

## Bolt connection terminal block - RBO 10-HC - 3247976

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Bolt connection terminal block, Connection method: Bolt connection, Number of positions: 1, Cross section: 6 mm<sup>2</sup> - 150 mm<sup>2</sup>, AWG: 10 - 300, Width: 41 mm, Color: gray, Mounting type: NS 35/7,5, NS 35/15, ct screw connection

### Why buy this product

- Tested for railway applications



### Key commercial data

Packing unit	5 pc
Minimum order quantity	5 pc
GTIN	 4 046356 725101
Weight per Piece (excluding packing)	99.99 g
Custom tariff number	85369010
Country of origin	China

### Technical data

#### General

Number of levels	1
Number of connections	2
Color	gray
Insulating material	PA
Inflammability class according to UL 94	V0
Area of application	Railway industry Mechanical engineering Plant engineering
Maximum load current	309 A (with 150 mm <sup>2</sup> conductor cross section)
Rated surge voltage	8 kV
Pollution degree	3
Surge voltage category	III

# Bolt connection terminal block - RBO 10-HC - 3247976

## Technical data

### General

Insulating material group	I
Connection in acc. with standard	IEC 60947-7-1
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>	1500 V
Maximum load current	309 A (with 150 mm <sup>2</sup> conductor cross section)
Open side panel	nein
Number of positions	1
Surge voltage test setpoint	12 kV
Result of surge voltage test	Test passed
Power frequency withstand voltage setpoint	2.7 kV
Result of power-frequency withstand voltage test	Test passed
Checking the mechanical stability of terminal points (5 x conductor connection)	Test passed
Tight fit on carrier	NS 35
Setpoint	15 N
Result of tight fit test	Test passed
Requirements, voltage drop	≤ 3.2 mV
Result of voltage drop test	Test passed
Temperature-rise test	Test passed
Conductor cross section short circuit testing	150 mm <sup>2</sup>
Short-time current	18 kA
Short circuit stability result	Test passed
Proof of thermal characteristics (needle flame) effective duration	30 s
Result of thermal test	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	0.8g
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis
Oscillation, broadband noise 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.)
Shock test result	Test passed

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## Technical data

### General

Temperature index, insulating material (DIN EN 60216-1 (VDE 0304-21))	130 °C
Static insulating material application in cold	-60 °C

### Dimensions

Width	41 mm
Length	235 mm
Height NS 35/7,5	77 mm
Height NS 35/15	84.5 mm

### Connection data

Note	Connection bolts
Connection in acc. with standard	IEC 60947-7-1
Connection method	Bolt connection
Conductor cross section solid min.	6 mm <sup>2</sup>
Conductor cross section solid max.	150 mm <sup>2</sup>
Conductor cross section AWG/kcmil min.	10
Conductor cross section AWG/kcmil max	300
Conductor cross section stranded min.	6 mm <sup>2</sup>
Conductor cross section stranded max.	150 mm <sup>2</sup>
Min. AWG conductor cross section, stranded	10
Max. AWG conductor cross section, stranded	300
Cable lug connection according to standard	DIN 46 234
Min. cross section for cable lug connection	6 mm <sup>2</sup>
Max. cross section for cable lug connection	150 mm <sup>2</sup>
Cable lug connection according to standard	DIN 46,235
Min. cross section	16 mm <sup>2</sup>
Max. cross section	150 mm <sup>2</sup>
Screw thread	M10
Tightening torque, min	10 Nm
Tightening torque max	20 Nm

## 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

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## Classifications

### 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

#### Approvals


UL Recognized / CSA / EAC


#### Ex Approvals

ATEX / IECEx / EAC Ex

#### Approvals submitted

### Approval details

UL Recognized 			
		B	C
mm <sup>2</sup> /AWG/kcmil	10-350	10-350	10-350
Nominal current I <sub>N</sub>	310 A	310 A	310 A
Nominal voltage U <sub>N</sub>	1000 V	600 V	600 V

CSA 		
	B	C
mm <sup>2</sup> /AWG/kcmil	10-350	10-350
Nominal current I <sub>N</sub>	310 A	310 A

## Bolt connection terminal block - RBO 10-HC - 3247976

### Approvals

	B	C
Nominal voltage UN	600 V	1000 V

EAC
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### Accessories

#### Accessories

#### Bridge

Connection rail - RBO 10-VS 2 - 3244643



Connection rail, Number of positions: 2, Color: silver

Connection rail - RBO 10-VS 3 - 3244656



Connection rail, Number of positions: 3, Color: silver

#### End block

End clamp - E/AL-NS 35 - 1201662



End clamp, for end support of UKH 50 to UKH 240, is pushed onto DIN rail NS 35 and fixed with 2 screws, width: 10 mm, color: aluminum

#### Insulating sleeve

Insulating sleeve - PS-IH WH - 0311566



Insulating sleeve, Color: white

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### Accessories

Insulating sleeve - PS-IH RD - 0311579



Insulating sleeve, Color: red

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Insulating sleeve - PS-IH BU - 0311582



Insulating sleeve, Color: blue

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Insulating sleeve - PS-IH YE - 0311595



Insulating sleeve, Color: yellow

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Insulating sleeve - PS-IH GN - 0311605



Insulating sleeve, Color: green

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Insulating sleeve - PS-IH GY - 0311621



Insulating sleeve, Color: gray

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### Accessories

Insulating sleeve - PS-IH BK - 0311634



Insulating sleeve, Color: black

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Insulating sleeve - PS-IH VT - 0311618



Insulating sleeve, Color: violet

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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

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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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## Bolt connection terminal block - RBO 10-HC - 3247976

### Accessories

#### 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

#### 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

#### 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

#### 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

#### 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



## Bolt connection terminal block - RBO 10-HC - 3247976

### Accessories

#### 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

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#### 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

## Bolt connection terminal block - RBO 10-HC - 3247976

### Accessories

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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### Marker carriers

Terminal strip marker carrier - KLM 3-L - 0814788



Terminal strip marker carrier, height-adjustable, for end brackets CLIPFIX 15, CLIPFIX 35 and CLIPFIX 35-5, can be labeled with BMK...20 x 8 labels, or directly with the M-PEN or X-PEN

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### Mounting 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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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)

## Bolt connection terminal block - RBO 10-HC - 3247976

### Accessories

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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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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## Bolt connection terminal block - RBO 10-HC - 3247976

### Accessories

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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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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## Bolt connection terminal block - RBO 10-HC - 3247976

### Accessories

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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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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## Bolt connection terminal block - RBO 10-HC - 3247976

### Accessories

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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### Planning and marking software

Software - CLIP-PROJECT ADVANCED - 5146040



Multilingual software for easy planning of Phoenix Contact on DIN rails together with the integrated TRABTECH-select software module for planning comprehensive surge protection concepts.

Software - CLIP-PROJECT PROFESSIONAL - 5146053



Multi-lingual software for terminal strip project planning. A marking module allows professional labeling of markers and labels for marking terminal blocks, conductors, cables and devices. The additionally integrated software module TRABTECH-select for planning comprehensive surge protection concepts.

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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

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

## Bolt connection terminal block - RBO 10-HC - 3247976

### Accessories

#### 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

#### 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

#### 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

#### 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

### Test plug terminal block

#### Test plugs - PS-MT - 0311647



Test plugs

### Drawings

## Bolt connection terminal block - RBO 10-HC - 3247976

Circuit diagram



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