

PCB terminal block - MKDSF 3/10 (1-7,9,10) - 1706387

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PCB terminal block, nominal current: 24 A, nom. voltage: 400 V, pitch: 5 mm, number of positions: 10, connection method: Screw connection with tension sleeve, mounting: Wave soldering, conductor/PCB connection direction: 90 °, color: green. The article can be aligned to create different nos. of positions!

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
- ✓ 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
GTIN	
GTIN	4017918229108

Technical data

Item properties

Brief article description	PCB terminal block
Range of articles	MKDSF 3
Pitch	5 mm
Number of positions	10
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

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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 ² ... 4 mm ²
Conductor cross section flexible	0.2 mm ² ... 2.5 mm ²
Conductor cross section AWG / kcmil	24 ... 12
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm ² ... 2.5 mm ²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm ² ... 2.5 mm ²
2 conductors with same cross section, solid	0.2 mm ² ... 1.5 mm ²
2 conductors with same cross section, flexible	0.2 mm ² ... 1.5 mm ²
2 conductors with same cross section, stranded, ferrules without plastic sleeve	0.25 mm ² ... 0.75 mm ²
2 conductors with same cross section, stranded, with TWIN ferrules with plastic sleeve	0.5 mm ² ... 1.5 mm ²
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
Width [w]	50 mm
Height [h]	15.3 mm
Pitch	5 mm
Height (without solder pin)	11.2 mm

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Dimensions for the product

Solder pin [P]	4.1 mm
Pin dimensions	0.9 x 0.9 mm
Dimension a	45 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

Termination and connection method

Pull-out test

Pull-out test	IEC 60999-1:1990-05
	Test passed
Conductor cross section / conductor type / tensile force	0.2 mm² / solid / > 10 N
	0.2 mm² / flexible / > 10 N
	4 mm² / solid / > 60 N
	2.5 mm² / flexible / > 50 N

Mechanical tests according to standard

Test specification	IEC 60999-1 (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

Specification	IEC 60664-1:2007-04
Insulating material group	I
Voltage	250 V

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Technical data

Air clearances and creepage distances

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

Current carrying capacity / derating curves

Specification	IEC 60999-1 (in parts)
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Standards and Regulations

Connection in acc. with standard	EN-VDE
	CSA
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"

Approvals


Approvals

Approvals

CSA / CCA / SEV / EAC / cULus Recognized

Ex Approvals


Approval details


CSA		http://www.csagroup.org/services-industries/product-listing/	13631
	D	B	
Nominal voltage UN	300 V	300 V	
Nominal current IN	10 A	10 A	
mm²/AWG/kcmil	28-12	28-12	


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Approvals

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

SEV		https://www.electrosuisse.ch/de/meta/shop/produktezertifikate.html	IK-4199
Nominal voltage UN	250 V		
Nominal current IN	32 A		
mm ² /AWG/kcmil	4		

EAC		B.01742
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cULus Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	E60425-19870331
	D	B	
Nominal voltage UN	300 V	250 V	
Nominal current IN	10 A	15 A	
mm ² /AWG/kcmil	30-12	30-12	

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PHOENIX CONTACT GmbH & Co. KG
 Flachsmarktstr. 8
 32825 Blomberg
 Germany
 Tel. +49 5235 300
 Fax +49 5235 3 41200
<http://www.phoenixcontact.com>