

# High Current Connectors - UKH 50 - 3009118

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High Current Connectors, Connection method: Screw connection, Cross section: 16 mm<sup>2</sup> - 70 mm<sup>2</sup>, AWG: 6 - 2/0, Width: 20 mm, Height: 75.8 mm, Color: gray, Mounting type: NS 35/15, NS 32

## Product Features

- Reliable cable connection is ensured by three-point centering of the conductor in the prismatic sleeve base
- Low contact resistance of the contact surface due to ribbing
- Screw locking by means of spring-loaded elements in the clamping part



## Key commercial data

package_quantity	10
GTIN	4017918091644

## Technical data

### General

Number of levels	1
Number of connections	2
Color	gray
Insulating material	PA
Inflammability class according to UL 94	V0

### General

Maximum load current	150 A (with 50 mm <sup>2</sup> conductor cross section)
Rated surge voltage	8 kV
Pollution degree	3
Surge voltage category	III
Insulating material group	I
Connection in acc. with standard	IEC 60947-7-1
Nominal current I <sub>N</sub>	150 A
Nominal voltage U <sub>N</sub>	1000 V
Open side panel	nein
Shock protection test specification	DIN EN 50274 (VDE 0660-514):2002-11
Back of the hand protection	guaranteed

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## Technical data

### General

Finger protection	guaranteed
Surge voltage test setpoint	9.8 kV
Result of surge voltage test	Test passed
Power frequency withstand voltage setpoint	2.2 kV
Result of power-frequency withstand voltage test	Test passed
Checking the mechanical stability of terminal points (5 x conductor connection)	Test passed
Bending test rotation speed	10 rpm
Bending test turns	135
Bending test conductor cross section/weight	16 mm <sup>2</sup> / 2.9 kg
Bending test conductor cross section/weight	50 mm <sup>2</sup> / 9.5 kg
Result of bending test	Test passed
Conductor cross section tensile test	16 mm <sup>2</sup>
Tractive force setpoint	100 N
Conductor cross section tensile test	50 mm <sup>2</sup>
Tractive force setpoint	236 N
Tensile test result	Test passed
Tight fit on carrier	NS 32/NS 35
Setpoint	10 N
Result of tight fit test	Test passed
Requirements, voltage drop	≤ 3.2 mV
Result of voltage drop test	Test passed
Temperature-rise test	Test passed
Conductor cross section short circuit testing	50 mm <sup>2</sup>
Short-time current	6 kA
Short circuit stability result	Test passed
Proof of thermal characteristics (needle flame) effective duration	30 s
Result of thermal test	Test passed
Temperature index, insulating material (DIN EN 60216-1 (VDE 0304-21))	130 °C
Static insulating material application in cold	-60 °C

### Dimensions

Width	20 mm
Length	75.5 mm
Height	75.8 mm
Height NS 35/15	83.5 mm
Height NS 32	81 mm

### Connection data

Connection in acc. with standard	IEC 60947-7-1
Connection method	Screw connection

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## Technical data

### Connection data

<b>Note</b>	Note: Product releases, connection cross sections and notes on connecting aluminum cables can be found in the download area.
<b>Conductor cross section solid min.</b>	16 mm <sup>2</sup>
<b>Conductor cross section solid max.</b>	70 mm <sup>2</sup>
<b>Conductor cross section AWG/kcmil min.</b>	6
<b>Conductor cross section AWG/kcmil max</b>	2/0
<b>Conductor cross section stranded min.</b>	25 mm <sup>2</sup>
<b>Conductor cross section stranded max.</b>	70 mm <sup>2</sup>
<b>Min. AWG conductor cross section, stranded</b>	3
<b>Max. AWG conductor cross section, stranded</b>	2/0
<b>Conductor cross section stranded, with ferrule without plastic sleeve min.</b>	25 mm <sup>2</sup>
<b>Conductor cross section stranded, with ferrule without plastic sleeve max.</b>	50 mm <sup>2</sup>
<b>Conductor cross section stranded, with ferrule with plastic sleeve min.</b>	25 mm <sup>2</sup>
<b>Conductor cross section stranded, with ferrule with plastic sleeve max.</b>	50 mm <sup>2</sup>
<b>2 conductors with same cross section, solid min.</b>	10 mm <sup>2</sup>
<b>2 conductors with same cross section, solid max.</b>	16 mm <sup>2</sup>
<b>2 conductors with same cross section, stranded min.</b>	10 mm <sup>2</sup>
<b>2 conductors with same cross section, stranded max.</b>	16 mm <sup>2</sup>
<b>2 conductors with same cross section, stranded, ferrules without plastic sleeve, min.</b>	10 mm <sup>2</sup>
<b>2 conductors with same cross section, stranded, ferrules without plastic sleeve, max.</b>	16 mm <sup>2</sup>
<b>Stripping length</b>	24 mm
<b>Internal cylindrical gage</b>	B10
<b>Screw thread</b>	M6
<b>Tightening torque, min</b>	6 Nm
<b>Tightening torque max</b>	8 Nm

## classifications

### eCl@ss

<b>eCl@ss 4.0</b>	27141120
<b>eCl@ss 4.1</b>	27141120
<b>eCl@ss 5.0</b>	27141120
<b>eCl@ss 5.1</b>	27141120
<b>eCl@ss 6.0</b>	27141120
<b>eCl@ss 7.0</b>	27141120
<b>eCl@ss 8.0</b>	27141120

### ETIM

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## classifications

### ETIM

<b>ETIM 2.0</b>	EC000897
<b>ETIM 3.0</b>	EC000897
<b>ETIM 4.0</b>	EC000897
<b>ETIM 5.0</b>	EC000897

### UNSPSC

<b>UNSPSC 6.01</b>	30211811
<b>UNSPSC 7.0901</b>	39121410
<b>UNSPSC 11</b>	39121410
<b>UNSPSC 12.01</b>	39121410
<b>UNSPSC 13.2</b>	39121410

## approvals

IECEX / ATEX / FM approved / UL Recognized / cUL Recognized / cULus Recognized / CSA / UL Recognized / KEMA-KEUR / cUL Recognized / GOST / LR / GL / DNV / PRS / CCA / GOST / VDE Zeichengenehmigung / IEC EE CB Scheme / cULus Recognized /

### Approval details

<b>IECEX</b>	
Nominal voltage UN	690 V
Nominal current IN	133 A
mm <sup>2</sup> /AWG/kcmil	25-50

<b>ATEX</b>	
Nominal voltage UN	690 V
Nominal current IN	133 A
mm <sup>2</sup> /AWG/kcmil	25-50

<b>FM approved</b>	
Nominal voltage UN	600 V
Nominal current IN	135 A
mm <sup>2</sup> /AWG/kcmil	6

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## approvals

**UL Recognized**

Nominal voltage UN	600 V
Nominal current IN	150 A
mm <sup>2</sup> /AWG/kcmil	6

**cUL Recognized**

Nominal voltage UN	600 V
Nominal current IN	150 A
mm <sup>2</sup> /AWG/kcmil	6

**cULus Recognized**

**CSA**

Usegroups	B	C
Nominal voltage UN	600 V	600 V
Nominal current IN	150 A	150 A
mm <sup>2</sup> /AWG/kcmil	6	6

Usegroups	B	C
Nominal voltage UN	600 V	600 V
Nominal current IN	150 A	150 A
mm <sup>2</sup> /AWG/kcmil	6	6

**KEMA-KEUR**

Nominal voltage UN	1000 V
Nominal current IN	
mm <sup>2</sup> /AWG/kcmil	50

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## approvals

Usegroups	B	C
Nominal voltage UN	600 V	600 V
Nominal current IN	150 A	150 A
mm <sup>2</sup> /AWG/kcmil	6	6

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LR
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GL
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DNV
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PRS
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<b>CCA</b>	
Nominal voltage UN	1000 V
Nominal current IN	
mm <sup>2</sup> /AWG/kcmil	50

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<b>VDE Zeichengenehmigung</b>	
Nominal voltage UN	1000 V
Nominal current IN	
mm <sup>2</sup> /AWG/kcmil	

<b>IECEE CB Scheme</b>
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## approvals

Nominal voltage UN	1000 V
Nominal current IN	
mm <sup>2</sup> /AWG/kcmil	



## accessories

### Mounting material

UKH 50 EP - 3009228



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### Pick-off terminal block

AGK 10-UKH 50 - 3001763



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### Screwdriver tools

SZS 1,2X8,0 VDE - 1205082



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### Marker pen

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## accessories

X-PEN 0,35 - 0811228



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## Bridge

FBI 2-20 - 0201346



FBI 3-20 - 0201317



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## Mounting rail

NS 32 PERF 2000MM - 1201002



NS 32 UNPERF 2000MM - 1201015





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## accessories

NS 35/15 PERF 2000MM - 1201730



NS 35/15 UNPERF 2000MM - 1201714



NS 35/15 WH PERF 2000MM - 0806602



NS 35/15 WH UNPERF 2000MM - 1204135



NS 35/15 AL UNPERF 2000MM - 1201756



NS 35/15 ZN PERF 2000MM - 1206599



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## accessories

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NS 35/15 ZN UNPERF 2000MM - 1206586



NS 35/15 CU UNPERF 2000MM - 1201895



NS 35/15 CAP - 1206573



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## Terminal marking

ZB 10:UNBEDRUCKT - 1053001



UC-TM 10 - 0818069



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## accessories

UCT-TM 10 - 0829142



TMT 10 R - 0816210



### Labeled terminal marker

ZB 10 CUS - 0824941



ZB10,LGS:FORTL.ZAHLEN - 1053014



ZB10,QR:FORTL.ZAHLEN - 1053027



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## accessories

ZB10,LGS:GLEICHE ZAHLEN - 1053030



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ZB10,LGS:L1-N,PE - 1053412



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ZB10,LGS:U-N - 1053438



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UC-TM 10 CUS - 0824605



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UCT-TM 10 CUS - 0829623



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TMT 10 R CUS - 0824500



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accessories

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## End block

E/AL-NS 32 - 1201659



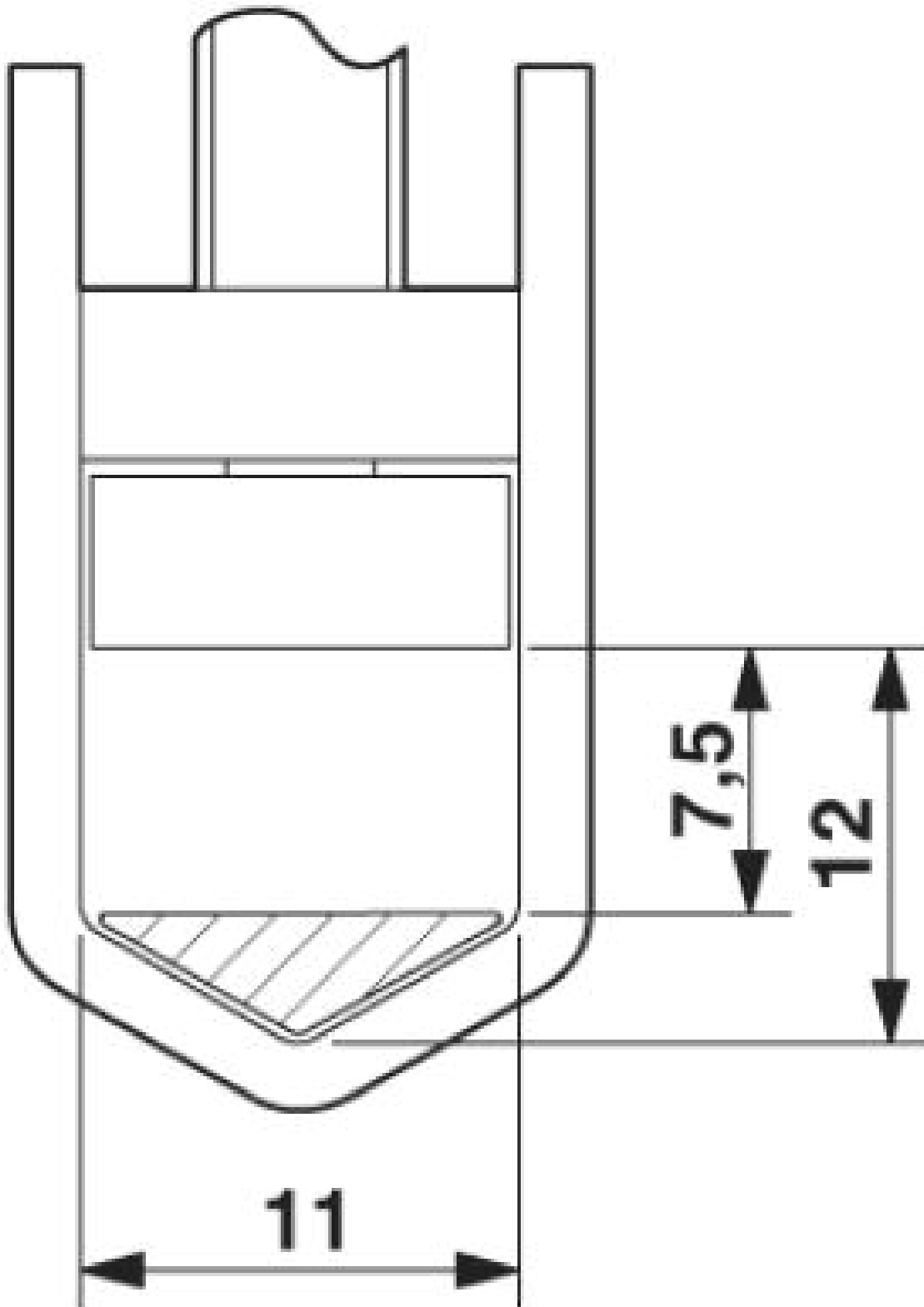
E/AL-NS 35 - 1201662



Drawings

# High Current Connectors - UKH 50 - 3009118

Dimensioned drawing

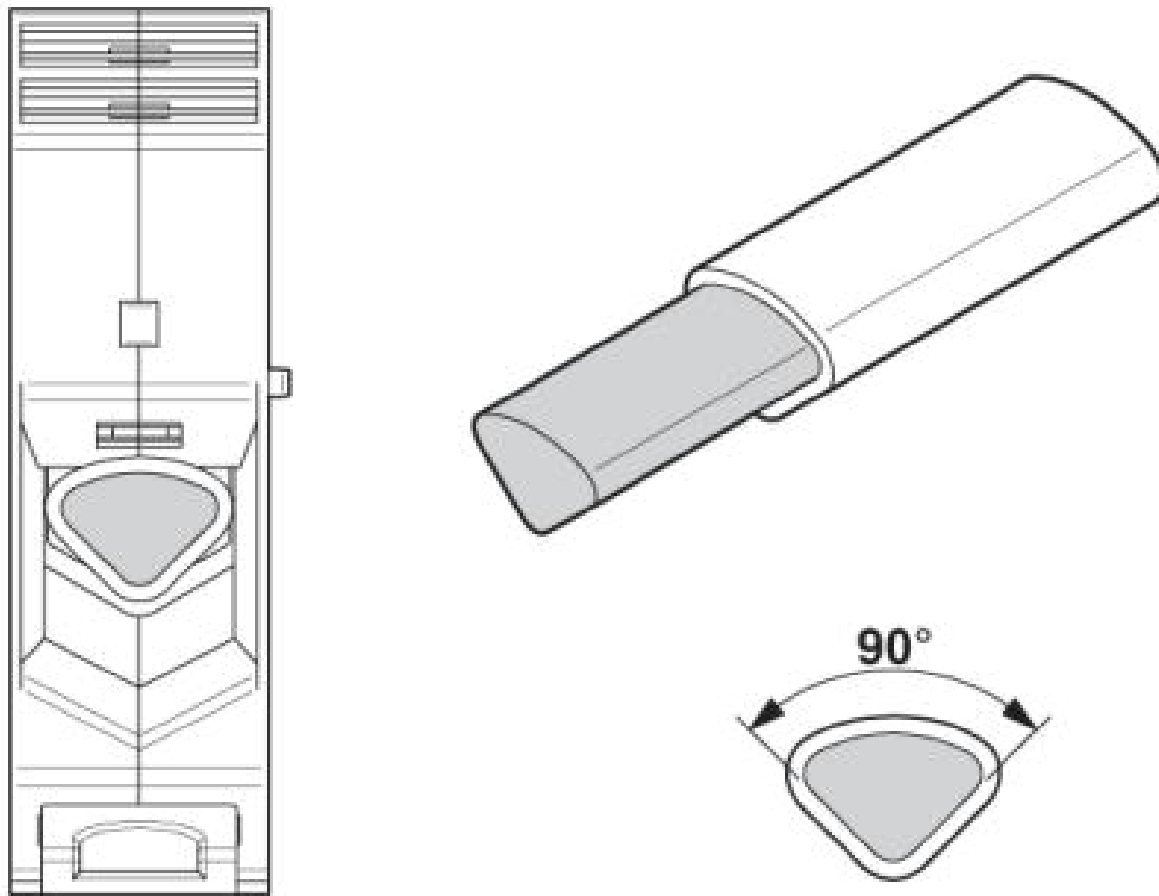


# High Current Connectors - UKH 50 - 3009118

Circuit diagram



Schematic diagram



Connecting aluminum cables. Further notes can be found in the download area

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