

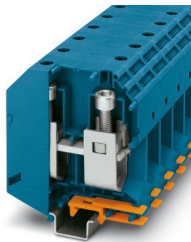
UKH 150 BU - High-current terminal block



3010123

<https://www.phoenixcontact.com/us/products/3010123>

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High-current terminal block, nom. voltage: 1000 V, nominal current: 309 A, number of connections: 2, number of positions: 1, connection method: Screw connection, cross section: 35 mm² - 150 mm², mounting type: NS 35/15, NS 32, color: blue

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

Commercial data

| | |
|--------------------------------------|---------------------|
| Item number | 3010123 |
| Packing unit | 3 pc |
| Minimum order quantity | 3 pc |
| Sales key | BE13 |
| Product key | BE1311 |
| Catalog page | Page 197 (C-1-2019) |
| GTIN | 4017918091859 |
| Weight per piece (including packing) | 380 g |
| Weight per piece (excluding packing) | 346.333 g |
| Customs tariff number | 85369010 |
| Country of origin | IN |

UKH 150 BU - High-current terminal block



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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 | 9.55 W |

Connection data

| | |
|---|--|
| Number of connections per level | 2 |
| Nominal cross section | 150 mm ² |
| Screw thread | M10 |
| Note | Screws with hexagonal socket |
| Tightening torque | 25 ... 30 Nm |
| Stripping length | 40 mm |
| Connection in acc. with standard | IEC 60947-7-1 |
| Conductor cross section rigid | 35 mm ² ... 150 mm ² |
| Cross section AWG | 1/0 ... 250 kcmil (converted acc. to IEC) |
| Conductor cross section flexible | 50 mm ² ... 150 mm ² |
| Conductor cross section, flexible [AWG] | 1/0 ... 250 kcmil (converted acc. to IEC) |
| Conductor cross-section flexible (ferrule without plastic sleeve) | 50 mm ² ... 150 mm ² |
| Flexible conductor cross section (ferrule with plastic sleeve) | 50 mm ² ... 150 mm ² |
| Cross-section with insertion bridge, rigid | 150 mm ² |
| Cross-section with insertion bridge, flexible | 120 mm ² |
| 2 conductors with same cross section, solid | 25 mm ² ... 50 mm ² |
| 2 conductors with same cross section, flexible | 35 mm ² ... 50 mm ² |
| 2 conductors with same cross section, flexible, with ferrule without plastic sleeve | 25 mm ² ... 50 mm ² |
| Nominal current | 309 A |
| Maximum load current | 309 A (with 150 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. |

Ex data

UKH 150 BU - High-current terminal block



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Rated data (ATEX/IECEx)

| | |
|-----------------------------------|--|
| Identification | Ex 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 2-31/UKH / 0201388 |
| | Insertion bridge / EB 3-31/UKH / 0201391 |
| Bridge data | 195.5 A / 150 mm ² |
| Ex temperature increase | 40 K (281.5 A / 150 mm ²) |
| Rated voltage | 1100 V |
| at bridging with insertion bridge | 880 V |
| Rated insulation voltage | 1000 V |
| output | (Permanent) |

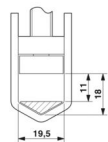
Ex level General

| | |
|----------------------|---------|
| Rated current | 256 A |
| Maximum load current | 256 A |
| Contact resistance | 0.06 mΩ |

Ex connection data General

| | |
|---|--|
| Torque range | 25 Nm ... 30 Nm |
| Nominal cross section | 150 mm ² |
| Rated cross section AWG | 300 kcmil |
| Connection capacity rigid | 35 mm ² ... 150 mm ² |
| Connection capacity AWG | 2 ... 300 kcmil |
| Connection capacity flexible | 50 mm ² ... 150 mm ² |
| Connection capacity AWG | 1/0 ... 300 kcmil |
| 2 conductors with same cross section, solid | 25 mm ² ... 50 mm ² |
| 2 conductors with the same cross-section AWG rigid | 4 ... 1/0 |
| 2 conductors with same cross section, stranded | 35 mm ² ... 50 mm ² |
| 2 conductors with the same cross-section AWG flexible | 2 ... 1/0 |

Dimensions

| | |
|---------------------|--|
| Dimensional drawing |  |
| Width | 31 mm |
| Height | 100 mm |
| Depth | 107.3 mm |
| Depth on NS 32 | 116 mm |
| Depth on NS 35/15 | 118.5 mm |

UKH 150 BU - High-current terminal block



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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

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

Temperature-rise test

| | |
|--|-------------------------------------|
| Requirement temperature-rise test | Increase in temperature ≤ 45 K |
| Result | Test passed |
| Short-time withstand current 150 mm ² | 18 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 |
| Result | Test passed |

Test for conductor damage and slackening

| | |
|----------------|----------------|
| Rotation speed | 10 (+/- 2) rpm |
| Revolutions | 135 |

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| | |
|--------------------------------|-----------------------------|
| Conductor cross section/weight | 35 mm ² / 6.8 kg |
| | 50 mm ² / 9.5 kg |
| | 150 mm ² / 15 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):2018-05 |
| Spectrum | Service life test category 2, bogie-mounted |
| Frequency | $f_1 = 5 \text{ Hz}$ to $f_2 = 250 \text{ Hz}$ |
| ASD level | 6.12 (m/s ²) 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):2018-05 |
| Pulse shape | Half-sine |
| Acceleration | 30g |
| Shock duration | 18 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 | NS 35/15 |
| | NS 32 |

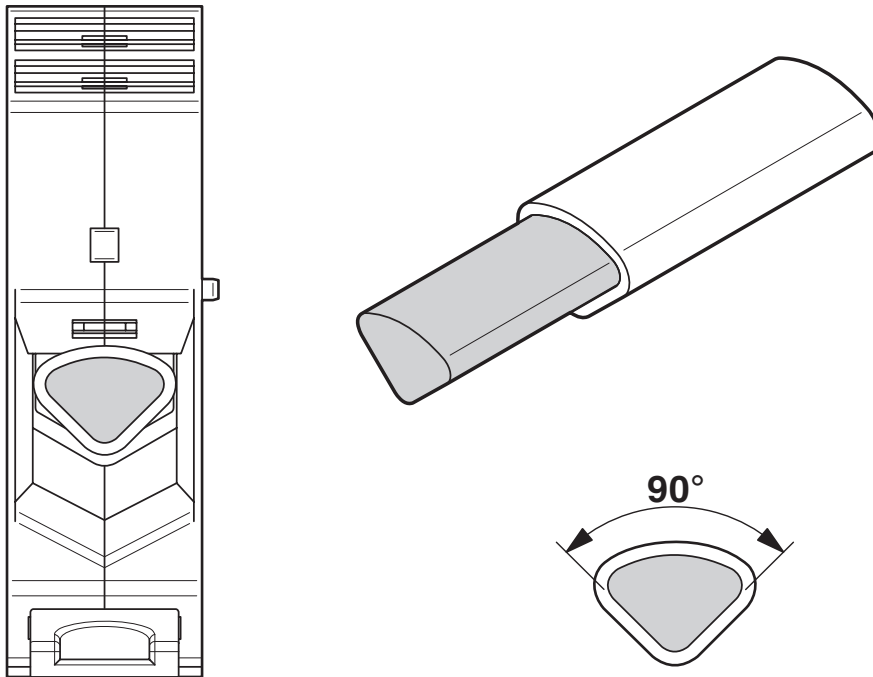
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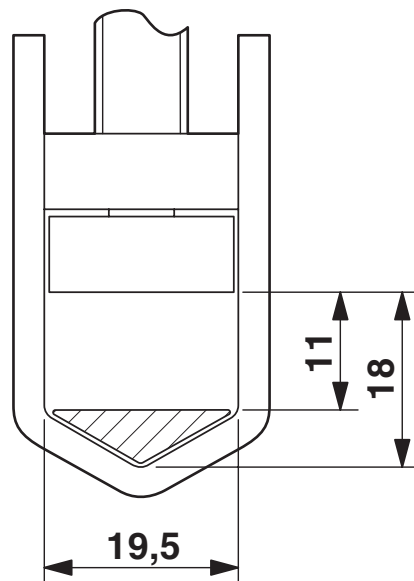
Drawings

Schematic diagram



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

Dimensional drawing



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Circuit diagram



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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/3010123>

DNV

Approval ID: TAE00001CT



CSA

Approval ID: 13631

| | Nominal voltage U_N | Nominal current I_N | Cross section AWG | Cross section mm^2 |
|-------------|-----------------------|-----------------------|-------------------|-----------------------------|
| Use group B | | | | |
| | 600 V | 275 A | 2 - 300 | - |
| Use group C | | | | |
| | 600 V | 275 A | 2 - 300 | - |



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 B | | | | |
| | 600 V | 285 A | 2 - 300 | - |
| Multi-conductor connection | 600 V | 285 A | 4 - 1/0 | - |
| Use group C | | | | |
| | 600 V | 285 A | 2 - 300 | - |
| Multi-conductor connection | 600 V | 285 A | 4 - 1/0 | - |



ATEX

Approval ID: KEMA99ATEX8332U



cUL Recognized

Approval ID: E192998

| | Nominal voltage U_N | Nominal current I_N | Cross section AWG | Cross section mm^2 |
|--|-----------------------|-----------------------|-------------------|-----------------------------|
| | 600 V | 285 A | 2 - 300 | - |



EAC Ex

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

UKH 150 BU - High-current terminal block





3010123

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IECEx
Approval ID: IECEx KEM 06.0030U

| | <div><div>UL Recognized Approval ID: E192998</div></div> | | | |
|--|--|-----------------------|-------------------|-----------------------------|
| | Nominal voltage U_N | Nominal current I_N | Cross section AWG | Cross section mm^2 |
| | 600 V | 285 A | 2 - 300 | - |



CCC
Approval ID: 2020322313000623



UKCA-EX
Approval ID: DEKRA 21UKEX0309U

cULus Recognized

UKH 150 BU - High-current terminal block



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Classifications

ECLASS

| | |
|-------------|----------|
| ECLASS-11.0 | 27141120 |
| ECLASS-13.0 | 27250101 |

ETIM

| | |
|----------|----------|
| ETIM 9.0 | EC000897 |
|----------|----------|

UNSPSC

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

UKH 150 BU - High-current terminal block



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<https://www.phoenixcontact.com/us/products/3010123>

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 150 BU - High-current terminal block



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<https://www.phoenixcontact.com/us/products/3010123>

Accessories

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

EB 3-31/UKH - Insertion bridge

0201391

<https://www.phoenixcontact.com/us/products/0201391>



Insertion bridge, pitch: 31 mm, number of positions: 3, color: gray

i Max. current carrying capacity: 232 A

EB 2-31/UKH - Insertion bridge

0201388

<https://www.phoenixcontact.com/us/products/0201388>



Insertion bridge, pitch: 31 mm, number of positions: 2, color: gray

i Max. current carrying capacity: 232 A

UKH 150 BU - High-current terminal block

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NS 32 PERF 2000MM-VPE 10 - DIN rail perforated

1201002

<https://www.phoenixcontact.com/us/products/1201002>



DIN rail perforated, Pack of 10 (20 m), acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, G profile, color: silver

NS 32 UNPERF 2000MM-VPE 10 - DIN rail, unperforated

1201015

<https://www.phoenixcontact.com/us/products/1201015>



DIN rail, unperforated, Pack of 10 (20 m), acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, G profile, color: silver

UKH 150 BU - High-current terminal block



3010123

<https://www.phoenixcontact.com/us/products/3010123>

NS 35/15 PERF 2000MM - DIN rail perforated

1201730

<https://www.phoenixcontact.com/us/products/1201730>



DIN rail perforated, Pack of 25 (50 m), similar to EN 60715, material: Steel, galvanized, passivated with a thick layer, Standard profile, color: silver

NS 35/15 UNPERF 2000MM - DIN rail, unperforated

1201714

<https://www.phoenixcontact.com/us/products/1201714>



DIN rail, unperforated, Pack of 25 (50 m), similar to EN 60715, material: Steel, galvanized, passivated with a thick layer, Standard profile, color: silver

UKH 150 BU - High-current terminal block

3010123

<https://www.phoenixcontact.com/us/products/3010123>



NS 35/15 WH PERF 2000MM - DIN rail perforated

0806602

<https://www.phoenixcontact.com/us/products/0806602>



DIN rail perforated, Pack of 25 (50 m), similar to EN 60715, material: Steel, Galvanized, white passivated, Standard profile, color: white

NS 35/15 WH UNPERF 2000MM-VPE 10 - DIN rail, unperforated

1204135

<https://www.phoenixcontact.com/us/products/1204135>



DIN rail, unperforated, Pack of 10 (20 m), similar to EN 60715, material: Steel, Galvanized, white passivated, Standard profile, color: silver

UKH 150 BU - High-current terminal block

3010123

<https://www.phoenixcontact.com/us/products/3010123>



NS 35/15 AL UNPERF 2000MM - DIN rail, unperforated

1201756

<https://www.phoenixcontact.com/us/products/1201756>



DIN rail, unperforated, similar to EN 60715, material: Aluminum, uncoated, Standard profile, color: silver

NS 35/15 ZN PERF 2000MM - DIN rail perforated

1206599

<https://www.phoenixcontact.com/us/products/1206599>



DIN rail perforated, Pack of 25 (50 m), similar to EN 60715, material: Steel, galvanized, Standard profile, color: silver

UKH 150 BU - High-current terminal block

3010123

<https://www.phoenixcontact.com/us/products/3010123>



NS 35/15 ZN UNPERF 2000MM - DIN rail, unperforated

1206586

<https://www.phoenixcontact.com/us/products/1206586>



DIN rail, unperforated, Pack of 25 (50 m), similar to EN 60715, material: Steel, galvanized, Standard profile, color: silver

NS 35/15 CU UNPERF 2000MM-VPE 10 - DIN rail, unperforated

1201895

<https://www.phoenixcontact.com/us/products/1201895>



DIN rail, unperforated, Pack of 10 (20 m), similar to EN 60715, material: Copper, uncoated, Standard profile, color: copper-colored

UKH 150 BU - High-current terminal block

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NS 35/15 CAP - End cap

1206573

<https://www.phoenixcontact.com/us/products/1206573>

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



ZB 22:UNBEDRUCKT - Zack marker strip

0811862

<https://www.phoenixcontact.com/us/products/0811862>



Zack marker strip, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snapped, for terminal block width: 22 mm, lettering field size: 10.5 x 21.8 mm, Number of individual labels: 4

UKH 150 BU - High-current terminal block



3010123

<https://www.phoenixcontact.com/us/products/3010123>

ZB 22 CUS - Zack marker strip

0824949

<https://www.phoenixcontact.com/us/products/0824949>



Zack marker strip, can be ordered: Strip, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 22 mm, lettering field size: 10.5 x 21.8 mm, Number of individual labels: 4

ZB 22,LGS:L1-N,PE - Zack marker strip

0811875

<https://www.phoenixcontact.com/us/products/0811875>



Zack marker strip, Strip, white, labeled, printed horizontally: L1, L2, L3, N, PE, mounting type: snapped, for terminal block width: 22 mm, lettering field size: 10.5 x 21.8 mm, Number of individual labels: 50

UKH 150 BU - High-current terminal block



3010123

<https://www.phoenixcontact.com/us/products/3010123>

ZB 25:UNPRINTED - Zack marker strip

0802751

<https://www.phoenixcontact.com/us/products/0802751>



Zack marker strip, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, Marker pen, mounting type: snapped, for terminal block width: 25 mm, lettering field size: 25 x 10 mm, Number of individual labels: 4

ZB 25 CUS - Zack marker strip

0802752

<https://www.phoenixcontact.com/us/products/0802752>



Zack marker strip, can be ordered: Strip, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 25 mm, lettering field size: 25 x 10 mm, Number of individual labels: 4

UKH 150 BU - High-current terminal block



3010123

<https://www.phoenixcontact.com/us/products/3010123>

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

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

UKH 150 BU - High-current terminal block



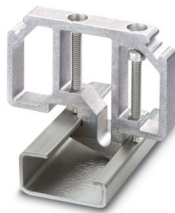
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E/AL-NS 32 - End bracket

1201659

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

E/AL-NS 35 - End bracket

1201662

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

UKH 150 BU - High-current terminal block

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WS-2K - Warning label

1004513

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



UKH 150/240 EP - Insertion profile

3009244

<https://www.phoenixcontact.com/us/products/3009244>

Insertion profile, color: silver



UKH 150 BU - High-current terminal block

3010123

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AGK 10-UKH 150/240 - Pick-off terminal block

3003554

<https://www.phoenixcontact.com/us/products/3003554>



Pick-off terminal block, 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, mounting type: on base element, color: gray

WS-4K - Warning label

1004584

<https://www.phoenixcontact.com/us/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 150 BU - High-current terminal block

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SF-THEX 8-200 - Screwdriver

1212643

<https://www.phoenixcontact.com/us/products/1212643>



T-handle screwdriver, for Allen screws, hexagonal (with chamfer), size: hex 8 x 200 mm, ergonomically shaped handle, matt chrome-plated

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