

3001381

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1-level terminal block with double connection on one side, cross section: 0.5 - 10 mm<sup>2</sup>, AWG: 24 - 6, width: 10.2 mm, color: gray

### Your advantages

- · These twin modular terminal blocks are designed for the basic task of potential branching
- Universal foot for mounting on NS 35.. or NS 32... DIN rails
- Two independent conductor connections can be used on the control cabinet side
- · Easy connection of different types of conductors with different cross sections
- · Can be bridged in the terminal center, even with neighboring feed-through terminal blocks aligned

#### Commercial data

| Item number                          | 3001381             |
|--------------------------------------|---------------------|
| Packing unit                         | 50 pc               |
| Sales key                            | BE12                |
| Product key                          | BE1212              |
| Catalog page                         | Page 467 (C-1-2019) |
| GTIN                                 | 4017918089870       |
| Weight per piece (including packing) | 22.32 g             |
| Weight per piece (excluding packing) | 21.534 g            |
| Customs tariff number                | 85369010            |
| Country of origin                    | PL                  |



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### Technical data

#### Product properties

| Product type               | Multi-conductor terminal block |
|----------------------------|--------------------------------|
| Product family             | UK                             |
| Number of connections      | 3                              |
| Number of rows             | 2                              |
| Potentials                 | 1                              |
| Insulation characteristics |                                |
| Overvoltage category       | III                            |
| Degree of pollution        | 3                              |

#### Electrical properties

| Rated surge voltage                             | 8 kV   |
|---|--------|
| Maximum power dissipation for nominal condition | 1.82 W |

### Connection data

| Number of connections per level | 3      |
|---------------------------------|--------|
| Nominal cross section           | 10 mm² |
|                                 |        |

#### 1 level

| i level   |  |
|---|--|
| Screw thread  | M4   |
| Note  | Feed-through   |
| Tightening torque   | 1.5 1.8 Nm   |
| Stripping length  | 11 mm  |
| Connection in acc. with standard  | IEC 60947-7-1  |
| Conductor cross section rigid   | 0.5 mm² 16 mm²   |
| Cross section AWG   | 20 6 (converted acc. to IEC)   |
| Conductor cross section flexible  | 0.5 mm² 10 mm²   |
| Conductor cross section, flexible [AWG]   | 20 8 (converted acc. to IEC)   |
| Conductor cross-section flexible (ferrule without plastic sleeve)                         | 0.5 mm² 10 mm²   |
| Flexible conductor cross section (ferrule with plastic sleeve)                            | 0.5 mm² 6 mm²  |
| 2 conductors with same cross section, solid   | 0.5 mm² 4 mm²  |
| 2 conductors with same cross section, flexible  | 0.5 mm² 4 mm²  |
| 2 conductors with same cross section, flexible, with ferrule without plastic sleeve       | 0.5 mm² 2.5 mm²  |
| 2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve | 0.5 mm² 4 mm²  |
| Nominal current   | 57 A (with 10 mm² conductor cross section)   |
| Maximum load current  | 76 A (In case of a 16 mm² conductor connection, the maximum load current must not be exceeded by the total current of all connected conductors.) |
| Nominal voltage   | 800 V  |
| Nominal cross section   | 10 mm²   |



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#### 1st level connection right

| Screw thread  | M3   |
|---|--|
| Tightening torque   | 0.6 0.8 Nm   |
| Stripping length  | 7 mm   |
| Connection in acc. with standard  | IEC 60947-7-1  |
| Conductor cross section rigid   | 0.2 mm² 6 mm²  |
| Cross section AWG   | 24 10 (converted acc. to IEC)  |
| Conductor cross section flexible  | 0.2 mm² 4 mm²  |
| Conductor cross-section flexible (ferrule without plastic sleeve)                         | 0.25 mm² 4 mm²   |
| Flexible conductor cross section (ferrule with plastic sleeve)                            | 0.25 mm² 4 mm²   |
| 2 conductors with same cross section, solid   | 0.2 mm² 1.5 mm²  |
| 2 conductors with same cross section, flexible  | 0.2 mm² 1.5 mm²  |
| 2 conductors with same cross section, flexible, with ferrule without plastic sleeve       | 0.25 mm² 1.5 mm²   |
| 2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve | 0.5 mm² 1.5 mm²  |
| Nominal current   | 32 A (with 6 mm² conductor cross section)  |
| Maximum load current  | 41 A (In the case of a 6 mm² conductor cross section, the maximum load current must not be exceeded by the total curren of all connected conductors) |
| Nominal voltage   | 800 V  |
| Nominal cross section   | 4 mm²  |

#### Dimensions

| Width              | 10.2 mm |
|--------------------|---------|
| Height             | 53 mm   |
| Depth on NS 32     | 52 mm   |
| Depth on NS 35/7,5 | 47 mm   |
| Depth on NS 35/15  | 54.5 mm |

### Material specifications

| Color   | gray        |
|---|-------------|
| 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)) | 130 °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)                        | 28 MJ/kg    |
| Surface flammability NFPA 130 (ASTM E 162)                              | passed      |



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| Specific optical density of smoke NFPA 130 (ASTM E 662)  | passed   |
|--|--|
| Smoke gas toxicity NFPA 130 (SMP 800C)   | passed   |
| ectrical 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 10 mm²  | 1.2 kA   |
| Short-time withstand current 4 mm²   | 0.48 kA  |
| Result   | Test passed  |
| Power-frequency withstand voltage  |  |
| Test voltage setpoint  | 2 kV   |
| Result   | Test passed  |
| Mechanical data  |  |
|  | No   |
| Open side panel  | No   |
|  | No   |
| Open side panel  | No   |
| Open side panel echanical tests  | No Test passed   |
| Open side panel echanical tests Mechanical strength  |  |
| Open side panel echanical tests  Mechanical strength Result  |  |
| Open side panel echanical tests  Mechanical strength Result  Attachment on the carrier   | Test passed  |
| Open side panel echanical tests  Mechanical strength Result  Attachment on the carrier  DIN rail/fixing support  | Test passed  NS 32/NS 35   |
| Open side panel  echanical tests  Mechanical strength  Result  Attachment on the carrier  DIN rail/fixing support  Test force setpoint   | Test passed  NS 32/NS 35 5 N   |
| Open side panel  echanical tests  Mechanical strength  Result  Attachment on the carrier  DIN rail/fixing support  Test force setpoint  Result   | Test passed  NS 32/NS 35 5 N   |
| Open side panel  echanical tests  Mechanical strength Result  Attachment on the carrier DIN rail/fixing support Test force setpoint Result  Test for conductor damage and slackening   | Test passed  NS 32/NS 35 5 N  Test passed  |
| Open side panel  echanical tests  Mechanical strength Result  Attachment on the carrier  DIN rail/fixing support  Test force setpoint Result  Test for conductor damage and slackening Rotation speed  | Test passed  NS 32/NS 35 5 N Test passed  10 rpm   |
| Open side panel  echanical tests  Mechanical strength  Result  Attachment on the carrier  DIN rail/fixing support  Test force setpoint  Result  Test for conductor damage and slackening  Rotation speed  Revolutions  | Test passed  NS 32/NS 35 5 N Test passed  10 rpm 135   |
| Open side panel  echanical tests  Mechanical strength  Result  Attachment on the carrier  DIN rail/fixing support  Test force setpoint  Result  Test for conductor damage and slackening  Rotation speed  Revolutions  | Test passed  NS 32/NS 35  5 N  Test passed  10 rpm  135  0.2 mm² / 0.2 kg  |
| Open side panel  echanical tests  Mechanical strength  Result  Attachment on the carrier  DIN rail/fixing support  Test force setpoint  Result  Test for conductor damage and slackening  Rotation speed  Revolutions  | Test passed  NS 32/NS 35 5 N  Test passed  10 rpm 135 0.2 mm² / 0.2 kg 4 mm² / 0.9 kg                                  |
| Open side panel  echanical tests  Mechanical strength Result  Attachment on the carrier  DIN rail/fixing support  Test force setpoint Result  Test for conductor damage and slackening  Rotation speed  Revolutions  Conductor cross section/weight  | Test passed  NS 32/NS 35  5 N  Test passed  10 rpm  135  0.2 mm² / 0.2 kg  4 mm² / 0.9 kg  6 mm² / 1.4 kg              |
| Open side panel  echanical tests  Mechanical strength Result  Attachment on the carrier  DIN rail/fixing support  Test force setpoint  Result  Test for conductor damage and slackening  Rotation speed  Revolutions  Conductor cross section/weight   | Test passed  NS 32/NS 35  5 N  Test passed  10 rpm  135  0.2 mm² / 0.2 kg  4 mm² / 0.9 kg  6 mm² / 1.4 kg              |
| Open side panel  echanical tests  Mechanical strength Result  Attachment on the carrier DIN rail/fixing support Test force setpoint Result  Test for conductor damage and slackening Rotation speed Revolutions Conductor cross section/weight  Test for conductor damage and slackening                               | Test passed  NS 32/NS 35  5 N  Test passed  10 rpm  135  0.2 mm² / 0.2 kg  4 mm² / 0.9 kg  6 mm² / 1.4 kg  Test passed |
| Open side panel  echanical tests  Mechanical strength Result  Attachment on the carrier  DIN rail/fixing support  Test force setpoint Result  Test for conductor damage and slackening Rotation speed Revolutions  Conductor cross section/weight  Test for conductor damage and slackening Rotation speed Revolutions | Test passed  NS 32/NS 35 5 N Test passed  10 rpm 135 0.2 mm² / 0.2 kg 4 mm² / 0.9 kg 6 mm² / 1.4 kg Test passed        |



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|  | 16 mm² / 2.9 kg   |
|--|---|
| Result                                   | Test passed   |
| vironmental and real-life conditions     |   |
| Needle-flame test                        |   |
| Time of exposure                         | 30 s  |
| 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)   |
| 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 %   |
| andards and regulations                  |   |
| Connection in acc. with standard         | IEC 60947-7-1   |
|  | IEC 60947-7-1   |
| punting                                  |   |
| Mounting type                            | NS 35/7,5   |
|  | NS 35/15  |
|  | NS 32   |

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