

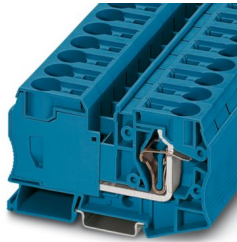
ST 35 BU - Feed-through terminal block



3036181

<https://www.phoenixcontact.com/it/products/3036181>

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Feed-through terminal block, nom. voltage: 1000 V, nominal current: 125 A, number of connections: 2, connection method: Spring-cage connection, 1 level, Rated cross section: 35 mm², cross section: 2.5 mm² - 35 mm², mounting type: NS 35/7,5, NS 35/15, color: blue

Your advantages

- The double bridge shaft not only enables individual chain bridging, but also reducing bridging to spring-cage terminal blocks with smaller cross sections
- The flexible options for reducing bridging in the CLIPLINE complete system can be found in "Accessories for the CLIPLINE complete modular terminal block system"

Commercial data

| | |
|--------------------------------------|---------------------|
| Item number | 3036181 |
| Packing unit | 10 pc |
| Minimum order quantity | 1 pc |
| Sales key | BE2 |
| Product key | BE2111 |
| Catalog page | Page 249 (C-1-2019) |
| GTIN | 4017918821050 |
| Weight per piece (including packing) | 84.76 g |
| Weight per piece (excluding packing) | 84.76 g |
| Customs tariff number | 85369010 |
| Country of origin | PL |

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Technical data

Product properties

| | |
|-----------------------|-----------------------------|
| Product type | Feed-through terminal block |
| 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 | 4.06 W |

Connection data

| | |
|---------------------------------|--------------------|
| Number of connections per level | 2 |
| Nominal cross section | 35 mm ² |

1 level

| | |
|---|---|
| Stripping length | 25 mm |
| Internal cylindrical gage | A8 |
| Connection in acc. with standard | IEC 60947-7-1 |
| Conductor cross section rigid | 2.5 mm ² ... 35 mm ² |
| Cross section AWG | 12 ... 2 (converted acc. to IEC) |
| Conductor cross section flexible | 2.5 mm ² ... 35 mm ² |
| Conductor cross section, flexible [AWG] | 12 ... 2 (converted acc. to IEC) |
| Conductor cross-section flexible (ferrule without plastic sleeve) | 2.5 mm ² ... 35 mm ² |
| Flexible conductor cross section (ferrule with plastic sleeve) | 2.5 mm ² ... 35 mm ² |
| 2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve | 2.5 mm ² ... 10 mm ² |
| Nominal current | 125 A |
| Maximum load current | 125 A (with 35 mm ² conductor cross section) |
| Nominal voltage | 1000 V |
| Note | The supply from the ST 35 terminal block to the ST 16 TWIN terminal block with the RB-ST 35 reducing bridge is single-sided only. In the case of a central supply, the D-ST 16-TWIN cover cannot be bridged via the reducing bridge. |
| Nominal cross section | 35 mm ² |

Ex data

Rated data (ATEX/IECEx)

| | |
|----------------|------------------------|
| Identification | ⊕ II 2 GD Ex eb IIC Gb |
|----------------|------------------------|

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| | |
|-----------------------------|--------------------------------------|
| Operating temperature range | -60 °C ... 110 °C |
| Ex-certified accessories | 1206612 SZF 3-1,0X5,5 |
| | 3022276 CLIPFIX 35-5 |
| | 3022218 CLIPFIX 35 |
| List of bridges | Plug-in bridge / FBS 2-16 / 3005963 |
| Bridge data | 85.5 A / 35 mm ² |
| Ex temperature increase | 40 K (118.6 A / 35 mm ²) |
| Rated voltage | 690 V |
| for bridging with bridge | 690 V |
| Rated insulation voltage | 630 V |
| output | (Permanent) |

Ex level General

| | |
|----------------------|---------|
| Rated current | 107.5 A |
| Maximum load current | 107.5 A |
| Contact resistance | 0.21 mΩ |

Ex connection data General

| | |
|------------------------------|--|
| Nominal cross section | 35 mm ² |
| Rated cross section AWG | 2 |
| Connection capacity rigid | 2.5 mm ² ... 35 mm ² |
| Connection capacity AWG | 14 ... 2 |
| Connection capacity flexible | 2.5 mm ² ... 35 mm ² |
| Connection capacity AWG | 14 ... 2 |

Dimensions

| | |
|--------------------|---------|
| Width | 16 mm |
| Height | 100 mm |
| Depth on NS 35/7,5 | 59 mm |
| Depth on NS 35/15 | 66.5 mm |

Material specifications

| | |
|---|-------------|
| Color | blue |
| 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 |

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| | |
|---|--------|
| 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 | 9.8 kV |
| Result | Test passed |

Temperature-rise test

| | |
|---|-------------------------------------|
| Requirement temperature-rise test | Increase in temperature ≤ 45 K |
| Result | Test passed |
| Short-time withstand current 35 mm ² | 4.2 kA |
| Result | Test passed |

Power-frequency withstand voltage

| | |
|-----------------------|-------------|
| Test voltage setpoint | 2.2 kV |
| Result | Test passed |

Mechanical properties

Mechanical data

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

Mechanical tests

Mechanical strength

| | |
|--------|-------------|
| Result | Test passed |
|--------|-------------|

Attachment on the carrier

| | |
|-------------------------|-------------|
| DIN rail/fixing support | NS 35 |
| Test force setpoint | 10 N |
| Result | Test passed |

Test for conductor damage and slackening

| | |
|--------------------------------|------------------------------|
| Rotation speed | 10 rpm |
| Revolutions | 135 |
| Conductor cross section/weight | 2.5 mm ² / 0.7 kg |
| | 35 mm ² / 6.8 kg |
| Result | Test passed |

Environmental and real-life conditions

Aging

| | |
|--------------------|-------------|
| Temperature cycles | 192 |
| Result | Test passed |

Needle-flame test

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| | |
|------------------|-------------|
| 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 2, bogie-mounted |
| Frequency | $f_1 = 5 \text{ Hz}$ to $f_2 = 250 \text{ Hz}$ |
| ASD level | $6.12 \text{ (m/s}^2\text{)}^2\text{/Hz}$ |
| 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 | 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, 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 60947-7-1 |
|----------------------------------|---------------|

Mounting

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

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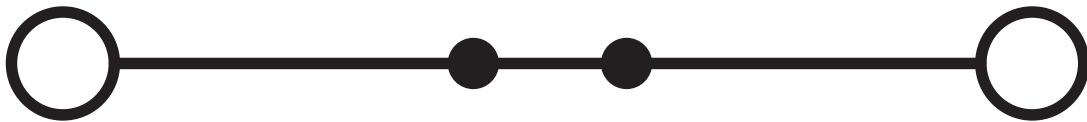


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Drawings

Circuit diagram



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Approvals


To download certificates, visit the product detail page: <https://www.phoenixcontact.com/it/products/3036181>


|  CSA Approval ID: 13631 | | | | |
|--|-----------------------|-----------------------|-------------------|-----------------------------|
| | Nominal voltage U_N | Nominal current I_N | Cross section AWG | Cross section mm^2 |
| Use group B | 600 V | 115 A | 14 - 2 | - |
| Use group C | 600 V | 115 A | 14 - 2 | - |


|  IECEE CB Scheme Approval ID: DE1-62909 | | | | |
|--|--|--|--|--|
|--|--|--|--|--|


|  LR Approval ID: LR2014888TA | | | | |
|---|--|--|--|--|
|---|--|--|--|--|

|  KR Approval ID: HMB17372-EL002 | | | | |
|--|--|--|--|--|
|--|--|--|--|--|

|  NK Approval ID: 09 ME 140 | | | | |
|---|--|--|--|--|
|---|--|--|--|--|

|  RS Approval ID: 22.44.01.00083.250 | | | | |
|--|--|--|--|--|
|--|--|--|--|--|

|  BV Approval ID: 13403/D0 BV | | | | |
|---|--|--|--|--|
|---|--|--|--|--|

|  cULus Recognized Approval ID: E60425 | | | | |
|--|-----------------------|-----------------------|-------------------|-----------------------------|
| | Nominal voltage U_N | Nominal current I_N | Cross section AWG | Cross section mm^2 |
| Use group B | 600 V | 115 A | 14 - 2 | - |
| Use group C | 600 V | 115 A | 14 - 2 | - |

| DNV | | | | |
|------------|--|--|--|--|
|------------|--|--|--|--|

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Approval ID: TAE00001CS



ATEX

Approval ID: KEMA01ATEX2260U

| | Nominal voltage U_N | Nominal current I_N | Cross section AWG | Cross section mm^2 |
|------------------------------|-----------------------|-----------------------|-------------------|-----------------------------|
| Type examination certificate | 690 V | 107.5 A | - | 2.5 - 35 |



EAC Ex

Approval ID: RU C-DE.HA91.B.00066



IECEx

Approval ID: IECEx KEM 06.0033U

| | Nominal voltage U_N | Nominal current I_N | Cross section AWG | Cross section mm^2 |
|--|-----------------------|-----------------------|-------------------|-----------------------------|
| | 690 V | 107.5 A | - | 2.5 - 35 |



CCC

Approval ID: 2020322313000621



UKCA-EX

Approval ID: DEKRA 21UKEX0303U

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Classifications

ECLASS

| | |
|-------------|----------|
| ECLASS-11.0 | 27141120 |
| ECLASS-13.0 | 27250101 |

ETIM

| | |
|----------|----------|
| ETIM 9.0 | EC000897 |
|----------|----------|

UNSPSC

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

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Environmental product compliance

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

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