

## 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

### Your advantages

- 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	1 pc
Minimum order quantity	50 pc
GTIN	 4 017918 257866
GTIN	4017918257866
Weight per Piece (excluding packing)	8.410 g
Custom tariff number	85369010
Country of origin	Germany

### Technical data

#### Item properties

Brief article description	PCB terminal block
Range of articles	MKDS 5
Pitch	6.35 mm
Number of positions	3

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### Technical data

#### Item properties

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
Number of connections	3
Number of potentials	3

#### Electrical parameters

Rated current	32 A
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#### 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>
Stripping length	8 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
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

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#### Material data - housing

Glow wire flammability index GWF1 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
Dimension a	12.7 mm

#### 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.

#### 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).

#### 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)

#### Termination and connection method

Test for conductor damage and slackening	IEC 60998-2-1:1990-04
	Test passed

#### Pull-out test

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### Technical data

#### 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> / flexible / > 10 N
	6 mm <sup>2</sup> / solid / > 80 N
	4 mm <sup>2</sup> / flexible / > 60 N

#### Electrical tests

Rated current	32 A
Conductor cross section	4 mm <sup>2</sup>

#### Air clearances and creepage distances

Rated insulation voltage (III/3)	500 V
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
Minimum creepage distance value (II/2)	5.5 mm
Note on connection cross section	With connected conductor 6 mm <sup>2</sup> (solid).

#### 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

	Lead 7439-92-1
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## Technical data

### Environmental Product Compliance

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

## Classifications

### eCl@ss

eCl@ss 4.0	27141109
eCl@ss 4.1	27141109
eCl@ss 5.0	27141190
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
UNSPSC 12.01	39121432
UNSPSC 13.2	39121432

## Approvals

### Approvals

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Approvals

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

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## Approvals

Ex Approvals


### Approval details

DNV GL		<a href="https://approvalfinder.dnvgl.com/">https://approvalfinder.dnvgl.com/</a>	TAE00001EV
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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	300 V	300 V	
Nominal current IN	10 A	10 A	
mm <sup>2</sup> /AWG/kcmil	28-10	28-10	

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

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

EAC			B.01742
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## Approvals

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	30 A	10 A	
mm <sup>2</sup> /AWG/kcmil	30-10	30-10	

## Accessories

### Accessories

#### Labeled terminal marker

Marker card - SK 6,2/3,8:FORTL.ZAHLEN - 0804374



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: 6.2 mm, lettering field size: 6.2 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