

https://www.phoenixcontact.com/us/products/1910539



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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: Sn, contact connection type: Socket, number of potentials: 3, number of rows: 1, number of positions: 3, number of connections: 3, product range: FKC 2,5/. .-STF, pitch: 5 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0°, locking clip: - Locking clip, plug-in system: COMBICON MSTB 2,5, locking: Screw locking mechanism, mounting: Screw flange, type of packaging: packed in cardboard

### Your advantages

- · Time saving push-in connection, tools not required
- · Intuitive operation due to color-coded actuating push button
- · Quick and convenient testing using integrated test option
- · Screwable flange for superior mechanical stability
- Can be combined with the MSTB 2,5 range

#### Commercial data

Item number	1910539
Packing unit	100 pc
Minimum order quantity	50 pc
Sales key	AA03
Product key	AACFAD
Catalog page	Page 275 (C-1-2013)
GTIN	4017918175313
Weight per piece (including packing)	6.18 g
Weight per piece (excluding packing)	5.657 g
Customs tariff number	85366990
Country of origin	DE



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### Technical data

#### Product properties

Product type	PCB connector
Product family	FKC 2,5/STF
Product line	COMBICON Connectors M
Туре	Standard
Number of positions	3
Pitch	5 mm
Number of connections	3
Number of rows	1
Number of potentials	3
Mounting flange	Screw flange
Data management status	
Article revision	08
lectrical properties	
Nominal current I <sub>N</sub>	12 A
Managard allows III	000 1/

#### Εl

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	Standard
Connector system	COMBICON MSTB 2,5
Nominal cross section	2.5 mm²
Contact connection type	Socket
Interlock	

Locking type	Screw locking mechanism
Mounting flange	Screw flange
Tightening torque	0.3 Nm

#### Conductor connection

Connection method	Push-in spring connection
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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Material data - actuating element



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 the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm² 1.5 mm²
Cylindrical gauge a x b / diameter	2.8 mm x 2.0 mm / 2.0 mm
Stripping length	10 mm
pecifications for ferrules without insulating collar	
recommended crimping tool	1212034 CRIMPFOX 6
ferrules without insulating collar, according to DIN 46228-1	Cross section: 0.5 mm²; Length: 8 mm 10 mm
	Cross section: 0.75 mm²; Length: 8 mm 10 mm
	Cross section: 1 mm²; Length: 8 mm 10 mm
	Cross section: 1.5 mm²; Length: 8 mm 10 mm
	Cross section: 2.5 mm²; Length: 10 mm
pecifications for ferrules with insulating collar	
recommended crimping tool	1212034 CRIMPFOX 6
ferrules with insulating collar, according to DIN 46228-4	Cross section: 0.5 mm²; Length: 8 mm 10 mm
	Cross section: 0.75 mm²; Length: 8 mm 10 mm
	Cross section: 1 mm²; Length: 8 mm 10 mm
	Cross section: 1 mm²; Length: 8 mm 10 mm  Cross section: 1.5 mm²; Length: 8 mm 10 mm
erial specifications	
erial specifications aterial data - contact Note	Cross section: 1.5 mm²; Length: 8 mm 10 mm
aterial data - contact	Cross section: 1.5 mm²; Length: 8 mm 10 mm  Cross section: 2.5 mm²; Length: 10 mm  WEEE/RoHS-compliant, free of whiskers according to IEC
aterial data - contact  Note	Cross section: 1.5 mm²; Length: 8 mm 10 mm  Cross section: 2.5 mm²; Length: 10 mm  WEEE/RoHS-compliant, free of whiskers according to IEC 60068-2-82/JEDEC JESD 201  Cu alloy
aterial data - contact  Note  Contact material	Cross section: 1.5 mm²; Length: 8 mm 10 mm  Cross section: 2.5 mm²; Length: 10 mm  WEEE/RoHS-compliant, free of whiskers according to IEC 60068-2-82/JEDEC JESD 201
aterial data - contact  Note  Contact material  Surface characteristics	Cross section: 1.5 mm²; Length: 8 mm 10 mm  Cross section: 2.5 mm²; Length: 10 mm  WEEE/RoHS-compliant, free of whiskers according to IEC 60068-2-82/JEDEC JESD 201  Cu alloy hot-dip tin-plated
aterial data - contact  Note  Contact material  Surface characteristics  Metal surface terminal point (top layer)	Cross section: 1.5 mm²; Length: 8 mm 10 mm  Cross section: 2.5 mm²; Length: 10 mm  WEEE/RoHS-compliant, free of whiskers according to IEC 60068-2-82/JEDEC JESD 201  Cu alloy hot-dip tin-plated  Tin (4 - 8 µm Sn)
aterial data - contact  Note  Contact material  Surface characteristics  Metal surface terminal point (top layer)  Metal surface contact area (top layer)	Cross section: 1.5 mm²; Length: 8 mm 10 mm  Cross section: 2.5 mm²; Length: 10 mm  WEEE/RoHS-compliant, free of whiskers according to IEC 60068-2-82/JEDEC JESD 201  Cu alloy hot-dip tin-plated  Tin (4 - 8 µm Sn)
aterial data - contact  Note  Contact material  Surface characteristics  Metal surface terminal point (top layer)  Metal surface contact area (top layer)  aterial data - housing	Cross section: 1.5 mm²; Length: 8 mm 10 mm  Cross section: 2.5 mm²; Length: 10 mm  WEEE/RoHS-compliant, free of whiskers according to IEC 60068-2-82/JEDEC JESD 201  Cu alloy  hot-dip tin-plated  Tin (4 - 8 µm Sn)  Tin (4 - 8 µm Sn)
aterial data - contact  Note  Contact material  Surface characteristics  Metal surface terminal point (top layer)  Metal surface contact area (top layer)  aterial data - housing  Color (Housing)	Cross section: 1.5 mm²; Length: 8 mm 10 mm  Cross section: 2.5 mm²; Length: 10 mm  WEEE/RoHS-compliant, free of whiskers according to IEC 60068-2-82/JEDEC JESD 201  Cu alloy hot-dip tin-plated Tin (4 - 8 µm Sn) Tin (4 - 8 µm Sn)  green (6021)
aterial data - contact  Note  Contact material  Surface characteristics  Metal surface terminal point (top layer)  Metal surface contact area (top layer)  aterial data - housing  Color (Housing)  Insulating material	Cross section: 1.5 mm²; Length: 8 mm 10 mm  Cross section: 2.5 mm²; Length: 10 mm  WEEE/RoHS-compliant, free of whiskers according to IEC 60068-2-82/JEDEC JESD 201  Cu alloy hot-dip tin-plated Tin (4 - 8 µm Sn) Tin (4 - 8 µm Sn)  green (6021)
aterial data - contact  Note  Contact material  Surface characteristics  Metal surface terminal point (top layer)  Metal surface contact area (top layer)  aterial data - housing  Color (Housing)  Insulating material  Insulating material group	Cross section: 1.5 mm²; Length: 8 mm 10 mm  Cross section: 2.5 mm²; Length: 10 mm  WEEE/RoHS-compliant, free of whiskers according to IEC 60068-2-82/JEDEC JESD 201  Cu alloy hot-dip tin-plated  Tin (4 - 8 µm Sn)  Tin (4 - 8 µm Sn)  green (6021) PA
aterial data - contact  Note  Contact material  Surface characteristics  Metal surface terminal point (top layer)  Metal surface contact area (top layer)  aterial data - housing  Color (Housing)  Insulating material  Insulating material group  CTI according to IEC 60112	Cross section: 1.5 mm²; Length: 8 mm 10 mm  Cross section: 2.5 mm²; Length: 10 mm  WEEE/RoHS-compliant, free of whiskers according to IEC 60068-2-82/JEDEC JESD 201  Cu alloy hot-dip tin-plated Tin (4 - 8 µm Sn)  Tin (4 - 8 µm Sn)  green (6021)  PA  I 600
aterial data - contact  Note  Contact material  Surface characteristics  Metal surface terminal point (top layer)  Metal surface contact area (top layer)  aterial data - housing  Color (Housing)  Insulating material  Insulating material group  CTI according to IEC 60112  Flammability rating according to UL 94	Cross section: 1.5 mm²; Length: 8 mm 10 mm  Cross section: 2.5 mm²; Length: 10 mm  WEEE/RoHS-compliant, free of whiskers according to IEC 60068-2-82/JEDEC JESD 201  Cu alloy hot-dip tin-plated  Tin (4 - 8 µm Sn)  Tin (4 - 8 µm Sn)  green (6021) PA  I 600 V0



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Color (Actuating element)	orange (2003)
Insulating material	PBT
Insulating material group	I
CTI according to IEC 60112	600
Flammability rating according to UL 94	V0

#### **Dimensions**

Dimensional drawing	h
Pitch	5 mm
Width [w]	25.02 mm
Height [h]	15 mm
Length [I]	25.73 mm

### Mounting

#### Flange

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	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	I
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



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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
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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CSA Approval ID: 13631				
	Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
Use group B				
	300 V	12 A	24 - 12	-
Use group D				
	300 V	10 A	24 - 12	-

CULus Recognized Approval ID: E60425-19931011				
	Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
Use group B				
	300 V	10 A	26 - 12	-
Use group D				
	300 V	10 A	26 - 12	-

VDE Zeichengenehmigung Approval ID: 40004701				
	Nominal voltage $U_N$	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
	250 V	12 A	-	0.2 - 2.5



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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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