

1729616

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PCB connector, nominal cross section: 6 mm², color: blue grey, nominal current: 32 A, rated voltage (III/2): 1000 V, contact surface: Sn, contact connection type: Socket, number of potentials: 4, number of rows: 1, number of positions: 4, number of connections: 4, product range: SPC 5/..-ST, pitch: 7.62 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, locking clip: - Locking clip, plug-in system: COMBICON PC 5, locking: without, mounting method: without, type of packaging: packed in cardboard

Your advantages

- · Time saving push-in connection, tools not required
- · Defined contact force ensures that contact remains stable over the long term
- · Clamping space opened by means of fixed screwdriver enables convenient conductor connection
- · Integrated double steel spring provides additional safety in the event of temperature and power fluctuations
- · Optimized for tight installation situations: operation and conductor connection from one direction
- 600 V UL approval in the smallest of dimensions

Commercial data

Item number	1729616
Packing unit	50 pc
Minimum order quantity	1 pc
Product key	AADFBA
GTIN	4046356149907
Weight per piece (including packing)	20.32 g
Weight per piece (excluding packing)	19.297 g
Country of origin	IN



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Technical data

Product properties

Product type	PCB connector
Product family	SPC 5/ST
Product line	COMBICON Connectors L
Number of positions	4
Pitch	7.62 mm
Number of connections	4
Number of rows	1
Number of potentials	4
Mounting type	without

Electrical properties

Properties

Nominal current I _N	32 A
Nominal voltage U _N	1000 V
Contact resistance	0.8 mΩ
Rated voltage (III/3)	1000 V
Rated surge voltage (III/3)	8 kV
Rated voltage (III/2)	1000 V
Rated surge voltage (III/2)	8 kV
Rated voltage (II/2)	1000 V
Rated surge voltage (II/2)	6 kV

Connection data

Connection technology

Туре	Standard
Connector system	COMBICON PC 5
Nominal cross section	6 mm²
Contact connection type	Socket

Interlock

Locking type	without
Mounting type	without

Conductor connection

Connection method	Push-in spring connection
Connection direction of the conductor to plug-in direction	0 °
Conductor/PCB connection direction	0 °
Conductor cross-section rigid	0.2 mm ² 10 mm ²
Conductor cross-section flexible	0.2 mm² 6 mm²
Conductor cross-section AWG	24 8



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Conductor cross-section flexible, with ferrule without plastic sleeve	0.25 mm² 6 mm²
Conductor cross-section, flexible, with ferrule, with plastic sleeve	0.25 mm² 4 mm²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.25 mm² 1.5 mm²
Cylindrical gauge a x b / diameter	4.3 mm x 4.0 mm / 4.0 mm
Stripping length	15 mm
Specifications for ferrules without insulating collar	
recommended crimping tool	1212034 CRIMPFOX 6
	1213144 CRIMPFOX CENTRUS 6S
	1213146 CRIMPFOX CENTRUS 6H
ferrules without insulating collar, according to DIN 46228-1	Cross section: 0.5 mm²; Length: 10 mm 15 mm
	Cross section: 0.75 mm²; Length: 10 mm 15 mm
	Cross section: 1 mm²; Length: 10 mm 15 mm
	Cross section: 1.5 mm²; Length: 12 mm 15 mm
	Cross section: 2.5 mm²; Length: 12 mm 15 mm
	Cross section: 4 mm²; Length: 12 mm 15 mm
	Cross section: 6 mm²; Length: 12 mm 15 mm
Specifications for ferrules with insulating collar	
recommended crimping tool	1212034 CRIMPFOX 6
	1213144 CRIMPFOX CENTRUS 6S
	1213146 CRIMPFOX CENTRUS 6H
ferrules with insulating collar, according to DIN 46228-4	Cross section: 0.5 mm²; Length: 10 mm 15 mm
	Cross section: 0.75 mm²; Length: 12 mm 15 mm
	Cross section: 1 mm²; Length: 12 mm 15 mm
	Cross section: 1.5 mm²; Length: 12 mm 15 mm
	Cross section: 2.5 mm²; Length: 12 mm 15 mm
	Cross section: 4 mm²; Length: 12 mm 15 mm

Material specifications

Material data - contact

material acta comment	
Note	WEEE/RoHS-compliant, free of whiskers according to IEC 60068-2-82/JEDEC JESD 201
Contact material	Cu alloy
Surface characteristics	hot-dip tin-plated
Metal surface terminal point (top layer)	Tin (4 - 8 μm Sn)
Metal surface contact area (top layer)	Tin (4 - 8 μm Sn)

Material data - housing

Color (Housing)	blue grey (7031)
Insulating material	PA
Insulating material group	1
CTI according to IEC 60112	600
Flammability rating according to UL 94	V0



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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

Dimensional drawing	h
Pitch	7.62 mm
Width [w]	30.48 mm
Height [h]	19.8 mm
Length [I]	38.5 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	$0.2 \text{ mm}^2 / \text{solid} / > 10 \text{ N}$
setpoint/actual value	0.2 mm² / flexible / > 10 N
	10 mm² / solid / > 90 N
	6 mm^2 / flexible / > 80 N

Insertion and withdrawal forces

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Specification	IEC 60512-13-2:2006-02
Result	Test passed
No. of cycles	50



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nsertion strength per pos. approx.	8 N
Withdraw strength per pos. approx.	6 N
lesistance of inscriptions	
Specification	IEC 60068-2-70:1995-12
Result	Test passed
olarization and coding	
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
bration test Specification	IEC 60068-2-6:2007-12
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	2.5 h
Test directions	X-, Y- and Z-axis
urability test	
Specification	IEC 60512-9-1:2010-03
Impulse withstand voltage at sea level	7.3 kV
Contact resistance R ₁	0.8 mΩ
Contact resistance R ₂	0.8 mΩ
Insertion/withdrawal cycles	50
Insertion/withdrawal cycles Insulation resistance, neighboring positions	50 > 5 MΩ
Insulation resistance, neighboring positions	> 5 MΩ
	> 5 MΩ ISO 6988:1985-02
Insulation resistance, neighboring positions Climatic test Specification Corrosive stress	> 5 MΩ ISO 6988:1985-02 0.2 dm ³ SO ₂ on 300 dm ³ /40 °C/1 cycle
Insulation resistance, neighboring positions Climatic test Specification Corrosive stress Thermal stress	> 5 MΩ ISO 6988:1985-02 0.2 dm³ SO ₂ on 300 dm³/40 °C/1 cycle 100 °C/168 h
Insulation resistance, neighboring positions Climatic test Specification Corrosive stress	> 5 MΩ ISO 6988:1985-02 0.2 dm ³ SO ₂ on 300 dm ³ /40 °C/1 cycle
Insulation resistance, neighboring positions Climatic test Specification Corrosive stress Thermal stress	> 5 MΩ ISO 6988:1985-02 0.2 dm³ SO ₂ on 300 dm³/40 °C/1 cycle 100 °C/168 h
Insulation resistance, neighboring positions Climatic test Specification Corrosive stress Thermal stress Power-frequency withstand voltage	> 5 MΩ ISO 6988:1985-02 0.2 dm³ SO ₂ on 300 dm³/40 °C/1 cycle 100 °C/168 h
Insulation resistance, neighboring positions Climatic test Specification Corrosive stress Thermal stress Power-frequency withstand voltage	> 5 MΩ ISO 6988:1985-02 0.2 dm³ SO ₂ on 300 dm³/40 °C/1 cycle 100 °C/168 h 3.31 kV



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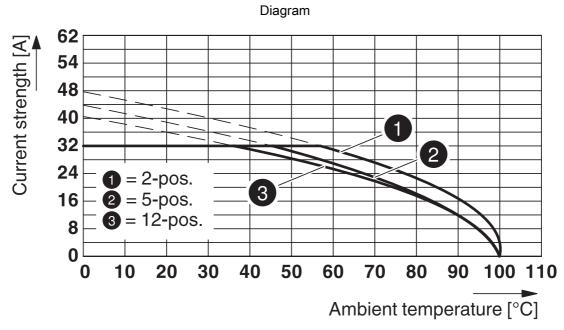
Ambient temperature (assembly)	-5 °C 100 °C
Electrical tests	
Thermal test Test group C	
Specification	IEC 60512-5-1:2002-02
Tested number of positions	12
Insulation resistance	
Specification	IEC 60512-3-1:2002-02
Insulation resistance, neighboring positions	> 5 MΩ
Temperature cycles	
Specification	IEC 60999-1:1999-11
Result	Test passed
Air clearances and creepage distances	150 0000 / 1 0005 0 /
Specification	IEC 60664-1:2007-04
Insulating material group	1
Comparative tracking index (IEC 60112)	CTI 600
Rated insulation voltage (III/3)	1000 V
Rated surge voltage (III/3)	8 kV
minimum clearance value - non-homogenous field (III/3)	8 mm
minimum creepage distance (III/3)	12.5 mm
Rated insulation voltage (III/2)	1000 V
Rated surge voltage (III/2)	8 kV
minimum clearance value - non-homogenous field (III/2)	8 mm
minimum creepage distance (III/2)	8 mm
Rated insulation voltage (II/2)	1000 V
Rated surge voltage (II/2)	6 kV
minimum clearance value - non-homogenous field (II/2)	5.5 mm
minimum creepage distance (II/2)	5.5 mm
Packaging specifications	
Type of packaging	packed in cardboard



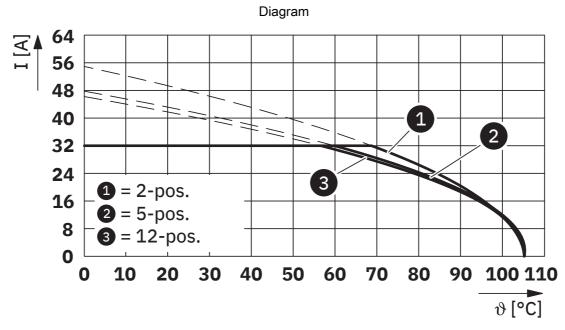
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Drawings



Type: SPC 5/...-ST-7,62 with PC 5/...-G-7,62

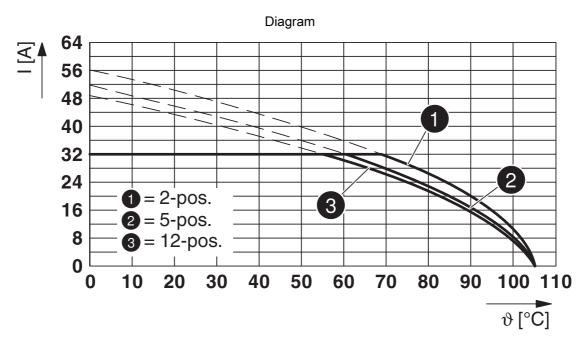


Type: SPC 5/..-ST-7,62 with DFK-PC 5/..-ST-7,62



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Type: SPC 5/...-ST-7,62 with IPC 5/...-ST-7,62



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Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1729616

c 911 us	CULus Recognized Approval ID: E60425-19920722				
		Nominal voltage U_N	Nominal current I _N	Cross section AWG	Cross section mm ²
В					
		600 V	35 A	24 - 8	-
С					
		600 V	35 A	24 - 8	-



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Classifications

ECLASS

	ECLASS-13.0	27460202		
	ECLASS-15.0	27460202		
	ETIM			
	IIVI			
	ETIM 9.0	EC002638		
UNSPSC				
	UNSPSC 21.0	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