

## Sensor/actuator box - SACB-8Q/4P-L-10,0PUR - 1695294

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Sensor/actuator box, application: Standard, connection method: QUICKON, 0.34 mm² ... 0.75 mm², number of slots: 8, number of positions: 4, slot assignment: single, status display: yes, pnp; master cable connection: Fixed connection 180°, PUR/PVC, cable length: 10 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

RoHS

### Key Commercial Data

|              |                                                                                                         |
|--------------|---------------------------------------------------------------------------------------------------------|
| Packing unit | 1 pc                                                                                                    |
| GTIN         | <br>4 017918 177737 |
| GTIN         | 4017918177737                                                                                           |
| Sales Key    | 02                                                                                                      |

### 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 | 4 A                                                                                                                                      |
| Current carrying capacity per slot       | 4 A                                                                                                                                      |
| Total rated current                      | 12 A                                                                                                                                     |
| Number of positions                      | 4                                                                                                                                        |
| Number of slots                          | 8                                                                                                                                        |
| Flammability rating according to UL 94   | V0                                                                                                                                       |
| 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 |

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### General

|  |                                                                                                                          |
|--|--------------------------------------------------------------------------------------------------------------------------|
|  | 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                                        |
| Ambient temperature (operation) | -25 °C ... 60 °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   | 10 m             |

### Conductor data

|                                                                             |                                                                                     |
|-----------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Structure of individual litz in acc. with VDE 0295 / smallest wire diameter | Class 2-6 // 0.34 mm <sup>2</sup> : 0.1 mm; 0.5 - 0.75 mm <sup>2</sup> : 0.15 mm    |
| Wire insulation material                                                    | PVC / PE                                                                            |
| Wire diameter including insulation                                          | ≤ 2.5 mm                                                                            |
| Minimum external conductor diameter                                         | 4 mm                                                                                |
| Maximum external conductor diameter                                         | 7.5 mm                                                                              |
| Tightening torque, union nut                                                | 2.5 Nm                                                                              |
| Wrench size, union nut                                                      | 22 mm                                                                               |
| Note on the frequency of connections                                        | if the conductor is connected more than once, seal and cap may need to be replaced. |
| Conductor cross section flexible min.                                       | 0.34 mm <sup>2</sup>                                                                |
| Conductor cross section flexible max.                                       | 0.75 mm <sup>2</sup>                                                                |
| Conductor cross section AWG min.                                            | 22                                                                                  |
| Conductor cross section AWG max.                                            | 18                                                                                  |

### Insulation material

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

### Pin assignment

|                                          |                |
|------------------------------------------|----------------|
| Slot/position = Wire color or connection | 1 / 4 (A) = WH |
|                                          | 2 / 4 (A) = GN |

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### Pin assignment

|  |                        |
|--|------------------------|
|  | 3 / 4 (A) = YE         |
|  | 4 / 4 (A) = GY         |
|  | 5 / 4 (A) = PK         |
|  | 6 / 4 (A) = RD         |
|  | 7 / 4 (A) = BK         |
|  | 8 / 4 (A) = VT         |
|  | 1-8 / 1 (+ 120 V) = BN |
|  | 1-8 / 3 (0 V) = BU     |
|  | 1-8 / 5 (PE) = GN/YE   |

### 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 (80°C/300 V)                                                              |
| Conductor cross section                         | 8x 0.34 mm <sup>2</sup> (Signal line)                                           |
|                                                 | 3x 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, green/yellow, white, green, yellow, gray, pink, red, black, violet |
| 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                       | 8.5 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                                                                         |
| Minimum bending radius, drag chain applications | 10 x D                                                                          |
| Traversing path                                 | 2 m                                                                             |
| Traversing rate                                 | 2 m/s                                                                           |
| Cable weight                                    | 107.4 kg/km                                                                     |
| Outer sheath, material                          | PUR                                                                             |

## Sensor/actuator box - SACB-8Q/4P-L-10,0PUR - 1695294

### Technical data

#### Cable

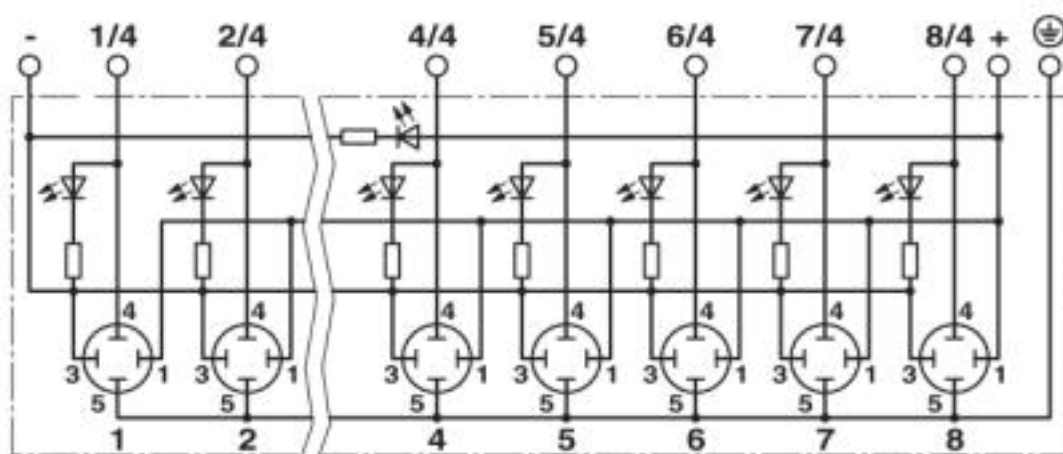
|                                 |                                                            |
|---------------------------------|------------------------------------------------------------|
| Material, inner sheath          | PVC                                                        |
| Material conductor insulation   | PVC                                                        |
| Conductor material              | Bare Cu litz wires                                         |
| Insulation resistance           | $\geq 5 \text{ M}\Omega \cdot \text{km}$                   |
| Conductor resistance            | $\leq 53 \text{ }\Omega/\text{km}$ (Signal line)           |
|                                 | $\leq 26 \text{ }\Omega/\text{km}$ (power line)            |
| Nominal voltage, cable          | 300 V AC                                                   |
| Test voltage Core/Core          | 2000 V (50 Hz, 5 min.)                                     |
| 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" |

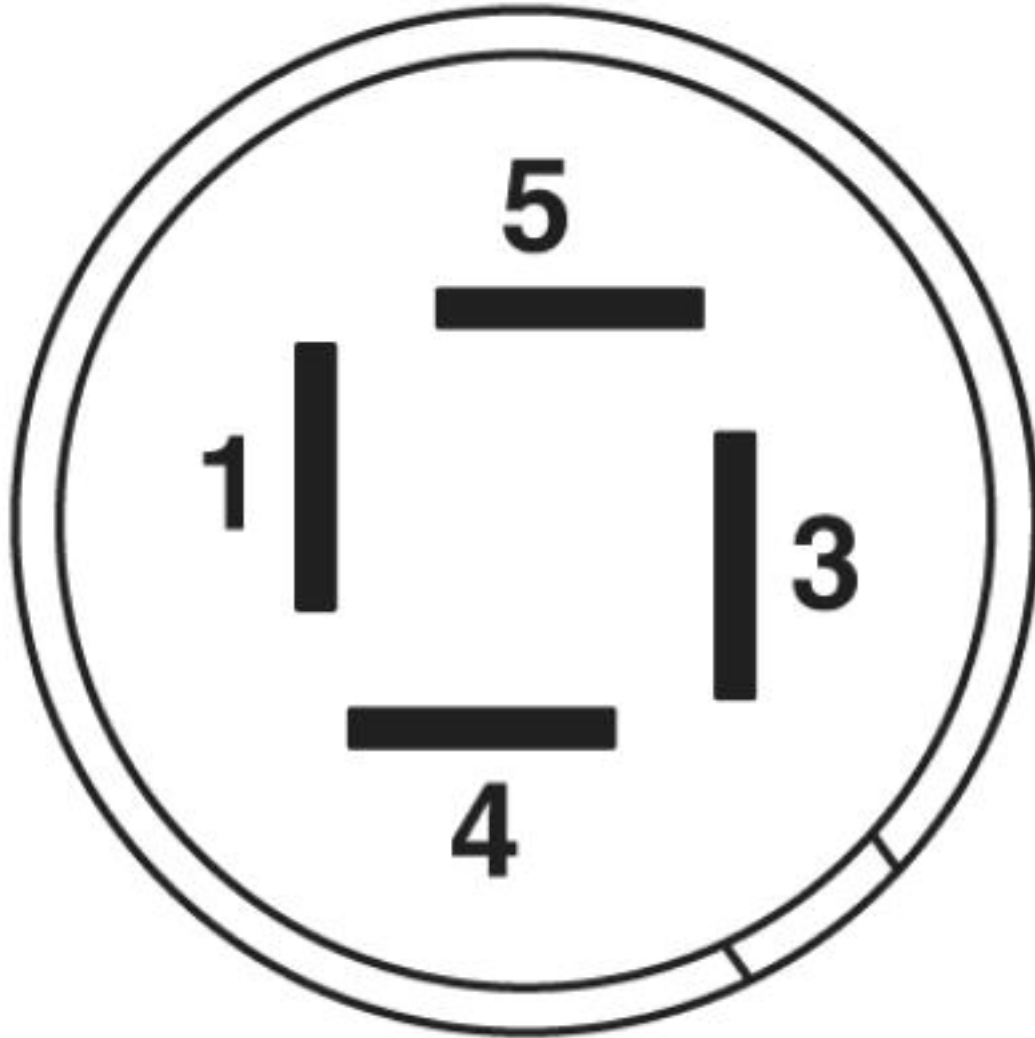
### Drawings

Circuit diagram



## Sensor/actuator box - SACB-8Q/4P-L-10,0PUR - 1695294

Schematic diagram



QUICKON connection, 4-pos.

## Sensor/actuator box - SACB-8Q/4P-L-10,0PUR - 1695294

Cable cross section



PUR/PVC black [PUR]

### Approvals

Approvals

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Approvals

UL Recognized / cUL Recognized / EAC / EAC / cULus Recognized

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Ex Approvals

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Approval details

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### 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 118976 |
|                    |  |                                                                                   |                                                                                                                                                       |               |
| Nominal voltage UN |  | 24 V                                                                              |                                                                                                                                                       |               |
| mm²/AWG/kcmil      |  | 22-16                                                                             |                                                                                                                                                       |               |

|                    |  |                                                                                   |                                                                                                                                                       |               |
|--------------------|--|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| 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                                                                              |                                                                                                                                                       |               |
| mm²/AWG/kcmil      |  | 22-16                                                                             |                                                                                                                                                       |               |

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

|     |                                                                                     |                          |
|-----|-------------------------------------------------------------------------------------|--------------------------|
| EAC |  | RU C-<br>DE.BL08.B.00511 |
|-----|-------------------------------------------------------------------------------------|--------------------------|

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

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