

# MSTBC 2,5/24-STZFD-5,08 - PCB connector



1809491

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The figure shows an 10-position version

PCB connector, nominal cross section: 2.5 mm<sup>2</sup>, color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact connection type: Socket, number of potentials: 24, number of rows: 1, number of positions: 24, number of connections: 24, product range: MSTBC 2,5/-STZFD, pitch: 5.08 mm, connection method: Crimp connection, mounting: Direct mounting, conductor/PCB connection direction: 0 °, locking clip: - without locking clip, plug-in system: COMBICON MSTB 2,5, locking: Screw locking mechanism, mounting method: Screw flange, type of packaging: packed in cardboard, Corresponding female crimp contacts with current [A] and conductor cross-section range [mm<sup>2</sup>] data: 10A/MSTBC-MT 0,5-1,0 (3190564); 10A/MSTBC-MT 0,5-1,0 BA (3190645); 12A/MSTBC-MT 1,5-2,5 (3190551); 12A/MSTBC-MT 1,5-2,5 BA (3190658). BA = Bandkontakte

## Your advantages

- Inexpensive connection of large quantities of preassembled conductors
- Pull-out aid facilitates handling and allows the tensile force to be reduced at the contact point

## Commercial data

Item number	1809491
Packing unit	50 pc
Minimum order quantity	50 pc
Note	Made to order (non-returnable)
Sales key	AA03
Product key	AACCED
GTIN	4017918047634
Weight per piece (including packing)	12.87 g
Weight per piece (excluding packing)	12.17 g
Customs tariff number	85389099
Country of origin	PL

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## Technical data

### Product properties

Product type	PCB connector
Product family	MSTBC 2,5/...-STZFD
Product line	COMBICON Connectors M
Type	Direct mounting
Number of positions	24
Pitch	5.08 mm
Number of connections	24
Number of rows	1
Number of potentials	24
Mounting type	Screw flange

### Electrical properties

#### Properties

Nominal current $I_N$	12 A
Nominal voltage $U_N$	320 V
Rated voltage (III/3)	320 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

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

#### Interlock

Locking type	Screw locking mechanism
Mounting type	Screw flange
Tightening torque	0.3 Nm

#### Conductor connection

Connection method	Crimp connection
Conductor/PCB connection direction	0 °
Conductor cross-section flexible	0.5 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross-section AWG	20 ... 14

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1809491

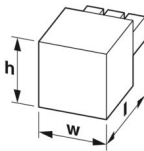
<https://www.phoenixcontact.com/us/products/1809491>

## Material specifications

### 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	5.08 mm
Width [w]	131.57 mm
Height [h]	10.7 mm
Length [l]	25 mm

## Mounting

Mounting type	Direct mounting
Tightening torque	0.3 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 (storage/transport)	-40 °C ... 70 °C
Relative humidity (storage/transport)	30 % ... 70 %
Ambient temperature (assembly)	-5 °C ... 100 °C
Ambient temperature (operation)	-40 °C ... 100 °C (dependent on the derating curve)

## Electrical tests

### Air clearances and creepage distances |

Specification	IEC 60664-1:2007-04
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1809491

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Insulating material group	I
Comparative tracking index (IEC 60112)	CTI 600
Rated insulation voltage (III/3)	320 V
Rated surge voltage (III/3)	4 kV
minimum clearance value - non-homogenous field (III/3)	3 mm
minimum creepage distance (III/3)	4 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

Type of packaging	packed in cardboard
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Drawings

Drilling plan/solder pad geometry



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## Approvals

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 <b>cULus Recognized</b> Approval ID: E60425-19930525				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
B	300 V	10 A	20 - 14	-
D	300 V	10 A	20 - 14	-

 <b>CSA</b> Approval ID: 13631				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
keine	300 V	10 A	20 - 14	-

 <b>VDE approval of drawings</b> Approval ID: 40050648				
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## Classifications

### ECLASS

ECLASS-13.0	27460202
ECLASS-15.0	27460202

### ETIM

ETIM 10.0	EC002638
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### UNSPSC

UNSPSC 21.0	39121400
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## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
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### 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%
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### EF3.1 Climate Change

CO2e kg	0.081 kg CO2e
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