PHŒNIX CONTACT

High Current Connectors - HV M5/1 - 3049107

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High Current Connectors, nom. voltage: 1000 V, nominal current: 76 A, connection method: Bolt connection, number of connections: 1, width: 13 mm, height: 56.1 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	1 pc
Minimum order quantity	25 pc
GTIN	
GTIN	4046356184014
Weight per Piece (excluding packing)	20.680 g
Custom tariff number	85369010
Country of origin	China

Technical data

General

Number of levels	1
Number of connections	1
Nominal cross section	16 mm²
Color	gray
Insulating material	PA
Flammability rating according to UL 94	V0
Rated surge voltage	8 kV

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Technical data

General

Degree of pollution	3
Overvoltage category	III
Insulating material group	I
Maximum power dissipation for nominal condition	2.43 W
Ambient temperature (operation)	-60 °C ... 85 °C
Ambient temperature (storage/transport)	-25 °C ... 55 °C (For a short time, not exceeding 24 h, -60 to +70 °C)
Permissible humidity (storage/transport)	30 % ... 70 %
Ambient temperature (assembly)	-5 °C ... 70 °C
Ambient temperature (actuation)	-5 °C ... 70 °C
Connection in acc. with standard	IEC 60947-7-1
Nominal current I_N	76 A
Maximum load current	76 A (with 16 mm² conductor cross section)
Nominal voltage U_N	1000 V
Open side panel	No
Shock protection test specification	DIN EN 50274 (VDE 0660-514):2002-11
Back of the hand protection	guaranteed
Finger protection	guaranteed
Result of surge voltage test	Test passed
Result of power-frequency withstand voltage test	Test passed
Power frequency withstand voltage setpoint	0.0022 kV
Result of the test for mechanical stability of terminal points (5 x conductor connection)	Test passed
Bending test rotation speed	10 rpm
Bending test turns	135
Result of tight fit on support	Test passed
Tight fit on carrier	NS 35
Setpoint	5 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
Result of thermal test	Test passed
Proof of thermal characteristics (needle flame) effective duration	30 s
Test specification, oscillation, broadband noise	DIN EN 50155 (VDE 0115-200):2018-05
Test spectrum	Service life test category 2, bogie-mounted
Test frequency	f_1 = 5 Hz to f_2 = 250 Hz
ASD level	6.12 $(m/s^2)^2$/Hz

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General

Acceleration	3.12 g
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis
Test specification, shock test	DIN EN 50155 (VDE 0115-200):2018-05
Shock form	Half-sine
Acceleration	30g
Shock duration	18 ms
Number of shocks per direction	3
Test directions	X-, Y- and Z-axis (pos. and neg.)

Dimensions

Length	64 mm
Width	13 mm
Height	56.1 mm
Height NS 35/7,5	56.8 mm
Height NS 35/15	64.3 mm
Bolt length	22.5 mm

Connection data

Connection method	Bolt connection
Cable lug connection according to standard	DIN 46234:1980-03
Min. cross section for cable lug connection	0.5 mm²
Max. cross section for cable lug connection	16 mm²
Hole diameter, min.	5.3 mm
Cable lug width, max.	11 mm
Bolt length	22.5 mm
Bolt diameter	5 mm
Screw thread	M5
Tightening torque, min	2 Nm
Tightening torque max	4 Nm
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	10 mm²
Hole diameter, min.	5.3 mm
Cable lug width, max.	9 mm
Bolt length	22.5 mm
Bolt diameter	5 mm
Screw thread	M5

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Technical data

Connection data

Tightening torque, min	2 Nm
Tightening torque max	4 Nm
Cable lug connection according to standard	DIN 46237:1970-07
Min. cross section for cable lug connection	1 mm²
Max. cross section for cable lug connection	6 mm²
Hole diameter, min.	5.3 mm
Cable lug width, max.	10 mm
Bolt length	22.5 mm
Bolt diameter	5 mm
Screw thread	M5
Tightening torque, min	2 Nm
Tightening torque max	4 Nm
Stripping length	The stripping length depends on the specification provided by the cable lug manufacturer.

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"

Classifications

eCl@ss

eCl@ss 10.0.1	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 8.0	27141120
eCl@ss 9.0	27141120

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Classifications

ETIM

ETIM 2.0	EC000897
ETIM 3.0	EC000897
ETIM 4.0	EC000897
ETIM 5.0	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
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 / EAC / UL Recognized / cUL Recognized / cULus Recognized

Ex Approvals

Approval details

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

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Approvals

CSA		http://www.csagroup.org/services-industries/product-listing/	158887
		C	
Nominal voltage UN		1000 V	
Nominal current IN		76 A	

EAC			RU C-DE.BL08.B.00540

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	
Nominal current IN		76 A	

cULus Recognized			

Accessories

Accessories

Bridge

Connection element - HV M5/1-VS 2 - 3049437

Connection element, length: 27 mm, width: 12 mm, height: 4 mm, number of positions: 2, color: silver

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Accessories

Connection element - HV M5/1-VS 3 - 3049440

Connection element, length: 42 mm, width: 12 mm, height: 4 mm, number of positions: 3, color: silver

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Cover profile

Cover profile - HV M5/1-AP - 3049806

Cover profile, for single-bolt terminal block M5, length: 52 mm, width: 13 mm, height: 6.5 mm, color: gray

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Cover profile carrier

Cover profile carrier - APH-HV - 1069621

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

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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

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DIN rail

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Accessories

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

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

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Accessories

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

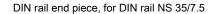DIN rail, unperforated - NS 35/ 7,5 ZN UNPERF 2000MM - 1206434

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

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

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Accessories

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

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

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Accessories

Partition plate

Separating plate - HV M12/1-TP - 3049602

Separating plate, length: 50 mm, width: 1.5 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

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