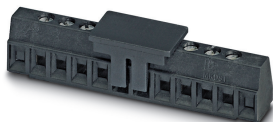


# PCB terminal block - MKDS 1/ 5-3,81 SMD BK - 1727269

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PCB terminal block, nominal current: 8 A, rated voltage (III/2): 160 V, nominal cross section: 1 mm<sup>2</sup>, number of potentials: 5, Number of rows: 1, Number of positions per row: 5, product range: MKDS 1/..-SMD, pitch: 3.81 mm, connection method: Screw connection with tension sleeve, mounting: SMD soldering, conductor/PCB connection direction: 0 °, color: black, Pin layout: Linear pad geometry, type of packaging: Tube magazine



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
- Extremely small design for the respective conductor cross section
- Designed for integration into the SMT soldering process



## Key Commercial Data

Packing unit	20 pc
Minimum order quantity	20 pc
GTIN	
GTIN	4017918025632

## Technical data

### Item properties

Brief article description	PCB terminal block
Range of articles	MKDS 1/..-SMD
Pitch	3.81 mm
Number of positions	5
Screw thread	M2
Mounting type	SMD soldering
Pin layout	Linear pad geometry
Number of levels	1
Number of connections	5

# PCB terminal block - MKDS 1/ 5-3,81 SMD BK - 1727269

## Technical data

### Item properties

Number of potentials	5
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### Electrical parameters

Nominal current	8 A
Nom. voltage	160 V
Rated voltage (III/3)	160 V
Rated voltage (III/2)	160 V
Rated voltage (II/2)	250 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

### Connection capacity

Connection method	Screw connection with tension sleeve
pluggable	no
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
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

Housing color	black (9005)
Insulating material	PA
Insulating material group	IIIa
CTI according to IEC 60112	325
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

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## Technical data

### Material data - housing

Temperature for the ball pressure test according to EN 60695-10-2	125 °C
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### Dimensions for the product

Caption	Schematische Abbildung - weitere Details siehe Produktfamilienzeichnung im Download Center
Length [ l ]	7.3 mm
Width [ w ]	19.04 mm
Height [ h ]	9.2 mm
Pitch	3.81 mm
Height (without solder pin)	9.2 mm

### Dimensions for PCB design

Pad geometry	1.5 x 2.5 mm
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### Packaging information

Type of packaging	Tube magazine
Pieces per package	20
Denomination packing units	Pcs.

### General product information

Type of note	Note on application
Note	Pick and place pads may protrude beyond the components. The PCB layout must ensure that collisions are avoided when components are assembled.

### Ambient conditions

Ambient temperature (storage/transport)	-40 °C ... 70 °C
Ambient temperature (assembly)	-5 °C ... 100 °C
Ambient temperature (operation)	-40 °C ... 100 °C (dependent on the derating curve)

### Electrical tests

Rated current	8 A
Conductor cross section	1 mm <sup>2</sup>
Rated voltage (III/2)	160 V
Rated surge voltage (III/2)	2.5 kV

### Air clearances and creepage distances

### Standards and Regulations

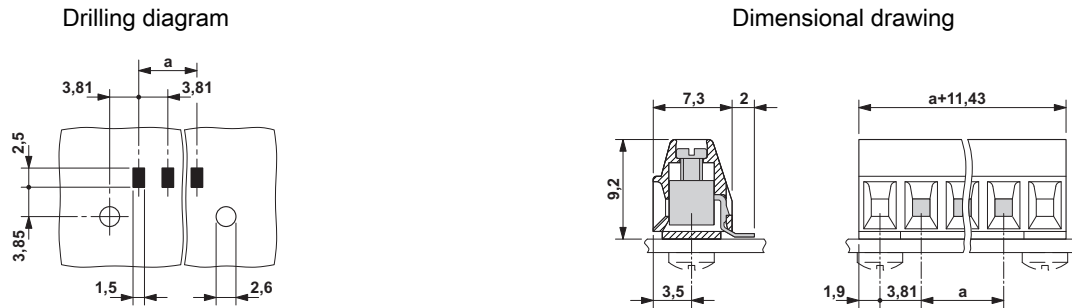
Connection in acc. with standard	EN-VDE
	CSA
Flammability rating according to UL 94	V0

### Environmental Product Compliance

China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

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## Drawings



## Classifications

### eCl@ss

eCl@ss 10.0.1	27440401
eCl@ss 11.0	27460101
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 9.0	27440401

### ETIM

ETIM 3.0	EC001121
ETIM 4.0	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

# PCB terminal block - MKDS 1/ 5-3,81 SMD BK - 1727269

## Approvals

### Approvals

IECEE CB Scheme / SEV / EAC / cULus Recognized

### Ex Approvals

### Approval details

IECEE CB Scheme		<a href="http://www.iecee.org/">http://www.iecee.org/</a>	CH-10787
Nominal voltage UN		160 V	
Nominal current IN		12 A	
mm <sup>2</sup> /AWG/kcmil		1.5	

SEV		<a href="https://www.eurofins.ch/de/">https://www.eurofins.ch/de/</a>	IK-4497
Nominal voltage UN		160 V	
Nominal current IN		12 A	
mm <sup>2</sup> /AWG/kcmil		1.5	

EAC			B.01687
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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

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### Accessories

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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### Screwdriver tools

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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