UT 16 BK - Feed-through terminal block

3044197

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Feed-through terminal block, nom. voltage: 1000 V, nominal current: 76 A, number of connections: 2, connection method: Screw connection, Rated cross section: 16 mm^2, cross section: 1.5 mm^2 - 25 mm^2, mounting type: NS 35/7,5, NS 35/15, color: black

Your advantages

- Globally recognized: Internationally proven screw connection
- Maintenance-free and vibration-resistant thanks to the patented Reakdyn principle
- Space savings and flexibility with the connection of two identical conductors
- Long-term stable connections with the use of high-quality materials
- Low self-heating due to high contact forces
- Full flexibility thanks to the standardized CLIPLINE complete bridging, marking, and testing accessories
- Vibration-resistant and maintenance-free conductor connection

Commercial data

Item number	3044197
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	BE01
Product key	BE1111
GTIN	4055626055275
Weight per piece (including packing)	30.583 g
Weight per piece (excluding packing)	30.583 g
Customs tariff number	85369010
Country of origin	TR

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	2.43 W

Connection data

Number of connections per level	2
Nominal cross section	16 mm²

Level 1 above 1 below 1

Connection method	Screw connection
Screw thread	M5
Tightening torque	2.5 ... 3 Nm
Stripping length	14 mm
Internal cylindrical gage	A7
Connection in acc. with standard	IEC 60947-7-1
Conductor cross-section rigid	1.5 mm² ... 25 mm²
Cross section AWG	14 ... 4 (converted acc. to IEC)
Conductor cross-section flexible	1.5 mm² ... 25 mm²
Conductor cross-section, flexible [AWG]	14 ... 4 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	1 mm² ... 16 mm²
Flexible conductor cross-section (ferrule with plastic sleeve)	1 mm² ... 16 mm²
2 conductors with same cross section, rigid	1 mm² ... 6 mm²
2 conductors with same cross section, flexible	1 mm² ... 6 mm²
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	1 mm² ... 6 mm²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.75 mm² ... 10 mm²
Nominal cross section	16 mm²

Nominal current	76 A
Maximum load current	101 A (with 25 mm² 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.

Ex data

Rated data (ATEX/IECEx)

Identification	Ⓔx II 2 GD Ex eb IIC Gb
Operating temperature range	-60 °C ... 110 °C
Ex-certified accessories	3047206 D-UT 16
	1205066 SZS 1,0X4,0 VDE
	3022276 CLIPFIX 35-5
	3022218 CLIPFIX 35
List of bridges	Plug-in bridge / FBS 2-12 / 3005950
Bridge data	73.5 A (16 mm²)
Ex temperature increase	40 K (80.5 A / 16 mm²)
for bridging with bridge	690 V
Rated insulation voltage	630 V
output	(Permanent)

Ex level General

Rated voltage	690 V
Rated current	73.5 A
Maximum load current	89.5 A
Contact resistance	0.16 mΩ

Ex connection data General

Torque range	2.5 Nm ... 3 Nm
Nominal cross section	16 mm²
Rated cross section AWG	6
Connection capacity rigid	1.5 mm² ... 25 mm²
Connection capacity AWG	16 ... 4
Connection capacity flexible	1.5 mm² ... 16 mm²
Connection capacity AWG	16 ... 6
2 conductors with same cross section, solid	1 mm² ... 6 mm²
2 conductors with the same cross-section AWG rigid	18 ... 10
2 conductors with same cross section, stranded	1 mm² ... 4 mm²
2 conductors with the same cross-section AWG flexible	18 ... 12

Dimensions

Width	12.2 mm
End cover width	2.2 mm
Height	55.5 mm
Depth	54.4 mm

Depth on NS 35/7,5	55 mm
Depth on NS 35/15	62.5 mm

Material specifications

Color	black (RAL 9005)
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
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	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 16 mm²	1.92 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

Mechanical strength

Result	Test passed

Attachment on the carrier

DIN rail/fixing support	NS 32/NS 35
Result	Test passed

Test for conductor damage and slackening

Rotation speed	10 rpm
Revolutions	135
Conductor cross-section/weight	1.5 mm² / 0.4 kg
	16 mm² / 2.9 kg
	25 mm² / 4.5 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):2018-05
Spectrum	Long life test category 2, bogie-mounted
Frequency	f_1 = 5 Hz to f_2 = 250 Hz
ASD level	6.12 (m/s²)²/Hz
Acceleration	3.12g
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis

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.)

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

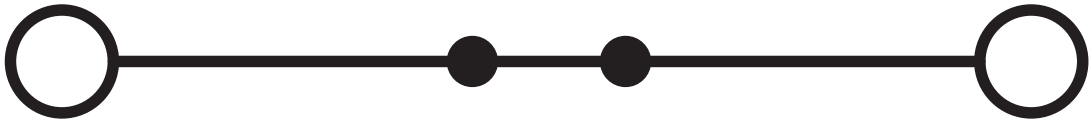
Connection in acc. with standard	IEC 60947-7-1

Mounting

Mounting type	NS 35/7,5
	NS 35/15

Drawings

Circuit diagram



Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/3044197

DNV
Approval ID: TAE00001S9

CSA
Approval ID: 13631

IECEE CB Scheme
Approval ID: DE1-65779

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
	1000 V	76 A	-	- 16

cULus Recognized
Approval ID: E60425

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
B				
	600 V	85 A	16 - 4	-
Multi-conductor connection	600 V	85 A	- 14	-
C				
	600 V	85 A	16 - 4	-
Multi-conductor connection	600 V	85 A	- 14	-

LR
Approval ID: LR24100022TA

VDE Zeichengenehmigung
Approval ID: 40020166

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
	1000 V	76 A	-	1.5 - 16

CSA
Approval ID: 13631

ATEX
Approval ID: KEMA04ATEX2048U

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
Only flexible conductors	690 V	73.5 A	-	1.5 - 16
Only rigid conductors	690 V	89.5 A	-	1.5 - 25

cUL Recognized
Approval ID: E192998

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
	600 V	85 A	16 - 4	-

IECEx
Approval ID: IECExKEM06.0027U

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
Only flexible conductors	690 V	73.5 A	-	1.5 - 16
Only rigid conductors	690 V	89.5 A	-	1.5 - 25

UL Recognized
Approval ID: E192998

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
	600 V	85 A	16 - 4	-

CCC
Approval ID: 2020322313000622

UKCA-EX
Approval ID: DEKRA 21UKEX0304U

EAC Ex
Approval ID: KZ 7500525010101950

Classifications

ECLASS

ECLASS-13.0	27250101
ECLASS-15.0	27250101

ETIM

ETIM 10.0	EC000897

UNSPSC

UNSPSC 21.0	39121400

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%

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