

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's documentation. Our General Terms of Use for Downloads are valid (http://phoenixcontact.com/download)



PCB connector, nominal current: 41 A, rated voltage (III/2): 1000 V, nominal cross section: 6 mm<sup>2</sup>, number of positions: 6, pitch: 10.16 mm, connection method: Screw connection with tension sleeve, color: green, contact surface: Silver

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

### Your advantages

- ☑ Well-known connection principle allows worldwide use
- ☑ Low temperature rise, thanks to maximum contact force
- Mallows 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

### RoHS

### Key Commercial Data

Packing unit	25 pc
GTIN	4 017918 179090
GTIN	4017918179090

### Technical data

#### Item properties

Brief article description	Printed-circuit board connector
Plug-in system	POWER COMBICON 16
Type of contact	Female connector
Range of articles	PC 6/STF
Pitch	10.16 mm
Number of positions	6
Connection method	Screw connection with tension sleeve
Drive form screw head	Slotted (L)
Screw thread	M4



## Technical data

### Item properties

Locking	Screw flange	
Number of levels	1	
Number of connections	6	
Number of potentials	6	
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	Screw connection with tension sleeve	
pluggable	Yes	
Conductor cross section solid	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 / kcmil	18 8	
Conductor cross section flexible, with ferrule without plastic sleeve	0.5 mm <sup>2</sup> 6 mm <sup>2</sup>	
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 mm² 2.5 mm²	
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm² 4 mm²	
Stripping length	12 mm	
Torque	1.2 Nm 1.5 Nm	
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	Selective coating
Metal surface terminal point (top layer)	Silver (4 - 8 µm Ag)
Metal surface contact area (top layer)	Silver (4 - 8 µm Ag)



## Technical data

### Material data - housing

Housing color	green (6021)
Insulating material	РА
Insulating material group	1
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 [1]	39 mm
Width [ w ]	78.72 mm
Height [ h ]	27.55 mm
Pitch	10.16 mm
Height (without solder pin)	27.55 mm

### Packaging information

Type of packaging	packed in cardboard
Pieces per package	25
Denomination packing units	Pcs.

### General product information

Note	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.
	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.

### 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)

### 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

**Environmental Product Compliance** 

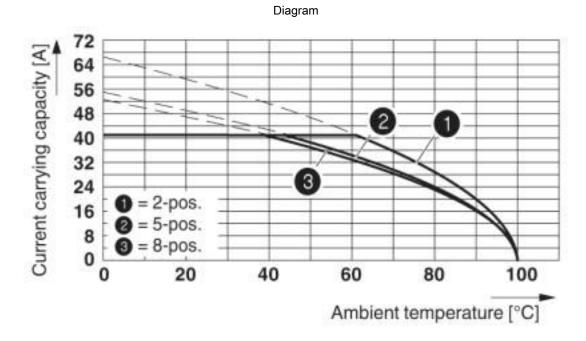


## Technical data

### **Environmental Product Compliance**

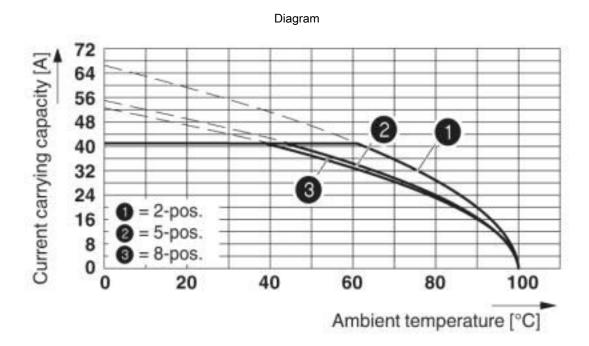
REACh SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

### Drawings



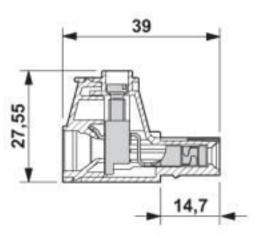
Derating curve for: PC 6/..-ST-10,16 with PC 6-16/..-G1-10,16

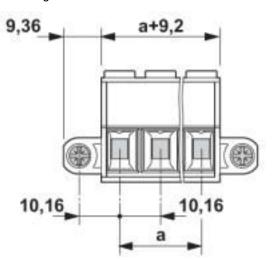




Derating curve for: PC 6/..-ST-10,16 with PCV 6-16/..-G1-10,16

Dimensional drawing





## Classifications

### eCl@ss

eCl@ss 10.0.1	27440309
eCl@ss 4.0	27260700
eCl@ss 4.1	27260700
eCl@ss 5.0	27260700
eCl@ss 5.1	27260700
eCl@ss 6.0	27260700

09/12/2020 Page 5 / 8



## Classifications

eCl@ss

eCl@ss 7.0	27440309
eCl@ss 8.0	27440309
eCl@ss 9.0	27440309

### ETIM

ETIM 3.0	EC001121
ETIM 4.0	EC002638
ETIM 5.0	EC002638
ETIM 6.0	EC002638
ETIM 7.0	EC002638

### UNSPSC

UNSPSC 6.01	30211810
UNSPSC 7.0901	39121409
UNSPSC 11	39121409
UNSPSC 12.01	39121409
UNSPSC 13.2	39121409
UNSPSC 18.0	39121409
UNSPSC 19.0	39121409
UNSPSC 20.0	39121409
UNSPSC 21.0	39121409

## Approvals

### Approvals

### Approvals

EAC / cULus Recognized

Ex Approvals

### Approval details

EAC	ERE	B.01687	
-----	-----	---------	--



## Approvals

Γ

cULus Recognized	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm E60425-2001	
	В	С
Nominal voltage UN	600 V	600 V
Nominal current IN	50 A	50 A
mm²/AWG/kcmil	20-8	20-8

### Accessories

Accessories

Coding element

Coding profile - CP-PC RD - 1701967



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

### Screwdriver tools

Screwdriver - SZS 1,0X4,0 VDE - 1205066



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

### Additional products

Feed-through header - PCV 6-16/ 6-G1F-10,16 - 1998904



PCB headers, nominal current: 76 A, rated voltage (III/2): 1000 V, nominal cross section: 16 mm<sup>2</sup>, number of positions: 6, pitch: 10.16 mm, color: green, contact surface: Silver, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 4 mm



### Accessories

Feed-through header - PC 6-16/ 6-G1F-10,16 - 1999042



PCB headers, nominal current: 76 A, rated voltage (III/2): 1000 V, nominal cross section: 16 mm<sup>2</sup>, number of positions: 6, pitch: 10.16 mm, color: green, contact surface: Silver, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 4 mm

Phoenix Contact 2020 © - all rights reserved http://www.phoenixcontact.com

PHOENIX CONTACT GmbH & Co. KG Flachsmarktstr. 8 32825 Blomberg Germany Tel. +49 5235 300 Fax +49 5235 3 41200 http://www.phoenixcontact.com

# **Mouser Electronics**

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Phoenix Contact: <u>1913617</u>