

## Plug - SP 4/ 1-M BU - 3042793

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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 center, left housing with 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                         | 1 1      |
| Weight per Piece (excluding packing) | 4.48 GRM |
| Custom tariff number                 | 85366990 |
| Country of origin                    | Poland   |

### Technical data

#### General

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

## Plug - SP 4/ 1-M BU - 3042793

### 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 <sub>N</sub>   | 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 mm <sup>2</sup>   |
| 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 mm <sup>2</sup>   |
| 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 mm <sup>2</sup>   |
| 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 mm <sup>2</sup>    |
| 2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, max. | 1 mm <sup>2</sup>      |
| Connection method   | Spring-cage connection |
| Stripping length  | 10 mm                  |
| Internal cylindrical gage   | A4                     |

## Plug - SP 4/ 1-M BU - 3042793

### 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

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#### Approvals

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

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#### Ex Approvals

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#### Approvals submitted

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#### Approval details

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## Approvals

CSA

|                                | B     | C     |
|--------------------------------|-------|-------|
| mm <sup>2</sup> /AWG/kcmil     | 24-12 | 24-12 |
| Nominal current I <sub>N</sub> | 30 A  | 30 A  |
| Nominal voltage U <sub>N</sub> | 600 V | 600 V |

UL Recognized

|                                | B     | C     |
|--------------------------------|-------|-------|
| mm <sup>2</sup> /AWG/kcmil     | 28-10 | 28-10 |
| Nominal current I <sub>N</sub> | 30 A  | 30 A  |
| Nominal voltage U <sub>N</sub> | 600 V | 600 V |

VDE Gutachten mit Fertigungsüberwachung

| mm <sup>2</sup> /AWG/kcmil     | 0.2-6 |
|--------------------------------|-------|
| Nominal voltage U <sub>N</sub> | 800 V |

cUL Recognized

|                                | B     | C     |
|--------------------------------|-------|-------|
| mm <sup>2</sup> /AWG/kcmil     | 28-10 | 28-10 |
| Nominal current I <sub>N</sub> | 30 A  | 30 A  |
| Nominal voltage U <sub>N</sub> | 600 V | 600 V |

GOST

GOST

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## Approvals

|                            |       |
|----------------------------|-------|
| IECEE CB Scheme            |       |
| mm <sup>2</sup> /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

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### Accessories

Marker pen - B-STIFT - 1051993



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

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### Mounting material

Latching - PR - 3040559



Latching, Number of positions: 1, Color: orange

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Latching - PR/2 - 3040630



Latching, Number of positions: 2, Color: orange

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Latching - PRZ - 3040614



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

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### Shield connection

Shield connection clamp - PSH 3- 6 - 3040591



Shield connection clamp, Color: black

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### Accessories

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Shield connection clamp - PSH 5-10 - 3040601



Shield connection clamp, Color: black

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### Strain relief

Strain relief - PZ/4 - 3040643



Strain relief, 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: Plotter, Mounting type: Snap into flat marker groove, For terminal block width: 5 mm, Lettering field: 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 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

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## Accessories

Marker for terminal blocks - UCT-TMF 5 - 0828744



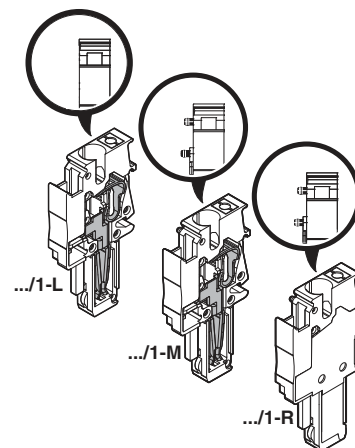
Marker for terminal blocks. Sheet, white, Unlabeled, Can be labeled with: THERMOMARK CARD PLUS, THERMOMARK CARD, BLUEMARK CLED, BLUEMARK LED, Mounting type: Snap into flat marker groove, For terminal block width: 5.2 mm, Lettering field: 4.4 x 4.7 mm

## Drawings

Circuit diagram



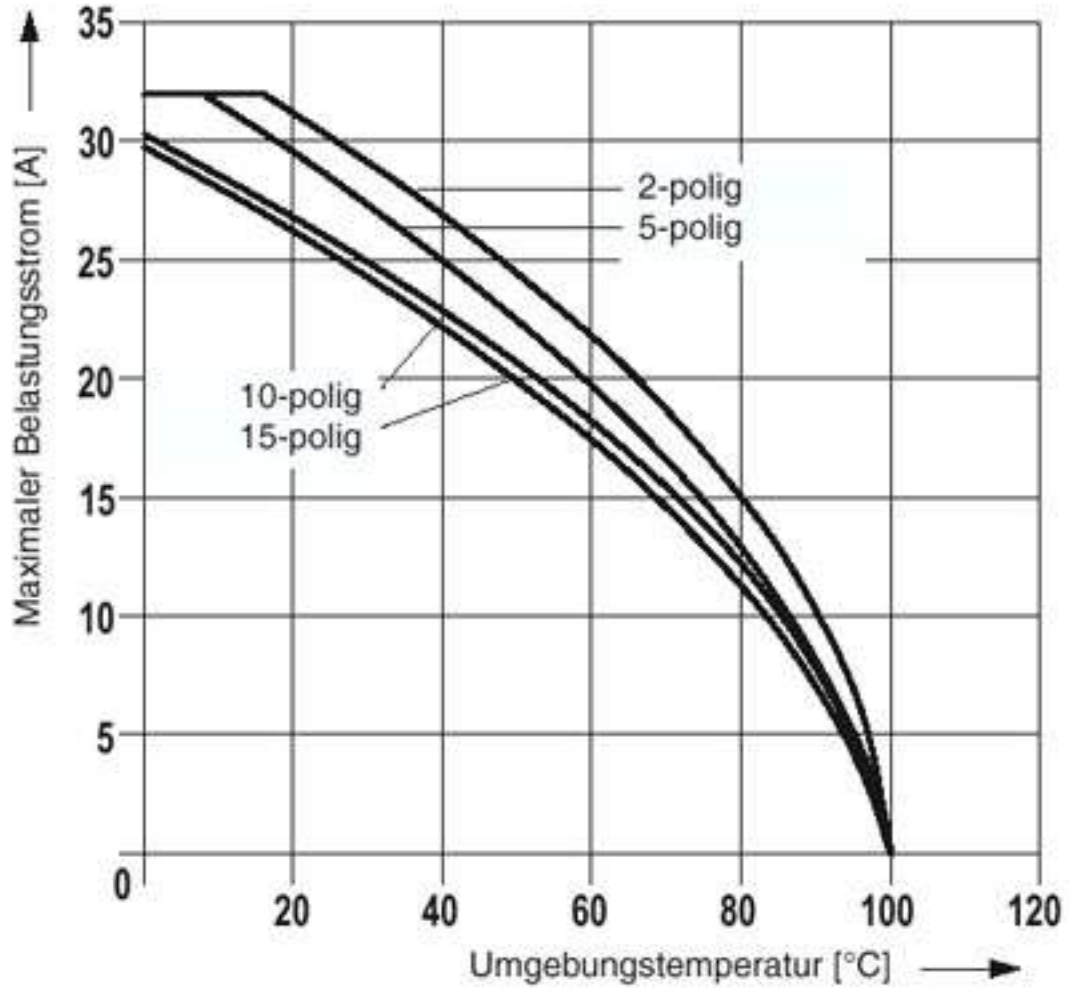
Schematic diagram





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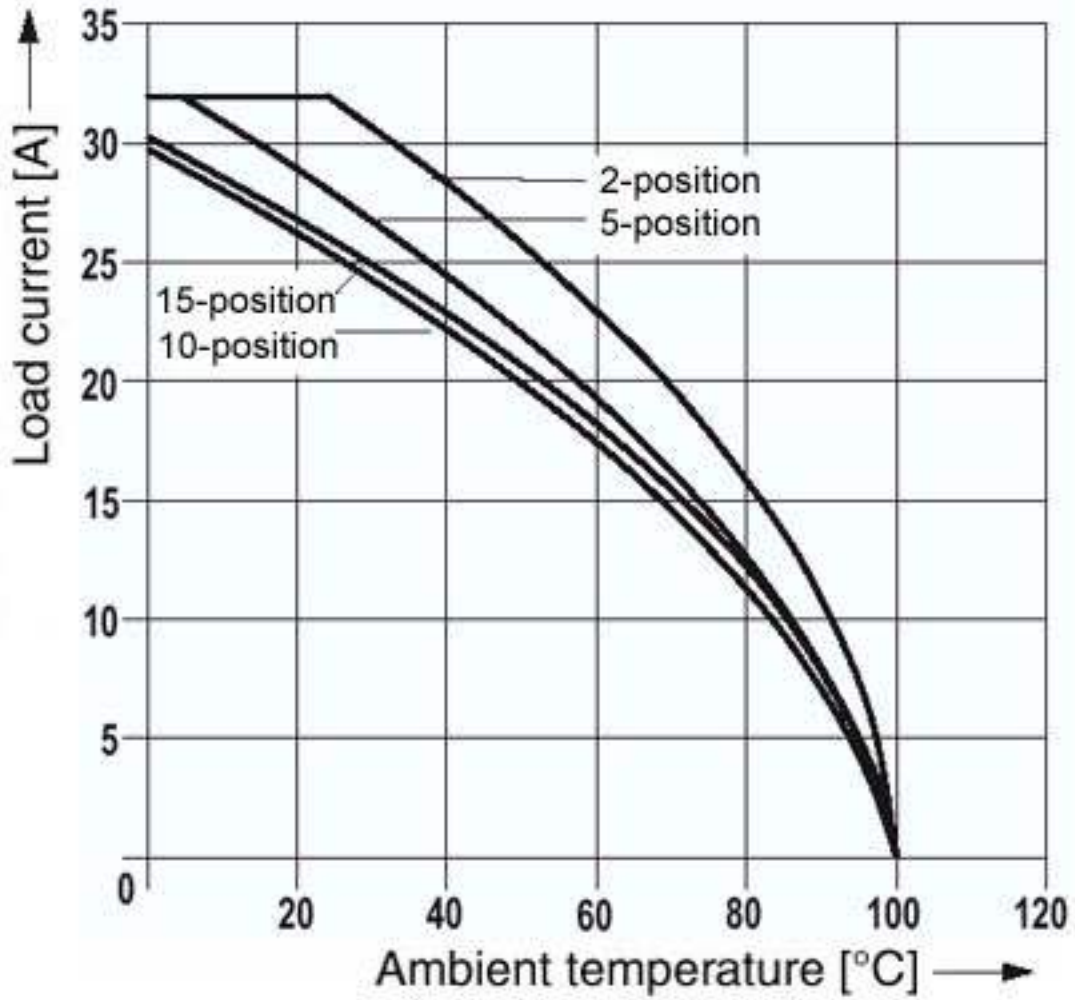
Diagram



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.

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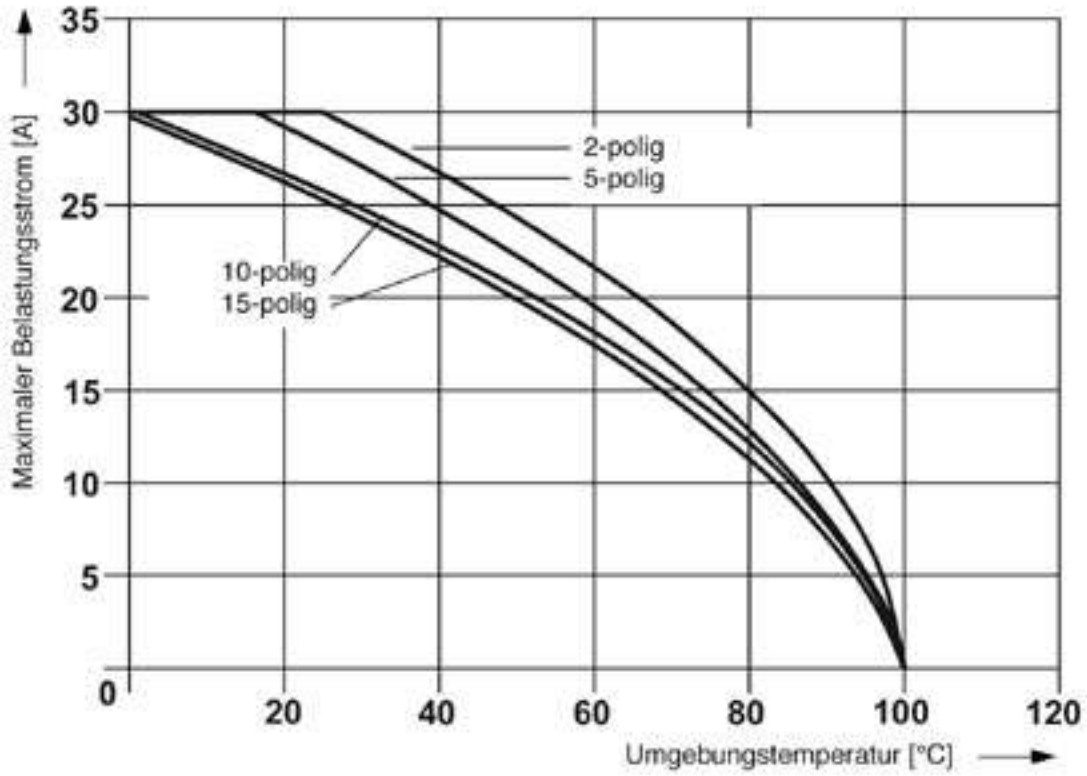
Diagram



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

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Diagram



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