

1376640

https://www.phoenixcontact.com/us/products/1376640

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PCB connector, color: black, nominal current: 8 A, rated voltage (III/2): 320 V, contact surface: Sn, contact connection type: Pin, number of rows: 1, number of positions: 4, product range: D32H 2,2/..-FH, pitch: 5.08 mm, connection method: Crimp connection, conductor/PCB connection direction: 0 °, pin layout: Linear pinning, locking clip: - without locking clip, plug-in system: CONNEXIS D, locking: Snap-in locking, mounting method: Engagement nose, type of packaging: packed in cardboard

Your advantages

- · Cost-effective connection of crimped conductors in large quantities
- · Small component size for applications where space is at a premium
- · Intuitive locking mechanism prevents accidental disconnection
- · Tools for automatic crimping available as an option

Commercial data

Item number	1376640
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	AA03
Product key	AACCUA
GTIN	4063151742034
Weight per piece (including packing)	6.829 g
Weight per piece (excluding packing)	6.816 g
Customs tariff number	85366990
Country of origin	CN



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Technical data

Product properties

Product type	PCB connector
Product family	D32H 2,2/FH
Product line	CONNEXIS Connectors M
Number of positions	4
Pitch	5.08 mm
Number of rows	1
Pin layout	Linear pinning

Electrical properties

Properties

Nominal current I _N	8 A
Nominal voltage U _N	320 V
Contact resistance	1 mΩ
Rated voltage (III/3)	250 V
Rated surge voltage (III/3)	4 kV
Rated voltage (III/2)	320 V
Rated surge voltage (III/2)	4 kV
Rated voltage (II/2)	600 V
Rated surge voltage (II/2)	4 kV

Connection data

Interlock

Locking type	Snap-in locking
Mounting flange	Engagement nose
Conductor connection	
Connection method	Crimp connection
Conductor/PCB connection direction	0 °
Conductor cross section AWG	28 14
Stripping length	4.5 mm

Material specifications

Material data - contact

Metal surface contact area (top layer)	Tin (Sn)
Material data - housing	
Color (Housing)	black (9005)
Insulating material	PBT
Insulating material group	II II
CTI according to IEC 60112	400 ≤ CTI < 600



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Flammability rating according to UL 94	V0
nensions	
Dimensional drawing	h
Pitch	5.08 mm
Width [w]	32.43 mm
Height [h]	9.35 mm
Length [I]	33.6 mm
unting	
Pin layout	Linear pinning
tes	
Note on the contact	These connectors conform to DIN EN 61984, connectors without
	switching capacity (COC). When used for their intended purpos
Tensile strength of crimp connections Result	switching capacity (COC). When used for their intended purpos they must not be plugged in or disconnected live or under load. Test passed
ensile strength of crimp connections	switching capacity (COC). When used for their intended purpos they must not be plugged in or disconnected live or under load.
Result Conductor cross section/conductor type/tractive force setpoint/actual value	switching capacity (COC). When used for their intended purpos they must not be plugged in or disconnected live or under load. Test passed
Result Conductor cross section/conductor type/tractive force setpoint/actual value	switching capacity (COC). When used for their intended purpos they must not be plugged in or disconnected live or under load. Test passed
Result Conductor cross section/conductor type/tractive force setpoint/actual value nsertion and withdrawal forces	switching capacity (COC). When used for their intended purpos they must not be plugged in or disconnected live or under load. Test passed AWG 28 / flexible / > 11 N
Result Conductor cross section/conductor type/tractive force setpoint/actual value Disertion and withdrawal forces Specification	switching capacity (COC). When used for their intended purpose they must not be plugged in or disconnected live or under load. Test passed AWG 28 / flexible / > 11 N IEC 60512-13-2:2006-02
Result Conductor cross section/conductor type/tractive force setpoint/actual value nsertion and withdrawal forces Specification Result	switching capacity (COC). When used for their intended purpos they must not be plugged in or disconnected live or under load. Test passed AWG 28 / flexible / > 11 N IEC 60512-13-2:2006-02 Test passed
Result Conductor cross section/conductor type/tractive force setpoint/actual value consertion and withdrawal forces Specification Result No. of cycles	switching capacity (COC). When used for their intended purpos they must not be plugged in or disconnected live or under load. Test passed AWG 28 / flexible / > 11 N IEC 60512-13-2:2006-02 Test passed 25
Result Conductor cross section/conductor type/tractive force setpoint/actual value sertion and withdrawal forces Specification Result No. of cycles Insertion strength per pos. approx. Withdraw strength per pos. approx.	switching capacity (COC). When used for their intended purpos they must not be plugged in or disconnected live or under load. Test passed AWG 28 / flexible / > 11 N IEC 60512-13-2:2006-02 Test passed 25 3 N
Tensile strength of crimp connections Result Conductor cross section/conductor type/tractive force setpoint/actual value Insertion and withdrawal forces Specification Result No. of cycles Insertion strength per pos. approx. Withdraw strength per pos. approx.	switching capacity (COC). When used for their intended purpos they must not be plugged in or disconnected live or under load. Test passed AWG 28 / flexible / > 11 N IEC 60512-13-2:2006-02 Test passed 25 3 N
Result Conductor cross section/conductor type/tractive force setpoint/actual value Insertion and withdrawal forces Specification Result No. of cycles Insertion strength per pos. approx. Withdraw strength per pos. approx.	switching capacity (COC). When used for their intended purpos they must not be plugged in or disconnected live or under load. Test passed AWG 28 / flexible / > 11 N IEC 60512-13-2:2006-02 Test passed 25 3 N 3 N
Result Conductor cross section/conductor type/tractive force setpoint/actual value sertion and withdrawal forces Specification Result No. of cycles Insertion strength per pos. approx. Withdraw strength per pos. approx. desistance of inscriptions Specification Result Result Result	switching capacity (COC). When used for their intended purpos they must not be plugged in or disconnected live or under load. Test passed AWG 28 / flexible / > 11 N IEC 60512-13-2:2006-02 Test passed 25 3 N 3 N IEC 60068-2-70:1995-12
Result Conductor cross section/conductor type/tractive force setpoint/actual value sertion and withdrawal forces Specification Result No. of cycles Insertion strength per pos. approx. Withdraw strength per pos. approx. desistance of inscriptions Specification Result Result Result	switching capacity (COC). When used for their intended purpos they must not be plugged in or disconnected live or under load. Test passed AWG 28 / flexible / > 11 N IEC 60512-13-2:2006-02 Test passed 25 3 N 3 N IEC 60068-2-70:1995-12
Conductor cross section/conductor type/tractive force setpoint/actual value Insertion and withdrawal forces Specification Result No. of cycles Insertion strength per pos. approx. Withdraw strength per pos. approx. Resistance of inscriptions Specification Result Polarization and coding	switching capacity (COC). When used for their intended purpose they must not be plugged in or disconnected live or under load. Test passed AWG 28 / flexible / > 11 N IEC 60512-13-2:2006-02 Test passed 25 3 N 3 N IEC 60068-2-70:1995-12 Test passed
Result Conductor cross section/conductor type/tractive force setpoint/actual value Insertion and withdrawal forces Specification Result No. of cycles Insertion strength per pos. approx. Withdraw strength per pos. approx. Resistance of inscriptions Specification Result Polarization and coding Specification Result Result	switching capacity (COC). When used for their intended purpos they must not be plugged in or disconnected live or under load. Test passed AWG 28 / flexible / > 11 N IEC 60512-13-2:2006-02 Test passed 25 3 N 3 N IEC 60068-2-70:1995-12 Test passed
Result Conductor cross section/conductor type/tractive force setpoint/actual value consertion and withdrawal forces Specification Result No. of cycles Insertion strength per pos. approx. Withdraw strength per pos. approx. Resistance of inscriptions Specification Result Colarization and coding Specification	switching capacity (COC). When used for their intended purpose they must not be plugged in or disconnected live or under load. Test passed AWG 28 / flexible / > 11 N IEC 60512-13-2:2006-02 Test passed 25 3 N 3 N IEC 60068-2-70:1995-12 Test passed



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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	4.8 kV
Contact resistance R ₁	1 mΩ
Contact resistance R ₂	1.05 mΩ
Insertion/withdrawal cycles	25

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	105 °C/168 h
Power-frequency withstand voltage	2.21 kV

Shocks

Specification	IEC 60068-2-27:2008-02
Pulse shape	Half-sine
Acceleration	30g
Shock duration	11 ms
Test directions	X-, Y- and Z-axis (pos. and neg.)

Ambient conditions

Ambient temperature (operation)	-55 °C 105 °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

Electrical tests

Thermal test | Test group C

Specification	IEC 60512-5-1:2002-02	
Tested number of positions	10	



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Insulation resistance

insulation resistance		
Specification	IEC 60512-3-1:2002-02	
Insulation resistance, neighboring positions	> 5 MΩ	
Air clearances and creepage distances		
Specification	IEC 60664-1:2020-05	
Insulating material group	II II	
Comparative tracking index (IEC 60112)	CTI ≥400 to <600	
Rated insulation voltage (III/3)	250 V	
Rated surge voltage (III/3)	4 kV	
minimum clearance value - non-homogenous field (III/3)	3 mm	
minimum creepage distance (III/3)	3.6 mm	
Rated insulation voltage (III/2)	320 V	
Rated surge voltage (III/2)	4 kV	
minimum clearance value - non-homogenous field (III/2)	3 mm	
minimum creepage distance (III/2)	3 mm	
Rated insulation voltage (II/2)	600 V	
Rated surge voltage (II/2)	4 kV	
minimum clearance value - non-homogenous field (II/2)	3 mm	

Packaging specifications

minimum creepage distance (II/2)

Type of packaging packed in cardboard

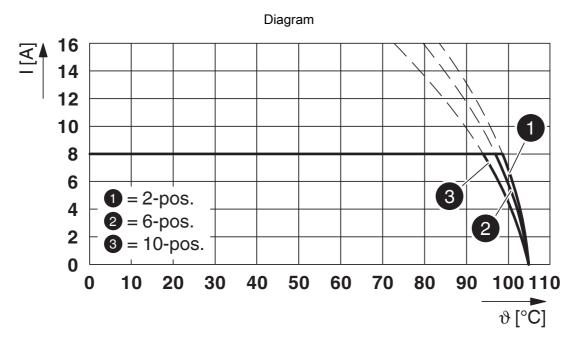
4.5 mm



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Drawings



Type: D32PC 2,2/...-5,08-X with D32H 2,2/...-FH-5,08-X



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Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1376640

7/	UL Recognized Approval ID: E118976-20240617				
		Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
		250 V	11.25 A	14	-



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Classifications

ECLASS

ECLASS-13.0 27460202

ETIM

ETIM 9.0 EC002638



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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%
EF3.0 Climate Change	
CO2e kg	0.058 kg CO2e

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