1712737

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PCB terminal block, nominal current: 24 A, rated voltage (III/2): 400 V, nominal cross section: 2.5 mm², number of potentials: 3, number of rows: 1, number of positions per row: 3, product range: MKDSF 3, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, mounting: Wave soldering, conductor/PCB connection direction: 90 °, color: green, Pin layout: Linear pinning, Solder pin [P]: 4.1 mm, number of solder pins per potential: 1, type of packaging: packed in cardboard. The article can be aligned to create different nos. of positions!

Your advantages

- · Well-known connection principle allows worldwide use
- Low temperature rise, thanks to maximum contact force
- · Allows connection of two conductors
- · Integrated protective guide prevents incorrect insertion of the conductor underneath the tension sleeve
- · The latching on the side enables various numbers of positions to be combined

Commercial data

| Item number | 1712737 |
|--------------------------------------|---------------------|
| Packing unit | 50 pc |
| Minimum order quantity | 50 pc |
| Sales key | AA13 |
| Product key | AAMFIJ |
| Catalog page | Page 107 (C-1-2013) |
| GTIN | 4017918023850 |
| Weight per piece (including packing) | 6.261 g |
| Weight per piece (excluding packing) | 5.748 g |
| Customs tariff number | 85369010 |
| Country of origin | DE |



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Technical data

Product properties

| Product type | Printed circuit board terminal |
|---------------------------|----------------------------------|
| Product family | MKDSF 3 |
| Product line | COMBICON Terminals M |
| Туре | PC terminal block can be aligned |
| Number of positions | 3 |
| Pitch | 5.08 mm |
| Number of connections | 3 |
| Number of rows | 1 |
| Number of potentials | 3 |
| Pin layout | Linear pinning |
| Solder pins per potential | 1 |

Electrical properties

| Nominal current I _N | 24 A |
|--------------------------------|-------|
| Nominal voltage U _N | 400 V |
| Degree of pollution | 3 |
| Rated voltage (III/3) | 250 V |
| Rated surge voltage (III/3) | 4 kV |
| Rated voltage (III/2) | 400 V |
| Rated surge voltage (III/2) | 4 kV |
| Rated voltage (II/2) | 630 V |
| Rated surge voltage (II/2) | 4 kV |

Connection data

| Connection technology | |
|---|---|
| Туре | PC terminal block can be aligned |
| Nominal cross section | 2.5 mm ² |
| Conductor connection | |
| Connection method | Screw connection with tension sleeve |
| Conductor cross section rigid | 0.2 mm ² 4 mm ² |
| Conductor cross section flexible | 0.2 mm ² 2.5 mm ² |
| Conductor cross section AWG | 24 12 |
| Conductor cross section flexible, with ferrule without plastic sleeve | 0.25 mm ² 2.5 mm ² |
| Conductor cross section, flexible, with ferrule, with plastic sleeve | 0.25 mm ² 2.5 mm ² |
| 2 conductors with same cross section, solid | 0.2 mm² 1.5 mm² |
| 2 conductors with same cross section, flexible | 0.2 mm ² 1.5 mm ² |
| 2 conductors with same cross section, flexible, with ferrule without plastic sleeve | 0.25 mm ² 0.75 mm ² |
| 2 conductors with the same cross section, flexible, with TWIN | 0.5 mm² 1.5 mm² |

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| ferrule with plastic sleeve | |
|-----------------------------|---------------|
| Stripping length | 8 mm |
| Tightening torque | 0.5 Nm 0.6 Nm |

Mounting

| Mounting type | Wave soldering |
|-----------------------|----------------|
| Pin layout | Linear pinning |
| Drive form screw head | Slotted (L) |

Material specifications

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 | hot-dip tin-plated |
| Metal surface terminal point (top layer) | Tin (4 - 8 μm Sn) |
| Metal surface soldering area (top layer) | Tin (4 - 8 μm Sn) |

Material data - housing

| Color (Housing) | 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 |

Notes

| 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). |
| |

Dimensions

| Dimensional drawing | h b b b b b b b b b b b b b b b b b b b |
|---------------------|--|
| Pitch | 5.08 mm |
| Width [w] | 15.24 mm |

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| Height [h] | 16.1 mm |
|-----------------------|--------------|
| Length [I] | 18 mm |
| Installed height | 12 mm |
| Solder pin length [P] | 4.1 mm |
| Pin dimensions | 0.9 x 0.9 mm |
| PCB design | |
| Hole diameter | 1.3 mm |

Electrical tests

| Air clearances and creepage distances | |
|---------------------------------------|-------|
| Insulating material group | 1 |
| Rated insulation voltage (III/3) | 250 V |
| Rated surge voltage (III/3) | 4 kV |
| Rated insulation voltage (III/2) | 400 V |
| Rated surge voltage (III/2) | 4 kV |
| Rated insulation voltage (II/2) | 630 V |
| Rated surge voltage (II/2) | 4 kV |

Environmental and real-life conditions

| Ambient temperature (operation) | -40 °C 100 °C (Depending on the current carrying capacity/derating curve) |
|---|---|
| Ambient temperature (storage/transport) | -40 °C 70 °C |
| Relative humidity (storage/transport) | 30 % 70 % |
| Ambient temperature (assembly) | -5 °C 100 °C |

Packaging specifications

| Type of packaging | packed in cardboard |
|-------------------|---------------------|
| | |

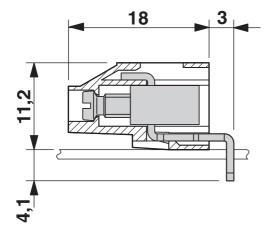


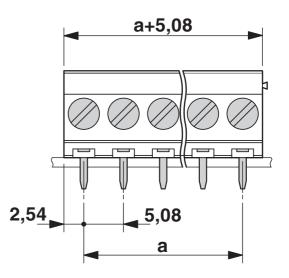
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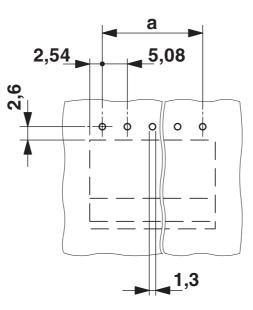
Drawings

Dimensional drawing





Drilling plan/solder pad geometry





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Approvals

🌣 To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1712737

| CSA Approval ID: 13631 | | | | |
|---------------------------|--------------------------------|--------------------------------|-------------------|-------------------------------|
| | Nominal voltage U _N | Nominal current I _N | Cross section AWG | Cross section mm ² |
| Use group B | | | | |
| | 300 V | 10 A | 28 - 12 | - |
| Use group D | | | | |
| | 300 V | 10 A | 28 - 12 | - |

| Approval ID: E60425-19870331 | | | | |
|------------------------------|--------------------------------|--------------------------------|-------------------|-------------------------------|
| | Nominal voltage U _N | Nominal current I _N | Cross section AWG | Cross section mm ² |
| Use group B | | | | |
| | 250 V | 15 A | 30 - 12 | - |
| Use group D | | | | |
| | 300 V | 10 A | 30 - 12 | - |

| VDE Zeichengene Approval ID: 40055394 | hmigung | | | |
|--|--------------------------------|--------------------------------|-------------------|-------------------------------|
| | Nominal voltage U _N | Nominal current I _N | Cross section AWG | Cross section mm ² |
| | 400 V | 32 A | - | 0.2 - 4 |



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Classifications

ECLASS

| ECLASS-12.0 27460101 | ECLASS-11.0 | 27460101 |
|----------------------|-------------|----------|
| | ECLASS-12.0 | 27460101 |
| ECLASS-13.0 2/460101 | ECLASS-13.0 | 27460101 |

ETIM

| | ETIM 9.0 | EC002643 |
|----|-------------|----------|
| UN | NSPSC | |
| | UNSPSC 21.0 | 39121400 |

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Environmental product compliance

EU RoHS

| Fulfills EU RoHS substance requirements | Yes, No exemptions | | | |
|---|--|--|--|--|
| China RoHS | | | | |
| Environment friendly use period (EFUP) | EFUP-E | | | |
| | No hazardous substances above the limits | | | |
| EU REACH SVHC | | | | |
| REACH candidate substance (CAS No.) | No substance above 0.1 wt% | | | |

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Accessories

SZS 0,6X3,5 - Screwdriver

1205053 https://www.phoenixcontact.com/us/products/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

SK 5,08/3,8:FORTL.ZAHLEN - Marker card

0804293

https://www.phoenixcontact.com/us/products/0804293



Marker card, white, labeled, horizontal: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 91 ... (99)100, mounting type: adhesive, for terminal block width: 5.08 mm, lettering field size: 5.08×3.8 mm

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EBP 2-5 - Insertion bridge

1733169

https://www.phoenixcontact.com/us/products/1733169

Insertion bridge for connectors with 5.0 mm or 5.08 mm pitch



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