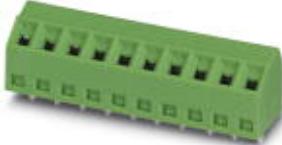


## PCB terminal block - SMKDS 1/ 2-3,81 - 1728284

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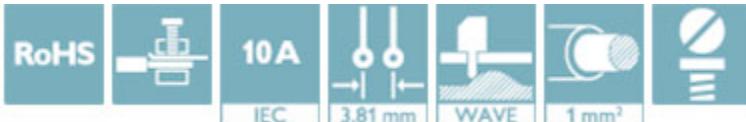
PCB terminal block, nominal current: 10 A, pitch: 3.81 mm, number of positions: 2, connection method: Screw connection with tension sleeve, mounting: Wave soldering, conductor/PCB connection direction: 35 °, color: green



The figure shows a 10-position version of the product

### Your advantages

- Well-known connection principle allows worldwide use
- Low temperature rise, thanks to maximum contact force
- Allows connection of two conductors
- Angled connection enables multi-row arrangement on the PCB
- Extremely small design for the respective conductor cross section



### Key Commercial Data

Packing unit	1 pc
Minimum order quantity	250 pc
GTIN	 4 017918 025731
GTIN	4017918025731
Weight per Piece (excluding packing)	1.280 g
Custom tariff number	85369010
Country of origin	Germany

### Technical data

#### Item properties

Brief article description	PCB terminal block
Range of articles	SMKDS 1
Pitch	3.81 mm

# PCB terminal block - SMKDS 1/ 2-3,81 - 1728284

## Technical data

### Item properties

Number of positions	2
Connection method	Screw connection with tension sleeve
Drive form screw head	Slotted (L)
Screw thread	M2
Mounting type	Wave soldering
Pin layout	Linear pinning
Number of levels	1
Number of connections	2
Number of potentials	2

### Connection capacity

Conductor cross section solid	0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Conductor cross section flexible	0.14 mm <sup>2</sup> ... 1 mm <sup>2</sup>
Conductor cross section AWG / kcmil	26 ... 16
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm <sup>2</sup> ... 0.5 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>
2 conductors with same cross section, solid	0.14 mm <sup>2</sup> ... 0.5 mm <sup>2</sup>
2 conductors with same cross section, flexible	0.14 mm <sup>2</sup> ... 0.2 mm <sup>2</sup>
Stripping length	5 mm
Torque	0.22 Nm ... 0.25 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 (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

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

# PCB terminal block - SMKDS 1/ 2-3,81 - 1728284

## Technical data

### Dimensions for the product

Length [ l ]	10 mm
Width [ w ]	7.61 mm
Height [ h ]	13 mm
Pitch	3.81 mm
Height (without solder pin)	9.5 mm
Solder pin [P]	3.5 mm
Pin dimensions	0.5 x 0.9 mm
Dimension a	3.81 mm

### Dimensions for PCB design

Hole diameter	1.1 mm
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### 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 ... 100 °C (Depending on the current carrying capacity/derating curve)

### Electrical tests

Rated current	10 A
Conductor cross section	1 mm <sup>2</sup>
Rated voltage (III/2)	200 V
Rated surge voltage (III/2)	2.5 kV

### Air clearances and creepage distances

## PCB terminal block - SMKDS 1/ 2-3,81 - 1728284

### Technical data

#### Air clearances and creepage distances

Rated insulation voltage (III/3)	160 V
Rated insulation voltage (III/2)	200 V
Rated insulation voltage (II/2)	400 V
Rated surge voltage (III/3)	2.5 kV
Rated surge voltage (III/2)	2.5 kV
Rated surge voltage (II/2)	2.5 kV
Minimum clearance - inhomogeneous field (III/3)	1.5 mm
Minimum clearance - inhomogeneous field (III/2)	1.5 mm
Minimum clearance - inhomogeneous field (II/2)	1.5 mm
Minimum creepage distance value (III/3)	2 mm
Minimum creepage distance value (III/2)	0.8 mm
Minimum creepage distance value (II/2)	1.6 mm
Note on connection cross section	With connected conductor 1.5 mm <sup>2</sup> (solid).

#### Standards and Regulations

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

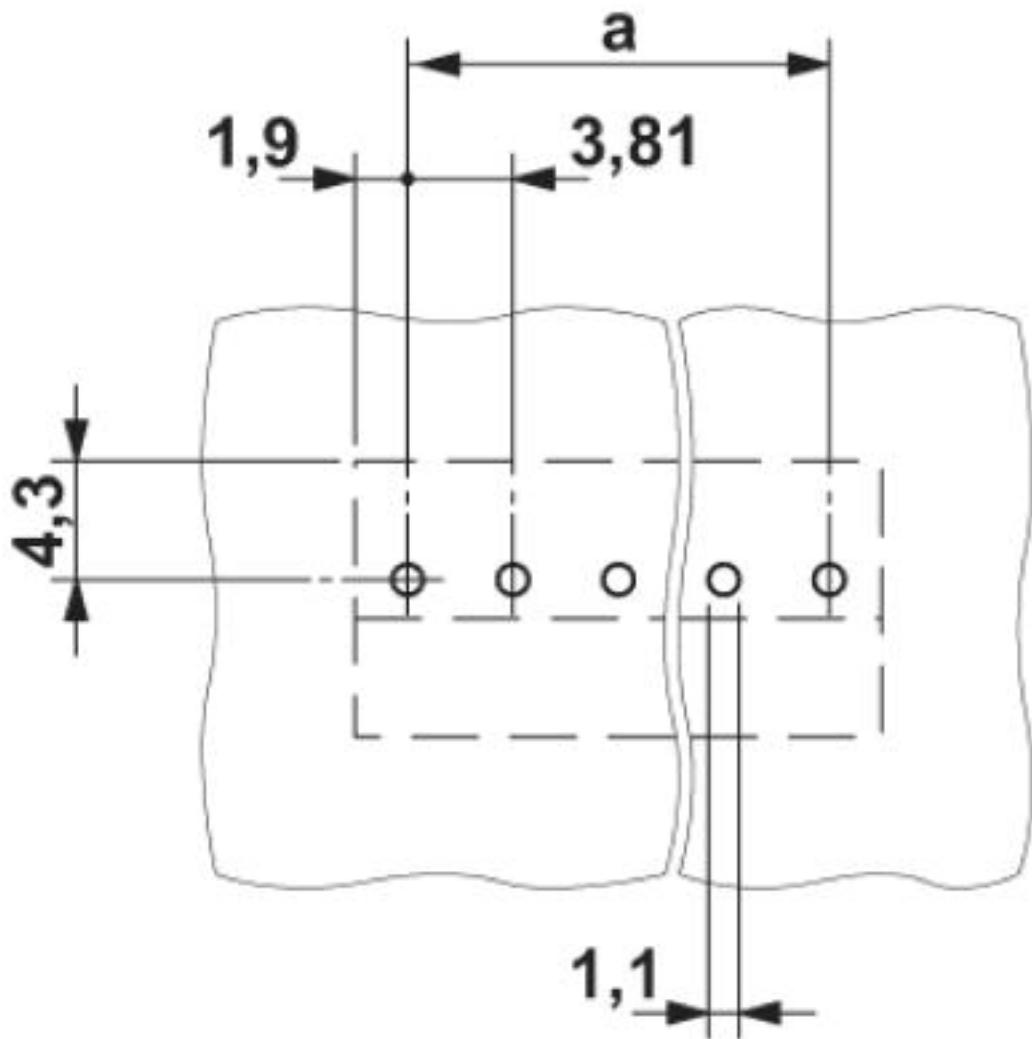
#### Environmental Product Compliance

	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

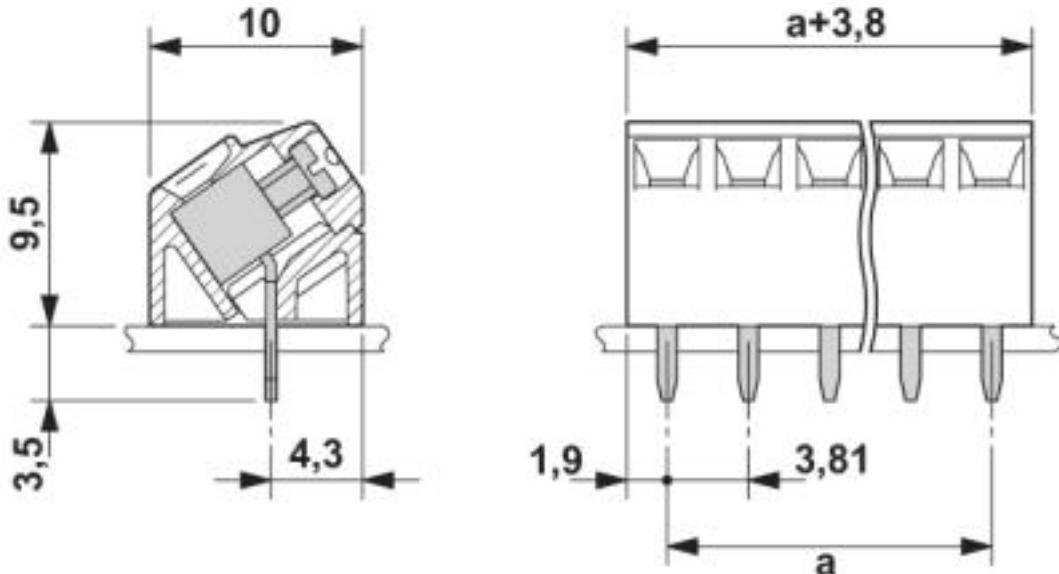
PCB terminal block - SMKDS 1/ 2-3,81 - 1728284

## Drilling diagram



## PCB terminal block - SMKDS 1/ 2-3,81 - 1728284

Dimensional drawing



### Classifications

eCl@ss

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

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

## PCB terminal block - SMKDS 1/ 2-3,81 - 1728284

### Classifications

#### UNSPSC

UNSPSC 12.01	39121432
UNSPSC 13.2	39121432

### Approvals

#### Approvals

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#### Approvals

CSA / IECIEE CB Scheme / SEV / EAC / cULus Recognized

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#### Ex Approvals

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#### Approval details

CSA		<a href="http://www.csagroup.org/services-industries/product-listing/">http://www.csagroup.org/services-industries/product-listing/</a>	13631
	B	D	
Nominal voltage UN	150 V	300 V	
Nominal current IN	10 A	10 A	
mm <sup>2</sup> /AWG/kcmil	28-16	28-16	

IECEE CB Scheme		<a href="http://www.iecee.org/">http://www.iecee.org/</a>	CH-8225
Nominal voltage UN	125 V		
Nominal current IN	12 A		
mm <sup>2</sup> /AWG/kcmil	1.5		

SEV		<a href="https://www.electrosuisse.ch/de/meta/shop/produktezertifikate.html">https://www.electrosuisse.ch/de/meta/shop/produktezertifikate.html</a>	IK-3542-M1
Nominal voltage UN	125 V		
Nominal current IN	12 A		

## PCB terminal block - SMKDS 1/ 2-3,81 - 1728284

### Approvals

mm <sup>2</sup> /AWG/kcmil	1.5
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EAC		B.01742
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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
	B	D	
Nominal voltage UN	300 V	300 V	
Nominal current IN	10 A	10 A	
mm <sup>2</sup> /AWG/kcmil	30-16	30-16	

### Accessories

#### Accessories

#### Labeled terminal marker

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

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#### Marker pen

Marker pen - B-STIFT - 1051993



Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 mm

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#### Screwdriver tools

## PCB terminal block - SMKDS 1/ 2-3,81 - 1728284

### Accessories

Screwdriver - SZS 0,4X2,5 VDE - 1205037



Screwdriver, slot-headed, VDE insulated, size: 0.4 x 2.5 x 80 mm, 2-component grip, with non-slip grip

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### Terminal marking

Marker card - SK U/2,8 WH:UNBEDRUCKT - 0803883



Marker card, Sheet, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, Office printing systems, mounting type: adhesive, for terminal block width: 210 mm, lettering field size: 186 x 2.8 mm, Number of individual labels: 3600