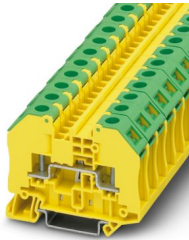


RT 3-PE - Ground terminal

3049411

<https://www.phoenixcontact.com/sg/products/3049411>

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Ground terminal, Note: the BE-RT... path extension is to be used for non-insulated cable lugs (see accessories)., nom. voltage: 1000 V, nominal current: 24 A, number of connections: 2, connection method: Bolt connection, 1 level, Rated cross section: 2.5 mm², mounting type: NS 35/7,5, NS 35/15, color: green-yellow

Your advantages

- Additional labeling options
- Corrosion-free terminal points
- Low contact resistance
- Green-yellow housing
- Tested for railway applications

Commercial data

| | |
|--------------------------------------|--------------------------------|
| Item number | 3049411 |
| Packing unit | 50 pc |
| Minimum order quantity | 50 pc |
| Note | Made to order (non-returnable) |
| Sales key | 0180* |
| Product key | BE4313 |
| Catalog page | Page 379 (C-1-2019) |
| GTIN | 4046356140164 |
| Weight per piece (including packing) | 29.92 g |
| Weight per piece (excluding packing) | 27.7 g |
| Customs tariff number | 85369010 |
| Country of origin | CN |

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Technical data

Notes

| | |
|---------|---|
| General | Note: the BE-RT... path extension is to be used for non-insulated cable lugs (see accessories). |
|---------|---|

Product properties

| | |
|-----------------------|--------------------------------|
| Product type | Bolt connection terminal block |
| Area of application | Railway industry |
| | Machine building |
| | Plant engineering |
| | Process industry |
| Number of connections | 2 |
| 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 | 0.77 W |

Connection data

| | |
|---------------------------------|---------------------|
| Number of connections per level | 2 |
| Nominal cross section | 2.5 mm ² |

1 level

| | |
|----------------------------------|---|
| Stripping length | The stripping length depends on the specification provided by the cable lug manufacturer. |
| Connection in acc. with standard | IEC 60947-7-2 |
| Nominal current | 24 A |
| Maximum load current | 24 A (with a 2.5 mm ² conductor cross section) |
| Nominal voltage | 1000 V |
| Nominal cross section | 2.5 mm ² |

Cable lug connection DIN 46234:1980-03

| | |
|----------------------------------|---|
| Connection in acc. with standard | DIN 46234:1980-03 |
| Cross section | 0.5 mm ² ... 2.5 mm ² |
| Cross section range AWG | 20 ... 14 (converted acc. to IEC) |
| Hole diameter | 3.2 mm |
| Width | 6 mm |
| Bolt diameter | 3 mm |
| Screw thread | M3 |

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| | |
|--|---|
| Tightening torque | 0.6 ... 0.8 Nm |
| Connection in acc. with standard | DIN 46237:1970-07 |
| Cross section | 1 mm ² ... 2.5 mm ² |
| Cross section range AWG | 18 ... 14 (converted acc. to IEC) |
| Hole diameter | 3.2 mm |
| Width | 6 mm |
| Bolt diameter | 3 mm |
| Identification color of ring cable lugs : red | 1 mm ² |
| Identification color of ring cable lugs : blue | 2.5 mm ² |

Ex data

Rated data (ATEX/IECEx)

| | |
|-----------------------------|---|
| Identification | Ⓔ II 2 G Ex eb IIC Gb |
| Operating temperature range | -60 °C ... 110 °C |
| Ex-certified accessories | 3049097 D-RT 3/5 0706647 TPNS-UK 3049819 BE-RT 3/5 1205053 SZS 0,6X3,5 3022276 CLIPFIX 35-5 |
| output | (Permanent) |

Ex connection data General

| | |
|------------------------------|---|
| Torque range | 0.6 Nm ... 0.8 Nm |
| Nominal cross section | 2.5 mm ² |
| Rated cross section AWG | 14 |
| Connection capacity rigid | 0.1 mm ² ... 2.5 mm ² |
| Connection capacity AWG | 26 ... 14 |
| Connection capacity flexible | 0.1 mm ² ... 2.5 mm ² |
| Connection capacity AWG | 26 ... 14 |

Dimensions

| | |
|--------------------|---------|
| Width | 12.3 mm |
| End cover width | 2.2 mm |
| Height | 66 mm |
| Depth on NS 35/7,5 | 51 mm |
| Depth on NS 35/15 | 58.5 mm |

Material specifications

| | |
|---|--------------|
| Color | green-yellow |
| 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 | 130 °C |

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| | |
|--|-------------|
| 0304-21)) | |
| 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

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 | 0.02g ² /Hz |
| Acceleration | 0.8g |
| 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 ... 110 °C (Operating temperature range incl. self-heating; for max. short-term operating temperature, see RTI Elec.) |
| 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 % |
| Permissible humidity (storage/transport) | 30 % ... 70 % |

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Standards and regulations

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

| |
|---------------|
| IEC 60947-7-2 |
|---------------|

Mounting

| |
|---------------|
| Mounting type |
|---------------|

| |
|-----------|
| NS 35/7,5 |
|-----------|

| |
|----------|
| NS 35/15 |
|----------|

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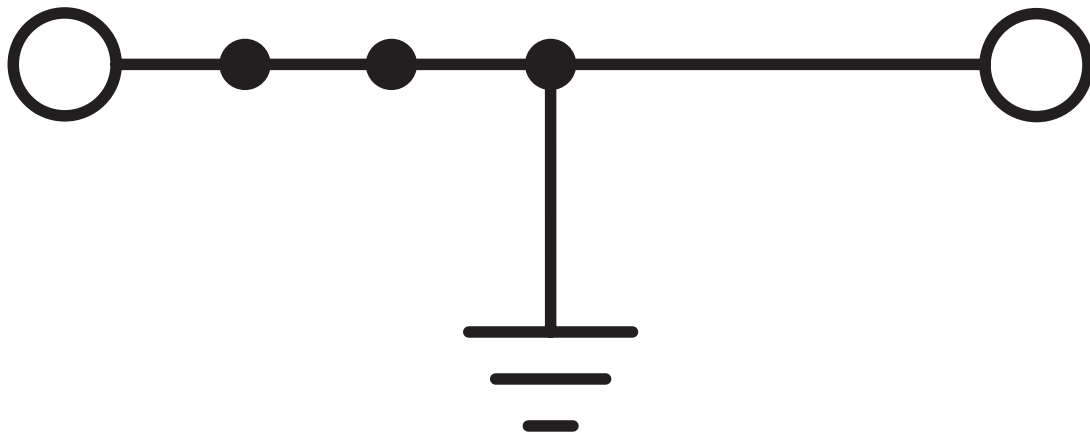
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Drawings

Circuit diagram



RT 3-PE - Ground terminal



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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/sg/products/3049411>



IECEE CB Scheme

Approval ID: DE1-62981



VDE approval of drawings

Approval ID: 40022551

| | Nominal voltage U_N | Nominal current I_N | Cross section AWG | Cross section mm^2 |
|--|-----------------------|-----------------------|-------------------|-----------------------------|
| | - | - | - | 0.14 - 2.5 |



cULus Recognized

Approval ID: E60425



EAC Ex

Approval ID: KZ 7500525010101950



IECEx

Approval ID: IECExPTB08.0063U

| | Nominal voltage U_N | Nominal current I_N | Cross section AWG | Cross section mm^2 |
|--|-----------------------|-----------------------|-------------------|-----------------------------|
| | - | - | - | 0.1 - 2.5 |



ATEX

Approval ID: PTB09ATEX1003U

| | Nominal voltage U_N | Nominal current I_N | Cross section AWG | Cross section mm^2 |
|--|-----------------------|-----------------------|-------------------|-----------------------------|
| | - | - | - | 0.1 - 2.5 |



CCC

Approval ID: 2020322313000627



UKCA-EX

Approval ID: CSAE 22UKEX1085U

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Classifications

ECLASS

| | |
|-------------|----------|
| ECLASS-11.0 | 27141120 |
| ECLASS-13.0 | 27250103 |

ETIM

| | |
|----------|----------|
| ETIM 9.0 | EC000901 |
|----------|----------|

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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