Bolt connection terminal block - RBO 8 - 3213137

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: 192 A, connection method: Bolt connection, number of connections: 2, number of positions: 1, cross section: 6 mm² - 70 mm², width: 29 mm, color: gray, mounting type: NS 35/7,5, NS 35/15

Your advantages

- Mounting on standard DIN rails or directly in control boxes
- Optional snap-on shock protection
- Tested for railway applications
- Potential distribution with connection rails

Key Commercial Data

Packing unit	1 pc
Minimum order quantity	5 pc
GTIN	4 046356 549196
GTIN	4046356549196
Weight per Piece (excluding packing)	172.000 g
Custom tariff number	85369010
Country of origin	China

Technical data

General

Number of positions	1
Number of levels	1
Number of connections	2
Potentials	1
Nominal cross section	70 mm²

Bolt connection terminal block - RBO 8 - 3213137

Technical data

General

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
Maximum power dissipation for nominal condition	6.27 W
Designation	Level 1 above 1 below 1
Maximum load current	192 A (in case of a 70 mm² conductor cross section, the maximum load current must not be exceeded by the total current of all connected conductors.)
Nominal current I_N	192 A
Nominal voltage U_N	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	10 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	70 mm²
Short-time current	8.4 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

Bolt connection terminal block - RBO 8 - 3213137

Technical data

General

Test frequency	f_1 = 5 Hz to f_2 = 150 Hz
ASD level	1.857 $(m/s^2)^2/Hz$
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
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	29 mm
End cover width	2.2 mm
Length	136 mm
Height NS 35/7,5	67 mm
Height NS 35/15	74.5 mm
Pitch	29 mm

Connection data

Bolt connection terminal block - RBO 8 - 3213137

Technical data

Connection data

Note	Connection bolts
Connection	1 level
Connection method	Bolt connection
Screw thread	M8
Tightening torque, min	6 Nm
Tightening torque max	12 Nm
Connection in acc. with standard	IEC 60947-7-1
Conductor cross section solid min.	6 mm²
Conductor cross section solid max.	70 mm²
Conductor cross section flexible min.	6 mm²
Conductor cross section flexible max.	70 mm²
Min. AWG conductor cross section, flexible	8
Max. AWG conductor cross section, flexible	2/0
Conductor cross section flexible, with ferrule with plastic sleeve min.	6 mm²
Conductor cross section flexible, with ferrule with plastic sleeve max.	70 mm²
Cable lug connection according to standard	DIN 46234
Min. cross section for cable lug connection	2.5 mm²
Max. cross section for cable lug connection	70 mm²
Hole diameter, min.	8.4 mm
Cable lug width, max.	22 mm
Bolt diameter	8 mm
Screw thread	M8
Tightening torque, min	6 Nm
Tightening torque max	12 Nm
Cable lug connection according to standard	DIN 46235
Min. cross section for cable lug connection	16 mm²
Max. cross section for cable lug connection	70 mm²
Hole diameter, min.	8.4 mm
Cable lug width, max.	24 mm
Bolt diameter	8 mm
Screw thread	M8
Tightening torque, min	6 Nm
Tightening torque max	12 Nm
Cable lug connection according to standard	DIN 46237
Min. cross section for cable lug connection	2.5 mm²
Max. cross section for cable lug connection	6 mm²
Hole diameter, min.	8.4 mm

Bolt connection terminal block - RBO 8 - 3213137

Technical data

Connection data

Cable lug width, max.	14 mm
Bolt diameter	8 mm
Screw thread	M8
Tightening torque, min	6 Nm
Tightening torque max	12 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

Classifications

eCl@ss

eCl@ss 4.1	27141100
eCl@ss 5.1	27141100
eCl@ss 6.0	27141100
eCl@ss 7.0	27141120
eCl@ss 8.0	27141120
eCl@ss 9.0	27141120

ETIM

ETIM 2.0	EC000897
ETIM 3.0	EC000897
ETIM 4.0	EC000897
ETIM 5.0	EC000897
ETIM 6.0	EC000897
ETIM 7.0	EC000897

UNSPSC

UNSPSC 6.01	30211811

Bolt connection terminal block - RBO 8 - 3213137

Classifications

UNSPSC

UNSPSC 7.0901	39121410
UNSPSC 11	39121410
UNSPSC 12.01	39121410
UNSPSC 13.2	39121410

Approvals

Approvals

Approvals

CSA / UL Recognized / EAC / EAC

Ex Approvals

IECEx / ATEX / EAC Ex

Approval details

CSA http://www.csagroup.org/services-industries/product-listing/ 13631

	B	C
Nominal voltage UN	600 V	600 V
Nominal current IN	175 A	175 A

UL Recognized http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm FILE E 60425

	B	C
Nominal voltage UN	600 V	600 V
Nominal current IN	175 A	175 A

EAC EAC-Zulassung

Bolt connection terminal block - RBO 8 - 3213137

Approvals

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

Accessories

Accessories

Bridge

Connection rail - RBO 8-VS 2 - 3213179

Bridge, 2-pos.

Connection rail - RBO 8-VS 3 - 3213182

Bridge, 3-pos.

Cover profile

Covering hood - HC-RBO 8 - 3247967

Covering hood, length: 85.6 mm, width: 28.8 mm, height: 46.7 mm, color: gray

Covering hood - HC-RBO 8 BU - 3247969

Covering hood, length: 85.6 mm, width: 28.8 mm, height: 46.7 mm, color: blue

Bolt connection terminal block - RBO 8 - 3213137

Accessories

Covering hood - HC-RBO 8-FE - 3247968

Covering hood, length: 85.6 mm, width: 28.8 mm, height: 46.7 mm, color: black/yellow

---

DIN rail

DIN rail perforated - NS 35/ 7,5 PERF 2000MM - 0801733

DIN rail perforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

---

DIN rail, unperforated - NS 35/ 7,5 UNPERF 2000MM - 0801681

DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

---

DIN rail perforated - NS 35/ 7,5 WH PERF 2000MM - 1204119

DIN rail perforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, Galvanized, white passivated, length: 2000 mm, color: silver

---

DIN rail, unperforated - NS 35/ 7,5 WH UNPERF 2000MM - 1204122

DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, Galvanized, white passivated, length: 2000 mm, color: silver

---

Bolt connection terminal block - RBO 8 - 3213137

Accessories

DIN rail, unperforated - NS 35/ 7,5 AL UNPERF 2000MM - 0801704

DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Aluminum, uncoated, length: 2000 mm, color: silver

DIN rail perforated - NS 35/ 7,5 ZN PERF 2000MM - 1206421

DIN rail perforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, galvanized, length: 2000 mm, color: silver

DIN rail, unperforated - NS 35/ 7,5 ZN UNPERF 2000MM - 1206434

DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, galvanized, length: 2000 mm, color: silver

DIN rail, unperforated - NS 35/ 7,5 CU UNPERF 2000MM - 0801762

DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Copper, uncoated, length: 2000 mm, color: copper-colored

End cap - NS 35/ 7,5 CAP - 1206560

DIN rail end piece, for DIN rail NS 35/7.5

Bolt connection terminal block - RBO 8 - 3213137

Accessories

DIN rail perforated - NS 35/15 PERF 2000MM - 1201730

DIN rail perforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

---

DIN rail, unperforated - NS 35/15 UNPERF 2000MM - 1201714

DIN rail, unperforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

---

DIN rail perforated - NS 35/15 WH PERF 2000MM - 0806602

DIN rail perforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Steel, Galvanized, white passivated, length: 2000 mm, color: silver

---

DIN rail, unperforated - NS 35/15 WH UNPERF 2000MM - 1204135

DIN rail, unperforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Steel, Galvanized, white passivated, length: 2000 mm, color: silver

---

DIN rail, unperforated - NS 35/15 AL UNPERF 2000MM - 1201756

DIN rail, unperforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Aluminum, uncoated, length: 2000 mm, color: silver

---

Bolt connection terminal block - RBO 8 - 3213137

Accessories

DIN rail perforated - NS 35/15 ZN PERF 2000MM - 1206599

DIN rail perforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Steel, galvanized, length: 2000 mm, color: silver

---

DIN rail, unperforated - NS 35/15 ZN UNPERF 2000MM - 1206586

DIN rail, unperforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Steel, galvanized, length: 2000 mm, color: silver

---

DIN rail, unperforated - NS 35/15 CU UNPERF 2000MM - 1201895

DIN rail, unperforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Copper, uncoated, length: 2000 mm, color: copper-colored

---

End cap - NS 35/15 CAP - 1206573

DIN rail end piece, for DIN rail NS 35/15

DIN rail, unperforated - NS 35/15-2,3 UNPERF 2000MM - 1201798

DIN rail, unperforated, Standard profile 2.3 mm, width: 35 mm, height: 15 mm, acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

---

End block

Bolt connection terminal block - RBO 8 - 3213137

Accessories

End clamp - E/NS 35 N - 0800886

End clamp, width: 9.5 mm, color: gray

Labeled device marker

Label - EML (51X25)R YE /RBO8 - 0801353

Label, yellow/black, labeled, can be labeled with: THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2: Lightning flash, mounting type: adhesive, lettering field size: 51 x 25 mm

---

Labeled terminal marker

Zack marker strip - ZB 10 CUS - 0824941

Zack marker strip, can be ordered: Strip, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 10.2 mm, lettering field size: 10.15 x 10.5 mm

---

Zack marker strip - ZB10,LGS:FORTL.ZAHLEN - 1053014

Zack marker strip, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, printed horizontally: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 991 ... 1000, mounting type: snap into tall marker groove, for terminal block width: 10.2 mm, lettering field size: 10.15 x 10.5 mm

---

Zack marker strip - ZB10,QR:FORTL.ZAHLEN - 1053027

Zack marker strip, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, Printed vertically: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 991 ... 1000, mounting type: snap into tall marker groove, for terminal block width: 10.2 mm, lettering field size: 10.15 x 10.5 mm

Bolt connection terminal block - RBO 8 - 3213137

Accessories

Marker for terminal blocks - ZB10,LGS:L1-N,PE - 1053412

Marker for terminal blocks, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, Horizontal: L1, L2, L3, N, PE, L1, L2, L3, N, PE, mounting type: snap into tall marker groove, for terminal block width: 10.2 mm, lettering field size: 10.15 x 10.5 mm

Marker for terminal blocks - ZB10,LGS:U-N - 1053438

Marker for terminal blocks, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, Horizontal: U, V, W, N, GND, U, V, W, N, GND, mounting type: snap into tall marker groove, for terminal block width: 10.2 mm, lettering field size: 10.15 x 10.5 mm

Marker for terminal blocks - UC-TM 10 CUS - 0824605

Marker for terminal blocks, can be ordered: by sheet, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 10.2 mm, lettering field size: 9.6 x 10.5 mm

Marker for terminal blocks - UCT-TM 10 CUS - 0829623

Marker for terminal blocks, can be ordered: by sheet, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 10.2 mm, lettering field size: 8.9 x 9.6 mm

Zack Marker strip, flat - ZBF10 CUS - 0825031

Zack Marker strip, flat, can be ordered: Strip, white, labeled according to customer specifications, mounting type: snap into flat marker groove, for terminal block width: 10 mm, lettering field size: 5.15 x 10 mm

Bolt connection terminal block - RBO 8 - 3213137

Accessories

Zack Marker strip, flat - ZBF10,LGS:FORTL.ZAHLEN - 0810009

Zack Marker strip, flat, Strip, white, labeled, printed horizontally: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 991 ... 1000, mounting type: snap into flat marker groove, for terminal block width: 10 mm, lettering field size: 5.15 x 10 mm

Zack Marker strip, flat - ZBF10,QR:FORTL.ZAHLEN - 0810025

Zack Marker strip, flat, Strip, white, labeled, Printed vertically: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 991 ... 1000, mounting type: snap into flat marker groove, for terminal block width: 10 mm, lettering field size: 5.15 x 10 mm

Marker for terminal blocks - UC-TMF 10 CUS - 0824662

Marker for terminal blocks, can be ordered: by sheet, white, labeled according to customer specifications, mounting type: snap into flat marker groove, for terminal block width: 10.2 mm, lettering field size: 9.6 x 5.1 mm

Marker for terminal blocks - UCT-TMF 10 CUS - 0829679

Marker for terminal blocks, can be ordered: by sheet, white, labeled according to customer specifications, mounting type: snap into flat marker groove, for terminal block width: 10.2 mm, lettering field size: 9.4 x 4.7 mm

Planning and marking software

Software - CLIP-PROJECT ADVANCED - 5146040

Multilingual software for convenient configuration of Phoenix Contact products on standard DIN rails.

Bolt connection terminal block - RBO 8 - 3213137

Accessories

Software - CLIP-PROJECT PROFESSIONAL - 5146053

Multilingual software for terminal strip configuration. A marking module enables the professional marking of markers and labels for identifying terminal blocks, conductors and cables, and devices.

Socket spanner

Tool - SHN 13 - 1209923

Socket wrench, wrench size 13 mm

Terminal marking

Zack marker strip - ZB 10:UNBEDRUCKT - 1053001

Zack marker strip, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into tall marker groove, for terminal block width: 10.2 mm, lettering field size: 10.5 x 10.15 mm

---

Marker for terminal blocks - UC-TM 10 - 0818069

Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into tall marker groove, for terminal block width: 10.2 mm, lettering field size: 9.6 x 10.5 mm

---

Marker for terminal blocks - UCT-TM 10 - 0829142

Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: TOPMARK NEO, TOPMARK LASER, BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: snap into tall marker groove, for terminal block width: 10.2 mm, lettering field size: 8.9 x 9.6 mm

Bolt connection terminal block - RBO 8 - 3213137

Accessories

Zack Marker strip, flat - ZBF10:UNBEDRUCKT - 0809997

Zack Marker strip, flat, Strip, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, PLOTMARK, mounting type: snap into flat marker groove, for terminal block width: 10 mm, lettering field size: 5.15 x 10 mm

Marker for terminal blocks - UC-TMF 10 - 0818124

Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into flat marker groove, for terminal block width: 10.2 mm, lettering field size: 9.6 x 5.1 mm

Marker for terminal blocks - UCT-TMF 10 - 0829204

Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: TOPMARK NEO, TOPMARK LASER, BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: snap into flat marker groove, for terminal block width: 10.2 mm, lettering field size: 9.4 x 4.7 mm