

## PCB terminal block - MKDSN 2,5/ 2-5,08 - 1888687

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: 16 A, nom. voltage: 400 V, pitch: 5.08 mm, number of positions: 2, connection method: Screw connection with tension sleeve, mounting: Wave soldering, conductor/PCB connection direction: 0 °, color: green. The article can be aligned to create different nos. of positions!

### Your advantages

- ✓ Well-known connection principle allows worldwide use
- ✓ Low temperature rise, thanks to maximum contact force
- ✓ Allows connection of two conductors
- ✓ Extremely small design for the respective conductor cross section
- ✓ Integrated protective guide prevents incorrect insertion of the conductor underneath the tension sleeve
- ✓ The latching on the side enables various numbers of positions to be combined



### Key Commercial Data

Packing unit	250 pc
GTIN	 4 017918 157005
GTIN	4017918157005
Weight per Piece (excluding packing)	2.890 g
Custom tariff number	85369010
Country of origin	Germany

### Technical data

#### Item properties

Brief article description	PCB terminal block
Range of articles	MKDSN 2,5
Pitch	5.08 mm
Number of positions	2
Connection method	Screw connection with tension sleeve
Drive form screw head	Philipps recess with slotted Torx (H1L)
Screw thread	M3

# PCB terminal block - MKDSN 2,5/ 2-5,08 - 1888687

## Technical data

### Item properties

Mounting type	Wave soldering
Pin layout	Linear pinning
Number of levels	1

### Electrical parameters

Rated current	16 A
Rated insulation voltage (III/2)	400 V
Rated surge voltage (III/2)	4 kV

### Connection capacity

Conductor cross section solid	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section flexible	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section AWG / kcmil	24 ... 14
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
2 conductors with same cross section, solid	0.2 mm <sup>2</sup> ... 0.75 mm <sup>2</sup>
2 conductors with same cross section, flexible	0.2 mm <sup>2</sup> ... 0.75 mm <sup>2</sup>
2 conductors with same cross section, stranded, ferrules without plastic sleeve	0.25 mm <sup>2</sup> ... 0.75 mm <sup>2</sup>
2 conductors with same cross section, stranded, with TWIN ferrules with plastic sleeve	0.5 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Stripping length	6.5 mm
Torque	0.5 Nm ... 0.6 Nm

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

### Material data - housing

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

Length [ l ]	9.5 mm
Width [ w ]	10.16 mm

# PCB terminal block - MKDSN 2,5/ 2-5,08 - 1888687

## Technical data

### Dimensions for the product

Height [ h ]	18.5 mm
Pitch	5.08 mm
Height (without solder pin)	15 mm
Solder pin [P]	3.5 mm
Pin dimensions	0.8 x 0.9 mm
Dimension a	5.08 mm

### Dimensions for PCB design

Hole diameter	1.3 mm
---------------	--------

### Packaging information

Type of packaging	packed in cardboard
Pieces per package	250
Denomination packing units	Pcs.

### General product information

Type of note	Note on application
Note	For safe conductor connection, always adhere to a defined tightening torque. Particularly in the case of PCB terminal blocks with two or three positions, the individual solder pin for each contact point cannot compensate for this. That is why the terminal blocks must be supported during conductor connection (held with one hand, support on the housing).

### Processing notes

Process	Wave soldering
Specification	Following IEC 61760-1:2006-04
	Following IEC 60068-2-54:2006-04

### Ambient conditions

Ambient temperature (storage/transport)	-40 °C ... 70 °C
Ambient temperature (assembly)	-5 °C ... 100 °C
Ambient temperature (operation)	-40 °C

### Termination and connection method

#### Pull-out test

Pull-out test	IEC 60998-2-1:1990-04
	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
	2.5 mm <sup>2</sup> / solid / > 50 N
	2.5 mm <sup>2</sup> / flexible / > 50 N

### Mechanical tests according to standard

Test specification	IEC 60998-2-1 (in parts)
--------------------	--------------------------

### Electrical tests

# PCB terminal block - MKDSN 2,5/ 2-5,08 - 1888687

## Technical data

### Electrical tests

Rated current	16 A
Rated insulation voltage (III/2)	400 V
Rated surge voltage (III/2)	4 kV

### Air clearances and creepage distances

Insulating material group	I
Voltage	250 V
Rated insulation voltage (III/3)	250 V
Rated insulation voltage (III/2)	400 V
Rated insulation 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

### Current carrying capacity / derating curves

Specification	IEC 60998-2-1 (in parts)
---------------	--------------------------

### Vibration test

Resistance to ageing, to humidity conditions, to ingress of solid objects and to harmful ingress of water	Test passed IEC 60998-2-1:1990-04 168 h/85 °C 48 h/30 °C/92 %
Test result	Test passed
Test specification	IEC 60998-2-1:1990-04
Dry heat	168 h/85 °C
Humid heat	48 h/30 °C/92 %

### Resistance to ageing, humidity and penetration of solids

Test result	Test passed
Test specification	IEC 60998-2-1:1990-04
Dry heat	168 h/85 °C
Humid heat	48 h/30 °C/92 %

### Standards and Regulations

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

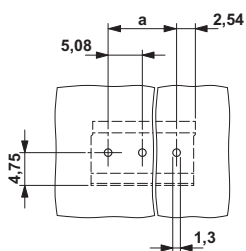
### Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

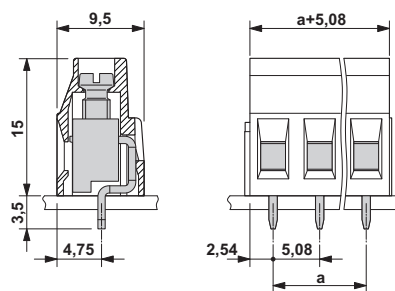
## Drawings

# PCB terminal block - MKDSN 2,5/ 2-5,08 - 1888687

Drilling diagram



Dimensional drawing



## Classifications

### eCl@ss

eCl@ss 4.0	27141109
eCl@ss 4.1	27141109
eCl@ss 5.0	27141190
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 3.0	EC001121
ETIM 4.0	EC002643
ETIM 5.0	EC002643
ETIM 6.0	EC002643

### UNSPSC

UNSPSC 6.01	30211801
UNSPSC 7.0901	39121432
UNSPSC 11	39121432
UNSPSC 12.01	39121432
UNSPSC 13.2	39121432

## Approvals

### Approvals

#### Approvals


IECEE CB Scheme / VDE Gutachten mit Fertigungsüberwachung / EAC / cULus Recognized


#### Ex Approvals

# PCB terminal block - MKDSN 2,5/ 2-5,08 - 1888687


## Approvals

### Approval details

IECEE CB Scheme		<a href="http://www.iecee.org/">http://www.iecee.org/</a>	DE1-58859
Nominal voltage UN	250 V		
Nominal current IN	24 A		
mm <sup>2</sup> /AWG/kcmil	0.2-2.5		

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>	40018557
Nominal voltage UN	250 V		
Nominal current IN	24 A		
mm <sup>2</sup> /AWG/kcmil	0.2-2.5		

EAC		B.01742
-----	---	---------

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>	E60425-19770427
	D	B	
Nominal voltage UN	300 V	300 V	
Nominal current IN	10 A	20 A	
mm <sup>2</sup> /AWG/kcmil	30-12	30-12	