

## PCB terminal block - MKDS 1/ 4-3,5 HT BK - 1820589

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PCB terminal block, nominal current: 13.5 A, rated voltage (III/2): 200 V, nominal cross section: 1.5 mm<sup>2</sup>, pitch: 3.5 mm, number of positions: 4, connection method: Screw connection with tension sleeve, mounting: THR soldering, conductor/PCB connection direction: 0 °, color: black, Pin layout: Linear pinning, Solder pin [P]: 3.5 mm

The figure shows the 3-pos. version

### 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	50 pc
GTIN	
GTIN	4046356783194

### Technical data

#### Item properties

Brief article description	PCB terminal block
Range of articles	MKDS 1/..-HT
Pitch	3.5 mm
Number of positions	4
Connection method	Screw connection with tension sleeve
Drive form screw head	Slotted (L)
Screw thread	M2
Mounting type	THR soldering
Pin layout	Linear pinning
Number of levels	1
Number of connections	4

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## Technical data

### Item properties

Number of potentials	4
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### Electrical parameters

Nominal current	13.5 A
Nom. voltage	200 V
Rated voltage	63 V
Rated voltage (III/2)	200 V
Rated voltage (II/2)	200 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> ... 1.5 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> ... 0.34 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

### Dimensions for the product

Length [ l ]	7.3 mm
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## Technical data

### Dimensions for the product

Width [ w ]	14.5 mm
Height [ h ]	12 mm
Pitch	3.5 mm
Height (without solder pin)	8.5 mm
Solder pin [P]	3.5 mm
Pin spacing	3.5 mm
Pin dimensions	0.5 x 0.9 mm

### Dimensions for PCB design

Hole diameter	1.1 mm
Pin spacing	3.5 mm

### 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).

### Electrical tests

Rated current	13.5 A
Conductor cross section	1.5 mm <sup>2</sup>
Rated voltage (III/2)	200 V
Rated surge voltage (III/2)	2.5 kV

### Standards and Regulations

Connection in acc. with standard	EN-VDE
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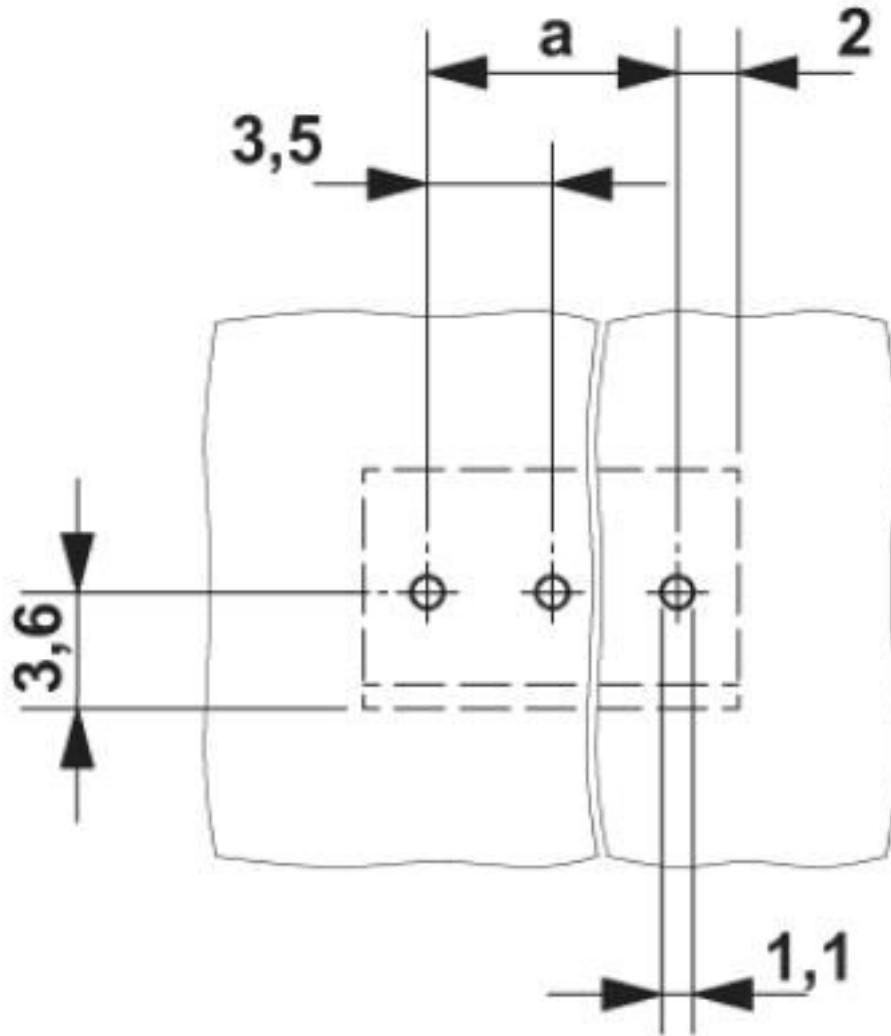
### Environmental Product Compliance

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

## Drawings

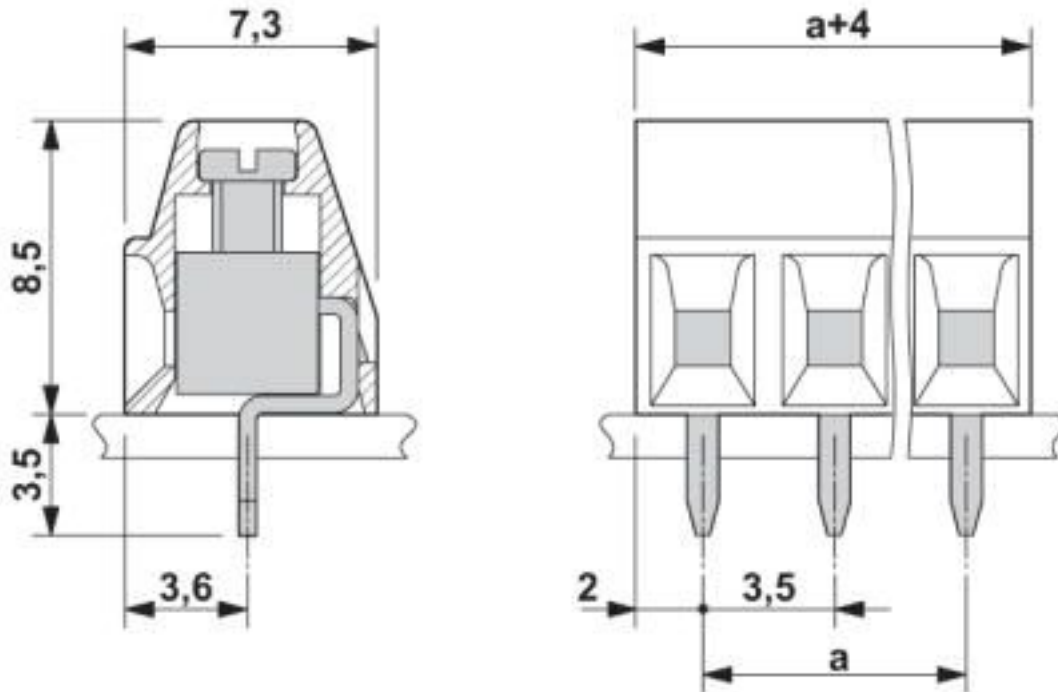
# PCB terminal block - MKDS 1/ 4-3,5 HT BK - 1820589

Drilling diagram



# PCB terminal block - MKDS 1/ 4-3,5 HT BK - 1820589

Dimensional drawing



## Classifications

### eCl@ss

eCl@ss 10.0.1	27440401
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

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## Classifications

### UNSPSC

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


#### 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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### 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	10 A	10 A
mm <sup>2</sup> /AWG/kcmil	30-16	30-16

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