

3038451

https://www.phoenixcontact.com/sg/products/3038451

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Disconnect terminal block, The max. load current must not be exceeded by the total current of all connected conductors.

Current and voltage are determined by the plug used., nom. voltage: 400 V, Thermal continuous current l_{th} : 20 A, connection method: Spring-cage connection, Rated cross section: 2.5 mm², cross section: 0.08 mm² - 4 mm², mounting: NS 35/7,5, NS 35/15, color: gray

Your advantages

- · Three and four-conductor terminal blocks can be used for multi-conductor connections
- · User-friendly wiring thanks to front connection
- Test pick-off parallel to the disconnect point for test plugs with 2.3 mm diameter
- · Tested for railway applications
- · Consistent and can be double bridged for all tasks in time-saving potential supply and distribution

Commercial data

| Item number | 3038451 |
|--------------------------------------|---------------------|
| Packing unit | 50 pc |
| Minimum order quantity | 50 pc |
| Sales key | 0164* |
| Product key | BE2132 |
| Catalog page | Page 216 (C-1-2019) |
| GTIN | 4017918890599 |
| Weight per piece (including packing) | 10.83 g |
| Weight per piece (excluding packing) | 10.425 g |
| Customs tariff number | 85369010 |
| Country of origin | IN |



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Technical data

Notes

| General | The max. load current must not be exceeded by the total current of all connected conductors. Current and voltage are determined by the plug used. |
|---------|--|
| General | |
| Note | The max. load current must not be exceeded by the total current of all connected conductors. |

Product properties

| Product type | Disconnect terminal block |
|-----------------------|---------------------------|
| Area of application | Railway industry |
| | Machine building |
| | Plant engineering |
| Number of connections | 4 |
| Number of rows | 1 |
| Potentials | 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

| Number of connections per level | 4 |
|---|--|
| Nominal cross section | 2.5 mm ² |
| Stripping length | 8 mm 10 mm |
| Internal cylindrical gage | A3 |
| Connection in acc. with standard | IEC 60947-7-1 |
| Conductor cross section rigid | 0.08 mm² 4 mm² |
| Cross section AWG | 28 12 (converted acc. to IEC) |
| Conductor cross section flexible | 0.08 mm² 2.5 mm² |
| Conductor cross section, flexible [AWG] | 28 14 (converted acc. to IEC) |
| Conductor cross-section flexible (ferrule without plastic sleeve) | 0.14 mm² 2.5 mm² |
| Flexible conductor cross section (ferrule with plastic sleeve) | 0.14 mm² 2.5 mm² |
| 2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve | 0.5 mm ² |
| Thermal continuous current I _{th} | 20 A (with 4 mm² conductor cross section) |
| Maximum load current | 20 A (with 4 mm² conductor cross section) |
| Nominal voltage | 400 V (voltage is determined by the plug used) |
| Nominal cross section | 2.5 mm² |



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Dimensions

| Width | 5.2 mm |
|--------------------|---------|
| End cover width | 2.2 mm |
| Height | 84 mm |
| Depth on NS 35/7,5 | 36.5 mm |
| Depth on NS 35/15 | 44 mm |

Material specifications

| Color | gray (RAL 7042) |
|--|-----------------|
| Flammability rating according to UL 94 | V0 |
| Insulating material group | 1 |
| Insulating material | PA |
| 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 |

Electrical tests

Surge voltage test

| Test voltage setpoi | nt | 6 kV |
|---------------------|----|-------------|
| Result | | Test passed |

Temperature-rise test

| Requirement temperature-rise test | Increase in temperature ≤ 45 K |
|--------------------------------------|--------------------------------|
| Result | Test passed |
| Short-time withstand current 2.5 mm² | 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 |
|-----------------|-----|

Mechanical tests

Mechanical strength



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| Result | Test passed |
|--|---|
| Attachment on the carrier | |
| Test force setpoint | 1 N |
| Result | Test passed |
| Test for conductor damage and slackening | |
| Rotation speed | 10 (+/- 2) rpm |
| Revolutions | 135 |
| Conductor cross section/weight | 0.08 mm² / 0.1 kg |
| | 2.5 mm² / 0.7 kg |
| | 4 mm² / 0.9 kg |
| Result | Test passed |
| vironmental and real-life conditions | |
| Aging | |
| Temperature cycles | 192 |
| Result | Test passed |
| Needle-flame test | |
| Time of exposure | 30 s |
| Result | Test passed |
| Oscillation/broadband noise | |
| Specification | DIN EN 50155 (VDE 0115-200):2022-06 |
| 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/s²)²/Hz |
| Acceleration | 3.12g |
| 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) |



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| 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 60947-7-1 |
| Mounting | |
| Mounting type | NS 35/7,5 |
| | NS 35/15 |



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Drawings

Circuit diagram





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Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/sg/products/3038451

| CSA Approval ID: 13631 | | | | |
|------------------------|-----------------------|--------------------------------|-------------------|-------------------------------|
| | Nominal voltage U_N | Nominal current I _N | Cross section AWG | Cross section mm ² |
| Use group B | | | | |
| | 300 V | 16 A | 28 - 12 | - |
| Use group C | | | | |
| | 150 V | 16 A | 28 - 12 | - |
| Use group D | | | | |
| | 300 V | 10 A | 28 - 12 | - |

| ERC | EAC |
|------|-----------------------------------|
| LIIL | Approval ID: RU C-DE.BL08.B.00644 |

| cULus Recogni Approval ID: E60425 | zed | | | |
|--------------------------------------|-----------------------|--------------------------------|-------------------|-------------------------------|
| | Nominal voltage U_N | Nominal current I _N | Cross section AWG | Cross section mm ² |
| Use group B | | | | |
| | 300 V | 16 A | 28 - 12 | - |
| Use group C | | | | |
| | 300 V | 16 A | 28 - 12 | - |

| EAC Approval ID: EACKZ | 08593 |
|------------------------|-------|
|------------------------|-------|



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Classifications

ECLASS

UNSPSC 21.0

| 27141126 |
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| 27141126 |
| 27250108 |
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| EC000902 |
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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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PHOENIX CONTACT SEA Pte. Ltd. 105 Eunos Avenue 3, #04-00 Singapore 409836 +65 6228 4900 marketing@phoenixcontact.com.sg