

SPB 2,5/ 1-R - Plug



3043161

<https://www.phoenixcontact.com/us/products/3043161>

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: 500 V, nominal current: 24 A, number of positions: 1, connection method: Spring-cage connection, Rated cross section: 2.5 mm², cross section: 0.08 mm²- 4 mm², color: gray

Product description

Connector element right, left housing with engagement pin, right closed with cover

Your advantages

- Plug with bridging option, for use with basic terminal blocks
- The plug with spring-cage connection is assembled directly on site by snapping together single-position plug elements
- The ST-COMBI plugs for self-assembly provide solutions that users can implement themselves

Commercial data

Item number	3043161
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	BE02
Product key	BE2144
Catalog page	Page 321 (C-1-2019)
GTIN	4017918895020
Weight per piece (including packing)	3.778 g
Weight per piece (excluding packing)	3.653 g
Customs tariff number	85366990
Country of origin	PL

SPB 2,5/ 1-R - Plug

3043161

<https://www.phoenixcontact.com/us/products/3043161>



Technical data

Product properties

Product type	Terminal plug
Number of positions	1
Pitch	5.2 mm
Potentials	1

Insulation characteristics

Overvoltage category	III
Degree of pollution	3

Electrical properties

Rated surge voltage	6 kV
---------------------	------

Connection data

Nominal cross section	2.5 mm ²
Stripping length	8 mm ... 10 mm
Internal cylindrical gage	A3
Connection in acc. with standard	IEC 61984
Conductor cross section rigid	0.08 mm ² ... 4 mm ²
Cross section AWG	28 ... 12 (converted acc. to IEC)
Conductor cross section flexible	0.08 mm ² ... 2.5 mm ²
Conductor cross section, flexible [AWG]	28 ... 14 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.14 mm ² ... 2.5 mm ²
Flexible conductor cross section (ferrule with plastic sleeve)	0.14 mm ² ... 2.5 mm ²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm ²
Nominal current	24 A
Maximum load current	24 A (with 4 mm ² conductor cross section)
Nominal voltage	500 V
Nominal cross section	2.5 mm ²

Dimensions

Width	5.2 mm
Height	20 mm
Depth	39 mm
Length	20 mm
Pitch	5.2 mm

Material specifications

Color	gray (RAL 7042)
Flammability rating according to UL 94	V0
Insulating material group	I

SPB 2,5/ 1-R - Plug



3043161

<https://www.phoenixcontact.com/us/products/3043161>

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

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

Standards and regulations

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

SPB 2,5/ 1-R - Plug

3043161

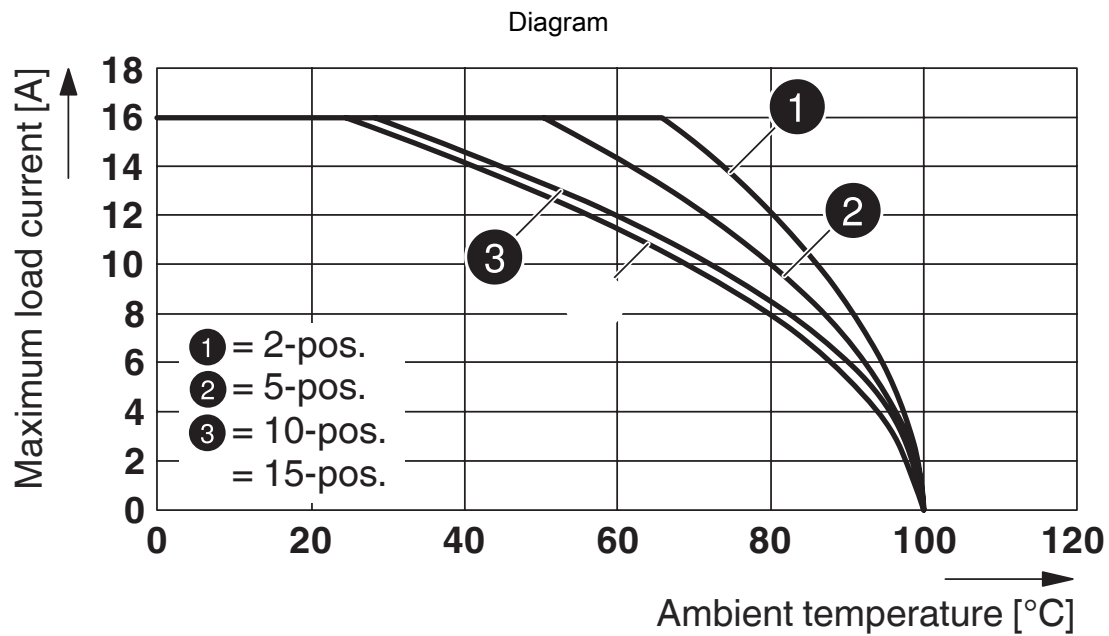
<https://www.phoenixcontact.com/us/products/3043161>



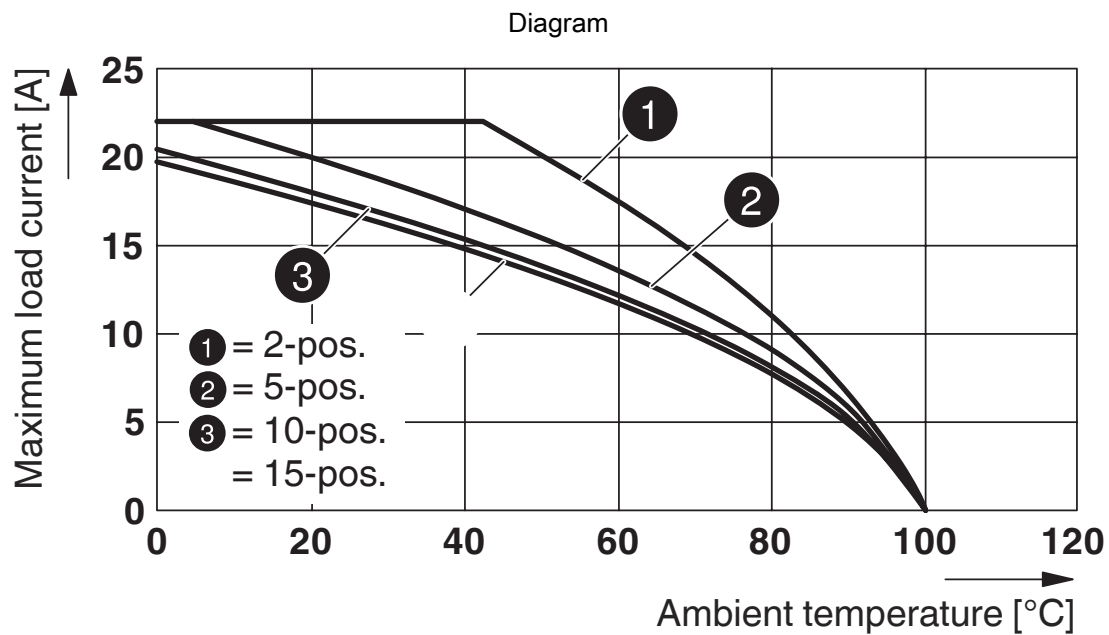
Drawings

Schematic diagram





Derating curve for ST 2,5-TWIN-MT/1P, ST 2,5-TWIN-TG/1P and for all plug versions SP...



Derating curve for STTB 2,5/ 2P, STTB 2,5/ 2P-PV and for all plug versions SP...

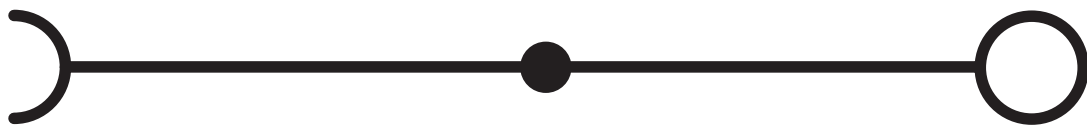
SPB 2,5/ 1-R - Plug

3043161

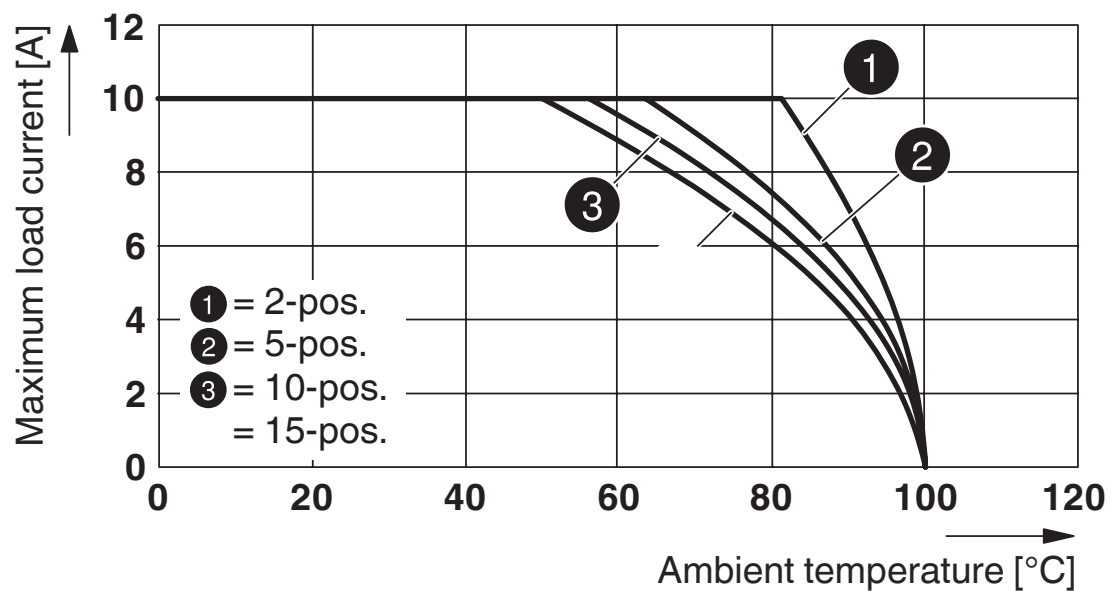
<https://www.phoenixcontact.com/us/products/3043161>



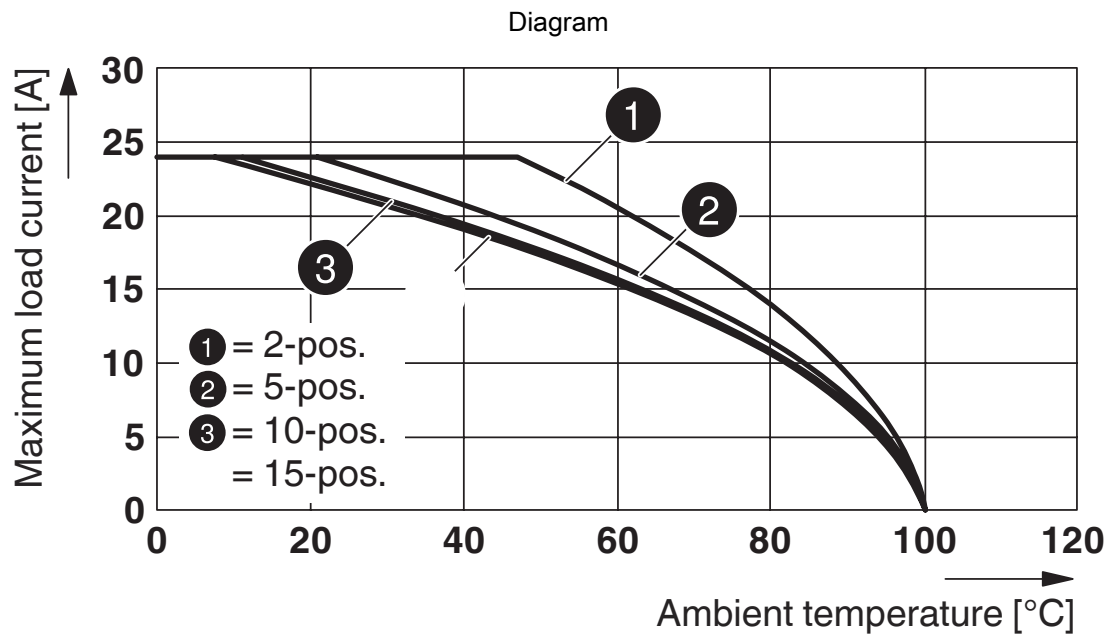
Circuit diagram



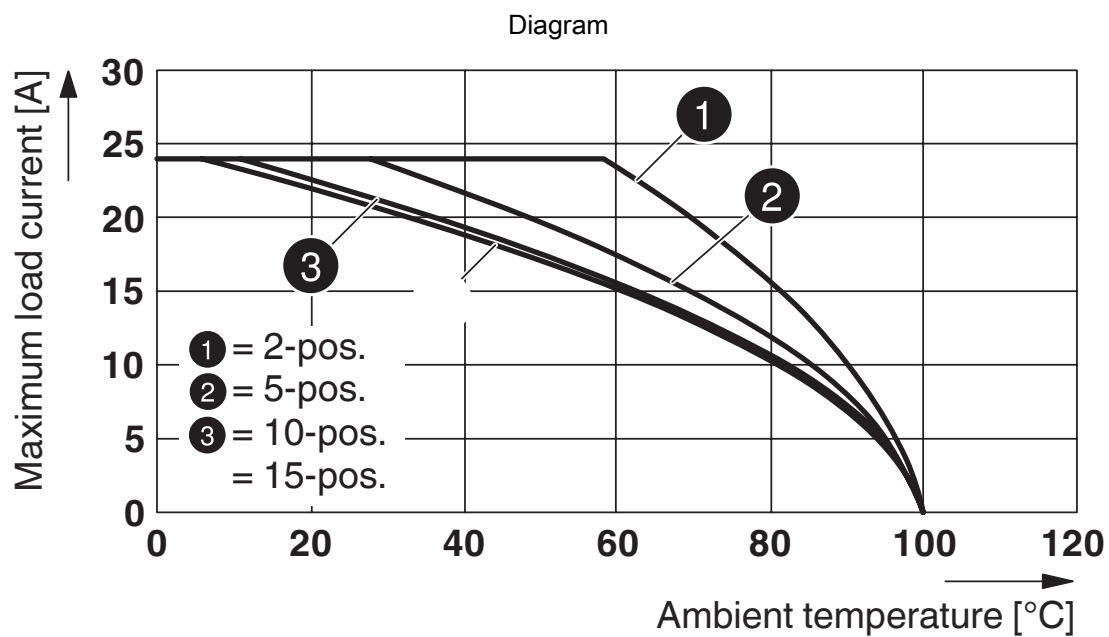
Diagram



Derating curve for ST 2,5-4L/1P, ST 2,5-4L/2P and for all plug versions SP...



Derating curve for ST 2,5/ 1P, ST 2,5/ 2P, ST 2,5-TWIN/ 1P and for all plug versions SP... .



Derating curve for ST 2,5-QUATTRO/2P, ST 2,5-QUATTRO/4P and for all plug versions SP... .

SPB 2,5/ 1-R - Plug

3043161

<https://www.phoenixcontact.com/us/products/3043161>



Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/3043161>

CSA Approval ID: 13631				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B	300 V	20 A	28 - 12	-
Use group C	300 V	20 A	28 - 12	-
Use group D	600 V	5 A	28 - 12	-

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

LR Approval ID: LR2042068TA				
--------------------------------	--	--	--	--

VDE Zeichengenehmigung Approval ID: 40019518				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Only flexible conductors	500 V	-	-	0.2 - 2.5
Only rigid conductors	500 V	-	-	0.2 - 4

cULus Recognized Approval ID: E60425				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B	300 V	20 A	26 - 12	-
Use group C	300 V	20 A	26 - 12	-
Use group D	600 V	5 A	26 - 12	-

DNV Approval ID: TAE00001CS				
--------------------------------	--	--	--	--

SPB 2,5/ 1-R - Plug

3043161

<https://www.phoenixcontact.com/us/products/3043161>



EAC

Approval ID: EACKZ 08593

SPB 2,5/ 1-R - Plug

3043161

<https://www.phoenixcontact.com/us/products/3043161>



Classifications

ECLASS

ECLASS-11.0	27141151
ECLASS-12.0	27141151
ECLASS-13.0	27250306

ETIM

ETIM 9.0	EC002021
----------	----------

UNSPSC

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

SPB 2,5/ 1-R - Plug

3043161

<https://www.phoenixcontact.com/us/products/3043161>



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 2025 © - 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