

## Feed-through terminal block - UKH 70 - 3213140

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Feed-through 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: 78.3 mm, Color: gray, Mounting type: NS 35/7,5, NS 35/15, NS 32

### Product Features

- Reliable cable connection is ensured by three-point centering of the conductor in the prismatic sleeve base
- Tested for railway applications
- 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 PCE
Weight per Piece (excluding packing)	144.4 GRM
Custom tariff number	85369010
Country of origin	China

### Technical data

#### General

Number of levels	1
Number of connections	2
Color	gray
Insulating material	PA
Inflammability class according to UL 94	V0
Area of application	Railway industry
	Mechanical engineering
	Plant engineering
Maximum load current	192 A (At 70 mm <sup>2</sup> conductor cross section)
Rated surge voltage	8 kV
Pollution degree	3

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## Technical data

### General

Surge voltage category	III
Insulating material group	I
Connection in acc. with standard	IEC 60947-7-1
Nominal current I <sub>N</sub>	192 A
Nominal voltage U <sub>N</sub>	1000 V
Open side panel	nein
Number of positions	1
Shock protection test specification	DIN EN 50274 (VDE 0660-514):2002-11
Back of the hand protection	guaranteed
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	25 mm <sup>2</sup> / 4.5 kg
	70 mm <sup>2</sup> /10.4 kg
	95 mm <sup>2</sup> /14 kg
Result of bending test	Test passed
Conductor cross section tensile test	25 mm <sup>2</sup>
Tractive force setpoint	135 N
Conductor cross section tensile test	70 mm <sup>2</sup>
Tractive force setpoint	285 N
Conductor cross section tensile test	95 mm <sup>2</sup>
Tractive force setpoint	351 N
Tensile test result	Test passed
Tight fit on carrier	NS 35/NS 32
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	70 mm <sup>2</sup>
Short-time current	8.4 kA

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## Technical data

### General

Short circuit stability result	Test passed
Proof of thermal characteristics (needle flame) effective duration	30 s
Result of thermal test	Test passed
Test specification, oscillation, broadband noise	DIN EN 50155 (VDE 0115-200):2008-03
Test spectrum	Service life test category 1, class B, body mounted
Test frequency	$f_1 = 5 \text{ Hz}$ to $f_2 = 150 \text{ Hz}$
ASD level	0.02 g <sup>2</sup> /Hz
Acceleration	0.8 g
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis
Oscillation, broadband noise test result	Test passed
Test specification, shock test	DIN EN 50155 (VDE 0115-200):2008-03
Shock form	Half-sine
Acceleration	5 g
Shock duration	30 ms
Number of shocks per direction	3
Test directions	X-, Y- and Z-axis
Shock test result	Test passed
Temperature index, insulating material (DIN EN 60216-1 (VDE 0304-21))	130 °C

### Dimensions

Width	20.3 mm
Length	70.5 mm
Height	78.3 mm
Height NS 35/7,5	80 mm
Height NS 35/15	87.5 mm
Height NS 32	85.5 mm

### Connection data

Note	Note: Product releases, connection cross sections and notes on connecting aluminum cables can be found in the download area.
Conductor cross section solid min.	16 mm <sup>2</sup>
Conductor cross section solid max.	95 mm <sup>2</sup>
Conductor cross section AWG/kcmil min.	4
Conductor cross section AWG/kcmil max	3/0
Conductor cross section stranded min.	25 mm <sup>2</sup>
Conductor cross section stranded max.	70 mm <sup>2</sup>
Min. AWG conductor cross section, stranded	3
Max. AWG conductor cross section, stranded	2/0

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## Technical data

### Connection data

Conductor cross section stranded, with ferrule without plastic sleeve min.	16 mm <sup>2</sup>
Conductor cross section stranded, with ferrule without plastic sleeve max.	70 mm <sup>2</sup>
Conductor cross section stranded, with ferrule with plastic sleeve min.	16 mm <sup>2</sup>
Conductor cross section stranded, 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>
Connection method	Screw connection
Stripping length	24 mm
Internal cylindrical gage	A11
Screw thread	M8
Tightening torque, min	8 Nm
Tightening torque max	10 Nm

## 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	27141120
eCl@ss 8.0	27141120

### ETIM

ETIM 2.0	EC000897
ETIM 3.0	EC000897
ETIM 4.0	EC000897
ETIM 5.0	EC000897

### UNSPSC

UNSPSC 6.01	30211811
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## Classifications

### UNSPSC

UNSPSC 7.0901	39121410
UNSPSC 11	39121410
UNSPSC 12.01	39121410
UNSPSC 13.2	39121410

## Approvals

### Approvals

#### Approvals


CSA / UL Recognized / cUL Recognized / VDE Zeichengenehmigung / IECEE CB Scheme / cULus Recognized


#### Ex Approvals

ATEX / ATEX / IECEX

#### Approvals submitted

### Approval details

CSA 		
	B	C
mm <sup>2</sup> /AWG/kcmil	6	6
Nominal current I <sub>N</sub>	192 A	192 A
Nominal voltage U <sub>N</sub>	600 V	1000 V

UL Recognized 		
	B	C
mm <sup>2</sup> /AWG/kcmil	6	6
Nominal current I <sub>N</sub>	192 A	192 A
Nominal voltage U <sub>N</sub>	1000 V	1000 V

# Feed-through terminal block - UKH 70 - 3213140

## Approvals

cUL Recognized		
	B	C
mm <sup>2</sup> /AWG/kcmil	6	6
Nominal current I <sub>N</sub>	192 A	192 A
Nominal voltage U <sub>N</sub>	1000 V	1000 V

VDE Zeichengenehmigung	
Nominal voltage U <sub>N</sub>	1000 V

IECEE CB Scheme	
Nominal voltage U <sub>N</sub>	1000 V

cULus Recognized	
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## Accessories

### Accessories

#### Bridge

Fixed bridge - FBI 2-20 N - 3213195



Fixed bridge, Number of positions: 2, Color: silver

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### Accessories

Fixed bridge - FBI 3-20 N - 3213205



Fixed bridge, Number of positions: 3, 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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### Mounting material

Insertion profile - UKH 50 EP - 3009228



Insertion profile, Color: silver

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### Mounting rail

## Feed-through terminal block - UKH 70 - 3213140

### Accessories

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



DIN rail 35 mm (NS 35)

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## Feed-through terminal block - UKH 70 - 3213140

### Accessories

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 - 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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DIN rail - 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 - 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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# Feed-through terminal block - UKH 70 - 3213140

## Accessories

End cap - NS 35/15 CAP - 1206573



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

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## Pick-off terminal block

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



Pick-off terminal block, Connection method: Special and hybrid 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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## 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

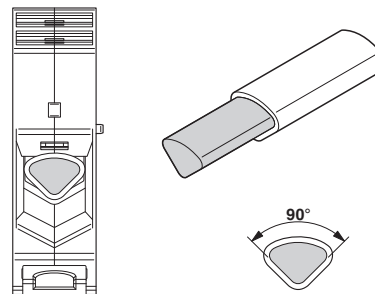
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## Drawings

Circuit diagram



Schematic diagram



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

