

HV M10/2 NFF - High-current connector



1055646

<https://www.phoenixcontact.com/in/products/1055646>

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 documentation. Our general terms of use for downloads are valid.



High-current connector, nom. voltage: 1000 V, nominal current: 269 A, number of connections: 2, connection method: Bolt connection, Rated cross section: 120 mm², mounting type: NS 35/7,5, NS 35/15, color: gray

Your advantages

- HFR nut screw locking
- Conical washer CS

Commercial data

Item number	1055646
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	*****
Product key	BE4212
GTIN	4055626692982
Weight per piece (including packing)	268.3 g
Weight per piece (excluding packing)	267.8 g
Customs tariff number	85369010
Country of origin	CN

HV M10/2 NFF - High-current connector



1055646

<https://www.phoenixcontact.com/in/products/1055646>

Technical data

Notes

General

Note	The rated insulation voltage applies to insulated cable lugs acc. DIN 46237:1970-07 and for uninsulated cable lugs acc. DIN 46234:1980-03 with shrink sleeve.
	The rated insulation voltage applies to insulated cable lugs acc. DIN 46237:1970-07 and for uninsulated cable lugs acc. DIN 46234:1980-03 with shrink sleeve. When using uninsulated cable lugs with shrink sleeve the min. required air clearances and creepage distances have to be ensured by the enduser.
	The rated insulation voltage applies to insulated cable lugs acc. to DIN 46237:1970-07 and for uninsulated cable lugs acc. to DIN 46234:1980-03 with path extension.

Product properties

Product type	Bolt connection terminal block
Number of connections	2
Number of rows	1
Potentials	1

Insulation characteristics

Overvoltage category	III
Degree of pollution	3

Electrical properties

Rated surge voltage	8 kV
Maximum power dissipation for nominal condition	4.06 W

Connection data

Number of connections per level	2
Nominal cross section	120 mm ²
Stripping length	The stripping length depends on the specification provided by the cable lug manufacturer.
Connection in acc. with standard	IEC 60947-7-1
Nominal current	269 A
Maximum load current	269 A
Nominal voltage	1000 V
Nominal cross section	120 mm ²
Connection in acc. with standard	NF F61-017
Maximum total current	101 A
Nominal voltage	1000 V
Nominal cross section	120 mm ²

Cable lug connection DIN 46234:1980-03

Connection in acc. with standard	DIN 46234:1980-03
----------------------------------	-------------------

HV M10/2 NFF - High-current connector



1055646

<https://www.phoenixcontact.com/in/products/1055646>

Cross section	6 mm² ... 120 mm²
Cross section range AWG	8 ... 250 kcmil (converted acc. to IEC)
Hole diameter	10.5 mm
Width	24 mm
Bolt length	16 mm
Bolt diameter	10 mm
Screw thread	M10
Tightening torque	30.00 Nm
Connection in acc. with standard	DIN 46235:1983-07
Cross section	16 mm² ... 95 mm²
Cross section range AWG	4 ... 250 kcmil (converted acc. to IEC)
Hole diameter	10.5 mm
Width	32 mm
Bolt length	16 mm
Bolt diameter	10 mm
Screw thread	M10
Tightening torque	30.00 Nm
Connection in acc. with standard	DIN 46237:1970-07
Cross section	... 6 mm²
Cross section range AWG	... 8 (converted acc. to IEC)
Hole diameter	10.5 mm
Width	18 mm
Bolt length	16 mm
Bolt diameter	10 mm
Screw thread	M10
Tightening torque	30.00 Nm
Connection in acc. with standard	NF F00-363:1995-12-01
Cross section	... 120 mm²
Additional text	The stripping length is based on the specifications of the cable lug manufacturer.
Cross section range AWG	(converted acc. to IEC)
Bolt diameter	10 mm
Screw thread	M10
Tightening torque	30.00 Nm
Connection in acc. with standard	NF F00-363
Cross section	0.5 mm² ... 25 mm²
Additional text	Release list on request
Cross section range AWG	(converted acc. to IEC)

Dimensions

Width	32 mm
Height	90.5 mm
Depth	74.6 mm
Depth on NS 35/7,5	75.3 mm

HV M10/2 NFF - High-current connector



1055646

<https://www.phoenixcontact.com/in/products/1055646>

Depth on NS 35/15	82.8 mm
Bolt length	42 mm

Material specifications

Color	gray (RAL 7042)
Flammability rating according to UL 94	V0
Insulating material group	I
Insulating material	PA
Static insulating material application in cold	-60 °C
Relative insulation material temperature index (Elec., UL 746 B)	130 °C
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
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

Electrical tests

Surge voltage test

Result	Test passed
--------	-------------

Temperature-rise test

Requirement temperature-rise test	Increase in temperature ≤ 45 K
Result	Test passed
Short-time withstand current 120 mm ²	14.4 kA
Result	Test passed

Power-frequency withstand voltage

Test voltage setpoint	2.2 kV
Result	Test passed

Mechanical properties

Mechanical data

Open side panel	No
-----------------	----

Mechanical tests

Mechanical strength

Result	Test passed
--------	-------------

Attachment on the carrier

Result	Test passed
--------	-------------

Test for conductor damage and slackening

Rotation speed	10 (+/- 2) rpm
----------------	----------------

HV M10/2 NFF - High-current connector



1055646

<https://www.phoenixcontact.com/in/products/1055646>

Revolutions	135
Conductor cross section/weight	120 mm ² /14 kg
Result	Test passed

Environmental and real-life conditions

Needle-flame test

Time of exposure	30 s
Result	Test passed

Oscillation/broadband noise

Specification	DIN EN 50155 (VDE 0115-200):2022-06
Spectrum	Service life test category 2, bogie-mounted
Frequency	$f_1 = 5 \text{ Hz}$ to $f_2 = 250 \text{ Hz}$
ASD level	6.12 (m/s ²) ² /Hz
Acceleration	3.12g
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis
Result	Test passed

Shocks

Pulse shape	Half-sine
Acceleration	30g
Shock duration	18 ms
Number of shocks per direction	3
Test directions	X-, Y- and Z-axis (pos. and neg.)
Result	Test passed

Ambient conditions

Ambient temperature (operation)	-60 °C ... 110 °C (Operating temperature range incl. self-heating; for max. short-term operating temperature, see RTI Elec.)
Ambient temperature (storage/transport)	-25 °C ... 60 °C (for a short time, not exceeding 24 h, -60 °C to +70 °C)
Ambient temperature (assembly)	-5 °C ... 70 °C
Ambient temperature (actuation)	-5 °C ... 70 °C
Permissible humidity (operation)	20 % ... 90 %
Permissible humidity (storage/transport)	30 % ... 70 %

Standards and regulations

Connection in acc. with standard	IEC 60947-7-1
	NF F61-017

Mounting

Mounting type	NS 35/7,5
	NS 35/15

HV M10/2 NFF - High-current connector

1055646

<https://www.phoenixcontact.com/in/products/1055646>



Drawings

Circuit diagram



HV M10/2 NFF - High-current connector



1055646

<https://www.phoenixcontact.com/in/products/1055646>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/in/products/1055646>



cULus Recognized
Approval ID: E60425

	CSA Approval ID: 13631			
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group C				
	1000 V	269 A	10 - 300	-



cULus Recognized
Approval ID: E60425

HV M10/2 NFF - High-current connector



1055646

<https://www.phoenixcontact.com/in/products/1055646>

Classifications

ECLASS

ECLASS-11.0	27141120
ECLASS-13.0	27250101

ETIM

ETIM 9.0	EC000897
----------	----------

UNSPSC

UNSPSC 21.0	39121400
-------------	----------

HV M10/2 NFF - High-current connector



1055646

<https://www.phoenixcontact.com/in/products/1055646>

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
---	--------------------

China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%
-------------------------------------	----------------------------

HV M10/2 NFF - High-current connector



1055646

<https://www.phoenixcontact.com/in/products/1055646>

Accessories

AGK PT 4X6/M10 - Pick-off terminal block

1017448

<https://www.phoenixcontact.com/in/products/1017448>

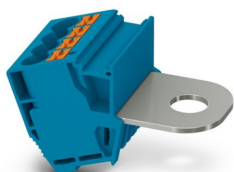


Pick-off terminal block, nom. voltage: 1000 V, nominal current: 41 A, number of connections: 5, connection method: Push-in connection, 1 level, Rated cross section: 6 mm², cross section: 0.5 mm² - 10 mm², Bolt connection, Line contact, mounting type: on base element, color: gray

AGK PT 4X6/M10 BU - Pick-off terminal block

1083237

<https://www.phoenixcontact.com/in/products/1083237>



Pick-off terminal block, nom. voltage: 1000 V, nominal current: 41 A, number of connections: 5, connection method: Push-in connection, 1 level, Rated cross section: 6 mm², cross section: 0.5 mm² - 10 mm², Bolt connection, 1 level, mounting type: on base element, color: blue

HV M10/2 NFF - High-current connector



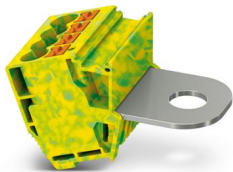
1055646

<https://www.phoenixcontact.com/in/products/1055646>

AGK PT 4X6/M10 GNYE - Pick-off terminal block

1083238

<https://www.phoenixcontact.com/in/products/1083238>



Pick-off terminal block, nom. voltage: 1000 V, nominal current: 41 A, number of connections: 5, connection method: Push-in connection, 1 level, Rated cross section: 6 mm², cross section: 0.5 mm² - 10 mm², Bolt connection, 1 level, mounting type: on base element, color: green-yellow

AGK PT 8X6/M10 - Pick-off terminal block

1017450

<https://www.phoenixcontact.com/in/products/1017450>



Pick-off terminal block, nom. voltage: 1000 V, nominal current: 41 A, number of connections: 9, connection method: Push-in connection, 1 level, Rated cross section: 6 mm², cross section: 0.5 mm² - 10 mm², Bolt connection, 1 level, mounting type: on base element, color: gray

HV M10/2 NFF - High-current connector



1055646

<https://www.phoenixcontact.com/in/products/1055646>

AGK PT 8X6/M10 BU - Pick-off terminal block

1083235

<https://www.phoenixcontact.com/in/products/1083235>

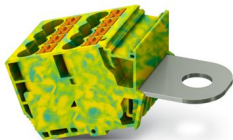


Pick-off terminal block, nom. voltage: 1000 V, nominal current: 41 A, number of connections: 9, connection method: Push-in connection, 1 level, Rated cross section: 6 mm², cross section: 0.5 mm² - 10 mm², Bolt connection, 1 level, mounting type: on base element, color: blue

AGK PT 8X6/M10 GNYE - Pick-off terminal block

1083236

<https://www.phoenixcontact.com/in/products/1083236>



Pick-off terminal block, nom. voltage: 1000 V, nominal current: 41 A, number of connections: 9, connection method: Push-in connection, 1 level, Rated cross section: 6 mm², cross section: 0.5 mm² - 10 mm², Bolt connection, 1 level, mounting type: on base element, color: green/yellow

HV M10/2 NFF - High-current connector

1055646

<https://www.phoenixcontact.com/in/products/1055646>



AP-BTO 5,5/14 - Cover profile

3281151

<https://www.phoenixcontact.com/in/products/3281151>

Cover profile, material: PC, color: transparent



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

0801733

<https://www.phoenixcontact.com/in/products/0801733>



DIN rail perforated, Pack of 25 (50 m), acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, Standard profile, color: silver

HV M10/2 NFF - High-current connector



1055646

<https://www.phoenixcontact.com/in/products/1055646>

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

0801681

<https://www.phoenixcontact.com/in/products/0801681>



DIN rail, unperforated, Pack of 25 (50 m), acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, Standard profile, color: silver

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

1204119

<https://www.phoenixcontact.com/in/products/1204119>



DIN rail perforated, Pack of 25 (50 m), acc. to EN 60715, material: Steel, galvanized, white passivated, Standard profile, color: silver

HV M10/2 NFF - High-current connector

1055646

<https://www.phoenixcontact.com/in/products/1055646>



NS 35/ 7,5 WH UNPERF 2000MM-VPE 10 - DIN rail, unperforated

1204122

<https://www.phoenixcontact.com/in/products/1204122>



DIN rail, unperforated, Pack of 10 (20 m), acc. to EN 60715, material: Steel, galvanized, white passivated, Standard profile, color: silver

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

0801704

<https://www.phoenixcontact.com/in/products/0801704>



DIN rail, unperforated, Pack of 25 (50 m), acc. to EN 60715, material: Aluminum, uncoated, Standard profile, color: silver

HV M10/2 NFF - High-current connector

1055646

<https://www.phoenixcontact.com/in/products/1055646>



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

1206421

<https://www.phoenixcontact.com/in/products/1206421>



DIN rail perforated, Pack of 25 (50 m), acc. to EN 60715, material: Steel, galvanized, Standard profile, color: silver

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

1206434

<https://www.phoenixcontact.com/in/products/1206434>



DIN rail, unperforated, Pack of 25 (50 m), acc. to EN 60715, material: Steel, galvanized, Standard profile, color: silver

HV M10/2 NFF - High-current connector

1055646

<https://www.phoenixcontact.com/in/products/1055646>



NS 35/ 7,5 CU UNPERF 2000MM-VPE 10 - DIN rail, unperforated

0801762

<https://www.phoenixcontact.com/in/products/0801762>



DIN rail, unperforated, Pack of 10 (20 m), acc. to EN 60715, material: Copper, uncoated, Standard profile, color: copper-colored

NS 35/ 7,5 CAP - End cap

1206560

<https://www.phoenixcontact.com/in/products/1206560>

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



HV M10/2 NFF - High-current connector



1055646

<https://www.phoenixcontact.com/in/products/1055646>

ZB 12:UNPRINTED - Zack marker strip

0812120

<https://www.phoenixcontact.com/in/products/0812120>



Zack marker strip, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: latching, for terminal block width: 12.2 mm, Number of individual labels: 5, text field height: 10.5 mm, text field width: 12.15 mm

ZB 12 CUS - Zack marker strip

0824942

<https://www.phoenixcontact.com/in/products/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, Number of individual labels: 5, text field height: 12.15 mm, text field width: 10.5 mm

HV M10/2 NFF - High-current connector



1055646

<https://www.phoenixcontact.com/in/products/1055646>

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

0812146

<https://www.phoenixcontact.com/in/products/0812146>



Zack marker strip, Strip, white, labeled, printed horizontally: L1, L2, L3, N, PE, mounting type: latching, for terminal block width: 12.2 mm, Number of individual labels: 5, text field height: 10.5 mm, text field width: 12.15 mm

UC-TM 12 - Marker for terminal blocks

0819194

<https://www.phoenixcontact.com/in/products/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: latching, for terminal block width: 12 mm, Number of individual labels: 40, text field height: 10.5 mm, text field width: 11.45 mm

HV M10/2 NFF - High-current connector



1055646

<https://www.phoenixcontact.com/in/products/1055646>

UC-TM 12 CUS - Marker for terminal blocks

0824613

<https://www.phoenixcontact.com/in/products/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, Number of individual labels: 40, text field height: 10.5 mm, text field width: 11.45 mm

UCT-TM 12 - Marker for terminal blocks

0829144

<https://www.phoenixcontact.com/in/products/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: latching, for terminal block width: 12 mm, Number of individual labels: 30, text field height: 9.6 mm, text field width: 10.8 mm

HV M10/2 NFF - High-current connector

1055646

<https://www.phoenixcontact.com/in/products/1055646>



UCT-TM 12 CUS - Marker for terminal blocks

0829630

<https://www.phoenixcontact.com/in/products/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, Number of individual labels: 30, text field height: 9.6 mm, text field width: 10.8 mm

WS-4K - Warning label

1004584

<https://www.phoenixcontact.com/in/products/1004584>



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

Phoenix Contact 2025 © - all rights reserved

<https://www.phoenixcontact.com>

PHOENIX CONTACT (I) Pvt. Ltd.

A-58/2, Okhla Industrial Area, Phase - II, New Delhi-110 020

+91.1275.71420

info@phoenixcontact.co.in