

Sensor/actuator box - SACB-8/16-SC SCO P - 1452974

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Sensor/actuator box, application: Standard, connection method: M12-SPEEDCON-socket Plastic, number of slots: 8, number of positions: 5, coding: A - standard, slot assignment: Double, status display: No, Universal; master cable connection: Spring-cage connection 180°, 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
- ✓ Save space: distributor box with double occupancy for two sensors in one slot
- ✓ Save time, thanks to installation with SPEEDCON fast locking system
- ✓ Flexible: distributor box with connector hood for on-site assembly



Key Commercial Data

| | |
|--------------------------------------|---|
| Packing unit | 1 pc |
| GTIN |  4 046356 553599 |
| GTIN | 4046356553599 |
| Weight per Piece (excluding packing) | 220.000 g |
| Custom tariff number | 85366990 |
| Country of origin | Germany |

Technical data

General

| | |
|--|----------|
| Rated voltage | 120 V AC |
| | 120 V DC |
| Current carrying capacity per I/O signal | 2 A |
| Current carrying capacity per slot | 4 A |
| Total rated current | 12 A |

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Technical data

General

| | |
|--|--|
| Number of positions | 5 |
| Number of slots | 8 |
| Flammability rating according to UL 94 | V0 |
| Sensor/actuator connection system | M12-SPEEDCON-socket |
| Note | <p>When connecting the signal lines to the black PCB terminal blocks, please use a 0.4 x 2.0 mm screwdriver. The black PCB terminal blocks only require a minimal amount of operating force. Screwdriver: SZS 0,4X2,0 - 1205202 Using larger screwdrivers or excessive force may damage the PCB terminal blocks. When using ferrules, the wires can be inserted straight into the PCB terminal blocks without opening the clamping area.</p> |
| | <p>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.</p> |
| | <p>Unused slots are to be sealed off prior to commissioning. Suitable sealing elements are to be found under "Accessories".</p> |

Ambient conditions

| | |
|---------------------------------|------------------|
| Degree of protection | IP65 |
| | IP67 |
| Ambient temperature (operation) | -25 °C ... 80 °C |

Master cable data/connection data

| | |
|---|------------------------|
| Connection method | Spring-cage connection |
| Conductor cross section min. (signal) | 0.2 mm ² |
| Conductor cross section max. (signal) | 0.5 mm ² |
| Conductor cross section AWG min. (signal) | 24 |
| Conductor cross section AWG max. (signal) | 20 |
| Stripping length (signal) | 6 mm |
| Conductor cross section min. (energy) | 0.2 mm ² |
| Conductor cross section max. (energy) | 1.5 mm ² |
| Conductor cross section AWG min. (energy) | 24 |
| Conductor cross section AWG max. (energy) | 16 |
| Stripping length (power) | 10 mm |
| External cable diameter min. | 7 mm |
| External cable diameter max. | 12 mm |
| Stripping length | 50 mm (Master cable) |
| Tightening torque, cover screw | 1 Nm |
| Tightening torque, union nut | 2.5 Nm |

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Technical data

Master cable data/connection data

| | |
|--|--------|
| Tightening torque slot sensor/actuator cable | 0.4 Nm |
| Tightening torque of mounting screw for fixing the housing | 0.5 Nm |

Insulation material

| | |
|-------------------------------|----------------------|
| Housing material | PBT |
| Material of the moulding mass | PUR |
| Contact material | Cu alloy |
| Contact surface material | gold-plated |
| Contact carrier material | PA |
| Material of threaded sleeve | PBT |
| O-ring material | NBR |
| Sealing material | NBR (Connector hood) |

Pin assignment

| | |
|--|------------------------|
| Slot/position = Wire color or connection | 1 / 4 (A) = WH |
| | 1 / 2 (B) = GY/PK |
| | 2 / 4 (A) = GN |
| | 2 / 2 (B) = RD/BU |
| | 3 / 4 (A) = YE |
| | 3 / 2 (B) = WH/GN |
| | 4 / 4 (A) = GY |
| | 4 / 2 (B) = BN/GN |
| | 5 / 4 (A) = PK |
| | 5 / 2 (B) = WH/YE |
| | 6 / 4 (A) = RD |
| | 6 / 2 (B) = YE/BN |
| | 7 / 4 (A) = BK |
| | 7 / 2 (B) = WH/GY |
| | 8 / 4 (A) = VT |
| | 8 / 2 (B) = GY/BN |
| | 1-8 / 1 (+ 120 V) = BN |
| | 1-8 / 3 (0 V) = BU |
| | 1-8 / 5 (PE) = GN/YE |

Standards and Regulations

| | |
|--|-------------------------------|
| Standards/specifications | M12 connector IEC 61076-2-101 |
| Connection in acc. with standard | CUL |
| Flammability rating according to UL 94 | V0 |

Sensor/actuator box - SACB-8/16-SC SCO P - 1452974

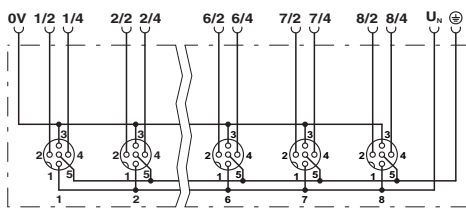
Technical data

Environmental Product Compliance

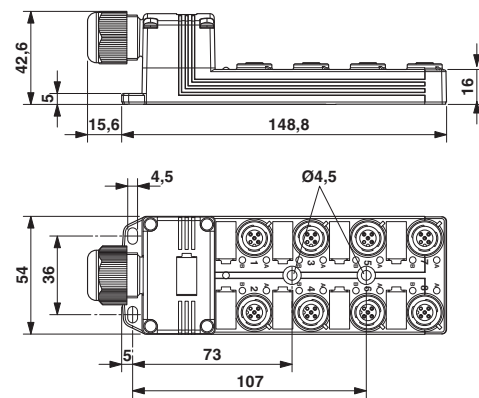
| | |
|------------|---|
| China RoHS | Environmentally Friendly Use Period = 50 years |
| | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |

Drawings

Circuit diagram



Dimensional drawing



Schematic diagram



M12 slot, socket, 5-pos.

Classifications

eCl@ss

| | |
|---------------|----------|
| eCl@ss 10.0.1 | 27440111 |
| eCl@ss 11.0 | 27440111 |
| eCl@ss 4.0 | 27140800 |
| eCl@ss 4.1 | 27140800 |

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Classifications

eCl@ss

| | |
|------------|----------|
| eCl@ss 5.0 | 27143400 |
| eCl@ss 5.1 | 27250300 |
| eCl@ss 6.0 | 27279200 |
| eCl@ss 7.0 | 27279219 |
| eCl@ss 9.0 | 27440108 |

ETIM

| | |
|----------|----------|
| ETIM 4.0 | 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 / EAC / cULus Recognized

Ex Approvals

Approval details

| | | | |
|--------------------|---|---|---------------|
| UL Recognized |  | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 118976 |
| Nominal voltage UN | 120 V | | |

Sensor/actuator box - SACB-8/16-SC SCO P - 1452974

Approvals

| | | | |
|--------------------|--|---|---------------|
| cUL Recognized | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 118976 |
| Nominal voltage UN | | 120 V | |

| | | |
|-----|--|--------------------------|
| EAC | | RU C- DE.AI30.B.01102 |
|-----|--|--------------------------|

| | | |
|-----|--|--------------------------|
| EAC | | RU C- DE.BL08.B.00511 |
|-----|--|--------------------------|

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

Accessories

Accessories

Cable by the meter

Master cable ring - SACB-16X0,5/ 3X1,0-50,0 PUR - 1503373



Master cable for sensor/actuator boxes, with PE conductor, unshielded, material PUR/PP, 19-pos., 16 x 0.50 mm² and 3 x 1.00 mm², length: 50 m

Master cable ring - SACB-16X0,5/ 3X1,0-200,0 PUR - 1559893



Master cable for sensor/actuator boxes, with PE conductor, unshielded, material PUR/PP, 19-pos., 16 x 0.50 mm² and 3 x 1.00 mm², length: 200 m on drum

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Accessories

Master cable ring - SACB-16X0,5/ 3X1,0-50,0 VPUR - 1430938



Master cable for sensor/actuator boxes, with PE conductor, unshielded, material PUR/PP, 19-pos., 16 x 0.50 mm² and 3 x 1.00 mm², length: 50 m

Cable end sleeve

Ferrule - A 0,5 - 6 - 3200218



Ferrule, length: 6 mm, color: silver

Ferrule - A 0,75-10 - 3200234



Ferrule, length: 10 mm, color: silver

Ferrule - A 1 -10 - 3200250



Ferrule, length: 10 mm, color: silver

Ferrule - A 1,5 -10 - 3200276



Ferrule, length: 10 mm, color: silver

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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



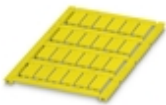
Snap-in markers, Sheet, white, unlabeled, can be labeled with: TOPMARK NEO, TOPMARK LASER, BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: snapped into marker carrier, lettering field size: 17.5 x 9 mm, Number of individual labels: 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

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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Accessories

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



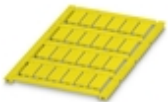
UniCard sheet, for labeling devices from other manufacturers, for overview table see download area, labeled according to customer specifications

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

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

Mounting rail adapter

DIN rail adapter - UTA 136 - 2853996

Universal DIN rail adapter, for screwing on switchgear



Plug for cable screw gland

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Accessories

Screw plug - PROT-MS SCO - 1553129



M12 screw plug with fast-locking system for unoccupied M12 female connectors of sensor/actuator cables, boxes, and flush-type connectors

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

Tool - SAC BIT M12-D15 - 1208432



Nut for assembling sensor/actuator cables with M12 connector and M12 connectors for assembly, with a knurl diameter of 15 mm, for 4 mm hexagonal drive

Tool - SACC BIT M12-D20 - 1208445



Nut for assembling M12 connectors for assembly with a knurl diameter of 20 mm, for 4 mm hexagonal drive

Philips screwdriver - SZK PZ2 VDE - 1206463



Screwdriver, PZ crosshead, VDE insulated, size: PZ 2 x 100 mm, 2-component grip, with non-slip grip

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Accessories

Tool - SAC BIT HOOD-W 24 - 1212486

Nut for assembling pressure nuts with 24 mm wrench size, for 4 mm hexagonal drive



Screw insert - SF-BIT-PZ 2-50 - 1212592



Screw bit, PZ crosshead, E6.3-1/4" drive, size: PZ 2 x 50 mm, hardened, suitable for holder according to DIN 3126-F6.3/ISO 1173

Screwdriver - SZS 0,4X2,0 - 1205202



Micro screwdriver, bladed, size: 0.4 x 2.0 x 60 mm, 2-component grip, with non-slip grip and twist cap

Torque tool

Torque screwdriver - TSD 04 SAC - 1208429



Torque screwdriver, with preset torque of 0.4 Nm and 4 mm hexagonal drive for M12 connectors

Torque screwdriver - TSD-M 1,2NM - 1212224



Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 0.3 - 1.2 Nm

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Accessories

Torque screwdriver - TSD 25 SAC - 1212315



Torque screwdriver, with preset torque of 2.5 Nm and 4 mm hexagonal drive for the pressure nut of the connector hood

Torque screwdriver - TSD-M 3NM - 1212225



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