PCB terminal block - MKDSP 25/ 7-15,00 - 1932630

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The figure shows a 5-pos. version of the product

PCB terminal block, nominal current: 125 A, rated voltage (III/2): 1000 V, nominal cross section: 35 mm², pitch: 15 mm, number of positions: 7, connection method: Screw connection with tension sleeve, mounting: Wave soldering, conductor/PCB connection direction: 0 °, color: green, Pin layout: Linear pinning, Solder pin [P]: 4.5 mm. Avoid placing permanent mechanical loads on the terminal

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
Minimum order quantity	25 pc
GTIN	4 017918 902131
GTIN	4017918902131
Weight per Piece (excluding packing)	146.550 g
Custom tariff number	85369010
Country of origin	Slovakia

Technical data

Item properties

Brief article description	PCB terminal block
Range of articles	MKDSP 25

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Technical data

Item properties

Pitch	15 mm
Number of positions	7
Connection method	Screw connection with tension sleeve
Drive form screw head	Philipps recess with slotted Torx (H1L)
Screw thread	M5
Mounting type	Wave soldering
Pin layout	Linear pinning
Number of levels	1
Number of connections	7
Number of potentials	7

Electrical parameters

Nominal current	125 A
Nom. voltage	1000 V
Rated voltage	1000 V
Rated voltage (III/2)	1000 V
Rated voltage (II/2)	1000 V
Rated surge voltage (III/3)	8 kV
Rated surge voltage (III/2)	8 kV
Rated surge voltage (II/2)	8 kV

Connection capacity

Connection method	Screw connection with tension sleeve
pluggable	no
Conductor cross section solid	0.5 mm² ... 35 mm²
Conductor cross section flexible	0.5 mm² ... 35 mm²
Conductor cross section AWG / kcmil	20 ... 2
Conductor cross section flexible, with ferrule without plastic sleeve	1 mm² ... 35 mm²
Conductor cross section, flexible, with ferrule, with plastic sleeve	1.5 mm² ... 35 mm²
2 conductors with same cross section, solid	0.5 mm² ... 6 mm²
2 conductors with same cross section, flexible	0.5 mm² ... 6 mm²
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	0.5 mm² ... 4 mm²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm² ... 16 mm²
Stripping length	18 mm
Torque	2.5 Nm ... 4.5 Nm (≤ 25 mm² = 2.5 Nm; 35 mm² = 4.5 Nm)

Information on the aluminum conductor

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Information on the aluminum conductor

Cross section-torque-form of cable	Cable cross section:35 mm²; Torque:4.5 Nm; Form of cable:round, single-strand, class 1(re)
	Cable cross section:25 mm²; Torque:2.5 Nm; Form of cable:round, single-strand, class 1(re)
	Cable cross section:16 mm²; Torque:2.5 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	Tin-plated
Metal surface terminal point (top layer)	Tin (5 - 7 µm Sn)
Metal surface soldering area (top layer)	Tin (5 - 7 µm Sn)

Material data - housing

Housing color	green (6021)
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

Caption	Schematische Abbildung - weitere Details siehe Produktfamilienzeichnung im Download Center
Length [l]	31 mm
Width [w]	105 mm
Height [h]	43.5 mm
Pitch	15 mm
Height (without solder pin)	39 mm
Solder pin [P]	4.5 mm
Pin dimensions	1.2 x 1.2 mm

Dimensions for PCB design

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Dimensions for PCB design

Hole diameter	1.6 mm

Packaging information

Type of packaging	packed in cardboard
Pieces per package	25
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 ... 100 °C (Depending on the current carrying capacity/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	0.5 mm² / solid / > 20 N
	0.5 mm² / flexible / > 20 N
	35 mm² / stranded / > 190 N
	35 mm² / flexible / > 190 N

Mechanical tests according to standard

Test specification	IEC 60947-7-4

Electrical tests

Rated current	125 A
Conductor cross section	35 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

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Technical data

Air clearances and creepage distances

Minimum clearance - inhomogeneous field (III/3)	8 mm
Minimum clearance - inhomogeneous field (III/2)	8 mm
Minimum clearance - inhomogeneous field (II/2)	8 mm
Minimum creepage distance value (III/3)	12.5 mm
Minimum creepage distance value (III/2)	8 mm
Minimum creepage distance value (II/2)	8 mm

Temperature-rise test

Specification	IEC 60947-7-4:2013-08
Result	Test passed
Requirement temperature-rise test	The sum of ambient temperature and temperature rise of the PCB terminal block shall not exceed the upper limiting temperature.

Current carrying capacity / derating curves

Caption	Type: MKDSP 25/...-15,00(-F)
Specification	IEC 60947-7-4:2013-08
Number of positions	4
Reduction factor	1
Note	Representation based on IEC 60512-5-2:2002-02

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)
Acceleration	5 g (60.1 - 150 Hz)
Test duration per axis	2.5 h

Insulation resistance

Specification	IEC 60512-3-1:2002-02
Result	Test passed
Insulation resistance, neighboring positions	> 1 TΩ

Glow-wire test

Specification	IEC 60695-2-10:2000-10
Result	Test passed
Temperature	850 °C
Time of exposure	5 s

Alternating climate test

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Technical data

Alternating climate test

Result	Test passed
Specification	ISO 6988:1985-02
Corrosive stress	KFW 0.2 S/1 cycle

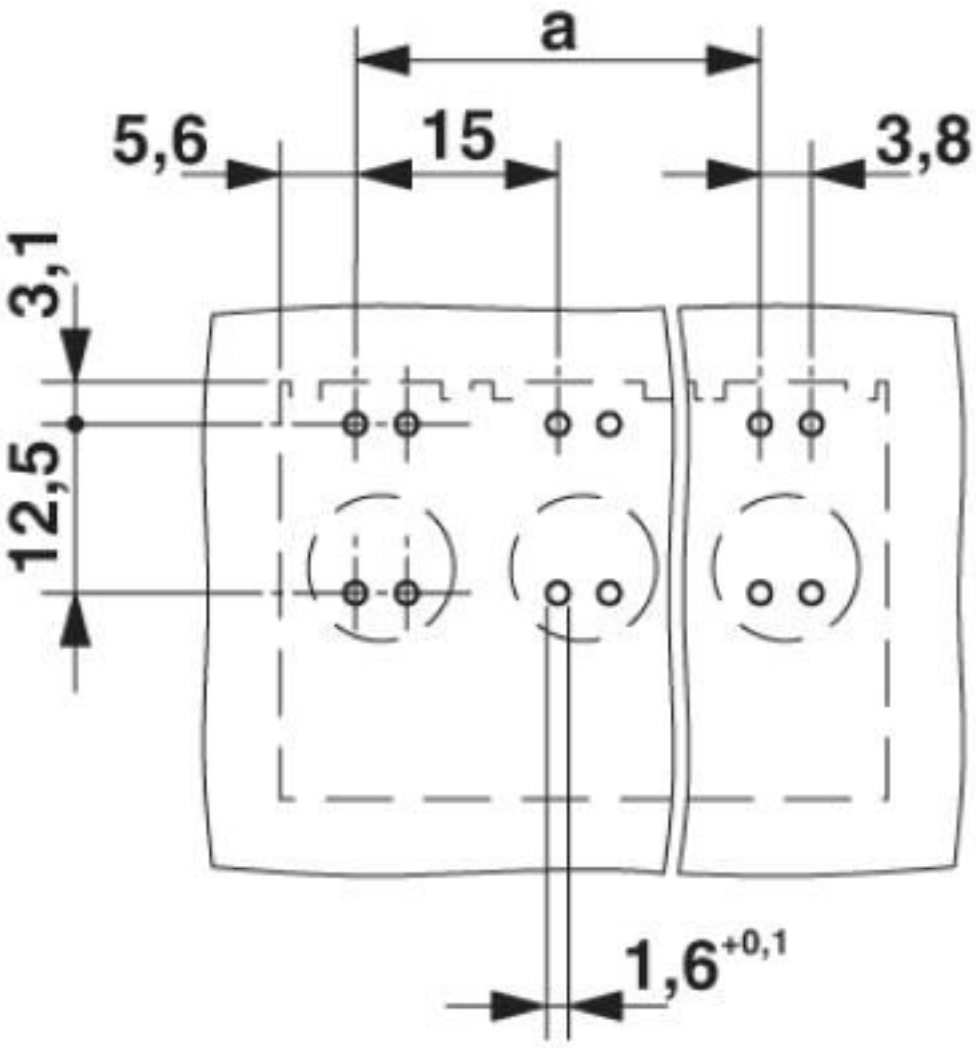
Environmental Product Compliance

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

Drawings

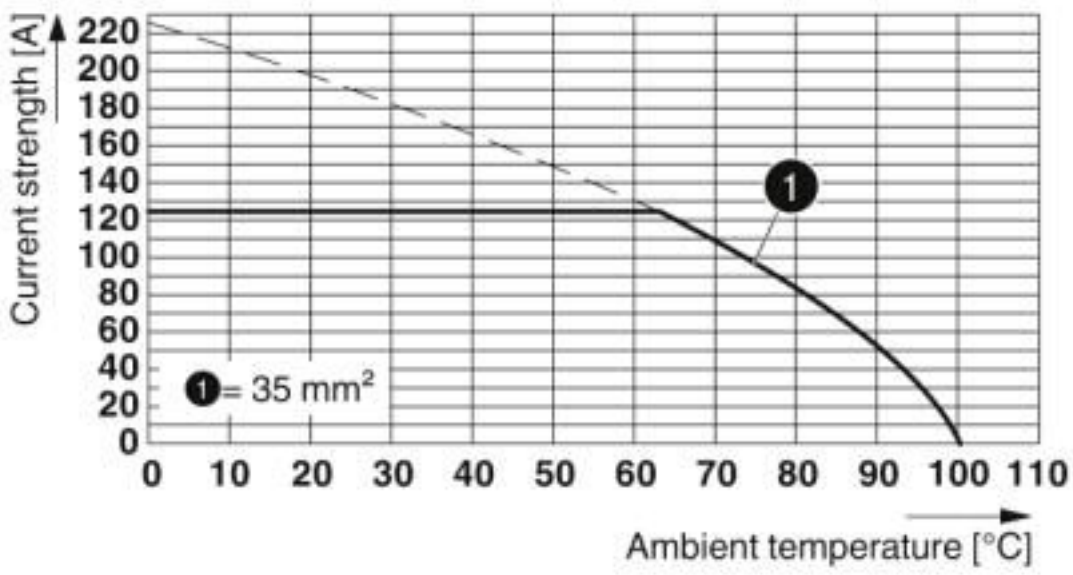
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Drilling diagram



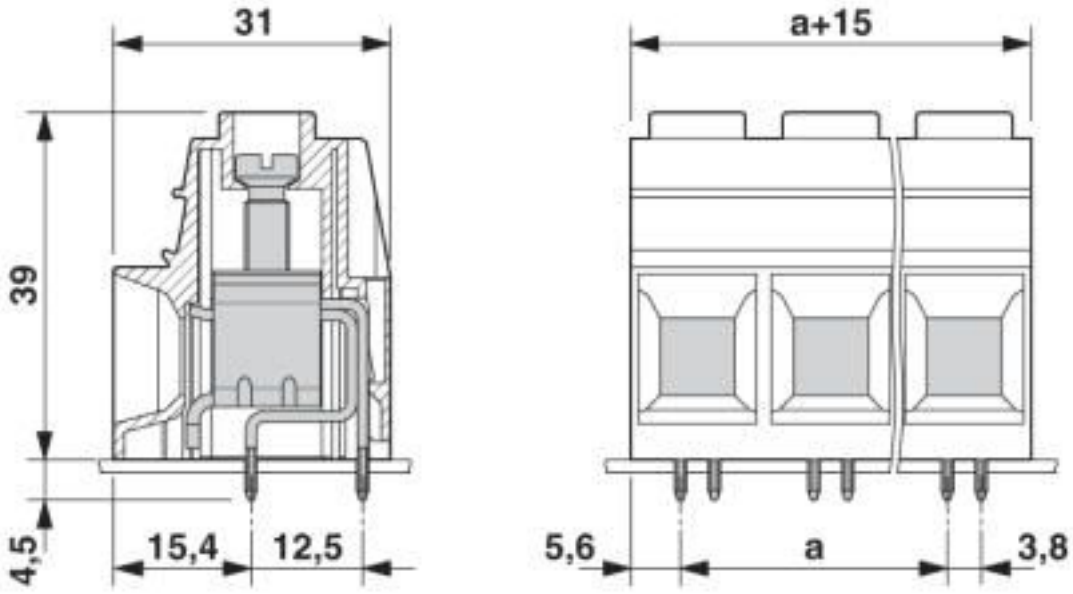
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Diagram



Type: MKDSP 25/...-15,00(-F)

Dimensional drawing



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Classifications

eCl@ss

eCl@ss 10.0.1	27440401
eCl@ss 4.0	27141100
eCl@ss 4.1	27141100
eCl@ss 5.0	27141100
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 3.0	EC001121
ETIM 4.0	EC002643
ETIM 5.0	EC002643
ETIM 6.0	EC002643
ETIM 7.0	EC002643

UNSPSC

UNSPSC 6.01	30211801
UNSPSC 7.0901	39121432
UNSPSC 11	39121432
UNSPSC 12.01	39121432
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 / SEV / VDE Zeichengenehmigung / EAC / cULus Recognized

Ex Approvals

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Approvals

Approval details

IECEE CB Scheme		http://www.iecee.org/	CH-10724-A1

Nominal voltage UN	1000 V
Nominal current IN	125 A
mm²/AWG/kcmil	35

SEV		https://www.eurofins.ch/de/	IK-4486-A1

Nominal voltage UN	1000 V
Nominal current IN	125 A
mm²/AWG/kcmil	35

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	125 A
mm²/AWG/kcmil	0.5-35

EAC		B.01687

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	115 A	115 A
mm²/AWG/kcmil	20-2	20-2

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Accessories

Accessories

Insulating sleeve

Insulating sleeve - MPS-IH WH - 0201663

Insulating sleeve, color: white



Insulating sleeve - MPS-IH RD - 0201676

Insulating sleeve, color: red



Insulating sleeve - MPS-IH BU - 0201689

Insulating sleeve, color: blue



Insulating sleeve - MPS-IH YE - 0201692

Insulating sleeve, color: yellow



Insulating sleeve - MPS-IH GN - 0201702

Insulating sleeve, color: green



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Accessories

Insulating sleeve - MPS-IH GY - 0201728



Insulating sleeve, color: gray

Insulating sleeve - MPS-IH BK - 0201731



Insulating sleeve, color: black

Labeled terminal marker

Zack Marker strip, flat - ZBF 15 CUS - 0825019



Zack Marker strip, flat, can be ordered: Strip, white, labeled according to customer specifications, mounting type: snap into flat marker groove, for terminal block width: 15 mm, lettering field size: 5.15 x 15.1 mm, Number of individual labels: 5

Screwdriver tools

Screwdriver - SZS 1,0X6,5 VDE - 1205079



Screwdriver, slot-headed, VDE insulated, size: 1.0 x 6.5 x 150 mm, 2-component grip, with non-slip grip

Terminal marking

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Accessories

Marker strip - SK 10,0 WH:REEL - 0812188



Marker strip, Roll, white, unlabeled, can be labeled with: THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, mounting type: adhesive, for terminal block width: 90000 mm, lettering field size: continuous x 10#mm, Number of individual labels: 54000

Zack Marker strip, flat - ZBF 15:UNBEDRUCKT - 0811202



Zack Marker strip, flat, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into flat marker groove, for terminal block width: 15 mm, lettering field size: 15 x 5.2 mm, Number of individual labels: 5

Test plug terminal block

Reducing plug - RPS - 0201647



Reducing plug, color: gray

Test plugs - MPS-MT - 0201744



Test plugs, with solder connection up to 1 mm² conductor cross section, color: gray

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