

Plug - SP 2,5/ 1-M BU - 3043051

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Plug, nom. voltage: 500 V, nominal current: 24 A, connection method: Spring-cage connection, Plug connection, number of connections: 1, number of positions: 1, cross section: 0.08 mm² - 4 mm², AWG: 28 - 12, width: 5.2 mm, height: 39 mm, color: blue

The figure shows versions of the SP 2,5/1-... connector in various colors

Product Description

Connector element center, left housing with engagement pin, right opened without cover

Why buy this product

- ✓ Cable housing can be snapped on to the plugs, see figure below
- ✓ 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

RoHS

Key Commercial Data

Packing unit	50 STK
GTIN	
GTIN	4017918894917

Technical data

General

Number of positions	1
Number of levels	1
Number of connections	1
Nominal cross section	2.5 mm ²
Color	blue
Insulating material	PA
Flammability rating according to UL 94	V0
Maximum load current	24 A (with a 2.5 mm ² conductor cross section)
Rated surge voltage	6 kV

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Technical data

General

Degree of pollution	3
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)	32.3 %
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	5.2 mm
Length	15.8 mm
Height	39 mm
	24 mm
Pitch	5.2 mm

Connection data

Connection method	Spring-cage connection
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

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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
Stripping length	8 mm ... 10 mm
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 HL 1 - HL 3 HL 1 - HL 3 HL 1 - HL 3
Fire protection for rail vehicles (DIN EN 45545-2) R23	HL 1 - HL 3 HL 1 - HL 3 HL 1 - HL 3 HL 1 - HL 3
Fire protection for rail vehicles (DIN EN 45545-2) R24	HL 1 - HL 3 HL 1 - HL 3 HL 1 - HL 3 HL 1 - HL 3
Fire protection for rail vehicles (DIN EN 45545-2) R26	HL 1 - HL 3 HL 1 - HL 3 HL 1 - HL 3 HL 1 - HL 3

Environmental Product Compliance

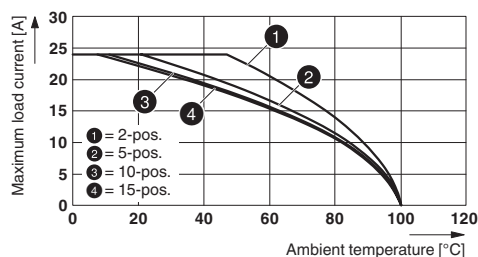
China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

Drawings

Circuit diagram



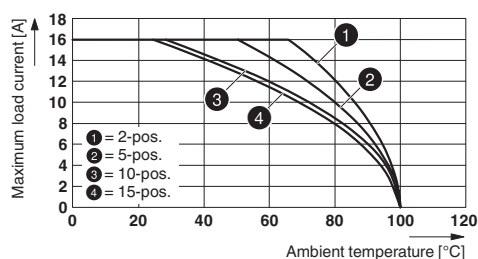
Diagram



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

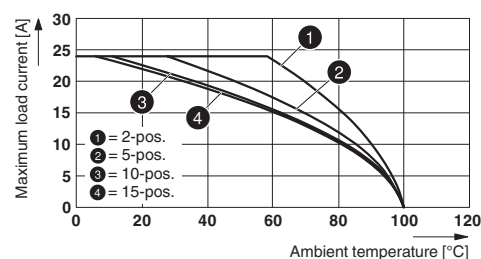
Plug - SP 2,5/ 1-M BU - 3043051

Diagram



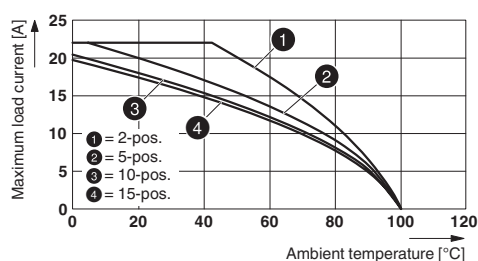
Derating curve for ST 2,5-TWIN-MT/1P, ST 2,5-TWIN-TG/1P and for all plug versions SP...

Diagram



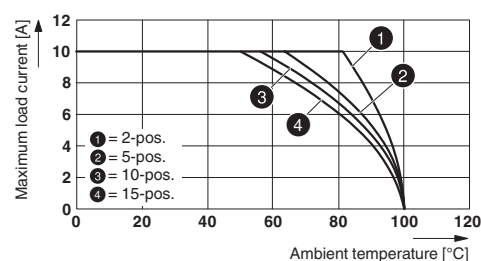
Derating curve for ST 2,5-QUATTRO/2P, ST 2,5-QUATTRO/4P and for all plug versions SP...

Diagram



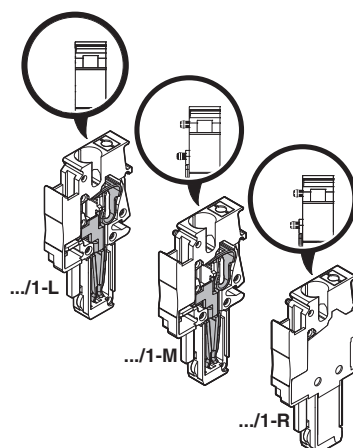
Derating curve for STTB 2,5/ 2P, STTB 2,5/ 2P-PV and for all plug versions SP...

Diagram



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

Schematic diagram



Approvals

Approvals

Approvals

CSA / UL Recognized / VDE Gutachten mit Fertigungsüberwachung / cUL Recognized / LR / BV / RS / IEC CB Scheme / CSA / EAC / DNV GL / DNV GL / UL Recognized / cUL Recognized / cULus Recognized

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Approvals

Ex Approvals

Approval details

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

UL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 60425
	B	C	D
mm²/AWG/kcmil	28-12	28-12	28-12
Nominal current I _N	20 A	20 A	5 A
Nominal voltage U _N	300 V	300 V	600 V

VDE Gutachten mit Fertigungsüberwachung		http://www.vde.com/en/Institute/OnlineService/ VDE-approved-products/Pages/Online-Search.aspx	40019518
mm²/AWG/kcmil		0.2-4	
Nominal voltage U _N		500 V	

cUL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 60425
	B	C	D
mm²/AWG/kcmil	28-12	28-12	28-12
Nominal current I _N	20 A	20 A	5 A
Nominal voltage U _N	300 V	300 V	600 V

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

BV		http://www.veristar.com/portal/veristarinfo/generalinfo/approved/approvedProducts/equipmentAndMaterials	27721/A0 BV
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RS		http://www.rs-head.spb.ru/en/index.php	11.04057.250
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IECEE CB Scheme		http://www.iecee.org/	DE1-57873_B1
mm²/AWG/kcmil	0.2-4		
Nominal voltage UN	500 V		

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

EAC		7500651.22.01.00246
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DNV GL	https://www.dnvgl.com/	E-13345 (E-9232)
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DNV GL	http://exchange.dnv.com/tari/	TAE00001CS
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	B	C	D
mm²/AWG/kcmil	26-12	26-12	26-12
Nominal current IN	20 A	20 A	5 A
Nominal voltage UN	300 V	300 V	600 V

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Approvals

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mm²/AWG/kcmil	26-12	26-12	26-12
Nominal current I _N	20 A	20 A	5 A
Nominal voltage U _N	300 V	300 V	600 V

cULus Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm
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