

1778191

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PCB connector, nominal cross section: 6 mm², color: green, nominal current: 32 A, rated voltage (III/2): 1000 V, contact surface: Sn, contact connection type: Socket, number of potentials: 4, number of rows: 1, number of positions: 4, number of connections: 4, 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 method: 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	1778191
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	AA04
Product key	AADABD
Catalog page	Page 525 (C-1-2013)
GTIN	4046356523325
Weight per piece (including packing)	40.271 g
Weight per piece (excluding packing)	39.104 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
Туре	Standard
Number of positions	4
Pitch	7.62 mm
Number of connections	4
Number of rows	1
Number of potentials	4
Mounting flange	Screw flange
Electrical characteristic	shielded

### Electrical properties

Nominal current I <sub>N</sub>	32 A
Nominal voltage U <sub>N</sub>	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

Туре	Standard
Connector system	COMBICON PC 5
Nominal cross section	6 mm²
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 °
Conductor cross section rigid	0.2 mm² 10 mm²
Conductor cross section flexible	0.2 mm² 6 mm²
Conductor cross section AWG	24 10



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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 mm <sup>2</sup> 1.5 mm <sup>2</sup>
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 mm² is 0.5 Nm to 0.6 Nm, > 4 mm² 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	h
Pitch	7.62 mm
Width [w]	38.08 mm
Height [h]	22.9 mm



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Length [I]	77.75 mm
lounting	
io an initial	
Flange	
Tightening torque	0.3 Nm 0.7 Nm
otes	
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.
nvironmental and real-life conditions	
Ambient conditions	
	-40 °C 100 °C (dependent on the derating curve)
Ambient temperature (operation)	
Ambient temperature (storage/transport)	-40 °C 70 °C
Relative humidity (storage/transport)	30 % 70 %
Ambient temperature (assembly)	-5 °C 100 °C
lectrical tests	
lectrical tests	
Air clearances and creepage distances	
Specification	IEC 60664-1:2007-04
Insulating material group	
insulating material group	1
Comparative tracking index (IEC 60112)	I CTI 600
	I CTI 600 1000 V

### Packaging specifications

Rated surge voltage (III/3)

minimum creepage distance (III/3)

minimum creepage distance (III/2)

minimum creepage distance (II/2)

Rated insulation voltage (II/2)

Rated surge voltage (II/2)

Rated insulation voltage (III/2)

Rated surge voltage (III/2)

minimum clearance value - non-homogenous field (III/3)

minimum clearance value - non-homogenous field (III/2)

minimum clearance value - non-homogenous field (II/2)

Type of packaging	packed in cardboard

8 kV

8 mm

12.5 mm

1000 V

8 kV

8 mm

8 mm 1000 V

6 kV

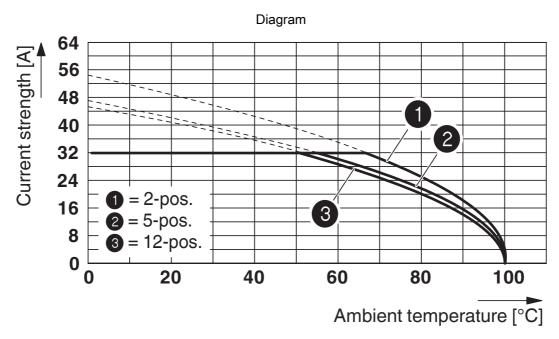
5.5 mm 5.5 mm



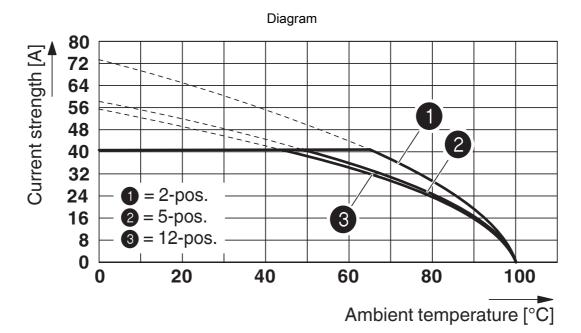
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## **Drawings**



Type: PC 5/...-ST1-7,62 with PC 5/...-G-7,62 Conductor cross section: 6 mm<sup>2</sup>

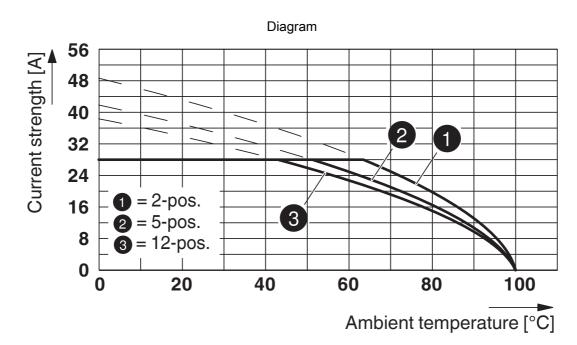


Type: PC 5/...-ST1-7,62 with PC 5/...-G-7,62 Conductor cross section: 10 mm<sup>2</sup>



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Type: PC 5/...-ST1-7,62 with PC 4/....-G-7,62 Conductor cross section: 4 mm<sup>2</sup>



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## **Approvals**

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CULus Recognized Approval ID: E60425-19920722				
	Nominal voltage $U_N$	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
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

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

#### EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions	
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%	
EF3.0 Climate Change		
CO2e kg	0.493 kg CO2e	

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