

1810191

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PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, contact surface: Sn, contact connection type: Pin, number of potentials: 10, number of rows: 1, number of positions: 10, number of connections: 10, product range: IC 2,5/..-STF-EX, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, conductor/PCB connection direction: 0 °, locking clip: - without locking clip, plug-in system: COMBICON MSTB 2,5 EX, locking: Screw locking mechanism, mounting method: Screw flange, type of packaging: packed in cardboard

## Your advantages

- · Well-known connection principle allows worldwide use
- · Inverted connector with pin contacts for touch-proof device outputs or free-hanging cable/cable connections
- · Screwable flange for superior mechanical stability
- · Satisfies the more stringent safety requirements of "Ex eb" protection according to IEC 60079-7 for potentially explosive areas
- · Easy PCB replacement thanks to plug-in modules

#### Commercial data

Item number	1810191
Packing unit	50 pc
Minimum order quantity	50 pc
Note	Made to order (non-returnable)
Sales key	AA03
Product key	AACADD
GTIN	4046356706520
Weight per piece (including packing)	17.698 g
Weight per piece (excluding packing)	17.152 g
Customs tariff number	85366990
Country of origin	DE



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## Technical data

## Product properties

Product type	PCB connector
Product family	IC 2,5/STF-EX
Product line	COMBICON Connectors M
Туре	Inverted
Number of positions	10
Pitch	5.08 mm
Number of connections	10
Number of rows	1
Number of potentials	10
Mounting flange	Screw flange

### Electrical properties

### **Properties**

Nominal current I <sub>N</sub>	12 A
Nominal voltage U <sub>N</sub>	176 V
Rated current / conductor cross section	12 A/2.5 mm <sup>2</sup>

### Ex data

### Ex approval

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

### Connection data

### Connection technology

Туре	Inverted
Connector system	COMBICON MSTB 2,5 EX
Nominal cross section	2.5 mm <sup>2</sup>
Contact connection type	Pin

### 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	0 °
Conductor cross section rigid	0.2 mm² 2.5 mm²
Conductor cross section flexible	0.2 mm² 2.5 mm²



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Conductor cross section AWG	24 12
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm² 2.5 mm²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm² 2.5 mm²
2 conductors with same cross section, solid	0.2 mm² 1 mm²
2 conductors with same cross section, flexible	0.2 mm² 1.5 mm²
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	0.25 mm² 1 mm²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm² 1.5 mm²
Stripping length	7 mm
Drive form screw head	Slotted (L)
Tightening torque	0.5 Nm 0.6 Nm
Specifications for ferrules without insulating collar	
recommended crimping tool	1212034 CRIMPFOX 6
Specifications for ferrules with insulating collar	
recommended crimping tool	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	Tin-plated
Metal surface terminal point (top layer)	Tin (5 - 7 μm Sn)
Metal surface terminal point (middle layer)	Nickel (2 - 3 µm Ni)
Metal surface contact area (top layer)	Tin (5 - 7 μm Sn)
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]	52.3 mm
Height [h]	15 mm
Length [I]	19 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)	-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



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## **Approvals**

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1810191

<b>(Ex</b> )	ATEX Approval ID: KEMA 10ATEX0196 U				
		Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
keine					
		176 V	12 A	-	0.2 - 2.5

II ( IEĈEX	IECEx Approval ID: IECEx KEM 10.0093U				
		Nominal voltage $U_N$	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
keine					
		176 V	12 A	-	0.2 - 2.5

	ccc
(C)	Approval ID: 2021122313114375



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## Classifications

UNSPSC 21.0

### **ECLASS**

	ECLASS-13.0	27460202
	ECLASS-15.0	27460202
ETIM		
	ETIM 9.0	EC002638
UN	ISPSC	

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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	0.142 kg CO2e

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