

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: 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
Catalog page	Page 373 (C-1-2013)
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



1810191

https://www.phoenixcontact.com/us/products/1810191

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
Data management status	
Article revision	05
lectrical properties	
Nominal current I _N	12 A
Nominal voltage U _N	176 V

Ex data

Ex approval

Rated current / conductor cross section

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

12 A/2.5 mm²

Connection data

Connection technology

Туре	Inverted
Connector system	COMBICON MSTB 2,5 EX
Nominal cross section	2.5 mm²
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 mm ² 2.5 mm ²



1810191

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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
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 mm ² 1.5 mm ²
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



switching power (COC). During designated use, they must not be plugged in or disconnected when carrying voltage or under load.

1810191

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Dimensional drawing	h
Pitch	5.08 mm
Width [w]	52.3 mm
Height [h]	15 mm
Length [I]	19 mm
ounting	
Tightening torque	0.3 Nm
otes	
Notes on operation	In accordance with IEC 61984, COMBICON connectors have no

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



1810191

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Approvals

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

cULus Recognized Approval ID: E60425-19931014				
	Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
Use group B				
	250 V	12 A	30 - 12	-
Use group D				
	300 V	10 A	30 - 12	-

€ ⊋	ATEX Approval ID: KEMA 10ATEX0196 U				
		Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
		176 V	12 A	-	0.2 - 2.5

II (IEĈEx)	IECEx Approval ID: IECEx KEM 10.0093U				
		Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
		176 V	12 A	-	0.2 - 2.5

(1)	CCC Approval ID: 2021122313114375



1810191

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Classifications

UNSPSC 21.0

ECLASS

ECLASS-11.0	27460202			
ECLASS-12.0	27460202			
ECLASS-13.0	27460202			
ETIM				
ETIM 9.0	EC002638			
UNSPSC				

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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Phoenix Contact USA 586 Fulling Mill Road Middletown, PA 17057, United States (+717) 944-1300 info@phoenixcon.com