Bolt connection terminal block - RBO 12-FE-HC - 3247988

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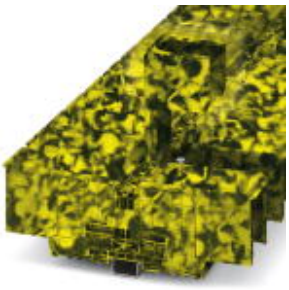

Bolt connection terminal block, nom. voltage: 1500 V, nominal current: 415 A, connection method: Bolt connection, number of connections: 2, number of positions: 1, cross section: 10 mm² - 240 mm², width: 49 mm, color: black/yellow, mounting type: NS 35/7,5, NS 35/15, direct screw connection

Your advantages

- Tested for railway applications

Key Commercial Data

Packing unit	5 pc
GTIN	4 046356 725156
GTIN	4046356725156

Technical data

General

Number of positions	1
Number of levels	1
Number of connections	2
Potentials	1
Nominal cross section	240 mm²
Color	black/yellow
Insulating material	PA
Flammability rating according to UL 94	V0
Area of application	Railway industry
	Machine building
	Plant engineering
Rated surge voltage	8 kV
Degree of pollution	3
Overvoltage category	III
Insulating material group	I

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Technical data

General

Maximum power dissipation for nominal condition	13.78 W
Designation	Level 1 above 1 below 1
Maximum load current	415 A (with 240 mm² conductor cross section)
Nominal current I_N	415 A
Nominal voltage U_N	1500 V
Open side panel	No
Shock protection test specification	DIN EN 50274 (VDE 0660-514):2002-11
Back of the hand protection	guaranteed
Finger protection	guaranteed
Note regarding shock protection	Touch proofness is effective only if the ring cable lug is insulated with a shrink sleeve and does not extend beyond the cover.
Result of surge voltage test	Test passed
Surge voltage test setpoint	12 kV
Result of power-frequency withstand voltage test	Test passed
Power frequency withstand voltage setpoint	2.7 kV
Result of the test for mechanical stability of terminal points (5 x conductor connection)	Test passed
Result of tight fit on support	Test passed
Tight fit on carrier	NS 35
Setpoint	20 N
Result of voltage-drop test	Test passed
Requirements, voltage drop	≤ 3.2 mV
Result of temperature-rise test	Test passed
Short circuit stability result	Test passed
Conductor cross section short circuit testing	240 mm²
Short-time current	28.8 kA
Result of thermal test	Test passed
Proof of thermal characteristics (needle flame) effective duration	30 s
Oscillation, broadband noise test result	Test passed
Test specification, oscillation, broadband noise	DIN EN 50155 (VDE 0115-200):2008-03
Test spectrum	Service life test category 1, class B, body mounted
Test frequency	f_1 = 5 Hz to f_2 = 150 Hz
ASD level	1.857 $(m/s^2)^2$/Hz
Acceleration	0,8 g
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis
Shock test result	Test passed
Test specification, shock test	DIN EN 50155 (VDE 0115-200):2008-03
Shock form	Half-sine
Acceleration	5g
Shock duration	30 ms

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General

Number of shocks per direction	3
Test directions	X-, Y- and Z-axis (pos. and neg.)
Relative insulation material temperature index (Elec., UL 746 B)	130 °C
Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21))	130 °C
Static insulating material application in cold	-60 °C
Behavior in fire for rail vehicles (DIN 5510-2)	Test passed
Flame test method (DIN EN 60695-11-10)	V0
Oxygen index (DIN EN ISO 4589-2)	>32 %
NF F16-101, NF F10-102 Class I	2
NF F16-101, NF F10-102 Class F	2
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
Calorimetric heat release NFPA 130 (ASTM E 1354)	28 MJ/kg
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

Dimensions

Width	49 mm
Length	265 mm
Height NS 35/7,5	83.3 mm
Height NS 35/15	90.8 mm
Pitch	49 mm

Connection data

Note	Connection bolts
Connection	1 level
Connection method	Bolt connection
Screw thread	M12
Tightening torque, min	14 Nm
Tightening torque max	30 Nm
Connection in acc. with standard	IEC 60947-7-1
Conductor cross section solid min.	10 mm²
Conductor cross section solid max.	240 mm²
Conductor cross section flexible min.	10 mm²
Conductor cross section flexible max.	240 mm²
Min. AWG conductor cross section, flexible	8
Max. AWG conductor cross section, flexible	500
Conductor cross section flexible, with ferrule with plastic sleeve min.	10 mm²

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Technical data

Connection data

Conductor cross section flexible, with ferrule with plastic sleeve max.	240 mm²
Cable lug connection according to standard	DIN 46234
Min. cross section for cable lug connection	10 mm²
Max. cross section for cable lug connection	240 mm²
Hole diameter, min.	13 mm
Cable lug width, max.	38 mm
Bolt diameter	12 mm
Screw thread	M12
Tightening torque, min	14 Nm
Tightening torque max	30 Nm
Cable lug connection according to standard	DIN 46235
Min. cross section for cable lug connection	25 mm²
Max. cross section for cable lug connection	240 mm²
Hole diameter, min.	13 mm
Cable lug width, max.	42 mm
Bolt diameter	12 mm
Screw thread	M12
Tightening torque, min	14 Nm
Tightening torque max	30 Nm

Standards and Regulations

Connection in acc. with standard	CSA
	IEC 60947-7-1
Flammability rating according to UL 94	V0
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

Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

Drawings

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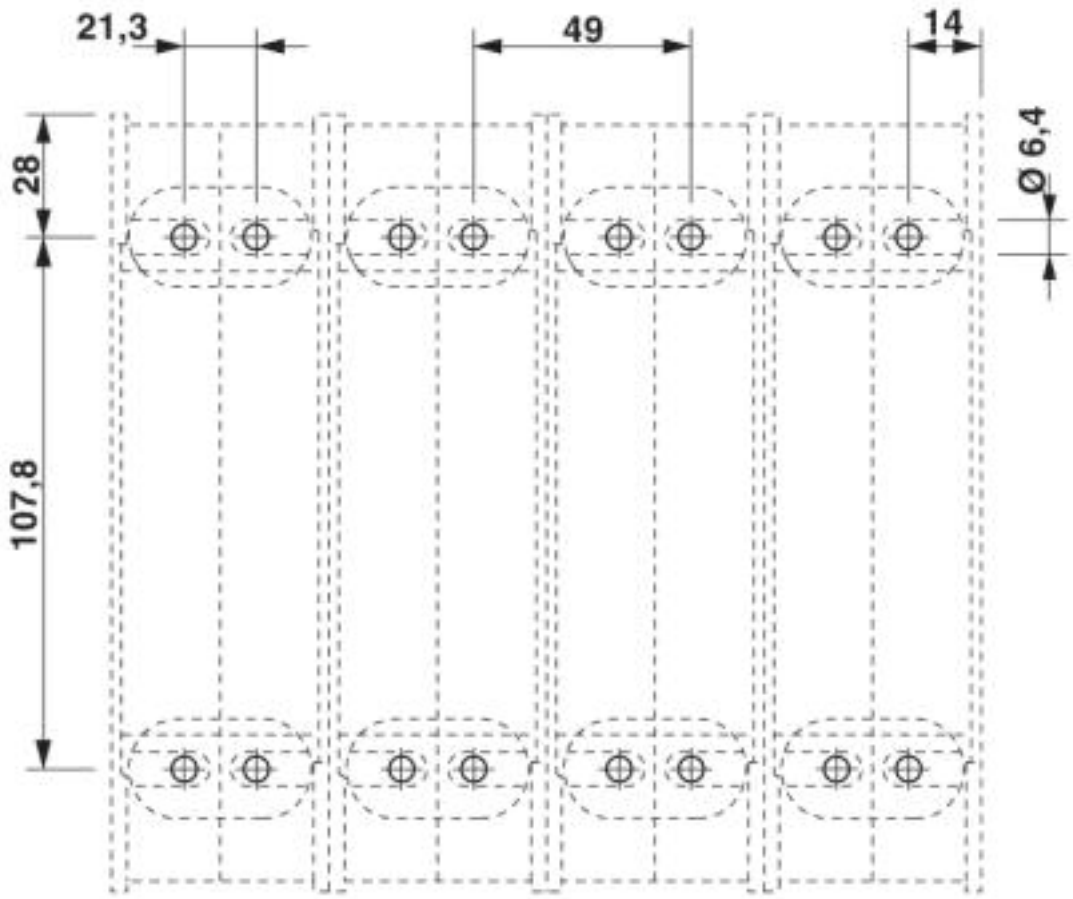
Dimensional drawing



Circuit diagram

Approvals

Approvals

Approvals

CSA / UL Recognized / EAC

Ex Approvals

IECEx / ATEX

Approval details

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Approvals

CSA		http://www.csagroup.org/services-industries/product-listing/	13631

	C
Nominal voltage UN	1000 V
Nominal current IN	420 A
mm²/AWG/kcmil	8-600

UL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 60425

		B	C
Nominal voltage UN	1000 V	600 V	600 V
Nominal current IN	420 A	420 A	420 A
mm²/AWG/kcmil	8-600	8-600	8-600

EAC		RU C-DE.A*30.B.01742

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