PCB terminal block - MKDS 5/12-6,35 - 1713846

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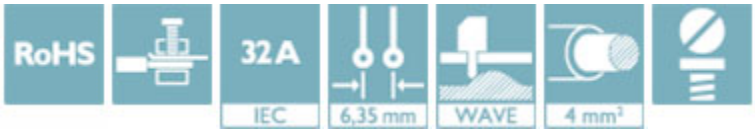


The figure shows the 5-pos. version

PCB terminal block, nominal current: 32 A, rated voltage (III/2): 630 V, nominal cross section: 4 mm², pitch: 6.35 mm, number of positions: 12, connection method: Screw connection with tension sleeve, mounting: Wave soldering, conductor/PCB connection direction: 0 °, color: green, Pin layout: Linear pinning, Solder pin [P]: 5.1 mm

Your advantages

- Well-known connection principle allows worldwide use
- Low temperature rise, thanks to maximum contact force
- Allows connection of two conductors
- The latching on the side enables various numbers of positions to be combined



Key Commercial Data

Packing unit	1 pc
Minimum order quantity	50 pc
GTIN	4 017918 228569
GTIN	4017918228569
Weight per Piece (excluding packing)	32.100 g
Custom tariff number	85369010
Country of origin	Germany

Technical data

Item properties

Brief article description	PCB terminal block
Range of articles	MKDS 5
Pitch	6.35 mm
Number of positions	12

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Technical data

Item properties

Connection method	Screw connection with tension sleeve
Drive form screw head	Slotted (L)
Screw thread	M3
Mounting type	Wave soldering
Pin layout	Linear pinning
Number of levels	1
Number of connections	12
Number of potentials	12

Electrical parameters

Nominal current	32 A
Nom. voltage	630 V
Rated voltage	500 V
Rated voltage (III/2)	630 V
Rated voltage (II/2)	1000 V
Rated surge voltage (III/3)	6 kV
Rated surge voltage (III/2)	6 kV
Rated surge voltage (II/2)	6 kV

Connection capacity

Connection method	Screw connection with tension sleeve
pluggable	Yes
Conductor cross section solid	0.2 mm² ... 6 mm²
Conductor cross section flexible	0.2 mm² ... 4 mm²
Conductor cross section AWG / kcmil	24 ... 10
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm² ... 4 mm²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm² ... 4 mm²
2 conductors with same cross section, solid	0.2 mm² ... 1.5 mm²
2 conductors with same cross section, flexible	0.2 mm² ... 1.5 mm²
2 conductors with same cross section, stranded, ferrules without plastic sleeve	0.25 mm² ... 0.75 mm²
2 conductors with same cross section, stranded, with TWIN ferrules with plastic sleeve	0.5 mm² ... 2.5 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

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Technical data

Material data - contact

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

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	Schematic representation – for additional information, see product range drawing in the Download Center
Length [l]	12.5 mm
Width [w]	76.2 mm
Height [h]	26.6 mm
Pitch	6.35 mm
Height (without solder pin)	21.5 mm
Solder pin [P]	5.1 mm
Pin dimensions	0.9 x 0.9 mm
Dimension a	69.85 mm

Dimensions for PCB design

Hole diameter	1.3 mm

Packaging information

Type of packaging	packed in cardboard
Pieces per package	50
Denomination packing units	Pcs.

General product information

Type of note	Note on application
Note	For safe conductor connection, always adhere to a defined tightening torque. Particularly in the case of PCB terminal blocks with two or three positions, the individual solder pin for each contact point cannot compensate for this. That is why the terminal blocks must be supported during conductor connection (held with one hand, support on the housing).

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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 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	0.2 mm² / solid / > 10 N
	0.2 mm² / flexible / > 10 N
	6 mm² / solid / > 80 N
	4 mm² / flexible / > 60 N

Electrical tests

Rated current	32 A
Conductor cross section	4 mm²
Rated voltage (III/2)	630 V
Rated surge voltage (III/2)	6 kV

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)	5.5 mm
Minimum clearance - inhomogeneous field (III/2)	5.5 mm
Minimum clearance - inhomogeneous field (II/2)	5.5 mm
Minimum creepage distance value (III/3)	6.3 mm
Minimum creepage distance value (III/2)	5.5 mm
Minimum creepage distance value (II/2)	5.5 mm
Note on connection cross section	With connected conductor 6 mm² (solid).

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)

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Technical data

Vibration test

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/25 °C/92%

Standards and Regulations

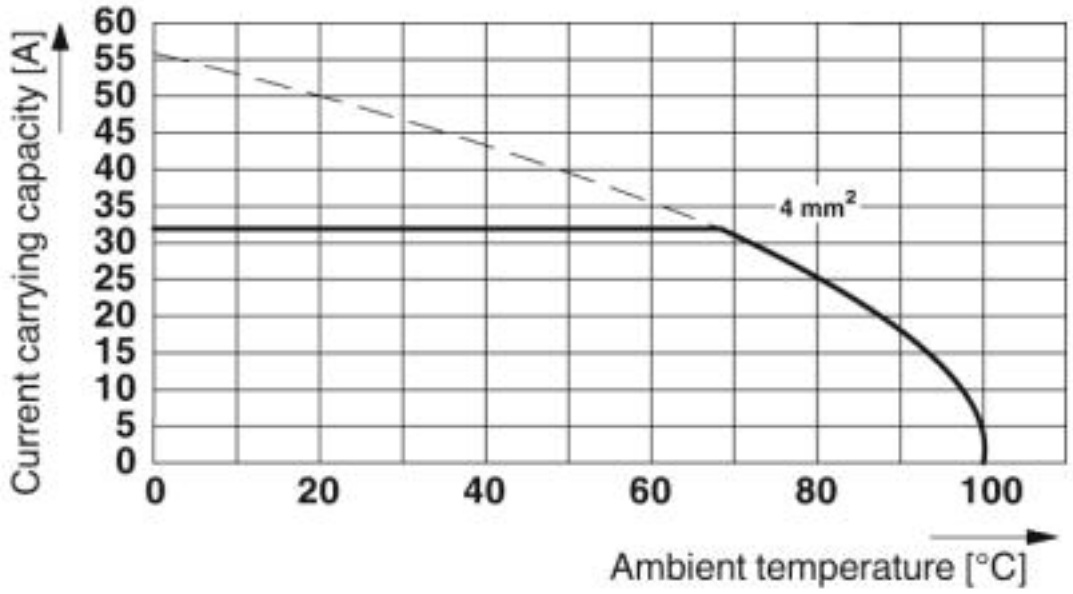
Connection in acc. with standard	EN-VDE
	CSA
Flammability rating according to UL 94	V0

Environmental Product Compliance

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

Drawings

Diagram



Type: MKDS 5/2-6,35 and MKDS 5/3-6,35
Test following DIN EN 60512-5-2:2003-01
Reduction factor = 1

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No. of positions: 5

Classifications

eCl@ss

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

DNV GL / CSA / RS / CCA / SEV / EAC / cULus Recognized / IECEE CB Scheme

Ex Approvals

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Approvals

Approval details

DNV GL	https://approvalfinder.dnvgl.com/	TAE00001EV

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	28-10	28-10

RS	http://www.rs-head.spb.ru/en/index.php	17.00014.272

CCA	IK-3249
Nominal voltage UN	450 V
mm²/AWG/kcmil	4

SEV	https://www.electrosuisse.ch/de/meta/shop/produktezertifikate.html	IK-4497

Nominal voltage UN	450 V
Nominal current IN	32 A
mm²/AWG/kcmil	4

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	D
Nominal voltage UN	300 V	300 V
Nominal current IN	30 A	10 A
mm²/AWG/kcmil	30-10	30-10

IECEE CB Scheme		http://www.iecee.org/	CH-10787

Nominal voltage UN	450 V
Nominal current IN	32 A
mm²/AWG/kcmil	4

Accessories

Accessories

Labeled terminal marker

Marker card - SK 6,2/3,8:FORTL.ZAHLEN - 0804374



Marker card, Card, white, labeled, Horizontal: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 91 ... (99)100, mounting type: adhesive, for terminal block width: 6.2 mm, lettering field size: 6.2 x 3.8 mm

Marker card - SK 3,8 REEL P6,2 WH CUS - 0825126



Marker card, Card, can be ordered: By card, white, labeled according to customer specifications, mounting type: adhesive, for terminal block width: 6.2 mm, lettering field size: continuous x 3.8 mm

Screwdriver tools

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Accessories

Screwdriver - SZS 0,6X3,5 - 1205053



Actuation tool, for ST terminal blocks, insulated, also suitable for use as a bladed screwdriver, size: 0.6 x 3.5 x 100 mm, 2-component grip, with non-slip grip

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Terminal marking

Marker strip - SK 5,0 WH:REEL - 0805221



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: 5 mm, lettering field size: continuous x 5 mm, Number of individual labels: 90000

Marker strip - SK 3,8 WH:REEL - 0805218



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 3.8 mm, Number of individual labels: 210000

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