

## Interface converter - PSM-ME-RS485/RS485-P - 2744429

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Repeater, for potential separation and range increase in RS-485 2-wire bus systems, 3-way isolation, rail-mountable

### Why buy this product

- Transmission speeds of up to 1.5 Mbps
- Space-saving slim 22.5 mm device
- High-quality 3-way isolation between all interfaces
- Integrated, connectable termination resistors
- All connections can be plugged in using a COMBICON screw terminal block
- Shipbuilding approval according to DNV



### Key commercial data

Packing unit	1 pc
GTIN	 4 017918 171797
Weight per Piece (excluding packing)	188.8 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	22.5 mm
Height	99 mm
Depth	114.5 mm

#### Ambient conditions

Ambient temperature (operation)	0 °C ... 55 °C
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## Technical data

### Ambient conditions

Ambient temperature (storage/transport)	-40 °C ... 85 °C
Permissible humidity (operation)	10 % ... 95 % (non-condensing)
Altitude	5000 m (For restrictions see manufacturer's declaration)
Degree of protection	IP20
Noise immunity	EN 61000-6-2:2005

### General

Transmission channels	2 (1/1), TD, RD, half duplex
Bit delay	< 200 ns
Bit distortion	< 1.5 %
Bit distortion, input	max. ± 35 %
Bit distortion, output	< 3.6 %
Electrical isolation	VCC // RS-485 (A) // RS-485 (B)
Test voltage data interfaces	2 kV AC
Test voltage data interface/power supply	2 kV AC
	2 kV
Electromagnetic compatibility	Conformance with EMC Directive 2004/108/EC
Noise emission	EN 50 081-1
Net weight	130 g
Housing material	PA
Color	green
MTBF	1849 Years (Telcordia standard, 25°C temperature, 21% operating cycle (5 days a week, 8 hours a day))
	385 Years (Telcordia standard, 40°C temperature, 34.25% operating cycle (5 days a week, 12 hours a day))
Conformance	CE-compliant
UL, USA / Canada	508 recognized
	Class I, Div. 2, Groups A, B, C, D

### Power supply

Nominal supply voltage	24 V AC/DC ±20 %
Typical current consumption	90 mA (24 V DC)

### Serial interface

Interface 1	RS-485 interface, in acc. with EIA/TIA-485, DIN 66259-4/RS-485 2-wire
Operating mode	Semi-duplex
Connection method	Pluggable screw connection
File format/coding	UART (11/10 bit switchable; NRZ)
Data direction switching	Automatic control, min. station response time 1 bits
Transmission medium	2-wire twisted pair, shielded
Transmission length	max. 1200 m (depends on transmission speed, bus system and cable type)
Cascadability	9 (4,8 - 93,75 kbps)

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## Technical data

### Serial interface

	7 (115.2 - 136 kbps)
Termination resistor	390 Ω
	180 Ω
	390 Ω (Can be connected)
Conductor cross section stranded min.	0.2 mm <sup>2</sup>
Conductor cross section stranded max.	2.5 mm <sup>2</sup>
Conductor cross section AWG/kcmil min.	24
Conductor cross section AWG/kcmil max	14
Serial transmission speed	4.8/ 9.6/ 19.2/ 38.4/ 57.6/ 75/ 93.75/ 115.2/ 136/ 187.5/ 375/ 500/ 1500 kbps
Interface 2	RS-485 interface, in acc. with EIA/TIA-485, DIN 66259-4/RS-485 2-wire
Operating mode	Semi-duplex
File format/coding	UART (11/10 bit switchable; NRZ)
Data direction switching	Automatic control, min. station response time 1 bits
Transmission medium	2-wire twisted pair, shielded
Transmission length	1200 m (depends on transmission speed, bus system and cable type)
Cascadability	9 (4,8 - 93,75 kbps)
Conductor cross section stranded min.	0.2 mm <sup>2</sup>
Conductor cross section stranded max.	2.5 mm <sup>2</sup>
Conductor cross section AWG/kcmil min.	24
Conductor cross section AWG/kcmil max	14
Serial transmission speed	4.8/ 9.6/ 19.2/ 38.4/ 57.6/ 75/ 93.75/ 115.2/ 136/ 187.5/ 375/ 500/ 1500 kbps

## Classifications

### eCl@ss

eCl@ss 4.0	27250312
eCl@ss 4.1	27250312
eCl@ss 5.0	27242208
eCl@ss 5.1	27242208
eCl@ss 6.0	27242208
eCl@ss 7.0	27242208
eCl@ss 8.0	27143129

### ETIM

ETIM 2.0	EC000698
ETIM 3.0	EC000698
ETIM 4.0	EC000698
ETIM 5.0	EC000698

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## Classifications

### UNSPSC

UNSPSC 6.01	30211506
UNSPSC 7.0901	39121008
UNSPSC 11	39121008
UNSPSC 12.01	39121008
UNSPSC 13.2	43201553

## Approvals

### Approvals

#### Approvals

UL Recognized / cUL Recognized / GOST / DNV / cULus Recognized

#### Ex Approvals

cUL Recognized / UL Listed / cUL Listed / cULus Listed

#### Approvals submitted

### Approval details

UL Recognized

cUL Recognized

GOST

DNV

cULus Recognized

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## Accessories

Accessories

Mounting material

Components of electronic housing - ME-SAS - 2853899



Shield connection clamp for printed circuit terminal block

## Screwdriver tools

Screwdriver - SZF 1-0,6X3,5 - 1204517



Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size: 0.6 x 3.5 x 100 mm, 2-component grip, with non-slip grip

## Terminal resistor

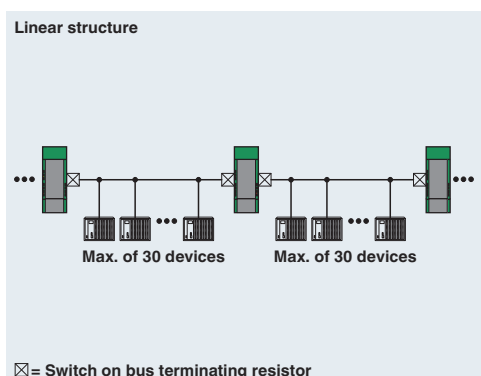
Termination resistor - PSI-TERMINATOR-PB - 2313944



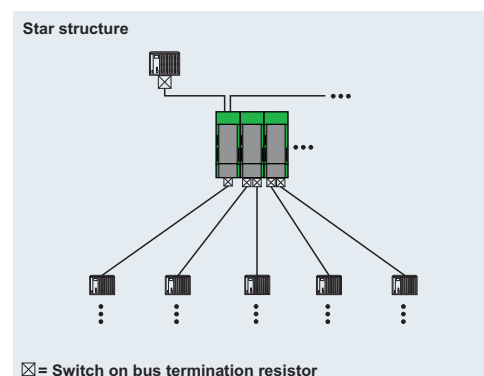
Active termination resistor with redundant voltage supply for PROFIBUS and RS-485 bus systems. Compact design. Electrical isolation between supply and data interface. Bus termination can be switched. Integrated programming interface.

## Drawings

Application drawing

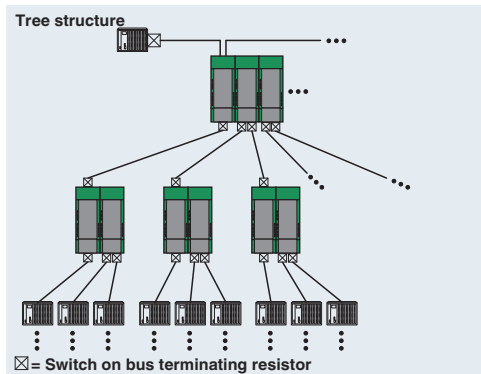


Application drawing

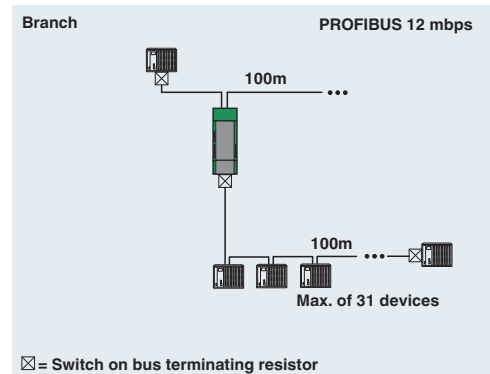


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Application drawing



Application drawing



Circuit diagram

