

PP-H 4/ 1-R - Plug

3211977

<https://www.phoenixcontact.com/us/products/3211977>

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Plug, nom. voltage: 800 V, nominal current: 32 A, number of connections: 1, number of positions: 1, connection method: Push-in connection, Rated cross section: 4 mm², 1st level connection left, cross section: 0.2 mm² - 6 mm², color: gray

Your advantages

- Large-surface labeling option
- The Push-in technology COMBI plugs for self-assembly provide solutions that users can implement themselves
- Tested for railway applications

Commercial data

| | |
|--------------------------------------|---------------|
| Item number | 3211977 |
| Packing unit | 50 pc |
| Minimum order quantity | 50 pc |
| Sales key | BE22 |
| Product key | BE2244 |
| GTIN | 4046356483001 |
| Weight per piece (including packing) | 5.338 g |
| Weight per piece (excluding packing) | 4.763 g |
| Customs tariff number | 85366990 |
| Country of origin | PL |

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Technical data

Notes

| | |
|--------------------|---|
| Notes on operation | COMBI connectors are connectors without switching power in accordance with IEC 61984 and can be connected or disconnected without load or voltage when used as intended |
|--------------------|---|

Product properties

| | |
|-----------------------|-------------------|
| Product type | Terminal plug |
| Area of application | Railway industry |
| | Machine building |
| | Plant engineering |
| Number of positions | 1 |
| Pitch | 6.2 mm |
| Number of connections | 1 |
| Number of rows | 1 |
| Potentials | 1 |

Insulation characteristics

| | |
|----------------------|-----|
| Overvoltage category | III |
| Degree of pollution | 3 |

Electrical properties

| | |
|---|--------|
| Rated surge voltage | 8 kV |
| Maximum power dissipation for nominal condition | 1.02 W |

Connection data

| | |
|---------------------------------|-------------------|
| Number of connections per level | 1 |
| Nominal cross section | 4 mm ² |

1st level connection left

| | |
|---|--|
| Connection method | Push-in connection |
| Stripping length | 10 mm ... 12 mm |
| Internal cylindrical gage | A4 |
| Connection in acc. with standard | IEC 61984 |
| Conductor cross-section rigid | 0.2 mm ² ... 6 mm ² |
| Cross section AWG | 24 ... 10 (converted acc. to IEC) |
| Conductor cross-section flexible | 0.2 mm ² ... 4 mm ² |
| Conductor cross-section, flexible [AWG] | 24 ... 12 (converted acc. to IEC) |
| Conductor cross-section flexible (ferrule without plastic sleeve) | 0.25 mm ² ... 4 mm ² |
| Flexible conductor cross-section (ferrule with plastic sleeve) | 0.25 mm ² ... 4 mm ² |
| 2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve | 0.5 mm ² ... 1 mm ² |
| Nominal cross section | 4 mm ² |
| Nominal current | 32 A |

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| | |
|----------------------|---|
| Maximum load current | 32 A (with 6 mm ² conductor cross-section) |
| Nominal voltage | 800 V |

1st level connection left Connection cross sections directly pluggable

| | |
|---|---|
| Conductor cross-section rigid | 0.5 mm ² ... 6 mm ² |
| Conductor cross-section flexible (ferrule without plastic sleeve) | 0.5 mm ² ... 4 mm ² |
| Flexible conductor cross-section (ferrule with plastic sleeve) | 0.5 mm ² ... 4 mm ² |

Dimensions

| | |
|--------|---------|
| Width | 6.2 mm |
| Height | 21 mm |
| Depth | 42.3 mm |
| Pitch | 6.2 mm |

Material specifications

| | |
|---|-----------------|
| Color | gray (RAL 7042) |
| Flammability rating according to UL 94 | V0 |
| Insulating material group | I |
| Insulating material | PA |
| Static insulating material application in cold | -60 °C |
| Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21)) | 130 °C |
| Relative insulation material temperature index (Elec., UL 746 B) | 130 °C |
| 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 |
| Calorimetric heat release NFPA 130 (ASTM E 1354) | 28 MJ/kg |
| 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 |

Mechanical properties

Mechanical data

| | |
|-----------------|-----|
| Open side panel | Yes |
|-----------------|-----|

Environmental and real-life conditions

Ambient conditions

| | |
|---|---|
| Ambient temperature (operation) | -60 °C (max. operating temperature see derating curve) |
| Ambient temperature (storage/transport) | -25 °C ... 60 °C (for a short time, not exceeding 24 h, -60 °C to +70 °C) |
| Ambient temperature (assembly) | -5 °C ... 70 °C |
| Ambient temperature (actuation) | -5 °C ... 70 °C |
| Permissible humidity (operation) | 20 % ... 90 % |

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| | |
|--|---------------|
| Permissible humidity (storage/transport) | 30 % ... 70 % |
|--|---------------|

Standards and regulations

| | |
|----------------------------------|-----------|
| Connection in acc. with standard | IEC 61984 |
|----------------------------------|-----------|

Mounting

| | |
|---------------|---|
| Assembly note | Use of a parallel pressing tool is recommended for easy latching of the COMBI connector and coupling elements for self-assembly |
|---------------|---|

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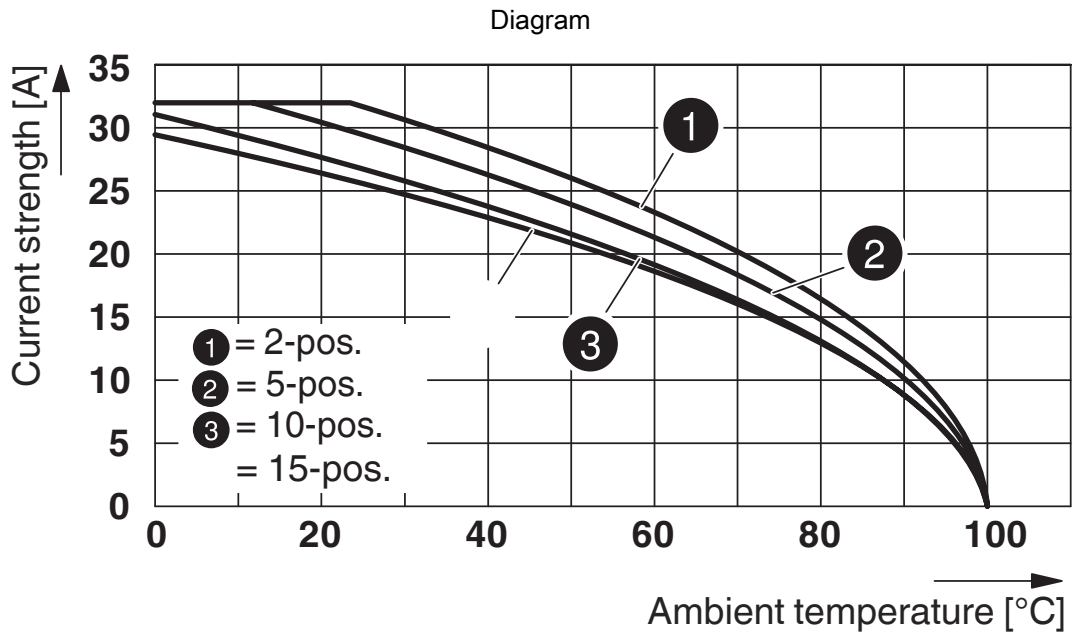
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Drawings

Schematic diagram





Circuit diagram



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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/3211977>

DNV

Approval ID: TAE000010T



IECEE CB Scheme

Approval ID: DE1-64672_B1_B2

| | Nominal voltage U_N | Nominal current I_N | Cross section AWG | Cross section mm^2 |
|-------|-----------------------|-----------------------|-------------------|-----------------------------|
| keine | | | | |
| | 800 V | 32 A | - | - |



cULus Recognized

Approval ID: E60425

| | Nominal voltage U_N | Nominal current I_N | Cross section AWG | Cross section mm^2 |
|---|-----------------------|-----------------------|-------------------|-----------------------------|
| C | | | | |
| | 600 V | 28 A | 24 - 10 | - |



BV

Approval ID: 39979/B0 BV



VDE Zeichengenehmigung

Approval ID: 40043445

| | Nominal voltage U_N | Nominal current I_N | Cross section AWG | Cross section mm^2 |
|--------------------------|-----------------------|-----------------------|-------------------|-----------------------------|
| keine | | | | |
| Only flexible conductors | 800 V | 32 A | - | 0.2 - 4 |



EAC

Approval ID: KZ7500651131219505

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Classifications

ECLASS

| | |
|-------------|----------|
| ECLASS-13.0 | 27250306 |
| ECLASS-15.0 | 27250306 |

ETIM

| | |
|-----------|----------|
| ETIM 10.0 | EC002021 |
|-----------|----------|

UNSPSC

| | |
|-------------|----------|
| UNSPSC 21.0 | 39121400 |
|-------------|----------|

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Environmental product compliance

EU RoHS

| | |
|---|--------------------|
| Fulfills EU RoHS substance requirements | Yes, No exemptions |
|---|--------------------|

China RoHS

| | |
|--|--|
| Environment friendly use period (EFUP) | EFUP-E |
| | No hazardous substances above the limits |

EU REACH SVHC

| | |
|-------------------------------------|----------------------------|
| REACH candidate substance (CAS No.) | No substance above 0.1 wt% |
|-------------------------------------|----------------------------|

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