

## Feed-through terminal block - UT 10 BU - 3044188

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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 mm<sup>2</sup> - 16 mm<sup>2</sup>, AWG: 20 - 6, width: 10.2 mm, height: 46.9 mm, color: blue, 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
- ✓ Tested for railway applications
- ✓ 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 960469
GTIN	4017918960469
Weight per Piece (excluding packing)	16.900 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 mm <sup>2</sup>
Color	blue
Insulating material	PA
Flammability rating according to UL 94	V0

# Feed-through terminal block - UT 10 BU - 3044188

## Technical data

### General

Area of application	Railway industry
	Machine building
	Plant engineering
	Process industry
Rated surge voltage	8 kV
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 mm <sup>2</sup> conductor cross section)
Nominal current I <sub>N</sub>	57 A
Nominal voltage U <sub>N</sub>	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 mm <sup>2</sup> / 0.3 kg
	10 mm <sup>2</sup> / 2 kg
	16 mm <sup>2</sup> / 2.9 kg
Tensile test result	Test passed
Conductor cross section tensile test	0.5 mm <sup>2</sup>
Tractive force setpoint	20 N
Conductor cross section tensile test	10 mm <sup>2</sup>
Tractive force setpoint	90 N
Conductor cross section tensile test	16 mm <sup>2</sup>
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

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## Technical data

### General

Short circuit stability result	Test passed
Conductor cross section short circuit testing	10 mm <sup>2</sup>
Short-time current	1.2 kA
Conductor cross section short circuit testing	16 mm <sup>2</sup>
Short-time current	1.92 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	10.2 mm
End cover width	2.2 mm
Length	47.7 mm
Height	46.9 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.

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## Technical data

### Connection data

Conductor cross section solid min.	0.5 mm <sup>2</sup>
Conductor cross section solid max.	16 mm <sup>2</sup>
Conductor cross section AWG min.	20
Conductor cross section AWG max.	6
Conductor cross section flexible min.	0.5 mm <sup>2</sup>
Conductor cross section flexible max.	16 mm <sup>2</sup>
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 mm <sup>2</sup>
Conductor cross section flexible, with ferrule without plastic sleeve max.	10 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve min.	0.5 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve max.	10 mm <sup>2</sup>
2 conductors with same cross section, solid min.	0.5 mm <sup>2</sup>
2 conductors with same cross section, solid max.	4 mm <sup>2</sup>
2 conductors with same cross section, stranded min.	0.5 mm <sup>2</sup>
2 conductors with same cross section, stranded max.	4 mm <sup>2</sup>
2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, min.	0.5 mm <sup>2</sup>
2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, max.	6 mm <sup>2</sup>
2 conductors with same cross section, stranded, ferrules without plastic sleeve, min.	0.5 mm <sup>2</sup>
2 conductors with same cross section, stranded, ferrules without plastic sleeve, max.	2.5 mm <sup>2</sup>
Connection in acc. with standard	IEC/EN 60079-7
Conductor cross section solid min.	0.5 mm <sup>2</sup>
Conductor cross section solid max.	16 mm <sup>2</sup>
Conductor cross section AWG min.	20
Conductor cross section AWG max.	6
Conductor cross section flexible min.	0.5 mm <sup>2</sup>
Conductor cross section flexible max.	10 mm <sup>2</sup>
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

# Feed-through terminal block - UT 10 BU - 3044188

## Technical data

### 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"

## Drawings

### Circuit diagram



## 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

# Feed-through terminal block - UT 10 BU - 3044188

## Approvals

### Approvals

DNV GL / CSA / PRS / LR / UL Recognized / cUL Recognized / IECEx 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		<a href="http://exchange.dnv.com/tari/">http://exchange.dnv.com/tari/</a>	TAE00001S9
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CSA		<a href="http://www.csagroup.org/services-industries/product-listing/">http://www.csagroup.org/services-industries/product-listing/</a>	13631
	B	C	
Nominal voltage UN	600 V	600 V	
Nominal current IN	65 A	65 A	
mm <sup>2</sup> /AWG/kcmil	20-6	20-6	

PRS		<a href="http://www.prs.pl/">http://www.prs.pl/</a>	TE/2156/880590/17
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LR		<a href="http://www.lr.org/en">http://www.lr.org/en</a>	05/20042
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UL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 60425
	B	C	
Nominal voltage UN	600 V	600 V	
Nominal current IN	65 A	65 A	
mm <sup>2</sup> /AWG/kcmil	20-6	20-6	

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## Approvals

cUL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	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		<a href="http://www.iecee.org/">http://www.iecee.org/</a>	DE1-60928
Nominal voltage UN		1000 V	
mm²/AWG/kcmil		0.5-10	

VDE Gutachten mit Fertigungsüberwachung		<a href="http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx">http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx</a>	40013658
Nominal voltage UN		1000 V	
Nominal current IN		57 A	
mm²/AWG/kcmil		0.5-10	

EAC			RU C-DE.A*30.B.01742
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RS		<a href="http://www.rs-head.spb.ru/en/index.php">http://www.rs-head.spb.ru/en/index.php</a>	17.00013.272
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cULus Recognized			
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## Accessories

Accessories

DIN rail

## Feed-through terminal block - UT 10 BU - 3044188

### Accessories

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

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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

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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

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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

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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

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## Feed-through terminal block - UT 10 BU - 3044188

### Accessories

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

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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

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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

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



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

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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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## Feed-through terminal block - UT 10 BU - 3044188

### Accessories

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

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

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

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

## Feed-through terminal block - UT 10 BU - 3044188

### Accessories

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

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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

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End cap - NS 35/15 CAP - 1206573



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

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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

## Feed-through terminal block - UT 10 BU - 3044188

### Accessories

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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End cover - D-UT 2,5/10 BU - 3047235



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

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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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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

## Feed-through terminal block - UT 10 BU - 3044188

### Accessories

#### 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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#### 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

## Feed-through terminal block - UT 10 BU - 3044188

### Accessories

#### 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

##### Partition plate - ATP-UT - 3047167



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

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#### Pick-off terminal block

## Feed-through terminal block - UT 10 BU - 3044188

### Accessories

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 mm<sup>2</sup> - 6 mm<sup>2</sup>, AWG: 26 - 10, width: 8.1 mm, height: 24.7 mm, color: gray, mounting type: on base element

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### 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

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### 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

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### Terminal marking

## Feed-through terminal block - UT 10 BU - 3044188

### Accessories

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

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

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

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

### Warning label printed

Warning label - WS UT 10 - 3047361

Warning sign for UT terminal blocks

