

## PCB terminal block - MKDS 5/ 3-6,35 BK - 1714942

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Printed circuit terminal block, nominal current: 32 A, rated voltage: 500 V, pitch: 6.35 mm, no. of positions: 3, mounting: Soldering, type of connection: Screw connection, connection direction from the conductor to the PCB: 0°


The figure shows a 2-pos. version of the product

### Why buy this product

- Well-known connection principle allows worldwide use
- Low temperature rise, thanks to maximum contact force
- Allows connection of two conductors
- The latching on the side enables various numbers of positions to be combined



### Key Commercial Data

Packing unit	50 STK
GTIN	 4 017918 257866
GTIN	4017918257866

### Technical data

#### Item properties

Brief article description	PCB terminal block
Range of articles	MKDS 5
Pitch	6.35 mm
Number of positions	3
Connection method	Screw connection with tension sleeve
Drive form screw head	Slotted
Screw thread	M3
Mounting type	Wave soldering
Pin layout	Linear pinning
Number of levels	1

#### Electrical parameters

# PCB terminal block - MKDS 5/ 3-6,35 BK - 1714942

## Technical data

### Electrical parameters

Rated current	32 A
Rated insulation voltage (III/2)	630 V
Rated surge voltage (III/2)	6 kV

### Connection capacity

Conductor cross section solid	0.2 mm <sup>2</sup> ... 6 mm <sup>2</sup>
Conductor cross section flexible	0.2 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Conductor cross section AWG / kcmil	24 ... 10
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm <sup>2</sup> ... 4 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, stranded, ferrules without plastic sleeve	0.25 mm <sup>2</sup> ... 0.75 mm <sup>2</sup>
2 conductors with same cross section, stranded, with TWIN ferrules with plastic sleeve	0.5 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>

### 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 (4 - 8 µm Sn)
Metal surface soldering area (top layer)	Tin (4 - 8 µm Sn)

### 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

Caption	Schematic representation – for additional information, see product range drawing in the Download Center
Length [ l ]	12.5 mm
Width [ w ]	19.05 mm
Height [ h ]	26.6 mm
Pitch	6.35 mm
Height (without solder pin)	21.5 mm
Solder pin [P]	5.1 mm
Pin dimensions	0.9 x 0.9 mm

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## Technical data

### Dimensions for the product

Dimension a	12.7 mm
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### Dimensions for PCB design

Hole diameter	1.3 mm
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### Packaging information

Type of packaging	packed in cardboard
Pieces per package	50
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

### Termination and connection method

#### Pull-out test

Pull-out test	IEC 60998-2-1:1990-04
	Test passed
Conductor cross section / conductor type / tensile force	0.2 mm <sup>2</sup> solid 10 N > 0.2 mm <sup>2</sup> / solid / > 10 N

### Mechanical tests according to standard

Test specification	IEC 60998-2-1 (in parts)
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### Electrical tests

Rated current	32 A
Rated insulation voltage (III/2)	630 V
Rated surge voltage (III/2)	6 kV

### Air clearances and creepage distances

Insulating material group	I
Comparative tracking index (IEC 60112:2003-01)	CTI 600
Voltage	500 V
Rated insulation voltage (III/3)	500 V
Rated insulation voltage (III/2)	630 V
Rated insulation voltage (II/2)	1000 V
Rated surge voltage (III/3)	6 kV
Rated surge voltage (III/2)	6 kV
Rated surge voltage (II/2)	6 kV
Minimum clearance - inhomogeneous field (III/3)	5.5 mm
Minimum clearance - inhomogeneous field (III/2)	5.5 mm
Minimum clearance - inhomogeneous field (II/2)	5.5 mm
Minimum creepage distance value (III/3)	6.3 mm
Minimum creepage distance value (III/2)	5.5 mm

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## Technical data

### Air clearances and creepage distances

Minimum creepage distance value (II/2)	5.5 mm
Note on connection cross section	With connected conductor 6 mm <sup>2</sup> (solid).

### Current carrying capacity / derating curves

Specification	IEC 60998-2-1 (in parts)
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### Vibration test

Resistance to ageing, to humidity conditions, to ingress of solid objects and to harmful ingress of water	Test passed IEC 60998-2-1:1990-04 168 h/100°C 48 h/25 °C/92%
Test result	Test passed
Test specification	IEC 60998-2-1:1990-04
Dry heat	168 h/100°C
Humid heat	48 h/25 °C/92%

### Resistance to ageing, humidity and penetration of solids

Test result	Test passed
Test specification	IEC 60998-2-1:1990-04
Dry heat	168 h/100°C
Humid heat	48 h/25 °C/92%

### Standards and Regulations

Connection in acc. with standard	EN-VDE
	CSA

### Environmental Product Compliance

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

## Approvals

### Approvals

Approvals


CSA / SEV / CCA / EAC / cULus Recognized / DNV GL / RS


Ex Approvals

### Approval details

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## Approvals

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

SEV		<a href="https://www.electrosuisse.ch/en/meta/shop/product-certificates.html">https://www.electrosuisse.ch/en/meta/shop/product-certificates.html</a>	IK-4199
Nominal voltage UN	450 V		
Nominal current IN	32 A		
mm <sup>2</sup> /AWG/kcmil	4		

CCA			IK-3249
Nominal voltage UN	450 V		
mm <sup>2</sup> /AWG/kcmil	4		

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

DNV GL	<a href="http://exchange.dnv.com/tari/">http://exchange.dnv.com/tari/</a>	TAE00001EV
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RS		<a href="http://www.rs-head.spb.ru/en/index.php">http://www.rs-head.spb.ru/en/index.php</a>	17.00014.272
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