

MBK 5/E-TG - Disconnect terminal block



1415089

<https://www.phoenixcontact.com/sg/products/1415089>

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Disconnect terminal block, Current and voltage are determined by the plug used., nom. voltage: 500 V, nominal current: 16 A, connection method: Screw connection, Rated cross section: 4 mm², cross section: 0.2 mm² - 4 mm², mounting: NS 15, color: gray

Your advantages

- Design width of just 6.2 mm

Commercial data

Item number	1415089
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	0110*
Product key	BE1261
Catalog page	Page 506 (C-1-2019)
GTIN	4017918021375
Weight per piece (including packing)	7.774 g
Weight per piece (excluding packing)	7.314 g
Customs tariff number	85369010
Country of origin	DE

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Technical data

Notes

General	Current and voltage are determined by the plug used.
General	
Note	The max. load current must not be exceeded by the total current of all connected conductors.

Product properties

Product type	Disconnect terminal block
Number of connections	2
Number of rows	1
Potentials	1

Data management status

Article revision	00
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Insulation characteristics

Overvoltage category	III
Degree of pollution	3

Electrical properties

Rated surge voltage	6 kV
Maximum power dissipation for nominal condition	1.02 W

Connection data

Number of connections per level	2
Nominal cross section	4 mm ²

Level 1 above 1 below 1

Screw thread	M3
Tightening torque	0.6 ... 0.8 Nm
Stripping length	9 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 ... 4 mm ²
Conductor cross section, flexible [AWG]	24 ... 12 (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 ... 2.5 mm ²
Cross-section with insertion bridge, rigid	1.5 mm ²
Cross-section with insertion bridge, flexible	1.5 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

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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 ... 1.5 mm ²
Nominal current	16 A
Maximum load current	16 A (with 4 mm ² conductor cross section)
Nominal voltage	500 V
Nominal cross section	4 mm ²

Dimensions

Width	6.2 mm
End cover width	1 mm

Material specifications

Color	gray (RAL 7042)
Flammability rating according to UL 94	V2
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

Mechanical properties

Mechanical data

Open side panel	Yes
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Environmental and real-life conditions

Needle-flame test

Time of exposure	30 s
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Oscillation/broadband noise

Specification	DIN EN 50155 (VDE 0115-200):2022-06
Spectrum	Service life test category 2, bogie-mounted

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Frequency	$f_1 = 5 \text{ Hz}$ to $f_2 = 250 \text{ Hz}$
ASD level	$6.12 \text{ (m/s}^2\text{)}^2\text{/Hz}$
Acceleration	3.12g
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis

Shocks

Pulse shape	Half-sine
Acceleration	30g
Shock duration	18 ms
Number of shocks per direction	3
Test directions	X-, Y- and Z-axis (pos. and neg.)

Ambient conditions

Ambient temperature (operation)	-60 °C ... 105 °C (max. short-term operating temperature 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 (storage/transport)	30 % ... 70 %

Standards and regulations

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

Mounting type	NS 15
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Drawings

Circuit diagram



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Approvals

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 CSA Approval ID: 13631				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B	300 V	15 A	22 - 12	-
Use group C	300 V	15 A	22 - 12	-
Use group D	300 V	10 A	22 - 12	-

 EAC Approval ID: RU C-DE.BL08.B.00534				
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 cULus Recognized Approval ID: E60425				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B	300 V	20 A	28 - 12	-
Use group C	300 V	20 A	28 - 12	-
Use group F	500 V	20 A	28 - 12	-
Use group D	600 V	5 A	28 - 12	-

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Classifications

ECLASS

ECLASS-11.0	27141126
ECLASS-12.0	27141126
ECLASS-13.0	27250108

ETIM

ETIM 9.0	EC000902
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UNSPSC

UNSPSC 21.0	39121400
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Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
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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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