

3044513

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Feed-through terminal block, nom. voltage: 500 V, nominal current: 24 A, number of connections: 3, connection method: Screw connection, Rated cross section: 2.5 mm², 1 level, cross section: 0.14 mm² - 4 mm², mounting type: NS 35/7,5, NS 35/15, color: gray

Your advantages

- · The consistent double function shaft offers every opportunity for time-saving potential distribution and accommodating test accessories
- · User-friendly implementation of all potential branching tasks
- · Tested for railway applications

Commercial data

Item number	3044513
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	BE01
Product key	BE1112
GTIN	4046356055406
Weight per piece (including packing)	11.3 g
Weight per piece (excluding packing)	10.8 g
Customs tariff number	85369010
Country of origin	DE



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Technical data

Product properties

Product type	Multi-conductor terminal block
Product family	UT
Area of application	Railway industry
	Machine building
	Plant engineering
	Process industry
Number of connections	3
Number of rows	1
Potentials	1
nsulation characteristics	
Overvoltage category	III

Degree of pollution

Maximum power dissipation for nominal condition

Electrical properties		
	Rated surge voltage	6 kV

3

0.77 W

Connection data

Number of connections per level	3
Nominal cross section	2.5 mm²
Rated cross section AWG	12

1 level

Connection method	Screw connection
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 mm² 4 mm²
Cross section AWG	26 12 (converted acc. to IEC)
Conductor cross-section flexible	0.14 mm² 4 mm²
Conductor cross-section, flexible [AWG]	26 12 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.14 mm² 2.5 mm²
Flexible conductor cross-section (ferrule with plastic sleeve)	0.14 mm² 2.5 mm²
2 conductors with same cross section, solid	0.14 mm² 1.5 mm²
2 conductors with same cross section, flexible	0.14 mm² 1.5 mm²
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	0.14 mm² 1.5 mm²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm ² 1 mm ²



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Nominal current	24 A
Maximum load current	30 A (in case of a 4 mm² conductor cross-section, the maximum load current must not be exceeded by the total current of all connected conductors.)
Nominal voltage	500 V
Nominal cross section	2.5 mm²
Maximum load current	25 A (with 4 mm² conductor cross-section)
	21 A (with a 2.5 mm² conductor cross-section)
Nominal voltage	352 V

Ex data

Rated data (ATEX/IECEx)

Rateu data (ATEA/IECEX)	
Identification	ⓑ II 2 GD Ex eb IIC Gb
Operating temperature range	-60 °C 110 °C
Ex-certified accessories	3047141 D-UT 2,5/4-TWIN
	3047109 DS-UT 2,5/4
	3047183 ATP-UT-TWIN
	1205053 SZS 0,6X3,5
	3022276 CLIPFIX 35-5
	3022218 CLIPFIX 35
List of bridges	Plug-in bridge / FBS 2-5 / 3030161
	Plug-in bridge / FBS 3-5 / 3030174
	Plug-in bridge / FBS 4-5 / 3030187
	Plug-in bridge / FBS 5-5 / 3030190
	Plug-in bridge / FBS 10-5 / 3030213
	Plug-in bridge / FBS 20-5 / 3030226
Bridge data	20 A (2.5 mm²)
Ex temperature increase	40 K (23.4 A / 2.5 mm²)
for bridging with bridge	352 V
- At bridging between non-adjacent terminal blocks	352 V
- At bridging between non-adjacent terminal blocks via PE terminal block	275 V
- At cut-to-length bridging with cover	220 V
- At cut-to-length bridging with partition plate	275 V
Rated insulation voltage	320 V
output	(Permanent)
Ex level General	
Rated voltage	352 V
Rated current	21 A
Maximum load current	25 A
Contact resistance	0.6 mΩ
Ex connection data General	
Torque range	0.5 Nm 0.6 Nm



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Nominal cross section	2.5 mm²
Rated cross section AWG	14
Connection capacity rigid	0.14 mm² 4 mm²
Connection capacity AWG	26 12
Connection capacity flexible	0.14 mm² 2.5 mm²
Connection capacity AWG	26 14
2 conductors with same cross section, solid	0.14 mm² 1.5 mm²
2 conductors with the same cross-section AWG rigid	26 16
2 conductors with same cross section, stranded	0.14 mm² 1.5 mm²
2 conductors with the same cross-section AWG flexible	26 16

Dimensions

Width	5.2 mm
End cover width	2.2 mm
Height	57.8 mm
Depth	46.9 mm
Depth on NS 35/7,5	47.5 mm
Depth on NS 35/15	55 mm

Material specifications

Color	gray (RAL 7042)
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



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Result

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Result	Test passed
Short-time withstand current 2.5 mm²	0.3 kA
Short-time withstand current 4 mm²	0.48 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 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	0.14 mm² / 0.2 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):2008-03
Spectrum	Long life test category 1, class B, body mounted
Frequency	$f_1 = 5 \text{ Hz to } f_2 = 150 \text{ Hz}$
ASD level	1.857 (m/s²)²/Hz
Acceleration	0.8g
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis

Test passed



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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 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
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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/us/products/3044513

DNV

Approval ID: TAE00001S9



ATEX

Approval ID: KEMA06ATEX0017U

.71	cUL Recognized Approval ID: E192998				
		Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
В					
		150 V	20 A	26 - 12	-
С					
		150 V	20 A	26 - 12	-



EAC Ex

Approval ID: KZ 7500525010101950



IECEx

Approval ID: IECEx KEM 06.0013U

SU UL Re	cognized			
	Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
В				
	150 V	20 A	26 - 12	-
С				
	150 V	20 A	26 - 12	-



CCC

Approval ID: 2020322313000622



UKCA-EX

Approval ID: DEKRA 21UKEX0305U



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Classifications

ECLASS

	ECLASS-13.0	27250101	
	ECLASS-15.0	27250101	
ETIM			
	ETIM 9.0	EC000897	
	ICDCC		
Uľ	NSPSC		
	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: n/a)
SCIP	d20b055f-9079-4fe8-b15c-7c7423683540

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Phoenix Contact USA 586 Fulling Mill Road Middletown, PA 17057, United States (+717) 944-1300 info@phoenixcon.com