

## Feed-through terminal block - BT 1,25 - 3281122

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Feed-through terminal block, nom. voltage: 690 V, nominal current: 17.5 A, connection method: Ring cable lug, number of connections: 2, width: 7 mm, color: black, mounting type: NS 35/7,5, NS 35/15

### Why buy this product

- ✓ Convenient ring cable lug connection thanks to the screw connection principle with spring-guided screw; maintenance-free with integrated screw locking
- ✓ Easy potential distribution with time-saving jumper system
- ✓ Safety for users thanks to integrated shock protection
- ✓ Maximum overview thanks to extensive marking and labeling of every terminal point
- ✓ Reduction in logistics costs with the uniform CLIPLINE complete system accessories
- ✓ Flexible use, thanks to DIN rail and direct mounting



### Key Commercial Data

|                        |   |
|------------------------|---|
| Packing unit           | 50 STK  |
| Minimum order quantity | 50 STK  |
| GTIN                   | <br>4 055626 118093 |
| GTIN                   | 4055626118093   |

### Technical data

#### General

|  |                     |
|--|---------------------|
| Number of levels                       | 1                   |
| Number of connections                  | 2                   |
| Potentials                             | 1                   |
| Nominal cross section                  | 1.5 mm <sup>2</sup> |
| Color                                  | black               |
| Insulating material                    | PC                  |
| Flammability rating according to UL 94 | V0                  |
| Rated surge voltage                    | 6 kV                |
| Degree of pollution                    | 3                   |

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## Technical data

### General

|   |                                     |
|---|-------------------------------------|
| Overvoltage category  | III                                 |
| Insulating material group   | IIIa                                |
| Maximum power dissipation for nominal condition   | 0.56 W                              |
| Ambient temperature (operation)   | -40 °C ... 110 °C                   |
| Maximum load current  | 17.5 A                              |
| Nominal current I <sub>N</sub>  | 17.5 A                              |
| Nominal voltage U <sub>N</sub>  | 690 V                               |
| Open side panel   | Yes                                 |
| Shock protection test specification   | DIN EN 50274 (VDE 0660-514):2002-11 |
| Back of the hand protection   | guaranteed                          |
| Finger protection   | guaranteed                          |
| Result of surge voltage test  | Test passed                         |
| Surge voltage test setpoint   | 7.3 kV                              |
| Result of power-frequency withstand voltage test  | Test passed                         |
| Power frequency withstand voltage setpoint  | 1.89 kV                             |
| Result of the test for mechanical stability of terminal points (5 x conductor connection) | Test passed                         |
| Result of bending test  | Test passed                         |
| Bending test rotation speed   | 10 rpm                              |
| Bending test turns  | 135                                 |
| Bending test conductor cross section/weight   | 1.5 mm <sup>2</sup> / 0.4 kg        |
| Tensile test result   | Test passed                         |
| Conductor cross section tensile test  | 1.5 mm <sup>2</sup>                 |
| Tractive force setpoint   | 40 N                                |
| Conductor cross section tensile test  | 1.25 mm <sup>2</sup>                |
| Tractive force setpoint   | 40 N                                |
| Result of tight fit on support  | Test passed                         |
| Tight fit on carrier  | NS 35                               |
| Setpoint  | 1 N                                 |
| Result of voltage-drop test   | Test passed                         |
| Requirements, voltage drop  | ≤ 3.2 mV                            |
| Result of temperature-rise test   | Test passed                         |
| Short circuit stability result  | Test passed                         |
| Conductor cross section short circuit testing   | 1.5 mm <sup>2</sup>                 |
| Short-time current  | 0.18 kA                             |
| Conductor cross section short circuit testing   | 1.25 mm <sup>2</sup>                |
| Short-time current  | 0.15 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 |

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## Technical data

### General

|   |  |
|---|--|
| Test spectrum   | Service life test category 2, bogie-mounted    |
| Test 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  | 3.12 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  | 30g  |
| Shock duration  | 18 ms  |
| Test directions   | X-, Y- and Z-axis (pos. and neg.)              |
| Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21)) | 130 °C   |

### Dimensions

|                  |         |
|------------------|---------|
| Width            | 7 mm    |
| Length           | 42 mm   |
| Height NS 35/7,5 | 33.5 mm |
| Height NS 35/15  | 41 mm   |

### Connection data

|   |                      |
|---|----------------------|
| Connection method                           | Ring cable lug       |
| Connection in acc. with standard            | IEC 60947-7-1        |
| Conductor cross section flexible min.       | 0.14 mm <sup>2</sup> |
| Conductor cross section flexible max.       | 1.5 mm <sup>2</sup>  |
| Min. AWG conductor cross section, flexible  | 26                   |
| Max. AWG conductor cross section, flexible  | 16                   |
| Cable lug connection according to standard  | DIN 46234            |
| Min. cross section for cable lug connection | 0.14 mm <sup>2</sup> |
| Max. cross section for cable lug connection | 1.5 mm <sup>2</sup>  |
| AWG min                                     | 26                   |
| AWG max                                     | 16                   |
| Hole diameter, min.                         | 3.2 mm               |
| Cable lug width, max.                       | 5.8 mm               |
| Bolt diameter                               | 3 mm                 |
| Screw thread                                | M3                   |
| Tightening torque, min                      | 0.6 Nm               |
| Tightening torque max                       | 1 Nm                 |
| Screw thread                                | M3                   |
| Tightening torque, min                      | 0.6 Nm               |
| Tightening torque max                       | 1 Nm                 |

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## Technical data

### Connection data (JIS standard)

|   |                      |
|---|----------------------|
| Connection method                               | Ring cable lug       |
| Connection in acc. with standard                | JIS 8207-7-1         |
| Single-wire/terminal point, solid diameter min. | 0.5 mm               |
| Single-wire/terminal point, solid diameter max. | 1.2 mm               |
| Conductor cross section flexible min.           | 0.5 mm <sup>2</sup>  |
| Conductor cross section flexible max.           | 1.25 mm <sup>2</sup> |
| Cable lug connection according to standard      | JIS 8207-7-1         |
| Min. cross section for cable lug connection     | 0.5 mm <sup>2</sup>  |
| Max. cross section for cable lug connection     | 1.25 mm <sup>2</sup> |
| Hole diameter, min.                             | 3.2 mm               |
| Cable lug width, max.                           | 5.8 mm               |
| Bolt diameter                                   | 3 mm                 |
| Screw thread                                    | M3                   |
| Tightening torque, min                          | 0.6 Nm               |
| Tightening torque max                           | 1 Nm                 |
| Nominal current I <sub>N</sub>                  | 16 A                 |
| Maximum load current                            | 16 A                 |
| Nominal voltage U <sub>N</sub>                  | 600 V                |

### Standards and Regulations

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

### Environmental Product Compliance

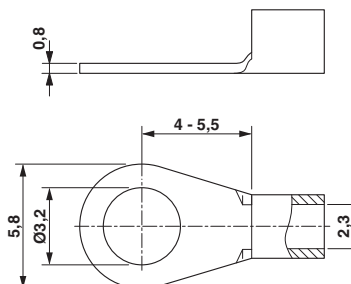
|            |   |
|------------|---|
| China RoHS | Environmentally friendly use period: unlimited = EFUP-e |
|            | No hazardous substances above threshold values          |

## Drawings

Circuit diagram

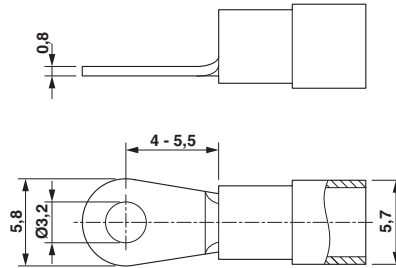


Dimensional drawing



# Feed-through terminal block - BT 1,25 - 3281122

Dimensional drawing



## Approvals

### Approvals

#### Approvals

UL Recognized / cUL Recognized / CSA / DNV GL / 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         | 10 A  | 10 A  |              |
| mm <sup>2</sup> /AWG/kcmil | 26-16 | 26-16   |              |

|                            |       |   |              |
|----------------------------|-------|---|--------------|
| 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         | 10 A  | 10 A  |              |
| mm <sup>2</sup> /AWG/kcmil | 26-16 | 26-16   |              |


|                    |       |   |       |
|--------------------|-------|---|-------|
| CSA                |       | <a href="http://www.csagroup.org/services-industries/product-listing/">http://www.csagroup.org/services-industries/product-listing/</a> | 13631 |
|                    | B     | C   |       |
| Nominal voltage UN | 600 V | 600 V   |       |

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### Approvals

|                            | B     | C     |
|----------------------------|-------|-------|
| Nominal current IN         | 10 A  | 10 A  |
| mm <sup>2</sup> /AWG/kcmil | 26-16 | 26-16 |

|        |   |            |
|--------|---|------------|
| DNV GL | <a href="http://exchange.dnv.com/tari/">http://exchange.dnv.com/tari/</a> | TAE00001S2 |
|--------|---|------------|

|                  |   |   |
|------------------|---|---|
| cULus 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> |
|------------------|---|---|

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