

Printed-circuit board connector - ISPC 16/ 2-ST-10,16 - 1748545

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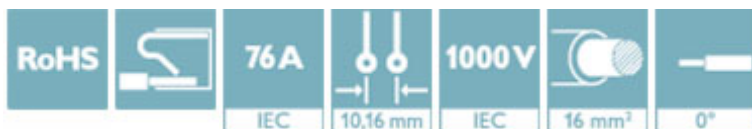
PCB connector, nominal current: 76 A, rated voltage (III/2): 1000 V, number of positions: 2, pitch: 10.16 mm, connection method: Push-in spring connection, color: green, contact surface: Silver



The figure shows the 5-pos. version

Why buy this product

- ✓ Time saving push-in connection, tools not required
- ✓ Defined contact force ensures that contact remains stable over the long term
- ✓ Clamping space opened by means of fixed screwdriver enables convenient conductor connection
- ✓ Inverted connector with pin contacts for touch-proof device outputs or free-hanging cable/cable connections



Key Commercial Data

Packing unit	50 pc
GTIN	
GTIN	4046356310604

Technical data

Item properties

Brief article description	Printed-circuit board connector
Range of articles	ISPC 16/...-ST
Pitch	10.16 mm
Type of contact	Male connector
Plug-in system	POWER COMBICON 16
Number of positions	2
Connection method	Push-in spring connection
Screw thread	M4
Locking	without
Number of levels	1

Electrical parameters

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Technical data

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 mm ² ... 16 mm ²
Conductor cross section flexible	0.75 mm ² ... 16 mm ²
Conductor cross section AWG / kcmil	18 ... 4
Conductor cross section flexible, with ferrule without plastic sleeve	0.75 mm ² ... 16 mm ²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.75 mm ² ... 10 mm ²
2 conductors with same cross section, solid	0.75 mm ² ... 6 mm ²
2 conductors with same cross section, flexible	0.75 mm ² ... 6 mm ²
2 conductors with same cross section, stranded, with TWIN ferrules with plastic sleeve	0.75 mm ² ... 4 mm ²

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
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

Dimensions for the product

Length [l]	45.1 mm
Width [w]	23.36 mm
Height [h]	25.1 mm
Pitch	10.16 mm
Dimension a	10.16 mm

Packaging information

Type of packaging	packed in cardboard
Pieces per package	50
Denomination packing units	Pcs.
Outer packaging type	Carton

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Technical data

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 mm ² / solid / > 30 N
	0.75 mm ² / flexible / > 30 N
	16 mm ² / solid / > 100 N
	16 mm ² / flexible / > 100 N

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

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

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Air clearances and creepage distances

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
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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
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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

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

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Technical data

Climatic tests (D)

Power-frequency withstand voltage	4.26 kV
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Environmental and durability tests (E)

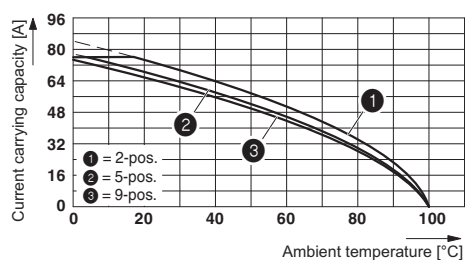
Specification	IEC 61984:2008-10
Result, degree of protection, IP code	Finger safety with IP20 test finger

Environmental Product Compliance

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

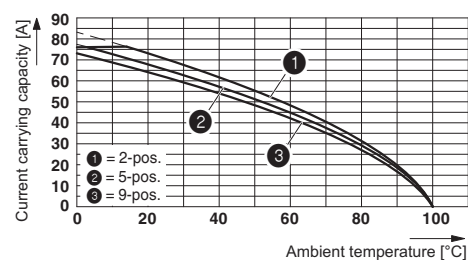
Drawings

Diagram



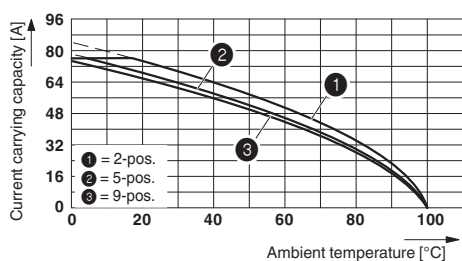
Type : ISPC 16/...-ST-10,16 with IPC 16/...-G-10,16

Diagram



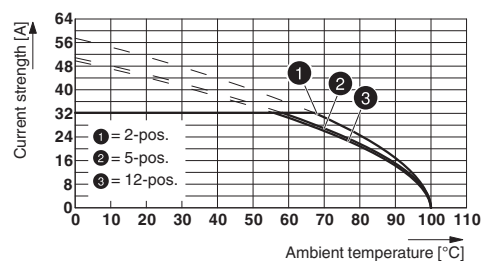
Type: ISPC 16/...-ST-10,16 with SPC 16/...-ST-10,16

Diagram



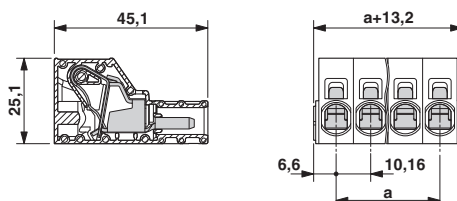
Derating curve for: ISPC 16/...-ST-10,16 with IPCV 16/...-G-10,16

Diagram



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

Dimensional drawing



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Approvals

Approvals

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SEV / IECCEB CB Scheme / EAC / cULus Recognized

Ex Approvals

Approval details

SEV		https://www.electrosuisse.ch/en/meta/shop/product-certificates.html	IK-3431
Nominal voltage UN		1000 V	
Nominal current IN		76 A	
mm²/AWG/kcmil		16	

IECEE CB Scheme		http://www.iecee.org/	CH-8077
Nominal voltage UN		1000 V	
Nominal current IN		76 A	

EAC		B.01742	
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cULus Recognized		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		66 A	66 A
mm²/AWG/kcmil		20-4	20-4

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