TB 4-MTD I - Feed-through terminal block

3000605

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Feed-through terminal block, same profile as fuse terminal block TB 4-HESI, nom. voltage: 800 V, nominal current: 32 A, connection method: Screw connection, Rated cross section: 4 mm^2, cross section: 0.5 mm^2 - 6 mm^2, mounting: NS 35/7,5, NS 35/15, NS 32, color: dark gray

Commercial data

Item number	3000605
Packing unit	50 pc
Minimum order quantity	50 pc
Note	Made to order (non-returnable)
Sales key	*****
Product key	BEK211
GTIN	4046356708999
Weight per piece (including packing)	12.11 g
Weight per piece (excluding packing)	11.074 g
Customs tariff number	85369010
Country of origin	CN

Technical data

Product properties

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

Insulation characteristics

Overvoltage category	III
Degree of pollution	3

Electrical properties

Rated surge voltage	8 kV
Maximum power dissipation for nominal condition	1.02 W

Connection data

Number of connections per level	2
Nominal cross section	4 mm²
Rated cross section AWG	10
Screw thread	M3
Tightening torque	0.5 ... 0.6 Nm
Stripping length	8 mm
Internal cylindrical gage	A3
	B3
Connection in acc. with standard	IEC 60947-7-1
Conductor cross section rigid	0.5 mm² ... 6 mm²
Cross section AWG	20 ... 10 (converted acc. to IEC)
Conductor cross section flexible	0.5 mm² ... 4 mm²
Conductor cross section, flexible [AWG]	20 ... 12 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.5 mm² ... 4 mm²
Flexible conductor cross section (ferrule with plastic sleeve)	0.5 mm² ... 2.5 mm²
Cross-section with insertion bridge, rigid	0.5 mm² ... 4 mm²
Cross-section with insertion bridge, flexible	0.5 mm² ... 4 mm²
Cross-section with insertion bridge, flexible, with ferrule without plastic sleeve	0.5 mm² ... 2.5 mm²
Cross-section with insertion bridge, flexible, with ferrule with plastic sleeve	0.5 mm² ... 1.5 mm²
2 conductors with same cross section, solid	0.5 mm² ... 1.5 mm²
2 conductors with the same cross-section AWG rigid	20 ... 14 (converted acc. to IEC)
2 conductors with same cross section, flexible	0.5 mm² ... 1.5 mm²
2 conductors with the same cross-section AWG flexible	20 ... 14 (converted acc. to IEC)
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	0.5 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 current	32 A
Maximum load current	32 A (with 4 mm² conductor cross section)
Nominal voltage	800 V
Nominal cross section	4 mm²

Dimensions

Width	8.2 mm
Height	58 mm
Depth on NS 32	53 mm
Depth on NS 35/7,5	48 mm
Depth on NS 35/15	55.5 mm

Material specifications

Color	traffic grey B (RAL 7043)
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	9.8 kV
Result	Test passed

Temperature-rise test

Requirement temperature-rise test	Increase in temperature ≤ 45 K
Result	Test passed
Short-time withstand current 4 mm²	0.48 kA
Result	Test passed

Power-frequency withstand voltage

Test voltage setpoint	2 kV
Result	Test passed

Mechanical tests

Mechanical strength

Result	Test passed

Attachment on the carrier

Test force setpoint	1 N
Result	Test passed

Test for conductor damage and slackening

Rotation speed	10 rpm
Revolutions	135
Conductor cross section/weight	0.5 mm² / 0.3 kg
	4 mm² / 0.9 kg
	6 mm² / 1.4 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
Frequency	5 Hz ... 150 Hz
ASD level	1.857 (m/s²)²/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	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 ... 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

Mounting

Mounting type	NS 35/7,5
	NS 35/15
	NS 32

Drawings

Circuit diagram

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/sg/products/3000605

EAC
Approval ID: RU C-DE.A*30.B.01742

cULus Recognized
Approval ID: E60425

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B				
	600 V	30 A	20 - 10	-
Use group C				
	600 V	30 A	20 - 10	-

Classifications

ECLASS

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

ETIM

ETIM 9.0	EC000902

UNSPSC

UNSPSC 21.0	39121400

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%

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