High Current Connectors - HV M10/1 - 3049408

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High Current Connectors, nom. voltage: 1000 V, nominal current: 269 A, connection method: Bolt connection, number of connections: 1, cross section: 1.5 mm² - 120 mm², width: 32 mm, height: 73.5 mm, color: gray, mounting type: NS 35/7,5, NS 35/15

Your advantages

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

RoHS

Key Commercial Data

Packing unit	10 pc
GTIN	4 046356 184076
GTIN	4046356184076

Technical data

General

Number of levels	1
Number of connections	1
Nominal cross section	120 mm²
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	8.68 W
Connection in acc. with standard	IEC 60947-7-1
Nominal current I_N	269 A
Maximum load current	269 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	15 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	120 mm²
Short-time current	14.4 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 $(m/s^2)^2$/Hz
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):2018-05
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

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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

Length	67 mm
Width	32 mm
Height	73.5 mm
Height NS 35/7,5	76 mm
Height NS 35/15	83.5 mm
Bolt length	40.5 mm

Connection data

Connection method	Bolt connection
Conductor cross section solid min.	1.5 mm²
Conductor cross section solid max.	120 mm²
Conductor cross section flexible min.	6 mm²
Conductor cross section flexible max.	120 mm²
Conductor cross section flexible, with ferrule with plastic sleeve min.	6 mm²
Conductor cross section flexible, with ferrule with plastic sleeve max.	120 mm²
Cable lug connection according to standard	DIN 46234
Min. cross section for cable lug connection	6 mm²
Max. cross section for cable lug connection	120 mm²
Bolt length	40.5 mm
Bolt diameter	10 mm
Tightening torque, min	10 Nm
Tightening torque max	20 Nm
Cable lug connection according to standard	DIN 46235
Min. cross section for cable lug connection	10 mm²
Max. cross section for cable lug connection	95 mm²
Bolt length	40.5 mm
Bolt diameter	10 mm
Tightening torque, min	10 Nm
Tightening torque max	20 Nm
Cable lug connection according to standard	DIN 46237
Max. cross section for cable lug connection	6 mm²

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Connection data

Bolt length	40.5 mm
Bolt diameter	10 mm
Tightening torque, min	10 Nm
Tightening torque max	20 Nm
Screw thread	M10
Tightening torque, min	10 Nm
Tightening torque max	20 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

Approvals

EAC

Ex Approvals

Approval details

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

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