

## High-current terminal block - UBAL 240 - 1086505

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High-current terminal block, Terminal block for aluminum and copper conductors (AL-CU), nom. voltage: 1000 V, nominal current: 380 A, connection method: Screw connection, number of connections: 2, number of positions: 1, cross section: 35 mm<sup>2</sup> - 240 mm<sup>2</sup>, AWG: 3/0 - 500, width: 37.5 mm, height: 70 mm, color: gray, mounting type: Screw mounting

### 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 | 5 pc                                                                                 |
| GTIN         |  |
| GTIN         | 4055626879338                                                                        |

### 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                  | 240 mm <sup>2</sup>                                       |
| Color                                  | gray                                                      |
| 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                     | 380 A (with 240 mm <sup>2</sup> conductor cross section – test current in accordance with IEC 61238-1) |
| Nominal current I <sub>N</sub>           | 380 A                                                                                                  |
| Nominal voltage U <sub>N</sub>           | 1000 V                                                                                                 |
| Note                                     | The following values apply to copper wires                                                             |
| Maximum load current                     | 415 A (with 240 mm <sup>2</sup> conductor cross section)                                               |
| Nominal current I <sub>N</sub>           | 415 A                                                                                                  |
| Nominal voltage U <sub>N</sub>           | 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  | 37.5 mm |
| Length | 130 mm  |
| Height | 70 mm   |

### Connection data

|                                       |                                                                                                                                                                                                      |
|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Note                                  | Screws with hexagonal socket                                                                                                                                                                         |
| Connection method                     | Screw connection                                                                                                                                                                                     |
| Screw thread                          | M20                                                                                                                                                                                                  |
| Stripping length                      | 43 mm                                                                                                                                                                                                |
| Note                                  | The following values apply to aluminum conductors                                                                                                                                                    |
| Connection in acc. with standard      | IEC 61238-1                                                                                                                                                                                          |
| Conductor cross section solid min.    | 35 mm <sup>2</sup>                                                                                                                                                                                   |
| Conductor cross section solid max.    | 240 mm <sup>2</sup>                                                                                                                                                                                  |
| Conductor cross section AWG min.      | 3/0                                                                                                                                                                                                  |
| Conductor cross section AWG max.      | 500                                                                                                                                                                                                  |
| Conductor cross section flexible min. | 35 mm <sup>2</sup>                                                                                                                                                                                   |
| Conductor cross section flexible max. | 240 mm <sup>2</sup>                                                                                                                                                                                  |
| Note                                  | 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. |
|                                       | The following values apply to copper wires                                                                                                                                                           |
| Connection in acc. with standard      | IEC 60947-7-1                                                                                                                                                                                        |
| Conductor cross section solid min.    | 35 mm <sup>2</sup>                                                                                                                                                                                   |
| Conductor cross section solid max.    | 240 mm <sup>2</sup>                                                                                                                                                                                  |
| Conductor cross section AWG min.      | 3/0                                                                                                                                                                                                  |

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## Technical data

### Connection data

|                                                                            |                     |
|----------------------------------------------------------------------------|---------------------|
| Conductor cross section AWG max.                                           | 500                 |
| Conductor cross section flexible min.                                      | 35 mm <sup>2</sup>  |
| Conductor cross section flexible max.                                      | 185 mm <sup>2</sup> |
| Conductor cross section flexible, with ferrule without plastic sleeve min. | 35 mm <sup>2</sup>  |
| Conductor cross section flexible, with ferrule without plastic sleeve max. | 185 mm <sup>2</sup> |
| Conductor cross section flexible, with ferrule with plastic sleeve min.    | 35 mm <sup>2</sup>  |
| Conductor cross section flexible, with ferrule with plastic sleeve max.    | 185 mm <sup>2</sup> |
| 2 conductors with same cross section, stranded min.                        | 35 mm <sup>2</sup>  |
| 2 conductors with same cross section, stranded max.                        | 70 mm <sup>2</sup>  |

### 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 |

### ETIM

|          |          |
|----------|----------|
| ETIM 2.0 | EC000897 |
| ETIM 3.0 | EC000897 |

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### Classifications

#### ETIM

|          |          |
|----------|----------|
| 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 |  | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> | FILE E 60425 |
|---------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|

### Accessories

Accessories

End cover

# High-current terminal block - UBAL 240 - 1086505

## Accessories

Cover plate - CEC UBAL 240 - 1090037



Cover plate, color: yellow

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## Terminal marking

Marker for terminal blocks - UCT-TM 12 - 0829144



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: 12 mm, lettering field size: 10.8 x 9.6 mm, Number of individual labels: 30

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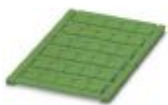
Marker for terminal blocks - UCT-TM 12 BU - 0829177



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: 12 mm, lettering field size: 10.8 x 9.6 mm, Number of individual labels: 30

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Marker for terminal blocks - UCT-TM 12 GN - 0829178



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: 12 mm, lettering field size: 10.8 x 9.6 mm, Number of individual labels: 30

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Marker for terminal blocks - UCT-TM 12 VT - 0829176



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: 12 mm, lettering field size: 10.8 x 9.6 mm, Number of individual labels: 30

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## High-current terminal block - UBAL 240 - 1086505

### Accessories

#### Marker for terminal blocks - UCT-TM 12 RD - 0829174



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: 12 mm, lettering field size: 10.8 x 9.6 mm, Number of individual labels: 30

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#### Marker for terminal blocks - UCT-TM 12 OG - 0829175



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: 12 mm, lettering field size: 10.8 x 9.6 mm, Number of individual labels: 30

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#### Marker for terminal blocks - UCT-TM 12 YE - 0829145



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: 12 mm, lettering field size: 10.8 x 9.6 mm, Number of individual labels: 30

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