

PP-H 4/ 1-R - Plug

3211977

<https://www.phoenixcontact.com/us/products/3211977>

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.



Plug, nom. voltage: 800 V, nominal current: 32 A, number of connections: 1, number of positions: 1, connection method: Push-in connection, Rated cross section: 4 mm², 1st level connection left, cross section: 0.2 mm² - 6 mm², color: gray

Your advantages

- Large-surface labeling option
- The Push-in technology COMBI plugs for self-assembly provide solutions that users can implement themselves
- Tested for railway applications

Commercial data

Item number	3211977
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	BE22
Product key	BE2244
GTIN	4046356483001
Weight per piece (including packing)	5.338 g
Weight per piece (excluding packing)	4.763 g
Customs tariff number	85366990
Country of origin	PL

Technical data

Notes

Notes on operation	COMBI connectors are connectors without switching power in accordance with IEC 61984 and can be connected or disconnected without load or voltage when used as intended
--------------------	---

Product properties

Product type	Terminal plug
Area of application	Railway industry
	Machine building
	Plant engineering
Number of positions	1
Pitch	6.2 mm
Number of connections	1
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	1.02 W

Connection data

Number of connections per level	1
Nominal cross section	4 mm ²

1st level connection left

Connection method	Push-in connection
Stripping length	10 mm ... 12 mm
Internal cylindrical gage	A4
Connection in acc. with standard	IEC 61984
Conductor cross-section rigid	0.2 mm ² ... 6 mm ²
Cross section AWG	24 ... 10 (converted acc. to IEC)
Conductor cross-section flexible	0.2 mm ² ... 4 mm ²
Conductor cross-section, flexible [AWG]	24 ... 12 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.25 mm ² ... 4 mm ²
Flexible conductor cross-section (ferrule with plastic sleeve)	0.25 mm ² ... 4 mm ²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm ² ... 1 mm ²
Nominal cross section	4 mm ²
Nominal current	32 A

PP-H 4/ 1-R - Plug



3211977

<https://www.phoenixcontact.com/us/products/3211977>

Maximum load current	32 A (with 6 mm ² conductor cross-section)
Nominal voltage	800 V

1st level connection left Connection cross sections directly pluggable

Conductor cross-section rigid	0.5 mm ² ... 6 mm ²
Conductor cross-section flexible (ferrule without plastic sleeve)	0.5 mm ² ... 4 mm ²
Flexible conductor cross-section (ferrule with plastic sleeve)	0.5 mm ² ... 4 mm ²

Dimensions

Width	6.2 mm
Height	21 mm
Depth	42.3 mm
Pitch	6.2 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
Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21))	130 °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
Calorimetric heat release NFPA 130 (ASTM E 1354)	28 MJ/kg
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

Mechanical properties

Mechanical data

Open side panel	Yes
-----------------	-----

Environmental and real-life conditions

Ambient conditions

Ambient temperature (operation)	-60 °C (max. operating temperature see derating curve)
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 %

PP-H 4/ 1-R - Plug



3211977

<https://www.phoenixcontact.com/us/products/3211977>

Permissible humidity (storage/transport)	30 % ... 70 %
--	---------------

Standards and regulations

Connection in acc. with standard	IEC 61984
----------------------------------	-----------

Mounting

Assembly note	Use of a parallel pressing tool is recommended for easy latching of the COMBI connector and coupling elements for self-assembly
---------------	---

PP-H 4/ 1-R - Plug

3211977

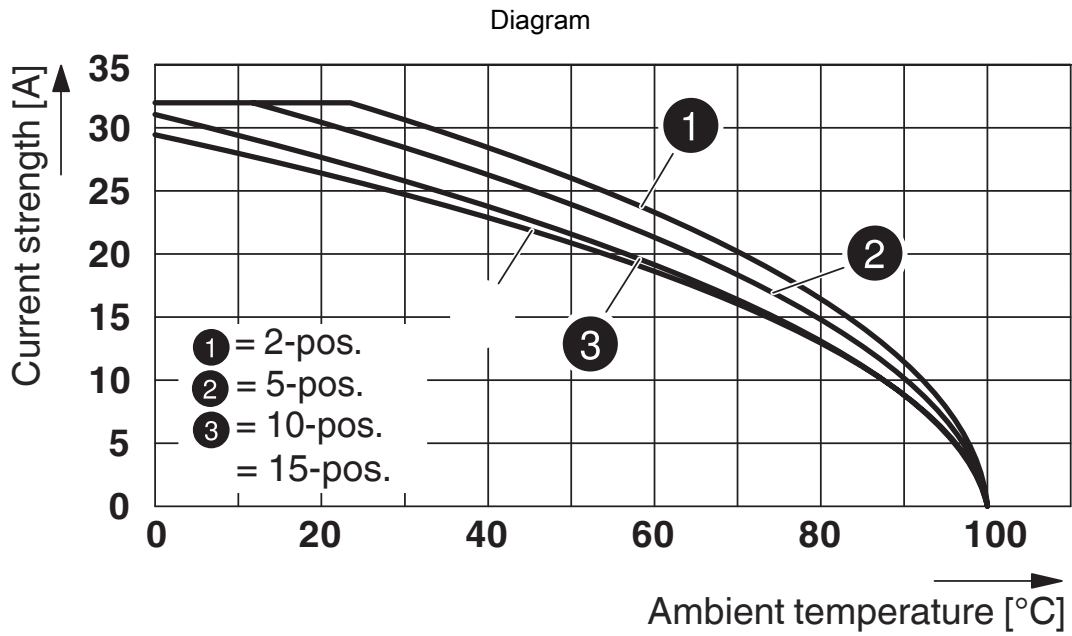
<https://www.phoenixcontact.com/us/products/3211977>



Drawings

Schematic diagram





Circuit diagram



PP-H 4/ 1-R - Plug



3211977

<https://www.phoenixcontact.com/us/products/3211977>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/3211977>

DNV

Approval ID: TAE000010T



IECEE CB Scheme

Approval ID: DE1-64672_B1_B2

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
	800 V	32 A	-	-



cULus Recognized

Approval ID: E60425

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
C				
	600 V	28 A	24 - 10	-



BV

Approval ID: 39979/B0 BV



VDE Zeichengenehmigung

Approval ID: 40043445

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
Only flexible conductors	800 V	32 A	-	0.2 - 4



EAC

Approval ID: KZ7500651131219505

PP-H 4/ 1-R - Plug



3211977

<https://www.phoenixcontact.com/us/products/3211977>

Classifications

ECLASS

ECLASS-13.0	27250306
ECLASS-15.0	27250306

ETIM

ETIM 10.0	EC002021
-----------	----------

UNSPSC

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

PP-H 4/ 1-R - Plug



3211977

<https://www.phoenixcontact.com/us/products/3211977>

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%
-------------------------------------	----------------------------

Phoenix Contact 2026 © - all rights reserved
<https://www.phoenixcontact.com>

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com