DI-2
RS-232/RS-485 interface converter
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
- Conversion of RS-232 signals 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.

Approvals

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

Technical data

**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 $\leq 2.2$ W

**Interfaces**

**BMS**
- Interface/protocol $1 \times$ RS-485/–
- Baud rate $9.6 \ldots 115.2$ kbit/s
- Cable length $\leq 1200$ m
- Cable (twisted in pairs, one end of shield connected to PE) recommended: J-Y(St)Y min. 2 x 0.8
- Connection DATA + (A), DATA - (B)
- Terminating resistor $120$ Ω (0.25 W)
- Device address, BMS bus $1 \times$ RS-232
- Alarm LEDs ON

**Environment/EMC**
- EMC immunity/EMC emission EN 61000-6-2/EN 61000-6-4
- Classification of climatic conditions acc. to IEC 60721
  - Stationary use 3K5
  - Transport 2K3
  - Long-time storage 1K4
  - Ambient temperature, operation $-10 \ldots +55$ °C
- Classification of mechanical conditions acc. to IEC 60721
  - Stationary use 3M4
  - Transport 2M2
  - Long-time storage 1M3

**Connection**
- Connection screw-type terminals
- Connection rigid/flexible/conductor sizes $0.5 \ldots 2.5$ mm² (AWG 22 ... 12)

**Other**
- Operating mode continuous operation
- Mounting any position
- Degree of protection, internal components (IEC 60529) IP30
- Degree of protection, terminals (IEC 60529) IP30
- Screw mounting $2 \times$ M3
- DIN rail mounting acc. to IEC 60715
- Operating manual TBP109010
- Weight $\leq 160$ g