

## Bolt connection terminal block - RBO 8-HC - 3247973

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Bolt connection terminal block, Connection method: Bolt connection, Number of positions: 1, Cross section: 6 mm<sup>2</sup> - 70 mm<sup>2</sup>, AWG: 8 - 2/0, Width: 29 mm, Height: 66 mm, Color: gray, Mounting type: NS 35/7,5, NS 35/15, ct screw connection

### Why buy this product

- Mounting on standard DIN rails or directly in control boxes
- Tested for railway applications



### Key Commercial Data

Packing unit	1 STK
Minimum order quantity	5 STK
Weight per Piece (excluding packing)	190.0 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 mm <sup>2</sup>
Color	gray
Insulating material	PA
Flammability rating according to UL 94	V0
Area of application	Railway industry

## Bolt connection terminal block - RBO 8-HC - 3247973

### Technical data

#### General

	Machine building
	Plant engineering
Rated surge voltage	8 kV
Degree of pollution	3
Overvoltage category	III
Insulating material group	I
Maximum load current	192 A (in case of a 70 mm <sup>2</sup> conductor cross section, the maximum load current must not be exceeded by the total current of all connected conductors.)
Nominal current I <sub>N</sub>	192 A
Nominal voltage U <sub>N</sub>	1500 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 mm <sup>2</sup>
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
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

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### Technical data

#### General

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

#### Dimensions

Width	29 mm
Length	184 mm
Height	66 mm
Height NS 35/7,5	67 mm
Height NS 35/15	74.5 mm
Pitch	29.00 mm

#### Connection data

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

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## Technical data

### Connection data

Tightening torque max	12 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	70 mm <sup>2</sup>
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
Screw thread	M8
Tightening torque, min	6 Nm
Tightening torque max	12 Nm

### Standards and Regulations

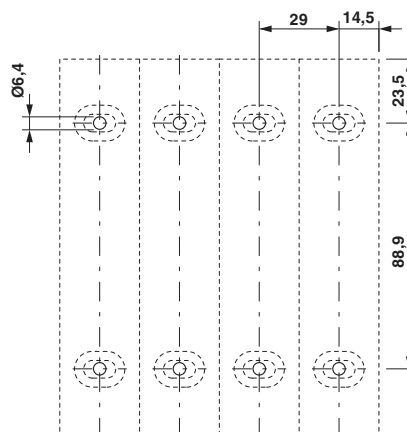
Connection in acc. with standard	UL
	IEC 60947-7-1
	DIN 46234
	DIN 46235
Flammability rating according to UL 94	V0

## Drawings

Circuit diagram



Dimensional drawing



## Bolt connection terminal block - RBO 8-HC - 3247973

### Classifications

#### eCl@ss

eCl@ss 4.0	27141120
eCl@ss 4.1	27141120
eCl@ss 5.0	27141120
eCl@ss 5.1	27141120
eCl@ss 6.0	27141120
eCl@ss 7.0	27141120
eCl@ss 8.0	27141120
eCl@ss 9.0	27141120

#### ETIM

ETIM 3.0	EC000897
ETIM 4.0	EC000897
ETIM 5.0	EC000897

#### UNSPSC

UNSPSC 6.01	30211811
UNSPSC 7.0901	39121410
UNSPSC 11	39121410
UNSPSC 12.01	39121410
UNSPSC 13.2	39121410

### Approvals

#### Approvals

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##### Approvals

UL Recognized / EAC / EAC

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##### Ex Approvals

IEGEx / ATEX / EAC Ex

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Approvals submitted

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#### Approval details

## Bolt connection terminal block - RBO 8-HC - 3247973

### Approvals

UL Recognized		
	B	C
Nominal current I <sub>N</sub>	175 A	175 A
Nominal voltage U <sub>N</sub>	600 V	600 V

EAC
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EAC
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### Accessories

#### Accessories

#### Bridge

Connection rail - RBO 8-VS 2 - 3213179



Bridge, 2-pos.

Connection rail - RBO 8-VS 3 - 3213182



Bridge, 3-pos.

#### DIN rail

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



DIN rail, material: steel galvanized and passivated with a thick layer, perforated, height 7.5 mm, width 35 mm, length: 2000 mm

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### Accessories

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



DIN rail, material: Steel, unperforated, height 7.5 mm, width 35 mm, length: 2 m

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



DIN rail 35 mm (NS 35)

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



DIN rail 35 mm (NS 35)

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



DIN rail, unperforated, Width: 35 mm, Height: 7.5 mm, Length: 2000 mm, Color: silver

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



DIN rail, material: Galvanized, perforated, height 7.5 mm, width 35 mm, length: 2 m

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## Bolt connection terminal block - RBO 8-HC - 3247973

### Accessories

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



DIN rail, material: Galvanized, unperforated, height 7.5 mm, width 35 mm, length: 2 m

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



DIN rail, material: Copper, unperforated, height 7.5 mm, width 35 mm, length: 2 m

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



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

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



DIN rail, material: steel galvanized and passivated with a thick layer, perforated, height 15 mm, width 35 mm, length: 2000 mm

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



DIN rail, material: Steel, unperforated, height 15 mm, width 35 mm, length: 2 m

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## Bolt connection terminal block - RBO 8-HC - 3247973

### Accessories

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



DIN rail 35 mm (NS 35)

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



DIN rail 35 mm (NS 35)

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



DIN rail, deep drawn, high profile, unperforated, 1.5 mm thick, material: aluminum, height 15 mm, width 35 mm, length 2000 mm

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



DIN rail, material: Galvanized, perforated, height 15 mm, width 35 mm, length: 2 m

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



DIN rail, material: Galvanized, unperforated, height 15 mm, width 35 mm, length: 2 m

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## Bolt connection terminal block - RBO 8-HC - 3247973

### Accessories

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



DIN rail, material: Copper, unperforated, 1.5 mm thick, height 15 mm, width 35 mm, length: 2 m

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End cap - NS 35/15 CAP - 1206573



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

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



DIN rail, material: Steel, unperforated, 2.3 mm thick, height 15 mm, width 35 mm, length: 2 m

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### End block

End clamp - E/NS 35 N - 0800886



End clamp, width: 9.5 mm, color: gray

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### Labeled device marker

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



Label, yellow/black, labeled, can be labeled with: THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK X1.2: Lightning flash, Mounting type: Adhesive, Lettering field: 51 x 25 mm

## Bolt connection terminal block - RBO 8-HC - 3247973

### Accessories

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#### 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: 10.15 x 10.5 mm

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



Zack marker strip, Strip, white, labeled, can be labeled with: 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: 10.15 x 10.5 mm

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



Zack marker strip, Strip, white, labeled, can be labeled with: 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: 10.15 x 10.5 mm

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##### Zack marker strip - ZB10,LGS:GLEICHE ZAHLEN - 1053030



Zack marker strip, Strip, white, labeled, can be labeled with: Plotter, Printed horizontally: Identical numbers 1 or 2, etc. up to 100, Mounting type: Snap into tall marker groove, for terminal block width: 10.2 mm, Lettering field: 10.15 x 10.5 mm

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



Marker for terminal blocks, Strip, white, labeled, can be labeled with: 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: 10.15 x 10.5 mm

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## Bolt connection terminal block - RBO 8-HC - 3247973

### Accessories

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



Marker for terminal blocks, Strip, white, labeled, can be labeled with: 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: 10.15 x 10.5 mm

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#### 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: 9.6 x 10.5 mm

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#### 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: 8.9 x 9.6 mm

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#### 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: 5.15 x 10 mm

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#### 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: 5.15 x 10 mm

## Bolt connection terminal block - RBO 8-HC - 3247973

### Accessories

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: 5.15 x 10 mm

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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: 9.6 x 5.1 mm

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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: 9.4 x 4.7 mm

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### Planning and marking software

Software - CLIP-PROJECT ADVANCED - 5146040



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

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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.

## Bolt connection terminal block - RBO 8-HC - 3247973

### Accessories

#### Socket spanner

Tool - SHN 13 - 1209923



Socket wrench, wrench size 13 mm

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#### Terminal marking

Zack marker strip - ZB 10:UNBEDRUCKT - 1053001



Zack marker strip, Strip, white, unlabeled, can be labeled with: Plotter, Mounting type: Snap into tall marker groove, for terminal block width: 10.2 mm, Lettering field: 10.5 x 10.15 mm

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Marker for terminal blocks - UC-TM 10 - 0818069



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: BLUEMARK CLED, BLUEMARK LED, Plotter, Mounting type: Snap into tall marker groove, for terminal block width: 10.2 mm, Lettering field: 9.6 x 10.5 mm

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Marker for terminal blocks - UCT-TM 10 - 0829142



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: THERMOMARK CARD, BLUEMARK CLED, BLUEMARK LED, TOPMARK LASER, Mounting type: Snap into tall marker groove, for terminal block width: 10.2 mm, Lettering field: 8.9 x 9.6 mm

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Zack Marker strip, flat - ZBF10:UNBEDRUCKT - 0809997



Zack Marker strip, flat, Strip, white, unlabeled, can be labeled with: Plotter, Mounting type: Snap into flat marker groove, for terminal block width: 10 mm, Lettering field: 5.15 x 10 mm

## Bolt connection terminal block - RBO 8-HC - 3247973

### Accessories

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#### Marker for terminal blocks - UC-TMF 10 - 0818124



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: BLUEMARK CLED, BLUEMARK LED, Plotter, Mounting type: Snap into flat marker groove, for terminal block width: 10.2 mm, Lettering field: 9.6 x 5.1 mm

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#### Marker for terminal blocks - UCT-TMF 10 - 0829204



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: THERMOMARK CARD, BLUEMARK CLED, BLUEMARK LED, TOPMARK LASER, Mounting type: Snap into flat marker groove, for terminal block width: 10.2 mm, Lettering field: 9.4 x 4.7 mm

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