TB 2,5-2L I BU - Multi-level terminal block

3000954

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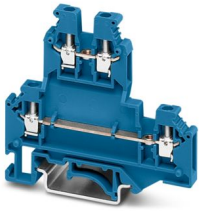

Multi-level terminal block, upper and lower level bridgeable, nom. voltage: 500 V, nominal current: 21 A, Thermal continuous current I_{th}: 21 A, connection method: Screw connection, Rated cross section: 2.5 mm^2, cross section: 0.5 mm^2 - 4 mm^2, mounting type: NS 35/7,5, NS 35/15, NS 32, color: blue

Commercial data

Item number	3000954
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	BEK214
Product key	BEK214
GTIN	4046356763295
Weight per piece (including packing)	12.781 g
Weight per piece (excluding packing)	11.891 g
Customs tariff number	85369010
Country of origin	CN

Technical data

Product properties

Product type	Multi-level terminal block
Product family	TB
Number of connections	4
Number of rows	2

Insulation characteristics

Overvoltage category	III
Degree of pollution	3

Electrical properties

Rated surge voltage	6 kV

Connection data

Number of connections per level	2
Nominal cross section	2.5 mm²
Connection method	Screw connection
Screw thread	M2,5
Tightening torque	0.4 ... 0.5 Nm
Stripping length	8 mm
Internal cylindrical gage	A3
Connection in acc. with standard	IEC 60947-7-1
Conductor cross-section rigid	0.5 mm² ... 4 mm²
Cross section AWG	20 ... 12 (converted acc. to IEC)
Conductor cross-section flexible	0.5 mm² ... 2.5 mm²
Conductor cross-section, flexible [AWG]	20 ... 14 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.5 mm² ... 2.5 mm²
Flexible conductor cross-section (ferrule with plastic sleeve)	0.5 mm² ... 1.5 mm²
Cross-section with insertion bridge, rigid	0.5 mm² ... 2.5 mm²
Cross-section with insertion bridge, flexible	0.5 mm² ... 2.5 mm²
Cross-section with insertion bridge, flexible, with ferrule without plastic sleeve	0.5 mm² (1.5 mm²)
Cross-section with insertion bridge, flexible, with ferrule with plastic sleeve	0.5 mm² ... 1.5 mm²
Nominal cross section	2.5 mm²
Thermal continuous current I_{th}	21 A
Nominal current	21 A
Maximum load current	24 A (with 4 mm² conductor cross-section)
Nominal voltage	500 V
Connection in acc. with standard	IEC 60947-7-1
Conductor cross-section rigid	0.5 mm² ... 4 mm²
Cross section AWG	20 ... 12 (converted acc. to IEC)

Conductor cross-section flexible	0.5 mm² ... 2.5 mm²
Conductor cross-section, flexible [AWG]	20 ... 14 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.5 mm² ... 2.5 mm²
Flexible conductor cross-section (ferrule with plastic sleeve)	0.5 mm² ... 1.5 mm²
Cross-section with insertion bridge, rigid	0.5 mm² ... 2.5 mm²
Cross-section with insertion bridge, flexible	0.5 mm² ... 2.5 mm²
Cross-section with insertion bridge, flexible, with ferrule without plastic sleeve	0.5 mm² (1.5 mm²)
Cross-section with insertion bridge, flexible, with ferrule with plastic sleeve	0.5 mm² ... 1.5 mm²
2 conductors with same cross section, rigid	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 mm²
Nominal cross section	2.5 mm²
Thermal continuous current I_{th}	21 A
Nominal current	21 A
Maximum load current	24 A (with 4 mm² conductor cross-section)
Nominal voltage	500 V

Dimensions

Width	5.2 mm
End cover width	2.5 mm
Height	67 mm
Depth on NS 32	67 mm
Depth on NS 35/7,5	62 mm
Depth on NS 35/15	69.5 mm

Material specifications

Color	blue
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

Temperature-rise test

Requirement temperature-rise test	Increase in temperature ≤ 45 K
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

Mechanical strength

Result	Test passed

Attachment on the carrier

DIN rail/fixing support	NS 32/NS 35
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
	2.5 mm² / 0.7 kg
	4 mm² / 0.9 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	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
	IEC 60947-7-1

Mounting

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

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/gb/products/3000954

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				
	300 V	20 A	20 - 12	-
C				
	300 V	20 A	20 - 12	-
D				
	600 V	5 A	20 - 12	-

Classifications

ECLASS

ECLASS-13.0	27250102
ECLASS-15.0	27250102

ETIM

ETIM 10.0	EC000897

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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