

https://www.phoenixcontact.com/us/products/1804962



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PCB connector, nominal cross section: 4 mm², color: green, nominal current: 20 A, rated voltage (III/2): 630 V, contact surface: Tin, contact connection type: Socket, number of potentials: 8, number of rows: 1, number of positions: 8, number of connections: 8, product range: PC 4/..-ST, pitch: 7.62 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, conductor/PCB connection direction: 0 °, locking clip: - Locking clip, plug-in system: COMBICON PC 4, locking: without, mounting: without, 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
- · Integrated double steel spring provides additional safety in the event of temperature and power fluctuations

Commercial data

Item number	1804962
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	AA04
Product key	AADAAC
Catalog page	Page 512 (C-1-2013)
GTIN	4017918046408
Weight per piece (including packing)	34.33 g
Weight per piece (excluding packing)	33.92 g
Customs tariff number	85366990
Country of origin	DE



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Technical data

Product properties

Туре	Standard
Product line	COMBICON Connectors L
Product type	PCB connector
Product family	PC 4/ST
Number of positions	8
Pitch	7.62 mm
Number of connections	8
Number of rows	1
Mounting flange	without
Number of potentials	8

Electrical properties

Nominal current I _N	20 A
Nominal voltage U _N	630 V
Degree of pollution	3
Contact resistance	0.5 mΩ
Rated voltage (III/3)	400 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

Connection data

Connection technology

Туре	Standard
Connector system	COMBICON PC 4
Nominal cross section	4 mm²
Contact connection type	Socket

Interlock

Locking type	without
Mounting flange	without

Conductor connection

Connection method	Screw connection with tension sleeve
Conductor/PCB connection direction	0 °
Conductor cross section rigid	0.2 mm² 4 mm²
Conductor cross section flexible	0.2 mm² 4 mm²
Conductor cross section AWG	24 10
Conductor cross section flexible, with ferrule without plastic	0.25 mm² 4 mm²



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sleeve	
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm² 4 mm²
2 conductors with same cross section, solid	0.2 mm ² 2.5 mm ²
2 conductors with same cross section, flexible	0.2 mm ² 1.5 mm ²
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	0.25 mm ² 1.5 mm ²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm² 2.5 mm²
Cylindrical gauge a x b / diameter	3.6 mm x 3.1 mm / 3.0 mm
Stripping length	7 mm
Tightening torque	0.5 Nm 0.6 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]	60.94 mm
Height [h]	18.1 mm
Length [I]	30.7 mm

Mounting



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Drive form screw head	Slotted (L)
Drive form screw head	Slotted (L)
tes	
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
chanical tests	
est 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
	4 mm² / solid / > 60 N
	4 mm² / flexible / > 60 N
nsertion and withdrawal forces	
Result	Test passed
No. of cycles	50
Insertion strength per pos. approx.	8 N
Withdraw strength per pos. approx.	5 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
Result	Test passed

Environmental and real-life conditions

Vibration test

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



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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
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	0.6 mΩ
Insertion/withdrawal cycles	50
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	100 °C/168 h
Power-frequency withstand voltage	3.31 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
ectrical tests	
Thermal test Test group C	
Specification	IEC 60512-5-1:2002-02
Tested number of positions	12
Insulation resistance	
Specification	
Insulation resistance, neighboring positions	IEC 60512-3-1:2002-02
	IEC 60512-3-1:2002-02 > 5 MΩ
Air clearances and creepage distances I	
Air clearances and creepage distances Specification	> 5 MΩ
Specification	
Specification Insulating material group	> 5 MΩ IEC 60664-1:2007-04
Specification	> 5 MΩ IEC 60664-1:2007-04 I
Specification Insulating material group Comparative tracking index (IEC 60112) Rated insulation voltage (III/3)	> 5 MΩ IEC 60664-1:2007-04 I CTI 600
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 600 400 V
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 600 400 V 6 kV 5.5 mm
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 600 400 V 6 kV

5.5 mm



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minimum creepage distance (III/2)	5.5 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

Packaging specifications

Type of packaging	packed in cardboard
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Classifications

UNSPSC 21.0

ECLASS

E	ECLASS-11.0	27460202
Е	ECLASS-12.0	27460202
Е	ECLASS-13.0	27460202
ETIM		
Е	TIM 9.0	EC002638
UNSPSC		

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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