

DD21H 0,85/16-PT-2,5-Y - Feed-through plug

1378111

<https://www.phoenixcontact.com/us/products/1378111>



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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: 16, 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 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 | 1378111 |
| Packing unit | 50 pc |
| Minimum order quantity | 50 pc |
| Note | Made to order (non-returnable) |
| Sales key | AA01 |
| Product key | AAACXG |
| GTIN | 4063151745721 |
| Weight per piece (including packing) | 6.139 g |
| Weight per piece (excluding packing) | 6.048 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 | 16 |
| Pitch | 2.5 mm |
| Number of rows | 2 |

Electrical properties

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 type | Engagement nose |

Conductor connection

| | |
|-----------------------------|------------------|
| Connection method | Crimp connection |
| Conductor cross-section AWG | 28 ... 18 |
| Stripping length | 3 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 |

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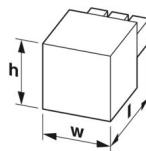
Notes

Note on the contact

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

Dimensions

Dimensional drawing



Pitch

2.5 mm

Width [w]

32.2 mm

Height [h]

16.2 mm

Length [l]

30.69 mm

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. | 2 N |
| Withdraw strength per pos. approx. | 2 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 |

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 |

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 |

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 |
| minimum creepage distance (II/2) | 1.5 mm |

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/s ² (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 | 2.95 kV |
| Contact resistance R ₁ | 2.6 mΩ |
| Contact resistance R ₂ | 2.6 mΩ |

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| | |
|-----------------------------|----|
| 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 |

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 |

Packaging specifications

| | |
|-------------------|---------------------|
| Type of packaging | packed in cardboard |
|-------------------|---------------------|

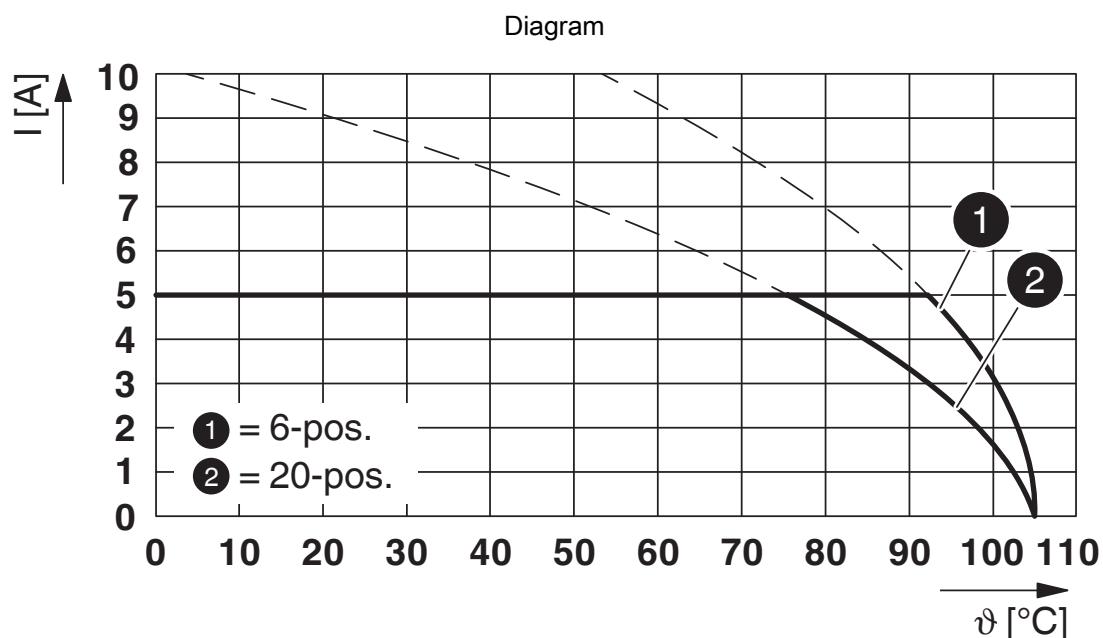
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Drawings



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/1378111>

| UL Recognized | | | | |
|---------------|-----------------------|-----------------------|-------------------|----------------------|
| | Nominal voltage U_N | Nominal current I_N | Cross section AWG | Cross section mm^2 |
| keine | 125 V | 3.2 A | 18 | - |

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Classifications

ECLASS

| | |
|-------------|----------|
| ECLASS-13.0 | 27460202 |
| ECLASS-15.0 | 27460202 |

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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