TB 6 I BU - Feed-through terminal block

3057681

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Feed-through terminal block, nom. voltage: 800 V, nominal current: 41 A, number of connections: 2, connection method: Screw connection, Rated cross section: 6 mm^2, cross section: 1.5 mm^2 - 6 mm^2, mounting type: NS 35/7,5, NS 35/15, NS 32, color: blue

Commercial data

Item number	3057681
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	BEK211
Product key	BEK211
GTIN	4046356648240
Weight per piece (including packing)	11.62 g
Weight per piece (excluding packing)	11.62 g
Customs tariff number	85369010
Country of origin	CN

Technical data

Product properties

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

Insulation characteristics

Overvoltage category	III
Degree of pollution	3

Electrical properties

Rated surge voltage	8 kV
Maximum power dissipation for nominal condition	1.31 W

Connection data

Number of connections per level	2
Nominal cross section	6 mm²
Rated cross section AWG	8
Connection method	Screw connection
Screw thread	M4
Tightening torque	1.4 ... 1.5 Nm
Stripping length	10 mm
Connection in acc. with standard	IEC 60947-7-1
Conductor cross-section rigid	1.5 mm² ... 6 mm²
Cross section AWG	14 ... 10 (converted acc. to IEC)
Conductor cross-section flexible	1.5 mm² ... 6 mm²
Conductor cross-section, flexible [AWG]	14 ... 10 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	1.5 mm² ... 6 mm²
Flexible conductor cross-section (ferrule with plastic sleeve)	1.5 mm² ... 6 mm²
Cross-section with insertion bridge, rigid	1 mm² ... 4 mm²
Cross-section with insertion bridge, flexible	1 mm² ... 4 mm²
2 conductors with same cross section, rigid	1 mm² ... 4 mm²
2 conductors with the same cross-section AWG rigid	16 ... 10 (converted acc. to IEC)
2 conductors with same cross section, flexible	1 mm² ... 4 mm²
2 conductors with the same cross-section AWG flexible	16 ... 10 (converted acc. to IEC)
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	1 mm² ... 2.5 mm²
Nominal cross section	6 mm²
Nominal current	41 A
Maximum load current	41 A (with 6 mm² conductor connection)
Nominal voltage	800 V

Dimensions

Width	8.2 mm
End cover width	1.8 mm
Height	42.5 mm
Depth on NS 32	52 mm
Depth on NS 35/7,5	47 mm
Depth on NS 35/15	54.5 mm

Material specifications

Color	blue (RAL 5015)
Flammability rating according to UL 94	V0
Insulating material group	I
Insulating material	PA

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 6 mm²	0.72 kA
Result	Test passed

Power-frequency withstand voltage

Test voltage setpoint	2 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 32/NS 35
Test force setpoint	5 N
Result	Test passed

Test for conductor damage and slackening

Rotation speed	10 rpm

Revolutions	135
Conductor cross-section/weight	1.5 mm² / 0.4 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	EN 50155:2021-07
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	30g
Shock duration	18 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 32

Drawings

Circuit diagram



Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/gb/products/3057681

cULus Recognized
Approval ID: E60425

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
B				
	600 V	50 A	16 - 8	-
C				
	600 V	50 A	16 - 8	-

EAC
Approval ID: KZ7500651131219505

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%

EF3.1 Climate Change

CO2e kg	0.147 kg CO2e

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