

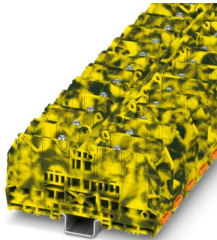
RBO 8-FE - Bolt connection terminal block



3213139

<https://www.phoenixcontact.com/us/products/3213139>

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Bolt connection terminal block, nom. voltage: 1000 V, nominal current: 192 A, number of connections: 2, number of positions: 1, connection method: Bolt connection, 1 level, Rated cross section: 70 mm², mounting type: NS 35/7,5, NS 35/15, direct screw connection, color: black/yellow

Your advantages

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

Commercial data

Item number	3213139
Packing unit	5 pc
Minimum order quantity	10 pc
Sales key	BE44
Product key	BE4412
Catalog page	Page 390 (C-1-2019)
GTIN	4046356719254
Weight per piece (including packing)	177 g
Weight per piece (excluding packing)	141.75 g
Customs tariff number	85369010
Country of origin	CN

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Technical data

Product properties

Product type	Bolt connection terminal block
Area of application	Railway industry
	Machine building
	Plant engineering
Number of positions	1
Pitch	29 mm
Number of connections	2
Number of rows	1
Potentials	1

Data management status

Article revision	03
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Insulation characteristics

Overvoltage category	III
Degree of pollution	3

Electrical properties

Rated surge voltage	8 kV
Maximum power dissipation for nominal condition	6.27 W

Connection data

Number of connections per level	2
Nominal cross section	70 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	192 A
Maximum load current	192 A (in case of a 70 mm ² conductor cross section, the maximum load current must not be exceeded by the total current of all connected conductors.)
Nominal voltage	1000 V
Nominal cross section	70 mm ²

Cable lug connection DIN 46234:1980-03

Connection in acc. with standard	DIN 46234:1980-03
Cross section	2.5 mm ² ... 70 mm ²
Cross section range AWG	(converted acc. to IEC)
Hole diameter	8.4 mm
Width	22 mm
Bolt diameter	8 mm

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Screw thread	M8
Tightening torque	6 ... 12 Nm
Connection in acc. with standard	DIN 46235:1983-07
Cross section	16 mm² ... 70 mm²
Cross section range AWG	(converted acc. to IEC)
Hole diameter	8.4 mm
Width	24 mm
Bolt diameter	8 mm
Screw thread	M8
Tightening torque	6 ... 12 Nm
Connection in acc. with standard	DIN 46237:1970-07
Cross section	2.5 mm² ... 6 mm²
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 ... 12 Nm
Identification color of ring cable lugs : blue	2.5 mm²
Identification color of ring cable lugs : yellow	6 mm²

Ex data

Rated data (ATEX/IECEx)

Identification	Ex II 2 GD Ex eb IIC Gb
Operating temperature range	-60 °C ... 110 °C
Ex-certified accessories	3247967 HC-RBO 8
	1209923 SHN 13
	0800886 E/NS 35 N
List of bridges	/ RBO 8-VS 2 / 3213179
	/ RBO 8-VS 3 / 3213182
Bridge data	187 A / 70 mm²
Ex temperature increase	40 K (187 A / 70 mm²)
Rated voltage	690 V
for bridging with bridge	690 V
Rated insulation voltage	630 V
output	(Permanent)

Ex level General

Rated current	187 A
Maximum load current	187 A
Contact resistance	0.06 mΩ

Ex connection data General

Torque range	6 Nm ... 12 Nm
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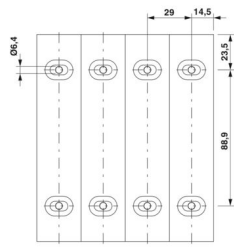


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Nominal cross section	70 mm ²
Rated cross section AWG	2/0
Connection capacity flexible	2.5 mm ² ... 70 mm ²
Connection capacity AWG	12 ... 2/0
2 conductors with same cross section, stranded	2.5 mm ² ... 70 mm ²
2 conductors with the same cross-section AWG flexible	12 ... 2/0

Dimensions

Dimensional drawing	
Width	29 mm
Height	136 mm
Depth	66 mm
Depth on NS 35/7,5	67 mm
Depth on NS 35/15	74.5 mm
Bolt length	20.5 mm
Pitch	29 mm

Material specifications

Color	multicolored
	black (RAL 9005)
	yellow (RAL 1018)
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

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Mechanical data

Open side panel	No
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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 (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
	direct screw connection

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Drawings

Circuit diagram



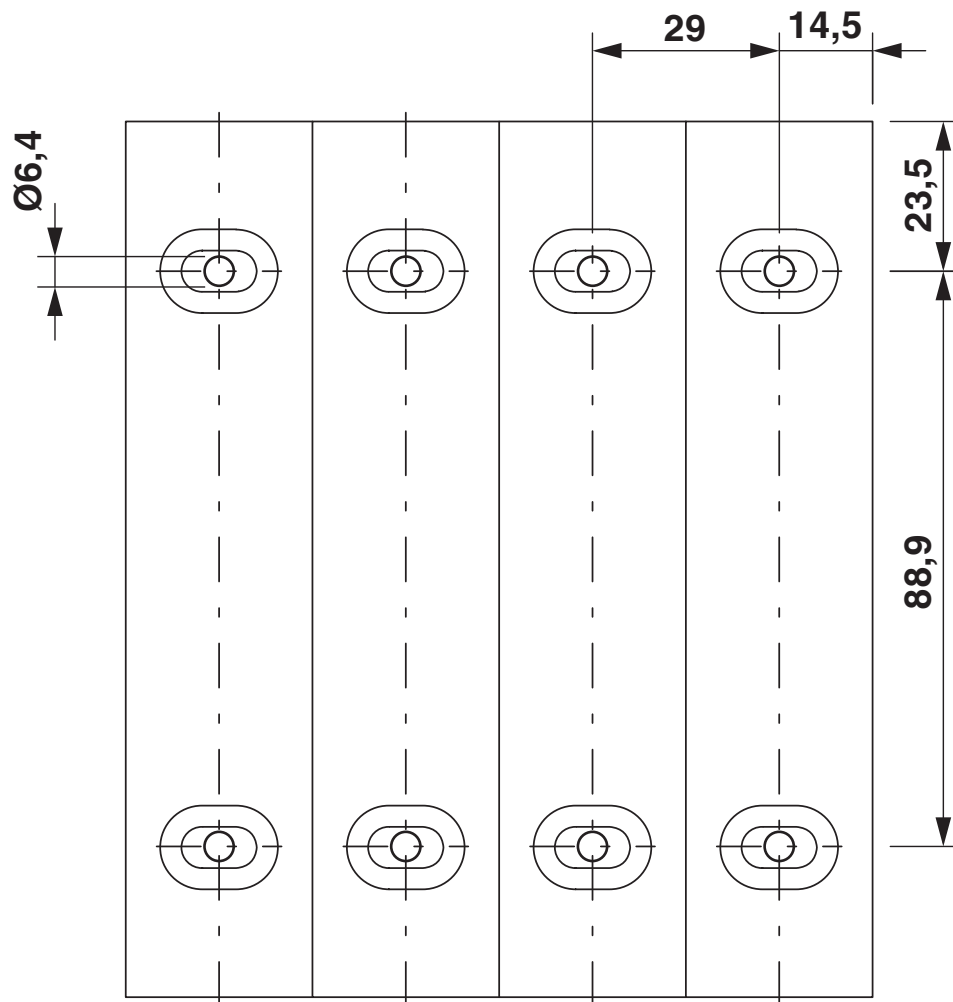
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Dimensional drawing



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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/3213139>

 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	175 A	-	-
Use group C	600 V	175 A	-	-

 EAC Approval ID: RU C-DE.BL08.B.00540				
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 DNV Approval ID: TAE00004G1				
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 IECEx Approval ID: IECExSEV13.0003U				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	690 V	187 A	-	2.5 - 70

 ATEX Approval ID: SEV13ATEX0132U				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	690 V	187 A	-	2.5 - 70

 CCC Approval ID: 2020322313000627				
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 UKCA-EX Approval ID: CML 22UKEX1230U				
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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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