

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: 320 V, Pitch: 5 mm, Number of positions: 2, Connection method: Screw connection with tension sleeve, Mounting: THR soldering, Conductor/PCB connection direction: 0 °, Color: black, This article can be soldered in the reflow furnace together with SMD components.

#### Why buy this product

- ✓ Well-known connection principle allows worldwide use
- Allows connection of two conductors
- ☑ Designed for integration into the SMT soldering process
- The latching on the side enables various numbers of positions to be combined



## **Key Commercial Data**

| Packing unit                         | 50 STK          |
|--------------------------------------|-----------------|
| Minimum order quantity               | 50 STK          |
| GTIN                                 | 4 017918 929244 |
| GTIN                                 | 4017918929244   |
| Weight per Piece (excluding packing) | 2.580 g         |
| Custom tariff number                 | 85369010        |
| Country of origin                    | Germany         |

#### Technical data

## Dimensions

| Length                | 8.1 mm   |
|-----------------------|----------|
| Pitch                 | 5 mm     |
| Dimension a           | 5.00 mm  |
| Width                 | 10.00 mm |
| Constructional height | 10 mm    |
| Height                | 13.5 mm  |



## Technical data

## Dimensions

| Solder pin [P] | 3.5 mm     |
|----------------|------------|
| Pin dimensions | 0,5 x 1 mm |
| Hole diameter  | 1.3 mm     |

## General

| Range of articles                      | MKDSN 1,5/HT |
|--|--------------|
| Insulating material group              | Illa         |
| Rated surge voltage (III/3)            | 4 kV         |
| Rated surge voltage (III/2)            | 4 kV         |
| Rated surge voltage (II/2)             | 4 kV         |
| Rated voltage (III/3)                  | 200 V        |
| Rated voltage (III/2)                  | 320 V        |
| Rated voltage (II/2)                   | 320 V        |
| Connection in acc. with standard       | EN-VDE       |
| Nominal current I <sub>N</sub>         | 13.5 A       |
| Nominal cross section                  | 1.5 mm²      |
| Maximum load current                   | 13.5 A       |
| Insulating material                    | PA 4.6       |
| Contact material                       | Cu alloy     |
| Solder pin surface                     | Sn           |
| Terminal point surface                 | Sn           |
| Flammability rating according to UL 94 | V0           |
| Internal cylindrical gage              | A1           |
| Stripping length                       | 6 mm         |
| Number of positions                    | 2            |
| Screw thread                           | M3           |
| Tightening torque, min                 | 0.5 Nm       |
| Tightening torque max                  | 0.6 Nm       |

#### Connection data

| Conductor cross section solid min.   | 0.14 mm² |
|--|----------|
| Conductor cross section solid max.   | 1.5 mm²  |
| Conductor cross section flexible min.                                      | 0.14 mm² |
| Conductor cross section flexible max.                                      | 1.5 mm²  |
| Conductor cross section flexible, with ferrule without plastic sleeve min. | 0.25 mm² |
| Conductor cross section flexible, with ferrule without plastic sleeve max. | 1 mm²    |
| Conductor cross section flexible, with ferrule with plastic sleeve min.    | 0.25 mm² |
| Conductor cross section flexible, with ferrule with plastic sleeve max.    | 1.5 mm²  |
| Conductor cross section AWG min.   | 26       |
| Conductor cross section AWG max.   | 16       |
| 2 conductors with same cross section, solid min.                           | 0.14 mm² |
| 2 conductors with same cross section, solid max.                           | 0.75 mm² |



## Technical data

## Connection data

| 2 conductors with same cross section, stranded min.                                     | 0.14 mm²            |
|---|---------------------|
| 2 conductors with same cross section, stranded max.                                     | 0.75 mm²            |
| 2 conductors with same cross section, stranded, ferrules without plastic sleeve, min.   | 0.25 mm²            |
| 2 conductors with same cross section, stranded, ferrules without plastic sleeve, max.   | 0.5 mm <sup>2</sup> |
| 2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, min. | 0.5 mm²             |
| 2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, max. | 0.75 mm²            |

#### Processing notes

| Process                                   | Reflow/wave soldering                    |  |
|---|--|--|
| Specification                             | Following IPC/JEDEC J-STD-020D.1:2008-03 |  |
|   | Following IEC 61760-1:2006-04            |  |
|   | Following IEC 60068-2-58:2005-02         |  |
| Moisture Sensitive Level                  | MSL 3                                    |  |
| Classification temperature T <sub>c</sub> | 250 °C                                   |  |
| Solder cycles in the reflow               | 3  |  |

## Standards and Regulations

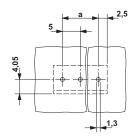
| Connection in acc. with standard       | EN-VDE |
|--|--------|
|  | CUL    |
| Flammability rating according to UL 94 | V0     |

## **Environmental Product Compliance**

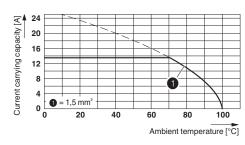
| China RoHS | Environmentally Friendly Use Period = 50  |  |
|------------|---|--|
|            | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |  |

## Drawings

Drilling diagram



Diagram



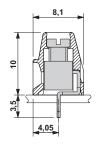
Type: MKDSN 1,5/5

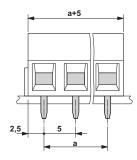
Test following DIN EN 60512-5-2:2003-01

Reduction factor = 1 No. of pos.:5



#### Dimensional drawing





## **Approvals**

#### Approvals

Approvals

SEV / CCA / IECEE CB Scheme / EAC / cULus Recognized / CCA / IECEE CB Scheme

Ex Approvals

## Approval details

| SEV                | SEV | https://www.electrosuisse.ch/en/meta/shop/product-certificates.html IK-3542-M1 |        |  |
|--------------------|-----|--|--------|--|
|                    |     |  |        |  |
| mm²/AWG/kcmil      |     |  | 1.5    |  |
| Nominal current IN |     |  | 13.5 A |  |
| Nominal voltage UN |     |  | 250 V  |  |

| CCA | IK-2722 |
|-----|---------|
|     |         |

IECEE CB Scheme http://www.iecee.org/ CH-8225

EAC **E**HI B.01742



## Approvals

| cULus Recognized <b>CFL</b> US | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm E60425-19770427 |       |
|--------------------------------|---|-------|
|                                | В   | D     |
| mm²/AWG/kcmil                  | 30-14   | 30-14 |
| Nominal current IN             | 10 A  | 10 A  |
| Nominal voltage UN             | 300 V   | 300 V |

| CCA                |        |
|--------------------|--------|
|                    |        |
| mm²/AWG/kcmil      | 1.5    |
| Nominal current IN | 13.5 A |
| Nominal voltage UN | 250 V  |

| IECEE CB Scheme    | <b>CB</b> scheme | http://www.iecee.org/ | CH-8225 |
|--------------------|------------------|-----------------------|---------|
|                    |                  |                       |         |
| mm²/AWG/kcmil      |                  | 1.5                   |         |
| Nominal current IN |                  | 13.5 A                |         |
| Nominal voltage UN |                  | 250 V                 |         |

Phoenix Contact 2017 © - all rights reserved http://www.phoenixcontact.com