

SC 2,5-RZ/ 8 - COMBI coupling



3041574

<https://www.phoenixcontact.com/us/products/3041574>

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 documentation. Our general terms of use for downloads are valid.



COMBI coupling, nom. voltage: 500 V, nominal current: 24 A, number of connections: 1, number of positions: 8, connection method: Spring-cage connection, Rated cross section: 2.5 mm², cross section: 0.08 mm² - 4 mm², mounting type: on mounting panel, color: gray

Your advantages

- COMBI coupling for direct mounting

Commercial data

| | |
|--------------------------------------|---------------------|
| Item number | 3041574 |
| Packing unit | 25 pc |
| Minimum order quantity | 25 pc |
| Sales key | BE02 |
| Product key | BE2145 |
| Catalog page | Page 314 (C-1-2019) |
| GTIN | 4017918922795 |
| Weight per piece (including packing) | 25.3 g |
| Weight per piece (excluding packing) | 25.3 g |
| Customs tariff number | 85366990 |
| Country of origin | PL |

SC 2,5-RZ/ 8 - COMBI coupling



3041574

<https://www.phoenixcontact.com/us/products/3041574>

Technical data

Product properties

| | |
|-----------------------|-------------------|
| Product type | Terminal coupling |
| Number of positions | 8 |
| Pitch | 5.2 mm |
| Number of connections | 1 |
| Number of rows | 1 |

Insulation characteristics

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

Electrical properties

| | |
|---|--------|
| Rated surge voltage | 6 kV |
| Maximum power dissipation for nominal condition | 0.77 W |

Connection data

| | |
|---|---|
| Nominal cross section | 2.5 mm ² |
| Stripping length | 8 mm ... 10 mm |
| Internal cylindrical gage | A3 |
| Connection in acc. with standard | IEC 61984 |
| Conductor cross section rigid | 0.08 mm ² ... 4 mm ² |
| Cross section AWG | 28 ... 12 (converted acc. to IEC) |
| Conductor cross section flexible | 0.08 mm ² ... 2.5 mm ² |
| Conductor cross section, flexible [AWG] | 28 ... 14 (converted acc. to IEC) |
| Conductor cross-section flexible (ferrule without plastic sleeve) | 0.14 mm ² ... 2.5 mm ² |
| Flexible conductor cross section (ferrule with plastic sleeve) | 0.14 mm ² ... 2.5 mm ² |
| 2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve | 0.5 mm ² |
| Nominal current | 24 A |
| Maximum load current | 24 A (with 4 mm ² conductor cross section) |
| Nominal voltage | 500 V |
| Nominal cross section | 2.5 mm ² |

Dimensions

| | |
|--------------------|-------------------|
| Width | 41.6 mm |
| End cover width | 2.2 mm |
| Height | 37.2 mm |
| Depth | 21.8 mm |
| Drill hole spacing | 5.2 mm |
| Hole diameter | 3.5 mm |
| Pitch | 5.2 mm |
| Plate thickness | 0.8 mm ... 1.5 mm |

SC 2,5-RZ/ 8 - COMBI coupling



3041574

<https://www.phoenixcontact.com/us/products/3041574>

Material specifications

| | |
|---|-------------|
| Color | gray |
| 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 |

Electrical tests

Surge voltage test

| | |
|--|-------------|
| Test voltage setpoint | 7.3 kV |
| Result | Test passed |
| Short-time withstand current 2.5 mm ² | 0.3 kA |
| Result | Test passed |

Power-frequency withstand voltage

| | |
|-----------------------|-------------|
| Test voltage setpoint | 1.89 kV |
| Result | Test passed |

Mechanical properties

Mechanical data

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

Technical data

| | |
|--------------------|--------|
| Drill hole spacing | 5.2 mm |
|--------------------|--------|

Mechanical tests

Attachment on the carrier

| | |
|-------------------------|-----------------|
| DIN rail/fixing support | Metal wall 1 mm |
| Test force setpoint | 1 N |
| Result | Test passed |

Environmental and real-life conditions

SC 2,5-RZ/ 8 - COMBI coupling



3041574

<https://www.phoenixcontact.com/us/products/3041574>

Needle-flame test

| | |
|------------------|-------------|
| Time of exposure | 30 s |
| Result | Test passed |

Oscillation/broadband noise

| | |
|------------------------|---|
| Specification | DIN EN 50155 (VDE 0115-200):2008-03 |
| Spectrum | Service life test category 1, class B, body mounted |
| Frequency | $f_1 = 5 \text{ Hz}$ to $f_2 = 150 \text{ Hz}$ |
| ASD level | $0.964 \text{ (m/s}^2\text{)}^2\text{/Hz}$ |
| Acceleration | 0.58g |
| Test duration per axis | 5 h |
| Test directions | X-, Y- and Z-axis |
| Result | Test passed |

Shocks

| | |
|--------------------------------|-------------------------------------|
| Specification | DIN EN 50155 (VDE 0115-200):2008-03 |
| Pulse shape | Half-sine |
| Acceleration | 5g |
| Shock duration | 30 ms |
| Number of shocks per direction | 3 |
| Test directions | X-, Y- and Z-axis (pos. and neg.) |
| Result | Test passed |

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, no longer than 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 % |
| Permissible humidity (storage/transport) | 30 % ... 70 % |

Standards and regulations

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

Mounting

| | |
|-----------------|-------------------|
| Mounting type | on mounting panel |
| Plate thickness | 0.8 mm ... 1.5 mm |

SC 2,5-RZ/ 8 - COMBI coupling



3041574

<https://www.phoenixcontact.com/us/products/3041574>

Classifications

ECLASS

| | |
|-------------|----------|
| ECLASS-11.0 | 27141151 |
| ECLASS-12.0 | 27141151 |
| ECLASS-13.0 | 27250306 |

ETIM

| | |
|----------|----------|
| ETIM 9.0 | EC002021 |
|----------|----------|

UNSPSC

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

SC 2,5-RZ/ 8 - COMBI coupling



3041574

<https://www.phoenixcontact.com/us/products/3041574>

Environmental product compliance

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

Phoenix Contact 2024 © - all rights reserved
<https://www.phoenixcontact.com>

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com