

Bolt connection terminal block - RBO 6-F - 3075935

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Bolt connection terminal block, nom. voltage: 800 V, nominal current: 125 A, connection method: Bolt connection, number of connections: 2, width: 17 mm, height: 39.7 mm, color: gray, mounting type: direct screw connection

Your advantages

- Compact connection with ring and fork-type cable lugs
- Direct mounting in control boxes
- Bridge shaft for potential distribution using standard screw bridges
- Isolator bridge bar for switchable cross connections

Key Commercial Data

| | |
|--------------|---|
| Packing unit | 40 pc |
| GTIN |  4 046356 535892 |
| GTIN | 4046356535892 |

Technical data

General

| | |
|---|--------------------|
| Number of levels | 1 |
| Number of connections | 2 |
| Potentials | 1 |
| Nominal cross section | 35 mm ² |
| Color | gray |
| Insulating material | PA |
| Flammability rating according to UL 94 | V0 |
| Rated surge voltage | 8 kV |
| Degree of pollution | 3 |
| Overvoltage category | III |
| Insulating material group | I |
| Maximum power dissipation for nominal condition | 4.06 W |

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Technical data

General

| | |
|---|--|
| Maximum load current | 125 A (with 35 mm ² conductor cross section) |
| Nominal current I _N | 125 A |
| Nominal voltage U _N | 800 V |
| Open side panel | No |
| Ambient temperature (operation) | -60 °C ... 85 °C |
| Ambient temperature (storage/transport) | -25 °C ... 55 °C (For a short time, not exceeding 24 h, -60 to +70 °C) |
| Permissible humidity (storage/transport) | 30 % ... 70 % |
| Ambient temperature (assembly) | -5 °C ... 70 °C |
| Ambient temperature (actuation) | -5 °C ... 70 °C |
| Result of surge voltage test | Test passed |
| Result of power-frequency withstand voltage test | Test passed |
| Power frequency withstand voltage setpoint | 2 kV |
| Result of the test for mechanical stability of terminal points (5 x conductor connection) | Test passed |
| Result of tight fit on support | Test passed |
| Setpoint | 10 N |
| Result of voltage-drop test | Test passed |
| Result of temperature-rise test | Test passed |
| Requirement temperature-rise test | Increase in temperature ≤ 45 K |
| Short circuit stability result | Test passed |
| Conductor cross section short circuit testing | 35 mm ² |
| Short-time current | 4.2 kA |
| Result of thermal test | Test passed |
| Proof of thermal characteristics (needle flame) effective duration | 30 s |
| Oscillation, broadband noise test result | Test passed |
| Test specification, oscillation, broadband noise | DIN EN 50155 (VDE 0115-200):2008-03 |
| Test spectrum | Service life test category 1, class B, body mounted |
| Test frequency | f ₁ = 5 Hz to f ₂ = 150 Hz |
| ASD level | 1.857 (m/s ²) ² /Hz |
| Acceleration | 0,8 g |
| Test duration per axis | 5 h |
| Test directions | X-, Y- and Z-axis |
| Shock test result | Test passed |
| Test specification, shock test | DIN EN 50155 (VDE 0115-200):2008-03 |
| Shock form | Half-sine |
| Acceleration | 5g |
| Shock duration | 30 ms |
| Number of shocks per direction | 3 |
| Test directions | X-, Y- and Z-axis (pos. and neg.) |
| Relative insulation material temperature index (Elec., UL 746 B) | 130 °C |

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Technical data

General

| | |
|---|-------------|
| Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21)) | 130 °C |
| Static insulating material application in cold | -60 °C |
| Surface flammability NFPA 130 (ASTM E 162) | passed |
| Specific optical density of smoke NFPA 130 (ASTM E 662) | passed |
| Calorimetric heat release NFPA 130 (ASTM E 1354) | 28 MJ/kg |
| Smoke gas toxicity NFPA 130 (SMP 800C) | passed |
| 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 |

Dimensions

| | |
|-----------------|---------|
| Width | 17 mm |
| End cover width | 2.2 mm |
| Length | 80.8 mm |
| Height | 39.7 mm |
| Pitch | 17 mm |

Connection data

| | |
|---|---|
| Connection | 1 level |
| Connection method | Bolt connection |
| Stripping length | The stripping length depends on the specification provided by the cable lug manufacturer. |
| Connection in acc. with standard | IEC 60947-7-1 |
| Cable lug connection according to standard | DIN 46234:1980-03 |
| Min. cross section for cable lug connection | 6 mm ² |
| Max. cross section for cable lug connection | 35 mm ² |
| AWG min | 10 |
| AWG max | 2 |
| Hole diameter, min. | 6.5 mm |
| Cable lug width, max. | 15 mm |
| Bolt diameter | 6 mm |
| Screw thread | M6 |
| Tightening torque, min | 3.2 Nm |
| Tightening torque max | 3.7 Nm |
| Cable lug connection according to standard | DIN 46237:1970-07 |
| Min. cross section for cable lug connection | 2.5 mm ² |
| Max. cross section for cable lug connection | 6 mm ² |
| AWG min | 14 |
| AWG max | 10 |
| Hole diameter, min. | 6.5 mm |

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Technical data

Connection data

| | |
|------------------------|--------|
| Cable lug width, max. | 11 mm |
| Bolt diameter | 6 mm |
| Screw thread | M6 |
| Tightening torque, min | 3.2 Nm |
| Tightening torque max | 3.7 Nm |

Standards and Regulations

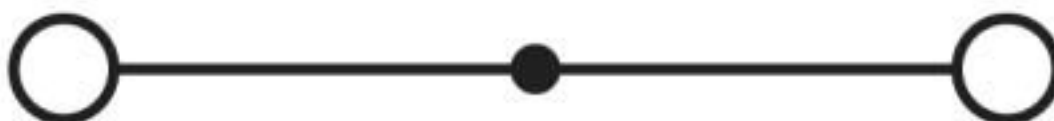
| | |
|--|---------------|
| Connection in acc. with standard | CUL |
| | IEC 60947-7-1 |
| Flammability rating according to UL 94 | V0 |

Environmental Product Compliance

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

Drawings

Circuit diagram



Classifications

eCl@ss

| | |
|---------------|----------|
| eCl@ss 10.0.1 | 27141120 |
| eCl@ss 4.0 | 27141100 |
| eCl@ss 4.1 | 27141100 |
| eCl@ss 5.0 | 27141100 |
| eCl@ss 5.1 | 27141100 |
| eCl@ss 6.0 | 27141100 |
| eCl@ss 7.0 | 27141120 |
| eCl@ss 8.0 | 27141120 |
| eCl@ss 9.0 | 27141120 |

ETIM

| | |
|----------|----------|
| ETIM 2.0 | EC000897 |
| ETIM 3.0 | EC000897 |
| ETIM 4.0 | EC000897 |
| ETIM 5.0 | EC000897 |
| ETIM 6.0 | EC000897 |
| ETIM 7.0 | EC000897 |

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Classifications

UNSPSC

| | |
|---------------|----------|
| UNSPSC 6.01 | 30211811 |
| UNSPSC 7.0901 | 39121410 |
| UNSPSC 11 | 39121410 |
| UNSPSC 12.01 | 39121410 |
| UNSPSC 13.2 | 39121410 |
| UNSPSC 18.0 | 39121410 |
| UNSPSC 19.0 | 39121410 |
| UNSPSC 20.0 | 39121410 |
| UNSPSC 21.0 | 39121410 |

Approvals


Approvals


Approvals

CSA / UL Recognized / cUL Recognized / EAC / EAC / EAC / cULus Recognized

Ex Approvals

Approval details

| | | | |
|----------------------------|---|---|-------|
| CSA |  | http://www.csagroup.org/services-industries/product-listing/ | 13631 |
| | B | C | |
| Nominal voltage UN | 600 V | 600 V | |
| Nominal current IN | 115 A | 115 A | |
| mm ² /AWG/kcmil | 12-2 | 12-2 | |

| | | | |
|--------------------|---|---|--------------|
| UL Recognized |  | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 60425 |
| | B | C | |
| Nominal voltage UN | 600 V | 600 V | |
| Nominal current IN | 115 A | 115 A | |

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Approvals

| | | | |
|--------------------|--|---|--------------|
| cUL Recognized | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 60425 |
| | | B | C |
| Nominal voltage UN | | 600 V | 600 V |
| Nominal current IN | | 115 A | 115 A |

| | | |
|-----|--|---------------|
| EAC | | EAC-Zulassung |
|-----|--|---------------|

| | | |
|-----|--|--------------------------|
| EAC | | RU C- DE.A*30.B.01742 |
|-----|--|--------------------------|

| | | |
|-----|--|--------------------------|
| EAC | | RU C- DE.BL08.B.00540 |
|-----|--|--------------------------|

| | | |
|------------------|--|--|
| cULus Recognized | | |
|------------------|--|--|

Accessories

Accessories

Cover profile

Cover profile - AP RSC-T - 3059139



Cover profile, for covering terminal strips, directly snapped onto RBO... and RSC... test disconnect terminal blocks.
Length supplied: 1 m

End cover

Flange cover - D-RSC 6-F - 3213108



Flange cover, length: 80.9 mm, width: 2.2 mm, height: 39.7 mm, color: gray

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Accessories

Labeled terminal marker

Zack marker strip - ZB 17 CUS - 0829393



Zack marker strip, can be ordered: Strip, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 17 mm, lettering field size: 17 x 10.5 mm, Number of individual labels: 50

Partition plate

Separating plate - TS-KK 3 - 2770215



Separating plate, length: 14 mm, width: 0.5 mm, height: 16 mm, color: gray

Screw bridge

Fixed bridge - FB 10-17 - 3075951



Fixed bridge, pitch: 17 mm, number of positions: 10, color: silver

Fixed bridge - FB 10-17 ISO - 3213085



Fixed bridge, pitch: 17 mm, number of positions: 10, color: silver

Socket spanner

Tool - SHN 13 - 1209923



Socket wrench, wrench size 13 mm

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Accessories

Terminal marking

Zack marker strip - ZB 17:UNBEDRUCKT - 0829391



Zack marker strip, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into tall marker groove, for terminal block width: 17 mm, lettering field size: 17 x 10.5 mm, Number of individual labels: 5

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PHOENIX CONTACT GmbH & Co. KG
Flachsmarktstr. 8
32825 Blomberg
Germany
Tel. +49 5235 300
Fax +49 5235 3 41200
<http://www.phoenixcontact.com>

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