

UBAL 95 BK - High-current terminal block



1086478

<https://www.phoenixcontact.com/us/products/1086478>

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High-current terminal block, nom. voltage: 1000 V, nominal current: 220 A, number of connections: 2, number of positions: 1, connection method: Screw connection, Rated cross section: 95 mm², cross section: 16 mm² - 95 mm², Rated cross section: 95 mm², cross section: 16 mm² - 95 mm², mounting type: NS 35/15, NS 35/7,5, color: black

Your advantages

- Maintenance-free terminal points that are greased beforehand simplify the connection of aluminum conductors
- Tailor-made screw connection for multi-stranded aluminum conductors and copper wires
- Extremely robust housing made from fiberglass-reinforced polyamide with V0 approval
- The special design of the UBAL enables the simultaneous connection of aluminum and copper conductors in various connections

Commercial data

| | |
|--------------------------------------|---------------------|
| Item number | 1086478 |
| Packing unit | 1 pc |
| Minimum order quantity | 10 pc |
| Sales key | BE13 |
| Product key | BE1311 |
| Catalog page | Page 584 (C-1-2019) |
| GTIN | 4055626876597 |
| Weight per piece (including packing) | 97.2 g |
| Weight per piece (excluding packing) | 22.22 g |
| Customs tariff number | 85369010 |
| Country of origin | EE |

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Technical data

Notes

| | |
|---------|--|
| General | Terminal block for aluminum and copper conductors (AL-CU) |
| General | |
| Note | We recommend using ferrules when using flexible conductor. |

Product properties

| | |
|-----------------------|-----------------------------|
| Product type | Feed-through 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 | 7.54 W |

Connection data

| | |
|-----------------------|--------------------|
| Nominal cross section | 95 mm ² |
|-----------------------|--------------------|

Aluminum conductor

| | |
|----------------------------------|--|
| Screw thread | M14 |
| Note | Screws with hexagonal socket |
| | The following values apply to aluminum conductors |
| | The values for aluminum conductors relate to rigid and multi-stranded conductors in accordance with EN 60228. Application notes on connecting aluminum conductors can be found in the download area. |
| Tightening torque | 20 Nm |
| Stripping length | 27 mm |
| Connection in acc. with standard | IEC 61238-1 |
| Conductor cross section rigid | 16 mm ² ... 95 mm ² |
| Cross section AWG | 4 ... 4/0 (converted acc. to IEC) |
| Nominal current | 220 A |
| Maximum load current | 220 A (with 95 mm ² conductor cross section – test current in accordance with IEC 61238-1) |
| Nominal voltage | 1000 V |
| Nominal cross section | 95 mm ² |

Copper conductor

| | |
|------|--|
| Note | The following values apply to copper wires |
|------|--|

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| | |
|---|--|
| | Flexible conductors, class 5, in accordance with EN 60228. |
| Tightening torque | 20 Nm |
| Stripping length | 27 mm |
| Connection in acc. with standard | IEC 60947-7-1 |
| Conductor cross section rigid | 16 mm ² ... 95 mm ² |
| Cross section AWG | 4 ... 4/0 (converted acc. to IEC) |
| Conductor cross section flexible | 50 mm ² ... 70 mm ² |
| 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, flexible | 16 mm ² ... 35 mm ² |
| Nominal current | 232 A |
| Maximum load current | 232 A (with 95 mm ² conductor cross section) |
| Nominal voltage | 1000 V |
| Nominal cross section | 95 mm ² |

Dimensions

| | |
|--------------------|---------|
| Width | 25.1 mm |
| Height | 93.6 mm |
| Depth | 58 mm |
| Depth on NS 35/7,5 | 58 mm |
| Depth on NS 35/15 | 65.5 mm |
| Hole diameter | 2.75 mm |

Material specifications

| | |
|--|--------|
| Color | black |
| Flammability rating according to UL 94 | V0 |
| Insulating material group | II |
| Insulating material | PA |
| Relative insulation material temperature index (Elec., UL 746 B) | 400 °C |

Electrical tests

Surge voltage test

| | |
|-----------------------|-------------|
| Test voltage setpoint | 8 kV |
| Result | Test passed |

Temperature-rise test

| | |
|---|--------------------------------|
| Requirement temperature-rise test | Increase in temperature ≤ 45 K |
| Result | Test passed |
| Short-time withstand current 95 mm ² | 11.4 kA |
| Result | Test passed |

Power-frequency withstand voltage

| | |
|-----------------------|-------------|
| Test voltage setpoint | 2.2 kV |
| Result | Test passed |

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Mechanical properties

Mechanical data

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

Mechanical tests

Mechanical strength

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

Attachment on the carrier

| | |
|-------------------------|-------------|
| DIN rail/fixing support | NS 35 |
| Test force setpoint | 15 N |
| Result | Test passed |

Test for conductor damage and slackening

| | |
|--------------------------------|-----------------------------|
| Rotation speed | 10 rpm |
| Revolutions | 135 |
| Conductor cross section/weight | 16 mm ² / 2.9 kg |
| | 95 mm ² /14 kg |
| Result | Test passed |

Environmental and real-life conditions

Needle-flame test

| | |
|------------------|-------------|
| Time of exposure | 10 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

| | |
|--------------------------------|-----------------------------------|
| 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.) |

Standards and regulations

| | |
|----------------------------------|-------------|
| Connection in acc. with standard | IEC 61238-1 |
|----------------------------------|-------------|

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| | |
|--|---------------|
| | IEC 60947-7-1 |
|--|---------------|

Mounting

| | |
|---------------|-----------|
| Mounting type | NS 35/15 |
| | NS 35/7,5 |

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Drawings

Circuit diagram



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Classifications

ECLASS

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

ETIM

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

UNSPSC

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

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Environmental product compliance

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

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Accessories

CEC UBAL 95 - Cover plate

1090035

<https://www.phoenixcontact.com/us/products/1090035>



Cover plate, color: yellow

UCT-TM 8 - Marker for terminal blocks

0828740

<https://www.phoenixcontact.com/us/products/0828740>



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: 8.2 mm, lettering field size: 7.6 x 10.5 mm, Number of individual labels: 42

UBAL 95 BK - High-current terminal block



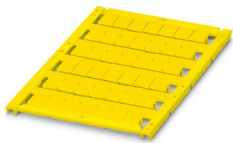
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UCT-TM 8 YE - Marker for terminal blocks

0828741

<https://www.phoenixcontact.com/us/products/0828741>



Marker for terminal blocks, Sheet, yellow, 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: 8.2 mm, lettering field size: 7.6 x 10.5 mm, Number of individual labels: 42

UCT-TM 8 GN - Marker for terminal blocks

0829168

<https://www.phoenixcontact.com/us/products/0829168>



Marker for terminal blocks, Sheet, green, 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: 8.2 mm, lettering field size: 7.6 x 10.5 mm, Number of individual labels: 42

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UCT-TM 8 RD - Marker for terminal blocks

0829164

<https://www.phoenixcontact.com/us/products/0829164>



Marker for terminal blocks, Sheet, red, 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: 8.2 mm, lettering field size: 7.6 x 10.5 mm, Number of individual labels: 42

UCT-TM 8 BU - Marker for terminal blocks

0829167

<https://www.phoenixcontact.com/us/products/0829167>



Marker for terminal blocks, Sheet, blue, 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: 8.2 mm, lettering field size: 7.6 x 10.5 mm, Number of individual labels: 42

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UCT-TM 8 VT - Marker for terminal blocks

0829166

<https://www.phoenixcontact.com/us/products/0829166>



Marker for terminal blocks, Sheet, violet, 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: snap in, for terminal block width: 8.2 mm, lettering field size: 7.6 x 10.5 mm, Number of individual labels: 42

UCT-TM 8 OG - Marker for terminal blocks

0829165

<https://www.phoenixcontact.com/us/products/0829165>



Marker for terminal blocks, Sheet, orange, 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: 8.2 mm, lettering field size: 7.6 x 10.5 mm, Number of individual labels: 42

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PXC TERMINAL GREASE - Antioxidant

1108540

<https://www.phoenixcontact.com/us/products/1108540>

Antioxidant



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