

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: Tin, 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: without, type of packaging: packed in cardboard

Your advantages

- · Time saving push-in connection, tools not required
- · Intuitive use through colour coded actuation lever
- · Quick and convenient testing using integrated test option
- · Can be combined with the MSTB 2,5 range

Commercial data

Item number	1910487
Packing unit	1 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

Туре	Standard
Product line	COMBICON Connectors M
Product type	PCB connector
Product family	FKC 2,5/ST
Number of positions	15
Pitch	5 mm
Number of connections	15
Number of rows	1
Mounting flange	without
Number of potentials	15

Electrical properties

Nominal current I _N	12 A
Nominal voltage U _N	320 V
Degree of pollution	3
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	0.25 mm² 2.5 mm²



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sleeve	
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
ecifications 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
ecifications 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 mm ² ; Length: 8 mm 10 mm
	, •
erial specifications	Cross section: 2.5 mm²; Length: 10 mm
aterial data - contact	Cross section: 2.5 mm²; Length: 10 mm WEEE/RoHS-compliant, free of whiskers according to IEC
nterial data - contact Note	Cross section: 2.5 mm²; Length: 10 mm WEEE/RoHS-compliant, free of whiskers according to IEC 60068-2-82/JEDEC JESD 201
nterial data - contact Note Contact material	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
Note Contact material Surface characteristics	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: 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: 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
Note Contact material Surface characteristics Metal surface terminal point (top layer) Metal surface contact area (top layer)	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: 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 Color (Housing) Insulating material	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) Insulating material Insulating material group	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) Insulating material Insulating material group CTI according to IEC 60112	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
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: 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
Atterial data - contact Note Contact material Surface characteristics Metal surface terminal point (top layer) Metal surface contact area (top layer) Atterial 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	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
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 Glow wire flammability index GWFI according to EN 60695-2-12 Glow wire ignition temperature GWIT according to EN 60695-2-	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 850
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 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	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 850 775
Atterial data - contact Note Contact material Surface characteristics Metal surface terminal point (top layer) Metal surface contact area (top layer) Atterial 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-	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 850 775



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Insulating material	PBT
Insulating material group	I
CTI according to IEC 60112	600
Flammability rating according to UL 94	V0
Dimensions	
Dimensional drawing	h

Width [w]	74.9 mm
Height [h]	15 mm
Length [I]	25.73 mm

5 mm

Mounting

Pitch

Connection method	Push-in spring connection

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

Test passed

Repeated connection and disconnection

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

Pull-out test

Result

Specification	IEC 60999-1:1999-11
Conductor cross section/conductor type/tractive force setpoint/actual value	$0.2 \text{ mm}^2 / \text{ solid } / > 10 \text{ N}$
	0.2 mm² / flexible / > 10 N
	$2.5 \text{ mm}^2 / \text{ solid } / > 50 \text{ N}$
	2.5 mm² / flexible / > 50 N

Insertion and withdrawal forces

Result Test passed



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	25
No. of cycles	20
nsertion strength per pos. approx.	8 N
Withdraw strength per pos. approx.	6 N
esistance of inscriptions	
Specification	IEC 60068-2-70:1995-12
Result	Test passed
Colorization and coding	UEO 00540 40 5 0000 00
Specification	IEC 60512-13-5:2006-02
Result	Test passed
isual inspection	
Specification	IEC 60512-1-1:2002-02
Result	Test passed
Dimension check	
Specification	IEC 60512-1-2:2002-02
Result	Test passed
Charation took	
	IFC 60068-2-6:2007-12
Specification	IEC 60068-2-6:2007-12 10 - 150 - 10 Hz
Specification Frequency	
Specification	10 - 150 - 10 Hz
Specification Frequency Sweep speed	10 - 150 - 10 Hz 1 octave/min
Specification Frequency Sweep speed Amplitude	10 - 150 - 10 Hz 1 octave/min 0.35 mm (10 Hz 60.1 Hz)
Specification Frequency Sweep speed Amplitude Sweep speed Test duration per axis	10 - 150 - 10 Hz 1 octave/min 0.35 mm (10 Hz 60.1 Hz) 5g (60.1 Hz 150 Hz)
Specification Frequency Sweep speed Amplitude Sweep speed Test duration per axis	10 - 150 - 10 Hz 1 octave/min 0.35 mm (10 Hz 60.1 Hz) 5g (60.1 Hz 150 Hz)
Frequency Sweep speed Amplitude Sweep speed Test duration per axis Durability test Specification	10 - 150 - 10 Hz 1 octave/min 0.35 mm (10 Hz 60.1 Hz) 5g (60.1 Hz 150 Hz) 2.5 h IEC 60512-9-1:2010-03
Specification Frequency Sweep speed Amplitude Sweep speed Test duration per axis Durability test Specification Impulse withstand voltage at sea level	10 - 150 - 10 Hz 1 octave/min 0.35 mm (10 Hz 60.1 Hz) 5g (60.1 Hz 150 Hz) 2.5 h
Specification Frequency Sweep speed Amplitude Sweep speed Test duration per axis urability test Specification Impulse withstand voltage at sea level Contact resistance R ₁	10 - 150 - 10 Hz 1 octave/min 0.35 mm (10 Hz 60.1 Hz) 5g (60.1 Hz 150 Hz) 2.5 h IEC 60512-9-1:2010-03 4.8 kV
Specification Frequency Sweep speed Amplitude Sweep speed Test duration per axis rurability test Specification Impulse withstand voltage at sea level	10 - 150 - 10 Hz 1 octave/min 0.35 mm (10 Hz 60.1 Hz) 5g (60.1 Hz 150 Hz) 2.5 h IEC 60512-9-1:2010-03 4.8 kV 1 mΩ
Specification Frequency Sweep speed Amplitude Sweep speed Test duration per axis Purability test Specification Impulse withstand voltage at sea level Contact resistance R ₁ Contact resistance R ₂	10 - 150 - 10 Hz 1 octave/min 0.35 mm (10 Hz 60.1 Hz) 5g (60.1 Hz 150 Hz) 2.5 h IEC 60512-9-1:2010-03 4.8 kV 1 mΩ 1.2 mΩ
Specification Frequency Sweep speed Amplitude Sweep speed Test duration per axis urability test Specification Impulse withstand voltage at sea level Contact resistance R ₁ Contact resistance R ₂ Insertion/withdrawal cycles Insulation resistance, neighboring positions	10 - 150 - 10 Hz 1 octave/min 0.35 mm (10 Hz 60.1 Hz) 5g (60.1 Hz 150 Hz) 2.5 h IEC 60512-9-1:2010-03 4.8 kV 1 mΩ 1.2 mΩ 25
Specification Frequency Sweep speed Amplitude Sweep speed Test duration per axis rurability test Specification Impulse withstand voltage at sea level Contact resistance R ₁ Contact resistance R ₂ Insertion/withdrawal cycles Insulation resistance, neighboring positions	10 - 150 - 10 Hz 1 octave/min 0.35 mm (10 Hz 60.1 Hz) 5g (60.1 Hz 150 Hz) 2.5 h IEC 60512-9-1:2010-03 4.8 kV 1 mΩ 1.2 mΩ 25 > 5 MΩ
Specification Frequency Sweep speed Amplitude Sweep speed Test duration per axis urability test Specification Impulse withstand voltage at sea level Contact resistance R ₁ Contact resistance R ₂ Insertion/withdrawal cycles Insulation resistance, neighboring positions	10 - 150 - 10 Hz 1 octave/min 0.35 mm (10 Hz 60.1 Hz) 5g (60.1 Hz 150 Hz) 2.5 h IEC 60512-9-1:2010-03 4.8 kV 1 mΩ 1.2 mΩ 25 > 5 MΩ ISO 6988:1985-02
Specification Frequency Sweep speed Amplitude Sweep speed Test duration per axis urability test Specification Impulse withstand voltage at sea level Contact resistance R ₁ Contact resistance R ₂ Insertion/withdrawal cycles Insulation resistance, neighboring positions	10 - 150 - 10 Hz 1 octave/min 0.35 mm (10 Hz 60.1 Hz) 5g (60.1 Hz 150 Hz) 2.5 h IEC 60512-9-1:2010-03 4.8 kV 1 mΩ 1.2 mΩ 25 > 5 MΩ ISO 6988:1985-02 0.2 dm 3 SO $_2$ on 300 dm 3 /40 °C/1 cycle
Specification Frequency Sweep speed Amplitude Sweep speed Test duration per axis furability test Specification Impulse withstand voltage at sea level Contact resistance R ₁ Contact resistance R ₂ Insertion/withdrawal cycles Insulation resistance, neighboring positions Climatic test Specification Corrosive stress Thermal stress	10 - 150 - 10 Hz 1 octave/min 0.35 mm (10 Hz 60.1 Hz) 5g (60.1 Hz 150 Hz) 2.5 h IEC 60512-9-1:2010-03 4.8 kV 1 mΩ 1.2 mΩ 25 > 5 MΩ ISO 6988:1985-02
Specification Frequency Sweep speed Amplitude Sweep speed Test duration per axis urability test Specification Impulse withstand voltage at sea level Contact resistance R ₁ Contact resistance R ₂ Insertion/withdrawal cycles Insulation resistance, neighboring positions limatic test Specification Corrosive stress Thermal stress Power-frequency withstand voltage	10 - 150 - 10 Hz 1 octave/min 0.35 mm (10 Hz 60.1 Hz) 5g (60.1 Hz 150 Hz) 2.5 h IEC 60512-9-1:2010-03 4.8 kV 1 mΩ 1.2 mΩ 25 > 5 MΩ ISO 6988:1985-02 0.2 dm 3 SO $_2$ on 300 dm 3 /40 °C/1 cycle 100 °C/168 h
Specification Frequency Sweep speed Amplitude Sweep speed Test duration per axis Purability test Specification Impulse withstand voltage at sea level Contact resistance R ₁ Contact resistance R ₂ Insertion/withdrawal cycles Insulation resistance, neighboring positions Cimatic test Specification Corrosive stress Thermal stress Power-frequency withstand voltage	10 - 150 - 10 Hz 1 octave/min 0.35 mm (10 Hz 60.1 Hz) 5g (60.1 Hz 150 Hz) 2.5 h IEC 60512-9-1:2010-03 4.8 kV 1 mΩ 1.2 mΩ 25 > 5 MΩ ISO 6988:1985-02 0.2 dm 3 SO $_2$ on 300 dm 3 /40 °C/1 cycle 100 °C/168 h 2.21 kV
Specification Frequency Sweep speed Amplitude Sweep speed Test duration per axis Furability test Specification Impulse withstand voltage at sea level Contact resistance R ₁ Contact resistance R ₂ Insertion/withdrawal cycles Insulation resistance, neighboring positions Flimatic test Specification Corrosive stress Thermal stress Power-frequency withstand voltage	10 - 150 - 10 Hz 1 octave/min 0.35 mm (10 Hz 60.1 Hz) 5g (60.1 Hz 150 Hz) 2.5 h IEC 60512-9-1:2010-03 4.8 kV 1 mΩ 1.2 mΩ 25 > 5 MΩ ISO 6988:1985-02 0.2 dm 3 SO $_2$ on 300 dm 3 /40 °C/1 cycle 100 °C/168 h



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Ambient temperature (assembly)	-5 °C 100 °C
Electrical tests	
Thermal test Test group C	
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
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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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	-

EHE	EAC
LIIL	Approval ID: B.01687

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 Zeichengeneh Approval ID: 40004701	nmigung			
	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 8.0	EC002638
UNSPSC	

39121400



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Environmental product compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e	
	No hazardous substances above threshold values	

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