

1716658

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Feed-through connector, nominal cross section: 6 mm², color: green, nominal current: 32 A, rated voltage (III/2): 1000 V, contact surface: Sn, contact connection type: Pin, number of potentials: 6, number of rows: 1, number of positions: 6, number of connections: 6, product range: DFK-PC 5/..-STF, 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: Screw locking mechanism, mounting method: Screw flange, 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
- · Shroud for professional EMC shield connection on the front of the device
- · Screwable flange for superior mechanical stability

Commercial data

Item number	1716658
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	AA04
Product key	AADWEB
Catalog page	Page 549 (C-1-2013)
GTIN	4046356137270
Weight per piece (including packing)	40.79 g
Weight per piece (excluding packing)	38.53 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/STF
Product line	COMBICON Connectors L
Туре	Feed-through header
Number of positions	6
Pitch	7.62 mm
Number of connections	6
Number of rows	1
Number of potentials	6
Mounting flange	Screw flange

Electrical properties

Properties

- Production and the second se	
Nominal current I _N	32 A
Nominal voltage U _N	1000 V
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
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	Screw locking mechanism
Mounting flange	Screw flange

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



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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 mm ² 2.5 mm ²
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 mm ² 2.5 mm ²
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

Dimensions

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Dimensional drawing	h



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Pitch	7.62 mm
Width [w]	80.34 mm
Height [h]	26.24 mm
Length [I]	48.95 mm
Installed height	26.24 mm

Mechanical tests

Test for conductor damage and slackening

Result Test passed Pull-out test	Specification	IEC 60999-1:1999-11
Pull-out test	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.	5 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



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Specification

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Specification	IEC 00312-3-1.2002-02
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
vironmental 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
Test directions	X-, Y- and Z-axis
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	
Contact redictaries 112	0.6 mΩ

IEC 60512-3-1:2002-02

Climatic test

Insertion/withdrawal cycles

Insulation resistance, neighboring positions

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

50

> 5 MΩ

Ambient conditions



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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

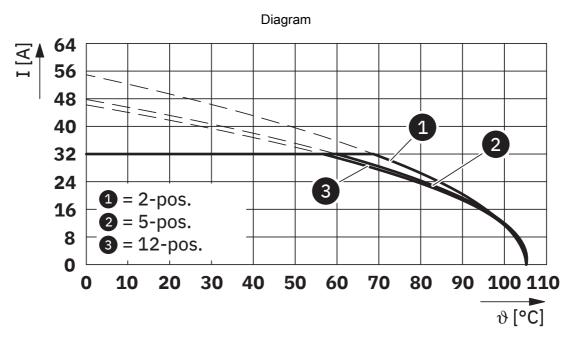
Type of packaging	packed in cardboard



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Drawings



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



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Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1716658

CULus Recogn Approval ID: E6042	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	-	



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Classifications

UNSPSC 21.0

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		A.7.7

	ECLASS-13.0	27460202			
ETIM					
	ETIM 9.0	EC002638			
UNSPSC					

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Environmental product compliance

EU RoHS

26 None			
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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Phoenix Contact USA 586 Fulling Mill Road Middletown, PA 17057, United States (+717) 944-1300 info@phoenixcon.com