

1987290

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PCB connector, nominal cross section: 1.5 mm², color: black, nominal current: 12 A, rated voltage (III/2): 400 V, contact surface: Sn, contact connection type: Socket, number of potentials: 6, number of rows: 1, number of positions: 6, number of connections: 6, product range: PT 1,5/..-PVH, pitch: 5 mm, connection method: Screw connection with wire protector, screw head form: H1L Slotted Phillips recess, conductor/PCB connection direction: 0 °, plug-in system: COMBICON PST 1,3, 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
- · High terminal block capacity thanks to rectangular terminal block space
- · Allows connection of two conductors
- · Horizontal and vertical connection option for optimum conductor routing
- The latching on the side enables various numbers of positions to be combined

Commercial data

Item number	1987290
Packing unit	100 pc
Minimum order quantity	100 pc
Sales key	AA02
Product key	AABAJB
GTIN	4017918928315
Weight per piece (including packing)	7.16 g
Weight per piece (excluding packing)	6.8 g
Customs tariff number	85366990
Country of origin	CN



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Technical data

Product properties

Product type	PCB connector
Product family	PT 1,5/PVH
Product line	COMBICON Connectors S
Number of positions	6
Pitch	5 mm
Number of connections	6
Number of rows	1
Number of potentials	6
Mounting flange	without

Data management status

Article revision 08

Electrical properties

Nominal current I _N	12 A
Nominal voltage U _N	400 V
Contact resistance	1.3 mΩ
Rated voltage (III/3)	250 V
Rated surge voltage (III/3)	4 kV
Rated voltage (III/2)	400 V
Rated surge voltage (III/2)	4 kV
Rated voltage (II/2)	630 V
Rated surge voltage (II/2)	4 kV

Connection data

Connection technology

Туре	Plug for pin strip
Connector system	COMBICON PST 1,3
Nominal cross section	1.5 mm²
Contact connection type	Socket

Interlock

Locking type	without
Mounting flange	without

Conductor connection

Connection method	Screw connection with wire protector
Conductor/PCB connection direction	0 °
Conductor cross section rigid	0.2 mm ² 2.5 mm ²
Conductor cross section flexible	0.2 mm² 2.5 mm²
Conductor cross section AWG	26 14



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Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm² 1.5 mm²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm² 1.5 mm²
2 conductors with same cross section, solid	0.2 mm² 0.75 mm²
2 conductors with same cross section, flexible	0.2 mm² 0.75 mm²
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	0.25 mm² 0.34 mm²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm² 0.75 mm²
Cylindrical gauge a x b / diameter	2.8 mm x 2.0 mm / 2.4 mm
Stripping length	5 mm
Drive form screw head	Slotted Phillips recess (H1L)
Tightening torque	0.35 Nm 0.4 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)	black (9005)
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	5 mm
Width [w]	30 mm
Height [h]	11.4 mm
Length [I]	15 mm



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Mechanical tests

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
	2.5 mm² / solid / > 50 N
	2.5 mm² / flexible / > 50 N
Insertion and withdrawal forces	
Specification	IEC 60512-13-2:2006-02
Result	Test passed
No. of cycles	10
Insertion strength per pos. approx.	5 N
Withdraw strength per pos. approx.	4 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 60512-7:1993-08 (Polarization)
Result	Test passed
Visual inspection	
Specification	IEC 60512-1-1:2002-02
Result	Test passed
Dimension check	
Specification	IEC 60512-1-2:2002-02

Environmental and real-life conditions

Vibration test

Specification	IEC 60068-2-6:1995-03
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)



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Test duration per axis	2.5 h
Test directions	X-, Y- and Z-axis
urability test	
Specification	IEC 60512-5:1992-08
Impulse withstand voltage at sea level	4.9 kV
Contact resistance R ₁	1.3 mΩ
Contact resistance R ₂	1.4 mΩ
Insertion/withdrawal cycles	10
limatic 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	2.5 kV
mbient conditions	40°C 400°C (danadata the day)
Analogat to an anatomy (an anation)	-40 °C 100 °C (dependent on the derating curve)
Ambient temperature (operation)	40.80 70.80
Ambient temperature (storage/transport)	-40 °C 70 °C
Ambient temperature (storage/transport) Relative humidity (storage/transport)	30 % 70 %
Ambient temperature (storage/transport)	
Ambient temperature (storage/transport) Relative humidity (storage/transport) Ambient temperature (assembly) ctrical tests hermal test Test group C Specification	30 % 70 %
Ambient temperature (storage/transport) Relative humidity (storage/transport) Ambient temperature (assembly) ctrical tests hermal test Test group C	30 % 70 % -5 °C 100 °C
Ambient temperature (storage/transport) Relative humidity (storage/transport) Ambient temperature (assembly) ctrical tests hermal test Test group C Specification Tested number of positions	30 % 70 % -5 °C 100 °C
Ambient temperature (storage/transport) Relative humidity (storage/transport) Ambient temperature (assembly) ctrical tests hermal test Test group C Specification	30 % 70 % -5 °C 100 °C
Ambient temperature (storage/transport) Relative humidity (storage/transport) Ambient temperature (assembly) ctrical tests nermal test Test group C Specification Tested number of positions sulation resistance	30 % 70 % -5 °C 100 °C IEC 60512-5-1:2002-02 16
Ambient temperature (storage/transport) Relative humidity (storage/transport) Ambient temperature (assembly) ctrical tests hermal test Test group C Specification Tested number of positions sulation resistance Specification Insulation resistance, neighboring positions	30 % 70 % -5 °C 100 °C IEC 60512-5-1:2002-02 16 IEC 60512-3-1:2002-02
Ambient temperature (storage/transport) Relative humidity (storage/transport) Ambient temperature (assembly) ctrical tests hermal test Test group C Specification Tested number of positions sullation resistance Specification Insulation resistance, neighboring positions ir clearances and creepage distances	30 % 70 % -5 °C 100 °C IEC 60512-5-1:2002-02 16 IEC 60512-3-1:2002-02 > 5 ΜΩ
Ambient temperature (storage/transport) Relative humidity (storage/transport) Ambient temperature (assembly) ctrical tests hermal test Test group C Specification Tested number of positions sullation resistance Specification Insulation resistance, neighboring positions ir clearances and creepage distances Specification	30 % 70 % -5 °C 100 °C IEC 60512-5-1:2002-02 16 IEC 60512-3-1:2002-02
Ambient temperature (storage/transport) Relative humidity (storage/transport) Ambient temperature (assembly) ctrical tests hermal test Test group C Specification Tested number of positions sullation resistance Specification Insulation resistance, neighboring positions ir clearances and creepage distances Specification Insulating material group	30 % 70 % -5 °C 100 °C IEC 60512-5-1:2002-02 16 IEC 60512-3-1:2002-02 > 5 ΜΩ IEC 60664-1:2007-04
Ambient temperature (storage/transport) Relative humidity (storage/transport) Ambient temperature (assembly) ctrical tests hermal test Test group C Specification Tested number of positions sullation resistance Specification Insulation resistance, neighboring positions ir clearances and creepage distances Specification Insulating material group Comparative tracking index (IEC 60112)	30 % 70 % -5 °C 100 °C IEC 60512-5-1:2002-02 16 IEC 60512-3-1:2002-02 > 5 ΜΩ IEC 60664-1:2007-04 I
Ambient temperature (storage/transport) Relative humidity (storage/transport) Ambient temperature (assembly) ctrical tests hermal test Test group C Specification Tested number of positions sulation resistance Specification Insulation resistance, neighboring positions ir clearances and creepage distances Specification Insulating material group Comparative tracking index (IEC 60112) Rated insulation voltage (III/3)	30 % 70 % -5 °C 100 °C IEC 60512-5-1:2002-02 16 IEC 60512-3-1:2002-02 > 5 ΜΩ IEC 60664-1:2007-04 I CTI 600
Ambient temperature (storage/transport) Relative humidity (storage/transport) Ambient temperature (assembly) ctrical tests hermal test Test group C Specification Tested number of positions sullation resistance Specification Insulation resistance, neighboring positions ir clearances and creepage distances Specification Insulating material group Comparative tracking index (IEC 60112) Rated insulation voltage (III/3) Rated surge voltage (III/3)	30 % 70 % -5 °C 100 °C IEC 60512-5-1:2002-02 16 IEC 60512-3-1:2002-02 > 5 ΜΩ IEC 60664-1:2007-04 I CTI 600 250 V
Ambient temperature (storage/transport) Relative humidity (storage/transport) Ambient temperature (assembly) ctrical tests hermal test Test group C Specification Tested number of positions sulation resistance Specification Insulation resistance, neighboring positions ir 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)	30 % 70 % -5 °C 100 °C IEC 60512-5-1:2002-02 16 IEC 60512-3-1:2002-02 > 5 ΜΩ IEC 60664-1:2007-04 I CTI 600 250 V 4 kV
Ambient temperature (storage/transport) Relative humidity (storage/transport) Ambient temperature (assembly) ctrical tests hermal test Test group C Specification Tested number of positions sullation resistance Specification Insulation resistance, neighboring positions ir clearances and creepage distances Specification Insulating material group Comparative tracking index (IEC 60112) Rated insulation voltage (III/3) Rated surge voltage (III/3)	30 % 70 % -5 °C 100 °C IEC 60512-5-1:2002-02 16 IEC 60512-3-1:2002-02 > 5 ΜΩ IEC 60664-1:2007-04 I CTI 600 250 V 4 kV 3 mm 3.2 mm
Ambient temperature (storage/transport) Relative humidity (storage/transport) Ambient temperature (assembly) ctrical tests hermal test Test group C Specification Tested number of positions sullation resistance Specification Insulation resistance, neighboring positions ir 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) Note on connection cross section	30 % 70 % -5 °C 100 °C IEC 60512-5-1:2002-02 16 IEC 60512-3-1:2002-02 > 5 ΜΩ IEC 60664-1:2007-04 I CTI 600 250 V 4 kV 3 mm 3.2 mm With connected conductor 2.5 mm² (solid).
Ambient temperature (storage/transport) Relative humidity (storage/transport) Ambient temperature (assembly) ctrical tests hermal test Test group C Specification Tested number of positions sullation resistance Specification Insulation resistance, neighboring positions ir clearances and creepage distances Specification Insulating material group Comparative tracking index (IEC 60112) Rated insulation voltage (III/3) minimum clearance value - non-homogenous field (III/3) minimum creepage distance (III/3) Note on connection cross section Rated insulation voltage (III/2)	30 % 70 % -5 °C 100 °C IEC 60512-5-1:2002-02 16 IEC 60512-3-1:2002-02 > 5 ΜΩ IEC 60664-1:2007-04 I CTI 600 250 V 4 kV 3 mm 3.2 mm
Ambient temperature (storage/transport) Relative humidity (storage/transport) Ambient temperature (assembly) ctrical tests hermal test Test group C Specification Tested number of positions sulation resistance Specification Insulation resistance, neighboring positions ir clearances and creepage distances Specification Insulating material group Comparative tracking index (IEC 60112) Rated insulation voltage (III/3) minimum clearance value - non-homogenous field (III/3) minimum creepage distance (III/3) Note on connection cross section Rated surge voltage (III/2) Rated surge voltage (III/2)	30 % 70 % -5 °C 100 °C IEC 60512-5-1:2002-02 16 IEC 60512-3-1:2002-02 > 5 ΜΩ IEC 60664-1:2007-04 I CTI 600 250 V 4 kV 3 mm 3.2 mm With connected conductor 2.5 mm² (solid). 400 V
Ambient temperature (storage/transport) Relative humidity (storage/transport) Ambient temperature (assembly) ctrical tests hermal test Test group C Specification Tested number of positions sulation resistance Specification Insulation resistance, neighboring positions ir 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) Note on connection cross section Rated insulation voltage (III/2) Rated surge voltage (III/2) Rated surge voltage (III/2) minimum clearance value - non-homogenous field (III/2) minimum clearance value - non-homogenous field (III/2)	30 % 70 % -5 °C 100 °C IEC 60512-5-1:2002-02 16 IEC 60512-3-1:2002-02 > 5 ΜΩ IEC 60664-1:2007-04 I CTI 600 250 V 4 kV 3 mm 3.2 mm With connected conductor 2.5 mm² (solid). 400 V 4 kV
Ambient temperature (storage/transport) Relative humidity (storage/transport) Ambient temperature (assembly) ctrical tests hermal test Test group C Specification Tested number of positions sulation resistance Specification Insulation resistance, neighboring positions ir clearances and creepage distances Specification Insulating material group Comparative tracking index (IEC 60112) Rated insulation voltage (III/3) minimum clearance value - non-homogenous field (III/3) Note on connection cross section Rated surge voltage (III/2) minimum clearance value - non-homogenous field (III/2) minimum clearance value - non-homogenous field (III/2) minimum creepage distance (III/2) minimum creepage distance (III/2)	30 % 70 % -5 °C 100 °C IEC 60512-5-1:2002-02 16 IEC 60512-3-1:2002-02 > 5 MΩ IEC 60664-1:2007-04 I CTI 600 250 V 4 kV 3 mm 3.2 mm With connected conductor 2.5 mm² (solid). 400 V 4 kV 3 mm
Ambient temperature (storage/transport) Relative humidity (storage/transport) Ambient temperature (assembly) ctrical tests hermal test Test group C Specification Tested number of positions sulation resistance Specification Insulation resistance, neighboring positions ir 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) Note on connection cross section Rated insulation voltage (III/2) Rated surge voltage (III/2) Rated surge voltage (III/2) minimum clearance value - non-homogenous field (III/2) minimum clearance value - non-homogenous field (III/2)	30 % 70 % -5 °C 100 °C IEC 60512-5-1:2002-02 16 IEC 60512-3-1:2002-02 > 5 MΩ IEC 60664-1:2007-04 I CTI 600 250 V 4 kV 3 mm 3.2 mm With connected conductor 2.5 mm² (solid). 400 V 4 kV 3 mm 3 mm 3 mm



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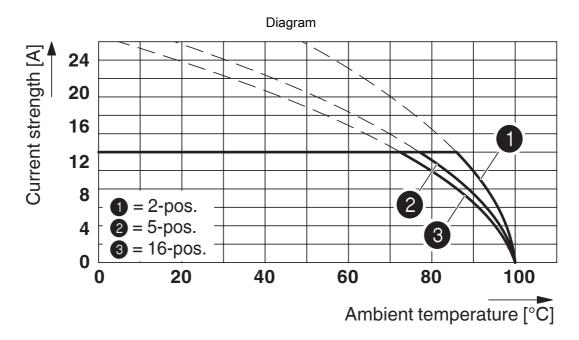
minimum clearance value - non-homogenous field (II/2)	3 mm	
minimum creepage distance (II/2)	3.2 mm	
Packaging specifications		



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Drawings



Type: PT 1,5/...-PVH-5,0 with PST 1,3/...-5,0



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Approvals

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cULus Recognized Approval ID: E60425-20030211				
	Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
Use group B				
	300 V	15 A	26 - 12	-
Use group D				
	300 V	10 A	26 - 12	-

VDE Zeichengenehmigung Approval ID: 40055514				
	Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
	400 V	12 A	-	0.5 - 1.5



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Classifications

ECLASS

	ECLASS-11.0	27460202	
	ECLASS-12.0	27460202	
	ECLASS-13.0	27460202	
ETIM			
	ETIM 9.0	EC002638	
UNSPSC			
	UNSPSC 21.0	39121400	



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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%	

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