Feed-through terminal block - UT 10 BK - 3046320

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Feed-through terminal block, nom. voltage: 1000 V, nominal current: 57 A, connection method: Screw connection, number of connections: 2, cross section: 0.5 mm² - 16 mm², AWG: 20 - 6, width: 10.2 mm, color: black, mounting type: NS 35/7,5, NS 35/15

Your advantages

- The large wiring space enables the connection of solid and stranded conductors without ferrules, even above the nominal cross section
- As well as saving space, the compact design enables user-friendly wiring in a small amount of space
- Optimum screwdriver guidance through closed screw shafts
- The cable entry funnel enables the use of conductors with ferrules and plastic collars within the nominal cross section

Key Commercial Data

Packing unit	50 pc
Minimum order quantity	50 pc
GTIN	4 017918 975661
GTIN	4017918975661
Weight per Piece (excluding packing)	17.730 g
Custom tariff number	85369010
Country of origin	Germany

Technical data

General

Number of levels	1
Number of connections	2
Potentials	1
Nominal cross section	10 mm²
Color	black
Insulating material	PA
Flammability rating according to UL 94	V0
Rated surge voltage	8 kV

Feed-through terminal block - UT 10 BK - 3046320

Technical data

General

Degree of pollution	3
Overvoltage category	III
Insulating material group	I
Maximum power dissipation for nominal condition	1.82 W
Maximum load current	76 A (with 16 mm² conductor cross section)
Nominal current I_N	57 A
Nominal voltage U_N	1000 V
Open side panel	Yes
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	9.8 kV
Result of power-frequency withstand voltage test	Test passed
Power frequency withstand voltage setpoint	2.2 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	0.5 mm² / 0.3 kg
	10 mm² / 2 kg
	16 mm² / 2.9 kg
Tensile test result	Test passed
Conductor cross section tensile test	0.5 mm²
Tractive force setpoint	20 N
Conductor cross section tensile test	10 mm²
Tractive force setpoint	90 N
Conductor cross section tensile test	16 mm²
Tractive force setpoint	100 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	≤ 3.2 mV
Result of temperature-rise test	Test passed
Short circuit stability result	Test passed
Conductor cross section short circuit testing	10 mm²
Short-time current	1.2 kA
Conductor cross section short circuit testing	16 mm²
Short-time current	1.92 kA

Feed-through terminal block - UT 10 BK - 3046320

Technical data

General

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	10.2 mm
End cover width	2.2 mm
Length	47.7 mm
Height NS 35/7,5	47.5 mm
Height NS 35/15	55 mm

Connection data

Connection method	Screw connection
Screw thread	M4
Stripping length	10 mm
Tightening torque, min	1.5 Nm
Tightening torque max	1.8 Nm
Connection in acc. with standard	IEC 60947-7-1
Note	Note: Product releases, connection cross sections and notes on connecting aluminum cables can be found in the download area.
Conductor cross section solid min.	0.5 mm²
Conductor cross section solid max.	16 mm²
Conductor cross section AWG min.	20
Conductor cross section AWG max.	6
Conductor cross section flexible min.	0.5 mm²
Conductor cross section flexible max.	16 mm²

Feed-through terminal block - UT 10 BK - 3046320

Technical data

Connection data

Min. AWG conductor cross section, flexible	20
Max. AWG conductor cross section, flexible	6
Conductor cross section flexible, with ferrule without plastic sleeve min.	0.5 mm²
Conductor cross section flexible, with ferrule without plastic sleeve max.	10 mm²
Conductor cross section flexible, with ferrule with plastic sleeve min.	0.5 mm²
Conductor cross section flexible, with ferrule with plastic sleeve max.	10 mm²
2 conductors with same cross section, solid min.	0.5 mm²
2 conductors with same cross section, solid max.	4 mm²
2 conductors with same cross section, stranded min.	0.5 mm²
2 conductors with same cross section, stranded max.	4 mm²
2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, min.	0.5 mm²
2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, max.	6 mm²
2 conductors with same cross section, stranded, ferrules without plastic sleeve, min.	0.5 mm²
2 conductors with same cross section, stranded, ferrules without plastic sleeve, max.	2.5 mm²
Connection in acc. with standard	IEC/EN 60079-7
Conductor cross section solid min.	0.5 mm²
Conductor cross section solid max.	16 mm²
Conductor cross section AWG min.	20
Conductor cross section AWG max.	6
Conductor cross section flexible min.	0.5 mm²
Conductor cross section flexible max.	10 mm²
Internal cylindrical gage	A6

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
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

Environmental Product Compliance

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

Feed-through terminal block - UT 10 BK - 3046320

Classifications

eCl@ss

eCl@ss 4.0	27141120
eCl@ss 4.1	27141120
eCl@ss 5.0	27141120
eCl@ss 5.1	27141100
eCl@ss 6.0	27141100
eCl@ss 7.0	27141120
eCl@ss 8.0	27141120
eCl@ss 9.0	27141120

ETIM

ETIM 2.0	EC000897
ETIM 3.0	EC000897
ETIM 4.0	EC000897
ETIM 5.0	EC000897
ETIM 6.0	EC000897
ETIM 7.0	EC000897

UNSPSC

UNSPSC 6.01	30211811
UNSPSC 7.0901	39121410
UNSPSC 11	39121410
UNSPSC 12.01	39121410
UNSPSC 13.2	39121410

Approvals

Approvals

Approvals

DNV GL / CSA / PRS / UL Recognized / cUL Recognized / IECEE CB Scheme / VDE Gutachten mit Fertigungsüberwachung / EAC / RS / cULus Recognized

Ex Approvals

IECEx / ATEX / UL Recognized / cUL Recognized / EAC Ex / cULus Recognized

Approval details

DNV GL		http://exchange.dnv.com/tari/	TAE00001S9

Feed-through terminal block - UT 10 BK - 3046320

Approvals

CSA		http://www.csagroup.org/services-industries/product-listing/	13631

	B	C
Nominal voltage UN	600 V	600 V
Nominal current IN	65 A	65 A
mm²/AWG/kcmil	20-6	20-6

PRS		http://www.prs.pl/	TE/2156/880590/17

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	65 A	65 A
mm²/AWG/kcmil	20-6	20-6

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	65 A	65 A
mm²/AWG/kcmil	20-6	20-6

IECEE CB Scheme		http://www.iecee.org/	DE1-60928

Nominal voltage UN	1000 V
mm²/AWG/kcmil	0.5-10

VDE Gutachten mit Fertigungsüberwachung		http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx	40013658

Nominal voltage UN	1000 V
Nominal current IN	57 A

Feed-through terminal block - UT 10 BK - 3046320

Approvals

mm²/AWG/kcmil	0.5-10

EAC		RU C-DE.A*30.B.01742

RS		http://www.rs-head.spb.ru/en/index.php	17.00013.272

cULus Recognized	

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, acc. to EN 60715, 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, acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

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

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

Feed-through terminal block - UT 10 BK - 3046320

Accessories

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

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

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

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

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

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

Feed-through terminal block - UT 10 BK - 3046320

Accessories

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, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

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

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

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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, material: Steel, Galvanized, white passivated, length: 2000 mm, color: silver

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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, material: Steel, Galvanized, white passivated, length: 2000 mm, color: silver

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Feed-through terminal block - UT 10 BK - 3046320

Accessories

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, 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, 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, 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, material: Copper, uncoated, length: 2000 mm, color: copper-colored

End cap - NS 35/15 CAP - 1206573

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

Feed-through terminal block - UT 10 BK - 3046320

Accessories

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, acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

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End block

End clamp - E/AL-NS 35 - 1201662

End clamp, for end support of UKH 50 to UKH 240, is pushed onto DIN rail NS 35 and fixed with 2 screws, width: 10 mm, color: aluminum

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End cover

End cover - D-UT 2,5/10 - 3047028

End cover, length: 47 mm, width: 2.2 mm, height: 39.8 mm, color: gray

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Jumper

Plug-in bridge - FBS 2-10 - 3005947

Plug-in bridge, pitch: 10.2 mm, number of positions: 2, color: red

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Plug-in bridge - FBS 5-10 - 3005948

Plug-in bridge, pitch: 10.2 mm, number of positions: 5, color: red

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Feed-through terminal block - UT 10 BK - 3046320

Accessories

Plug-in bridge - FBS 5-10 BU - 1040620

Plug-in bridge, pitch: 10.2 mm, number of positions: 5, color: blue

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Labeled terminal marker

Zack marker strip - ZB 10 CUS - 0824941

Zack marker strip, can be ordered: Strip, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 10.2 mm, lettering field size: 10.15 x 10.5 mm

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Zack marker strip - ZB10,LGS:FORTL.ZAHLEN - 1053014

Zack marker strip, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, printed horizontally: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 991 ... 1000, mounting type: snap into tall marker groove, for terminal block width: 10.2 mm, lettering field size: 10.15 x 10.5 mm

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Zack marker strip - ZB10,QR:FORTL.ZAHLEN - 1053027

Zack marker strip, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, Printed vertically: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 991 ... 1000, mounting type: snap into tall marker groove, for terminal block width: 10.2 mm, lettering field size: 10.15 x 10.5 mm

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Marker for terminal blocks - ZB10,LGS:L1-N,PE - 1053412

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: 10.2 mm, lettering field size: 10.15 x 10.5 mm

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Feed-through terminal block - UT 10 BK - 3046320

Accessories

Marker for terminal blocks - ZB10,LGS:U-N - 1053438

Marker for terminal blocks, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, Horizontal: U, V, W, N, GND, U, V, W, N, GND, mounting type: snap into tall marker groove, for terminal block width: 10.2 mm, lettering field size: 10.15 x 10.5 mm

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Marker for terminal blocks - UC-TM 10 CUS - 0824605

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: 10.2 mm, lettering field size: 9.6 x 10.5 mm

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Marker for terminal blocks - UCT-TM 10 CUS - 0829623

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: 10.2 mm, lettering field size: 8.9 x 9.6 mm

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Marker for terminal blocks - TMT 10 R CUS - 0824500

Marker for terminal blocks, can be ordered: by line, white, labeled according to customer specifications, mounting type: snap into universal marker groove, snap into flat marker groove, for terminal block width: 10.2 mm, lettering field size: 6.35 x 10.15 mm

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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

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Partition plate

Feed-through terminal block - UT 10 BK - 3046320

Accessories

Partition plate - ATP-UT - 3047167

Partition plate, length: 50 mm, width: 2.2 mm, height: 48 mm, color: gray

Pick-off terminal block

Pick-off terminal block - AGK 4-UT 10 - 3047112

Pick-off terminal block, nom. voltage: 1000 V, nominal current: 32 A, connection method: Screw connection, number of connections: 1, cross section: 0.14 mm² - 6 mm², AWG: 26 - 10, width: 8.1 mm, height: 24.7 mm, color: gray, mounting type: on base element

Reducing bridge

Reducing bridge - RB UT 10-(2,5/4) - 3047060

Reducing bridge, pitch: 10.2 mm, length: 29.3 mm, width: 15.1 mm, number of positions: 2, color: red

Reducing bridge - RB UT 10-ST(2,5/4) - 3047086

Reducing bridge, pitch: 10.2 mm, length: 33.4 mm, width: 15.1 mm, number of positions: 2, color: red

Reducing bridge - RB UT 35-10 - 3032168

Reducing bridge, pitch: 13.2 mm, number of positions: 2, color: red

Screwdriver tools

Feed-through terminal block - UT 10 BK - 3046320

Accessories

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

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Terminal marking

Zack marker strip - ZB 10:UNBEDRUCKT - 1053001

Zack marker strip, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into tall marker groove, for terminal block width: 10.2 mm, lettering field size: 10.5 x 10.15 mm

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Marker for terminal blocks - UC-TM 10 - 0818069

Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into tall marker groove, for terminal block width: 10.2 mm, lettering field size: 9.6 x 10.5 mm

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Marker for terminal blocks - UCT-TM 10 - 0829142

Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: TOPMARK NEO, TOPMARK LASER, BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: snap into tall marker groove, for terminal block width: 10.2 mm, lettering field size: 8.9 x 9.6 mm

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Marker for terminal blocks - TMT 10 R - 0816210

Marker for terminal blocks, Roll, white, unlabeled, can be labeled with: THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, THERMOMARK S1.1, perforated, mounting type: snap into universal marker groove, snap into flat marker groove, for terminal block width: 10.2 mm, lettering field size: 6.35 x 10.15 mm

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