

RBO 12-4L-HC - Bolt connection terminal block



3076061

<https://www.phoenixcontact.com/sg/products/3076061>

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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, mounting type: NS 35/7,5, NS 35/15, direct screw connection, color: gray

Commercial data

Item number	3076061
Packing unit	2 pc
Minimum order quantity	2 pc
Sales key	*****
Product key	BE4412
GTIN	4055626311203
Weight per piece (including packing)	870 g
Weight per piece (excluding packing)	860 g
Customs tariff number	85369010
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
Maximum power dissipation for nominal condition	13.78 W

Connection data

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

Cable lug connection DIN 46234:1980-03

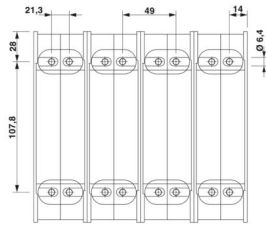
Connection in acc. with standard	DIN 46234:1980-03
Cross section	10 mm ² ... 240 mm ²
Cross section range AWG	8 ... 500 kcmil (converted acc. to IEC)
Hole diameter	13 mm
Width	38 mm
Bolt diameter	12 mm
Screw thread	M12
Tightening torque	14 ... 30 Nm
Connection in acc. with standard	DIN 46235:1983-07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

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Dimensions

Dimensional drawing	
Width	196 mm
Height	265 mm
Depth on NS 35/7,5	88.3 mm
Depth on NS 35/15	95.8 mm
Bolt length	36.5 mm
Pitch	49 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
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
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 \leq 45 K
Result	Test passed
	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	2.2 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 32/NS 35
Test force setpoint	20 N
Result	Test passed

Test for conductor damage and slackening

Rotation speed	10 (+/- 2) rpm
Revolutions	135
Conductor cross section/weight	240 mm ² /20.0 kg
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):2022-06
Spectrum	Long life test category 2, bogie-mounted
Frequency	$f_1 = 5 \text{ Hz}$ to $f_2 = 250 \text{ Hz}$
ASD level	6.12 (m/s ²) ² /Hz
Acceleration	3.12g
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

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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
	direct screw connection

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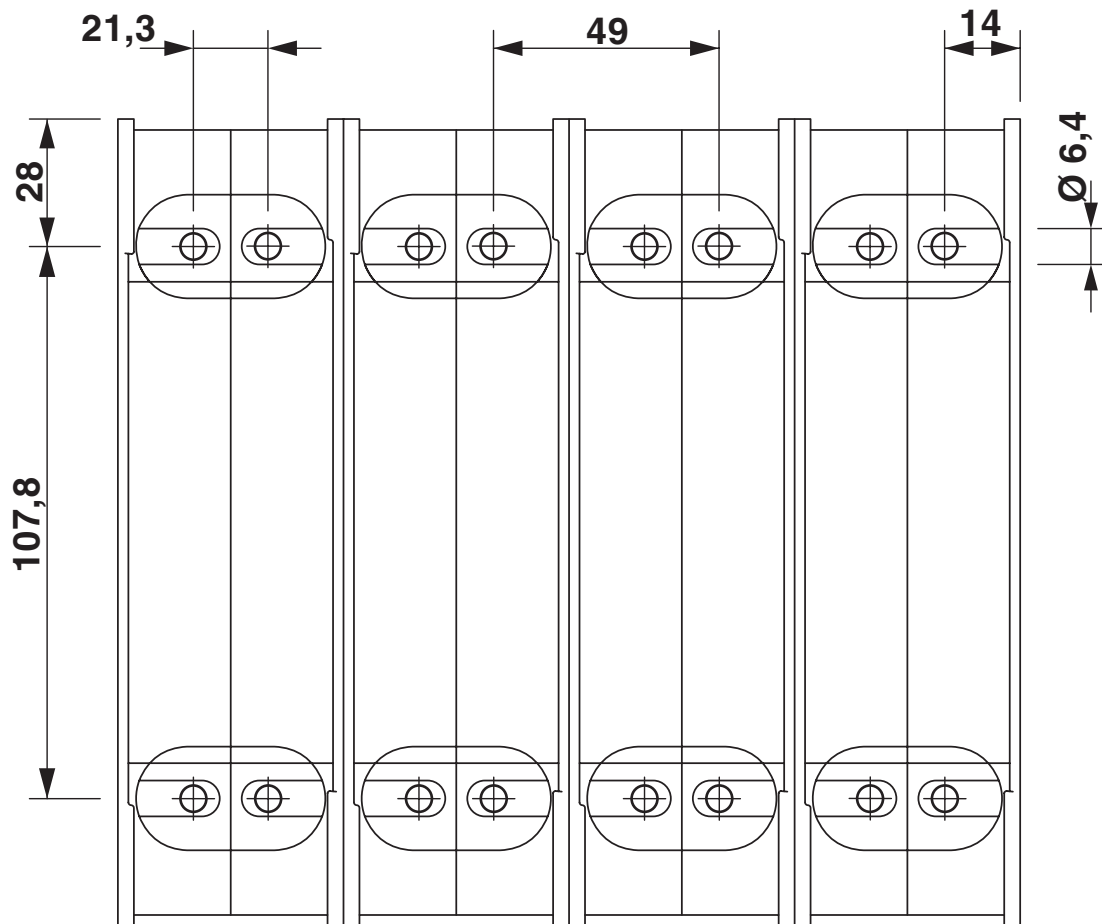


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Drawings

Dimensional drawing



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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/sg/products/3076061>



EAC

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

DNV

Approval ID: TAE00004G1



EAC

Approval ID: EACKZ 08593

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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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