

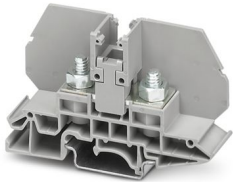
RBO 6 - Bolt connection terminal block



3075896

<https://www.phoenixcontact.com/us/products/3075896>

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Bolt connection terminal block, nom. voltage: 800 V, nominal current: 125 A, number of connections: 2, number of positions: 1, connection method: Bolt connection, Rated cross section: 35 mm², mounting type: NS 35/7,5, NS 35/15, NS 32, color: gray

Your advantages

- Compact connection with ring and fork-type cable lugs
- Mounting on standard DIN rails
- Bridge shaft for potential distribution using standard screw bridges
- Isolator bridge bar for switchable cross connections

Commercial data

Item number	3075896
Packing unit	40 pc
Minimum order quantity	40 pc
Sales key	BE44
Product key	BE4412
Catalog page	Page 389 (C-1-2019)
GTIN	4046356532853
Weight per piece (including packing)	38.4 g
Weight per piece (excluding packing)	36.8 g
Customs tariff number	85369010
Country of origin	IN

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Technical data

Notes

General

Note	
	The rated insulation voltage applies to insulated cable lugs acc. DIN 46237:1970-07 and for uninsulated cable lugs acc. DIN 46234:1980-03 with shrink sleeve.
	The rated insulation voltage applies to insulated cable lugs acc. DIN 46237:1970-07 and for uninsulated cable lugs acc. DIN 46234:1980-03 with shrink sleeve. When using uninsulated cable lugs with shrink sleeve the min. required air clearances and creepage distances have to be ensured by the enduser.
	The rated insulation voltage applies to insulated cable lugs acc. to DIN 46237:1970-07 and for uninsulated cable lugs acc. to DIN 46234:1980-03 with path extension.

Product properties

Product type	Bolt connection terminal block
Product family	RBO
Number of positions	1
Pitch	17 mm
Number of connections	2
Number of rows	1
Potentials	1

Insulation characteristics

Overvoltage category	III
Degree of pollution	3

Electrical properties

Rated surge voltage	8 kV
Maximum power dissipation for nominal condition	4.06 W

Connection data

Number of connections per level	2
Nominal cross section	35 mm ²
Stripping length	The stripping length depends on the specification provided by the cable lug manufacturer.
Connection in acc. with standard	IEC 60947-7-1
Nominal current	125 A
Maximum load current	125 A (with 35 mm ² conductor cross section)
Nominal voltage	800 V
Nominal cross section	35 mm ²

Cable lug connection DIN 46234:1980-03

Connection in acc. with standard	DIN 46234:1980-03
Cross section	6 mm ² ... 35 mm ²

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Additional text	only use with shrink sleeve
Cross section range AWG	10 ... 2 (converted acc. to IEC)
Hole diameter	6.5 mm
Width	15 mm
Bolt diameter	6 mm
Screw thread	M6
Tightening torque	3.2 ... 3.7 Nm
Connection in acc. with standard	DIN 46237:1970-07
Cross section	2.5 mm ² ... 6 mm ²
Cross section range AWG	14 ... 10 (converted acc. to IEC)
Hole diameter	6.5 mm
Width	11 mm
Bolt diameter	6 mm
Screw thread	M6
Tightening torque	3.2 ... 3.7 Nm
Identification color of ring cable lugs : blue	2.5 mm ²
Identification color of ring cable lugs : yellow	6 mm ²

Dimensions

Width	17 mm
End cover width	2.2 mm
Height	80.8 mm
Depth on NS 32	54.8 mm
Depth on NS 35/7,5	49.8 mm
Depth on NS 35/15	57.3 mm
Pitch	17 mm

Material specifications

Color	gray
Flammability rating according to UL 94	V0
Insulating material group	I
Insulating material	PA
Static insulating material application in cold	-60 °C
Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21))	130 °C
Relative insulation material temperature index (Elec., UL 746 B)	130 °C
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
Calorimetric heat release NFPA 130 (ASTM E 1354)	28 MJ/kg
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

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Electrical tests

Surge voltage test

Result	Test passed
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Temperature-rise test

Requirement temperature-rise test	Increase in temperature ≤ 45 K
Result	Test passed
Short-time withstand current 35 mm ²	4.2 kA
Result	Test passed

Power-frequency withstand voltage

Test voltage setpoint	2 kV
Result	Test passed

Mechanical properties

Mechanical data

Open side panel	No
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Mechanical tests

Mechanical strength

Result	Test passed
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Attachment on the carrier

DIN rail/fixing support	NS 32/NS 35
Test force setpoint	10 N
Result	Test passed

Environmental and real-life conditions

Needle-flame test

Time of exposure	30 s
Result	Test passed

Oscillation/broadband noise

Specification	DIN EN 50155 (VDE 0115-200):2018-05
Spectrum	Service life test category 2, bogie-mounted
Frequency	$f_1 = 5$ Hz to $f_2 = 250$ Hz
ASD level	6.12 (m/s ²) ² /Hz
Acceleration	3.12g
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis
Result	Test passed

Shocks

Specification	DIN EN 50155 (VDE 0115-200):2008-03
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Pulse shape	Half-sine
Acceleration	5g
Shock duration	30 ms
Number of shocks per direction	3
Test directions	X-, Y- and Z-axis (pos. and neg.)
Result	Test passed

Ambient conditions

Ambient temperature (operation)	-60 °C ... 110 °C (Operating temperature range incl. self-heating; for max. short-term operating temperature, see RTI Elec.)
Ambient temperature (storage/transport)	-25 °C ... 60 °C (for a short time, no longer than 24 h, -60°C to +70°C)
Ambient temperature (assembly)	-5 °C ... 70 °C
Ambient temperature (actuation)	-5 °C ... 70 °C
Permissible humidity (operation)	20 % ... 90 %
Permissible humidity (storage/transport)	30 % ... 70 %

Standards and regulations

Connection in acc. with standard	IEC 60947-7-1
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Mounting

Mounting type	NS 35/7,5
	NS 35/15
	NS 32

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Drawings

Circuit diagram



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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/3075896>

 CSA Approval ID: 13631				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B				
	600 V	115 A	12 - 2	-
Use group C				
	600 V	115 A	12 - 2	-

 cUL Recognized Approval ID: FILE E 60425				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B				
	600 V	115 A	-	-
Use group C				
	600 V	115 A	-	-

 UL Recognized Approval ID: FILE E 60425				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B				
	600 V	115 A	-	-
Use group C				
	600 V	115 A	-	-

 EAC Approval ID: RU C-DE.BL08.B.00540				
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DNV Approval ID: TAE00004G1				
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cULus Recognized				
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Classifications

ECLASS

ECLASS-11.0	27141120
ECLASS-13.0	27250101

ETIM

ETIM 9.0	EC000897
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UNSPSC

UNSPSC 21.0	39121400
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Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
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China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%
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Accessories

i Note: Applying some accessories below might limit this product.

FB 10-17 - Fixed bridge

3075951

<https://www.phoenixcontact.com/us/products/3075951>



Fixed bridge, pitch: 17 mm, number of positions: 10, color: silver

i Max. current carrying capacity: 101 A

FB 10-17 ISO - Fixed bridge

3213085

<https://www.phoenixcontact.com/us/products/3213085>



Fixed bridge, pitch: 17 mm, number of positions: 10, color: silver

i Max. current carrying capacity: 24 A

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TS-KK 3 - Separating plate

2770215

<https://www.phoenixcontact.com/us/products/2770215>



Separating plate, depth: 16 mm, width: 0.5 mm, height: 14 mm, color: gray

D-RSC 6 - End cover

3213098

<https://www.phoenixcontact.com/us/products/3213098>



End cover, depth: 39.7 mm, width: 2.2 mm, height: 80.9 mm, color: gray

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AP RSC-T - Cover profile

3059139

<https://www.phoenixcontact.com/us/products/3059139>



Cover profile, for covering terminal strips, directly snapped onto RBO... and RSC... test disconnect terminal blocks. Length supplied: 1 m

NS 32 PERF 2000MM-VPE 10 - DIN rail perforated

1201002

<https://www.phoenixcontact.com/us/products/1201002>



DIN rail perforated, Pack of 10 (20 m), acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, G profile, color: silver

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NS 32 UNPERF 2000MM-VPE 10 - DIN rail, unperforated

1201015

<https://www.phoenixcontact.com/us/products/1201015>



DIN rail, unperforated, Pack of 10 (20 m), acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, G profile, color: silver

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

0801733

<https://www.phoenixcontact.com/us/products/0801733>



DIN rail perforated, Pack of 25 (50 m), acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, Standard profile, color: silver

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

0801681

<https://www.phoenixcontact.com/us/products/0801681>



DIN rail, unperforated, Pack of 25 (50 m), acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, Standard profile, color: silver

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

1204119

<https://www.phoenixcontact.com/us/products/1204119>



DIN rail perforated, Pack of 25 (50 m), acc. to EN 60715, material: Steel, Galvanized, white passivated, Standard profile, color: silver

RBO 6 - Bolt connection terminal block

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NS 35/ 7,5 WH UNPERF 2000MM-VPE 10 - DIN rail, unperforated

1204122

<https://www.phoenixcontact.com/us/products/1204122>



DIN rail, unperforated, Pack of 10 (20 m), acc. to EN 60715, material: Steel, Galvanized, white passivated, Standard profile, color: silver

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

0801704

<https://www.phoenixcontact.com/us/products/0801704>



DIN rail, unperforated, Pack of 25 (50 m), acc. to EN 60715, material: Aluminum, uncoated, Standard profile, color: silver

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

1206421

<https://www.phoenixcontact.com/us/products/1206421>



DIN rail perforated, Pack of 25 (50 m), acc. to EN 60715, material: Steel, galvanized, Standard profile, color: silver

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

1206434

<https://www.phoenixcontact.com/us/products/1206434>



DIN rail, unperforated, Pack of 25 (50 m), acc. to EN 60715, material: Steel, galvanized, Standard profile, color: silver

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NS 35/ 7,5 CU UNPERF 2000MM-VPE 10 - DIN rail, unperforated

0801762

<https://www.phoenixcontact.com/us/products/0801762>



DIN rail, unperforated, Pack of 10 (20 m), acc. to EN 60715, material: Copper, uncoated, Standard profile, color: copper-colored

NS 35/ 7,5 CAP - End cap

1206560

<https://www.phoenixcontact.com/us/products/1206560>

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



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NS 35/15 PERF 2000MM - DIN rail perforated

1201730

<https://www.phoenixcontact.com/us/products/1201730>



DIN rail perforated, Pack of 25 (50 m), similar to EN 60715, material: Steel, galvanized, passivated with a thick layer, Standard profile, color: silver

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

1201714

<https://www.phoenixcontact.com/us/products/1201714>



DIN rail, unperforated, Pack of 25 (50 m), similar to EN 60715, material: Steel, galvanized, passivated with a thick layer, Standard profile, color: silver

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

0806602

<https://www.phoenixcontact.com/us/products/0806602>



DIN rail perforated, Pack of 25 (50 m), similar to EN 60715, material: Steel, Galvanized, white passivated, Standard profile, color: white

NS 35/15 WH UNPERF 2000MM-VPE 10 - DIN rail, unperforated

1204135

<https://www.phoenixcontact.com/us/products/1204135>



DIN rail, unperforated, Pack of 10 (20 m), similar to EN 60715, material: Steel, Galvanized, white passivated, Standard profile, color: silver

RBO 6 - Bolt connection terminal block



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

1201756

<https://www.phoenixcontact.com/us/products/1201756>



DIN rail, unperforated, similar to EN 60715, material: Aluminum, uncoated, Standard profile, color: silver

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

1206599

<https://www.phoenixcontact.com/us/products/1206599>



DIN rail perforated, Pack of 25 (50 m), similar to EN 60715, material: Steel, galvanized, Standard profile, color: silver

RBO 6 - Bolt connection terminal block

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

1206586

<https://www.phoenixcontact.com/us/products/1206586>



DIN rail, unperforated, Pack of 25 (50 m), similar to EN 60715, material: Steel, galvanized, Standard profile, color: silver

NS 35/15 CU UNPERF 2000MM-VPE 10 - DIN rail, unperforated

1201895

<https://www.phoenixcontact.com/us/products/1201895>



DIN rail, unperforated, Pack of 10 (20 m), similar to EN 60715, material: Copper, uncoated, Standard profile, color: copper-colored

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NS 35/15 CAP - End cap

1206573

<https://www.phoenixcontact.com/us/products/1206573>

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



NS 35/15-2,3 UNPERF 2000MM-VPE 10 - DIN rail, unperforated

1201798

<https://www.phoenixcontact.com/us/products/1201798>



DIN rail, unperforated, Pack of 10 (20 m), acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, Standard profile 2.3 mm, color: silver

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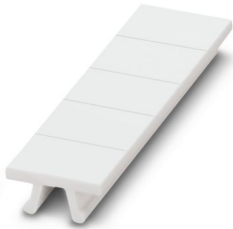
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ZB 17:UNBEDRUCKT - Zack marker strip

0829391

<https://www.phoenixcontact.com/us/products/0829391>

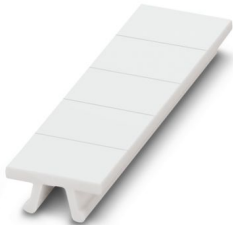


Zack marker strip, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snapped, for terminal block width: 17 mm, lettering field size: 17 x 10.5 mm, Number of individual labels: 5

ZB 17 CUS - Zack marker strip

0829393

<https://www.phoenixcontact.com/us/products/0829393>



Zack marker strip, can be ordered: Strip, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 17 mm, lettering field size: 17 x 10.5 mm, Number of individual labels: 50

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CLIPFIX 35 - End bracket

3022218

<https://www.phoenixcontact.com/us/products/3022218>



Quick mounting end clamp for NS 35/7,5 DIN rail or NS 35/15 DIN rail, with marking option, width: 9.5 mm, color: gray

CLIPFIX 35-5 - End bracket

3022276

<https://www.phoenixcontact.com/us/products/3022276>



Quick mounting end clamp for NS 35/7,5 DIN rail or NS 35/15 DIN rail, with marking option, with parking option for FBS...5, FBS...6, KSS 5, KSS 6, width: 5.15 mm, color: gray

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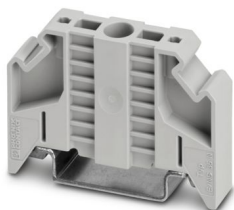


E/NS 35 N - End bracket

0800886

<https://www.phoenixcontact.com/us/products/0800886>

End clamp, width: 9.5 mm, color: gray



E/UK - End bracket

1201442

<https://www.phoenixcontact.com/us/products/1201442>

End bracket, Mounting on a DIN rail NS 32 or NS 35, material: PA, color: gray



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E/UK 1 - End bracket

1201413

<https://www.phoenixcontact.com/us/products/1201413>



End clamps, for supporting the ends of double-level and three-level terminal blocks, width: 10 mm, color: gray

ZBF 17:UNBEDRUCKT - Zack Marker strip, flat

0815020

<https://www.phoenixcontact.com/us/products/0815020>



Zack Marker strip, flat, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snapped, for terminal block width: 17 mm, lettering field size: 17 x 5.2 mm, Number of individual labels: 5

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ZBF 17 CUS - Zack Marker strip, flat

0825020

<https://www.phoenixcontact.com/us/products/0825020>



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: 17 mm, lettering field size: 17 x 5.2 mm, Number of individual labels: 5

SHN 13 - Tool

1209923

<https://www.phoenixcontact.com/us/products/1209923>



Socket wrench, wrench size 13 mm

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Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com