

https://www.phoenixcontact.com/us/products/1708967



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 headers, nominal cross section: 6 mm², color: green, nominal current: 41 A, rated voltage (III/2): 630 V, contact surface: Tin, contact connection type: Socket, number of potentials: 5, number of rows: 1, number of positions: 5, number of connections: 5, product range: IPCV 5/..-GF, pitch: 7.62 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 5 mm, number of solder pins per potential: 3, plug-in system: COMBICON PC 5, Pin connector pattern alignment: Standard, locking: Screw locking mechanism, mounting: Threaded flange, type of packaging: packed in cardboard

Your advantages

- · Well-known mounting principle allows worldwide use
- · Maximum flexibility when it comes to device design one header for connectors with different connection technologies
- · Inverted header with socket contacts for touch-proof device outputs or PCB/PCB connections
- · Screwable flange for superior mechanical stability
- · Integrated double steel spring provides additional safety in the event of temperature and power fluctuations

Commercial data

Item number	1708967
Packing unit	50 pc
Minimum order quantity	50 pc
Note	Made to order (non-returnable)
Sales key	AA04
Product key	AADSCF
Catalog page	Page 543 (C-1-2013)
GTIN	4046356089944
Weight per piece (including packing)	16.275 g
Weight per piece (excluding packing)	14.632 g
Customs tariff number	85366930
Country of origin	PL



https://www.phoenixcontact.com/us/products/1708967



Technical data

Product properties

Product type	PCB headers
Product family	IPCV 5/GF
Product line	COMBICON Connectors L
Туре	Inverted
Number of positions	5
Pitch	7.62 mm
Number of connections	5
Number of rows	1
Number of potentials	5
Mounting flange	Threaded flange
Pin layout	Linear pinning
Solder pins per potential	3

Electrical properties

Nominal current I _N	41 A
Nominal voltage U _N	630 V
Degree of pollution	3
Contact resistance	0.4 mΩ
Rated voltage (III/3)	630 V
Rated surge voltage (III/3)	6 kV
Rated voltage (III/2)	630 V
Rated surge voltage (III/2)	6 kV
Rated voltage (II/2)	1000 V
Rated surge voltage (II/2)	6 kV

Mounting

Mounting type	Wave soldering
Pin layout	Linear pinning
Flange	

Material specifications

Material data - contact

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



https://www.phoenixcontact.com/us/products/1708967



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

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.

Dimensions

Dimensional drawing	h h
Pitch	7.62 mm
Width [w]	53.32 mm
Height [h]	35.1 mm
Length [I]	12.8 mm
Installed height	30.1 mm
Solder pin length [P]	5 mm
Pin dimensions	1.2 x 0.8 mm
PCB design	
Pin spacing	7.62 mm
Hole diameter	1.3 mm

Mechanical tests

Visual inspection

Specification	IEC 60512-1-1:2002-02
Result	Test passed
Dimension check	
Specification	IEC 60512-1-2:2002-02

Resistance of inscriptions



1708967

https://www.phoenixcontact.com/us/products/1708967

	150 00000 0 70 1005 10
Specification	IEC 60068-2-70:1995-12
Result	Test passed
Polarization and coding	
Specification	IEC 60512-13-5:2006-02
Result	Test passed
room	1031 passed
Contact holder in insert	
Specification	IEC 60512-15-1:2008-05
Contact holder in insert Requirements >20 N	Test passed
nsertion and withdrawal forces	
Result	Test passed
No. of cycles	50
Insertion strength per pos. approx.	8 N
Withdraw strength per pos. approx.	6 N
Thermal test Test group C	
Specification	IEC 60512-5-1:2002-02
	IEC 60512-5-1:2002-02
Specification	
Specification Tested number of positions	
Specification Tested number of positions nsulation resistance	12
Specification Tested number of positions nsulation resistance Specification	12 IEC 60512-3-1:2002-02
Specification Tested number of positions nsulation resistance Specification Insulation resistance, neighboring positions	12 IEC 60512-3-1:2002-02
Specification Tested number of positions nsulation resistance Specification Insulation resistance, neighboring positions Air clearances and creepage distances	12 IEC 60512-3-1:2002-02 > 5 MΩ
Specification Tested number of positions nsulation resistance Specification Insulation resistance, neighboring positions Air clearances and creepage distances Specification	12 IEC 60512-3-1:2002-02 > 5 MΩ
Specification Tested number of positions Insulation resistance Specification Insulation resistance, neighboring positions Air clearances and creepage distances Specification Insulating material group	12 IEC 60512-3-1:2002-02 > 5 MΩ IEC 60664-1:2007-04 I
Specification Tested number of positions nsulation resistance Specification Insulation resistance, neighboring positions Air clearances and creepage distances Specification Insulating material group Comparative tracking index (IEC 60112)	IEC 60512-3-1:2002-02 > 5 MΩ IEC 60664-1:2007-04 I CTI 600
Specification Tested number of positions Insulation resistance Specification Insulation resistance, neighboring positions Air clearances and creepage distances Specification Insulating material group Comparative tracking index (IEC 60112) Rated insulation voltage (III/3)	IEC 60512-3-1:2002-02 > 5 MΩ IEC 60664-1:2007-04 I CTI 600 630 V
Specification Tested number of positions nsulation resistance Specification Insulation resistance, neighboring positions Air clearances and creepage distances Specification Insulating material group Comparative tracking index (IEC 60112) Rated insulation voltage (III/3) Rated surge voltage (III/3)	IEC 60512-3-1:2002-02 > 5 MΩ IEC 60664-1:2007-04 I CTI 600 630 V 6 kV
Specification Tested number of positions Insulation resistance Specification Insulation resistance, neighboring positions Air clearances and creepage distances Specification Insulating material group Comparative tracking index (IEC 60112) Rated insulation voltage (III/3) Rated surge voltage (III/3) minimum clearance value - non-homogenous field (III/3)	12 IEC 60512-3-1:2002-02 > 5 MΩ IEC 60664-1:2007-04 I CTI 600 630 V 6 kV 5.5 mm
Specification Tested number of positions Insulation resistance Specification Insulation resistance, neighboring positions Air clearances and creepage distances Specification Insulating material group Comparative tracking index (IEC 60112) Rated insulation voltage (III/3) Rated surge voltage (III/3) minimum clearance value - non-homogenous field (III/3) minimum creepage distance (III/3)	IEC 60512-3-1:2002-02 > 5 MΩ IEC 60664-1:2007-04 I CTI 600 630 V 6 kV 5.5 mm 8 mm

5.5 mm

5.5 mm

1000 V 6 kV

5.5 mm

5.5 mm

Environmental and real-life conditions

minimum creepage distance (II/2)

minimum creepage distance (III/2)

Rated insulation voltage (II/2)

Rated surge voltage (II/2)

minimum clearance value - non-homogenous field (III/2)

minimum clearance value - non-homogenous field (II/2)

Vibration test



1708967

https://www.phoenixcontact.com/us/products/1708967

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
rability test	
Specification	IEC 60512-9-1:2010-03
Impulse withstand voltage at sea level	9.8 kV
Contact resistance R ₁	0.4 mΩ
Contact resistance R ₂	0.5 mΩ
Insertion/withdrawal cycles	50
Insulation resistance, neighboring positions	> 5 MΩ
matic test	
Specification	ISO 6988:1985-02
Corrosive stress	$0.2~\mathrm{dm^3SO_2}$ on 300 $\mathrm{dm^3/40~^\circ C/1}$ cycle
Thermal stress	105 °C/168 h
Power-frequency withstand voltage	4.26 kV
ocks	
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.)
bient 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

packed in cardboard

Phoenix Contact 2024 © - all rights reserved https://www.phoenixcontact.com

Type of packaging

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