

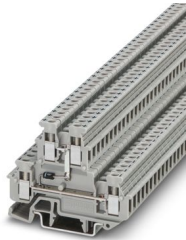
# MBKKB 2,5-DIO/O-U - Mini feed-through terminal block



2800567

<https://www.phoenixcontact.com/us/products/2800567>

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, The max. current is determined by the diode. Installed: Diode 1N 4007, reverse voltage: 1300 V, maximum continuous current: 0.5 A., with integrated diode, nom. voltage: 500 V, nominal current: 0.5 A, 1st and 2nd level, connection method: Screw connection, Rated cross section: 2.5 mm<sup>2</sup>, cross section: 0.2 mm<sup>2</sup> - 4 mm<sup>2</sup>, mounting: NS 15, NS 35/7,5, NS 35/15, color: gray

## Your advantages

- Thanks to the different versions of double-level diode terminal blocks, a variety of switching tasks can be performed
- Space saving thanks to compact design and mounting option on a 15 mm DIN rail
- Clear arrangement thanks to marking of all terminal points
- Easy potential distribution thanks to standardized plug-in bridges

## Commercial data

Item number	2800567
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	BE12
Product key	BE1264
GTIN	4017918074258
Weight per piece (including packing)	12 g
Weight per piece (excluding packing)	11.42 g
Customs tariff number	85369010
Country of origin	PL

## Technical data

### Notes

General	The max. current is determined by the diode. Installed: Diode 1N 4007, reverse voltage: 1300 V, maximum continuous current: 0.5 A.
---------	--

### 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 <sup>2</sup>

#### 1st and 2nd level

Connection method	Screw connection
Screw thread	M3
Tightening torque	0.5 ... 0.6 Nm
Stripping length	7 mm
Internal cylindrical gage	A3
Conductor cross-section rigid	0.2 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Cross section AWG	24 ... 12 (converted acc. to IEC)
Conductor cross-section flexible	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross-section, flexible [AWG]	24 ... 14 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.25 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Flexible conductor cross-section (ferrule with plastic sleeve)	0.25 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Cross-section with insertion bridge, rigid	2.5 mm <sup>2</sup>
Cross-section with insertion bridge, flexible	2.5 mm <sup>2</sup>
2 conductors with same cross section, rigid	0.2 mm <sup>2</sup> ... 1 mm <sup>2</sup>
2 conductors with same cross section, flexible	0.2 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	0.25 mm <sup>2</sup> ... 1.5 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>
Nominal cross section	2.5 mm <sup>2</sup>

# MBKKB 2,5-DIO/O-U - Mini feed-through terminal block



2800567

<https://www.phoenixcontact.com/us/products/2800567>

Nominal current	0.5 A
Maximum load current	0.5 A
Nominal voltage	500 V (Data is based on the dielectric strength of adjacent terminal blocks or of the DINg rail.)

## 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	gray (RAL 7042)
Flammability rating according to UL 94	V0
Insulating material group	I
Insulating material	PA
Static insulating material application in cold	-60 °C
Relative insulation material temperature index (Elec., UL 746 B)	130 °C
Fire protection for rail vehicles (DIN EN 45545-2) R22	HL 1 - HL 3
Fire protection for rail vehicles (DIN EN 45545-2) R23	HL 1 - HL 3
Fire protection for rail vehicles (DIN EN 45545-2) R24	HL 1 - HL 3
Fire protection for rail vehicles (DIN EN 45545-2) R26	HL 1 - HL 3
Surface flammability NFPA 130 (ASTM E 162)	passed
Specific optical density of smoke NFPA 130 (ASTM E 662)	passed
Smoke gas toxicity NFPA 130 (SMP 800C)	passed

## 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 <sup>2</sup>	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

### 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 <sup>2</sup> / 0.2 kg
	2.5 mm <sup>2</sup> / 0.7 kg
	4 mm <sup>2</sup> / 0.9 kg
Result	Test passed

## Environmental and real-life conditions

### Needle-flame test

Time of exposure	30 s
Result	Test passed

### Oscillation/broadband noise

Specification	DIN EN 50155 (VDE 0115-200):2008-03
Spectrum	Long life test category 1, class B, body mounted
Frequency	$f_1 = 5 \text{ Hz}$ to $f_2 = 150 \text{ Hz}$
ASD level	0.964 (m/s <sup>2</sup> ) <sup>2</sup> /Hz
Acceleration	0.8g
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis
Result	Test passed

### Shocks

Specification	DIN EN 50155 (VDE 0115-200):2008-03
Pulse shape	Half-sine
Acceleration	0.58g
Shock duration	30 ms
Number of shocks per direction	3
Test directions	X-, Y- and Z-axis (pos. and neg.)
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.)
---------------------------------	--

# MBKKB 2,5-DIO/O-U - Mini feed-through terminal block



2800567

<https://www.phoenixcontact.com/us/products/2800567>

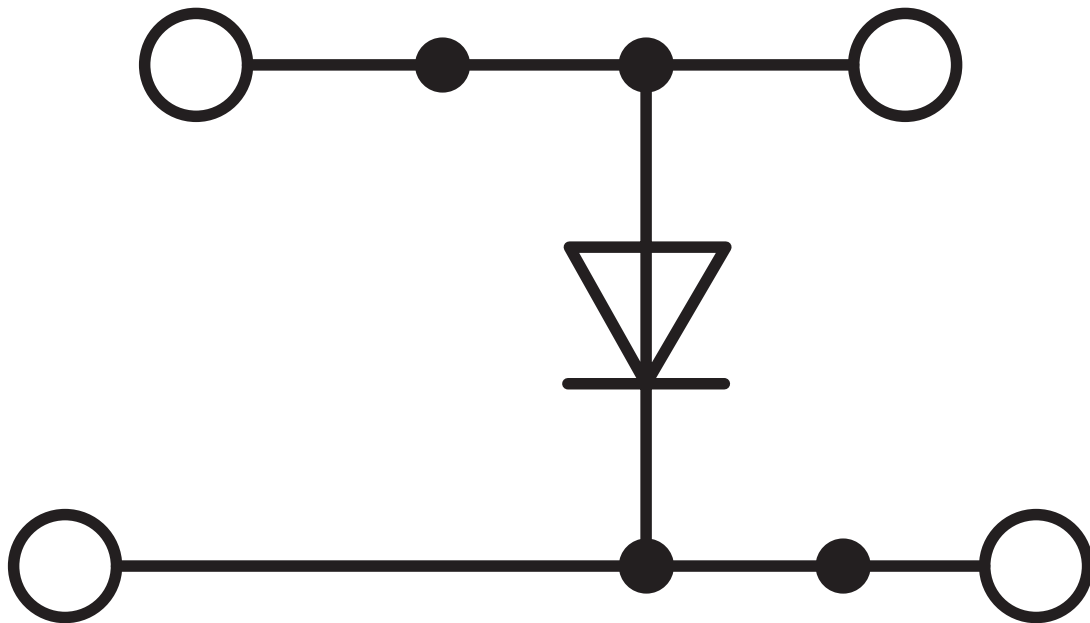
Ambient temperature (storage/transport)	-25 °C ... 60 °C (for a short time, not exceeding 24 h, -60 °C to +70 °C)
Ambient temperature (assembly)	-5 °C ... 70 °C
Ambient temperature (actuation)	-5 °C ... 70 °C
Permissible humidity (operation)	20 % ... 90 %
Permissible humidity (storage/transport)	30 % ... 70 %

## Mounting

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

Drawings

Circuit diagram



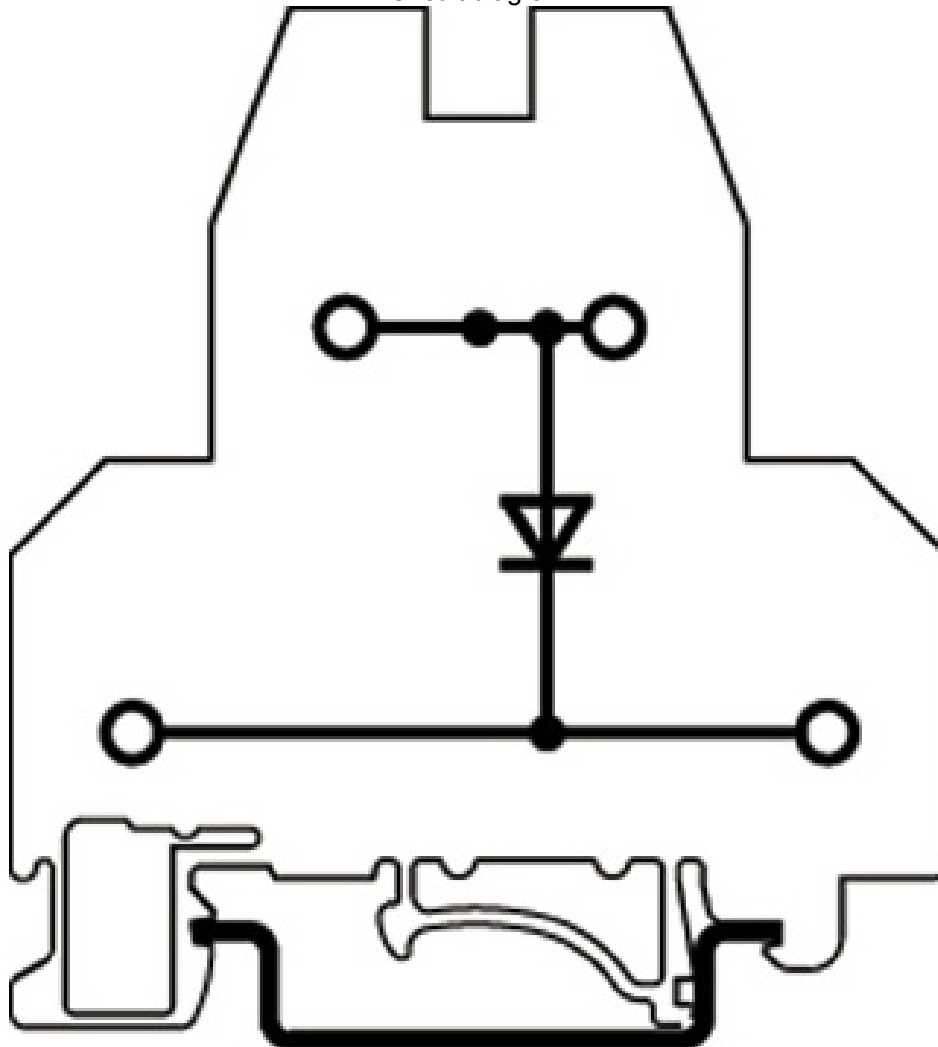
# MBKKB 2,5-DIO/O-U - Mini feed-through terminal block



2800567

<https://www.phoenixcontact.com/us/products/2800567>

Circuit diagram



# MBKKB 2,5-DIO/O-U - Mini feed-through terminal block



2800567

<https://www.phoenixcontact.com/us/products/2800567>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2800567>



**EAC**

Approval ID: KZ7500651131219505

# MBKKB 2,5-DIO/O-U - Mini feed-through terminal block



2800567

<https://www.phoenixcontact.com/us/products/2800567>

## Classifications

### ECLASS

ECLASS-13.0	27250114
ECLASS-15.0	27250114

### ETIM

ETIM 10.0	EC000898
-----------	----------

### UNSPSC

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

2800567

<https://www.phoenixcontact.com/us/products/2800567>

## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	6(c), 7(a)

### China RoHS

Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

### EU REACH SVHC

REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)
SCIP	1435e7c8-893a-4b52-bc22-bfc0ea43ac6b

### EF3.1 Climate Change

CO2e kg	0.082 kg CO2e
---------	---------------

Phoenix Contact 2026 © - 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](mailto:info@phoenixcon.com)