

## High-current terminal block - UKH 240 - 3010217

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High-current terminal block, nom. voltage: 1000 V, nominal current: 415 A, connection method: Screw connection, number of connections: 2, cross section: 70 mm<sup>2</sup> - 240 mm<sup>2</sup>, AWG: 2/0 - 500 kcmil, width: 36 mm, height: 123.6 mm, color: gray, mounting type: NS 35/15, 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	3 pc
GTIN	 4 017918 091873
GTIN	4017918091873
Weight per Piece (excluding packing)	476.000 g
Custom tariff number	85369010
Country of origin	India

### Technical data

#### General

Number of levels	1
Number of connections	2
Potentials	1
Nominal cross section	240 mm <sup>2</sup>
Color	gray
Insulating material	PA
Flammability rating according to UL 94	V0
Rated surge voltage	8 kV
Degree of pollution	3
Overvoltage category	III

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## Technical data

### General

Insulating material group	I
Maximum power dissipation for nominal condition	13.78 W
Designation	Level 1 above 1 below 1
Maximum load current	415 A (with 240 mm <sup>2</sup> conductor cross section)
Nominal current I <sub>N</sub>	415 A
Nominal voltage U <sub>N</sub>	1000 V
Open side panel	No
Shock protection test specification	DIN EN 50274 (VDE 0660-514):2002-11
Back of the hand protection	guaranteed
Finger protection	guaranteed
Note regarding shock protection	Finger-safe protection is not guaranteed if bridges are positioned.
Result of surge voltage test	Test passed
Surge voltage test setpoint	9.8 kV
Result of power-frequency withstand voltage test	Test passed
Power frequency withstand voltage setpoint	2.2 kV
Result of the test for mechanical stability of terminal points (5 x conductor connection)	Test passed
Result of bending test	Test passed
Bending test rotation speed	10 rpm
Bending test turns	135
Bending test conductor cross section/weight	70 mm <sup>2</sup> /10.4 kg
	240 mm <sup>2</sup> /20.0 kg
Tensile test result	Test passed
Conductor cross section tensile test	70 mm <sup>2</sup>
Tractive force setpoint	285 N
Conductor cross section tensile test	240 mm <sup>2</sup>
Tractive force setpoint	578 N
Result of tight fit on support	Test passed
Tight fit on carrier	NS 32/NS 35
Setpoint	20 N
Result of voltage-drop test	Test passed
Requirements, voltage drop	≤ 3.2 mV
Result of temperature-rise test	Test passed
Short circuit stability result	Test passed
Conductor cross section short circuit testing	240 mm <sup>2</sup>
Short-time current	28.8 kA
Result of thermal test	Test passed
Proof of thermal characteristics (needle flame) effective duration	30 s
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

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### General

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	36 mm
Length	100 mm
Height	123.6 mm
Height NS 35/15	131.5 mm
Height NS 32	129 mm

### Connection data

Note	Screws with hexagonal socket
Connection method	Screw connection
Screw thread	M10
Stripping length	40 mm
Tightening torque, min	25 Nm
Tightening torque max	30 Nm
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.	70 mm <sup>2</sup>
Conductor cross section solid max.	240 mm <sup>2</sup>
Conductor cross section AWG min.	2/0
Conductor cross section AWG max.	500 kcmil
Conductor cross section flexible min.	70 mm <sup>2</sup>
Conductor cross section flexible max.	240 mm <sup>2</sup>
Min. AWG conductor cross section, flexible	2/0
Max. AWG conductor cross section, flexible	500 kcmil
Conductor cross section flexible, with ferrule without plastic sleeve min.	70 mm <sup>2</sup>
Conductor cross section flexible, with ferrule without plastic sleeve max.	185 mm <sup>2</sup>

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### Technical data

#### Connection data

Conductor cross section flexible, with ferrule with plastic sleeve min.	70 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve max.	185 mm <sup>2</sup>
Cross section with insertion bridge, solid max.	240 mm <sup>2</sup>
Cross section with insertion bridge, stranded max.	185 mm <sup>2</sup>
2 conductors with same cross section, solid min.	35 mm <sup>2</sup>
2 conductors with same cross section, solid max.	95 mm <sup>2</sup>
2 conductors with same cross section, stranded min.	50 mm <sup>2</sup>
2 conductors with same cross section, stranded max.	95 mm <sup>2</sup>
2 conductors with same cross section, stranded, ferrules without plastic sleeve, min.	35 mm <sup>2</sup>
2 conductors with same cross section, stranded, ferrules without plastic sleeve, max.	50 mm <sup>2</sup>
Connection in acc. with standard	IEC/EN 60079-7
Conductor cross section solid min.	70 mm <sup>2</sup>
Conductor cross section solid max.	240 mm <sup>2</sup>
Conductor cross section AWG min.	2/0
Conductor cross section AWG max.	500
Conductor cross section flexible min.	70 mm <sup>2</sup>
Conductor cross section flexible max.	185 mm <sup>2</sup>
Internal cylindrical gage	B15

#### Standards and Regulations

Connection in acc. with standard	CSA
	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

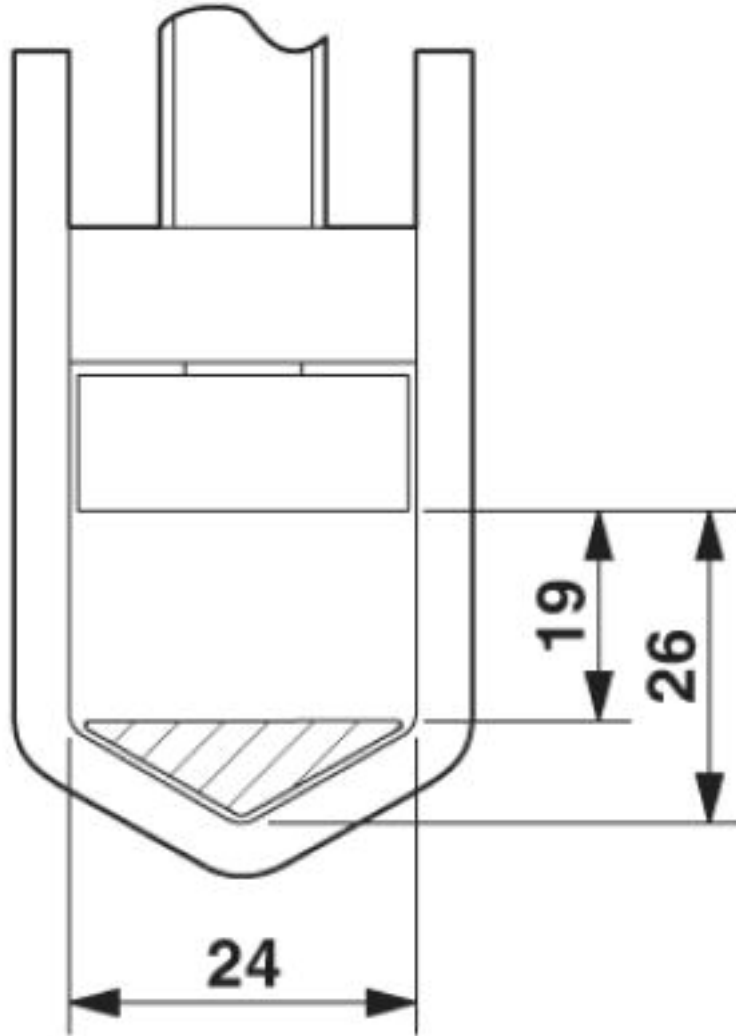
#### Environmental Product Compliance

	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

### Drawings

# High-current terminal block - UKH 240 - 3010217

Dimensional drawing

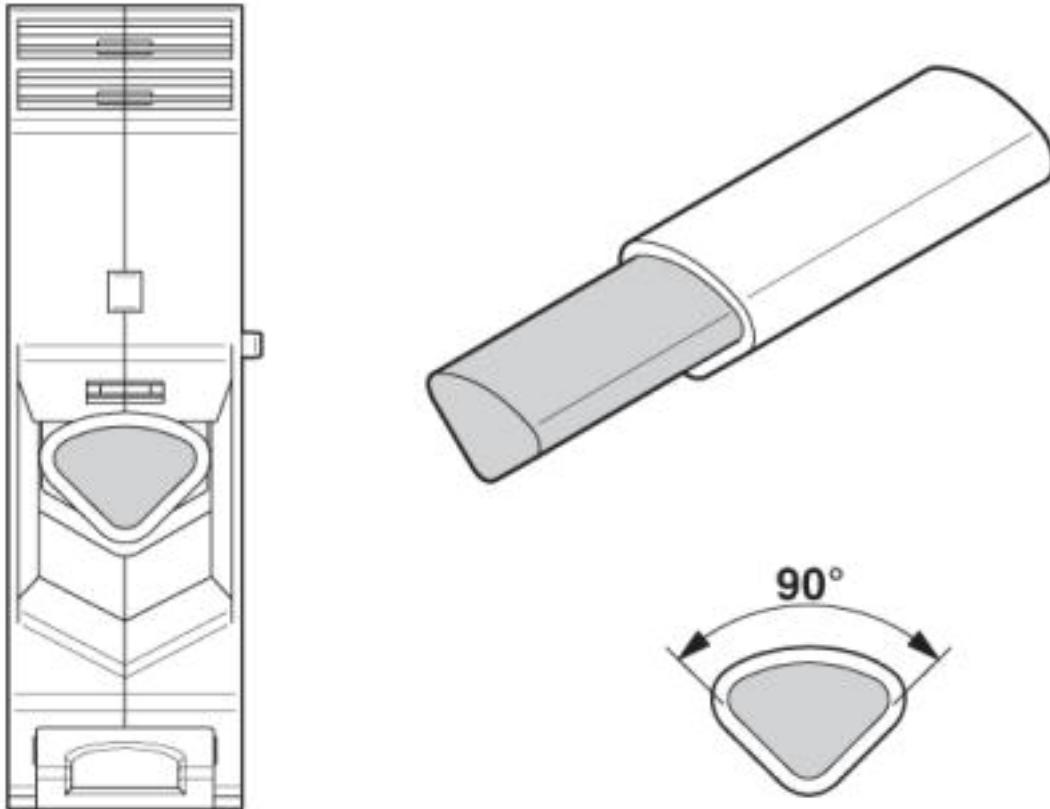


Circuit diagram



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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 2.0	EC000897
ETIM 3.0	EC000897
ETIM 4.0	EC000897
ETIM 5.0	EC000897
ETIM 6.0	EC000897

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## High-current terminal block - UKH 240 - 3010217

### Classifications

#### ETIM

ETIM 7.0	EC000897
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#### UNSPSC

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

### Approvals

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DNV GL / CSA / PRS / UL Recognized / EAC / RS

#### Ex Approvals

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

#### Approval details

DNV GL		<a href="https://approvalfinder.dnvgl.com/">https://approvalfinder.dnvgl.com/</a>	TAE00001CT
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CSA		<a href="http://www.csagroup.org/services-industries/product-listing/">http://www.csagroup.org/services-industries/product-listing/</a>	13631
	B	C	
Nominal voltage UN	600 V	600 V	
Nominal current IN	400 A	400 A	
mm <sup>2</sup> /AWG/kcmil	500	500	


PRS		<a href="http://www.prs.pl/">http://www.prs.pl/</a>	TE/2156/880590/17
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### Approvals

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
	B	C	
Nominal voltage UN	600 V	600 V	
Nominal current IN	380 A	380 A	
mm <sup>2</sup> /AWG/kcmil	500	500	

EAC		RU C- DE.AI30.B.01102
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RS		<a href="http://www.rs-head.spb.ru/en/index.php">http://www.rs-head.spb.ru/en/index.php</a>	17.00013.272
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