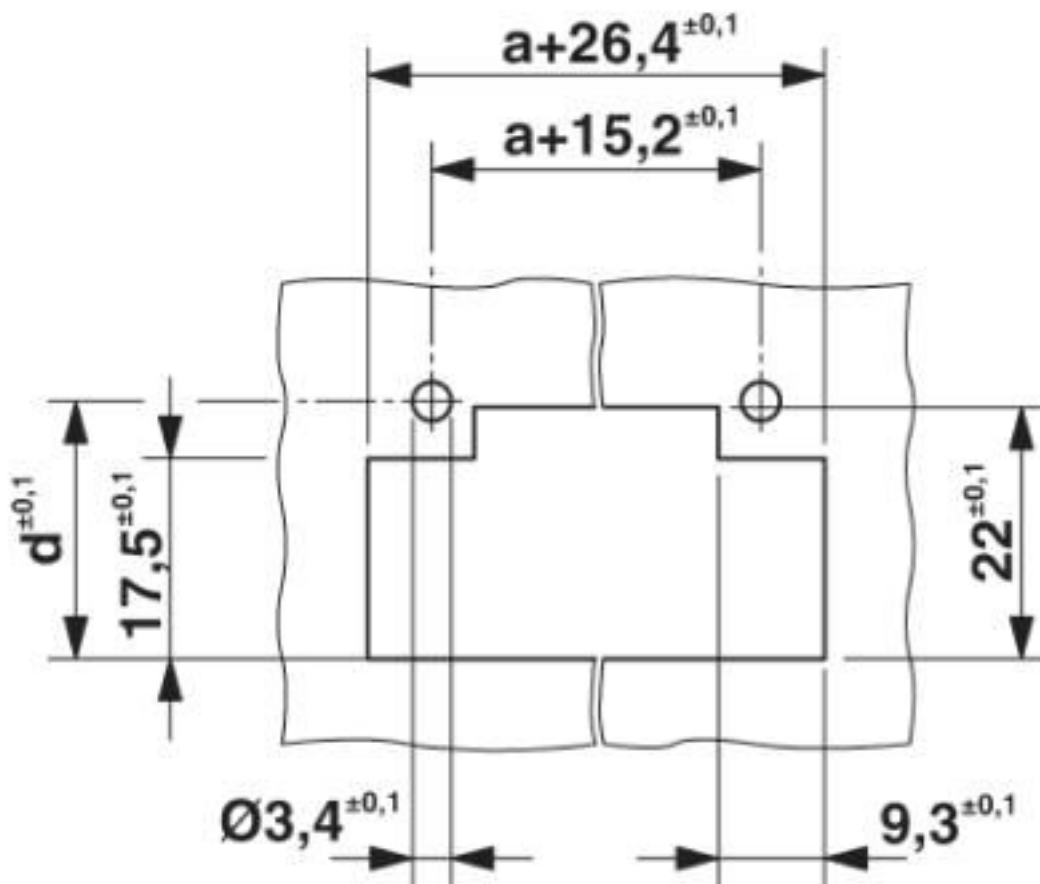
Derating curve for: PC 4/...-ST-7,62 with DFK-PC 4/...-GF-7,62

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Dimensional drawing



Dimensional drawing



Dimension d depending on the wall thickness (W) in mm: W=1: d=21.4
W=2: d=21.9

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W=3: d=22.5
W=4: d=23.1
W=5: d=23.7

Classifications

eCl@ss

eCl@ss 10.0.1	27440309
eCl@ss 4.0	27260700
eCl@ss 4.1	27260700
eCl@ss 5.0	27141100
eCl@ss 5.1	27141100
eCl@ss 6.0	27141100
eCl@ss 7.0	27141134
eCl@ss 8.0	27440309
eCl@ss 9.0	27440309

ETIM

ETIM 3.0	EC001283
ETIM 4.0	EC001283
ETIM 5.0	EC002638
ETIM 6.0	EC002637
ETIM 7.0	EC002637

UNSPSC

UNSPSC 6.01	30211810
UNSPSC 7.0901	39121409
UNSPSC 11	39121409
UNSPSC 12.01	39121409
UNSPSC 13.2	39121410
UNSPSC 18.0	39121409
UNSPSC 19.0	39121409
UNSPSC 20.0	39121409
UNSPSC 21.0	39121409

Approvals

Approvals

Approvals

DNV GL / CSA / LR / EAC / cULus Recognized

Ex Approvals

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Approvals

Approval details

DNV GL		https://approvalfinder.dnvgl.com/	TAE00001EZ
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CSA		http://www.csagroup.org/services-industries/product-listing/	13631
	B	C	
Nominal voltage UN	300 V	300 V	
Nominal current IN	20 A	20 A	
mm ² /AWG/kcmil	28-10	28-10	

LR		http://www.lr.org/en	96/20012
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EAC			B.01687
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cULus Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	E60425-19920722
	B	C	D
Nominal voltage UN	300 V	300 V	600 V
Nominal current IN	35 A	35 A	5 A
mm ² /AWG/kcmil	30-10	30-10	30-10

Accessories

Accessories

Coding element

Coding profile - CP-PC RD - 1701967

Coding profile, for plugging into the coding ribs of the plug at a later date, insulating material, color: Red



Labeled terminal marker

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Accessories

Marker card - SK 7,62/3,8:FORTL.ZAHLEN - 0804549

Marker card, Card, white, labeled, horizontal: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 91 ... 100, mounting type: adhesive, for terminal block width: 7.62 mm, lettering field size: 7.62 x 3.8 mm



Mounting material

Screw set - DFK-MSTB-SS - 0708263



Screw set, for securing the header to the device wall, consists of an M3 x 10 screw, with a spring washer and a nut

Screwdriver tools

Screwdriver - SZS 0,6X3,5 - 1205053



Actuation tool, for ST terminal blocks, insulated, also suitable for use as a bladed screwdriver, size: 0.6 x 3.5 x 100 mm, 2-component grip, with non-slip grip

Additional products

Printed-circuit board connector - PC 4/10-STF-7,62 - 1828320



PCB connector, nominal current: 20 A, rated voltage (III/2): 630 V, nominal cross section: 4 mm², number of positions: 10, pitch: 7.62 mm, connection method: Screw connection with tension sleeve, color: green, contact surface: Tin

Printed-circuit board connector - PC 5/10-STF1-7,62 - 1777914



PCB connector, nominal current: 41 A, rated voltage (III/2): 1000 V, nominal cross section: 6 mm², number of positions: 10, pitch: 7.62 mm, connection method: Screw connection with tension sleeve, color: green, contact surface: Tin

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Accessories

Printed-circuit board connector - SPC 5/10-STF-7,62 - 1996207



PCB connector, nominal current: 41 A, rated voltage (III/2): 1000 V, nominal cross section: 6 mm², number of positions: 10, pitch: 7.62 mm, connection method: Push-in spring connection, color: green, contact surface: Tin

Printed-circuit board connector - TSPC 5/10-STF-7,62 - 1728280



PCB connector, nominal current: 41 A, rated voltage (III/2): 1000 V, nominal cross section: 6 mm², number of positions: 10, pitch: 7.62 mm, connection method: Push-in spring connection, color: green, contact surface: Tin

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