

PCB terminal block - MKDSP 10N/ 3-10,16 - 1774137

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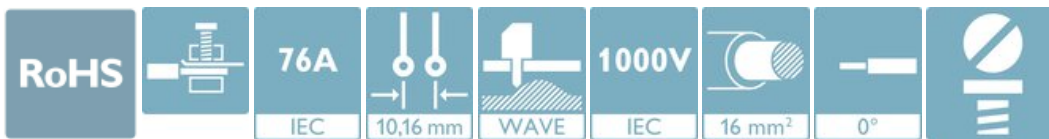


PCB terminal block, nominal current: 76 A, rated voltage (III/2): 1000 V, nominal cross section: 16 mm², number of potentials: 3, Number of rows: 1, Number of positions per row: 3, product range: MKDSP 10N, pitch: 10.16 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, mounting: Wave soldering, conductor/PCB connection direction: 0 °, color: green, Pin layout: Linear double pinning, Solder pin [P]: 5 mm, type of packaging: packed in cardboard. The article can be aligned to create different nos. of positions!

The figure shows a 5-pos. 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
- ✓ Quick and convenient testing using integrated test option
- ✓ The latching on the side enables various numbers of positions to be combined
- ✓ Integrated protective guide prevents incorrect insertion of the conductor underneath the tension sleeve



Key Commercial Data

| | |
|--------------------------------------|---------------|
| Packing unit | 1 pc |
| Minimum order quantity | 50 pc |
| GTIN | |
| GTIN | 4046356481588 |
| Weight per Piece (excluding packing) | 22.800 g |
| Custom tariff number | 85369010 |
| Country of origin | Poland |

Technical data

Item properties

| | |
|---------------------------|--------------------|
| Brief article description | PCB terminal block |
|---------------------------|--------------------|

PCB terminal block - MKDSP 10N/ 3-10,16 - 1774137

Technical data

Item properties

| | |
|-----------------------|-----------------------|
| Range of articles | MKDSP 10N |
| Pitch | 10.16 mm |
| Number of positions | 3 |
| Drive form screw head | Slotted (L) |
| Screw thread | M4 |
| Mounting type | Wave soldering |
| Pin layout | Linear double pinning |
| Number of rows | 1 |
| Number of connections | 3 |
| Number of potentials | 3 |

Electrical parameters

| | |
|-----------------------------|--------|
| Nominal current | 76 A |
| Nom. voltage | 1000 V |
| Rated voltage (III/3) | 690 V |
| Rated voltage (III/2) | 1000 V |
| Rated voltage (II/2) | 1000 V |
| Rated surge voltage (III/3) | 8 kV |
| Rated surge voltage (III/2) | 8 kV |
| Rated surge voltage (II/2) | 6 kV |

Connection capacity

| | |
|---|---|
| Connection method | Screw connection with tension sleeve |
| pluggable | Yes |
| Conductor cross section solid | 0.5 mm ² ... 16 mm ² |
| Conductor cross section flexible | 0.5 mm ² ... 16 mm ² |
| Conductor cross section AWG / kcmil | 20 ... 6 |
| Conductor cross section flexible, with ferrule without plastic sleeve | 0.5 mm ² ... 16 mm ² |
| Conductor cross section, flexible, with ferrule, with plastic sleeve | 0.5 mm ² ... 16 mm ² |
| 2 conductors with same cross section, solid | 0.5 mm ² ... 4 mm ² |
| 2 conductors with same cross section, flexible | 0.5 mm ² ... 4 mm ² |
| 2 conductors with same cross section, flexible, with ferrule without plastic sleeve | 0.5 mm ² ... 2.5 mm ² |
| 2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve | 0.5 mm ² ... 6 mm ² |
| Stripping length | 10 mm |
| Torque | 1.2 Nm ... 1.5 Nm |

Material data - contact

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Technical data

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 |

Dimensions for the product

| | |
|-----------------------------|--|
| Caption | Schematische Abbildung - weitere Details siehe Produktfamilienzeichnung im Download Center |
| Length [l] | 18.4 mm |
| Width [w] | 30.48 mm |
| Height [h] | 34.3 mm |
| Pitch | 10.16 mm |
| Height (without solder pin) | 29.3 mm |
| Solder pin [P] | 5 mm |
| Pin dimensions | 1 x 0.9 mm |

Dimensions for PCB design

| | |
|---------------|--------|
| Hole diameter | 1.5 mm |
|---------------|--------|

Packaging information

| | |
|----------------------------|---------------------|
| Type of packaging | packed in cardboard |
| Pieces per package | 50 |
| Denomination packing units | Pcs. |

Ambient conditions

| | |
|---|------------------|
| Ambient temperature (storage/transport) | -40 °C ... 70 °C |
| Relative humidity (storage/transport) | 30 % ... 70 % |

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Ambient conditions

| | |
|---------------------------------|---|
| 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 60998-2-1:2002-12 |
| | Test passed |

Pull-out test

| | |
|--|---|
| Pull-out test | IEC 60998-2-1:2002-12 |
| Conductor cross section / conductor type / tensile force | 0.5 mm ² / solid / > 20 N |
| | 0.5 mm ² / flexible / > 20 N |
| | 16 mm ² / solid / > 100 N |
| | 16 mm ² / flexible / > 100 N |

Mechanical tests according to standard

| | |
|--------------------|--------------------------|
| Test specification | IEC 60998-2-1 (in parts) |
|--------------------|--------------------------|

Electrical tests

| | |
|-----------------------------|--------------------|
| Rated current | 76 A |
| Conductor cross section | 16 mm ² |
| Rated voltage (III/2) | 1000 V |
| Rated surge voltage (III/2) | 8 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) | 8 mm |
| Minimum clearance - inhomogeneous field (III/2) | 8 mm |
| Minimum clearance - inhomogeneous field (II/2) | 5.5 mm |
| Minimum creepage distance value (III/3) | 8 mm |
| Minimum creepage distance value (III/2) | 5 mm |
| Minimum creepage distance value (II/2) | 5 mm |

Temperature-rise test

| | |
|-----------------------------------|--------------------------------|
| Specification | IEC 60998-1:2002-12 |
| Requirement temperature-rise test | Increase in temperature ≤ 45 K |

Current carrying capacity / derating curves

| | |
|---------|--|
| Caption | Type: MKDSP 10N/...-10,16 Tested in accordance with DIN EN 60512-5-2:2003-01 Reduction factor = 1 No. of positions: 5 |
|---------|--|

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Technical data

Vibration test

| | |
|------------------------|------------------------|
| Specification | IEC 60068-2-6:2007-12 |
| Frequency | 10 - 150 - 10 Hz |
| Sweep speed | 1 octave/min |
| Amplitude | 0.35 mm (10 - 60.1 Hz) |
| Acceleration | 5g (60.1 - 150 Hz) |
| Test duration per axis | 2.5 h |

Insulation resistance

| | |
|--|---------------------|
| Specification | IEC 60998-1:2002-12 |
| Result | Test passed |
| Insulation resistance, neighboring positions | > 5 M Ω |

Glow-wire test

| | |
|------------------|---------------------|
| Specification | IEC 60998-1:2002-12 |
| Temperature | 850 °C |
| Time of exposure | 5 s |

Mechanical strength/tumbling barrel test

| | |
|-----------------------|---------------------|
| Specification | IEC 60998-1:2002-12 |
| Number of drop cycles | 50 |

Standards and Regulations

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

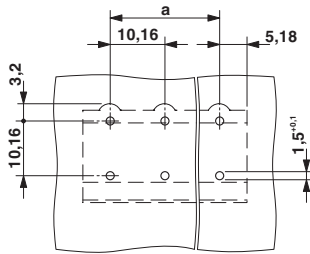
Environmental Product Compliance

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

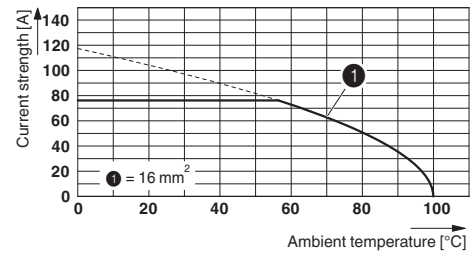
Drawings

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Drilling diagram

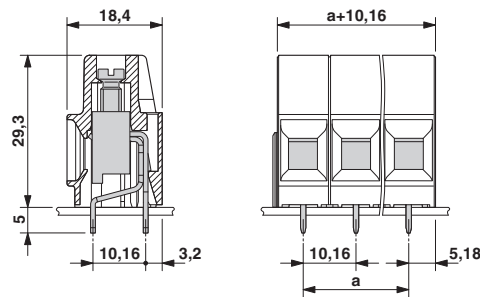


Diagram



Type: MKDSP 10N/...-10,16
 Tested in accordance with DIN EN 60512-5-2:2003-01
 Reduction factor = 1
 No. of positions: 5

Dimensional drawing



Classifications

eCl@ss

| | |
|---------------|----------|
| eCl@ss 10.0.1 | 27440401 |
| eCl@ss 11.0 | 27460101 |
| 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 9.0 | 27440401 |

ETIM

| | |
|----------|----------|
| ETIM 3.0 | EC001121 |
| ETIM 4.0 | 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 |
| UNSPSC 18.0 | 39121432 |
| UNSPSC 19.0 | 39121432 |
| UNSPSC 20.0 | 39121432 |
| UNSPSC 21.0 | 39121432 |

Approvals


Approvals

Approvals

VDE Gutachten mit Fertigungsüberwachung / CCA / IECCE CB Scheme / EAC / cULus Recognized

Ex Approvals

Approval details

| | | | |
|---|---|---|----------|
| VDE Gutachten mit Fertigungsüberwachung |  | http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx | 40035740 |
| Nominal voltage UN | 1000 V | | |
| Nominal current IN | 76 A | | |
| mm ² /AWG/kcmil | 0.5-16 | | |

| | |
|----------------------------|----------------|
| CCA | CCA/ DE1 34205 |
| Nominal voltage UN | 1000 V |
| Nominal current IN | 76 A |
| mm ² /AWG/kcmil | 0.5-16 |

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Approvals

| | | | |
|----------------------------|---------------------|---|-----------|
| IECEE CB Scheme | CB scheme | http://www.iecee.org/ | DE1-58858 |
| Nominal voltage UN | 1000 V | | |
| Nominal current IN | 76 A | | |
| mm ² /AWG/kcmil | 0.5-16 | | |

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

| | | | |
|----------------------------|--------------|---|-----------------|
| cULus Recognized | cULus | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | E60425-19770427 |
| | B | C | D |
| Nominal voltage UN | 300 V | 300 V | 600 V |
| Nominal current IN | 60 A | 60 A | 5 A |
| mm ² /AWG/kcmil | 20-6 | 20-6 | 20-6 |

Accessories

Accessories

Crimping tool

Crimping pliers - CRIMPFOX 6 - 1212034



Crimping pliers, for ferrules without insulating collar according to DIN 46228 Part 1 and ferrules with insulating collar according to DIN 46228 Part 4, 0.25 mm² ... 6.0 mm², lateral entry, trapezoidal crimp

Crimping pliers - CRIMPFOX 16 S - 1207983



Crimping pliers for ferrules up to 16 mm²

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Accessories

Insulating sleeve

Insulating sleeve - MPS-IH WH - 0201663

Insulating sleeve, color: white



Insulating sleeve - MPS-IH RD - 0201676

Insulating sleeve, color: red



Insulating sleeve - MPS-IH BU - 0201689

Insulating sleeve, color: blue



Insulating sleeve - MPS-IH YE - 0201692

Insulating sleeve, color: yellow



Insulating sleeve - MPS-IH GN - 0201702

Insulating sleeve, color: green



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Accessories

Insulating sleeve - MPS-IH GY - 0201728

Insulating sleeve, color: gray



Insulating sleeve - MPS-IH BK - 0201731

Insulating sleeve, color: black



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

Test plug terminal block

Test plugs - MPS-MT - 0201744



Test plugs, with solder connection up to 1 mm² conductor cross section, color: gray

Reducing plug - RPS - 0201647



Reducing plug, color: gray

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Accessories

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