

2202757

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PCB connector, nominal cross section: 2.5 mm², color: black, nominal current: 16 A, rated voltage (III/2): 300 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 2,5/..-ST, pitch: 5 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0°, locking clip: - Locking clip, locking: without, mounting method: 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
- · Quick and easily coded when initially connecting the connector and header
- · Intuitive operation due to color-coded actuating push button
- · Time saving push-in connection, tools not required

#### Commercial data

Item number	2202757
Packing unit	50 pc
Minimum order quantity	100 pc
Sales key	ACHADB
Product key	ACHADB
GTIN	4055626217895
Weight per piece (including packing)	4.9 g
Weight per piece (excluding packing)	4.9 g
Customs tariff number	85366990
Country of origin	CN



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### Technical data

### Product properties

Product type	PCB connector
Product family	PSPT 2,5/ST
Туре	Standard
Number of positions	4
Pitch	5 mm
Number of connections	4
Number of rows	1
Number of potentials	4

### Electrical properties

#### **Properties**

Nominal current I <sub>N</sub>	16 A
Nominal voltage U <sub>N</sub>	300 V
Contact resistance	1.5 mΩ
Rated voltage (III/3)	300 V
Rated surge voltage (III/3)	4 kV
Rated voltage (III/2)	300 V
Rated surge voltage (III/2)	4 kV
Rated voltage (II/2)	600 V
Rated surge voltage (II/2)	4 kV

#### Connection data

#### Connection technology

Nominal cross section	2.5 mm²
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 mm² 2.5 mm²
Conductor cross section flexible	0.2 mm² 2.5 mm²
Conductor cross section AWG	24 14
Conductor cross section flexible, with ferrule without plastic sleeve	0.2 mm² 2.5 mm²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.2 mm² 2.5 mm²
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	0.25 mm² 0.34 mm²



2202757

https://www.phoenixcontact.com/gb/products/2202757

2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm² 1.5 mm²
Cylindrical gauge a x b / diameter	2.8 mm x 2.0 mm / 2.4 mm
Stripping length	10 mm

### 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)	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

### Material data – actuating element

Color (Actuating element)	orange (2003)
Insulating material	PBT
Insulating material group	I .
CTI according to IEC 60112	600
Flammability rating according to UL 94	V0

#### **Dimensions**

Dimensional drawing	h
Pitch	5 mm
Width [w]	19.95 mm
Height [h]	15 mm
Length [I]	21.3 mm

### Notes



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Notes on operation	In accordance with IEC 61984, COMBICON connectors have no
. 15.65 on operation	switching power (COC). During designated use, they must not be plugged in or disconnected when carrying voltage or under load.
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.
	<ul> <li>WARNING: Commission properly functioning products only.</li> <li>The products must be regularly inspected for damage.</li> <li>Decommission defective products immediately. Replace damaged products. Repairs are not possible.</li> </ul>
	<ul> <li>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.</li> </ul>
	<ul> <li>The item is intended to be an unencapsulated plug for installation in a housing.</li> </ul>
	Operate the connector only when it is fully plugged in.
Conductor connection  Specification	JEO 00000 4 4000 44
	IEC 60999-1:1999-11
Result	
Result	Test passed
Result Test for conductor damage and slackening	
Result	Test passed
Result  Test for conductor damage and slackening  Specification  Result	Test passed  IEC 60999-1:1999-11
Result  Test for conductor damage and slackening  Specification	Test passed  IEC 60999-1:1999-11
Result  Test for conductor damage and slackening  Specification  Result  Repeated connection and disconnection	Test passed  IEC 60999-1:1999-11  Test passed
Result  Test for conductor damage and slackening  Specification  Result  Repeated connection and disconnection  Specification	Test passed  IEC 60999-1:1999-11  Test passed  IEC 60999-1:1999-11
Result  Test for conductor damage and slackening  Specification  Result  Repeated connection and disconnection  Specification  Result	Test passed  IEC 60999-1:1999-11  Test passed  IEC 60999-1:1999-11
Result  Test for conductor damage and slackening Specification Result  Repeated connection and disconnection Specification Result  Pull-out test	Test passed  IEC 60999-1:1999-11  Test passed  IEC 60999-1:1999-11  Test passed
Result  Test for conductor damage and slackening  Specification  Result  Repeated connection and disconnection  Specification  Result  Pull-out test  Specification	Test passed  IEC 60999-1:1999-11  Test passed  IEC 60999-1:1999-11  Test passed
Result  Test for conductor damage and slackening  Specification  Result  Repeated connection and disconnection  Specification  Result  Pull-out test  Specification  Conductor cross section/conductor type/tractive force	Test passed  IEC 60999-1:1999-11  Test passed  IEC 60999-1:1999-11  Test passed  IEC 60999-1:1999-11  0.2 mm² / solid / > 10 N
Result  Test for conductor damage and slackening  Specification  Result  Repeated connection and disconnection  Specification  Result  Pull-out test  Specification  Conductor cross section/conductor type/tractive force	Test passed  IEC 60999-1:1999-11  Test passed  IEC 60999-1:1999-11  Test passed  IEC 60999-1:1999-11  0.2 mm² / solid / > 10 N  0.2 mm² / flexible / > 10 N
Result  Test for conductor damage and slackening  Specification  Result  Repeated connection and disconnection  Specification  Result  Pull-out test  Specification  Conductor cross section/conductor type/tractive force	Test passed  IEC 60999-1:1999-11  Test passed  IEC 60999-1:1999-11  Test passed  IEC 60999-1:1999-11  0.2 mm² / solid / > 10 N  0.2 mm² / flexible / > 10 N  2.5 mm² / solid / > 50 N
Result  Test for conductor damage and slackening Specification Result  Repeated connection and disconnection Specification Result  Pull-out test Specification Conductor cross section/conductor type/tractive force setpoint/actual value	Test passed  IEC 60999-1:1999-11  Test passed  IEC 60999-1:1999-11  Test passed  IEC 60999-1:1999-11  0.2 mm² / solid / > 10 N  0.2 mm² / flexible / > 10 N  2.5 mm² / solid / > 50 N
Result  Test for conductor damage and slackening Specification Result  Repeated connection and disconnection Specification Result  Pull-out test Specification Conductor cross section/conductor type/tractive force setpoint/actual value	Test passed  IEC 60999-1:1999-11  Test passed  IEC 60999-1:1999-11  Test passed  IEC 60999-1:1999-11  0.2 mm² / solid / > 10 N  0.2 mm² / flexible / > 10 N  2.5 mm² / solid / > 50 N  2.5 mm² / flexible / > 50 N
Result  Test for conductor damage and slackening Specification Result  Repeated connection and disconnection Specification Result  Pull-out test Specification Conductor cross section/conductor type/tractive force setpoint/actual value  Insertion and withdrawal forces Specification	Test passed  IEC 60999-1:1999-11  Test passed  IEC 60999-1:1999-11  Test passed  IEC 60999-1:1999-11  0.2 mm² / solid / > 10 N  0.2 mm² / flexible / > 10 N  2.5 mm² / solid / > 50 N  2.5 mm² / flexible / > 50 N
Result  Test for conductor damage and slackening  Specification  Result  Repeated connection and disconnection  Specification  Result  Pull-out test  Specification  Conductor cross section/conductor type/tractive force setpoint/actual value  Insertion and withdrawal forces  Specification  Result	Test passed   IEC 60999-1:1999-11   Test passed   IEC 60999-1:1999-11   Test passed   IEC 60999-1:1999-11   Test passed   IEC 60999-1:1999-11   0.2 mm² / solid / > 10 N   0.2 mm² / flexible / > 10 N   2.5 mm² / solid / > 50 N   2.5 mm² / flexible / > 50 N   IEC 60512-13-2:2006-02   Test passed   IEC 60512-13-2:2006-02   Test passed   IEC 60599-1:1999-11   IEC 60599-11   IEC 60599-11



2202757

https://www.phoenixcontact.com/gb/products/2202757

Resistance of inscriptions

Climatic test

Specification

Ambient conditions

Corrosive stress
Thermal stress

Power-frequency withstand voltage

	150 00000 0 50 1005 10
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
vironmental and real-life conditions  Vibration test	
Vibration test	IEC 60068-2-6:2007-12
Vibration test Specification	IEC 60068-2-6:2007-12
Vibration test Specification Frequency	10 - 150 - 10 Hz
Vibration test Specification Frequency Sweep speed	10 - 150 - 10 Hz 1 octave/min
Vibration test Specification Frequency Sweep speed Amplitude	10 - 150 - 10 Hz 1 octave/min 0.35 mm (10 Hz 60.1 Hz)
Vibration test Specification Frequency Sweep speed Amplitude Acceleration	10 - 150 - 10 Hz 1 octave/min
Vibration test Specification Frequency Sweep speed Amplitude	10 - 150 - 10 Hz 1 octave/min 0.35 mm (10 Hz 60.1 Hz) 5g (60.1 Hz 150 Hz)
Vibration test  Specification  Frequency  Sweep speed  Amplitude  Acceleration  Test duration per axis  Test directions	10 - 150 - 10 Hz 1 octave/min 0.35 mm (10 Hz 60.1 Hz) 5g (60.1 Hz 150 Hz) 2.5 h
Vibration test  Specification  Frequency  Sweep speed  Amplitude  Acceleration  Test duration per axis	10 - 150 - 10 Hz 1 octave/min 0.35 mm (10 Hz 60.1 Hz) 5g (60.1 Hz 150 Hz) 2.5 h
Specification Frequency Sweep speed Amplitude Acceleration Test duration per axis Test directions  Durability test	10 - 150 - 10 Hz  1 octave/min  0.35 mm (10 Hz 60.1 Hz)  5g (60.1 Hz 150 Hz)  2.5 h  X-, Y- and Z-axis
Vibration test  Specification  Frequency  Sweep speed  Amplitude  Acceleration  Test duration per axis  Test directions  Durability test  Specification	10 - 150 - 10 Hz  1 octave/min  0.35 mm (10 Hz 60.1 Hz)  5g (60.1 Hz 150 Hz)  2.5 h  X-, Y- and Z-axis
Specification Frequency Sweep speed Amplitude Acceleration Test duration per axis Test directions  Durability test Specification Impulse withstand voltage at sea level	10 - 150 - 10 Hz  1 octave/min  0.35 mm (10 Hz 60.1 Hz)  5g (60.1 Hz 150 Hz)  2.5 h  X-, Y- and Z-axis  IEC 60512-9-1:2010-03  4.8 kV
Specification Frequency Sweep speed Amplitude Acceleration Test duration per axis Test directions  Durability test Specification Impulse withstand voltage at sea level Contact resistance R <sub>1</sub>	10 - 150 - 10 Hz 1 octave/min 0.35 mm (10 Hz 60.1 Hz) 5g (60.1 Hz 150 Hz) 2.5 h X-, Y- and Z-axis  IEC 60512-9-1:2010-03 4.8 kV 1.5 mΩ

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

ISO 6988:1985-02

105 °C/168 h 2.21 kV

 $0.2~\mathrm{dm}^3~\mathrm{SO}_2~\mathrm{on}~300~\mathrm{dm}^3/40~^\circ\mathrm{C}/1~\mathrm{cycle}$ 



2202757

https://www.phoenixcontact.com/gb/products/2202757

### Electrical tests

Type of packaging

Specification	IEC 60512-5-1:2002-02
Tested number of positions	4
nsulation resistance	
Specification	IEC 60512-3-1:2002-02
Insulation resistance, neighboring positions	> 30 GΩ
emperature cycles	
Specification	IEC 60999-1:1999-11
Result	Test passed
ir clearances and creepage distances	
Specification	IEC 60664-1:2007-04
Insulating material group	I I
Comparative tracking index (IEC 60112)	CTI 600
Rated insulation voltage (III/3)	300 V
Rated surge voltage (III/3)	4 kV
minimum clearance value - non-homogenous field (III/3)	3 mm
minimum creepage distance (III/3)	3.2 mm
Rated insulation voltage (III/2)	300 V
Rated surge voltage (III/2)	4 kV
Rated insulation voltage (II/2)	600 V
Rated surge voltage (II/2)	4 kV

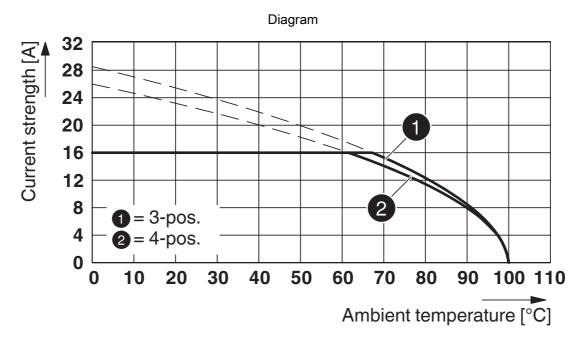
packed in cardboard



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## Drawings



Type: PSPT 2,5/...-ST ... with ICC20(25)-H/...L(R)5,0-...



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### **Approvals**

To download certificates, visit the product detail page: https://www.phoenixcontact.com/gb/products/2202757

c <b>911</b> us	cULus Recognized Approval ID: E60425-19931012				
		Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
Use grou	ір В				
		300 V	15 A	24 - 14	-

<b>₩</b>	VDE report with production monitoring Approval ID: 40044868				
		Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
		320 V	16 A	-	0.2 - 2.5



2202757

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### Classifications

	ECLASS-13.0	27460202		
E	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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