

## Plug - SP 2,5/12 - 3040368

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Plug, nom. voltage: 500 V, nominal current: 24 A, connection method: Spring-cage connection, Plug connection, number of connections: 12, number of positions: 12, cross section: 0.08 mm<sup>2</sup> - 4 mm<sup>2</sup>, AWG: 28 - 12, width: 62.4 mm, height: 39 mm, color: gray

### Your advantages

- Large-surface labeling option
- Practical coding option

### Key Commercial Data

Packing unit	1 pc
Minimum order quantity	10 pc
GTIN	 4 017918 832896
GTIN	4017918832896
Weight per Piece (excluding packing)	35.740 g
Custom tariff number	85366990
Country of origin	Poland

### Technical data

#### General

Number of positions	12
Number of levels	1
Number of connections	12
Nominal cross section	2.5 mm <sup>2</sup>
Color	gray
Insulating material	PA
Flammability rating according to UL 94	V0

# Plug - SP 2,5/12 - 3040368

## Technical data

### General

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)
Nominal current I <sub>N</sub>	24 A
Nominal voltage U <sub>N</sub>	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	62.4 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 <sup>2</sup>

## Plug - SP 2,5/12 - 3040368

### Technical data

#### Connection data

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>
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>
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
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

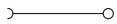
#### Environmental Product Compliance

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

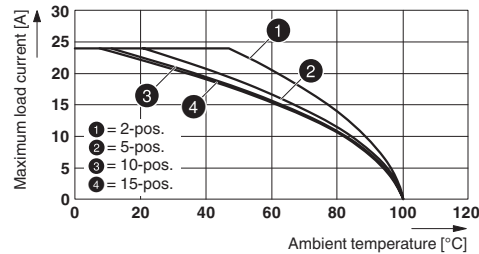
### Drawings

# Plug - SP 2,5/12 - 3040368

Circuit diagram

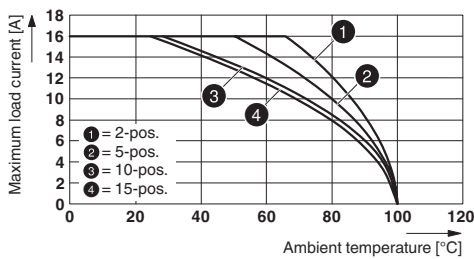


Diagram



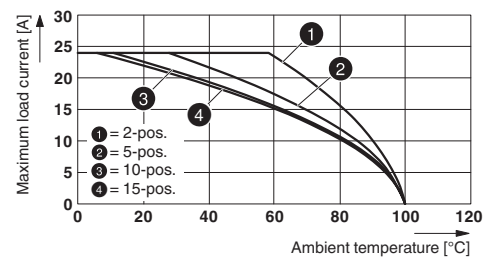
Derating curve for ST 2,5/ 1P, ST 2,5/ 2P, ST 2,5-TWIN/ 1P and for all plug versions SP...

Diagram



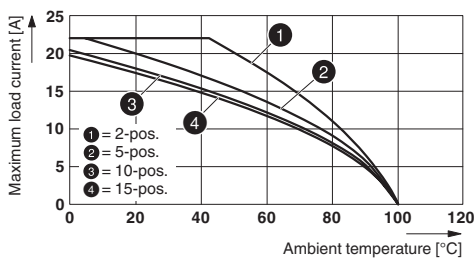
Derating curve for ST 2,5-TWIN-MT/1P, ST 2,5-TWIN-TG/1P and for all plug versions SP...

Diagram



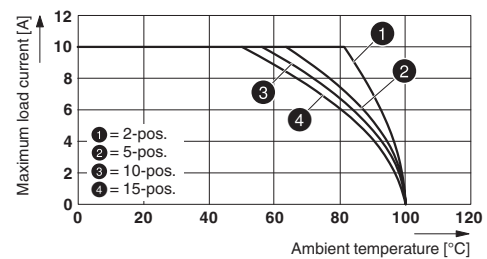
Derating curve for ST 2,5-QUATTRO/2P, ST 2,5-QUATTRO/4P and for all plug versions SP...

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...

## Classifications

eCl@ss

eCl@ss 4.0	272607xx
eCl@ss 4.1	27260701
eCl@ss 5.0	27260701
eCl@ss 5.1	27260700

# Plug - SP 2,5/12 - 3040368

## Classifications

### eCl@ss

eCl@ss 6.0	27141100
eCl@ss 7.0	27141151
eCl@ss 8.0	27141151
eCl@ss 9.0	27141151

### ETIM

ETIM 2.0	EC000897
ETIM 3.0	EC000897
ETIM 4.0	EC002021
ETIM 5.0	EC002021
ETIM 6.0	EC002021

### UNSPSC

UNSPSC 6.01	30211802
UNSPSC 7.0901	39121402
UNSPSC 11	39121402
UNSPSC 12.01	39121402
UNSPSC 13.2	39121402

## Approvals

### Approvals

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#### Approvals

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

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#### Ex Approvals


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### Approval details


DNV GL		<a href="http://exchange.dnv.com/tari/">http://exchange.dnv.com/tari/</a>	TAE00001CS
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# Plug - SP 2,5/12 - 3040368


## Approvals


CSA		<a href="http://www.csagroup.org/services-industries/product-listing/">http://www.csagroup.org/services-industries/product-listing/</a>		13631
	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
	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
	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
Nominal voltage UN	500 V			
mm <sup>2</sup> /AWG/kcmil	0.2-4			

# Plug - SP 2,5/12 - 3040368

## 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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cULus Recognized		
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## Accessories

### Accessories

#### Insulating sleeve

Insulating sleeve - ISH 2,5/0,2 - 3002843



Insulating sleeve, color: white

Insulating sleeve - ISH 2,5/0,5 - 3002856



Insulating sleeve, color: gray

## Plug - SP 2,5/12 - 3040368

### Accessories

Insulating sleeve - ISH 2,5/1,0 - 3002869



Insulating sleeve, color: black

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### Labeled terminal marker

Zack Marker strip, flat - ZBF 5 CUS - 0825025



Zack Marker strip, flat, can be ordered: Strip, white, labeled according to customer specifications, mounting type: snap into flat marker groove, for terminal block width: 5 mm, lettering field size: 5.15 x 5.15 mm

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Zack Marker strip, flat - ZBF 5,LGS:FORTL.ZAHLEN - 0808671



Zack Marker strip, flat, Strip, white, labeled, printed horizontally: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 491 ... 500, mounting type: snap into flat marker groove, for terminal block width: 5 mm, lettering field size: 5.15 x 5.15 mm

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Zack Marker strip, flat - ZBF 5,QR:FORTL.ZAHLEN - 0808697



Zack Marker strip, flat, Strip, white, labeled, Printed vertically: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 91 ... 100, mounting type: snap into flat marker groove, for terminal block width: 5 mm, lettering field size: 5.15 x 5.15 mm

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Zack Marker strip, flat - ZBF 5,LGS:GERADE ZAHLEN - 0810821



Zack Marker strip, flat, Strip, white, labeled, printed horizontally: consecutive numbers 2 ... 20, 22 ... 40, etc. up to 82 ... 100, mounting type: snap into flat marker groove, for terminal block width: 5 mm, lettering field size: 5.15 x 5.15 mm

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## Plug - SP 2,5/12 - 3040368

### Accessories

Zack Marker strip, flat - ZBF 5,LGS:UNGERADE ZAHLEN - 0810863



Zack Marker strip, flat, Strip, white, labeled, printed horizontally: Odd numbers 1 - 19, 21 - 39, etc. up to 81 - 99, mounting type: snap into flat marker groove, for terminal block width: 5 mm, lettering field size: 5.15 x 5.15 mm

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Marker for terminal blocks - UC-TMF 5 CUS - 0824638



Marker for terminal blocks, can be ordered: by sheet, white, labeled according to customer specifications, mounting type: snap into flat marker groove, for terminal block width: 5.2 mm, lettering field size: 4.6 x 5.1 mm

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Marker for terminal blocks - UCT-TMF 5 CUS - 0829658



Marker for terminal blocks, can be ordered: by sheet, white, labeled according to customer specifications, mounting type: snap into flat marker groove, for terminal block width: 5.2 mm, lettering field size: 4.4 x 4.7 mm

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### Mounting material

Latching - PR - 3040559



Latching, length: 29.8 mm, width: 4.4 mm, number of positions: 1, color: orange

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Latching - PR/2 - 3040630



Latching, length: 29.8 mm, width: 10 mm, number of positions: 2, color: orange

## Plug - SP 2,5/12 - 3040368

### Accessories

Latching - PRT/2 - 3040631



Latching, can only be released using a screwdriver, length: 23.2 mm, width: 9 mm, number of positions: 2, color: orange

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Latching - PRZ - 3040614



Latching, length: 63.6 mm, width: 9.7 mm, number of positions: 2, color: orange

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### Screwdriver tools

Screwdriver - ST-BW - 1207608



Actuation tool, for all 2.5 mm<sup>2</sup> - 4.0 mm<sup>2</sup> spring-cages

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### Shield connection

Shield connection clip - PSH 3- 6 - 3040591



Shield connection clip, color: black

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Shield connection clip - PSH 5-10 - 3040601



Shield connection clip, color: black

## Plug - SP 2,5/12 - 3040368

### Accessories

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#### Strain relief

##### Strain relief - PZ/2 - 3040627



Strain relief, length: 48.7 mm, width: 9.3 mm, number of positions: 2, color: black

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##### Strain relief - PZ/4 - 3040643



Strain relief, length: 48.7 mm, width: 19.6 mm, number of positions: 4, color: black

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#### Terminal marking

##### Zack Marker strip, flat - ZBF 5:UNBEDRUCKT - 0808642



Zack Marker strip, flat, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into flat marker groove, for terminal block width: 5 mm, lettering field size: 5.1 x 5.2 mm

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##### Marker for terminal blocks - UC-TMF 5 - 0818153



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into flat marker groove, for terminal block width: 5.2 mm, lettering field size: 4.6 x 5.1 mm

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## Plug - SP 2,5/12 - 3040368

### Accessories

Marker for terminal blocks - UCT-TMF 5 - 0828744



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: TOPMARK NEO, TOPMARK LASER, BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: snap into flat marker groove, for terminal block width: 5.2 mm, lettering field size: 4.4 x 4.7 mm