

MKKDSH 3/ 3-EX BK - PCB terminal block



1758713

<https://www.phoenixcontact.com/pc/products/1758713>

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 documentation. Our general terms of use for downloads are valid.



PCB terminal block, nominal current: 20 A, nominal cross section: 2.5 mm², number of potentials: 3, number of rows: 1, number of positions per row: 3, product range: MKKDSH 3-EX, pitch: 5 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, mounting: Wave soldering, conductor/PCB connection direction: 0 °, color: black, Pin layout: Linear pinning, Solder pin [P]: 5 mm, number of solder pins per potential: 1, type of packaging: packed in cardboard

Your advantages

- Well-known connection principle allows worldwide use
- Low temperature rise, thanks to maximum contact force
- Satisfies the more stringent safety requirements of "Ex eb" protection according to IEC 60079-7 for potentially explosive areas
- Conductor connection on several levels enables higher contact density
- Tall type enables conductor connection for sealed PCBs
- 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 | 1758713 |
| Packing unit | 50 pc |
| Minimum order quantity | 1 pc |
| Product key | AAMFKB |
| GTIN | 4046356345453 |
| Weight per piece (including packing) | 8.278 g |
| Weight per piece (excluding packing) | 8.074 g |
| Customs tariff number | 85369010 |
| Country of origin | CN |

MKKDSH 3/ 3-EX BK - PCB terminal block



1758713

<https://www.phoenixcontact.com/pc/products/1758713>

Technical data

Product properties

| | |
|---------------------------|----------------------------------|
| Product type | Printed circuit board terminal |
| Product family | MKKDSH 3-EX |
| Product line | COMBICON Terminals M |
| Type | PC terminal block can be aligned |
| Number of positions | 3 |
| Pitch | 5 mm |
| Number of connections | 3 |
| Number of rows | 1 |
| Number of potentials | 3 |
| Pin layout | Linear pinning |
| Solder pins per potential | 1 |

Data management status

| | |
|------------------|----|
| Article revision | 04 |
|------------------|----|

Electrical properties

| | |
|---|--------------------------|
| Nominal current I_N | 20 A |
| Nominal voltage U_N | 176 V |
| Rated current / conductor cross section | 20 A/2.5 mm ² |

Ex data

Ex approval

| | |
|---------------------------------|---|
| Identification | 0344 [Ⓢ] II 2GD / Ex eb IIC Gb |
| EU-type examination certificate | KEMA 01ATEX2130 U |
| IECEX certificate | IECEX KEM 07.0019 U |

Connection data

Connection technology

| | |
|-----------------------|----------------------------------|
| Type | 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 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 ... 1.5 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 mm ² ... 1.5 mm ² |

MKKDSH 3/ 3-EX BK - PCB terminal block



1758713

<https://www.phoenixcontact.com/pc/products/1758713>

| | |
|---|---|
| 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 ferrule with plastic sleeve | 0.5 mm ² ... 1.5 mm ² |
| Stripping length | 7 mm |
| Drive form screw head | Slotted (L) |
| Tightening torque | 0.5 Nm ... 0.6 Nm |

Mounting

| | |
|---------------|----------------|
| Mounting type | Wave soldering |
| Pin layout | Linear pinning |

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 | 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) | black (9005) |
| 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

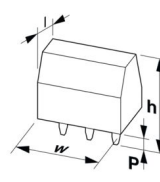
| | |
|---------------------|--|
| Note on application | For safe conductor connection, always adhere to a defined tightening torque. Particularly in the case of PCB terminal blocks with two or three positions, the individual solder pin for each contact point cannot compensate for this. That is why the terminal blocks must be supported during conductor connection (held with one hand, support on the housing). |
|---------------------|--|

Dimensions

MKKDSH 3/ 3-EX BK - PCB terminal block

1758713

<https://www.phoenixcontact.com/pc/products/1758713>

| | |
|-----------------------|--|
| Dimensional drawing |  |
| Pitch | 5 mm |
| Width [w] | 15 mm |
| Height [h] | 36.5 mm |
| Length [l] | 11.1 mm |
| Installed height | 31.5 mm |
| Solder pin length [P] | 5 mm |
| Pin dimensions | 0.9 x 0.9 mm |

PCB design

| | |
|---------------|--------|
| Hole diameter | 1.3 mm |
|---------------|--------|

Environmental and real-life conditions

Ambient conditions

| | |
|---|-------------------|
| Ambient temperature (operation) | -50 °C ... 110 °C |
| 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 |
|-------------------|---------------------|

MKKDSH 3/ 3-EX BK - PCB terminal block



1758713

<https://www.phoenixcontact.com/pc/products/1758713>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/pc/products/1758713>



ATEX

Approval ID: KEMA 01ATEX2130 U



IECEX

Approval ID: IECEX KEM 07.0019 U



EAC Ex

Approval ID: B.00065/19

MKKDSH 3/ 3-EX BK - PCB terminal block



1758713

<https://www.phoenixcontact.com/pc/products/1758713>

Classifications

ECLASS

| | |
|-------------|----------|
| ECLASS-11.0 | 27460101 |
| ECLASS-12.0 | 27460101 |
| ECLASS-13.0 | 27460101 |

ETIM

| | |
|----------|----------|
| ETIM 9.0 | EC002643 |
|----------|----------|

UNSPSC

| | |
|-------------|----------|
| UNSPSC 21.0 | 39121400 |
|-------------|----------|

MKKDSH 3/ 3-EX BK - PCB terminal block



1758713

<https://www.phoenixcontact.com/pc/products/1758713>

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% |
|-------------------------------------|----------------------------|

Phoenix Contact 2024 © - all rights reserved
<https://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG
Flachmarktstraße 8
D-32825 Blomberg
+49 (0) 5235-3 00
info@phoenixcontact.com