

MTK BU - Knife-disconnect terminal block



3101197

<https://www.phoenixcontact.com/us/products/3101197>

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.



Knife-disconnect terminal block, nom. voltage: 400 V, nominal current: 16 A, connection method: Screw connection, Rated cross section: 2.5 mm², cross section: 0.2 mm² - 4 mm², mounting: NS 35/7,5, NS 35/15, NS 32, color: blue

Your advantages

- Space-saving design
- High current carrying capacity of up to 16 A

Commercial data

Item number	3101197
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	BE12
Product key	BE1231
GTIN	4017918092641
Weight per piece (including packing)	9.218 g
Weight per piece (excluding packing)	9.04 g
Customs tariff number	85369010
Country of origin	PL

3101197

<https://www.phoenixcontact.com/us/products/3101197>

Technical data

Product properties

Product type	Disconnect terminal block
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	0.77 W

Connection data

Number of connections per level	2
Nominal cross section	2.5 mm ²
Connection method	Screw connection
Screw thread	M3
Tightening torque	0.5 ... 0.6 Nm
Stripping length	7 mm
Internal cylindrical gage	A3
Connection in acc. with standard	IEC 60947-7-1
Conductor cross-section rigid	0.2 mm ² ... 4 mm ²
Cross section AWG	24 ... 12 (converted acc. to IEC)
Conductor cross-section flexible	0.2 mm ² ... 2.5 mm ²
Conductor cross-section, flexible [AWG]	24 ... 14 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.25 mm ² ... 2.5 mm ²
Flexible conductor cross-section (ferrule with plastic sleeve)	0.25 mm ² ... 1.5 mm ²
Cross-section with insertion bridge, rigid	4 mm ²
Cross-section with insertion bridge, flexible	2.5 mm ²
2 conductors with same cross section, rigid	0.2 mm ² ... 1.5 mm ²
2 conductors with same cross section, flexible	0.2 mm ² ... 1.5 mm ²
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	0.25 mm ² ... 1.5 mm ²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm ² ... 1.5 mm ²
Nominal cross section	2.5 mm ²
Nominal current	16 A
Maximum load current	16 A (with 4 mm ² conductor cross-section)
Nominal voltage	400 V

Dimensions

MTK BU - Knife-disconnect terminal block



3101197

<https://www.phoenixcontact.com/us/products/3101197>

Width	5.2 mm
End cover width	1 mm
Height	46 mm
Depth on NS 32	56.5 mm
Depth on NS 35/7,5	51.5 mm
Depth on NS 35/15	59 mm

Material specifications

Color	blue (RAL 5015)
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 \leq 45 K
Result	Test passed
Short-time withstand current 1.5 mm ²	0.18 kA
Result	Test passed

Power-frequency withstand voltage

Test voltage setpoint	1.89 kV
Result	Test passed

Mechanical properties

Mechanical data

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

Mechanical tests

Mechanical strength

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

Attachment on the carrier

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

Test for conductor damage and slacking

Rotation speed	10 (+/- 2) rpm
Revolutions	135
Conductor cross-section/weight	0.2 mm ² / 0.2 kg
	2.5 mm ² / 0.7 kg
	4 mm ² / 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):2018-05
Spectrum	Long 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
Result	Test passed

Shocks

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
----------------------------------	---------------

MTK BU - Knife-disconnect terminal block



3101197

<https://www.phoenixcontact.com/us/products/3101197>

Mounting

Mounting type	NS 35/7,5
	NS 35/15
	NS 32

MTK BU - Knife-disconnect terminal block



3101197

<https://www.phoenixcontact.com/us/products/3101197>

Drawings

Circuit diagram



MTK BU - Knife-disconnect terminal block





3101197


<https://www.phoenixcontact.com/us/products/3101197>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/3101197>

 CSA Approval ID: 13631				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
	300 V	15 A	28 - 12	-

 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				
	250 V	10 A	28 - 12	-
D				
	300 V	10 A	28 - 12	-

DNV Approval ID: TAE00001CT				
---------------------------------------	--	--	--	--

MTK BU - Knife-disconnect terminal block



3101197

<https://www.phoenixcontact.com/us/products/3101197>

Classifications

ECLASS

ECLASS-13.0	27250108
ECLASS-15.0	27250108

ETIM

ETIM 10.0	EC000902
-----------	----------

UNSPSC

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

MTK BU - Knife-disconnect terminal block



3101197

<https://www.phoenixcontact.com/us/products/3101197>

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%
-------------------------------------	----------------------------

EF3.1 Climate Change

CO2e kg	0.045 kg CO2e
---------	---------------

Phoenix Contact 2026 © - 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