

1102108

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PCB connector, nominal cross section: 1.5 mm², color: light grey, nominal current: 8 A, rated voltage (III/2): 150 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: ICC..-PPC1,5/..-3,5, pitch: 3.5 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, locking clip: - Locking clip, locking: without, mounting: without, type of packaging: packed in cardboard, Color of the spring lever: orange

Your advantages

- · Time saving push-in connection, tools not required
- · Variable coding, for reliable protection against incorrect connection
- · Push-in technology for quick and easy wiring
- · Quick and easily coded when initially connecting the connector and header
- · Intuitive operation due to color-coded actuating push button
- High packing density with 3.5 mm pitch

Commercial data

Item number	1102108
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	AC09
Product key	ACHAFC
GTIN	4055626961576
Weight per piece (including packing)	4.29 g
Weight per piece (excluding packing)	3.51 g
Customs tariff number	85366990
Country of origin	CN



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Technical data

Product properties

Product type	PCB connector
Product family	ICCPPC1,5/3,5
Number of positions	5
Pitch	3.5 mm
Number of connections	5
Number of rows	1
Number of potentials	5

Electrical properties

Nominal current I _N	8 A
Nominal voltage U _N	150 V
Degree of pollution	3
Contact resistance	2.19 mΩ
Rated voltage (III/3)	150 V
Rated surge voltage (III/3)	2.5 kV
Rated voltage (III/2)	150 V
Rated surge voltage (III/2)	2.5 kV
Rated voltage (II/2)	250 V

Connection data

Connection technology

Nominal cross section	1.5 mm ²
Contact connection type	Socket

Interlock

Locking type	without
Mounting flange	without

Conductor connection

Connection method	Push-in spring connection
Conductor/PCB connection direction	0 °
Conductor cross section rigid	0.2 mm ² 1.5 mm ²
Conductor cross section flexible	0.2 mm ² 1.5 mm ²
Conductor cross section AWG	24 16
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm² 1 mm²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm² 0.75 mm²
Stripping length	10 mm

Material specifications

Material data - contact



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Note	WEEE/RoHS-compliant, free of whiskers according to IEC 60068-2-82/JEDEC JESD 201
Contact material	Cu alloy
Surface characteristics	Tin-plated
aterial data - housing	
Color (Housing)	light grey (7035)
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
aterial data – actuating element	
Color (Actuating element)	orange (2003)
Insulating material	PBT
CTI according to IEC 60112	275
Flammability rating according to UL 94	V0
ensions	
Dimensional drawing	h
	W
Pitch	3.5 mm

Notes

Height [h]

Length [I]

Coding	For details, refer to the product drawing in the "Downloads" tab.
Safety note	
Safety note	WARNING: The connectors may not be plugged in or disconnected under load. Ignoring the warning or improper use may damage persons and/or property.
	 WARNING: Commission properly functioning products only. The products must be regularly inspected for damage. Decommission defective products immediately. Replace damaged products. Repairs are not possible.
	 WARNING: Only electrically qualified personnel may install and operate the product. They must observe the following safety notes. The qualified personnel must be familiar with the basics of

14.9 mm

22 mm



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	electrical engineering. They must be able to recognize and prevent danger. The relevant symbol on the packaging indicates that only personnel familiar with electrical engineering are allowed to install and operate the product.
	 The item is intended to be an unencapsulated plug for installation in a housing.
	Operate the connector only when it is fully plugged in.
Cechanical tests Fest for conductor damage and slackening Specification	IEC 60999-1:1999-11
Result	Test passed
Repeated connection and disconnection	
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
	1.5 mm² / solid / > 40 N
	1.5 mm² / flexible / > 40 N
nsertion and withdrawal forces	
Result	Test passed
No. of cycles	25
Insertion strength per pos. approx.	6.1 N
Withdraw strength per pos. approx.	3.9 N
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
/isual inspection	
Specification	IEC 60512-1-1:2002-02
Result	Test passed
Dimension check	
Specification	IEC 60512-1-2:2002-02
<u> </u>	

Environmental and real-life conditions

Vibration test



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Rated surge voltage (III/2)

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	50 m/s² (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	2.95 kV
Contact resistance R ₁	2.19 mΩ
Contact resistance R ₂	2.17 mΩ
Insertion/withdrawal cycles	25
Insulation resistance, neighboring positions	> 5 TΩ
Climatic test	
Specification	ISO 6988:1985-02
Corrosive stress	0.2 dm ³ SO ₂ on 300 dm ³ /40 °C/1 cycle
	100 °C/168 h
Thermal stress	
Thermal stress Power-frequency withstand voltage	1.39 kV
	1.39 kV
Power-frequency withstand voltage	-40 °C 105 °C (dependent on the derating curve)
Power-frequency withstand voltage Ambient conditions	
Power-frequency withstand voltage Ambient conditions Ambient temperature (operation)	-40 °C 105 °C (dependent on the derating curve)
Power-frequency withstand voltage Ambient conditions Ambient temperature (operation) Ambient temperature (storage/transport)	-40 °C 105 °C (dependent on the derating curve) -40 °C 55 °C
Power-frequency withstand voltage Ambient conditions Ambient temperature (operation) Ambient temperature (storage/transport) Relative humidity (storage/transport) Ambient temperature (assembly)	-40 °C 105 °C (dependent on the derating curve) -40 °C 55 °C 30 % 70 %
Power-frequency withstand voltage Ambient conditions Ambient temperature (operation) Ambient temperature (storage/transport) Relative humidity (storage/transport) Ambient temperature (assembly) ectrical tests Thermal test Test group C	-40 °C 105 °C (dependent on the derating curve) -40 °C 55 °C 30 % 70 % -5 °C 100 °C
Power-frequency withstand voltage Ambient conditions Ambient temperature (operation) Ambient temperature (storage/transport) Relative humidity (storage/transport) Ambient temperature (assembly) ectrical tests Thermal test Test group C Specification	-40 °C 105 °C (dependent on the derating curve) -40 °C 55 °C 30 % 70 % -5 °C 100 °C
Power-frequency withstand voltage Ambient conditions Ambient temperature (operation) Ambient temperature (storage/transport) Relative humidity (storage/transport) Ambient temperature (assembly) ectrical tests Thermal test Test group C	-40 °C 105 °C (dependent on the derating curve) -40 °C 55 °C 30 % 70 % -5 °C 100 °C
Power-frequency withstand voltage Ambient conditions Ambient temperature (operation) Ambient temperature (storage/transport) Relative humidity (storage/transport) Ambient temperature (assembly) ectrical tests Thermal test Test group C Specification	-40 °C 105 °C (dependent on the derating curve) -40 °C 55 °C 30 % 70 % -5 °C 100 °C
Power-frequency withstand voltage Ambient conditions Ambient temperature (operation) Ambient temperature (storage/transport) Relative humidity (storage/transport) Ambient temperature (assembly) actrical tests Thermal test Test group C Specification Tested number of positions	-40 °C 105 °C (dependent on the derating curve) -40 °C 55 °C 30 % 70 % -5 °C 100 °C
Power-frequency withstand voltage Ambient conditions Ambient temperature (operation) Ambient temperature (storage/transport) Relative humidity (storage/transport) Ambient temperature (assembly) ectrical tests Thermal test Test group C Specification Tested number of positions Insulation resistance	-40 °C 105 °C (dependent on the derating curve) -40 °C 55 °C 30 % 70 % -5 °C 100 °C
Power-frequency withstand voltage Ambient conditions Ambient temperature (operation) Ambient temperature (storage/transport) Relative humidity (storage/transport) Ambient temperature (assembly) ectrical tests Thermal test Test group C Specification Tested number of positions nsulation resistance Specification	-40 °C 105 °C (dependent on the derating curve) -40 °C 55 °C 30 % 70 % -5 °C 100 °C IEC 60512-5-1:2002-02 5
Power-frequency withstand voltage Ambient conditions Ambient temperature (operation) Ambient temperature (storage/transport) Relative humidity (storage/transport) Ambient temperature (assembly) actrical tests Thermal test Test group C Specification Tested number of positions Insulation resistance Specification Insulation resistance, neighboring positions	-40 °C 105 °C (dependent on the derating curve) -40 °C 55 °C 30 % 70 % -5 °C 100 °C IEC 60512-5-1:2002-02 5
Power-frequency withstand voltage Ambient conditions Ambient temperature (operation) Ambient temperature (storage/transport) Relative humidity (storage/transport) Ambient temperature (assembly) Actrical tests Thermal test Test group C Specification Tested number of positions Insulation resistance Specification Insulation resistance, neighboring positions Air clearances and creepage distances	-40 °C 105 °C (dependent on the derating curve) -40 °C 55 °C 30 % 70 % -5 °C 100 °C IEC 60512-5-1:2002-02 5 IEC 60512-3-1:2002-02 > 1 ΤΩ
Power-frequency withstand voltage Ambient conditions Ambient temperature (operation) Ambient temperature (storage/transport) Relative humidity (storage/transport) Ambient temperature (assembly) actrical tests Thermal test Test group C Specification Tested number of positions Insulation resistance Specification Insulation resistance, neighboring positions Air clearances and creepage distances Specification	-40 °C 105 °C (dependent on the derating curve) -40 °C 55 °C 30 % 70 % -5 °C 100 °C IEC 60512-5-1:2002-02 5 IEC 60512-3-1:2002-02 > 1 ΤΩ IEC 60664-1:2007-04
Power-frequency withstand voltage Ambient conditions Ambient temperature (operation) Ambient temperature (storage/transport) Relative humidity (storage/transport) Ambient temperature (assembly) Actrical tests Thermal test Test group C Specification Tested number of positions Insulation resistance Specification Insulation resistance, neighboring positions Air clearances and creepage distances Specification Insulating material group	-40 °C 105 °C (dependent on the derating curve) -40 °C 55 °C 30 % 70 % -5 °C 100 °C IEC 60512-5-1:2002-02 5 IEC 60512-3-1:2002-02 > 1 ΤΩ IEC 60664-1:2007-04
Power-frequency withstand voltage Ambient conditions Ambient temperature (operation) Ambient temperature (storage/transport) Relative humidity (storage/transport) Ambient temperature (assembly) actrical tests Thermal test Test group C 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)	-40 °C 105 °C (dependent on the derating curve) -40 °C 55 °C 30 % 70 % -5 °C 100 °C IEC 60512-5-1:2002-02 5 IEC 60512-3-1:2002-02 > 1 ΤΩ IEC 60664-1:2007-04 I CTI 600
Power-frequency withstand voltage Ambient conditions Ambient temperature (operation) Ambient temperature (storage/transport) Relative humidity (storage/transport) Ambient temperature (assembly) Ambient temperature (assembly) Ambient temperature (assembly) Ambient temperature (assembly) Actrical tests Thermal test Test group C Specification Tested number of positions Air clearances Air clearances and creepage distances Specification Insulating material group Comparative tracking index (IEC 60112) Rated insulation voltage (III/3)	-40 °C 105 °C (dependent on the derating curve) -40 °C 55 °C 30 % 70 % -5 °C 100 °C IEC 60512-5-1:2002-02 5 IEC 60512-3-1:2002-02 > 1 ΤΩ IEC 60664-1:2007-04 I CTI 600 150 V
Power-frequency withstand voltage Ambient conditions Ambient temperature (operation) Ambient temperature (storage/transport) Relative humidity (storage/transport) Ambient temperature (assembly) Petrical tests Thermal test Test group C 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)	-40 °C 105 °C (dependent on the derating curve) -40 °C 55 °C 30 % 70 % -5 °C 100 °C IEC 60512-5-1:2002-02 5 IEC 60512-3-1:2002-02 > 1 ΤΩ IEC 60664-1:2007-04 I CTI 600 150 V 2.5 kV

2.5 kV



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minimum clearance value - non-homogenous field (III/2)	1.5 mm
minimum creepage distance (III/2)	0.8 mm
Rated insulation voltage (II/2)	250 V
minimum clearance value - non-homogenous field (II/2)	1.5 mm
minimum creepage distance (II/2)	1.25 mm

Packaging specifications

Type of packaging	packed in cardboard
Outer packaging type	Carton



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Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1102108

CULus Recognized Approval ID: E60425-20181123				
	Nominal voltage U_N	Nominal current I _N	Cross section AWG	Cross section mm ²
Use group B				
Field wiring	150 V	8 A	24 - 16	-



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Classifications

ECLASS

UNSPSC 21.0

ECLASS-11.0	27460202		
ECLASS-12.0	27460202		
ECLASS-13.0	27460202		
ETIM			
ETIM 8.0	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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Accessories

ICC-CODING - Coding element

1084009

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Coding profile for ICC connectors of the ICS housing series

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