

1718614

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PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Au, contact connection type: Socket, number of potentials: 20, number of rows: 1, number of positions: 20, number of connections: 20, product range: MVSTBW 2,5/..-STF, pitch: 5.08 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, locking: Screw locking mechanism, mounting method: Screw flange, type of packaging: packed in cardboard

## Your advantages

- · Gold-plated contacts ensure transfer quality remains stable over the long term
- · Well-known connection principle allows worldwide use
- · Low temperature rise, thanks to maximum contact force
- · Allows connection of two conductors
- · Screwable flange for superior mechanical stability

#### Commercial data

Item number	1718614
Packing unit	50 pc
Minimum order quantity	50 pc
Note	Made to order (non-returnable)
Sales key	AA03
Product key	AACAKI
GTIN	4046356140171
Weight per piece (including packing)	45.128 g
Weight per piece (excluding packing)	42.57 g
Customs tariff number	85366990
Country of origin	IN



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## Technical data

### Product properties

Product type	PCB connector
Product family	MVSTBW 2,5/STF
Product line	COMBICON Connectors M
Number of positions	20
Pitch	5.08 mm
Number of connections	20
Number of rows	1
Number of potentials	20
Mounting type	Screw flange

### Electrical properties

#### **Properties**

·	
Nominal current I <sub>N</sub>	12 A
Nominal voltage U <sub>N</sub>	320 V
Rated voltage (III/3)	250 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	Components DeviceNet compatible
Connector system	COMBICON MSTB 2,5
Nominal cross section	2.5 mm²
Contact connection type	Socket

### Interlock

Locking type	Screw locking mechanism
Mounting type	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
Conductor cross-section flexible	0.2 mm² 2.5 mm²
Conductor cross-section AWG	24 12
Conductor cross-section flexible, with ferrule without plastic sleeve	0.25 mm² 2.5 mm²



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0.25 mm² 2.5 mm²		
0.2 mm² 1 mm²		
0.2 mm <sup>2</sup> 1.5 mm <sup>2</sup>		
0.25 mm <sup>2</sup> 1 mm <sup>2</sup>		
0.5 mm² 1.5 mm²		
2.8 mm x 2.0 mm / 2.4 mm		
7 mm		
Slotted (L)		
0.5 Nm 0.6 Nm		
Specifications for ferrules without insulating collar		
1212034 CRIMPFOX 6		
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	partially gold-plated
Metal surface terminal point (top layer)	Tin (4 - 8 μm Sn)
Metal surface terminal point (middle layer)	Nickel (2 - 3 µm Ni)
Metal surface contact area (top layer)	Gold (0.8 - 1.4 µm Au)
Metal surface contact area (middle layer)	Nickel (2 - 3 µm Ni)

#### 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**



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Dimensional drawing	h
Pitch	5.08 mm
Width [w]	111.76 mm
Height [h]	26 mm
Length [I]	12.6 mm

## Mounting

#### Flange

Tightening torque	0.3 Nm

#### 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)	250 V
Rated surge voltage (III/3)	4 kV
minimum clearance value - non-homogenous field (III/3)	3 mm
minimum creepage distance (III/3)	3.2 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



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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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## **Approvals**

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cULus Recognized Approval ID: E60425-19931011				
	Nominal voltage $U_N$	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
В				
	300 V	15 A	30 - 12	-
D				
	300 V	10 A	30 - 12	-

	VDE Zeichengenehmigung Approval ID: 40050694				
		Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
keine					
		250 V	12 A	-	0.2 - 2.5



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## Classifications

### **ECLASS**

	ECLASS-13.0	27460202	
	ECLASS-15.0	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-E
	No hazardous substances above the limits
EU REACH SVHC	
REACH candidate substance (CAS No.)	No substance above 0.1 wt%
EF3.0 Climate Change	
CO2e kg	0.254 kg CO2e

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