TB 50 I - Feed-through terminal block

3247180

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Feed-through terminal block, nom. voltage: 1000 V, nominal current: 150 A, number of connections: 2, number of positions: 1, connection method: Screw connection, Rated cross section: 50 mm^2, cross section: 16 mm^2 - 70 mm^2, mounting type: NS 35/7,5, NS 35/15, NS 35/15-2,3, NS 32, color: dark gray

Commercial data

Item number	3247180
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	BEK311
Product key	BEK311
GTIN	4046356723558
Weight per piece (including packing)	121.85 g
Weight per piece (excluding packing)	121.07 g
Customs tariff number	85369010
Country of origin	IN

Technical data

Product properties

Product type	Feed-through terminal block
Product family	TB
Number of positions	1
Number of connections	2
Number of rows	1

Insulation characteristics

Overvoltage category	III
Degree of pollution	3

Electrical properties

Maximum power dissipation for nominal condition	4.73 W

Connection data

Number of connections per level	2
Nominal cross section	50 mm²
Rated cross section AWG	1/0
Connection method	Screw connection
Screw thread	M6
Tightening torque	6 ... 8 Nm
Stripping length	24 mm
Internal cylindrical gage	A10
	B10
Connection in acc. with standard	IEC 60947-7-1
Conductor cross-section rigid	16 mm² ... 70 mm²
Cross section AWG	4 ... 2/0 (converted acc. to IEC)
Conductor cross-section flexible	25 mm² ... 70 mm²
Conductor cross-section, flexible [AWG]	2 ... 2/0 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	25 mm² ... 50 mm²
Flexible conductor cross-section (ferrule with plastic sleeve)	25 mm² ... 50 mm²
2 conductors with same cross section, rigid	10 mm² ... 16 mm²
2 conductors with the same cross-section AWG rigid	6 ... 4 (converted acc. to IEC)
2 conductors with same cross section, flexible	10 mm² ... 16 mm²
2 conductors with the same cross-section AWG flexible	6 ... 4 (converted acc. to IEC)
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	10 mm² ... 16 mm²
Nominal cross section	50 mm²
Nominal current	150 A
Maximum load current	150 A
Nominal voltage	1000 V

Dimensions

Width	20 mm
Height	70.5 mm
Depth on NS 32	81.5 mm
Depth on NS 35/7,5	76.1 mm
Depth on NS 35/15	83.6 mm

Material specifications

Color	traffic gray 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 50 mm²	6 kA
Result	Test passed

Power-frequency withstand voltage

Test voltage setpoint	2.2 kV
Result	Test passed

Mechanical properties

Mechanical data

Open side panel	No

Mechanical tests

Mechanical strength

Result	Test passed

Attachment on the carrier

DIN rail/fixing support	NS 32/NS 35
Test force setpoint	10 N
Result	Test passed

Test for conductor damage and slackening

Rotation speed	10 (+/- 2) rpm
Revolutions	135
Conductor cross-section/weight	16 mm² / 2.9 kg
	50 mm² / 9.5 kg
	70 mm²/10.4 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):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/s²)²/Hz
Acceleration	3.12g
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis
Result	Test passed

Shocks

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 35/7,5
	NS 35/15
	NS 35/15-2,3
	NS 32

Drawings

Circuit diagram



Approvals

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EAC
Approval ID: KZ7500651131219505

cULus Recognized
Approval ID: E60425

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
B				
	600 V	150 A	6 - 1/0	-
C				
	600 V	150 A	6 - 1/0	-

Classifications

ECLASS

ECLASS-13.0	27250101
ECLASS-15.0	27250101

ETIM

ETIM 10.0	EC000897

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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