

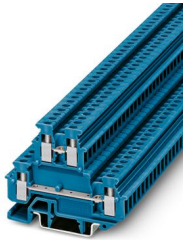
MBKKB 2,5 BU - Mini feed-through terminal block



1414077

<https://www.phoenixcontact.com/us/products/1414077>

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.



Mini feed-through terminal block, nom. voltage: 500 V, nominal current: 24 A, connection method: Screw connection, 1st and 2nd level, Rated cross section: 2.5 mm², cross section: 0.2 mm² - 4 mm², mounting type: NS 15, NS 35/7,5, NS 35/15, color: blue

Your advantages

- Fixed bridges and test sockets can be used on both levels
- Clear arrangement thanks to marking of all terminal points
- Space saving thanks to compact design and mounting option on a 15 mm DIN rail
- Easy potential distribution thanks to standardized plug-in bridges

Commercial data

| | |
|--------------------------------------|---------------------|
| Item number | 1414077 |
| Packing unit | 50 pc |
| Sales key | BE12 |
| Product key | BE1264 |
| Catalog page | Page 560 (C-1-2019) |
| GTIN | 4017918021320 |
| Weight per piece (including packing) | 11.505 g |
| Weight per piece (excluding packing) | 10.379 g |
| Customs tariff number | 85369010 |
| Country of origin | CN |

MBKKB 2,5 BU - Mini feed-through terminal block



1414077

<https://www.phoenixcontact.com/us/products/1414077>

Technical data

Product properties

| | |
|-----------------------|--------------------------|
| Product type | Miniature terminal block |
| Number of connections | 4 |
| Number of rows | 2 |
| Potentials | 2 |

Insulation characteristics

| | |
|----------------------|-----|
| Overvoltage category | III |
| Degree of pollution | 3 |

Electrical properties

| | |
|---|--------|
| Rated surge voltage | 6 kV |
| Maximum power dissipation for nominal condition | 0.77 W |

Connection data

| | |
|---------------------------------|---------------------|
| Number of connections per level | 2 |
| Nominal cross section | 2.5 mm ² |

1st and 2nd level

| | |
|---|---|
| Screw thread | M3 |
| Tightening torque | 0.5 ... 0.6 Nm |
| Stripping length | 7 mm |
| Internal cylindrical gage | A3 |
| Connection in acc. with standard | IEC 60947-7-1 |
| Conductor cross section rigid | 0.2 mm ² ... 4 mm ² |
| Cross section AWG | 24 ... 12 (converted acc. to IEC) |
| Conductor cross section flexible | 0.2 mm ² ... 2.5 mm ² |
| Conductor cross section, flexible [AWG] | 24 ... 14 (converted acc. to IEC) |
| Conductor cross-section flexible (ferrule without plastic sleeve) | 0.25 mm ² ... 2.5 mm ² |
| Flexible conductor cross section (ferrule with plastic sleeve) | 0.25 mm ² ... 1.5 mm ² |
| Cross-section with insertion bridge, rigid | 2.5 mm ² |
| Cross-section with insertion bridge, flexible | 2.5 mm ² |
| 2 conductors with same cross section, solid | 0.2 mm ² ... 1.5 mm ² |
| 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 ... 1.5 mm ² |
| 2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve | 0.5 mm ² ... 1 mm ² |
| Nominal current | 24 A |
| Maximum load current | 24 A (with 4 mm ² conductor cross section) |
| Nominal voltage | 500 V |
| Nominal cross section | 2.5 mm ² |

MBKKB 2,5 BU - Mini feed-through terminal block



1414077

<https://www.phoenixcontact.com/us/products/1414077>

Ex data

Rated data (ATEX/IECEX)

| | |
|-----------------------------|--|
| Identification | Ⓜ II 2 G Ex eb IIC Gb |
| Operating temperature range | -50 °C ... 110 °C |
| Ex-certified accessories | 1413052 D-MBKKB 2,5 1413065 DP-MBKKB 2,5 1205053 SZS 0,6X3,5 3022218 CLIPFIX 35 1401637 E/MBK |
| List of bridges | Fixed bridge / FBRNI 2-5 N / 3000175 Fixed bridge / FBRNI 3-5 N / 3000162 Fixed bridge / FBRNI 4-5 N / 3000159 Fixed bridge / FBRNI 5-5 N / 3000146 Fixed bridge / FBRNI 6-5 N / 3000133 Fixed bridge / FBRNI 7-5 N / 3000230 Fixed bridge / FBRNI 8-5 N / 3000243 Fixed bridge / FBRNI 9-5 N / 3000298 Fixed bridge / FBRNI 10-5 N / 2770639 Fixed bridge / FBRNI 20-5 N / 3000609 |
| Bridge data | 19 A / 2.5 mm ² |
| Ex temperature increase | 40 K (21 A / 2.5 mm ²) |
| Rated voltage | 275 V |
| for bridging with bridge | 275 V |
| Rated insulation voltage | 250 V |
| output | (Permanent) |

Ex level General

| | |
|----------------------|------|
| Rated current | 21 A |
| Maximum load current | 26 A |

Ex connection data General

| | |
|---|---|
| Torque range | 0.5 Nm ... 0.6 Nm |
| Nominal cross section | 2.5 mm ² |
| Rated cross section AWG | 14 |
| Connection capacity rigid | 0.2 mm ² ... 4 mm ² |
| Connection capacity AWG | 24 ... 12 |
| Connection capacity flexible | 0.2 mm ² ... 2.5 mm ² |
| Connection capacity AWG | 24 ... 14 |
| 2 conductors with same cross section, solid | 0.2 mm ² ... 1.5 mm ² |
| 2 conductors with the same cross-section AWG rigid | 24 ... 16 |
| 2 conductors with same cross section, stranded | 0.2 mm ² ... 1.5 mm ² |
| 2 conductors with the same cross-section AWG flexible | 24 ... 16 |
| output | (Permanent) |

MBKKB 2,5 BU - Mini feed-through terminal block



1414077

<https://www.phoenixcontact.com/us/products/1414077>

Ex level Level 1

| | |
|--------------------|-------------|
| Contact resistance | 0.5 mΩ |
| output | (Permanent) |

Ex level Level 2

| | |
|--------------------|--------|
| Contact resistance | 0.4 mΩ |
|--------------------|--------|

Dimensions

| | |
|--------------------|---------|
| Width | 5.2 mm |
| End cover width | 2.5 mm |
| Height | 62 mm |
| Depth on NS 15 | 47.5 mm |
| Depth on NS 35/7,5 | 48 mm |
| Depth on NS 35/15 | 55.5 mm |

Material specifications

| | |
|---|--------|
| Color | blue |
| Flammability rating according to UL 94 | V2 |
| Insulating material group | I |
| Insulating material | PA |
| Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21)) | 125 °C |
| Relative insulation material temperature index (Elec., UL 746 B) | 125 °C |

Electrical tests

Surge voltage test

| | |
|-----------------------|-------------|
| Test voltage setpoint | 7.3 kV |
| Result | Test passed |

Temperature-rise test

| | |
|--|-------------------------------------|
| Requirement temperature-rise test | Increase in temperature \leq 45 K |
| Result | Test passed |
| Short-time withstand current 2.5 mm ² | 0.3 kA |
| Result | Test passed |

Power-frequency withstand voltage

| | |
|-----------------------|-------------|
| Test voltage setpoint | 1.89 kV |
| Result | Test passed |

Mechanical properties

Mechanical data

| | |
|-----------------|-----|
| Open side panel | Yes |
|-----------------|-----|

Mechanical tests

MBKKB 2,5 BU - Mini feed-through terminal block



1414077

<https://www.phoenixcontact.com/us/products/1414077>

Mechanical strength

| | |
|--------|-------------|
| Result | Test passed |
|--------|-------------|

Attachment on the carrier

| | |
|-------------------------|-------------|
| DIN rail/fixing support | NS 35/NS 15 |
| Test force setpoint | 1 N |
| Result | Test passed |

Test for conductor damage and slackening

| | |
|--------------------------------|------------------------------|
| Rotation speed | 10 rpm |
| Revolutions | 135 |
| Conductor cross section/weight | 0.2 mm ² / 0.2 kg |
| | 2.5 mm ² / 0.7 kg |
| | 4 mm ² / 0.9 kg |
| Result | Test passed |

Environmental and real-life conditions

Needle-flame test

| | |
|------------------|-------------|
| Time of exposure | 30 s |
| Result | Test passed |

Ambient conditions

| | |
|--|--|
| Ambient temperature (operation) | -60 °C ... 110 °C (Operating temperature range incl. self-heating; for max. short-term operating temperature, see RTI Elec.) |
| Ambient temperature (storage/transport) | -25 °C ... 60 °C (for a short time, not exceeding 24 h, -60 °C to +70 °C) |
| Ambient temperature (assembly) | -5 °C ... 70 °C |
| Ambient temperature (actuation) | -5 °C ... 70 °C |
| Permissible humidity (operation) | 20 % ... 90 % |
| Permissible humidity (storage/transport) | 30 % ... 70 % |

Standards and regulations

| | |
|----------------------------------|---------------|
| Connection in acc. with standard | IEC 60947-7-1 |
|----------------------------------|---------------|

Mounting

| | |
|---------------|-----------|
| Mounting type | NS 15 |
| | NS 35/7,5 |
| | NS 35/15 |

MBKKB 2,5 BU - Mini feed-through terminal block



1414077

<https://www.phoenixcontact.com/us/products/1414077>

Phoenix Contact 2024 © - all rights reserved

<https://www.phoenixcontact.com>

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com