

3046171

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Knife-disconnect terminal block, With test socket screws for insertion of test plugs, nom. voltage: 500 V, Thermal continuous current  $I_{th}$ : 20 A, connection method: Screw connection, Rated cross section: 4 mm<sup>2</sup>, cross section: 0.14 mm<sup>2</sup> - 6 mm<sup>2</sup>, mounting: NS 35/7,5, NS 35/15, color: gray

### Your advantages

- · Double bridge shaft enables individual potential distribution and supply
- · Tested for railway applications

### Commercial data

Item number	3046171
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	BE1131
Product key	BE1131
Catalog page	Page 165 (C-1-2019)
GTIN	4017918975593
Weight per piece (including packing)	13.32 g
Weight per piece (excluding packing)	12.8 g
Customs tariff number	85369010
Country of origin	CN



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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
Potentials	1
Insulation characteristics	
Overvoltage category	Ш
Degree of pollution	3
Electrical properties	
Rated surge voltage	6 kV
Maximum power dissipation for nominal condition	1.02 W
Connection data	
Number of connections per level	2
Nominal cross section	4 mm <sup>2</sup>
Screw thread	M3
Tightening torque	0.6 0.8 Nm
Stripping length	9 mm
Internal cylindrical gage	A4
Connection in acc. with standard	IEC 60947-7-1
Conductor cross section rigid	0.14 mm <sup>2</sup> 6 mm <sup>2</sup>
Cross section AWG	26 10 (converted acc. to IEC)
Conductor cross section flexible	0.14 mm <sup>2</sup> 6 mm <sup>2</sup>
Conductor cross section, flexible [AWG]	26 10 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.14 mm <sup>2</sup> 4 mm <sup>2</sup>
Flexible conductor cross section (ferrule with plastic sleeve)	0.14 mm <sup>2</sup> 4 mm <sup>2</sup>
2 conductors with same cross section, solid	0.14 mm <sup>2</sup> 1.5 mm <sup>2</sup>
2 conductors with same cross section, flexible	0.14 mm <sup>2</sup> 1.5 mm <sup>2</sup>
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	0.14 mm <sup>2</sup> 1.5 mm <sup>2</sup>
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm² 2.5 mm²
Thermal continuous current I <sub>th</sub>	20 A (with 4 mm <sup>2</sup> conductor cross section)
Maximum load current	20 A (with 6 mm <sup>2</sup> conductor cross section)
Nominal voltage	500 V (up to 690 V for pollution degree II)
Nominal cross section	4 mm <sup>2</sup>

Ex data





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output	(Permanent)
Ex connection data	
Single conductor/terminal point, flexible, with ferrule, without plastic sleeve, AWG	26 12
imensions	
Width	6.2 mm
Height	57.8 mm
Depth on NS 35/7,5	49.1 mm
Depth on NS 35/15	56.6 mm
laterial specifications	
Color	gray (RAL 7042)
Flammability rating according to UL 94	V0
Insulating material group	1
Insulating material	
	PA
Static insulating material application in cold	PA -60 °C
Static insulating material application in cold Relative insulation material temperature index (Elec., UL 746 B)	
	-60 °C
Relative insulation material temperature index (Elec., UL 746 B)	-60 °C 130 °C
Relative insulation material temperature index (Elec., UL 746 B) Fire protection for rail vehicles (DIN EN 45545-2) R22	-60 °C 130 °C HL 1 - HL 3
Relative insulation material temperature index (Elec., UL 746 B) Fire protection for rail vehicles (DIN EN 45545-2) R22 Fire protection for rail vehicles (DIN EN 45545-2) R23	-60 °C 130 °C HL 1 - HL 3 HL 1 - HL 3
Relative insulation material temperature index (Elec., UL 746 B)Fire protection for rail vehicles (DIN EN 45545-2) R22Fire protection for rail vehicles (DIN EN 45545-2) R23Fire protection for rail vehicles (DIN EN 45545-2) R24	-60 °C 130 °C HL 1 - HL 3 HL 1 - HL 3 HL 1 - HL 3
Relative insulation material temperature index (Elec., UL 746 B)Fire protection for rail vehicles (DIN EN 45545-2) R22Fire protection for rail vehicles (DIN EN 45545-2) R23Fire protection for rail vehicles (DIN EN 45545-2) R24Fire protection for rail vehicles (DIN EN 45545-2) R24Fire protection for rail vehicles (DIN EN 45545-2) R26	-60 °C 130 °C HL 1 - HL 3 HL 1 - HL 3 HL 1 - HL 3 HL 1 - HL 3

#### 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 Test passed Short-time withstand current 2.5 mm<sup>2</sup> 0.3 kA Result Test passed Power-frequency withstand voltage Test voltage setpoint 1.89 kV Result Test passed

#### Mechanical properties

Mechanical data



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Open side panel	No
chanical tests	
lechanical strength	
Result	Test passed
ttachment on the carrier	
DIN rail/fixing support	NS 35
Test force setpoint	1 N
Result	Test passed
est for conductor damage and slackening	
Rotation speed	10 rpm
Revolutions	135
Conductor cross section/weight	0.14 mm² / 0.2 kg
	4 mm² / 0.9 kg
	6 mm² / 1.4 kg
Result	Test passed
Result	Test passed
Time of exposure Result	30 s Test passed
Dscillation/broadband noise	
Specification	DIN EN 50155 (VDE 0115-200):2022-06
Spectrum	Long life test category 2, bogie-mounted
	Long me test category 2, bogie-mounted
Frequency	$f_1 = 5$ Hz to $f_2 = 250$ Hz
Frequency ASD level	
	$f_1 = 5 \text{ Hz to } f_2 = 250 \text{ Hz}$
ASD level	$f_1 = 5 \text{ Hz to } f_2 = 250 \text{ Hz}$ 6.12 (m/s <sup>2</sup> ) <sup>2</sup> /Hz
ASD level Acceleration	$f_1 = 5$ Hz to $f_2 = 250$ Hz $6.12 $ (m/s <sup>2</sup> ) <sup>2</sup> /Hz $3.12g$
ASD level Acceleration Test duration per axis	$f_1 = 5 \text{ Hz to } f_2 = 250 \text{ Hz}$ $6.12 \text{ (m/s}^2)^2/\text{Hz}$ $3.12g$ $5 \text{ h}$
ASD level Acceleration Test duration per axis Test directions Result	$f_1 = 5 \text{ Hz to } f_2 = 250 \text{ Hz}$ $6.12 \text{ (m/s}^2)^2/\text{Hz}$ $3.12g$ $5 \text{ h}$ X-, Y- and Z-axis
ASD level Acceleration Test duration per axis Test directions Result	$f_1 = 5 \text{ Hz to } f_2 = 250 \text{ Hz}$ $6.12 \text{ (m/s}^2)^2/\text{Hz}$ $3.12g$ $5 \text{ h}$ X-, Y- and Z-axis
ASD level Acceleration Test duration per axis Test directions Result	$f_1 = 5 \text{ Hz to } f_2 = 250 \text{ Hz}$ $6.12 \text{ (m/s}^2)^2/\text{Hz}$ $3.12g$ $5 \text{ h}$ X-, Y- and Z-axis         Test passed
ASD level Acceleration Test duration per axis Test directions Result thocks Specification	f <sub>1</sub> = 5 Hz to f <sub>2</sub> = 250 Hz         6.12 (m/s <sup>2</sup> ) <sup>2</sup> /Hz         3.12g         5 h         X-, Y- and Z-axis         Test passed
ASD level Acceleration Test duration per axis Test directions Result Shocks Specification Pulse shape	f <sub>1</sub> = 5 Hz to f <sub>2</sub> = 250 Hz         6.12 (m/s <sup>2</sup> ) <sup>2</sup> /Hz         3.12g         5 h         X-, Y- and Z-axis         Test passed         DIN EN 50155 (VDE 0115-200):2008-03         Half-sine
ASD level Acceleration Test duration per axis Test directions Result Shocks Specification Pulse shape Acceleration	f <sub>1</sub> = 5 Hz to f <sub>2</sub> = 250 Hz         6.12 (m/s <sup>2</sup> ) <sup>2</sup> /Hz         3.12g         5 h         X-, Y- and Z-axis         Test passed         DIN EN 50155 (VDE 0115-200):2008-03         Half-sine         5g
ASD level Acceleration Test duration per axis Test directions Result Shocks Specification Pulse shape Acceleration Shock duration	$f_1 = 5 Hz to f_2 = 250 Hz$ $6.12 (m/s^2)^2/Hz$ $3.12g$ $5 h$ $X-, Y- and Z-axis$ Test passed         DIN EN 50155 (VDE 0115-200):2008-03         Half-sine         5g $30 ms$
ASD level Acceleration Test duration per axis Test directions Result Shocks Specification Pulse shape Acceleration Shock duration	$f_1 = 5 Hz to f_2 = 250 Hz$ $6.12 (m/s^2)^2/Hz$ $3.12g$ $5 h$ $X-, Y- and Z-axis$ Test passed         DIN EN 50155 (VDE 0115-200):2008-03         Half-sine         5g $30 ms$ $3$
ASD level Acceleration Test duration per axis Test directions Result Shocks Specification Pulse shape Acceleration Shock duration Number of shocks per direction Test directions	$f_1 = 5 Hz to f_2 = 250 Hz$ $6.12 (m/s^2)^2/Hz$ $3.12g$ $5 h$ $X-, Y- and Z-axis$ Test passed         DIN EN 50155 (VDE 0115-200):2008-03         Half-sine         5g $30 ms$ $3 ms$ $3$ X-, Y- and Z-axis (pos. and neg.)



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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 %
ter de la condición de la Press	
tandards and regulations	IEC 60947-7-1
Connection in acc. with standard	IEC 60947-7-1
-	IEC 60947-7-1
Connection in acc. with standard	NS 35/7,5

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Drawings

Circuit diagram







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#### Approvals

EAL

🌣 To download certificates, visit the product detail page: https://www.phoenixcontact.com/au/products/3046171



EAC Approval ID: KZ7500651131219505

Approval ID: E60425				
	Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
Use group B				
	300 V	16 A	26 - 10	-
Multi-conductor connection	300 V	16 A	26 - 14	-
Use group C				
	300 V	16 A	26 - 10	-
Multi-conductor connection	300 V	16 A	26 - 14	-



CSA Approval ID: 13631

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### Classifications

#### ECLASS

	ECLASS-13.0	27250108
E	ГIМ	
	ETIM 9.0	EC000902
U	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: 7439-92-1)
SCIP	b0f843ce-8bca-47a6-88f8-9e847e20ba3c
EF3.0 Climate Change	
CO2e kg	0.099 kg CO2e

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