

MCC 1/ 8-STZF-3,81 - PCB connector



1852422

<https://www.phoenixcontact.com/us/products/1852422>

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The figure shows an 10-position version

PCB connector, nominal cross section: 1 mm², color: green, nominal current: 8 A, rated voltage (III/2): 160 V, contact connection type: Socket, number of potentials: 8, number of rows: 1, number of positions: 8, number of connections: 8, product range: MCC 1/..-STZF, pitch: 3.81 mm, connection method: Crimp connection, conductor/PCB connection direction: 0 °, plug-in system: COMBICON MC 1,5, locking: Screw locking mechanism, mounting method: Screw flange, type of packaging: packed in cardboard, Corresponding female crimp contacts with current [A] and conductor cross-section range [mm²] data: 5A/MCC-MT 0,2-0,35 (1859988); 8A/MCC-MT 0,5-1,0 (1859991)

Your advantages

- Inexpensive connection of large quantities of preassembled conductors
- Screwable flange for superior mechanical stability
- Pull-out aid facilitates handling and allows the tensile force to be reduced at the contact point

Commercial data

| | |
|--------------------------------------|---------------|
| Item number | 1852422 |
| Packing unit | 50 pc |
| Minimum order quantity | 50 pc |
| Sales key | AA02 |
| Product key | AABCAB |
| GTIN | 4017918143954 |
| Weight per piece (including packing) | 3.21 g |
| Weight per piece (excluding packing) | 2.85 g |
| Customs tariff number | 85366990 |
| Country of origin | PL |

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Technical data

Product properties

| | |
|-----------------------|-----------------------|
| Product type | PCB connector |
| Product family | MCC 1/..-STZF |
| Product line | COMBICON Connectors S |
| Type | Standard |
| Number of positions | 8 |
| Pitch | 3.81 mm |
| Number of connections | 8 |
| Number of rows | 1 |
| Number of potentials | 8 |
| Mounting type | Screw flange |

Electrical properties

Properties

| | |
|-----------------------------|--------|
| Nominal current I_N | 8 A |
| Nominal voltage U_N | 160 V |
| 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

Connection technology

| | |
|-------------------------|-------------------|
| Type | Standard |
| Connector system | COMBICON MC 1,5 |
| Nominal cross section | 1 mm ² |
| Contact connection type | Socket |

Interlock

| | |
|---------------|-------------------------|
| Locking type | Screw locking mechanism |
| Mounting type | Screw flange |

Conductor connection

| | |
|------------------------------------|---|
| Connection method | Crimp connection |
| Conductor/PCB connection direction | 0 ° |
| Conductor cross-section flexible | 0.2 mm ² ... 1 mm ² |
| Conductor cross-section AWG | 24 ... 18 |

Material specifications

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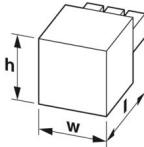
Material data - contact

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

Material data - housing

| | |
|---|--------------|
| Color (Housing) | green (6021) |
| Insulating material | PA |
| Insulating material group | I |
| CTI according to IEC 60112 | 600 |
| Flammability rating according to UL 94 | V0 |
| Glow wire flammability index GWFI according to EN 60695-2-12 | 850 |
| Glow wire ignition temperature GWIT according to EN 60695-2-13 | 775 |
| Temperature for the ball pressure test according to EN 60695-10-2 | 125 °C |

Dimensions

| | |
|---------------------|--|
| Dimensional drawing |  |
| Pitch | 3.81 mm |
| Width [w] | 40.87 mm |
| Height [h] | 8.7 mm |
| Length [l] | 23.1 mm |

Notes

| | |
|---------------------|---|
| Note on the contact | The information on the basic material and the finish properties of the crimp contacts is to be found in the E-Shop in the technical data for the respective crimp contact. |
| 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. |
| Note on application | The crimp contacts may only be processed with approved crimping tools. |
| 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. |

Environmental and real-life conditions

Ambient conditions

| | |
|---|------------------|
| Ambient temperature (storage/transport) | -40 °C ... 70 °C |
| Relative humidity (storage/transport) | 30 % ... 70 % |

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| | |
|---------------------------------|---|
| Ambient temperature (assembly) | -5 °C ... 100 °C |
| Ambient temperature (operation) | -40 °C ... 100 °C (dependent on the derating curve) |

Electrical tests

Air clearances and creepage distances |

| | |
|--|---------------------|
| Specification | IEC 60664-1:2007-04 |
| Insulating material group | I |
| Comparative tracking index (IEC 60112) | CTI 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 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) | 1.6 mm |

Packaging specifications

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

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Drawings

Dimensional drawing



Diagram



Type: MCC 1/...-ST-3,81 with MC 1,5/...-G-3,81; contact: MCC-MT 0,5 - 1,0

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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1852422>

|  cULus Recognized Approval ID: E60425-20110128 | | Nominal voltage U_N | Nominal current I_N | Cross section AWG | Cross section mm^2 |
|---|--|-----------------------|-----------------------|-------------------|-----------------------------|
| B | | 300 V | 5 A | 24 - 22 | - |
| D | | 300 V | 5 A | 24 - 22 | - |

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Classifications

ECLASS

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

ETIM

| | |
|-----------|----------|
| ETIM 10.0 | 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% |
|-------------------------------------|----------------------------|

EF3.1 Climate Change

| | |
|---------|---------------|
| CO2e kg | 0.021 kg CO2e |
|---------|---------------|

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