Feed-through plug - DFK-PC 5/ 7-ST-7,62

1716551

https://www.phoenixcontact.com/us/products/1716551

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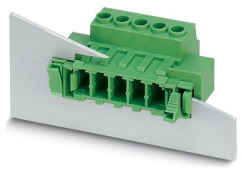


Feed-through connector, nominal cross section: 6 mm^2, color: green, nominal current: 41 A, rated voltage (III/2): 1000 V, contact surface: Tin, type of contact: Male connector, number of potentials: 7, number of rows: 1, number of positions: 7, number of connections: 7, product range: DFK-PC 5/..-ST, pitch: 7.62 mm, connection method: Screw connection with tension sleeve, screw head form: Z1L Slotted Pozidriv, conductor/PCB connection direction: 0 °, plug-in system: COMBICON PC 5, Pin connector pattern alignment: Standard, locking: without, mounting: without, 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

Commercial Data

Item number	1716551
Packing unit	1 pc
Minimum order quantity	10 pc
Note	Made to Order (non-returnable)
Sales Key	A02
Product Key	AADWEA
Catalog Page	Page 548 (C-1-2013)
GTIN	4046356137171
Weight per Piece (including packing)	40.23 g
Weight per Piece (excluding packing)	39.88 g
Customs tariff number	85366990
Country of origin	PL

Technical Data

Product properties

Type	Feed-through header
Product line	COMBICON Connectors L
Product type	Feed-through connector
Number of positions	7
Pitch	7.62 mm
Number of connections	7
Number of rows	1
Mounting flange	without
Number of potentials	7

Electrical properties

Nominal current I_N	41 A
Nominal voltage U_N	1000 V
Degree of pollution	3
Contact resistance	0.5 mΩ
Rated voltage (III/3)	630 V
Rated surge voltage (III/3)	8 kV
Rated voltage (III/2)	1000 V
Rated surge voltage (III/2)	8 kV

Connection data

Connection technology

Type	Feed-through header
Connector system	COMBICON PC 5
Nominal cross section	6 mm²
Type of contact	Male connector

Interlock

Locking type	without
Mounting flange	without

Conductor connection

Connection method	Screw connection with tension sleeve
Connection direction of the conductor to plug-in direction	0 °
Conductor cross section solid	0.2 mm² ... 10 mm²
Conductor cross section flexible	0.2 mm² ... 6 mm²
Conductor cross section AWG	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
Tightening torque	0.7 Nm ... 0.8 Nm

Mounting

Drive form screw head	Slotted Pozidriv (Z1L)
Drive form screw head	Slotted Pozidriv (Z1L)

Material specifications

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)

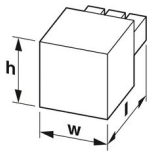
Material data - housing

Housing color	green (RAL 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

Notes

Notes on operation	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.

Dimensions

Dimensional drawing	
Pitch	7.62 mm

Width [w]	78.84 mm
Height [h]	26.24 mm
Length [l]	48.93 mm
Installed height	26.24 mm

Mechanical tests

Test for conductor damage and slackening

Specification	IEC 60999-1:1999-11
Result	Test passed

Pull-out test

Specification	IEC 60999-1:1999-11
Conductor cross section/conductor type/tractive force setpoint/actual value	0.2 mm² / solid / > 10 N
	0.2 mm² / flexible / > 10 N
	10 mm² / solid / > 90 N
	6 mm² / flexible / > 80 N

Insertion and withdrawal forces

Result	Test passed
No. of cycles	50
Insertion strength per pos. approx.	6 N
Withdraw strength per pos. approx.	4 N

Resistance of inscriptions

Specification	IEC 60068-2-70:1995-12
Result	Test passed

Polarization and coding

Specification	IEC 60512-13-5:2006-02
Result	Test passed

Visual inspection

Specification	IEC 60512-1-1:2002-02
Result	Test passed

Dimension check

Specification	IEC 60512-1-2:2002-02
Result	Test passed

Electrical tests

Thermal test | Test group C

Specification	IEC 60512-5-1:2002-02
Tested number of positions	12

Insulation resistance

Specification	IEC 60512-3-1:2002-02

Insulation resistance, neighboring positions	> 5 MΩ

Air clearances and creepage distances |

Specification	IEC 60664-1:2007-04
Insulating material group	I
Comparative tracking index (IEC 60112)	CTI 600
Rated insulation voltage (III/3)	630 V
Rated surge voltage (III/3)	8 kV
minimum clearance value - non-homogenous field (III/3)	8 mm
minimum creepage distance (III/3)	8 mm
Rated insulation voltage (III/2)	1000 V
Rated surge voltage (III/2)	8 kV
minimum clearance value - non-homogenous field (III/2)	8 mm
minimum creepage distance (III/2)	8 mm
Rated insulation voltage (II/2)	1000 V
Rated surge voltage (II/2)	6 kV
minimum clearance value - non-homogenous field (II/2)	5.5 mm
minimum creepage distance (II/2)	5.5 mm

Environmental and real-life conditions

Vibration test

Specification	IEC 60068-2-6:2007-12
Frequency	10 - 150 - 10 Hz
Sweep speed	1 octave/min
Amplitude	0.35 mm (10 Hz ... 60.1 Hz)
Sweep speed	5g (60.1 - 150 Hz)
Test duration per axis	2.5 h

Durability test

Specification	IEC 60512-9-1:2010-03
Impulse withstand voltage at sea level	9.8 kV
Contact resistance R_1	0.5 mΩ
Contact resistance R_2	0.6 mΩ
Insertion/withdrawal cycles	50
Insulation resistance, neighboring positions	> 5 MΩ

Climatic test

Specification	ISO 6988:1985-02
Corrosive stress	0.2 dm^3 SO_2 on 300 dm^3/40 °C/1 cycle
Thermal stress	100 °C/168 h
Power-frequency withstand voltage	4.26 kV

Ambient conditions

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

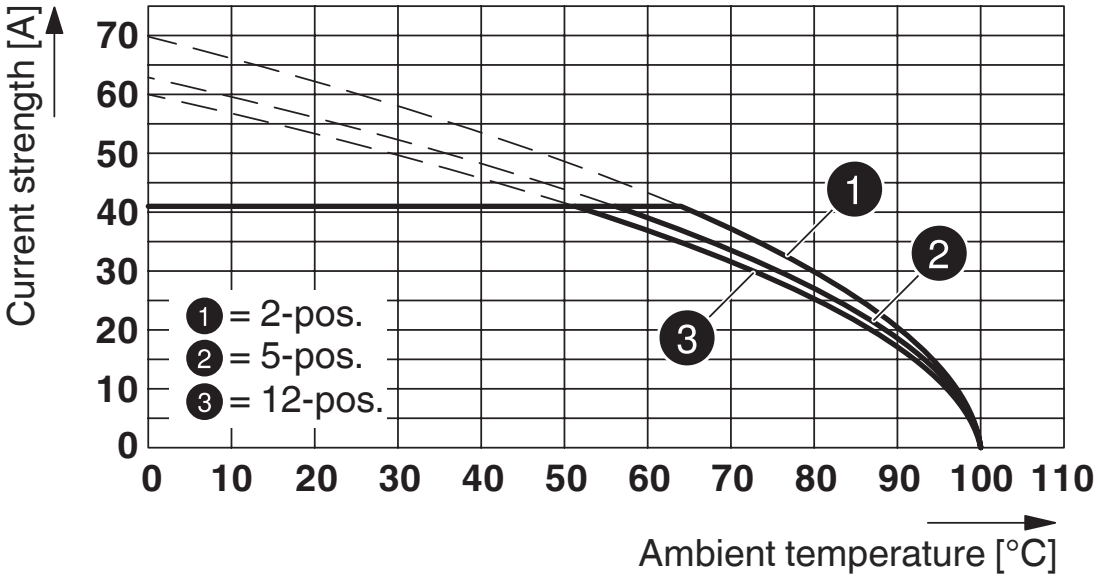
Relative humidity (storage/transport)	30 % ... 70 %
Ambient temperature (assembly)	-5 °C ... 100 °C

Packaging specifications

Type of packaging	packed in cardboard

Drawings

Diagram



Type: SPC 5/..-ST-7,62 with DFK-PC 5/..-ST-7,62

Approvals

EAC
Approval ID: B.01687

cULus Recognized
Approval ID: E60425-19920722

	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
Use group B				
	600 V	41 A	24 - 8	-
Use group C				
	600 V	41 A	24 - 8	-

Classifications

ECLASS

ECLASS-9.0	27440309
ECLASS-10.0.1	27440309
ECLASS-11.0	27460202

ETIM

ETIM 8.0	EC002638

UNSPSC

UNSPSC 21.0	39121400

Environmental Product Compliance

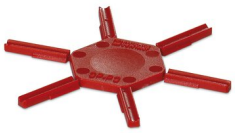
China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

Accessories

Coding profile

Coding profile - CP-PC RD - 1701967

https://www.phoenixcontact.com/us/products/1701967



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

Accessories

Accessories - DFK-PC 16-SS - 1705449

https://www.phoenixcontact.com/us/products/1705449

Screw set for DFK-PC 16... connectors

Screwdriver

Screwdriver - SZK PZ1 VDE - 1206450

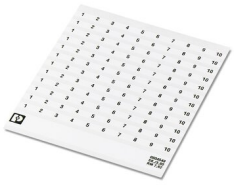
https://www.phoenixcontact.com/us/products/1206450

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

Marker card

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

https://www.phoenixcontact.com/us/products/0804549

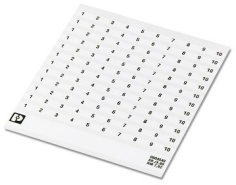


Marker card, white, labeled, horizontal: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 91 ... 100, mounting type: adhesive, for terminal block width: 7.62 mm, lettering field size: 7.62 x 3.8 mm

Marker card

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

https://www.phoenixcontact.com/us/products/0825128



Marker 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

Marker card

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

https://www.phoenixcontact.com/us/products/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

Accessories

Accessories - DFK-PC MOUNT SET - 1054021

https://www.phoenixcontact.com/us/products/1054021

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

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