

# High-current terminal block - UKH 240-FE



3247056

<https://www.phoenixcontact.com/de/produkte/3247056>

Please be informed that the data shown in this PDF document is generated from our Online Catalog. Please find the complete data in the user documentation. Our General Terms of Use for Downloads are valid.



High-current terminal block, nom. voltage: 1000 V, nominal current: 415 A, connection method: Screw connection, Rated cross section: 240 mm<sup>2</sup>, cross section: 70 mm<sup>2</sup> - 240 mm<sup>2</sup>, mounting type: NS 35/15, NS 32, color: black/yellow

## Your advantages

- Reliable cable connection is ensured by three-point centering of the conductor in the prismatic sleeve base
- Screw locking by means of spring-loaded elements in the clamping part
- Low contact resistance of the contact surface due to ribbing

## Commercial Data

Item number	3247056
Packing unit	3 pc
Minimum order quantity	1 pc
Sales Key	A1 - Reihenklemmen
Product Key	BE1311
GTIN	4046356707220
Weight per Piece (including packing)	502,27 g
Weight per Piece (excluding packing)	485,75 g
Customs tariff number	85369010
Country of origin	IN

## Technical Data

### Notes

#### General

Note	For a reliable contact of multi stranded conductors it is recommended to untwist multi stranded conductors.
------	-------------------------------------------------------------------------------------------------------------

### Product properties

Product type	High current terminal block
Number of connections	2
Number of rows	1
Potentials	1

#### Insulation characteristics

Overvoltage category	III
Degree of pollution	3

### Electrical properties

Rated surge voltage	8 kV
Maximum power dissipation for nominal condition	13.78 W

### Connection data

Number of connections per level	2
Nominal cross section	240 mm <sup>2</sup>

#### Level 1 above 1 below 1

Screw thread	M10
Note	Screws with hexagonal socket
Tightening torque	25 ... 30 Nm
Stripping length	40 mm
Internal cylindrical gage	B15
Connection in acc. with standard	IEC 60947-7-1
Conductor cross section solid	70 mm <sup>2</sup> ... 240 mm <sup>2</sup>
Cross section AWG	2/0 ... 500 kcmil (converted acc. to IEC)
Conductor cross section flexible	70 mm <sup>2</sup> ... 240 mm <sup>2</sup>
Conductor cross section, flexible [AWG]	2/0 ... 500 kcmil (converted acc. to IEC)
Flexible conductor cross section flexible (ferrule, w/o plastic sleeve)	70 mm <sup>2</sup> ... 185 mm <sup>2</sup>
Flexible conductor cross section (ferrule with plastic sleeve)	70 mm <sup>2</sup> ... 185 mm <sup>2</sup>
Cross-section with insertion bridge, rigid	240 mm <sup>2</sup>
Cross-section with insertion bridge, flexible	185 mm <sup>2</sup>
2 conductors with same cross section, solid	35 mm <sup>2</sup> ... 95 mm <sup>2</sup>
2 conductors with same cross section, flexible	50 mm <sup>2</sup> ... 95 mm <sup>2</sup>
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	35 mm <sup>2</sup> ... 50 mm <sup>2</sup>

# High-current terminal block - UKH 240-FE



3247056

<https://www.phoenixcontact.com/de/produkte/3247056>

Nominal current	415 A
Maximum load current	415 A (with 240 mm <sup>2</sup> conductor cross section)
Nominal voltage	1000 V
Note	Note: Product releases, connection cross sections and notes on connecting aluminum cables can be found in the download area.
Nominal cross section	240 mm <sup>2</sup>

## Ex data

### Rated data (ATEX/IECEX)

Identification	□ II 2 GD Ex eb IIC Gb
Operating temperature range	-60 °C ... 110 °C
Ex-certified accessories	1201947 VDE-ISS 8 1201659 E/AL-NS 32 1201662 E/AL-NS 35
List of bridges	Insertion bridge / EB 2-36/UKH / 0201401 Insertion bridge / EB 3-36/UKH / 0201414
Bridge data	270 A / 240 mm <sup>2</sup>
Ex temperature increase	40 K (389 A / 240 mm <sup>2</sup> )
Rated voltage	1100 V
at bridging with insertion bridge	690 V
Rated insulation voltage	1000 V
output	(Permanent)

### Ex level General

Rated current	350 A
Maximum load current	350 A
Contact resistance	0.03 mΩ

### Ex connection data General

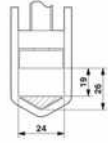
Stripping length	40 mm
Torque range	25 Nm ... 30 Nm
Nominal cross section	240 mm <sup>2</sup>
Rated cross section AWG	500 kcmil
Connection capacity rigid	70 mm <sup>2</sup> ... 240 mm <sup>2</sup>
Connection capacity AWG	2/0 ... 500 kcmil
Connection capacity flexible	70 mm <sup>2</sup> ... 240 mm <sup>2</sup>
Connection capacity AWG	2/0 ... 500 kcmil
2 conductors with same cross section, solid	35 mm <sup>2</sup> ... 95 mm <sup>2</sup>
2 conductors with the same cross-section AWG rigid	2 ... 3/0
2 conductors with same cross section, stranded	50 mm <sup>2</sup> ... 95 mm <sup>2</sup>
2 conductors with the same cross-section AWG flexible	1/0 ... 3/0

## Dimensions

# High-current terminal block - UKH 240-FE

3247056

<https://www.phoenixcontact.com/de/produkte/3247056>

Dimensional drawing	
Width	36 mm
Height NS 35/15	131.5 mm
Height	5.177 "
Height NS 32	129 mm
Length	100 mm

## Material specifications

Color	black/yellow
Flammability rating according to UL 94	V0
Insulating material group	I
Insulating material	PA
Static insulating material application in cold	-60 °C
Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21))	130 °C
Relative insulation material temperature index (Elec., UL 746 B)	130 °C
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
Calorimetric heat release NFPA 130 (ASTM E 1354)	28 MJ/kg
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

## Electrical tests

### Surge voltage test

Result	Test passed
Short-time withstand current 240 mm <sup>2</sup>	28.8 kA
Result	Test passed

### Power-frequency withstand voltage

Test voltage setpoint	2.2 kV
Result	Test passed

## Mechanical properties

### Mechanical data

Open side panel	No
-----------------	----

## Mechanical tests

# High-current terminal block - UKH 240-FE



3247056

<https://www.phoenixcontact.com/de/produkte/3247056>

## Mechanical strength

Result	Test passed
--------	-------------

## Attachment on the carrier

DIN rail/fixing support	NS 32/NS 35
Result	Test passed

## Test for conductor damage and slackening

Rotation speed	10 rpm
Revolutions	135
Conductor cross section/weight	70 mm <sup>2</sup> /10.4 kg 240 mm <sup>2</sup> /20.0 kg
Result	Test passed

## Environmental and real-life conditions

### Needle-flame test

Time of exposure	30 s
Result	Test passed

### Ambient conditions

Ambient temperature (operation)	-60 °C ... 105 °C (max. short-term operating temperature RTI Elec.)
Ambient temperature (storage/transport)	-25 °C ... 60 °C (for a short time, not exceeding 24 h, -60 °C to +70 °C)
Ambient temperature (assembly)	-5 °C ... 70 °C
Ambient temperature (actuation)	-5 °C ... 70 °C
Permissible humidity (storage/transport)	30 % ... 70 %

## Standards and regulations

Connection in acc. with standard	IEC 60947-7-1
----------------------------------	---------------

## Mounting

Mounting type	NS 35/15
	NS 32

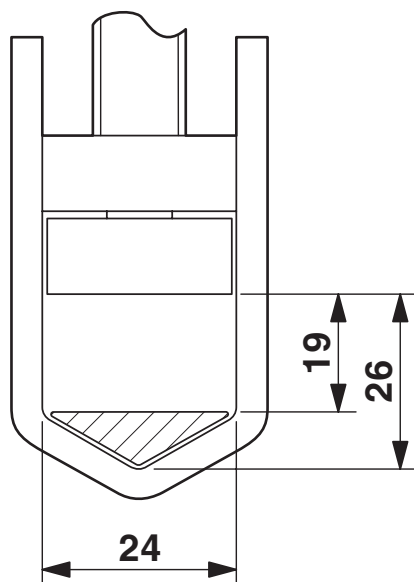
# High-current terminal block - UKH 240-FE

3247056

<https://www.phoenixcontact.com/de/produkte/3247056>

## Drawings

Dimensional drawing



Circuit diagram



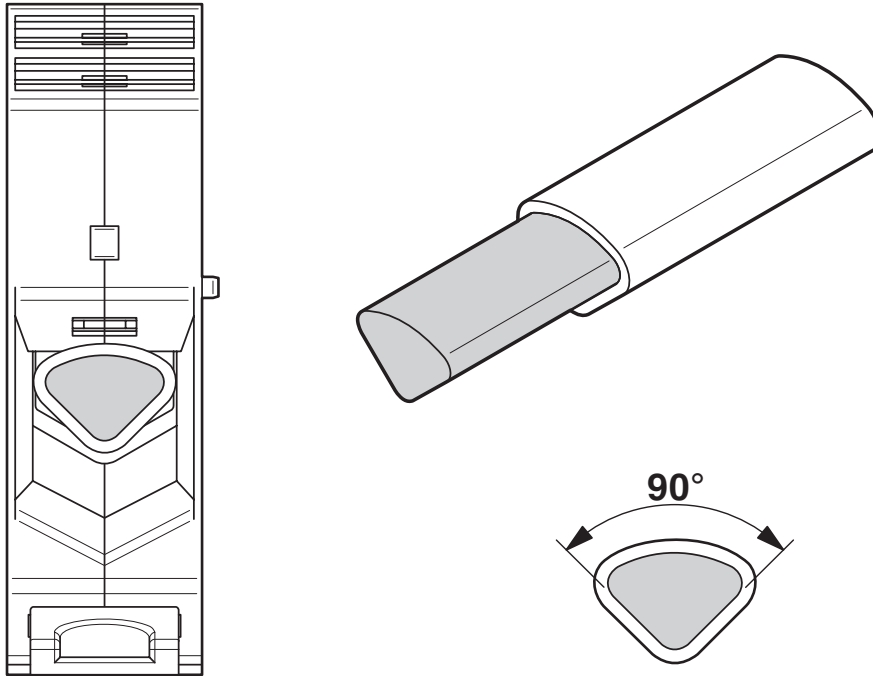
# High-current terminal block - UKH 240-FE

3247056

<https://www.phoenixcontact.com/de/produkte/3247056>



Schematic diagram



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

# High-current terminal block - UKH 240-FE



3247056

<https://www.phoenixcontact.com/de/produkte/3247056>

## Approvals



**EAC**

Approval ID: RU C-DE.AI30.B.01102



**LR**

Approval ID: LR2041789TA



**EAC**

Approval ID: RU C-DE.BL08.B.00534



**cULus Recognized**

Approval ID: E60425

	Nominal Voltage $U_N$	Nominal Current $I_N$	Cross Section AWG	Cross Section $\text{mm}^2$
Use group B				
	600 V	380 A	2/0 - 500	-
Multi-conductor connection	600 V	380 A	2 - 3/0	-
Use group C				
	600 V	380 A	2/0 - 500	-
Multi-conductor connection	600 V	380 A	2 - 3/0	-



**ATEX**

Approval ID: KEMA99ATEX8332U

	Nominal Voltage $U_N$	Nominal Current $I_N$	Cross Section AWG	Cross Section $\text{mm}^2$
Type examination certificate	1100 V	350 A	-	70 - 240



**EAC Ex**

Approval ID: RU C-DE.HA91.B.00066



**IECEX**

Approval ID: IECEX KEM 06.0030U

	Nominal Voltage $U_N$	Nominal Current $I_N$	Cross Section AWG	Cross Section $\text{mm}^2$
	1100 V	350 A	-	70 - 240



**CCC**

Approval ID: 2020322313000623

# High-current terminal block - UKH 240-FE



3247056

<https://www.phoenixcontact.com/de/produkte/3247056>



**NEPSI**

Approval ID: GYJ20.1195U



**UKCA-EX**

Approval ID: DEKRA 21UKEX0309U

# High-current terminal block - UKH 240-FE



3247056

<https://www.phoenixcontact.com/de/produkte/3247056>

## Classifications

### ECLASS

ECLASS-9.0	27141120
ECLASS-10.0.1	27141120
ECLASS-11.0	27141120

### ETIM

ETIM 8.0	EC000897
----------	----------

### UNSPSC

UNSPSC 21.0	39121400
-------------	----------

# High-current terminal block - UKH 240-FE



3247056

<https://www.phoenixcontact.com/de/produkte/3247056>

## Environmental Product Compliance

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

Phoenix Contact 2023 © - all rights reserved  
<https://www.phoenixcontact.com>

PHOENIX CONTACT Deutschland GmbH  
Flachmarktstraße 8  
D-32825 Blomberg  
+49 52 35/3-1 20 00  
[info@phoenixcontact.de](mailto:info@phoenixcontact.de)