UT 4-MT-P/P - Knife-disconnect terminal block

3046171

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Knife-disconnect terminal block, With test socket screws for insertion of test plugs, nom. voltage: 500 V, Thermal continuous current I_{th}: 20 A, connection method: Screw connection, Rated cross section: 4 mm^2, cross section: 0.14 mm^2 - 6 mm^2, mounting: NS 35/7,5, NS 35/15, color: gray

Your advantages

- Globally recognized: Internationally proven screw connection
- Maintenance-free and vibration-resistant thanks to the patented Reakdyn principle
- Convenient separation of circuits through the implementation of knife disconnection
- 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
- Maximum efficiency in the smallest space - thanks to integrated level bridging, the connections are connected across levels

Commercial data

Item number	3046171
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	BE01
Product key	BE1131
GTIN	4017918975593
Weight per piece (including packing)	13.26 g
Weight per piece (excluding packing)	12.8 g
Customs tariff number	85369010
Country of origin	DE

Technical data

Product properties

Product type	Disconnect terminal block
Product family	UT
Area of application	Railway industry
	Machine building
	Plant engineering
Number of connections	2
Number of rows	1
Potentials	1

Insulation characteristics

Overvoltage category	III
Degree of pollution	3

Electrical properties

Rated surge voltage	6 kV
Maximum power dissipation for nominal condition	1.02 W

Connection data

Number of connections per level	2
Nominal cross section	4 mm²
Connection method	Screw connection
Screw thread	M3
Tightening torque	0.6 ... 0.8 Nm
Stripping length	9 mm
Internal cylindrical gage	A4
Connection in acc. with standard	IEC 60947-7-1
Conductor cross-section rigid	0.14 mm² ... 6 mm²
Cross section AWG	26 ... 10 (converted acc. to IEC)
Conductor cross-section flexible	0.14 mm² ... 6 mm²
Conductor cross-section, flexible [AWG]	26 ... 10 (converted acc. to IEC)
Conductor cross-section flexible ultrasound-compressed	0.34 mm² ... 6 mm²
Conductor cross-section, flexible [AWG] ultrasound-compressed	22 ... 10 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.14 mm² ... 4 mm²
Flexible conductor cross-section (ferrule with plastic sleeve)	0.14 mm² ... 4 mm²
2 conductors with same cross section, rigid	0.14 mm² ... 1.5 mm²
2 conductors with same cross section, flexible	0.14 mm² ... 1.5 mm²
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	0.14 mm² ... 1.5 mm²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm² ... 2.5 mm²
Nominal cross section	4 mm²

Thermal continuous current I_{th}	20 A (with 4 mm² conductor cross-section)
Maximum load current	20 A (with 6 mm² conductor cross-section)
Nominal voltage	500 V (up to 690 V for pollution degree II)

Ex data

output	(Permanent)

Ex connection data

Single conductor/terminal point, flexible, with ferrule, without plastic sleeve, AWG	26 ... 12

Dimensions

Width	6.2 mm
Height	57.8 mm
Depth on NS 35/7,5	49.1 mm
Depth on NS 35/15	56.6 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	7.3 kV
Result	Test passed

Temperature-rise test

Requirement temperature-rise test	Increase in temperature ≤ 45 K
Result	Test passed
	Test passed
Short-time withstand current 2.5 mm²	0.3 kA
Result	Test passed

Power-frequency withstand voltage

Test voltage setpoint	1.89 kV

Result	Test passed

Mechanical properties

Mechanical data

Open side panel	No

Mechanical tests

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 mm² / 0.2 kg
	4 mm² / 0.9 kg
	6 mm² / 1.4 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):2022-06
Spectrum	Long life test category 2, bogie-mounted
Frequency	f_1 = 5 Hz to f_2 = 250 Hz
ASD level	6.12 $(m/s^2)^2/Hz$
Acceleration	3.12g
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
Ambient temperature (actuation)	-5 °C ... 70 °C
Permissible humidity (operation)	20 % ... 90 %
Permissible humidity (storage/transport)	30 % ... 70 %

Standards and regulations

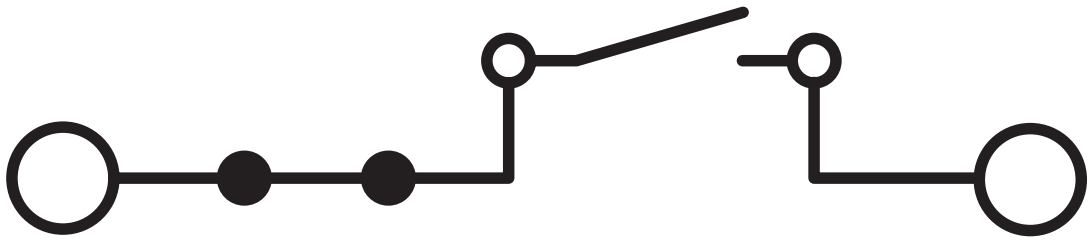
Connection in acc. with standard	IEC 60947-7-1

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/3046171

CSA
Approval ID: 13631

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
B				
	300 V	16 A	26 - 10	-
C				
	300 V	16 A	26 - 10	-

EAC
Approval ID: KZ7500651131219505

cULus Recognized
Approval ID: E60425

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
B				
	300 V	16 A	26 - 10	-
Multi-conductor connection	300 V	16 A	26 - 14	-
C				
	300 V	16 A	26 - 10	-
Multi-conductor connection	300 V	16 A	26 - 14	-

DNV
Approval ID: TAE00001S9

Classifications

ECLASS

ECLASS-13.0	27250108
ECLASS-15.0	27250108

ETIM

ETIM 10.0	EC000902

UNSPSC

UNSPSC 21.0	39121400

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	b0f843ce-8bca-47a6-88f8-9e847e20ba3c

EF3.1 Climate Change

CO2e kg	0.051 kg CO2e

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https://www.phoenixcontact.com

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