

## PCB terminal block - MKDS 3/ 6-5,08 - 1701144

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PCB terminal block, nominal current: 24 A, nom. voltage: 400 V, pitch: 5.08 mm, number of positions: 6, connection method: Screw connection with tension sleeve, mounting: Wave soldering, conductor/PCB connection direction: 0 °, color: green. The article can be aligned to create different nos. of positions!

The figure shows a 4-position version

### Why buy this product

- Well-known connection principle allows worldwide use
- Low temperature rise, thanks to maximum contact force
- Allows connection of two conductors
- Integrated protective guide prevents incorrect insertion of the conductor underneath the tension sleeve
- The latching on the side enables various numbers of positions to be combined



### Key Commercial Data

Packing unit	50 STK
GTIN	
GTIN	4046356910101

### Technical data

#### Item properties

Brief article description	PCB terminal block
Range of articles	MKDS 3
Pitch	5.08 mm
Number of positions	6
Connection method	Screw connection with tension sleeve
Drive form screw head	Slotted (L)
Screw thread	M3
Mounting type	Wave soldering
Pin layout	Linear pinning
Number of levels	1

# PCB terminal block - MKDS 3/ 6-5,08 - 1701144

## Technical data

### Electrical parameters

Rated current	24 A
Rated insulation voltage (III/2)	400 V
Rated surge voltage (III/2)	4 kV

### Connection capacity

Conductor cross section solid	0.2 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Conductor cross section flexible	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section AWG / kcmil	24 ... 12
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm <sup>2</sup> ... 2.5 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> ... 1.5 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

Housing color	green (6021)
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 ]	11.2 mm
Width [ w ]	30.48 mm
Height [ h ]	23 mm
Pitch	5.08 mm
Height (without solder pin)	18 mm
Solder pin [P]	5 mm

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## Technical data

### Dimensions for the product

Pin dimensions	0.9 x 0.9 mm
Dimension a	25.4 mm
Pin spacing	15.24 mm

### Dimensions for PCB design

Hole diameter	1.3 mm
Pin spacing	15.24 mm

### 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

Connection test	IEC 60998-2-2:2002-12
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### Pull-out test

Pull-out test	IEC 60998-2-1:2002-12
	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	24 A
Rated insulation voltage (III/2)	400 V
Rated surge voltage (III/2)	4 kV

### Air clearances and creepage distances

Insulating material group	I
Comparative tracking index (IEC 60112:2003-01)	CTI 600
Voltage	250 V
Rated insulation voltage (III/3)	250 V
Rated insulation voltage (III/2)	400 V
Rated insulation voltage (II/2)	630 V
Rated surge voltage (III/3)	4 kV
Rated surge voltage (III/2)	4 kV
Rated surge voltage (II/2)	4 kV
Minimum clearance - inhomogeneous field (III/3)	3 mm

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### Technical data

#### Air clearances and creepage distances

Minimum clearance - inhomogeneous field (III/2)	3 mm
Minimum clearance - inhomogeneous field (II/2)	3 mm
Minimum creepage distance value (III/3)	3.2 mm
Minimum creepage distance value (III/2)	2 mm
Minimum creepage distance value (II/2)	3.2 mm
Note on connection cross section	With connected conductor 4 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 60998-1:2002-12 168 h/100°C 48 h/30 °C/92 %
Test result	Test passed
Test specification	IEC 60998-1:2002-12
Dry heat	168 h/100°C
Humid heat	48 h/30 °C/92 %

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

Test result	Test passed
Test specification	IEC 60998-1:2002-12
Dry heat	168 h/100°C
Humid heat	48 h/30 °C/92 %

#### Standards and Regulations

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

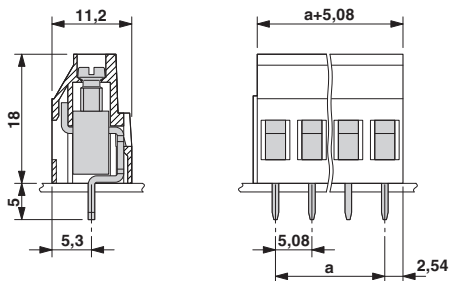
#### Environmental Product Compliance

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"

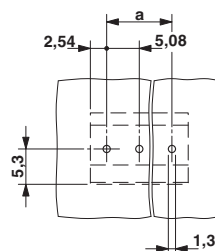
### Drawings

# PCB terminal block - MKDS 3/ 6-5,08 - 1701144

Dimensional drawing



Drilling diagram



## Approvals

### Approvals

#### Approvals

EAC / SEV / cULus Recognized / DNV GL / CCA

#### Ex Approvals

### Approval details

EAC		B.01742
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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	250 V		
Nominal current IN	28 A		
mm <sup>2</sup> /AWG/kcmil	4		

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	15 A	
mm <sup>2</sup> /AWG/kcmil	30-12	30-12	

DNV GL	<a href="http://exchange.dnv.com/tari/">http://exchange.dnv.com/tari/</a>	TAE00001EV
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### Approvals

CCA	IK-3249
Nominal voltage UN	250 V
mm <sup>2</sup> /AWG/kcmil	4

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