

# MSTBC 2,5/23-STZFD-5,08 - PCB connector



1809488

<https://www.phoenixcontact.com/de/produkte/1809488>

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PCB connector, nominal cross section: 2.5 mm<sup>2</sup>, color: green, nominal current: 12 A, rated voltage (III/2): 320 V, type of contact: Female connector, number of potentials: 23, number of rows: 1, number of positions: 23, number of connections: 23, 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, mounting: 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 pre-assembled conductors
- Pull-out aid facilitates handling and allows the tensile force to be reduced at the contact point

## Commercial Data

Item number	1809488
Packing unit	50 pc
Minimum order quantity	50 pc
Note	Made to Order (non-returnable)
Sales Key	E1 - Leiterplattenanschl.
Product Key	AACCED
GTIN	4017918047627
Weight per Piece (including packing)	13,43 g
Weight per Piece (excluding packing)	13,43 g
Customs tariff number	85389099
Country of origin	PL

# MSTBC 2,5/23-STZFD-5,08 - PCB connector



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## Technical Data

### Product properties

Type	Direct mounting
Product line	COMBICON Connectors M
Product type	PCB plug
Product family	MSTBC 2,5/...-STZFD
Number of positions	23
Pitch	5.08 mm
Number of connections	23
Number of rows	1
Mounting flange	Screw flange
Number of potentials	23

### Electrical properties

Nominal current $I_N$	12 A
Nominal voltage $U_N$	320 V
Degree of pollution	3
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
	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>
Type of contact	Female connector

#### Interlock

Locking type	Screw locking
Mounting flange	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

### Material specifications

# MSTBC 2,5/23-STZFD-5,08 - PCB connector



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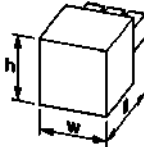
## Material data - housing

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

## Material data – actuating element

Color ()	()
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## Dimensions

Dimensional drawing	
Pitch	5.08 mm
Width [w]	126.49 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 (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 |

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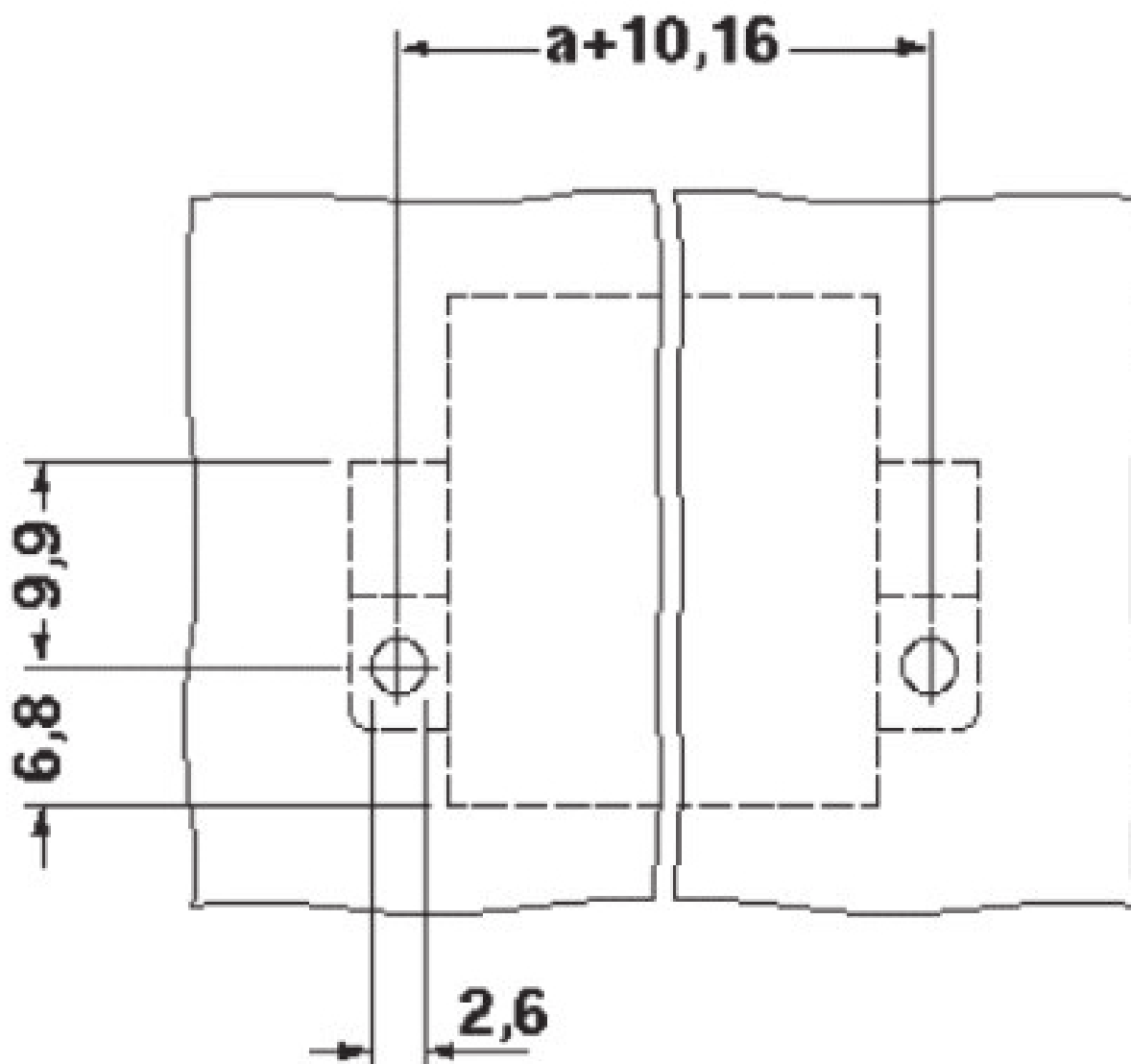
Specification	IEC 60664-1:2007-04
Insulating material group	I
Comparative tracking index (IEC 60112)	CTI 600
Rated insulation voltage (III/3)	320 V
Rated surge voltage (III/3)	4 kV
minimum clearance value - non-homogenous field (III/3)	3 mm
minimum creepage distance (III/3)	4 mm
Rated insulation voltage (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

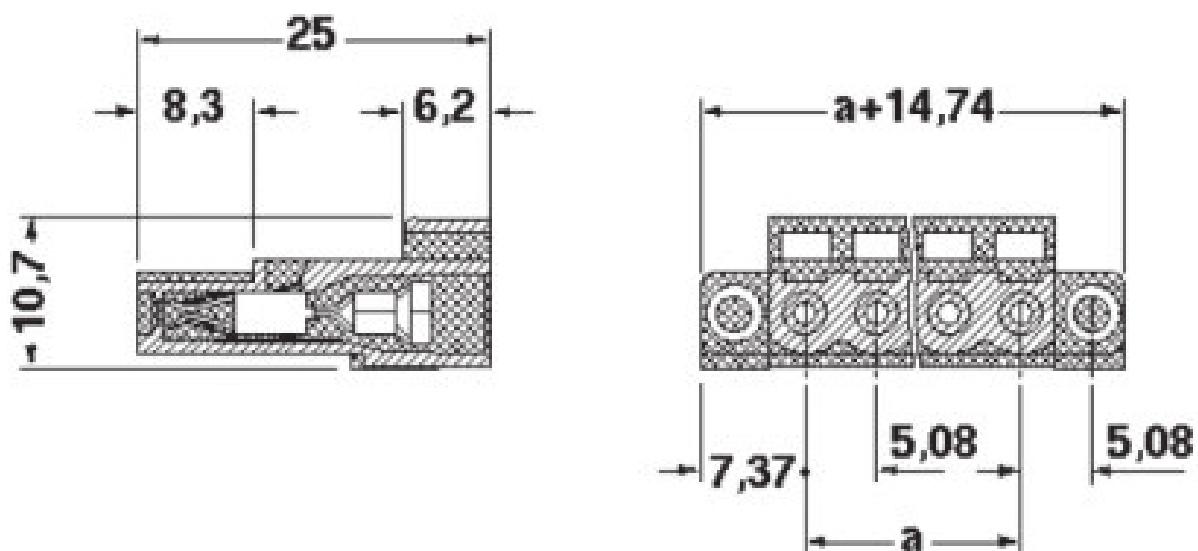
Type of packaging	packed in cardboard
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Drawings

Drilling plan/solder pad geometry



Dimensional drawing




# MSTBC 2,5/23-STZFD-5,08 - PCB connector



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## Approvals

 <b>cULus Recognized</b> Approval ID: E60425-19930525				
	Nominal Voltage $U_N$	Nominal Current $I_N$	Cross Section AWG	Cross Section $\text{mm}^2$
Use group B	300 V	10 A	20 - 14	-
Use group 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 $\text{mm}^2$
	300 V	10 A	20 - 14	-

 <b>IECEE CB Scheme</b> Approval ID: DE1-60988-B1B2				
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 <b>EAC</b> Approval ID: B.01687				
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 <b>VDE Zeichengenehmigung</b> Approval ID: 40050648				
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# MSTBC 2,5/23-STZFD-5,08 - PCB connector



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## Classifications

### ECLASS

ECLASS-9.0	27440309
ECLASS-10.0.1	27440309
ECLASS-11.0	27460202

### ETIM

ETIM 8.0	EC002638
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### UNSPSC

UNSPSC 21.0	39121400
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# MSTBC 2,5/23-STZFD-5,08 - PCB connector



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## Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

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## Accessories

### MSTBC-MT 0,5-1,0 - Crimp contact

3190564

<https://www.phoenixcontact.com/de/produkte/3190564>



Module female contact, is inserted into the plug housing MSTBC after crimping the conductor, for conductors from 0.5 to 1.0 mm<sup>2</sup>

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### MSTBC-MT 0,5-1,0 BA - Crimp contact

3190645

<https://www.phoenixcontact.com/de/produkte/3190645>



Module female contact, is inserted into the MSTBC connector shell after the conductor has been crimped, for conductors from 0.5 - 1.0 mm<sup>2</sup>, ribbon contact

# MSTBC 2,5/23-STZFD-5,08 - PCB connector

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## MSTBC-MT 1,5-2,5 - Crimp contact

3190551

<https://www.phoenixcontact.com/de/produkte/3190551>



Module female contact, is inserted into the plug housing MSTBC after crimping the conductor, for conductors from 1.5 to 2.5 mm<sup>2</sup>

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## MSTBC-MT 1,5-2,5 BA - Crimp contact

3190658

<https://www.phoenixcontact.com/de/produkte/3190658>



Module female contact, is inserted into the MSTBC connector shell after the conductor has been crimped, for conductors from 1.5 - 2.5 mm<sup>2</sup>, ribbon contact

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## CRIMPFOX MT 2,5 - Crimping pliers

1204038

<https://www.phoenixcontact.com/de/produkte/1204038>



Crimping pliers, for crimping conductors to the module female contacts STG-MTN, crimp range: 0.5-2.5 mm<sup>2</sup>, AWG: 20-14

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## SZS 0,4X2,5 VDE - Screwdriver

1205037

<https://www.phoenixcontact.com/de/produkte/1205037>



Screwdriver, slot-headed, VDE insulated, size: 0.4 x 2.5 x 80 mm, 2-component grip, with non-slip grip

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## STZ 2-MSTBC-5,08 - Strain relief

1810529

<https://www.phoenixcontact.com/de/produkte/1810529>



Strain relief for snapping into the latching chambers of the plug components, 2-pos., labeling with ZB 6

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## STZ 4-MSTBC-5,08 - Strain relief

1810532

<https://www.phoenixcontact.com/de/produkte/1810532>



Strain relief for snapping into the latching chambers of the plug components, 4-pos., labeling with ZB 6

# MSTBC 2,5/23-STZFD-5,08 - PCB connector

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<https://www.phoenixcontact.com/de/produkte/1809488>

## STZ 8-MSTBC-5,08 - Strain relief

1810516

<https://www.phoenixcontact.com/de/produkte/1810516>



Strain relief for snapping into the latching chambers of the plug components, 8-pos., labeling with ZB 6

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## STZ 12-MSTBC-5,08 - Strain relief

1810503

<https://www.phoenixcontact.com/de/produkte/1810503>



Strain relief for snapping into the latching chambers of the plug components, 12-pos., labeling with ZB 6

# MSTBC 2,5/23-STZFD-5,08 - PCB connector

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<https://www.phoenixcontact.com/de/produkte/1809488>

## SK 5,08/3,8:FORTL.ZAHLEN - Marker card

0804293

<https://www.phoenixcontact.com/de/produkte/0804293>



Marker card, white, labeled, horizontal: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 91 ... (99)100, mounting type: adhesive, for terminal block width: 5.08 mm, lettering field size: 5.08 x 3.8 mm

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## CP-MSTB - Coding profile

1734634

<https://www.phoenixcontact.com/de/produkte/1734634>



Coding profile, is inserted into the slot on the plug or inverted header, red insulating material

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<https://www.phoenixcontact.com/de/produkte/1809488>

## MSTBC-MT 0,2-0,5 - Crimp contact

1879531

<https://www.phoenixcontact.com/de/produkte/1879531>



Module socket contact, is inserted into the plug housing MSTBC after crimping the conductor, for conductors from 0.2 to 0.5 mm<sup>2</sup>

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## MSTBC-MT 0,2-0,5 BAND - Crimp contact

1879544

<https://www.phoenixcontact.com/de/produkte/1879544>



Module socket contact, is inserted into the plug housing MSTBC after crimping the conductor, for conductors from 0.2 to 0.5 mm<sup>2</sup>

# MSTBC 2,5/23-STZFD-5,08 - PCB connector



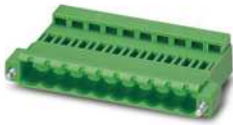
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## ICC 2,5/23-STZF-5,08 - PCB connector

1823590

<https://www.phoenixcontact.com/de/produkte/1823590>



PCB connector, nominal cross section: 2.5 mm<sup>2</sup>, color: green, nominal current: 12 A, rated voltage (III/2): 320 V, type of contact: Male connector, number of potentials: 23, number of rows: 1, number of positions: 23, number of connections: 23, product range: ICC 2,5/...-STZF, pitch: 5.08 mm, connection method: Crimp connection, conductor/PCB connection direction: 0 °, locking clip: - without locking clip, plug-in system: COMBICON MSTB 2,5, locking: Screw locking, mounting: Screw flange, type of packaging: packed in cardboard, Corresponding male crimp contacts with current [A] and conductor cross section range [mm<sup>2</sup>] data: 10A/ICC-MT 0,5-1,0 (3190577); 10A/ICC-MT 0,5-1,0 BA (3190603); 12A/ICC-MT 1,5-2,5 (3190580); 12A/ICC-MT 1,5-2,5 BA (3190593). BA = Bandkontakte

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