

3044144

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Feed-through terminal block, nom. voltage: 1000 V, nominal current: 41 A, number of connections: 2, connection method: Screw connection, Rated cross section:  $6~\text{mm}^2$ , cross section:  $0.2~\text{mm}^2$  -  $10~\text{mm}^2$ , mounting type: NS 35/7,5, NS 35/15, color: blue

### Your advantages

- The large wiring space enables the connection of solid and stranded conductors without ferrules, even above the nominal cross section
- · As well as saving space, the compact design enables user-friendly wiring in a small amount of space
- · Optimum screwdriver guidance through closed screw shafts
- · The cable entry funnel enables the use of conductors with ferrules and plastic collars within the nominal cross section
- · Tested for railway applications

#### Commercial data

Item number	3044144
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	BE01
Product key	BE1111
Catalog page	Page 173 (C-1-2019)
GTIN	4017918960421
Weight per piece (including packing)	14.573 g
Weight per piece (excluding packing)	13.9 g
Customs tariff number	85369010
Country of origin	DE



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## Technical data

### Product properties

Railway industry	
Machine building	
Plant engineering	
Process industry	
2	
1	
1	
Insulation characteristics	
III	
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
Rated cross section AWG	8

#### Level 1 above 1 below 1

Level 1 above 1 below 1	
Screw thread	M4
Tightening torque	1.5 1.8 Nm
Stripping length	10 mm
Internal cylindrical gage	A5
Connection in acc. with standard	IEC 60947-7-1
Conductor cross section rigid	0.2 mm² 10 mm²
Cross section AWG	24 8 (converted acc. to IEC)
Conductor cross section flexible	0.2 mm² 10 mm²
Conductor cross section, flexible [AWG]	24 8 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.25 mm² 6 mm²
Flexible conductor cross section (ferrule with plastic sleeve)	0.25 mm² 6 mm²
2 conductors with same cross section, solid	0.2 mm² 2.5 mm²
2 conductors with same cross section, flexible	0.2 mm² 2.5 mm²
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	0.25 mm² 1.5 mm²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm² 4 mm²
Nominal current	41 A
Maximum load current	57 A (with 10 mm² conductor cross section)



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Nominal voltage	1000 V
Note	Note: Product releases, connection cross sections and notes on connecting aluminum cables can be found in the download area.
Nominal cross section	6 mm²

### Ex data

#### Rated data (ATEX/IECEx)

Identification	
Operating temperature range	-60 °C 110 °C
Ex-certified accessories	3047028 D-UT 2,5/10
	3047167 ATP-UT
	1205066 SZS 1,0X4,0 VDE
	3022276 CLIPFIX 35-5
	3022218 CLIPFIX 35
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 10-8 / 3030323
Bridge data	39 A / 6 mm²
Ex temperature increase	40 K (44.9 A / 6 mm²)
Rated voltage	690 V
for bridging with bridge	690 V
- At bridging between non-adjacent terminal blocks	275 V
- At bridging between non-adjacent terminal blocks via PE terminal block	176 V
- At cut-to-length bridging with cover	220 V
- At cut-to-length bridging with partition plate	275 V
Rated insulation voltage	630 V
output	(Permanent)

#### Ex level General

Rated current	40 A
Maximum load current	50 A
Contact resistance	$0.2~\text{m}\Omega$

### Ex connection data General

Torque range	1.5 Nm 1.8 Nm
Nominal cross section	6 mm²
Rated cross section AWG	10
Connection capacity rigid	0.2 mm² 10 mm²
Connection capacity AWG	24 8
Connection capacity flexible	0.2 mm² 6 mm²
Connection capacity AWG	24 10
2 conductors with same cross section, solid	0.2 mm² 2.5 mm²



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2 conductors with the same cross-section AWG rigid	24 14
2 conductors with same cross section, stranded	0.2 mm² 2.5 mm²
2 conductors with the same cross-section AWG flexible	24 14

#### **Dimensions**

Width	8.2 mm
End cover width	2.2 mm
Height	47.7 mm
Depth	46.9 mm
Depth on NS 35/7,5	47.5 mm
Depth on NS 35/15	55 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

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
Short-time withstand current 10 mm²	1.2 kA
Result	Test passed

#### Power-frequency withstand voltage

rower-frequency withstand voltage	
Test voltage setpoint	2.2 kV
Result	Test passed



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#### Mechanical properties

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Open side panel	Yes
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#### Mechanical tests

Result

#### Mechanical strength

DIN rail/fixing support	NS 35	
Test force setpoint	5 N	
Result	Test passed	

Test passed

Rotation speed	10 rpm
Revolutions	135
Conductor cross section/weight	0.2 mm² / 0.2 kg
	6 mm² / 1.4 kg
	10 mm² / 2 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

Specification	DIN LN 30133 (VDL 0113-200).2000-03
Spectrum	Service life test category 1, class B, body mounted
Frequency	$f_1 = 5 \text{ Hz to } f_2 = 150 \text{ Hz}$
ASD level	1.857 (m/s²)²/Hz
Acceleration	0.8g
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis

Test passed

#### Shocks

Result

SNOCKS	
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



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#### 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, no longer than 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

### Mounting

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



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# Classifications

#### **ECLASS**

	ECLASS-11.0	27141120	
	ECLASS-13.0	27250101	
ETIM			
ETIM			
	ETIM 9.0	EC000897	
UNSPSC			
	UNSPSC 21.0	39121400	



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# Environmental product compliance

REACh SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

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