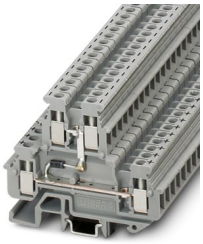
MBKKB 2,5-DIO/U-O - Mini feed-through terminal block

2800570

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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^2, cross section: 0.2 mm^2 - 4 mm^2, 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	2800570
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	BE12
Product key	BE1264
GTIN	4017918074265
Weight per piece (including packing)	11.72 g
Weight per piece (excluding packing)	11.72 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 mm²

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
Connection in acc. with standard	IEC 60947-7-1
Conductor cross-section rigid	0.2 mm² ... 4 mm²
Cross section AWG	24 ... 12 (converted acc. to IEC)
Conductor cross-section flexible	0.2 mm² ... 2.5 mm²
Conductor cross-section, flexible [AWG]	24 ... 14 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.25 mm² ... 2.5 mm²
Flexible conductor cross-section (ferrule with plastic sleeve)	0.25 mm² ... 2.5 mm²
Cross-section with insertion bridge, rigid	2.5 mm²
Cross-section with insertion bridge, flexible	2.5 mm²
2 conductors with same cross section, rigid	0.2 mm² ... 1 mm²
2 conductors with same cross section, flexible	0.2 mm² ... 1.5 mm²
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	0.25 mm² ... 1.5 mm²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm² ... 1.5 mm²

Nominal cross section	2.5 mm²
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
Short-time withstand current 2.5 mm²	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

Attachment on the carrier

DIN rail/fixing support	NS 32/NS 35
Test force setpoint	1 N
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):2022-06
Spectrum	Long life test category 2, bogie-mounted
Frequency	f_1 = 5 Hz to f_2 = 250 Hz
ASD level	6.12 $(m/s^2)^2/Hz$
Acceleration	3.12g
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	5g
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.)
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

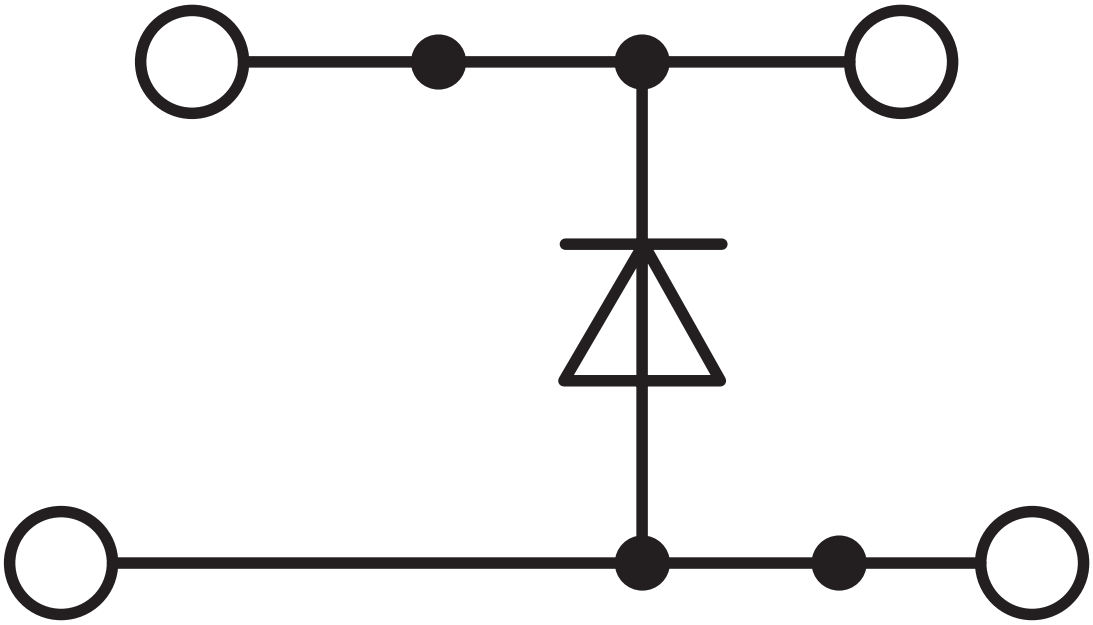
Connection in acc. with standard	IEC 60947-7-1

Mounting

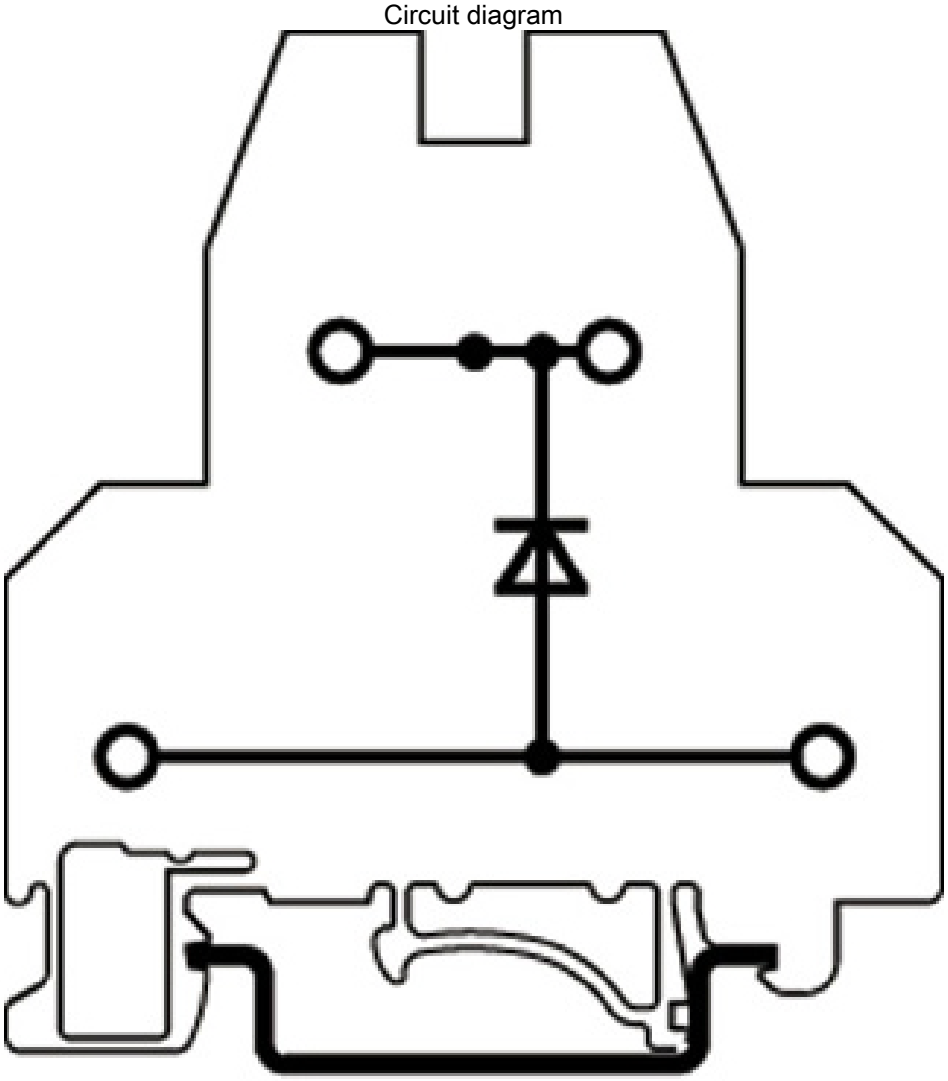
Mounting type	NS 15
	NS 35/7,5
	NS 35/15

Drawings

Circuit diagram



Circuit diagram



Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/2800570

EAC
Approval ID: KZ7500651131219505

Classifications

ECLASS

ECLASS-13.0	27250114
ECLASS-15.0	27250114

ETIM

ETIM 10.0	EC000898

UNSPSC

UNSPSC 21.0	39121400

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	6ae387b6-6e31-48f6-8138-0904d8ebb875

EF3.1 Climate Change

CO2e kg	0.082 kg CO2e

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