

1703483

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Feed-through connector, nominal cross section: 16 mm², color: green, nominal current: 76 A, rated voltage (III/2): 1000 V, contact surface: Silver, contact connection type: Pin, number of potentials: 5, number of rows: 1, number of positions: 5, number of connections: 5, product range: DFK-PC 16/..-STF, pitch: 10.16 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, conductor/PCB connection direction: 0 °, plug-in system: COMBICON PC 16, 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	1703483
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	AAE
Product key	AAEWDB
Catalog page	Page 583 (C-1-2013)
GTIN	4017918994402
Weight per piece (including packing)	61.6 g
Weight per piece (excluding packing)	54.775 g
Customs tariff number	85366990
Country of origin	PL



1703483

https://www.phoenixcontact.com/lt/products/1703483

Technical data

Product properties

Туре	Feed-through header
Product line	COMBICON Connectors XL
Product type	Feed-through connector
Product family	DFK-PC 16/STF
Number of positions	5
Pitch	10.16 mm
Number of connections	5
Number of rows	1
Mounting flange	Screw flange
Number of potentials	5

Electrical properties

Nominal current I _N	76 A
Nominal voltage U _N	1000 V
Degree of pollution	3
Contact resistance	0.5 mΩ
Rated voltage (III/3)	1000 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 16
Nominal cross section	16 mm²
Contact connection type	Pin

Interlock

Locking type	without
Mounting flange	without

Conductor connection

Conductor Connection	
Connection method	Screw connection with tension sleeve
Connection direction of the conductor to plug-in direction	0 °
Conductor cross section rigid	0.75 mm² 16 mm²
Conductor cross section flexible	0.75 mm² 16 mm²
Conductor cross section AWG	18 6
Conductor cross section flexible, with ferrule without plastic	0.5 mm ² 16 mm ² (Only in connection with CRIMPFOX 16 S)



1703483

https://www.phoenixcontact.com/lt/products/1703483

sleeve	
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.5 mm² 16 mm² (Only in connection with CRIMPFOX 16 S)
2 conductors with same cross section, solid	0.75 mm² 6 mm²
2 conductors with same cross section, flexible	0.75 mm² 6 mm²
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	0.5 mm² 4 mm²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm² 6 mm²
Cylindrical gauge a x b / diameter	4.3 mm x 4.0 mm / 5.4 mm
Stripping length	12 mm
Tightening torque	1.7 Nm 1.8 Nm

Mounting

Drive form screw head	Slotted (L)
Drive form screw head	Slotted (L)

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	Electroplated silver
Metal surface terminal point (top layer)	Silver (4 - 8 µm Ag)
Metal surface contact area (top layer)	Silver (4 - 8 μm Ag)

Material data - housing

3	
Color (Housing)	green (6021)
Insulating material	PA
Insulating material group	T .
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



1703483

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Dimensional drawing	h
Pitch	10.16 mm
Width [w]	86.16 mm
Height [h]	27.8 mm
Length [I]	44.1 mm
echanical tests	
Fest 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	0.75 mm² / solid / > 30 N
setpoint/actual value	0.75 mm² / flexible / > 30 N
	16 mm² / solid / > 100 N
	16 mm² / flexible / > 100 N
Insertion and withdrawal forces	
Result	Test passed
No. of cycles	50
Insertion strength per pos. approx.	7 N
Withdraw strength per pos. approx.	7 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
/isual inspection	
Specification	IEC 60512-1-1:2002-02
Result	Test passed
Dimension check	
Specification	IEC 60512-1-2:2002-02
Оресписацоп	1LO 00012-1-2.2002-02

Test passed

Electrical tests

Result



1703483

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Therma	l test	Tes	t group	С

mermantest prest group C	
Specification	IEC 60512-5-1:2002-02
Tested number of positions	9
Insulation resistance	
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	1
Comparative tracking index (IEC 60112)	CTI 600
Rated insulation voltage (III/3)	1000 V
Rated surge voltage (III/3)	8 kV
minimum clearance value - non-homogenous field (III/3)	8 mm
minimum creepage distance (III/3)	12.5 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 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 ₁	0.5 mΩ
Contact resistance R ₂	0.5 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



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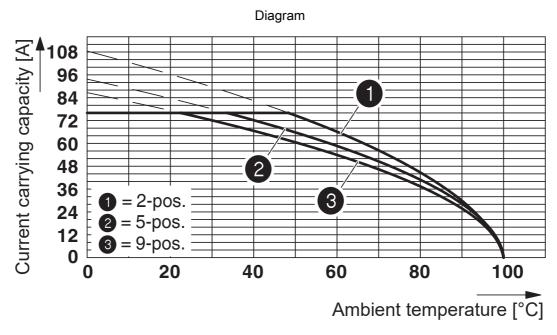
Power-frequency withstand voltage	4.26 kV
abient conditions	
Ambient temperature (operation)	-40 °C 100 °C (dependent on the derating curve)
Ambient temperature (storage/transport)	-40 °C 70 °C
Relative humidity (storage/transport)	30 % 70 %
Ambient temperature (assembly)	-5 °C 100 °C



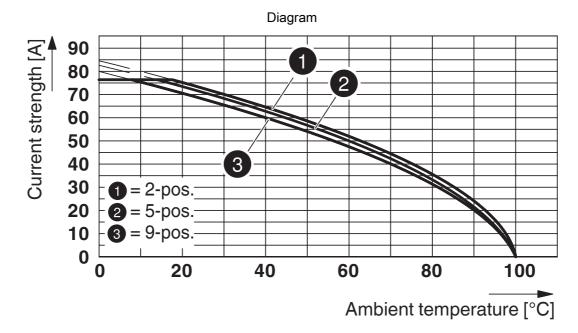
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Drawings



Derating curve for: PC 16/...-ST-10.16 with DFK-PC 16/...-ST-10.16



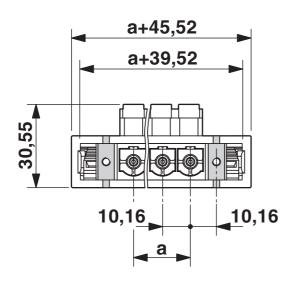
Type: SPC 16/...-ST(F)-10,16 with DFK-PC 16/...-ST(F)-10,16

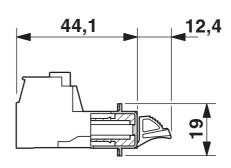


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Dimensional drawing







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Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/lt/products/1703483

CULus Recognized Approval ID: E60425-20040202				
	Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
Use group B				
	600 V	55 A	20 - 6	-
Use group C				
	600 V	55 A	20 - 6	-

VDE Zeichengeneh Approval ID: 40055586	nmigung			
	Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
	1000 V	76 A	-	0.75 - 16



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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

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

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