

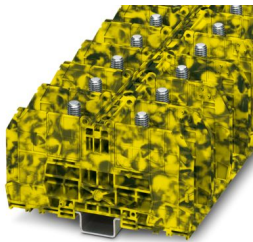
RBO 10-FE - Bolt connection terminal block



3244615

<https://www.phoenixcontact.com/us/products/3244615>

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Bolt connection terminal block, nom. voltage: 1000 V, nominal current: 309 A, number of connections: 2, number of positions: 1, connection method: Bolt connection, Rated cross section: 150 mm², 1 level, mounting type: NS 35/7,5, NS 35/15, color: black/yellow

Your advantages

- Tested for railway applications

Commercial data

Item number	3244615
Packing unit	5 pc
Minimum order quantity	5 pc
Product key	BE4412
GTIN	4046356724401
Weight per piece (including packing)	273.74 g
Weight per piece (excluding packing)	273.2 g
Country of origin	CN

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Technical data

Product properties

Product type	Bolt connection terminal block
Product family	RBO
Area of application	Railway industry
	Machine building
	Plant engineering
Number of positions	1
Pitch	41 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	9.55 W

Connection data

Number of connections per level	2
Nominal cross section	150 mm ²

1 level

Connection method	Bolt connection
Screw thread	M10
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	309 A
Maximum load current	309 A (with 150 mm ² conductor cross-section)
Nominal voltage	1000 V
Nominal cross section	150 mm ²

Cable lug connection DIN 46234:1980-03

Connection in acc. with standard	DIN 46234:1980-03
Cross section	6 mm ² ... 150 mm ²
Cross section range AWG	(converted acc. to IEC)
Hole diameter	10.5 mm
Width	30 mm
Bolt diameter	10 mm
Screw thread	M10

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Tightening torque	10 ... 20 Nm
Connection in acc. with standard	DIN 46235:1983-07
Cross section	16 mm² ... 150 mm²
Cross section range AWG	(converted acc. to IEC)
Hole diameter	10.5 mm
Width	34 mm
Bolt diameter	10 mm
Screw thread	M10
Tightening torque	10 ... 20 Nm
Connection in acc. with standard	DIN 46237:1970-07
Cross section	6 mm² ... 6 mm²
Cross section range AWG	(converted acc. to IEC)
Hole diameter	10.5 mm
Width	18 mm
Bolt diameter	10 mm
Screw thread	M10
Tightening torque	10 ... 20 Nm
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	3247970 HC-RBO 10 0800886 E/NS 35 N
List of bridges	/ RBO 10-VS 2 / 3244643 / RBO 10-VS 3 / 3244656
Bridge data	309 A (150 mm²)
Ex temperature increase	40 K (309 A / 150 mm²)
for bridging with bridge	1100 V
Rated insulation voltage	1000 V
output	(Permanent)

Ex level General

Rated voltage	1100 V
Rated current	309 A
Maximum load current	309 A
Contact resistance	0.05 mΩ

Ex connection data General

Torque range	10 Nm ... 20 Nm
Nominal cross section	150 mm²
Rated cross section AWG	300 kcmil
Connection capacity rigid	6 mm² ... 150 mm²

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Connection capacity AWG	10 ... 300 kcmil
Connection capacity flexible	6 mm ² ... 150 mm ²
Connection capacity AWG	10 ... 300 kcmil
2 conductors with same cross section, solid	6 mm ² ... 150 mm ²
2 conductors with the same cross-section AWG rigid	10 ... 300 kcmil
2 conductors with same cross section, stranded	6 mm ² ... 150 mm ²
2 conductors with the same cross-section AWG flexible	10 ... 300 kcmil

Dimensions

Dimensional drawing	
Width	41 mm
Height	144 mm
Depth on NS 35/7,5	77 mm
Depth on NS 35/15	84.5 mm
Bolt length	31 mm
Hole diameter	6.4 mm
Pitch	41 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

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Mechanical properties

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, 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 (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

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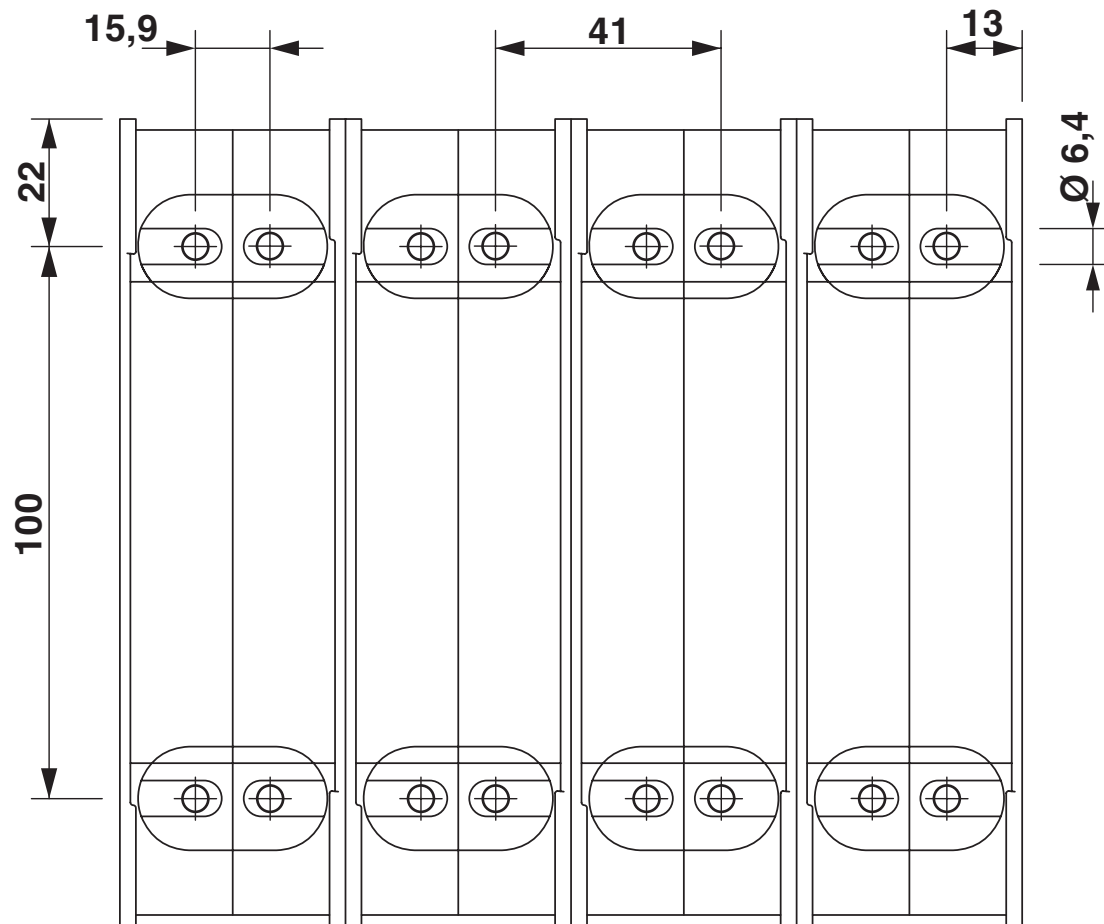


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Drawings

Dimensional drawing



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Circuit diagram



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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/3244615>

 CSA Approval ID: 13631				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
B	600 V	310 A	10 - 350	-
C	1000 V	310 A	10 - 350	-
E	600 V	310 A	10 - 350	-

 UL Recognized Approval ID: E60425				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
B	600 V	310 A	10 - 350	-
C	600 V	310 A	10 - 350	-
E	1000 V	310 A	10 - 350	-

 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
keine	1100 V	309 A	-	6 - 150

 ATEX Approval ID: SEV13ATEX0132U				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine	1100 V	309 A	-	6 - 150

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CCC

Approval ID: 2020322313000627



UKCA-EX

Approval ID: CML 22UKEX1230U



EAC Ex

Approval ID: KZ 7500525010101950

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Classifications

ECLASS

ECLASS-13.0	27250101
ECLASS-15.0	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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