

# SACB-8/ 8-C SCO - Distributor box



1516881

<https://www.phoenixcontact.com/us/products/1516881>

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Distributor box, application: Standard, connection method: M12-SPEEDCON-socket Metal, number of slots: 8, number of positions: 4, coding: A, slot assignment: single, status display: No, Universal; master cable connection: Pluggable screw connection 180°, shielding: no

## Your advantages

- Safety in the field, thanks to molded housing and high degree of protection
- Save time, thanks to installation with SPEEDCON fast locking system
- Flexible: distributor box with connector hood for on-site assembly

## Commercial data

Item number	1516881
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF42
Product key	BF3CCD
Catalog page	Page 264 (C-2-2019)
GTIN	4017918967611
Weight per piece (including packing)	365 g
Weight per piece (excluding packing)	370 g
Customs tariff number	85366990
Country of origin	DE

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## Technical data

### Notes

Note regarding documentation	For details about the PCB connectors used, refer to the technical data for MC 1,5/10-STF-3,5 (1847204)
Assembly note	<b>NOTE:</b> 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.
Note on application	Unused slots are to be sealed off prior to commissioning. Suitable sealing elements are to be found under "Accessories".

### Product properties

Product type	Distributor box
Application	Standard
Number of positions	4
Number of slots	8
Coding	A
LED	No

### Electrical properties

Max. operating voltage $U_{max}$	135 V
Nominal voltage $U_N$	120 V AC
	120 V DC
Rated current, total	10 A
	2x 8 A (For electrical isolation)
Max. current carrying capacity per path	2 A
Current carrying capacity per slot	4 A

### Connection data

#### Conductor connection

Sensor/actuator connection system	M12-SPEEDCON-socket
Conductor cross section Flexible signal line	0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Conductor cross section Flexible power supply	0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Connection cross section AWG Flexible signal line	26 ... 16
Connection cross section AWG Flexible power supply	26 ... 16
Stripping length Signal line	7 mm
Stripping length of the sheath	50 mm (Master cable)
Tightening torque, cover screw	0.35 Nm
Tightening torque slot sensor/actuator cable	0.4 Nm
Tightening torque of mounting screw for fixing the housing	0.5 Nm
Tightening torque, union nut	2.5 Nm

#### Pin assignment

1 / 4 (A) = 1 / 4

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Slot/position = Wire color or connection	2 / 4 (A) = 2 / 4
	3 / 4 (A) = 3 / 4
	4 / 4 (A) = 4 / 4
	5 / 4 (A) = 5 / 4
	6 / 4 (A) = 6 / 4
	7 / 4 (A) = 7 / 4
	8 / 4 (A) = 8 / 4
	1-8 / 1 (+ 120 V) = U <sub>N</sub>
	1-8 / 3 (0 V) = 0 V
1-8 / 5 (PE) = PE	

## Signaling

Status display present	No
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## Dimensions

Dimensional drawing	
Width	58 mm
Height	45 mm
Length	153 mm

## Material specifications

Material Threaded sleeve	Die-cast zinc
Material Housing	PBT
Material Molding compound	PUR
Flammability rating according to UL 94	V0
Seal material O-ring	NBR
Contact material	Cu alloy
Contact surface material	gold-plated
Contact carrier material	PA
Material of contact, master cable side	CU alloy
Material of the contact carrier on the master cable side	PA 6.6 V0
Material of contact surface, master cable side	gold-plated

## Cable/line

External cable diameter	7 mm ... 12 mm
Connection method	Pluggable screw connection

## Environmental and real-life conditions

Ambient conditions

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Degree of protection	IP65
	IP67
	IP69K
Ambient temperature (operation)	-30 °C ... 80 °C

## Standards and regulations

Standard designation	M12 connector
Standards/specifications	IEC 61076-2-101

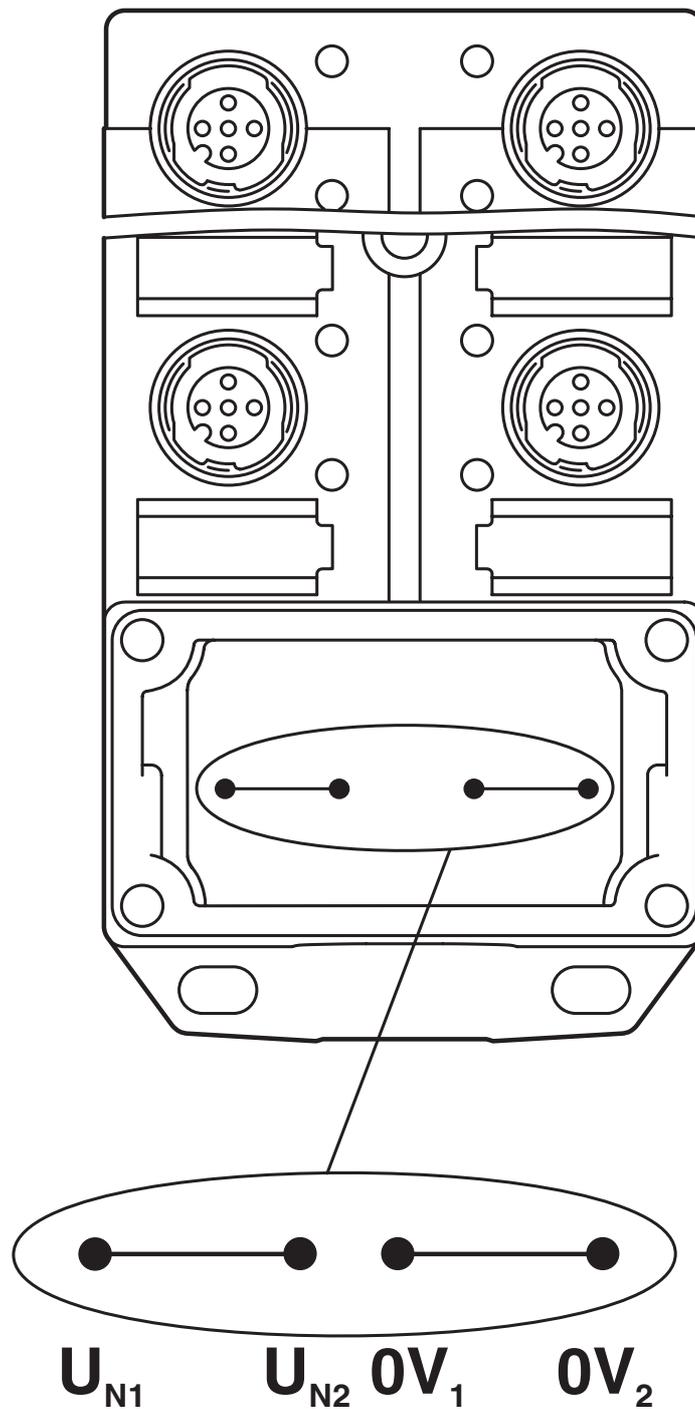
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## Drawings

Schematic diagram



Potential  $U_{N1}$  and  $U_{N2}$  bridged. Potential assignment:  $U_{N1} = U_{N2} =$  slots 1,2,3,4,5,6,7,8.

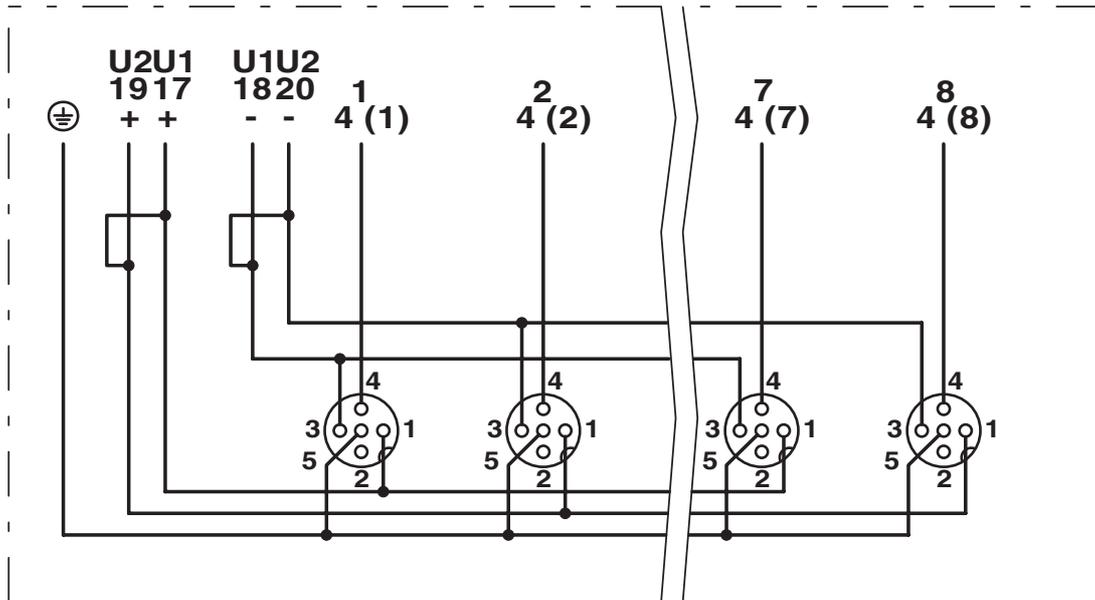
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Circuit diagram

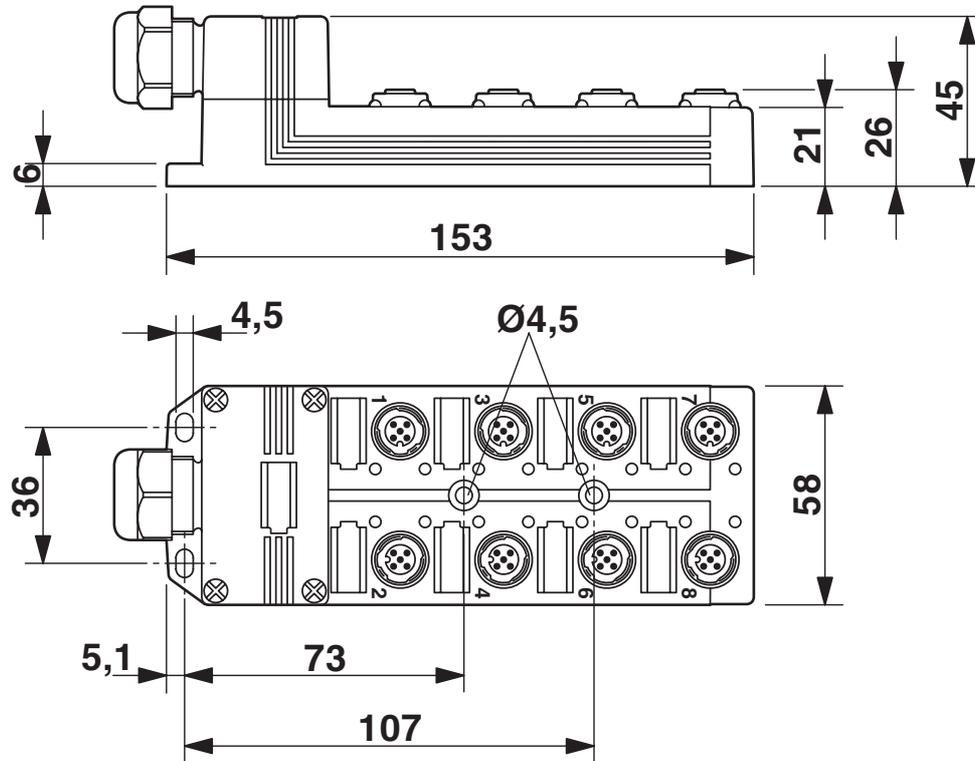


# SACB-8/ 8-C SCO - Distributor box

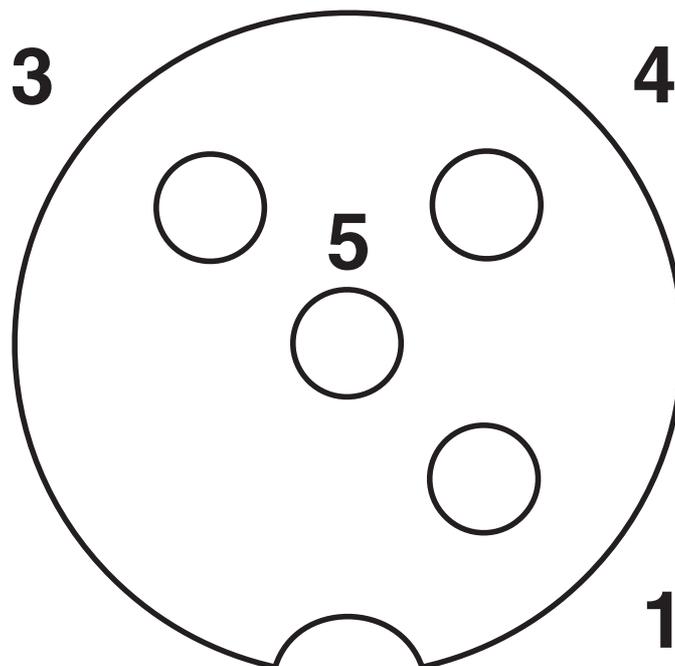
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Dimensional drawing



Schematic diagram



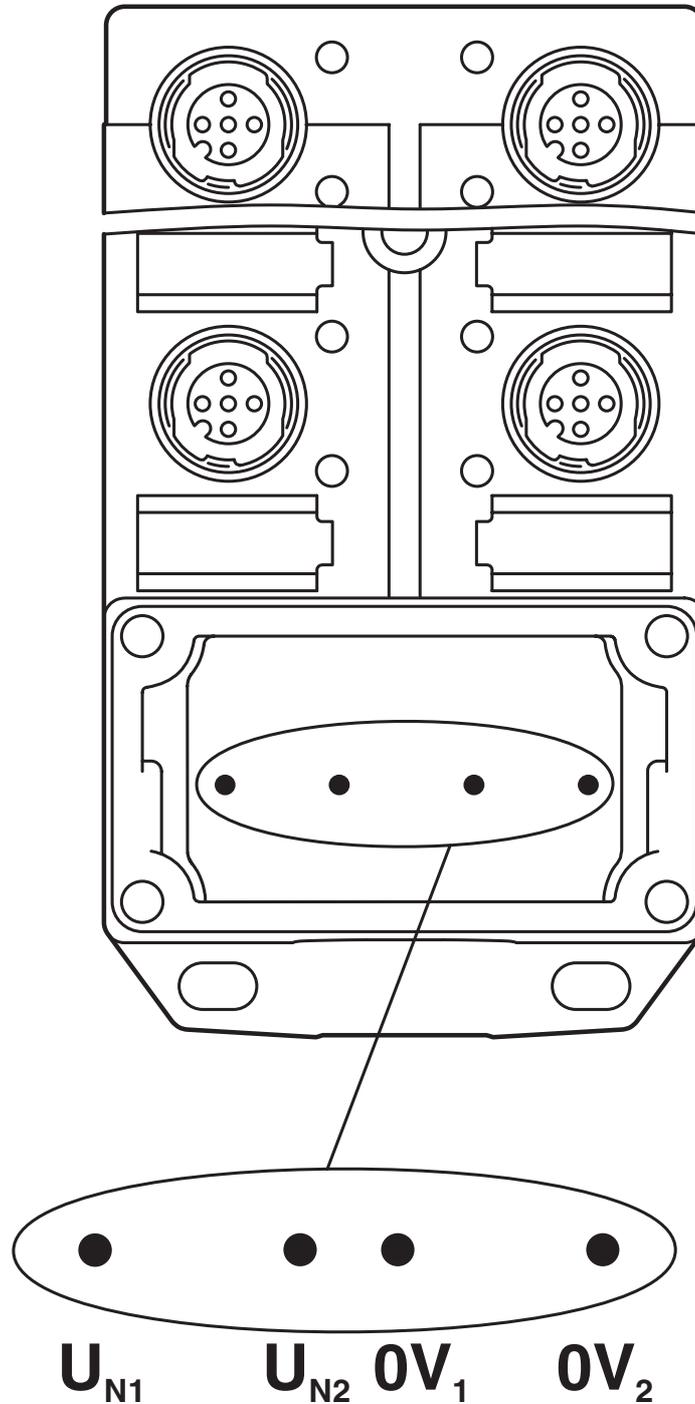
M12 slot, socket, 4-pos.

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Schematic diagram



Electrically isolated. Potential assignment:  $U_{N1}$  = slots 1,3,5,7 and  $U_{N2}$  = slots 2,4,6,8.

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## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1516881>

 <b>cUL Recognized</b> Approval ID: FILE E 118976				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $mm^2$
	120 V	3 A	-	-

 <b>UL Recognized</b> Approval ID: FILE E 118976				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $mm^2$
	120 V	3 A	-	-

 <b>EAC</b> Approval ID: RU C-DE.AI30.B.01102	
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 <b>EAC</b> Approval ID: RU C-DE.BL08.B.00511	
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<b>cULus Recognized</b>	
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# SACB-8/ 8-C SCO - Distributor box



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## Classifications

### ECLASS

ECLASS-11.0	27440111
ECLASS-12.0	27440111
ECLASS-13.0	27440111

### ETIM

ETIM 9.0	EC003558
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### UNSPSC

UNSPSC 21.0	31251500
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## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
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### China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

### EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%
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## Accessories

### SACB-C-H180 8/16 SCO - Connector hood

1516713

<https://www.phoenixcontact.com/us/products/1516713>



Connector hood with integrated connector with screw connection, for sensor/actuator boxes with M12 metal thread or QUICKON connection and master cable connection, for 4, 6, or 8 slots

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### SACB- 8X0,34/ 3X0,75-50,0 PUR - Master cable ring

1503344

<https://www.phoenixcontact.com/us/products/1503344>



Master cable for sensor/actuator boxes, with PE conductor, unshielded, material PUR/PVC, 11-pos., 8 x 0.34 mm<sup>2</sup> and 3 x 0.75 mm<sup>2</sup>

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## PROT-MS SCO - Screw plug

1553129

<https://www.phoenixcontact.com/us/products/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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## UC-EM (17,5X9) - Snap-in markers

0827490

<https://www.phoenixcontact.com/us/products/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, lettering field size: 17.5 x 9 mm, Number of individual labels: 20

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

0828238

<https://www.phoenixcontact.com/us/products/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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## UCT-EM (17,5X9) - Snap-in markers

0801491

<https://www.phoenixcontact.com/us/products/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, lettering field size: 17.5 x 9 mm, Number of individual labels: 24

# SACB-8/ 8-C SCO - Distributor box

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

0801575

<https://www.phoenixcontact.com/us/products/0801575>

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



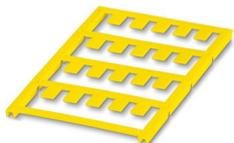
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## UC-EM (17,5X9) YE - Snap-in markers

0827494

<https://www.phoenixcontact.com/us/products/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, lettering field size: 17.5 x 9 mm, Number of individual labels: 20



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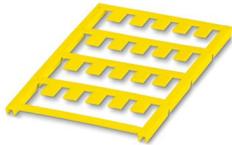
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## UC-EM (17,5X9) YE CUS - Snap-in markers

0828239

<https://www.phoenixcontact.com/us/products/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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## UCT-EM (17,5X9) YE - Snap-in markers

0801492

<https://www.phoenixcontact.com/us/products/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, lettering field size: 17.5 x 9 mm, Number of individual labels: 24

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

0801576

<https://www.phoenixcontact.com/us/products/0801576>

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



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## UTA 136 - DIN rail adapter

2853996

<https://www.phoenixcontact.com/us/products/2853996>

Universal DIN rail adapter, for screwing on switchgear



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## TSD 04 SAC - Torque screwdriver

1208429

<https://www.phoenixcontact.com/us/products/1208429>



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

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

1212224

<https://www.phoenixcontact.com/us/products/1212224>



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

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

1212600

<https://www.phoenixcontact.com/us/products/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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## SAC BIT M12-D15 - Tool

1208432

<https://www.phoenixcontact.com/us/products/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

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## SACC BIT M12-D20 - Tool

1208445

<https://www.phoenixcontact.com/us/products/1208445>

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



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## SZK PZ1 VDE - Screwdriver

1206450

<https://www.phoenixcontact.com/us/products/1206450>

Screwdriver, PZ crosshead, VDE insulated, size: PZ 1 x 80 mm, 2-component grip, with non-slip grip



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## TSD 25 SAC - Torque screwdriver

1212315

<https://www.phoenixcontact.com/us/products/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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## TSD-M 3NM - Torque screwdriver

1212225

<https://www.phoenixcontact.com/us/products/1212225>



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

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## SAC BIT HOOD-W 24 - Tool

1212486

<https://www.phoenixcontact.com/us/products/1212486>

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



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## SF-BIT-PZ 1-50 - Screw insert

1212591

<https://www.phoenixcontact.com/us/products/1212591>

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



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## SZS 0,4X2,5 VDE - Screwdriver

1205037

<https://www.phoenixcontact.com/us/products/1205037>



Screwdriver, slot-headed, VDE insulated, size: 0.4 x 2.5 x 80 mm, 2-component grip, with non-slip grip

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## SF-BIT-SL 0,45X2,4-70 - Screw insert

1212607

<https://www.phoenixcontact.com/us/products/1212607>



Screw bit, slotted, E6.3-1/4" drive, size: 0.45 x 2.4 x 70 mm, hardened, suitable for holder according to DIN 3126-F6.3/ISO 1173

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## SF-M BH - Screwdriver

1212070

<https://www.phoenixcontact.com/us/products/1212070>



Bit screwdriver, with 1/4" quick-action chuck, handle length 119 mm, 2-component handle, with non-slip grip, suitable for bits according to DIN 3126-C 6.3 and E 6.3/ISO 1173, magnetic

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