

PCV 6-16/ 4-G-10,16 - PCB header



1922501

<https://www.phoenixcontact.com/pc/products/1922501>

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PCB headers, nominal cross section: 6 mm², color: green, nominal current: 76 A (41 A in combination with PC 6 plug), rated voltage (III/2): 1000 V, contact surface: Silver, type of contact: Pin, number of potentials: 4, number of rows: 1, number of positions: 4, number of connections: 4, product range: PCV 6-16/..-G, pitch: 10.16 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 4 mm, number of solder pins per potential: 3, plug-in system: COMBICON PC 16, Pin connector pattern alignment: Standard, locking: without, mounting: without, type of packaging: packed in cardboard, The nominal current of 76 A applies in connection with connectors from the PC 16 family. 41 A are reached in connection with PC 6 connectors (50 A in accordance with UL).

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

Commercial Data

Item number	1922501
Packing unit	50 pc
Minimum order quantity	1 pc
Product Key	AAESAD
Catalog Page	Page 195 (CC-2002)
GTIN	4017918726966
Weight per Piece (including packing)	15.748 g
Weight per Piece (excluding packing)	15.047 g
Customs tariff number	85366930
Country of origin	PL

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Technical Data

Product properties

Type	Standard
Product line	COMBICON Connectors XL
Product type	PCB headers
Product family	PCV 6-16/..-G
Number of positions	4
Pitch	10.16 mm
Number of connections	4
Number of rows	1
Mounting flange	without
Number of potentials	4
Pin layout	Linear pinning
Solder pins per potential	3

Electrical properties

Nominal current I_N	76 A (41 A in combination with PC 6 plug)
Nominal voltage U_N	1000 V
Degree of pollution	3
Contact resistance	0.3 m Ω
Rated voltage (III/3)	630 V
Rated surge voltage (III/3)	6 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

Mounting

Mounting type	Wave soldering
Pin layout	Linear pinning

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	completely silver-plated
Metal surface contact area (top layer)	Silver (4 - 8 μ m Ag)
Metal surface soldering area (top layer)	Silver (4 - 8 μ m Ag)

Material data - housing

Color (Housing)	green (6021)
Insulating material	PA

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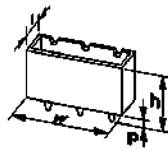
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Insulating material group	I
CTI according to IEC 60112	600
Flammability rating according to UL 94	V0
Glow wire flammability index GWFI according to EN 60695-2-12	850
Glow wire ignition temperature GWIT according to EN 60695-2-13	775
Temperature for the ball pressure test according to EN 60695-10-2	125 °C

Notes

General	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	
Pitch	10.16 mm
Width [w]	43.68 mm
Height [h]	32.3 mm
Length [l]	15.16 mm
Installed height	28.3 mm
Solder pin length [P]	4 mm
Pin dimensions	0.8 x 1.2 mm

Mechanical tests

Visual inspection

Specification	IEC 60512-1-1:2002-02
Result	Test passed

Dimension check

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

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

Contact holder in insert

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Specification	IEC 60512-15-1:2008-05
Contact holder in insert Requirements >20 N	Test passed

Insertion and withdrawal forces

Result	Test passed
No. of cycles	50
Insertion strength per pos. approx.	11 N
Withdraw strength per pos. approx.	12 N

Electrical tests

Thermal test | Test group C

Specification	IEC 60512-5-1:2002-02
Tested number of positions	9

Insulation resistance

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	I
Comparative tracking index (IEC 60112)	CTI 600
Rated insulation voltage (III/3)	630 V
Rated surge voltage (III/3)	6 kV
minimum clearance value - non-homogenous field (III/3)	5.5 mm
minimum creepage distance (III/3)	8 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

Environmental and real-life conditions

Vibration 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)
Sweep speed	5g (60.1 Hz ... 150 Hz)
Test duration per axis	2.5 h

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Durability test

Specification	IEC 60512-9-1:2010-03
Impulse withstand voltage at sea level	9.8 kV
Contact resistance R ₁	0.3 mΩ
Contact resistance R ₂	0.4 mΩ
Insertion/withdrawal cycles	50
Insulation resistance, neighboring positions	> 5 MΩ

Climatic test

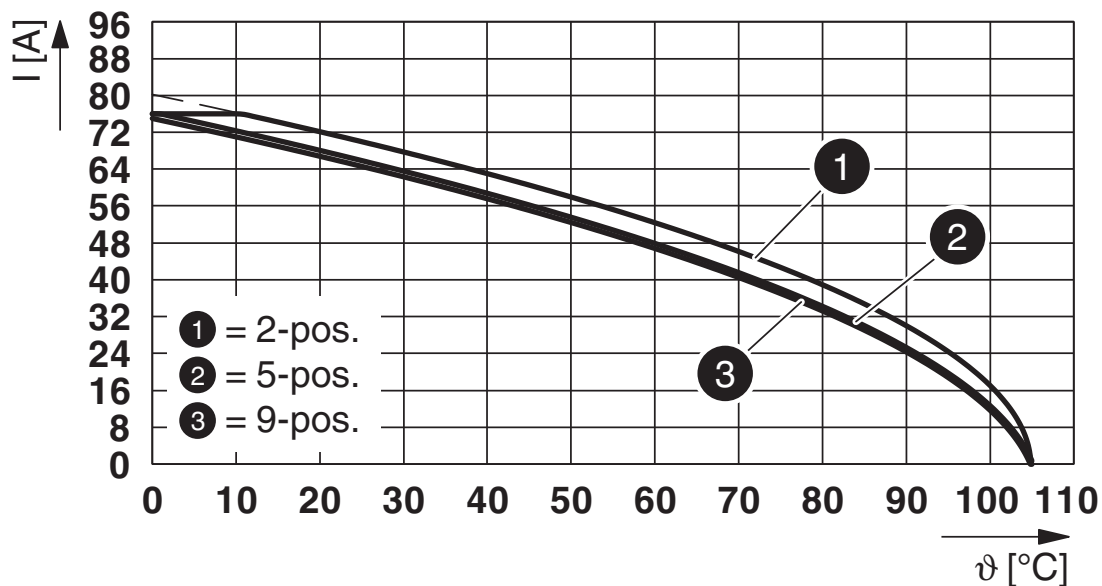
Specification	ISO 6988:1985-02
Corrosive stress	0.2 dm ³ SO ₂ on 300 dm ³ /40 °C/1 cycle
Thermal stress	105 °C/168 h
Power-frequency withstand voltage	4.26 kV

Ambient conditions

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

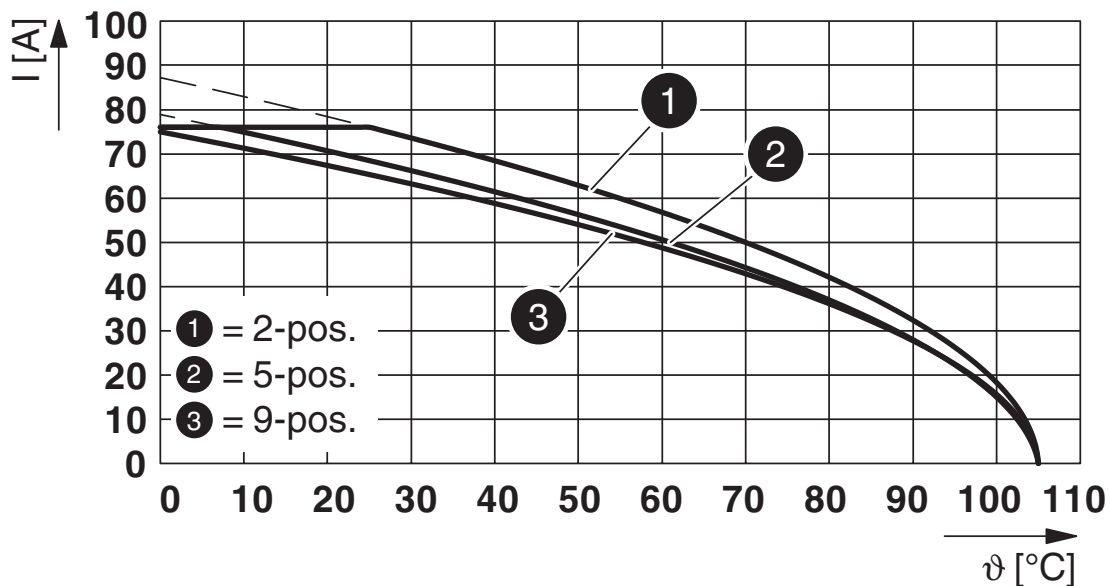
Drawings

Diagram



Type: SPC 16/...-ST-10,16 with PCV 6-16/...-G-10,16

Diagram



Type: PC 16/...-ST-10,16 with PCV 6-16/...-G-10,16

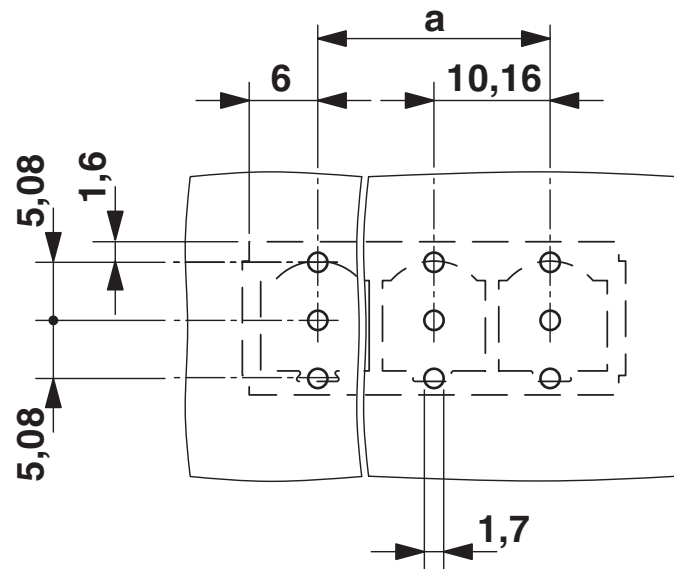
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Drilling plan/solder pad geometry



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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/pc/products/1922501>



EAC

Approval ID: B.01687



cULus Recognized

Approval ID: E60425-20040202

	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
Use group B				
	300 V	66 A	-	-
Use group C				
	300 V	66 A	-	-
Use group D				
	600 V	5 A	-	-



IECEE CB Scheme

Approval ID: DE1-66677

	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
	1000 V	76 A	-	-



VDE Zeichengenehmigung

Approval ID: 40055586

	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
	1000 V	76 A	-	-

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Classifications

ECLASS

ECLASS-11.0	27460201
ECLASS-12.0	27460201
ECLASS-13.0	27460201

ETIM

ETIM 8.0	EC002637
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UNSPSC

UNSPSC 21.0	39121400
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Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

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Accessories

CP-HCC 4 - Coding profile

1600027

<https://www.phoenixcontact.com/pc/products/1600027>

Coding element, Coding profile, color: red, product range: CODIERUNG



PC 6/ 4-ST-10,16 - PCB connector

1913523

<https://www.phoenixcontact.com/pc/products/1913523>



PCB connector, nominal cross section: 6 mm², color: green, nominal current: 41 A, rated voltage (III/2): 1000 V, contact surface: Silver, type of contact: Socket, number of potentials: 4, number of rows: 1, number of positions: 4, number of connections: 4, product range: PC 6/..-ST, pitch: 10.16 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, conductor/PCB connection direction: 0 °, locking clip: - without locking clip, plug-in system: COMBICON PC 16, locking: without, mounting: without, type of packaging: packed in cardboard

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