

PCB terminal block - GMKDS 3/ 2-7,62 - 1731721

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PCB terminal block, nominal current: 24 A, pitch: 7.62 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!

Your advantages

- Well-known connection principle allows worldwide use
- Low temperature rise, thanks to maximum contact force
- Allows connection of two conductors
- Larger pitch for increased voltage requirements
- Integrated protective guide prevents incorrect insertion of the conductor underneath the tension sleeve
- The latching on the side enables various numbers of positions to be combined



Key Commercial Data

| | |
|--------------------------------------|---|
| Packing unit | 1 pc |
| Minimum order quantity | 100 pc |
| GTIN |  4 017918 026400 |
| GTIN | 4017918026400 |
| Weight per Piece (excluding packing) | 4.840 g |
| Custom tariff number | 85369010 |
| Country of origin | Germany |

Technical data

Item properties

| | |
|---------------------------|--------------------|
| Brief article description | PCB terminal block |
| Range of articles | GMKDS 3 |
| Pitch | 7.62 mm |

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Technical data

Item properties

| | |
|-----------------------|--------------------------------------|
| 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 |
| Number of connections | 2 |
| Number of potentials | 2 |

Connection capacity

| | |
|--|---|
| Conductor cross section solid | 0.2 mm ² ... 4 mm ² |
| Conductor cross section flexible | 0.2 mm ² ... 2.5 mm ² |
| Conductor cross section AWG / kcmil | 24 ... 12 |
| Conductor cross section flexible, with ferrule without plastic sleeve | 0.25 mm ² ... 2.5 mm ² |
| Conductor cross section, flexible, with ferrule, with plastic sleeve | 0.25 mm ² ... 2.5 mm ² |
| 2 conductors with same cross section, solid | 0.2 mm ² ... 1.5 mm ² |
| 2 conductors with same cross section, flexible | 0.2 mm ² ... 1.5 mm ² |
| 2 conductors with same cross section, stranded, ferrules without plastic sleeve | 0.25 mm ² ... 0.75 mm ² |
| 2 conductors with same cross section, stranded, with TWIN ferrules with plastic sleeve | 0.5 mm ² ... 1.5 mm ² |
| 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 |
| 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

| | |
|--|-----|
| 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 |

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Material data - housing

| | |
|---|--------|
| Temperature for the ball pressure test according to EN 60695-10-2 | 125 °C |
|---|--------|

Dimensions for the product

| | |
|-----------------------------|--------------|
| Length [l] | 11.2 mm |
| Width [w] | 15.24 mm |
| Height [h] | 23 mm |
| Pitch | 7.62 mm |
| Height (without solder pin) | 18 mm |
| Solder pin [P] | 5 mm |
| Pin dimensions | 0.9 x 0.9 mm |
| Dimension a | 7.62 mm |

Dimensions for PCB design

| | |
|---------------|--------|
| Hole diameter | 1.3 mm |
|---------------|--------|

Packaging information

| | |
|----------------------------|---------------------|
| Type of packaging | packed in cardboard |
| Pieces per package | 100 |
| 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). |

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 60998-2-1:1990-04 |
| | Test passed |

Pull-out test

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Technical data

Pull-out test

| | |
|--|---|
| Pull-out test | IEC 60998-2-1:1990-04 |
| | Test passed |
| Conductor cross section / conductor type / tensile force | 0.2 mm ² / solid / > 10 N |
| | 0.2 mm ² / flexible / > 10 N |
| | 4 mm ² / solid / > 60 N |
| | 2.5 mm ² / flexible / > 50 N |

Electrical tests

| | |
|-----------------------------|---------------------|
| Rated current | 24 A |
| Conductor cross section | 2.5 mm ² |
| Rated voltage (III/2) | 630 V |
| Rated surge voltage (III/2) | 6 kV |

Air clearances and creepage distances

| | |
|---|--------|
| Rated insulation voltage (III/3) | 500 V |
| Rated insulation voltage (III/2) | 630 V |
| Rated insulation 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 |
| 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 |

Current carrying capacity / derating curves

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) |
| 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 |
|----------|-------------|

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Technical data

Resistance to ageing, humidity and penetration of solids

| | |
|------------|----------------|
| 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 |

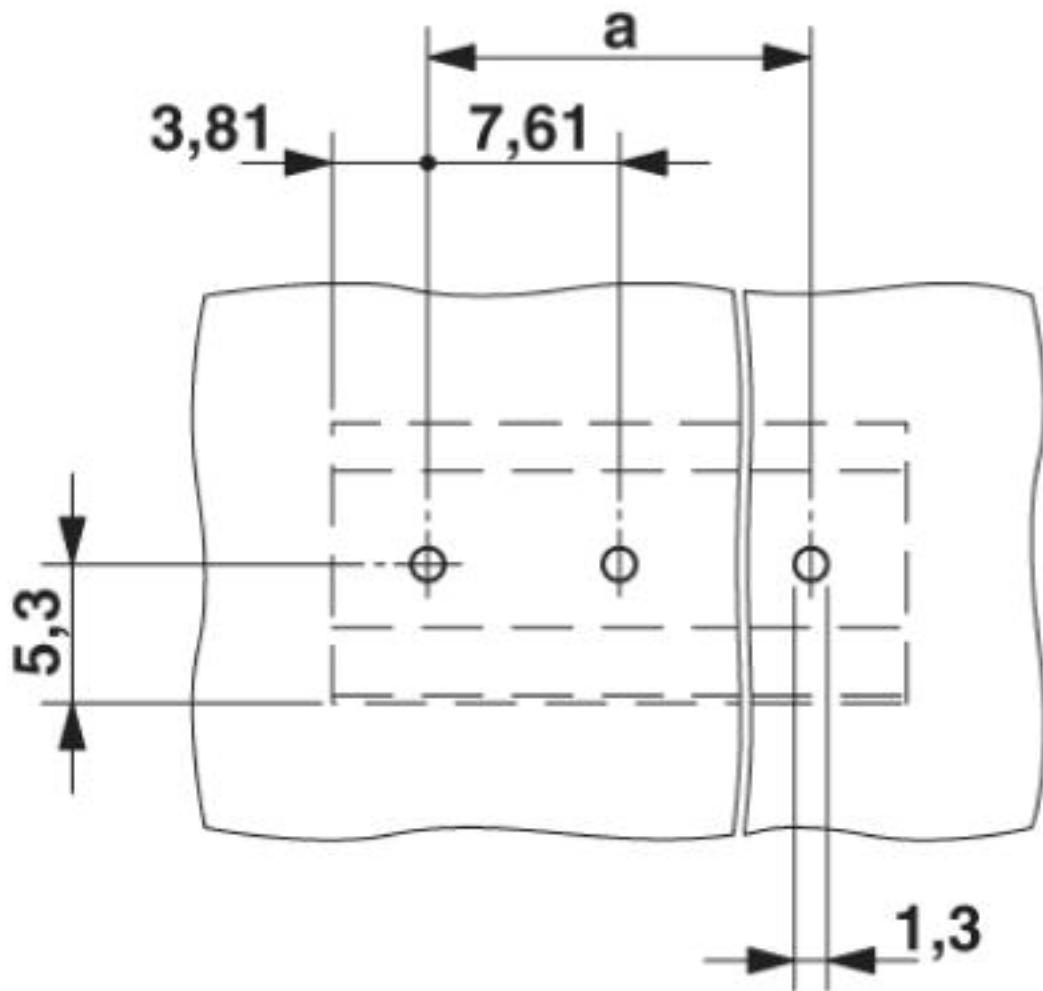
Environmental Product Compliance

| | |
|------------|---|
| | 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

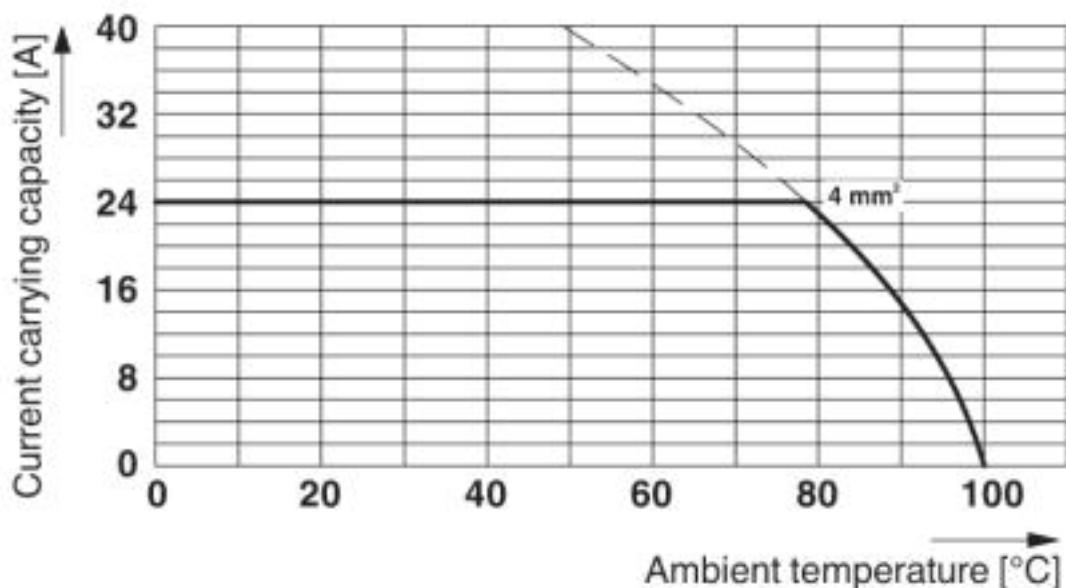
PCB terminal block - GMKDS 3/ 2-7,62 - 1731721

Drilling diagram



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Diagram



Type: GMKDS 3/2-7,62 and GMKDS 3/3-7,62

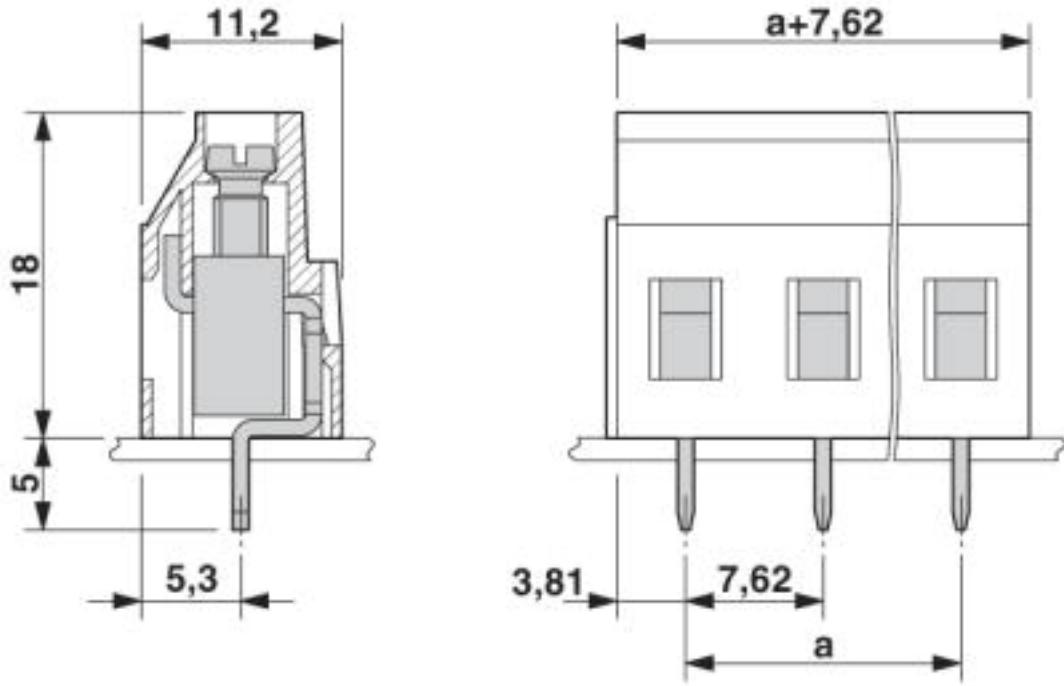
Tested according to DIN EN 60512-5-2:2003-01

Reduction factor = 1

Number of positions: 5

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Dimensional drawing



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 |

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Classifications

UNSPSC

| | |
|---------------|----------|
| UNSPSC 6.01 | 30211801 |
| UNSPSC 7.0901 | 39121432 |
| UNSPSC 11 | 39121432 |
| UNSPSC 12.01 | 39121432 |
| UNSPSC 13.2 | 39121432 |

Approvals

Approvals

Approvals

DNV GL / CSA / CCA / SEV / EAC / cULus Recognized

Ex Approvals

Approval details

| | | | |
|--------|---|---|------------|
| DNV GL |  | https://approvalfinder.dnvg.com/ | TAE00001EV |
|--------|---|---|------------|

| | | | |
|----------------------------|---|---|-------|
| CSA |  | http://www.csagroup.org/services-industries/product-listing/ | 13631 |
| | | | |
| Nominal voltage UN | B | D | |
| Nominal current IN | 300 V | 300 V | |
| mm ² /AWG/kcmil | 10 A | 10 A | |
| | 28-12 | 28-12 | |

| | | |
|----------------------------|-------|---------|
| CCA | | IK-3249 |
| | | |
| Nominal voltage UN | 500 V | |
| mm ² /AWG/kcmil | 4 | |

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Approvals

| | | | |
|----------------------------|---|---|---------|
| SEV |  | https://www.electrosuisse.ch/de/meta/shop/produktezertifikate.html | IK-4199 |
| Nominal voltage UN | | 500 V | |
| Nominal current IN | | 30 A | |
| mm ² /AWG/kcmil | | 4 | |

| | | |
|-----|---|---------|
| EAC |  | B.01742 |
|-----|---|---------|

| | | | |
|----------------------------|---|---|-----------------|
| cULus Recognized |  | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | E60425-19870331 |
| | B | D | |
| Nominal voltage UN | 250 V | 300 V | |
| Nominal current IN | 15 A | 10 A | |
| mm ² /AWG/kcmil | 30-12 | 30-12 | |

Accessories

Accessories

Cover

Cover - EA-MKDS - 1711408



Single cover for single and multi-level MKDS 3 PCB terminal blocks, for covering individual terminal positions, color: orange, transparent

Labeled terminal marker

Marker card - SK 7,62/5:FORTL.ZAHLEN - 0804552



Marker card, Card, white, labeled, Horizontal: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 91 ... 100, mounting type: adhesive, for terminal block width: 7.62 mm, lettering field size: 7.62 x 5 mm

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Accessories

Marker pen

Marker pen - B-STIFT - 1051993



Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 mm

Screwdriver tools

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

Terminal marking

Marker card - SK U/3,8 WH:UNBEDRUCKT - 0803906



Marker card, Sheet, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, Office printing systems, mounting type: adhesive, for terminal block width: 210 mm, lettering field size: 186 x 3.8 mm, Number of individual labels: 1440