

## PCB terminal block - MKDSO 2,5/ 4-L - 1707234

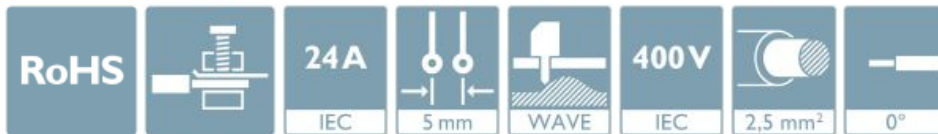
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PCB terminal block, nominal current: 24 A, rated voltage (III/2): 400 V, nominal cross section: 2.5 mm<sup>2</sup>, Number of rows: 1, Number of positions per row: 4, product range: MKDSO 2,5/..-L, pitch: 5 mm, connection method: Screw connection with tension sleeve, mounting: Wave soldering, conductor/PCB connection direction: 0 °, color: green, Pin layout: Linear pinning, Solder pin [P]: 3.5 mm. Article with lateral pin exit

### Your advantages

- ✓ PCB terminal block for ME/ME MAX electronics housing
- ✓ 5 mm pitch
- ✓ PCB terminal block orthogonal to the PCB
- ✓ Maintenance-free and vibration-resistant, thanks to the Reakdyn principle or spring-loaded elements
- ✓ PCB terminal block is orthogonal to the PCB
- ✓ Internationally recognized and proven screw connection



### Key Commercial Data

|              |               |
|--------------|---------------|
| Packing unit | 250 pc        |
| GTIN         |               |
| GTIN         | 4017918136826 |

### Technical data

#### Item properties

|                           |                    |
|---------------------------|--------------------|
| Brief article description | PCB terminal block |
| Range of articles         | MKDSO 2,5/..-L     |
| Pitch                     | 5 mm               |
| Number of positions       | 4                  |
| Screw thread              | M3                 |
| Mounting type             | Wave soldering     |
| Pin layout                | Linear pinning     |
| Number of levels          | 1                  |

#### Electrical parameters

|                 |      |
|-----------------|------|
| Nominal current | 24 A |
|-----------------|------|

# PCB terminal block - MKDSO 2,5/ 4-L - 1707234

## Technical data

### Electrical parameters

|                             |       |
|-----------------------------|-------|
| Nom. voltage                | 400 V |
| Rated voltage               | 250 V |
| Rated voltage (III/2)       | 400 V |
| Rated 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  |

### Connection capacity

|                                                                                           |                                               |
|-------------------------------------------------------------------------------------------|-----------------------------------------------|
| Connection method                                                                         | Screw connection with tension sleeve          |
| Conductor cross section solid                                                             | 0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>  |
| Conductor cross section flexible                                                          | 0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>  |
| Conductor cross section AWG / kcmil                                                       | 26 ... 14                                     |
| Conductor cross section flexible, with ferrule without plastic sleeve                     | 0.25 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>  |
| Conductor cross section, flexible, with ferrule, with plastic sleeve                      | 0.25 mm <sup>2</sup> ... 2.5 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> ... 0.75 mm <sup>2</sup> |
| 2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve | 0.5 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>   |
| 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 (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          |
| Temperature for the ball pressure test according to EN 60695-10-2 | 125 °C       |

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## Technical data

### Dimensions for the product

|                             |                                                                                            |
|-----------------------------|--------------------------------------------------------------------------------------------|
| Caption                     | Schematische Abbildung - weitere Details siehe Produktfamilienzeichnung im Download Center |
| Length [ l ]                | 15.3 mm                                                                                    |
| Pitch                       | 5 mm                                                                                       |
| Height (without solder pin) | 18 mm                                                                                      |
| Solder pin [P]              | 3.5 mm                                                                                     |
| Pin dimensions              | 1.1 x 0.8 mm                                                                               |

### Dimensions for PCB design

|               |        |
|---------------|--------|
| Hole diameter | 1.4 mm |
|---------------|--------|

### Packaging information

|                            |      |
|----------------------------|------|
| Pieces per package         | 250  |
| Denomination packing units | Pcs. |

### Ambient conditions

|                                         |                                                                               |
|-----------------------------------------|-------------------------------------------------------------------------------|
| Ambient temperature (storage/transport) | -40 °C ... 55 °C                                                              |
| Ambient temperature (assembly)          | -5 °C ... 100 °C                                                              |
| Ambient temperature (operation)         | -40 °C ... 105 °C (Depending on the current carrying capacity/derating curve) |

### Electrical tests

|                             |                     |
|-----------------------------|---------------------|
| Rated current               | 24 A                |
| Conductor cross section     | 2.5 mm <sup>2</sup> |
| Rated voltage (III/2)       | 400 V               |
| Rated surge voltage (III/2) | 4 kV                |

### Air clearances and creepage distances

|                                                 |                     |
|-------------------------------------------------|---------------------|
| Clearances and creepage distances               | IEC 60664-1:2007-04 |
| Specification                                   | IEC 60664-1:2007-04 |
| Minimum clearance - inhomogeneous field (III/3) | 3 mm                |
| 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)         | 2 mm                |
| Minimum creepage distance value (II/2)          | 3.2 mm              |

### 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 years |

## PCB terminal block - MKDSO 2,5/ 4-L - 1707234

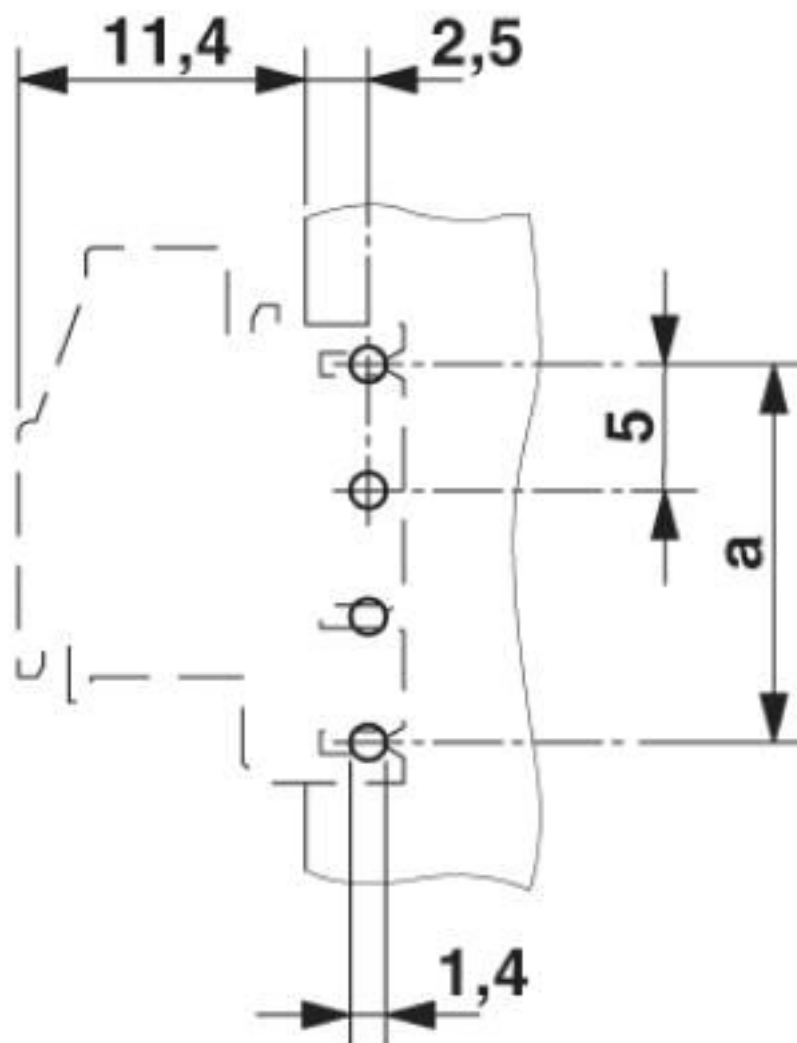
### Technical data

#### Environmental Product Compliance

|  |                                                                                                     |
|--|-----------------------------------------------------------------------------------------------------|
|  | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |
|--|-----------------------------------------------------------------------------------------------------|

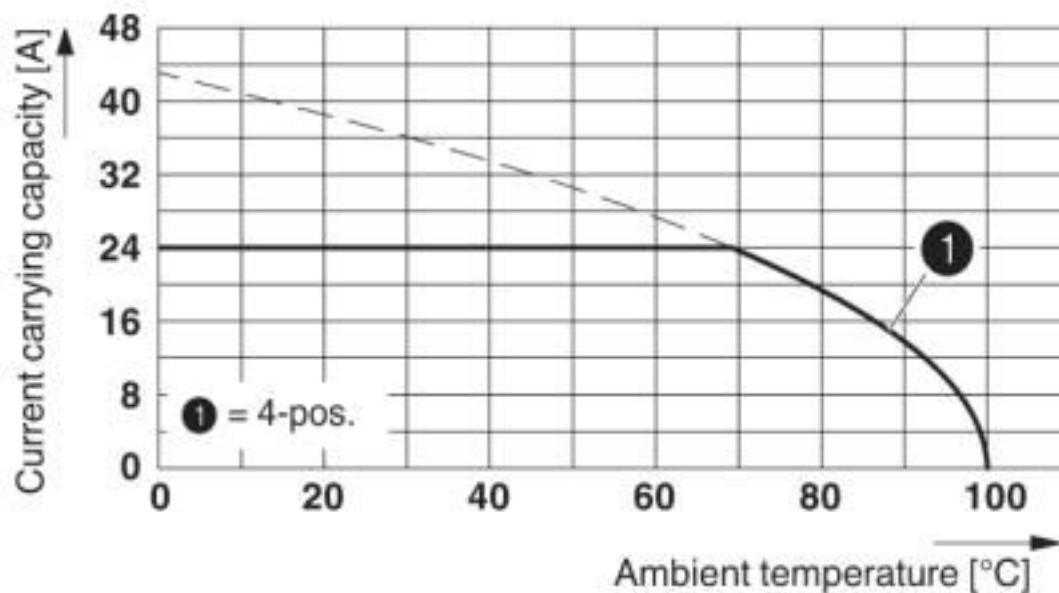
### Drawings

Drilling diagram



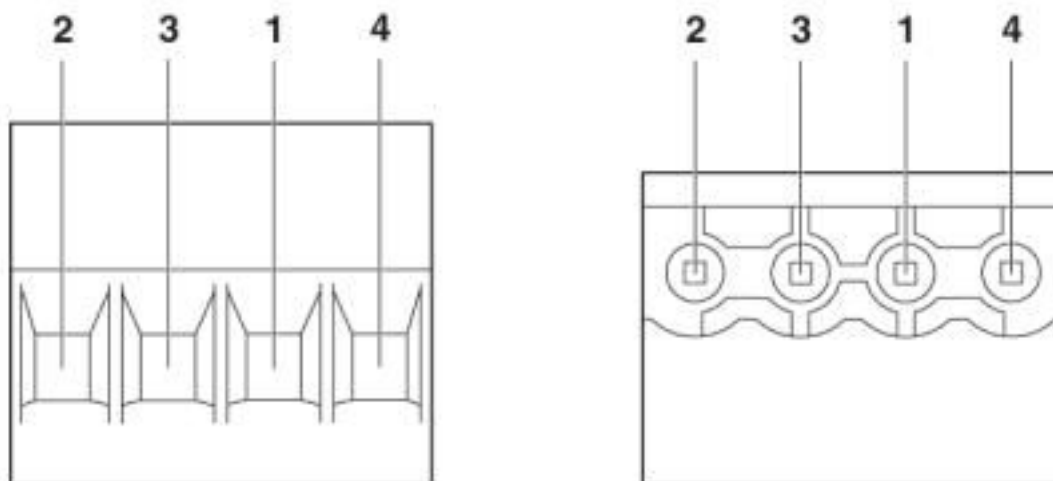
## PCB terminal block - MKDSO 2,5/ 4-L - 1707234

Diagram



Type: MKDSO 2,5/4...L(R)  
 Test based on DIN EN 60512-5-2:2003-01  
 Reduction factor = 1  
 Number of positions: 4

Schematic diagram



Pin assignment left

### Classifications

eCl@ss

|               |          |
|---------------|----------|
| eCl@ss 10.0.1 | 27440401 |
| eCl@ss 11.0   | 27460101 |

## PCB terminal block - MKDSO 2,5/ 4-L - 1707234

### Classifications

#### eCl@ss

|            |          |
|------------|----------|
| eCl@ss 4.0 | 27180400 |
| eCl@ss 4.1 | 27180400 |
| eCl@ss 5.0 | 27180500 |
| 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 2.0 | EC001031 |
| ETIM 3.0 | EC001031 |
| ETIM 4.0 | EC002643 |
| ETIM 5.0 | EC002643 |
| ETIM 6.0 | EC002643 |
| ETIM 7.0 | EC002643 |

#### UNSPSC

|               |          |
|---------------|----------|
| UNSPSC 6.01   | 31261501 |
| UNSPSC 7.0901 | 31261501 |
| UNSPSC 11     | 31261501 |
| UNSPSC 12.01  | 31261501 |
| UNSPSC 13.2   | 39121432 |
| UNSPSC 18.0   | 39121432 |
| UNSPSC 19.0   | 39121432 |
| UNSPSC 20.0   | 39121432 |
| UNSPSC 21.0   | 39121432 |

### Approvals

#### Approvals

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#### Approvals

CSA / IECCEB Scheme / VDE Gutachten mit Fertigungsüberwachung / EAC / cULus Recognized

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#### Ex Approvals

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#### Approval details

## PCB terminal block - MKDSO 2,5/ 4-L - 1707234

### Approvals

|                    |                                                                                   |                                                                                                                                         |       |
|--------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|-------|
| CSA                |  | <a href="http://www.csagroup.org/services-industries/product-listing/">http://www.csagroup.org/services-industries/product-listing/</a> | 13631 |
|                    | B                                                                                 | D                                                                                                                                       |       |
| Nominal voltage UN | 300 V                                                                             | 300 V                                                                                                                                   |       |
| Nominal current IN | 10 A                                                                              | 10 A                                                                                                                                    |       |
| mm²/AWG/kcmil      | 28-12                                                                             | 28-12                                                                                                                                   |       |

|                    |                                                                                   |                                                           |              |
|--------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------|--------------|
| IECEE CB Scheme    |  | <a href="http://www.iecee.org/">http://www.iecee.org/</a> | CB DE1-60046 |
| Nominal voltage UN | 450 V                                                                             |                                                           |              |
| Nominal current IN | 24 A                                                                              |                                                           |              |
| mm²/AWG/kcmil      | 2.5                                                                               |                                                           |              |

|                                            |                                                                                     |                                                                                                                                                                                                                |          |
|--------------------------------------------|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| VDE Gutachten mit<br>Fertigungsüberwachung |  | <a href="http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx">http://www2.vde.com/de/Institut/Online-Service/<br/>VDE-gepruefteProdukte/Seiten/Online-Suche.aspx</a> | 40023968 |
| Nominal voltage UN                         | 450 V                                                                               |                                                                                                                                                                                                                |          |
| Nominal current IN                         | 24 A                                                                                |                                                                                                                                                                                                                |          |
| mm²/AWG/kcmil                              | 0.2-2.5                                                                             |                                                                                                                                                                                                                |          |

|     |                                                                                     |  |         |
|-----|-------------------------------------------------------------------------------------|--|---------|
| EAC |  |  | B.01687 |
|-----|-------------------------------------------------------------------------------------|--|---------|

|                    |                                                                                     |                                                                                                                                                       |                 |
|--------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| cULus Recognized   |  | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> | E60425-19770427 |
|                    | B                                                                                   | D                                                                                                                                                     |                 |
| Nominal voltage UN | 300 V                                                                               | 300 V                                                                                                                                                 |                 |
| Nominal current IN | 20 A                                                                                | 10 A                                                                                                                                                  |                 |
| mm²/AWG/kcmil      | 30-12                                                                               | 30-12                                                                                                                                                 |                 |

### Accessories

Accessories

Mounting material

## PCB terminal block - MKDSO 2,5/ 4-L - 1707234

### Accessories

Shield connection clamp - ME-SAS - 2853899



Shield connection clamp for printed circuit terminal block

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