

Interface converter DI-2

RS-232 / RS-485 interface converter



Interface converter DI-2

Product description

The DI-2 converter is designed for the connection of personal computers and workstations utilising an RS-232 interface with Bender devices utilising an RS-485 interface. The hardware and software of the computers need not to be changed. A typical application is the connection of a personal computer to a BMS network.

Application

- RS-232 signals are converted into RS-485 signals
- Parameterisation of alarm indicator and operator panels (MK800, MK2430) with RS-485 interface via PC with RS-232 interface using software

Function

Many PCs and work stations are equipped with serial RS-232 interfaces. The interface converter DI-2 is designed to connect these devices via an RS-232 interface to the BMS bus using the RS-485 standard. The connected devices are protected against spikes by galvanic separation between the input and output circuit. Additional internal measures protect the device against voltage spikes.

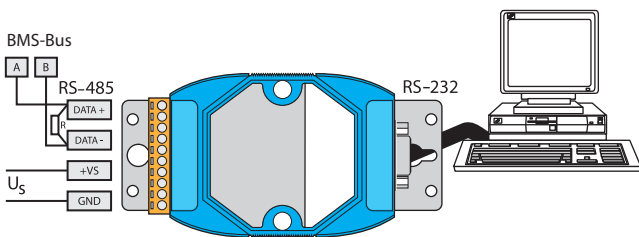
Device features

- Plastic enclosure for DIN rail mounting
- Electrical separation between the input and output circuit
- Supply voltage DC 10...30 V

Approvals



Wiring diagram (example)



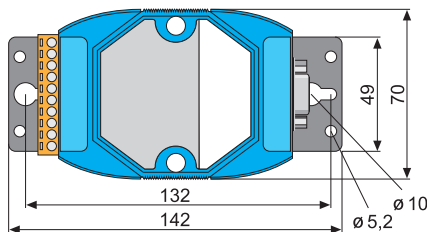
DI-2 for the integration of a personal computer utilising an RS-232 interface into a BMS network.

Note:

- Terminate both ends of the BMS bus with 120 Ω resistors (R).

Dimension diagram DI-2

Dimensions in mm



Ordering information		
Type	Supply voltage U_s	Art. No.
DI-2	DC 10...30 V*	B 9501 2022

* Absolute values

Technical data DI-2 interface converter

Insulation coordination acc. to IEC 60664-1

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

Supply voltage

Supply voltage U_s	see ordering information
Power consumption	≤ 2.2 W

Interfaces

BMS	
Interface / protocol	1 x RS-485 / --
Baud rate	9.6...115.2 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
Mode	--
Connection	DATA + (A), DATA - (B)
Terminating resistor	120 Ω (0.25 W)
Device address, BMS bus	--
Serial interface	1 x RS-232
Alarm LEDs	ON

General data

EMV immunity / EMC emission	EN 61000-6-2 / EN 61000-6-4
Classification of climatic conditions acc. to IEC 60721	
Stationary use / Transport / Long-time storage	3K5 / 2K3 / 1K4
Ambient temperature, operation	- 10 °C...+ 55 °C
Classification of mechanical conditions acc. to IEC 60721	
Stationary use / Transport / Long-time storage	3M4 / 2M2 / 1M3
Operating mode	continuous operation
Mounting	any position
Connection	screw-type terminals
Connection rigid / flexible / conductor sizes	0.5...2.5 mm ² / AWG 22...12
Degree of protection, internal components / terminal (DIN EN 60529)	IP 30 / IP 20
Screw mounting	2 x M3
DIN rail mounting acc. to	IEC 60715
Operating manual	TBP109010
Weight	≤ 160 g