

## High-current terminal block - UKH 70-FE - 3247053

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High-current terminal block, nom. voltage: 1000 V, nominal current: 192 A, connection method: Screw connection, number of connections: 2, number of positions: 1, cross section: 16 mm<sup>2</sup> - 70 mm<sup>2</sup>, AWG: 4 - 2/0, width: 20.3 mm, color: black/yellow, 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
- ✓ 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	10 pc
GTIN	 4 046356 707190
GTIN	4046356707190
Weight per Piece (excluding packing)	158.100 g
Custom tariff number	85369010
Country of origin	China

### Technical data

#### General

Number of positions	1
Number of levels	1
Number of connections	2
Potentials	1
Nominal cross section	70 mm <sup>2</sup>
Color	black/yellow
Insulating material	PA
Flammability rating according to UL 94	V0
Area of application	Railway industry

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## Technical data

### General

	Machine building
	Plant engineering
Rated surge voltage	8 kV
Degree of pollution	3
Overvoltage category	III
Insulating material group	I
Maximum power dissipation for nominal condition	6.27 W
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>	1000 V
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	70.5 mm
Height NS 35/15	87.5 mm
Height NS 32	85 mm

### Connection data

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

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## Technical data

### Connection data

Conductor cross section solid max.	70 mm <sup>2</sup>
Conductor cross section AWG min.	4
Conductor cross section AWG max.	2/0
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
Tightening torque max	10 Nm

### 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

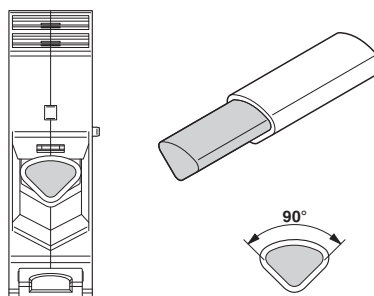
## Drawings

# High-current terminal block - UKH 70-FE - 3247053

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	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

### UNSPSC

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

## Approvals

### Approvals

#### Approvals

DNV GL / PRS / EAC

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## Approvals

Ex Approvals

IECEX / ATEX / UL Recognized / cUL Recognized / EAC Ex / cULus Recognized

### Approval details

DNV GL		<a href="http://exchange.dnv.com/tari/">http://exchange.dnv.com/tari/</a>	TAE00001CT
PRS		<a href="http://www.prs.pl/">http://www.prs.pl/</a>	TE/2156/880590/17
EAC			EAC-Zulassung

## 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

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### Accessories

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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

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

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

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

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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### Accessories

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 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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## High-current terminal block - UKH 70-FE - 3247053

### Accessories

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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End cap - NS 35/15 CAP - 1206573



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

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## High-current terminal block - UKH 70-FE - 3247053

### Accessories

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

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

## High-current terminal block - UKH 70-FE - 3247053

### Accessories

Insertion profile - UKH 50 EP - 3009228



Insertion profile, color: silver

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### Pick-off terminal block

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, 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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Fixed bridge - FBI 2-20 N EX - 3213210



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

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## High-current terminal block - UKH 70-FE - 3247053

### Accessories

Fixed bridge - FBI 3-20 N EX - 3213211



Fixed bridge, 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: 200 mm, handle width: 110 mm, for all terminal blocks with 8 mm Allen screw