

1051570

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Knife-disconnect terminal block, nom. voltage: 500 V, nominal current: 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

- · Tested for railway applications
- · Compact design and high current carrying capacity of 20 A

#### Commercial data

Item number	1051570
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	****
Product key	BE1131
GTIN	4055626673561
Weight per piece (including packing)	19.16 g
Weight per piece (excluding packing)	19 g
Customs tariff number	85369010
Country of origin	PL



1051570

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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	4		
Number of rows	1		
Potentials	1		
Insulation characteristics			
Overvoltage category	III		

## Electrical properties

Rated surge voltage	6 kV
Maximum power dissipation for nominal condition	1.02 W

### Connection data

Number of connections per level	4
Nominal cross section	4 mm²

#### Level 1 above 1 below 1

Level 1 above 1 below 1	
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 mm² 6 mm²
Cross section AWG	26 10 (converted acc. to IEC)
Conductor cross section flexible	0.14 mm² 6 mm²
Conductor cross section, flexible [AWG]	26 10 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.14 mm² 4 mm²
Flexible conductor cross section (ferrule with plastic sleeve)	0.14 mm² 4 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 mm² 2.5 mm²
Nominal current	20 A (with 6 mm² conductor cross section)
Maximum load current	20 A (with 6 mm² conductor cross section)
Nominal voltage	500 V
Nominal cross section	4 mm²



1051570

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#### **Dimensions**

Width	6.2 mm
End cover width	2.2 mm
Height	65.4 mm
Depth on NS 35/7,5	49.1 mm
Depth on NS 35/15	56.6 mm

### Material 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	-60 °C
Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21))	130 °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)	28 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
	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



1051570

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Open side panel	Yes
echanical 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
	4 mm² / 0.9 kg
	6 mm² / 1.4 kg
Dooult	
	Test passed
vironmental and real-life conditions	
vironmental and real-life conditions	30 s Test passed
vironmental and real-life conditions  Needle-flame test  Time of exposure  Result	30 s
vironmental and real-life conditions  Needle-flame test  Time of exposure  Result	30 s Test passed
Needle-flame test Time of exposure Result Ambient conditions	30 s  Test passed  -60 °C 110 °C (Operating temperature range incl. self-heating
Needle-flame test Time of exposure Result Ambient conditions Ambient temperature (operation)	30 s  Test passed  -60 °C 110 °C (Operating temperature range incl. self-heating for max. short-term operating temperature, see RTI Elec.)  -25 °C 60 °C (for a short time, not exceeding 24 h, -60 °C to
Needle-flame test Time of exposure Result  Ambient conditions Ambient temperature (operation)  Ambient temperature (storage/transport)	30 s  Test passed  -60 °C 110 °C (Operating temperature range incl. self-heating for max. short-term operating temperature, see RTI Elec.)  -25 °C 60 °C (for a short time, not exceeding 24 h, -60 °C to +70 °C)
Needle-flame test Time of exposure Result  Ambient conditions Ambient temperature (operation)  Ambient temperature (storage/transport)  Ambient temperature (assembly)	30 s  Test passed  -60 °C 110 °C (Operating temperature range incl. self-heating for max. short-term operating temperature, see RTI Elec.)  -25 °C 60 °C (for a short time, not exceeding 24 h, -60 °C to +70 °C)  -5 °C 70 °C
Needle-flame test Time of exposure Result  Ambient conditions Ambient temperature (operation)  Ambient temperature (storage/transport)  Ambient temperature (assembly) Ambient temperature (actuation)	30 s  Test passed  -60 °C 110 °C (Operating temperature range incl. self-heating for max. short-term operating temperature, see RTI Elec.)  -25 °C 60 °C (for a short time, not exceeding 24 h, -60 °C to +70 °C)  -5 °C 70 °C  -5 °C 70 °C
Needle-flame test Time of exposure Result  Ambient conditions Ambient temperature (operation)  Ambient temperature (storage/transport)  Ambient temperature (assembly) Ambient temperature (actuation)  Permissible humidity (operation)  Permissible humidity (storage/transport)	30 s  Test passed  -60 °C 110 °C (Operating temperature range incl. self-heating for max. short-term operating temperature, see RTI Elec.)  -25 °C 60 °C (for a short time, not exceeding 24 h, -60 °C to +70 °C)  -5 °C 70 °C  -5 °C 70 °C  20 % 90 %
Needle-flame test Time of exposure Result  Ambient conditions Ambient temperature (operation)  Ambient temperature (storage/transport)  Ambient temperature (assembly) Ambient temperature (actuation)  Permissible humidity (operation)  Permissible humidity (storage/transport)	30 s  Test passed  -60 °C 110 °C (Operating temperature range incl. self-heating for max. short-term operating temperature, see RTI Elec.)  -25 °C 60 °C (for a short time, not exceeding 24 h, -60 °C to +70 °C)  -5 °C 70 °C  -5 °C 70 °C  20 % 90 %
Needle-flame test Time of exposure Result  Ambient conditions Ambient temperature (operation)  Ambient temperature (storage/transport)  Ambient temperature (assembly)  Ambient temperature (actuation)  Permissible humidity (operation)  Permissible humidity (storage/transport)  andards and regulations	30 s  Test passed  -60 °C 110 °C (Operating temperature range incl. self-heating for max. short-term operating temperature, see RTI Elec.)  -25 °C 60 °C (for a short time, not exceeding 24 h, -60 °C to +70 °C)  -5 °C 70 °C  -5 °C 70 °C  20 % 90 %  30 % 70 %
Needle-flame test Time of exposure Result  Ambient conditions Ambient temperature (operation)  Ambient temperature (storage/transport)  Ambient temperature (assembly) Ambient temperature (actuation) Permissible humidity (operation) Permissible humidity (storage/transport)  andards and regulations  Connection in acc. with standard	30 s  Test passed  -60 °C 110 °C (Operating temperature range incl. self-heating for max. short-term operating temperature, see RTI Elec.)  -25 °C 60 °C (for a short time, not exceeding 24 h, -60 °C to +70 °C)  -5 °C 70 °C  -5 °C 70 °C  20 % 90 %  30 % 70 %

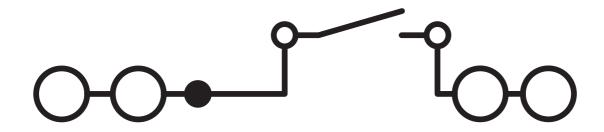


1051570

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# Drawings

Circuit diagram





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## **Approvals**

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Approval ID: 13631



cULus Recognized

Approval ID: E60425



CSA

Approval ID: 13631



**cULus Recognized**Approval ID: E60425



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# Classifications

#### **ECLASS**

	ECLASS-11.0	27141126			
	ECLASS-12.0	27141126			
	ECLASS-13.0	27250108			
ET	ETIM				
	ETIM 9.0	EC000902			
UNSPSC					
	UNSPSC 21.0	39121400			



1051570

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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	54960670-4606-4fcf-9b67-661f74bb8890

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