

1748943

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PCB connector, nominal cross section: 6 mm², color: green, nominal current: 32 A, rated voltage (III/2): 1000 V, 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: ISPC 5/..-STGCL, pitch: 7.62 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, locking clip: - without locking clip, plug-in system: COMBICON PC 5, locking: Clip locking, mounting method: Click & Lock latching window, 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
- · Inverted connector with pin contacts for touch-proof device outputs or free-hanging cable/cable connections
- Standard header also suitable for connectors with automatically locking Click and Lock system
- 600 V UL approval in the smallest of dimensions

#### Commercial data

Item number	1748943
Packing unit	50 pc
Minimum order quantity	50 pc
Note	Made to order (non-returnable)
Sales key	AA04
Product key	AADFCA
GTIN	4046356312592
Weight per piece (including packing)	45.294 g
Weight per piece (excluding packing)	45.274 g
Customs tariff number	85366990
Country of origin	IN



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## Technical data

### Product properties

Product type	PCB connector
Product family	ISPC 5/STGCL
Product line	COMBICON Connectors L
Туре	Inverted
Number of positions	10
Pitch	7.62 mm
Number of connections	10
Number of rows	1
Number of potentials	10
Mounting type	Click & Lock latching window

### Electrical properties

#### **Properties**

Nominal current $I_N$ 32 ANominal voltage $U_N$ 1000 VContact resistance0.55 mΩRated voltage (III/3)1000 VRated surge voltage (III/3)8 kVRated voltage (III/2)1000 VRated voltage (III/2)8 kVRated voltage (III/2)8 kVRated voltage (III/2)6 kV	•	
Contact resistance       0.55 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 (III/2)       1000 V	Nominal current I <sub>N</sub>	32 A
Rated voltage (III/3)  Rated surge voltage (III/3)  Rated voltage (III/2)  Rated surge voltage (III/2)  Rated surge voltage (III/2)  Rated voltage (III/2)  1000 V	Nominal voltage U <sub>N</sub>	1000 V
Rated surge voltage (III/3)  Rated voltage (III/2)  Rated surge voltage (III/2)  Rated voltage (III/2)  8 kV  Rated voltage (III/2)  1000 V	Contact resistance	0.55 mΩ
Rated voltage (III/2)  Rated surge voltage (III/2)  Rated voltage (III/2)  1000 V  1000 V	Rated voltage (III/3)	1000 V
Rated surge voltage (III/2) 8 kV Rated voltage (II/2) 1000 V	Rated surge voltage (III/3)	8 kV
Rated voltage (II/2) 1000 V	Rated voltage (III/2)	1000 V
	Rated surge voltage (III/2)	8 kV
Rated surge voltage (II/2) 6 kV	Rated voltage (II/2)	1000 V
	Rated surge voltage (II/2)	6 kV

## Connection data

## Connection technology

Туре	Inverted
Connector system	COMBICON PC 5
Nominal cross section	6 mm²
Contact connection type	Pin

#### Interlock

Locking type	Clip locking
Mounting type	Click & Lock latching window

#### Conductor connection

Connection method	Push-in spring connection
Conductor/PCB connection direction	0°
Conductor cross-section rigid	0.2 mm² 10 mm²
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 mm <sup>2</sup> 6 mm <sup>2</sup>
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
ecifications for ferrules without insulating collar	
recommended crimping tool	1212034 CRIMPFOX 6
	1213144 CRIMPFOX CENTRUS 6S
	1213146 CRIMPFOX CENTRUS 6H
errules 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 mm <sup>2</sup> ; Length: 12 mm 15 mm
	Cross section: 6 mm²; Length: 12 mm 15 mm
ecifications for ferrules with insulating collar	
recommended crimping tool	1212034 CRIMPFOX 6
	1213144 CRIMPFOX CENTRUS 6S
	1213146 CRIMPFOX CENTRUS 6H
errules 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 mm <sup>2</sup> ; Length: 12 mm 15 mm

### 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 (4 - 8 µm Sn)
Metal surface contact area (top layer)	Tin (4 - 8 μm Sn)

### Material data - housing

Color (Housing)	green (6021)
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- 775
Temperature for the ball pressure test according to EN 60695 10-2	5- 125 °C
Dimensions	
Dimensional drawing	

	h
Pitch	7.62 mm
Width [w]	79 mm
Height [h]	19.8 mm
Length [I]	40.5 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	10 mm² / solid / > 90 N
setpoint/actual value	6 mm² / flexible / > 80 N
	0.2 mm² / solid / > 10 N
	0.2 mm² / flexible / > 10 N

#### Insertion and withdrawal forces

modition and maintain forces	
Specification	IEC 60512-13-2:2006-02
Result	Test passed
No. of cycles	25



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Insertion strength per pos. approx.	7.5 N		
Withdraw strength per pos. approx.	5 N		
Resistance of inscriptions			
Specification	IEC 60068-2-70:1995-12		
Result	Test passed		
Polarization and coding			
Specification	IEC 60512-7:1993-08 (Polarization)		
Result	Test passed		
icual increation			
isual inspection Specification	IEC 60512-1-1:2002-02		
Result	Test passed		
Toour	i cai passed		
imension check			
Specification	IEC 60512-1-2:2002-02		
Result	Test passed		
ironmental and real-life conditions			
ibration test			
Specification	IEC 60068-2-6:1995-03		
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 60512-5:1992-08		
Impulse withstand voltage at sea level	9.8 kV		
Contact resistance R <sub>1</sub>	0.55 mΩ		
Contact resistance R <sub>2</sub>	0.6 mΩ		
Insertion/withdrawal cycles	25		
limatic test			
Specification	ISO 6988:1985-02		
Corrosive stress	0.2 dm <sup>3</sup> SO <sub>2</sub> on 300 dm <sup>3</sup> /40 °C/1 cycle		
Thermal stress	100 °C/168 h		
Power-frequency withstand voltage	4.26 kV		
	TIZONY		
mbient conditions	40 °C 400 °C (decorded to the decor		
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

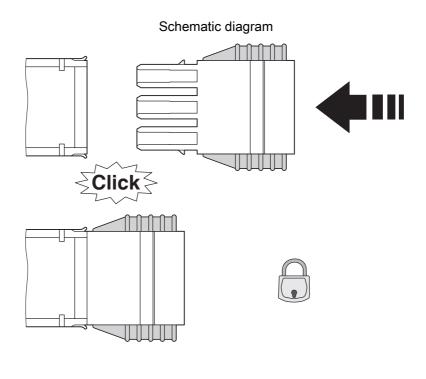
Specification	IEC 60512-5-1:2002-02
Tested number of positions	12
Insulation resistance	
Specification	IEC 60512-3-1:2002-02
Insulation resistance, neighboring positions	10 <sup>12</sup> Ω
Temperature cycles	
Specification	IEC 60999-1:1999-11
Air clearances and creepage distances	
Specification	IEC 60664-1:2007-04
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
ackaging specifications	
Type of packaging	packed in cardboard
1 Jpc of paolaging	paonoa iii dalabdala

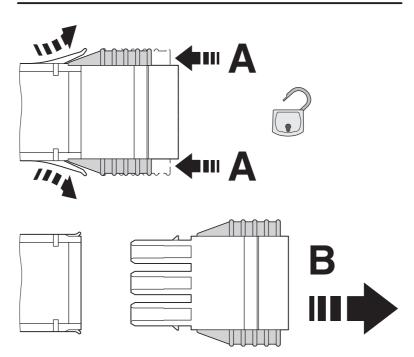


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## **Drawings**



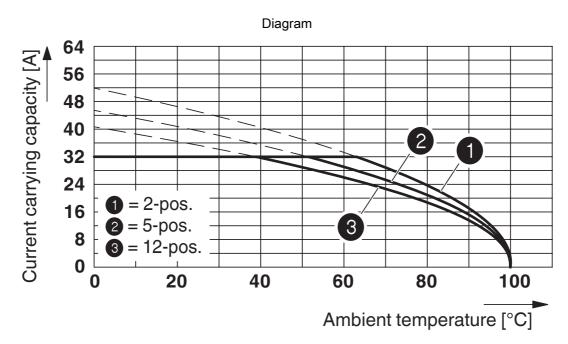


Click and Lock system method of operation

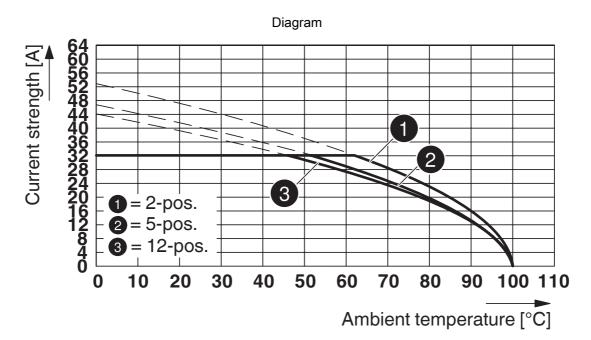


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Type: ISPC 5/...-STGCL-7,62 with IPC 5/...-G-7,62

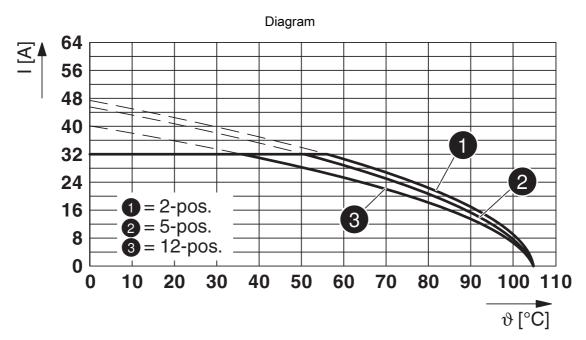


Type: SPC 5/...-STCL-7,62 with ISPC 5/...-STGCL-7,62



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Type: PC 5/...-STCL1-7,62 with ISPC 5/...-STGCL-7,62



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## **Approvals**

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1748943

c <b>911</b> us	cULus Recognized Approval ID: E60425-19920722				
		Nominal voltage $U_N$	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
В					
		600 V	35 A	24 - 8	-
С					
		600 V	35 A	24 - 8	-



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## Classifications

### **ECLASS**

	ECLASS-13.0	27460202		
	Filter und Facetten	Leiterplattenstecker		
	Filter und Facetten	Leiterplattenstecker		
ETIM				
	ETIM 9.0	EC002638		
UNSPSC				
	UNSPSC 21.0	39121400		



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## Environmental product compliance

#### EU RoHS

20 1.01.0	
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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