

PCB terminal block - MKDSP 50/ 3-17,5 - 1856139

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PCB terminal block, nominal current: 192 A, pitch: 17.5 mm, number of positions: 3, connection method: Screw connection with tension sleeve, mounting: Wave soldering, conductor/PCB connection direction: 0 °, color: green

Your advantages

- ✓ Well-known connection principle allows worldwide use
- ✓ Low temperature rise, thanks to maximum contact force
- ✓ Allows connection of two conductors
- ✓ Quick and convenient testing using integrated test option
- ✓ Integrated protective guide prevents incorrect insertion of the conductor underneath the tension sleeve



Key Commercial Data

Packing unit	1 pc
GTIN	 4 055626 029061
GTIN	4055626029061
Weight per Piece (excluding packing)	124.800 g
Custom tariff number	85369010
Country of origin	China

Technical data

Item properties

Brief article description	PCB terminal block
Range of articles	MKDSP 50
Pitch	17.5 mm
Number of positions	3
Connection method	Screw connection with tension sleeve

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Technical data

Item properties

Drive form screw head	Torx® (T20)
Screw thread	M6
Mounting type	Wave soldering
Pin layout	Linear 2x2 pinning
Number of levels	1
Number of connections	3
Number of potentials	3

Electrical parameters

Rated current	192 A
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Connection capacity

Conductor cross section solid	1.5 mm² ... 70 mm²
Single-wire/terminal point, stranded GRP	1.5 mm² ... 70 mm²
Conductor cross section flexible	1.5 mm² ... 70 mm²
Conductor cross section AWG / kcmil	16 ... 2/0
Conductor cross section flexible, with ferrule without plastic sleeve	1.5 mm² ... 50 mm²
Conductor cross section, flexible, with ferrule, with plastic sleeve	1.5 mm² ... 50 mm²
2 conductors with same cross section, solid	1.5 mm² ... 16 mm²
2 conductors with same cross section, flexible	1.5 mm² ... 25 mm²
2 conductors with same cross section, stranded, with TWIN ferrules with plastic sleeve	1.5 mm² ... 16 mm²
Stripping length	20 mm
Torque	5.5 Nm

Information on the aluminum conductor

Cross section-torque-form of cable	Cable cross section:50 mm²; Torque:5.5 Nm; Form of cable:sector-shaped, single-strand, class 1, $\alpha = 90^\circ$ (se)
	Cable cross section:35 mm²; Torque:5.5 Nm; Form of cable:round, single-strand, class 1(re)
	Cable cross section:25 mm²; Torque:5.5 Nm; Form of cable:round, single-strand, class 1(re)
	Cable cross section:16 mm²; Torque:5.5 Nm; Form of cable:round, single-strand, class 1(re)
Specification	DIN VDE 0276-603 (VDE 0276-603):2010-03
Note on conductor pretreatment	The following measures are required for durable and reliable contacting of the aluminum conductor: the stripped end of the aluminum conductor must be separated from the oxide layer using a blade, and immediately dipped in non-acid and non-alkali Vaseline. The pretreatment must be repeated when connecting the conductors anew.

Material data - contact

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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

Insulating material	PA
Insulating material group	I
CTI according to IEC 60112	600
Flammability rating according to UL 94	V0

Dimensions for the product

Length [l]	32 mm
Width [w]	55 mm
Height [h]	59 mm
Pitch	17.5 mm
Height (without solder pin)	55 mm
Solder pin [P]	4 mm
Pin dimensions	1.4 x 1.4 mm
Dimension a	35 mm

Dimensions for PCB design

Hole diameter	2.4 mm
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Packaging information

Type of packaging	packed in cardboard
Pieces per package	10
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 ... 100 °C (dependent on the derating curve)

Termination and connection method

Test for conductor damage and slackening	IEC 60999-1:1999-11
	Test passed

Pull-out test

Pull-out test	IEC 60999-1:1999-11
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Pull-out test

	Test passed
Conductor cross section / conductor type / tensile force	1.5 mm ² / solid / > 40 N
	1.5 mm ² / flexible / > 40 N
	70 mm ² / stranded / > 285 N
	70 mm ² / flexible / > 285 N
	50 mm ² / flexible with ferrule / > 236 N
	1.5 mm ² / flexible with ferrule / > 40 N

Electrical tests

Rated current	192 A
Conductor cross section	70 mm ²

Air clearances and creepage distances

Rated insulation voltage (III/3)	1000 V
Minimum clearance - inhomogeneous field (III/3)	8 mm
Minimum clearance - inhomogeneous field (III/2)	8 mm
Minimum clearance - inhomogeneous field (II/2)	5.5 mm
Minimum creepage distance value (III/3)	12.5 mm
Minimum creepage distance value (III/2)	8 mm
Minimum creepage distance value (II/2)	5.5 mm

Current carrying capacity / derating curves

Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

Classifications

eCl@ss

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 5.0	EC002643
ETIM 6.0	EC002643
ETIM 7.0	EC002643

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Classifications

UNSPSC

UNSPSC 13.2	39121432
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Approvals

Approvals

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IECEE CB Scheme / VDE Zeichengenehmigung / EAC / cULus Recognized

Ex Approvals

Approval details

IECEE CB Scheme		http://www.iecee.org/	DE1-55973
Nominal voltage UN	1000 V		
Nominal current IN	192 A		
mm²/AWG/kcmil	1.5-70		

VDE Zeichengenehmigung		http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx	40041859
Nominal voltage UN	1000 V		
Nominal current IN	192 A		
mm²/AWG/kcmil	1.5-70		

EAC		B.01742
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Approvals

cULus Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	E60425-19770427
	B	C	
Nominal voltage UN	600 V	600 V	
Nominal current IN	160 A	160 A	
mm²/AWG/kcmil	16	16	