

Printed-circuit board connector - SPC 5/ 5-STF-7,62 BD:1-5 - 1027788

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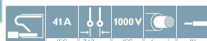
PCB connector, nominal current: 41 A, rated voltage (III/2): 1000 V, nominal cross section: 6 mm², number of positions: 5, pitch: 7.62 mm, connection method: Push-in spring connection, color: green, contact surface: Tin




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

Your advantages

- ✓ 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
- ✓ Integrated double steel spring provides additional safety in the event of temperature and power fluctuations
- ✓ Optimized for tight installation situations: operation and conductor connection from one direction
- ✓ Screwable flange for superior mechanical stability
- ✓ 600 V UL approval in the smallest of dimensions



Key Commercial Data

Packing unit	50 pc
Minimum order quantity	50 pc
GTIN	 4 055626 523309
GTIN	4055626523309

Technical data

Item properties

Brief article description	Printed-circuit board connector
Plug-in system	POWER COMBICON 5
Type of contact	Female connector
Range of articles	SPC 5/..-STF
Pitch	7.62 mm
Number of positions	5
Connection method	Push-in spring connection

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Technical data

Item properties

Number of levels	1
Number of connections	5
Number of potentials	5

Electrical parameters

Nominal current	41 A
Nom. voltage	1000 V
Rated voltage	1000 V
Rated voltage (III/2)	1000 V
Rated 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

Connection capacity

Connection method	Push-in spring connection
pluggable	Yes
Conductor cross section solid	0.2 mm ² ... 10 mm ²
Conductor cross section flexible	0.2 mm ² ... 6 mm ²
Conductor cross section AWG / kcmil	24 ... 8
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm ² ... 6 mm ²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm ² ... 4 mm ²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.25 mm ² ... 1.5 mm ²
Stripping length	15 mm

Specifications for ferrules

Recommended crimping pliers	1212034 CRIMPFOX 6
Ferrules without insulating collar, according to DIN 46228-1	Cross section: 0.5 mm ² ; Length: 10 mm ... 15 mm
	Cross section: 0.75 mm ² ; Length: 10 mm ... 15 mm
	Cross section: 1 mm ² ; Length: 10 mm ... 15 mm
	Cross section: 1.5 mm ² ; Length: 10 mm ... 15 mm
	Cross section: 2.5 mm ² ; Length: 12 mm ... 15 mm
	Cross section: 4 mm ² ; Length: 12 mm ... 15 mm
Recommended crimping pliers	1212034 CRIMPFOX 6
Ferrules with insulating collar, according to DIN 46228-4	Cross section: 0.5 mm ² ; Length: 10 mm ... 15 mm
	Cross section: 0.75 mm ² ; Length: 12 mm ... 15 mm
	Cross section: 1 mm ² ; Length: 12 mm ... 15 mm
	Cross section: 1.5 mm ² ; Length: 12 mm ... 15 mm
	Cross section: 2.5 mm ² ; Length: 12 mm ... 15 mm
	Cross section: 4 mm ² ; Length: 12 mm ... 15 mm

Flange specifications

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Flange specifications

Type of locking	Screw locking
Mounting flange	Screw flange
Torque	0.3 Nm ... 0.7 Nm

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

Housing color	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

Dimensions for the product

Length [l]	38.5 mm
Width [w]	53.32 mm
Height [h]	19.8 mm
Pitch	7.62 mm
Height (without solder pin)	19.8 mm

Packaging information

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

Ambient conditions

Ambient temperature (storage/transport)	-40 °C ... 70 °C
Ambient temperature (assembly)	-5 °C ... 100 °C
Ambient temperature (operation)	-40 °C ... 100 °C (dependent on the derating curve)

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

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Technical data

Termination and connection method

	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	0.2 mm ² / solid / > 10 N
	0.2 mm ² / flexible / > 10 N
	6 mm ² / flexible / > 80 N

Mechanical tests according to standard

Test specification	IEC 61984
Visual inspection	IEC 60512-1-1:2002-02
Dimension check	IEC 60512-1-2:2002-02
Resistance of inscriptions	IEC 60068-2-70:1995-12
Insertion and withdrawal force	IEC 60512-13-2:2006-02
No. of cycles	50
Insertion strength per pos. approx.	5 N
Withdraw strength per pos. approx.	4 N
Polarization and coding	IEC 60512-13-5:2006-02

Air clearances and creepage distances

Clearances and creepage distances	IEC 60664-1:2007-04
Specification	IEC 60664-1:2007-04
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)	5 A DC
Test current (maximum cross section)	32 A DC
Temperature cycles	192

Current carrying capacity / derating curves

Caption	Type: SPC 5/...-STF-7,62 with DFK-PC 5/...-STF-7,62 Conductor cross section: 10 mm ²
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Technical data

Current carrying capacity / derating curves

Specification	IEC 61984:2008-10
Reduction factor	0.8
Note	Representation based on IEC 60512-5-2:2002-02
	For number of positions, see diagram

Mechanical tests (A)

Test specification	IEC 61984
Insertion strength per pos. approx.	5 N
Withdraw strength per pos. approx.	4 N
Polarization when inserted requirement >20 N	Test passed

Durability tests (B)

Specification	IEC 60512-9-1:2010-03
Contact resistance R ₁	0.5 mΩ
Insertion/withdrawal cycles	50
Contact resistance R ₂	0.6 mΩ
Impulse withstand voltage at sea level	9.8 kV
Power-frequency withstand voltage	4.26 kV

Thermal tests (C)

Specification	IEC 60512-5-1:2002-02
Number of positions	12
Conductor cross section	6 mm ²
Test current	32 A
Upper limiting temperature requirements <100 °C	Test passed

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

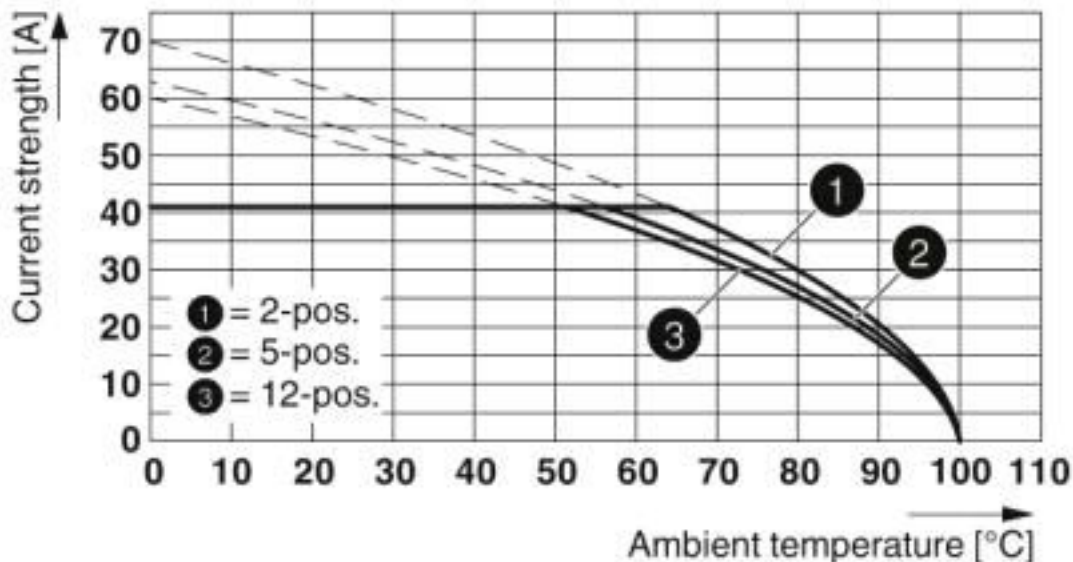
Environmental Product Compliance

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

Drawings

Printed-circuit board connector - SPC 5/ 5-STF-7,62 BD:1-5 - 1027788

Diagram



Type: SPC 5/...-STF-7,62 with DFK-PC 5/...-STF-7,62
 Conductor cross section: 10 mm²

Classifications

eCl@ss

eCl@ss 10.0.1	27440309
eCl@ss 5.1	27261100
eCl@ss 6.0	27261100
eCl@ss 7.0	27440401
eCl@ss 8.0	27440309
eCl@ss 9.0	27440309

ETIM

ETIM 5.0	EC002638
ETIM 6.0	EC002638
ETIM 7.0	EC002638

Approvals

Approvals

Approvals


EAC / cULus Recognized


Ex Approvals

Printed-circuit board connector - SPC 5/ 5-STF-7,62 BD:1-5 - 1027788

Approvals

Approval details

EAC		B.01687
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cULus Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	E60425-19920722
	B	C	
Nominal voltage UN	600 V	600 V	
Nominal current IN	35 A	35 A	
mm ² /AWG/kcmil	24-8	24-8	

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