

High-current terminal block - UBAL 50 FE - 1086471

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High-current terminal block, Terminal block for aluminum and copper conductors (AL-CU), nom. voltage: 1000 V, nominal current: 145 A, connection method: Screw connection, number of connections: 2, number of positions: 1, cross section: 6 mm² - 50 mm², AWG: 6 - 1/0, width: 19.2 mm, height: 51 mm, color: yellow, mounting type: NS 35/15, NS 35/7,5

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

RoHS

Key Commercial Data

| | |
|--------------|---|
| Packing unit | 20 pc |
| GTIN |  4 055626 878461 |
| GTIN | 4055626878461 |

Technical data

General

| | |
|--|---|
| Note | Terminal block for aluminum and copper conductors (AL-CU) |
| Number of positions | 1 |
| Number of levels | 1 |
| Number of connections | 2 |
| Potentials | 1 |
| Nominal cross section | 50 mm ² |
| Color | yellow |
| Insulating material | PA |
| Flammability rating according to UL 94 | V0 |
| Rated surge voltage | 8 kV |
| Degree of pollution | 3 |
| Overvoltage category | III |
| Insulating material group | II |

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Technical data

General

| | |
|--|---|
| Note | The following values apply to aluminum conductors |
| Maximum load current | 145 A (with 50 mm ² conductor cross section – test current in accordance with IEC 61238-1) |
| Nominal current I _N | 145 A |
| Nominal voltage U _N | 1000 V |
| Note | The following values apply to copper wires |
| Maximum load current | 150 A (with 50 mm ² conductor cross section) |
| Nominal current I _N | 150 A |
| Nominal voltage U _N | 1000 V |
| Open side panel | No |
| Ambient temperature (operation) | -60 °C ... 85 °C |
| Ambient temperature (storage/transport) | -25 °C ... 55 °C (For a short time, not exceeding 24 h, -60 to +70 °C) |
| Permissible humidity (storage/transport) | 30 % ... 70 % |
| Ambient temperature (assembly) | -5 °C ... 70 °C |
| Ambient temperature (actuation) | -5 °C ... 70 °C |

Dimensions

| | |
|------------------|---------|
| Width | 19.2 mm |
| Length | 82.5 mm |
| Height | 51 mm |
| Height NS 35/7,5 | 51 mm |
| Height NS 35/15 | 58.5 mm |

Connection data

| | |
|---------------------------------------|--|
| Note | Screws with hexagonal socket |
| Connection method | Screw connection |
| Screw thread | M10 |
| Stripping length | 23 mm |
| Note | The following values apply to aluminum conductors |
| Connection in acc. with standard | IEC 61238-1 |
| Conductor cross section solid min. | 6 mm ² |
| Conductor cross section solid max. | 50 mm ² |
| Conductor cross section AWG min. | 6 |
| Conductor cross section AWG max. | 1/0 |
| Conductor cross section flexible min. | 6 mm ² |
| Conductor cross section flexible max. | 50 mm ² |
| Note | The values for aluminum conductors relate to multi-stranded conductors in accordance with EN 60228. Application notes on connecting aluminum conductors can be found in the download area. |
| | The following values apply to copper wires |
| Connection in acc. with standard | IEC 60947-7-1 |
| Conductor cross section solid min. | 2.5 mm ² |

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Connection data

| | |
|--|---------------------|
| Conductor cross section solid max. | 50 mm ² |
| Conductor cross section AWG min. | 6 |
| Conductor cross section AWG max. | 1/0 |
| Conductor cross section flexible min. | 2.5 mm ² |
| Conductor cross section flexible max. | 35 mm ² |
| Conductor cross section flexible, with ferrule without plastic sleeve min. | 2.5 mm ² |
| Conductor cross section flexible, with ferrule without plastic sleeve max. | 35 mm ² |
| Conductor cross section flexible, with ferrule with plastic sleeve min. | 2.5 mm ² |
| Conductor cross section flexible, with ferrule with plastic sleeve max. | 35 mm ² |
| 2 conductors with same cross section, stranded min. | 1.5 mm ² |
| 2 conductors with same cross section, stranded max. | 16 mm ² |

Standards and Regulations

| | |
|--|---------------|
| Connection in acc. with standard | IEC 61238-1 |
| | IEC 60947-7-1 |
| Flammability rating according to UL 94 | V0 |

Environmental Product Compliance

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

Drawings

Circuit diagram



Classifications

eCl@ss

| | |
|---------------|----------|
| eCl@ss 10.0.1 | 27141120 |
| eCl@ss 4.0 | 27141120 |
| eCl@ss 4.1 | 27141120 |
| eCl@ss 5.0 | 27141120 |
| eCl@ss 5.1 | 27141100 |
| eCl@ss 6.0 | 27141100 |
| eCl@ss 7.0 | 27141120 |
| eCl@ss 8.0 | 27141120 |
| eCl@ss 9.0 | 27141120 |

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Classifications

ETIM

| | |
|----------|----------|
| ETIM 2.0 | EC000897 |
| ETIM 3.0 | EC000897 |
| ETIM 4.0 | EC000897 |
| ETIM 5.0 | EC000897 |
| ETIM 6.0 | EC000897 |
| ETIM 7.0 | EC000897 |

UNSPSC

| | |
|---------------|----------|
| UNSPSC 6.01 | 30211811 |
| UNSPSC 7.0901 | 39121410 |
| UNSPSC 11 | 39121410 |
| UNSPSC 12.01 | 39121410 |
| UNSPSC 13.2 | 39121410 |
| UNSPSC 18.0 | 39121410 |
| UNSPSC 19.0 | 39121410 |
| UNSPSC 20.0 | 39121410 |
| UNSPSC 21.0 | 39121410 |

Approvals

Approvals

Approvals

UL Recognized

Ex Approvals

Approval details

| | | | |
|---------------|--|---|--------------|
| UL Recognized | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 60425 |
|---------------|--|---|--------------|

Accessories

Accessories

End cover

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Accessories

Cover plate - CEC UBAL 50 - 1086473



Cover plate, color: yellow

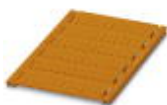
Terminal marking

Marker for terminal blocks - UCT-TM 5 - 0828734



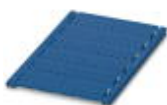
Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: TOPMARK NEO, TOPMARK LASER, BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: snap into tall marker groove, for terminal block width: 5.2 mm, lettering field size: 4.6 x 10.5 mm, Number of individual labels: 72

Marker for terminal blocks - UCT-TM 5 OG - 0829155



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: snap into tall marker groove, for terminal block width: 5.2 mm, lettering field size: 4.6 x 10.5 mm, Number of individual labels: 72

Marker for terminal blocks - UCT-TM 5 BU - 0829157



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: snap into tall marker groove, for terminal block width: 5.2 mm, lettering field size: 4.6 x 10.5 mm, Number of individual labels: 72

Marker for terminal blocks - UCT-TM 5 YE - 0828735

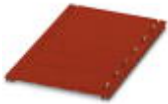


Marker for terminal blocks, Sheet, yellow, unlabeled, can be labeled with: TOPMARK NEO, TOPMARK LASER, BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: snap into tall marker groove, for terminal block width: 5.2 mm, lettering field size: 4.6 x 10.5 mm, Number of individual labels: 72

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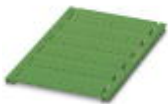
Accessories

Marker for terminal blocks - UCT-TM 5 RD - 0829154



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: snap into tall marker groove, for terminal block width: 5.2 mm, lettering field size: 4.6 x 10.5 mm, Number of individual labels: 72

Marker for terminal blocks - UCT-TM 5 GN - 0829158



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: snap into tall marker groove, for terminal block width: 5.2 mm, lettering field size: 4.6 x 10.5 mm, Number of individual labels: 72

Marker for terminal blocks - UCT-TM 5 VT - 0829156



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 into tall marker groove, for terminal block width: 5.2 mm, lettering field size: 4.6 x 10.5 mm, Number of individual labels: 72

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