

## Bolt connection terminal block - RBO 8-3L/N/FE - 3076280

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Bolt connection terminal block, nom. voltage: 1000 V, nominal current: 192 A, connection method: Bolt connection, number of connections: 10, number of positions: 5, width: 145 mm, color: gray/blue/black-yellow, mounting type: NS 35/7,5, NS 35/15, direct screw connection

### Your advantages

- Mounting on standard DIN rails or directly in control boxes

### Key Commercial Data

|                      |   |
|----------------------|---|
| Packing unit         | 1   |
| GTIN                 | <br>4 046356 653527 |
| GTIN                 | 4046356653527   |
| Custom tariff number | 85369010  |

### Technical data

#### General

|  |                        |
|--|------------------------|
| Number of positions                    | 5                      |
| Number of levels                       | 1                      |
| Number of connections                  | 10                     |
| Potentials                             | 5                      |
| Nominal cross section                  | 70 mm <sup>2</sup>     |
| Color                                  | gray/blue/black-yellow |
| Insulating material                    | PA                     |
| Flammability rating according to UL 94 | V0                     |
| Rated surge voltage                    | 8 kV                   |
| Degree of pollution                    | 3                      |
| Overvoltage category                   | III                    |

## Bolt connection terminal block - RBO 8-3L/N/FE - 3076280

### Technical data

#### General

|   |  |
|---|--|
| Insulating material group   | I  |
| Maximum power dissipation for nominal condition                         | 6.27 W   |
| Maximum load current  | 192 A (in case of a 70 mm <sup>2</sup> conductor cross section, the maximum load current must not be exceeded by the total current of all connected conductors.) |
| Nominal current I <sub>N</sub>  | 192 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  |
| Relative insulation material temperature index (Elec., UL 746 B)        | 130 °C   |
| Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21)) | 130 °C   |
| Static insulating material application in cold                          | -60 °C   |
| Surface flammability NFPA 130 (ASTM E 162)                              | passed   |
| Specific optical density of smoke NFPA 130 (ASTM E 662)                 | passed   |
| Calorimetric heat release NFPA 130 (ASTM E 1354)                        | 28 MJ/kg   |
| Smoke gas toxicity NFPA 130 (SMP 800C)                                  | passed   |
| 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  |

#### Dimensions

|                  |         |
|------------------|---------|
| Width            | 145 mm  |
| Length           | 136 mm  |
| Height NS 35/7,5 | 67 mm   |
| Height NS 35/15  | 74.5 mm |
| Pitch            | 29 mm   |

#### Connection data

|   |                     |
|---|---------------------|
| Connection                                  | 1 level             |
| Connection method                           | Bolt connection     |
| Connection in acc. with standard            | IEC 60947-7-1       |
| Cable lug connection according to standard  | DIN 46234:1980-03   |
| Min. cross section for cable lug connection | 2.5 mm <sup>2</sup> |
| Max. cross section for cable lug connection | 70 mm <sup>2</sup>  |

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### Technical data

#### Connection data

|   |                     |
|---|---------------------|
| Hole diameter, min.                         | 8.4 mm              |
| Cable lug width, max.                       | 22 mm               |
| Bolt diameter                               | 8 mm                |
| Screw thread                                | M8                  |
| Tightening torque, min                      | 6 Nm                |
| Tightening torque max                       | 12 Nm               |
| Cable lug connection according to standard  | DIN 46235:1983-07   |
| Min. cross section for cable lug connection | 16 mm <sup>2</sup>  |
| Max. cross section for cable lug connection | 70 mm <sup>2</sup>  |
| Hole diameter, min.                         | 8.4 mm              |
| Cable lug width, max.                       | 24 mm               |
| Bolt diameter                               | 8 mm                |
| Screw thread                                | M8                  |
| Tightening torque, min                      | 6 Nm                |
| Tightening torque max                       | 12 Nm               |
| Cable lug connection according to standard  | DIN 46237:1970-07   |
| Min. cross section for cable lug connection | 2.5 mm <sup>2</sup> |
| Max. cross section for cable lug connection | 6 mm <sup>2</sup>   |
| Hole diameter, min.                         | 8.4 mm              |
| Cable lug width, max.                       | 14 mm               |
| Bolt diameter                               | 8 mm                |
| Screw thread                                | M8                  |
| Tightening torque, min                      | 6 Nm                |
| Tightening torque max                       | 12 Nm               |

#### Standards and Regulations

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

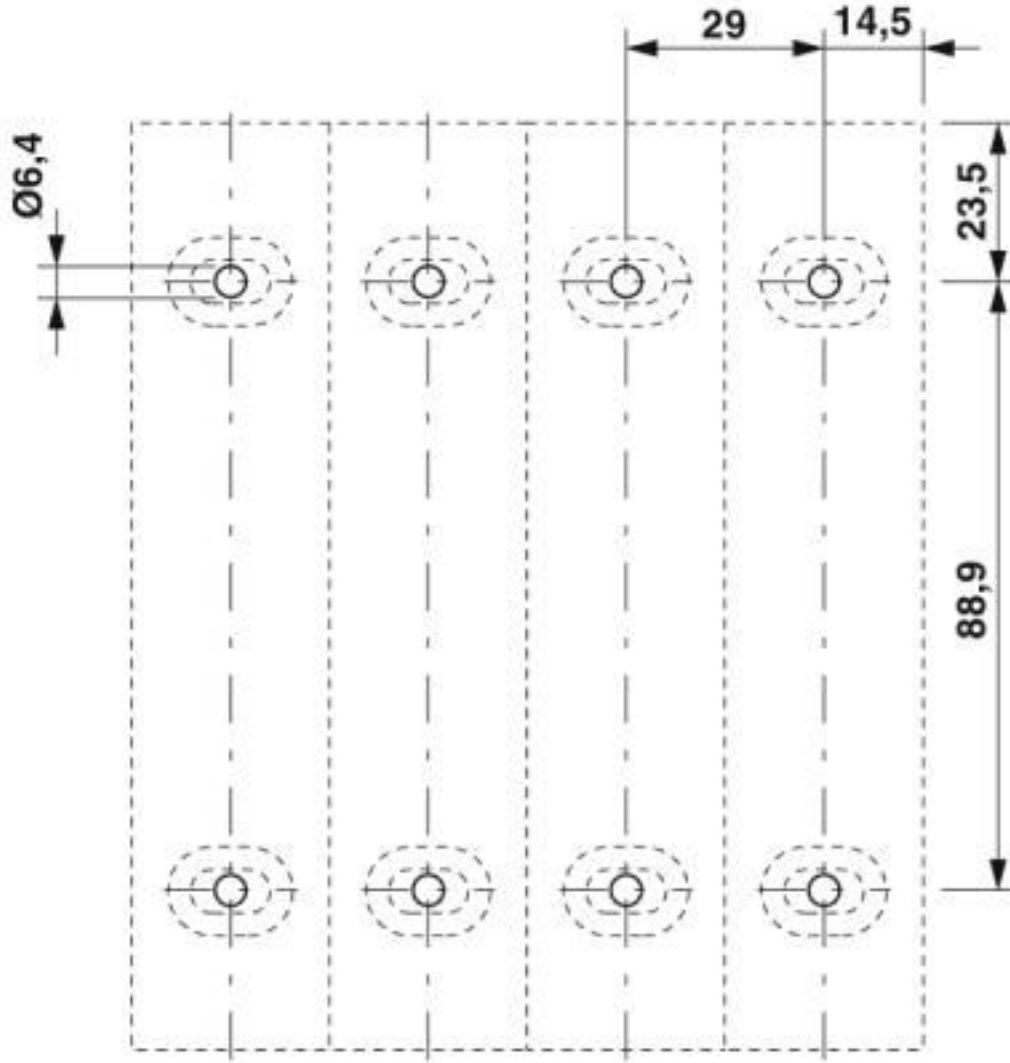
#### Environmental Product Compliance

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

### Drawings

# Bolt connection terminal block - RBO 8-3L/N/FE - 3076280

Dimensional drawing



Circuit diagram



## Classifications

eCl@ss

|               |          |
|---------------|----------|
| eCl@ss 10.0.1 | 27141120 |
|---------------|----------|

## Bolt connection terminal block - RBO 8-3L/N/FE - 3076280

### Classifications

#### eCl@ss

|            |          |
|------------|----------|
| eCl@ss 4.0 | 27141100 |
| eCl@ss 4.1 | 27141100 |
| eCl@ss 5.0 | 27141100 |
| 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 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

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##### Approvals

UL Recognized / EAC / EAC / EAC

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##### Ex Approvals

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#### Approval details

## Bolt connection terminal block - RBO 8-3L/N/FE - 3076280

### Approvals

|                    |   |   |              |
|--------------------|---|---|--------------|
| 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 |
|                    | B   | C   |              |
| Nominal voltage UN | 600 V   | 600 V   |              |
| Nominal current IN | 175 A   | 175 A   |              |

|     |   |               |
|-----|---|---------------|
| EAC |  | EAC-Zulassung |
|-----|---|---------------|

|     |   |                          |
|-----|---|--------------------------|
| EAC |  | RU C-<br>DE.A*30.B.01742 |
|-----|---|--------------------------|

|     |   |                          |
|-----|---|--------------------------|
| EAC |  | RU C-<br>DE.BL08.B.00540 |
|-----|---|--------------------------|

### Accessories

#### Accessories

#### Bridge

Connection rail - RBO 8-VS 2 - 3213179



Bridge, 2-pos.

Connection rail - RBO 8-VS 3 - 3213182



Connection rail, number of positions: 3, color: silver

#### Cover profile

## Bolt connection terminal block - RBO 8-3L/N/FE - 3076280

### Accessories

Covering hood - HC-RBO 8 - 3247967



Covering hood, length: 85.6 mm, width: 28.8 mm, height: 46.7 mm, color: gray

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Covering hood - HC-RBO 8 BU - 3247969



Covering hood, length: 85.6 mm, width: 28.8 mm, height: 46.7 mm, color: blue

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Covering hood - HC-RBO 8-FE - 3247968



Covering hood, length: 85.6 mm, width: 28.8 mm, height: 46.7 mm, color: black/yellow

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### DIN rail

DIN rail perforated - NS 35/ 7,5 PERF 2000MM - 0801733



DIN rail perforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

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DIN rail, unperforated - NS 35/ 7,5 UNPERF 2000MM - 0801681



DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

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## Bolt connection terminal block - RBO 8-3L/N/FE - 3076280

### Accessories

DIN rail perforated - NS 35/ 7,5 WH PERF 2000MM - 1204119



DIN rail perforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, Galvanized, white passivated, length: 2000 mm, color: silver

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DIN rail, unperforated - NS 35/ 7,5 WH UNPERF 2000MM - 1204122



DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, Galvanized, white passivated, length: 2000 mm, color: silver

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DIN rail, unperforated - NS 35/ 7,5 AL UNPERF 2000MM - 0801704



DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Aluminum, uncoated, length: 2000 mm, color: silver

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DIN rail perforated - NS 35/ 7,5 ZN PERF 2000MM - 1206421



DIN rail perforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, galvanized, length: 2000 mm, color: silver

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DIN rail, unperforated - NS 35/ 7,5 ZN UNPERF 2000MM - 1206434



DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, galvanized, length: 2000 mm, color: silver

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## Bolt connection terminal block - RBO 8-3L/N/FE - 3076280

### Accessories

DIN rail, unperforated - NS 35/ 7,5 CU UNPERF 2000MM - 0801762



DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Copper, uncoated, length: 2000 mm, color: copper-colored

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End cap - NS 35/ 7,5 CAP - 1206560



DIN rail end piece, for DIN rail NS 35/7.5

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DIN rail perforated - NS 35/15 PERF 2000MM - 1201730



DIN rail perforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

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DIN rail, unperforated - NS 35/15 UNPERF 2000MM - 1201714



DIN rail, unperforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

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DIN rail perforated - NS 35/15 WH PERF 2000MM - 0806602



DIN rail perforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Steel, Galvanized, white passivated, length: 2000 mm, color: silver

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## Bolt connection terminal block - RBO 8-3L/N/FE - 3076280

### Accessories

DIN rail, unperforated - NS 35/15 WH UNPERF 2000MM - 1204135



DIN rail, unperforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Steel, Galvanized, white passivated, length: 2000 mm, color: silver

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DIN rail, unperforated - NS 35/15 AL UNPERF 2000MM - 1201756



DIN rail, unperforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Aluminum, uncoated, length: 2000 mm, color: silver

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DIN rail perforated - NS 35/15 ZN PERF 2000MM - 1206599



DIN rail perforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Steel, galvanized, length: 2000 mm, color: silver

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DIN rail, unperforated - NS 35/15 ZN UNPERF 2000MM - 1206586



DIN rail, unperforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Steel, galvanized, length: 2000 mm, color: silver

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DIN rail, unperforated - NS 35/15 CU UNPERF 2000MM - 1201895



DIN rail, unperforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Copper, uncoated, length: 2000 mm, color: copper-colored

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## Bolt connection terminal block - RBO 8-3L/N/FE - 3076280

### Accessories

End cap - NS 35/15 CAP - 1206573



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

DIN rail, unperforated - NS 35/15-2,3 UNPERF 2000MM - 1201798



DIN rail, unperforated, Standard profile 2.3 mm, width: 35 mm, height: 15 mm, acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

### End block

End clamp - E/NS 35 N - 0800886



End clamp, width: 9.5 mm, color: gray

### Labeled device marker

Label - EML (51X25)R YE /RBO8 - 0801353



Label, yellow/black, labeled, can be labeled with: THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2: Lightning flash, mounting type: adhesive, lettering field size: 51 x 25 mm

### Labeled terminal marker

## Bolt connection terminal block - RBO 8-3L/N/FE - 3076280

### Accessories

#### Zack marker strip - ZB 10 CUS - 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

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#### Zack marker strip - ZB10,LGS:FORTL.ZAHLEN - 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: 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

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#### Zack marker strip - ZB10,QR:FORTL.ZAHLEN - 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: 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

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#### Marker for terminal blocks - ZB10,LGS:L1-N,PE - 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: 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

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

## Bolt connection terminal block - RBO 8-3L/N/FE - 3076280

### Accessories

#### Marker for terminal blocks - UC-TM 10 CUS - 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

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#### Marker for terminal blocks - UCT-TM 10 CUS - 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

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#### Zack Marker strip, flat - ZBF10 CUS - 0825031



Zack Marker strip, flat, can be ordered: Strip, white, labeled according to customer specifications, mounting type: snap into flat marker groove, for terminal block width: 10 mm, lettering field size: 5.15 x 10 mm, Number of individual labels: 10

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#### Zack Marker strip, flat - ZBF10,LGS:FORTL.ZAHLEN - 0810009



Zack Marker strip, flat, Strip, white, labeled, printed horizontally: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 91 ... 100, mounting type: snap into flat marker groove, for terminal block width: 10 mm, lettering field size: 5.15 x 10 mm, Number of individual labels: 10

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#### Zack Marker strip, flat - ZBF10,QR:FORTL.ZAHLEN - 0810025



Zack Marker strip, flat, Strip, white, labeled, Printed vertically: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 91 ... 100, mounting type: snap into flat marker groove, for terminal block width: 10 mm, lettering field size: 5.15 x 10 mm, Number of individual labels: 10

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## Bolt connection terminal block - RBO 8-3L/N/FE - 3076280

### Accessories

#### Marker for terminal blocks - UC-TMF 10 CUS - 0824662



Marker for terminal blocks, can be ordered: by sheet, white, labeled according to customer specifications, mounting type: snap into flat marker groove, for terminal block width: 10.2 mm, lettering field size: 9.6 x 5.1 mm, Number of individual labels: 48

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#### Marker for terminal blocks - UCT-TMF 10 CUS - 0829679



Marker for terminal blocks, can be ordered: by sheet, white, labeled according to customer specifications, mounting type: snap into flat marker groove, for terminal block width: 10.2 mm, lettering field size: 9.4 x 4.7 mm, Number of individual labels: 36

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### Planning and marking software

#### Software - CLIP-PROJECT ADVANCED - 5146040



Multilingual software for convenient configuration of Phoenix Contact products on standard DIN rails.

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#### Software - CLIP-PROJECT PROFESSIONAL - 5146053



Multilingual software for terminal strip configuration. A marking module enables the professional marking of markers and labels for identifying terminal blocks, conductors and cables, and devices.

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### Socket spanner

#### Tool - SHN 13 - 1209923



Socket wrench, wrench size 13 mm

## Bolt connection terminal block - RBO 8-3L/N/FE - 3076280

### Accessories

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#### Terminal marking

##### Zack marker strip - ZB 10:UNBEDRUCKT - 1053001



Zack marker strip, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into tall marker groove, for terminal block width: 10.2 mm, lettering field size: 10.5 x 10.15 mm, Number of individual labels: 10

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##### Marker for terminal blocks - UC-TM 10 - 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: 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

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##### Marker for terminal blocks - UCT-TM 10 - 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: 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

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##### Zack Marker strip, flat - ZBF10:UNBEDRUCKT - 0809997



Zack Marker strip, flat, Strip, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, PLOTMARK, mounting type: snap into flat marker groove, for terminal block width: 10 mm, lettering field size: 5.15 x 10 mm, Number of individual labels: 10

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##### Marker for terminal blocks - UC-TMF 10 - 0818124



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into flat marker groove, for terminal block width: 10.2 mm, lettering field size: 9.6 x 5.1 mm, Number of individual labels: 48

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## Bolt connection terminal block - RBO 8-3L/N/FE - 3076280

### Accessories

Marker for terminal blocks - UCT-TMF 10 - 0829204



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 flat marker groove, for terminal block width: 10.2 mm, lettering field size: 9.4 x 4.7 mm, Number of individual labels: 36