

UKH 70-F - High-current terminal block



3247051

<https://www.phoenixcontact.com/pc/products/3247051>

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: 192 A, number of connections: 2, number of positions: 1, connection method: Screw connection, Rated cross section: 70 mm², cross section: 16 mm² - 95 mm², mounting type: direct screw connection, color: gray

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
- Tested for railway applications
- Screw locking by means of spring-loaded elements in the clamping part

Commercial data

Item number	3247051
Packing unit	10 pc
Minimum order quantity	1 pc
Product key	BE1311
Catalog page	Page 191 (C-1-2019)
GTIN	4046356607247
Weight per piece (including packing)	165.04 g
Weight per piece (excluding packing)	151.9 g
Customs tariff number	85369010
Country of origin	CN

UKH 70-F - High-current terminal block



3247051

<https://www.phoenixcontact.com/pc/products/3247051>

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 positions	1
Area of application	Railway industry
	Machine building
	Plant engineering
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	6.27 W

Connection data

Number of connections per level	2
Nominal cross section	70 mm ²

Level 1 above 1 below 1

Screw thread	M8
Tightening torque	8 ... 10 Nm
Stripping length	24 mm
Internal cylindrical gage	A11
Connection in acc. with standard	IEC 60947-7-1
Conductor cross section rigid	16 mm ² ... 95 mm ²
Cross section AWG	4 ... 3/0 (converted acc. to IEC)
Conductor cross section flexible	25 mm ² ... 70 mm ²
Conductor cross section, flexible [AWG]	3 ... 2/0 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	16 mm ² ... 70 mm ²
Flexible conductor cross section (ferrule with plastic sleeve)	16 mm ² ... 70 mm ²
2 conductors with same cross section, solid	16 mm ² ... 25 mm ²
2 conductors with same cross section, flexible	16 mm ² ... 25 mm ²
2 conductors with same cross section, flexible, with ferrule	16 mm ² ... 25 mm ²

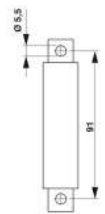
UKH 70-F - High-current terminal block

3247051

<https://www.phoenixcontact.com/pc/products/3247051>

without plastic sleeve	
Nominal current	192 A
Maximum load current	192 A (with 70 mm ² 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	70 mm ²

Dimensions

Dimensional drawing	
Width	20.3 mm
Height	103.4 mm
Depth	80 mm
Hole diameter	5.5 mm

Material specifications

Color	gray
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

Test voltage setpoint	9.8 kV
Result	Test passed
Short-time withstand current 70 mm ²	8.4 kA
Result	Test passed

UKH 70-F - High-current terminal block



3247051

<https://www.phoenixcontact.com/pc/products/3247051>

Power-frequency withstand voltage

Test voltage setpoint	2.2 kV
Result	Test passed

Mechanical properties

Mechanical data

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

Mechanical tests

Mechanical strength

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

Attachment on the carrier

Test force setpoint	10 N
Result	Test passed

Test for conductor damage and slackening

Conductor cross section/weight	25 mm ² / 4.5 kg
	70 mm ² /10.4 kg
	95 mm ² /14 kg
Result	Test passed

Environmental and real-life conditions

Needle-flame test

Time of exposure	30 s
Result	Test passed

Oscillation/broadband noise

Specification	DIN EN 50155 (VDE 0115-200):2008-03
Spectrum	Service life test category 1, class B, body mounted
Frequency	$f_1 = 5 \text{ Hz}$ to $f_2 = 150 \text{ Hz}$
ASD level	1.857 (m/s ²) ² /Hz
Acceleration	0.8g
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis
Result	Test passed

Shocks

Specification	DIN EN 50155 (VDE 0115-200):2008-03
Pulse shape	Half-sine
Acceleration	5g
Shock duration	30 ms
Number of shocks per direction	3
Test directions	X-, Y- and Z-axis (pos. and neg.)

UKH 70-F - High-current terminal block



3247051

<https://www.phoenixcontact.com/pc/products/3247051>

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	direct screw connection
---------------	-------------------------

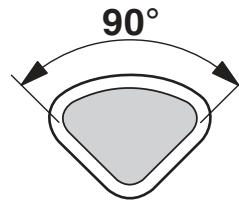
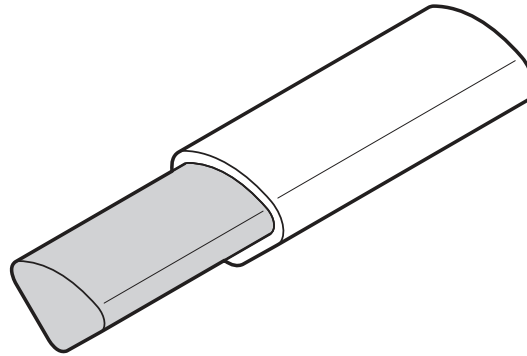
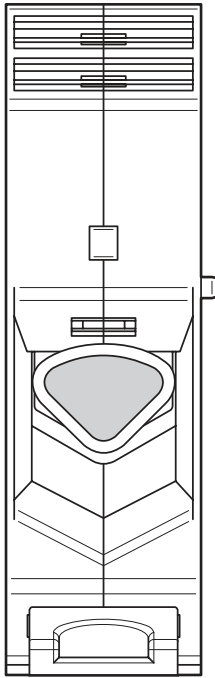
UKH 70-F - High-current terminal block

3247051

<https://www.phoenixcontact.com/pc/products/3247051>

Drawings

Schematic diagram



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

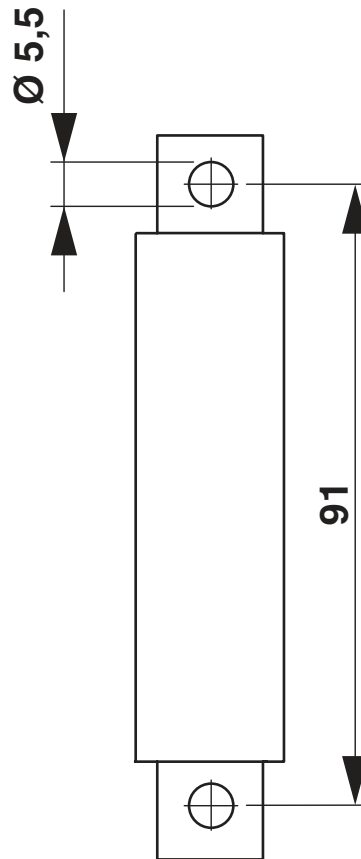
UKH 70-F - High-current terminal block

3247051

<https://www.phoenixcontact.com/pc/products/3247051>



Dimensional drawing



Circuit diagram



UKH 70-F - High-current terminal block



3247051

<https://www.phoenixcontact.com/pc/products/3247051>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/pc/products/3247051>



EAC

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



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 mm^2
Use group C				
	1000 V	192 A	6 - 3/0	-
Use group E				
	1000 V	192 A	6 - 3/0	-

UKH 70-F - High-current terminal block



3247051

<https://www.phoenixcontact.com/pc/products/3247051>

Classifications

ECLASS

ECLASS-11.0	27141120
ECLASS-13.0	27250101

ETIM

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

UNSPSC

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

UKH 70-F - High-current terminal block



3247051

<https://www.phoenixcontact.com/pc/products/3247051>

Environmental product compliance


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

UKH 70-F - High-current terminal block

3247051

<https://www.phoenixcontact.com/pc/products/3247051>

Accessories

 Note: Applying some accessories below might limit this product.


FBI 2-20 N - Fixed bridge

3213195

<https://www.phoenixcontact.com/pc/products/3213195>



Fixed bridge, pitch: 20 mm, number of positions: 2, color: silver

 Max. current carrying capacity: 192 A

FBI 3-20 N - Fixed bridge

3213205

<https://www.phoenixcontact.com/pc/products/3213205>



Fixed bridge, pitch: 20 mm, number of positions: 3, color: silver

 Max. current carrying capacity: 192 A

UKH 70-F - High-current terminal block

3247051

<https://www.phoenixcontact.com/pc/products/3247051>




FBI 2-20 N EX - Fixed bridge

3213210

<https://www.phoenixcontact.com/pc/products/3213210>



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

 Max. current carrying capacity: 180 A


FBI 3-20 N EX - Fixed bridge

3213211

<https://www.phoenixcontact.com/pc/products/3213211>



Fixed bridge, number of positions: 3, color: silver

 Max. current carrying capacity: 180 A

UKH 70-F - High-current terminal block

3247051

<https://www.phoenixcontact.com/pc/products/3247051>



AGK 10-UKH 50 - Pick-off terminal

3001763

<https://www.phoenixcontact.com/pc/products/3001763>



Pick-off terminal, nom. voltage: 1000 V, nominal current: 57 A, number of connections: 1, connection method: Screw connection, Rated cross section: 10 mm², cross section: 0.5 mm² - 10 mm², color: gray

UKH 50 EP - Insertion profile

3009228

<https://www.phoenixcontact.com/pc/products/3009228>



Insertion profile, color: silver

UKH 70-F - High-current terminal block

3247051

<https://www.phoenixcontact.com/pc/products/3247051>



X-PEN 0,35 - Marker pen

0811228

<https://www.phoenixcontact.com/pc/products/0811228>



Marker pen without ink cartridge, for manual labeling of markers, labeling extremely wipe-proof, line thickness 0.35 mm

SF-THEX 6-200 - Screwdriver

1212642

<https://www.phoenixcontact.com/pc/products/1212642>



T-handle screwdriver, for Allen screws, hexagonal (with chamfer), size: hex 6 x 200 mm, ergonomically shaped handle, matt chrome-plated

UKH 70-F - High-current terminal block

3247051

<https://www.phoenixcontact.com/pc/products/3247051>



WS-2K - Warning label

1004513

<https://www.phoenixcontact.com/pc/products/1004513>

Adhesive warning plate, self-adhesive, black print: lightning flash with mixed version - "Vorsicht Spannung - Attention Danger" size of label: 32 x 26 mm



WS-4K - Warning label

1004584

<https://www.phoenixcontact.com/pc/products/1004584>

Adhesive warning plate, self-adhesive, black print: lightning flash with mixed version - "Vorsicht Spannung - Attention Danger" size of label: 13 x 23.5 mm



UKH 70-F - High-current terminal block

3247051

<https://www.phoenixcontact.com/pc/products/3247051>



VDE-ISS 6 - Tool

1201934

<https://www.phoenixcontact.com/pc/products/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

ZB 10:UNBEDRUCKT - Zack marker strip

1053001

<https://www.phoenixcontact.com/pc/products/1053001>



Zack marker strip, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snapped, for terminal block width: 10.2 mm, lettering field size: 10.5 x 10.15 mm, Number of individual labels: 10

UKH 70-F - High-current terminal block

3247051

<https://www.phoenixcontact.com/pc/products/3247051>



ZB 10 CUS - Zack marker strip

0824941

<https://www.phoenixcontact.com/pc/products/0824941>



Zack marker strip, can be ordered: Strip, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 10.2 mm, lettering field size: 10,15 x 10,5 mm, Number of individual labels: 10

ZB10,LGS:FORTL.ZAHLEN - Zack marker strip

1053014

<https://www.phoenixcontact.com/pc/products/1053014>



Zack marker strip, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, printed horizontally: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 91 ... 100, mounting type: snapped, for terminal block width: 10.2 mm, lettering field size: 10,15 x 10,5 mm, Number of individual labels: 10

UKH 70-F - High-current terminal block



3247051

<https://www.phoenixcontact.com/pc/products/3247051>

ZB10,QR:FORTL.ZAHLEN - Zack marker strip

1053027

<https://www.phoenixcontact.com/pc/products/1053027>



Zack marker strip, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, Printed vertically: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 91 ... 100, mounting type: snapped, for terminal block width: 10.2 mm, lettering field size: 10,15 x 10,5 mm, Number of individual labels: 10

ZB10,LGS:L1-N,PE - Marker for terminal blocks

1053412

<https://www.phoenixcontact.com/pc/products/1053412>



Marker for terminal blocks, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, horizontal: L1, L2, L3, N, PE, L1, L2, L3, N, PE, mounting type: snapped, for terminal block width: 10.2 mm, lettering field size: 10,15 x 10,5 mm, Number of individual labels: 10

UKH 70-F - High-current terminal block

3247051

<https://www.phoenixcontact.com/pc/products/3247051>



ZB10,LGS:U-N - Marker for terminal blocks

1053438

<https://www.phoenixcontact.com/pc/products/1053438>



Marker for terminal blocks, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, horizontal: U, V, W, N, GND, U, V, W, N, GND, mounting type: snapped, for terminal block width: 10.2 mm, lettering field size: 10,15 x 10,5 mm, Number of individual labels: 10

UC-TM 10 - Marker for terminal blocks

0818069

<https://www.phoenixcontact.com/pc/products/0818069>



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, PLOTMARK, CMS-P1-PLOTTER, mounting type: snapped, for terminal block width: 10.2 mm, lettering field size: 9.6 x 10.5 mm, Number of individual labels: 48

UKH 70-F - High-current terminal block

3247051

<https://www.phoenixcontact.com/pc/products/3247051>



UC-TM 10 CUS - Marker for terminal blocks

0824605

<https://www.phoenixcontact.com/pc/products/0824605>



Marker for terminal blocks, can be ordered: by sheet, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 10.2 mm, lettering field size: 9.6 x 10.5 mm, Number of individual labels: 48

UCT-TM 10 - Marker for terminal blocks

0829142

<https://www.phoenixcontact.com/pc/products/0829142>



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: TOPMARK NEO, TOPMARK LASER, BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: snapped, for terminal block width: 10.2 mm, lettering field size: 8.9 x 9.6 mm, Number of individual labels: 36

UKH 70-F - High-current terminal block

3247051

<https://www.phoenixcontact.com/pc/products/3247051>



UCT-TM 10 CUS - Marker for terminal blocks

0829623

<https://www.phoenixcontact.com/pc/products/0829623>



Marker for terminal blocks, can be ordered: by sheet, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 10.2 mm, lettering field size: 8.9 x 9.6 mm, Number of individual labels: 36

TMT 10 R - Marker for terminal blocks

0816210

<https://www.phoenixcontact.com/pc/products/0816210>



Marker for terminal blocks, Roll, white, unlabeled, can be labeled with: THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, THERMOMARK S1.1, perforated, mounting type: snapped, snap into flat marker groove, for terminal block width: 10.2 mm, lettering field size: 6.35 x 10.15 mm, Number of individual labels: 10000

UKH 70-F - High-current terminal block

3247051

<https://www.phoenixcontact.com/pc/products/3247051>



TMT 10 R CUS - Marker for terminal blocks

0824500

<https://www.phoenixcontact.com/pc/products/0824500>



Marker for terminal blocks, can be ordered: by line, white, labeled according to customer specifications, mounting type: snap into universal marker groove, snap into flat marker groove, for terminal block width: 10.2 mm, lettering field size: 6.35 x 10.15 mm

Phoenix Contact 2023 © - all rights reserved

<https://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG

Flachsmarktstraße 8

D-32825 Blomberg

+49 (0) 5235-3 00

info@phoenixcontact.com