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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: 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

- 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



## **Key Commercial Data**

Packing unit	25 pc
GTIN	4 017918 179083
GTIN	4017918179083

#### 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	5
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	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	Screw connection with tension sleeve
pluggable	Yes
Conductor cross section solid	0.75 mm² 10 mm²
Conductor cross section flexible	0.75 mm² 6 mm²
Conductor cross section AWG / kcmil	18 8
Conductor cross section flexible, with ferrule without plastic sleeve	0.5 mm² 6 mm²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.5 mm² 6 mm²
2 conductors with same cross section, solid	0.75 mm² 4 mm²
2 conductors with same cross section, flexible	0.75 mm² 6 mm²
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	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 [1]	39 mm
Width [w]	68.56 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.
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#### 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**



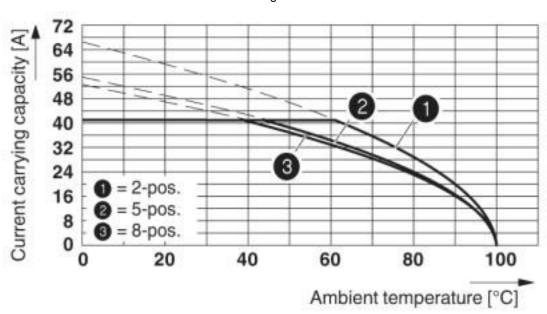
## Technical data

## **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

#### Diagram

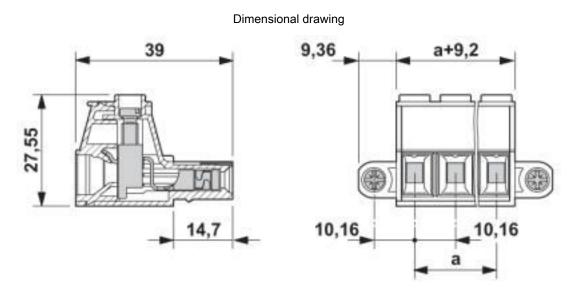


Derating curve for: PC 6/..-ST-10,16 with PC 6-16/..-G1-10,16



Diagram 72 Current carrying capacity [A] 64 56 48 40 32 3 24 0 = 2-pos. 16 = 5-pos. = 8-pos. 40 60 100 80 20 Ambient temperature [°C]

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



### 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



## 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 []



## Approvals

cULus Recognized c	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm E60425-20010	
	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/ 5-G1F-10,16 - 1998894



PCB headers, nominal current: 76 A, rated voltage (III/2): 1000 V, nominal cross section: 16 mm², number of positions: 5, 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 6-16/5-G1F-10,16 - 1999039



PCB headers, nominal current: 76 A, rated voltage (III/2): 1000 V, nominal cross section: 16 mm², number of positions: 5, pitch: 10.16 mm, color: green, contact surface: Silver, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 4 mm

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