

https://www.phoenixcontact.com/us/products/1720932



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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: Pin, number of potentials: 5, number of rows: 1, number of positions: 5, number of connections: 5, product range: PCV 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
- · Screwable flange for superior mechanical stability
- · Maximum flexibility when it comes to device design one header for connectors with different connection technologies

Commercial data

Item number	1720932
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	AA04
Product key	AADSBE
Catalog page	Page 539 (C-1-2013)
GTIN	4046356114059
Weight per piece (including packing)	15.867 g
Weight per piece (excluding packing)	15.044 g
Customs tariff number	85366930
Country of origin	PL



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Technical data

Product properties

Product type	PCB headers
Product family	PCV 5/GF
Product line	COMBICON Connectors L
Туре	Standard
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	0.5 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	
Tightening torque	0.3 Nm 0.7 Nm
Attachment on the PCB	
Tightening torque	0.3 Nm
Screw	1705449 DFK-PC 16-SS

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



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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)
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
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.
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Dimensions

Dimensional drawing	ph ph
Pitch	7.62 mm
Width [w]	54.2 mm
Height [h]	34.25 mm
Length [I]	14.29 mm
Installed height	29.25 mm
Solder pin length [P]	5 mm
Pin dimensions	0.8 x 1 mm
PCB design	
Pin spacing	7.62 mm
Hole diameter	1.3 mm

Mechanical tests

Vieual	inspection

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



Result

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Specification	IEC 60068-2-70:1995-12
Result	Test passed
plarization and coding	
Specification	IEC 60512-13-5:2006-02
Result	Test passed
ontact holder in insert	
Specification	IEC 60512-15-1:2008-05
Contact holder in insert Requirements >20 N	Test passed
sertion and withdrawal forces	
Result	Test passed
No. of cycles	25
Insertion strength per pos. approx.	9 N
Withdraw strength per pos. approx.	5 N
Tested number of positions	12
nsulation resistance	
Specification	IEC 60512-3-1:2002-02
Specification Insulation resistance, neighboring positions	IEC 60512-3-1:2002-02 > 5 MΩ
Insulation resistance, neighboring positions	
Insulation resistance, neighboring positions	
Insulation resistance, neighboring positions ir clearances and creepage distances	> 5 MΩ
Insulation resistance, neighboring positions Air clearances and creepage distances Specification	> 5 MΩ
Insulation resistance, neighboring positions Air clearances and creepage distances Specification Insulating material group	> 5 MΩ IEC 60664-1:2007-04 I
Insulation resistance, neighboring positions Air clearances and creepage distances Specification Insulating material group Comparative tracking index (IEC 60112)	> 5 MΩ IEC 60664-1:2007-04 I CTI 600
Insulation resistance, neighboring positions Air clearances and creepage distances Specification Insulating material group Comparative tracking index (IEC 60112) Rated insulation voltage (III/3)	> 5 MΩ IEC 60664-1:2007-04 I CTI 600 630 V
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)	> 5 MΩ IEC 60664-1:2007-04 I CTI 600 630 V 6 kV
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)	> 5 MΩ IEC 60664-1:2007-04 I CTI 600 630 V 6 kV 5.5 mm
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)	> 5 MΩ IEC 60664-1:2007-04 I CTI 600 630 V 6 kV 5.5 mm 8 mm
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) Rated insulation voltage (III/2)	> 5 MΩ IEC 60664-1:2007-04 I CTI 600 630 V 6 kV 5.5 mm 8 mm 630 V
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) Rated insulation voltage (III/2) Rated surge voltage (III/2)	> 5 MΩ IEC 60664-1:2007-04 I CTI 600 630 V 6 kV 5.5 mm 8 mm 630 V 6 kV
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Test passed



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Environmental and real-life conditions

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

Durability test

Specification	IEC 60512-9-1:2010-03
Impulse withstand voltage at sea level	7.3 kV
Contact resistance R ₁	0.5 mΩ
Contact resistance R ₂	0.5 mΩ
Insertion/withdrawal cycles	25
Insulation resistance, neighboring positions	> 5 MΩ

Climatic 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	3.31 kV

Ambient 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

Packaging specifications

Type of packaging	packed in cardboard
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