

3046553
<https://www.phoenixcontact.com/pc/products/3046553>

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Knife-disconnect terminal block, nom. voltage: 400 V, nominal current: 20 A, connection method: Screw connection, Rated cross section: 2.5 mm², cross section: 0.14 mm² - 4 mm², mounting: NS 35/7,5, NS 35/15, color: blue

Your advantages

- Compact design and high current carrying capacity of 20 A
- Double bridge shaft enables individual potential distribution and supply

Commercial data

Item number	3046553
Packing unit	50 pc
Minimum order quantity	50 pc
Product key	BE1131
Catalog page	Page 152 (C-1-2019)
GTIN	4046356285889
Weight per piece (including packing)	10.515 g
Weight per piece (excluding packing)	10.204 g
Customs tariff number	85369010
Country of origin	CN

UT 2,5-MT BU - Knife-disconnect terminal block



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Technical data

Product properties

Product type	Disconnect terminal block
Area of application	Railway industry
	Machine building
	Plant engineering
Number of connections	2
Number of rows	1

Insulation characteristics

Overvoltage category	III
Degree of pollution	3

Electrical properties

Rated surge voltage	6 kV
Maximum power dissipation for nominal condition	0.77 W

Connection data

Number of connections per level	2
Nominal cross section	2.5 mm ²
Rated cross section AWG	12

Level 1 above 1 below 1

Screw thread	M3
Tightening torque	0.5 ... 0.6 Nm
Stripping length	9 mm
Internal cylindrical gage	A3
Connection in acc. with standard	IEC 60947-7-1
Conductor cross section rigid	0.14 mm ² ... 4 mm ²
Cross section AWG	26 ... 12 (converted acc. to IEC)
Conductor cross section flexible	0.14 mm ² ... 4 mm ²
Conductor cross section, flexible [AWG]	26 ... 12 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.14 mm ² ... 2.5 mm ²
Flexible conductor cross section (ferrule with plastic sleeve)	0.14 mm ² ... 2.5 mm ²
2 conductors with same cross section, solid	0.14 mm ² ... 1.5 mm ²
2 conductors with same cross section, flexible	0.14 mm ² ... 1.5 mm ²
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	0.14 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	20 A (with 4 mm ² conductor cross section)
Maximum load current	20 A (with 4 mm ² conductor cross section)
Nominal voltage	400 V
Nominal cross section	2.5 mm ²

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Dimensions

Width	5.2 mm
End cover width	2.2 mm
Height	57.8 mm
Depth on NS 35/7,5	49.1 mm
Depth on NS 35/15	56.6 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
Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21))	125 °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
Calorimetric heat release NFPA 130 (ASTM E 1354)	27,5 MJ/kg
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 mm ²	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
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Mechanical tests

Mechanical strength

Result	Test passed
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Attachment on the carrier

DIN rail/fixing support	NS 35
Test force setpoint	1 N
Result	Test passed

Test for conductor damage and slackening

Rotation speed	10 (+/- 2) rpm
Revolutions	135
Conductor cross section/weight	0.14 mm ² / 0.2 kg
	2.5 mm ² / 0.7 kg
	4 mm ² / 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):2018-05
Spectrum	Service life test category 2, bogie-mounted
Frequency	$f_1 = 5 \text{ Hz}$ to $f_2 = 250 \text{ Hz}$
ASD level	6.12 (m/s ²) ² /Hz
Acceleration	3.12g
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	Semi-sinusoidal
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.)
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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
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Mounting

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

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Drawings

Circuit diagram



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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/pc/products/3046553>

 CSA Approval ID: 13631				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B				
	300 V	16 A	26 - 12	-
Use group C				
	300 V	16 A	26 - 12	-
Use group D				
	300 V	10 A	26 - 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	16 A	26 - 12	-
Multi-conductor connection	300 V	16 A	26 - 16	-
Use group C				
	300 V	16 A	26 - 12	-
Multi-conductor connection	300 V	16 A	26 - 16	-
Use group D				
	300 V	10 A	26 - 12	-
Multi-conductor connection	300 V	10 A	26 - 16	-

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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
Exemption	6(c)
China RoHS	
Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.
EU REACH SVHC	
REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)
SCIP	9a7f5a3b-6be9-4c5d-9a4c-121932b1121c

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