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Feed-through connector, nominal cross section: 6 mm², color: green, nominal current: 41 A, rated voltage (III/2): 1000 V, contact surface: Tin, type of contact: Male connector, Number of potentials: 4, Number of rows: 1, Number of positions per row: 4, number of connections: 4, product range: DFK-PC 5/..-STF, pitch: 7.62 mm, connection method: Screw connection with tension sleeve, conductor/PCB connection direction: 0 °, plug-in system: POWER COMBICON 5, Locking: Screw locking, type of packaging: packed in cardboard

## 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
- Screwable flange for superior mechanical stability













## **Key Commercial Data**

Packing unit	10 pc
Minimum order quantity	10 pc
GTIN	4 046356 137256
GTIN	4046356137256
Weight per Piece (excluding packing)	29.600 g
Custom tariff number	85366990
Country of origin	Poland
Sales Key	AABCDA

#### 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



# Technical data

## Item properties

Number of positions	4
Screw thread	M3
Locking	Screw flange
Number of levels	1
Number of connections	4
Number of potentials	4
Pin connector pattern alignment	Standard

## Electrical parameters

Nominal current	41 A
Nom. voltage	1000 V
Rated voltage (III/3)	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 <sup>2</sup> 10 mm <sup>2</sup>
Conductor cross section flexible	0.2 mm² 6 mm²
Conductor cross section AWG / kcmil	24 10
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm² 6 mm²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm² 4 mm²
2 conductors with same cross section, solid	0.2 mm² 2.5 mm²
2 conductors with same cross section, flexible	0.2 mm² 4 mm²
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	0.25 mm² 1.5 mm²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.25 mm² 2.5 mm²
Cylindrical gauge a x b / diameter	3.6 mm x 3.1 mm / 3.4 mm
Stripping length	10 mm
Torque	0.7 Nm 0.8 Nm

## Flange specifications

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



## Technical data

## Material data - contact

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
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

Caption	Schematische Abbildung - weitere Details siehe Produktfamilienzeichnung im Download Center
Length [1]	48.95 mm
Width [ w ]	65.1 mm
Height [ h ]	26.24 mm
Pitch	7.62 mm
Height (without solder pin)	26.24 mm

## Packaging information

Type of packaging	packed in cardboard
Pieces per package	10
Denomination packing units	Pcs.

## General product information

Type of note	Notes on operation
Note	In accordance with IEC 61984, COMBICON connectors have no switching power (COC). During designated use, they must not be plugged in or disconnected when carrying voltage or under load.

#### 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



## Technical data

## 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
Conductor cross section / conductor type / tensile force	0.2 mm² / solid / > 10 N
	0.2 mm² / flexible / > 10 N
	10 mm² / solid / > 90 N
	6 mm² / flexible / > 80 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 60512-13-2:2006-02
No. of cycles	50
Insertion strength per pos. approx.	5 N
Withdraw strength per pos. approx.	4 N
Polarization and coding	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

## Temperature cycles

Specification	IEC 60999-1:1999-11

## Current carrying capacity / derating curves

Caption	Type: SPC 5/STF-7,62 with DFK-PC 5/STF-7,62 Conductor cross section: 10 mm²
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## Mechanical tests (A)

Test specification	IEC 61984
Insertion strength per pos. approx.	5 N
Withdraw strength per pos. approx.	4 N

Polarization when inserted requirement >20 N



# Feed-through plug - DFK-PC 5/ 4-STF-7,62 - 1716632

## Technical data

## Mechanical tests (A)

Durability tests (B)	
Specification	IEC 60512-9-1:2010-03
Contact resistance R <sub>1</sub>	0.5 mΩ
Insertion/withdrawal cycles	50

Test passed

 $0.6\ m\Omega$ 

9.8 kV

## Thermal tests (C)

Contact resistance R<sub>2</sub>

Impulse withstand voltage at sea level

Specification	IEC 60512-5-1:2002-02
Number of positions	12
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	0.2 dm <sup>3</sup> SO <sub>2</sub> on 300 dm <sup>3</sup> /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**

China RoHS	Environmentally Friendly Use Period = 50 years	
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"	

## Drawings

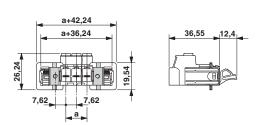
Diagram

V 1 70 60 60 90 90 100 110

Ambient temperature [°C]

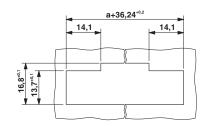
Type: SPC 5/...-STF-7,62 with DFK-PC 5/...-STF-7,62 Conductor cross section: 10 mm²

## Dimensional drawing

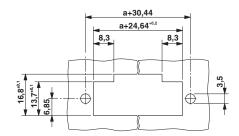




## Dimensional drawing



## Dimensional drawing



Sheet metal cutout for snap-on.

Sheet metal cutout for screw connection.

## Classifications

## eCl@ss

eCl@ss 10.0.1	27440309
eCl@ss 11.0	27460202
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 9.0	27440309

## **ETIM**

ETIM 3.0	EC001121
ETIM 4.0	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
UNSPSC 13.2	39121410
UNSPSC 18.0	39121409
UNSPSC 19.0	39121409
UNSPSC 20.0	39121409
UNSPSC 21.0	39121409

# Approvals

## Approvals



## Approvals

Approvals

EAC / cULus Recognized

Ex Approvals

## Approval details

EAC [H[

B.01687

cULus Recognized CTLUS	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm E60425-19920722	
	В	С
Nominal voltage UN	600 V	600 V
Nominal current IN	41 A	41 A
mm²/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

#### Connector set

Accessories - DFK-PC MOUNT SET - 1054021

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

Labeled terminal marker



#### 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

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

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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