UKH 50-F BU - High-current terminal block

3247062

https://www.phoenixcontact.com/us/products/3247062

PHŒNIX CONTACT

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: 150 A, number of connections: 2, number of positions: 1, connection method: Screw connection, Rated cross section: 50 mm^2, cross section: 16 mm^2 - 70 mm^2, mounting type: direct screw connection, color: blue

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	3247062
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	BE13
Product key	BE1311
GTIN	4046356733304
Weight per piece (including packing)	131.05 g
Weight per piece (excluding packing)	131.05 g
Customs tariff number	85369010
Country of origin	IN

Technical data

Product properties

Product type	High current terminal block
Number of positions	1
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	4.73 W

Connection data

Number of connections per level	2
Nominal cross section	50 mm²
Screw thread	M6
Tightening torque	6 ... 8 Nm
Stripping length	24 mm
Internal cylindrical gage	B10
Connection in acc. with standard	IEC 60947-7-1
Conductor cross section rigid	16 mm² ... 70 mm²
Cross section AWG	4 ... 2/0 (converted acc. to IEC)
Conductor cross section flexible	25 mm² ... 70 mm²
Conductor cross section, flexible [AWG]	2 ... 2/0 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	25 mm² ... 50 mm²
Flexible conductor cross section (ferrule with plastic sleeve)	25 mm² ... 50 mm²
2 conductors with same cross section, solid	10 mm² ... 16 mm²
2 conductors with same cross section, flexible	10 mm² ... 16 mm²
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	10 mm² ... 16 mm²
Nominal current	150 A
Maximum load current	150 A (with 50 mm² 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	50 mm²

Ex data

Rated data (ATEX/IECEx)

UKH 50-F BU - High-current terminal block

3247062

https://www.phoenixcontact.com/us/products/3247062

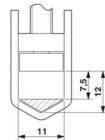|	
Identification	⟨Ex⟩ II 2 GD Ex eb IIC Gb
Operating temperature range	-60 °C ... 110 °C
Ex-certified accessories	1205082 SZS 1,2X8,0 VDE
List of bridges	Fixed bridge / FBI 2-20-EX / 0201113
	Fixed bridge / FBI 3-20-EX / 0201812
Bridge data	130.5 A / 50 mm²
Ex temperature increase	40 K (146.5 A / 50 mm²)
Rated voltage	690 V
for bridging with bridge	690 V
Rated insulation voltage	630 V
output	(Permanent)

Ex level General

Rated current	133 A
Maximum load current	133 A
Contact resistance	0.1 mΩ

Ex connection data General

Torque range	6 Nm ... 8 Nm
Nominal cross section	50 mm²
Rated cross section AWG	1/0
Connection capacity rigid	16 mm² ... 50 mm²
Connection capacity AWG	6 ... 1/0
Connection capacity flexible	25 mm² ... 50 mm²
Connection capacity AWG	4 ... 1/0
2 conductors with same cross section, solid	10 mm² ... 16 mm²
2 conductors with the same cross-section AWG rigid	8 ... 6
2 conductors with same cross section, stranded	10 mm² ... 16 mm²
2 conductors with the same cross-section AWG flexible	8 ... 6

Dimensions

Dimensional drawing	
Width	20 mm
Height	75.5 mm
Depth	76 mm
Hole diameter	5.5 mm

Material specifications

Color	blue
Flammability rating according to UL 94	V0
Insulating material group	I

Insulating material	PA
Static insulating material application in cold	-60 °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
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

Temperature-rise test

Requirement temperature-rise test	Increase in temperature ≤ 45 K
Result	Test passed
Short-time withstand current 50 mm²	6 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

Mechanical strength

Result	Test passed

Attachment on the carrier

DIN rail/fixing support	NS 32/NS 35
Test force setpoint	10 N
Result	Test passed

Test for conductor damage and slackening

Rotation speed	10 (+/- 2) rpm
Revolutions	135
Conductor cross section/weight	16 mm² / 2.9 kg
	50 mm² / 9.5 kg
	70 mm²/10.4 kg

UKH 50-F BU - High-current terminal block

3247062

https://www.phoenixcontact.com/us/products/3247062

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):2022-06
Spectrum	Service life test category 2, bogie-mounted
Frequency	f_1 = 5 Hz to f_2 = 250 Hz
ASD level	6.12 (m/s²)²/Hz
Acceleration	3.12g
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis
Result	Test passed

Shocks

Specification	DIN EN 50155 (VDE 0115-200):2022-06
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.)
Result	Test passed

Ambient conditions

Ambient temperature (operation)	-60 °C ... 110 °C (Operating temperature range incl. self-heating; for max. short-term operating temperature, see RTI Elec.)
Ambient temperature (storage/transport)	-25 °C ... 60 °C (for a short time, no longer than 24 h, -60°C to +70°C)
Ambient temperature (assembly)	-5 °C ... 70 °C
Ambient temperature (actuation)	-5 °C ... 70 °C
Permissible humidity (operation)	20 % ... 90 %
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 50-F BU - High-current terminal block

3247062

https://www.phoenixcontact.com/us/products/3247062
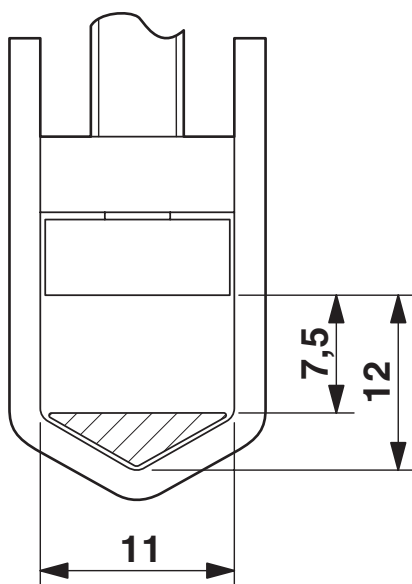
Drawings

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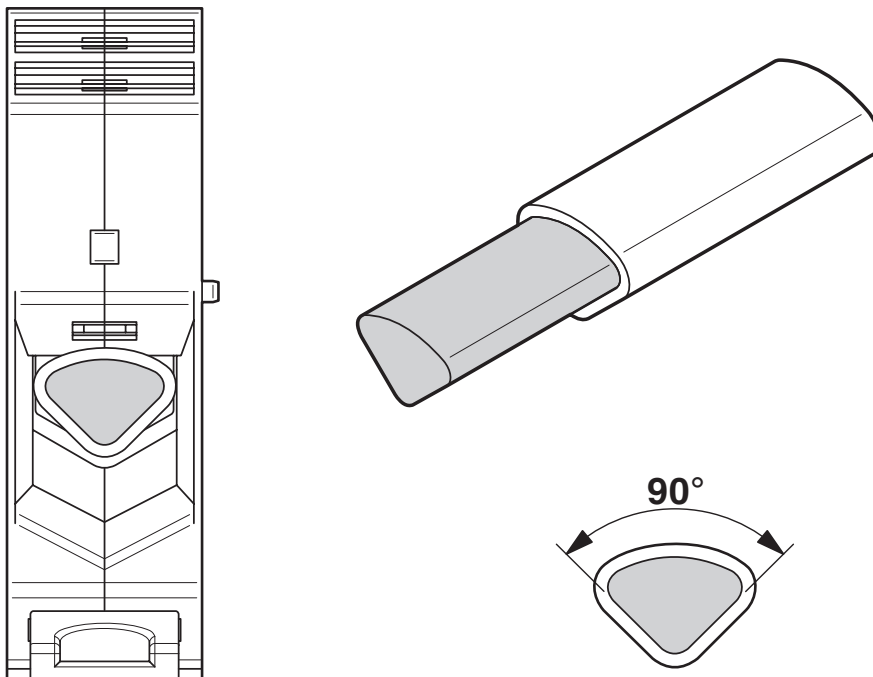
Connecting aluminum cables. Further notes can be found in the download area

Dimensional drawing

7,5

12

11
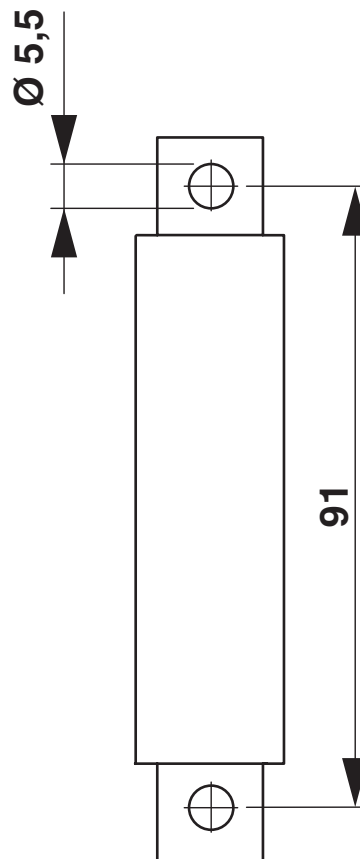
UKH 50-F BU - High-current terminal block

PHŒNIX CONTACT

Dimensional drawing

Ø 5,5

91

Circuit diagram

UKH 50-F BU - High-current terminal block

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/3247062

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

ATEX
Approval ID: KEMA98ATEX1786U

IECEx
Approval ID: IECEx KEM 06.0029U

UKH 50-F BU - High-current terminal block

3247062

https://www.phoenixcontact.com/us/products/3247062

Classifications

ECLASS

ECLASS-11.0	27141120
ECLASS-13.0	27250101

ETIM

ETIM 9.0	EC000897

UNSPSC

UNSPSC 21.0	39121400

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions

China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%

UKH 50-F BU - High-current terminal block

3247062

https://www.phoenixcontact.com/us/products/3247062

Accessories

> ⓘ Note: Applying some accessories below might limit this product.

FBI 2-20 - Fixed bridge

0201346

https://www.phoenixcontact.com/us/products/0201346

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

ⓘ Max. current carrying capacity: 150 A

FBI 3-20 - Fixed bridge

0201317

https://www.phoenixcontact.com/us/products/0201317

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

ⓘ Max. current carrying capacity: 150 A

UKH 50-F BU - High-current terminal block

3247062

https://www.phoenixcontact.com/us/products/3247062

FBI 2-20-EX - Fixed bridge

0201113

https://www.phoenixcontact.com/us/products/0201113

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

ⓘ Max. current carrying capacity: 130 A

FBI 3-20-EX - Fixed bridge

0201812

https://www.phoenixcontact.com/us/products/0201812

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

ⓘ Max. current carrying capacity: 130 A

UKH 50-F BU - High-current terminal block

3247062

https://www.phoenixcontact.com/us/products/3247062

AGK 10-UKH 50 - Pick-off terminal block

3001763

https://www.phoenixcontact.com/us/products/3001763

Pick-off terminal block, nom. voltage: 1000 V, nominal current: 57 A, number of connections: 1, connection method: Screw connection, Rated cross section: 10 mm^2, cross section: 0.5 mm^2 - 10 mm^2, color: gray

ZB 10:UNBEDRUCKT - Zack marker strip

1053001

https://www.phoenixcontact.com/us/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 50-F BU - High-current terminal block

3247062

https://www.phoenixcontact.com/us/products/3247062

ZB 10 CUS - Zack marker strip

0824941

https://www.phoenixcontact.com/us/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/us/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 50-F BU - High-current terminal block

3247062

https://www.phoenixcontact.com/us/products/3247062

ZB10,QR:FORTL.ZAHLEN - Zack marker strip

1053027

https://www.phoenixcontact.com/us/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/us/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 50-F BU - High-current terminal block

3247062

https://www.phoenixcontact.com/us/products/3247062

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

1053438

https://www.phoenixcontact.com/us/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/us/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 50-F BU - High-current terminal block

3247062

https://www.phoenixcontact.com/us/products/3247062

UC-TM 10 CUS - Marker for terminal blocks

0824605

https://www.phoenixcontact.com/us/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/us/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 50-F BU - High-current terminal block

3247062

https://www.phoenixcontact.com/us/products/3247062

UCT-TM 10 CUS - Marker for terminal blocks

0829623

https://www.phoenixcontact.com/us/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/us/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 50-F BU - High-current terminal block

3247062

https://www.phoenixcontact.com/us/products/3247062

TMT 10 R CUS - Marker for terminal blocks

0824500

https://www.phoenixcontact.com/us/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

SZS 1,2X8,0 VDE - Screwdriver

1205082

https://www.phoenixcontact.com/us/products/1205082

Screwdriver, slot-headed, VDE insulated, size: 1.2 x 8.0 x 175 mm, 2-component grip, with non-slip grip

UKH 50-F BU - High-current terminal block

3247062

https://www.phoenixcontact.com/us/products/3247062

X-PEN 0,35 - Marker pen

0811228

https://www.phoenixcontact.com/us/products/0811228

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

WS-2K - Warning label

1004513

https://www.phoenixcontact.com/us/products/1004513

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

UKH 50-F BU - High-current terminal block

3247062

https://www.phoenixcontact.com/us/products/3247062

WS-4K - Warning label

1004584

https://www.phoenixcontact.com/us/products/1004584

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

UKH 50 EP - Insertion profile

3009228

https://www.phoenixcontact.com/us/products/3009228

Insertion profile, color: silver

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com