

TB 6-PE I - Ground terminal

3059870

<https://www.phoenixcontact.com/sg/products/3059870>



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Ground terminal, number of connections: 2, connection method: Screw connection, cross section: 1.5 mm² - 6 mm², mounting method: PE foot with mounting screw, M4, mounting type: NS 35/7,5, NS 35/15, NS 32, color: green-yellow

Commercial data

| | |
|--------------------------------------|--------------------------------|
| Item number | 3059870 |
| Packing unit | 50 pc |
| Minimum order quantity | 50 pc |
| Note | Made to order (non-returnable) |
| Sales key | ***** |
| Product key | BEK221 |
| GTIN | 4046356643566 |
| Weight per piece (including packing) | 26.155 g |
| Weight per piece (excluding packing) | 26.064 g |
| Customs tariff number | 85369010 |
| Country of origin | CN |

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Technical data

Product properties

| | |
|-----------------------|-----------------------|
| Product type | Ground terminal block |
| Number of connections | 2 |
| Number of rows | 1 |

Insulation characteristics

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

Electrical properties

| | |
|---|--------|
| Rated surge voltage | 8 kV |
| Maximum power dissipation for nominal condition | 1.31 W |

Connection data

| | |
|---|--|
| Number of connections per level | 2 |
| Nominal cross section | 6 mm ² |
| Screw thread | M4 |
| Note | Please observe the current carrying capacity of the DIN rails. |
| Tightening torque | 1.4 ... 1.5 Nm |
| Stripping length | 10 mm |
| Internal cylindrical gage | A4 |
| Connection in acc. with standard | IEC 60947-7-2 |
| Conductor cross section rigid | 1.5 mm ² ... 6 mm ² |
| Cross section AWG | 24 ... 10 (converted acc. to IEC) |
| Conductor cross section flexible | 1.5 mm ² ... 6 mm ² |
| Conductor cross section, flexible [AWG] | 24 ... 10 (converted acc. to IEC) |
| Conductor cross-section flexible (ferrule without plastic sleeve) | 1.5 mm ² ... 6 mm ² |
| Flexible conductor cross section (ferrule with plastic sleeve) | 1.5 mm ² ... 6 mm ² |

Dimensions

| | |
|--------------------|---------|
| Width | 8.2 mm |
| End cover width | 1.8 mm |
| Height | 42.5 mm |
| Depth on NS 32 | 52 mm |
| Depth on NS 35/7,5 | 47 mm |
| Depth on NS 35/15 | 54.5 mm |

Material specifications

| | |
|--|--------------|
| Color | green-yellow |
| Flammability rating according to UL 94 | V0 |
| Insulating material group | I |
| Insulating material | PA |

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| | |
|--|-------------|
| Static insulating material application in cold | -60 °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 |
| 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

General

| | |
|-------------------------|---|
| Terminal block mounting | 1.5 Nm ... 1.8 Nm (PE foot with mounting screw, M4) |
|-------------------------|---|

Mechanical data

| | |
|-----------------|----|
| Open side panel | No |
|-----------------|----|

Environmental and real-life conditions

Oscillation/broadband noise

| | |
|------------------------|--|
| Specification | EN 50155:2021 |
| Spectrum | Service life test category 2, bogie-mounted |
| Frequency | $f_1 = 5 \text{ Hz}$ to $f_2 = 250 \text{ Hz}$ |
| ASD level | 6.12 (m/s ²) ² /Hz |
| Acceleration | 3.12g |
| Test duration per axis | 5 h |
| Test directions | X-, Y- and Z-axis |
| Result | Test passed |

Shocks

| | |
|--------------------------------|-----------------------------------|
| Pulse shape | Half-sine |
| Acceleration | 30g |
| Shock duration | 18 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 |
| | NS 32 |
| Terminal block mounting | 1.5 Nm ... 1.8 Nm (PE foot with mounting screw, M4) |

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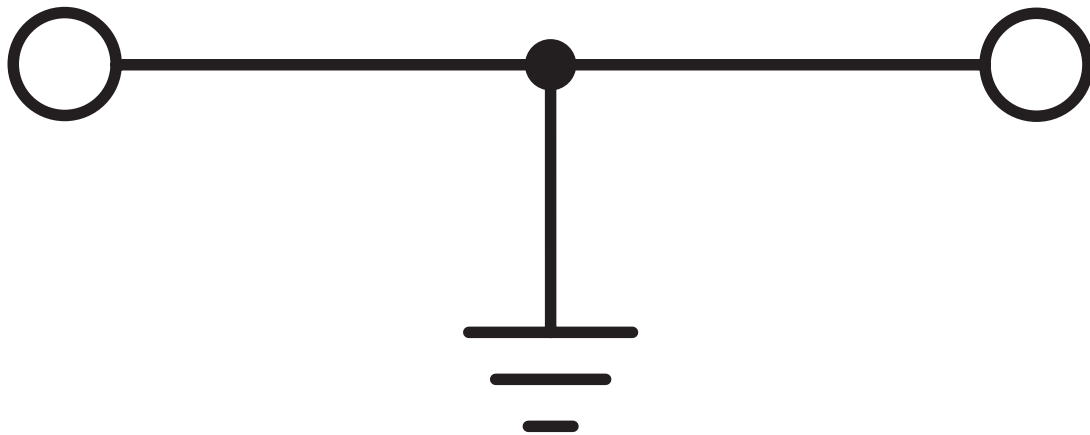
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Drawings

Circuit diagram



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Approvals

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|  cULus Recognized Approval ID: E60425 | | | | |
|--|-----------------------|-----------------------|-------------------|-----------------------------|
| | Nominal voltage U_N | Nominal current I_N | Cross section AWG | Cross section mm^2 |
| Use group B | - | - | 16 - 8 | - |
| Use group C | - | - | 16 - 8 | - |
| Use group D | - | - | 16 - 8 | - |

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Classifications

ECLASS

| | |
|-------------|----------|
| ECLASS-11.0 | 27141141 |
| ECLASS-13.0 | 27250103 |

ETIM

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

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