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Plug, Connection method: Spring-cage connection, 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: blue

Illustration shows versions of the SP 4/1-... connector in various colors

#### Product description

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

#### **Product Features**

- Cable housing can be snapped on to the plugs, see figure below
- ☑ Tested for railway applications
- 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



### Key commercial data

Packing unit	11
Weight per Piece (excluding packing)	4.31 GRM
Custom tariff number	85366990
Country of origin	Poland

### Technical data

### General

Number of levels	1
Number of connections	1
Color	blue
Insulating material	РА
Inflammability class according to UL 94	V0
Area of application	Railway industry
	Mechanical engineering

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## Technical data

#### General

	Plant engineering	
Maximum load current	32 A (with 6 mm <sup>2</sup> conductor cross section)	
Rated surge voltage	8 kV	
Pollution degree	3	
Surge voltage category	III	
Insulating material group	I	
Connection in acc. with standard	IEC 61984	
Nominal current I <sub>N</sub>	32 A	
Nominal voltage $U_N$	800 V	
Open side panel	nein	
Number of positions	1	

### Dimensions

Width	6.2 mm
Length	21 mm
Height	41.5 mm

#### Connection data

Conductor cross section solid min.	0.08 mm²
Conductor cross section solid max.	6 mm <sup>2</sup>
Conductor cross section AWG/kcmil min.	28
Conductor cross section AWG/kcmil max	10
Conductor cross section stranded min.	0.08 mm²
Conductor cross section stranded max.	4 mm <sup>2</sup>
Min. AWG conductor cross section, stranded	28
Max. AWG conductor cross section, stranded	12
Conductor cross section stranded, with ferrule without plastic sleeve min.	0.14 mm <sup>2</sup>
Conductor cross section stranded, with ferrule without plastic sleeve max.	4 mm <sup>2</sup>
Conductor cross section stranded, with ferrule with plastic sleeve min.	0.14 mm²
Conductor cross section stranded, 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 mm²
2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, max.	1 mm²
Connection method	Spring-cage connection
Stripping length	10 mm
Internal cylindrical gage	A4



## Classifications

eCl@ss

eCl@ss 4.0	272607xx
eCl@ss 4.1	27260701
eCl@ss 5.0	27260701
eCl@ss 5.1	27260701
eCl@ss 6.0	27141151
eCl@ss 7.0	27141151
eCl@ss 8.0	27141151

ETIM

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

### UNSPSC

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

## Approvals

#### Approvals

Approvals

CSA / UL Recognized / VDE Gutachten mit Fertigungsüberwachung / cUL Recognized / GOST / GOST / IECEE CB Scheme / cULus Recognized

Ex Approvals

Approvals submitted

Approval details



# Plug - SP 4/ 1-L BU - 3042764

## Approvals

CSA 🚯		
	В	C
mm²/AWG/kcmil	24-12	24-12
Nominal current IN	30 A	30 A
Nominal voltage UN	600 V	600 V

	В	С
mm²/AWG/kcmil	28-10	28-10
Nominal current IN	30 A	30 A
Nominal voltage UN	600 V	600 V

VDE Gutachten mit Fertigungsüberwachung	
mm²/AWG/kcmil	0.2-6
Nominal voltage UN	800 V

	В	С
mm²/AWG/kcmil	28-10	28-10
Nominal current IN	30 A	30 A
Nominal voltage UN	600 V	600 V

GOST 📀

GOST 💁

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## Plug - SP 4/ 1-L BU - 3042764

### Approvals

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mm²/AWG/kcmil	0.2-6
Nominal voltage UN	800 V

## cULus Recognized

### Accessories

Accessories

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: 5.15 x 5.15 mm

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: 4.6 x 5.1 mm

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: 4.4 x 4.7 mm

Marker pen



### Accessories

Marker pen - B-STIFT - 1051993



Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 mm

### Mounting material

Latching - PR - 3040559



Latching, Number of positions: 1, Color: orange

#### Latching - PR/2 - 3040630



Latching, Number of positions: 2, Color: orange

Latching - PRZ - 3040614



Latching, Length: 3 mm, Width: 5.2 mm, Number of positions: 2, Color: orange

Shield connection

Shield connection clamp - PSH 3- 6 - 3040591



Shield connection clamp, Color: black

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### Accessories

Shield connection clamp - PSH 5-10 - 3040601



Shield connection clamp, Color: black

Strain relief

Strain relief - PZ/4 - 3040643



Strain relief, Number of positions: 4, Color: black

Terminal marking

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



Zack Marker strip, flat, Strip, white, Unlabeled, Can be labeled with: Plotter, Mounting type: Snap into flat marker groove, For terminal block width: 5 mm, Lettering field: 5.1 x 5.2 mm

Marker for terminal blocks - UC-TMF 5 - 0818153



Marker for terminal blocks, Sheet, white, Unlabeled, Can be labeled with: BLUEMARK CLED, BLUEMARK LED, Plotter, Mounting type: Snap into flat marker groove, For terminal block width: 5.2 mm, Lettering field: 4.6 x 5.1 mm



### Accessories

Marker for terminal blocks - UCT-TMF 5 - 0828744



Marker for terminal blocks, Sheet, white, Unlabeled, Can be labeled with: THERMOMARK CARD PLUS, THERMOMARK CARD, BLUEMARK CLED, BLUEMARK LED, Mounting type: Snap into flat marker groove, For terminal block width: 5.2 mm, Lettering field: 4.4 x 4.7 mm

## Drawings

Circuit diagram

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Derating curve for spring-cage terminals ST 4/1P.. and ST 4/2P.. with all plug versions SP 4/.... The derating curves are determined by multiplying the values of the base curves by the factor 0.8.





Derating curve for the spring-cage terminal with all plug versions SP 4/....







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