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Knife-disconnect terminal block, with actuation bracket and test socket screws for insertion of test plugs, nom. voltage: 500 V, nominal current: 20 A, connection method: Screw connection, Rated cross section: 2.5 mm², cross section: 0.14 mm² - 6 mm², mounting: NS 35/7,5, NS 35/15, color: gray

Your advantages

- Compact design and high current carrying capacity of 20 A

Commercial data

Item number	3046146
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	BE01
Product key	BE1131
Catalog page	Page 166 (C-1-2019)
GTIN	4055626063430
Weight per piece (including packing)	13.71 g
Weight per piece (excluding packing)	13.71 g
Customs tariff number	85369010
Country of origin	PL

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



3046146

<https://www.phoenixcontact.com/us/products/3046146>

Technical data

Product properties

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

Data management status

Article revision	07
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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 mm ²

Level 1 above 1 below 1

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 mm ² ... 6 mm ²
Cross section AWG	26 ... 10 (converted acc. to IEC)
Conductor cross section flexible	0.14 mm ² ... 6 mm ²
Conductor cross section, flexible [AWG]	26 ... 10 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.14 mm ² ... 4 mm ²
Flexible conductor cross section (ferrule with plastic sleeve)	0.14 mm ² ... 4 mm ²
2 conductors with same cross section, solid	0.14 mm ² ... 1.5 mm ²
2 conductors with same cross section, flexible	0.14 mm ² ... 1.5 mm ²
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	0.14 mm ² ... 1.5 mm ²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm ² ... 2.5 mm ²
Nominal current	20 A
Maximum load current	20 A (with 6 mm ² conductor cross section)

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Nominal voltage	500 V
Nominal cross section	2.5 mm ²

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
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
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)	27,5 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

Result	Test passed
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Temperature-rise test

Requirement temperature-rise test	Increase in temperature ≤ 45 K
Result	Test passed
Short-time withstand current 2.5 mm ²	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
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Mechanical tests

Mechanical strength

Result	Test passed
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Attachment on the carrier

DIN rail/fixing support	NS 35
Result	Test passed

Test for conductor damage and slackening

Rotation speed	10 (+/- 2) rpm
Revolutions	135
Conductor cross section/weight	0.14 mm ² / 0.2 kg
	4 mm ² / 0.9 kg
	6 mm ² / 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):2018-05
Spectrum	Service life test category 2, bogie-mounted
Frequency	$f_1 = 5 \text{ Hz}$ to $f_2 = 250 \text{ Hz}$
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

Shocks

Pulse shape	Semi-sinusoidal
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 %

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Permissible humidity (storage/transport)	30 % ... 70 %
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Standards and regulations

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

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

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Drawings

Circuit diagram



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



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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/3046146>

cULus Recognized Approval ID: E60425				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B				
	300 V	16 A	26 - 10	-
Multi-conductor connection	300 V	16 A	26 - 14	-
Use group C				
	300 V	16 A	26 - 10	-
Multi-conductor connection	300 V	16 A	26 - 14	-

CSA Approval ID: 13631				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B				
	300 V	16 A	26 - 10	-
Use group C				
	300 V	16 A	26 - 10	-
Use group D				
	600 V	5 A	26 - 10	-

EAC Approval ID: RU C-DE.BL08.B.00534				
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Classifications

ECLASS

ECLASS-11.0	27141126
ECLASS-12.0	27141126
ECLASS-13.0	27250108

ETIM

ETIM 9.0	EC000902
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UNSPSC

UNSPSC 21.0	39121400
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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	7b38e63a-c84c-49b0-ae32-d3ef34a088a8

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