

## Printed-circuit board connector - FK-MC 0,5/11-ST-2,5 BK - 1923720

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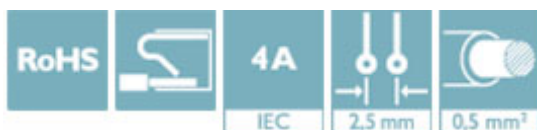
PCB connector, nominal current: 4 A, number of positions: 11, pitch: 2.5 mm, connection method: Push-in spring connection, color: black, contact surface: Tin



The figure shows a 10-position version of the product

### Your advantages

- ✓ Time saving push-in connection, tools not required
- ✓ Defined contact force ensures that contact remains stable over the long term
- ✓ Intuitive use through colour coded actuation lever
- ✓ Operation and conductor connection from one direction enable integration into front of device
- ✓ Quick and convenient testing using integrated test option



### Key Commercial Data

|                      |                                                                                                         |
|----------------------|---------------------------------------------------------------------------------------------------------|
| Packing unit         | 1                                                                                                       |
| GTIN                 | <br>4 017918 571177 |
| GTIN                 | 4017918571177                                                                                           |
| Custom tariff number | 85366990                                                                                                |

### Technical data

#### Item properties

|                           |                                 |
|---------------------------|---------------------------------|
| Brief article description | Printed-circuit board connector |
| Plug-in system            | MICRO COMBICON - FK-MC 0,5      |
| Type of contact           | Female connector                |
| Range of articles         | FK-MC 0,5/...-ST                |
| Pitch                     | 2.5 mm                          |
| Number of positions       | 11                              |
| Connection method         | Push-in spring connection       |
| Locking                   | without                         |
| Number of levels          | 1                               |

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## Technical data

### Electrical parameters

|                                  |        |
|----------------------------------|--------|
| Rated current                    | 4 A    |
| Rated insulation voltage (III/2) | 160 V  |
| Rated surge voltage (III/2)      | 2.5 kV |

### Connection capacity

|                                                                       |                                              |
|-----------------------------------------------------------------------|----------------------------------------------|
| Conductor cross section solid                                         | 0.14 mm <sup>2</sup> ... 0.5 mm <sup>2</sup> |
| Conductor cross section flexible                                      | 0.14 mm <sup>2</sup> ... 0.5 mm <sup>2</sup> |
| Conductor cross section AWG / kcmil                                   | 26 ... 20                                    |
| Conductor cross section flexible, with ferrule without plastic sleeve | 0.25 mm <sup>2</sup> ... 0.5 mm <sup>2</sup> |
| Cylindrical gauge a x b / diameter                                    | - / 1.4 mm                                   |
| Stripping length                                                      | 8 mm                                         |

### Material data - contact

|                                          |                                                                                   |
|------------------------------------------|-----------------------------------------------------------------------------------|
| Note                                     | WEEE/RoHS-compliant, free of whiskers according to IEC 60068-2-82/ JEDEC JESD 201 |
| Contact material                         | Cu alloy                                                                          |
| Surface characteristics                  | hot-dip tin-plated                                                                |
| Metal surface terminal point (top layer) | Tin (4 - 8 µm Sn)                                                                 |
| Metal surface contact area (top layer)   | Tin (4 - 8 µm Sn)                                                                 |

### Material data - housing

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

### Material data – actuating element

|                                        |     |
|----------------------------------------|-----|
| Insulating material                    | POM |
| CTI according to IEC 60112             | 600 |
| Flammability rating according to UL 94 | HB  |

### Dimensions for the product

|                             |                                                                                                         |
|-----------------------------|---------------------------------------------------------------------------------------------------------|
| Caption                     | Schematic representation – for additional information, see product range drawing in the Download Center |
| Length [ l ]                | 19.5 mm                                                                                                 |
| Width [ w ]                 | 28.1 mm                                                                                                 |
| Height [ h ]                | 11.75 mm                                                                                                |
| Pitch                       | 2.5 mm                                                                                                  |
| Height (without solder pin) | 11.75 mm                                                                                                |
| Dimension a                 | 25 mm                                                                                                   |

### Packaging information

# Printed-circuit board connector - FK-MC 0,5/11-ST-2,5 BK - 1923720

## Technical data

### Packaging information

|                            |                     |
|----------------------------|---------------------|
| Type of packaging          | packed in cardboard |
| Pieces per package         | 50                  |
| Denomination packing units | Pcs.                |

### General product information

|              |                                                                                                                                                                                          |
|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Type of note | Notes on operation                                                                                                                                                                       |
| Note         | In accordance with IEC 61984, COMBICON connectors have no switching power (COC). During designated use, they must not be plugged in or disconnected when carrying voltage or under load. |
| Type of note | Notes on operation                                                                                                                                                                       |
| Note         | In accordance with IEC 61984, COMBICON connectors have no switching power (COC). During designated use, they must not be plugged in or disconnected when carrying voltage or under load. |

### Ambient conditions

|                                         |                  |
|-----------------------------------------|------------------|
| Ambient temperature (storage/transport) | -40 °C ... 70 °C |
| Ambient temperature (assembly)          | -5 °C ... 100 °C |
| Ambient temperature (operation)         | -40 °C           |

### Termination and connection method

|                                        |                     |
|----------------------------------------|---------------------|
| Test – repeated connection and release | IEC 60999-1:1999-11 |
|----------------------------------------|---------------------|

### Pull-out test

|                                                          |                             |
|----------------------------------------------------------|-----------------------------|
| Conductor cross section / conductor type / tensile force | 0.2 mm² / solid / > 10 N    |
|                                                          | 0.2 mm² / flexible / > 10 N |
|                                                          | 0.5 mm² / solid / > 20 N    |
|                                                          | 0.5 mm² / flexible / > 20 N |

### Air clearances and creepage distances

|                                  |                                               |
|----------------------------------|-----------------------------------------------|
| Specification                    | IEC 60664-1:1992-10 + A1:2000-02 + A2:2002-05 |
| Insulating material group        | I                                             |
| Voltage                          | 100 V                                         |
| Rated insulation voltage (III/3) | 100 V                                         |
| Rated insulation voltage (III/2) | 160 V                                         |
| Rated insulation voltage (II/2)  | 320 V                                         |
| Rated surge voltage (III/3)      | 1.5 kV                                        |
| Rated surge voltage (III/2)      | 2.5 kV                                        |
| Rated surge voltage (II/2)       | 2.5 kV                                        |

### Temperature cycles

|                                      |                     |
|--------------------------------------|---------------------|
| Specification                        | IEC 60999-1:1999-11 |
| Test current (minimum cross section) | 4 A                 |
| Test current (maximum cross section) | 6 A                 |
| Temperature cycles                   | 192                 |

### Current carrying capacity / derating curves

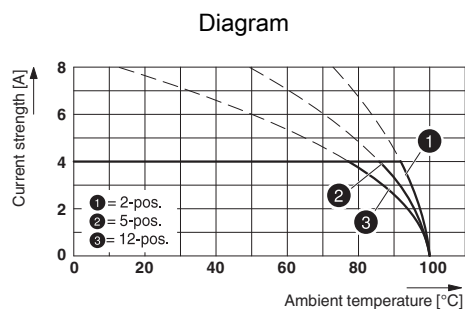
# Printed-circuit board connector - FK-MC 0,5/11-ST-2,5 BK - 1923720

## Technical data

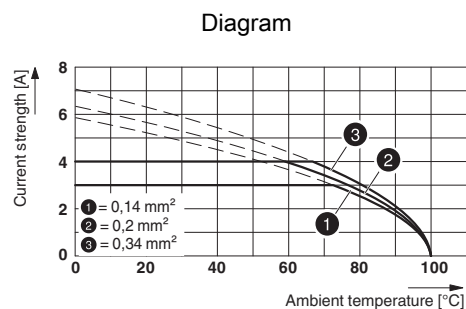
### Environmental Product Compliance

|            |                                                         |
|------------|---------------------------------------------------------|
| China RoHS | Environmentally friendly use period: unlimited = EFUP-e |
|            | No hazardous substances above threshold values          |

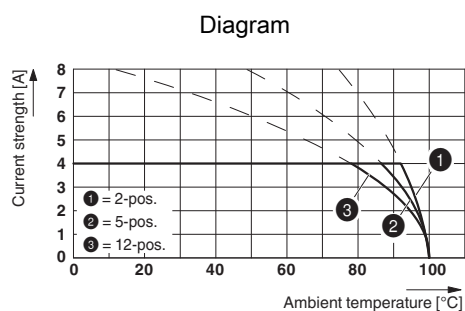
## Drawings



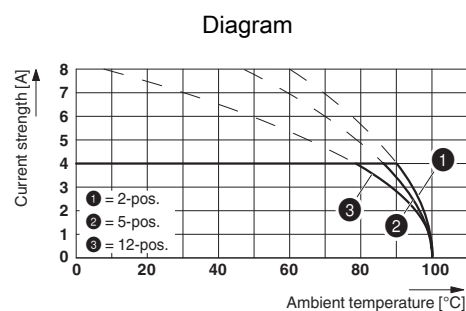
Type: FK-MC 0,5/...-ST-2,5 with MC 0,5/...-G-2,5



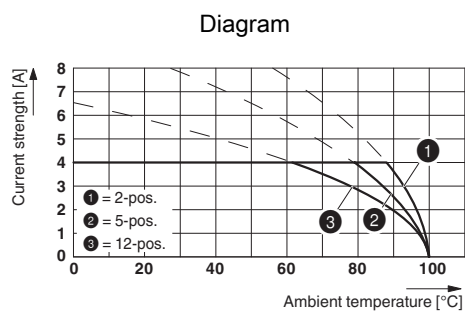
Type: FK-MC 0,5/...-ST-2,5 with MC 0,5/...-G-2,5



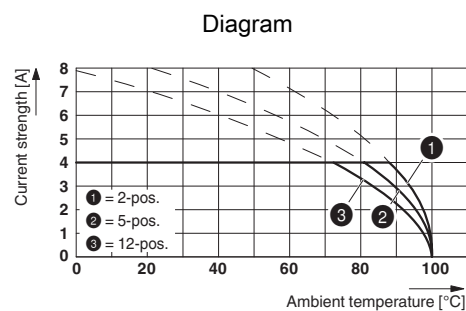
Type: FK-MC 0,5/...-ST-2,5 with MCV 0,5/...-G-2,5 THT



Type: FK-MC 0,5/...-ST-2,5 with MC 0,5/...-G-2,5 THT



Type: FK-MC 0,5/...-ST-2,5 with MCD 0,5/...-G1-2,5



Type: FK-MC 0,5/...-ST-2,5 with MCDV 0,5/...-G1-2,5

## Classifications

eCl@ss

|            |          |
|------------|----------|
| eCl@ss 4.0 | 272607xx |
| eCl@ss 4.1 | 27260701 |

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### Classifications

#### eCl@ss

|            |          |
|------------|----------|
| eCl@ss 5.0 | 27260701 |
| eCl@ss 5.1 | 27260700 |
| eCl@ss 6.0 | 27260700 |
| eCl@ss 7.0 | 27440309 |
| eCl@ss 8.0 | 27440309 |
| eCl@ss 9.0 | 27440309 |

#### ETIM

|          |          |
|----------|----------|
| ETIM 3.0 | EC001121 |
| ETIM 4.0 | EC002638 |
| ETIM 5.0 | EC002638 |
| ETIM 6.0 | EC002638 |

#### UNSPSC

|               |          |
|---------------|----------|
| UNSPSC 6.01   | 30211810 |
| UNSPSC 7.0901 | 39121409 |
| UNSPSC 11     | 39121409 |
| UNSPSC 12.01  | 39121409 |
| UNSPSC 13.2   | 39121409 |

### Approvals

#### Approvals

#### Approvals

CCA / IEC EE CB Scheme / VDE Gutachten mit Fertigungsüberwachung / EAC / cULus Recognized

#### Ex Approvals

#### Approval details

|                    |                |
|--------------------|----------------|
| CCA                | CCA/ DE1 34250 |
| Nominal voltage UN | 100 V          |
| Nominal current IN | 4 A            |
| mm²/AWG/kcmil      | 0.2-.5         |

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### Approvals

|                    |                     |                                                           |                |
|--------------------|---------------------|-----------------------------------------------------------|----------------|
| IECEE CB Scheme    | <b>CB</b><br>scheme | <a href="http://www.iecee.org/">http://www.iecee.org/</a> | DE1-56068-B1B2 |
| Nominal voltage UN | 100 V               |                                                           |                |
| Nominal current IN | 4 A                 |                                                           |                |
| mm²/AWG/kcmil      | 0.2-5               |                                                           |                |

|                                            |                                                                                   |                                                                                                                                                                                                                |          |
|--------------------------------------------|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| VDE Gutachten mit<br>Fertigungsüberwachung |  | <a href="http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx">http://www2.vde.com/de/Institut/Online-Service/<br/>VDE-gepruefteProdukte/Seiten/Online-Suche.aspx</a> | 40013394 |
| Nominal voltage UN                         | 100 V                                                                             |                                                                                                                                                                                                                |          |
| Nominal current IN                         | 4 A                                                                               |                                                                                                                                                                                                                |          |
| mm²/AWG/kcmil                              | 0.2-5                                                                             |                                                                                                                                                                                                                |          |

|     |                                                                                     |         |  |
|-----|-------------------------------------------------------------------------------------|---------|--|
| EAC |  | B.01742 |  |
|-----|-------------------------------------------------------------------------------------|---------|--|

|                    |                                                                                     |                                                                                                                                                       |                 |
|--------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| cULus Recognized   |  | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> | E60425-19930913 |
| Nominal voltage UN | 125 V                                                                               |                                                                                                                                                       |                 |
| Nominal current IN | 4 A                                                                                 |                                                                                                                                                       |                 |
| mm²/AWG/kcmil      | 28-20                                                                               |                                                                                                                                                       |                 |

### Accessories

#### Accessories

#### Crimping tool

Crimping pliers - CRIMPFOX 6 - 1212034



Crimping pliers, for ferrules without insulating collar according to DIN 46228 Part 1 and ferrules with insulating collar according to DIN 46228 Part 4, 0.25 mm² ... 6.0 mm², lateral entry, trapezoidal crimp

#### Labeled terminal marker

## Printed-circuit board connector - FK-MC 0,5/11-ST-2,5 BK - 1923720

### Accessories

Marker card - SK 2,54/2,8:FORTL.ZAHLEN - 0804853



Marker card, Card, white, labeled, Horizontal: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 91 ... 99, mounting type: adhesive, for terminal block width: 2.54 mm, lettering field size: 2.54 x 2.8 mm

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### Screwdriver tools

Screwdriver - SZS 0,4X2,0 - 1205202



Micro screwdriver, bladed, size: 0.4 x 2.0 x 60 mm, 2-component grip, with non-slip grip and twist cap