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Sensor/actuator box, Application: Standard, Connection method: M12-SPEEDCON-socket Metal, Number of slots: 4, Number of positions: 5, Slot assignment: Double, Status indication: Yes, pnp; Master cable connection: Pluggable screw connection 180°, Shielding: No

#### **Product Features**

- 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
Weight per Piece (excluding packing)	253.2 GRM
Custom tariff number	85366990
Country of origin	Poland

#### 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	2 A
Current carrying capacity per slot	4 A
Total rated current	10 A
	2x 8 A (For electrical isolation)
Number of positions	5
Number of slots	4



# Technical data

#### General

Inflammability class according to UL 94	V0
Sensor/actuator connection system	M12-SPEEDCON-socket

### Ambient conditions

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

# Local diagnostics function

Local diagnostics	Supply voltage per module Green LED
	Status display I/O Yellow LED

#### Master cable data/connection data

Connection method	Pluggable screw connection
Conductor cross section min. (signal)	0.14 mm²
Conductor cross section max. (signal)	1.5 mm <sup>2</sup>
Conductor cross section AWG min. (signal)	26
Conductor cross section AWG max. (signal)	16
Stripping length (signal)	7 mm
Conductor cross section min. (energy)	0.14 mm <sup>2</sup>
Conductor cross section max. (energy)	1.5 mm <sup>2</sup>
Conductor cross section AWG min. (energy)	26
Conductor cross section AWG max. (energy)	16
External cable diameter min.	7 mm
External cable diameter max.	12 mm
Stripping length	50 mm (Master cable)
Tightening torque, cover screw	0.35 Nm
Tightening torque, union nut	2.5 Nm
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	РВТ
Material of the moulding mass	PUR
Contact material	Cu alloy
Contact surface material	Gold-plated
Contact carrier material	PA
Material of contact, master cable side	CU alloy



# Technical data

#### Insulation material

Material of contact surface, master cable side	Gold-plated
Material of the contact carrier on the master cable side	PA 66 V0
Material of threaded sleeve	Zinc die-cast
Material of threaded sleeve surface	Nickel-plated
Material, O-ring	NBR

# Pin assignment

Slot/position = Wire color or connection	1 / 4 (A) = 1 / 4
	1 / 2 (B) = 1 / 2
	2 / 4 (A) = 2 / 4
	2 / 2 (B) = 2 / 2
	3 / 4 (A) = 3 / 4
	3 / 2 (B) = 3 / 2
	4 / 4 (A) = 4 / 4
	4 / 2 (B) = 4 / 2
	1-4 / 1 (+ 24 V) = U <sub>N</sub>
	1-4 / 3 (0 V) = 0 V
	1-4 / 5 (PE) = PE

# Classifications

# eCl@ss

eCl@ss 4.0	27140815
eCl@ss 4.1	27140815
eCl@ss 5.0	27143423
eCl@ss 5.1	27143423
eCl@ss 6.0	27143423
eCl@ss 7.0	27449001
eCl@ss 8.0	27449001

## **ETIM**

ETIM 2.0	EC000200
ETIM 3.0	EC001856
ETIM 4.0	EC002585
ETIM 5.0	EC002585

## **UNSPSC**

UNSPSC 6.01	31261501



# Classifications

### **UNSPSC**

UNSPSC 7.0901	31261501
UNSPSC 11	31261501
UNSPSC 12.01	31261501
UNSPSC 13.2	31261501

# Approvals

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Approvals

UL Recognized / cUL Recognized / GOST / cULus Recognized

Ex Approvals

Approvals submitted

### Approval details

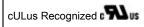
UL Recognized <b>5</b>			
Nominal current IN	3 A		
Nominal voltage UN	24 V		

cUL Recognized •		
Nominal current IN	3 A	
Nominal voltage UN	24 V	

GOST		



# Approvals



#### Accessories

#### Accessories

Cable by the meter

Master cable ring - SACB- 8X0,5/ 3X1,0-50,0 PUR - 1503357



Master cable for sensor/actuator boxes, with PE conductor, unshielded, material PUR/PVC, 11-pos.,  $8 \times 0.50 \text{ mm}^2$  and  $3 \times 1.00 \text{ mm}^2$ , length: 50 m

#### Connector hood without master cable

Connector hood - SACB-C-H180 8/16 SCO - 1516713



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

#### Device marking

Contactor marker - zack marker strip - SS-ZB 17,5 WH - 0804963



Contactor marker – zack marker strip, Strip, white, unlabeled, can be labeled with: Plotter, Mounting type: Snap into flat marker groove, Lettering field: 17.5 x 9 mm

Contactor marker - zack marker strip - SS-ZB 17,5 YE - 0804976



Contactor marker – zack marker strip, Strip, yellow, unlabeled, can be labeled with: Plotter, Mounting type: Snap into flat marker groove, Lettering field: 17.5 x 9 mm



#### Accessories

#### Labeled device marker

Contactor marker - zack marker strip - SS-ZB 17,5 WH CUS - 0824468



Contactor marker – zack marker strip, can be ordered: Strip, white, labeled according to customer specifications, Mounting type: Snap into flat marker groove, Lettering field: 17.5 x 9 mm

Contactor marker - zack marker strip - SS-ZB 17,5 YE CUS - 0824469



Contactor marker – zack marker strip, can be ordered: Strip, yellow, labeled according to customer specifications, Mounting type: Snap into flat marker groove, Lettering field: 17.5 x 9 mm

### Mounting rail adapter

Assembly adapters - UTA 107 - 2853983

Universal DIN rail adapter



## Protective cap

Screw plug - PROT-MS SCO - 1553129



M12 screw plug with SPEEDCON quick locking for unoccupied M12 sockets of the sensor/actuator cables, boxes and flush-type connectors

Screwdriver tools



#### Accessories

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 for M12 connectors with QUICKON fast connection technology, for 4 mm hexagonal drive

#### Tool - SACC BIT M12-D20 - 1208445



Nut for assembling SACC M12 connectors for free assembly, excluding M12 connectors with QUICKON fast connection technology, for 4 mm hexagonal drive

#### Philips screwdriver - SZK PZ1 VDE - 1206450



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

# Tool - SAC BIT HOOD-W 24 - 1212486



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



#### Accessories

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

#### 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

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



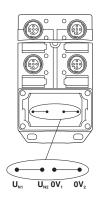
# Drawings

### Schematic diagram



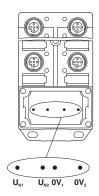
M12 slot, socket, 5-pos.

### Schematic diagram



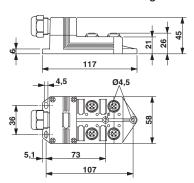
Potential  $U_{N1}$  and  $U_{N2}$  bridged. Potential assignment:  $U_{N1}$  =  $U_{N2}$  = slots 1,2,3,4.

# Schematic diagram



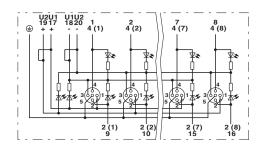
Electrically isolated. Potential assignment:  $U_{N1}$  = slots 1,3 and  $U_{N2}$  = slots 2,4.

# Dimensioned drawing





### Circuit diagram



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