

# MT 1,5 - Micro terminal

3100305

<https://www.phoenixcontact.com/us/products/3100305>



Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



Micro terminal, nom. voltage: 400 V, nominal current: 17.5 A, number of connections: 2, connection method: Screw connection, Rated cross section: 1.5 mm<sup>2</sup>, cross section: 0.14 mm<sup>2</sup> - 1.5 mm<sup>2</sup>, mounting type: NS 15, color: gray

## Your advantages

- Nominal cross section of 1.5 mm<sup>2</sup>
- Design width of just 4.2 mm
- Space saving thanks to compact design and mounting option on a 15 mm DIN rail
- Clear arrangement thanks to marking of all terminal points
- Snap-on foot for NS 15 DIN rails
- Easy potential distribution thanks to standardized screw bridges in the terminal center

## Commercial data

|                                      |               |
|--------------------------------------|---------------|
| Item number                          | 3100305       |
| Packing unit                         | 50 pc         |
| Minimum order quantity               | 50 pc         |
| Sales key                            | BE12          |
| Product key                          | BE1261        |
| GTIN                                 | 4017918099251 |
| Weight per piece (including packing) | 2.286 g       |
| Weight per piece (excluding packing) | 2.283 g       |
| Customs tariff number                | 85369010      |
| Country of origin                    | TR            |

# MT 1,5 - Micro terminal

3100305

<https://www.phoenixcontact.com/us/products/3100305>



## Technical data

### Product properties

|                       |                          |
|-----------------------|--------------------------|
| Product type          | Miniature 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                             | 4 kV   |
| Maximum power dissipation for nominal condition | 0.56 W |

### Connection data

|                                                                                     |                                                           |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------|
| Number of connections per level                                                     | 2                                                         |
| Nominal cross section                                                               | 1.5 mm <sup>2</sup>                                       |
| Connection method                                                                   | Screw connection                                          |
| Screw thread                                                                        | M2                                                        |
| Tightening torque                                                                   | 0.22 ... 0.25 Nm                                          |
| Stripping length                                                                    | 6 mm                                                      |
| Internal cylindrical gage                                                           | A1                                                        |
| Connection in acc. with standard                                                    | IEC 60947-7-1                                             |
| Conductor cross-section rigid                                                       | 0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>              |
| Cross section AWG                                                                   | 26 ... 16 (converted acc. to IEC)                         |
| Conductor cross-section flexible                                                    | 0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>              |
| Conductor cross-section, flexible [AWG]                                             | 26 ... 16 (converted acc. to IEC)                         |
| Conductor cross-section flexible (ferrule without plastic sleeve)                   | 0.25 mm <sup>2</sup> ... 0.75 mm <sup>2</sup>             |
| Flexible conductor cross-section (ferrule with plastic sleeve)                      | 0.25 mm <sup>2</sup> ... 0.75 mm <sup>2</sup>             |
| 2 conductors with same cross section, solid                                         | 0.14 mm <sup>2</sup> ... 0.5 mm <sup>2</sup>              |
| 2 conductors with same cross section, flexible                                      | 0.14 mm <sup>2</sup> ... 0.5 mm <sup>2</sup>              |
| 2 conductors with same cross section, flexible, with ferrule without plastic sleeve | 0.25 mm <sup>2</sup> ... 0.34 mm <sup>2</sup>             |
| Nominal current                                                                     | 17.5 A                                                    |
| Maximum load current                                                                | 17.5 A (with 1.5 mm <sup>2</sup> conductor cross-section) |
| Nominal voltage                                                                     | 400 V                                                     |
| Nominal cross section                                                               | 1.5 mm <sup>2</sup>                                       |

### Dimensions

|                 |        |
|-----------------|--------|
| Width           | 4.2 mm |
| End cover width | 1 mm   |
| Height          | 22 mm  |

# MT 1,5 - Micro terminal



3100305

<https://www.phoenixcontact.com/us/products/3100305>

|                |         |
|----------------|---------|
| Depth on NS 15 | 23.5 mm |
|----------------|---------|

## Material specifications

|                                                                  |                 |
|------------------------------------------------------------------|-----------------|
| Color                                                            | gray (RAL 7042) |
| Flammability rating according to UL 94                           | V0              |
| Insulating material group                                        | I               |
| Insulating material                                              | PA              |
| Static insulating material application in cold                   | -60 °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     |
| 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 | 4.8 kV      |
| Result                | Test passed |

### Temperature-rise test

|                                                  |                                     |
|--------------------------------------------------|-------------------------------------|
| Requirement temperature-rise test                | Increase in temperature $\leq 45$ K |
| Result                                           | Test passed                         |
| Short-time withstand current 1.5 mm <sup>2</sup> | 0.18 kA                             |
| Result                                           | Test passed                         |

### Power-frequency withstand voltage

|                       |             |
|-----------------------|-------------|
| Test voltage setpoint | 1.89 kV     |
| Result                | Test passed |

## Mechanical properties

### Mechanical data

|                 |     |
|-----------------|-----|
| Open side panel | Yes |
|-----------------|-----|

## Mechanical tests

### Attachment on the carrier

|                         |             |
|-------------------------|-------------|
| DIN rail/fixing support | NS 15       |
| Result                  | Test passed |

## Environmental and real-life conditions

### Needle-flame test

|                  |      |
|------------------|------|
| Time of exposure | 30 s |
|------------------|------|

# MT 1,5 - Micro terminal



3100305

<https://www.phoenixcontact.com/us/products/3100305>

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

## Oscillation/broadband noise

|                        |                                                |
|------------------------|------------------------------------------------|
| Specification          | DIN EN 50155 (VDE 0115-200):2022-06            |
| Spectrum               | Long 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

|                                |                                   |
|--------------------------------|-----------------------------------|
| 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, 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 %                                                                                                                |

## Standards and regulations

|                                  |               |
|----------------------------------|---------------|
| Connection in acc. with standard | IEC 60947-7-1 |
|----------------------------------|---------------|

## Mounting

|               |       |
|---------------|-------|
| Mounting type | NS 15 |
|---------------|-------|

# MT 1,5 - Micro terminal

3100305

<https://www.phoenixcontact.com/us/products/3100305>



## Drawings

Circuit diagram



# MT 1,5 - Micro terminal

3100305

<https://www.phoenixcontact.com/us/products/3100305>



## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/3100305>

|  <b>CSA</b><br>Approval ID: 13631 |                       |                       |                   |                             |
|--------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|-------------------|-----------------------------|
|                                                                                                                    | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
| keine                                                                                                              |                       |                       |                   |                             |
|                                                                                                                    | 300 V                 | 15 A                  | 28 - 14           | -                           |

|  <b>EAC</b><br>Approval ID: KZ7500651131219505 |  |  |  |  |
|---------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|
|---------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|

|  <b>cULus Recognized</b><br>Approval ID: E60425 |                       |                       |                   |                             |
|----------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|-------------------|-----------------------------|
|                                                                                                                                  | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
| B                                                                                                                                |                       |                       |                   |                             |
|                                                                                                                                  | 300 V                 | 15 A                  | 30 - 14           | -                           |
| F                                                                                                                                |                       |                       |                   |                             |
|                                                                                                                                  | 400 V                 | 15 A                  | 30 - 14           | -                           |
| D                                                                                                                                |                       |                       |                   |                             |
|                                                                                                                                  | 300 V                 | 10 A                  | 30 - 14           | -                           |

| <b>CCA</b><br>Approval ID: NTR-NL 4240 |                       |                       |                   |                             |
|----------------------------------------|-----------------------|-----------------------|-------------------|-----------------------------|
|                                        | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
| keine                                  |                       |                       |                   |                             |
|                                        | 400 V                 | -                     | -                 | - 1.5                       |

|  <b>BV</b><br>Approval ID: 07774/E0 BV |  |  |  |  |
|---------------------------------------------------------------------------------------------------------------------------|--|--|--|--|
|---------------------------------------------------------------------------------------------------------------------------|--|--|--|--|

| <b>DNV</b><br>Approval ID: TAE00001CT |  |  |  |  |
|---------------------------------------|--|--|--|--|
|---------------------------------------|--|--|--|--|

# MT 1,5 - Micro terminal

3100305

<https://www.phoenixcontact.com/us/products/3100305>



## Classifications

### ECLASS

|             |          |
|-------------|----------|
| ECLASS-13.0 | 27250101 |
| ECLASS-15.0 | 27250101 |

### ETIM

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

### UNSPSC

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

# MT 1,5 - Micro terminal

3100305

<https://www.phoenixcontact.com/us/products/3100305>



## Environmental product compliance

|                                         |                                          |
|-----------------------------------------|------------------------------------------|
| EU RoHS                                 |                                          |
| Fulfills EU RoHS substance requirements | Yes, No exemptions                       |
| China RoHS                              |                                          |
| Environment friendly use period (EFUP)  | EFUP-E                                   |
|                                         | No hazardous substances above the limits |
| EU REACH SVHC                           |                                          |
| REACH candidate substance (CAS No.)     | No substance above 0.1 wt%               |

Phoenix Contact 2025 © - all rights reserved  
<https://www.phoenixcontact.com>

Phoenix Contact USA  
586 Fulling Mill Road  
Middletown, PA 17057, United States  
(+717) 944-1300  
[info@phoenixcon.com](mailto:info@phoenixcon.com)