High Current Connectors - HV M6/2 - 3049547

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (http://phoenixcontact.com/download)

High Current Connectors, nom. voltage: 1000 V, nominal current: 125 A, connection method: Bolt connection, number of connections: 2, width: 16 mm, height: 56.1 mm, color: gray, mounting type: NS 35/7,5, NS 35/15

Your advantages

- Comprehensive range of accessories for safe and user-friendly wiring of conductors up to 120 mm²
- 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
- Secure connection of up to 4 conductors with cable lugs according to DIN 46234, 46235, and 46237 in a small amount of space
- Spring washers are used to prevent hexagonal nuts from loosening
- The feed-through window provided in the partition plates can be easily removed for mounting the connection rails

RoHS

Key Commercial Data

Packing unit	1 pc
Minimum order quantity	25 pc
GTIN	4 046356 310291
GTIN	4046356310291
Weight per Piece (excluding packing)	76.000 g
Custom tariff number	85369010
Country of origin	China

Technical data

General

Number of levels	1
Number of connections	2
Nominal cross section	35 mm²

High Current Connectors - HV M6/2 - 3049547

Technical data

General

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_N	125 A
Maximum load current	125 A (with 35 mm² conductor cross section)
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
Result of temperature-rise test	Test passed
Short circuit stability result	Test passed
Conductor cross section short circuit testing	35 mm²
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 $(m/s^2)^2/Hz$
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis
Shock test result	Test passed

High Current Connectors - HV M6/2 - 3049547

Technical data

General

Test specification, shock test	DIN EN 50155 (VDE 0115-200):2008-03
Shock form	Half-sine
Acceleration	5g
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
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	64 mm
Width	16 mm
Height	56.1 mm
Height NS 35/7,5	56.1 mm
Height NS 35/15	63.6 mm
Bolt length	17 mm

Connection data

Connection method	Bolt connection
Cable lug connection according to standard	DIN 46234:1980-03
Min. cross section for cable lug connection	2.5 mm²
Max. cross section for cable lug connection	35 mm²
Hole diameter, min.	6.5 mm
Cable lug width, max.	15 mm
Bolt length	17 mm
Bolt diameter	6 mm
Screw thread	M6
Tightening torque, min	3 Nm
Tightening torque max	6 Nm

High Current Connectors - HV M6/2 - 3049547

Technical data

Connection data

Cable lug connection according to standard	DIN 46235:1983-07
Min. cross section for cable lug connection	6 mm²
Max. cross section for cable lug connection	25 mm²
Hole diameter, min.	6.4 mm
Cable lug width, max.	14 mm
Bolt length	17 mm
Bolt diameter	6 mm
Screw thread	M6
Tightening torque, min	3 Nm
Tightening torque max	6 Nm
Cable lug connection according to standard	DIN 46237:1970-07
Min. cross section for cable lug connection	2.5 mm²
Max. cross section for cable lug connection	6 mm²
Hole diameter, min.	6.5 mm
Cable lug width, max.	11 mm
Bolt length	16 mm
Bolt diameter	6 mm
Screw thread	M6
Tightening torque, min	3 Nm
Tightening torque max	6 Nm
Stripping length	The stripping length depends on the specification provided by the cable lug manufacturer.

Ambient conditions

Operating temperature	-60 °C ... 105 °C (max. short-term operating temperature 130°C)
Ambient temperature (storage/transport)	-25 °C ... 60 °C (for a short time, not exceeding 24 h, -60 °C to +70 °C)
Permissible humidity (storage/transport)	30 % ... 70 %
Ambient temperature (assembly)	-5 °C ... 70 °C
Ambient temperature (actuation)	-5 °C ... 70 °C

Standards and Regulations

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

Environmental Product Compliance

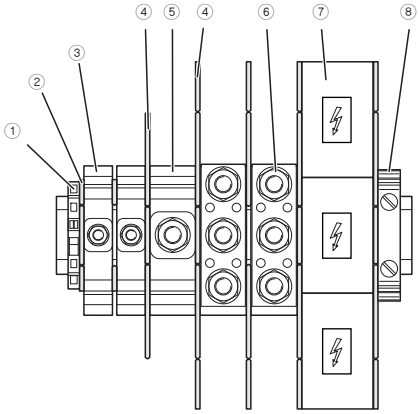
China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab “Downloads”, Category “Manufacturer's declaration”

High Current Connectors - HV M6/2 - 3049547

Drawings

Circuit diagram

Application drawing



Classifications

eCl@ss

eCl@ss 10.0.1	27141120
eCl@ss 11.0	27141120
eCl@ss 4.0	27141100
eCl@ss 4.1	27141100
eCl@ss 5.0	27141100
eCl@ss 5.1	27141100
eCl@ss 6.0	27141100
eCl@ss 7.0	27141120
eCl@ss 9.0	27141120

ETIM

ETIM 2.0	EC000897
ETIM 3.0	EC000897
ETIM 4.0	EC000897
ETIM 6.0	EC000897
ETIM 7.0	EC000897

UNSPSC

UNSPSC 6.01	30211811
UNSPSC 7.0901	39121410
UNSPSC 11	39121410
UNSPSC 12.01	39121410

High Current Connectors - HV M6/2 - 3049547

Classifications

UNSPSC

UNSPSC 13.2	39121410
UNSPSC 18.0	39121410
UNSPSC 19.0	39121410
UNSPSC 20.0	39121410
UNSPSC 21.0	39121410

Approvals

Approvals

Approvals

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

Ex Approvals

Approval details

EAC			RU C-DE.BL08.B.00540

CSA		http://www.csagroup.org/services-industries/product-listing/	158887

	C
Nominal voltage UN	1000 V
Nominal current IN	125 A

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

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

	C
Nominal voltage UN	1000 V

High Current Connectors - HV M6/2 - 3049547

Approvals

	C
Nominal current IN	125 A

cULus Recognized

Accessories

Accessories

Bridge

Connection element - HV M6/1-VS 2 - 3049262

Connection element, length: 91.3 mm, width: 42.8 mm, height: 11.4 mm, number of positions: 2, color: silver

Connection element - HV M6/1-VS 3 - 3049275

Connection element, length: 50 mm, width: 15 mm, height: 4 mm, number of positions: 3, color: silver

Cover profile

Cover profile - HV M6/1-AP - 3049903

Cover profile, for single-bolt terminal block M6, length: 70 mm, width: 16 mm, height: 6.5 mm, color: gray

Cover profile carrier

High Current Connectors - HV M6/2 - 3049547

Accessories

Cover profile carrier - APH-HV - 1069621

Cover profile carrier, width: 4.5 mm, height: 88.4 mm, material: PA, length: 50 mm, color: gray

Cover profile carrier - APH-HV-M - 1136699

Cover profile carrier, width: 4.5 mm, height: 35 mm, material: PA, length: 50.2 mm, color: gray

DIN rail

DIN rail perforated - NS 35/ 7,5 PERF 2000MM - 0801733

DIN rail perforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

DIN rail, unperforated - NS 35/ 7,5 UNPERF 2000MM - 0801681

DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

DIN rail perforated - NS 35/ 7,5 WH PERF 2000MM - 1204119

DIN rail perforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, Galvanized, white passivated, length: 2000 mm, color: silver

High Current Connectors - HV M6/2 - 3049547

Accessories

DIN rail, unperforated - NS 35/ 7,5 WH UNPERF 2000MM - 1204122

DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, Galvanized, white passivated, length: 2000 mm, color: silver

---

DIN rail, unperforated - NS 35/ 7,5 AL UNPERF 2000MM - 0801704

DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Aluminum, uncoated, length: 2000 mm, color: silver

---

DIN rail perforated - NS 35/ 7,5 ZN PERF 2000MM - 1206421

DIN rail perforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, galvanized, length: 2000 mm, color: silver

---

DIN rail, unperforated - NS 35/ 7,5 ZN UNPERF 2000MM - 1206434

DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, galvanized, length: 2000 mm, color: silver

---

DIN rail, unperforated - NS 35/ 7,5 CU UNPERF 2000MM - 0801762

DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Copper, uncoated, length: 2000 mm, color: copper-colored

---

High Current Connectors - HV M6/2 - 3049547

Accessories

End cap - NS 35/ 7,5 CAP - 1206560

DIN rail end piece, for DIN rail NS 35/7.5

End block

End clamp - CLIPFIX 35-5 - 3022276

Quick mounting end clamp for NS 35/7,5 DIN rail or NS 35/15 DIN rail, with marking option, with parking option for FBS...5, FBS...6, KSS 5, KSS 6, width: 5.15 mm, color: gray

---

Labeled terminal marker

Warning label - WS-4K - 1004584

Adhesive warning plate, self-adhesive, black print: lightning flash with mixed verson - "Vorsicht Spannung - Attention Danger" size of label: 13 x 23.5 mm

---

Zack marker strip - ZB 12 CUS - 0824942

Zack marker strip, can be ordered: Strip, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 12.2 mm, lettering field size: 10.5 x 12.15 mm, Number of individual labels: 5

Zack marker strip - ZB 12,LGS:L1-N,PE - 0812146

Zack marker strip, Strip, white, labeled, printed horizontally: L1, L2, L3, N, PE, mounting type: snap into tall marker groove, for terminal block width: 12.2 mm, lettering field size: 10.5 x 12.15 mm, Number of individual labels: 5

High Current Connectors - HV M6/2 - 3049547

Accessories

Marker for terminal blocks - UC-TM 12 CUS - 0824613

Marker for terminal blocks, can be ordered: by sheet, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 12 mm, lettering field size: 11.45 x 10.5 mm, Number of individual labels: 40

Marker for terminal blocks - UCT-TM 12 CUS - 0829630

Marker for terminal blocks, can be ordered: by sheet, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 12 mm, lettering field size: 10.8 x 9.6 mm, Number of individual labels: 30

Partition plate

Separating plate - HV M12/2-TP - 3049709

Separating plate, length: 156 mm, width: 2 mm, color: gray

Terminal marking

Zack marker strip - ZB 12:UNPRINTED - 0812120

Zack marker strip, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into tall marker groove, for terminal block width: 12.2 mm, lettering field size: 12 x 10.5 mm, Number of individual labels: 5

High Current Connectors - HV M6/2 - 3049547

Accessories

Marker for terminal blocks - UC-TM 12 - 0819194

Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into tall marker groove, for terminal block width: 12 mm, lettering field size: 11.45 x 10.5 mm, Number of individual labels: 40

Marker for terminal blocks - UCT-TM 12 - 0829144

Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: TOPMARK NEO, TOPMARK LASER, BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: snap into tall marker groove, for terminal block width: 12 mm, lettering field size: 10.8 x 9.6 mm, Number of individual labels: 30