

RBO 8-FE-HC - Bolt connection terminal block



3247975

<https://www.phoenixcontact.com/us/products/3247975>

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Bolt connection terminal block, nom. voltage: 1500 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	3247975
Packing unit	1 pc
Minimum order quantity	5 pc
Sales key	BE44
Product key	BE4412
Catalog page	Page 392 (C-1-2019)
GTIN	4046356725095
Weight per piece (including packing)	195.6 g
Weight per piece (excluding packing)	176.92 g
Customs tariff number	85369010
Country of origin	CN

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Technical data

Product properties

Product type	Bolt connection terminal block
Number of positions	1
Pitch	29 mm
Area of application	Railway industry
	Machine building
	Plant engineering
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	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	1500 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
Screw thread	M8
Tightening torque	6 ... 12 Nm
Connection in acc. with standard	DIN 46235:1983-07

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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	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
Nominal cross section	70 mm²
Rated cross section AWG	2/0
Connection capacity flexible	2.5 mm² ... 70 mm²
Connection capacity AWG	12 ... 2/0
2 conductors with same cross section, stranded	2.5 mm² ... 70 mm²

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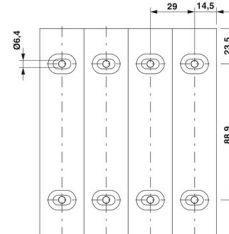
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2 conductors with the same cross-section AWG flexible

12 ... 2/0

Dimensions

Dimensional drawing



Width	29 mm
Height	184 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	black/yellow
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

Electrical tests

Surge voltage test

Test voltage setpoint	9.8 kV
Result	Test passed

Temperature-rise test

Requirement temperature-rise test	Increase in temperature ≤ 45 K
Result	Test passed

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Short-time withstand current 70 mm ²	8.4 kA
Result	Test passed

Power-frequency withstand voltage

Test voltage setpoint	2.2 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 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):2008-03
Spectrum	Service life test category 1, class B, body mounted
Frequency	$f_1 = 5 \text{ Hz}$ to $f_2 = 150 \text{ Hz}$
ASD level	1.857 (m/s ²)/Hz
Acceleration	0.8g
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
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

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Ambient temperature (storage/transport)	-25 °C ... 60 °C (for a short time, not exceeding 24 h, -60 °C to +70 °C)
Ambient temperature (assembly)	-5 °C ... 70 °C
Ambient temperature (actuation)	-5 °C ... 70 °C
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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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/3247975>



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.AI30.B.01102



EAC

Approval ID: RU C-DE.BL08.B.00540

DNV

Approval ID: TAE00004G1



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



UKCA-EX

Approval ID: CML 22UKEX1230U

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Classifications

ECLASS

ECLASS-11.0	27141120
ECLASS-13.0	27250101

ETIM

ETIM 8.0	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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