

# PCB terminal block - PTSA 1,5/12-3,5-Z MC GN/WH - 1021383

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's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



PCB terminal block, nominal current: 8 A, rated voltage (III/2): 400 V, nominal cross section: 1.5 mm<sup>2</sup>, pitch: 3.5 mm, number of positions: 12, connection method: Push-in spring connection, mounting: Wave soldering, conductor/PCB connection direction: 45 °, color: multi-color, Pin layout: Zigzag pinning M, Solder pin [P]: 3.6 mm

The figure shows a 10-position version of the product

## Your advantages

- Time saving push-in connection, tools not required
- Defined contact force ensures that contact remains stable over the long term
- Angled connection enables multi-row arrangement on the PCB



## Key Commercial Data

Packing unit	80 pc
Minimum order quantity	80 pc
GTIN	
GTIN	4055626513539

## Technical data

### Item properties

Brief article description	PCB terminal block
Range of articles	PTSA 1,5
Pitch	3.5 mm
Number of positions	12
Connection method	Push-in spring connection
Mounting type	Wave soldering
Pin layout	Zigzag pinning M
Number of levels	1
Number of connections	12
Number of potentials	12

### Electrical parameters

# PCB terminal block - PTSA 1,5/12-3,5-Z MC GN/WH - 1021383

## Technical data

### Electrical parameters

Nominal current	8 A
Nom. voltage	400 V
Rated voltage	250 V
Rated voltage (III/2)	400 V
Rated voltage (II/2)	630 V
Rated surge voltage (III/3)	4 kV
Rated surge voltage (III/2)	4 kV
Rated surge voltage (II/2)	4 kV

### Connection capacity

Connection method	Push-in spring connection
pluggable	no
Conductor cross section solid	0.2 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Conductor cross section flexible	0.2 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Conductor cross section AWG / kcmil	24 ... 16
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm <sup>2</sup> ... 1 mm <sup>2</sup>
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm <sup>2</sup> ... 0.5 mm <sup>2</sup>
Stripping length	9 mm

### 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	hot-dip tin-plated
Metal surface terminal point (top layer)	Tin (4 - 8 µm Sn)
Metal surface soldering area (top layer)	Tin (4 - 8 µm Sn)

### Material data - housing

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

### Dimensions for the product

Caption	The figure shows the dimensional drawing of the 5-position product version
Length [ l ]	12 mm
Width [ w ]	43.5 mm
Height [ h ]	16.7 mm
Pitch	3.5 mm

# PCB terminal block - PTSA 1,5/12-3,5-Z MC GN/WH - 1021383

## Technical data

### Dimensions for the product

Height (without solder pin)	13.1 mm
Solder pin [P]	3.6 mm
Pin spacing	3.5 mm
Pin dimensions	0.4 x 0.75 mm

### Dimensions for PCB design

Hole diameter	1 mm
Pin spacing	3.5 mm

### Packaging information

Type of packaging	packed in cardboard
Pieces per package	80
Denomination packing units	Pcs.

### Ambient conditions

Ambient temperature (storage/transport)	-40 °C ... 70 °C
Ambient temperature (assembly)	-5 °C ... 85 °C
Ambient temperature (operation)	-40 °C ... 100 °C (Depending on the current carrying capacity/derating curve)

### Termination and connection method

Test for conductor damage and slackening	IEC 60999-1:1999-11
	Test passed

### Pull-out test

Pull-out test	IEC 60999-1:1999-11
	Test passed
Conductor cross section / conductor type / tensile force	0.2 mm <sup>2</sup> / solid / > 10 N
	0.2 mm <sup>2</sup> / flexible / > 10 N
	1.5 mm <sup>2</sup> / solid / > 40 N
	1.5 mm <sup>2</sup> / flexible / > 40 N

### Mechanical tests according to standard

Test specification	IEC 60947-7-4
--------------------	---------------

### Electrical tests

Rated current	8 A
Conductor cross section	1.5 mm <sup>2</sup>
Rated voltage (III/2)	400 V
Rated surge voltage (III/2)	4 kV

### Air clearances and creepage distances

Clearances and creepage distances	IEC 60947-1:2007-06 + A1:2010-12 + A2:2014-09
Specification	IEC 60947-1:2007-06 + A1:2010-12 + A2:2014-09
Minimum clearance - inhomogeneous field (III/3)	3 mm
Minimum clearance - inhomogeneous field (III/2)	3 mm

# PCB terminal block - PTSA 1,5/12-3,5-Z MC GN/WH - 1021383

## Technical data

### Air clearances and creepage distances

Minimum clearance - inhomogeneous field (II/2)	3 mm
Minimum creepage distance value (III/3)	3.2 mm
Minimum creepage distance value (III/2)	3 mm
Minimum creepage distance value (II/2)	3.2 mm
Note on connection cross section	With connected conductor 1.5 mm <sup>2</sup> (solid).

### Temperature-rise test

Specification	IEC 60947-7-4:2013-08
Result	Test passed
Requirement temperature-rise test	The sum of ambient temperature and temperature rise of the PCB terminal block shall not exceed the upper limiting temperature.

### Current carrying capacity / derating curves

Caption	Type: PTSA 1,5/4-3,5-Z Tested in accordance with DIN EN 60512-5-2:2003-01 Reduction factor = 1 Number of positions: 4
Specification	IEC 60947-7-4:2013-08
Number of positions	4
Reduction factor	1
Note	Representation based on IEC 60512-5-2:2002-02

### Vibration test

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

### Insulation resistance

Specification	IEC 60512-3-1:2002-02
Result	Test passed
Insulation resistance, neighboring positions	> 1 TΩ

### Glow-wire test

Specification	IEC 60695-2-10:2000-10
Result	Test passed
Temperature	850 °C
Time of exposure	5 s

### Alternating climate test

Result	Test passed
Specification	ISO 6988:1985-02

# PCB terminal block - PTSA 1,5/12-3,5-Z MC GN/WH - 1021383

## Technical data

### Alternating climate test

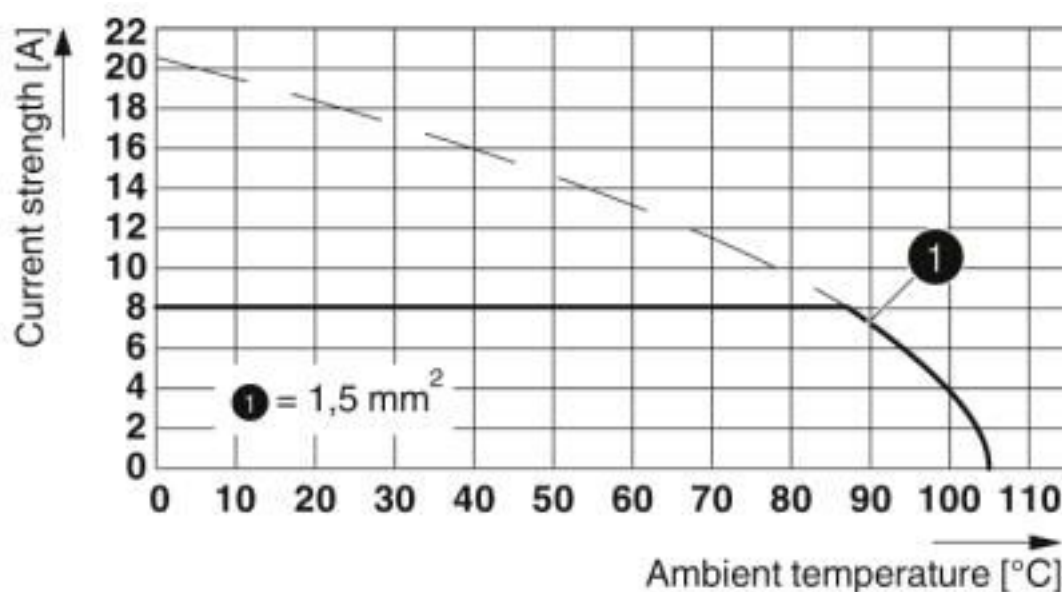
Corrosive stress	KFW 0.2 S/1 cycle
------------------	-------------------

### Environmental Product Compliance

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

## Drawings

Diagram



Type: PTSA 1,5/4-3,5-Z  
 Tested in accordance with DIN EN 60512-5-2:2003-01  
 Reduction factor = 1  
 Number of positions: 4

## Classifications

### eCl@ss

eCl@ss 10.0.1	27440401
eCl@ss 5.1	27261100
eCl@ss 6.0	27261100
eCl@ss 7.0	27440401
eCl@ss 8.0	27440401
eCl@ss 9.0	27440401

### ETIM

ETIM 5.0	EC002643
ETIM 6.0	EC002643

# PCB terminal block - PTSA 1,5/12-3,5-Z MC GN/WH - 1021383

## Classifications

### ETIM

ETIM 7.0	EC002643
----------	----------

## Approvals

### Approvals


### Approvals


CCA / VDE Gutachten mit Fertigungsüberwachung / EAC / cULus Recognized


### Ex Approvals

## Approval details

CCA	CCA/DE1 34182/33276
Nominal current IN	2 A
mm <sup>2</sup> /AWG/kcmil	0.75

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>	40018594
Nominal voltage UN	250 V		
Nominal current IN	2 A		
mm <sup>2</sup> /AWG/kcmil	0.5-.75		

EAC		B.01687
-----	---	---------

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>	E60425-20030527
	B	D	
Nominal voltage UN	300 V	300 V	
Nominal current IN	5 A	5 A	
mm <sup>2</sup> /AWG/kcmil	24-16	24-16	

Phoenix Contact 2020 © - all rights reserved  
<http://www.phoenixcontact.com>

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

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Phoenix Contact:](#)

[1021383](#)