

PCB terminal block - MKDSO 2,5/ 4-L - 1707234

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PCB terminal block, nominal current: 24 A, rated voltage (III/2): 400 V, nominal cross section: 2.5 mm², pitch: 5 mm, number of positions: 4, connection method: Screw connection with tension sleeve, mounting: Wave soldering, conductor/PCB connection direction: 0 °, color: green, Pin layout: Linear pinning, Solder pin [P]: 3.5 mm. Article with lateral pin exit

Your advantages

- ✓ PCB terminal block for ME/ME MAX electronics housing
- ✓ 5 mm pitch
- ✓ PCB terminal block orthogonal to the PCB
- ✓ PCB terminal block for series ME MAX and ME electronic housings
- ✓ Maintenance-free and vibration-resistant, thanks to the Reakdyn principle or spring-loaded elements
- ✓ PCB terminal block is orthogonal to the PCB
- ✓ Internationally recognized and proven screw connection

RoHS



Key Commercial Data

Packing unit	50 pc
GTIN	 4 017918 136826
GTIN	4017918136826
Weight per Piece (excluding packing)	7.660 g
Custom tariff number	85369010
Country of origin	Germany

Technical data

Item properties

Brief article description	PCB terminal block
Range of articles	MKDSO 2,5/...-L
Pitch	5 mm
Number of positions	4
Connection method	Screw connection with tension sleeve
Screw thread	M3

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Technical data

Item properties

Mounting type	Wave soldering
Pin layout	Linear pinning
Number of levels	1

Electrical parameters

Nominal current	24 A
Nom. voltage	400 V
Rated voltage	250 V
Rated voltage (III/2)	400 V
Rated 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

Connection capacity

Connection method	Screw connection with tension sleeve
Conductor cross section solid	0.14 mm² ... 2.5 mm²
Conductor cross section flexible	0.14 mm² ... 2.5 mm²
Conductor cross section AWG / kcmil	26 ... 14
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm² ... 2.5 mm²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm² ... 2.5 mm²
2 conductors with same cross section, solid	0.14 mm² ... 0.75 mm²
2 conductors with same cross section, flexible	0.14 mm² ... 0.75 mm²
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	0.25 mm² ... 0.75 mm²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm² ... 1.5 mm²
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

Housing color	green (6021)
Insulating material	PA
Insulating material group	I

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Technical data

Material data - housing

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]	15.3 mm
Pitch	5 mm
Height (without solder pin)	18 mm
Solder pin [P]	3.5 mm
Pin dimensions	1.1 x 0.8 mm

Dimensions for PCB design

Hole diameter	1.4 mm
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Packaging information

Pieces per package	250
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 ... 105 °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

Pull-out test	IEC 60998-2-1:1990-04
	Test passed
Conductor cross section / conductor type / tensile force	0.14 mm ² / solid / > 10 N
	0.14 mm ² / flexible / > 10 N
	2.5 mm ² / solid / > 50 N
	2.5 mm ² / flexible / > 50 N

Mechanical tests according to standard

Test specification	IEC 60998-2-1 (in parts)
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Electrical tests

Rated current	24 A
Conductor cross section	2.5 mm ²
Rated voltage (III/2)	400 V
Rated surge voltage (III/2)	4 kV

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Air clearances and creepage distances

Clearances and creepage distances	IEC 60664-1:2007-04
Specification	IEC 60664-1:2007-04
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

Temperature-rise test

Result	Test passed
Specification	IEC 60998-2-1:1990-04

Current carrying capacity / derating curves

Specification	IEC 60998-2-1 (in parts)
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Vibration test

Specification	IEC 60068-2-6:1995-03
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

Resistance to ageing, humidity and penetration of solids

Dry heat	168 h/100°C
Humid heat	48 h/30 °C/92 %

Standards and Regulations

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

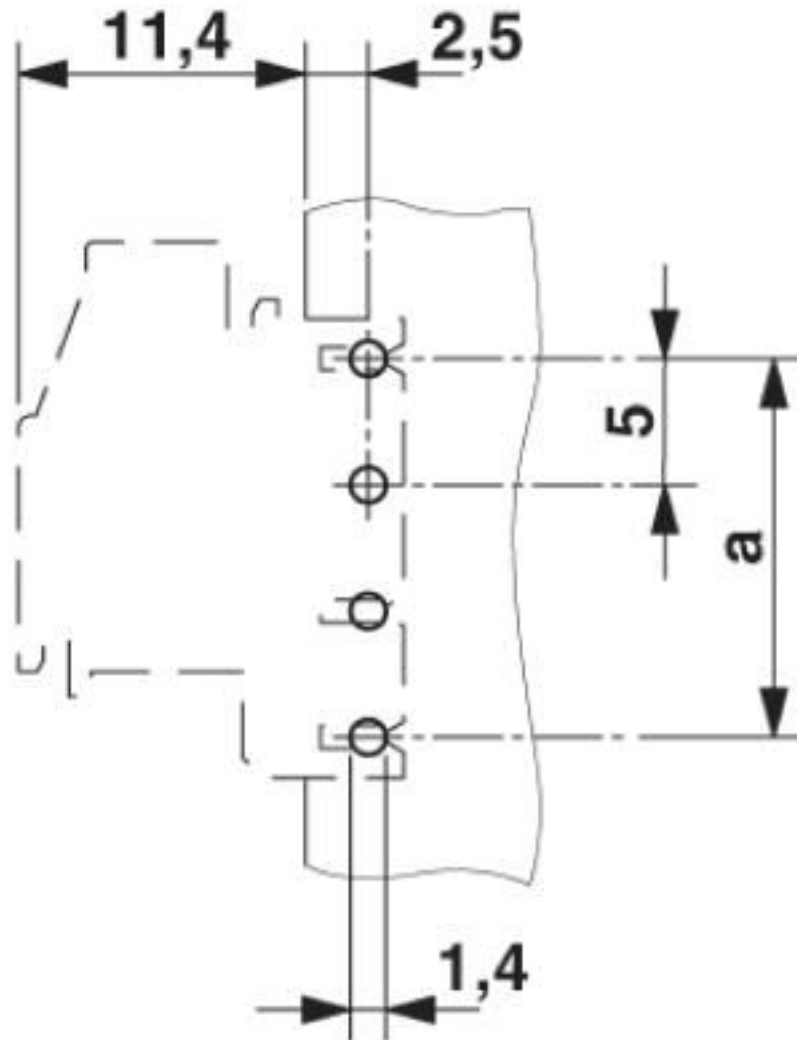
Environmental Product Compliance

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

Drawings

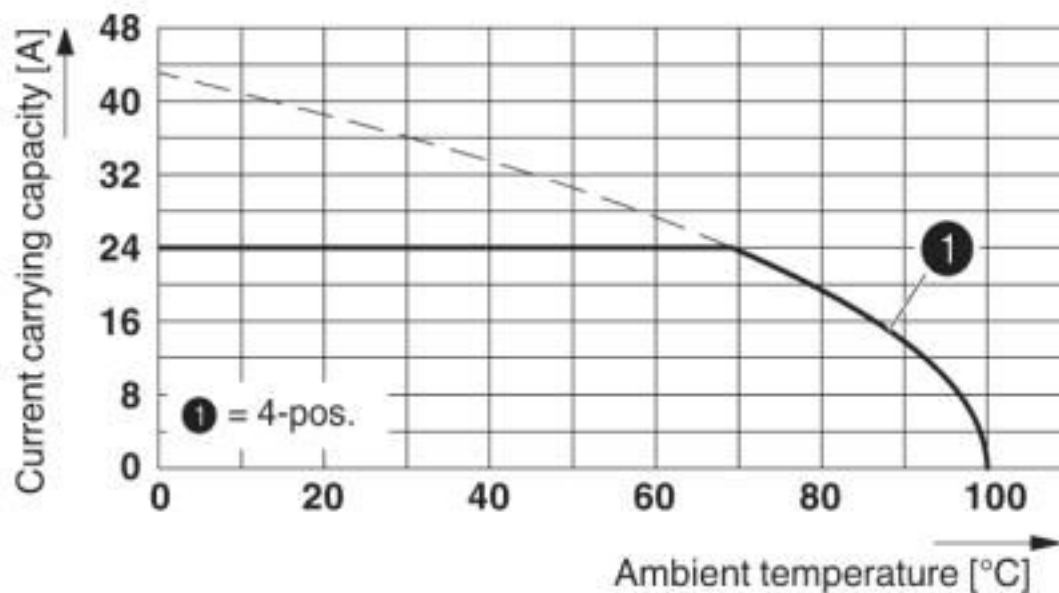
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Drilling diagram



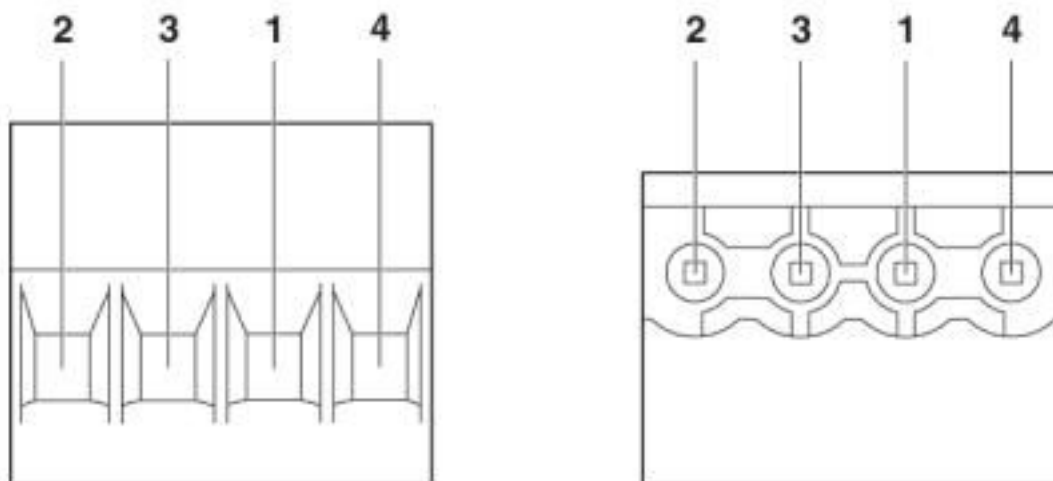
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Diagram



Type: MKDSO 2,5/4...L(R)
 Test based on DIN EN 60512-5-2:2003-01
 Reduction factor = 1
 Number of positions: 4

Schematic diagram



Pin assignment left

Classifications

eCl@ss

eCl@ss 10.0.1	27440401
eCl@ss 4.0	27180400

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Classifications

eCl@ss

eCl@ss 4.1	27180400
eCl@ss 5.0	27180500
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 2.0	EC001031
ETIM 3.0	EC001031
ETIM 4.0	EC002643
ETIM 5.0	EC002643
ETIM 6.0	EC002643
ETIM 7.0	EC002643

UNSPSC

UNSPSC 6.01	31261501
UNSPSC 7.0901	31261501
UNSPSC 11	31261501
UNSPSC 12.01	31261501
UNSPSC 13.2	39121432
UNSPSC 18.0	39121432
UNSPSC 19.0	39121432
UNSPSC 20.0	39121432
UNSPSC 21.0	39121432

Approvals

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CSA / IEC CB Scheme / VDE Gutachten mit Fertigungsüberwachung / EAC / cULus Recognized

Ex Approvals

Approval details

PCB terminal block - MKDSO 2,5/ 4-L - 1707234

Approvals

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

IECEE CB Scheme		http://www.iecee.org/	CB DE1-60046
Nominal voltage UN	450 V		
Nominal current IN	24 A		
mm²/AWG/kcmil	2.5		

VDE Gutachten mit Fertigungsüberwachung		http://www2.vde.com/de/Institut/Online-Service/ VDE-gepruefteProdukte/Seiten/Online-Suche.aspx	40023968
Nominal voltage UN	450 V		
Nominal current IN	24 A		
mm²/AWG/kcmil	0.2-2.5		

EAC			B.01687
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cULus Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	E60425-19770427
	B	D	
Nominal voltage UN	300 V	300 V	
Nominal current IN	20 A	10 A	
mm²/AWG/kcmil	30-12	30-12	

Accessories

Accessories

Mounting material

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Accessories

Shield connection clamp - ME-SAS - 2853899



Shield connection clamp for printed circuit terminal block