

## PCB terminal block - MKDSF 3/ 8 - 1712083

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PCB terminal block, nominal current: 24 A, rated voltage (III/2): 400 V, pitch: 5 mm, number of positions: 8, connection method: Screw connection with tension sleeve, mounting: Wave soldering, conductor/PCB connection direction: 90 °, color: green, Solder pin [P]: 4.1 mm. The article can be aligned to create different nos. of positions!

The figure shows a 2-position version

### Your advantages

- Generously dimensioned wiring space, solid conductors up to 4 mm<sup>2</sup>
- 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 pc
Minimum order quantity	50 pc
GTIN	 4 017918 023799
GTIN	4017918023799
Weight per Piece (excluding packing)	15.450 g
Custom tariff number	85369010
Country of origin	Germany

### Technical data

#### Item properties

Brief article description	PCB terminal block
Range of articles	MKDSF 3
Pitch	5 mm
Number of positions	8
Connection method	Screw connection with tension sleeve

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## Technical data

### Item properties

Drive form screw head	Slotted (L)
Screw thread	M3
Mounting type	Wave soldering
Pin layout	Linear pinning
Number of levels	1
Number of connections	8
Number of potentials	8

### 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>
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 (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	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

Length [ l ]	18 mm
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## Technical data

### Dimensions for the product

Width [ w ]	40 mm
Height [ h ]	15.3 mm
Pitch	5 mm
Height (without solder pin)	11.2 mm
Solder pin [P]	4.1 mm
Pin dimensions	0.9 x 0.9 mm
Dimension a	35 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 60999-1:1990-05
	Test passed

### Pull-out test

Pull-out test	IEC 60999-1:1990-05
	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
	4 mm <sup>2</sup> / solid / > 60 N
	2.5 mm <sup>2</sup> / flexible / > 50 N

### Electrical tests

Rated current	24 A
Conductor cross section	2.5 mm <sup>2</sup>
Rated voltage (III/2)	400 V

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## Technical data

### Electrical tests

Rated surge voltage (III/2)	4 kV
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### Air clearances and creepage distances

Specification	IEC 60664-1:2007-04
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
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

### Vibration test

Specification	IEC 60068-2-6:1982 + AMD 2:1985
Result	Test passed
Frequency	10 - 150 - 10 Hz
Sweep speed	1 octave/min
Amplitude	0.35 mm (10 - 60.1 Hz)
Acceleration	5 g (60.1 - 150 Hz)
Test duration per axis	2.5 h

### Standards and Regulations

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

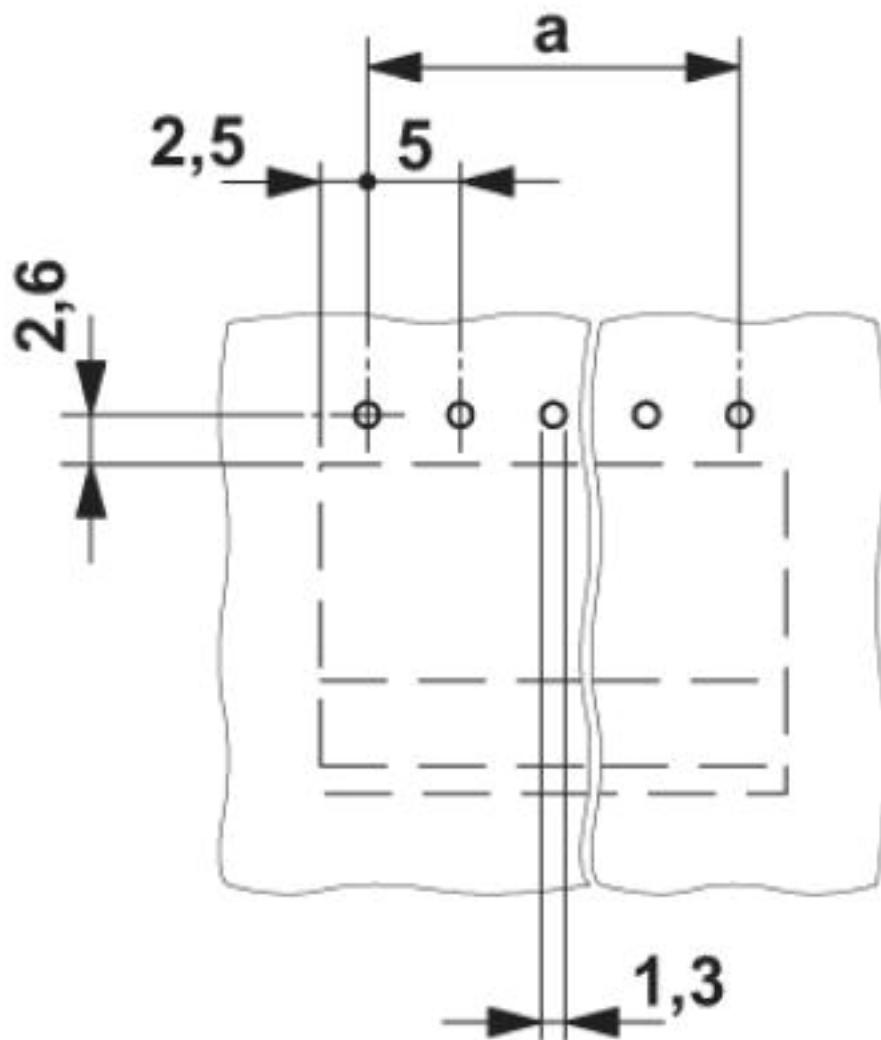
### Environmental Product Compliance

	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

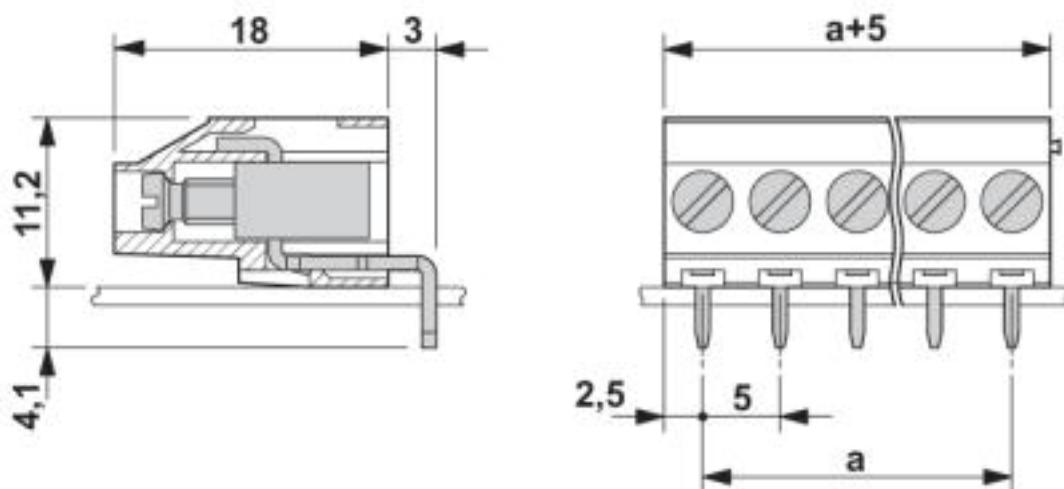
## PCB terminal block - MKDSF 3/ 8 - 1712083

Drilling diagram



## PCB terminal block - MKDSF 3/ 8 - 1712083

Dimensional drawing



### Classifications

#### eCl@ss

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
UNSPSC 11	39121432
UNSPSC 12.01	39121432
UNSPSC 13.2	39121432

### Approvals

#### Approvals

## PCB terminal block - MKDSF 3/ 8 - 1712083

### Approvals

#### Approvals

CSA / CCA / SEV / EAC / cULus Recognized

#### Ex Approvals

#### Approval details

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	28-12	28-12	

CCA		IK-3249
Nominal voltage UN	250 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	250 V		
Nominal current IN	32 A		
mm <sup>2</sup> /AWG/kcmil	4		

EAC			B.01742

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>	E60425-19870331
	B	D	
Nominal voltage UN	250 V	300 V	
Nominal current IN	15 A	10 A	
mm <sup>2</sup> /AWG/kcmil	30-12	30-12	

## PCB terminal block - MKDSF 3/ 8 - 1712083

### Accessories

#### Accessories

##### Bridge

Insertion bridge - EBP 2- 5 - 1733169



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#### Labeled terminal marker

Marker card - SK 5/3,8:FORTL.ZAHLEN - 0804183



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: 5 mm, lettering field size: 5 x 3.8 mm

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### 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