

PCB terminal block - MKDS 1/ 8-3,81 SMD BK - 1727175

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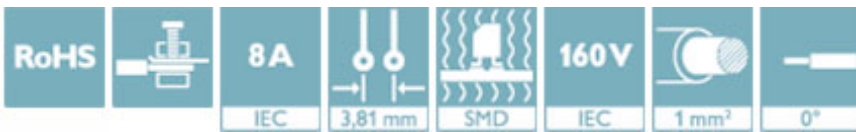
PCB terminal block, nominal current: 8 A, nom. voltage: 160 V, pitch: 3.81 mm, number of positions: 8, connection method: Screw connection with tension sleeve, mounting: SMD soldering, conductor/PCB connection direction: 0 °, color: black




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	14 pc
GTIN	 4 017918 025595
GTIN	4017918025595

Technical data

Item properties

Brief article description	PCB terminal block
Range of articles	MKDS 1/..-SMD
Pitch	3.81 mm
Number of positions	8
Connection method	Screw connection with tension sleeve
Screw thread	M2
Mounting type	SMD soldering
Pin layout	Linear pad geometry
Number of levels	1

Electrical parameters

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Technical data

Electrical parameters

Rated current	8 A
Rated insulation voltage (III/2)	160 V
Rated surge voltage (III/2)	2.5 kV

Connection capacity

Conductor cross section solid	0.14 mm ² ... 1.5 mm ²
Conductor cross section flexible	0.14 mm ² ... 1 mm ²
Conductor cross section AWG / kcmil	26 ... 16
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm ² ... 0.5 mm ²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm ² ... 0.5 mm ²
2 conductors with same cross section, solid	0.14 mm ² ... 0.5 mm ²
2 conductors with same cross section, flexible	0.14 mm ² ... 0.2 mm ²
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

Insulating material	PA
Insulating material group	IIIa
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

Caption	Schematic representation – for additional information, see product range drawing in the Download Center
Length [l]	7.3 mm
Width [w]	30.47 mm
Height [h]	9.2 mm
Pitch	3.81 mm
Height (without solder pin)	9.2 mm
Dimension a	26.67 mm

Packaging information

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Technical data

Packaging information

Type of packaging	Tube magazine
Pieces per package	14
Denomination packing units	Pcs.

Ambient conditions

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

Electrical tests

Rated current	8 A
Rated insulation voltage (III/2)	160 V
Rated surge voltage (III/2)	2.5 kV

Air clearances and creepage distances

Insulating material group	IIIa
Voltage	160 V
Rated insulation voltage (III/3)	160 V
Rated insulation voltage (III/2)	160 V
Rated insulation 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

Standards and Regulations

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

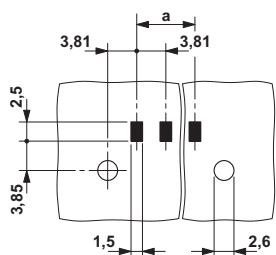
Environmental Product Compliance

REACH SVHC	DOTE 15571-58-1
	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

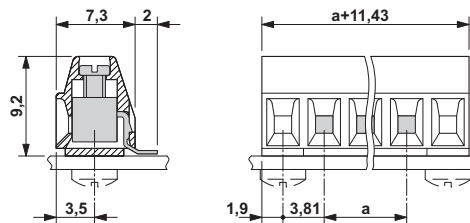
Drawings

PCB terminal block - MKDS 1/ 8-3,81 SMD BK - 1727175

Drilling diagram



Dimensional drawing



Approvals

Approvals

Approvals

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

Ex Approvals

Approval details

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


IECEE CB Scheme		http://www.iecee.org/	CH-8225
Nominal voltage UN	125 V		
Nominal current IN	12 A		
mm ² /AWG/kcmil	1.5		


SEV		https://www.electrosuisse.ch/de/meta/shop/produktzertifikate.html	IK-3542-M1
Nominal voltage UN	125 V		

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Approvals

Nominal current IN	12 A
mm ² /AWG/kcmil	1.5

EAC		B.01742
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cULus Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	E60425-19770427
	D	B	
Nominal voltage UN	300 V	300 V	
Nominal current IN	10 A	10 A	
mm ² /AWG/kcmil	30-16	30-16	

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