

## Bolt connection terminal block - RSC 5-F - 3058156

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Feed-through terminal block with bolt connection method, cross section: 0.1 - 10 mm², AWG: 26 - 8, width 13 mm, color: gray

### Your advantages

- ✓ Large-surface, consistent external and center labeling
- ✓ Mounting on standard DIN rails or directly in control boxes
- ✓ Compact screw connection of ring and fork-type cable lugs
- ✓ Cover profile that can be snapped directly onto the terminal blocks provides touch-proof protection
- ✓ Screw nuts and current bars are latched in the insulating housing and cannot be removed
- ✓ The isolator bridge bar supports switchable cross connections; the bridge screw therefore has the function of a live contact
- ✓ Bridge shaft for potential distribution using standard screw bridges

**RoHS**

### Key Commercial Data

|              |                                                                                                         |
|--------------|---------------------------------------------------------------------------------------------------------|
| Packing unit | 50 pc                                                                                                   |
| GTIN         | <br>4 046356 500333 |
| GTIN         | 4046356500333                                                                                           |

### Technical data

#### General

|                                        |        |
|----------------------------------------|--------|
| Number of levels                       | 1      |
| Number of connections                  | 2      |
| Potentials                             | 1      |
| Nominal cross section                  | 10 mm² |
| Color                                  | gray   |
| Insulating material                    | PA     |
| Flammability rating according to UL 94 | V0     |
| Rated surge voltage                    | 8 kV   |
| Degree of pollution                    | 3      |

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## Technical data

### General

|                                                                                           |                                                                        |
|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------|
| Overvoltage category                                                                      | III                                                                    |
| Insulating material group                                                                 | I                                                                      |
| Maximum power dissipation for nominal condition                                           | 1.82 W                                                                 |
| Maximum load current                                                                      | 57 A (with 10 mm <sup>2</sup> conductor cross section)                 |
| Nominal current I <sub>N</sub>                                                            | 57 A                                                                   |
| Nominal voltage U <sub>N</sub>                                                            | 800 V                                                                  |
| Open side panel                                                                           | Yes                                                                    |
| 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                                                        |
| Shock protection test specification                                                       | IEC 60529:2001-02                                                      |
| Back of the hand protection                                                               | guaranteed                                                             |
| 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 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                                             | 10 mm <sup>2</sup>                                                     |
| Short-time current                                                                        | 1.2 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 <sub>1</sub> = 5 Hz to f <sub>2</sub> = 150 Hz                       |
| ASD level                                                                                 | 1.857 (m/s <sup>2</sup> ) <sup>2</sup> /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                                                                      |

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## Technical data

### General

|                                                                         |                                   |
|-------------------------------------------------------------------------|-----------------------------------|
| Test directions                                                         | X-, Y- and Z-axis (pos. and neg.) |
| Relative insulation material temperature index (Elec., UL 746 B)        | 130 °C                            |
| 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           | 13 mm   |
| End cover width | 10 mm   |
| Length          | 53.3 mm |
| Height          | 37 mm   |
| Pitch           | 13 mm   |

### Connection data

|                                             |                                                                                           |
|---------------------------------------------|-------------------------------------------------------------------------------------------|
| Connection                                  | 1 level                                                                                   |
| Connection method                           | Bolt connection                                                                           |
| Screw thread                                | M5                                                                                        |
| 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 | 0.1 mm <sup>2</sup>                                                                       |
| Max. cross section for cable lug connection | 10 mm <sup>2</sup>                                                                        |
| AWG min                                     | 26                                                                                        |
| AWG max                                     | 8                                                                                         |
| Hole diameter, min.                         | 5.3 mm                                                                                    |
| Cable lug width, max.                       | 10 mm                                                                                     |
| Bolt diameter                               | 5 mm                                                                                      |
| Screw thread                                | M5                                                                                        |
| Tightening torque, min                      | 2 Nm                                                                                      |
| Tightening torque max                       | 2.2 Nm                                                                                    |
| Cable lug connection according to standard  | DIN 46237:1970-07                                                                         |
| Min. cross section for cable lug connection | 0.5 mm <sup>2</sup>                                                                       |
| Max. cross section for cable lug connection | 6 mm <sup>2</sup>                                                                         |

## Bolt connection terminal block - RSC 5-F - 3058156

### Technical data

#### Connection data

|                        |        |
|------------------------|--------|
| AWG min                | 20     |
| AWG max                | 10     |
| Hole diameter, min.    | 5.3 mm |
| Cable lug width, max.  | 10 mm  |
| Bolt diameter          | 5 mm   |
| Screw thread           | M5     |
| Tightening torque, min | 2 Nm   |
| Tightening torque max  | 22 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 |

## Bolt connection terminal block - RSC 5-F - 3058156

### Classifications

#### ETIM

|          |          |
|----------|----------|
| ETIM 5.0 | EC000897 |
| ETIM 6.0 | EC000897 |
| ETIM 7.0 | EC000897 |

#### 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

UL Recognized / cUL Recognized / IEC CB Scheme / VDE Zeichengenehmigung / EAC / cULus Recognized

#### Ex Approvals

### Approval details

|                                                                                                                                                                                                                                                                      |       |       |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-------|
| UL Recognized  <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> FILE E 60425 |       |       |
|                                                                                                                                                                                                                                                                      | B     | C     |
| Nominal voltage UN                                                                                                                                                                                                                                                   | 600 V | 600 V |
| Nominal current IN                                                                                                                                                                                                                                                   | 45 A  | 45 A  |

|                                                                                                                                                                                                                                                                       |       |       |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-------|
| cUL Recognized  <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> FILE E 60425 |       |       |
|                                                                                                                                                                                                                                                                       | B     | C     |
| Nominal voltage UN                                                                                                                                                                                                                                                    | 600 V | 600 V |
| Nominal current IN                                                                                                                                                                                                                                                    | 45 A  | 45 A  |

## Bolt connection terminal block - RSC 5-F - 3058156

### Approvals

|                 |                                                                                   |                                                           |           |
|-----------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------|-----------|
| IECEE CB Scheme |  | <a href="http://www.iecee.org/">http://www.iecee.org/</a> | DE1-62918 |
|-----------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------|-----------|

|                        |                                                                                   |                                                                                                                                                                                                           |          |
|------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| VDE Zeichengenehmigung |  | <a href="http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx">http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx</a> | 40030587 |
| Nominal voltage UN     |                                                                                   | 800 V                                                                                                                                                                                                     |          |
| Nominal current IN     |                                                                                   | 57 A                                                                                                                                                                                                      |          |
| mm²/AWG/kcmil          |                                                                                   | 0.2-10                                                                                                                                                                                                    |          |

|     |                                                                                   |                          |  |
|-----|-----------------------------------------------------------------------------------|--------------------------|--|
| EAC |  | RU C-<br>DE.BL08.B.00534 |  |
|-----|-----------------------------------------------------------------------------------|--------------------------|--|

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

### Accessories

#### Accessories

#### Cover profile

Cover profile - AP RSC - 3058017



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

#### DIN rail

DIN rail perforated - NS 35/ 7,5 PERF 2000MM - 0801733



DIN rail perforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

## Bolt connection terminal block - RSC 5-F - 3058156

### Accessories

DIN rail, unperforated - NS 35/ 7,5 UNPERF 2000MM - 0801681



DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

DIN rail perforated - NS 35/ 7,5 WH PERF 2000MM - 1204119



DIN rail perforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, Galvanized, white passivated, length: 2000 mm, color: silver

DIN rail, unperforated - NS 35/ 7,5 WH UNPERF 2000MM - 1204122



DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, Galvanized, white passivated, length: 2000 mm, color: silver

DIN rail, unperforated - NS 35/ 7,5 AL UNPERF 2000MM - 0801704



DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Aluminum, uncoated, length: 2000 mm, color: silver

DIN rail perforated - NS 35/ 7,5 ZN PERF 2000MM - 1206421



DIN rail perforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, galvanized, length: 2000 mm, color: silver

## Bolt connection terminal block - RSC 5-F - 3058156

### Accessories

DIN rail, unperforated - NS 35/ 7,5 ZN UNPERF 2000MM - 1206434



DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, galvanized, length: 2000 mm, color: silver

DIN rail, unperforated - NS 35/ 7,5 CU UNPERF 2000MM - 0801762



DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Copper, uncoated, length: 2000 mm, color: copper-colored

End cap - NS 35/ 7,5 CAP - 1206560



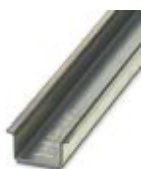
DIN rail end piece, for DIN rail NS 35/7.5

DIN rail perforated - NS 35/15 PERF 2000MM - 1201730



DIN rail perforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

DIN rail, unperforated - NS 35/15 UNPERF 2000MM - 1201714



DIN rail, unperforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

## Bolt connection terminal block - RSC 5-F - 3058156

### Accessories

DIN rail perforated - NS 35/15 WH PERF 2000MM - 0806602



DIN rail perforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Steel, Galvanized, white passivated, length: 2000 mm, color: silver

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DIN rail, unperforated - NS 35/15 WH UNPERF 2000MM - 1204135



DIN rail, unperforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Steel, Galvanized, white passivated, length: 2000 mm, color: silver

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DIN rail, unperforated - NS 35/15 AL UNPERF 2000MM - 1201756



DIN rail, unperforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Aluminum, uncoated, length: 2000 mm, color: silver

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DIN rail perforated - NS 35/15 ZN PERF 2000MM - 1206599



DIN rail perforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Steel, galvanized, length: 2000 mm, color: silver

---

DIN rail, unperforated - NS 35/15 ZN UNPERF 2000MM - 1206586



DIN rail, unperforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Steel, galvanized, length: 2000 mm, color: silver

## Bolt connection terminal block - RSC 5-F - 3058156

### Accessories

DIN rail, unperforated - NS 35/15 CU UNPERF 2000MM - 1201895



DIN rail, unperforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Copper, uncoated, length: 2000 mm, color: copper-colored

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End cap - NS 35/15 CAP - 1206573



DIN rail end piece, for DIN rail NS 35/15

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DIN rail, unperforated - NS 35/15-2,3 UNPERF 2000MM - 1201798



DIN rail, unperforated, Standard profile 2.3 mm, width: 35 mm, height: 15 mm, acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

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End block

End clamp - CLIPFIX 35 - 3022218



Quick mounting end clamp for NS 35/7,5 DIN rail or NS 35/15 DIN rail, with marking option, width: 9.5 mm, color: gray

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End clamp - CLIPFIX 35-5 - 3022276



Quick mounting end clamp for NS 35/7,5 DIN rail or NS 35/15 DIN rail, with marking option, with parking option for FBS...5, FBS...6, KSS 5, KSS 6, width: 5.15 mm, color: gray

## Bolt connection terminal block - RSC 5-F - 3058156

### Accessories

End clamp - E/NS 35 N - 0800886



End clamp, width: 9.5 mm, color: gray

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End clamp - E/UK - 1201442



End clamp, width: 9.5 mm, height: 35.3 mm, material: PA, length: 50.5 mm, Mounting on a DIN rail NS 32 or NS 35, color: gray

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End clamp - E/UK 1 - 1201413



End clamps, for supporting the ends of double-level and three-level terminal blocks, width: 10 mm, color: gray

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End cover

End cover - D-RSC 5-F - 3059647



End cover, length: 53.3 mm, width: 2.2 mm, height: 37 mm, color: gray

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Labeled terminal marker

Zack marker strip - ZB 13 CUS - 0829132



Zack marker strip, can be ordered: Strip, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 13 mm, lettering field size: 13 x 10.5 mm, Number of individual labels: 5

## Bolt connection terminal block - RSC 5-F - 3058156

### Accessories

Zack Marker strip, flat - ZBF 13 CUS - 0829134



Zack Marker strip, flat, can be ordered: Strip, white, labeled according to customer specifications, mounting type: snap into flat marker groove, for terminal block width: 13 mm, lettering field size: 13 x 5.2 mm, Number of individual labels: 5

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### Partition plate

Separating plate - TS-KK 3 - 2770215



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

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### Screw bridge

Fixed bridge - FB 10-13 - 3059126



Fixed bridge, pitch: 13 mm, number of positions: 10, color: silver

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Fixed bridge - FB 10-13 ISO - 3059663



Fixed bridge, pitch: 13 mm, number of positions: 10, color: silver

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### Screwdriver tools

Screwdriver - SZK PH2 VDE - 1205163



Screwdriver, PH crosshead, VDE insulated, size: PH 2 x 100 mm, 2-component grip, with non-slip grip

## Bolt connection terminal block - RSC 5-F - 3058156

### Accessories

Screwdriver - SZS 1,2X8,0 VDE - 1205082



Screwdriver, slot-headed, VDE insulated, size: 1.2 x 8.0 x 175 mm, 2-component grip, with non-slip grip

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### Short-circuit connector

Short circuit kit for current transformers - CARRIER F-13 KIT - 3215070



Short-circuit kit for current transformer. Use with panel mounted RBO/RSC 5 feed-through terminals

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### Terminal marking

Zack marker strip - ZB 13:UNBEDRUCKT - 0829131



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: 13 mm, lettering field size: 13 x 10.5 mm, Number of individual labels: 5

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Zack Marker strip, flat - ZBF 13:UNBEDRUCKT - 0829133



Zack Marker strip, flat, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into flat marker groove, for terminal block width: 13 mm, lettering field size: 13 x 5.2 mm, Number of individual labels: 5