

PCB terminal block - MKDS 1/10-3,5 BK - 1800028

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)

PCB terminal block, nominal current: 13.5 A, nom. voltage: 200 V, pitch: 3.5 mm, number of positions: 10, connection method: Screw connection with tension sleeve, mounting: Wave soldering, conductor/PCB connection direction: 0 °, color: black



The figure shows a 10-position version of the product

Your advantages

- ✓ Well-known connection principle allows worldwide use
- ✓ Low temperature rise, thanks to maximum contact force
- ✓ Allows connection of two conductors
- ✓ Extremely small design for the respective conductor cross section



Key Commercial Data

| | |
|--------------|---------------|
| Packing unit | 50 pc |
| GTIN | |
| GTIN | 4046356490665 |

Technical data

Item properties

| | |
|---------------------------|--------------------------------------|
| Brief article description | PCB terminal block |
| Range of articles | MKDS 1 |
| Pitch | 3.5 mm |
| Number of positions | 10 |
| Connection method | Screw connection with tension sleeve |
| Drive form screw head | Slotted (L) |
| Screw thread | M2 |
| Mounting type | Wave soldering |
| Pin layout | Linear pinning |
| Number of levels | 1 |

Electrical parameters

PCB terminal block - MKDS 1/10-3,5 BK - 1800028

Technical data

Electrical parameters

| | |
|----------------------------------|--------|
| Rated current | 13.5 A |
| Rated insulation voltage (III/2) | 200 V |
| Rated surge voltage (III/2) | 2.5 kV |

Connection capacity

| | |
|---|---|
| Conductor cross section solid | 0.14 mm ² ... 1.5 mm ² |
| Conductor cross section flexible | 0.14 mm ² ... 1.5 mm ² |
| Conductor cross section AWG / kcmil | 26 ... 16 |
| Conductor cross section flexible, with ferrule without plastic sleeve | 0.25 mm ² ... 0.5 mm ² |
| Conductor cross section, flexible, with ferrule, with plastic sleeve | 0.25 mm ² ... 0.5 mm ² |
| 2 conductors with same cross section, solid | 0.14 mm ² ... 0.5 mm ² |
| 2 conductors with same cross section, flexible | 0.14 mm ² ... 0.34 mm ² |
| Stripping length | 5 mm |
| Torque | 0.22 Nm ... 0.25 Nm |

Material data - contact

| | |
|---|---|
| Note | WEEE/RoHS-compliant, free of whiskers according to IEC 60068-2-82/ JEDEC JESD 201 |
| Contact material | Cu alloy |
| Metal surface terminal point (top layer) | Tin (5 - 7 µm Sn) |
| Metal surface terminal point (middle layer) | Nickel (2 - 3 µm Ni) |
| Metal surface soldering area (top layer) | Tin (5 - 7 µm Sn) |
| Metal surface soldering area (middle layer) | Nickel (2 - 3 µm Ni) |

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

Dimensions for the product

| | |
|-----------------------------|--------------|
| Length [l] | 7.3 mm |
| Width [w] | 35.5 mm |
| Height [h] | 12 mm |
| Pitch | 3.5 mm |
| Height (without solder pin) | 8.5 mm |
| Solder pin [P] | 3.5 mm |
| Pin dimensions | 0.5 x 0.9 mm |
| Dimension a | 31.5 mm |

Dimensions for PCB design

PCB terminal block - MKDS 1/10-3,5 BK - 1800028

Technical data

Dimensions for PCB design

| | |
|---------------|--------|
| Hole diameter | 1.1 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). |

Ambient conditions

| | |
|---|------------------|
| Ambient temperature (storage/transport) | -40 °C ... 70 °C |
| Ambient temperature (assembly) | -5 °C ... 100 °C |
| Ambient temperature (operation) | -40 °C |

Electrical tests

| | |
|----------------------------------|--------|
| Rated current | 13.5 A |
| Rated insulation voltage (III/2) | 200 V |
| Rated surge voltage (III/2) | 2.5 kV |

Air clearances and creepage distances

| | |
|----------------------------------|--------|
| Insulating material group | I |
| Voltage | 160 V |
| Rated insulation voltage (III/3) | 160 V |
| Rated insulation voltage (III/2) | 200 V |
| Rated insulation voltage (II/2) | 400 V |
| Rated surge voltage (III/3) | 2.5 kV |
| Rated surge voltage (III/2) | 2.5 kV |
| Rated surge voltage (II/2) | 2.5 kV |

Standards and Regulations

| | |
|----------------------------------|--------|
| Connection in acc. with standard | EN-VDE |
| | CSA |

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" |

PCB terminal block - MKDS 1/10-3,5 BK - 1800028

Approvals


Approvals


Approvals


CSA / IEC EE CB Scheme / SEV / EAC / cULus Recognized


Ex Approvals

Approval details

| | | | |
|----------------------------|---|---|-------|
| CSA |  | http://www.csagroup.org/services-industries/product-listing/ | 13631 |
| | | D | B |
| Nominal voltage UN | | 300 V | 150 V |
| Nominal current IN | | 10 A | 10 A |
| mm ² /AWG/kcmil | | 28-16 | 28-16 |


| | | | |
|----------------------------|---|---|---------|
| IECEE CB Scheme |  | http://www.iecee.org/ | CH-8225 |
| Nominal voltage UN | | 125 V | |
| Nominal current IN | | 12 A | |
| mm ² /AWG/kcmil | | 1.5 | |

| | | | |
|----------------------------|---|---|------------|
| SEV |  | https://www.electrosuisse.ch/de/meta/shop/produktezertifikate.html | IK-3542-M1 |
| Nominal voltage UN | | 125 V | |
| Nominal current IN | | 12 A | |
| mm ² /AWG/kcmil | | 1.5 | |

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

PCB terminal block - MKDS 1/10-3,5 BK - 1800028

Approvals

| | | |
|----------------------------|---|---|
| cULus Recognized |  | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm E60425-19770427 |
| | D | B |
| Nominal voltage UN | 300 V | 300 V |
| Nominal current IN | 10 A | 10 A |
| mm ² /AWG/kcmil | 30-16 | 30-16 |

Phoenix Contact 2018 © - all rights reserved
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG
Flachsmarktstr. 8
32825 Blomberg
Germany
Tel. +49 5235 300
Fax +49 5235 3 41200
<http://www.phoenixcontact.com>

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Phoenix Contact:](#)

[1800028](#)