

1378112

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Feed-through connector, color: black, nominal current: 5 A, rated voltage (III/2): 160 V, contact surface: Sn, contact connection type: Pin, number of rows: 2, number of positions: 10, product range: DD21H 0,85/..-PT, pitch: 2.5 mm, connection method: Crimp connection, conductor/PCB connection direction: 0 °, locking clip: - without locking clip, plug-in system: CONNEXIS DD, Pin connector pattern alignment: Standard, locking: Snap-in locking, mounting: 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	1378112
Packing unit	50 pc
Minimum order quantity	50 pc
Note	Made to order (non-returnable)
Sales key	AA01
Product key	AAACXG
GTIN	4063151744373
Weight per piece (including packing)	4.529 g
Weight per piece (excluding packing)	5.38 g
Customs tariff number	85366990
Country of origin	CN



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Technical data

Product properties

Product type	Feed-through connector
Product family	DD21H 0,85/PT
Product line	CONNEXIS Connectors XS
Number of positions	10
Pitch	2.5 mm
Number of rows	2
Data management status	
Data management status	
Article revision	00

Electrical properties

Nominal current I _N	5 A
Nominal voltage U _N	160 V
Contact resistance	2.6 mΩ
Rated voltage (III/3)	40 V
Rated surge voltage (III/3)	2.5 kV
Rated voltage (III/2)	160 V
Rated surge voltage (III/2)	2.5 kV
Rated voltage (II/2)	200 V
Rated surge voltage (II/2)	2.5 kV

Connection data

Interlock

Locking type	Snap-in locking
Mounting flange	Engagement nose
Conductor connection	
Connection method	Crimp connection
Conductor cross section AWG	28 18
Stripping length	3 mm

Material specifications

Material	data -	contact
Matchai	uutu	Contact

Metal surface contact area (top layer)	Tin (Sn)
Material data - housing	
Color (Housing)	black (9005)
Insulating material	РВТ
Insulating material group	II
CTI according to IEC 60112	400 ≤ CTI < 600
Flammability rating according to UL 94	V0



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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.
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Dimensions

Dimensional drawing	h
Pitch	2.5 mm
Width [w]	24.7 mm
Height [h]	16.2 mm
Length [I]	30.69 mm

Mechanical tests

Result

Tensile strength of crimp connections

Conductor cross section/conductor type/tractive force setpoint/actual value	AWG 28 / flexible / > 11 N
Insertion and withdrawal forces	
Result	Test passed
No. of cycles	25
Insertion strength per pos. approx.	2 N
Withdraw strength per pos. approx.	2 N
Contact holder in insert	
Specification	IEC 60512-15-1:2008-05
Contact holder in insert	Test passed

Test passed

Resistance of inscriptions

Requirements >20 N

Specification	IEC 60068-2-70:1995-12
Result	Test passed

Polarization and coding

Result Test nassed	Specification	IEC 60512-13-5:2006-02
rest passed	Result	Test passed

Visual inspection	
Specification	IEC 60512-1-1:2002-02
Result	Test passed

Dimension check



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Specification	IEC 60512-1-2:2002-02
Result	Test passed
ectrical tests	
Thermal test Test group C	
Specification	IEC 60512-5-1:2002-02
Tested number of positions	20
Insulation resistance	
Specification	IEC 60512-3-1:2002-02
Insulation resistance, neighboring positions	> 5 MΩ
modation resistance, neighboring positions	
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)	40 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)	160 V
Rated surge voltage (III/2)	2.5 kV
minimum clearance value - non-homogenous field (III/2)	1.5 mm
minimum creepage distance (III/2)	1.5 mm
Rated insulation voltage (II/2)	200 V
Rated surge voltage (II/2)	2.5 kV
minimum clearance value - non-homogenous field (II/2)	1.5 mm

Environmental and real-life conditions

minimum creepage distance (II/2)

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

1.5 mm

Durability test

Specification	IEC 60512-9-1:2010-03
Impulse withstand voltage at sea level	2.95 kV
Contact resistance R ₁	$2.6~\text{m}\Omega$
Contact resistance R ₂	$2.6~\text{m}\Omega$



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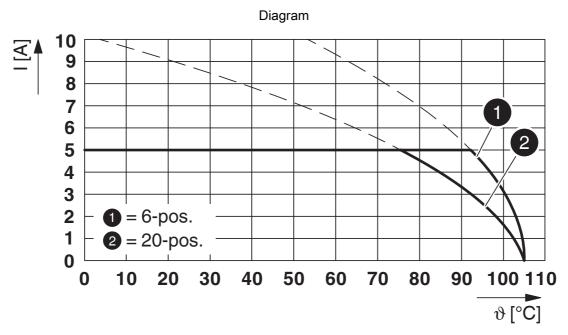
nsertion/withdrawal cycles	25
isertion/withdrawar cycles	23
matic test	
Specification	ISO 6988:1985-02
Corrosive stress	0.2 dm ³ SO ₂ on 300 dm ³ /40 °C/1 cycle
Thermal stress	105 °C/168 h
Power-frequency withstand voltage	1.39 kV
nocks	
Specification	IEC 60068-2-27:2008-02
Pulse shape	Half-sine
Acceleration	30g
Shock duration	11 ms
Test directions	X-, Y- and Z-axis (pos. and neg.)
mbient 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
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kaging specifications	
Type of packaging	packed in cardboard
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Drawings



Type: DD21PC 0,85/...-2,5-Y with DD21H 0,85/...-PT-2,5-Y



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Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1378112

7.1	UL Recognized Approval ID: E118976-2	0240611			
		Nominal voltage U_N	Nominal current I _N	Cross section AWG	Cross section mm ²
		125 V	5 A	18	-



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Classifications

ECLASS

ECLASS-11.0	27460202
ECLASS-12.0	27460202
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%

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