

# Printed-circuit board connector - MC 1,5/ 3-ST-3,81 - 1803581

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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: Screw connection with tension sleeve, 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
- Allows connection of two conductors



## Key Commercial Data

Packing unit	250 STK
GTIN	 4 017918 045890
GTIN	4017918045890
Weight per Piece (excluding packing)	2.200 g
Custom tariff number	85366990

## Technical data

### Dimensions

Length [ l ]	16.1 mm
Width [ w ]	12.22 mm
Height [ h ]	11.1 mm
Pitch	3.81 mm
Dimension a	7.62 mm

### General

Range of articles	MC 1,5/...-ST
Type of contact	Female connector
Number of positions	3

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## Technical data

### General

Connection method	Screw connection with tension sleeve
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	7 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.	0.08 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.	0.08 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>

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## Technical data

### Connection data

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	14

### Standards and Regulations

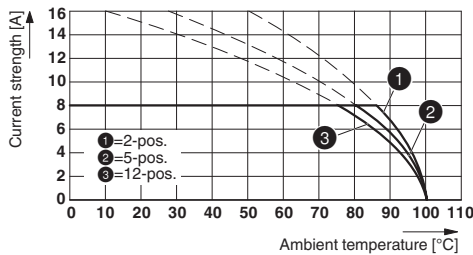
Connection in acc. with standard	EN-VDE
	CSA
Flammability rating according to UL 94	V0

### Environmental Product Compliance

China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

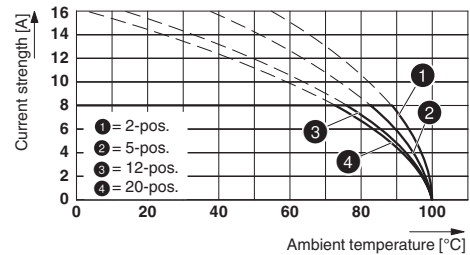
## Drawings

Diagram



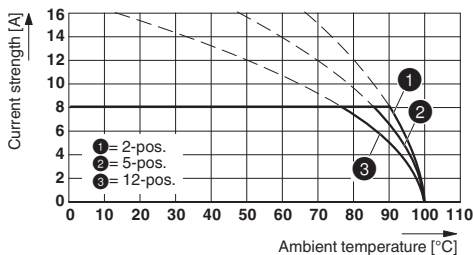
Type: MC 1,5/...-ST-3,81 with MC 1,5/...-G-3,81 THT

Diagram



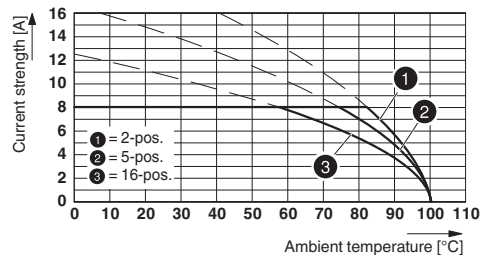
Type: MC 1,5/...-ST-3,81 with MCV 1,5/...-G-3,81

Diagram



Type: MC 1,5/...-ST-3,81 with MCV 1,5/...-G-3,81 P26 THR

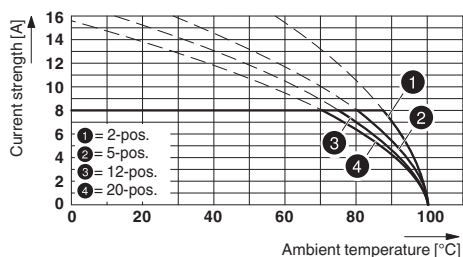
Diagram



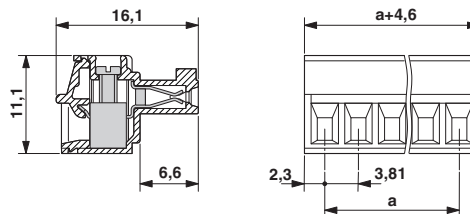
Type: MC 1,5/...-ST-3,81 with MCD 1,5/...-G1-3,81

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Diagram



Dimensional drawing



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

## 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 / IEC CB Scheme / CCA / cULus Recognized / EAC

Ex Approvals

# Printed-circuit board connector - MC 1,5/ 3-ST-3,81 - 1803581

## 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		<a href="http://www.vde.com/en/Institute/OnlineService/VDE-approved-products/Pages/Online-Search.aspx">http://www.vde.com/en/Institute/OnlineService/VDE-approved-products/Pages/Online-Search.aspx</a>	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		

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	30-14	30-14	
Nominal current I <sub>N</sub>	8 A	8 A	
Nominal voltage U <sub>N</sub>	300 V	300 V	

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## Approvals

EAC		B.01742
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## Accessories

### Accessories

#### Bridge

Insertion bridge - EBPL 2-3,81 - 1733495



Insertion bridge for plugs featuring a screw connection with a 3.81 mm pitch

Insertion bridge - EBPL 3-3,81 - 1733505



Insertion bridge for plugs featuring a screw connection with a 3.81 mm pitch

#### Cable housing

Cable housing - KGG-MC 1,5/ 3 - 1834356



Cable housing, pitch: 3.81 mm, number of positions: 3, dimension a: 13.82 mm, color: green

#### Labeled terminal marker

Marker card - SK 3,81/2,8:FORTL.ZAHLEN - 0804109



Marker card, Card, white, labeled, Horizontal: consecutive numbers 1 - 10, 11 - 20, etc. up to 91 - (99)100, mounting type: adhesive, for terminal block width: 3.81 mm, lettering field size: 3.81 x 2.8 mm

#### Screwdriver tools

## Printed-circuit board connector - MC 1,5/ 3-ST-3,81 - 1803581

### Accessories

Screwdriver - SZS 0,4X2,5 VDE - 1205037



Screwdriver, slot-headed, VDE insulated, size: 0.4 x 2.5 x 80 mm, 2-component grip, with non-slip grip

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### Additional products

Header - MCV 1,5/ 3-G-3,81 P14 THR - 1707010



PCB headers, nominal current: 8 A, rated voltage (III/2): 160 V, number of positions: 3, pitch: 3.81 mm, color: black, contact surface: Tin, mounting: THR soldering, User information and design recommendations for through hole reflow technology can be found under "Downloads"

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Header - MCV 1,5/ 3-G-3,81 P26 THR - 1707434



PCB headers, nominal current: 8 A, rated voltage (III/2): 160 V, number of positions: 3, pitch: 3.81 mm, color: black, contact surface: Tin, mounting: THR soldering, User information and design recommendations for through hole reflow technology can be found under "Downloads"

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Header - MCV 1,5/ 3-G-3,81 P26 THRR32 - 1712843



PCB headers, nominal current: 8 A, rated voltage (III/2): 160 V, number of positions: 3, pitch: 3.81 mm, color: black, contact surface: Tin, mounting: THR soldering, User information and design recommendations for through hole reflow technology can be found under "Downloads"

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Printed-circuit board connector - MC 1,5/ 3-G-3,81 P20 THRR32 - 1782585



PCB headers, nominal current: 8 A, rated voltage (III/2): 160 V, number of positions: 3, pitch: 3.81 mm, color: black, contact surface: Tin, mounting: THR soldering, User information and design recommendations for through hole reflow technology can be found under "Downloads"

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## Printed-circuit board connector - MC 1,5/ 3-ST-3,81 - 1803581

### Accessories

#### Printed-circuit board connector - MC 1,5/ 3-G-3,81 - 1803280

PCB headers, nominal current: 8 A, rated voltage (III/2): 160 V, number of positions: 3, pitch: 3.81 mm, color: green, contact surface: Tin, mounting: Wave soldering



#### Printed-circuit board connector - MCV 1,5/ 3-G-3,81 - 1803439

PCB headers, nominal current: 8 A, rated voltage (III/2): 160 V, number of positions: 3, pitch: 3.81 mm, color: green, contact surface: Tin, mounting: Wave soldering



#### Printed-circuit board connector - SMC 1,5/ 3-G-3,81 - 1827282

PCB headers, nominal current: 8 A, rated voltage (III/2): 160 V, number of positions: 3, pitch: 3.81 mm, color: green, contact surface: Tin, mounting: Wave soldering



#### Header - MCD 1,5/ 3-G-3,81 - 1829963



PCB headers, nominal current: 8 A, rated voltage (III/2): 160 V, number of positions: 3, pitch: 3.81 mm, color: green, contact surface: Tin, mounting: Wave soldering, In combination with MCV plug components, both an MCVW and an MCVR plug must be used.

#### Header - MCDV 1,5/ 3-G-3,81 - 1830415



PCB headers, nominal current: 8 A, rated voltage (III/2): 160 V, number of positions: 3, pitch: 3.81 mm, color: green, contact surface: Tin, mounting: Wave soldering, In combination with MCV plug components, both an MCVW and an MCVR plug must be used.



## Printed-circuit board connector - MC 1,5/ 3-ST-3,81 - 1803581

### Accessories

#### Header - MCVDU 1,5/ 3-G-3,81 - 1832701



PCB headers, nominal current: 8 A, rated voltage (III/2): 160 V, number of positions: 3, pitch: 3.81 mm, color: green, contact surface: Tin, mounting: Wave soldering

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#### Printed-circuit board connector - MCD 1,5/ 3-G1-3,81 - 1843088



PCB headers, nominal current: 8 A, rated voltage (III/2): 160 V, number of positions: 3, pitch: 3.81 mm, color: green, contact surface: Tin, mounting: Wave soldering, In combination with MCV plug components, both an MCVW and an MCVR plug must be used.

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#### Header - MCDV 1,5/ 3-G1-3,81 - 1847738



PCB headers, nominal current: 8 A, rated voltage (III/2): 160 V, number of positions: 3, pitch: 3.81 mm, color: green, contact surface: Tin, mounting: Wave soldering, In combination with MCV plug components, both an MCVW and an MCVR plug must be used.

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#### Header - EMCV 1,5/ 3-G-3,81 - 1860650



PCB headers, nominal current: 8 A, rated voltage (III/2): 160 V, number of positions: 3, pitch: 3.81 mm, color: green, contact surface: Tin, mounting: Press-in technology

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#### Header - MCO 1,5/ 3-GR-3,81 - 1861659



PCB headers, nominal current: 8 A, rated voltage (III/2): 160 V, number of positions: 3, pitch: 3.81 mm, color: green, contact surface: Tin, mounting: Wave soldering

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## Printed-circuit board connector - MC 1,5/ 3-ST-3,81 - 1803581

### Accessories

Header - MCO 1,5/ 3-GL-3,81 - 1861730



PCB headers, nominal current: 8 A, rated voltage (III/2): 160 V, number of positions: 3, pitch: 3.81 mm, color: green, contact surface: Tin, mounting: Wave soldering

Header - EMC 1,5/ 3-G-3,81 - 1897814



PCB headers, nominal current: 8 A, rated voltage (III/2): 160 V, number of positions: 3, pitch: 3.81 mm, color: green, contact surface: Tin, mounting: Press-in technology

Header - MC 1,5/ 3-G-3,81 THT - 1908774



PCB headers, nominal current: 8 A, rated voltage (III/2): 160 V, number of positions: 3, pitch: 3.81 mm, color: black, contact surface: Tin, mounting: THR soldering, User information and design recommendations for through hole reflow technology can be found under "Downloads"

Header - MC 1,5/ 3-G-3,81 THT-R56 - 1943768



PCB headers, nominal current: 8 A, rated voltage (III/2): 160 V, number of positions: 3, pitch: 3.81 mm, color: black, contact surface: Tin, mounting: THR soldering, User information and design recommendations for through hole reflow technology can be found under "Downloads"