

## High Current Connectors - HV M6/1 - 3049204

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High Current Connectors, nom. voltage: 1000 V, nominal current: 125 A, connection method: Bolt connection, number of connections: 1, cross section: 1.5 mm<sup>2</sup> - 35 mm<sup>2</sup>, width: 16 mm, height: 55 mm, color: gray, mounting type: NS 35/7,5, NS 35/15

### Your advantages

- Comprehensive, supplementary accessories
- For connecting up to four conductors

### Key Commercial Data

Packing unit	25 pc
GTIN	
GTIN	4046356184038

### Technical data

#### General

Number of levels	1
Number of connections	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
Maximum power dissipation for nominal condition	4.06 W
Connection in acc. with standard	IEC 60947-7-1
Nominal current I <sub>N</sub>	125 A
Maximum load current	125 A

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## Technical data

### General

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	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):2018-05
Test spectrum	Service life test category 1, class B, body mounted
Test frequency	$f_1 = 5$ Hz to $f_2 = 150$ Hz
ASD level	0.964 (m/s <sup>2</sup> ) <sup>2</sup> /Hz
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis
Shock test result	Test passed
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
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

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### General

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

Length	67 mm
Width	16 mm
Height	55 mm
Height NS 35/7,5	58 mm
Height NS 35/15	65.5 mm
Bolt length	22.5 mm

### Connection data

Connection method	Bolt connection
Conductor cross section solid min.	1.5 mm <sup>2</sup>
Conductor cross section solid max.	35 mm <sup>2</sup>
Conductor cross section flexible min.	2.5 mm <sup>2</sup>
Conductor cross section flexible max.	35 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve min.	2.5 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve max.	35 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	35 mm <sup>2</sup>
Bolt length	22.5 mm
Bolt diameter	6 mm
Tightening torque, min	3 Nm
Tightening torque max	6 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	22.5 mm
Bolt diameter	6 mm
Tightening torque, min	3 Nm
Tightening torque max	6 Nm
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>

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## Technical data

### Connection data

Bolt length	22.5 mm
Bolt diameter	6 mm
Tightening torque, min	3 Nm
Tightening torque max	6 Nm
Screw thread	M6
Tightening torque, min	3 Nm
Tightening torque max	6 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 = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

## Approvals

### Approvals

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Approvals

EAC

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Ex Approvals

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### Approval details

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