

## Bolt connection terminal block - RBO 16 - 3244630

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Bolt connection terminal block, nom. voltage: 1000 V, nominal current: 520 A, connection method: Bolt connection, number of connections: 2, number of positions: 1, cross section: 25 mm<sup>2</sup> - 300 mm<sup>2</sup>, width: 54.8 mm, color: gray, mounting type: NS 35/7,5, NS 35/15

### Your advantages

- Tested for railway applications



### Key Commercial Data

Packing unit	5 pc
GTIN	
GTIN	4046356583961

### Technical data

#### General

Number of positions	1
Number of levels	1
Number of connections	2
Potentials	1
Nominal cross section	300 mm <sup>2</sup>
Color	gray
Insulating material	PA
Flammability rating according to UL 94	V0
Area of application	Railway industry
	Machine building
	Plant engineering
Rated surge voltage	8 kV
Degree of pollution	3
Overvoltage category	III
Insulating material group	I

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## Technical data

### General

Maximum power dissipation for nominal condition	16.22 W
Designation	Level 1 above 1 below 1
Maximum load current	520 A (At a conductor cross section of 300 mm <sup>2</sup> )
Nominal current I <sub>N</sub>	520 A
Nominal voltage U <sub>N</sub>	1000 V
Open side panel	No
Result of surge voltage test	Test passed
Surge voltage test setpoint	9.8 kV
Result of power-frequency withstand voltage test	Test passed
Power frequency withstand voltage setpoint	2.2 kV
Result of the test for mechanical stability of terminal points (5 x conductor connection)	Test passed
Result of tight fit on support	Test passed
Tight fit on carrier	NS 35
Setpoint	20 N
Result of voltage-drop test	Test passed
Requirements, voltage drop	≤ 3.2 mV
Result of temperature-rise test	Test passed
Short circuit stability result	Test passed
Conductor cross section short circuit testing	300 mm <sup>2</sup>
Short-time current	36 kA
Result of thermal test	Test passed
Proof of thermal characteristics (needle flame) effective duration	30 s
Oscillation, broadband noise test result	Test passed
Test specification, oscillation, broadband noise	DIN EN 50155 (VDE 0115-200):2008-03
Test spectrum	Service life test category 1, class B, body mounted
Test frequency	f <sub>1</sub> = 5 Hz to f <sub>2</sub> = 150 Hz
ASD level	1.857 (m/s <sup>2</sup> ) <sup>2</sup> /Hz
Acceleration	0,8 g
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis
Shock test result	Test passed
Test specification, shock test	DIN EN 50155 (VDE 0115-200):2008-03
Shock form	Half-sine
Acceleration	5g
Shock duration	30 ms
Number of shocks per direction	3
Test directions	X-, Y- and Z-axis (pos. and neg.)
Relative insulation material temperature index (Elec., UL 746 B)	130 °C
Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21))	130 °C

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## Technical data

### General

Static insulating material application in cold	-60 °C
Behavior in fire for rail vehicles (DIN 5510-2)	Test passed
Flame test method (DIN EN 60695-11-10)	V0
Oxygen index (DIN EN ISO 4589-2)	>32 %
NF F16-101, NF F10-102 Class I	2
NF F16-101, NF F10-102 Class F	2
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
Calorimetric heat release NFPA 130 (ASTM E 1354)	28 MJ/kg
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

### Dimensions

Width	54.8 mm
Length	164 mm
Height NS 35/7,5	91.8 mm
Height NS 35/15	99.3 mm
Pitch	54.8 mm

### Connection data

Note	Connection bolts
Connection	1 level
Connection method	Bolt connection
Screw thread	M16
Tightening torque, min	25 Nm
Tightening torque max	35 Nm
Connection in acc. with standard	IEC 60947-7-1
Conductor cross section solid min.	25 mm <sup>2</sup>
Conductor cross section solid max.	300 mm <sup>2</sup>
Conductor cross section flexible min.	25 mm <sup>2</sup>
Conductor cross section flexible max.	300 mm <sup>2</sup>
Min. AWG conductor cross section, flexible	4
Max. AWG conductor cross section, flexible	600
Cable lug connection according to standard	DIN 46234
Min. cross section for cable lug connection	25 mm <sup>2</sup>
Max. cross section for cable lug connection	240 mm <sup>2</sup>
Hole diameter, min.	17 mm
Cable lug width, max.	38 mm
Bolt diameter	16 mm

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### Technical data

#### Connection data

Screw thread	M16
Tightening torque, min	25 Nm
Tightening torque max	35 Nm
Cable lug connection according to standard	DIN 46235
Min. cross section for cable lug connection	50 mm <sup>2</sup>
Max. cross section for cable lug connection	300 mm <sup>2</sup>
Hole diameter, min.	17 mm
Cable lug width, max.	48 mm
Bolt diameter	16 mm
Screw thread	M16
Tightening torque, min	25 Nm
Tightening torque max	35 Nm

#### Standards and Regulations

Connection in acc. with standard	CSA
	IEC 60947-7-1
Flammability rating according to UL 94	V0
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

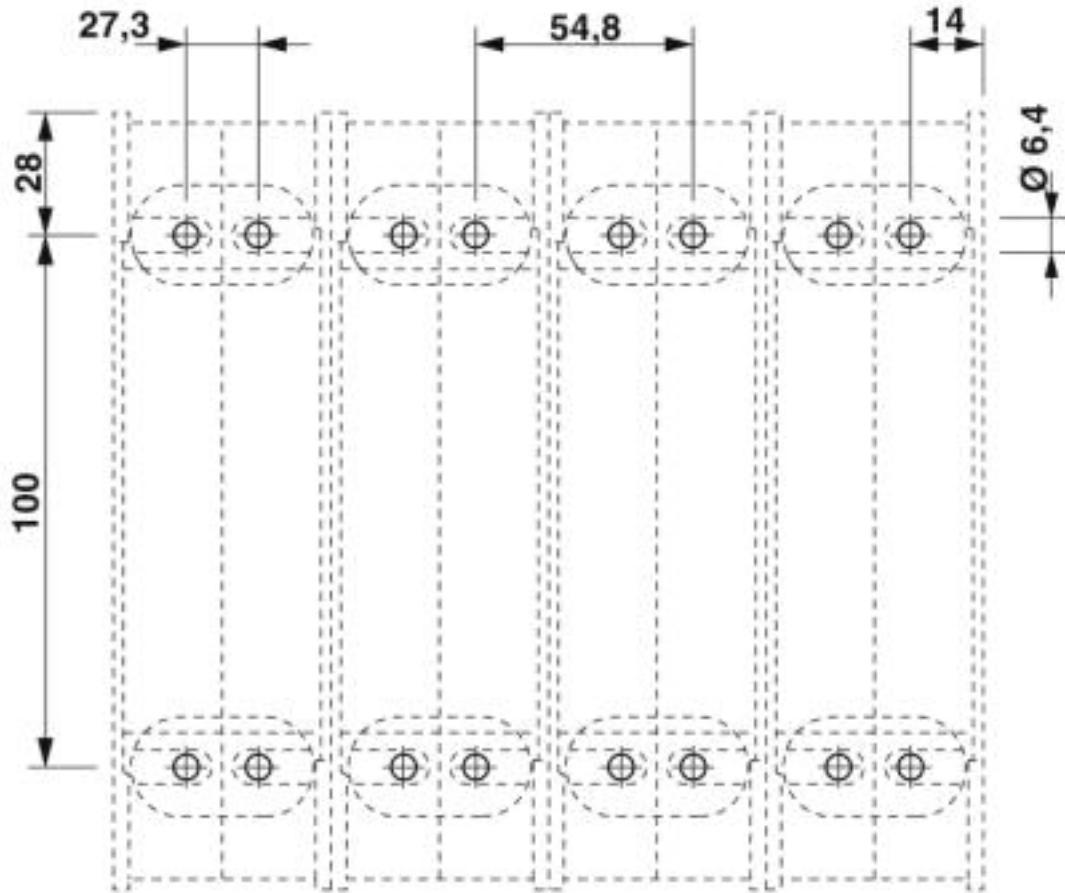
#### Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

### Drawings

# Bolt connection terminal block - RBO 16 - 3244630

Dimensional drawing



Circuit diagram



## Approvals

Approvals

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Approvals

CSA / UL Recognized / EAC / EAC

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Ex Approvals


IECEX / ATEX / EAC Ex


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Approval details


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### Approvals

CSA		<a href="http://www.csagroup.org/services-industries/product-listing/">http://www.csagroup.org/services-industries/product-listing/</a>	13631
		C	
Nominal voltage UN	1000 V		
Nominal current IN	540 A		
mm <sup>2</sup> /AWG/kcmil	4-1000		

UL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 60425
		B	C
Nominal voltage UN	1000 V	600 V	600 V
Nominal current IN	540 A	540 A	540 A
mm <sup>2</sup> /AWG/kcmil	4-1000	4-1000	4-1000

EAC		EAC-Zulassung
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EAC		RU C- DE.A*30.B.01742
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