

1709157

https://www.phoenixcontact.com/us/products/1709157

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



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: 2, number of rows: 1, number of positions: 2, number of connections: 2, product range: IPC 5/..-STF, pitch: 7.62 mm, connection method: Screw connection with tension sleeve, screw head form: Z1L Slotted Pozidriv, conductor/PCB connection direction: 0 °, locking clip: - without locking clip, plug-in system: COMBICON PC 5, locking: Screw locking mechanism, mounting method: Screw flange, type of packaging: packed in cardboard

### Your advantages

- · Well-known connection principle allows worldwide use
- · Low temperature rise, thanks to maximum contact force
- · Allows connection of two conductors
- · Inverted connector with pin contacts for touch-proof device outputs or free-hanging cable/cable connections
- · Screwable flange for superior mechanical stability
- 600 V UL approval in the smallest of dimensions

#### Commercial data

Item number	1709157
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	AA04
Product key	AADACB
Catalog page	Page 527 (C-1-2013)
GTIN	4046356075695
Weight per piece (including packing)	12.12 g
Weight per piece (excluding packing)	11.454 g
Customs tariff number	85366990
Country of origin	PL



1709157

https://www.phoenixcontact.com/us/products/1709157

### Technical data

### Product properties

Product type	PCB connector
Product family	IPC 5/STF
Product line	COMBICON Connectors L
Туре	Inverted
Number of positions	2
Pitch	7.62 mm
Number of connections	2
Number of rows	1
Number of potentials	2
Mounting flange	Screw flange

### Electrical properties

#### **Properties**

- P	
Nominal current I <sub>N</sub>	32 A
Nominal voltage U <sub>N</sub>	1000 V
Contact resistance	0.4 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	Inverted
Connector system	COMBICON PC 5
Nominal cross section	6 mm²
Contact connection type	Pin

#### Interlock

Locking type	Screw locking mechanism
Mounting flange	Screw flange
Tightening torque	0.3 Nm 0.7 Nm

#### Conductor connection

Connection method	Screw connection with tension sleeve
Conductor/PCB connection direction	0 °
Conductor cross section rigid	0.2 mm² 10 mm²
Conductor cross section flexible	0.2 mm² 6 mm²



1709157

https://www.phoenixcontact.com/us/products/1709157

Conductor cross section AWG	24 10
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 same cross section, solid	0.2 mm <sup>2</sup> 2.5 mm <sup>2</sup>
2 conductors with same cross section, flexible	0.2 mm² 4 mm²
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	0.25 mm² 1.5 mm²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.25 mm <sup>2</sup> 2.5 mm <sup>2</sup>
Cylindrical gauge a x b / diameter	3.6 mm x 3.1 mm / 3.4 mm
Stripping length	10 mm
Drive form screw head	Slotted Pozidriv (Z1L)
Tightening torque	0.7 Nm 0.8 Nm

### 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	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)	green (6021)
Insulating material	PA
Insulating material group	I
CTI according to IEC 60112	600
Flammability rating according to UL 94	V0
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]	15.24 mm
Height [h]	22.9 mm



1709157

https://www.phoenixcontact.com/us/products/1709157

Length [I]	36.55 mm
ounting	
Outling	
Flange	
Tightening torque	0.3 Nm 0.7 Nm
otes	
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.
echanical tests	
Test for conductor damage and slackening	
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 mm² / solid / > 10 N
setpoint/actual value	0.2 mm² / flexible / > 10 N
	10 mm² / solid / > 90 N
	6 mm² / flexible / > 80 N
Insertion and withdrawal forces	
Specification	IEC 60512-13-2:2006-02
Result	Test passed
No. of cycles	50
Insertion strength per pos. approx.	9 N
Withdraw strength per pos. approx.	9 N
Torque test	
Specification	IEC 60999-1:1999-11
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
Visual inspection	
Specification	IEC 60512-1-1:2002-02
Result	Test passed
Dimension check	
Specification	IEC 60512-1-2:2002-02



1709157

https://www.phoenixcontact.com/us/products/1709157

Result	Test passed
ironmental and real-life conditions	
pration test	
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	9.8 kV
Contact resistance R <sub>1</sub>	0.4 mΩ
Contact resistance R <sub>2</sub>	0.5 mΩ
Insertion/withdrawal cycles	50
Insulation resistance, neighboring positions	> 5 MΩ
imatic 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	105 °C/168 h
Power-frequency withstand voltage	4.26 kV
nocks	
Specification	IEC 60068-2-27:2008-02
Pulse shape	Semi-sinusoidal
Acceleration	30g
Shock duration	18 ms
Test directions	X-, Y- and Z-axis (pos. and neg.)
nbient conditions	
Ambient temperature (operation)	-40 °C 105 °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
etrical tests	
parmel test I Test group C	
ermal test   Test group C Specification	IEC 60513 5 1-2003 03
Specification	IEC 60512-5-1:2002-02

Insulation resistance



1709157

https://www.phoenixcontact.com/us/products/1709157

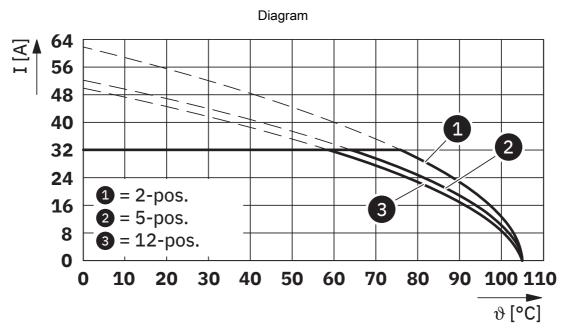
Specification	IEC 60512-3-1:2002-02
Insulation resistance, neighboring positions	> 5 MΩ
Air clearances and creepage distances	
Specification	IEC 60664-1:2007-04
Insulating material group	1
Comparative tracking index (IEC 60112)	CTI 600
Rated insulation voltage (III/3)	1000 V
Rated surge voltage (III/3)	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
ckaging specifications	
Type of packaging	packed in cardboard



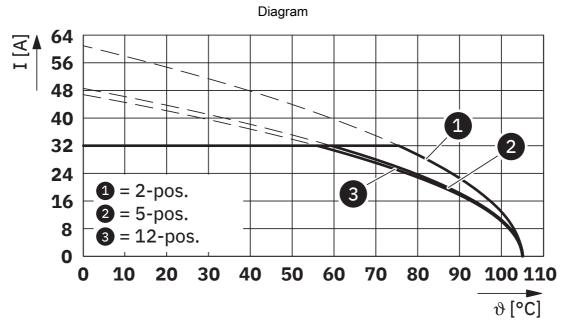
https://www.phoenixcontact.com/us/products/1709157



## **Drawings**



Type: IPC 5/...-STF-7,62 with IPC 5/...-GF-7,62



Type: IPC 5/...-STF-7,62 with IPCV 5/...-GF-7,62



1709157

https://www.phoenixcontact.com/us/products/1709157

## **Approvals**

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1709157

CULus Recognized Approval ID: E60425-19920722				
	Nominal voltage $\mathbf{U}_{\mathbf{N}}$	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
Use group B				
	600 V	41 A	24 - 8	-
Use group C				
	600 V	41 A	24 - 8	-



1709157

https://www.phoenixcontact.com/us/products/1709157

## Classifications

	ECLASS-13.0	27460202			
ETIM					
	ETIM 9.0	EC002638			
UNSPSC					
	UNSPSC 21.0	39121400			



1709157

https://www.phoenixcontact.com/us/products/1709157

## 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%
EF3.0 Climate Change	
CO2e kg	0.101 kg CO2e

Phoenix Contact 2025 @ - all rights reserved https://www.phoenixcontact.com

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