

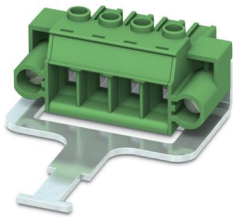
PC 5/ 3-STF-SH1-7,62 - PCB connector



1778188

<https://www.phoenixcontact.com/pc/products/1778188>

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PCB connector, nominal cross section: 6 mm², color: green, nominal current: 41 A, rated voltage (III/2): 1000 V, contact surface: Sn, contact connection type: Socket, number of potentials: 3, number of rows: 1, number of positions: 3, number of connections: 3, product range: PC 5/..-STF1-SH, pitch: 7.62 mm, connection method: Screw connection with tension sleeve, screw head form: H1L Slotted Phillips recess, conductor/PCB connection direction: 0 °, locking clip: - without locking clip, plug-in system: COMBICON PC 5, Electrical properties: shielded, locking: Screw locking mechanism, mounting: 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
- Integrated double steel spring provides additional safety in the event of temperature and power fluctuations
- 600 V UL approval in the smallest of dimensions
- Shield for adherence to the EMC requirements and an optional strain relief
- Screwable flange for superior mechanical stability

Commercial data

Item number	1778188
Packing unit	50 pc
Minimum order quantity	1 pc
Product key	AADABD
Catalog page	Page 525 (C-1-2013)
GTIN	4046356523318
Weight per piece (including packing)	34.38 g
Weight per piece (excluding packing)	34.308 g
Customs tariff number	85366990
Country of origin	DE

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Technical data

Product properties

Product type	PCB connector
Product family	PC 5/...-STF1-SH
Product line	COMBICON Connectors L
Type	Standard
Number of positions	3
Pitch	7.62 mm
Number of connections	3
Number of rows	1
Number of potentials	3
Mounting flange	Screw flange
Electrical characteristic	shielded

Data management status

Article revision	03
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Electrical properties

Nominal current I_N	41 A
Nominal voltage U_N	1000 V
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
Electrical characteristic	shielded

Connection data

Connection technology

Type	Standard
Connector system	COMBICON PC 5
Nominal cross section	6 mm ²
Contact connection type	Socket

Interlock

Locking type	Screw locking mechanism
Mounting flange	Screw flange
Tightening torque	0.3 Nm ... 0.7 Nm

Conductor connection

Connection method	Screw connection with tension sleeve
Conductor/PCB connection direction	0 °

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Conductor cross section rigid	0.2 mm² ... 10 mm²
Conductor cross section flexible	0.2 mm² ... 6 mm²
Conductor cross section AWG	24 ... 10
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 mm² ... 2.5 mm²
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 mm² ... 2.5 mm²
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 Phillips recess (H1L)
Tightening torque	0.5 Nm ... 0.8 Nm ($\leq 4 \text{ mm}^2$ is 0.5 Nm to 0.6 Nm, $> 4 \text{ mm}^2$ is 0.7 Nm to 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

Dimensions

Dimensional drawing	
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Pitch	7.62 mm
Width [w]	30.46 mm
Height [h]	22.9 mm
Length [l]	77.75 mm

Mounting

Flange

Tightening torque	0.3 Nm ... 0.7 Nm
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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.
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Environmental and real-life conditions

Ambient 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

Electrical tests

Air clearances and creepage distances |

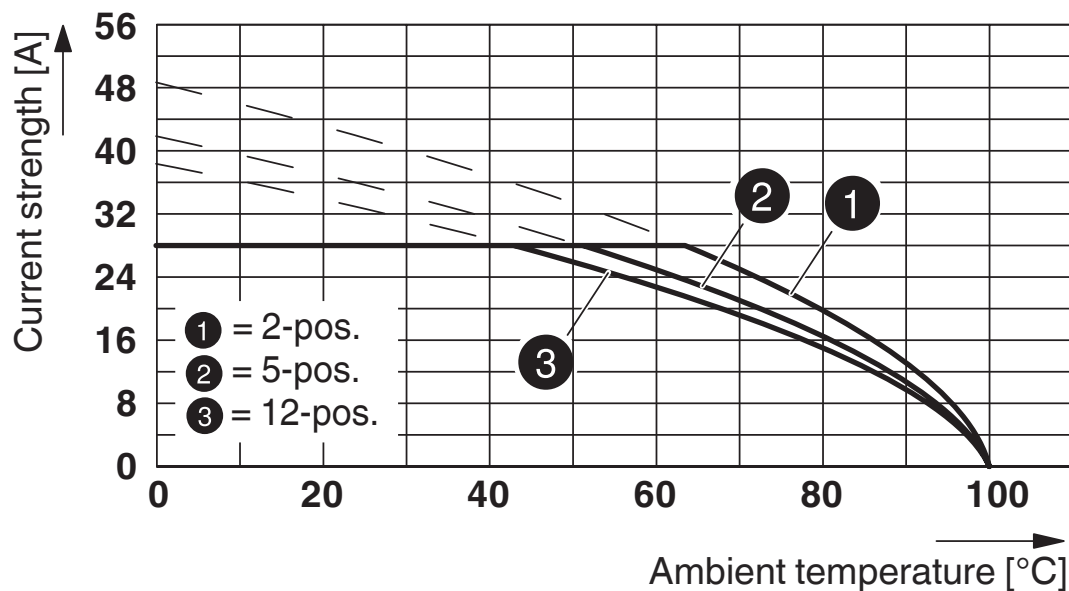
Specification	IEC 60664-1:2007-04
Insulating material group	I
Comparative tracking index (IEC 60112)	CTI 600
Rated insulation voltage (III/3)	1000 V
Rated surge voltage (III/3)	8 kV
minimum clearance value - non-homogenous field (III/3)	8 mm
minimum creepage distance (III/3)	12.5 mm
Rated insulation 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

Packaging specifications

Type of packaging	packed in cardboard
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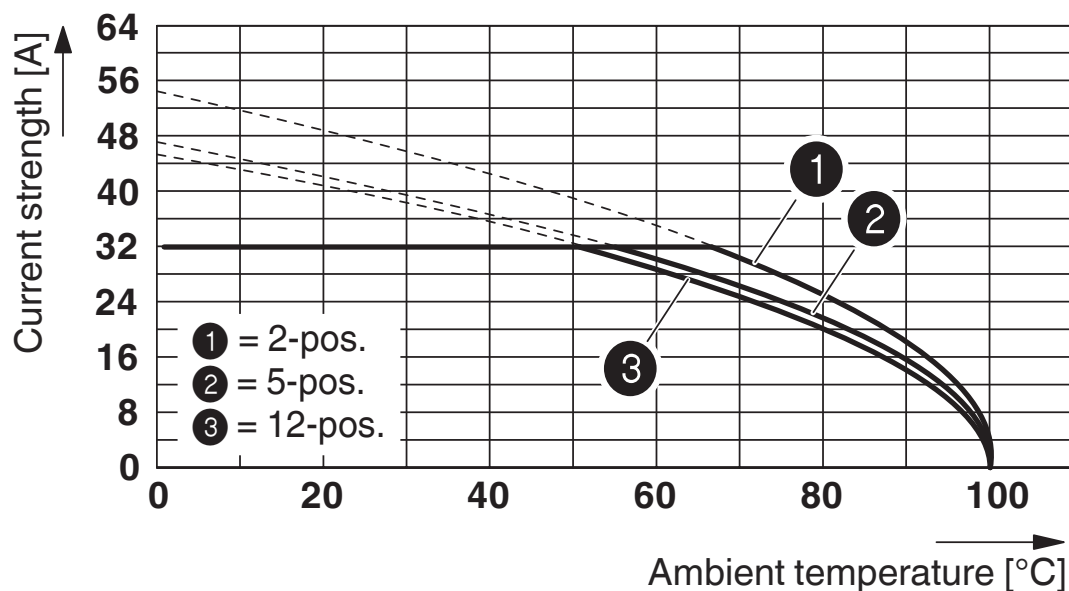
Drawings

Diagram



Derating curve for: PC 5/...-ST1-7,62 with PC 4/...-G-7,62
 Conductor cross section: 4 mm²

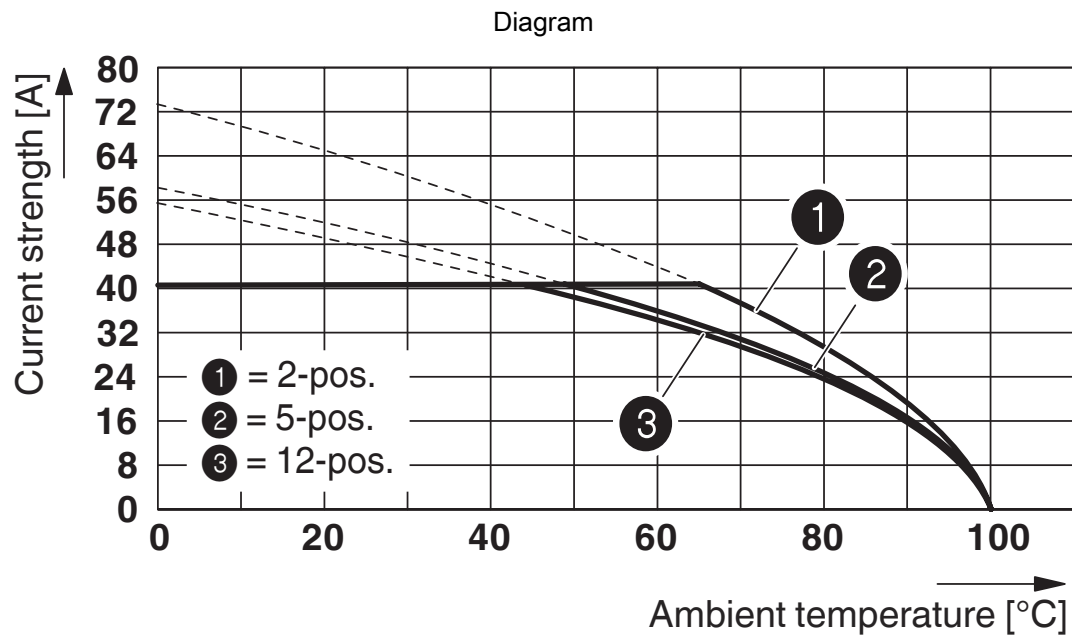
Diagram



Derating curve for: PC 5/...-ST1-7,62 with PC 5/...-G-7,62
 Conductor cross section: 6 mm²

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Derating curve for: PC 5/...-ST1-7,62 with PC 5/...-G-7,62
Conductor cross section: 10 mm²

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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/pc/products/1778188>

<div> cULus Recognized Approval ID: E60425-19920722</div>				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B				
Multi-conductor connection	600 V	41 A	24 - 12	-
Screw connection	600 V	41 A	24 - 8	-
Use group C				
Multi-conductor connection	600 V	41 A	24 - 12	-
Screw connection	600 V	41 A	24 - 8	-

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Classifications

ECLASS

ECLASS-11.0	27460202
ECLASS-12.0	27460202
ECLASS-13.0	27460202

ETIM

ETIM 9.0	EC002638
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UNSPSC

UNSPSC 21.0	39121400
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Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
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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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