

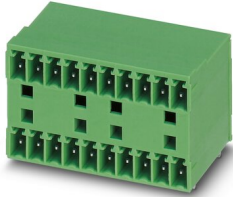
Printed-circuit board connector - MCD 1,5/ 8-G1-3,81



1843130

<https://www.phoenixcontact.com/in/products/1843130>

Please be informed that the data shown in this PDF document is generated from our Online Catalog. Please find the complete data in the user documentation. Our General Terms of Use for Downloads are valid.



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: 16, number of rows: 2, number of positions: 8, number of connections: 16, product range: MCD 1,5/..-G1, pitch: 3.81 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.5 mm, number of solder pins per potential: 1, plug-in system: MINI COMBICON, Pin connector pattern alignment: Standard, Locking: without, mounting: without, type of packaging: packed in cardboard, In combination with MCV plug components, both an MCVW and an MCVR plug must be used.

Your advantages

- Well-known mounting principle allows worldwide use
- Conductor connection on several levels enables higher contact density
- Maximum flexibility when it comes to device design – one header for connectors with different connection technologies

Printed-circuit board connector - MCD 1,5/ 8-G1-3,81



1843130

<https://www.phoenixcontact.com/in/products/1843130>

Commercial Data

Order Key	1843130
Packing unit	50 pc
Minimum order quantity	50 pc
Sales Key	AAA
Product Key	AABSHB
Catalog Page	Page 235 (C-1-2013)
GTIN	4017918102333
Weight per Piece (including packing)	10.1 g
Weight per Piece (excluding packing)	9.285 g
Customs tariff number	85366930
Country of origin	DE

Printed-circuit board connector - MCD 1,5/ 8-G1-3,81



1843130

<https://www.phoenixcontact.com/in/products/1843130>

Technical Data

Product properties

Type	Standard
Number of positions	8
Number of connections	16
Number of rows	2
Connector system	MINI COMBICON
Mounting flange	without
Number of potentials	16
Pin layout	Linear pinning

Electrical properties

Maximum load current	8 A
Rated voltage (II/2)	320 V
Rated voltage (III/2)	160 V
Rated surge voltage (II/2)	2.5 kV
Rated surge voltage (III/2)	2.5 kV
Rated surge voltage (III/3)	2.5 kV
Nominal voltage U_N	160 V
Nominal current I_N	8 A
Nominal current I_N	8 A

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 (6021)
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

Printed-circuit board connector - MCD 1,5/ 8-G1-3,81

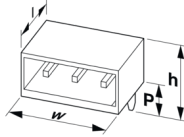


1843130

<https://www.phoenixcontact.com/in/products/1843130>

Temperature for the ball pressure test according to EN 60695-10-2	125 °C
---	--------

Dimensions

Dimensional drawing	
Width	31.87 mm
Height	26.2 mm
Installed height	22.7 mm
Length of the solder pin	3.5 mm
Length	21.9 mm
Length of the solder pin	3.5 mm
Pin dimensions	0.8 x 0.8 mm
Hole diameter	1.2 mm
Pitch	3.81 mm

PCB design

Pin spacing	12.70 mm
-------------	----------

Mechanical tests

Test for conductor damage and slackening

Specification	IEC 60999-1:1999-11
Result	Test passed

Pull-out test

Specification	IEC 60999-1:1999-11
Conductor cross section/conductor type/tractive force setpoint/actual value	0.14 mm ² / solid / > 7 N
	0.14 mm ² / flexible / > 7 N
	1.5 mm ² / solid / > 40 N
	1.5 mm ² / flexible / > 40 N

Insertion and withdrawal forces

Result	Test passed
No. of cycles	25
Insertion strength per pos. approx.	8 N
Withdraw strength per pos. approx.	5 N

Torque test

Specification	IEC 60999-1:1999-11
---------------	---------------------

Contact holder in insert

Specification	IEC 60512-15-1:2008-05
Result	Test passed

Printed-circuit board connector - MCD 1,5/ 8-G1-3,81



1843130

<https://www.phoenixcontact.com/in/products/1843130>

Test force per pos.	28.5 N
Resistance of inscriptions	
Specification	IEC 60068-2-70:1995-12
Result	Test passed
Polarization and coding	
Specification	IEC 60512-13-5:2006-02
Result	Test passed
Visual inspection	
Specification	IEC 60512-1-1:2002-02
Result	Test passed
Dimension check	
Specification	IEC 60512-1-2:2002-02
Result	Test passed

Electrical tests

Electrical properties

Rated voltage (III/2)	160 V
Rated surge voltage (III/2)	2.5 kV
Contact resistance	1.2 mΩ
Pollution degree	2

Thermal test | Test group C

Specification	IEC 60512-5-1:2002-02
Tested number of positions	16

Insulation resistance

Specification	IEC 60512-3-1:2002-02
Insulation resistance, neighboring positions	> 5 MΩ

Air clearances and creepage distances |

Specification	IEC 60664-1:2007-04
Insulating material group	I
Comparative tracking index (IEC 60112:2003-01)	CTI 600
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 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)	1.5 mm
Rated insulation voltage (II/2)	320 V
Rated surge voltage (II/2)	2.5 kV

Printed-circuit board connector - MCD 1,5/ 8-G1-3,81



1843130

<https://www.phoenixcontact.com/in/products/1843130>

minimum clearance value - non-homogenous field (II/2)	1.5 mm
minimum creepage distance (II/2)	1.6 mm

Environmental and real-life conditions

Vibration test

Specification	IEC 60068-2-6:2007-12
Frequency	10 - 150 - 10 Hz
Sweep speed	1 octave/min
Amplitude	0.35 mm (10 - 60.1 Hz)
Sweep speed	5g (60.1 - 150 Hz)
Test duration per axis	2.5 h

Durability test

Specification	IEC 60512-9-1:2010-03
Impulse withstand voltage at sea level	2.95 kV
Contact resistance R ₁	1.2 mΩ
Contact resistance R ₂	1.3 mΩ
Contact resistance R ₂ 2nd level	2.2 mΩ
Insertion/withdrawal cycles	25
Insulation resistance, neighboring positions	> 5 MΩ

Climatic test

Specification	ISO 6988:1985-02
Corrosive stress	0.2 dm ³ SO ₂ on 300 dm ³ /40 °C/1 cycle
Thermal stress	100 °C/168 h
Power-frequency withstand voltage	1.39 kV

Ambient conditions

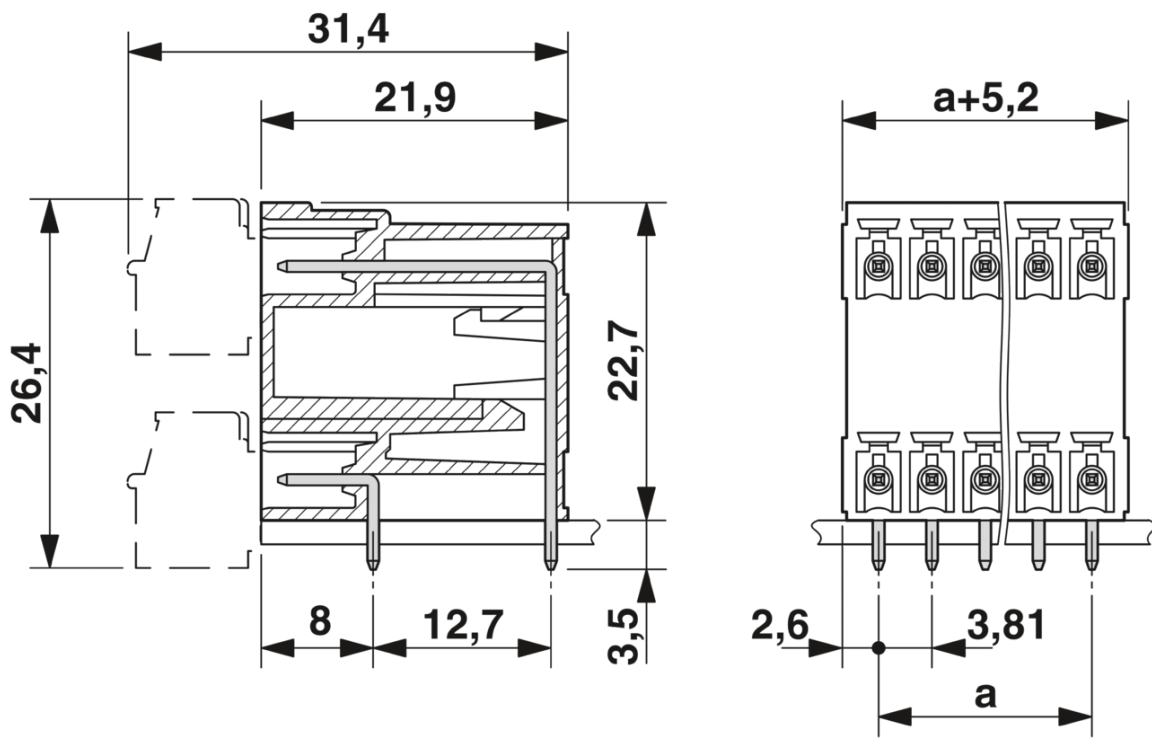
Ambient temperature (operation)	-40 °C ... 100 °C (dependent on the derating curve)
Ambient temperature (storage/transport)	-40 °C ... 70 °C
Relative humidity (storage/transport)	30 % ... 70 %
Ambient temperature (assembly)	-5 °C ... 100 °C

Packaging specifications

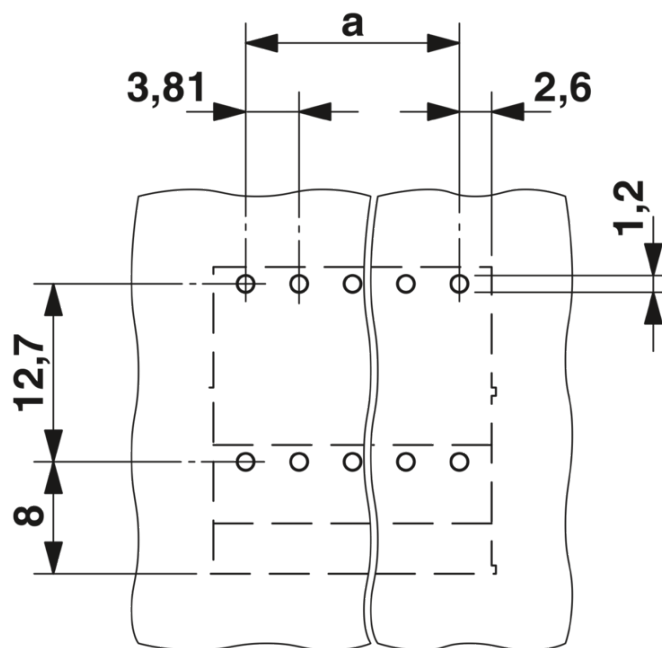
Type of packaging	packed in cardboard
-------------------	---------------------

Drawings

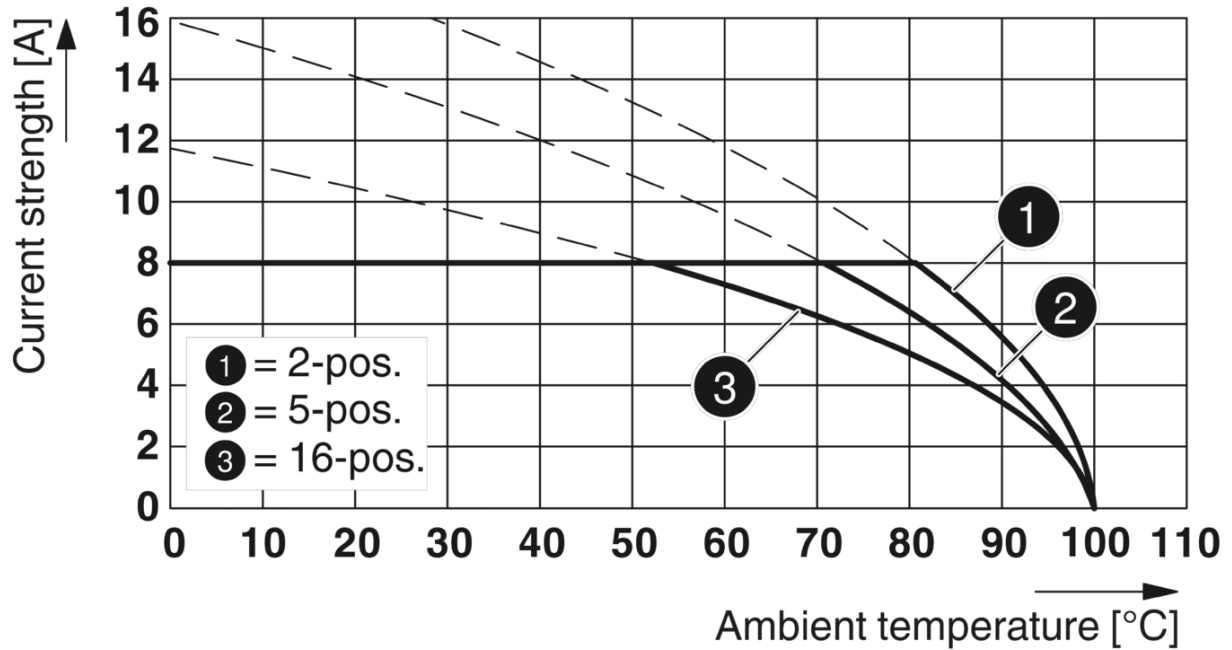
Dimensional drawing



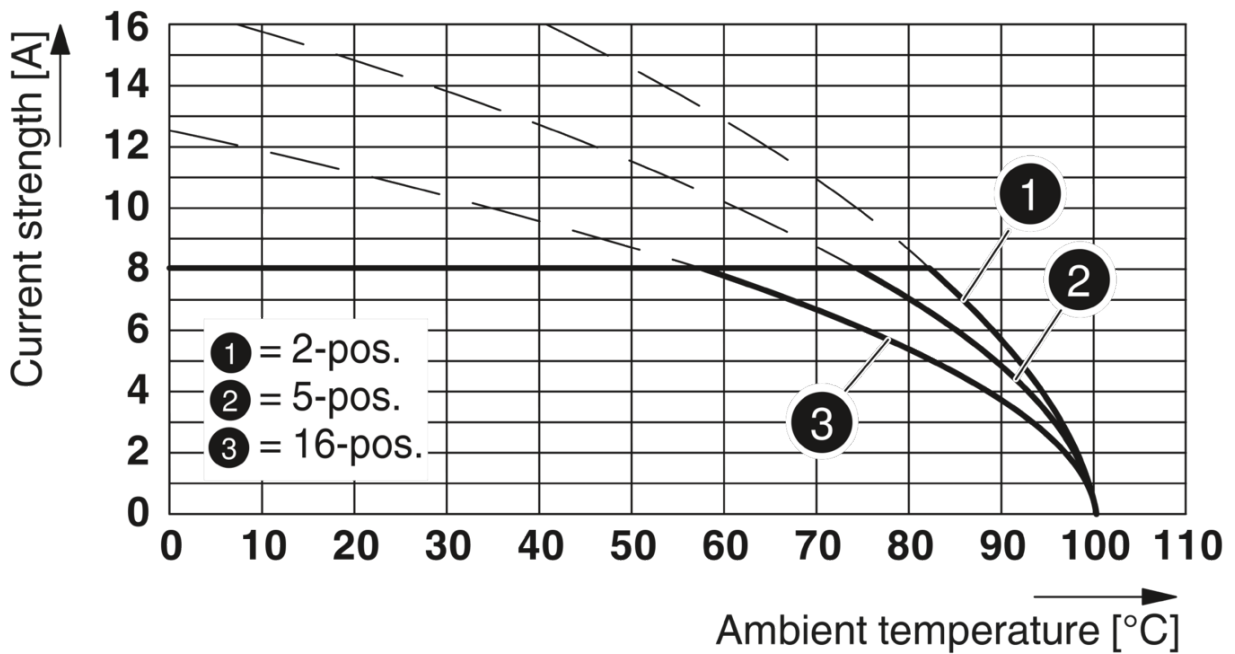
Drilling plan/solder pad geometry

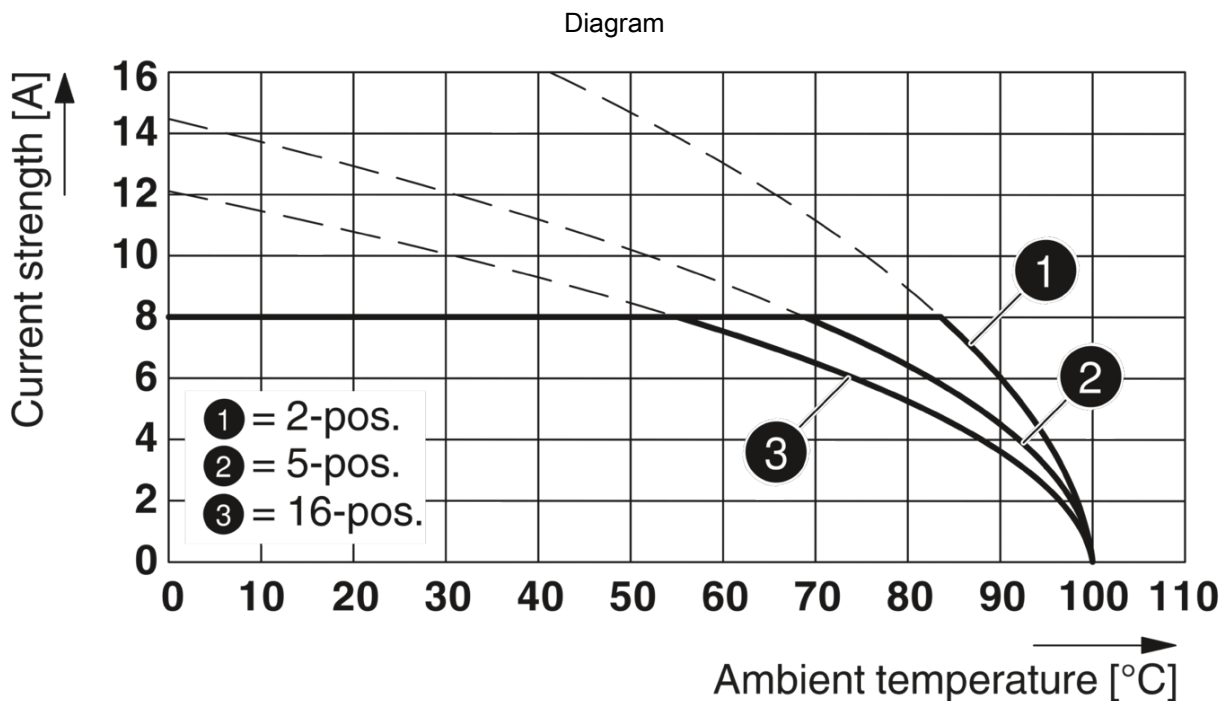
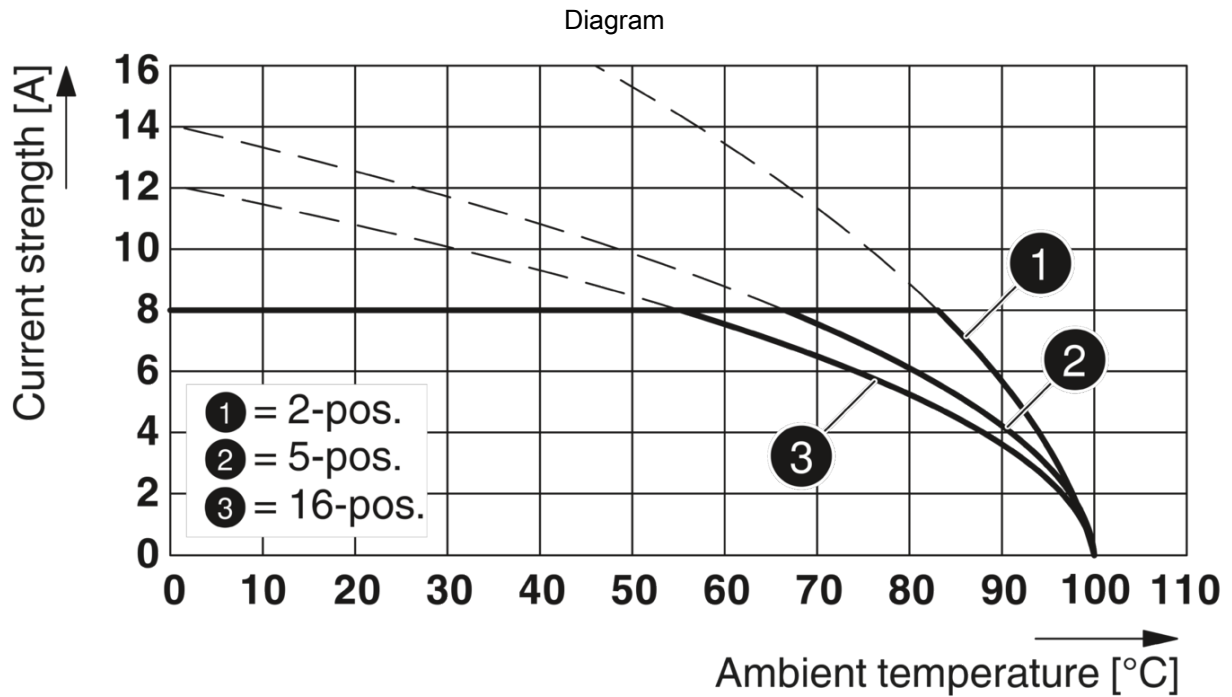


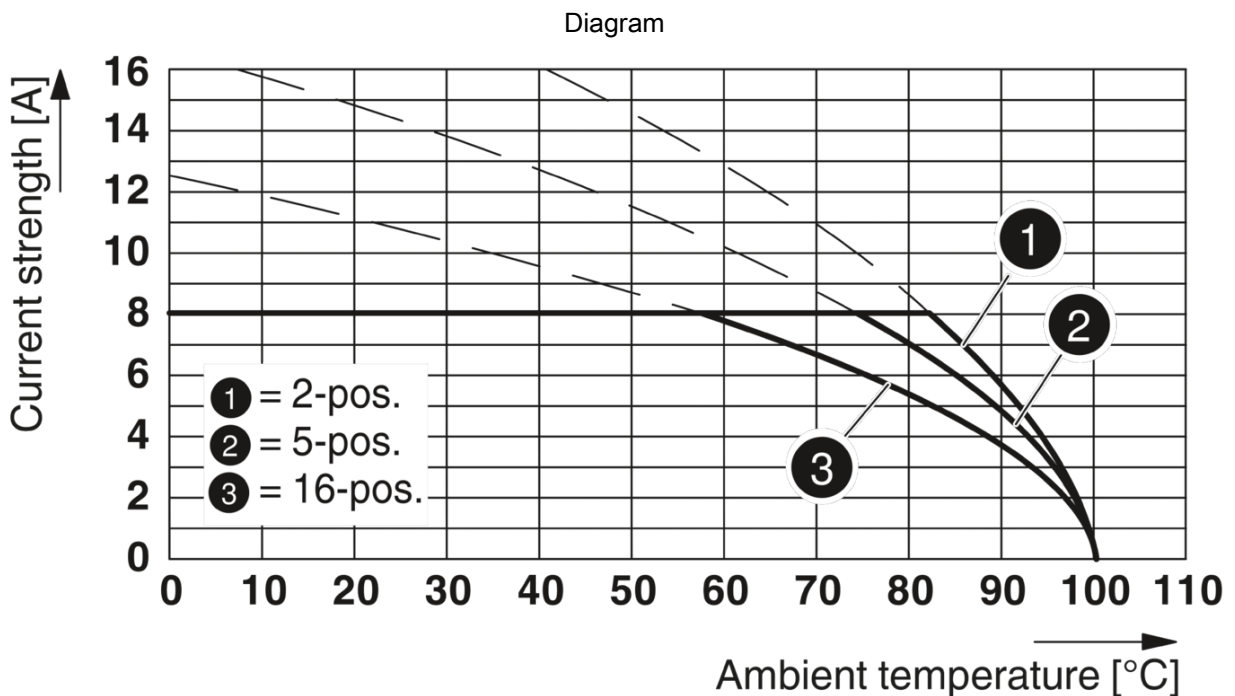
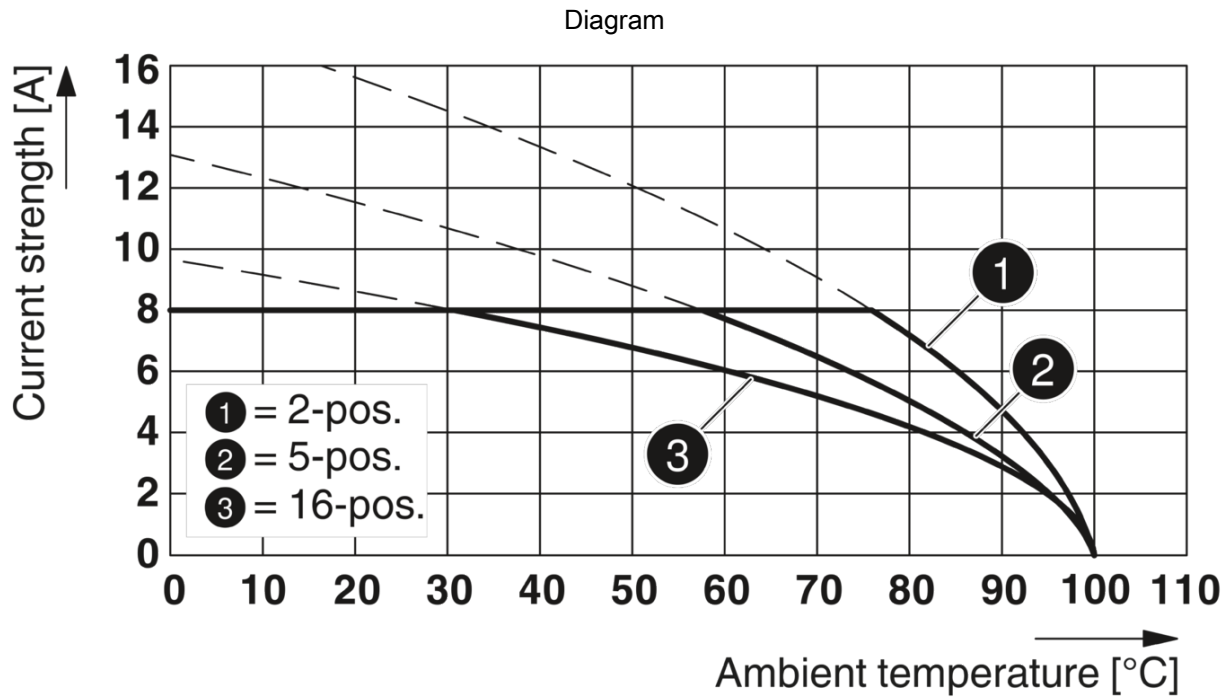
Diagram



Diagram







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


Printed-circuit board connector - MCD 1,5/ 8-G1-3,81




1843130


<https://www.phoenixcontact.com/in/products/1843130>


Approvals

CSA 	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
Use group B				
	300 V	8 A	-	-
Use group D				
	300 V	8 A	-	-

IECEE CB Scheme 	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
	160 V	8 A	-	-

EAC

cULus Recognized 	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
Use group B				
	300 V	8 A	-	-
Use group D				
	300 V	8 A	-	-

VDE Gutachten mit Fertigungsüberwachung 	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
	160 V	8 A	-	-

Printed-circuit board connector - MCD 1,5/ 8-G1-3,81



1843130

<https://www.phoenixcontact.com/in/products/1843130>

Classifications

ECLASS

ECLASS-9.0	27440402
ECLASS-10.0.1	27440402
ECLASS-11.0	27460201

ETIM

ETIM 6.0	EC002637
----------	----------

UNSPSC

UNSPSC 19.0	39121409
UNSPSC 20.0	39121409
UNSPSC 21.0	39121409

Printed-circuit board connector - MCD 1,5/ 8-G1-3,81



1843130

<https://www.phoenixcontact.com/in/products/1843130>

Environmental Product Compliance

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

Printed-circuit board connector - MCD 1,5/ 8-G1-3,81



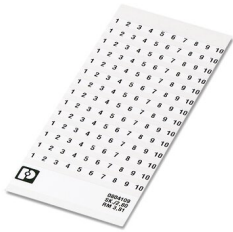
1843130

<https://www.phoenixcontact.com/in/products/1843130>

Accessories

Marker card

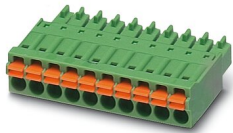
Marker card - SK 3,81/2,8:FORTL.ZAHLEN - 0804109



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

Printed-circuit board connector

Printed-circuit board connector - FMC 1,5/ 8-ST-3,81 - 1748037



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: 8, number of rows: 1, number of positions: 8, number of connections: 8, product range: FMC 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: MINI COMBICON, Locking: without, mounting: without, type of packaging: packed in cardboard

Printed-circuit board connector - MCD 1,5/ 8-G1-3,81

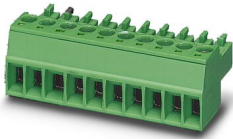


1843130

<https://www.phoenixcontact.com/in/products/1843130>

Printed-circuit board connector

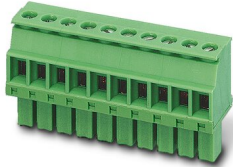
Printed-circuit board connector - MC 1,5/ 8-ST-3,81 - 1803633



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: 8, number of rows: 1, number of positions: 8, number of connections: 8, 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 °, pin layout: Linear three-way pinning, number of solder pins per potential: 1, plug-in system: MINI COMBICON, Locking: without, mounting: without, type of packaging: packed in cardboard

Printed-circuit board connector

Printed-circuit board connector - MCVW 1,5/ 8-ST-3,81 - 1827033



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: 8, number of rows: 1, number of positions: 8, number of connections: 8, 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: MINI COMBICON, Locking: without, mounting: without, type of packaging: packed in cardboard

Printed-circuit board connector - MCD 1,5/ 8-G1-3,81

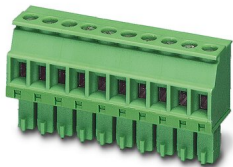


1843130

<https://www.phoenixcontact.com/in/products/1843130>

Printed-circuit board connector

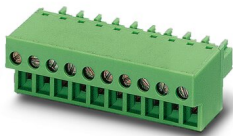
Printed-circuit board connector - MCVR 1,5/ 8-ST-3,81 - 1827185



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: 8, number of rows: 1, number of positions: 8, number of connections: 8, 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: MINI COMBICON, Locking: without, mounting: without, type of packaging: packed in cardboard

Printed-circuit board connector

Printed-circuit board connector - FRONT-MC 1,5/ 8-ST-3,81 - 1850725



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: 8, number of rows: 1, number of positions: 8, number of connections: 8, product range: FRONT-MC 1,5/...-ST, pitch: 3.81 mm, connection method: Front screw connection, conductor/PCB connection direction: 0 °, number of solder pins per potential: 1, plug-in system: MINI COMBICON, Locking: without, mounting: without, type of packaging: packed in cardboard

Printed-circuit board connector - MCD 1,5/ 8-G1-3,81

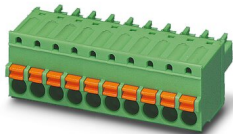


1843130

<https://www.phoenixcontact.com/in/products/1843130>

Printed-circuit board connector

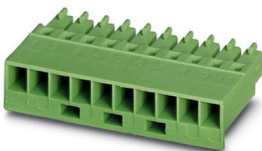
Printed-circuit board connector - FK-MCP 1,5/ 8-ST-3,81 - 1851106



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: 8, number of rows: 1, number of positions: 8, number of connections: 8, 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: MINI COMBICON, Locking: without, mounting: without, type of packaging: packed in cardboard

Printed-circuit board connector

Printed-circuit board connector - MCC 1/ 8-STZ-3,81 - 1852231



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: 8, number of rows: 1, number of positions: 8, number of connections: 8, 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: MINI COMBICON, 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)

Printed-circuit board connector - MCD 1,5/ 8-G1-3,81

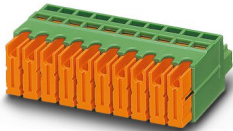


1843130

<https://www.phoenixcontact.com/in/products/1843130>

Printed-circuit board connector

Printed-circuit board connector - QC 0,5/ 8-ST-3,81 - 1897458



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: 8, number of rows: 1, number of positions: 8, number of connections: 8, 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: MINI COMBICON, Locking: without, mounting: without, type of packaging: packed in cardboard

Coding profile

Coding profile - CP-MSTB - 1734634

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



Phoenix Contact 2022 © - all rights reserved

<https://www.phoenixcontact.com>

PHOENIX CONTACT (I) Pvt. Ltd.

A-58/2, Okhla Industrial Area, Phase - II, New Delhi-110 020

+91.1275.71420

info@phoenixcontact.co.in

单击下面可查看定价，库存，交付和生命周期等信息

[>>Phoenix Contact \(菲尼克斯\)](#)