

# SP 4/ 1 - Plug

3042887

<https://www.phoenixcontact.com/us/products/3042887>



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 positions: 1, connection method: Spring-cage connection, 1 level, Rated cross section: 4 mm<sup>2</sup>, cross section: 0.08 mm<sup>2</sup>- 6 mm<sup>2</sup>, color: gray

## Your advantages

- Large-surface labeling option
- Practical coding option
- Tested for railway applications

## Commercial data

Item number	3042887
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	BE02
Product key	BE2144
GTIN	4017918956233
Weight per piece (including packing)	4.644 g
Weight per piece (excluding packing)	4.644 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
--------------------	---

### General

Note	With a free-hanging connection, an insulating foil has to be placed between the plug connection and electrically conductive surfaces.
------	---

### Product properties

Product type	Terminal plug
Number of positions	1
Pitch	6.2 mm

### Insulation characteristics

Overvoltage category	III
Degree of pollution	3

### Electrical properties

Rated surge voltage	8 kV
---------------------	------

### Connection data

Nominal cross section	4 mm <sup>2</sup>
-----------------------	-------------------

#### 1 level

Connection method	Spring-cage connection
Stripping length	8 mm ... 10 mm
Internal cylindrical gage	A4
Connection in acc. with standard	IEC 61984
Conductor cross-section rigid	0.08 mm <sup>2</sup> ... 6 mm <sup>2</sup>
Cross section AWG	28 ... 10 (converted acc. to IEC)
Conductor cross-section flexible	0.08 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Conductor cross-section, flexible [AWG]	28 ... 12 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.14 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Flexible conductor cross-section (ferrule with plastic sleeve)	0.14 mm <sup>2</sup> ... 4 mm <sup>2</sup>
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm <sup>2</sup> ... 1 mm <sup>2</sup>
Nominal cross section	4 mm <sup>2</sup>
Nominal current	32 A
Maximum load current	32 A (with 6 mm <sup>2</sup> conductor cross-section)
Nominal voltage	800 V

### Dimensions

Width	6.2 mm
-------	--------

# SP 4/ 1 - Plug



3042887

<https://www.phoenixcontact.com/us/products/3042887>

Height	21 mm
Depth	41.5 mm
Length	21 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

## Electrical tests

### Surge voltage test

Result	Test passed
Short-time withstand current 4 mm <sup>2</sup>	0.48 kA
Result	Test passed

### Power-frequency withstand voltage

Test voltage setpoint	2 kV
Result	Test passed

## Mechanical tests

### Attachment on the carrier

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):2018-05
---------------	-------------------------------------

# SP 4/ 1 - Plug



3042887

<https://www.phoenixcontact.com/us/products/3042887>

Spectrum	Long life test category 1, class B, body mounted
Frequency	$f_1 = 5 \text{ Hz}$ to $f_2 = 150 \text{ Hz}$
ASD level	$0.964 \text{ (m/s}^2\text{)/Hz}$
Acceleration	0.58g
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis
Result	Test passed

## Shocks

Pulse shape	Half-sine
Acceleration	5g
Shock duration	30 ms
Number of shocks per direction	3
Test directions	X-, Y- and Z-axis (pos. and neg.)
Result	Test passed

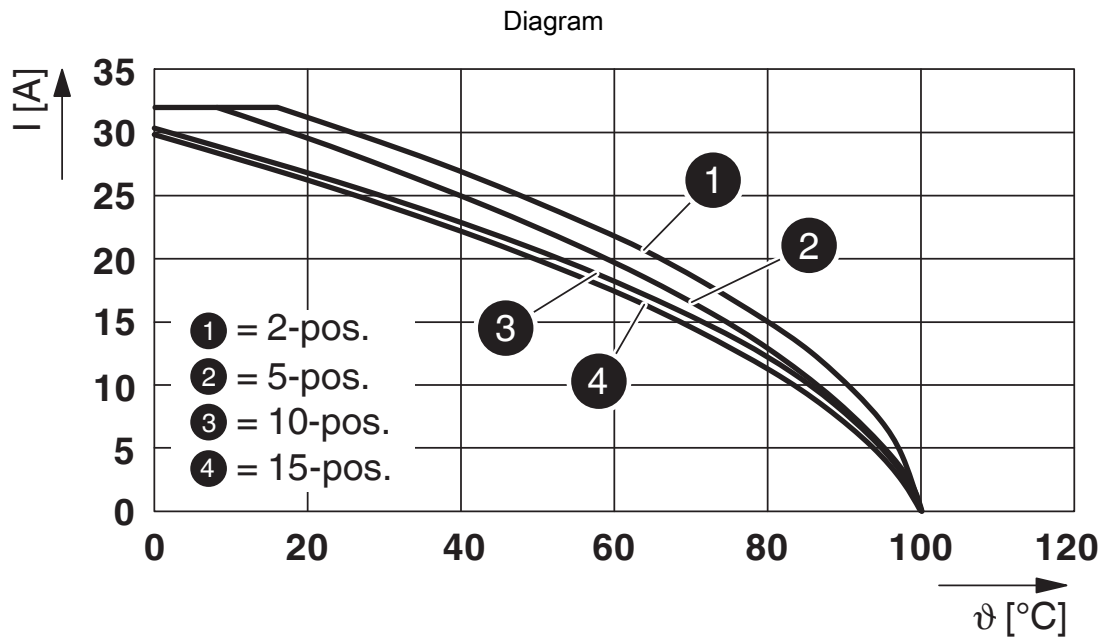
## Ambient conditions

Ambient temperature (operation)	-60 °C (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 %
Permissible humidity (storage/transport)	30 % ... 70 %

## Standards and regulations

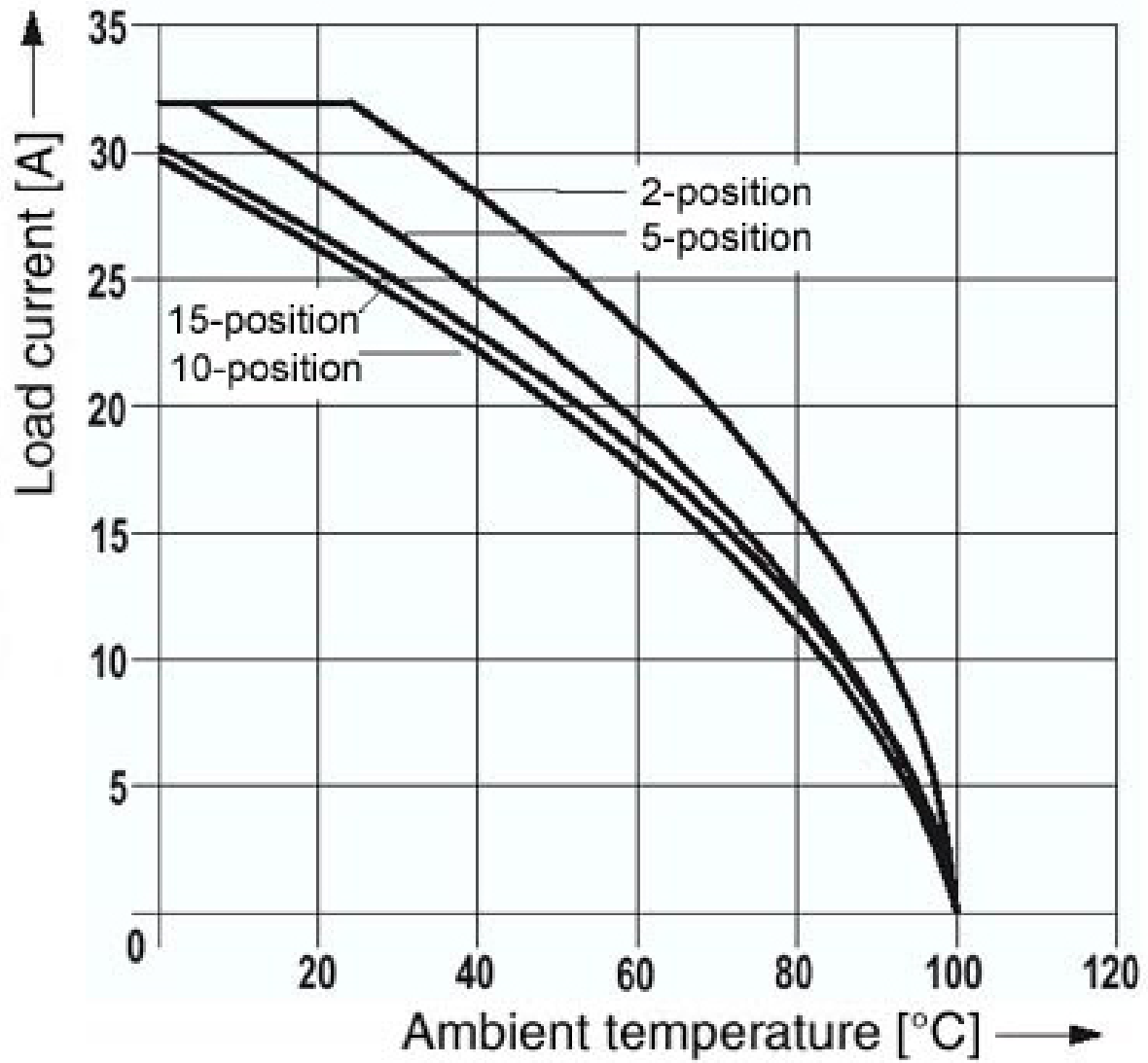
Connection in acc. with standard	IEC 61984
----------------------------------	-----------

## Drawings



Derating curve for spring-cage terminals ST 4/1P.. and ST 4/2P.. with all plug versions SP 4/... . The derating curves are determined by multiplying the values of the base curves by the factor 0.8.

Diagram



Derating curve for the spring-cage terminal with all plug versions SP 4/... .

Diagram



Derating curve for ST 4/ 1P and for all plug versions SP...

Circuit diagram



# SP 4/ 1 - Plug




3042887


<https://www.phoenixcontact.com/us/products/3042887>


## Approvals


To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/3042887>

 <b>CSA</b> Approval ID: 13631				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
B	600 V	30 A	24 - 12	-
C	600 V	30 A	24 - 12	-

 <b>IECEE CB Scheme</b> Approval ID: DE1-62736/B1/B2				
--	--	--	--	--

 <b>EAC</b> Approval ID: KZ7500651131219505				
---	--	--	--	--

 <b>cULus Recognized</b> Approval ID: E60425				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
B	600 V	30 A	28 - 10	-
C	600 V	30 A	28 - 10	-

 <b>VDE Zeichengenehmigung</b> Approval ID: 40019518				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
keine				
Only flexible conductors	800 V	-	-	0.2 - 4
Only rigid conductors	800 V	-	-	0.2 - 6

# SP 4/ 1 - Plug

3042887

<https://www.phoenixcontact.com/us/products/3042887>



## Classifications

### ECLASS

ECLASS-13.0	27250306
ECLASS-15.0	27250306

### ETIM

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

### UNSPSC

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

# SP 4/ 1 - Plug



3042887

<https://www.phoenixcontact.com/us/products/3042887>

## 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](mailto:info@phoenixcon.com)