

DD31PC 2,2/18-3,81-Y - PCB connector



1341287

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PCB connector, color: black, nominal current: 8 A, rated voltage (III/2): 160 V, type of contact: Female connector, number of rows: 2, number of positions: 18, product range: DD31PC 2,2/, pitch: 3.81 mm, connection method: Crimp connection, conductor/PCB connection direction: 0 °, locking clip: - without locking clip, plug-in system: CONNEXIS DD, locking: Snap-in locking, mounting: Self-locking 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
- Contacts arranged in a double row enable high packing density in a compact area
- Intuitive locking mechanism prevents accidental disconnection
- Tools for automatic crimping available as an option

Commercial Data

Item number	1341287
Packing unit	50 pc
Minimum order quantity	50 pc
Note	Made to Order (non-returnable)
Product Key	AABCUH
GTIN	4063151650155
Weight per Piece (including packing)	9.188 g
Weight per Piece (excluding packing)	8.866 g
Country of origin	CN

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Technical Data

Product properties

Product line	CONNEXIS Connectors S
Product type	PCB plug
Product family	DD31PC 2,2/
Number of positions	18
Pitch	3.81 mm
Number of rows	2

Electrical properties

Nominal current I_N	8 A
Nominal voltage U_N	160 V
Degree of pollution	3
Contact resistance	5 m Ω
Rated voltage (III/3)	160 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)	320 V
Rated surge voltage (II/2)	2.5 kV

Connection data

Interlock

Locking type	Snap-in locking
Mounting flange	Self-locking 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 - housing

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

Material data – actuating element

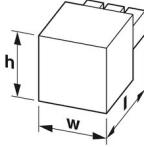
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Dimensions

Dimensional drawing	
Pitch	3.81 mm
Width [w]	47.22 mm
Height [h]	12.23 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.
Note on application	All laboratory tests are performed in combination with the crimp contacts specified as accessories.
Note on application	The current depends on the crimp contact and conductor cross section used.
Note on application	The corresponding crimp contacts are to be found in the "Accessories" tab.

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

Result	Test passed
No. of cycles	25
Insertion strength per pos. approx.	6 N
Withdraw strength per pos. approx.	6 N

Contact holder in insert

Specification	IEC 60512-15-1:2008-05
Contact holder in insert Requirements >20 N	Test passed

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

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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)
Sweep speed	50 m/s ² (60.1 Hz ... 150 Hz)
Test duration per axis	2.5 h

Durability test

Specification	IEC 60512-9-1:2010-03
Impulse withstand voltage at sea level	2.95 kV
Contact resistance R ₁	5 mΩ
Contact resistance R ₂	5 mΩ
Contact resistance R ₂ 2nd level	5 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	1.39 kV

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	20

Insulation resistance

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

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Air clearances and creepage distances |

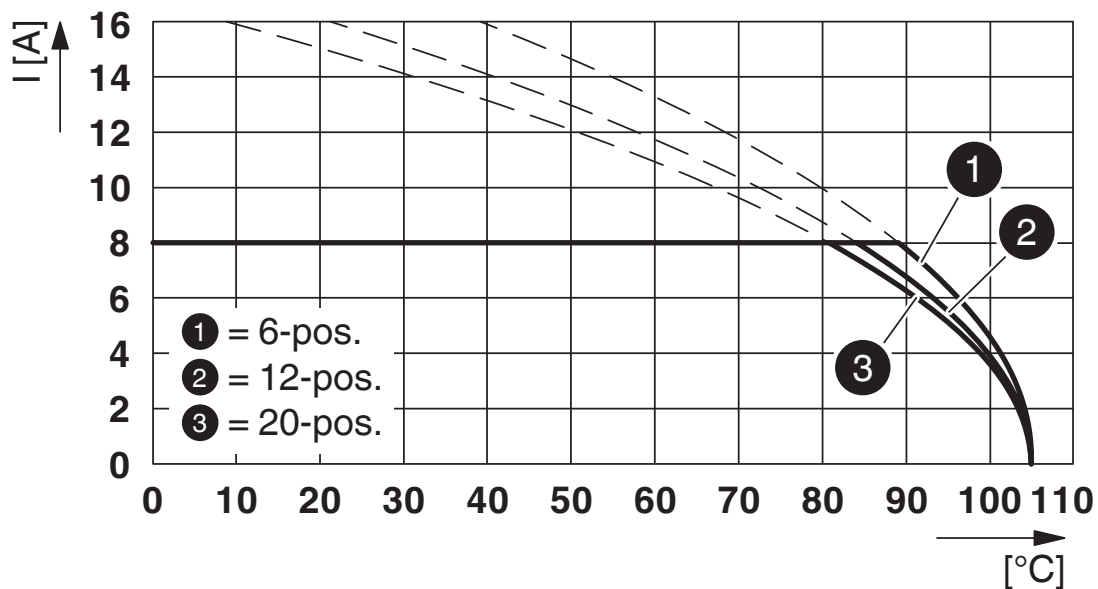
Specification	IEC 60664-1:2007-04
Insulating material group	II
Comparative tracking index (IEC 60112)	CTI ≥ 400 to < 600
Rated insulation voltage (III/3)	160 V
Rated surge voltage (III/3)	2.5 kV
minimum clearance value - non-homogenous field (III/3)	1.5 mm
minimum creepage distance (III/3)	2.2 mm
Rated 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)	320 V
Rated surge voltage (II/2)	2.5 kV
minimum clearance value - non-homogenous field (II/2)	1.5 mm
minimum creepage distance (II/2)	2.2 mm

Packaging specifications

Type of packaging	packed in cardboard
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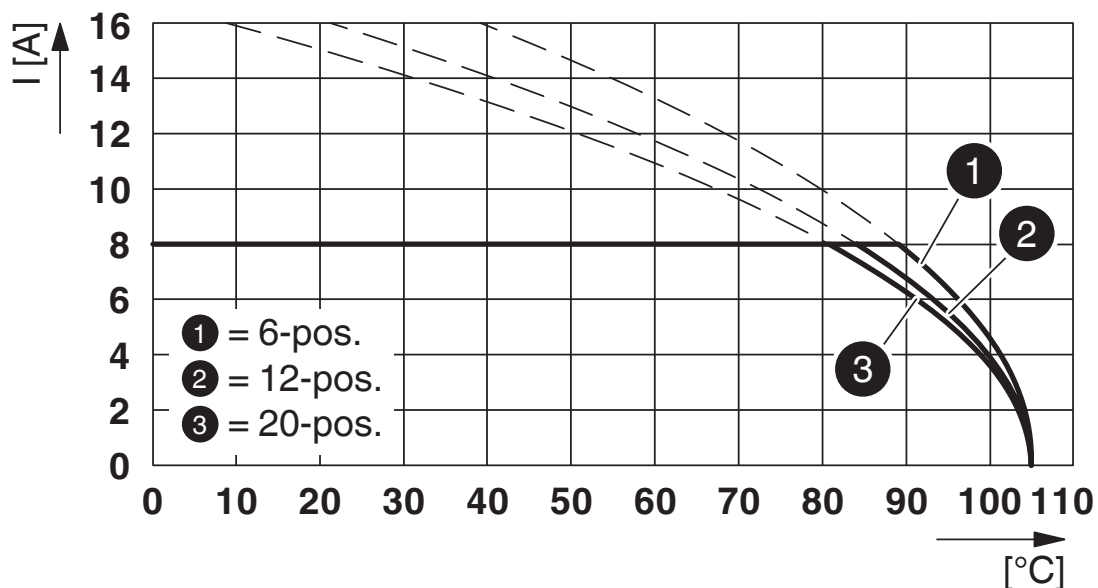
Drawings

Diagram



Type: DD31PC 2,2/...-3,81-Y with DD31H 2,2/...-H-3,81-Y

Diagram



Type: DD31PC 2,2/...-3,81-Y with DD31H 2,2/...-V-3,81-Y

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Classifications

ECLASS

ECLASS-9.0	27440309
ECLASS-10.0.1	27440309
ECLASS-11.0	27460202

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Accessories

D3PC-MP 0,08-0,20-F-SN-R - Crimp contact

1340671

<https://www.phoenixcontact.com/in/products/1340671>

Crimp contact, nominal current: 4 A, contact surface: Tin



D3PC-MP 0,20-0,50-F-SN-R - Crimp contact

1340887

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Crimp contact, nominal current: 6 A, contact surface: Tin



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D3PC-MP 0,50-1,25-F-SN-R - Crimp contact

1340888

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Crimp contact, nominal current: 6 A, contact surface: Tin

D3PC-MP 1,25-2,2-F-SN-R - Crimp contact

1340889

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Crimp contact, nominal current: 8 A, contact surface: Tin

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D3-MP RELEASE TOOL - Removal tool

1441450

<https://www.phoenixcontact.com/in/products/1441450>



Crimping tool, Removal tool, color: black, product range: Accessories, width: 7 mm

DD31H 2,2/18-H-3,81-Y - PCB header

1341392

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PCB headers, color: black, nominal current: 8 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Male connector, number of rows: 2, number of positions: 18, product range: DD31H 2,2/..-H, pitch: 3.81 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.8 mm, number of solder pins per potential: 1, plug-in system: CONNEXIS DD, Pin connector pattern alignment: Standard, locking: Snap-in locking, mounting: Engagement nose, type of packaging: packed in cardboard

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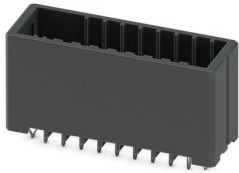
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DD31H 2,2/18-V-3,81-Y - PCB header

1341417

<https://www.phoenixcontact.com/in/products/1341417>



PCB headers, color: black, nominal current: 8 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Male connector, number of rows: 2, number of positions: 18, product range: DD31H 2,2/..-V, pitch: 3.81 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.8 mm, number of solder pins per potential: 1, plug-in system: CONNEXIS DD, Pin connector pattern alignment: Standard, locking: Snap-in locking, mounting: Engagement nose, type of packaging: packed in cardboard

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