

Plug - SPDB 2,5/ 2 - 3040410

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's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



Plug, nom. voltage: 500 V, nominal current: 24 A, connection method: Spring-cage connection, Plug connection, number of connections: 2, number of positions: 2, cross section: 0.08 mm² - 4 mm², AWG: 28 - 12, width: 10.4 mm, height: 39 mm, color: gray

Your advantages

- ✓ Plug with bridging option, for use with basic terminal blocks
- ✓ Tested for railway applications



Key Commercial Data

Packing unit	50 pc
GTIN	 4 017918 833091
GTIN	4017918833091

Technical data

General

Number of positions	2
Number of levels	1
Number of connections	2
Potentials	2
Nominal cross section	2.5 mm ²
Color	gray
Insulating material	PA
Flammability rating according to UL 94	V0
Area of application	Railway industry
	Machine building
	Plant engineering
Maximum load current	24 A (with a 2.5 mm ² conductor cross section)
Rated surge voltage	6 kV
Degree of pollution	3

Plug - SPDB 2,5/ 2 - 3040410

Technical data

General

Overvoltage category	III
Insulating material group	I
Maximum power dissipation for nominal condition	0.77 W
Maximum load current	24 A (with 4 mm ² conductor cross section)
Nominal current I _N	24 A
Nominal voltage U _N	500 V
Open side panel	No
Relative insulation material temperature index (Elec., UL 746 B)	130 °C
Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21))	130 °C
Static insulating material application in cold	-60 °C
Behavior in fire for rail vehicles (DIN 5510-2)	Test passed
Flame test method (DIN EN 60695-11-10)	V0
Oxygen index (DIN EN ISO 4589-2)	>32 %
NF F16-101, NF F10-102 Class I	2
NF F16-101, NF F10-102 Class F	2
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
Calorimetric heat release NFPA 130 (ASTM E 1354)	28 MJ/kg
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

Dimensions

Width	10.4 mm
Length	32.7 mm
Height	39 mm
	24 mm
Pitch	5.2 mm

Connection data

Connection method	Spring-cage connection
Stripping length	8 mm ... 10 mm
Connection in acc. with standard	IEC 61984
Conductor cross section solid min.	0.08 mm ²
Conductor cross section solid max.	4 mm ²
Conductor cross section AWG min.	28
Conductor cross section AWG max.	12
Conductor cross section flexible min.	0.08 mm ²
Conductor cross section flexible max.	2.5 mm ²

Plug - SPDB 2,5/ 2 - 3040410

Technical data

Connection data

Min. AWG conductor cross section, flexible	28
Max. AWG conductor cross section, flexible	14
Conductor cross section flexible, with ferrule without plastic sleeve min.	0.14 mm ²
Conductor cross section flexible, with ferrule without plastic sleeve max.	2.5 mm ²
Conductor cross section flexible, with ferrule with plastic sleeve min.	0.14 mm ²
Conductor cross section flexible, with ferrule with plastic sleeve max.	2.5 mm ²
2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, max.	0.5 mm ²
Internal cylindrical gage	A3
Connection method	Plug connection

Standards and Regulations

Connection in acc. with standard	CSA
	IEC 61984
Flammability rating according to UL 94	V0
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

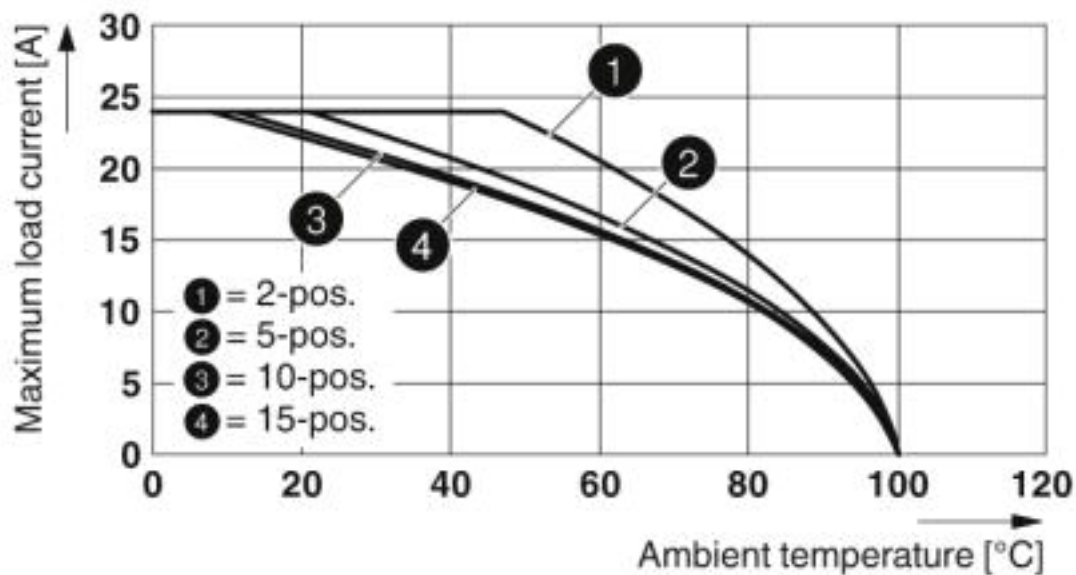
Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

Drawings

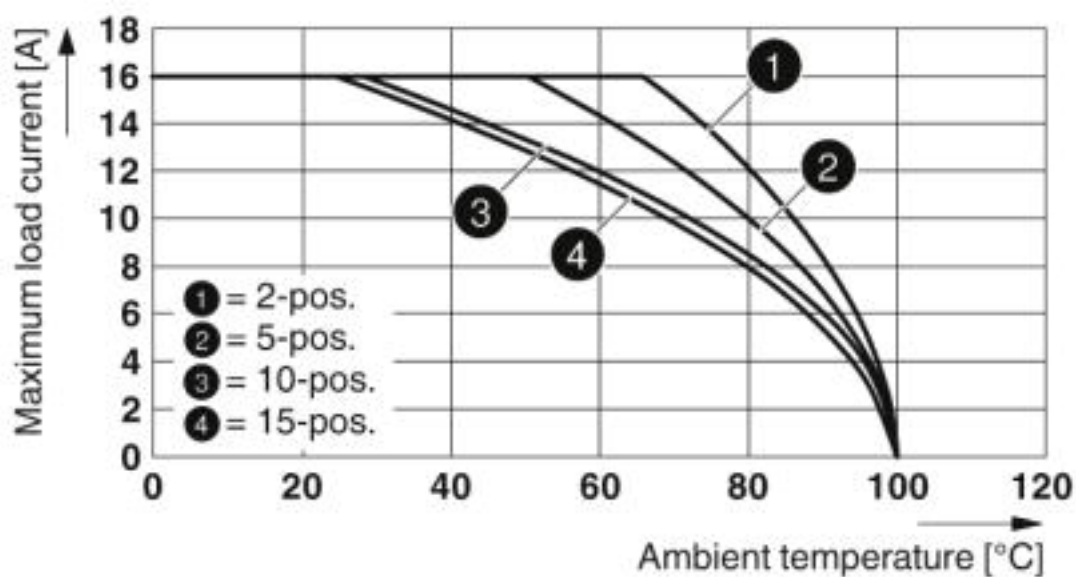
Plug - SPDB 2,5/ 2 - 3040410

Diagram



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

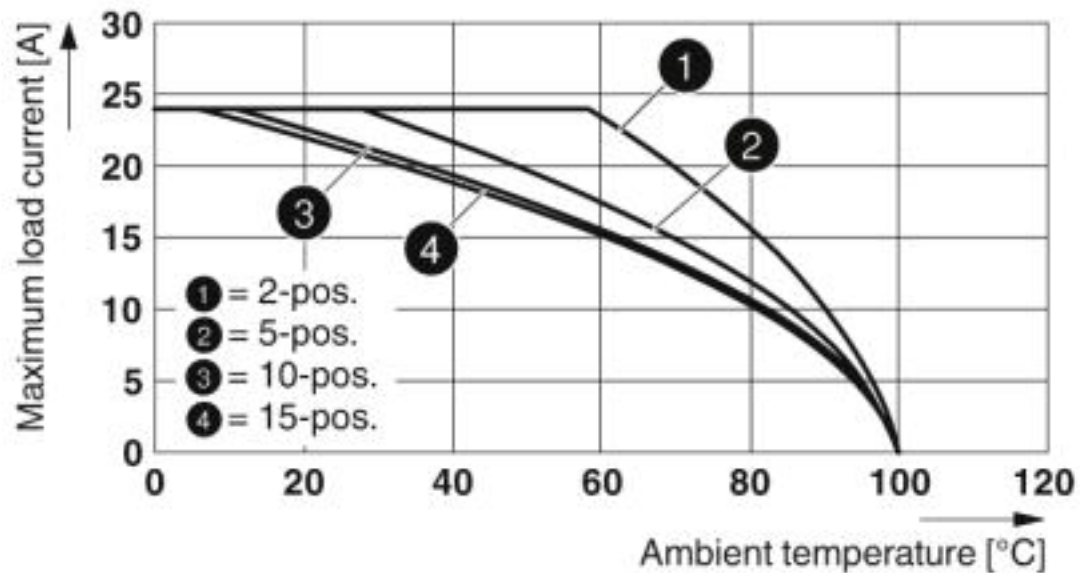
Diagram



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

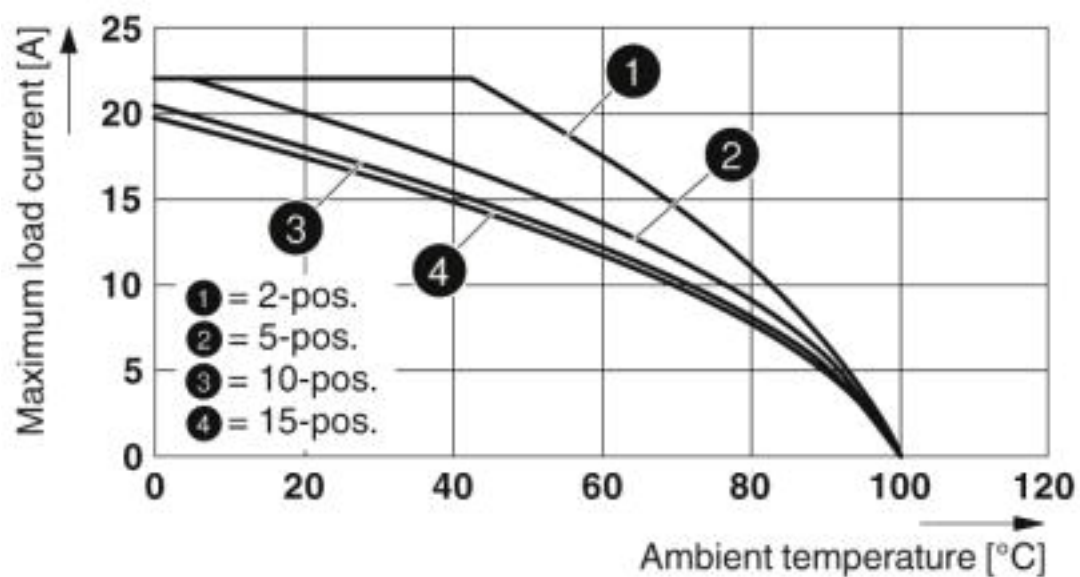
Plug - SPDB 2,5/ 2 - 3040410

Diagram



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

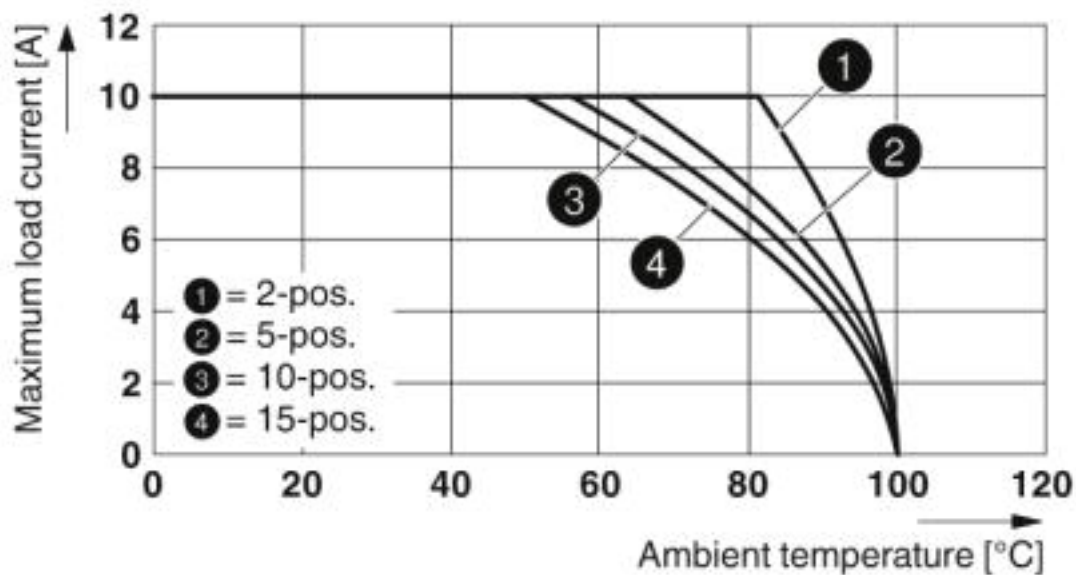
Diagram



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

Plug - SPDB 2,5/ 2 - 3040410

Diagram



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

Circuit diagram



Approvals

Approvals

Approvals

DNV GL / CSA / BV / LR / UL Recognized / cUL Recognized / EAC / EAC / cULus Recognized

Ex Approvals

Approval details

DNV GL



<https://approvalfinder.dnvgi.com/>

TAE00001CS

Plug - SPDB 2,5/ 2 - 3040410

Approvals

CSA		http://www.csagroup.org/services-industries/product-listing/	13631
	B	C	D
Nominal voltage UN	300 V	300 V	600 V
Nominal current IN	20 A	20 A	5 A
mm²/AWG/kcmil	24-12	24-12	24-12

BV		http://www.veristar.com/portal/veristarinfo/generalinfo/approved/approvedProducts/equipmentAndMaterials	27721/B0 BV
----	---	---	-------------

LR		http://www.lr.org/en	05/20042
----	---	---	----------

UL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 60425
	B	C	D
Nominal voltage UN	300 V	300 V	600 V
Nominal current IN	20 A	20 A	5 A
mm²/AWG/kcmil	26-12	26-12	26-12

cUL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 60425
	B	C	D
Nominal voltage UN	300 V	300 V	600 V
Nominal current IN	20 A	20 A	5 A
mm²/AWG/kcmil	26-12	26-12	26-12

EAC		EAC-Zulassung
-----	---	---------------

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

Plug - SPDB 2,5/ 2 - 3040410

Approvals

cULus Recognized



Phoenix Contact 2019 © - all rights reserved
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG
Flachsmarktstr. 8
32825 Blomberg
Germany
Tel. +49 5235 300
Fax +49 5235 3 41200
<http://www.phoenixcontact.com>