

# Plug - SP 4/ 1-L - 3042751

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Plug, nom. voltage: 800 V, nominal current: 32 A, connection method: Spring-cage connection, number of connections: 1, number of positions: 1, cross section: 0.08 mm<sup>2</sup> - 6 mm<sup>2</sup>, AWG: 28 - 10, width: 6.2 mm, height: 41.5 mm, color: gray

## Product Description

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

## Your advantages

- ✓ 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
- ✓ Tested for railway applications



## Key Commercial Data

Packing unit	50 pc
GTIN	
GTIN	4017918956059

## Technical data

### General

Number of positions	1
Number of levels	1
Number of connections	1
Nominal cross section	4 mm <sup>2</sup>
Color	gray
Insulating material	PA
Flammability rating according to UL 94	V0
Area of application	Railway industry
	Machine building
	Plant engineering

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## Technical data

### General

Maximum load current	32 A (with 6 mm <sup>2</sup> conductor cross section)
Rated surge voltage	8 kV
Degree of pollution	3
Overvoltage category	III
Insulating material group	I
Maximum power dissipation for nominal condition	1.02 W
Maximum load current	32 A (with 6 mm <sup>2</sup> conductor cross section)
Nominal current I <sub>N</sub>	32 A
Nominal voltage U <sub>N</sub>	800 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	6.2 mm
Length	21 mm
Height	41.5 mm
	24 mm
Pitch	6.2 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.	6 mm <sup>2</sup>
Conductor cross section AWG min.	28

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## Technical data

### Connection data

Conductor cross section AWG max.	10
Conductor cross section flexible min.	0.08 mm <sup>2</sup>
Conductor cross section flexible max.	4 mm <sup>2</sup>
Min. AWG conductor cross section, flexible	28
Max. AWG conductor cross section, flexible	10
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.	4 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.	4 mm <sup>2</sup>
2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, min.	0.5 mm <sup>2</sup>
2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, max.	1 mm <sup>2</sup>
Internal cylindrical gage	A4

### 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

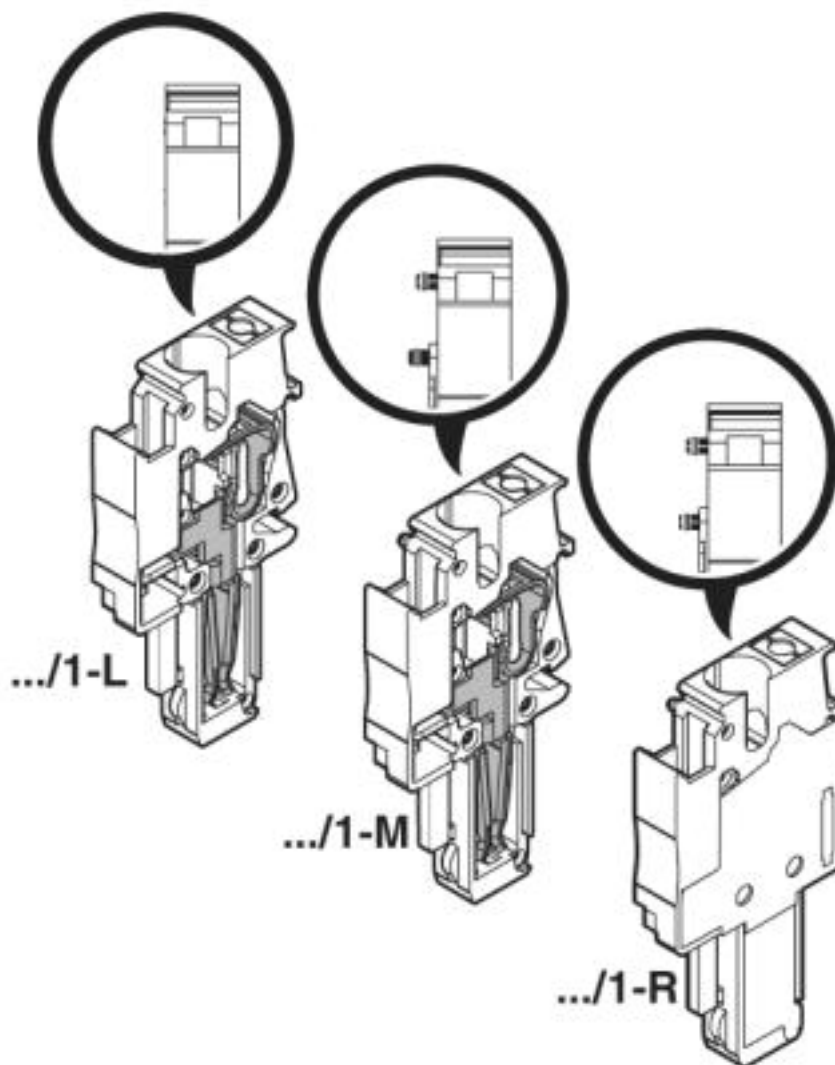
### Environmental Product Compliance

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

## Drawings

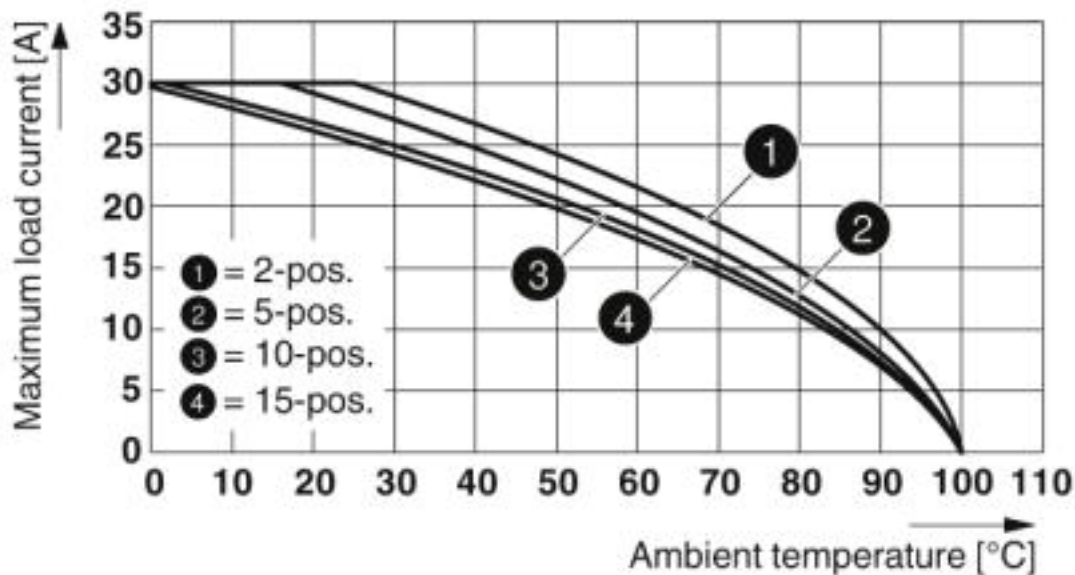
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Schematic diagram



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Diagram



Derating curve for ST 4/ 1P and for all SP... connector versions .

Circuit diagram



## Approvals

Approvals

Approvals

CSA / UL Recognized / cUL Recognized / IECCE CB Scheme / VDE Gutachten mit Fertigungsüberwachung / EAC / EAC / cULus Recognized

Ex Approvals

## Approval details

CSA		<a href="http://www.csagroup.org/services-industries/product-listing/">http://www.csagroup.org/services-industries/product-listing/</a>	13631
		B	C
Nominal voltage UN		600 V	600 V
Nominal current IN		30 A	30 A

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## Approvals

	B	C
mm <sup>2</sup> /AWG/kcmil	24-12	24-12

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
	B	C	
Nominal voltage UN	600 V	600 V	
Nominal current IN	30 A	30 A	
mm <sup>2</sup> /AWG/kcmil	28-10	28-10	

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
	B	C	
Nominal voltage UN	600 V	600 V	
Nominal current IN	30 A	30 A	
mm <sup>2</sup> /AWG/kcmil	28-10	28-10	

IECEE CB Scheme		<a href="http://www.iecee.org/">http://www.iecee.org/</a>	DE1-62194/B1/B2
Nominal voltage UN		800 V	
mm <sup>2</sup> /AWG/kcmil		0.2-6	

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		800 V	
mm <sup>2</sup> /AWG/kcmil		0.2-6	

EAC		EAC-Zulassung
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EAC		RU C- DE.A*30.B.01742
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### Approvals

cULus Recognized



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