

UT 6 BK - Feed-through terminal block



3045208

<https://www.phoenixcontact.com/us/products/3045208>

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Feed-through terminal block, nom. voltage: 1000 V, nominal current: 41 A, number of connections: 2, connection method: Screw connection, Rated cross section: 6 mm², cross section: 0.2 mm² - 10 mm², mounting type: NS 35/7,5, NS 35/15, color: black

Your advantages

- Globally recognized: Internationally proven screw connection
- Maintenance-free and vibration-resistant thanks to the patented Reakdyn principle
- Space savings and flexibility with the connection of two identical conductors
- Long-term stable connections with the use of high-quality materials
- Low self-heating due to high contact forces
- Full flexibility thanks to the standardized CLIPLINE complete bridging, marking, and testing accessories
- Vibration-resistant and maintenance-free conductor connection

Commercial data

| | |
|--------------------------------------|---------------|
| Item number | 3045208 |
| Packing unit | 50 pc |
| Minimum order quantity | 50 pc |
| Sales key | BE01 |
| Product key | BE1111 |
| GTIN | 4017918975548 |
| Weight per piece (including packing) | 14.366 g |
| Weight per piece (excluding packing) | 13.814 g |
| Customs tariff number | 85369010 |
| Country of origin | DE |

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Technical data

Product properties

| | |
|-----------------------|-----------------------------|
| Product type | Feed-through terminal block |
| Product family | UT |
| 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 | 1.31 W |

Connection data

| | |
|---------------------------------|-------------------|
| Number of connections per level | 2 |
| Nominal cross section | 6 mm ² |
| Rated cross section AWG | 8 |

Level 1 above 1 below 1

| | |
|---|--|
| Connection method | Screw connection |
| Screw thread | M4 |
| Tightening torque | 1.5 ... 1.8 Nm |
| Stripping length | 10 mm |
| Internal cylindrical gage | A5 |
| Connection in acc. with standard | IEC 60947-7-1 |
| Conductor cross-section rigid | 0.2 mm ² ... 10 mm ² |
| Cross section AWG | 24 ... 8 (converted acc. to IEC) |
| Conductor cross-section flexible | 0.2 mm ² ... 10 mm ² |
| Conductor cross-section, flexible [AWG] | 24 ... 8 (converted acc. to IEC) |
| Conductor cross-section flexible ultrasound-compressed | 0.34 mm ² ... 10 mm ² |
| Conductor cross-section, flexible [AWG] ultrasound-compressed | 22 ... 8 (converted acc. to IEC) |
| Conductor cross-section flexible (ferrule without plastic sleeve) | 0.25 mm ² ... 6 mm ² |
| Flexible conductor cross-section (ferrule with plastic sleeve) | 0.25 mm ² ... 6 mm ² |
| 2 conductors with same cross section, rigid | 0.2 mm ² ... 2.5 mm ² |
| 2 conductors with same cross section, flexible | 0.2 mm ² ... 2.5 mm ² |
| 2 conductors with same cross section, flexible, with ferrule without plastic sleeve | 0.25 mm ² ... 1.5 mm ² |

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| | |
|---|--|
| 2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve | 0.5 mm ² ... 4 mm ² |
| Nominal cross section | 6 mm ² |
| Nominal current | 41 A |
| Maximum load current | 57 A (with 10 mm ² conductor cross-section) |
| Nominal voltage | 1000 V |
| Note | Note: Product releases, connection cross sections and notes on connecting aluminum cables can be found in the download area. |

Ex data

Rated data (ATEX/IECEx)

| | |
|--|---|
| Identification | Ⓔ II 2 GD Ex eb IIC Gb |
| Operating temperature range | -60 °C ... 110 °C |
| Ex-certified accessories | 3047028 D-UT 2,5/10 3047167 ATP-UT 1205066 SZS 1,0X4,0 VDE 3022276 CLIPFIX 35-5 3022218 CLIPFIX 35 |
| List of bridges | Plug-in bridge / FBS 2-8 / 3030284 Plug-in bridge / FBS 3-8 / 3030297 Plug-in bridge / FBS 4-8 / 3030307 Plug-in bridge / FBS 5-8 / 3030310 Plug-in bridge / FBS 10-8 / 3030323 |
| Bridge data | 39 A (6 mm ²) |
| Ex temperature increase | 40 K (44.9 A / 6 mm ²) |
| for bridging with bridge | 690 V |
| - At bridging between non-adjacent terminal blocks | 275 V |
| - At bridging between non-adjacent terminal blocks via PE terminal block | 176 V |
| - At cut-to-length bridging with cover | 220 V |
| - At cut-to-length bridging with partition plate | 275 V |
| Rated insulation voltage | 630 V |
| output | (Permanent) |

Ex level General

| | |
|----------------------|--------|
| Rated voltage | 690 V |
| Rated current | 40 A |
| Maximum load current | 50 A |
| Contact resistance | 0.2 mΩ |

Ex connection data General

| | |
|---------------------------|--|
| Torque range | 1.5 Nm ... 1.8 Nm |
| Nominal cross section | 6 mm ² |
| Rated cross section AWG | 10 |
| Connection capacity rigid | 0.2 mm ² ... 10 mm ² |

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| | |
|---|---|
| Connection capacity AWG | 24 ... 8 |
| Connection capacity flexible | 0.2 mm ² ... 6 mm ² |
| Connection capacity AWG | 24 ... 10 |
| 2 conductors with same cross section, solid | 0.2 mm ² ... 2.5 mm ² |
| 2 conductors with the same cross-section AWG rigid | 24 ... 14 |
| 2 conductors with same cross section, stranded | 0.2 mm ² ... 2.5 mm ² |
| 2 conductors with the same cross-section AWG flexible | 24 ... 14 |

Dimensions

| | |
|--------------------|---------|
| Width | 8.2 mm |
| End cover width | 2.2 mm |
| Height | 47.7 mm |
| Depth on NS 35/7,5 | 47.5 mm |
| Depth on NS 35/15 | 55 mm |

Material specifications

| | |
|---|------------------|
| Color | black (RAL 9005) |
| 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)) | 125 °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) | 27,5 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 ... 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 |

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| | |
|--|-----------------|
| 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/us/products/3045208>

DNV

Approval ID: TAE00001S9



CSA

Approval ID: 13631



IECEE CB Scheme

Approval ID: DE1-63061

| | Nominal voltage U_N | Nominal current I_N | Cross section AWG | Cross section mm^2 |
|-------|-----------------------|-----------------------|-------------------|----------------------|
| keine | | | | |
| | 1000 V | 41 A | - | - 6 |



cULus Recognized

Approval ID: E60425



VDE approval of drawings

Approval ID: 40013658

| | Nominal voltage U_N | Nominal current I_N | Cross section AWG | Cross section mm^2 |
|-------|-----------------------|-----------------------|-------------------|----------------------|
| keine | | | | |
| | 1000 V | 41 A | - | 0.2 - 6 |



CSA

Approval ID: 13631



cULus Recognized

Approval ID: E60425



ATEX

Approval ID: KEMA04ATEX2048U

| | Nominal voltage U_N | Nominal current I_N | Cross section AWG | Cross section mm^2 |
|--------------------------|-----------------------|-----------------------|-------------------|----------------------|
| keine | | | | |
| Only flexible conductors | 690 V | 40 A | - | 0.2 - 6 |
| Only rigid conductors | 690 V | 50 A | - | 0.2 - 10 |

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|  cUL Recognized Approval ID: E192998 | | | | |
|---|-----------------------|-----------------------|-------------------|----------------------|
| | Nominal voltage U_N | Nominal current I_N | Cross section AWG | Cross section mm^2 |
| B | 600 V | 50 A | 24 - 8 | - |
| C | 600 V | 50 A | 24 - 8 | - |

|  EAC Ex Approval ID: KZ 7500525010101950 | | | | |
|---|--|--|--|--|
|---|--|--|--|--|

|  IECEx Approval ID: IECEx KEM 06.0027U | | | | |
|---|-----------------------|-----------------------|-------------------|----------------------|
| | Nominal voltage U_N | Nominal current I_N | Cross section AWG | Cross section mm^2 |
| keine | | | | |
| Only flexible conductors | 690 V | 40 A | - | 0.2 - 6 |
| Only rigid conductors | 690 V | 50 A | - | 0.2 - 10 |

|  UL Recognized Approval ID: E192998 | | | | |
|--|-----------------------|-----------------------|-------------------|----------------------|
| | Nominal voltage U_N | Nominal current I_N | Cross section AWG | Cross section mm^2 |
| B | 600 V | 50 A | 24 - 8 | - |
| C | 600 V | 50 A | 24 - 8 | - |

|  CCC Approval ID: 2020322313000622 | | | | |
|---|--|--|--|--|
|---|--|--|--|--|

|  UKCA-EX Approval ID: DEKRA 21UKEX0304U | | | | |
|--|--|--|--|--|
|--|--|--|--|--|

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Classifications

ECLASS

| | |
|-------------|----------|
| ECLASS-13.0 | 27250101 |
| ECLASS-15.0 | 27250101 |

ETIM

| | |
|-----------|----------|
| ETIM 10.0 | EC000897 |
|-----------|----------|

UNSPSC

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

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Environmental product compliance

EU RoHS

| | |
|---|------|
| Fulfills EU RoHS substance requirements | Yes |
| Exemption | 6(c) |

China RoHS

| | |
|--|---|
| Environment friendly use period (EFUP) | EFUP-50 |
| | An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required. |

EU REACH SVHC

| | |
|-------------------------------------|-------------------------------------|
| REACH candidate substance (CAS No.) | Lead(CAS: 7439-92-1) |
| SCIP | 2bcbd0d4-3020-48b7-9a31-6bbe08cb9af |

EF3.1 Climate Change

| | |
|---------|---------------|
| CO2e kg | 0.016 kg CO2e |
|---------|---------------|

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