

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (http://phoenixcontact.com/download)



The figure shows a 10-position version of the product

Feed-through header, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Male connector, Number of potentials: 2, Number of rows: 1, Number of positions per row: 2, number of connections: 2, product range: DFK-MSTB 2,5/..-G, pitch: 5.08 mm, connection method: Solder/Slip-on connection, mounting: Direct mounting, pin layout: Linear pinning, solder pin [P]: 9.3 mm, plug-in system: CLASSIC COMBICON, Locking: without, type of packaging: packed in cardboard, accessory order no. 5030172 can only be used in conjunction with MSTB 2,5/...ST-5,08 and MSTBT 2,5/...ST-5,08.

#### Your advantages

- ☑ Cable connection on the inside of the device enables flexible positioning of the panel feed-through
- Free choice permanent solder connection or standardized slip-on connection
- Maximum flexibility when it comes to device design one header for connectors with different connection technologies











## **Key Commercial Data**

Packing unit	1 pc
Minimum order quantity	50 pc
GTIN	4 017918 004019
GTIN	4017918004019
Weight per Piece (excluding packing)	3.540 g
Custom tariff number	85366930
Country of origin	Germany

#### Technical data

#### Item properties

Brief article description	Feed-through header
Plug-in system	CLASSIC COMBICON
Type of contact	Male connector
Range of articles	DFK-MSTB 2,5/G



## Technical data

## Item properties

Pitch	5.08 mm
Number of positions	2
Mounting type	Direct mounting
Pin layout	Linear pinning
Locking	without
Number of levels	1
Number of connections	2
Number of potentials	2
Pin connector pattern alignment	Standard

### Electrical parameters

Nominal current	12 A
Nom. voltage	320 V
Max. current slip-on connection	7.5 A
Rated voltage (III/3)	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

### 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	Tin-plated
Metal surface contact area (top layer)	Tin (5 - 7 μm Sn)
Metal surface contact area (middle layer)	Nickel (2 - 3 µm Ni)
Metal surface soldering area (top layer)	Tin (5 - 7 μm Sn)
Metal surface soldering area (middle layer)	Nickel (2 - 3 µm Ni)

### 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	V2

### Dimensions for the product



## Technical data

## Dimensions for the product

Caption	Schematische Abbildung - weitere Details siehe Produktfamilienzeichnung im Download Center
Length [1]	17.5 mm
Width [w]	30.48 mm
Height [ h ]	29.5 mm
Pitch	5.08 mm
Height (without solder pin)	20.2 mm
Solder pin [P]	9.3 mm
Dimensions of slip-on connection	2,8 x 0,8 mm

## Dimensions for PCB design

Hole diameter	3.2 mm

### Packaging information

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

### General product information

Type of note	Notes on operation
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.

#### 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

## Standards and Regulations

Connection in acc. with standard	EN-VDE
	CSA



## Technical data

## Standards and Regulations

Flammability rating according to UL 94	V2

## **Environmental Product Compliance**

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

## Classifications

## eCl@ss

eCl@ss 10.0.1	27440402
eCl@ss 11.0	27460201
eCl@ss 4.0	27260700
eCl@ss 4.1	27260700
eCl@ss 5.0	27141100
eCl@ss 5.1	27141100
eCl@ss 6.0	27141100
eCl@ss 7.0	27141134
eCl@ss 9.0	27440402

#### **ETIM**

ETIM 3.0	EC001283
ETIM 4.0	EC001283
ETIM 6.0	EC002637
ETIM 7.0	EC002637

### UNSPSC

UNSPSC 6.01	30211810
UNSPSC 7.0901	39121409
UNSPSC 11	39121409
UNSPSC 12.01	39121409
UNSPSC 13.2	39121410
UNSPSC 18.0	39121409
UNSPSC 19.0	39121409
UNSPSC 20.0	39121409
UNSPSC 21.0	39121409

## Approvals

## Approvals



## Approvals

Approvals

VDE Zeichengenehmigung / CSA / IECEE CB Scheme / EAC / cULus Recognized

Ex Approvals

### Approval details

VDE Zeichengenehmigung	Ď <sup>V</sup> E	http://www2.vde.com/de/Institut/Online-Service/ VDE-gepruefteProdukte/Seiten/Online-Suche.aspx		40050648
Nominal voltage UN			250 V	
Nominal current IN			12 A	

CSA <b>SP</b>	http://www.csagroup.org/services-indus	stries/product-listing/ 13631
	В	D
Nominal voltage UN	300 V	300 V
Nominal current IN	15 A	10 A

IECEE CB Scheme	<b>CB</b> scheme	http://www.iecee.org/	DE1-60988-B1B2
Nominal voltage UN		250 V	
Nominal current IN		12 A	

EAC [H]



## Approvals

cULus Recognized	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm		E60425-19931011
	В	D	
Nominal voltage UN	300 V	300 V	
Nominal current IN	15 A	10 A	

#### Accessories

Accessories

Coding element

Coding section - CR-MSTB - 1734401



Coding section, inserted into the recess in the header or the inverted plug, red insulating material

#### Connector

Connector - C-SCF 1/2,8X0,8 - 3240153



Slip-on sleeve, non-insulated, 0.5 ... 1 mm<sup>2</sup>, 2.8 x 0.8

Connector - C-SCFI 1,5/2,8X0,8 - 3240049



Slip-on sleeve, red, 0.5 ... 1.5 mm<sup>2</sup>, 2.8 x 0.8



#### Accessories

Connector - C-SCFFI 1,5/2,8X0,8 - 3240535



Slip-on sleeve, fully isolated, red, 0.5 ... 1.5 mm², for plug 2.8 x 0.8 mm

### Filler plug

Accessories - MSTB-BL - 1755477



Keying cap, for forming sections, plugs onto header pin, green insulating material

#### Mounting material

Screw set - DFK-MSTB-SS - 0708263



Screw set, for securing the header to the device wall, consists of an M3 x 10 screw, with a spring washer and a nut

Accessories - DFK-MSTB-R - 5030172



Locking latch, red insulating material, for housings MSTB 2.5/...ST and MSTBT 2.5/...ST

#### Additional products



#### Accessories

Printed-circuit board connector - MSTB 2,5/ 2-ST-5,08 - 1757019



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, Number of potentials: 2, Number of rows: 1, Number of positions per row: 2, number of connections: 2, product range: MSTB 2,5/..-ST, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, conductor/PCB connection direction: 0 °, Locking clip: - Locking clip, plug-in system: CLASSIC COMBICON, Locking: without, type of packaging: packed in cardboard

#### Printed-circuit board connector - FKCVR 2,5/ 2-ST-5,08 - 1873951



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, Number of potentials: 2, Number of rows: 1, Number of positions per row: 2, number of connections: 2, product range: FKCVR 2,5/..-ST, pitch: 5.08 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 90 °, Locking clip: - Locking clip, plug-in system: CLASSIC COMBICON, Locking: without, type of packaging: packed in cardboard

#### Printed-circuit board connector - FKC 2.5/ 2-ST-5.08 - 1873058



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, Number of potentials: 2, Number of rows: 1, Number of positions per row: 2, number of connections: 2, product range: FKC 2,5/..-ST, pitch: 5.08 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, Locking clip: - Locking clip, plug-in system: CLASSIC COMBICON, Locking: without, type of packaging: packed in cardboard

#### Feed-through header - A-ICV 2,5/ 2-G-5,08 - 1872693



Feed-through header, nominal current: 12 A, nom. voltage: 250 V, mounting type: DIN rail mounting, number of positions: 2, pitch: 5.08 mm, color: green

#### Printed-circuit board connector - TMSTBP 2,5/ 2-ST-5,08 - 1853010



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, Number of potentials: 2, Number of rows: 1, Number of positions per row: 2, number of connections: 4, product range: TMSTBP 2,5/..-ST, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, conductor/PCB connection direction: 0 °, Locking clip: - Locking clip, plug-in system: CLASSIC COMBICON, Locking: without, type of packaging: packed in cardboard, The plug allows conductors to be looped through from module to module.



#### Accessories

Printed-circuit board connector - SMSTB 2,5/ 2-ST-5,08 - 1826283



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, Number of potentials: 2, Number of rows: 1, Number of positions per row: 2, number of connections: 2, product range: SMSTB 2,5/..-ST, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, conductor/PCB connection direction: -45 °, Locking clip: - Locking clip, plug-in system: CLASSIC COMBICON, Locking: without, type of packaging: packed in cardboard

Printed-circuit board connector - MSTBC 2,5/ 2-STZ-5,08 - 1809501



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, type of contact: Female connector, Number of potentials: 2, Number of rows: 1, Number of positions per row: 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: CLASSIC COMBICON, Locking: without, type of packaging: packed in cardboard, Corresponding female crimp contacts with current [A] and conductor cross section range [mm²] 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

Printed-circuit board connector - MSTBC 2,5/ 2-ST-5,08 - 1808816



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, type of contact: Female connector, Number of potentials: 2, Number of rows: 1, Number of positions per row: 2, number of connections: 2, 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: CLASSIC COMBICON, Locking: without, type of packaging: packed in cardboard, Corresponding female crimp contacts with current [A] and conductor cross section range [mm²] 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

Printed-circuit board connector - MVSTBW 2,5/ 2-ST-5,08 - 1792757



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, Number of potentials: 2, Number of rows: 1, Number of positions per row: 2, number of connections: 2, product range: MVSTBW 2,5/..-ST, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, conductor/PCB connection direction: -90 °, Locking clip: - Locking clip, plug-in system: CLASSIC COMBICON, Locking: without, type of packaging: packed in cardboard

Feed-through header - IC 2,5/ 2-G-5,08 - 1786404



PCB header, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, Number of potentials: 2, Number of rows: 1, Number of positions per row: 2, number of connections: 2, product range: IC 2,5/..-G, pitch: 5.08 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.5 mm, plug-in system: CLASSIC COMBICON, Locking: without, type of packaging: packed in cardboard



#### Accessories

Printed-circuit board connector - MSTBP 2.5/ 2-ST-5.08 - 1769010



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, Number of potentials: 2, Number of rows: 1, Number of positions per row: 2, number of connections: 2, product range: MSTBP 2,5/..-ST, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, conductor/PCB connection direction: 0 °, Locking clip: - Locking clip, plug-in system: CLASSIC COMBICON, Locking: without, type of packaging: packed in cardboard

Printed-circuit board connector - MSTBT 2,5/ 2-ST-5,08 - 1779987



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, Number of potentials: 2, Number of rows: 1, Number of positions per row: 2, number of connections: 2, product range: MSTBT 2,5/..-ST, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, conductor/PCB connection direction: 0 °, Locking clip: - Locking clip, plug-in system: CLASSIC COMBICON, Locking: without, type of packaging: packed in cardboard

Printed-circuit board connector - MVSTBR 2,5/ 2-ST-5,08 - 1792249



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, Number of potentials: 2, Number of rows: 1, Number of positions per row: 2, number of connections: 2, product range: MVSTBR 2,5/..-ST, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, conductor/PCB connection direction: 90 °, Locking clip: - Locking clip, plug-in system: CLASSIC COMBICON, Locking: without, type of packaging: packed in cardboard

Printed-circuit board connector - ICV 2,5/2-G-5,08 - 1785942



PCB header, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, Number of potentials: 2, Number of rows: 1, Number of positions per row: 2, number of connections: 2, product range: ICV 2,5/..-G, pitch: 5.08 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.5 mm, plug-in system: CLASSIC COMBICON, Locking: without, type of packaging: packed in cardboard

Printed-circuit board connector - FRONT-MSTB 2,5/ 2-ST-5,08 - 1777280



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, Number of potentials: 2, Number of rows: 1, Number of positions per row: 2, number of connections: 2, product range: FRONT-MSTB 2,5/..-ST, pitch: 5.08 mm, connection method: Front screw connection, conductor/PCB connection direction: 0 °, Locking clip: - Locking clip, plug-in system: CLASSIC COMBICON, Locking: without, type of packaging: packed in cardboard



#### Accessories

Printed-circuit board connector - FKCVW 2,5/ 2-ST-5,08 - 1873650



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, Number of potentials: 2, Number of rows: 1, Number of positions per row: 2, number of connections: 2, product range: FKCVW 2,5/..-ST, pitch: 5.08 mm, connection method: Push-in spring connection, conductor/PCB connection direction: -90 °, Locking clip: - Locking clip, plug-in system: CLASSIC COMBICON, Locking: without, type of packaging: packed in cardboard

Printed-circuit board connector - QC 1/2-ST-5,08 - 1883255



PCB connector, nominal cross section: 1 mm², color: green, nominal current: 10 A, rated voltage (III/2): 630 V, contact surface: Tin, type of contact: Female connector, Number of potentials: 2, Number of rows: 1, Number of positions per row: 2, number of connections: 2, product range: QC 1/..-ST, pitch: 5.08 mm, connection method: Displacement connection, conductor/PCB connection direction: 0 °, Locking clip: - Locking clip, plug-in system: CLASSIC COMBICON, Locking: without, type of packaging: packed in cardboard

Printed-circuit board connector - FKCT 2.5/ 2-ST-5.08 - 1902110



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, Number of potentials: 2, Number of rows: 1, Number of positions per row: 2, number of connections: 2, product range: FKCT 2,5/..-ST, pitch: 5.08 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, Locking clip: - Locking clip, plug-in system: CLASSIC COMBICON, Locking: without, type of packaging: packed in cardboard

Phoenix Contact 2021 © - all rights reserved http://www.phoenixcontact.com