

## High Current Connectors - HV M8/2 - 3049550

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High Current Connectors, nom. voltage: 1000 V, nominal current: 150 A, connection method: Bolt connection, number of connections: 2, width: 21 mm, height: 63.5 mm, color: gray, mounting type: NS 35/7,5, NS 35/15

### Why buy this product

- ✓ Comprehensive range of accessories for safe and user-friendly wiring of conductors up to 120 mm<sup>2</sup>
- ✓ Two different partition plates can be used for the range of single and double-bolt terminal blocks
- ✓ 2 and 3-pos. connection rails can be used for potential distribution
- ✓ Spring washers are used to prevent hexagonal nuts from loosening
- ✓ Secure connection of up to 4 conductors with cable lugs according to DIN 46234, 46235, and 46237 in a small amount of space
- ✓ The feed-through window provided in the partition plates can be easily removed for mounting the connection rails

### Key Commercial Data

Packing unit	25 STK
GTIN	 4 046356 310307
GTIN	4046356310307

### Technical data

#### General

Number of levels	1
Number of connections	2
Nominal cross section	50 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	4.73 W
Connection in acc. with standard	IEC 60947-7-1
Nominal current $I_N$	150 A
Maximum load current	150 A
Nominal voltage $U_N$	1000 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	2.2 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 35
Setpoint	10 N
Result of voltage-drop test	Test passed
Requirements, voltage drop	$\leq 3.2$ mV
Result of temperature-rise test	Test passed
Short circuit stability result	Test passed
Conductor cross section short circuit testing	50 mm <sup>2</sup>
Short-time current	6 kA
Result of thermal test	Test passed
Proof of thermal characteristics (needle flame) effective duration	10 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	0.02 g <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))	125 °C

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## Technical data

### General

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)	27,5 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

Length	67 mm
Width	21 mm
Height	63.5 mm
Height NS 35/7,5	66 mm
Height NS 35/15	73.5 mm
Bolt length	21 mm

### Connection data

Connection method	Bolt connection
Conductor cross section flexible min.	2.5 mm <sup>2</sup>
Conductor cross section flexible max.	50 mm <sup>2</sup>
Cable lug connection according to standard	DIN 46234
Min. cross section for cable lug connection	2.5 mm <sup>2</sup>
Max. cross section for cable lug connection	50 mm <sup>2</sup>
Bolt length	21 mm
Bolt diameter	8 mm
Tightening torque, min	6 Nm
Tightening torque max	12 Nm
Cable lug connection according to standard	DIN 46235
Min. cross section for cable lug connection	6 mm <sup>2</sup>
Max. cross section for cable lug connection	35 mm <sup>2</sup>
Bolt length	21 mm
Bolt diameter	8 mm
Tightening torque, min	6 Nm
Tightening torque max	12 Nm
Cable lug connection according to standard	DIN 46237

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## Technical data

### Connection data

Max. cross section for cable lug connection	10 mm <sup>2</sup>
Bolt length	21 mm
Bolt diameter	8 mm
Tightening torque, min	6 Nm
Tightening torque max	12 Nm
Screw thread	M8
Tightening torque, min	6 Nm
Tightening torque max	12 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 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 = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

## Drawings

Circuit diagram



## Approvals

### Approvals

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#### Approvals

CSA / CSAus / EAC / cCSAus

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#### Ex Approvals


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### Approval details


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## Approvals

CSA		<a href="http://www.csagroup.org/services-industries/product-listing/">http://www.csagroup.org/services-industries/product-listing/</a>	245029
Nominal voltage UN		1000 V	
Nominal current IN		130 A	
mm <sup>2</sup> /AWG/kcmil		3	

CSAus		<a href="http://www.csagroup.org/services-industries/product-listing/">http://www.csagroup.org/services-industries/product-listing/</a>	245029
Nominal voltage UN		1000 V	
Nominal current IN		130 A	
mm <sup>2</sup> /AWG/kcmil		3	

EAC		EAC-Zulassung
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cCSAus		<a href="http://www.csagroup.org/us/en/services/testing-and-certification/certified-product-listing">http://www.csagroup.org/us/en/services/testing-and-certification/certified-product-listing</a>
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