

1759004

https://www.phoenixcontact.com/gb/products/1759004

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 connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Sn, contact connection type: Socket, number of potentials: 10, number of rows: 1, number of positions: 10, number of connections: 10, product range: MSTB 2,5/..-ST, pitch: 5 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, conductor/PCB connection direction: 0 °, locking clip: - Locking clip, plug-in system: COMBICON MSTB 2,5, locking: without, mounting method: without, type of packaging: packed in cardboard, Pull-out aid (STZ13)

## Your advantages

- Standard plug-in system for 320 V (III/2)
- · Individual position coding by inserting coding profiles

#### Commercial data

Item number	1759004
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	AACAFC
Product key	AACAFC
Catalog page	Page 263 (C-1-2013)
GTIN	4017918030476
Weight per piece (including packing)	20.61 g
Weight per piece (excluding packing)	17.629 g
Customs tariff number	85366990
Country of origin	DE



https://www.phoenixcontact.com/gb/products/1759004



## Technical data

### Product properties

Product type	PCB connector
Product family	MSTB 2,5/ST
Product line	COMBICON Connectors M
Туре	Standard
Number of positions	10
Pitch	5 mm
Number of connections	10
Number of rows	1
Number of potentials	10
Mounting flange	without

### Electrical properties

### **Properties**

Nominal current I <sub>N</sub>	12 A
Nominal voltage U <sub>N</sub>	320 V
Rated voltage (III/3)	250 V
Rated surge voltage (III/3)	4 kV
Rated voltage (III/2)	320 V
Rated surge voltage (III/2)	4 kV
Rated voltage (II/2)	630 V
Rated surge voltage (II/2)	4 kV

### Connection data

### Connection technology

Туре	Standard
Connector system	COMBICON MSTB 2,5
Nominal cross section	2.5 mm <sup>2</sup>
Contact connection type	Socket

#### Interlock

Locking type	without
Mounting flange	without

### Conductor connection

Connection method	Screw connection with tension sleeve
Conductor/PCB connection direction	0°
Conductor cross section rigid	0.2 mm² 2.5 mm²
Conductor cross section flexible	0.2 mm² 2.5 mm²
Conductor cross section AWG	24 12
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm² 2.5 mm²



https://www.phoenixcontact.com/gb/products/1759004



Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm <sup>2</sup> 2.5 mm <sup>2</sup>
2 conductors with same cross section, solid	0.2 mm² 1 mm²
2 conductors with same cross section, flexible	0.2 mm <sup>2</sup> 1.5 mm <sup>2</sup>
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	0.25 mm² 1 mm²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm² 1.5 mm²
Cylindrical gauge a x b / diameter	2.8 mm x 2.0 mm / 2.4 mm
Stripping length	7 mm
Drive form screw head	Slotted (L)
Tightening torque	0.5 Nm 0.6 Nm
Specifications for ferrules without insulating collar	
recommended crimping tool	1212034 CRIMPFOX 6
Specifications for ferrules with insulating collar	
recommended crimping tool	1212034 CRIMPFOX 6

## 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	hot-dip tin-plated
Metal surface terminal point (top layer)	Tin (5 - 7 μm Sn)
Metal surface contact area (top layer)	Tin (5 - 7 µm Sn)

### 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	h
Pitch	5 mm



1759004

https://www.phoenixcontact.com/gb/products/1759004

Width [w]	50 mm
Height [h]	15.5 mm
Length [I]	63.9 mm

### 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.

### 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)	250 V
Rated surge voltage (III/3)	4 kV
minimum clearance value - non-homogenous field (III/3)	3 mm
minimum creepage distance (III/3)	3.2 mm
Rated insulation voltage (III/2)	320 V
Rated surge voltage (III/2)	4 kV
minimum clearance value - non-homogenous field (III/2)	3 mm
minimum creepage distance (III/2)	3 mm
Rated insulation voltage (II/2)	630 V
Rated surge voltage (II/2)	4 kV
minimum clearance value - non-homogenous field (II/2)	3 mm
minimum creepage distance (II/2)	3.2 mm

### Packaging specifications



https://www.phoenixcontact.com/gb/products/1759004



# **Approvals**

To download certificates, visit the product detail page: https://www.phoenixcontact.com/gb/products/1759004

CSA Approval ID: 13631				
	Nominal voltage $U_N$	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
Use group B				
	300 V	15 A	28 - 12	-
Use group D				
	300 V	10 A	28 - 12	-

	cULus Recognized Approval ID: E60425-19931011			
	Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
Use group B				
	250 V	12 A	30 - 12	-
Use group D				
	300 V	10 A	30 - 12	-

VDE approval of drawings Approval ID: 40004701				
	Nominal voltage $\mathbf{U}_{\mathrm{N}}$	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
	250 V	12 A	-	0.2 - 2.5



1759004

https://www.phoenixcontact.com/gb/products/1759004

# Classifications

	ECLASS-13.0	27460202		
E <sup>-</sup>	ETIM			
	ETIM 9.0	EC002638		
UNSPSC				
	UNSPSC 21.0	39121400		



1759004

https://www.phoenixcontact.com/gb/products/1759004

# Environmental product compliance

#### EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
China RoHS	
Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits
EU REACH SVHC	
REACH candidate substance (CAS No.)	No substance above 0.1 wt%

Phoenix Contact 2025 @ - all rights reserved https://www.phoenixcontact.com

PHOENIX CONTACT Ltd Halesfield 13, Telford Shropshire, TF7 4PG 01952 681700 info@phoenixcontact.co.uk