

https://www.phoenixcontact.com/us/products/1803426



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PCB headers, nominal cross section: 1.5 mm², color: green, nominal current: 8 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Male connector, number of potentials: 2, number of rows: 1, number of positions: 2, number of connections: 2, product range: MCV 1,5/..-G, pitch: 3.81 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.4 mm, number of solder pins per potential: 1, plug-in system: COMBICON MC 1,5, Pin connector pattern alignment: Standard, locking: without, mounting: without, type of packaging: packed in cardboard

## Your advantages

- · Well-known mounting principle allows worldwide use
- · Vertical connection enables multi-row arrangement on the PCB
- · Maximum flexibility when it comes to device design one header for connectors with different connection technologies

### Commercial Data

Item number	1803426	
Packing unit	1 pc	
Minimum order quantity	250 pc	
Sales Key	A01	
Product Key	AABSBE	
Catalog Page	Page 226 (C-1-2013)	
GTIN	4017918045739	
Weight per Piece (including packing)	0.646 g	
Weight per Piece (excluding packing)	0.646 g	
Customs tariff number	85366930	
Country of origin	DE	



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## **Technical Data**

### Product properties

Туре	Standard	
Product line	COMBICON Connectors S	
Product type	PCB headers	
Number of positions	2	
Pitch	3.81 mm	
Number of connections	2	
Number of rows	1	
Mounting flange	without	
Number of potentials	2	
Pin layout	Linear pinning	
Solder pins per potential	1	

### Electrical properties

Nominal current I <sub>N</sub>	8 A
Nominal voltage U <sub>N</sub>	160 V
Degree of pollution	3
Rated voltage (III/3)	160 V
Rated surge voltage (III/3)	2.5 kV
Rated voltage (III/2)	160 V
Rated surge voltage (III/2)	2.5 kV

### Mounting

Mounting type	Wave soldering	
Pin layout	Linear pinning	

### Material specifications

### 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	Tin-plated	
Metal surface contact area (top layer)	Tin (3 - 5 µm Sn)	
Metal surface contact area (middle layer)	Nickel (1 - 3 µm Ni)	
Metal surface soldering area (top layer)	Tin (3 - 5 µm Sn)	
Metal surface soldering area (middle layer)	Nickel (1 - 3 µm Ni)	

### Material data - housing

Housing color	green (RAL 6021)
Insulating material	PBT
Insulating material group	Illa
CTI according to IEC 60112	225



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	Flammability rating according to UL 94	V0			
Dir	Dimensions				
	Dimensional drawing	h h			
	Pitch	3.81 mm			
	Width [w]	9.01 mm			
	Height [h]	12.6 mm			
	Length [I]	7.25 mm			
	Installed height	9.2 mm			

3.4 mm

### Electrical tests

Solder pin length [P]

### Air clearances and creepage distances |

Specification	IEC 60664-1:2007-04	
Insulating material group	Illa	
Comparative tracking index (IEC 60112)	CTI 225	
Rated insulation voltage (III/3)	160 V	
Rated surge voltage (III/3)	2.5 kV	
minimum clearance value - non-homogenous field (III/3)	1.5 mm	
minimum creepage distance (III/3)	2.5 mm	
Rated insulation voltage (III/2)	160 V	
Rated surge voltage (III/2)	2.5 kV	
minimum clearance value - non-homogenous field (III/2)	1.5 mm	
minimum creepage distance (III/2)	1.6 mm	
Rated insulation voltage (II/2)	250 V	
Rated surge voltage (II/2)	2.5 kV	
minimum clearance value - non-homogenous field (II/2)	1.5 mm	
minimum creepage distance (II/2)	2.5 mm	

### Environmental and real-life conditions

### Ambient conditions

Ambient temperature (operation)	-40 °C 100 °C (dependent on the derating curve)	
Ambient temperature (storage/transport)	-40 °C 70 °C	
Relative humidity (storage/transport)	30 % 70 %	
Ambient temperature (assembly)	-5 °C 100 °C	

## Packaging specifications

Type of packaging	packed in cardboard
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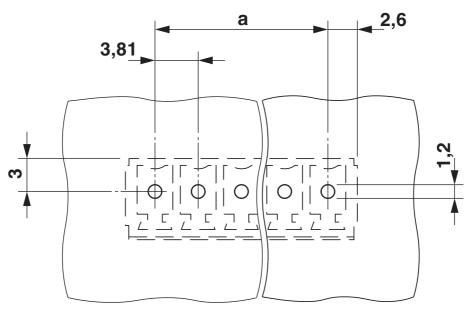
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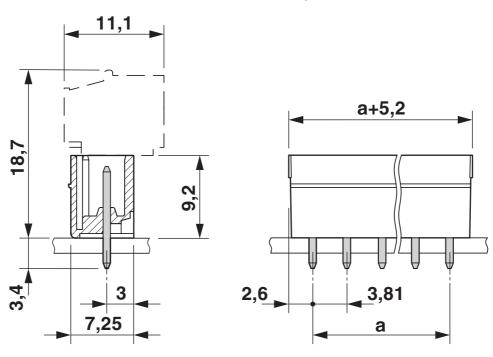


## Drawings

Drilling plan/solder pad geometry



Dimensional drawing





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## Approvals

CSA Approval ID: 13631				
	Nominal Voltage U <sub>N</sub>	Nominal Current I <sub>N</sub>	Cross Section AWG	Cross Section mm <sup>2</sup>
Use group B				
	300 V	8 A	-	-
Use group D				
	300 V	8 A	-	-

EB IECEE CB Scheme Approval ID: DE1-60987-B1B2					
		Nominal Voltage U <sub>N</sub>	Nominal Current I <sub>N</sub>	Cross Section AWG	Cross Section mm <sup>2</sup>
		160 V	8 A	-	-

EAC
Approval ID: B.01687

	cULus Recognized Approval ID: E60425-20110128				
	Nominal Voltage $U_N$	Nominal Current I <sub>N</sub>	Cross Section AWG	Cross Section mm <sup>2</sup>	
Use group B					
	300 V	8 A	-	-	
Use group D					
	300 V	8 A	-	-	

VDE Zeichengenehmigung Approval ID: 40011723				
	Nominal Voltage U <sub>N</sub>	Nominal Current I <sub>N</sub>	Cross Section AWG	Cross Section mm <sup>2</sup>
	160 V	8 A	-	-



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## Classifications

UNSPSC 21.0

### **ECLASS**

	ECLASS-9.0	27440402	
	ECLASS-10.0.1	27440402	
	ECLASS-11.0	27460201	
ETIM			
	ETIM 8.0	EC002637	
UNSPSC			

39121400



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## **Environmental Product Compliance**

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



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### Accessories

### Marker card

Marker card - SK 3,81/2,8:FORTL.ZAHLEN - 0804109 https://www.phoenixcontact.com/us/products/0804109



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

### Coding profile

Coding profile - CP-MSTB - 1734634

https://www.phoenixcontact.com/us/products/1734634

Coding profile, is inserted into the slot on the plug or inverted header, red insulating material





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### Marker pen

Marker pen - B-STIFT - 1051993 https://www.phoenixcontact.com/us/products/1051993



Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 mm

### Printed-circuit board connector

Printed-circuit board connector - FMC 1,5/ 2-ST-3,81 - 1745894 https://www.phoenixcontact.com/us/products/1745894



PCB connector, nominal cross section: 1.5 mm², color: green, nominal current: 8 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Female connector, number of potentials: 2, number of rows: 1, number of positions: 2, number of connections: 2, product range: FMC 1,5/..-ST, pitch: 3.81 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, plug-in system: COMBICON MC 1,5, locking: without, mounting: without, type of packaging: packed in cardboard



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#### PCB connector

PCB connector - MC 1,5/ 2-ST-3,81 - 1803578 https://www.phoenixcontact.com/us/products/1803578



PCB connector, nominal cross section: 1.5 mm², color: green, nominal current: 8 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Female connector, number of potentials: 2, number of rows: 1, number of positions: 2, number of connections: 2, product range: MC 1,5/..-ST, pitch: 3.81 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, conductor/PCB connection direction: 0 °, number of solder pins per potential: 1, plug-in system: COMBICON MC 1,5, locking: without, mounting: without, type of packaging: packed in cardboard

#### PCB connector

PCB connector - MCVW 1,5/ 2-ST-3,81 - 1826979 https://www.phoenixcontact.com/us/products/1826979



PCB connector, nominal cross section: 1.5 mm², color: green, nominal current: 8 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Female connector, number of potentials: 2, number of rows: 1, number of positions: 2, number of connections: 2, product range: MCVW 1,5/..-ST, pitch: 3.81 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, conductor/PCB connection direction: -90 °, number of solder pins per potential: 1, plug-in system: COMBICON MC 1,5, locking: without, mounting: without, type of packaging: packed in cardboard



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#### PCB connector

PCB connector - MCVR 1,5/ 2-ST-3,81 - 1827127 https://www.phoenixcontact.com/us/products/1827127



PCB connector, nominal cross section: 1.5 mm², color: green, nominal current: 8 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Female connector, number of potentials: 2, number of rows: 1, number of positions: 2, number of connections: 2, product range: MCVR 1,5/..-ST, pitch: 3.81 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, conductor/PCB connection direction: 90 °, number of solder pins per potential: 1, plug-in system: COMBICON MC 1,5, locking: without, mounting: without, type of packaging: packed in cardboard

### Printed-circuit board connector

Printed-circuit board connector - FRONT-MC 1,5/ 2-ST-3,81 - 1850660 https://www.phoenixcontact.com/us/products/1850660



PCB connector, nominal cross section: 1.5 mm², color: green, nominal current: 8 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Female connector, number of potentials: 2, number of rows: 1, number of positions: 2, number of connections: 2, product range: FRONT-MC 1,5/..-ST, pitch: 3.81 mm, connection method: Front screw connection, screw head form: L Slotted, conductor/PCB connection direction: 0 °, number of solder pins per potential: 1, plug-in system: COMBICON MC 1,5, locking: without, mounting: without, type of packaging: packed in cardboard



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#### PCB connector

PCB connector - FK-MCP 1,5/ 2-ST-3,81 - 1851041 https://www.phoenixcontact.com/us/products/1851041



PCB connector, nominal cross section: 1.5 mm², color: green, nominal current: 8 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Female connector, number of potentials: 2, number of rows: 1, number of positions: 2, number of connections: 2, product range: FK-MCP 1,5/..-ST, pitch: 3.81 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, number of solder pins per potential: 1, plug-in system: COMBICON MC 1,5, locking: without, mounting: without, type of packaging: packed in cardboard.

#### PCB connector

PCB connector - MCC 1/ 2-STZ-3,81 - 1852176 https://www.phoenixcontact.com/us/products/1852176



PCB connector, nominal cross section: 1 mm², color: green, nominal current: 8 A, rated voltage (III/2): 160 V, type of contact: Female connector, number of potentials: 2, number of rows: 1, number of positions: 2, number of connections: 2, product range: MCC 1/..-STZ, pitch: 3.81 mm, connection method: Crimp connection, conductor/PCB connection direction: 0 °, number of solder pins per potential: 1, plug-in system: COMBICON MC 1,5, locking: without, mounting: without, type of packaging: packed in cardboard, Corresponding female crimp contacts with current [A] and conductor cross section range [mm²] data: 5A/MCC-MT 0,2-0,35 (1859988); 8A/MCC-MT 0,5-1,0 (1859991)

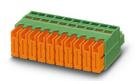


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#### Printed-circuit board connector

Printed-circuit board connector - QC 0,5/ 2-ST-3,81 - 1897393 https://www.phoenixcontact.com/us/products/1897393



PCB connector, nominal cross section: 0.5 mm², color: green, nominal current: 6 A, rated voltage (III/2): 200 V, contact surface: Tin, type of contact: Female connector, number of potentials: 2, number of rows: 1, number of positions: 2, number of connections: 2, product range: QC 0,5/..-ST, pitch: 3.81 mm, connection method: Displacement connection, conductor/PCB connection direction: 0 °, number of solder pins per potential: 1, plug-in system: COMBICON MC 1,5, locking: without, mounting: without, type of packaging: packed in cardboard

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