

3049026

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Bolt connection terminal block, nom. voltage: 1000 V, nominal current: 41 A, number of connections: 2, connection method: Bolt connection, Rated cross section: 6 mm², mounting type: NS 35/7,5, NS 35/15, color: gray

### Your advantages

- · The special clamping nuts can be actuated with a normal screwdriver
- · Large-surface labeling options in the terminal center and above the terminal points
- Quick and easy connection with fold-up hinged covers which hold the clamping nuts captive. With the covers folded open, the bolt is free to accept the cable lugs
- · After closing and engaging the covers, the clamping nut automatically aligns with the threaded bolt and can be tightened easily.
- · Easy bridging and potential distribution using the patented plug-in bridges from the CLIPLINE complete system
- · The screws are secured against loosening by captive spring-loaded spacers
- The use of the switching lock effectively prevents unintentional switching
- Testing with the standardized test adapters and test plugs of the CLIPLINE complete system
- The hinged cover cover the live metal parts including the insulated cable lugs in the clamping area so that they are touch proof
- · Tested for railway applications

#### Commercial data

Item number	3049026
Packing unit	50 pc
•	•
Minimum order quantity	50 pc
Sales key	0180*
Product key	BE4313
Catalog page	Page 381 (C-1-2019)
GTIN	4046356140799
Weight per piece (including packing)	39.334 g
Weight per piece (excluding packing)	39.334 g
Customs tariff number	85369010
Country of origin	CN



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### Technical data

#### Notes

General	Note: the BE-RT path extension is to be used for non-insulated cable lugs (see accessories).
General	
Note	The rated insulation voltage applies to insulated cable lugs acc. to DIN 46237:1970-07 with or without path extension and for uninsulated cable lugs acc. to DIN 46234:1980-03 with path extension.

### Product properties

Product type	Bolt connection terminal block
Product family	RT
Area of application	Railway industry
	Machine building
	Plant engineering
	Process industry
Number of connections	2
Number of rows	1
Potentials	1

#### Insulation characteristics

Overvoltage category	III
Degree of pollution	3

### Electrical properties

Rated surge voltage	8 kV
Maximum power dissipation for nominal condition	1.31 W

### Connection data

Number of connections per level	2
Nominal cross section	6 mm²

#### Level 1 above 1 below 1

Stripping length	The stripping length depends on the specification provided by the cable lug manufacturer.
Connection in acc. with standard	IEC 60947-7-1
Nominal current	41 A
Maximum load current	41 A (with 6 mm² conductor cross section)
Nominal voltage	1000 V
Nominal cross section	6 mm²

#### Cable lug connection DIN 46234:1980-03

0.00.00.00.00.00.00.00.00.00.00.00.00.0	
Connection in acc. with standard	DIN 46234:1980-03
Cross section	0.5 mm² 6 mm²



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Cross section range AWG	20 10 (converted acc. to IEC)
Hole diameter	5.3 mm
Width	10 mm
Bolt diameter	5 mm
Screw thread	M5
Tightening torque	2.5 3 Nm
Connection in acc. with standard	DIN 46237:1970-07
Cross section	1 mm² 6 mm²
Cross section range AWG	18 10 (converted acc. to IEC)
Hole diameter	5.3 mm
Width	10 mm
Bolt diameter	5 mm
Screw thread	M5
Tightening torque	2.5 3 Nm
Identification color of ring cable lugs : red	1 mm²
Identification color of ring cable lugs : blue	2.5 mm <sup>2</sup>
Identification color of ring cable lugs : yellow	6 mm²
Connection in acc. with standard	DIN 46235:1983-07
Cross section	6 mm² 10 mm²
Cross section range AWG	10 8 (converted acc. to IEC)
Hole diameter	5.3 mm
Width	9 mm
Bolt diameter	5 mm
Screw thread	M5
Tightening torque	2.5 3 Nm

#### Ex data

## Rated data (ATEX/IECEx)

Identification	
Operating temperature range	-60 °C 110 °C
Ex-certified accessories	3049097 D-RT 3/5
	0706647 TPNS-UK
	3049819 BE-RT 3/5
	1205079 SZS 1,0X6,5 VDE
	1212553 SF-SL 1,2X6,5-150
	3022276 CLIPFIX 35-5
List of bridges	Plug-in bridge / FBS 2-8 / 3030284
	Plug-in bridge / FBS 3-8 / 3030297
	Plug-in bridge / FBS 4-8 / 3030307
	Plug-in bridge / FBS 5-8 / 3030310
	Plug-in bridge / FBS 6-8 / 3032470
	Plug-in bridge / FBS 10-8 / 3030323
Bridge data	41 A / 6 mm²



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For the second control of the second	40 K (44 A at C array)
Ex temperature increase	40 K (41 A at 6 mm²)
Rated voltage	550 V
for bridging with bridge	550 V
- At bridging between non-adjacent terminal blocks	220 V
- At cut-to-length bridging with cover	220 V
- At cut-to-length bridging with partition plate	550 V
Rated insulation voltage	500 V
output	(Permanent)
Ex level General	
Rated current	41 A
Maximum load current	41 A
Contact resistance	0.41 mΩ
Ex connection data General	
Torque range	2.5 Nm 3 Nm
Nominal cross section	6 mm²
Rated cross section AWG	10
Connection capacity rigid	0.1 mm² 6 mm²
Connection capacity AWG	26 10
Connection capacity flexible	0.1 mm² 6 mm²
Connection capacity AWG	26 10
nensions Width	16.3 mm
Width End cover width	2.2 mm
Width	
Width End cover width Height Depth on NS 35/7,5	2.2 mm
Width End cover width Height	2.2 mm 66 mm
Width End cover width Height Depth on NS 35/7,5	2.2 mm 66 mm 51 mm
Width End cover width Height Depth on NS 35/7,5 Depth on NS 35/15	2.2 mm 66 mm 51 mm
Width End cover width Height Depth on NS 35/7,5 Depth on NS 35/15 terial specifications	2.2 mm 66 mm 51 mm 58.5 mm
Width End cover width Height Depth on NS 35/7,5 Depth on NS 35/15 terial specifications Color	2.2 mm 66 mm 51 mm 58.5 mm
Width  End cover width  Height  Depth on NS 35/7,5  Depth on NS 35/15  terial specifications  Color  Flammability rating according to UL 94	2.2 mm 66 mm 51 mm 58.5 mm  gray (RAL 7042)
Width  End cover width  Height  Depth on NS 35/7,5  Depth on NS 35/15  terial specifications  Color  Flammability rating according to UL 94  Insulating material group	2.2 mm 66 mm 51 mm 58.5 mm  gray (RAL 7042) V0
Width  End cover width  Height  Depth on NS 35/7,5  Depth on NS 35/15  terial specifications  Color  Flammability rating according to UL 94  Insulating material group  Insulating material	2.2 mm 66 mm 51 mm 58.5 mm  gray (RAL 7042) V0 I PA
Width  End cover width  Height  Depth on NS 35/7,5  Depth on NS 35/15  terial specifications  Color  Flammability rating according to UL 94  Insulating material group  Insulating material  Static insulating material application in cold  Temperature index of insulation material (DIN EN 60216-1 (VDE	2.2 mm 66 mm 51 mm 58.5 mm  gray (RAL 7042) V0 I PA -60 °C
Width  End cover width  Height  Depth on NS 35/7,5  Depth on NS 35/15  terial specifications  Color  Flammability rating according to UL 94  Insulating material group  Insulating material  Static insulating material application in cold  Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21))	2.2 mm 66 mm 51 mm 58.5 mm  gray (RAL 7042)  V0 I PA -60 °C 125 °C
Width  End cover width  Height  Depth on NS 35/7,5  Depth on NS 35/15  terial specifications  Color  Flammability rating according to UL 94  Insulating material group  Insulating material  Static insulating material application in cold  Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21))  Relative insulation material temperature index (Elec., UL 746 B)	2.2 mm 66 mm 51 mm 58.5 mm  gray (RAL 7042)  V0 I PA -60 °C 125 °C
Width  End cover width  Height  Depth on NS 35/7,5  Depth on NS 35/15  terial specifications  Color  Flammability rating according to UL 94  Insulating material group  Insulating material  Static insulating material application in cold  Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21))  Relative insulation material temperature index (Elec., UL 746 B)  Fire protection for rail vehicles (DIN EN 45545-2) R22	2.2 mm 66 mm 51 mm 58.5 mm  gray (RAL 7042)  V0 I PA -60 °C 125 °C  130 °C HL 1 - HL 3
Width  End cover width  Height  Depth on NS 35/7,5  Depth on NS 35/15  terial specifications  Color  Flammability rating according to UL 94  Insulating material group  Insulating material  Static insulating material application in cold  Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21))  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	2.2 mm 66 mm 51 mm 58.5 mm  gray (RAL 7042)  V0 I PA -60 °C 125 °C  130 °C HL 1 - HL 3 HL 1 - HL 3
Width  End cover width  Height  Depth on NS 35/7,5  Depth on NS 35/15  terial specifications  Color  Flammability rating according to UL 94  Insulating material group  Insulating material  Static insulating material application in cold  Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21))  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  Fire protection for rail vehicles (DIN EN 45545-2) R24	2.2 mm 66 mm 51 mm 58.5 mm  gray (RAL 7042)  V0 I PA -60 °C 125 °C  130 °C HL 1 - HL 3 HL 1 - HL 3 HL 1 - HL 3



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Test duration per axis

Test directions

Result

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	9.8 kV
Result	Test passed
Temperature-rise test	
Requirement temperature-rise test	Increase in temperature ≤ 45 K
Result	Test passed
Short-time withstand current 6 mm²	0.72 kA
Result	Test passed
Power-frequency withstand voltage	
Test voltage setpoint	2.2 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
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	Service life test category 1, class B, body mounted
Frequency	$f_1 = 5 \text{ Hz to } f_2 = 150 \text{ Hz}$
ASD level	1, - 3 1/2 to 1 <sub>2</sub> - 130 1/2 1.857 (m/s <sup>2</sup> ) <sup>2</sup> /Hz
Acceleration	0.8g
Accoloration	0.09

5 h

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

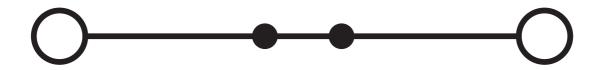


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## Drawings

Circuit diagram





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### **Approvals**

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#### **IECEE CB Scheme**

Approval ID: DE1-62814

VDE approval of dr Approval ID: 40022553				
	Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
	1000 V	41 A	-	0.14 - 6

cULus Recogni Approval ID: E60425	CULus Recognized 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				
	600 V	30 A	-	-
Use group C				
	600 V	30 A	-	-

EAC Ex
Approval ID: KZ 7500525010101950

II ( IEĈEX	IECEx Approval ID: IECExPTB08.0063U				
		Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
		550 V	41 A	-	0.1 - 6

<b>€</b> x	ATEX Approval ID: PTB09ATEX1003U				
		Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
		550 V	41 A	-	0.1 - 6

CCC
Approval ID: 2020322313000627



#### UKCA-EX

Approval ID: CSAE 22UKEX1085U



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## Classifications

### **ECLASS**

	ECLASS-11.0	27141120
	ECLASS-13.0	27250101
Ε٦	ГІМ	
	ETIM 9.0	EC000897
U	NSPSC	
	UNSPSC 21.0	39121400



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## 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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