

# PC 6/ 3-STF-10,16 - PCB connector



1913581

<https://www.phoenixcontact.com/in/products/1913581>

Please be informed that the data shown in this PDF document is generated from our Online Catalog. Please find the complete data in the user documentation. Our General Terms of Use for Downloads are valid.



PCB connector, nominal cross section: 6 mm<sup>2</sup>, color: green, nominal current: 41 A, rated voltage (III/2): 1000 V, contact surface: Silver, type of contact: Socket, number of potentials: 3, number of rows: 1, number of positions: 3, number of connections: 3, product range: PC 6/..-STF, pitch: 10.16 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, conductor/PCB connection direction: 0 °, locking clip: - without locking clip, plug-in system: COMBICON PC 16, locking: Screw locking, 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
- Screwable flange for superior mechanical stability
- Integrated protective guide prevents incorrect insertion of the conductor underneath the tension sleeve

## Commercial Data

Item number	1913581
Packing unit	25 pc
Minimum order quantity	25 pc
Sales Key	AAD
Product Key	AADADB
Catalog Page	Page 551 (C-1-2013)
GTIN	4017918179069
Weight per Piece (including packing)	28.99 g
Weight per Piece (excluding packing)	28.507 g
Customs tariff number	85366990
Country of origin	PL

# PC 6/ 3-STF-10,16 - PCB connector



1913581

<https://www.phoenixcontact.com/in/products/1913581>

## Technical Data

### Product properties

Type	Standard
Product line	COMBICON Connectors L
Product type	PCB plug
Product family	PC 6/...-STF
Number of positions	3
Pitch	10.16 mm
Number of connections	3
Number of rows	1
Mounting flange	Screw flange
Number of potentials	3

### Electrical properties

Nominal current $I_N$	41 A
Nominal voltage $U_N$	1000 V
Degree of pollution	3
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

### Connection data

#### Connection technology

Type	Standard
Connector system	COMBICON PC 16
Nominal cross section	6 mm <sup>2</sup>
Type of contact	Socket

#### Interlock

Locking type	Screw locking
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	0.75 mm <sup>2</sup> ... 10 mm <sup>2</sup>
Conductor cross section flexible	0.75 mm <sup>2</sup> ... 6 mm <sup>2</sup>
Conductor cross section AWG	18 ... 8
Conductor cross section flexible, with ferrule without plastic	0.5 mm <sup>2</sup> ... 6 mm <sup>2</sup>

# PC 6/ 3-STF-10,16 - PCB connector



1913581

<https://www.phoenixcontact.com/in/products/1913581>

sleeve	
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.5 mm <sup>2</sup> ... 6 mm <sup>2</sup>
2 conductors with same cross section, solid	0.75 mm <sup>2</sup> ... 4 mm <sup>2</sup>
2 conductors with same cross section, flexible	0.75 mm <sup>2</sup> ... 6 mm <sup>2</sup>
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	0.5 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Stripping length	12 mm
Tightening torque	1.2 Nm ... 1.5 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	Selective coating
Metal surface terminal point (top layer)	Silver (4 - 8 µm Ag)
Metal surface contact area (top layer)	Silver (4 - 8 µm Ag)

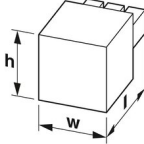
### Material data - housing

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

### Material data – actuating element

Color ()	()
----------	----

## Dimensions

Dimensional drawing	
Pitch	10.16 mm
Width [w]	48.24 mm
Height [h]	27.55 mm
Length [l]	39 mm

# PC 6/ 3-STF-10,16 - PCB connector



1913581

<https://www.phoenixcontact.com/in/products/1913581>

## Mounting

Drive form screw head	Slotted (L)
Drive form screw head	Slotted (L)

## Flange

Tightening torque	0.3 Nm ... 0.7 Nm
-------------------	-------------------

## 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.
--------------------	--

## 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
-------------------	---------------------

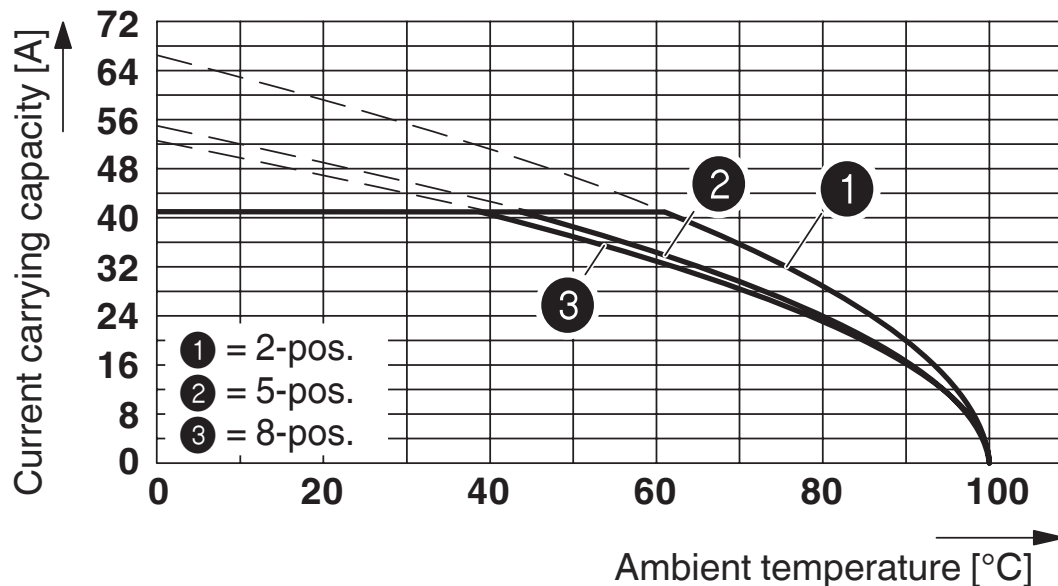
# PC 6/ 3-STF-10,16 - PCB connector

1913581

<https://www.phoenixcontact.com/in/products/1913581>

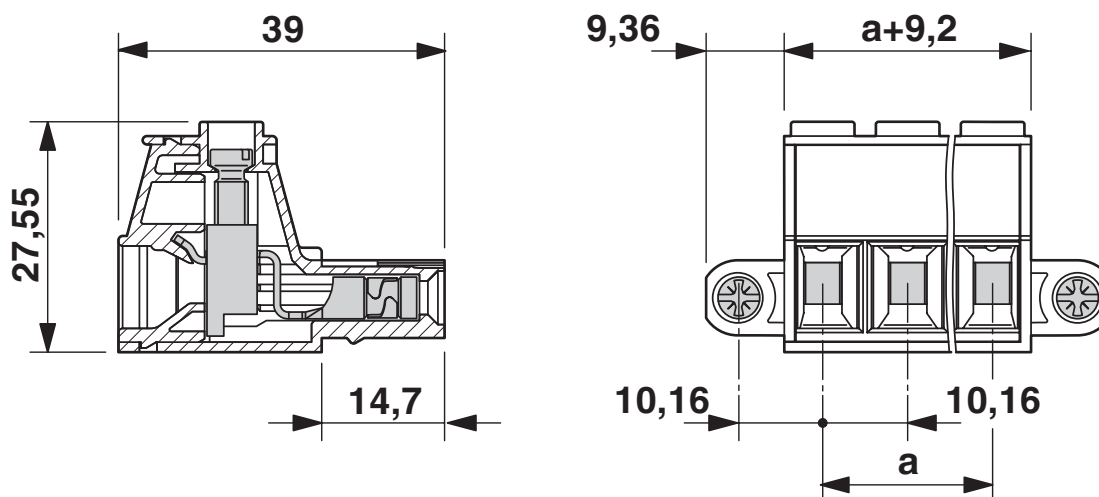
## Drawings

Diagram



Derating curve for: PC 6/..-ST-10,16 with PCV 6-16/..-G1-10,16

Dimensional drawing

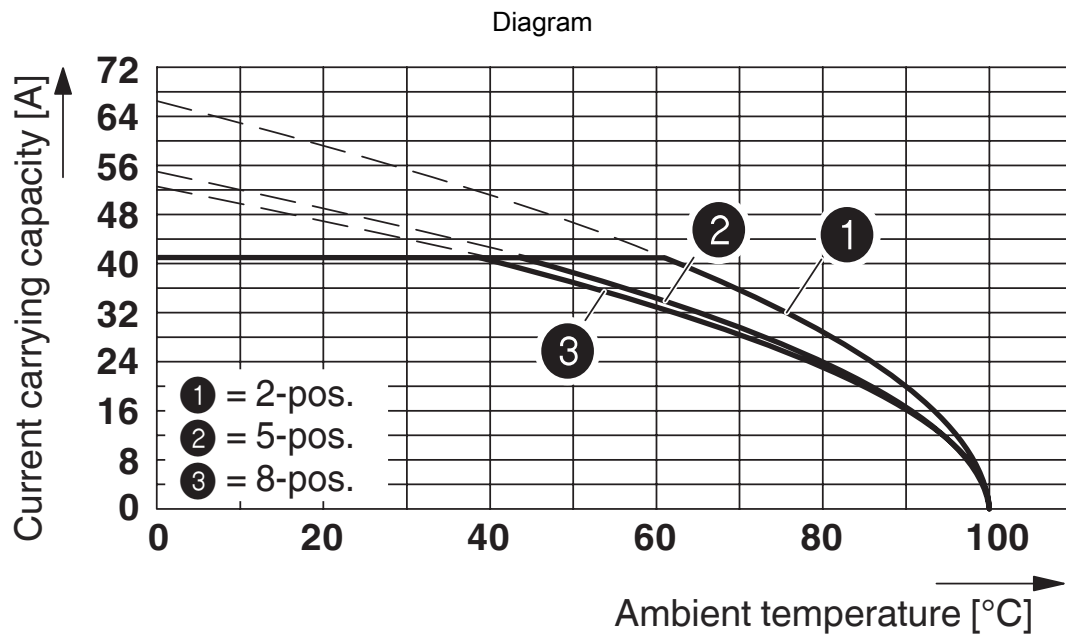


# PC 6/ 3-STF-10,16 - PCB connector



1913581

<https://www.phoenixcontact.com/in/products/1913581>



Derating curve for: PC 6/..-ST-10,16 with PC 6-16/..-G1-10,16

# PC 6/ 3-STF-10,16 - PCB connector




1913581

<https://www.phoenixcontact.com/in/products/1913581>

## Approvals

 **EAC**  
Approval ID: B.01687

 **cULus Recognized**  
Approval ID: E60425-20010727

	Nominal Voltage $U_N$	Nominal Current $I_N$	Cross Section AWG	Cross Section $\text{mm}^2$
	600 V	50 A	20 - 8	-
	600 V	50 A	20 - 8	-

# PC 6/ 3-STF-10,16 - PCB connector



1913581

<https://www.phoenixcontact.com/in/products/1913581>

## Classifications

### ECLASS

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

### ETIM

ETIM 8.0	EC002638
----------	----------

### UNSPSC

UNSPSC 21.0	39121400
-------------	----------



# PC 6/ 3-STF-10,16 - PCB connector



1913581

<https://www.phoenixcontact.com/in/products/1913581>

## Environmental Product Compliance

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

# PC 6/ 3-STF-10,16 - PCB connector

1913581

<https://www.phoenixcontact.com/in/products/1913581>

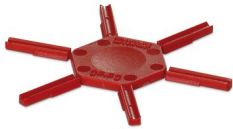
## Accessories

### CP-PC RD - Coding profile

1701967

<https://www.phoenixcontact.com/in/products/1701967>

Coding profile, for plugging into the coding ribs of the plug at a later date, insulating material, color: Red



---

### SZS 1,0X4,0 VDE - Screwdriver

1205066

<https://www.phoenixcontact.com/in/products/1205066>

Screwdriver, slot-headed, VDE insulated, size: 1.0 x 4.0 x 100 mm, 2-component grip, with non-slip grip



# PC 6/ 3-STF-10,16 - PCB connector



1913581

<https://www.phoenixcontact.com/in/products/1913581>

## PCV 6-16/ 3-G1F-10,16 - PCB header

1998878

<https://www.phoenixcontact.com/in/products/1998878>



PCB headers, nominal cross section: 16 mm<sup>2</sup>, color: green, nominal current: 76 A (41 A in combination with PC 6 plug), rated voltage (III/2): 1000 V, contact surface: Silver, type of contact: Pin, number of potentials: 3, number of rows: 1, number of positions: 3, number of connections: 3, product range: PCV 6-16/..-G1F, pitch: 10.16 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 4 mm, number of solder pins per potential: 3, plug-in system: COMBICON PC 16, Pin connector pattern alignment: Standard, locking: Screw locking, mounting: Threaded flange, type of packaging: packed in cardboard

## PC 6-16/ 3-G1F-10,16 - PCB header

1999013

<https://www.phoenixcontact.com/in/products/1999013>



PCB headers, nominal cross section: 16 mm<sup>2</sup>, color: green, nominal current: 76 A (41 A in combination with PC 6 plug), rated voltage (III/2): 1000 V, contact surface: Silver, type of contact: Pin, number of potentials: 3, number of rows: 1, number of positions: 3, number of connections: 3, product range: PC 6-16/..-G1F, pitch: 10.16 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 4 mm, number of solder pins per potential: 3, plug-in system: COMBICON PC 16, Pin connector pattern alignment: Standard, locking: Screw locking, mounting: Threaded flange, type of packaging: packed in cardboard

Phoenix Contact 2023 © - all rights reserved  
<https://www.phoenixcontact.com>

PHOENIX CONTACT (I) Pvt. Ltd.  
A-58/2, Okhla Industrial Area, Phase - II, New Delhi-110 020

+91.1275.71420  
[info@phoenixcontact.co.in](mailto:info@phoenixcontact.co.in)