

## High Current Connectors - UHV 50-AS/AS - 2130017

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High-current connector with bolt connection, cross section: 25 mm<sup>2</sup> ... 50 mm<sup>2</sup>, AWG: 6 ... 1/0, width: 32 mm, color: gray

The figure shows a combination of versions UHV 50-AS/AS, UHV 50-KH/AS and UHV 50-KH/KH

### Your advantages

- ✓ The comprehensive range of accessories, such as the connection rail for cross connection, ensures safe and user-friendly wiring of conductors up to 240 mm<sup>2</sup>
- ✓ Versions are available with a cable lug or direct connection and there is a mixed version of both connection methods
- ✓ The UHV ... high-current connectors are available in several versions

### Key Commercial Data

Packing unit	10 pc
GTIN	 4 017918 052799
GTIN	4017918052799

### Technical data

#### General

Number of levels	1
Number of connections	2
Nominal cross section	50 mm <sup>2</sup>
Color	gray
Insulating material	PA
Flammability rating according to UL 94	V0
Rated surge voltage	8 kV
Degree of pollution	3
Overvoltage category	III
Insulating material group	II
Maximum power dissipation for nominal condition	4.73 W

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## Technical data

### General

Ambient temperature (operation)	-60 °C ... 85 °C
Ambient temperature (storage/transport)	-25 °C ... 55 °C (For a short time, not exceeding 24 h, -60 to +70 °C)
Permissible humidity (storage/transport)	30 % ... 70 %
Ambient temperature (assembly)	-5 °C ... 70 °C
Ambient temperature (actuation)	-5 °C ... 70 °C
Connection in acc. with standard	IEC 60947-7-1
Nominal current $I_N$	150 A
Maximum load current	150 A (with 50 mm <sup>2</sup> conductor cross section)
Nominal voltage $U_N$	1000 V
Open side panel	No
Result of surge voltage test	Test passed
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
Bending test rotation speed	10 rpm
Bending test turns	135
Result of tight fit on support	Test passed
Tight fit on carrier	NS 32/NS 35
Result of temperature-rise test	Test passed
Short circuit stability result	Test passed
Ageing test for screwless modular terminal block temperature cycles	192
Result of thermal test	Test passed
Proof of thermal characteristics (needle flame) effective duration	30 s
Test specification, oscillation, broadband noise	DIN EN 50155 (VDE 0115-200):2008-03
Test spectrum	Service life test category 2, bogie-mounted
Test frequency	$f_1 = 5 \text{ Hz}$ to $f_2 = 250 \text{ Hz}$
ASD level	6.12 (m/s <sup>2</sup> ) <sup>2</sup> /Hz
Acceleration	3.12 g
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis
Shock form	Semi-sinusoidal
Acceleration	30g
Shock duration	18 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)	125 °C
Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21))	125 °C

### Dimensions

# High Current Connectors - UHV 50-AS/AS - 2130017

## Technical data

### Dimensions

Length	95 mm
Width	32 mm
Height NS 35/15	54.5 mm

### Connection data

Connection method	Bolt connection
Cable lug connection according to standard	DIN 46234:1980-03
Min. cross section for cable lug connection	6 mm <sup>2</sup>
Max. cross section for cable lug connection	50 mm <sup>2</sup>
Hole diameter, min.	10.5 mm
Cable lug width, max.	18 mm
Bolt diameter	10 mm
Screw thread	M10
Tightening torque, min	25 Nm
Tightening torque max	30 Nm
Cable lug connection according to standard	DIN 46235:1983-07
Min. cross section for cable lug connection	16 mm <sup>2</sup>
Max. cross section for cable lug connection	50 mm <sup>2</sup>
Hole diameter, min.	10.5 mm
Cable lug width, max.	22 mm
Bolt diameter	10 mm
Screw thread	M10
Tightening torque, min	25 Nm
Tightening torque max	30 Nm
Cable lug connection according to standard	DIN 46237:1970-07
Min. cross section for cable lug connection	6 mm <sup>2</sup>
Max. cross section for cable lug connection	6 mm <sup>2</sup>
Hole diameter, min.	10.5 mm
Bolt diameter	10 mm
Screw thread	M10
Tightening torque, min	25 Nm
Tightening torque max	30 Nm
Stripping length	The stripping length depends on the specification provided by the cable lug manufacturer.
Power rail	20 mm x 3 mm

### Standards and Regulations

Connection in acc. with standard	CSA
	IEC 60947-7-1
Flammability rating according to UL 94	V0

### Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
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# High Current Connectors - UHV 50-AS/AS - 2130017

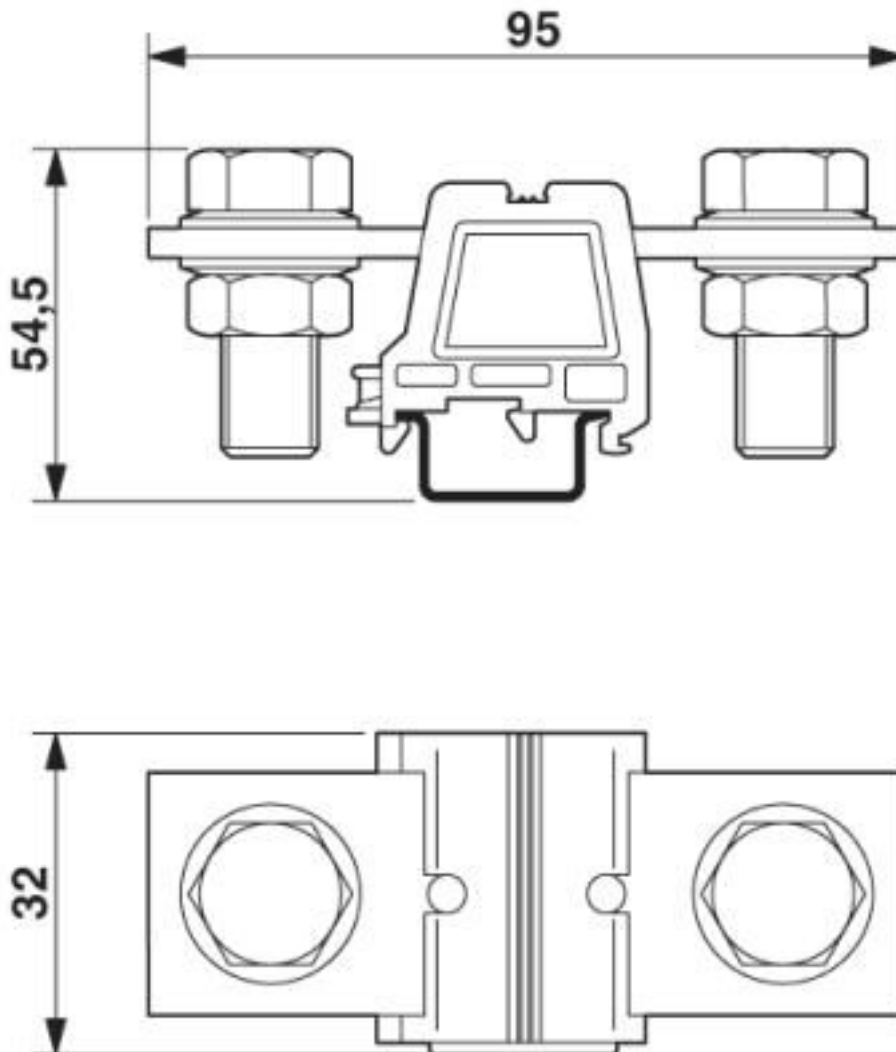
## Technical data

### Environmental Product Compliance

No hazardous substances above threshold values
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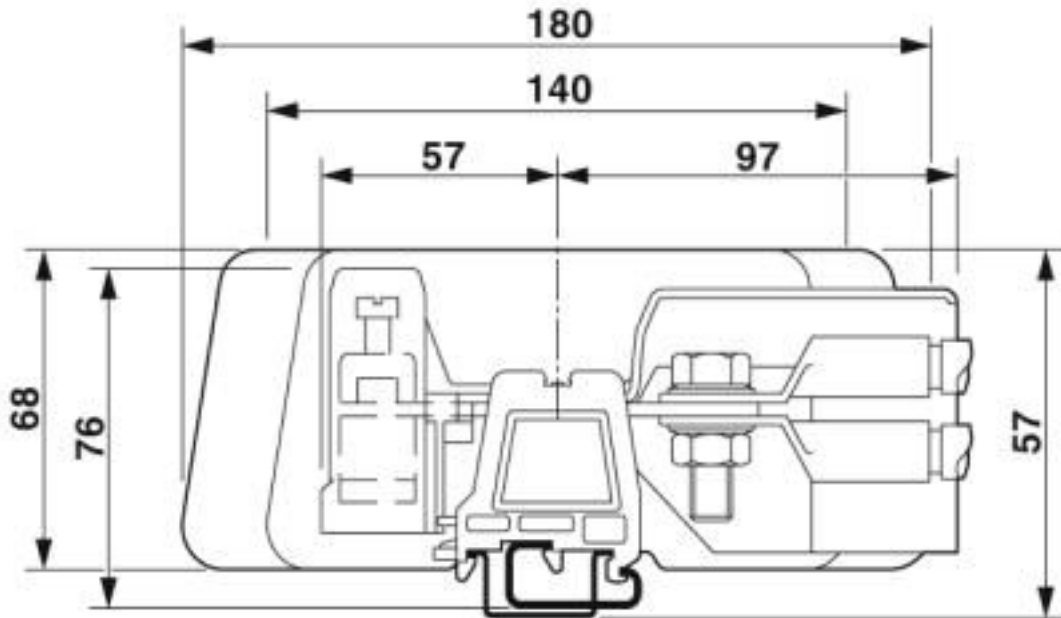
## Drawings

Dimensional drawing

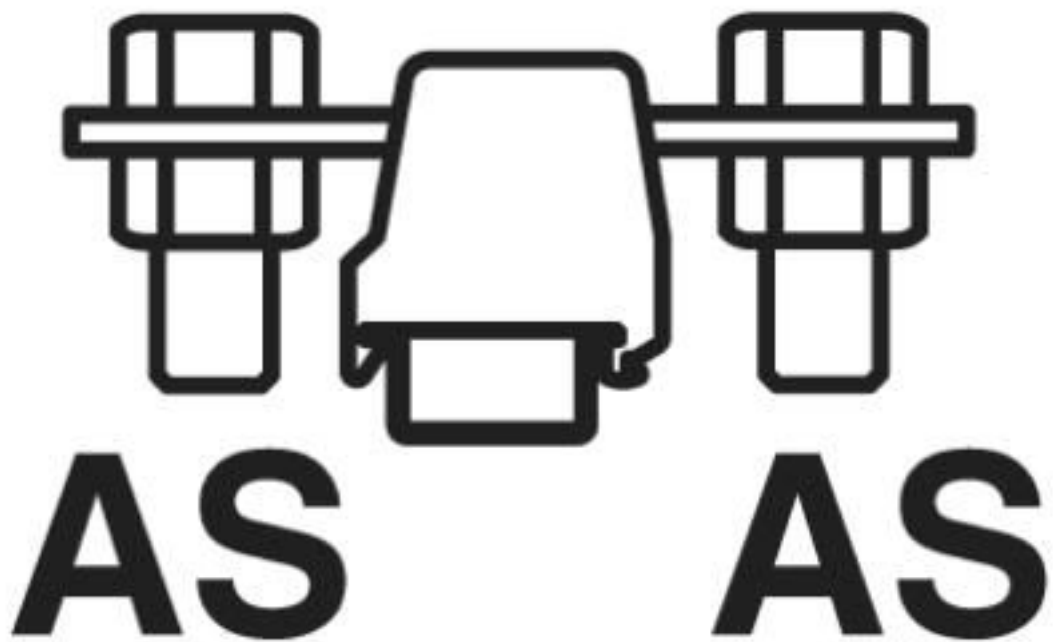


# High Current Connectors - UHV 50-AS/AS - 2130017

Dimensional drawing



Pictogram

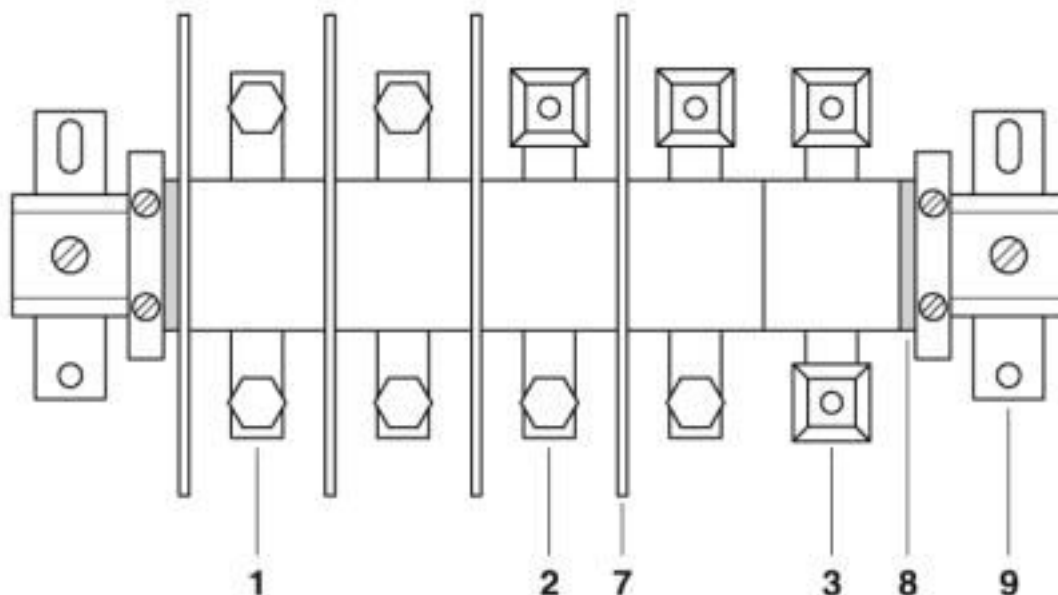


Circuit diagram



# High Current Connectors - UHV 50-AS/AS - 2130017

Schematic diagram



- 1 = high current connector, AS screw set on both sides
- 2 = high current connector, terminal sleeve KH on one side, screw set AS on the other side
- 3 = high current connector, terminal sleeves KH on both sides, for direct cable connection
- 7 = separating plate
- 8 = end piece
- 9 = flat bracket

## Classifications

eCl@ss

eCl@ss 10.0.1	27141120
eCl@ss 4.0	27141100
eCl@ss 4.1	27141100
eCl@ss 5.0	27141100
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

# High Current Connectors - UHV 50-AS/AS - 2130017

## Classifications

### UNSPSC

UNSPSC 6.01	30211811
UNSPSC 7.0901	39121410
UNSPSC 11	39121410
UNSPSC 12.01	39121410
UNSPSC 13.2	39121410
UNSPSC 18.0	39121410
UNSPSC 19.0	39121410
UNSPSC 20.0	39121410
UNSPSC 21.0	39121410

## Approvals

### Approvals


#### Approvals


DNV GL / CSA / UL Recognized / RS / EAC

#### Ex Approvals

### Approval details

DNV GL		<a href="https://approvalfinder.dnvgl.com/">https://approvalfinder.dnvgl.com/</a>	TAE00001CT
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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	125 A	125 A	
mm <sup>2</sup> /AWG/kcmil	6	6	

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	150 A	150 A	
mm <sup>2</sup> /AWG/kcmil	6	6	

## High Current Connectors - UHV 50-AS/AS - 2130017

### Approvals

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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EAC			RU C- DE.BL08.B.00540
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### Accessories

#### Accessories

#### Bridge

Connection rail - UHV 50-VS 2 - 5030897



Connection rail, number of positions: 2, color: silver

Connection rail - UHV 50-VS 3 - 2130622



Connection rail, number of positions: 3, color: silver

#### Connector

Ring cable lug - C-RC 6/M10 DIN - 3240087



Ring cable lug, non-insulated, 2.6 ... 6 mm<sup>2</sup>, M10

Ring cable lug - C-RC 10/M10 DIN - 3240092



Ring cable lug, non-insulated, 10 mm<sup>2</sup>, M10



## High Current Connectors - UHV 50-AS/AS - 2130017

### Accessories

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Ring cable lug - C-RC 16/M10 DIN - 3240097



Ring cable lug, non-insulated, 16 mm<sup>2</sup>, M10

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Ring cable lug - C-RC 25/M10 DIN - 3240102



Ring cable lug, non-insulated, 25 mm<sup>2</sup>, M10

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Ring cable lug - C-RC 35/M10 DIN - 3240107



Ring cable lug, non-insulated, 35 mm<sup>2</sup>, M10

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Ring cable lug - C-RC 50/M10 DIN - 3240112



Ring cable lug, non-insulated, 50 mm<sup>2</sup>, M10

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### Cover

Covering hood - UHV 50-AH - 2130444



Covering hood, length: 91 mm, width: 28.8 mm, height: 59 mm, color: gray

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### DIN rail

## High Current Connectors - UHV 50-AS/AS - 2130017

### Accessories

DIN rail perforated - NS 32 PERF 2000MM - 1201002



DIN rail perforated, G profile, width: 32 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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DIN rail, unperforated - NS 32 UNPERF 2000MM - 1201015



DIN rail, unperforated, G profile, width: 32 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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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



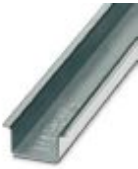
DIN rail perforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Steel, Galvanized, white passivated, length: 2000 mm, color: silver

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## High Current Connectors - UHV 50-AS/AS - 2130017

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

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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

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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

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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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## High Current Connectors - UHV 50-AS/AS - 2130017

### Accessories

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 32 - 1201659



End clamp, for end support of UKH 50 - UKH 240, is pushed onto DIN rail NS 32 and fixed with 2 screws, width: 10 mm, color: Aluminum

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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 clamp - CLIPFIX 15 - 3022263



Snap-on end bracket, to be snapped onto NS 15 DIN rail

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Labeled terminal marker

## High Current Connectors - UHV 50-AS/AS - 2130017

### 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, Number of individual labels: 10

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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 91 ... 100, mounting type: snap into tall marker groove, for terminal block width: 10.2 mm, lettering field size: 10.15 x 10.5 mm, Number of individual labels: 10

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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 91 ... 100, mounting type: snap into tall marker groove, for terminal block width: 10.2 mm, lettering field size: 10.15 x 10.5 mm, Number of individual labels: 10

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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, Number of individual labels: 10

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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, Number of individual labels: 10

## High Current Connectors - UHV 50-AS/AS - 2130017

### 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, Number of individual labels: 48

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, Number of individual labels: 36

### Mounting material

Insertion profile - UKH 50 EP - 3009228



Insertion profile, color: silver

### Partition plate

Separating plate - UHV -TP1 - 2130402



Separating plate, length: 140.2 mm, width: 2 mm, height: 68.3 mm, color: gray

### Pick-off terminal block

Pick-off terminal block - AGK PT 4X6/M10 - 1017448



Pick-off terminal block, nom. voltage: 1000 V, nominal current: 41 A, connection method: Push-in connection, Bolt connection, number of connections: 5, cross section: 0.5 mm<sup>2</sup> - 10 mm<sup>2</sup>, AWG: 20 - 8, width: 31 mm, height: 32.3 mm, color: gray, mounting type: on base element

## High Current Connectors - UHV 50-AS/AS - 2130017

### Accessories

Pick-off terminal block - AGK PT 8X6/M10 - 1017450



Pick-off terminal block, nom. voltage: 1000 V, nominal current: 41 A, connection method: Push-in connection, Bolt connection, number of connections: 9, cross section: 0.5 mm<sup>2</sup> - 10 mm<sup>2</sup>, AWG: 20 - 8, width: 31 mm, height: 32.3 mm, color: gray, mounting type: on base element

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### Screwdriver tools

Screwdriver - SZS 1,2X8,0 VDE - 1205082



Screwdriver, slot-headed, VDE insulated, size: 1.2 x 8.0 x 175 mm, 2-component grip, with non-slip grip

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### Terminal marking

Marker card - SBS10:UNBEDRUCKT - 1007248



Marker card, Card, white, unlabeled, can be labeled with: Marker pen, perforated, mounting type: snap into tall marker groove, snap into flat marker groove, for terminal block width: 10 mm, lettering field size: 6 x 10.1 mm, Number of individual labels: 250

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, Number of individual labels: 10

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, Number of individual labels: 48

## High Current Connectors - UHV 50-AS/AS - 2130017

### Accessories

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, Number of individual labels: 36

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### Necessary add-on products

Flange cover - UHV -E - 2130428



Flange cover, length: 43.3 mm, width: 5.2 mm, color: gray

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