

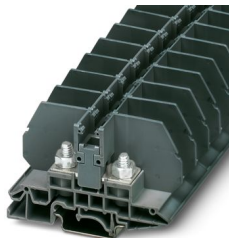
RBO 6 E - Bolt connection terminal block



3075906

<https://www.phoenixcontact.com/sg/products/3075906>

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

Commercial data

Item number	3075906
Packing unit	40 pc
Minimum order quantity	40 pc
Sales key	*****
Product key	BEM412
GTIN	4046356532860
Weight per piece (including packing)	99.99 g
Weight per piece (excluding packing)	99.99 g
Customs tariff number	85369010

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Technical data

Product properties

Product type	Bolt connection terminal block
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	1.02 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	800 V
Note	Checked at 1100 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
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

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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	48.6 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	traffic grey B (RAL 7043)
Flammability rating according to UL 94	V2
Insulating material group	I
Insulating material	PA
Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21))	125 °C
Relative insulation material temperature index (Elec., UL 746 B)	125 °C

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
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

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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 1, class B, body mounted
Frequency	$f_1 = 5 \text{ Hz}$ to $f_2 = 150 \text{ Hz}$
ASD level	$1.857 \text{ (m/s}^2\text{)}^2\text{/Hz}$
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):2018-05
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, 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

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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/sg/products/3075906>

 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	-

 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	-	-

DNV Approval ID: TAE00004G1				
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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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