# Plug - SP-H 2,5/ 1-M - 3210813

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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: gray

## 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
- Tested for railway applications

RoHS

## Key Commercial Data

| | |
|---|---|
| Packing unit | 50 STK |
| GTIN | 4 046356 411806 |
| GTIN | 4046356411806 |

## Technical data

### General

| | |
|---|---|
| Number of positions | 1 |
| Number of levels | 1 |
| Number of connections | 1 |
| Potentials | 1 |
| Nominal cross section | 2.5 mm² |
| Color | gray |
| Insulating material | PA |
| Flammability rating according to UL 94 | V0 |
| Area of application | Railway industry |
| | Machine building |

# Plug - SP-H 2,5/ 1-M - 3210813

## Technical data

### General

| | |
|---|---|
| | Plant engineering |
| Maximum load current | 24 A (with a 2.5 mm² 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 mm² conductor cross section) |
| Nominal current $I_N$ | 24 A |
| Nominal voltage $U_N$ | 500 V |
| 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 | 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 mm² |
| Conductor cross section solid max. | 4 mm² |
| Conductor cross section AWG min. | 28 |
| Conductor cross section AWG max. | 12 |

# Plug - SP-H 2,5/ 1-M - 3210813

## Technical data

### Connection data

| | |
|---|---|
| Conductor cross section flexible min. | 0.08 mm² |
| Conductor cross section flexible max. | 2.5 mm² |
| 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 mm² |
| Conductor cross section flexible, with ferrule without plastic sleeve max. | 2.5 mm² |
| Conductor cross section flexible, with ferrule with plastic sleeve min. | 0.14 mm² |
| Conductor cross section flexible, with ferrule with plastic sleeve max. | 2.5 mm² |
| 2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, max. | 0.5 mm² |
| 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 |
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### Environmental Product Compliance

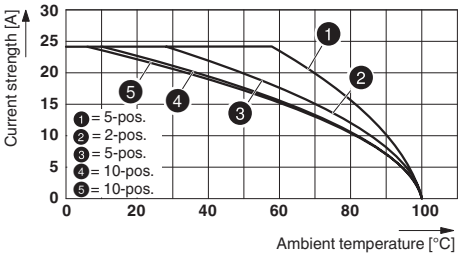
| | |
|---|---|
| China RoHS | Environmentally friendly use period: unlimited = EFUP-e |
| | No hazardous substances above threshold values |

## Drawings

Circuit diagram



Diagram



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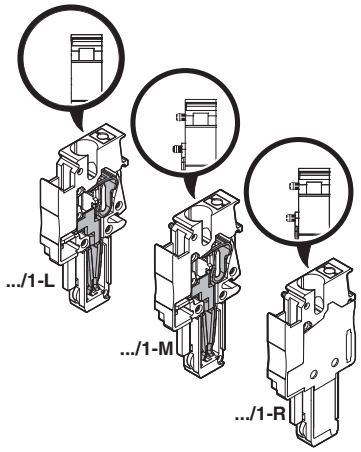
Schematic diagram




## Approvals

### Approvals

Approvals

CSA / UL Recognized / cUL Recognized / EAC / VDE report with production monitoring / IECEE CB Scheme / cULus Recognized

Ex Approvals

### Approval details

| CSA | | http://www.csagroup.org/services-industries/product-listing/ | 13631 |
|---|---|---|---|

| | B | C |
|---|---|---|
| Nominal voltage UN | 300 V | 300 V |
| Nominal current IN | 20 A | 20 A |
| mm²/AWG/kcmil | 26-12 | 26-12 |

| UL Recognized | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 60425 |
|---|---|---|---|

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## Approvals

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| cUL Recognized | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 60425 |

| | B | C |
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| Nominal voltage UN | 300 V | 300 V |
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| | | |
|---|---|---|
| EAC | | EAC-Zulassung |

| | | | |
|---|---|---|---|
| VDE report with production monitoring | | http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx | 40019518 |

| | |
|---|---|
| Nominal voltage UN | 500 V |
| mm²/AWG/kcmil | 0.2-4 |

| | | | |
|---|---|---|---|
| IECEE CB Scheme | | http://www.iecee.org/ | DE1-57873_B1 |

| | |
|---|---|
| Nominal voltage UN | 500 V |
| mm²/AWG/kcmil | 0.2-4 |

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



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