

# PCB terminal block - MKDSFW 1,5/ 2-3,5 BD:-42+41 - 1703620

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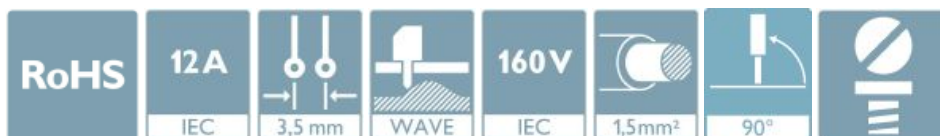


The figure shows a 10-position version of the product

PCB terminal block, nominal current: 12 A, rated voltage (III/2): 160 V, nominal cross section: 1.5 mm<sup>2</sup>, Number of potentials: 2, Number of rows: 1, Number of positions per row: 2, product range: MKDSFW 1,5, pitch: 3.5 mm, connection method: Screw connection with tension sleeve, mounting: Wave soldering, conductor/PCB connection direction: 90 °, color: green, Pin layout: Linear pinning, Solder pin [P]: 3.5 mm, type of packaging: packed in cardboard

## Your advantages

- Well-known connection principle allows worldwide use
- Low temperature rise, thanks to maximum contact force
- Allows connection of two conductors
- Stand-offs enable the PCB to be cleaned or sealed



## Key Commercial Data

|              |               |
|--------------|---------------|
| Packing unit | 50 pc         |
| GTIN         |               |
| GTIN         | 4046356660198 |

## Technical data

### Item properties

|                           |                    |
|---------------------------|--------------------|
| Brief article description | PCB terminal block |
| Range of articles         | MKDSFW 1,5         |
| Pitch                     | 3.5 mm             |
| Number of positions       | 2                  |
| Drive form screw head     | Slotted (L)        |
| Screw thread              | M2                 |
| Mounting type             | Wave soldering     |
| Pin layout                | Linear pinning     |
| Number of levels          | 1                  |
| Number of connections     | 2                  |
| Number of potentials      | 2                  |

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## Technical data

### Electrical parameters

|                             |        |
|-----------------------------|--------|
| Nominal current             | 12 A   |
| Nom. voltage                | 160 V  |
| Rated voltage (III/3)       | 160 V  |
| Rated voltage (III/2)       | 160 V  |
| Rated voltage (II/2)        | 320 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 |

### Connection capacity

|   |   |
|---|---|
| Connection method   | Screw connection with tension sleeve          |
| pluggable   | no  |
| Conductor cross section solid   | 0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>  |
| Conductor cross section flexible  | 0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>  |
| Conductor cross section AWG / kcmil   | 26 ... 16                                     |
| Conductor cross section flexible, with ferrule without plastic sleeve                     | 0.25 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>  |
| Conductor cross section, flexible, with ferrule, with plastic sleeve                      | 0.25 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>  |
| 2 conductors with same cross section, solid   | 0.14 mm <sup>2</sup> ... 0.75 mm <sup>2</sup> |
| 2 conductors with same cross section, flexible  | 0.14 mm <sup>2</sup> ... 0.75 mm <sup>2</sup> |
| 2 conductors with same cross section, flexible, with ferrule without plastic sleeve       | 0.25 mm <sup>2</sup> ... 0.5 mm <sup>2</sup>  |
| 2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve | 0.5 mm <sup>2</sup> ... 1 mm <sup>2</sup>     |
| Stripping length  | 6 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

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

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## Technical data

### Material data - housing

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

### Dimensions for the product

|                             |  |
|-----------------------------|--|
| Caption                     | Schematische Abbildung - weitere Details siehe Produktfamilienzeichnung im Download Center |
| Length [ l ]                | 11.3 mm  |
| Width [ w ]                 | 8.3 mm   |
| Height [ h ]                | 13.9 mm  |
| Pitch                       | 3.5 mm   |
| Height (without solder pin) | 10.4 mm  |
| Solder pin [P]              | 3.5 mm   |
| Pin dimensions              | 0.5 x 0.9 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.                |

### 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). |

### Electrical tests

|                             |                     |
|-----------------------------|---------------------|
| Rated current               | 12 A                |
| Conductor cross section     | 1.5 mm <sup>2</sup> |
| Rated voltage (III/2)       | 160 V               |
| Rated surge voltage (III/2) | 2.5 kV              |

### Air clearances and creepage distances

### Standards and Regulations

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

### Environmental Product Compliance

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

## PCB terminal block - MKDSFW 1,5/ 2-3,5 BD:-42+41 - 1703620

### Classifications

#### eCl@ss

|            |          |
|------------|----------|
| eCl@ss 4.0 | 27141109 |
| eCl@ss 4.1 | 27141109 |
| eCl@ss 5.0 | 27141190 |
| eCl@ss 5.1 | 27261100 |
| eCl@ss 6.0 | 27261100 |
| eCl@ss 7.0 | 27440401 |
| eCl@ss 9.0 | 27440401 |

#### ETIM

|          |          |
|----------|----------|
| ETIM 3.0 | EC001121 |
| ETIM 4.0 | EC002643 |
| ETIM 6.0 | EC002643 |
| ETIM 7.0 | EC002643 |

#### UNSPSC

|               |          |
|---------------|----------|
| UNSPSC 6.01   | 30211801 |
| UNSPSC 7.0901 | 39121432 |
| UNSPSC 11     | 39121432 |
| UNSPSC 12.01  | 39121432 |
| UNSPSC 13.2   | 39121432 |
| UNSPSC 19.0   | 39121432 |

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