

# Printed-circuit board connector - FK-MC 0,5/ 8-ST-2,5 BK - 1908101

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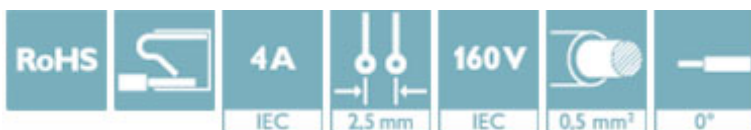
PCB connector, nominal current: 4 A, rated voltage (III/2): 160 V, number of positions: 8, pitch: 2.5 mm, connection method: Push-in spring connection, color: black, contact surface: Tin




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	50 pc
GTIN	 4 017918 446055
GTIN	4017918446055

## 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	8
Connection method	Push-in spring connection
Locking	no
Number of levels	1

### Electrical parameters

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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 ]	20.6 mm
Height [ h ]	11.75 mm
Pitch	2.5 mm
Height (without solder pin)	11.75 mm
Dimension a	17.5 mm

### Packaging information

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## 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.

### 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
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### Pull-out test

Conductor cross section / conductor type / tensile force	0.2 mm <sup>2</sup> / solid / > 10 N
	0.2 mm <sup>2</sup> / flexible / > 10 N
	0.5 mm <sup>2</sup> / solid / > 20 N
	0.5 mm <sup>2</sup> / 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	80 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

### Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
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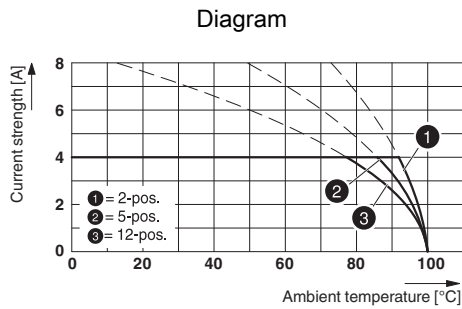
# Printed-circuit board connector - FK-MC 0,5/ 8-ST-2,5 BK - 1908101

## Technical data

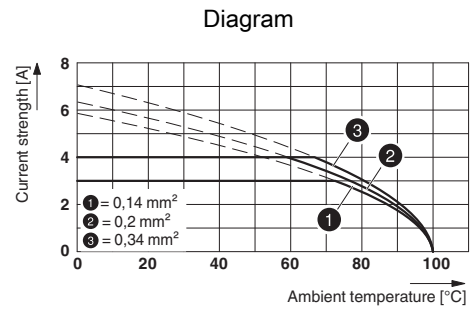
### Environmental Product Compliance

	No hazardous substances above threshold values
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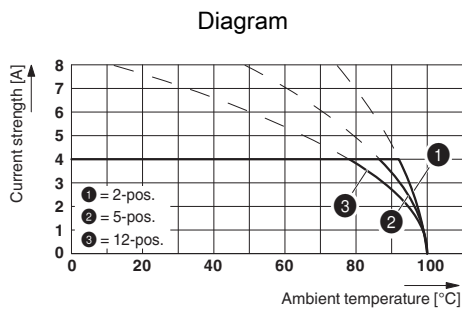
## Drawings



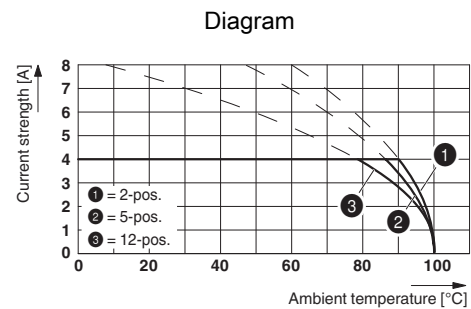
Type: FK-MC 0,5/...-ST-2,5 with MC 0,5/...-G-2,5



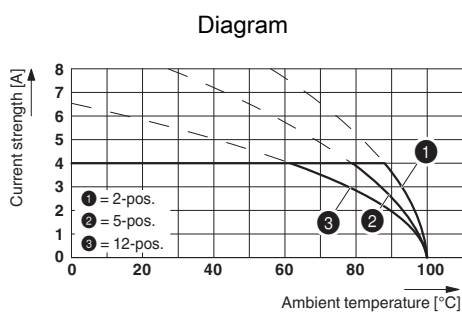
Type: FK-MC 0,5/...-ST-2,5 with MC 0,5/...-G-2,5



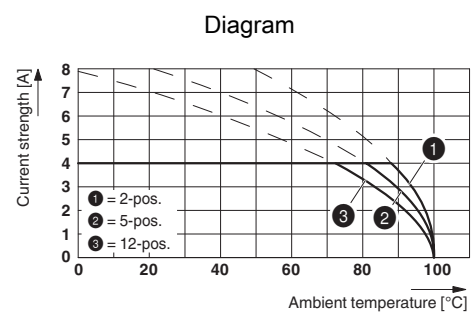
Type: FK-MC 0,5/...-ST-2,5 with MCV 0,5/...-G-2,5 THT



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

## Approvals

### Approvals

# Printed-circuit board connector - FK-MC 0,5/ 8-ST-2,5 BK - 1908101

## 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
mm <sup>2</sup> /AWG/kcmil	0.2-5

IECEE CB 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		
mm <sup>2</sup> /AWG/kcmil	0.2-5		

VDE Gutachten mit 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/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx</a>	40013394
Nominal voltage UN	100 V		
Nominal current IN	4 A		
mm <sup>2</sup> /AWG/kcmil	0.2-5		

EAC		B.01742
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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	B		
Nominal current IN	125 V		
mm <sup>2</sup> /AWG/kcmil	4 A		
	28-20		

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PHOENIX CONTACT GmbH & Co. KG  
Flachmarktstr. 8  
32825 Blomberg  
Germany  
Tel. +49 5235 300  
Fax +49 5235 3 41200  
<http://www.phoenixcontact.com>

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