

PCB terminal block - MKDSP 50/ 1-17,5-FL - 1856168

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PCB terminal block, nominal current: 192 A, nom. voltage: 1000 V, pitch: 17.5 mm, number of positions: 1, connection method: Screw connection with tension sleeve, mounting: Wave soldering, conductor/PCB connection direction: 0 °, color: green

Why buy this product

- ✓ 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	10 STK
GTIN	
GTIN	4055626029016

Technical data

Item properties

Brief article description	PCB terminal block
Range of articles	MKDSP 50/..-FL
Pitch	17.5 mm
Number of positions	1
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

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Technical data

Electrical parameters

Rated current	192 A
Rated insulation voltage (III/2)	1000 V
Rated surge voltage (III/2)	8 kV

Connection capacity

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

Information on the aluminum conductor

Cross section-torque-form of cable	Cable cross section:50 mm ² ; Torque:5.5 Nm; Form of cable:sector-shaped, single-strand, class 1, $\alpha = 90^\circ$ (se)
	Cable cross section:35 mm ² ; Torque:5.5 Nm; Form of cable:round, single-strand, class 1(re)
	Cable cross section:25 mm ² ; Torque:5.5 Nm; Form of cable:round, single-strand, class 1(re)
	Cable cross section:16 mm ² ; 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

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 μ m Sn)
Metal surface soldering area (top layer)	Tin (4 - 8 μ m Sn)

Material data - housing

Housing color	green (6021)
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Dimensions for the product

Length [l]	32 mm
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Dimensions for the product

Width [w]	32.6 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	15 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.

Processing notes

Process	Wave soldering
Specification	Following IEC 61760-1:2006-04
	Following IEC 60068-2-54:2006-04

Ambient conditions

Ambient temperature (storage/transport)	-40 °C ... 70 °C
Ambient temperature (assembly)	-5 °C ... 100 °C
Ambient temperature (operation)	-40 °C

Electrical tests

Rated current	192 A
Rated insulation voltage (III/2)	1000 V
Rated surge voltage (III/2)	8 kV

Air clearances and creepage distances

Insulating material group	I
Comparative tracking index (IEC 60112:2003-01)	CTI 600
Voltage	1000 V
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

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Air clearances and creepage distances

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

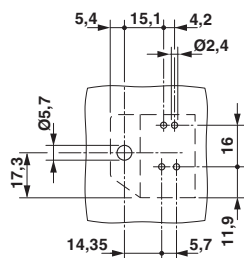
Current carrying capacity / derating curves

Environmental Product Compliance

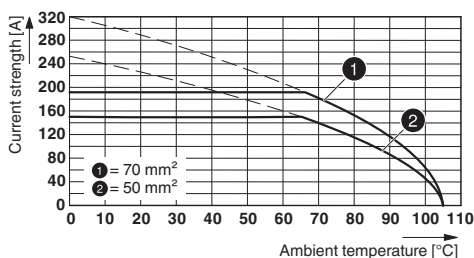
China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

Drawings

Drilling diagram

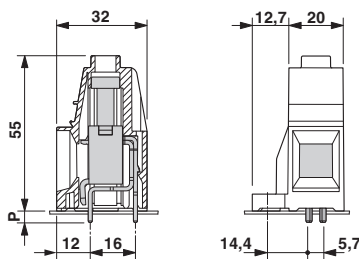


Diagram



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

Dimensional drawing



Approvals

Approvals

Approvals

cULus Recognized / VDE Zeichengenehmigung / IECCEB CB Scheme / EAC

Ex Approvals

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Approvals

Approval details

cULus Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	E60425-19770427
	B	C	
mm²/AWG/kcmil	16-2/0	16-2/0	
Nominal current I _N	160 A	160 A	
Nominal voltage U _N	600 V	600 V	

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

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

EAC		B.01742
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