

TPC 16/ 7-ST-10,16 - PCB connector



1715222

<https://www.phoenixcontact.com/us/products/1715222>

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 TWIN plug, nominal cross section: 16 mm², color: green, nominal current: 76 A, rated voltage (III/2): 1000 V, contact surface: Ag, contact connection type: Socket, number of potentials: 7, number of rows: 1, number of positions: 7, number of connections: 14, product range: TPC 16/...-ST, 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: COMBICON PC 16, locking: without, mounting method: without, 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
- Potentials can be easily looped through – ideal for BUS applications

Commercial data

Item number	1715222
Packing unit	20 pc
Minimum order quantity	50 pc
Note	Made to order (non-returnable)
Sales key	AA05
Product key	AAEAAD
GTIN	4046356103299
Weight per piece (including packing)	159.74 g
Weight per piece (excluding packing)	159.72 g
Customs tariff number	85366990
Country of origin	IN

TPC 16/ 7-ST-10,16 - PCB connector



1715222

<https://www.phoenixcontact.com/us/products/1715222>

Technical data

Product properties

Product type	PCB TWIN plug
Product family	TPC 16/...-ST
Product line	COMBICON Connectors XL
Type	Standard
Number of positions	7
Pitch	10.16 mm
Number of connections	14
Number of rows	1
Number of potentials	7
Mounting type	without

Electrical properties

Properties

Nominal current I_N	76 A
Nominal voltage U_N	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

Connection data

Connection technology

Type	Standard
Connector system	COMBICON PC 16
Nominal cross section	16 mm ²
Contact connection type	Socket

Interlock

Locking type	without
Mounting type	without

Conductor connection

Connection method	Screw connection with tension sleeve
Conductor/PCB connection direction	50 °
Conductor cross-section rigid	0.75 mm ² ... 16 mm ²
Conductor cross-section flexible	0.75 mm ² ... 16 mm ²
Conductor cross-section AWG	18 ... 6
Conductor cross-section flexible, with ferrule without plastic sleeve	0.5 mm ² ... 16 mm ²

TPC 16/ 7-ST-10,16 - PCB connector



1715222

<https://www.phoenixcontact.com/us/products/1715222>

Conductor cross-section, flexible, with ferrule, with plastic sleeve	0.5 mm² ... 16 mm² (Only in connection with CRIMPFOX 16 S)
2 conductors with same cross section, solid	0.75 mm² ... 6 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 ... 4 mm²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm² ... 6 mm²
Cylindrical gauge a x b / diameter	- / 6.4 mm
Stripping length	18 mm
Drive form screw head	Slotted (L)
Tightening torque	1.7 Nm ... 1.8 Nm

Material specifications

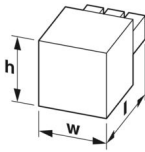
Material data - contact

Note	WEEE/RoHS-compliant, free of whiskers according to IEC 60068-2-82/JEDEC JESD 201
Contact material	Cu alloy
Surface characteristics	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

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	
Pitch	10.16 mm
Width [w]	70.96 mm
Height [h]	51.4 mm
Length [l]	54.9 mm

Notes

TPC 16/ 7-ST-10,16 - PCB connector



1715222

<https://www.phoenixcontact.com/us/products/1715222>

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

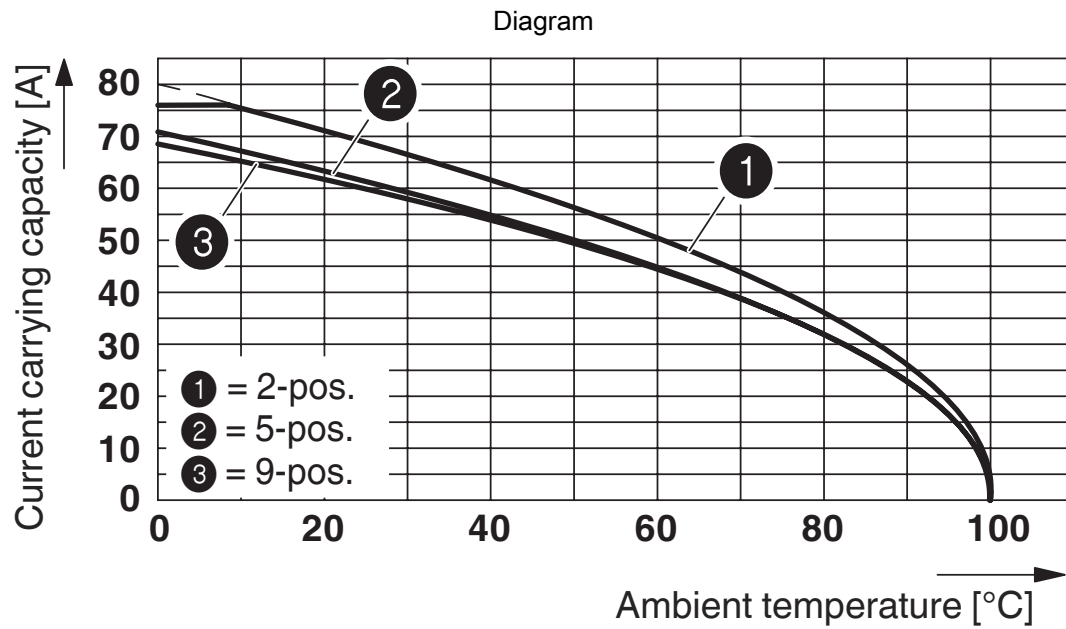
Air clearances and creepage distances |

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
-------------------	---------------------

Drawings



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

TPC 16/ 7-ST-10,16 - PCB connector



1715222

<https://www.phoenixcontact.com/us/products/1715222>

Approvals

📄 To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1715222>

 cULus Recognized Approval ID: E60425-20040202				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
B				
	600 V	60 A	20 - 4	-
C				
	600 V	60 A	20 - 4	-

TPC 16/ 7-ST-10,16 - PCB connector



1715222

<https://www.phoenixcontact.com/us/products/1715222>

Classifications

ECLASS

ECLASS-13.0	27460202
ECLASS-15.0	27460202

ETIM

ETIM 9.0	EC002638
----------	----------

UNSPSC

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

TPC 16/ 7-ST-10,16 - PCB connector



1715222

<https://www.phoenixcontact.com/us/products/1715222>

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	6(c)

China RoHS

Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

EU REACH SVHC

REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)
SCIP	f6a3d7db-bea0-4659-b4b7-a6a9e8780cb4

Phoenix Contact 2025 © - all rights reserved

<https://www.phoenixcontact.com>

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com