

# Printed-circuit board connector - FRONT-MC 1,5/ 9-ST-3,81 - 1850738

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PCB connector, nominal current: 8 A, rated voltage (III/2): 160 V, number of positions: 9, pitch: 3.81 mm, connection method: Front screw connection, color: green, contact surface: Tin




The figure shows a 10-position version of the product

## Why buy this product

- ✓ Well-known connection principle allows worldwide use
- ✓ Low temperature rise, thanks to maximum contact force
- ✓ Optimized for tight installation situations: operation and conductor connection from one direction



## Key Commercial Data

Packing unit	50 STK
GTIN	 4 017918 109783
GTIN	4017918109783

## Technical data

### Dimensions

Length [ l ]	21.7 mm
Width [ w ]	35.08 mm
Height [ h ]	12.3 mm
Pitch	3.81 mm
Dimension a	30.48 mm

### General

Range of articles	FRONT-MC 1,5/...-ST
Type of contact	Female connector
Number of positions	9
Connection method	Front screw connection
Insulating material group	I

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## Technical data

### General

Rated surge voltage (III/3)	2.5 kV
Rated surge voltage (III/2)	2.5 kV
Rated surge voltage (II/2)	2.5 kV
Rated voltage (III/3)	160 V
Rated voltage (III/2)	160 V
Rated voltage (II/2)	320 V
Connection in acc. with standard	EN-VDE
Nominal current $I_N$	8 A
Nominal cross section	1.5 mm <sup>2</sup>
Maximum load current	8 A (with 1.5 mm <sup>2</sup> conductor cross section)
Insulating material	PA
Flammability rating according to UL 94	V0
Internal cylindrical gage	A1
Stripping length	9 mm
Screw thread	M2
Tightening torque, min	0.22 Nm
Tightening torque max	0.25 Nm

### Connection data

Conductor cross section solid min.	0.14 mm <sup>2</sup>
Conductor cross section solid max.	1.5 mm <sup>2</sup>
Conductor cross section flexible min.	0.14 mm <sup>2</sup>
Conductor cross section flexible max.	1.5 mm <sup>2</sup>
Conductor cross section flexible, with ferrule without plastic sleeve min.	0.25 mm <sup>2</sup>
Conductor cross section flexible, with ferrule without plastic sleeve max.	1.5 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve min.	0.25 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve max.	0.5 mm <sup>2</sup>
Conductor cross section AWG min.	28
Conductor cross section AWG max.	16
2 conductors with same cross section, solid min.	0.14 mm <sup>2</sup>
2 conductors with same cross section, solid max.	0.5 mm <sup>2</sup>
2 conductors with same cross section, stranded min.	0.14 mm <sup>2</sup>
2 conductors with same cross section, stranded max.	0.75 mm <sup>2</sup>
2 conductors with same cross section, stranded, ferrules without plastic sleeve, min.	0.25 mm <sup>2</sup>
2 conductors with same cross section, stranded, ferrules without plastic sleeve, max.	0.34 mm <sup>2</sup>
2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, min.	0.5 mm <sup>2</sup>
2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, max.	0.5 mm <sup>2</sup>
Minimum AWG according to UL/CUL	30

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## Technical data

### Connection data

Maximum AWG according to UL/CUL	16
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### Standards and Regulations

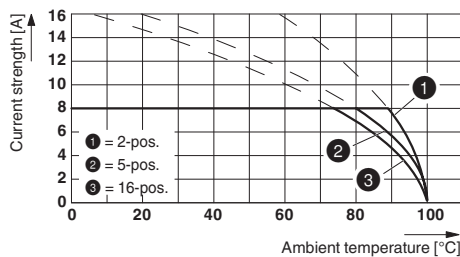
Connection in acc. with standard	EN-VDE
	CSA
Flammability rating according to UL 94	V0

### Environmental Product Compliance

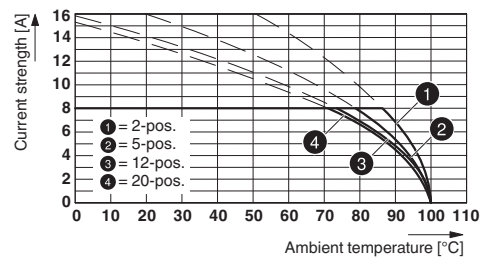
China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

## Drawings

Diagram



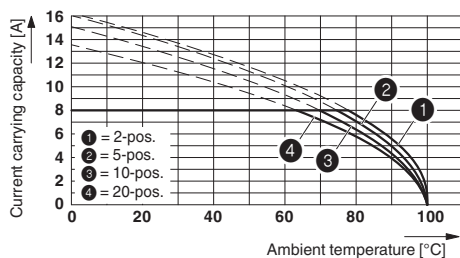
Diagram



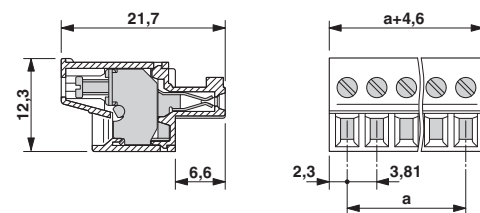
Type: FRONT-MC 1,5/...-ST-3,81 with SMC 1,5/...-G-3,81

Type: FRONT-MC 1,5/...-ST-3,81 with MCV 1,5/...-G-3,81

Diagram



Dimensional drawing



## Approvals

### Approvals

### Approvals

CSA / VDE Gutachten mit Fertigungsüberwachung / IEC60320 CB Scheme / cULus Recognized / EAC

### Ex Approvals

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## Approvals

### Approval details

CSA		<a href="http://www.csagroup.org/services-industries/product-listing/">http://www.csagroup.org/services-industries/product-listing/</a>	13631
	D	B	
Nominal voltage UN	300 V	300 V	
Nominal current IN	8 A	8 A	
mm <sup>2</sup> /AWG/kcmil	28-16	28-16	

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>	40011723
Nominal voltage UN	160 V		
Nominal current IN	8 A		
mm <sup>2</sup> /AWG/kcmil	0.2-1.5		

IECEE CB Scheme		<a href="http://www.iecee.org/">http://www.iecee.org/</a>	DE1-60604-B1B2
Nominal voltage UN	160 V		
Nominal current IN	8 A		
mm <sup>2</sup> /AWG/kcmil	0.2-1.5		

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>	E60425-20110128
	D	B	
Nominal voltage UN	300 V	300 V	
Nominal current IN	8 A	8 A	
mm <sup>2</sup> /AWG/kcmil	30-16	30-16	

EAC		B.01742
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PHOENIX CONTACT GmbH & Co. KG  
Flachsmarktstr. 8  
32825 Blomberg  
Germany  
Tel. +49 5235 300  
Fax +49 5235 3 41200  
<http://www.phoenixcontact.com>