MSTBC 2,5/ 2-STZ-5,08 - PCB connector

1809501

https://www.phoenixcontact.com/us/products/1809501

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PCB connector, nominal cross section: 2.5 mm^2, color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact connection type: Socket, number of potentials: 2, number of rows: 1, number of positions: 2, number of connections: 2, product range: MSTBC 2,5/..-STZ, pitch: 5.08 mm, connection method: Crimp connection, conductor/PCB connection direction: 0 °, locking clip: - Locking clip, plug-in system: COMBICON MSTB 2,5, locking: without, mounting: without, type of packaging: packed in cardboard, Corresponding female crimp contacts with current [A] and conductor cross section range [mm^2] 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	1809501
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	AA03
Product key	AACCEB
Catalog page	Page 295 (C-1-2013)
GTIN	4017918047641
Weight per piece (including packing)	1.315 g
Weight per piece (excluding packing)	1.315 g
Customs tariff number	85389099
Country of origin	PL

Technical data

Product properties

Product type	PCB connector
Product family	MSTBC 2,5/..-STZ
Product line	COMBICON Connectors M
Type	Standard
Number of positions	2
Pitch	5.08 mm
Number of connections	2
Number of rows	1
Number of potentials	2
Mounting flange	without

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
Rated voltage (II/2)	630 V
Rated surge voltage (II/2)	4 kV

Connection data

Connection technology

Type	Standard
Connector system	COMBICON MSTB 2,5
Nominal cross section	2.5 mm²
Contact connection type	Socket

Interlock

Locking type	without
Mounting flange	without

Conductor connection

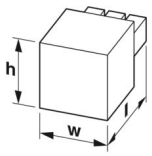
Connection method	Crimp connection
Conductor/PCB connection direction	0 °
Conductor cross section flexible	0.5 mm² ... 2.5 mm²
Conductor cross section AWG	20 ... 14

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]	10.12 mm
Height [h]	10.5 mm
Length [l]	25 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)	320 V
Rated surge voltage (III/3)	4 kV
minimum clearance value - non-homogenous field (III/3)	3 mm

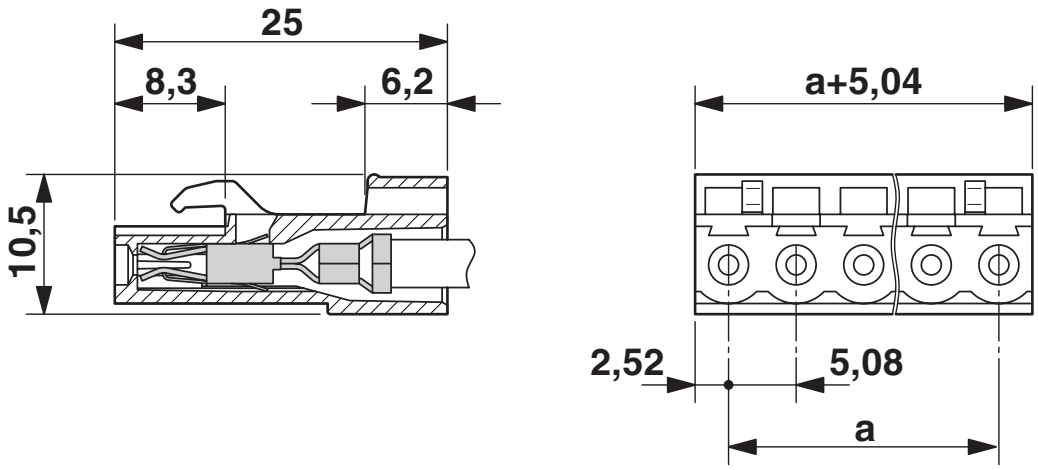
minimum creepage distance (III/3)	4 mm
Rated insulation voltage (III/2)	320 V
Rated surge voltage (III/2)	4 kV
minimum clearance value - non-homogenous field (III/2)	3 mm
minimum creepage distance (III/2)	3 mm
Rated insulation voltage (II/2)	630 V
Rated surge voltage (II/2)	4 kV
minimum clearance value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

Packaging specifications

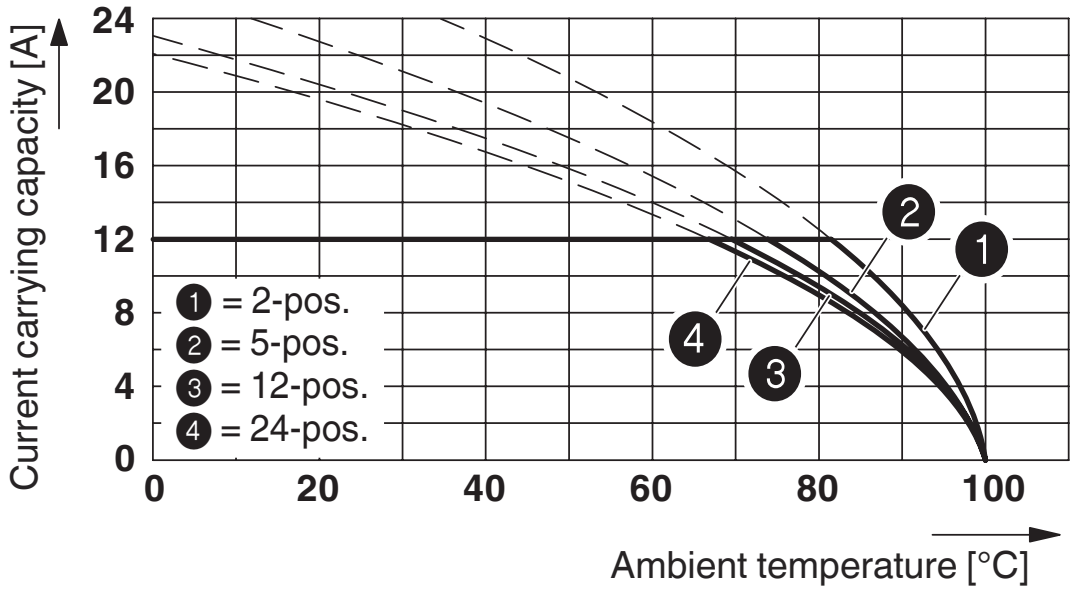
Type of packaging	packed in cardboard

Drawings

Dimensional drawing



Diagram



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

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1809501

cULus Recognized
Approval ID: E60425-19930525

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B				
	300 V	10 A	20 - 14	-
Use group D				
	300 V	10 A	20 - 14	-

CSA
Approval ID: 13631

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	300 V	10 A	20 - 14	-

VDE Zeichengenehmigung
Approval ID: 40050648

Classifications

ECLASS

ECLASS-11.0	27460202
ECLASS-12.0	27460202
ECLASS-13.0	27460202

ETIM

ETIM 9.0	EC002638

UNSPSC

UNSPSC 21.0	39121400

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%

Accessories

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

3190564

https://www.phoenixcontact.com/us/products/3190564



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

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

3190645

https://www.phoenixcontact.com/us/products/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^2, ribbon contact

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

3190551

https://www.phoenixcontact.com/us/products/3190551



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

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

3190658

https://www.phoenixcontact.com/us/products/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^2, ribbon contact

CRIMPFOX MT 2,5 - Crimping pliers

1204038

https://www.phoenixcontact.com/us/products/1204038



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

SZS 0,4X2,5 VDE - Screwdriver

1205037

https://www.phoenixcontact.com/us/products/1205037



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

STZ 2-MSTBC-5,08 - Strain relief

1810529

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

STZ 4-MSTBC-5,08 - Strain relief

1810532

https://www.phoenixcontact.com/us/products/1810532



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

STZ 8-MSTBC-5,08 - Strain relief

1810516

https://www.phoenixcontact.com/us/products/1810516



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

STZ 12-MSTBC-5,08 - Strain relief

1810503

https://www.phoenixcontact.com/us/products/1810503

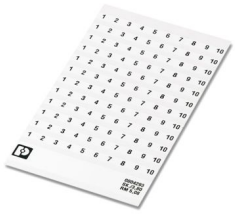


Strain relief for snapping into the latching chambers of the plug components, 12-pos., labeling with ZB 6

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

0804293

https://www.phoenixcontact.com/us/products/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

CP-MSTB - Coding profile

1734634

https://www.phoenixcontact.com/us/products/1734634

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



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

1879531

https://www.phoenixcontact.com/us/products/1879531



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

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

1879544

https://www.phoenixcontact.com/us/products/1879544

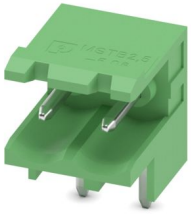


Module socket contact, is inserted into the plug housing MSTBC after crimping the conductor, for conductors from 0.2 to 0.5 mm^2

MSTBW 2,5/ 2-G-5,08 - PCB header

1735882

https://www.phoenixcontact.com/us/products/1735882

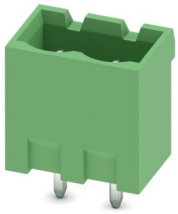


PCB headers, nominal cross section: 2.5 mm^2, color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, contact connection type: Pin, number of potentials: 2, number of rows: 1, number of positions: 2, number of connections: 2, product range: MSTBW 2,5/..-G, pitch: 5.08 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.5 mm, number of solder pins per potential: 1, plug-in system: COMBICON MSTB 2,5, Pin connector pattern alignment: Standard, locking: without, mounting: without, type of packaging: packed in cardboard

MSTBVA 2,5/ 2-G-5,08 - PCB header

1755736

https://www.phoenixcontact.com/us/products/1755736

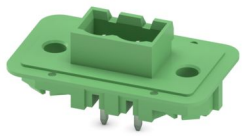


PCB headers, nominal cross section: 2.5 mm^2, color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, contact connection type: Pin, number of potentials: 2, number of rows: 1, number of positions: 2, number of connections: 2, product range: MSTBVA 2,5/..-G, pitch: 5.08 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.9 mm, number of solder pins per potential: 1, plug-in system: COMBICON MSTB 2,5, Pin connector pattern alignment: Standard, locking: without, mounting: without, type of packaging: packed in cardboard

DFK-MSTBVA 2,5/ 2-G-5,08 - Feed-through header

1899139

https://www.phoenixcontact.com/us/products/1899139



Feed-through header, nominal cross section: 2.5 mm^2, color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, contact connection type: Pin, number of potentials: 2, number of rows: 1, number of positions: 2, number of connections: 2, product range: DFK-MSTBVA 2,5/..-G, pitch: 5.08 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.9 mm, number of solder pins per potential: 1, plug-in system: COMBICON MSTB 2,5, Pin connector pattern alignment: Standard, locking: without, mounting: without, type of packaging: packed in cardboard

CCA 2,5/ 2-G-5,08 P26THR - PCB header

1954919

https://www.phoenixcontact.com/us/products/1954919



PCB headers, nominal cross section: 2.5 mm^2, color: black, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, contact connection type: Pin, number of potentials: 2, number of rows: 1, number of positions: 2, number of connections: 2, product range: CCA 2,5/..-G, pitch: 5.08 mm, connection method: Plug-in connection, mounting: THR soldering, pin layout: Linear pinning, solder pin [P]: 2.6 mm, number of solder pins per potential: 1, plug-in system: COMBICON MSTB 2,5, Pin connector pattern alignment: Standard, locking: without, mounting: without, type of packaging: packed in cardboard, For user information and design recommendations for through-hole reflow technology, go to: Downloads

MSTBC 2,5/ 2-STZ-5,08 - PCB connector

1809501

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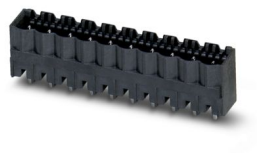
CCVA 2,5/ 2-G-5,08 P26THRR32 - PCB header

1955963

https://www.phoenixcontact.com/us/products/1955963



PCB headers, nominal cross section: 2.5 mm^2, color: black, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, contact connection type: Pin, number of potentials: 2, number of rows: 1, number of positions: 2, number of connections: 2, product range: CCVA 2,5/..-G, pitch: 5.08 mm, mounting: THR soldering, pin layout: Linear pinning, solder pin [P]: 2.6 mm, number of solder pins per potential: 1, plug-in system: COMBICON MSTB 2,5, Pin connector pattern alignment: Standard, locking: without, mounting: without, type of packaging: 32 mm wide tape, For user information and design recommendations for through-hole reflow technology, go to: Downloads

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