

# Printed-circuit board connector - MSTBC 2,5/16-STZF-5,08 - 1809873

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PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm<sup>2</sup>, number of positions: 16, pitch: 5.08 mm, connection method: Crimp connection, color: green, 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



The figure shows an 10-position version

## 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
- Screwable flange for superior mechanical stability



## Key Commercial Data

Packing unit	50 pc
GTIN	
GTIN	4017918048013

## Technical data

### Item properties

Brief article description	Printed-circuit board connector
Plug-in system	CLASSIC COMBICON
Type of contact	Female connector
Range of articles	MSTBC 2,5/..-STZF
Pitch	5.08 mm
Number of positions	16
Connection method	Crimp connection
Drive form screw head	Slotted (L)
Locking	Screw flange
Number of levels	1
Number of connections	16
Number of potentials	16

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## Technical data

### Electrical parameters

Nominal current	12 A
Nom. voltage	320 V
Rated voltage	320 V
Rated voltage (III/2)	320 V
Rated voltage (II/2)	630 V
Rated surge voltage (III/3)	4 kV
Rated surge voltage (III/2)	4 kV
Rated surge voltage (II/2)	4 kV

### Connection capacity

Connection method	Crimp connection
pluggable	Yes
Conductor cross section flexible	0.5 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section AWG / kcmil	20 ... 14

### Flange specifications

Type of locking	Screw locking
Mounting flange	Screw flange

### 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 (Sn)
Metal surface contact area (top layer)	Tin (Sn)

### Material data - housing

Housing color	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 for the product

Length [ l ]	25 mm
Width [ w ]	91.26 mm
Height [ h ]	10.5 mm
Pitch	5.08 mm
Height (without solder pin)	10.5 mm
Dimension a	76.2 mm

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## Technical data

### Packaging information

Type of packaging	packed in cardboard
Pieces per package	50
Denomination packing units	Pcs.

### General product information

Note	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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### Ambient conditions

Ambient temperature (storage/transport)	-40 °C ... 70 °C
Ambient temperature (assembly)	-5 °C ... 100 °C
Ambient temperature (operation)	-40 °C ... 100 °C (dependent on the derating curve)

### Air clearances and creepage distances

Clearances and creepage distances	IEC 60664-1:2007-04
Specification	IEC 60664-1:2007-04
Minimum clearance - inhomogeneous field (III/3)	3 mm
Minimum clearance - inhomogeneous field (III/2)	3 mm
Minimum clearance - inhomogeneous field (II/2)	3 mm
Minimum creepage distance value (III/3)	4 mm
Minimum creepage distance value (III/2)	3 mm
Minimum creepage distance value (II/2)	3.2 mm

### Current carrying capacity / derating curves

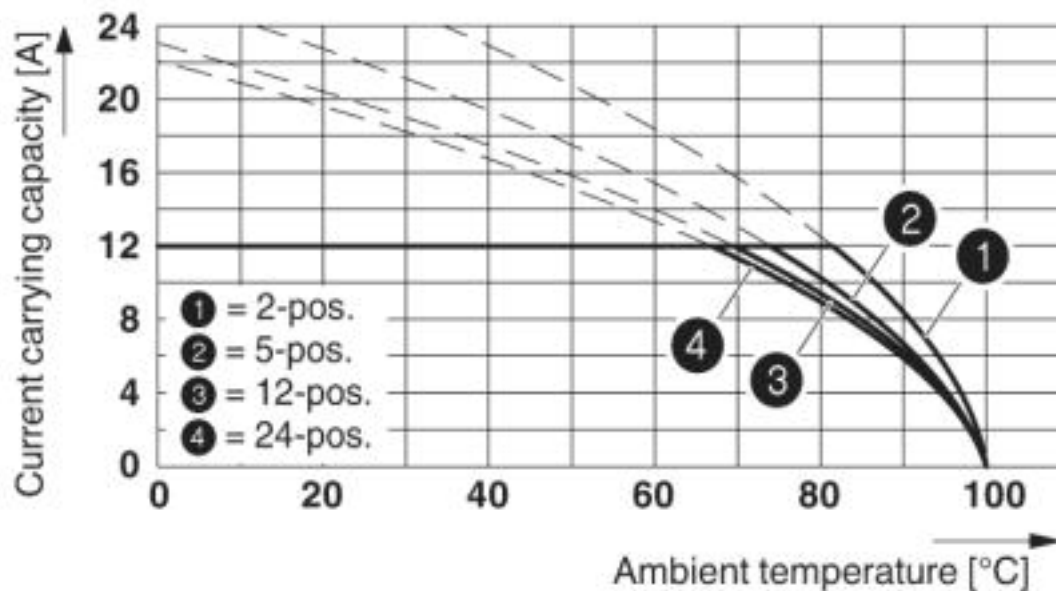
### Environmental Product Compliance

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

## Drawings

## Printed-circuit board connector - MSTBC 2,5/16-STZF-5,08 - 1809873

Diagram



Type: MSTBC 2,5/...-ST-5,08 with MSTBA 2,5/...-G-5,08; contact: MSTBC-MT 1,5 - 2,5

### Classifications

eCl@ss

eCl@ss 4.0	27260700
eCl@ss 4.1	27260700
eCl@ss 5.0	27260700
eCl@ss 5.1	27260700
eCl@ss 6.0	27260700
eCl@ss 7.0	27440309
eCl@ss 8.0	27440309
eCl@ss 9.0	27440309

### ETIM

ETIM 3.0	EC001121
ETIM 4.0	EC002638
ETIM 5.0	EC002638
ETIM 6.0	EC002638
ETIM 7.0	EC002638

### UNSPSC

UNSPSC 6.01	30211810
UNSPSC 7.0901	39121409
UNSPSC 11	39121409
UNSPSC 12.01	39121409

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## Classifications

### UNSPSC

UNSPSC 13.2	39121409
UNSPSC 18.0	39121409
UNSPSC 19.0	39121409
UNSPSC 20.0	39121409
UNSPSC 21.0	39121409

## Approvals

### Approvals

#### Approvals

CSA / UL Recognized / cUL Recognized / IECCEB Scheme / EAC / VDE Zeichengenehmigung / cULus Recognized

#### Ex Approvals

### Approval details

CSA		<a href="http://www.csagroup.org/services-industries/product-listing/">http://www.csagroup.org/services-industries/product-listing/</a>	13631
Nominal voltage UN		300 V	
Nominal current IN		10 A	
mm <sup>2</sup> /AWG/kcmil		20-14	

UL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 60425
	B	D	
Nominal voltage UN	250 V	300 V	
Nominal current IN	10 A	10 A	
mm <sup>2</sup> /AWG/kcmil	20-14	20-14	

cUL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 60425
	B	D	
Nominal voltage UN	250 V	300 V	
Nominal current IN	10 A	10 A	
mm <sup>2</sup> /AWG/kcmil	20-14	20-14	

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## Approvals

IECEE CB Scheme		<a href="http://www.iecee.org/">http://www.iecee.org/</a>	DE1-60988-B1B2
Nominal voltage UN	250 V		
Nominal current IN	10 A		
mm <sup>2</sup> /AWG/kcmil	0.5-1		

EAC			B.01687
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VDE Zeichengenehmigung		<a href="http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx">http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx</a>	40050648
Nominal voltage UN	250 V		
Nominal current IN	10 A		
mm <sup>2</sup> /AWG/kcmil	0.5-1		

cULus Recognized			
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## Accessories

Accessories

Coding element

Coding profile - CP-MSTB - 1734634

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



Crimp contact

## Printed-circuit board connector - MSTBC 2,5/16-STZF-5,08 - 1809873

### Accessories

#### Accessories - MSTBC-MT 0,5-1,0 - 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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#### Accessories - MSTBC-MT 0,5-1,0 BA - 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

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#### Accessories - MSTBC-MT 1,5-2,5 - 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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#### Female insert - MSTBC-MT 1,5-2,5 BA - 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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#### Accessories - MSTBC-MT 0,2-0,5 - 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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## Printed-circuit board connector - MSTBC 2,5/16-STZF-5,08 - 1809873

### Accessories

Accessories - MSTBC-MT 0,2-0,5 BAND - 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>

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### Crimping tool

Crimping pliers - CRIMPFOX MT 2,5 - 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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### Labeled terminal marker

Marker card - SK 5,08/3,8:FORTL.ZAHLEN - 0804293



Marker card, 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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### Screwdriver tools

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

Strain relief - STZ 2-MSTBC-5,08 - 1810529



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

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## Printed-circuit board connector - MSTBC 2,5/16-STZF-5,08 - 1809873

### Accessories

Strain relief - STZ 4-MSTBC-5,08 - 1810532



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

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Strain relief - STZ 8-MSTBC-5,08 - 1810516



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

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Strain relief - STZ 12-MSTBC-5,08 - 1810503



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

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### Additional products

Feed-through header - MSTB 2,5/16-GF-5,08 - 1776647

PCB headers, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm<sup>2</sup>, number of positions: 16, pitch: 5.08 mm, color: green, contact surface: Tin, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.5 mm



Printed-circuit board connector - MSTBV 2,5/16-GF-5,08 - 1777219

PCB headers, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm<sup>2</sup>, number of positions: 16, pitch: 5.08 mm, color: green, contact surface: Tin, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.9 mm



## Printed-circuit board connector - MSTBC 2,5/16-STZF-5,08 - 1809873

### Accessories

Printed-circuit board connector - DFK-MSTBA 2,5/16-GF-5,08 - 1899126



Feed-through header, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm<sup>2</sup>, number of positions: 16, pitch: 5.08 mm, color: green, contact surface: Tin, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.2 mm

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Printed-circuit board connector - DFK-MSTBVA 2,5/16-GF-5,08 - 1899427



Feed-through header, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm<sup>2</sup>, number of positions: 16, pitch: 5.08 mm, color: green, contact surface: Tin, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.9 mm

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