

Plug - SP 4/ 1-M - 3042780

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



Plug, Connection method: Spring-cage connection, Number of positions: 1, Cross section: 0.08 mm² - 6 mm², AWG: 28 - 10, Width: 6.2 mm, Height: 41.5 mm, Color: gray

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

Product Description

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

Product Features

- 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 | 1 pc |
| Minimum order quantity | 50 pc |
| Weight per Piece (excluding packing) | 4.56 g |
| Custom tariff number | 85366990 |
| Country of origin | Poland |

Technical data

General

| | |
|--|-------------------|
| Number of levels | 1 |
| Number of connections | 1 |
| Nominal cross section | 4 mm ² |
| Color | gray |
| Insulating material | PA |
| Flammability rating according to UL 94 | V0 |

Plug - SP 4/ 1-M - 3042780

Technical data

General

| | |
|--------------------------------|---|
| Area of application | Railway industry |
| | Machine building |
| | Plant engineering |
| Maximum load current | 32 A (with 6 mm ² conductor cross section) |
| Rated surge voltage | 8 kV |
| Degree of pollution | 3 |
| Overvoltage category | III |
| Insulating material group | I |
| Maximum load current | 32 A (with 6 mm ² conductor cross section) |
| Nominal current I _N | 32 A |
| Nominal voltage U _N | 800 V |
| Open side panel | No |

Dimensions

| | |
|--------|----------|
| Width | 6.2 mm |
| Length | 21 mm |
| Height | 41.5 mm |
| | 24.00 mm |
| Pitch | 6.20 mm |

Connection data

| | |
|---|------------------------|
| Connection method | Spring-cage connection |
| Connection in acc. with standard | IEC 61984 |
| Conductor cross section solid min. | 0.08 mm ² |
| Conductor cross section solid max. | 6 mm ² |
| Conductor cross section AWG min. | 28 |
| Conductor cross section AWG max. | 10 |
| Conductor cross section flexible min. | 0.08 mm ² |
| Conductor cross section flexible max. | 4 mm ² |
| 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 ² |
| Conductor cross section flexible, with ferrule without plastic sleeve max. | 4 mm ² |
| Conductor cross section flexible, with ferrule with plastic sleeve min. | 0.14 mm ² |
| Conductor cross section flexible, with ferrule with plastic sleeve max. | 4 mm ² |
| 2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, min. | 0.5 mm ² |
| 2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, max. | 1 mm ² |

Plug - SP 4/ 1-M - 3042780

Technical data

Connection data

| | |
|---------------------------|----------------|
| Stripping length | 8 mm ... 10 mm |
| Internal cylindrical gage | A4 |

Standards and Regulations

| | |
|--|-----------|
| Connection in acc. with standard | CSA |
| | IEC 61984 |
| Flammability rating according to UL 94 | V0 |

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 |
| eCl@ss 9.0 | 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

Plug - SP 4/ 1-M - 3042780

Approvals


Approvals


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


Ex Approvals

Approvals submitted

Approval details

| | | |
|---|-------|-------|
| CSA  | | |
| | B | C |
| mm ² /AWG/kcmil | 24-12 | 24-12 |
| Nominal current I _N | 30 A | 30 A |
| Nominal voltage U _N | 600 V | 600 V |

| | | |
|---|-------|-------|
| UL Recognized  | | |
| | B | C |
| mm ² /AWG/kcmil | 28-10 | 28-10 |
| Nominal current I _N | 30 A | 30 A |
| Nominal voltage U _N | 600 V | 600 V |

| | |
|---|-------|
| VDE Gutachten mit Fertigungsüberwachung  | |
| mm ² /AWG/kcmil | 0.2-6 |
| Nominal voltage U _N | 800 V |

Plug - SP 4/ 1-M - 3042780

Approvals

| | | |
|--------------------------------|-------|-------|
| cUL Recognized | | |
| | B | C |
| mm ² /AWG/kcmil | 28-10 | 28-10 |
| Nominal current I _N | 30 A | 30 A |
| Nominal voltage U _N | 600 V | 600 V |

| | |
|--------------------------------|-------|
| IECEE CB Scheme | |
| mm ² /AWG/kcmil | 0.2-6 |
| Nominal voltage U _N | 800 V |

EAC

EAC

| |
|------------------|
| 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

Plug - SP 4/ 1-M - 3042780

Accessories

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: 5.15 x 5.15 mm

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: 5.15 x 5.15 mm

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: 5.15 x 5.15 mm

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: 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

Plug - SP 4/ 1-M - 3042780

Accessories

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

Marker pen - B-STIFT - 1051993



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

Marker pen - X-PEN 0,35 - 0811228



Marker pen without ink cartridge, for manual labeling of markers, labeling extremely wipe-proof, line thickness 0.35 mm

Mounting material

Latching - PR - 3040559



Latching, Number of positions: 1, Color: orange

Latching - PR/2 - 3040630



Latching, Number of positions: 2, Color: orange

Plug - SP 4/ 1-M - 3042780

Accessories

Latching - PRT/2 - 3040631



Latching, can only be released using a screwdriver, Number of positions: 2, Color: orange

Latching - PRZ - 3040614



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

Screwdriver tools

Screwdriver - ST-BW - 1207608



Actuation tool, for all 2.5 mm² - 4.0 mm² spring-cages

Shield connection

Shield connection clip - PSH 3- 6 - 3040591



Shield connection clip, Color: black

Plug - SP 4/ 1-M - 3042780

Accessories

Shield connection clip - PSH 5-10 - 3040601



Shield connection clip, Color: black

Strain relief

Strain relief - PZ/2 - 3040627



Strain relief, Number of positions: 2, Color: black

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

Plug - SP 4/ 1-M - 3042780

Accessories

Marker for terminal blocks - UCT-TMF 5 - 0828744



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

Drawings

Diagram

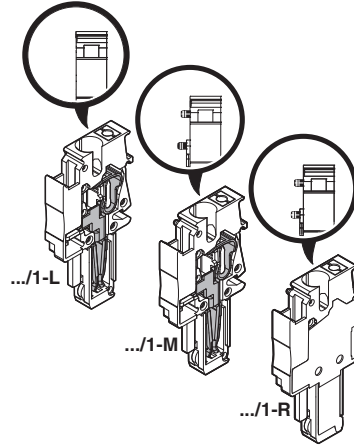
Derating
curve
for
spring-
loaded
terminals
with
IP..
and
plug
connections
with..
all
plug
versions
SP
4/...
The
derating
curves
are
determined
by
multiplying
the
values
of
the
base
curves
by
the
factor
0.8.

Plug - SP 4/ 1-M - 3042780

Circuit diagram

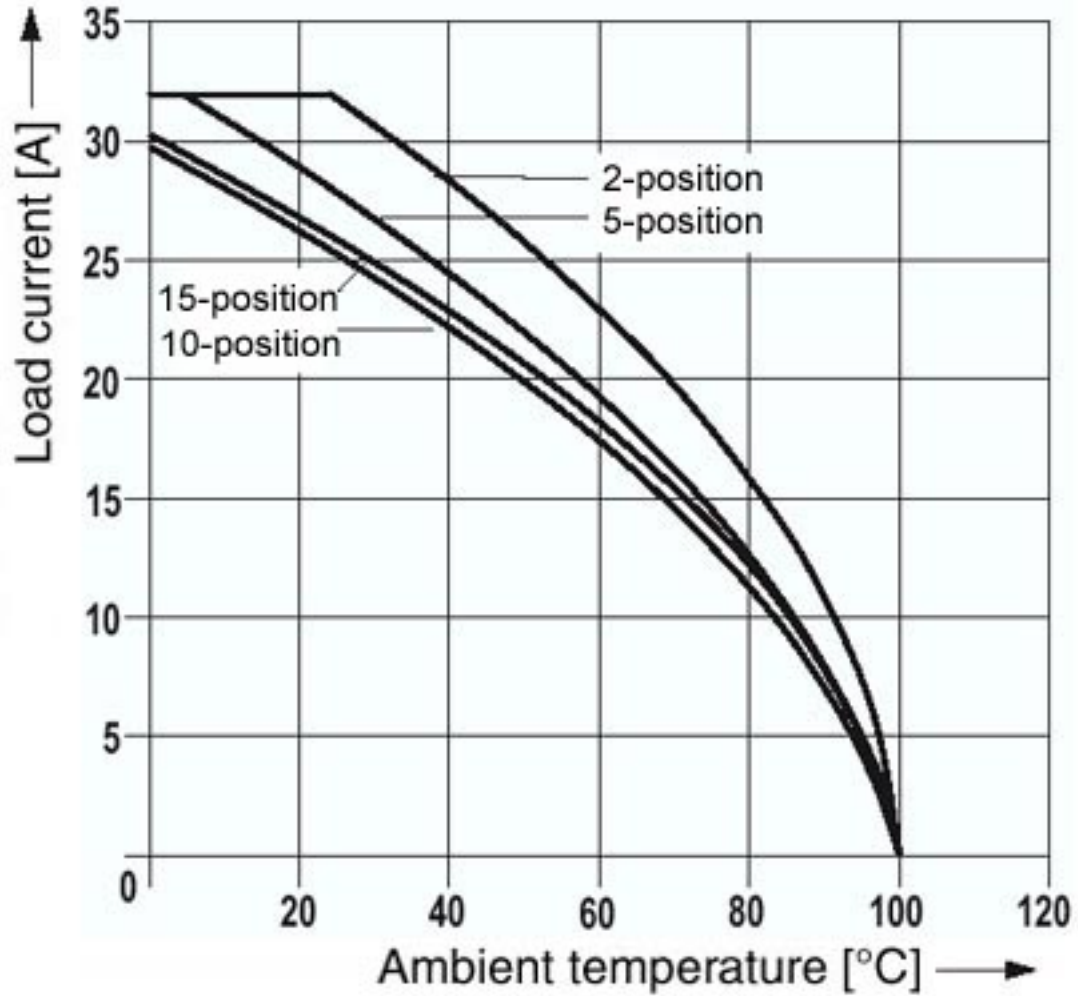


Schematic diagram



Plug - SP 4/ 1-M - 3042780

Diagram



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

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Phoenix Contact:](#)

[3042780](#)