

## Segment coupler - PSI-SC-DNET CAN - 2313449

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Modular segment coupler for electrical isolation and increasing the range for DeviceNet/SDS/CANopen, data rate of up to 1 Mbps. Different data rates at the interfaces can be configured via software. High-quality electrical isolation between the interfaces, DIN-rail mountable, 24 V DC supply.

### Your advantages

- Data rates of up to 1 Mbps
- High-quality 4-way isolation between all interfaces
- All connections can be plugged in using a COMBICON screw terminal block
- Approved for use in zone 2
- Can be combined with PSI-MOS FO converters in a modular way thanks to DIN rail connectors



### Key Commercial Data

Packing unit	1 pc
GTIN	 4 046356 451857
GTIN	4046356451857
Weight per Piece (excluding packing)	300.000 g
Custom tariff number	85176200
Country of origin	Germany

### Technical data

#### Note

Utilization restriction	EMC: class A product, see manufacturer's declaration in the download area
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#### Dimensions

Width	35 mm
Height	111 mm

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## Technical data

### Dimensions

Depth	121 mm
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### Ambient conditions

Ambient temperature (operation)	-20 °C ... 60 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Permissible humidity (operation)	30 % ... 95 % (non-condensing)
Degree of protection	IP20
Noise immunity	EN 61000-6-2

### Serial interface

Interface 1	CAN interface, in accordance with ISO/IS 11898 for DeviceNet, CAN, CANopen
Operating mode	Semi-duplex
No. of ports	2 (CAN_High / CAN_Low)
Connection method	COMBICON plug-in screw terminal block
File format/coding	Bit stuffing, NRZ
Transmission medium	2-wire twisted pair, shielded
Transmission length	≤ 5000 m (Dependent on the data rate and the protocol used)
Termination resistor	Integrated and ready to be switched
	124 Ω, integrated and can be connected
Conductor cross section solid min.	0.2 mm <sup>2</sup>
Conductor cross section solid max.	2.5 mm <sup>2</sup>
Conductor cross section flexible min.	0.2 mm <sup>2</sup>
Conductor cross section flexible max.	2.5 mm <sup>2</sup>
Conductor cross section AWG min.	24
Conductor cross section AWG max.	14
Serial transmission speed	≤ 1000 kbps
Interface 2	CAN interface, in accordance with ISO/IS 11898 for DeviceNet, CAN, CANopen
Connection method	COMBICON plug-in screw terminal block
Transmission length	≤ 5000 m (Dependent on the data rate and the protocol used)
Termination resistor	124 Ω, integrated and can be connected
Serial transmission speed	≤ 1000 kbps

### Digital outputs

Output name	Relay output
Number of outputs	1
Contact type	N/O contact
Minimum switching voltage	10 V DC
Maximum switching voltage	30 V DC

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## Technical data

### Digital outputs

Limiting continuous current	500 mA
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### Power supply

Nominal supply voltage	24 V DC
Supply voltage range	10 V DC ... 30 V DC (via pluggable COMBICON screw terminal block)
Max. current consumption	80 mA
Typical current consumption	55 mA (24 V DC)

### General

Bit distortion, input	± 35 %
Bit distortion, output	< 6.25 %
Electrical isolation	according to EN 60950
	VCC // CAN A // CAN B
Test voltage data interface/power supply	1.5 kV <sub>rms</sub> (50 Hz, 1 min.)
Electromagnetic compatibility	Conformance with EMC Directive 2014/30/EU
Noise emission	EN 55011
Net weight	234.7 g
Housing material	PA 6.6-FR
Color	green
MTBF	743 Years (Telcordia standard, 25°C temperature, 21% operating cycle (5 days a week, 8 hours a day))
	163 Years (Telcordia standard, 40°C temperature, 34.25% operating cycle (5 days a week, 12 hours a day))
MTTF	949 Years (SN 29500 standard, temperature 25 °C, operating cycle 21 % (5 days a week, 8 hours a day))
	443 Years (SN 29500 standard, temperature 40 °C, operating cycle 34.25 % (5 days a week, 12 hours a day))
	181 Years (SN 29500 standard, temperature 40 °C, operating cycle 100 % (7 days a week, 24 hours a day))
Conformance	CE-compliant
ATEX	# II 3 G Ex nA IIC T4 Gc X (Please follow the special installation instructions in the documentation!)
UL, USA/Canada	508 Listed

### Standards and Regulations

Electromagnetic compatibility	Conformance with EMC Directive 2014/30/EU
Type of test	Free fall in acc. with IEC 60068-2-32
Test result	1 m
Type of test	Vibration resistance in acc. with EN 60068-2-6/IEC 60068-2-6
Test result	5g, 10...150 Hz, 2.5 h, in XYZ direction
Type of test	Shock in acc. with EN 60068-2-27/IEC 60068-2-27

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## Technical data

### Standards and Regulations

Test result	15g, 11 ms period, half-sine shock pulse
Noise emission	EN 55011
Noise immunity	EN 61000-6-2
Free from substances that could impair the application of coating	according to P-VW 3.10.7 57 65 0 VW-AUDI-Seat central standard
Standards/regulations	EN 61000-4-2
Contact discharge	± 6 kV
Standards/regulations	EN 61000-4-3
Frequency range	80 MHz ... 3 GHz
Standards/regulations	EN 61000-4-4
Comments	Criterion B
Standards/regulations	EN 61000-4-5
Signal	± 1 kV
Standards/regulations	EN 55011
	EN 61000-4-6
Designation	Air clearances and creepage distances
Standards/regulations	DIN EN 50178, DIN EN 60950
Electrical isolation	according to EN 60950
Shock	15g in all directions in acc. with IEC 60068-2-27
Vibration (operation)	in acc. with IEC 60068-2-6: 5g, 150 Hz
Conformance	CE-compliant
ATEX	# II 3 G Ex nA IIC T4 Gc X
UL, USA/Canada	508 Listed
DNV GL-Temperature	B
DNV GL-Humidity	A
DNV GL-Vibration	A
DNV GL-EMC	B
DNV GL-Enclosure	Required protection according to the Rules shall be provided upon installation on board

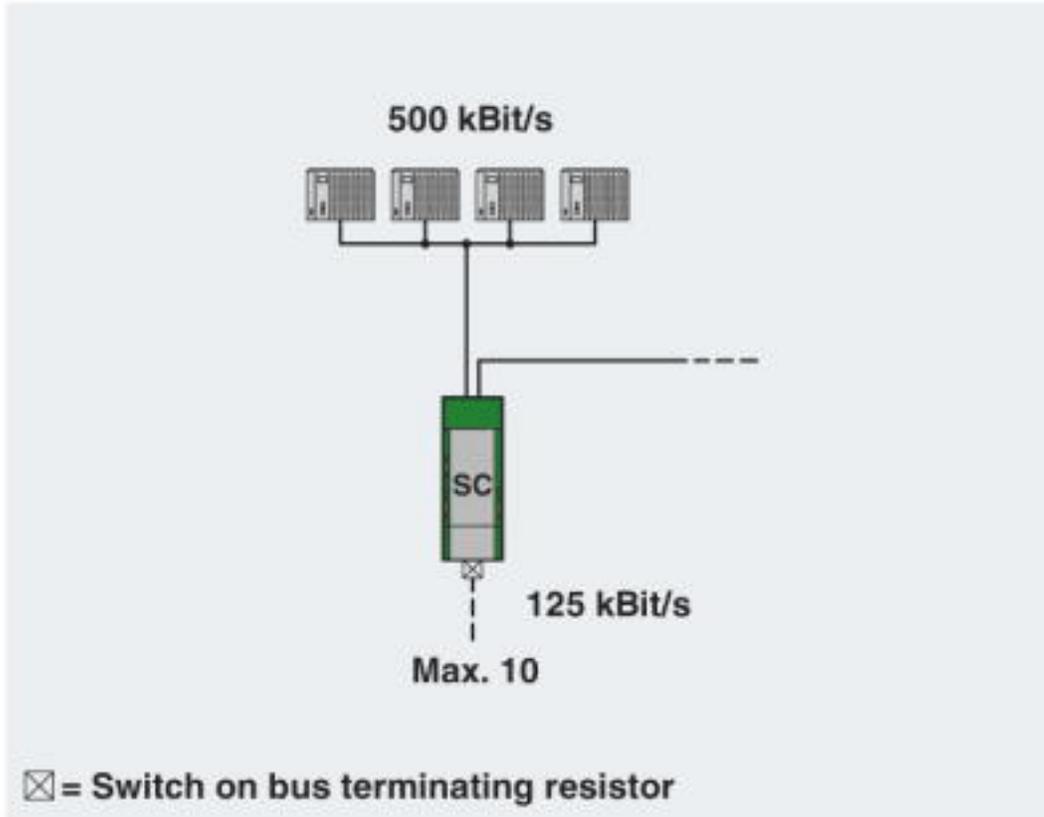
### Environmental Product Compliance

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

## Drawings

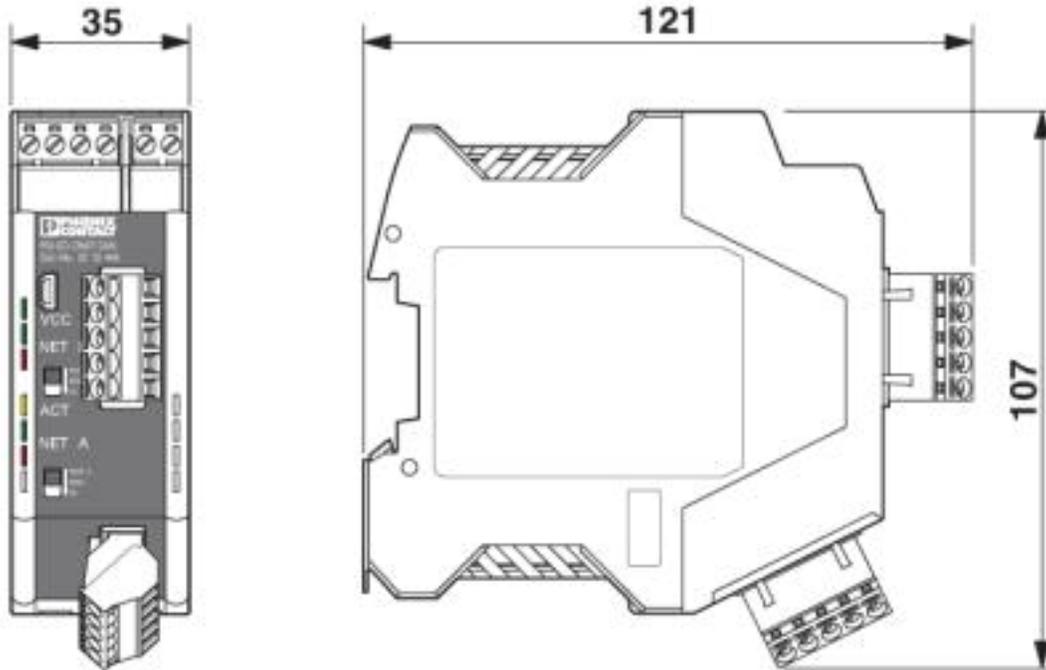
# Segment coupler - PSI-SC-DNET CAN - 2313449

Application drawing



## Segment coupler - PSI-SC-DNET CAN - 2313449

Dimensional drawing



### Classifications

#### eCl@ss

eCl@ss 4.0	27240490
eCl@ss 4.1	27240490
eCl@ss 5.0	27242208
eCl@ss 5.1	27242208
eCl@ss 6.0	27242208
eCl@ss 7.0	27242208
eCl@ss 8.0	27242208
eCl@ss 9.0	27242208

#### ETIM

ETIM 3.0	EC000673
ETIM 4.0	EC001423
ETIM 5.0	EC001423
ETIM 6.0	EC001423

#### UNSPSC

UNSPSC 6.01	30211506
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## Classifications

### UNSPSC

UNSPSC 7.0901	39121008
UNSPSC 11	39121008
UNSPSC 12.01	39121008
UNSPSC 13.2	39122114

## Accessories

### Accessories

#### Data cable by the meter

Bus system cable - SAC-5P-920/... - 1511504



Bus system cable, CANopen<sup>®</sup>, DeviceNet<sup>™</sup>, 4-position, PUR halogen-free, violet RAL 4001, shielded, cable length: Free entry (0.5 ... 400 m)

#### Data plug

D-SUB bus connector - SUBCON-PLUS-CAN/90/PG/M12 - 2902322



D-SUB plug, 9-pos., socket, with PG-D-SUB pin, assignment: 2, 3, 5, 6, 7, 9; two M12 cable glands (A-coded) under 90°. Bus system: CAN, CANopen<sup>®</sup>. Termination resistor via separate M12 terminator.

D-SUB bus connector - SUBCON-PLUS-CAN/90/M12 - 2902323



D-SUB plug, 9-pos., socket, assignment: 2, 3, 5, 6, 7, 9; two M12 cable glands (A-coded) under 90°. Bus system: CAN, CANopen<sup>®</sup>. Termination resistor via separate M12 terminator.

## Segment coupler - PSI-SC-DNET CAN - 2313449

### Accessories

#### D-SUB bus connector - SUBCON-PLUS-CAN/35/PG/M12 - 2902324



D-SUB plug, 9-pos., socket, with PG-D-SUB pin, assignment: 2, 3, 5, 6, 7, 9; two M12 cable glands (A-coded) under 35°. Bus system: CAN, CANopen®. Termination resistor via separate M12 terminator.

#### D-SUB bus connector - SUBCON-PLUS-CAN/35/M12 - 2902325



D-SUB plug, 9-pos., socket, assignment: 2, 3, 5, 6, 7, 9; two M12 cable glands (A-coded) under 35°. Bus system: CAN, CANopen®. Termination resistor via separate M12 terminator.

#### D-SUB bus connector - SUBCON-PLUS-CAN/AX/M12 - 2902326



D-SUB plug, 9-pos., socket, assignment: 2, 3, 5, 6, 7, 9; two M12 cable glands (A-coded) under 180° (axial). Bus system: CAN, CANopen®. Termination resistor via separate M12 terminator.

#### D-SUB bus connector - SUBCON-PLUS-CAN - 2744694



D-SUB connector, 9-pos. female connector, two cable entries < 35° to one terminal block row, bus system: CAN, CANopen®, SafetyBUS p up to 1 Mbps, termination resistor can be switched on via slide switch, pin assignment: 2, 3, 7; screw connection terminal blocks

#### D-SUB bus connector - SUBCON-PLUS-CAN/PG - 2708119



D-SUB connector, 9-pos. socket, cable entry < 35°, bus system: CAN, CANopen®, SafetyBUS p up to 1 Mbps, with PG D-SUB socket for connecting a programming device, termination resistor can be switched on via slide switch, pin assignment: 2, 3, 7, 9; screw terminal blocks

## Segment coupler - PSI-SC-DNET CAN - 2313449

### Accessories

D-SUB bus connector - SUBCON-PLUS-CAN/AX - 2306566



D-SUB connector, 9-pos. female connector, axial version with two cable entries, bus system: CAN, CANopen, SafetyBUS p; pin assignment: 2, 3, 7; screw connection terminal blocks

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### DIN rail connector

DIN rail bus connectors - ME 17,5 TBUS 1,5/ 5-ST-3,81 GN - 2709561



DIN rail connector for DIN rail mounting. Universal for TBUS housing. Gold-plated contacts, 5-pos.

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### Power supply

Power supply unit - MINI-SYS-PS-100-240AC/24DC/1.5 - 2866983



Primary-switched MINI POWER supply for DIN rail mounting, input: 1-phase, output: 24 V DC/1.5 A