

## Ground modular terminal block - UKH 70/4X10-PE - 3213144

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Ground modular terminal block, Connection method: Screw connection, 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: green-yellow, Mounting type: NS 35/7,5, NS 35/15, NS 35/15-2,3, NS 32

### Why buy this product

- 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	1 STK
Minimum order quantity	10 STK
Weight per Piece (excluding packing)	192.000 g
Custom tariff number	85369010
Country of origin	China

### Technical data

#### Environmental Product Compliance

China RoHS	No hazardous substances above threshold values
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#### General

Number of positions	1
Number of levels	1
Number of connections	5
Potentials	1
Nominal cross section	70 mm <sup>2</sup>
Color	green-yellow
Insulating material	PA

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## Technical data

### General

Flammability rating according to UL 94	V0
Rated surge voltage	8 kV
Degree of pollution	3
Overvoltage category	III
Insulating material group	I
Ambient temperature (operation)	-40 °C ... 120 °C
Open side panel	No
Terminal block mounting	6 Nm ... 8 Nm (PE foot with mounting screw, M6)
Oscillation, broadband noise test result	Test passed
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	$6.12 \text{ (m/s}^2\text{)}^2\text{/Hz}$
Acceleration	3.12 g
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis
Shock test result	Test passed
Test specification, shock test	DIN EN 50155 (VDE 0115-200):2008-03
Shock form	Half-sine
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)	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

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## Technical data

### General

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

Note	Please observe the current carrying capacity of the DIN rails.
Connection method	Screw connection
Connection in acc. with standard	IEC 60947-7-2
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>
Stripping length	24 mm
Internal cylindrical gage	A11
Screw thread	M8
Tightening torque, min	8 Nm

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### Technical data

#### Connection data

Tightening torque max	10 Nm
Note	PE foot with mounting screw, M4
Connection method	Screw connection
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>
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>
Stripping length	10 mm
Internal cylindrical gage	A5
Screw thread	M4
Tightening torque, min	1.4 Nm
Tightening torque max	1.5 Nm

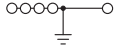
#### Standards and Regulations

Connection in acc. with standard	IEC 60947-7-2
Flammability rating according to UL 94	V0

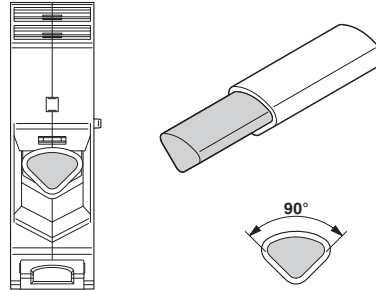
### Drawings

# Ground modular terminal block - UKH 70/4X10-PE - 3213144

Circuit diagram



Schematic diagram



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

## Classifications

### eCl@ss

eCl@ss 4.0	27141120
eCl@ss 4.1	27141120
eCl@ss 5.0	27141120
eCl@ss 5.1	27141120
eCl@ss 6.0	27141120
eCl@ss 7.0	27141133
eCl@ss 8.0	27141141
eCl@ss 9.0	27141141

### ETIM

ETIM 3.0	EC000897
ETIM 4.0	EC000897
ETIM 5.0	EC000901

### UNSPSC

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

## Accessories

Accessories

DIN rail

## Ground modular terminal block - UKH 70/4X10-PE - 3213144

### Accessories

DIN rail perforated - NS 35/ 7,5 PERF 2000MM - 0801733



DIN rail, material: steel galvanized and passivated with a thick layer, perforated, height 7.5 mm, width 35 mm, length: 2000 mm

DIN rail, unperforated - NS 35/ 7,5 UNPERF 2000MM - 0801681



DIN rail, material: Steel, unperforated, height 7.5 mm, width 35 mm, length: 2 m

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



DIN rail 35 mm (NS 35)

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



DIN rail 35 mm (NS 35)

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



DIN rail, unperforated, Width: 35 mm, Height: 7.5 mm, Length: 2000 mm, Color: silver

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### Accessories

DIN rail perforated - NS 35/ 7,5 ZN PERF 2000MM - 1206421



DIN rail, material: Galvanized, perforated, height 7.5 mm, width 35 mm, length: 2 m

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DIN rail, unperforated - NS 35/ 7,5 ZN UNPERF 2000MM - 1206434



DIN rail, material: Galvanized, unperforated, height 7.5 mm, width 35 mm, length: 2 m

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



DIN rail, material: Copper, unperforated, height 7.5 mm, width 35 mm, length: 2 m

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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, material: steel galvanized and passivated with a thick layer, perforated, height 15 mm, width 35 mm, length: 2000 mm

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## Ground modular terminal block - UKH 70/4X10-PE - 3213144

### Accessories

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



DIN rail, material: Steel, unperforated, height 15 mm, width 35 mm, length: 2 m

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DIN rail perforated - NS 35/15 WH PERF 2000MM - 0806602



DIN rail 35 mm (NS 35)

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DIN rail - NS 35/15 WH UNPERF 2000MM - 1204135



DIN rail 35 mm (NS 35)

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DIN rail, unperforated - NS 35/15 AL UNPERF 2000MM - 1201756



DIN rail, deep drawn, high profile, unperforated, 1.5 mm thick, material: aluminum, height 15 mm, width 35 mm, length 2000 mm

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DIN rail perforated - NS 35/15 ZN PERF 2000MM - 1206599



DIN rail, material: Galvanized, perforated, height 15 mm, width 35 mm, length: 2 m

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## Ground modular terminal block - UKH 70/4X10-PE - 3213144

### Accessories

DIN rail, unperforated - NS 35/15 ZN UNPERF 2000MM - 1206586



DIN rail, material: Galvanized, unperforated, height 15 mm, width 35 mm, length: 2 m

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DIN rail, unperforated - NS 35/15 CU UNPERF 2000MM - 1201895



DIN rail, material: Copper, unperforated, 1.5 mm thick, height 15 mm, width 35 mm, length: 2 m

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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, material: Steel, unperforated, 2.3 mm thick, height 15 mm, width 35 mm, length: 2 m

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DIN rail perforated - NS 32 PERF 2000MM - 1201002



G-profile DIN rail, material: Steel, perforated, height 15 mm, width 32 mm, length 2 m

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## Ground modular terminal block - UKH 70/4X10-PE - 3213144

### Accessories

DIN rail, unperforated - NS 32 UNPERF 2000MM - 1201015



G-profile DIN rail, material: Steel, unperforated, height 15 mm, width 32 mm, length 2 m

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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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### Mounting material

Insertion profile - UKH 50 EP - 3009228



Insertion profile, Color: silver

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### Pick-off terminal block

## Ground modular terminal block - UKH 70/4X10-PE - 3213144

### Accessories

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



Pick-off terminal block, Connection method: Screw connection, 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, Mounting type: On base element

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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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### Socket spanner

Tool - VDE-ISS 6 - 1201934



Allen wrench, fully insulated, safety tool in accordance with EN 60900, length: 150 mm, handle width: 110 mm, for all terminal blocks with 8 mm Allen screw

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### Terminal marking

## Ground modular terminal block - UKH 70/4X10-PE - 3213144

### Accessories

Zack marker strip - ZB 18:UNBEDRUCKT - 0811833



Zack marker strip, Strip, white, unlabeled, can be labeled with: Plotter, Mounting type: Snap into tall marker groove, for terminal block width: 18 mm, Lettering field: 10.5 x 17.4 mm