

Knife disconnect terminal block - UT 4-MT - 3046139

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Knife disconnect terminal block, nom. voltage: 500 V, nominal current: 20 A, connection method: Screw connection, cross section: 0.14 mm² - 6 mm², AWG: 26 - 10, length: 57.8 mm, width: 6.2 mm, color: gray, mounting: NS 35/7,5, NS 35/15, nom. voltage: 500 V

Your advantages

- Tested for railway applications
- Compact design and high current carrying capacity of 20 A

Key Commercial Data

Packing unit	50 pc
GTIN	
GTIN	4017918975562

Technical data

General

Number of levels	1
Number of connections	2
Potentials	1
Nominal cross section	4 mm ²
Color	gray
Insulating material	PA
Flammability rating according to UL 94	V0
Area of application	Railway industry
	Machine building
	Plant engineering
Rated surge voltage	6 kV
Degree of pollution	3
Overvoltage category	III
Insulating material group	I

Knife disconnect terminal block - UT 4-MT - 3046139

Technical data

General

Maximum power dissipation for nominal condition	1.02 W
Maximum load current	20 A (with 6 mm ² conductor cross section)
Nominal current I _N	20 A (with 4 mm ² conductor cross section)
Nominal voltage U _N	500 V
Open side panel	No
Shock protection test specification	IEC 60529:2001-02
Back of the hand protection	guaranteed
Finger protection	guaranteed
Result of surge voltage test	Test passed
Surge voltage test setpoint	7.3 kV
Result of power-frequency withstand voltage test	Test passed
Power frequency withstand voltage setpoint	1.89 kV
Result of the test for mechanical stability of terminal points (5 x conductor connection)	Test passed
Result of bending test	Test passed
Bending test rotation speed	10 rpm
Bending test turns	135
Bending test conductor cross section/weight	0.14 mm ² / 0.2 kg
	4 mm ² / 0.9 kg
	6 mm ² / 1.4 kg
Tensile test result	Test passed
Conductor cross section tensile test	0.14 mm ²
Tractive force setpoint	10 N
Conductor cross section tensile test	4 mm ²
Tractive force setpoint	60 N
Conductor cross section tensile test	6 mm ²
Tractive force setpoint	80 N
Result of tight fit on support	Test passed
Tight fit on carrier	NS 35
Setpoint	1 N
Result of voltage-drop test	Test passed
Requirements, voltage drop	≤ 6,4 mV
Result of temperature-rise test	Test passed
Short circuit stability result	Test passed
Conductor cross section short circuit testing	2.5 mm ²
Short-time current	0.3 kA
Result of thermal test	Test passed
Proof of thermal characteristics (needle flame) effective duration	30 s
Oscillation, broadband noise test result	Test passed
Test specification, oscillation, broadband noise	DIN EN 50155 (VDE 0115-200):2008-03
Test spectrum	Service life test category 1, class B, body mounted

Knife disconnect terminal block - UT 4-MT - 3046139

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Test frequency	$f_1 = 5 \text{ Hz}$ to $f_2 = 150 \text{ Hz}$
ASD level	$1.857 \text{ (m/s}^2\text{)}^2/\text{Hz}$
Acceleration	0,8 g
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis
Shock test result	Test passed
Test specification, shock test	DIN EN 50155 (VDE 0115-200):2008-03
Shock form	Half-sine
Acceleration	5 g
Shock duration	30 ms
Number of shocks per direction	3
Test directions	X-, Y- and Z-axis (pos. and neg.)
Relative insulation material temperature index (Elec., UL 746 B)	130 °C
Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21))	125 °C
Static insulating material application in cold	-60 °C
Behavior in fire for rail vehicles (DIN 5510-2)	Test passed
Flame test method (DIN EN 60695-11-10)	V0
Oxygen index (DIN EN ISO 4589-2)	>32 %
NF F16-101, NF F10-102 Class I	2
NF F16-101, NF F10-102 Class F	2
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
Calorimetric heat release NFPA 130 (ASTM E 1354)	27,5 MJ/kg
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

Dimensions

Width	6.2 mm
Length	57.8 mm
Height NS 35/7,5	49.1 mm
Height NS 35/15	56.6 mm

Connection data

Connection method	Screw connection
Connection in acc. with standard	IEC 60947-7-1
Conductor cross section solid min.	0.14 mm ²
Conductor cross section solid max.	6 mm ²
Conductor cross section AWG min.	26

Knife disconnect terminal block - UT 4-MT - 3046139

Technical data

Connection data

Conductor cross section AWG max.	10
Conductor cross section flexible min.	0.14 mm ²
Conductor cross section flexible max.	6 mm ²
Min. AWG conductor cross section, flexible	26
Max. AWG conductor cross section, flexible	10
Conductor cross section flexible, with ferrule without plastic sleeve min.	0.14 mm ²
Conductor cross section flexible, with ferrule without plastic sleeve max.	4 mm ²
Conductor cross section flexible, with ferrule with plastic sleeve min.	0.14 mm ²
Conductor cross section flexible, with ferrule with plastic sleeve max.	4 mm ²
2 conductors with same cross section, solid min.	0.14 mm ²
2 conductors with same cross section, solid max.	1.5 mm ²
2 conductors with same cross section, stranded min.	0.14 mm ²
2 conductors with same cross section, stranded max.	1.5 mm ²
2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, min.	0.5 mm ²
2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, max.	2.5 mm ²
2 conductors with same cross section, stranded, ferrules without plastic sleeve, min.	0.14 mm ²
2 conductors with same cross section, stranded, ferrules without plastic sleeve, max.	1.5 mm ²
Stripping length	9 mm
Internal cylindrical gage	A4
Screw thread	M3
Tightening torque, min	0.6 Nm
Tightening torque max	0.8 Nm

Standards and Regulations

Connection in acc. with standard	CSA
	IEC 60947-7-1
Flammability rating according to UL 94	V0
Fire protection for rail vehicles (DIN EN 45545-2) R22	HL 1 - HL 3
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Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

Drawings

Knife disconnect terminal block - UT 4-MT - 3046139

Circuit diagram



Approvals

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CSA / UL Recognized / cUL Recognized / EAC / EAC / cULus Recognized

Ex Approvals

Approval details

CSA		http://www.csagroup.org/services-industries/product-listing/	13631
	B	C	
Nominal voltage UN	600 V	600 V	
Nominal current IN	16 A	16 A	
mm ² /AWG/kcmil	26-10	26-10	

UL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 60425
	B	C	
Nominal voltage UN	600 V	600 V	
Nominal current IN	16 A	16 A	
mm ² /AWG/kcmil	26-10	26-10	

cUL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 60425
	B	C	
Nominal voltage UN	600 V	600 V	
Nominal current IN	16 A	16 A	
mm ² /AWG/kcmil	26-10	26-10	

EAC		EAC-Zulassung
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