

1102110

https://www.phoenixcontact.com/us/products/1102110

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PCB connector, nominal cross section: 1.5 mm², color: light gray, nominal current: 8 A, rated voltage (III/2): 150 V, contact surface: Sn, contact connection type: Socket, number of potentials: 4, number of rows: 1, number of positions: 4, number of connections: 4, product range: PSPT 1,5/..-ST-3,5, pitch: 3.5 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, locking clip: - Locking clip, plug-in system: PSPT 1,5, 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
- · High packing density with 3.5 mm pitch
- · Quick and easily coded when initially connecting the connector and header
- Intuitive operation due to color-coded actuating push button

Commercial data

Item number	1102110
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	AC08
Product key	ACHADB
GTIN	4055626961781
Weight per piece (including packing)	3.04 g
Weight per piece (excluding packing)	2.55 g
Customs tariff number	85366990
Country of origin	CN



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Technical data

Product properties

Product type	PCB connector
Product family	PSPT 1,5/ST-3,5
Туре	Standard
Number of positions	4
Pitch	3.5 mm
Number of connections	4
Number of rows	1
Number of potentials	4
Data management status	

Article revision	02
Article revision	02

Electrical properties

Nominal current I _N	8 A
Nominal voltage U _N	150 V
Contact resistance	2.02 mΩ
Rated voltage (III/3)	150 V
Rated surge voltage (III/3)	2.5 kV
Rated voltage (III/2)	150 V
Rated voltage (II/2)	250 V

Connection data

Connection technology

Connector system	PSPT 1,5
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



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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	Tin-plated
Metal surface terminal point (top layer)	Tin (Sn)
Metal surface contact area (top layer)	Tin (Sn)

Material data - housing

Color (Housing)	light gray (7035)
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

Material data – actuating element

Color (Actuating element)	orange (2003)
Insulating material	PBT
Insulating material group	1
CTI according to IEC 60112	275
Flammability rating according to UL 94	V0

Dimensions

Dimensional drawing	h
Pitch	3.5 mm
Width [w]	14.1 mm
Height [h]	14.9 mm
Length [I]	19.6 mm

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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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 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.
echanical tests Conductor connection	
Specification	IEC 60999-1:1999-11
Result	Test passed
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	
Specification	IEC 60512-13-2:2006-02
Result	Test passed
Result No. of cycles	Test passed 25
No. of cycles	25
No. of cycles Insertion strength per pos. approx.	25 7 N
No. of cycles Insertion strength per pos. approx. Withdraw strength per pos. approx.	25 7 N



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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

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	50 m/s² (60.1 Hz 150 Hz)
Test duration per axis	2.5 h
Test directions	X-, Y- and Z-axis

Durability test

Specification	IEC 60512-9-1:2010-03
Impulse withstand voltage at sea level	2.95 kV
Contact resistance R ₁	2.02 mΩ
Contact resistance R ₂	2.11 mΩ
Insertion/withdrawal cycles	25
Insulation resistance, neighboring positions	> 5 TΩ

Climatic test

Specification	ISO 6988:1985-02
Corrosive stress	$0.2~\mathrm{dm^3SO_2}$ on 300 dm 3 /40 °C/1 cycle
Thermal stress	100 °C/168 h
Power-frequency withstand voltage	1.39 kV

Ambient conditions

Ambient temperature (operation)	-40 °C 105 °C (dependent on the derating curve)
Ambient temperature (storage/transport)	-40 °C 55 °C
Relative humidity (storage/transport)	30 % 70 %
Ambient temperature (assembly)	-5 °C 100 °C

Electrical tests

Thermal test | Test group C

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



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Insulation resistance

insulation resistance		
Specification	IEC 60512-3-1:2002-02	
Insulation resistance, neighboring positions	> 1 TΩ	
Temperature cycles		
Specification	IEC 60999-1:1999-11	
Result	Test passed	
Air clearances and creepage distances		
Specification	IEC 60664-1:2007-04	
Insulating material group	1	
Comparative tracking index (IEC 60112)	CTI 600	
Rated insulation voltage (III/3)	150 V	
Rated surge voltage (III/3)	2.5 kV	
minimum clearance value - non-homogenous field (III/3)	1.5 mm	
minimum creepage distance (III/3)	1.6 mm	
Rated insulation voltage (III/2)	150 V	
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	

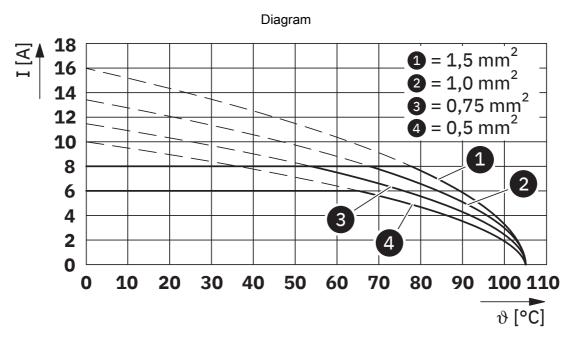
Packaging specifications



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Drawings



Type: PSPT 1,5/...-ST-3,5 ... with ICC20(25)-H/...L(R)3,5-...



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Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1102110

CULus Recognized Approval ID: E60425-20181123					
		Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
Use group	В				
Field wir	ring	150 V	8 A	24 - 16	-



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Classifications

UNSPSC 21.0

ECLASS

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

39121400



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Environmental product compliance

EU RoHS

Yes, No exemptions
EFUP-E
No hazardous substances above the limits
No substance above 0.1 wt%

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Phoenix Contact USA 586 Fulling Mill Road Middletown, PA 17057, United States (+717) 944-1300 info@phoenixcon.com