

Knife disconnect terminal block - UT 6-MTL - 3046145

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Knife disconnect terminal block, with actuation latch, nom. voltage: 500 V, nominal current: 20 A, connection method: Screw connection, cross section: 0.2 mm² - 10 mm², AWG: 24 - 8, length: 57.8 mm, width: 8.2 mm, color: gray, mounting: NS 35/7,5, NS 35/15, nom. voltage: 500 V

Why buy this product

- ✓ Double bridge shaft enables individual potential distribution and supply
- ✓ Compact design and high current carrying capacity of 20 A

RoHS

Key Commercial Data

Packing unit	1 STK
Minimum order quantity	50 STK
GTIN	 4 055626 007984
GTIN	4055626007984
Weight per Piece (excluding packing)	18.400 g
Custom tariff number	85369010
Country of origin	Poland

Technical data

General

Number of levels	1
Number of connections	2
Potentials	1
Nominal cross section	6 mm ²
Color	gray
Insulating material	PA
Flammability rating according to UL 94	V0

Knife disconnect terminal block - UT 6-MTL - 3046145

Technical data

General

Rated surge voltage	6 kV
Degree of pollution	3
Overvoltage category	III
Insulating material group	I
Maximum power dissipation for nominal condition	1.31 W
Maximum load current	20 A (with 10 mm ² conductor cross section)
Nominal current I _N	20 A
Nominal voltage U _N	500 V
Open side panel	No
Shock protection test specification	DIN EN 50274 (VDE 0660-514):2002-11
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	0.2 mm ² / 0.2 kg
	6 mm ² / 1.4 kg
	10 mm ² / 2 kg
Tensile test result	Test passed
Conductor cross section tensile test	0.2 mm ²
Tractive force setpoint	10 N
Conductor cross section tensile test	6 mm ²
Tractive force setpoint	80 N
Conductor cross section tensile test	10 mm ²
Tractive force setpoint	90 N
Result of tight fit on support	Test passed
Tight fit on carrier	NS 35
Setpoint	5 N
Result of voltage-drop test	Test passed
Requirements, voltage drop	≤ 6,4 mV
Result of temperature-rise test	Test passed

Knife disconnect terminal block - UT 6-MTL - 3046145

Technical data

General

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
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	8.2 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.	0.2 mm ²
Conductor cross section solid max.	10 mm ²
Conductor cross section AWG min.	24
Conductor cross section AWG max.	8
Conductor cross section flexible min.	0.2 mm ²
Conductor cross section flexible max.	10 mm ²
Min. AWG conductor cross section, flexible	24

Knife disconnect terminal block - UT 6-MTL - 3046145

Technical data

Connection data

Max. AWG conductor cross section, flexible	8
Conductor cross section flexible, with ferrule without plastic sleeve min.	0.25 mm ²
Conductor cross section flexible, with ferrule without plastic sleeve max.	6 mm ²
Conductor cross section flexible, with ferrule with plastic sleeve min.	0.25 mm ²
Conductor cross section flexible, with ferrule with plastic sleeve max.	6 mm ²
2 conductors with same cross section, solid min.	0.2 mm ²
2 conductors with same cross section, solid max.	2.5 mm ²
2 conductors with same cross section, stranded min.	0.2 mm ²
2 conductors with same cross section, stranded max.	2.5 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.	4 mm ²
2 conductors with same cross section, stranded, ferrules without plastic sleeve, min.	0.25 mm ²
2 conductors with same cross section, stranded, ferrules without plastic sleeve, max.	1.5 mm ²
Stripping length	10 mm
Internal cylindrical gage	A5
Screw thread	M4
Tightening torque, min	1.5 Nm
Tightening torque max	1.8 Nm

Standards and Regulations

Connection in acc. with standard	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 HL 1 - HL 3 HL 1 - HL 3 HL 1 - HL 3
Fire protection for rail vehicles (DIN EN 45545-2) R23	HL 1 - HL 3 HL 1 - HL 3 HL 1 - HL 3 HL 1 - HL 3
Fire protection for rail vehicles (DIN EN 45545-2) R24	HL 1 - HL 3 HL 1 - HL 3 HL 1 - HL 3 HL 1 - HL 3
Fire protection for rail vehicles (DIN EN 45545-2) R26	HL 1 - HL 3 HL 1 - HL 3 HL 1 - HL 3 HL 1 - HL 3

Environmental Product Compliance

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 6-MTL - 3046145

Circuit diagram



Classifications

eCl@ss

eCl@ss 5.1	27141126
eCl@ss 6.0	27141126
eCl@ss 8.0	27141126
eCl@ss 9.0	27141126

ETIM

ETIM 5.0	EC000902
ETIM 6.0	EC000902

UNSPSC

UNSPSC 13.2	39121410
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Approvals

Approvals

Approvals

CSA / UL Recognized / cUL Recognized / cULus Recognized

Ex Approvals

Approval details

CSA		http://www.csagroup.org/services-industries/product-listing/	13631
	B	C	
mm²/AWG/kcmil	24-8	24-8	
Nominal current I _N	16 A	16 A	
Nominal voltage U _N	600 V	600 V	

Knife disconnect terminal block - UT 6-MTL - 3046145

Approvals

UL Recognized  http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm FILE E 60425		
	B	C
mm²/AWG/kcmil	24-8	24-8
Nominal current IN	16 A	16 A
Nominal voltage UN	600 V	600 V

cUL Recognized  http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm FILE E 60425		
	B	C
mm²/AWG/kcmil	24-8	24-8
Nominal current IN	16 A	16 A
Nominal voltage UN	600 V	600 V

cULus Recognized  http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm		
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Accessories

Accessories

DIN rail

DIN rail perforated - NS 35/ 7,5 PERF 2000MM - 0801733



DIN rail perforated, Standard profile, width: 35 mm, height: 7.5 mm, in acc. with EN 60715: 2001, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

DIN rail, unperforated - NS 35/ 7,5 UNPERF 2000MM - 0801681



DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, in acc. with EN 60715: 2001, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

Knife disconnect terminal block - UT 6-MTL - 3046145

Accessories

DIN rail perforated - NS 35/ 7,5 WH PERF 2000MM - 1204119



DIN rail perforated, Standard profile, width: 35 mm, height: 7.5 mm, in acc. with EN 60715: 2001, material: Steel, Galvanized, white passivated, length: 2000 mm, color: white

DIN rail, unperforated - NS 35/ 7,5 WH UNPERF 2000MM - 1204122



DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, in acc. with EN 60715: 2001, material: Steel, Galvanized, white passivated, length: 2000 mm, color: white

DIN rail, unperforated - NS 35/ 7,5 AL UNPERF 2000MM - 0801704

DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, in acc. with EN 60715: 2001, material: Aluminum, uncoated, length: 2000 mm, color: silver

DIN rail perforated - NS 35/ 7,5 ZN PERF 2000MM - 1206421



DIN rail perforated, Standard profile, width: 35 mm, height: 7.5 mm, in acc. with EN 60715: 2001, material: Steel, galvanized, length: 2000 mm, color: silver

DIN rail, unperforated - NS 35/ 7,5 ZN UNPERF 2000MM - 1206434



DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, in acc. with EN 60715: 2001, material: Steel, galvanized, length: 2000 mm, color: silver

Knife disconnect terminal block - UT 6-MTL - 3046145

Accessories

DIN rail, unperforated - NS 35/ 7,5 CU UNPERF 2000MM - 0801762



DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, in acc. with EN 60715: 2001, material: Copper, uncoated, length: 2000 mm, color: copper-colored

End cap - NS 35/ 7,5 CAP - 1206560



DIN rail end piece, for DIN rail NS 35/7.5

DIN rail perforated - NS 35/15 PERF 2000MM - 1201730



DIN rail perforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715: 2001, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

DIN rail, unperforated - NS 35/15 UNPERF 2000MM - 1201714



DIN rail, unperforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715: 2001, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

DIN rail perforated - NS 35/15 WH PERF 2000MM - 0806602



DIN rail perforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715: 2001, material: Steel, Galvanized, white passivated, length: 2000 mm, color: white

Knife disconnect terminal block - UT 6-MTL - 3046145

Accessories

DIN rail, unperforated - NS 35/15 WH UNPERF 2000MM - 1204135



DIN rail, unperforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715: 2001, material: Steel, Galvanized, white passivated, length: 2000 mm, color: white

DIN rail, unperforated - NS 35/15 AL UNPERF 2000MM - 1201756



DIN rail, unperforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715: 2001, material: Aluminum, uncoated, length: 2000 mm, color: silver

DIN rail perforated - NS 35/15 ZN PERF 2000MM - 1206599



DIN rail perforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715: 2001, material: Steel, galvanized, length: 2000 mm, color: silver

DIN rail, unperforated - NS 35/15 ZN UNPERF 2000MM - 1206586



DIN rail, unperforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715: 2001, material: Steel, galvanized, length: 2000 mm, color: silver

DIN rail, unperforated - NS 35/15 CU UNPERF 2000MM - 1201895



DIN rail, unperforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715: 2001, material: Copper, uncoated, length: 2000 mm, color: copper-colored

Knife disconnect terminal block - UT 6-MTL - 3046145

Accessories

End cap - NS 35/15 CAP - 1206573



DIN rail end piece, for DIN rail NS 35/15

DIN rail, unperforated - NS 35/15-2,3 UNPERF 2000MM - 1201798



DIN rail, unperforated, Standard profile 2.3 mm, width: 35 mm, height: 15 mm, in acc. with EN 60715: 2001, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

End block

End clamp - CLIPFIX 35 - 3022218



Quick mounting end clamp for NS 35/7,5 DIN rail or NS 35/15 DIN rail, with marking option, width: 9.5 mm, color: gray

End clamp - CLIPFIX 35-5 - 3022276



Quick mounting end clamp for NS 35/7,5 DIN rail or NS 35/15 DIN rail, with marking option, with parking option for FBS...5, FBS...6, KSS 5, KSS 6, width: 5.15 mm, color: gray

End clamp - E/NS 35 N - 0800886



End clamp, width: 9.5 mm, color: gray

Knife disconnect terminal block - UT 6-MTL - 3046145

Accessories

Insulating sleeve

Insulating sleeve - MPS-IH WH - 0201663

Insulating sleeve, color: white



Insulating sleeve - MPS-IH RD - 0201676

Insulating sleeve, color: red



Insulating sleeve - MPS-IH BU - 0201689

Insulating sleeve, color: blue



Insulating sleeve - MPS-IH YE - 0201692

Insulating sleeve, color: yellow



Insulating sleeve - MPS-IH GN - 0201702

Insulating sleeve, color: green



Knife disconnect terminal block - UT 6-MTL - 3046145

Accessories

Insulating sleeve - MPS-IH GY - 0201728

Insulating sleeve, color: gray



Insulating sleeve - MPS-IH BK - 0201731

Insulating sleeve, color: black



Jumper

Plug-in bridge - FBS 2-8 - 3030284



Plug-in bridge, pitch: 8.2 mm, width: 14.7 mm, number of positions: 2, color: red

Plug-in bridge - FBS 3-8 - 3030297



Plug-in bridge, pitch: 8.2 mm, width: 22.9 mm, number of positions: 3, color: red

Plug-in bridge - FBS 4-8 - 3030307



Plug-in bridge, pitch: 8.2 mm, width: 31.1 mm, number of positions: 4, color: red

Knife disconnect terminal block - UT 6-MTL - 3046145

Accessories

Plug-in bridge - FBS 5-8 - 3030310



Plug-in bridge, pitch: 8.2 mm, width: 39.3 mm, number of positions: 5, color: red

Plug-in bridge - FBS 6-8 - 3032470



Plug-in bridge, pitch: 8.2 mm, width: 47.5 mm, number of positions: 6, color: red

Plug-in bridge - FBSR 2-8 - 3033808



Plug-in bridge, pitch: 8.2 mm, width: 14.8 mm, number of positions: 2, color: red

Plug-in bridge - FBSR 3-8 - 3001597



Plug-in bridge, pitch: 8.2 mm, width: 22.9 mm, number of positions: 3, color: red

Plug-in bridge - FBSR 4-8 - 3000585



Plug-in bridge, pitch: 8.2 mm, width: 31.1 mm, number of positions: 4, color: red

Knife disconnect terminal block - UT 6-MTL - 3046145

Accessories

Plug-in bridge - FBSR 5-8 - 3033809



Plug-in bridge, pitch: 8.2 mm, width: 39.3 mm, number of positions: 5, color: red

Plug-in bridge - FBSR 10-8 - 3001599



Plug-in bridge, pitch: 8.2 mm, width: 80.3 mm, number of positions: 10, color: red

Plug-in bridge - FBS 2-8 CT - 3033830



Plug-in bridge, pitch: 8.2 mm, width: 14.7 mm, number of positions: 2, color: orange

Plug-in bridge - FBS 3-8 CT - 3033831



Plug-in bridge, pitch: 8.2 mm, width: 22.9 mm, number of positions: 3, color: orange

Plug-in bridge - FBS 4-8 CT - 3033832



Plug-in bridge, pitch: 8.2 mm, width: 31.1 mm, number of positions: 4, color: orange

Knife disconnect terminal block - UT 6-MTL - 3046145

Accessories

Plug-in bridge - FBS 10-8 CT - 3033833



Plug-in bridge, pitch: 8.2 mm, width: 80.3 mm, number of positions: 10, color: orange

Plug-in bridge - FBS 2-8 BU - 3032567



Plug-in bridge, pitch: 8.2 mm, width: 14.7 mm, number of positions: 2, color: blue

Plug-in bridge - FBS 3-8 BU - 3032570



Plug-in bridge, pitch: 8.2 mm, width: 22.9 mm, number of positions: 3, color: blue

Plug-in bridge - FBS 4-8 BU - 3032583



Plug-in bridge, pitch: 8.2 mm, width: 31.1 mm, number of positions: 4, color: blue

Plug-in bridge - FBS 5-8 BU - 3032596



Plug-in bridge, pitch: 8.2 mm, width: 39.3 mm, number of positions: 5, color: blue

Knife disconnect terminal block - UT 6-MTL - 3046145

Accessories

Plug-in bridge - FBS 6-8 BU - 3032677



Plug-in bridge, pitch: 8.2 mm, width: 47.5 mm, number of positions: 6, color: blue

Plug-in bridge - FBS 10-8 BU - 3032606



Plug-in bridge, pitch: 8.2 mm, width: 80.3 mm, number of positions: 10, color: blue

Labeled terminal marker

Zack marker strip - ZB 8 CUS - 0825011



Zack marker strip, can be ordered: Strip, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 8.2 mm, lettering field size: 10.5 x 8.15 mm

Marker for terminal blocks - UC-TM 8 CUS - 0824597



Marker for terminal blocks, can be ordered: by sheet, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 8.2 mm, lettering field size: 7.6 x 10.5 mm

Marker for terminal blocks - UCT-TM 8 CUS - 0829616



Marker for terminal blocks, can be ordered: by sheet, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 8.2 mm, lettering field size: 7.6 x 10.5 mm

Knife disconnect terminal block - UT 6-MTL - 3046145

Accessories

Zack marker strip - ZB 8,LGS:FORTL.ZAHLEN - 1052015



Zack marker strip, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, printed horizontally: consecutive numbers 1 - 10, 11 - 20, etc. up to 491 - 500, mounting type: snap into tall marker groove, for terminal block width: 8.2 mm, lettering field size: 10.5 x 8.15 mm

Zack marker strip - ZB 8,QR:FORTL.ZAHLEN - 1052028



Zack marker strip, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, Printed vertically: consecutive numbers 1 - 10, 11 - 20, etc. up to 91 - 100, mounting type: snap into tall marker groove, for terminal block width: 8.2 mm, lettering field size: 10.5 x 8.15 mm

Marker for terminal blocks - ZB 8,LGS:L1-N,PE - 1052413



Marker for terminal blocks, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, Horizontal: L1, L2, L3, N, PE, L1, L2, L3, N, PE, mounting type: snap into tall marker groove, for terminal block width: 8.2 mm, lettering field size: 10.5 x 8.15 mm

Marker pen

Marker pen - X-PEN 0,35 - 0811228



Marker pen without ink cartridge, for manual labeling of markers, labeling extremely wipe-proof, line thickness 0.35 mm

Partition plate

Partition plate - ATP-UT-TWIN - 3047183



Partition plate, length: 62.1 mm, width: 2.2 mm, height: 52.5 mm, color: gray

Knife disconnect terminal block - UT 6-MTL - 3046145

Accessories

Reducing bridge

Reducing bridge - RB UT 6-(2,5/4) - 3047251



Reducing bridge, pitch: 9.5 mm, length: 24.6 mm, width: 14.5 mm, number of positions: 2, color: red

Reducing bridge - RB UT 6-ST(2,5/4) - 3047264



Reducing bridge, pitch: 9.5 mm, length: 33.4 mm, width: 14.5 mm, number of positions: 2, color: red

Screwdriver tools

Screwdriver - SZS 1,0X4,0 VDE - 1205066



Screwdriver, slot-headed, VDE insulated, size: 1.0 x 4.0 x 100 mm, 2-component grip, with non-slip grip

Short-circuit connector

Short-circuit connector - FBSRH 2-8 - 3033802



Short-circuit connector, pitch: 8.2 mm, width: 14.7 mm, number of positions: 2, color: red

Knife disconnect terminal block - UT 6-MTL - 3046145

Accessories

Short-circuit connector - FBSRH 3-8 - 3033803



Short-circuit connector, pitch: 8.2 mm, width: 22.9 mm, number of positions: 3, color: red

Short-circuit connector - FBSRH 4-8 - 3033804



Short-circuit connector, pitch: 8.2 mm, width: 31.1 mm, number of positions: 4, color: red

Switching jumper

Switching jumper - SB-MER 2-8 - 3000587



Switching jumper, pitch: 8.2 mm, length: 24.7 mm, width: 16.4 mm, number of positions: 2, color: gray/orange

Switching jumper - SB-MER 3-8 - 3000588



Switching jumper, pitch: 8.2 mm, length: 24.7 mm, width: 24.6 mm, number of positions: 3, color: gray/orange

Switching jumper - SB-MER 4-8 - 3000589



Switching jumper, pitch: 8.2 mm, length: 24.7 mm, width: 32.8 mm, number of positions: 4, color: gray/orange

Knife disconnect terminal block - UT 6-MTL - 3046145

Accessories

Terminal marking

Zack marker strip - ZB 8:UNBEDRUCKT - 1052002



Zack marker strip, Strip, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, PLOTMARK, mounting type: snap into tall marker groove, for terminal block width: 8.2 mm, lettering field size: 10.5 x 8.15 mm

Marker for terminal blocks - UC-TM 8 - 0818072



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: BLUEMARK CLED, BLUEMARK LED, CMS-P1-PLOTTER, PLOTMARK, mounting type: snap into tall marker groove, for terminal block width: 8.2 mm, lettering field size: 7.6 x 10.5 mm

Marker for terminal blocks - UCT-TM 8 - 0828740



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: THERMOMARK PRIME, THERMOMARK CARD, BLUEMARK CLED, BLUEMARK LED, TOPMARK LASER, mounting type: snap into tall marker groove, for terminal block width: 8.2 mm, lettering field size: 7.6 x 10.5 mm

Test plug terminal block

Test plugs - MPS-MT - 0201744



Test plugs, with solder connection up to 1 mm² conductor cross section, color: silver

Test socket

Knife disconnect terminal block - UT 6-MTL - 3046145

Accessories

Test adapter - PAI-4-N GY - 3032871



4 mm test adapter, for terminal blocks with 5.2 mm, 6.2 mm and 8.2 mm pitch