

1716564

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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, contact connection type: Pin, number of potentials: 8, number of rows: 1, number of positions: 8, number of connections: 8, 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	1716564
Packing unit	10 pc
Minimum order quantity	10 pc
Note	Made to order (non-returnable)
Sales key	AA04
Product key	AADWEA
Catalog page	Page 548 (C-1-2013)
GTIN	4046356137188
Weight per piece (including packing)	44.23 g
Weight per piece (excluding packing)	44.03 g
Customs tariff number	85366990
Country of origin	PL



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### Technical data

### Product properties

Product type	Feed-through connector
Product family	DFK-PC 5/ST
Product line	COMBICON Connectors L
Туре	Feed-through header
Number of positions	8
Pitch	7.62 mm
Number of connections	8
Number of rows	1
Number of potentials	8
Mounting flange	without

### Electrical properties

Nominal current I <sub>N</sub>	41 A
Nominal voltage U <sub>N</sub>	1000 V
Contact resistance	$0.5~\text{m}\Omega$
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
Rated voltage (II/2)	1000 V
Rated surge voltage (II/2)	6 kV

### Connection data

### Connection technology

Туре	Feed-through header
Connector system	COMBICON PC 5
Nominal cross section	6 mm²
Contact connection type	Pin

#### 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 rigid	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



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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 mm <sup>2</sup> 1.5 mm <sup>2</sup>
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
Drive form screw head	Slotted Pozidriv (Z1L)
Tightening torque	0.7 Nm 0.8 Nm

### 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

Color (Housing)	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

### 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.
	plagged in or discommented when sairying voltage or and or load.

### **Dimensions**

Dimensional drawing	h
Pitch	7.62 mm
Width [w]	86.46 mm



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Height [h]	26.24 mm
Length [I]	48.93 mm
Installed height	26.24 mm
echanical tests	
you all modification	
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	0.2 mm² / solid / > 10 N
setpoint/actual value	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
T.COURT	1 oct paced
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
ectrical tests	
Thermal test   Test group C	
Specification	IEC 60512-5-1:2002-02
Tested number of positions	12
Insulation resistance	
Insulation resistance Specification Insulation resistance, neighboring positions	IEC 60512-3-1:2002-02 > 5 ΜΩ



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#### Air clearances and creepage distances |

7. III Sidaraneed and Greepage dictaries		
Specification	IEC 60664-1:2007-04	
Insulating material group	l l	
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)
Acceleration	5g (60.1 Hz 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 <sub>1</sub>	0.5 mΩ
Contact resistance R <sub>2</sub>	0.6 mΩ
Insertion/withdrawal cycles	50
Insulation resistance, neighboring positions	> 5 MΩ

### Climatic test

Specification	ISO 6988:1985-02
Corrosive stress	$0.2~\mathrm{dm^3SO_2}$ 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 %



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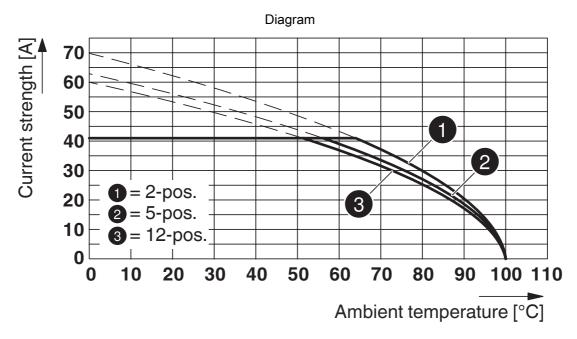
	Ambient temperature (assembly)	-5 °C 100 °C	
Packaging specifications			
	Type of packaging	packed in cardboard	



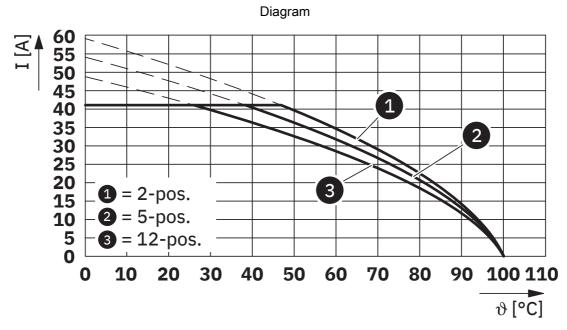
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### **Drawings**



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



Type: PC 5/...-ST1-7,62 with DFK-PC 5/...-ST-7,62



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### **Approvals**

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1716564

cULus Recognized Approval ID: E60425-19920722				
	Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
Use group B				
	600 V	41 A	24 - 8	-
Use group C				
	600 V	41 A	24 - 8	-



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### Classifications

UNSPSC 21.0

### **ECLASS**

ECLASS-11.0	27460202	
ECLASS-12.0	27460202	
ECLASS-13.0	27460202	
ETIM		
ETIM 9.0	EC002638	
UNSPSC		

39121400



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### Environmental product compliance

Fulfills EU RoHS substance requirements	Yes, No exemptions	
China RoHS		
Environment friendly use period (EFUP)	EFUP-E	
	No hazardous substances above the limits	
EU REACH SVHC		
REACH candidate substance (CAS No.)	No substance above 0.1 wt%	



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### Accessories

CP-PC RD - Coding profile

1701967

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



### DFK-PC 16-SS - Accessories

1705449

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Screw set for DFK-PC 16... connectors



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### SZK PZ1 VDE - Screwdriver

1206450

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

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

0804549

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



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



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

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

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

0803906

https://www.phoenixcontact.com/us/products/0803906



Marker card, Din A4, 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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### **DFK-PC MOUNT SET - Accessories**

1054021

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

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



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