

1825526

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PCB connector, nominal cross section: 2.5 mm², color: black, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Au, contact connection type: Socket, number of potentials: 3, number of rows: 1, number of positions: 3, number of connections: 3, product range: MSTBT 2,5/..-ST, pitch: 5 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, conductor/PCB connection direction: 0 °, pin layout: Linear pinning, locking clip: Locking clip, plug-in system: COMBICON MSTB 2,5, locking: without, mounting method: without, type of packaging: packed in cardboard

## Your advantages

- · Gold-plated contacts ensure transfer quality remains stable over the long term
- · Well-known connection principle allows worldwide use
- · Low temperature rise, thanks to maximum contact force
- · Allows connection of two conductors

#### Commercial data

Item number	1825526
Packing unit	50 pc
Minimum order quantity	
, ,	50 pc
Note	Made to order (non-returnable)
Sales key	NULL
Product key	AACAFH
GTIN	4046356865074
Weight per piece (including packing)	5.38 g
Weight per piece (excluding packing)	5.022 g
Customs tariff number	85366990
Country of origin	DE



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### Technical data

## Product properties

Product type	PCB connector
Product family	MSTBT 2,5/ST
Product line	COMBICON Connectors M
Number of positions	3
Pitch	5 mm
Number of connections	3
Number of rows	1
Number of potentials	3
Mounting type	without
Pin layout	Linear pinning

### 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 mm²
Contact connection type	Socket

#### Interlock

Locking type	without
Mounting type	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



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Conductor cross-section, flexible, with ferrule, with plastic sleeve	0.25 mm² 2.5 mm²
2 conductors with same cross section, solid	0.2 mm² 1 mm²
2 conductors with same cross section, flexible	0.2 mm² 1.5 mm²
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 mm <sup>2</sup> 1.5 mm <sup>2</sup>
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	partially gold-plated
Metal surface terminal point (top layer)	Tin (4 - 8 µm Sn)
Metal surface terminal point (middle layer)	Nickel (2 - 4 µm Ni)
Metal surface contact area (top layer)	Gold (0.8 - 1.4 μm Au)
Metal surface contact area (middle layer)	Nickel (2 - 4 µm Ni)

### Material data - housing

Color (Housing)	black (9005)
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**



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Dimensional drawing	h
Pitch	5 mm
Width [w]	15 mm
Height [h]	15 mm
Length [I]	18.1 mm

### Mounting

Pin layout	Linear pinning
Processing notes	
Moisture Sensitive Level	MSL 1
Classification temperature T <sub>c</sub>	260 °C
Solder cycles in the reflow	3

#### 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
Note on connection cross section	With connected conductor 2,5 mm².
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)	1.6 mm



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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

Type of packaging	packed in cardboard



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## **Approvals**

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1825526

CSA Approval ID: 13631-258	© CSA Approval ID: 13631-2585951				
	Nominal voltage $U_N$	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>	
В					
	300 V	10 A	28 - 12	-	
D					
	300 V	10 A	28 - 12	-	

c <b>911</b> us	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>
В					
		300 V	15 A	30 - 12	-
D					
		300 V	10 A	30 - 12	-

	VDE approval of drawings Approval ID: 40004701				
		Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
keine					
		250 V	12 A	-	0.2 - 2.5



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## Classifications

### **ECLASS**

	ECLASS-13.0	27460202				
	ECLASS-15.0	27460202				
Εī	ETIM					
	ETIM 9.0	EC002638				
U	UNSPSC					
	UNSPSC 21.0	39121400				



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## Environmental product compliance

#### EU RoHS

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substances above the limits				
EU REACH SVHC				
above 0.1 wt%				
: 6				

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