

1810023

https://www.phoenixcontact.com/us/products/1810023

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PCB connector, nominal cross section: 2.5 mm<sup>2</sup>, color: green, nominal current: 12 A, contact surface: Sn, contact connection type: Socket, number of potentials: 4, number of rows: 1, number of positions: 4, number of connections: 4, product range: GMVSTBW 2,5/..-STF-EX, pitch: 7.62 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, conductor/PCB connection direction: -90 °, locking clip: - Locking clip, plug-in system: COMBICON MSTB 2,5 EX, locking: Screw locking mechanism, mounting: Screw flange, type of packaging: packed in cardboard

## Your advantages

- · Well-known connection principle allows worldwide use
- · Satisfies the more stringent safety requirements of "Ex eb" protection according to IEC 60079-7 for potentially explosive areas
- · Screwable flange for superior mechanical stability
- · Low temperature rise, thanks to maximum contact force

## Commercial data

Item number	1810023
Packing unit	50 рс
Minimum order quantity	50 рс
Note	Made to order (non-returnable)
Sales key	AA03
Product key	AACAMK
Catalog page	Page 379 (C-1-2013)
GTIN	4046356705950
Weight per piece (including packing)	10.946 g
Weight per piece (excluding packing)	10.26 g
Customs tariff number	85366990
Country of origin	DE



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## Technical data

## Product properties

Product type	PCB connector
Product family	GMVSTBW 2,5/STF-EX
Product line	COMBICON Connectors M
Туре	Standard
Number of positions	4
Pitch	7.62 mm
Number of connections	4
Number of rows	1
Number of potentials	4
Mounting flange	Screw flange
Data management status	
Article revision	02
Electrical properties	
Nominal current I <sub>N</sub>	12 A
Nominal voltage U <sub>N</sub>	352 V
Rated current / conductor cross section	12 A/2.5 mm <sup>2</sup>

## Ex data

Ex approval	
Identification	0344 ll 2GD / Ex eb IIC Gb
EU-type examination certificate	KEMA 10ATEX0196 U
IECEx certificate	IECEx KEM 10.0093U

## Connection data

Connection technology	
Туре	Standard
Connector system	COMBICON MSTB 2,5 EX
Nominal cross section	2.5 mm <sup>2</sup>
Contact connection type	Socket
Interlock	
Locking type	Screw locking mechanism
Mounting flange	Screw flange
Tightening torque	0.3 Nm
Conductor connection	
Connection method	Screw connection with tension sleeve
Conductor/PCB connection direction	-90 °
Conductor cross section rigid	0.2 mm² 2.5 mm²



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onductor cross section flexible	0.2 mm <sup>2</sup> 2.5 mm <sup>2</sup>
onductor cross section AWG	24 12
onductor cross section flexible, with ferrule without plastic seve	0.25 mm <sup>2</sup> 2.5 mm <sup>2</sup>
onductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm² 2.5 mm²
conductors with same cross section, solid	0.2 mm² 1 mm²
conductors with same cross section, flexible	0.2 mm² 1.5 mm²
conductors with same cross section, flexible, with ferrule thout plastic sleeve	0.25 mm² 1 mm²
conductors with the same cross section, flexible, with TWIN rrule with plastic sleeve	0.5 mm² 1 mm²
/lindrical gauge a x b / diameter	2.8 mm x 2.0 mm / 2.4 mm
ripping length	7 mm
ive form screw head	Slotted (L)
ghtening torque	0.5 Nm 0.6 Nm
ifications for ferrules without insulating collar	
commended crimping tool	1212034 CRIMPFOX 6
ifications for ferrules with insulating collar	
commended crimping tool	1212034 CRIMPFOX 6
conductors with the same cross section, flexible, with TWIN rrule with plastic sleeve /lindrical gauge a x b / diameter ripping length rive form screw head ghtening torque ifications for ferrules without insulating collar commended crimping tool	2.8 mm x 2.0 mm / 2.4 mm 7 mm Slotted (L) 0.5 Nm 0.6 Nm 1212034 CRIMPFOX 6

### Material specifications

### 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 (4 - 8 μm Sn)
Metal surface contact area (top layer)	Tin (4 - 8 μm Sn)

Color (Housing)	green (6021)
Insulating material	PA
Insulating material group	1
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



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Dimensional drawing	h
Pitch	7.62 mm
Width [w]	28.44 mm
Height [h]	26 mm
Length [I]	12.52 mm

## Mounting

### Flange

Tightening torque 0.3	
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### 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)	-60 °C 110 °C
Ambient temperature (storage/transport)	-40 °C 70 °C
Relative humidity (storage/transport)	30 % 70 %
Ambient temperature (assembly)	-5 °C 100 °C

## Packaging specifications

Type of packaging	packed in cardboard
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Dimensional drawing

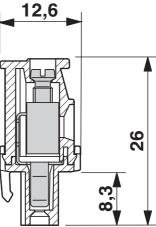


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## Drawings

a+5,58 6,24 6,24





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# Classifications

### ECLASS

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

## ETIM

	ETIM 9.0	EC002638	
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-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.
EU REACH SVHC	
REACH candidate substance (CAS No.)	No substance above 0.1 wt%

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Accessories

**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



## MPS-MT - Test plug

0201744 https://www.phoenixcontact.com/us/products/0201744



Test plug, with solder connection up to 1  $\mbox{mm}^2$  conductor cross section, number of positions: 1, color: gray

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**RPS** - Reducing plug

0201647

https://www.phoenixcontact.com/us/products/0201647



Reducing plug, number of positions: 1, color: gray

#### SZS 0,6X3,5 - Screwdriver

1205053 https://www.phoenixcontact.com/us/products/1205053



Actuation tool, for ST terminal blocks, insulated, also suitable for use as a bladed screwdriver, size: 0.6 x 3.5 x 100 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  $\dots$  10, 11  $\dots$  20, etc. up to 91  $\dots$  (99)100, mounting type: adhesive, for terminal block width: 5.08 mm, lettering field size: 5.08 x 3.8 mm

## SK 5,08/3,8:UNBEDRUCKT - Marker card

0805412 https://www.phoenixcontact.com/us/products/0805412



Marker card, Sheet, white, unlabeled, can be labeled with: Marker pen: without print, mounting type: adhesive, for terminal block width: 5.08 mm, lettering field size: 5.08 x 3.8 mm, Number of individual labels: 120

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B-STIFT - Marker pen

#### 1051993

https://www.phoenixcontact.com/us/products/1051993



Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5  $\rm mm$ 

### GMSTB 2,5/ 4-GF-7,62 EX - PCB header

1795909 https://www.phoenixcontact.com/us/products/1795909



PCB headers, nominal cross section: 2.5 mm<sup>2</sup>, color: green, nominal current: 12 A, contact surface: Sn, contact connection type: Pin, number of potentials: 4, number of rows: 1, number of positions: 4, number of connections: 4, product range: GMSTB 2,5/..-GF-EX, pitch: 7.62 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 EX, Pin connector pattern alignment: Standard, locking: Screw locking mechanism, mounting: Threaded flange, type of packaging: packed in cardboard

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### GMSTBV 2,5/ 4-GF-7,62 EX - PCB header

#### 1796681

https://www.phoenixcontact.com/us/products/1796681



PCB headers, nominal cross section: 2.5 mm<sup>2</sup>, color: green, nominal current: 12 A, contact surface: Sn, contact connection type: Pin, number of potentials: 4, number of rows: 1, number of positions: 4, number of connections: 4, product range: GMSTBV 2,5/..-GF-EX, pitch: 7.62 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 EX, Pin connector pattern alignment: Standard, locking: Screw locking mechanism, mounting: Threaded flange, type of packaging: packed in cardboard

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