

# UT 2,5 VT - Feed-through terminal block



3044078

<https://www.phoenixcontact.com/us/products/3044078>

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.



Feed-through terminal block, nom. voltage: 1000 V, nominal current: 24 A, number of connections: 2, connection method: Screw connection, Rated cross section: 2.5 mm<sup>2</sup>, cross section: 0.14 mm<sup>2</sup> - 4 mm<sup>2</sup>, mounting type: NS 35/7,5, NS 35/15, color: violet

## Your advantages

- The large wiring space enables the connection of solid and stranded conductors without ferrules, even above the nominal cross section
- As well as saving space, the compact design enables user-friendly wiring in a small amount of space
- Optimum screwdriver guidance through closed screw shafts
- Tested for railway applications
- The cable entry funnel enables the use of conductors with ferrules and plastic collars within the nominal cross section

## Commercial data

|                                      |               |
|--------------------------------------|---------------|
| Item number                          | 3044078       |
| Packing unit                         | 50 pc         |
| Minimum order quantity               | 50 pc         |
| Sales key                            | BE01          |
| Product key                          | BE1111        |
| GTIN                                 | 4055626260303 |
| Weight per piece (including packing) | 7.886 g       |
| Weight per piece (excluding packing) | 7.37 g        |
| Customs tariff number                | 85369010      |
| Country of origin                    | DE            |

# UT 2,5 VT - Feed-through terminal block



3044078

<https://www.phoenixcontact.com/us/products/3044078>

## Technical data

### Product properties

|                       |                             |
|-----------------------|-----------------------------|
| Product type          | Feed-through terminal block |
| Product family        | UT                          |
| Area of application   | Railway industry            |
|                       | Machine building            |
|                       | Plant engineering           |
|                       | Process industry            |
| Number of connections | 2                           |
| Number of rows        | 1                           |
| Potentials            | 1                           |

### Insulation characteristics

|                      |     |
|----------------------|-----|
| Overvoltage category | III |
| Degree of pollution  | 3   |

### Electrical properties

|                                                 |        |
|-------------------------------------------------|--------|
| Rated surge voltage                             | 8 kV   |
| Maximum power dissipation for nominal condition | 0.77 W |

### Connection data

|                                 |                     |
|---------------------------------|---------------------|
| Number of connections per level | 2                   |
| Nominal cross section           | 2.5 mm <sup>2</sup> |
| Rated cross section AWG         | 12                  |

### Level 1 above 1 below 1

|                                                                                           |                                              |
|-------------------------------------------------------------------------------------------|----------------------------------------------|
| Screw thread                                                                              | M3                                           |
| Tightening torque                                                                         | 0.5 ... 0.6 Nm                               |
| Stripping length                                                                          | 9 mm                                         |
| Internal cylindrical gage                                                                 | A3                                           |
| Connection in acc. with standard                                                          | IEC 60947-7-1                                |
| Conductor cross section rigid                                                             | 0.14 mm <sup>2</sup> ... 4 mm <sup>2</sup>   |
| Cross section AWG                                                                         | 26 ... 12 (converted acc. to IEC)            |
| Conductor cross section flexible                                                          | 0.14 mm <sup>2</sup> ... 4 mm <sup>2</sup>   |
| Conductor cross section, flexible [AWG]                                                   | 26 ... 12 (converted acc. to IEC)            |
| Conductor cross-section flexible (ferrule without plastic sleeve)                         | 0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup> |
| Flexible conductor cross section (ferrule with plastic sleeve)                            | 0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup> |
| 2 conductors with same cross section, solid                                               | 0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup> |
| 2 conductors with same cross section, flexible                                            | 0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup> |
| 2 conductors with same cross section, flexible, with ferrule without plastic sleeve       | 0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup> |
| 2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve | 0.5 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>  |
| Nominal current                                                                           | 24 A                                         |

# UT 2,5 VT - Feed-through terminal block



3044078

<https://www.phoenixcontact.com/us/products/3044078>

|                       |                                                                                                                              |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------|
| Maximum load current  | 32 A (with 4 mm <sup>2</sup> conductor cross section)                                                                        |
| Nominal voltage       | 1000 V                                                                                                                       |
| Note                  | Note: Product releases, connection cross sections and notes on connecting aluminum cables can be found in the download area. |
| Nominal cross section | 2.5 mm <sup>2</sup>                                                                                                          |

## Ex data

### Rated data (ATEX/IECEx)

|                                                                          |                                      |
|--------------------------------------------------------------------------|--------------------------------------|
| Identification                                                           | Ex II 2 GD Ex eb IIC Gb              |
| Operating temperature range                                              | -60 °C ... 110 °C                    |
| Ex-certified accessories                                                 | 3047028 D-UT 2,5/10                  |
|                                                                          | 3047167 ATP-UT                       |
|                                                                          | 1205053 SZS 0,6X3,5                  |
|                                                                          | 3022276 CLIPFIX 35-5                 |
|                                                                          | 3022218 CLIPFIX 35                   |
| List of bridges                                                          | Plug-in bridge / FBS 2-5 / 3030161   |
|                                                                          | Plug-in bridge / FBS 3-5 / 3030174   |
|                                                                          | Plug-in bridge / FBS 4-5 / 3030187   |
|                                                                          | Plug-in bridge / FBS 5-5 / 3030190   |
|                                                                          | Plug-in bridge / FBS 10-5 / 3030213  |
|                                                                          | Plug-in bridge / FBS 20-5 / 3030226  |
| Bridge data                                                              | 21 A (2.5 mm <sup>2</sup> )          |
| Ex temperature increase                                                  | 40 K (23.3 A / 2.5 mm <sup>2</sup> ) |
| for bridging with bridge                                                 | 690 V                                |
| - At bridging between non-adjacent terminal blocks                       | 352 V                                |
| - At bridging between non-adjacent terminal blocks via PE terminal block | 275 V                                |
| - At cut-to-length bridging with cover                                   | 220 V                                |
| - At cut-to-length bridging with partition plate                         | 275 V                                |
| Rated insulation voltage                                                 | 630 V                                |
| output                                                                   | (Permanent)                          |

### Ex level General

|                      |         |
|----------------------|---------|
| Rated voltage        | 690 V   |
| Rated current        | 21 A    |
| Maximum load current | 28 A    |
| Contact resistance   | 0.41 mΩ |

### Ex connection data General

|                              |                                              |
|------------------------------|----------------------------------------------|
| Torque range                 | 0.5 Nm ... 0.6 Nm                            |
| Nominal cross section        | 2.5 mm <sup>2</sup>                          |
| Rated cross section AWG      | 14                                           |
| Connection capacity rigid    | 0.14 mm <sup>2</sup> ... 4 mm <sup>2</sup>   |
| Connection capacity AWG      | 26 ... 12                                    |
| Connection capacity flexible | 0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup> |

# UT 2,5 VT - Feed-through terminal block



3044078

<https://www.phoenixcontact.com/us/products/3044078>

|                                                       |                                              |
|-------------------------------------------------------|----------------------------------------------|
| Connection capacity AWG                               | 26 ... 14                                    |
| 2 conductors with same cross section, solid           | 0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup> |
| 2 conductors with the same cross-section AWG rigid    | 26 ... 16                                    |
| 2 conductors with same cross section, stranded        | 0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup> |
| 2 conductors with the same cross-section AWG flexible | 26 ... 16                                    |

## Dimensions

|                    |         |
|--------------------|---------|
| Width              | 5.2 mm  |
| End cover width    | 2.2 mm  |
| Height             | 47.7 mm |
| Depth on NS 35/7,5 | 47.5 mm |
| Depth on NS 35/15  | 55 mm   |

## Material specifications

|                                                                         |                   |
|-------------------------------------------------------------------------|-------------------|
| Color                                                                   | violet (RAL 4005) |
| 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)) | 125 °C            |
| Relative insulation material temperature index (Elec., UL 746 B)        | 130 °C            |

## Electrical 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 2.5 mm <sup>2</sup> | 0.3 kA                         |
| Short-time withstand current 4 mm <sup>2</sup>   | 0.48 kA                        |
| Result                                           | Test passed                    |

### Power-frequency withstand voltage

|                       |             |
|-----------------------|-------------|
| Test voltage setpoint | 2.2 kV      |
| Result                | Test passed |

## Mechanical properties

### Mechanical data

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

## Mechanical tests

# UT 2,5 VT - Feed-through terminal block



3044078

<https://www.phoenixcontact.com/us/products/3044078>

## Mechanical strength

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

## Attachment on the carrier

|                         |             |
|-------------------------|-------------|
| DIN rail/fixing support | NS 35       |
| Test force setpoint     | 1 N         |
| Result                  | Test passed |

## Test for conductor damage and slackening

|                                |                               |
|--------------------------------|-------------------------------|
| Rotation speed                 | 10 rpm                        |
| Revolutions                    | 135                           |
| Conductor cross section/weight | 0.14 mm <sup>2</sup> / 0.2 kg |
|                                | 2.5 mm <sup>2</sup> / 0.7 kg  |
|                                | 4 mm <sup>2</sup> / 0.9 kg    |
| Result                         | Test passed                   |

## Environmental and real-life conditions

### Needle-flame test

|                  |             |
|------------------|-------------|
| Time of exposure | 30 s        |
| Result           | Test passed |

### Oscillation/broadband noise

|                        |                                                  |
|------------------------|--------------------------------------------------|
| Specification          | DIN EN 50155 (VDE 0115-200):2008-03              |
| Spectrum               | Long life test category 1, class B, body mounted |
| Frequency              | $f_1 = 5 \text{ Hz}$ to $f_2 = 150 \text{ Hz}$   |
| ASD level              | 1.857 (m/s <sup>2</sup> ) <sup>2</sup> /Hz       |
| Acceleration           | 0.8g                                             |
| Test duration per axis | 5 h                                              |
| Test directions        | X-, Y- and Z-axis                                |
| Result                 | Test passed                                      |

### Shocks

|                                |                                     |
|--------------------------------|-------------------------------------|
| Specification                  | DIN EN 50155 (VDE 0115-200):2008-03 |
| Pulse shape                    | Half-sine                           |
| Acceleration                   | 5g                                  |
| Shock duration                 | 30 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                                                                                                              |

# UT 2,5 VT - Feed-through terminal block



3044078

<https://www.phoenixcontact.com/us/products/3044078>

|                                          |                 |
|------------------------------------------|-----------------|
| 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 35/7,5 |
|               | NS 35/15  |

# UT 2,5 VT - Feed-through terminal block

3044078

<https://www.phoenixcontact.com/us/products/3044078>



## Drawings

Circuit diagram



# UT 2,5 VT - Feed-through terminal block



3044078

<https://www.phoenixcontact.com/us/products/3044078>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/3044078>

**DNV**

Approval ID: TAE00001S9



**CSA**

Approval ID: 13631



**cULus Recognized**

Approval ID: E60425



**LR**

Approval ID: LR24100022TA



**CSA**

Approval ID: 13631



**cULus Recognized**

Approval ID: E60425



**ATEX**

Approval ID: KEMA04ATEX2048U

|                          | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
|--------------------------|-----------------------|-----------------------|-------------------|-----------------------------|
| Only flexible conductors | 690 V                 | 21 A                  | -                 | 0.14 - 2.5                  |
| Only rigid conductors    | 690 V                 | 28 A                  | -                 | 0.14 - 4                    |



**cUL Recognized**

Approval ID: E192998

|             | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
|-------------|-----------------------|-----------------------|-------------------|-----------------------------|
| Use group B | 600 V                 | 20 A                  | 26 - 12           | -                           |
| Use group C | 600 V                 | 20 A                  | 26 - 12           | -                           |



**EAC Ex**

Approval ID: KZ 7500525010101950

# UT 2,5 VT - Feed-through terminal block

3044078

<https://www.phoenixcontact.com/us/products/3044078>



**IECEx**

Approval ID: IECEx KEM 06.0027U

|                          | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
|--------------------------|-----------------------|-----------------------|-------------------|-----------------------------|
| Only flexible conductors | 690 V                 | 21 A                  | -                 | 0.14 - 2.5                  |
| Only rigid conductors    | 690 V                 | 28 A                  | -                 | 0.14 - 4                    |



**UL Recognized**

Approval ID: E192998

|             | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
|-------------|-----------------------|-----------------------|-------------------|-----------------------------|
| Use group B |                       |                       |                   |                             |
|             | 600 V                 | 20 A                  | 26 - 12           | -                           |
| Use group C |                       |                       |                   |                             |
|             | 600 V                 | 20 A                  | 26 - 12           | -                           |



**CCC**

Approval ID: 2020322313000622



**UKCA-EX**

Approval ID: DEKRA 21UKEX0304U

# UT 2,5 VT - Feed-through terminal block



3044078

<https://www.phoenixcontact.com/us/products/3044078>

## Classifications

### ECLASS

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

### ETIM

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

### UNSPSC

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

# UT 2,5 VT - Feed-through terminal block



3044078

<https://www.phoenixcontact.com/us/products/3044078>

## Environmental product compliance

### EU RoHS

|                                         |      |
|-----------------------------------------|------|
| Fulfills EU RoHS substance requirements | Yes  |
| Exemption                               | 6(c) |

### China RoHS

|                                        |                                                                                                                                                                                                                                   |
|----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Environment friendly use period (EFUP) | EFUP-50                                                                                                                                                                                                                           |
|                                        | An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required. |

### EU REACH SVHC

|                                     |                                      |
|-------------------------------------|--------------------------------------|
| REACH candidate substance (CAS No.) | Lead(CAS: 7439-92-1)                 |
| SCIP                                | 68434601-3437-4a61-a3fa-c1d6f18d2936 |

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)