

## Sensor/actuator box - SACB- 4/3-L- 5,0PUR QO-0,34 - 1548448

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Sensor/actuator box, application: Standard, connection method: QUICKON, 0.14 mm<sup>2</sup> ... 0.34 mm<sup>2</sup>, number of slots: 4, number of positions: 3, slot assignment: single, status display: yes, pnp; master cable connection: Fixed connection 180°, PUR/PVC, cable length: 5 m, shielding: no

### Your advantages

- ✓ Safety in the field, thanks to molded housing and high degree of protection
- ✓ Flexible, distributed bundling of signals in one master cable
- ✓ Convenient: increased machine availability thanks to quick and easy diagnostics
- ✓ Innovative and time-saving assembly with insulation displacement connection

### Key Commercial Data

|                                      |   |
|--------------------------------------|---|
| Packing unit                         | 1 pc  |
| GTIN                                 | <br>4 046356 142915 |
| GTIN                                 | 4046356142915   |
| Weight per Piece (excluding packing) | 552.990 g   |
| Custom tariff number                 | 85444290  |
| Country of origin                    | Poland  |
| Note                                 | Made to Order (non-returnable)  |

### Technical data

#### General

|  |         |
|--|---------|
| Rated voltage                            | 24 V DC |
| Max. operating voltage U <sub>max</sub>  | 30 V DC |
| Current carrying capacity per I/O signal | 2 A     |
| Current carrying capacity per slot       | 4 A     |
| Total rated current                      | 12 A    |
| Number of positions                      | 3       |
| Number of slots                          | 4       |
| Flammability rating according to UL 94   | V0      |

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## Technical data

### General

|                                   |   |
|-----------------------------------|---|
| Sensor/actuator connection system | QUICKON   |
| Note                              | NOTE: Observe the permissible bending radii when laying conductors, since the degree of protection may be put in jeopardy if the bending forces are too high. Alleviate mechanical loads upstream of the connector, e.g. by using cable ties. |
|                                   | Unused slots are to be sealed off prior to commissioning. Suitable sealing elements are to be found under "Accessories".  |

### Ambient conditions

|                                 |   |
|---------------------------------|---|
| Degree of protection            | IP65  |
|                                 | IP67  |
|                                 | IP69K                                       |
| Ambient temperature (operation) | -30 °C ... 80 °C                            |
|                                 | -40 °C ... 90 °C (for fixed installation)   |
|                                 | -5 °C ... 80 °C (for flexible installation) |

### Local diagnostics function

|                   |                               |
|-------------------|-------------------------------|
| Local diagnostics | Supply voltage Green LED      |
|                   | Status display I/O Yellow LED |

### Master cable connection data

|  |                  |
|--|------------------|
| Connection method  | Fixed connection |
| Length of cable  | 5 m              |
| Tightening torque of mounting screw for fixing the housing | 0.5 Nm           |

### Conductor data

|   |                      |
|---|----------------------|
| Structure of individual litz in acc. with VDE 0295 / smallest wire diameter | Class 2-6            |
| Wire insulation material  | PVC / PE / PP        |
| Wire diameter including insulation  | 0.7 mm ... 1.3 mm    |
| Minimum external conductor diameter   | 3.5 mm               |
| Maximum external conductor diameter   | 6 mm                 |
| Tightening torque, union nut  | 2 Nm                 |
| Wrench size, union nut  | 13 mm                |
| Conductor cross section flexible min.                                       | 0.14 mm <sup>2</sup> |
| Conductor cross section flexible max.                                       | 0.34 mm <sup>2</sup> |
| Conductor cross section AWG min.  | 26                   |
| Conductor cross section AWG max.  | 22                   |

### Insulation material

|                               |              |
|-------------------------------|--------------|
| Housing material              | PBT          |
| Material of the moulding mass | PUR          |
| Contact material              | Steel/copper |
| Contact surface material      | Sn           |
| Contact carrier material      | PA 6.6       |

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## Technical data

### Pin assignment

|  |                       |
|--|-----------------------|
| Slot/position = Wire color or connection | 1 / 4 (A) = WH        |
|  | 2 / 4 (A) = GN        |
|  | 3 / 4 (A) = YE        |
|  | 4 / 4 (A) = GY        |
|  | 1-4 / 1 (+ 24 V) = BN |
|  | 1-4 / 3 (0 V) = BU    |

### Standards and Regulations

|  |     |
|--|-----|
| Connection in acc. with standard       | CUL |
| Flammability rating according to UL 94 | V0  |

### Cable

|   |   |
|---|---|
| Cable type                                    | PUR/PVC black                           |
| Cable type (abbreviation)                     | PUR                                     |
| Cable abbreviation                            | LiYY11Y-HF                              |
| UL AWM style                                  | 20549                                   |
| Conductor cross section                       | 4x 0.34 mm <sup>2</sup> (Signal line)   |
|   | 2x 0.75 mm <sup>2</sup> (power line)    |
| AWG signal line                               | 22                                      |
| AWG power supply                              | 18                                      |
| Conductor structure signal line               | 19x 0.15 mm                             |
| Conductor structure, voltage supply           | 42x 0.15 mm                             |
| Core diameter including insulation            | 1.3 mm ±0.1 mm (Signal line)            |
|   | 1.8 mm ±0.1 mm (power line)             |
| Wire colors                                   | brown, blue, white, green, yellow, gray |
| Overall twist                                 | Wires twisted in layers                 |
| External sheath, color                        | black RAL 9005                          |
| Inner sheath thickness                        | ≥ 0.15 mm                               |
| Outer sheath thickness                        | ≥ 0.38 mm                               |
| External cable diameter D                     | 6.8 mm ±0.2 mm                          |
| Minimum bending radius, fixed installation    | 7.5 x D                                 |
| Minimum bending radius, flexible installation | 10 x D                                  |
| Number of bending cycles                      | 1500000                                 |
| Bending radius                                | 68 mm                                   |
| Traversing path                               | 2 m                                     |
| Traversing rate                               | 2 m/s                                   |
| Cable weight                                  | 71.7 kg/km                              |
| Outer sheath, material                        | PUR                                     |
| Material, inner sheath                        | PVC                                     |
| Material conductor insulation                 | PVC                                     |
| Conductor material                            | Bare Cu litz wires                      |
| Nominal voltage, cable                        | 300 V                                   |

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### Technical data

#### Cable

|                                 |  |
|---------------------------------|--|
| Test voltage, cable             | 2000 V   |
| Special properties              | Silicone-free  |
| Flame resistance                | DIN EN 50265   |
| Resistance to oil               | according to VDE 0472 Part 803                             |
| Other resistance                | Highly resistant to acids, alkaline solutions and solvents |
| Ambient temperature (operation) | -40 °C ... 90 °C (cable, fixed installation)               |
|                                 | -5 °C ... 80 °C (cable, flexible installation)             |

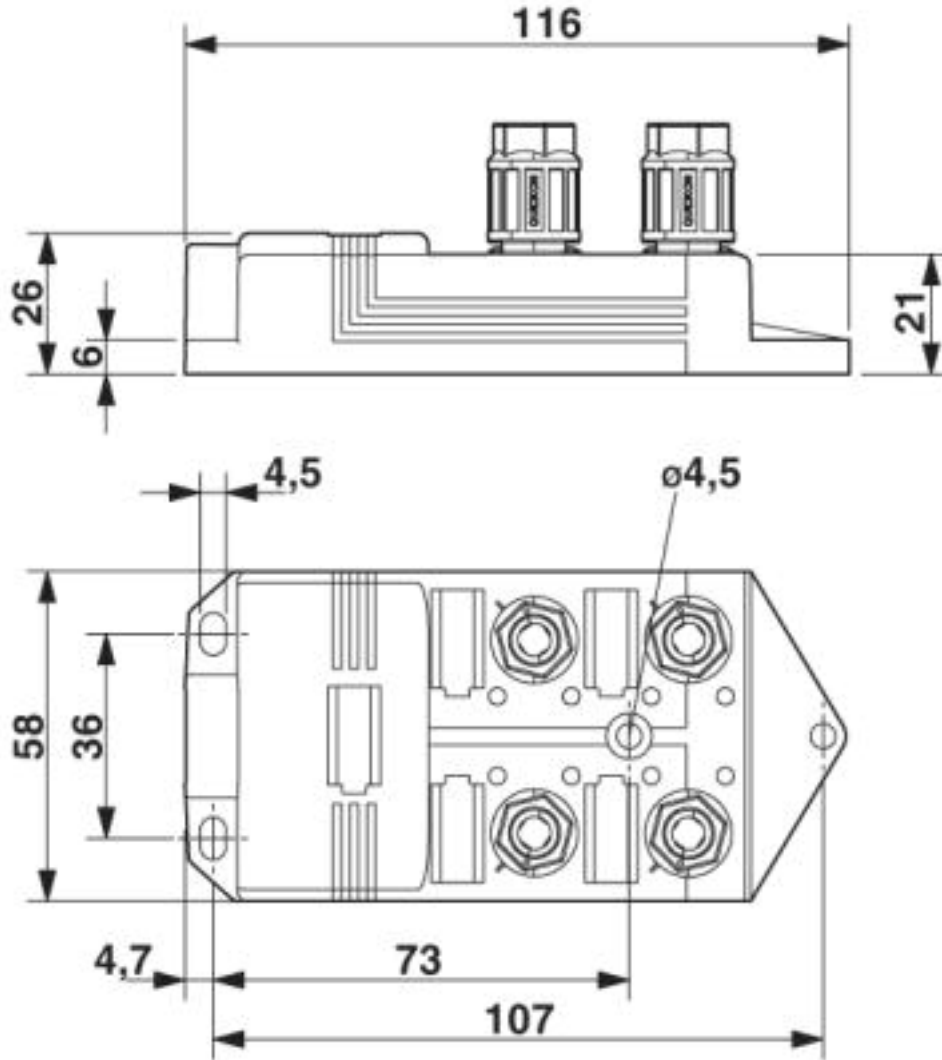
#### Environmental Product Compliance

|            |   |
|------------|---|
| China RoHS | Environmentally Friendly Use Period = 50  |
|            | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |

#### Drawings

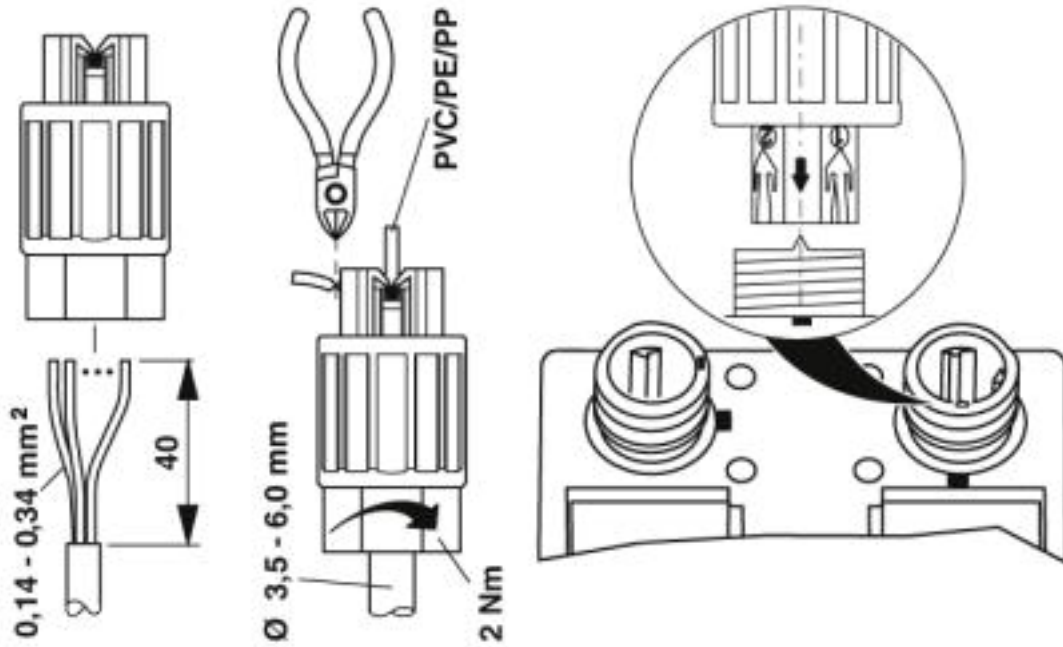
# Sensor/actuator box - SACB- 4/3-L- 5,0PUR QO-0,34 - 1548448

Dimensional drawing

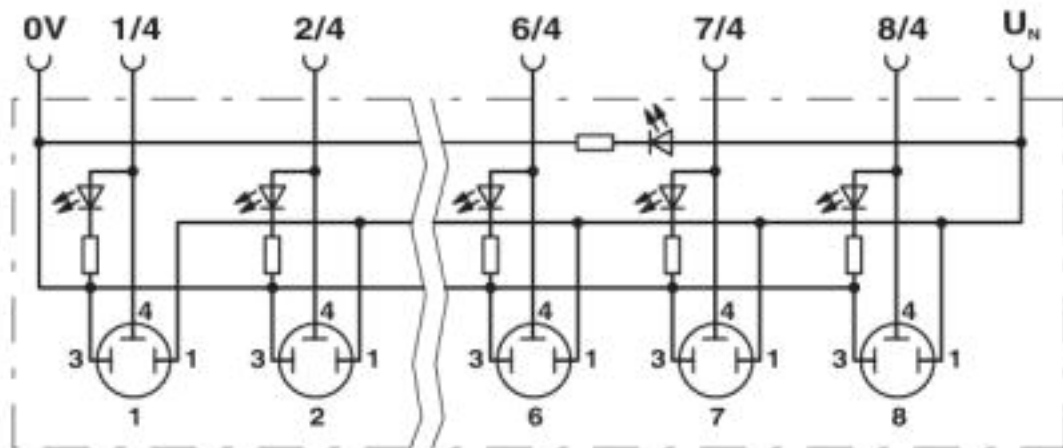


# Sensor/actuator box - SACB- 4/3-L- 5,0PUR QO-0,34 - 1548448

Functional drawing

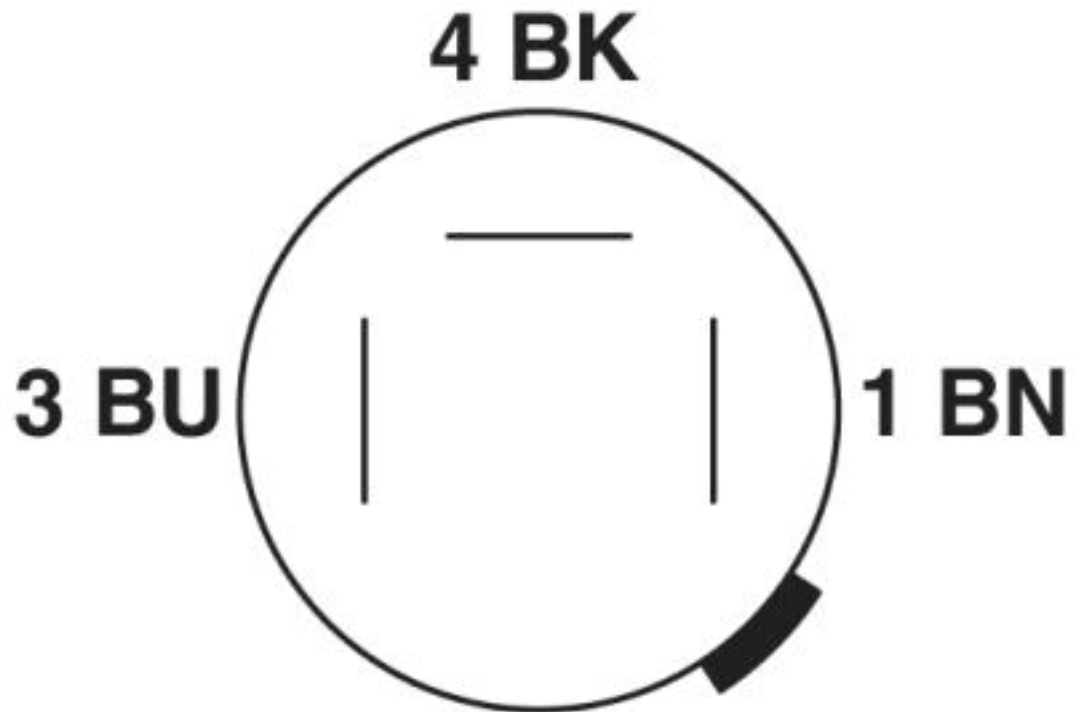


Circuit diagram



## Sensor/actuator box - SACB- 4/3-L- 5,0PUR QO-0,34 - 1548448

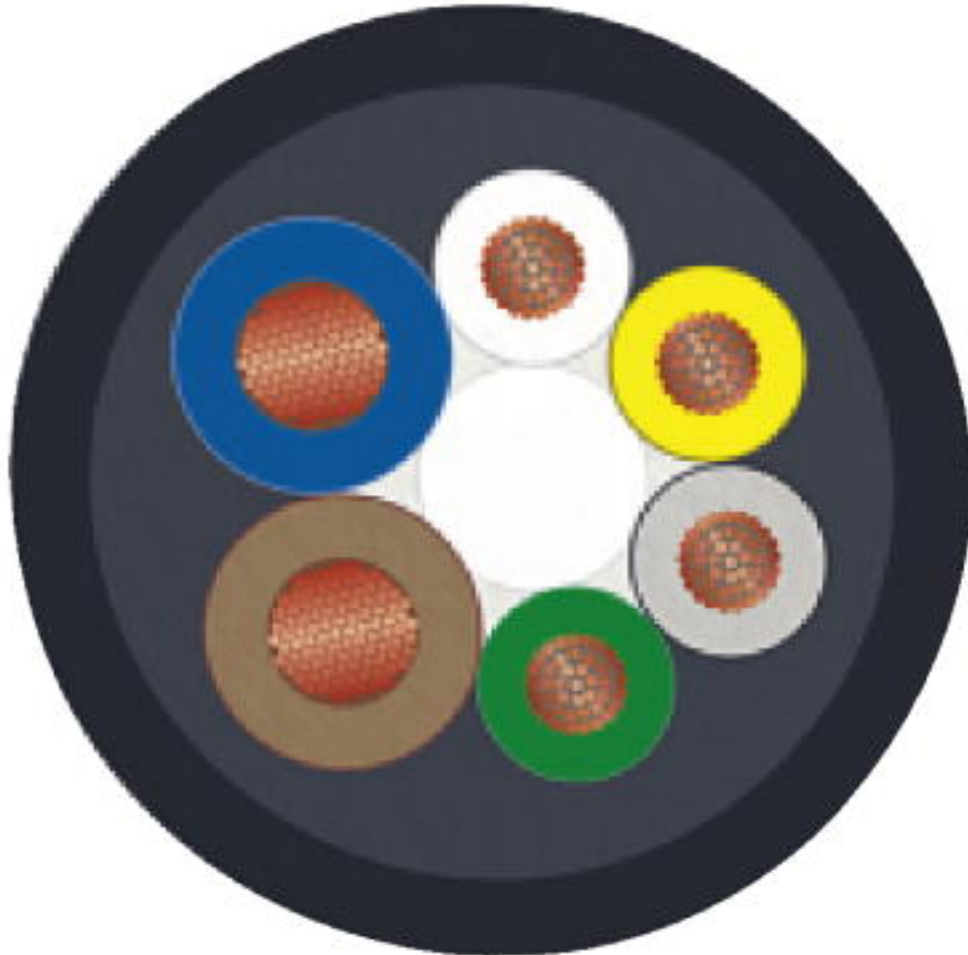
Schematic diagram



QUICKON connection, 4-pos.

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Cable cross section



PUR/PVC black [PUR]

## Classifications

eCl@ss

|            |          |
|------------|----------|
| eCl@ss 4.0 | 27140800 |
| eCl@ss 4.1 | 27140800 |
| eCl@ss 5.0 | 27143400 |
| eCl@ss 5.1 | 27250300 |
| eCl@ss 6.0 | 27279200 |
| eCl@ss 7.0 | 27279219 |
| eCl@ss 8.0 | 27279219 |
| eCl@ss 9.0 | 27440108 |



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## Classifications

### ETIM

|          |          |
|----------|----------|
| ETIM 3.0 | EC001856 |
| ETIM 4.0 | EC002585 |
| ETIM 5.0 | EC002585 |
| ETIM 6.0 | EC002585 |
| ETIM 7.0 | EC002585 |

### UNSPSC

|               |          |
|---------------|----------|
| UNSPSC 6.01   | 31261501 |
| UNSPSC 7.0901 | 31261501 |
| UNSPSC 11     | 31261501 |
| UNSPSC 12.01  | 31261501 |
| UNSPSC 13.2   | 31251501 |
| UNSPSC 19.0   | 31251501 |
| UNSPSC 20.0   | 31251501 |
| UNSPSC 21.0   | 31251501 |

## Approvals


### Approvals


#### Approvals

UL Recognized / cUL Recognized / EAC / cULus 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 118976 |
| Nominal voltage UN |   | 24 V  |               |

|                    |   |   |               |
|--------------------|---|---|---------------|
| cUL 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 118976 |
| Nominal voltage UN |   | 24 V  |               |

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## Approvals

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

|                  |  |
|------------------|--|
| cULus Recognized |  |
|------------------|--|

## Accessories

### Accessories

### Device marking

Snap-in markers - UC-EM (17,5X9) - 0827490



Snap-in markers, Sheet, white, unlabeled, can be labeled with: BLUEMARK ID, BLUEMARK ID COLOR, BLUEMARK CLED, BLUEMARK LED, CMS-P1-PLOTTER, PLOTMARK, mounting type: snapped into marker carrier, lettering field size: 17.5 x 9 mm, Number of individual labels: 20

Snap-in markers - UCT-EM (17,5X9) - 0801491



Snap-in markers, 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 into marker carrier, lettering field size: 17.5 x 9 mm, Number of individual labels: 24

Snap-in markers - UC-EM (17,5X9) YE - 0827494



Snap-in markers, Sheet, yellow, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, PLOTMARK, CMS-P1-PLOTTER, mounting type: snapped into marker carrier, lettering field size: 17.5 x 9 mm, Number of individual labels: 20

Snap-in markers - UCT-EM (17,5X9) YE - 0801492



Snap-in markers, 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 into marker carrier, lettering field size: 17.5 x 9 mm, Number of individual labels: 24

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### Accessories

#### Labeled device marker

Snap-in markers - UC-EM (17,5X9) CUS - 0828238



Snap-in markers, can be ordered: by sheet, white, labeled according to customer specifications, mounting type: snapped into marker carrier, lettering field size: 17.5 x 9 mm, Number of individual labels: 20

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Snap-in markers - UCT-EM (17,5X9) CUS - 0801575



UniCard sheet, for labeling devices from other manufacturers, for overview table see download area, labeled according to customer specifications

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Snap-in markers - UC-EM (17,5X9) YE CUS - 0828239



Snap-in markers, can be ordered: by sheet, yellow, labeled according to customer specifications, mounting type: snapped into marker carrier, lettering field size: 17.5 x 9 mm, Number of individual labels: 20

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Snap-in markers - UCT-EM (17,5X9) YE CUS - 0801576



UniCard sheet, for labeling devices from other manufacturers, for overview table see download area, labeled according to customer specifications

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#### Mounting rail adapter

DIN rail adapter - UTA 107 - 2853983

Universal DIN rail adapter, for screwing on switchgear



#### Pressure nut

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### Accessories

Connector - QO-SET - 1548626



QUICKON set for replacement purposes, consisting of splice ring, pressure nut and line seal

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### Screwdriver tools

Adapter insert - TSD-M SAC-BIT ADAPTER - 1212600



Adapter bit for TSD-M...torque tools, E6.3-1/4" drive with 4 mm hexagon to accommodate SAC bits

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Tool - SAC BIT QUICKON-W13 - 1212033



Nut for assembling pressure nuts with 13 mm wrench size, for 4 mm hexagonal drive

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### Sealing plugs

Filler plugs - Q-PROT 9/11 - 1670235



Closing cap for Pg9/Pg11 to close unoccupied connections

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### Torque tool

Torque screwdriver - TSD 20 SAC - 1212020



Torque screwdriver, with preset torque of 2.0 Nm and 4 mm hexagonal drive for the pressure nut of the fast connection

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### Accessories

Torque screwdriver - TSD-M 3NM - 1212225



Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 1.2 - 3 Nm