

## Bolt connection terminal block - RBO 10 - 3244614

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



Bolt connection terminal block, nom. voltage: 1000 V, nominal current: 309 A, connection method: Bolt connection, number of connections: 2, number of positions: 1, width: 41 mm, color: gray, mounting type: NS 35/7,5, NS 35/15

### Why buy this product

- Tested for railway applications



### Key Commercial Data

Packing unit	5 STK
GTIN	 4 046356 583947
GTIN	4046356583947

### Technical data

#### General

Number of positions	1
Number of levels	1
Number of connections	2
Potentials	1
Nominal cross section	150 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

# Bolt connection terminal block - RBO 10 - 3244614

## Technical data

### General

Maximum power dissipation for nominal condition	9.55 W
Maximum load current	309 A (with 150 mm <sup>2</sup> conductor cross section)
Nominal current I <sub>N</sub>	309 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	15 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	150 mm <sup>2</sup>
Short-time current	18 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	5 g
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
Static insulating material application in cold	-60 °C

## Bolt connection terminal block - RBO 10 - 3244614

### Technical data

#### General

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	41 mm
Length	144 mm
Height NS 35/7,5	77 mm
Height NS 35/15	84.5 mm
Pitch	41 mm

#### Connection data

Note	Connection bolts
Connection method	Bolt connection
Connection in acc. with standard	IEC 60947-7-1
Conductor cross section flexible min.	6 mm <sup>2</sup>
Conductor cross section flexible max.	150 mm <sup>2</sup>
Min. AWG conductor cross section, flexible	10
Max. AWG conductor cross section, flexible	300
Cable lug connection according to standard	DIN 46234
Min. cross section for cable lug connection	6 mm <sup>2</sup>
Max. cross section for cable lug connection	150 mm <sup>2</sup>
Hole diameter, min.	10.5 mm
Cable lug width, max.	30 mm
Bolt diameter	10 mm
Screw thread	M10
Tightening torque, min	10 Nm
Tightening torque max	20 Nm
Cable lug connection according to standard	DIN 46235
Min. cross section for cable lug connection	16 mm <sup>2</sup>
Max. cross section for cable lug connection	150 mm <sup>2</sup>
Hole diameter, min.	10.5 mm

## Bolt connection terminal block - RBO 10 - 3244614

### Technical data

#### Connection data

Cable lug width, max.	34 mm
Bolt diameter	10 mm
Screw thread	M10
Tightening torque, min	10 Nm
Tightening torque max	20 Nm
Cable lug connection according to standard	DIN 46237
Min. cross section for cable lug connection	6 mm <sup>2</sup>
Max. cross section for cable lug connection	6 mm <sup>2</sup>
Hole diameter, min.	10.5 mm
Cable lug width, max.	18 mm
Bolt diameter	10 mm
Screw thread	M10
Tightening torque, min	10 Nm
Tightening torque max	20 Nm
Screw thread	M10
Tightening torque, min	10 Nm
Tightening torque max	20 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 HL 1 - HL 3 HL 1 - HL 3 HL 1 - HL 3
Fire protection for rail vehicles (DIN EN 45545-2) R23	HL 1 - HL 3 HL 1 - HL 3 HL 1 - HL 3 HL 1 - HL 3
Fire protection for rail vehicles (DIN EN 45545-2) R24	HL 1 - HL 3 HL 1 - HL 3 HL 1 - HL 3 HL 1 - HL 3
Fire protection for rail vehicles (DIN EN 45545-2) R26	HL 1 - HL 3 HL 1 - HL 3 HL 1 - HL 3 HL 1 - HL 3

#### Environmental Product Compliance

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

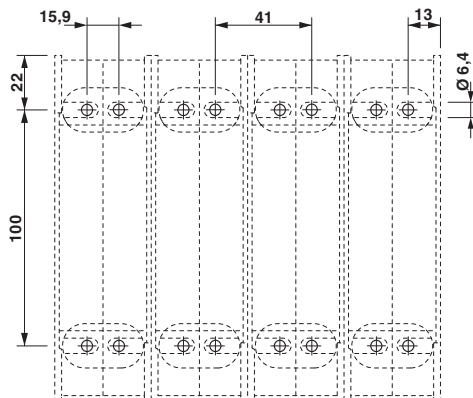
### Drawings

# Bolt connection terminal block - RBO 10 - 3244614

Circuit diagram



Dimensional drawing



## Approvals

### Approvals

Approvals

UL Recognized / CSA / EAC

Ex Approvals

IECEX / ATEX / EAC Ex


### Approval details

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	310 A	310 A	310 A
mm <sup>2</sup> /AWG/kcmil	10-350	10-350	10-350

CSA		<a href="http://www.csagroup.org/services-industries/product-listing/">http://www.csagroup.org/services-industries/product-listing/</a>	13631
		B	C
Nominal voltage UN		600 V	1000 V
Nominal current IN		310 A	310 A
mm <sup>2</sup> /AWG/kcmil		10-350	10-350

## Bolt connection terminal block - RBO 10 - 3244614

### Approvals

EAC		EAC-Zulassung
-----	---	---------------

Phoenix Contact 2018 © - all rights reserved  
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG  
Flachsmarktstr. 8  
32825 Blomberg  
Germany  
Tel. +49 5235 300  
Fax +49 5235 3 41200  
<http://www.phoenixcontact.com>