

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



3044077

<https://www.phoenixcontact.com/us/products/3044077>

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: brown

## 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	3044077
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	BE01
Product key	BE1111
GTIN	4046356689656
Weight per piece (including packing)	7.905 g
Weight per piece (excluding packing)	7.398 g
Customs tariff number	85369010
Country of origin	DE

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



3044077

<https://www.phoenixcontact.com/us/products/3044077>

## 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 BN - Feed-through terminal block



3044077

<https://www.phoenixcontact.com/us/products/3044077>

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	⊕ 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 BN - Feed-through terminal block



3044077

<https://www.phoenixcontact.com/us/products/3044077>

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	brown (RAL 8028)
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 BN - Feed-through terminal block



3044077

<https://www.phoenixcontact.com/us/products/3044077>

## 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 BN - Feed-through terminal block



3044077

<https://www.phoenixcontact.com/us/products/3044077>

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 BN - Feed-through terminal block

3044077

<https://www.phoenixcontact.com/us/products/3044077>



## Drawings

### Circuit diagram



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



3044077

<https://www.phoenixcontact.com/us/products/3044077>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/3044077>

### DNV

Approval ID: TAE00001S9



### CSA

Approval ID: 13631



### IECEE CB Scheme

Approval ID: DE1-63061\_M1

Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
1000 V	24 A	-	0.2 - 2.5



### cULus Recognized

Approval ID: E60425

	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	-
Multi-conductor connection	600 V	20 A	26 - 16	-
Use group C				
	600 V	20 A	26 - 12	-
Multi-conductor connection	600 V	20 A	26 - 16	-



### LR

Approval ID: LR24100022TA



### VDE approval of drawings

Approval ID: 40013658

Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
1000 V	24 A	-	0.2 - 2.5



### CSA

Approval ID: 13631



### ATEX

Approval ID: KEMA04ATEX2048U



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



3044077

<https://www.phoenixcontact.com/us/products/3044077>

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



**EAC Ex**  
Approval ID: KZ 7500525010101950



**IEC Ex**  
Approval ID: IECEx KEM 06.0027U

	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $mm^2$
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 $mm^2$
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 BN - Feed-through terminal block



3044077

<https://www.phoenixcontact.com/us/products/3044077>

## Classifications

### ECLASS

ECLASS-13.0

27250101

### ETIM

ETIM 9.0

EC000897

### UNSPSC

UNSPSC 21.0

39121400

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



3044077

<https://www.phoenixcontact.com/us/products/3044077>

## 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	e43727a1-567b-46f4-900d-b0f51b2abd91

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)