

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 cross section: 16 mm<sup>2</sup>, color: green, nominal current: 76 A, rated voltage (III/2): 1000 V, contact surface: Silver, type of contact: Female connector, number of potentials: 3, Number of rows: 1, Number of positions per row: 3, number of connections: 6, product range: TPC 16/..-STF, pitch: 10.16 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, conductor/ PCB connection direction: 50 °, Locking clip: - without locking clip, plug-in system: POWER COMBICON 16, Locking: Screw locking, mounting: Screw flange, type of packaging: packed in cardboard

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
- Potentials can be easily looped through ideal for BUS applications
- ☑ Screwable flange for superior mechanical stability



# Key Commercial Data

Packing unit	20 pc
GTIN	4 046356 103336
GTIN	4046356103336

# Technical data

### Item properties

Brief article description	PCB connector
Connector system	POWER COMBICON 16
Type of contact	Female connector
Range of articles	TPC 16/STF
Pitch	10.16 mm
Number of positions	3
Drive form screw head	Slotted (L)
Screw thread	M4
Locking	Screw flange



# Technical data

## Item properties

Number of levels	1
Number of connections	6
Number of potentials	3

## **Electrical parameters**

Nominal current	76 A
Nom. voltage	1000 V
Rated voltage (III/3)	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 16 mm²
Conductor cross section flexible	0.75 mm² 16 mm²
Conductor cross section AWG / kcmil	18 6
Conductor cross section flexible, with ferrule without plastic sleeve	0.5 mm <sup>2</sup> 16 mm <sup>2</sup>
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.5 mm <sup>2</sup> 16 mm <sup>2</sup> (Only in connection with CRIMPFOX 16 S)
2 conductors with same cross section, solid	0.75 mm <sup>2</sup> 6 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 4 mm²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm² 6 mm²
Stripping length	18 mm
Torque	1.7 Nm 1.8 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	Silver-plated strip
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



# Technical data

## Material data - housing

Housing color	green (6021)
Insulating material	PA
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

Caption	Schematische Abbildung - weitere Details siehe Produktfamilienzeichnung im Download Center
Length [1]	51.4 mm
Width [ w ]	48.24 mm
Height [ h ]	54.9 mm
Pitch	10.16 mm
Height (without solder pin)	54.9 mm

## Packaging information

Type of packaging	packed in cardboard
Pieces per package	20
Denomination packing units	Pcs.

## General product information

Type of note	Notes on operation
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.

### 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)	8 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: TPC 16/....-ST-10,16 with PC 6-16/...-G-10,16

# Classifications

eCl@ss

eCl@ss 10.0.1	27440309
eCl@ss 11.0	27460202
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
eCl@ss 7.0	27440309
eCl@ss 9.0	27440309

### ETIM

ETIM 3.0	EC001121
ETIM 4.0	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

Dimensional drawing



06/26/2021 Page 4 / 9



# Classifications

## UNSPSC

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

c**A**Us

 $http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm \\ E60425-20040202 \\$ 

	В	C
Nominal voltage UN	600 V	600 V
Nominal current IN	60 A	60 A
mm²/AWG/kcmil	20-4	20-4

## 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

Crimping tool



# Accessories

Crimping pliers - CRIMPFOX 6 - 1212034



Crimping pliers, for ferrules without insulating collar according to DIN 46228 Part 1 and ferrules with insulating collar according to DIN 46228 Part 4, 0.25 mm<sup>2</sup> ... 6.0 mm<sup>2</sup>, lateral entry, trapezoidal crimp

Crimping pliers - CRIMPFOX 16 S - 1207983



Crimping pliers for ferrules up to 16 mm<sup>2</sup>

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

Terminal marking

Marker strip - SK 5,0 WH:REEL - 0805221



Marker strip, Roll, white, unlabeled, can be labeled with: THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, mounting type: adhesive, for terminal block width: 5 mm, lettering field size: continuous x 5 mm, Number of individual labels: 90000

#### Additional products

#### PCB header - PCV 6-16/ 3-G1F-10,16 - 1998878



PCB header, 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: Male connector, number of potentials: 3, Number of rows: 1, Number of positions per row: 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, plug-in system: POWER COMBICON 16, Pin connector pattern alignment: Standard, Locking: Screw locking, mounting: Threaded flange, type of packaging: packed in cardboard



## Accessories

#### PCB header - PC 6-16/ 3-G1F-10,16 - 1999013



PCB header, 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: Male connector, number of potentials: 3, Number of rows: 1, Number of positions per row: 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, plug-in system: POWER COMBICON 16, Pin connector pattern alignment: Standard, Locking: Screw locking, mounting: Threaded flange, type of packaging: packed in cardboard

#### PCB header - PCV 6-16/ 3-G1F-10,16 - 1998878



PCB header, 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: Male connector, number of potentials: 3, Number of rows: 1, Number of positions per row: 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, plug-in system: POWER COMBICON 16, Pin connector pattern alignment: Standard, Locking: Screw locking, mounting: Threaded flange, type of packaging: packed in cardboard

#### Printed-circuit board connector - IPC 16/ 3-STGF-10,16 - 1975820



PCB connector, nominal cross section: 16 mm<sup>2</sup>, color: green, nominal current: 76 A, rated voltage (III/2): 1000 V, contact surface: Silver, type of contact: Male connector, number of potentials: 3, Number of rows: 1, Number of positions per row: 3, number of connections: 3, product range: IPC 16/..-STGF, 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: POWER COMBICON 16, Locking: Screw locking, mounting: Threaded flange, type of packaging: packed in cardboard

### Printed-circuit board connector - ISPC 16/ 3-STGF-10,16 - 1748710



PCB connector, nominal cross section: 16 mm<sup>2</sup>, color: green, nominal current: 76 A, rated voltage (III/2): 1000 V, contact surface: Silver, type of contact: Male connector, number of potentials: 3, Number of rows: 1, Number of positions per row: 3, number of connections: 3, product range: ISPC 16/..-STGF, pitch: 10.16 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, Locking clip: - without locking clip, plug-in system: POWER COMBICON 16, Locking: Screw locking, mounting: Threaded flange, type of packaging: packed in cardboard

#### PCB header - DFK-PC 6-16/ 3-GF-10,16 - 1701540



Feed-through header, nominal cross section: 16 mm<sup>2</sup>, color: green, nominal current: 76 A, rated voltage (III/2): 1000 V, contact surface: Silver, type of contact: Male connector, number of potentials: 3, Number of rows: 1, Number of positions per row: 3, number of connections: 3, product range: DFK-PC 6-16/..-GF, pitch: 10.16 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 4.1 mm, plug-in system: POWER COMBICON 16, Pin connector pattern alignment: Standard, Locking: Screw locking, mounting: Threaded flange, type of packaging: packed in cardboard



## Accessories

#### Feed-through header - DFK-PC 6-16/ 3-GFU-10,16 - 1701702



Feed-through header, nominal cross section: 16 mm<sup>2</sup>, color: green, nominal current: 76 A, rated voltage (III/2): 1000 V, contact surface: Silver, type of contact: Male connector, number of potentials: 3, Number of rows: 1, Number of positions per row: 3, number of connections: 3, product range: DFK-PC 6-16/..-GFU, pitch: 10.16 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 4.1 mm, plug-in system: POWER COMBICON 16, Pin connector pattern alignment: reversed, Locking: Screw locking, mounting: Threaded flange, type of packaging: packed in cardboard

#### PCB header - DFK-PC 6-16/ 3-GF-SH-10,16 - 1701948



Feed-through header, nominal cross section: 16 mm<sup>2</sup>, color: green, nominal current: 76 A, rated voltage (III/2): 1000 V, contact surface: Silver, type of contact: Male connector, number of potentials: 3, Number of rows: 1, Number of positions per row: 3, number of connections: 3, product range: DFK-PC 6-16/..-GF-SH, pitch: 10.16 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 4.1 mm, plug-in system: POWER COMBICON 16, Pin connector pattern alignment: Standard, Locking: Screw locking, mounting: Threaded flange, type of packaging: packed in cardboard

#### Feed-through header - DFK-PC 6-16/ 3-GFU-SH-10,16 - 1702028



Feed-through header, nominal cross section: 16 mm<sup>2</sup>, color: green, nominal current: 76 A, rated voltage (III/2): 1000 V, contact surface: Silver, type of contact: Male connector, number of potentials: 3, Number of rows: 1, Number of positions per row: 3, number of connections: 3, product range: DFK-PC 6-16/..-GFU-SH, pitch: 10.16 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 4.1 mm, plug-in system: POWER COMBICON 16, Pin connector pattern alignment: reversed, Locking: Screw locking, mounting: Threaded flange, type of packaging: packed in cardboard

### Feed-through header - DFK-PCV 6-16/ 3-GF-10,16 - 1702264



Feed-through header, nominal cross section: 16 mm<sup>2</sup>, color: green, nominal current: 76 A, rated voltage (III/2): 1000 V, contact surface: Silver, type of contact: Male connector, number of potentials: 3, Number of rows: 1, Number of positions per row: 3, number of connections: 3, product range: DFK-PCV 6-16/..-GF, pitch: 10.16 mm, mounting: Wave soldering, pin layout: Linear pinning, plug-in system: POWER COMBICON 16, Pin connector pattern alignment: Standard, Locking: Screw locking, mounting: Threaded flange, type of packaging: packed in cardboard

#### Feed-through plug - DFK-PC 16/ 3-STF-10,16 - 1703467



Feed-through connector, nominal cross section: 16 mm<sup>2</sup>, color: green, nominal current: 76 A, rated voltage (III/2): 1000 V, contact surface: Silver, type of contact: Male connector, number of potentials: 3, Number of rows: 1, Number of positions per row: 3, number of connections: 3, product range: DFK-PC 16/..-STF, pitch: 10.16 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, conductor/PCB connection direction: 0 °, plug-in system: POWER COMBICON 16, Pin connector pattern alignment: Standard, Locking: without, mounting: without, type of packaging: packed in cardboard



# Accessories

#### Feed-through plug - DFK-PC 16/ 3-STF-SH-10,16 - 1703629



Feed-through connector, nominal cross section: 16 mm<sup>2</sup>, color: green, nominal current: 76 A, rated voltage (III/2): 1000 V, contact surface: Silver, type of contact: Male connector, number of potentials: 3, Number of rows: 1, Number of positions per row: 3, number of connections: 3, product range: DFK-PC 16/..-STF-SH, pitch: 10.16 mm, connection method: Screw connection with tension sleeve, conductor/PCB connection direction: 0°, solder pin [P]: 4.1 mm, plug-in system: POWER COMBICON 16, Pin connector pattern alignment: Standard, Locking: Screw locking, mounting: Screw flange, type of packaging: packed in cardboard

Phoenix Contact 2021 © - 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