Plug - DFK-IPC 16/ 2-ST-10,16 - 1703690

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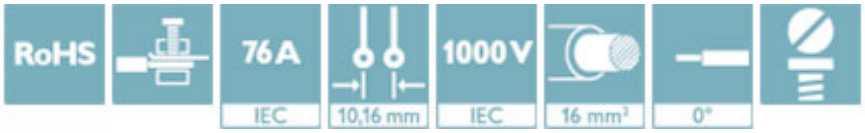
The figure shows a 5-pos. version of the product

Feed-through connector, nominal current: 76 A, rated voltage (III/2): 1000 V, number of positions: 2, pitch: 10.16 mm, connection method: Screw connection with tension sleeve, color: green, contact surface: Silver

Why buy this product

- 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
- Inverted connector with pin contacts for touch-proof device outputs or free-hanging cable/cable connections
- Integrated double steel spring provides additional safety in the event of temperature and power fluctuations



Key Commercial Data

Packing unit	10 STK
GTIN	4 017918 994532
GTIN	4017918994532

Technical data

Item properties

Brief article description	Plug
Range of articles	DFK-IPC 16/..-ST
Pitch	10.16 mm
Type of contact	Female connector
Plug-in system	POWER COMBICON 16
Number of positions	2
Connection method	Screw connection with tension sleeve
Drive form screw head	Slotted
Screw thread	M4

Plug - DFK-IPC 16/ 2-ST-10,16 - 1703690

Technical data

Item properties

Locking	without
Number of levels	1

Electrical parameters

Rated current	76 A
Rated insulation voltage (III/2)	1000 V
Rated surge voltage (III/2)	8 kV

Connection capacity

Conductor cross section solid	0.75 mm² ... 16 mm²
Conductor cross section flexible	0.75 mm² ... 16 mm²
Conductor cross section AWG / kcmil	18 ... 6
Conductor cross section flexible, with ferrule without plastic sleeve	0.5 mm² ... 16 mm²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.5 mm² ... 16 mm²
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, stranded, ferrules without plastic sleeve	0.5 mm² ... 4 mm²
2 conductors with same cross section, stranded, with TWIN ferrules with plastic sleeve	0.5 mm² ... 6 mm²

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

Insulating material	PA
Insulating material group	I
CTI according to IEC 60112	600
Flammability rating according to UL 94	V0

Dimensions for the product

Length [l]	56.4 mm
Width [w]	44.44 mm
Height [h]	32.05 mm
Pitch	10.16 mm
Dimension a	10.16 mm

Packaging information

Type of packaging	packed in cardboard
Pieces per package	10

Plug - DFK-IPC 16/ 2-ST-10,16 - 1703690

Technical data

Packaging information

Denomination packing units	Pcs.
Outer packaging type	Carton

Ambient conditions

Ambient temperature (storage/transport)	-40 °C ... 70 °C
Ambient temperature (assembly)	-5 °C ... 100 °C
Ambient temperature (operation)	-40 °C

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
Test for conductor damage and slackening	IEC 60999-1:1999-11
	Test passed

Pull-out test

Pull-out test	IEC 60999-1:1999-11
	Test passed
Conductor cross section / conductor type / tensile force	0.75 mm² solid > 0.75 mm² / solid / > 30 N
	0.75 mm² flexible > 0.75 mm² / flexible / > 30 N
	16 mm² solid > 16 mm² / solid / > 100 N
	16 mm² flexible > 16 mm² / flexible / > 100 N
	flexible

Mechanical tests according to standard

Test specification	IEC 61984
Visual examination	Test passed IEC 60512-1-1:2002-02
Dimensional test	Test passed IEC 60512-1-2:2002-02
Resistance of marking	Test passed IEC 60068-2-70:1995-12
Result	Test passed
Specification	IEC 60512-13-2:2006-02
No. of cycles	50
Insertion strength per pos. approx.	10 N
Withdraw strength per pos. approx.	8 N
Polarization and coding	Test passed IEC 60512-13-5:2006-02
Result	Test passed
Specification	IEC 60512-15-1:2008-05
Test force per pos.	48 N

Air clearances and creepage distances

Specification	IEC 60664-1:2007-04

Plug - DFK-IPC 16/ 2-ST-10,16 - 1703690

Technical data

Air clearances and creepage distances

Insulating material group	I
Comparative tracking index (IEC 60112:2003-01)	CTI 600
Voltage	1000 V
Rated insulation voltage (III/3)	1000 V
Rated insulation voltage (III/2)	1000 V
Rated insulation 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
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)	12.5 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
Test current (minimum cross section)	9 A DC
Test current (maximum cross section)	76 A DC
Temperature cycles	192

Current carrying capacity / derating curves

Specification	IEC 61984

Mechanical tests (A)

Test specification	IEC 61984
Insertion strength per pos. approx.	10 N
Withdraw strength per pos. approx.	8 N
Polarization when inserted requirement >20 N	Test passed
Contact holder in insert requirements >20 N	Test passed

Durability tests (B)

Specification	IEC 60512-9-1:2010-03
Contact resistance R_1	0.35 mΩ
Insertion/withdrawal cycles	50
Contact resistance R_2	0.34 mΩ
Impulse withstand voltage at sea level	9.8 kV
Power-frequency withstand voltage	4.26 kV
Insulation resistance, neighboring positions	6 TΩ

Plug - DFK-IPC 16/ 2-ST-10,16 - 1703690

Technical data

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^3 SO_2 on 300 dm^3/40 °C/1 cycle
Impulse withstand voltage at sea level	9.8 kV
Power-frequency withstand voltage	4.26 kV

Environmental and durability tests (E)

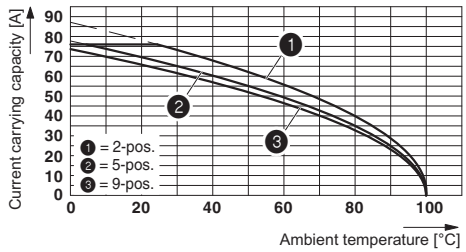
Specification	IEC 61984:2008-10
Result, degree of protection, IP code	Finger safety with IP20 test finger

Environmental Product Compliance

REACh SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab “Downloads”, Category “Manufacturer's declaration”

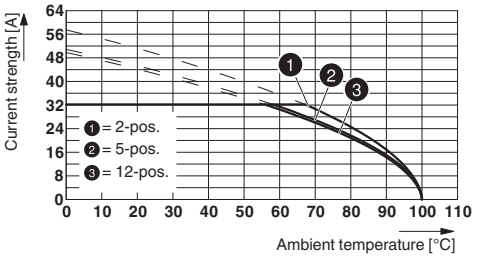
Drawings

Diagram



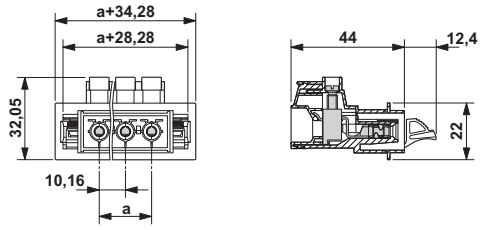
Derating curve for: IPC 16/...-ST-10.16 with DFK-IPC 16/...-ST-10.16

Diagram

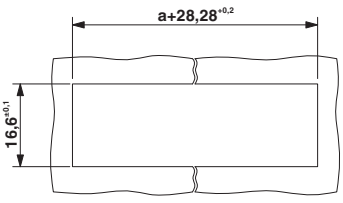


Type: ISPC 16/...-ST-10,16 with DFK-IPC 16/...-ST-10,16

Dimensional drawing



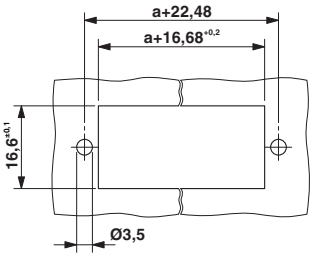
Dimensional drawing



Sheet metal cutout for snap-lock device for "ST" versions

Plug - DFK-IPC 16/ 2-ST-10,16 - 1703690

Dimensional drawing



Sheet metal cutout for screw connection.

Approvals

Approvals

Approvals

EAC / cULus Recognized

Ex Approvals

Approval details

EAC	EAC	B.01742

cULus Recognized	c UL us	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	E60425-20040202

	B	C
Nominal voltage UN	600 V	600 V
Nominal current IN	55 A	55 A
mm²/AWG/kcmil	20-6	20-6

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