

PCB terminal block - MKDS 1,5/ 2-5,08 - 1715721

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PCB terminal block, nominal current: 17.5 A, nom. voltage: 400 V, pitch: 5.08 mm, number of positions: 2, connection method: Screw connection with tension sleeve, mounting: Wave soldering, conductor/PCB connection direction: 0°, color: green. The article can be aligned to create different nos. of positions!



The figure shows a 10-position version of the product

Why buy this product

- 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	250 pc
GTIN	
GTIN	4017918024192

Technical data

Item properties

Brief article description	PCB terminal block
Range of articles	MKDS 1,5
Pitch	5.08 mm
Number of positions	2
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

Electrical parameters

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Technical data

Electrical parameters

Rated current	17.5 A
Rated insulation voltage (III/2)	400 V
Rated surge voltage (III/2)	4 kV

Connection capacity

Conductor cross section solid	0.14 mm ² ... 2.5 mm ²
Conductor cross section flexible	0.14 mm ² ... 1.5 mm ²
Conductor cross section AWG / kcmil	26 ... 14
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm ² ... 1.5 mm ²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm ² ... 1.5 mm ²
2 conductors with same cross section, solid	0.14 mm ² ... 1 mm ²
2 conductors with same cross section, flexible	0.14 mm ² ... 0.75 mm ²
2 conductors with same cross section, stranded, ferrules without plastic sleeve	0.25 mm ² ... 0.5 mm ²
2 conductors with same cross section, stranded, with TWIN ferrules with plastic sleeve	0.5 mm ² ... 1 mm ²

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

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]	9.8 mm
Width [w]	10.16 mm
Height [h]	17.3 mm
Pitch	5.08 mm
Height (without solder pin)	13.8 mm
Solder pin [P]	3.5 mm

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Technical data

Dimensions for the product

Pin dimensions	0.9 x 0.9 mm
Dimension a	5.08 mm

Dimensions for PCB design

Hole diameter	1.3 mm
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Packaging information

Type of packaging	packed in cardboard
Pieces per package	250
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

Termination and connection method

Pull-out test

Pull-out test	IEC 60998-2-1:1990-04
	Test passed
Conductor cross section / conductor type / tensile force	0.14 mm ² / solid / > 10 N
	0.14 mm ² / flexible / > 10 N
	2.5 mm ² / solid / > 50 N
	1.5 mm ² / flexible / > 40 N

Mechanical tests according to standard

Test specification	IEC 60998-2-1 (in parts)
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Electrical tests

Rated current	17.5 A
Rated insulation voltage (III/2)	400 V
Rated surge voltage (III/2)	4 kV

Air clearances and creepage distances

Insulating material group	I
Comparative tracking index (IEC 60112:2003-01)	CTI 600
Voltage	250 V
Rated insulation voltage (III/3)	250 V
Rated insulation voltage (III/2)	400 V
Rated insulation voltage (II/2)	630 V

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Technical data

Air clearances and creepage distances

Rated surge voltage (III/3)	4 kV
Rated surge voltage (III/2)	4 kV
Rated surge voltage (II/2)	4 kV
Minimum clearance - inhomogeneous field (III/3)	3 mm
Minimum clearance - inhomogeneous field (III/2)	3 mm
Minimum clearance - inhomogeneous field (II/2)	3 mm
Minimum creepage distance value (III/3)	3.2 mm
Minimum creepage distance value (III/2)	3 mm
Minimum creepage distance value (II/2)	3.2 mm
Note on connection cross section	With connected conductor 2.5 mm ² (solid).

Current carrying capacity / derating curves

Specification	IEC 60998-2-1 (in parts)
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Vibration test

Resistance to ageing, to humidity conditions, to ingress of solid objects and to harmful ingress of water	Test passed IEC 60998-2-1:1990-04 168 h/100°C 48 h/30 °C/92 %
Test result	Test passed
Test specification	IEC 60998-2-1:1990-04
Dry heat	168 h/100°C
Humid heat	48 h/30 °C/92 %

Resistance to ageing, humidity and penetration of solids

Test result	Test passed
Test specification	IEC 60998-2-1:1990-04
Dry heat	168 h/100°C
Humid heat	48 h/30 °C/92 %

Standards and Regulations

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

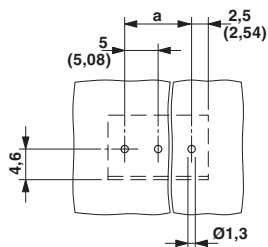
Environmental Product Compliance

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

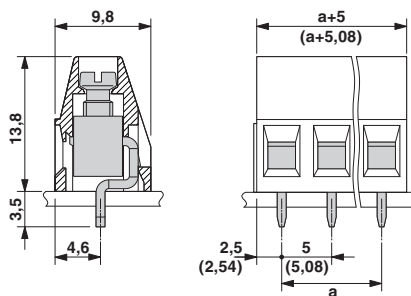
Drawings

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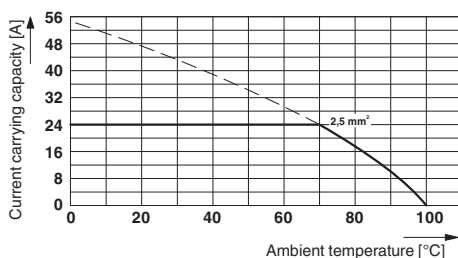
Drilling diagram



Dimensional drawing



Diagram



Type: MKDS 1,5/2 and MKDS 1,5/3
 Test as per DIN EN 60512-5-2:2003-01
 Reduction factor = 1
 No. of positions: 5

Approvals

Approvals

Approvals

CSA / SEV / CCA / EAC / cULus Recognized / DNV GL / IECCEB CB Scheme


Ex Approvals

Approval details


CSA		http://www.csagroup.org/services-industries/product-listing/	13631
	D	B	
Nominal voltage UN	300 V	300 V	
Nominal current IN	10 A	10 A	
mm²/AWG/kcmil	28-14	28-14	


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Approvals


SEV		https://www.electrosuisse.ch/en/meta/shop/product-certificates.html	IK-4199
Nominal voltage UN		250 V	
Nominal current IN		24 A	
mm ² /AWG/kcmil		2.5	

CCA	IK-3249		
Nominal voltage UN		250 V	
mm ² /AWG/kcmil		2.5	

EAC		B.01742
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cULus Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	E60425-19770427
Nominal voltage UN		D 300 V	B 300 V
Nominal current IN		10 A	15 A
mm ² /AWG/kcmil		30-14	30-14

DNV GL	http://exchange.dnv.com/tari/	TAE00001EV
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IECEE CB Scheme		http://www.iecee.org/	CH-8225
Nominal voltage UN		250 V	
Nominal current IN		24 A	
mm ² /AWG/kcmil		2.5	

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