

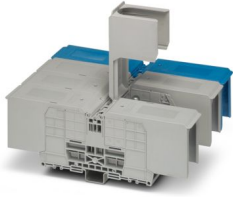
RBO 12-3L/N-HC - Bolt connection terminal block



3076109

<https://www.phoenixcontact.com/us/products/3076109>

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Bolt connection terminal block, nom. voltage: 1500 V, nominal current: 415 A, number of connections: 8, connection method: Bolt connection, Rated cross section: 240 mm², 1 level, mounting type: NS 35/7,5, NS 35/15, direct screw connection, color: gray/blue

Commercial data

Item number	3076109
Packing unit	1 pc
Minimum order quantity	1 pc
Product key	BE4412
GTIN	4046356653244
Weight per piece (including packing)	1,771 g
Weight per piece (excluding packing)	1,708 g
Country of origin	CN

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Technical data

Product properties

Product type	Bolt connection terminal block
Pitch	49 mm
Number of connections	8
Number of rows	1
Potentials	4

Insulation characteristics

Overvoltage category	III
Degree of pollution	3

Electrical properties

Rated surge voltage	8 kV
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Connection data

Number of connections per level	8
Nominal cross section	240 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	240 mm ²
Nominal current	415 A
Maximum load current	415 A (with 240 mm ² conductor cross-section)
Nominal voltage	1500 V

Cable lug connection DIN 46234:1980-03

Connection in acc. with standard	DIN 46234:1980-03
Cross section	10 mm ² ... 240 mm ²
Cross section range AWG	8 ... 500 kcmil (converted acc. to IEC)
Hole diameter	13 mm
Width	38 mm
Bolt diameter	12 mm
Screw thread	M12
Tightening torque	14 ... 30 Nm
Connection in acc. with standard	DIN 46235:1983-07
Cross section	10 mm ² ... 240 mm ²
Cross section range AWG	8 ... 500 kcmil (converted acc. to IEC)
Hole diameter	13 mm
Width	42 mm
Bolt diameter	12 mm

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Screw thread	M12
Tightening torque	14 ... 30 Nm

Dimensions

Dimensional drawing	
Width	196 mm
Pitch	49 mm

Material specifications

Color	gray/blue
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	12 kV
Result	Test passed

Temperature-rise test

Requirement temperature-rise test	Increase in temperature \leq 45 K
Result	Test passed
Short-time withstand current 240 mm ²	28.8 kA
Result	Test passed

Power-frequency withstand voltage

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Test voltage setpoint	2.7 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	20 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	Long 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):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

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
	direct screw connection

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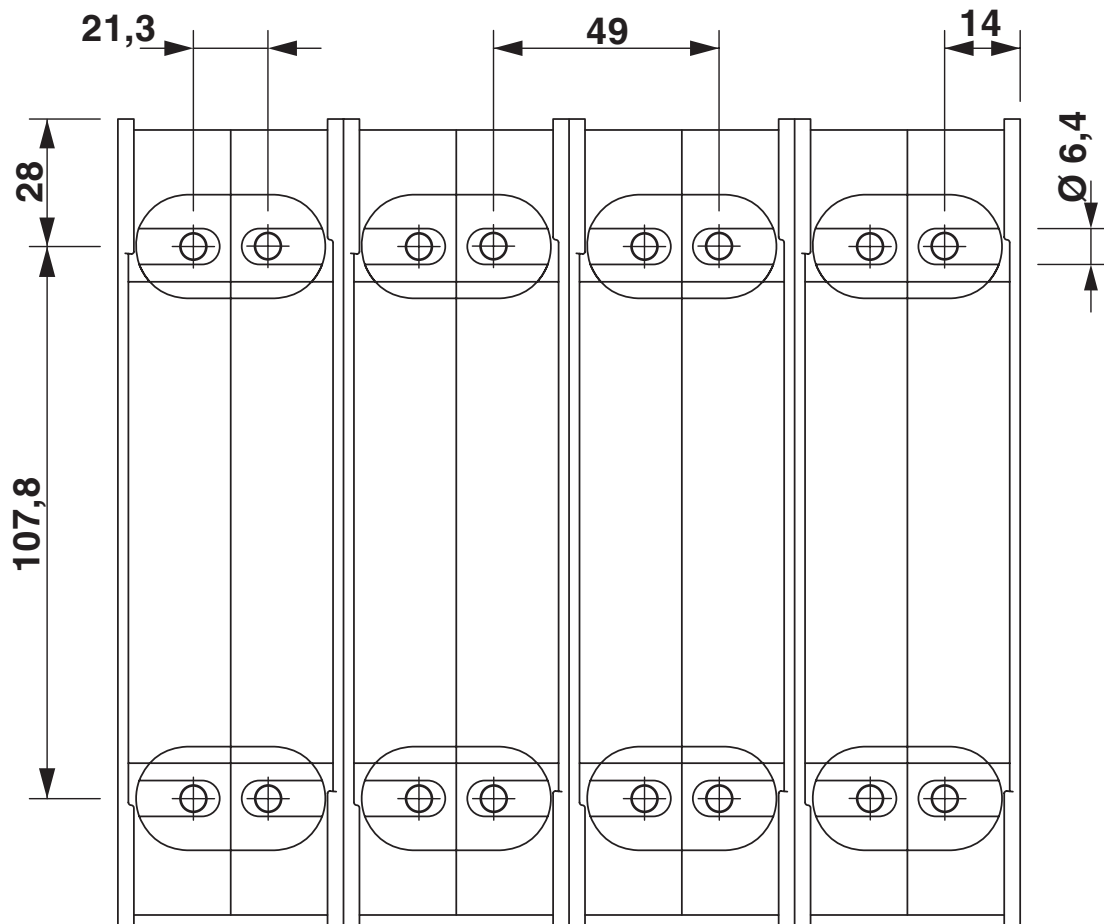


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Drawings

Dimensional drawing



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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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