

RBO 5-F/8 - Bolt connection terminal block



3058253

<https://www.phoenixcontact.com/us/products/3058253>

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Feed-through terminal block with bolt connection method, cross section: 0.1 - 6 mm², AWG: 26 - 10, width 13 mm, color: gray

Your advantages

- Direct mounting in control boxes
- Compact connection with ring and fork-type cable lugs
- Bridge shaft for potential distribution using standard screw bridges
- Isolator bridge bar for switchable cross connections

Commercial data

Item number	3058253
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BE44
Product key	BE4415
GTIN	4046356534789
Weight per piece (including packing)	184.3 g
Weight per piece (excluding packing)	184.3 g
Customs tariff number	85369010
Country of origin	IN

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Technical data

Product properties

Product type	Bolt connection terminal block
Pitch	13 mm
Number of connections	16
Number of rows	1
Potentials	8

Insulation characteristics

Overvoltage category	III
Degree of pollution	3

Electrical properties

Rated surge voltage	8 kV
Maximum power dissipation for nominal condition	1.82 W

Connection data

Number of connections per level	16
Nominal cross section	10 mm ²

1 level

Connection method	Bolt connection
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 cross section	10 mm ²
Nominal current	57 A
Maximum load current	57 A (with 10 mm ² conductor cross-section)
Nominal voltage	1000 V

Cable lug connection DIN 46234:1980-03

Connection in acc. with standard	DIN 46234:1980-03
Cross section	0.1 mm ² ... 10 mm ²
Cross section range AWG	26 ... 8 (converted acc. to IEC)
Hole diameter	5.3 mm
Width	10 mm
Bolt diameter	5 mm
Screw thread	M5
Tightening torque	2 ... 2.2 Nm
Connection in acc. with standard	DIN 46237:1970-07
Cross section	0.5 mm ² ... 6 mm ²
Additional text	Cable lug for 0.5 mm ² ... 1.5 mm ² and 1.5 mm ² ... 2.5 mm ² without shrink tubing only permitted up to 800 V.
Cross section range AWG	20 ... 10 (converted acc. to IEC)

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Hole diameter	5.3 mm
Width	10 mm
Bolt diameter	5 mm
Tightening torque	2 ... 2.2 Nm
Identification color of ring cable lugs : red	1 mm ²
Identification color of ring cable lugs : blue	2.5 mm ²
Identification color of ring cable lugs : yellow	6 mm ²

Dimensions

Width	121.7 mm
Height	53.3 mm
Depth	37 mm
Hole diameter	5.2 mm
Pitch	13 mm

Material specifications

Color	gray (RAL 7042)
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

Result	Test passed
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Temperature-rise test

Requirement temperature-rise test	Increase in temperature \leq 45 K
Result	Test passed
Short-time withstand current 10 mm ²	1.2 kA
Result	Test passed

Power-frequency withstand voltage

Test voltage setpoint	2 kV
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Result	Test passed
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Mechanical properties

Mechanical data

Open side panel	No
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Mechanical tests

Mechanical strength

Result	Test passed
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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	Long life test category 2, bogie-mounted
Frequency	$f_1 = 5 \text{ Hz}$ to $f_2 = 250 \text{ Hz}$
ASD level	$6.12 \text{ (m/s}^2\text{)}^2\text{/Hz}$
Acceleration	3.12g
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis

Shocks

Specification	DIN EN 50155 (VDE 0115-200):2008-03
Pulse shape	Half-sine
Acceleration	30g
Shock duration	18 ms
Number of shocks per direction	3
Test directions	X-, Y- and Z-axis (pos. and neg.)

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	direct screw connection
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Drawings

Circuit diagram



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Classifications

ECLASS

ECLASS-13.0

27250101

ETIM

ETIM 9.0

EC000897

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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