

## Bolt connection terminal block - RBO 6 - 3075896

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Bolt connection terminal block, nom. voltage: 800 V, nominal current: 125 A, connection method: Bolt connection, number of connections: 2, number of positions: 1, width: 17 mm, color: gray, mounting type: NS 35/7,5, NS 35/15, NS 32

### Why buy this product

- ✓ Compact connection with ring and fork-type cable lugs
- ✓ Mounting on standard DIN rails or directly in control boxes
- ✓ Isolator bridge bar for switchable cross connections
- ✓ Bridge shaft for potential distribution using standard screw bridges

### Key Commercial Data

Packing unit	40 STK
GTIN	 4 046356 532853
GTIN	4046356532853

### Technical data

#### General

Number of positions	1
Number of levels	1
Number of connections	2
Potentials	1
Nominal cross section	35 mm <sup>2</sup>
Color	gray
Insulating material	PA
Flammability rating according to UL 94	V0
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	4.06 W
Maximum load current	125 A (with 35 mm <sup>2</sup> conductor cross section)
Nominal current I <sub>N</sub>	125 A
Nominal voltage U <sub>N</sub>	800 V
Open side panel	No
Result of surge voltage test	Test passed
Surge voltage test setpoint	9.8 kV
Result of power-frequency withstand voltage test	Test passed
Power frequency withstand voltage setpoint	2 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 32/NS 35
Setpoint	10 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	35 mm <sup>2</sup>
Short-time current	4.2 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 <sub>1</sub> = 5 Hz to f <sub>2</sub> = 150 Hz
ASD level	1.857 (m/s <sup>2</sup> ) <sup>2</sup> /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	5 g
Shock duration	30 ms
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

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### Technical data

#### General

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	17 mm
End cover width	2.2 mm
Length	80.8 mm
Height NS 35/7,5	49.8 mm
Height NS 35/15	57.3 mm
Height NS 32	54.8 mm
Pitch	17 mm

#### Connection data

Note	Connection bolts
Connection method	Bolt connection
Connection in acc. with standard	IEC 60947-7-1
Conductor cross section flexible min.	2.5 mm <sup>2</sup>
Conductor cross section flexible max.	35 mm <sup>2</sup>
Min. AWG conductor cross section, flexible	12
Max. AWG conductor cross section, flexible	2
Cable lug connection according to standard	DIN 46234
Min. cross section for cable lug connection	6 mm <sup>2</sup>
Max. cross section for cable lug connection	35 mm <sup>2</sup>
Hole diameter, min.	6.5 mm
Cable lug width, max.	15 mm
Bolt diameter	6 mm
Cable lug connection according to standard	DIN 46237
Min. cross section for cable lug connection	2.5 mm <sup>2</sup>
Max. cross section for cable lug connection	6 mm <sup>2</sup>
Hole diameter, min.	6.5 mm
Cable lug width, max.	11 mm

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## Technical data

### Connection data

Bolt diameter	6 mm
Screw thread	M6
Tightening torque, min	3.2 Nm
Tightening torque max	3.7 Nm

### Standards and Regulations

Connection in acc. with standard	CUL
	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 HL 1 - HL 3 HL 1 - HL 3 HL 1 - HL 3
Fire protection for rail vehicles (DIN EN 45545-2) R23	HL 1 - HL 3 HL 1 - HL 3 HL 1 - HL 3 HL 1 - HL 3
Fire protection for rail vehicles (DIN EN 45545-2) R24	HL 1 - HL 3 HL 1 - HL 3 HL 1 - HL 3 HL 1 - HL 3
Fire protection for rail vehicles (DIN EN 45545-2) R26	HL 1 - HL 3 HL 1 - HL 3 HL 1 - HL 3 HL 1 - HL 3

### Environmental Product Compliance

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

## Drawings

Circuit diagram



## Approvals

### Approvals

#### Approvals

UL Recognized / cUL Recognized / CSA / EAC / cULus Recognized


#### Ex Approvals


### Approval details

UL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 60425
	B	C	
Nominal voltage UN	600 V	600 V	
Nominal current IN	115 A	115 A	

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cUL Recognized						<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>		FILE E 60425	
	D		B	C					
Nominal voltage UN	600 V		600 V						
Nominal current IN	115 A		115 A						

CSA						<a href="http://www.csagroup.org/services-industries/product-listing/">http://www.csagroup.org/services-industries/product-listing/</a>		13631	
		B	C						
Nominal voltage UN		600 V	600 V						
Nominal current IN		115 A	115 A						
mm²/AWG/kcmil		12-2	12-2						

EAC						EAC-Zulassung			
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cULus Recognized						<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>			
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