

RS2RS

RS-232 / RS-485 converter and amplifier



Description

The **RS2RS** converter lets you connect units with RS-232 communications to a RS-485 network. It also works as a repeater or amplifier of RS-485 networks. The converter is designed to be used in industrial environments, thanks to its galvanic insulation. It automatically adapts to all half-duplex communications protocols without the need to modify the software. It works as a communications transducer between RS-232/RS-485 data buses or as an octocoupled RS-485/RS-485 amplifier. The **RS2RS** automatically switches between transmission (Tx) and reception (Rx) when it detects activity in the Tx transmission line, avoiding the need for software control.

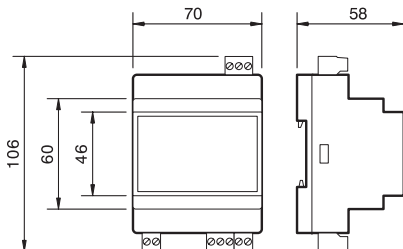
Using the **RS2RS** as an amplifier extends the length of an installation's RS-485 bus, which generally does not exceed 1,200 metres. It can be used in installations where there are communication issues due to interference or cabling distances. The key features of the **RS2RS** converter are:

- RS-232 / RS-485 bus transducer.
- RS-485 / RS-485 amplifier.
- Auto-detection of word speed and length, from 300 to 115,000 bauds.
- Galvanic insulation, up to 3 kV.
- 120 ... 230 Vac power supply
- Power, TX and RX LED
- Assembly. **DIN 46277 (EN-50022)**, 3 **DIN 43880** modules

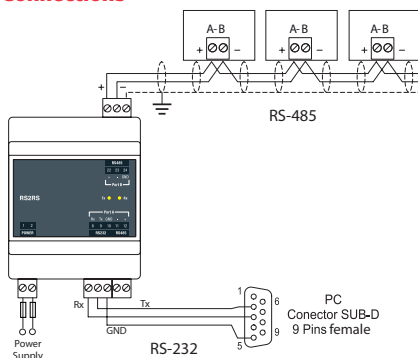
Applications

- For any installation that has units with RS-485 communications that need to communicate over an RS-232 connection.
- Amplification of the RS-485 bus where the required distance exceeds 1200 metres.
- Amplification of RS-485 signals in installations where there are communications problems.

Dimensions



Connections



More connections: see the manual.

Technical features

Electrical features	Rated voltage	120 ... 230 V~ ±10%
	Frequency	50 / 60 Hz
	Consumption	0.7 ... 2.3 VA
Input Port A	Type	RS-232 (3 wires (Tx, Rx, GND))
	Maximum distance	15 m point-to-point
	Speed	300 ... 115,000 bauds
Input Port B	Type	RS-485 (2 wires (Tx/Rx(+), Tx/Rx(-)))
	Maximum distance	1,200 m - 32 units
	Speed	300 ... 115,000 bauds
Output Port B	Type	RS-485 (2 wires (Tx/Rx(+), Tx/Rx(-)))
	Maximum distance	1,200 m - 32 units
	Speed	300 ... 115,000 bauds
Environmental features	Operating temperature	0 ... +50 °C
	Relative humidity (without condensation)	25 ... 85%
	Maximum altitude	2,000 m
Mechanical features	IP protection degree	IP 20
	Dimensions	70 x 106 x 58 mm
	Weight	0.195 Kg
	Enclosure	Noryl VO 1550
Electrical safety	Designed for CAT III 300 V installations, in accordance with IEC 61010 . Double-insulated electric shock protection, class II	
Standards	UNE-EN 61000-6-2, UNE-EN 61000-6-4	

References

Type	Description	Code
RS2RS	Convertor y amplificador RS-232 / RS-485	M62141