

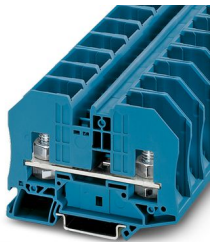
RTO 8 BU - Bolt connection terminal block



3049864

<https://www.phoenixcontact.com/us/products/3049864>

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Feed-through terminal block with bolt connection method, cross section: 2.5 - 35 mm², AWG: 14 - 2, width 20.2 mm, color: blue

Your advantages

- Four bridge shafts per terminal block
- Terminal point always freely accessible

Commercial data

Item number	3049864
Packing unit	25 pc
Sales key	BE43
Product key	BE4312
Catalog page	Page 385 (C-1-2019)
GTIN	4046356284684
Weight per piece (including packing)	81.59 g
Weight per piece (excluding packing)	81.59 g
Customs tariff number	85369010
Country of origin	CN

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Technical data

Notes

General	Note: the BE-RT... path extension is to be used for non-insulated cable lugs (see accessories).
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Product properties

Product type	Bolt connection terminal block
Number of positions	1
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

1 level

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	1000 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	2.5 mm ² ... 35 mm ²
Cross section range AWG	(converted acc. to IEC)
Hole diameter	8.4 mm
Width	16 mm
Bolt diameter	8 mm
Screw thread	M8
Tightening torque	6 ... 10 Nm
Connection in acc. with standard	DIN 46235:1983-07
Cross section range AWG	(converted acc. to IEC)

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Hole diameter	8.4 mm
Width	14 mm
Bolt diameter	8 mm
Screw thread	M8
Tightening torque	6 ... 10 Nm
Connection in acc. with standard	DIN 46237:1970-07
Cross section	2.5 mm ² ... 6 mm ²
Cross section range AWG	(converted acc. to IEC)
Hole diameter	8.4 mm
Width	14 mm
Bolt diameter	8 mm
Screw thread	M8
Tightening torque	6 ... 10 Nm
Identification color of ring cable lugs : blue	2.5 mm ²
Identification color of ring cable lugs : yellow	6 mm ²

Ex data

Rated data (ATEX/IECEx)

Identification	Ⓔ II 2 G Ex eb IIC Gb
Operating temperature range	-60 °C ... 110 °C
Ex-certified accessories	3049194 D-RT 8
	3003062 TPN-UK
	1209923 SHN 13
	3022276 CLIPFIX 35-5
List of bridges	Plug-in bridge / FBS 2-10 / 3005947
	Plug-in bridge / FBS 5-10 / 3005948
Bridge data	57 A / 10 mm ²
Ex temperature increase	40 K (123 A / 35 mm ²)
Rated voltage	690 V
for bridging with bridge	690 V
Rated insulation voltage	630 V
output	(Permanent)

Ex level General

Rated current	123 A
Maximum load current	123 A
Contact resistance	0.09 mΩ

Ex connection data General

Torque range	6 Nm ... 10 Nm
Nominal cross section	35 mm ²
Rated cross section AWG	2
Connection capacity rigid	2.5 mm ² ... 35 mm ²
Connection capacity AWG	14 ... 2

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Connection capacity flexible	2.5 mm² ... 35 mm²
Connection capacity AWG	14 ... 2

Dimensions

Width	20.2 mm
End cover width	2.2 mm
Height	84 mm
Depth	63.2 mm
Depth on NS 35/7,5	63.8 mm
Depth on NS 35/15	71.3 mm

Material specifications

Color	blue
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

Mechanical properties

Mechanical data

Open side panel	Yes
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Environmental and real-life conditions

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 ()
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

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

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

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Drawings

Circuit diagram



RTO 8 BU - Bolt connection terminal block



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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/3049864>



IECEE CB Scheme

Approval ID: DE1-62814



VDE Zeichengenehmigung

Approval ID: 40022553

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	1000 V	125 A	-	2.5 - 35



cULus Recognized

Approval ID: E60425

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B				
	600 V	130 A	-	-
Use group C				
	600 V	130 A	-	-



EAC Ex

Approval ID: RU C-DE.HA91.B.00066



IECEx

Approval ID: IECExPTB08.0063U

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	690 V	123 A	-	2.5 - 35



ATEX

Approval ID: PTB09ATEX1003U

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	690 V	123 A	-	2.5 - 35



CCC

Approval ID: 2020322313000627



UKCA-EX

Approval ID: CSAE 22UKEX1085U

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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

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

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Accessories

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

FBS 2-10 - Plug-in bridge

3005947

<https://www.phoenixcontact.com/us/products/3005947>



Plug-in bridge, pitch: 10.2 mm, number of positions: 2, color: red

i Max. current carrying capacity: 57 A

FBS 5-10 - Plug-in bridge

3005948

<https://www.phoenixcontact.com/us/products/3005948>



Plug-in bridge, pitch: 10.2 mm, number of positions: 5, color: red

i Max. current carrying capacity: 57 A

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<https://www.phoenixcontact.com/us/products/3049864>



FBS 5-10 BU - Plug-in bridge

1040620

<https://www.phoenixcontact.com/us/products/1040620>



Plug-in bridge, pitch: 10.2 mm, number of positions: 5, color: blue

 Max. current carrying capacity: 57 A

RB ST 10-(2,5/4) - Reducing bridge

3030873

<https://www.phoenixcontact.com/us/products/3030873>



Reducing bridge, pitch: 10 mm, number of positions: 2, length: 36 mm, color: red

 Max. current carrying capacity: 35 A

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D-RT 8 - End cover

3049194

<https://www.phoenixcontact.com/us/products/3049194>

Cover, width: 2.2 mm, color: gray



TPN-UK - Partition plate

3003062

<https://www.phoenixcontact.com/us/products/3003062>

Partition plate, depth: 69 mm, width: 2 mm, height: 110 mm, color: gray



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BE-RT 8 - Path extension

3049916

<https://www.phoenixcontact.com/us/products/3049916>



Path extension, color: gray

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

RTO 8 BU - Bolt connection terminal block

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<https://www.phoenixcontact.com/us/products/3049864>



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

RTO 8 BU - Bolt connection terminal block

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<https://www.phoenixcontact.com/us/products/3049864>



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

RTO 8 BU - Bolt connection terminal block

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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

RTO 8 BU - Bolt connection terminal block

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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

RTO 8 BU - 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

RTO 8 BU - 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

RTO 8 BU - Bolt connection terminal block

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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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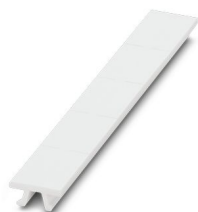
<https://www.phoenixcontact.com/us/products/3049864>



ZB 16,3:UNPRINTED - Zack marker strip

0820222

<https://www.phoenixcontact.com/us/products/0820222>

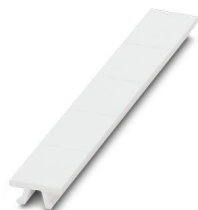


Zack marker strip, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snapped, for terminal block width: 16.3 mm, lettering field size: 10.5 x 16.25 mm, Number of individual labels: 5

ZB 16,3 CUS - Zack marker strip

0824946

<https://www.phoenixcontact.com/us/products/0824946>



Zack marker strip, can be ordered: Strip, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 16.3 mm, lettering field size: 10.5 x 16.25 mm, Number of individual labels: 5

RTO 8 BU - Bolt connection terminal block



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ZB 20,3:UNPRINTED - Zack marker strip

0820248

<https://www.phoenixcontact.com/us/products/0820248>



Zack marker strip, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snapped, for terminal block width: 20.3 mm, lettering field size: 10.5 x 20.25 mm, Number of individual labels: 5

ZB 20,3 CUS - Zack marker strip

0824948

<https://www.phoenixcontact.com/us/products/0824948>



Zack marker strip, can be ordered: Strip, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 20.3 mm, lettering field size: 10.5 x 20.25 mm, Number of individual labels: 5

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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



RTO 8 BU - Bolt connection terminal block

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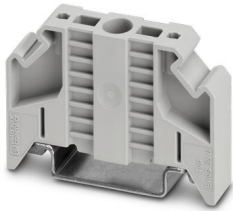


E/NS 35 N - End bracket

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

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