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## PCB terminal block - MKDS 1,5/ 8-5,08 BD:1-8 - 1715886

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PCB terminal block, nominal current: 17.5 A, nom. voltage: 400 V , pitch: 5.08 mm , number of positions: 8, connection method: Screw connection with tension sleeve, mounting: Wave soldering, conductor/PCB connection direction: $0^{\circ}$, color: green

The figure shows a combination as a 15-position version

Why buy this product
$\square$ Well-known connection principle allows worldwide use
$\boxed{\text { Low temperature rise, thanks to maximum contact force }}$
$\checkmark$ Allows connection of two conductors
$\square$ The latching on the side enables various numbers of positions to be combined


## Key Commercial Data

| Packing unit | 50 STK |
| :---: | :---: |
| GTIN |  |
| GTIN | 4017918231361 |

## Technical data

Item properties

| Brief article description | PCB terminal block |
| :--- | :--- |
| Range of articles | MKDS 1,5 |
| Pitch | 5.08 mm |
| Number of positions | 8 |
| 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

## PCB terminal block - MKDS 1,5/ 8-5,08 BD:1-8 - 1715886

## 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 | $0.14 \mathrm{~mm}^{2} \ldots 2.5 \mathrm{~mm}^{2}$ |
| :--- | :--- |
| Conductor cross section flexible | $0.14 \mathrm{~mm}^{2} \ldots 1.5 \mathrm{~mm}^{2}$ |
| Conductor cross section AWG / kcmil | $26 \ldots 14$ |
| Conductor cross section flexible, with ferrule without plastic sleeve | $0.25 \mathrm{~mm}^{2} \ldots 1.5 \mathrm{~mm}^{2}$ |
| Conductor cross section, flexible, with ferrule, with plastic sleeve | $0.25 \mathrm{~mm}^{2} \ldots 1.5 \mathrm{~mm}^{2}$ |
| 2 conductors with same cross section, solid | $0.14 \mathrm{~mm}^{2} \ldots 1 \mathrm{~mm}^{2}$ |
| 2 conductors with same cross section, flexible | $0.14 \mathrm{~mm}^{2} \ldots 0.75 \mathrm{~mm}^{2}$ |
| 2 conductors with same cross section, stranded, ferrules without plastic <br> sleeve | $0.25 \mathrm{~mm}^{2} \ldots 0.5 \mathrm{~mm}^{2}$ |
| 2 conductors with same cross section, stranded, with TWIN ferrules with <br> plastic sleeve | $0.5 \mathrm{~mm}^{2} \ldots 1 \mathrm{~mm}^{2}$ |

Material data - contact

| Note | WEEE/RoHS-compliant, free of whiskers according to IEC 60068-2-82/ <br> JEDEC JESD 201 |
| :--- | :--- |
| Contact material | Cu alloy |
| Surface characteristics | Tin-plated |
| Metal surface terminal point (top layer) | Tin $(4-8 \mu \mathrm{~m} \mathrm{Sn})$ |
| Metal surface soldering area (top layer) | Tin $(4-8 \mu \mathrm{~m} \mathrm{Sn})$ |

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 | $125^{\circ} \mathrm{C}$ |

Dimensions for the product

| Caption | Schematic representation - for additional information, see product range <br> drawing in the Download Center |
| :--- | :--- |
| Length [ I ] | 9.8 mm |
| Width [ w ] | 40.64 mm |
| Height [ h ] | 17.3 mm |
| Pitch | 5.08 mm |
| Height (without solder pin) | 13.8 mm |
| Solder pin [P] | 3.5 mm |

## PCB terminal block - MKDS 1,5/ 8-5,08 BD:1-8 - 1715886

## Technical data

Dimensions for the product

| Pin dimensions | $0.9 \times 0.9 \mathrm{~mm}$ |
| :--- | :--- |
| Dimension a | 35.56 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. |

Ambient conditions

| Ambient temperature (storage/transport) | $-40^{\circ} \mathrm{C} \ldots 70^{\circ} \mathrm{C}$ |
| :--- | :--- |
| Ambient temperature (assembly) | $-5^{\circ} \mathrm{C} \ldots 100^{\circ} \mathrm{C}$ |
| Ambient temperature (operation) | $-40^{\circ} \mathrm{C}$ |

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 | $0.14 \mathrm{~mm}^{2}$ solid $10 \mathrm{~N}>0.14 \mathrm{~mm}^{2} /$ solid $/>10 \mathrm{~N}$ |
|  | $0.14 \mathrm{~mm}^{2}$ flexible $10 \mathrm{~N}>0.14 \mathrm{~mm}^{2} /$ flexible $/>10 \mathrm{~N}$ |
|  | $2.5 \mathrm{~mm}^{2}$ solid $50 \mathrm{~N}>2.5 \mathrm{~mm}^{2} / \mathrm{solid} />50 \mathrm{~N}$ |
|  | $1.5 \mathrm{~mm}^{2}$ flexible $40 \mathrm{~N}>1.5 \mathrm{~mm}^{2} /$ flexible / $>40 \mathrm{~N}$ |

Mechanical tests according to standard

| Test specification | IEC 60998-2-1 (in parts) |
| :--- | :--- |

## 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 |
| 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 |

## PCB terminal block - MKDS 1,5/ 8-5,08 BD:1-8 - 1715886

Technical data
Air clearances and creepage distances

| 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 $2.5 \mathrm{~mm}^{2}$ (solid). |

Current carrying capacity / derating curves

| Specification | IEC 60998-2-1 (in parts) |
| :--- | :--- |

Vibration test

| Resistance to ageing, to humidity conditions, to ingress of solid objects <br> and to harmful ingress of water | Test passed IEC 60998-2-1:1990-04 $168 \mathrm{~h} / 100^{\circ} \mathrm{C} 48 \mathrm{~h} / 30{ }^{\circ} \mathrm{C} / 92 \%$ |
| :--- | :--- |
| Test result | Test passed |
| Test specification | IEC $60998-2-1: 1990-04$ |
| Dry heat | $168 \mathrm{~h} / 100^{\circ} \mathrm{C}$ |
| Humid heat | $48 \mathrm{~h} / 30^{\circ} \mathrm{C} / 92 \%$ |

Resistance to ageing, humidity and penetration of solids

| Test result | Test passed |
| :--- | :--- |
| Test specification | IEC $60998-2-1: 1990-04$ |
| Dry heat | $168 \mathrm{~h} / 100^{\circ} \mathrm{C}$ |
| Humid heat | $48 \mathrm{~h} / 30^{\circ} \mathrm{C} / 92 \%$ |

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", <br> Category "Manufacturer's declaration" |

## Approvals

## Approvals

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

## Ex Approvals

PCB terminal block - MKDS 1,5/ 8-5,08 BD:1-8-1715886
Approvals

Approval details

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


| SEV |  |
| :--- | :--- |
|  |  |
| Nominal voltage UN | 250 V |
| Nominal current IN | 24 A |
| $\mathrm{~mm}^{2} /$ AWG/kcmil | 2.5 |


| CCA |  |
| :--- | :--- |
|  |  |
| Nominal voltage UN | 250 V |
| $\mathrm{~mm}^{2} /$ AWG/kcmil | 2.5 |

EAC
EHI
B. 01742

| cULus Recognized |  | D |
| :--- | :--- | :--- |
|  | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm E60425-19770427 |  |
| Nominal voltage UN | 300 V | B |
| Nominal current IN | 10 A | 300 V |
| $\mathrm{~mm}^{2 /} / \mathrm{AWG} / \mathrm{kcmil}$ | $30-14$ | 15 A |


| DNV GL | http://exchange.dnv.com/tari/ | TAE00001EV |
| :---: | :---: | :---: |
| IECEE CB Scheme | http://www.iecee.org/ | CH-8225 |
| Nominal voltage UN | 250 V |  |

## PCB terminal block - MKDS 1,5/ 8-5,08 BD:1-8 - 1715886

## Approvals

|  |  |
| :--- | :--- |
| Nominal current IN | 24 A |
| $\mathrm{~mm}^{2} /$ AWG/kcmil | 2.5 |

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