D32PC 2,2/ 3-5,08-Z - PCB connector

1378299

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PCB connector, color: black, nominal current: 8 A, rated voltage (III/2): 320 V, contact surface: Sn, contact connection type: Socket, number of rows: 1, number of positions: 3, product range: D32PC 2,2/.., pitch: 5.08 mm, connection method: Crimp connection, conductor/PCB connection direction: 0 °, locking clip: - without locking clip, plug-in system: CONNEXIS D, locking: Snap-in locking, mounting method: Latching flange, 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	1378299
Packing unit	100 pc
Minimum order quantity	100 pc
Note	Made to order (non-returnable)
Sales key	AA03
Product key	AACCUC
GTIN	4063151746353
Weight per piece (including packing)	2.711 g
Weight per piece (excluding packing)	3.85 g
Customs tariff number	85366990
Country of origin	CN

Technical data

Product properties

Product type	PCB connector
Product family	D32PC 2,2/..
Product line	CONNEXIS Connectors M
Number of positions	3
Pitch	5.08 mm
Number of rows	1

Electrical properties

Properties

Nominal current I_N	8 A
Nominal voltage U_N	320 V
Contact resistance	0.9 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)	500 V
Rated surge voltage (II/2)	4 kV

Connection data

Interlock

Locking type	Snap-in locking
Mounting type	Latching flange

Conductor connection

Connection method	Crimp connection
Conductor/PCB connection direction	0 °
Conductor cross-section AWG	28 ... 14
Stripping length	4.5 mm

Material specifications

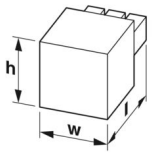
Material data - contact

Metal surface contact area (top layer)	Tin (Sn)

Material data - housing

Color (Housing)	black (9005)
Insulating material	PBT
Insulating material group	II
CTI according to IEC 60112	400 ≤ CTI < 600
Flammability rating according to UL 94	V0

Dimensions

Dimensional drawing	
Pitch	5.08 mm
Width [w]	29.3 mm
Height [h]	7.15 mm
Length [l]	22.8 mm

Notes

Note on the contact	These connectors conform to DIN EN 61984, connectors without switching capacity (COC). When used for their intended purpose, they must not be plugged in or disconnected live or under load.

Mechanical tests

Tensile strength of crimp connections

Result	Test passed
Conductor cross-section/conductor type/tractive force setpoint/actual value	AWG 28 / flexible / > 11 N

Insertion and withdrawal forces

Specification	IEC 60512-13-2:2006-02
Result	Test passed
No. of cycles	25
Insertion strength per pos. approx.	3 N
Withdraw strength per pos. approx.	4 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

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	4.8 kV
Contact resistance R_1	0.9 mΩ
Contact resistance R_2	1 mΩ
Insertion/withdrawal cycles	25

Climatic test

Specification	ISO 6988:1985-02
Corrosive stress	0.2 dm^3 SO_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

Insulation resistance

Specification	IEC 60512-3-1:2002-02
Insulation resistance, neighboring positions	> 5 MΩ

Air clearances and creepage distances |

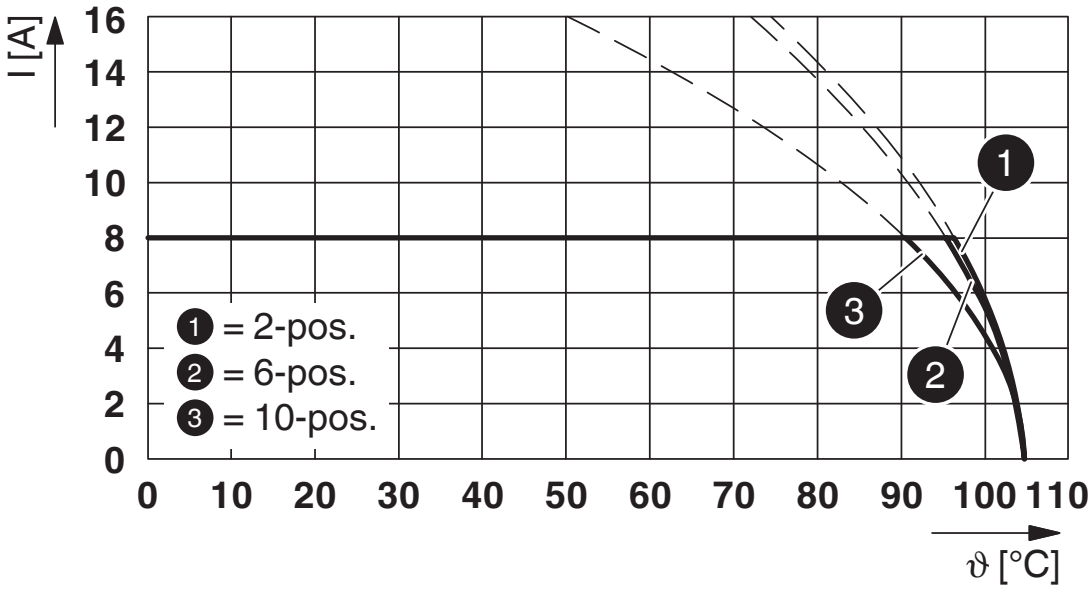
Specification	IEC 60664-1:2020-05
Insulating material group	II
Comparative tracking index (IEC 60112)	CTI ≥400 to <600
Rated insulation voltage (III/3)	250 V
Rated surge voltage (III/3)	4 kV
minimum clearance value - non-homogenous field (III/3)	3 mm
minimum creepage distance (III/3)	3.6 mm
Rated insulation 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)	500 V
Rated surge voltage (II/2)	4 kV
minimum clearance value - non-homogenous field (II/2)	3 mm
minimum creepage distance (II/2)	3.6 mm

Packaging specifications

Type of packaging	packed in cardboard

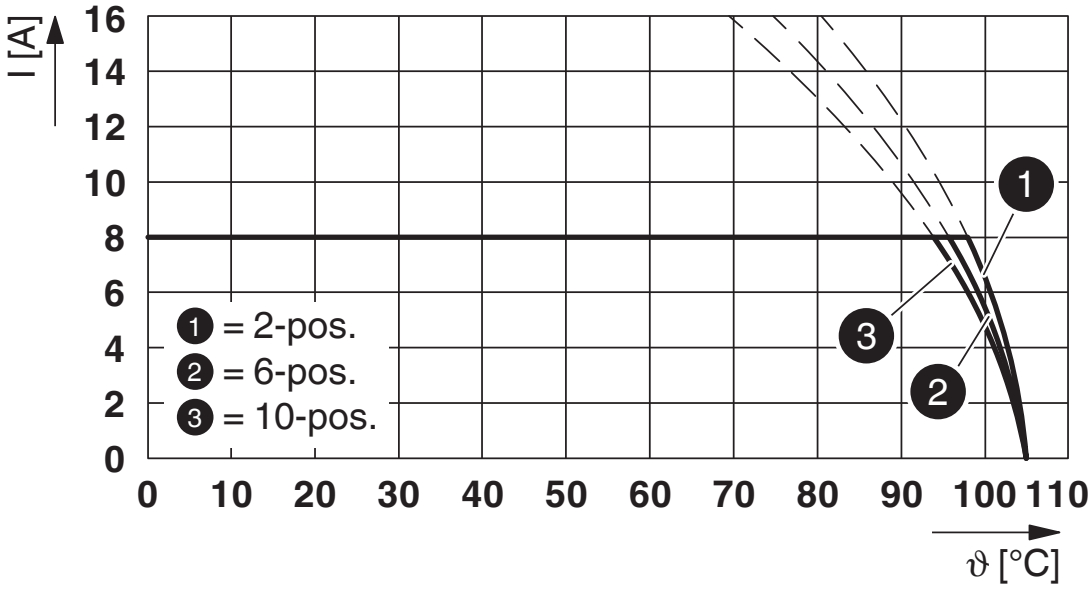
Drawings

Diagram



Type: D32PC 2,2/...-5,08-Z with D32H 2,2/...-H-5,08-Z

Diagram



Type: D32PC 2,2/...-5,08-Z with D32H 2,2/...-V-5,08-Z

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1378299

UL Recognized
Approval ID: E118976-20240617

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
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	250 V	12.25 A	14	-

Classifications

ECLASS

ECLASS-13.0	27460202
ECLASS-15.0	27460202

ETIM

ETIM 9.0	EC002638

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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