

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: 20 A, nominal cross section: 2.5 mm<sup>2</sup>, pitch: 5 mm, number of positions: 2, connection method: Screw connection with tension sleeve, mounting: Wave soldering, conductor/PCB connection direction: 0 °, color: green, Pin layout: Linear pinning, Solder pin [P]: 5 mm. The article can be aligned to create different nos. of positions!

The figure shows the 3-pos. version

#### Your advantages

- Well-known connection principle allows worldwide use
- ☑ Low temperature rise, thanks to maximum contact force
- Satisfies the more stringent safety requirements of "Ex eb" protection according to IEC 60079-7 for potentially explosive areas
- Conductor connection on several levels enables higher contact density
- ☑ Tall type enables conductor connection for sealed PCBs
- 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	1 pc
Minimum order quantity	50 pc
GTIN	4 017918 266684
GTIN	4017918266684
Weight per Piece (excluding packing)	5.400 g
Custom tariff number	85369010
Country of origin	Germany

### Technical data

#### Item properties

Probleminar block	Brief article description	PCB terminal block
-------------------	---------------------------	--------------------



### Technical data

### Item properties

Range of articles	MKKDSH 3-EX
Pitch	5 mm
Number of positions	2
Connection method	Screw connection with tension sleeve
Drive form screw head	Slotted (L)
Screw thread	M3
Mounting type	Wave soldering
Pin layout	Linear pinning
Number of levels	1
Number of connections	2
Number of potentials	2

### **Electrical parameters**

Nominal current	20 A
Nom. voltage	176 V
Rated current	20 A

### Connection capacity

Connection method	Screw connection with tension sleeve
pluggable	Yes
Conductor cross section solid	0.2 mm <sup>2</sup> 4 mm <sup>2</sup>
	0.2 mm <sup>2</sup> 4 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 12
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm² 1.5 mm²
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> 1.5 mm <sup>2</sup>
2 conductors with same cross section, flexible	0.2 mm <sup>2</sup> 1.5 mm <sup>2</sup>
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	0.25 mm² 0.75 mm²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm² 1.5 mm²
Stripping length	7 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
Metal surface terminal point (top layer)	Tin (4 - 8 μm Sn)



### Technical data

#### Material data - contact

Metal surface soldering area (top layer)	Tin (4 - 8 μm Sn)
Material data - housing	
Housing color	green (6021)
Insulating material	РА
Insulating material group	1
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 [1]	11.1 mm
Width [ w ]	10 mm
Height [ h ]	36.5 mm
Pitch	5 mm
Height (without solder pin)	31.5 mm
Solder pin [P]	5 mm
Pin dimensions	0.9 x 0.9 mm

### Dimensions for PCB design

Hole diameter	1.3 mm

### Packaging information

Type of packaging	packed in cardboard
Pieces per package	50
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

Electrical tests



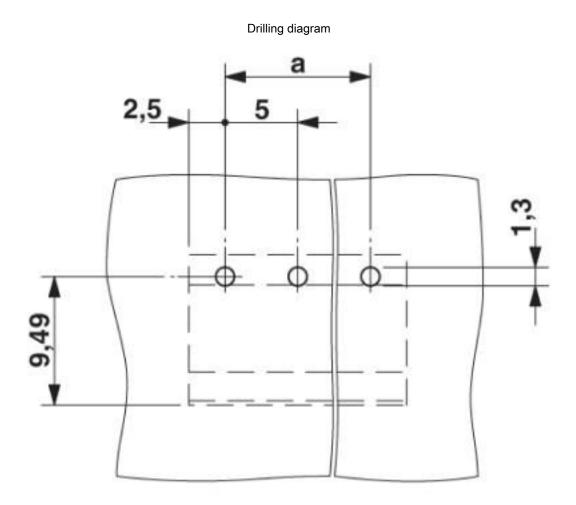
## Technical data

### Electrical tests

Rated current	20 A
Conductor cross section	2.5 mm <sup>2</sup>
Standards and Regulations	
Connection in acc. with standard	EN-VDE
Flammability rating according to UL 94	V0
Environmental Product Compliance	
REACh SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

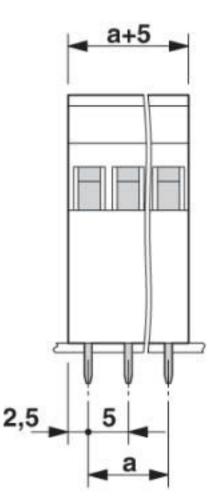
Drawings







11,1 5'E 9,49



## Classifications

### eCl@ss

eCl@ss 10.0.1	27440401
eCl@ss 4.0	27141100
eCl@ss 4.1	27141100
eCl@ss 5.0	27141100
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

06/30/2020 Page 6 / 8

### Dimensional drawing



## Classifications

### ETIM

ETIM 3.0	EC001121
ETIM 4.0	EC002643
ETIM 5.0	EC002643
ETIM 6.0	EC002643
ETIM 7.0	EC002643

### UNSPSC

UNSPSC 6.01	30211801
UNSPSC 7.0901	39121432
UNSPSC 11	39121432
UNSPSC 12.01	39121432
UNSPSC 13.2	39121432
UNSPSC 18.0	39121432
UNSPSC 19.0	39121432
UNSPSC 20.0	39121432
UNSPSC 21.0	39121432

## Approvals

### Approvals

Approvals

EAC

#### Ex Approvals

IECEx / ATEX / EAC Ex

### Approval details

EAC

EHE

B.01687

### Accessories

### Accessories

Cover



### Accessories

Cover - EA-MKDS - 1711408



Single cover for single and multi-level MKDS 3 PCB terminal blocks, for covering individual terminal positions, color: orange, transparent

#### Labeled terminal marker

Marker card - SK 5/3,8:FORTL.ZAHLEN - 0804183



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: 5 mm, lettering field size: 5 x 3.8 mm

#### Screwdriver tools

Screwdriver - SZS 0,6X3,5 - 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

### Terminal marking

Marker card - SK 5/3,8:UNBEDRUCKT - 0805409



Marker card, Card, white, unlabeled, can be labeled with: Marker pen, mounting type: adhesive, for terminal block width: 5 mm, lettering field size: 5 x 3.8 mm

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