

## Printed-circuit board connector - FRONT-MC 1,5/ 3-ST-3,81 - 1850673

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PCB connector, nominal current: 8 A, rated voltage (III/2): 160 V, number of positions: 3, 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	1 STK
GTIN	 4 017918 109868
GTIN	4017918109868
Weight per Piece (excluding packing)	4.210 g
Custom tariff number	85366990
Country of origin	Germany

### Technical data

#### Dimensions

Length [ l ]	21.7 mm
Width [ w ]	12.22 mm
Height [ h ]	12.3 mm
Pitch	3.81 mm
Dimension a	7.62 mm

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## Technical data

### General

Range of articles	FRONT-MC 1,5/...-ST
Type of contact	Female connector
Number of positions	3
Connection method	Front screw connection
Insulating material group	I
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>

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## Technical data

### Connection data

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
Maximum AWG according to UL/CUL	16

### Standards and Regulations

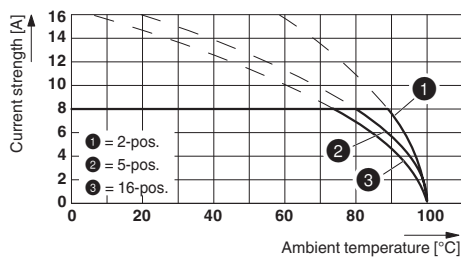
Connection in acc. with standard	EN-VDE
	CSA
Flammability rating according to UL 94	V0

### Environmental Product Compliance

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

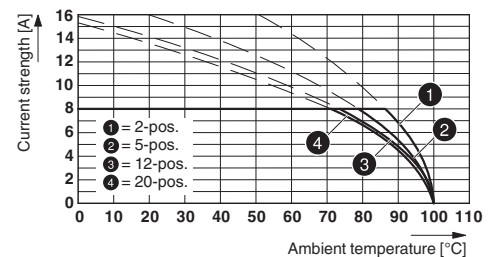
## Drawings

Diagram



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

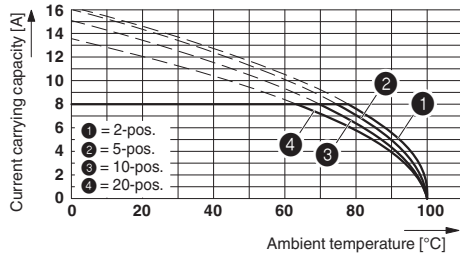
Diagram



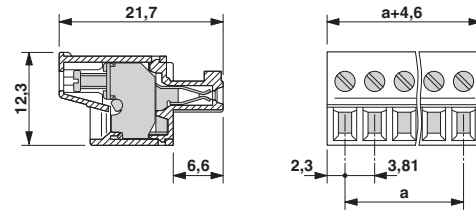
Type: FRONT-MC 1,5/...-ST-3,81 with MCV 1,5/...-G-3,81

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Diagram



Dimensional drawing



## Classifications

eCl@ss

eCl@ss 4.0	272607xx
eCl@ss 4.1	27260701
eCl@ss 5.0	27260701
eCl@ss 5.1	27260701
eCl@ss 6.0	27260704
eCl@ss 7.0	27440402
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

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


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## Approvals

Ex Approvals

### Approval details

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


VDE Gutachten mit Fertigungsüberwachung			40011723
mm <sup>2</sup> /AWG/kcmil		0.2-1.5	
Nominal current I <sub>N</sub>		8 A	
Nominal voltage U <sub>N</sub>		160 V	

IECEE CB Scheme		<a href="http://www.iecee.org/">http://www.iecee.org/</a>	DE1-59621-B1B2
mm <sup>2</sup> /AWG/kcmil		0.2-1.5	
Nominal current I <sub>N</sub>		8 A	
Nominal voltage U <sub>N</sub>		160 V	

CCA			CCA/ DE1 34219
mm <sup>2</sup> /AWG/kcmil		0.2-1.5	
Nominal current I <sub>N</sub>		8 A	
Nominal voltage U <sub>N</sub>		160 V	

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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>	E60425-20110128
	B	D	
mm <sup>2</sup> /AWG/kcmil	30-16	30-16	
Nominal current I <sub>N</sub>	8 A	8 A	
Nominal voltage U <sub>N</sub>	300 V	300 V	

EAC		B.01742
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