

# MKKDSNH 1,5/ 3-5,08 - PCB terminal block



1731831

<https://www.phoenixcontact.com/us/products/1731831>

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 terminal block, nominal current: 13.5 A, rated voltage (III/2): 400 V, nominal cross section: 1.5 mm<sup>2</sup>, number of potentials: 3, number of rows: 1, number of positions per row: 3, product range: MKKDSNH 1,5, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, mounting: Wave soldering, conductor/PCB connection direction: 0 °, color: green, Pin layout: Linear pinning, Solder pin [P]: 3.5 mm, number of solder pins per potential: 1, type of packaging: packed in cardboard. 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
- Tall type enables conductor connection for sealed PCBs
- The latching on the side enables various numbers of positions to be combined

## Commercial data

Item number	1731831
Packing unit	1 pc
Minimum order quantity	50 pc
Sales key	AA12
Product key	AALFJN
Catalog page	Page 93 (C-1-2013)
GTIN	4017918122508
Weight per piece (including packing)	4.08 g
Weight per piece (excluding packing)	3.575 g
Customs tariff number	85369010
Country of origin	CN

# MKKDSNH 1,5/ 3-5,08 - PCB terminal block



1731831

<https://www.phoenixcontact.com/us/products/1731831>

## Technical data

### Product properties

Type	PC terminal block can be aligned
Product line	COMBICON Terminals S
Product type	Printed circuit board terminal
Product family	MKKDSNH 1,5
Number of positions	3
Pitch	5.08 mm
Number of connections	3
Number of rows	1
Number of potentials	3
Pin layout	Linear pinning
Solder pins per potential	1

### Electrical properties

Nominal current $I_N$	13.5 A
Nominal voltage $U_N$	400 V
Degree of pollution	3
Rated voltage (III/3)	250 V
Rated surge voltage (III/3)	4 kV
Rated voltage (III/2)	400 V
Rated surge voltage (III/2)	4 kV
Rated voltage (II/2)	630 V
Rated surge voltage (II/2)	4 kV

### Connection data

#### Connection technology

Type	PC terminal block can be aligned
Nominal cross section	1.5 mm <sup>2</sup>

#### Conductor connection

Connection method	Screw connection with tension sleeve
Conductor cross section rigid	0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Conductor cross section flexible	0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Conductor cross section AWG	26 ... 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> ... 1.5 mm <sup>2</sup>
2 conductors with same cross section, solid	0.14 mm <sup>2</sup> ... 0.75 mm <sup>2</sup>
2 conductors with same cross section, flexible	0.14 mm <sup>2</sup> ... 0.75 mm <sup>2</sup>
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	0.25 mm <sup>2</sup> ... 0.5 mm <sup>2</sup>

# MKKDSNH 1,5/ 3-5,08 - PCB terminal block



1731831

<https://www.phoenixcontact.com/us/products/1731831>

2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm <sup>2</sup> ... 1 mm <sup>2</sup> (1st level: 0.5 mm <sup>2</sup> ... 1 mm <sup>2</sup> / 2nd level: 0.5 mm <sup>2</sup> )
Stripping length	6 mm
Tightening torque	0.5 Nm ... 0.6 Nm

## Mounting

Mounting type	Wave soldering
Pin layout	Linear pinning
Drive form screw head	Slotted (L)
Connection method	Screw connection with tension sleeve
Drive form screw head	Slotted (L)

## 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 terminal point (top layer)	Tin (5 - 7 µm Sn)
Metal surface terminal point (middle layer)	Nickel (2 - 3 µm Ni)
Metal surface soldering area (top layer)	Tin (5 - 7 µm Sn)
Metal surface soldering area (middle layer)	Nickel (2 - 3 µm Ni)

### Material data - housing

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

## Dimensions

Dimensional drawing	
Pitch	5.08 mm
Width [w]	15.24 mm
Height [h]	22.6 mm
Length [l]	8.6 mm

# MKKDSNH 1,5/ 3-5,08 - PCB terminal block



1731831

<https://www.phoenixcontact.com/us/products/1731831>

Installed height	19.1 mm
Solder pin length [P]	3.5 mm
Pin dimensions	0.5 x 1 mm

## Mechanical tests

### Test for conductor damage and slackening

Specification	IEC 60998-2-1:2002-12
Result	Test passed

### Pull-out test

Specification	IEC 60998-2-1:2002-12
Conductor cross section/conductor type/tractive force setpoint/actual value	0.14 mm <sup>2</sup> / solid / > 10 N
	0.14 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

### Torque test

Specification	IEC 60998-2-1:2002-12
---------------	-----------------------

## Electrical tests

### Temperature-rise test

Specification	IEC 60998-1:2002-12
Requirement temperature-rise test	Increase in temperature ≤ 45 K

### Insulation resistance

Specification	IEC 60998-1:2002-12
Insulation resistance, neighboring positions	10 <sup>9</sup> Ω

### Air clearances and creepage distances |

Specification	IEC 60664-1:2007-04
Insulating material group	I
Comparative tracking index (IEC 60112)	CTI 600
Rated insulation voltage (III/3)	250 V
Rated surge voltage (III/3)	4 kV
minimum clearance value - non-homogenous field (III/3)	3 mm
minimum creepage distance (III/3)	3.2 mm
Note on connection cross section	With connected conductor 1.5 mm <sup>2</sup> (solid).
Rated insulation voltage (III/2)	400 V
Rated surge voltage (III/2)	4 kV
minimum clearance value - non-homogenous field (III/2)	3 mm
minimum creepage distance (III/2)	3 mm
Rated insulation voltage (II/2)	630 V
Rated surge voltage (II/2)	4 kV
minimum clearance value - non-homogenous field (II/2)	3 mm
minimum creepage distance (II/2)	3.2 mm

# MKKDSNH 1,5/ 3-5,08 - PCB terminal block



1731831

<https://www.phoenixcontact.com/us/products/1731831>

## Environmental and real-life conditions

### Vibration test

Specification	IEC 60068-2-6:1995-03
Frequency	10 - 150 - 10 Hz
Sweep speed	1 octave/min
Amplitude	0.35 mm (10 Hz ... 60.1 Hz)
Sweep speed	5g (60.1 Hz ... 150 Hz)
Test duration per axis	2.5 h

### Glow-wire test

Specification	IEC 60998-1:2002-12
Temperature	850 °C
Time of exposure	5 s

### Ambient conditions

Ambient temperature (operation)	-40 °C ... 100 °C (Depending on the current carrying capacity/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
-------------------	---------------------

# MKKDSNH 1,5/ 3-5,08 - PCB terminal block

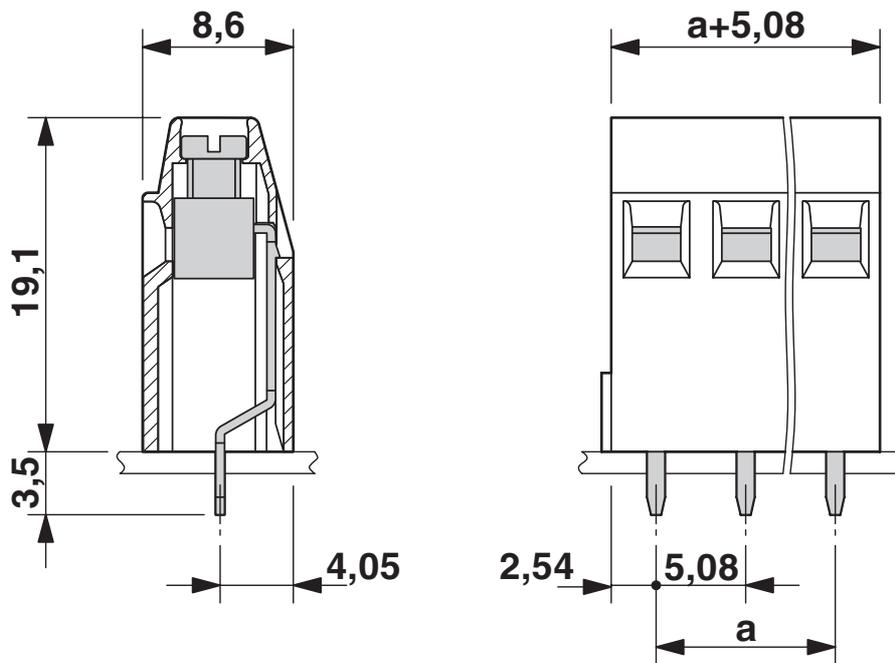


1731831

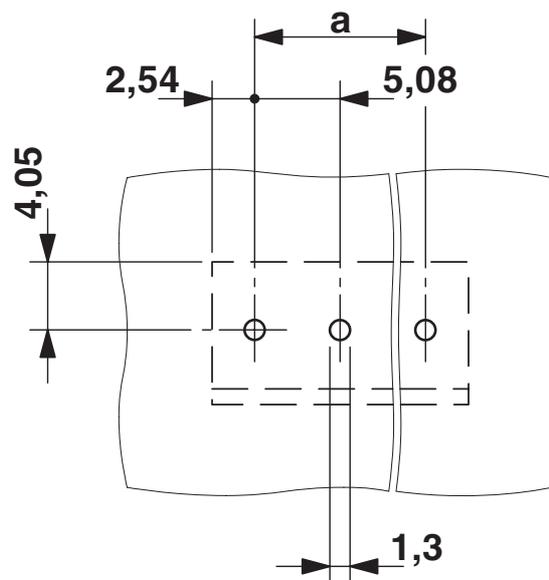
<https://www.phoenixcontact.com/us/products/1731831>

## Drawings

Dimensional drawing

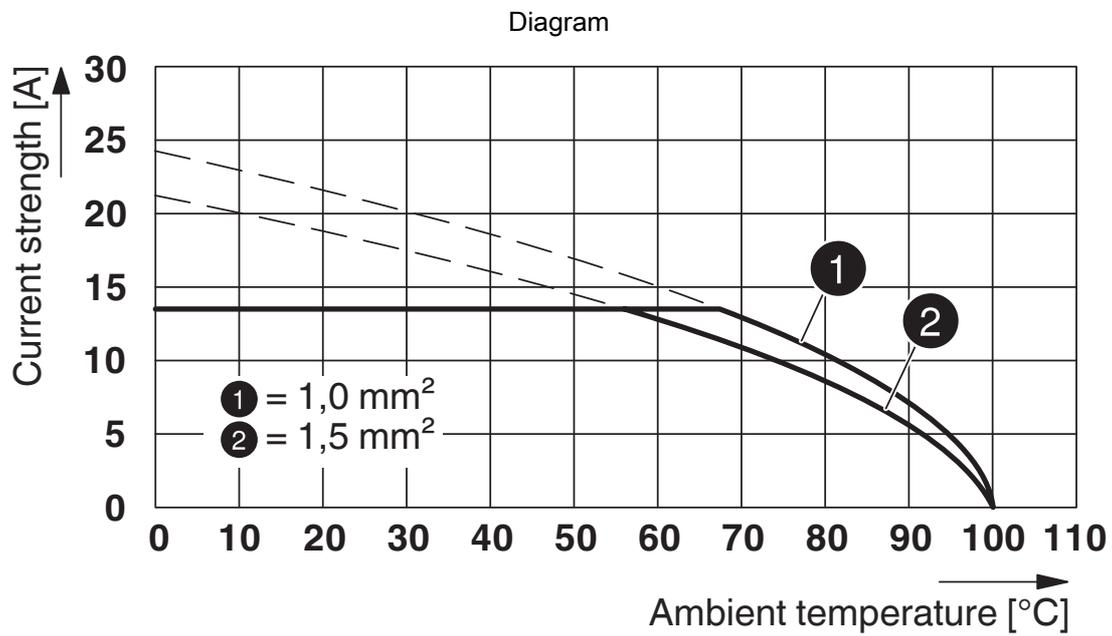


Drilling plan/solder pad geometry



1731831

<https://www.phoenixcontact.com/us/products/1731831>



Type: MKKDSNH 1,5/...-5,08

Tested according to DIN EN 60512-5-2:2003-01

Reduction factor = 1

Number of positions: 5

# MKKDSNH 1,5/ 3-5,08 - PCB terminal block



1731831

<https://www.phoenixcontact.com/us/products/1731831>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1731831>

 **EAC**  
Approval ID: B.01687

 **cULus Recognized**  
Approval ID: E60425-19770427

	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
<b>Use group B</b>				
Multi-conductor connection	300 V	10 A	2X - 18	-
Screw connection	300 V	10 A	30 - 14	-
<b>Use group D</b>				
Multi-conductor connection	300 V	10 A	2X - 18	-
Screw connection	300 V	10 A	30 - 14	-

# MKKDSNH 1,5/ 3-5,08 - PCB terminal block



1731831

<https://www.phoenixcontact.com/us/products/1731831>

## Classifications

### ECLASS

ECLASS-11.0	27460101
ECLASS-12.0	27460101
ECLASS-13.0	27460101

### ETIM

ETIM 8.0	EC002643
----------	----------

### UNSPSC

UNSPSC 21.0	39121400
-------------	----------

# MKKDSNH 1,5/ 3-5,08 - PCB terminal block



1731831

<https://www.phoenixcontact.com/us/products/1731831>

## Environmental product compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

# MKKDSNH 1,5/ 3-5,08 - PCB terminal block

1731831

<https://www.phoenixcontact.com/us/products/1731831>

## Accessories

**i** Note: Applying some accessories below might limit this product.

### EBP 2- 5 - Insertion bridge

1733169

<https://www.phoenixcontact.com/us/products/1733169>

Insertion bridge for connectors with 5.0 mm or 5.08 mm pitch



**i** Max. current carrying capacity: 12 A

### EBP 3- 5 - Insertion bridge

1733172

<https://www.phoenixcontact.com/us/products/1733172>

Insertion bridge for connectors with 5.0 mm or 5.08 mm pitch



**i** Max. current carrying capacity: 12 A

# MKKDSNH 1,5/ 3-5,08 - PCB terminal block



1731831

<https://www.phoenixcontact.com/us/products/1731831>

## SZS 0,6X3,5 - Screwdriver

1205053

<https://www.phoenixcontact.com/us/products/1205053>



Actuation tool, for ST terminal blocks, insulated, also suitable for use as a bladed screwdriver, size: 0.6 x 3.5 x 100 mm, 2-component grip, with non-slip grip

---

## SK 5,08/3,8:FORTL.ZAHLEN - Marker card

0804293

<https://www.phoenixcontact.com/us/products/0804293>



Marker card, white, labeled, horizontal: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 91 ... (99)100, mounting type: adhesive, for terminal block width: 5.08 mm, lettering field size: 5.08 x 3.8 mm

# MKKDSNH 1,5/ 3-5,08 - PCB terminal block



1731831

<https://www.phoenixcontact.com/us/products/1731831>

## SK 5,08/3,8:UNBEDRUCKT - Marker card

0805412

<https://www.phoenixcontact.com/us/products/0805412>

Marker card, white, unlabeled, can be labeled with: Marker pen: without print, mounting type: adhesive, for terminal block width: 5.08 mm, lettering field size: 5.08 x 3.8 mm, Number of individual labels: 120



---

Phoenix Contact 2023 © - all rights reserved

<https://www.phoenixcontact.com>

Phoenix Contact USA  
586 Fulling Mill Road  
Middletown, PA 17057, United States  
(+717) 944-1300  
[info@phoenixcon.com](mailto:info@phoenixcon.com)