

## Plug - SP 2,5/ 6 - 3040300

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Plug, nom. voltage: 500 V, nominal current: 24 A, connection method: Spring-cage connection, Plug connection, number of connections: 6, number of positions: 6, cross section: 0.08 mm<sup>2</sup> - 4 mm<sup>2</sup>, AWG: 28 - 12, width: 31.2 mm, height: 39 mm, color: gray

### Your advantages

- Large-surface labeling option
- Practical coding option



### Key Commercial Data

Packing unit	25 pc
GTIN	
GTIN	4017918832834

### Technical data

#### General

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

# Plug - SP 2,5/ 6 - 3040300

## Technical data

### General

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	31.2 mm
Length	15.8 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 <sup>2</sup>
Conductor cross section solid max.	4 mm <sup>2</sup>
Conductor cross section AWG min.	28
Conductor cross section AWG max.	12
Conductor cross section flexible min.	0.08 mm <sup>2</sup>
Conductor cross section flexible max.	2.5 mm <sup>2</sup>
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 <sup>2</sup>
Conductor cross section flexible, with ferrule without plastic sleeve max.	2.5 mm <sup>2</sup>

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## Technical data

### Connection data

Conductor cross section flexible, with ferrule with plastic sleeve min.	0.14 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve max.	2.5 mm <sup>2</sup>
2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, max.	0.5 mm <sup>2</sup>
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

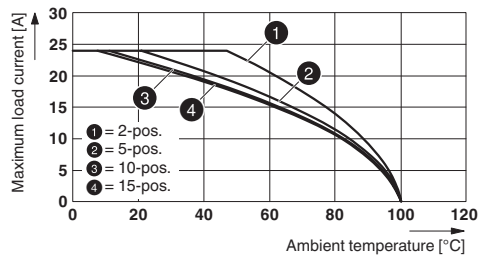
China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

## Drawings

### Circuit diagram



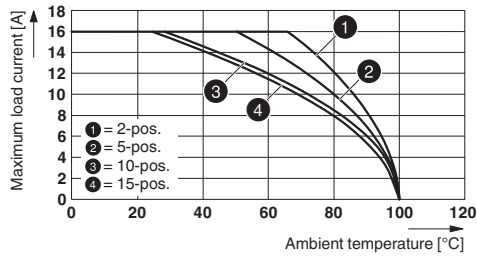
### Diagram



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

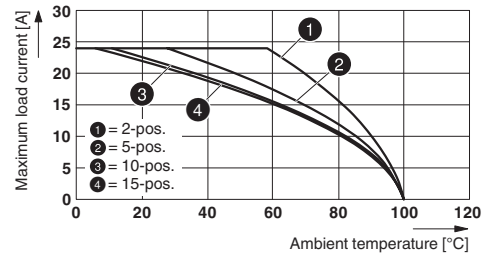
# Plug - SP 2,5/ 6 - 3040300

Diagram



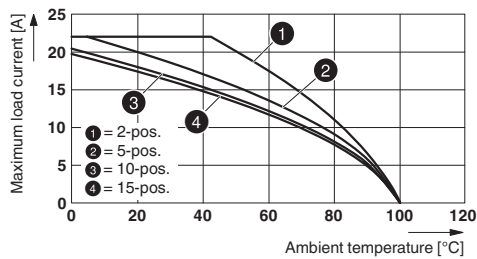
Derating curve for ST 2,5-TWIN-MT/1P, ST 2,5-TWIN-TG/1P and for all plug versions SP...

Diagram



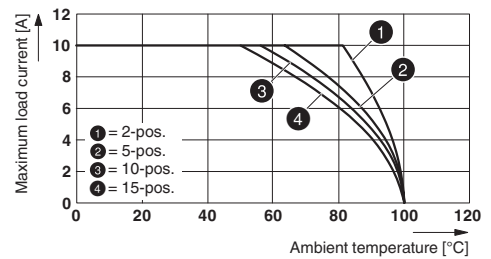
Derating curve for ST 2,5-QUATTRO/2P, ST 2,5-QUATTRO/4P and for all plug versions SP...

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...

## Approvals

### Approvals

#### Approvals

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

#### Ex Approvals

### Approval details

DNV GL



<http://exchange.dnv.com/tari/>

TAE00001CS

# Plug - SP 2,5/ 6 - 3040300

## Approvals

CSA		<a href="http://www.csagroup.org/services-industries/product-listing/">http://www.csagroup.org/services-industries/product-listing/</a>	13631
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	D	B	C
Nominal voltage UN	600 V	300 V	300 V
Nominal current IN	5 A	20 A	20 A
mm <sup>2</sup> /AWG/kcmil	24-12	24-12	24-12

BV		<a href="http://www.veristar.com/portal/veristarinfo/generalinfo/approved/approvedProducts/equipmentAndMaterials">http://www.veristar.com/portal/veristarinfo/generalinfo/approved/approvedProducts/equipmentAndMaterials</a>	27721/A0 BV
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LR		<a href="http://www.lr.org/en">http://www.lr.org/en</a>	05/20042
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UL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 60425
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	D	B	C
Nominal voltage UN	600 V	300 V	300 V
Nominal current IN	5 A	20 A	20 A
mm <sup>2</sup> /AWG/kcmil	26-12	26-12	26-12

cUL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 60425
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	D	B	C
Nominal voltage UN	600 V	300 V	300 V
Nominal current IN	5 A	20 A	20 A
mm <sup>2</sup> /AWG/kcmil	26-12	26-12	26-12

IECEE CB Scheme		<a href="http://www.iecee.org/">http://www.iecee.org/</a>	DE1-57873_B1
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	D	B	C
Nominal voltage UN		500 V	
mm <sup>2</sup> /AWG/kcmil		0.2-4	

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## Approvals

VDE Gutachten mit Fertigungsüberwachung		<a href="http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx">http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx</a>	40019518
Nominal voltage UN		500 V	
mm <sup>2</sup> /AWG/kcmil		0.2-4	

EAC		EAC-Zulassung
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EAC		RU C-DE.A*30.B.01742
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RS		<a href="http://www.rs-head.spb.ru/en/index.php">http://www.rs-head.spb.ru/en/index.php</a>	17.00013.272
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cULus Recognized		
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