

## Sensor/actuator box - SACB-8Q/4P- 5,0PUR - 1683701

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)




Sensor/actuator box, application: Standard, connection method: QUICKON, 0.34 mm<sup>2</sup> ... 0.75 mm<sup>2</sup>, number of slots: 8, number of positions: 4, slot assignment: single, status display: No, Universal; 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
- Innovative and time-saving assembly with insulation displacement connection

### Key Commercial Data

Packing unit	1 pc
GTIN	 4 017918 171063
GTIN	4017918171063
Sales Key	02

### Technical data

#### General

Rated voltage	120 V AC
	120 V DC
Max. operating voltage U <sub>max</sub>	135 V
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

# Sensor/actuator box - SACB-8Q/4P- 5,0PUR - 1683701

## Technical data

### 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)

### Master cable connection data

Connection method	Fixed connection
Length of cable	5 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
	3 / 4 (A) = YE
	4 / 4 (A) = GY
	5 / 4 (A) = PK
	6 / 4 (A) = RD

# Sensor/actuator box - SACB-8Q/4P- 5,0PUR - 1683701

## Technical data

### Pin assignment

	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
Material, inner sheath	PVC
Material conductor insulation	PVC
Conductor material	Bare Cu litz wires
Insulation resistance	≥ 5 MΩ*km

# Sensor/actuator box - SACB-8Q/4P- 5,0PUR - 1683701

## Technical data

### Cable

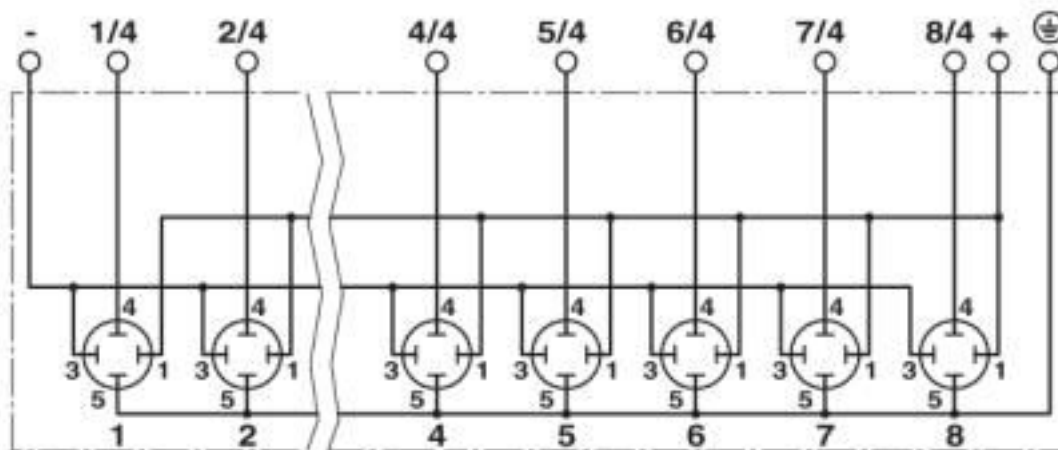
Conductor resistance	≤ 53 Ω/km (Signal line)
	≤ 26 Ω/km (power line)
Nominal voltage, cable	300 V AC
Test voltage Core/Core	2000 V (50 Hz, 5 min.)
Special properties	Silicone-free
Flame resistance	DIN EN 50265
Resistance to oil	according to VDE 0472 Part 803
Other resistance	Highly resistant to acids, 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 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

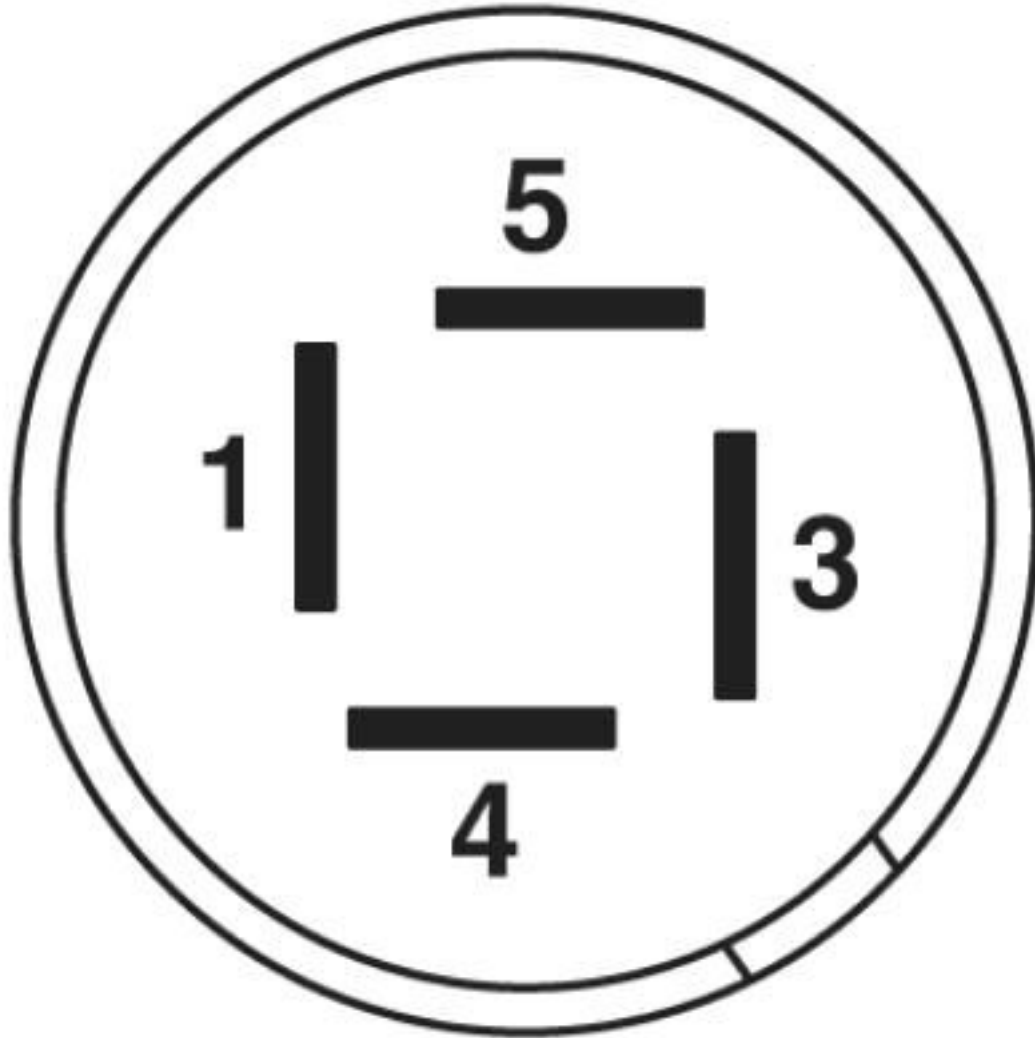
## Drawings

Circuit diagram



# Sensor/actuator box - SACB-8Q/4P- 5,0PUR - 1683701

Schematic diagram



QUICKON connection, 4-pos.

# Sensor/actuator box - SACB-8Q/4P- 5,0PUR - 1683701

Cable cross section



PUR/PVC black [PUR]

## Classifications

eCl@ss

eCl@ss 10.0.1	27440108
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

# Sensor/actuator box - SACB-8Q/4P- 5,0PUR - 1683701

## Classifications

### ETIM

ETIM 2.0	EC000200
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 / 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		
mm <sup>2</sup> /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	120 V		

# Sensor/actuator box - SACB-8Q/4P- 5,0PUR - 1683701

## Approvals

mm²/AWG/kcmil	22-16

EAC		EAC-Zulassung
-----	--	---------------

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

cULus Recognized		
------------------	--	--

## Accessories

### Accessories

#### Labeled terminal marker

Marker for terminal blocks - UC-TMF 16 CUS - 0824678



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: 16 mm, lettering field size: 15.45 x 5.1 mm, Number of individual labels: 32

Marker for terminal blocks - UC-TMF 16 YE CUS - 0824684



Marker for terminal blocks, can be ordered: by sheet, yellow, labeled according to customer specifications, mounting type: snap into flat marker groove, for terminal block width: 16 mm, lettering field size: 15.45 x 5.1 mm, Number of individual labels: 32

#### Pressure nut

Screw connection set - Q SET-11/4 COD1 SACB-Q - 1670743



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



## Sensor/actuator box - SACB-8Q/4P- 5,0PUR - 1683701

### Accessories

#### Seal

Seal - SACB-D PG 13,5 (4,0-6,5) YE - 1680377



Rubber seal for Pg13.5 screw connection, for 4.0 mm ... 6.5 mm cable diameter

---

Seal - SACB-D PG 13,5 (6,5-9,5) BK - 1680380



Rubber seal for Pg13.5 screw connection, for 6.5 mm ... 9.5 mm cable diameter

---

Seal - SACB-D PG 13,5 (9,0-13,0) RD - 1680393



Rubber seal for Pg13.5 screw connection, for 9.0 mm ... 13.0 mm cable diameter

---

#### Sealing plugs

Filler plugs - Q-PROT 9/11 - 1670235



Closing cap for Pg9/Pg11 to close unoccupied connections

---

#### Socket spanner

Socket wrench - QSS 22 - 1670206



Allen wrench, for loosening and fastening the QUICKON union nut, WAF 22 mm

---

#### Terminal marking

## Sensor/actuator box - SACB-8Q/4P- 5,0PUR - 1683701

### Accessories

#### Marker for terminal blocks - UC-TMF 16 - 0819262



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: 16 mm, lettering field size: 15.45 x 5.1 mm, Number of individual labels: 32

---

#### Marker for terminal blocks - UC-TMF 16 YE - 0819259



Marker for terminal blocks, Sheet, yellow, 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: 16 mm, lettering field size: 15.45 x 5.1 mm, Number of individual labels: 32

---

Phoenix Contact 2020 © - all rights reserved  
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG  
Flachsmarktstr. 8  
32825 Blomberg  
Germany  
Tel. +49 5235 300  
Fax +49 5235 3 41200  
<http://www.phoenixcontact.com>

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Sensor Cables / Actuator Cables](#) category:*

*Click to view products by [Phoenix Contact](#) manufacturer:*

Other Similar products are found below :

[60963](#) [60964](#) [703000D02F2002](#) [703001D02F0602](#) [703001D02F300](#) [704000D02F120](#) [773032K02F030](#) [802027107404-1](#) [802027213811-1](#)  
[804001A09M150](#) [805001A09M0502](#) [84914-0235](#) [84914-0237](#) [885030A09M020](#) [8R4J30E03C3003](#) [1200651332](#) [1200651713](#) [1200660844](#)  
[1200660845](#) [1200661173](#) [1200680071](#) [1200720053](#) [1200720081](#) [1200720099](#) [1200720217](#) [1200800231](#) [1200860125](#) [1200870123](#)  
[1200980102](#) [1200650267](#) [1200650298](#) [1200660183](#) [1200660782](#) [1200660849](#) [1200661295](#) [1200661297](#) [1200661342](#) [1200661343](#)  
[1200670080](#) [1200670220](#) [1200680331](#) [1200720252](#) [1200730184](#) [1200860344](#) [1200870359](#) [1200870643](#) [1200980008](#) [1200980031](#)  
[1210502211](#) [1210400542](#)