PCB terminal block - MKDSP 50/ 4-17,5-F - 1856197

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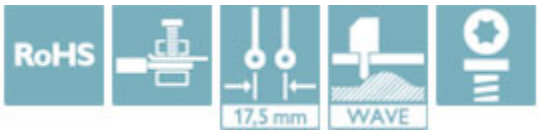
The figure shows a 3-position version

PCB terminal block, nominal current: 192 A, rated voltage (III/2): 1000 V, nominal cross section: 70 mm², pitch: 17.5 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 2x2 pinning, Solder pin [P]: 4 mm

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
- Mounting flanges reduce the mechanical strain on the soldering spots
- Integrated protective guide prevents incorrect insertion of the conductor underneath the tension sleeve



Key Commercial Data

Packing unit	1 pc
Minimum order quantity	10 pc
GTIN	4 055626 029030
GTIN	4055626029030
Weight per Piece (excluding packing)	174.000 g
Custom tariff number	85369010
Country of origin	China

Technical data

Item properties

Brief article description	PCB terminal block
Range of articles	MKDSP 50/..-FL

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Technical data

Item properties

Pitch	17.5 mm
Number of positions	4
Connection method	Screw connection with tension sleeve
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	4
Number of potentials	4

Electrical parameters

Nom. voltage	1000 V

Connection capacity

Connection method	Screw connection with tension sleeve
pluggable	no
Conductor cross section solid	1.5 mm² ... 70 mm²
Single-conductor/terminal point multi-stranded	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 the same cross section, stranded	1.5 mm² ... 25 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, α = 90°(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)

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Information on the aluminum conductor

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

Note	WEEE/RoHS-compliant, free of whiskers according to IEC 60068-2-82/ JEDEC JESD 201
Contact material	Cu alloy
Surface characteristics	galvanized
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]	97.7 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	52.5 mm

Dimensions for PCB design

Hole diameter	2.4 mm

Packaging information

Type of packaging	packed in cardboard
Pieces per package	10
Denomination packing units	Pcs.
Outer packaging type	Carton

Ambient conditions

Ambient temperature (storage/transport)	-40 °C ... 70 °C

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Technical data

Ambient conditions

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
	Test passed
Conductor cross section / conductor type / tensile force	1.5 mm² / solid / > 40 N
	1.5 mm² / flexible / > 40 N
	70 mm² / stranded / > 285 N
	70 mm² / flexible / > 285 N
	50 mm² / flexible with ferrule / > 236 N
	1.5 mm² / flexible with ferrule / > 40 N

Electrical tests

Rated current	192 A
Conductor cross section	70 mm²
Rated voltage (III/2)	1000 V
Rated surge voltage (III/2)	8 kV

Air clearances and creepage distances

Clearances and creepage distances	IEC 60664-1:2007-04
Specification	IEC 60664-1:2007-04
Rated insulation voltage (III/3)	1000 V
Rated insulation voltage (III/2)	1000 V
Rated insulation voltage (II/2)	1000 V
Rated surge voltage (III/3)	8 kV
Rated surge voltage (III/2)	8 kV
Rated surge voltage (II/2)	6 kV
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

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Technical data

Vibration test

Specification	IEC 60068-2-6:2007-12
Result	Test passed
Frequency	10 - 150 - 10 Hz
Sweep speed	1 octave/min
Amplitude	0.35 mm (10 - 60.1 Hz)
Test duration per axis	2.5 h

Environmental Product Compliance

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

Drawings

Drilling diagram

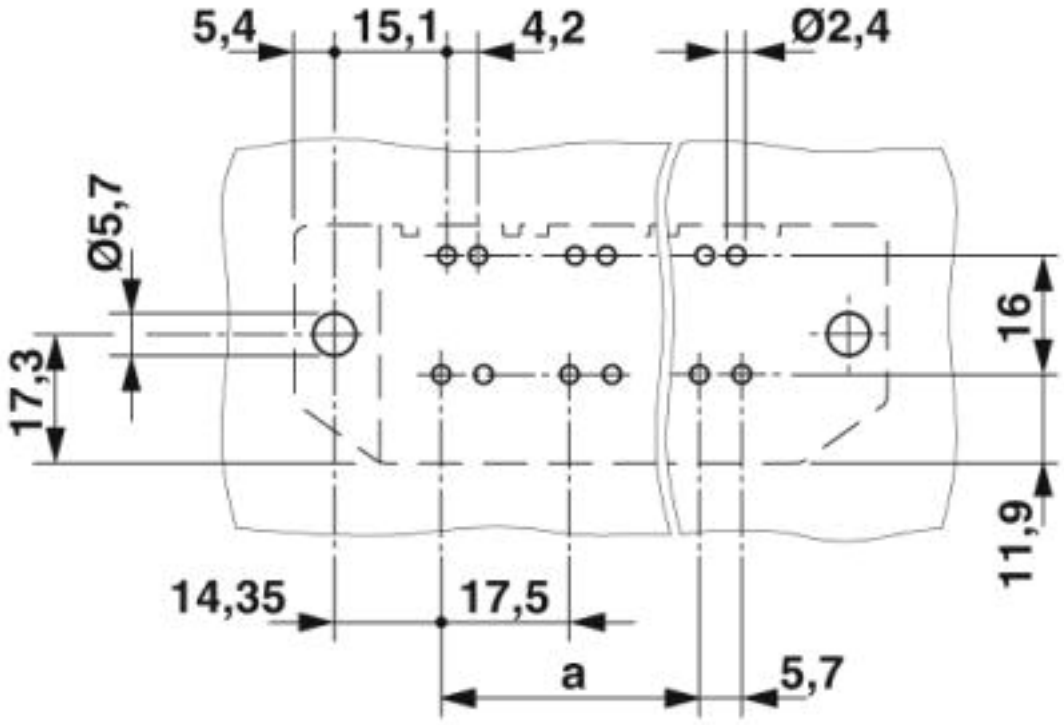

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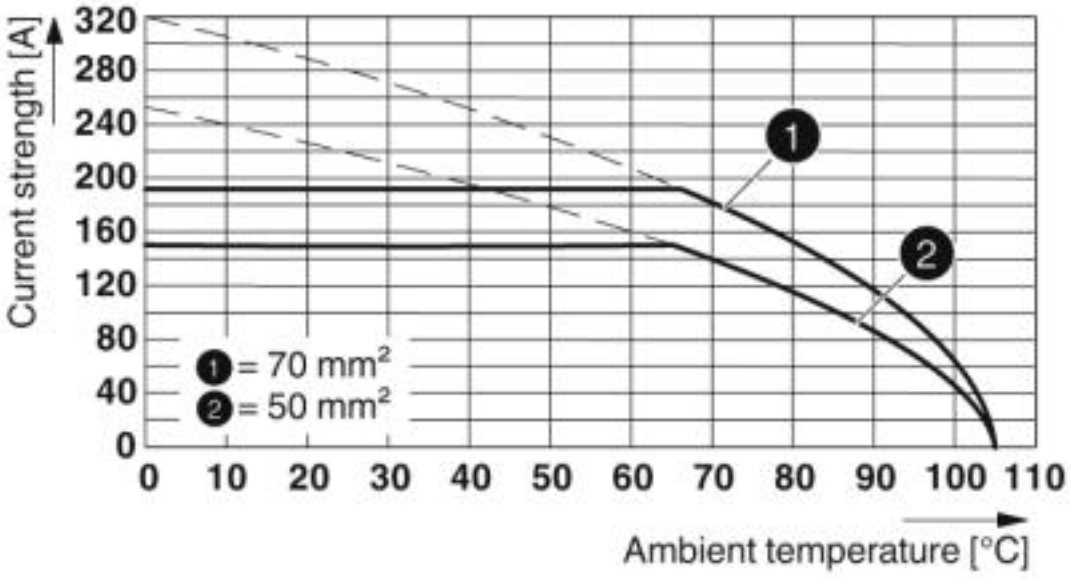
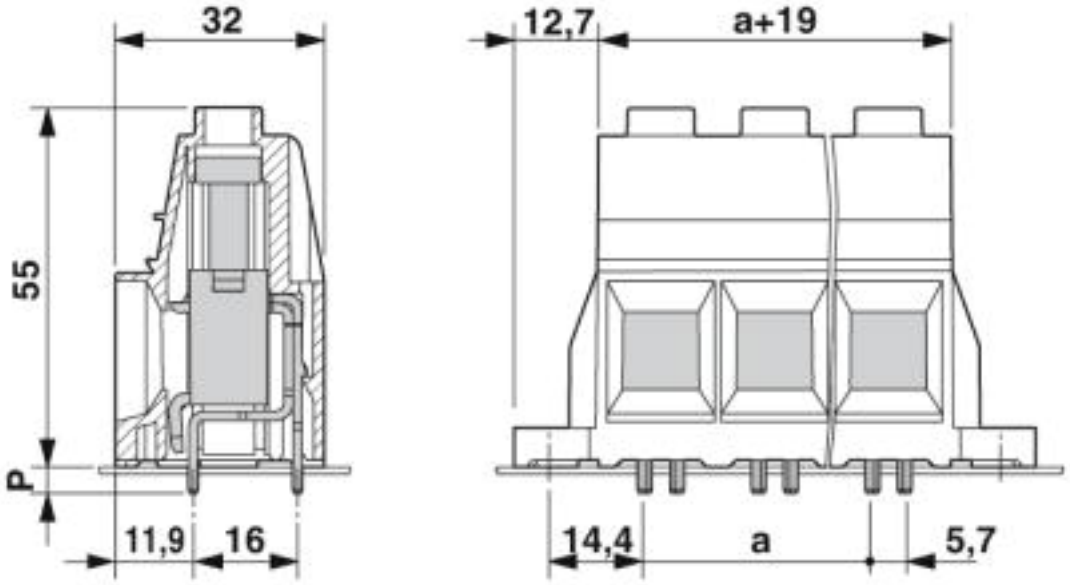
Diagram



Type: MKDSP 50/..-17,5-F

Dimensional drawing



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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

UNSPSC

UNSPSC 13.2	39121432
UNSPSC 18.0	39121432
UNSPSC 19.0	39121432
UNSPSC 20.0	39121432
UNSPSC 21.0	39121432

Approvals

Approvals

Approvals

IECEE CB Scheme / VDE Zeichengenehmigung / EAC / cULus Recognized

Ex Approvals

Approval details

IECEE CB Scheme	CB scheme	http://www.iecee.org/	DE1-55973

Nominal voltage UN	1000 V
Nominal current IN	192 A
mm²/AWG/kcmil	1.5-70

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Approvals

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

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