

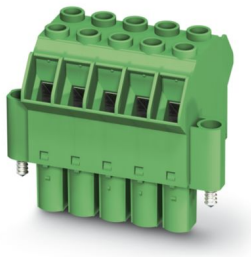
TPC 16/ 7-STF-10,16 - PCB connector



1715303

<https://www.phoenixcontact.com/us/products/1715303>

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PCB connector, nominal cross section: 16 mm², color: green, nominal current: 76 A, rated voltage (III/2): 1000 V, contact surface: Silver, contact connection type: Socket, number of potentials: 7, number of rows: 1, number of positions: 7, number of connections: 14, 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: COMBICON PC 16, locking: Screw locking mechanism, 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
- Potentials can be easily looped through – ideal for BUS applications
- Screwable flange for superior mechanical stability

Commercial data

Item number	1715303
Packing unit	20 pc
Minimum order quantity	20 pc
Sales key	AA05
Product key	AAEAAE
Catalog page	Page 557 (C-1-2013)
GTIN	4046356103398
Weight per piece (including packing)	171.94 g
Weight per piece (excluding packing)	171.94 g
Customs tariff number	85366990
Country of origin	BG

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Technical data

Product properties

Type	Standard
Product line	COMBICON Connectors XL
Product type	PCB connector
Product family	TPC 16/...STF
Number of positions	7
Pitch	10.16 mm
Number of connections	14
Number of rows	1
Mounting flange	Screw flange
Number of potentials	7

Electrical properties

Nominal current I_N	76 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	16 mm ²
Contact connection type	Socket

Interlock

Locking type	Screw locking mechanism
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	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	0.5 mm ² ... 16 mm ²

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sleeve	
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.5 mm ² ... 16 mm ² (Only in connection with CRIMPFOX 16 S)
2 conductors with same cross section, solid	0.75 mm ² ... 6 mm ²
2 conductors with same cross section, flexible	0.75 mm ² ... 6 mm ²
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	0.5 mm ² ... 4 mm ²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm ² ... 6 mm ²
Stripping length	18 mm
Tightening torque	1.7 Nm ... 1.8 Nm

Material specifications

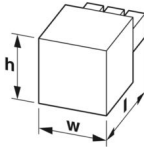
Material data - contact

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]	88.88 mm
Height [h]	54.9 mm
Length [l]	51.4 mm

Mounting

Drive form screw head	Slotted (L)
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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.
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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
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Classifications

ECLASS

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

ETIM

ETIM 9.0	EC002638
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UNSPSC

UNSPSC 21.0	39121400
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Environmental product compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

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