1808829

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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, contact connection type: Socket, number of potentials: 3, number of rows: 1, number of positions: 3, number of connections: 3, product range: MSTBC 2,5/..-ST, 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<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

### Commercial data

Item number	1808829
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	AA03
Product key	AACCEA
Catalog page	Page 294 (C-1-2013)
GTIN	4017918047177
Weight per piece (including packing)	1.709 g
Weight per piece (excluding packing)	1.679 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/ST
Product line	COMBICON Connectors M
Туре	Standard
Number of positions	3
Pitch	5.08 mm
Number of connections	3
Number of rows	1
Number of potentials	3
Mounting flange	without

### **Electrical properties**

Nominal current I <sub>N</sub>	12 A
Nominal voltage U <sub>N</sub>	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	
Туре	Standard
Connector system	COMBICON MSTB 2,5
Nominal cross section	2.5 mm <sup>2</sup>
Contact connection type	Socket
Interlock	
Locking type	without
Mounting flange	without
Conductor connection	
Connection method	Crimp 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





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#### Material data - housing

Color (Housing)	green (6021)
Insulating material	PA
Insulating material group	Ι
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	h I
Pitch	5.08 mm
Width [w]	15.2 mm
Height [h]	10 mm
Length [I]	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	1
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



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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

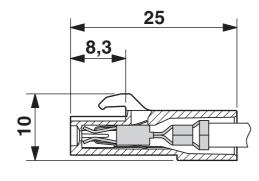
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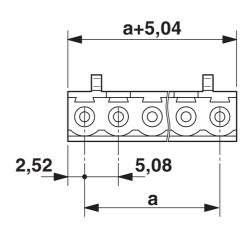
https://www.phoenixcontact.com/us/products/1808829

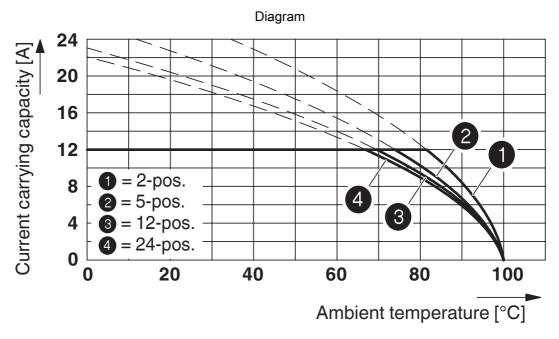


## Drawings

**Dimensional drawing** 







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



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## Approvals

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CULus Recognized Approval ID: E60425-19930525				
	Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
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 <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
	300 V	10 A	20 - 14	-



VDE Zeichengenehmigung Approval ID: 40050648



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## Classifications

### ECLASS

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

### ETIM

	ETIM 9.0	EC002638			
UN	UNSPSC				
	UNSPSC 21.0	39121400			

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# 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%

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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  $\rm mm^2$ 

### 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  $0.5 - 1.0 \text{ mm}^2$ , ribbon contact

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### 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  $\rm mm^2$ 

### 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  $1.5 - 2.5 \text{ mm}^2$ , ribbon contact

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### 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  $\rm mm^2,\,AWG:$  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

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### 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:  $5.08 \times 3.8$  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



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### 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  $\rm mm^2$ 

### 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  $\rm mm^2$ 

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#### MSTBW 2,5/ 3-G-5,08 - PCB header

1735879

https://www.phoenixcontact.com/us/products/1735879



PCB headers, nominal cross section: 2.5 mm<sup>2</sup>, color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, contact connection type: Pin, number of potentials: 3, number of rows: 1, number of positions: 3, number of connections: 3, 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

### MDSTBV 2,5/ 3-G1-5,08 - PCB header

1736742 https://www.phoenixcontact.com/us/products/1736742



PCB headers, nominal cross section: 2.5 mm<sup>2</sup>, color: green, nominal current: 10 A, rated voltage (III/2): 320 V, contact surface: Tin, contact connection type: Pin, number of potentials: 6, number of rows: 2, number of positions: 3, number of connections: 6, product range: MDSTBV 2,5/..-G1, 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, In combination with MVSTB or FKCV plug components, both an MVSTBW (or FKCVW) and an MVSTBR plug (or FKCVR) must be used. Combination with TMSTBP plug components is not possible!

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#### MSTBO 2,5/ 3-GL-5,08 - PCB header

1850440

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PCB headers, nominal cross section: 2.5 mm<sup>2</sup>, color: green, nominal current: 8 A, rated voltage (III/2): 320 V, contact surface: Tin, contact connection type: Pin, number of potentials: 3, number of rows: 1, number of positions: 3, number of connections: 3, product range: MSTBO 2,5/..-GL, pitch: 5.08 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.2 mm, number of solder pins per potential: 1, plug-in system: COMBICON MSTB 2,5, locking: without, mounting: without, type of packaging: packed in cardboard

### MDSTBA 2,5/ 3-GR-5,08 - PCB header

1874727 https://www.phoenixcontact.com/us/products/1874727



PCB headers, nominal cross section: 2.5 mm<sup>2</sup>, color: green, nominal current: 10 A, rated voltage (III/2): 320 V, contact surface: Tin, contact connection type: Pin, number of potentials: 6, number of rows: 2, number of positions: 3, number of connections: 6, product range: MDSTBA 2,5/..-G, pitch: 5.08 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.23 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, The article can be aligned to create different nos. of positions! In combination with MVSTB or FKCV plug components, both an MVSTBW (or FKCVW) and an MVSTBR plug (or FKCVR) must be used. Combination with TMSTBP plug components is not possible!

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#### MDSTBVA 2,5/ 3-GL-5,08 - PCB header

#### 1874756

https://www.phoenixcontact.com/us/products/1874756



PCB headers, nominal cross section: 2.5 mm<sup>2</sup>, color: green, nominal current: 10 A, rated voltage (III/2): 320 V, contact surface: Tin, contact connection type: Pin, number of potentials: 6, number of rows: 2, number of positions: 3, number of connections: 6, product range: MDSTBVA 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, The article can be aligned to create different nos. of positions! In combination with MVSTB or FKCV plug components, both an MVSTBW (or FKCVW) and an MVSTBR plug (or FKCVR) must be used. Combination with TMSTBP plug components is not possible!

### MDSTBVA 2,5/ 3-GR-5,08 - PCB header

#### 1874769

https://www.phoenixcontact.com/us/products/1874769



PCB headers, nominal cross section: 2.5 mm<sup>2</sup>, color: green, nominal current: 10 A, rated voltage (III/2): 320 V, contact surface: Tin, contact connection type: Pin, number of potentials: 6, number of rows: 2, number of positions: 3, number of connections: 6, product range: MDSTBVA 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, The article can be aligned to create different nos. of positions! In combination with MVSTB or FKCV plug components, both an MVSTBW (or FKCVW) and an MVSTBR plug (or FKCVR) must be used. Combination with TMSTBP plug components is not possible!

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### DFK-MSTBVA 2,5/ 3-G-5,08 - Feed-through header

#### 1899142

https://www.phoenixcontact.com/us/products/1899142



Feed-through header, nominal cross section: 2.5 mm<sup>2</sup>, color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, contact connection type: Pin, number of potentials: 3, number of rows: 1, number of positions: 3, number of connections: 3, 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

### CC 2,5/ 3-G-5,08 P26THR - PCB header

1954391 https://www.phoenixcontact.com/us/products/1954391



PCB headers, nominal cross section: 2.5 mm<sup>2</sup>, color: black, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, contact connection type: Pin, number of potentials: 3, number of rows: 1, number of positions: 3, number of connections: 3, product range: CC 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: packed in cardboard, For user information and design recommendations for through-hole reflow technology, go to: Downloads

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#### CC 2,5/ 3-G-5,08 P26THRR32 - PCB header

1954595

https://www.phoenixcontact.com/us/products/1954595



PCB headers, nominal cross section: 2.5 mm<sup>2</sup>, color: black, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, contact connection type: Pin, number of potentials: 3, number of rows: 1, number of positions: 3, number of connections: 3, product range: CC 2,5/..-G, pitch: 5.08 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

### CCA 2,5/ 3-G-5,08 P26THR - PCB header

1954922 https://www.phoenixcontact.com/us/products/1954922



PCB headers, nominal cross section: 2.5 mm<sup>2</sup>, color: black, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, contact connection type: Pin, number of potentials: 3, number of rows: 1, number of positions: 3, number of connections: 3, 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

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#### CCA 2,5/ 3-G-5,08 P26THRR32 - PCB header

1955044

https://www.phoenixcontact.com/us/products/1955044



PCB headers, nominal cross section: 2.5 mm<sup>2</sup>, color: black, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, contact connection type: Pin, number of potentials: 3, number of rows: 1, number of positions: 3, number of connections: 3, 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: 32 mm wide tape, For user information and design recommendations for through-hole reflow technology, go to: Downloads

### CCV 2,5/ 3-G-5,08 P26THR - PCB header

1955390 https://www.phoenixcontact.com/us/products/1955390



PCB headers, nominal cross section: 2.5 mm<sup>2</sup>, color: black, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, contact connection type: Pin, number of potentials: 3, number of rows: 1, number of positions: 3, number of connections: 3, product range: CCV 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: packed in cardboard, For user information and design recommendations for through-hole reflow technology, go to: Downloads

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#### CCV 2,5/ 3-G-5,08 P26THRR32 - PCB header

1955536

https://www.phoenixcontact.com/us/products/1955536



PCB headers, nominal cross section: 2.5 mm<sup>2</sup>, color: black, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, contact connection type: Pin, number of potentials: 3, number of rows: 1, number of positions: 3, number of connections: 3, product range: CCV 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

#### CCVA 2,5/ 3-G-5,08 P26THR - PCB header

1955866 https://www.phoenixcontact.com/us/products/1955866



PCB headers, nominal cross section: 2.5 mm<sup>2</sup>, color: black, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, contact connection type: Pin, number of potentials: 3, number of rows: 1, number of positions: 3, number of connections: 3, 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: packed in cardboard, For user information and design recommendations for through-hole reflow technology, go to: Downloads

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