

# PSI-REP-RS485W2

Order No.: 2313096



<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=2313096>

Modular repeater for electrical isolation and range increase in RS-485 2-wire bus systems up to 500 kbps, 4-way isolation, rail-mountable, supply 24 V DC



RS-485

### Commercial data

GTIN (EAN)	
sales group	H611
Pack	1 pcs.
Customs tariff	85176200
Catalog page information	Page 493 (IF-2009)

### Product notes

WEEE/RoHS-compliant since: 05/08/2007



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### Technical data

#### Serial interface

Interface 1	RS-485 interface, in acc. with EIA/TIA-485, DIN 66259-4/RS-485 2-wire
File format/coding	UART (11/10 bit switchable; NRZ)

Data direction switching	Automatic control, min. station response time 2 bits
Termination resistor	180 Ω can be connected; pull up/down 390 Ω
Transmission medium	2-wire twisted pair, shielded
Transmission length	max. 1200 m (depends on transmission speed, bus system and cable type)
Connection method	Pluggable screw connection
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 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	12
Serial transmission speed	Can be set manually: 4,8/9,6/19,2/38,4/57,6/75/93,75/115,2/136/187,5/375/500 Kbps
<b>Power supply</b>	
Nominal supply voltage	24 V DC ±20 %
Typical current consumption	75 mA (24 V DC)
<b>General data</b>	
Transmission channels	2 (1/1), TD, RD, half duplex
Bit delay	< 1 Bit
Bit distortion, input	Max. ± 35 %
Bit distortion, output	< 6.25 %
Width	35 mm
Height	99 mm
Depth	105 mm
Ambient temperature (operation)	-20 °C ... 60 °C
Electrical isolation	(VCC // T-BUS // RS-485 (A) // RS-485 (B))
Test voltage data interfaces	1.5 kV
Test voltage data interface/power supply	1.5 kV
Electromagnetic compatibility	Conformance with EMC Directive 2004/108/EC
Noise emission	EN 55011
Noise immunity	EN 61000-4-2
Housing material	PA V0, color green
Color	green

MTBF	1247 Years (Telcordia standard, 25°C temperature, 21% operating cycle (5 days a week, 8 hours a day))
	261 Years (Telcordia standard, 40°C temperature, 34.25% operating cycle (5 days a week, 12 hours a day))
ATEX	Ex II 3 G Ex nA II T4 X
UL, USA / Canada	cUL 508 Recognized

#### Certificates / Approvals



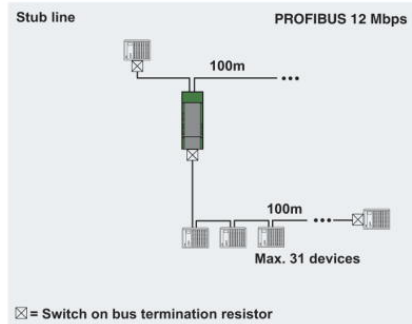
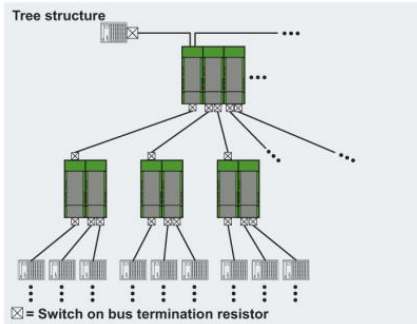
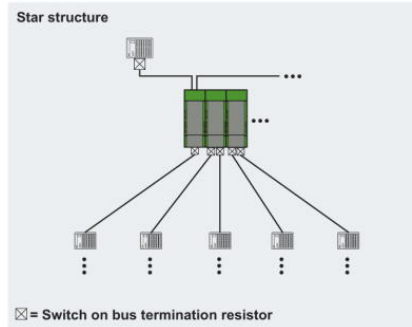
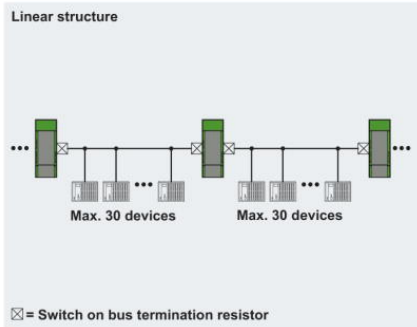
Certification CUL, UL

#### Accessories

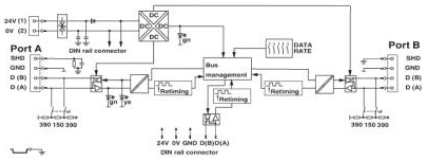
Item	Designation	Description
<b>Assembly</b>		
2853899	ME-SAS	Shield connection clamp for printed circuit terminal block
<b>General</b>		
2709561	ME 17,5 TBUS 1,5/ 5-ST-3,81 GN	DIN rail connector for DIN rail power supply unit, gold-plated contacts, for DIN rail mounting, 5-pos.
2866983	MINI-SYS-PS-100-240AC/24DC/1.5	DIN rail power supply unit, primary-switched mode, slim design, output: 24 V DC / 1.5 A
2313944	PSI-TERMINATOR-PB	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.
<b>Tools</b>		
1204517	SZF 1-0,6X3,5	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

**Diagrams/Drawings**

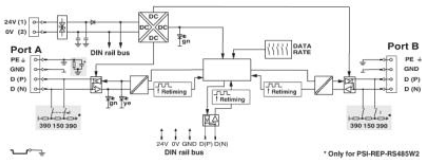
Application drawing



Block diagram



Diagram



**Address**

PHOENIX CONTACT Inc., USA  
586 Fulling Mill Road  
Middletown, PA 17057, USA  
Phone (800) 888-7388  
Fax (717) 944-1625  
<http://www.phoenixcon.com>



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