

https://www.phoenixcontact.com/us/products/1910487



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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: 15, number of rows: 1, number of positions: 15, number of connections: 15, product range: FKC 2,5/..-ST, 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: without, mounting method: without, 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
- · Can be combined with the MSTB 2,5 range

Commercial data

Item number	1910487
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	AA03
Product key	AACFAC
Catalog page	Page 274 (C-1-2013)
GTIN	4017918175269
Weight per piece (including packing)	25.86 g
Weight per piece (excluding packing)	23.637 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/ST
Product line	COMBICON Connectors M
Туре	Standard
Number of positions	15
Pitch	5 mm
Number of connections	15
Number of rows	1
Number of potentials	15
Mounting flange	without

Electrical properties

Nominal current I _N	12 A
Nominal voltage U _N	320 V
Contact resistance	1 mΩ
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	without
Mounting flange	without

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
Conductor cross section AWG	24 12
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm ² 2.5 mm ²



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Conductor cross section, flexible, with ferrule, with plastic sleeve conductors with the same cross section, flexible, with TWIN	0.5 mm² 1.5 mm²
ferrule with plastic sleeve	
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: 1.5 mm²; Length: 8 mm 10 mm
	Cross section: 2.5 mm²; Length: 10 mm
naterial data - contact Note	WEEE/RoHS-compliant, free of whiskers according to IEC 60068-2-82/JEDEC JESD 201
Note	60068-2-82/JEDEC JESD 201
Note Contact material	60068-2-82/JEDEC JESD 201 Cu alloy
Note Contact material Surface characteristics	60068-2-82/JEDEC JESD 201 Cu alloy hot-dip tin-plated
Contact material Surface characteristics Metal surface terminal point (top layer) Metal surface contact area (top layer)	60068-2-82/JEDEC JESD 201 Cu alloy hot-dip tin-plated Tin (4 - 8 µm Sn)
Contact material Surface characteristics Metal surface terminal point (top layer) Metal surface contact area (top layer)	60068-2-82/JEDEC JESD 201 Cu alloy hot-dip tin-plated Tin (4 - 8 µm Sn)
Note Contact material Surface characteristics Metal surface terminal point (top layer) Metal surface contact area (top layer) aterial data - housing	60068-2-82/JEDEC JESD 201 Cu alloy hot-dip tin-plated Tin (4 - 8 µm Sn) Tin (4 - 8 µm Sn)
Contact material Surface characteristics Metal surface terminal point (top layer) Metal surface contact area (top layer) aterial data - housing Color (Housing)	60068-2-82/JEDEC JESD 201 Cu alloy hot-dip tin-plated Tin (4 - 8 µm Sn) Tin (4 - 8 µm Sn) green (6021)
Note Contact material Surface characteristics Metal surface terminal point (top layer) Metal surface contact area (top layer) aterial data - housing Color (Housing) Insulating material	60068-2-82/JEDEC JESD 201 Cu alloy hot-dip tin-plated Tin (4 - 8 µm Sn) Tin (4 - 8 µm Sn) green (6021)
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	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
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	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
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	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
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 Glow wire flammability index GWFI according to EN 60695-2-12 Glow wire ignition temperature GWIT according to EN 60695-2-	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 850
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 Glow wire flammability index GWFI according to EN 60695-2-12 Glow wire ignition temperature GWIT according to EN 60695-2-13 Temperature for the ball pressure test according to EN 60695-10-2	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 850 775
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 Glow wire flammability index GWFI according to EN 60695-2-12 Glow wire ignition temperature GWIT according to EN 60695-2-13 Temperature for the ball pressure test according to EN 60695-	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 850 775



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Insulating material group	1
CTI according to IEC 60112	600
Flammability rating according to UL 94	V0

Dimensions

Dimensional drawing	h
Pitch	5 mm
Width [w]	74.9 mm
Height [h]	15 mm
Length [I]	25.73 mm

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.

Mechanical tests

Conductor connection

Specification	IEC 60999-1:1999-11
Result	Test passed

Test for conductor damage and slackening

Specification	IEC 60999-1:1999-11
Result	Test passed

Repeated connection and disconnection

Specification	IEC 60999-1:1999-11	
Result	Test passed	

Pull-out test

Specification	IEC 60999-1:1999-11
Conductor cross section/conductor type/tractive force setpoint/actual value	0.2 mm² / solid / > 10 N
	0.2 mm² / flexible / > 10 N
	2.5 mm² / solid / > 50 N
	2.5 mm² / flexible / > 50 N

Insertion and withdrawal forces

Specification	IEC 60512-13-2:2006-02	
Result	Test passed	
No. of cycles	25	
Insertion strength per pos. approx.	8 N	



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Withdraw strength per pos. approx.	6 N
Resistance of inscriptions	
Specification	IEC 60068-2-70:1995-12
Result	Test passed
Polarization and coding	
Specification	IEC 60512-13-5:2006-02
Result	Test passed
	1 cot passed
isual inspection	
Specification	IEC 60512-1-1:2002-02
Result	Test passed
imension check	
Specification	IEC 60512-1-2:2002-02
Result	Test passed
bration test	UF-0 00000 0 0 0007 10
Specification	IEC 60068-2-6:2007-12
Frequency	10 - 150 - 10 Hz
Sweep speed	1 octave/min
Amplitude	0.35 mm (10 Hz 60.1 Hz)
Acceleration	5g (60.1 Hz 150 Hz)
Test duration per axis Test directions	2.5 h X-, Y- and Z-axis
i est un ections	Λ-, 1- dilu Δ-dais
urability test	
Specification	IEC 60512-9-1:2010-03
Impulse withstand voltage at sea level	4.8 kV
Contact resistance R ₁	1 mΩ
Contact resistance R ₂	1.2 mΩ
Insertion/withdrawal cycles	25
Insulation resistance, neighboring positions	> 5 MΩ
limatic test	
Specification	ISO 6988:1985-02
Corrosive stress	0.2 dm ³ SO ₂ on 300 dm ³ /40 °C/1 cycle
Thermal stress	100 °C/168 h
Power-frequency withstand voltage	2.21 kV
mbient 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



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Electrical tests

Thermal	toct	I Tact	aroun	\sim
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Specification	IEC 60512-5-1:2002-02	
Tested number of positions	18	

Insulation resistance

Specification	IEC 60512-3-1:2002-02	
Insulation resistance, neighboring positions	> 5 MΩ	

Air clearances and creepage distances |

Specification	IEC 60664-1:2007-04
Insulating material group	I 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
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

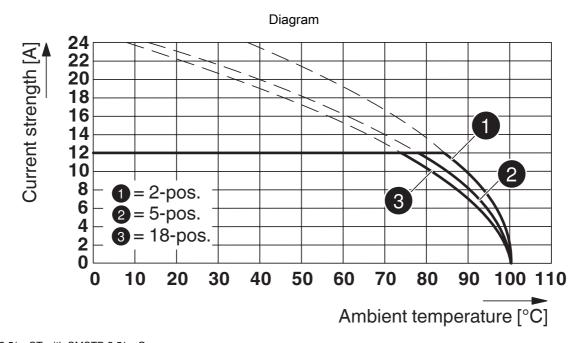
Type of packaging	packed in cardboard
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Drawings



Type: FKC 2,5/...-ST with SMSTB 2,5/...-G



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Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1910487

CSA Approval ID: 13631				
	Nominal voltage U_N	Nominal current I _N	Cross section AWG	Cross section mm ²
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_N	Nominal current I _N	Cross section AWG	Cross section mm ²	
Use group B					
	300 V	10 A	26 - 12	-	
Use group D					
	300 V	10 A	26 - 12	-	

VDE approval of drawings Approval ID: 40004701				
	Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
	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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