

# Potential collective terminal - UKH 70/4X10 BU - 3213143

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Potential collective terminal, nom. voltage: 1500 V DC / 1000 V AC, nominal current: 192 A, connection method: Screw connection, Screw connection, number of connections: 5, number of positions: 1, cross section: 16 mm<sup>2</sup> - 95 mm<sup>2</sup>, AWG: 4 - 3/0, width: 20.3 mm, height: 79.4 mm, color: blue, mounting type: NS 35/7,5, NS 35/15, NS 35/15-2,3, NS 32

## Your advantages

- ✓ 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

Packing unit	10 pc
Minimum order quantity	10 pc
GTIN	 4 046356 817837
GTIN	4046356817837
Weight per Piece (excluding packing)	125.200 g
Custom tariff number	85369010
Country of origin	China

## Technical data

### General

Number of positions	1
Number of levels	1
Number of connections	5
Potentials	1
Nominal cross section	70 mm <sup>2</sup>
Color	blue
Insulating material	PA
Flammability rating according to UL 94	V0
Rated surge voltage	8 kV

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## Technical data

### General

Degree of pollution	3
Overvoltage category	III
Insulating material group	I
Maximum power dissipation for nominal condition	6.27 W
Ambient temperature (operation)	-40 °C ... 120 °C
Maximum load current	192 A (in case of a 70 mm <sup>2</sup> conductor cross section, the maximum load current must not be exceeded by the total current of all connected conductors.)
Nominal current I <sub>N</sub>	192 A
Nominal voltage U <sub>N</sub>	1500 V DC
	1000 V AC
Nominal current I <sub>N</sub>	57 A
Nominal voltage U <sub>N</sub>	1500 V DC
	1000 V AC
Open side panel	No
Relative insulation material temperature index (Elec., UL 746 B)	130 °C
Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21))	130 °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)	28 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	20.3 mm
Length	88.5 mm
Height	79.4 mm
Height NS 35/7,5	80 mm
Height NS 35/15	87.5 mm
Height NS 32	85 mm

### Connection data

Connection method	Screw connection
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### Technical data

#### Connection data

Screw thread	M8
Stripping length	24 mm
Tightening torque, min	8 Nm
Tightening torque max	10 Nm
Connection in acc. with standard	IEC 60947-7-1
Conductor cross section solid min.	16 mm <sup>2</sup>
Conductor cross section solid max.	95 mm <sup>2</sup>
Conductor cross section AWG min.	4
Conductor cross section AWG max.	3/0
Conductor cross section flexible min.	25 mm <sup>2</sup>
Conductor cross section flexible max.	70 mm <sup>2</sup>
Min. AWG conductor cross section, flexible	3
Max. AWG conductor cross section, flexible	2/0
Conductor cross section flexible, with ferrule without plastic sleeve min.	16 mm <sup>2</sup>
Conductor cross section flexible, with ferrule without plastic sleeve max.	70 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve min.	16 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve max.	70 mm <sup>2</sup>
2 conductors with same cross section, solid min.	16 mm <sup>2</sup>
2 conductors with same cross section, solid max.	25 mm <sup>2</sup>
2 conductors with same cross section, stranded min.	16 mm <sup>2</sup>
2 conductors with same cross section, stranded max.	25 mm <sup>2</sup>
2 conductors with same cross section, stranded, ferrules without plastic sleeve, min.	16 mm <sup>2</sup>
2 conductors with same cross section, stranded, ferrules without plastic sleeve, max.	25 mm <sup>2</sup>
Internal cylindrical gage	A11
Connection method	Screw connection
Screw thread	M4
Stripping length	10 mm
Tightening torque, min	1.4 Nm
Tightening torque max	1.5 Nm
Conductor cross section solid min.	1.5 mm <sup>2</sup>
Conductor cross section solid max.	16 mm <sup>2</sup>
Conductor cross section AWG min.	16
Conductor cross section AWG max.	6
Conductor cross section flexible min.	1.5 mm <sup>2</sup>
Conductor cross section flexible max.	10 mm <sup>2</sup>
Min. AWG conductor cross section, flexible	16
Max. AWG conductor cross section, flexible	6
Conductor cross section flexible, with ferrule without plastic sleeve min.	1.5 mm <sup>2</sup>
Conductor cross section flexible, with ferrule without plastic sleeve max.	10 mm <sup>2</sup>

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## Technical data

### Connection data

Conductor cross section flexible, with ferrule with plastic sleeve min.	1.5 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve max.	6 mm <sup>2</sup>
2 conductors with same cross section, solid min.	1.5 mm <sup>2</sup>
2 conductors with same cross section, solid max.	2.5 mm <sup>2</sup>
2 conductors with same cross section, stranded min.	1.5 mm <sup>2</sup>
2 conductors with same cross section, stranded max.	2.5 mm <sup>2</sup>
2 conductors with same cross section, stranded, ferrules without plastic sleeve, min.	1.5 mm <sup>2</sup>
2 conductors with same cross section, stranded, ferrules without plastic sleeve, max.	2.5 mm <sup>2</sup>
Internal cylindrical gage	A5

### 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
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

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

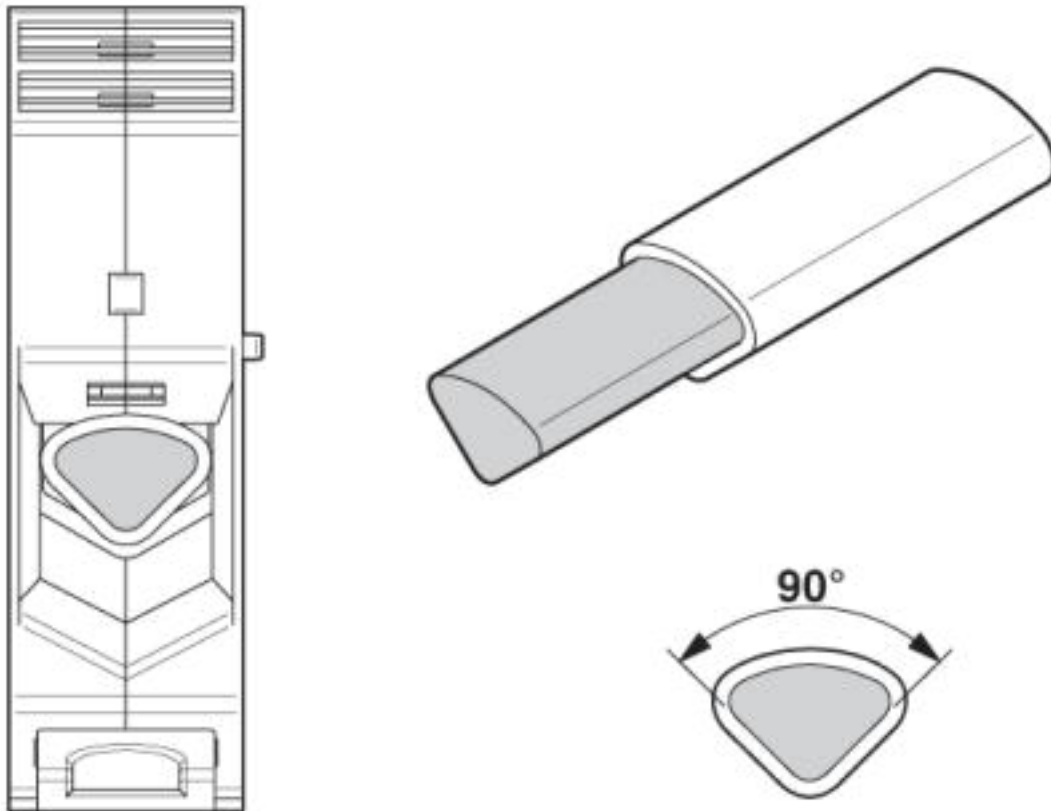
## Drawings

Circuit diagram



## Potential collective terminal - UKH 70/4X10 BU - 3213143

Schematic diagram



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

### Classifications

#### eCl@ss

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

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## 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


CSA / UL Recognized / cUL Recognized / EAC / cULus Recognized

#### Ex Approvals

### Approval details

CSA		<a href="http://www.csagroup.org/services-industries/product-listing/">http://www.csagroup.org/services-industries/product-listing/</a>	13631
		C	
Nominal voltage UN			1000 V
Nominal current IN			176 A
mm <sup>2</sup> /AWG/kcmil			4

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
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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
		C	
Nominal voltage UN			1000 V
Nominal current IN			176 A
mm <sup>2</sup> /AWG/kcmil			4

# Potential collective terminal - UKH 70/4X10 BU - 3213143

## Approvals

EAC		RU C- DE.AI30.B.01102
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cULus Recognized	
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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, 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

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

## Potential collective terminal - UKH 70/4X10 BU - 3213143

### Accessories

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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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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## Potential collective terminal - UKH 70/4X10 BU - 3213143

### Accessories

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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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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## Potential collective terminal - UKH 70/4X10 BU - 3213143

### Accessories

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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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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## Potential collective terminal - UKH 70/4X10 BU - 3213143

### 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

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

### 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

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

### Mounting material

Insertion profile - UKH 50 EP - 3009228



Insertion profile, color: silver

### Pick-off terminal block

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### Accessories

Pick-off terminal block - AGK 10-UKH 50 - 3001763



Pick-off terminal block, nom. voltage: 1000 V, nominal current: 57 A, connection method: Screw connection, number of connections: 1, cross section: 0.5 mm<sup>2</sup> - 10 mm<sup>2</sup>, AWG: 20 - 8, width: 10.2 mm, height: 34.7 mm, color: gray

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### Screw bridge

Fixed bridge - FBI 2-20 N - 3213195



Fixed bridge, pitch: 20 mm, number of positions: 2, color: silver

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Fixed bridge - FBI 3-20 N - 3213205



Fixed bridge, pitch: 20 mm, number of positions: 3, color: silver

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Fixed bridge - FBI 2-20 N EX - 3213210



Fixed bridge, number of positions: 2, color: silver

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Fixed bridge - FBI 3-20 N EX - 3213211



Fixed bridge, number of positions: 3, color: silver

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### Socket spanner

## Potential collective terminal - UKH 70/4X10 BU - 3213143

### Accessories

Screwdriver - SF-THEX 6-200 - 1212642



T-handle screwdriver, for Allen screws, hexagonal (with chamfer), size: hex 6 x 200 mm, ergonomically shaped handle, matt chrome-plated

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### Terminal marking

Zack marker strip - ZB 18:UNBEDRUCKT - 0811833



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: 18 mm, lettering field size: 10.5 x 17.4 mm, Number of individual labels: 5