

RS-485 interface repeater DI-1PSM

Repeater for RS-485 bus extension



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Product description

The RS-485 interface repeater DI-1PSM is designed for signal amplification on the RS-485 interface (BMS bus). This is required when the network distance exceeds a length of 1200 m and when more than 32 bus nodes exist.

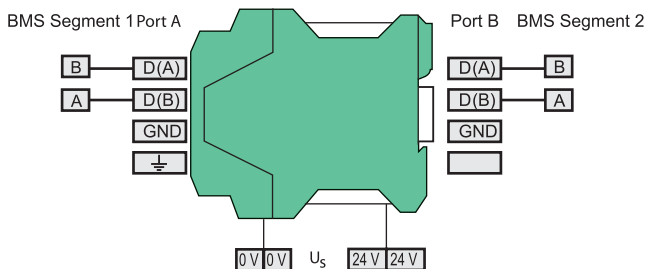
Application

- Extension of the maximum possible bus length by 1200 m in BMS systems (EDS, RCMS, MEDICS® systems)
- Extension of the maximum possible bus nodes by 32
- Protection against spikes by galvanic separation between the input and output circuit and the power supply

Device features

- Plastic enclosure for DIN rail mounting
- Adjustable baud rate
- Galvanic separation between the input and output circuit and the power supply
- Supply voltage AC / DC 24 V \pm 20 %

Wiring diagram



Note:

- Take the BMS bus termination into consideration

Technical data RS-485 interface repeater DI-1PSM

Insulation coordination acc. to IEC 60664-1

Rated voltage	
Rated impulse voltage / pollution degree	2 kV / 3

Supply voltage

Supply voltage U_s	see ordering information
Power consumption	90 mVA

Interfaces

BMS

Interface / protocol	2 x RS-485 / BMS
Baud rate adjustable via DIP switch	4.8...1500 kbit / s
Cable length	≤ 1200 m
Recommended cable (shielded, shield connected to PE on one side)	min. J-Y(St)Y 2 x 0.6
Operating mode	half-duplex
Change of data direction	automatic data direction control
Cascading capability	9 (4.8...93.75 kbit / s)
Terminating resistor, selectable via DIP switch	220 Ω
Device address, BMS bus	--
Alarm LEDs	ON (green), R x D (green), T x D (yellow)

General data

EMC immunity	EN 61000-6-2
EMV emission	EN 50081-1
Classification of climatic conditions acc. to IEC 60721	
Stationary use	3K5
Transport	2K3
Long-time storage	1K4
Operating temperature	0 °C...+ 55 °C
Classification of mechanical conditions acc. to IEC 60721	
Stationary use	3M4
Transport	2M2
Long-time storage	1M3
Operating mode	continuous operation
Mounting	any position
Connection	screw-type terminals
Connection properties	
rigid / flexible / conductor sizes	0.2...2.5 mm ² / AWG 24...12
Degree of protection, internal components (IEC 60529)	IP30
Degree of protection, terminals (IEC 60529)	IP20
DIN rail mounting acc. to	IEC 60715
Operating manual	TBP501012
Weight	≤ 130 g

Ordering information

Type	Supply voltage U_s	Art. No.
DI-1PSM	AC / DC 24 V ± 20 %	B 9501 2044

Dimension diagram DI-1PSM

Dimensions in mm

