

Feed-through plug - DFK-PC 5/ 7-STF-7,62 - 1716661

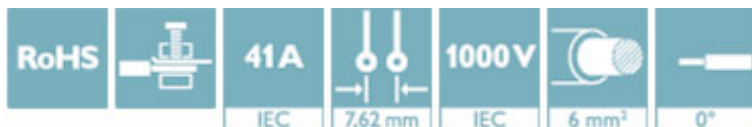
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Feed-through connector, nominal current: 41 A, rated voltage (III/2): 1000 V, nominal cross section: 6 mm², number of positions: 7, pitch: 7.62 mm, connection method: Screw connection with tension sleeve, color: green, contact surface: Tin

Your advantages

- ✓ Well-known connection principle allows worldwide use
- ✓ Low temperature rise, thanks to maximum contact force
- ✓ Allows connection of two conductors
- ✓ Flange system enables secure fixing to the housing panel by means of tool-free snap-in locking or screws
- ✓ Shroud for professional EMC shield connection on the front of the device
- ✓ Screwable flange for superior mechanical stability



Key Commercial Data

Packing unit	10 pc
GTIN	 4 046356 137287
GTIN	4046356137287

Technical data

Item properties

Brief article description	Feed-through plug
Plug-in system	POWER COMBICON 5
Type of contact	Male connector
Range of articles	DFK-PC 5/...-STF
Pitch	7.62 mm
Number of positions	7
Connection method	Screw connection with tension sleeve
Screw thread	M3
Locking	Screw flange
Number of levels	1

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Item properties

Number of connections	7
Number of potentials	7

Electrical parameters

Nominal current	41 A
Nom. voltage	1000 V
Rated voltage	630 V
Rated voltage (III/2)	1000 V
Rated voltage (II/2)	1000 V
Rated surge voltage (III/3)	8 kV
Rated surge voltage (III/2)	8 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 ... 10 mm ²
Conductor cross section flexible	0.2 mm ² ... 6 mm ²
Conductor cross section AWG / kcmil	24 ... 10
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm ² ... 6 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 ... 4 mm ²
2 conductors with same cross section, stranded, ferrules without plastic sleeve	0.25 mm ² ... 1.5 mm ²
2 conductors with same cross section, stranded, with TWIN ferrules with plastic sleeve	0.25 mm ² ... 2.5 mm ²
Stripping length	10 mm
Torque	0.7 Nm ... 0.8 Nm

Type of locking	Screw locking
Mounting flange	Screw flange

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 (4 - 8 µm Sn)
Metal surface contact area (top layer)	Tin (4 - 8 µm Sn)

Material data - housing

Housing color	green (6021)
Insulating material	PA

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Material data - housing

Insulating material group	I
CTI according to IEC 60112	600
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]	48.95 mm
Width [w]	87.96 mm
Height [h]	26.24 mm
Pitch	7.62 mm
Height (without solder pin)	26.24 mm
Dimension a	45.72 mm

Packaging information

Type of packaging	packed in cardboard
Pieces per package	10
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

Conductor connection test	The stripped-off ends of the largest conductor can be completely inserted in the opening of the terminal point without using excessive force.
Test result	Test passed
Test – repeated connection and release	IEC 60999-1:1999-11
	Test passed
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
	6 mm ² / flexible / > 80 N

Mechanical tests according to standard

Visual examination	Test passed IEC 60512-1-1:2002-02
Dimensional test	Test passed IEC 60512-1-2:2002-02

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Mechanical tests according to standard

Resistance of marking	Test passed IEC 60068-2-70:1995-12
Result	Test passed
Specification	IEC 60512-13-2:2006-02
No. of cycles	50
Insertion strength per pos. approx.	5 N
Withdraw strength per pos. approx.	4 N
Polarization and coding	Test passed IEC 60512-13-5:2006-02

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)	8 mm
Minimum clearance - inhomogeneous field (III/2)	8 mm
Minimum clearance - inhomogeneous field (II/2)	5.5 mm
Minimum creepage distance value (III/3)	8 mm
Minimum creepage distance value (III/2)	5 mm
Minimum creepage distance value (II/2)	5 mm

Electrical tests - Function

Specification	IEC 60999-1:1999-11
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Temperature cycles

Specification	IEC 60999-1:1999-11
Test current (minimum cross section)	5 A DC
Test current (maximum cross section)	32 A DC
Temperature cycles	192

Current carrying capacity / derating curves

Mechanical tests (A)

Insertion strength per pos. approx.	5 N
Withdraw strength per pos. approx.	4 N
Polarization when inserted requirement >20 N	Test passed

Durability tests (B)

Specification	IEC 60512-9-1:2010-03
Contact resistance R ₁	0.5 mΩ
Insertion/withdrawal cycles	50
Contact resistance R ₂	0.6 mΩ
Impulse withstand voltage at sea level	9.8 kV
Power-frequency withstand voltage	4.26 kV

Climatic tests (D)

Specification	ISO 6988:1985-02
Cold stress	-40 °C/2 h

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Climatic tests (D)

Thermal stress	100 °C/168 h
Corrosive stress	0.2 dm ³ SO ₂ on 300 dm ³ /40 °C/1 cycle
Impulse withstand voltage at sea level	9.8 kV
Power-frequency withstand voltage	4.26 kV

Environmental and durability tests (E)

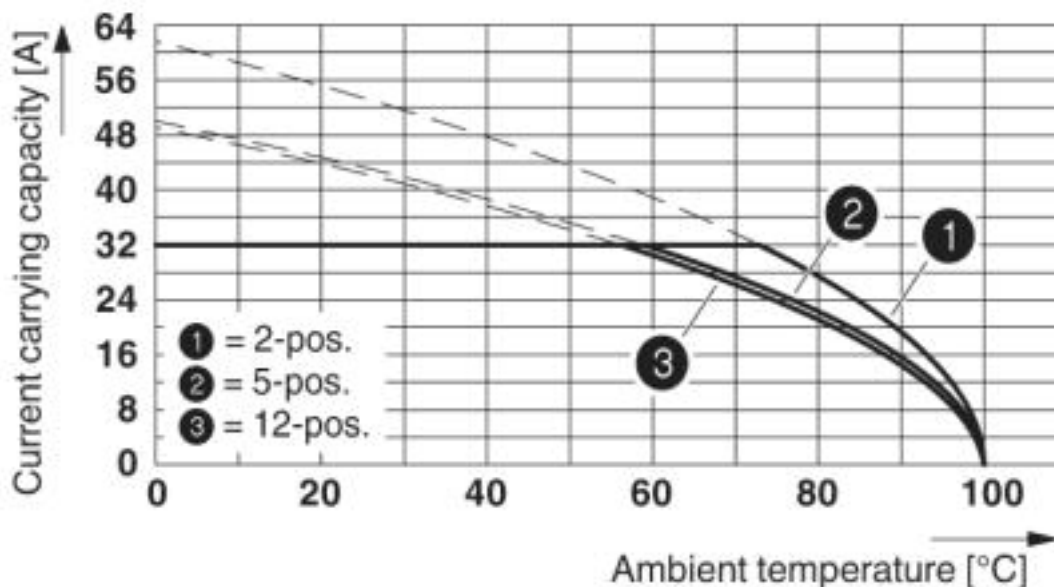
Specification	IEC 61984:2008-10
Result, degree of protection, IP code	Finger safety with IP20 test finger

Environmental Product Compliance

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

Drawings

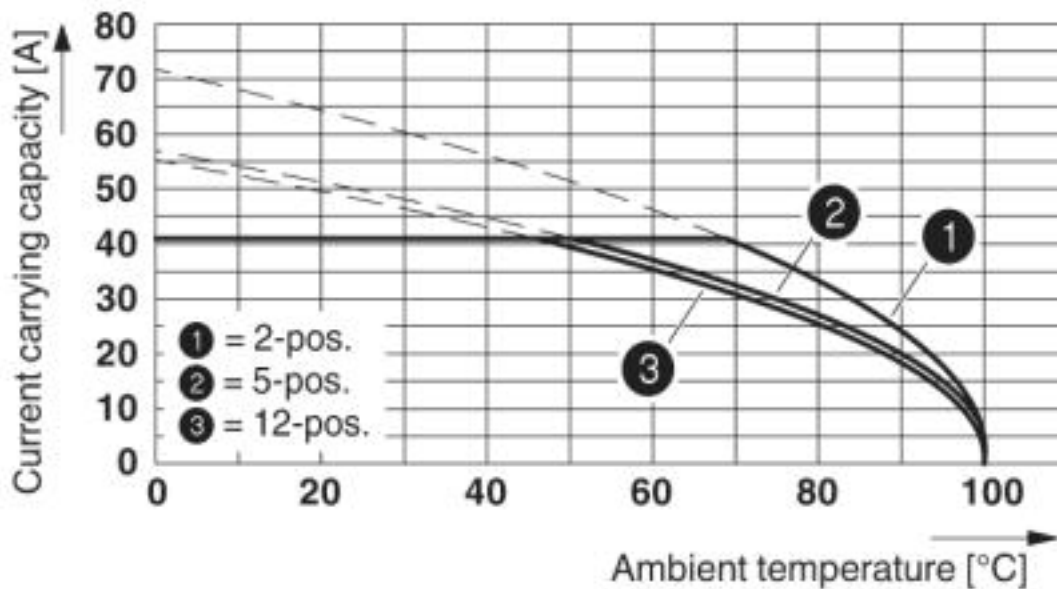
Diagram



Derating curve for: DFK-PC 5/...-ST-7,62 with PC 5/...-ST-7,62
 Conductor cross section = 6 mm²

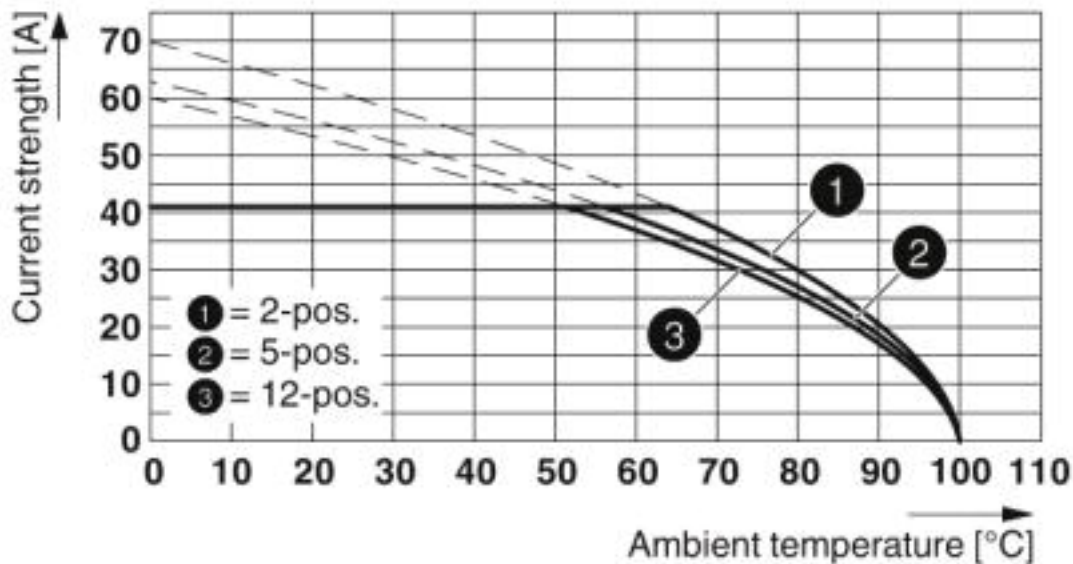
Feed-through plug - DFK-PC 5/ 7-STF-7,62 - 1716661

Diagram



Derating curve for: DFK-PC 5/...-ST-7,62 with PC 5/...-ST-7,62
 Conductor cross section = 10 mm²

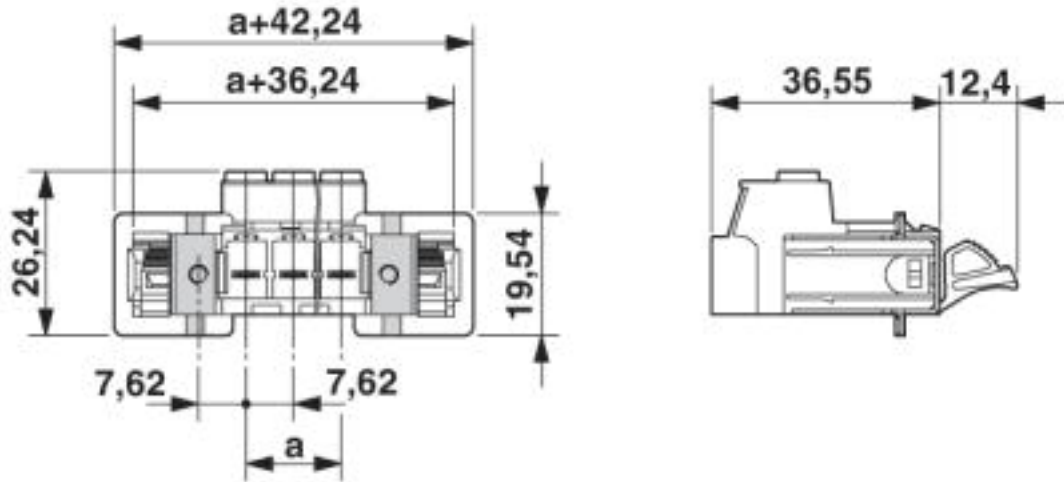
Diagram



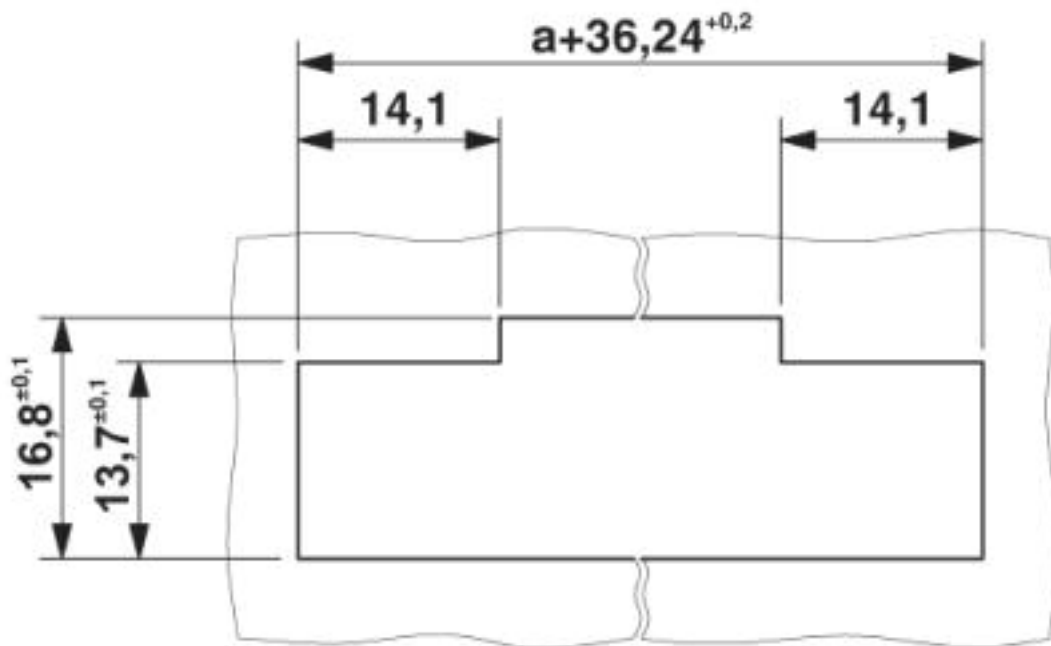
Type: SPC 5/...-STF-7,62 with DFK-PC 5/...-STF-7,62
 Conductor cross section: 10 mm²

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Dimensional drawing



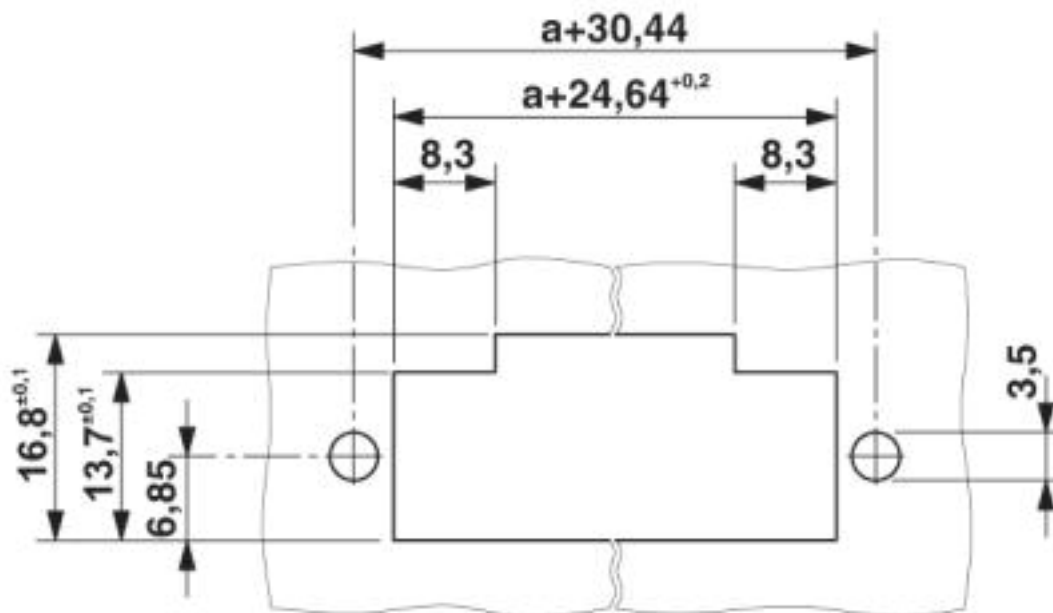
Dimensional drawing



Sheet metal cutout for snap-on.

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Dimensional drawing



Sheet metal cutout for screw connection.

Classifications

eCl@ss

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	EC001121
ETIM 4.0	EC002638
ETIM 5.0	EC002638
ETIM 6.0	EC002638
ETIM 7.0	EC002638

UNSPSC

UNSPSC 6.01	30211810
UNSPSC 7.0901	39121409
UNSPSC 11	39121409
UNSPSC 12.01	39121409

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Classifications

UNSPSC

UNSPSC 13.2	39121410
UNSPSC 18.0	39121409
UNSPSC 19.0	39121409
UNSPSC 20.0	39121409
UNSPSC 21.0	39121409

Approvals

Approvals

Approvals

EAC / cULus Recognized

Ex Approvals

Approval details

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	
Nominal voltage UN	600 V	600 V	
Nominal current IN	41 A	41 A	
mm ² /AWG/kcmil	24-8	24-8	

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



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Accessories

Connector set

Accessories - DFK-PC MOUNT SET - 1054021

Contains 20 pcs. latch and screw elements for feed-through connectors each

Labeled terminal marker

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



Marker card - SK 3,8 REEL P7,62 WH CUS - 0825128

Marker card, Card, can be ordered: By card, white, labeled according to customer specifications, mounting type: adhesive, for terminal block width: 7.62 mm, lettering field size: continuous x 3.8 mm



Mounting material

Accessories - DFK-PC 16-SS - 1705449



Screw set for DFK-PC 16... connectors

Screwdriver tools

Philips screwdriver - SZK PZ1 VDE - 1206450



Screwdriver, PZ crosshead, VDE insulated, size: PZ 1 x 80 mm, 2-component grip, with non-slip grip

Terminal marking

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Accessories

Marker card - SK U/3,8 WH:UNBEDRUCKT - 0803906

Marker card, Sheet, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, Office printing systems, mounting type: adhesive, for terminal block width: 210 mm, lettering field size: 186 x 3.8 mm, Number of individual labels: 1440



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