

## Sensor/actuator box - SACB-6/ 6-SC SCO P - 1452945

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Sensor/actuator box, application: Standard, connection method: M12-SPEEDCON-socket Plastic, number of slots: 6, number of positions: 4, coding: A - standard, slot assignment: single, 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 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 553568
GTIN	4046356553568
Weight per Piece (excluding packing)	180.000 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

## Sensor/actuator box - SACB-6/ 6-SC SCO P - 1452945

### Technical data

#### General

Number of positions	4
Number of slots	6
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 <sup>2</sup>
Conductor cross section max. (signal)	0.5 mm <sup>2</sup>
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 <sup>2</sup>
Conductor cross section max. (energy)	1.5 mm <sup>2</sup>
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
	2 / 4 (A) = GN
	3 / 4 (A) = YE
	4 / 4 (A) = GY
	5 / 4 (A) = PK
	6 / 4 (A) = RD
	1-6 / 1 (+ 120 V) = BN
	1-6 / 3 (0 V) = BU
	1-6 / 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

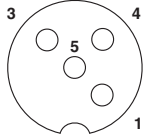
#### Environmental Product Compliance

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

### Drawings

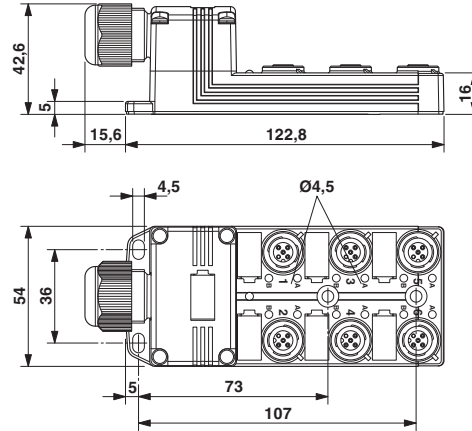
# Sensor/actuator box - SACB-6/ 6-SC SCO P - 1452945

Schematic diagram

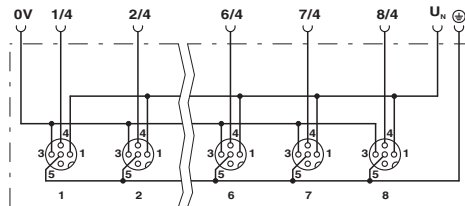


M12 slot, socket, 4-pos.

Dimensional drawing



Circuit diagram



## Classifications

eCl@ss

eCl@ss 10.0.1	27440111
eCl@ss 11.0	27440111
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 9.0	27440108

ETIM

ETIM 4.0	EC002585
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## Classifications

### ETIM

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		<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		120 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		120 V	

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### Approvals

EAC		RU C- DE.AI30.B.01102
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EAC		RU C- DE.BL08.B.00511
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cULus Recognized		
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### Accessories

#### Accessories

#### Cable by the meter

Master cable ring - SACB- 6X0,34/ 3X0,75-50,0 PUR - 1503331



Master cable for sensor/actuator boxes, with PE conductor, unshielded, material PUR/PVC, 9-pos., 6 x 0.34 mm<sup>2</sup> and 3 x 0.75 mm<sup>2</sup>

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#### Cable end sleeve

Ferrule - A 0,5 - 6 - 3200218



Ferrule, length: 6 mm, color: silver

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Ferrule - A 0,75-10 - 3200234



Ferrule, length: 10 mm, color: silver

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### Accessories

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Ferrule - A 1 -10 - 3200250



Ferrule, length: 10 mm, color: silver

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Ferrule - A 1,5 -10 - 3200276



Ferrule, length: 10 mm, color: silver

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### 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

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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

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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

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## Sensor/actuator box - SACB-6/ 6-SC SCO P - 1452945

### Accessories

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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### 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

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



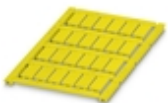
UniCard sheet, for labeling devices from other manufacturers, for overview table see download area, labeled according to customer specifications

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

## Sensor/actuator box - SACB-6/ 6-SC SCO P - 1452945

### Accessories

#### Mounting rail adapter

DIN rail adapter - UTA 107 - 2853983

Universal DIN rail adapter, for screwing on switchgear



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#### Plug for cable screw gland

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

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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 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

## Sensor/actuator box - SACB-6/ 6-SC SCO P - 1452945

### Accessories

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

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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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Tool - SAC BIT HOOD-W 24 - 1212486



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

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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

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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

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Torque tool

## Sensor/actuator box - SACB-6/ 6-SC SCO P - 1452945

### Accessories

Torque screwdriver - TSD 04 SAC - 1208429



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

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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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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

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Torque screwdriver - TSD-M 3NM - 1212225



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

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