

**Features**

- 4-channel
- Device installation in Zone 2
- 24 V DC supply voltage
- Lead breakage (LB) and short-circuit (SC) monitoring
- Power Rail bus
- EMC acc. to NAMUR NE 21

**Function**

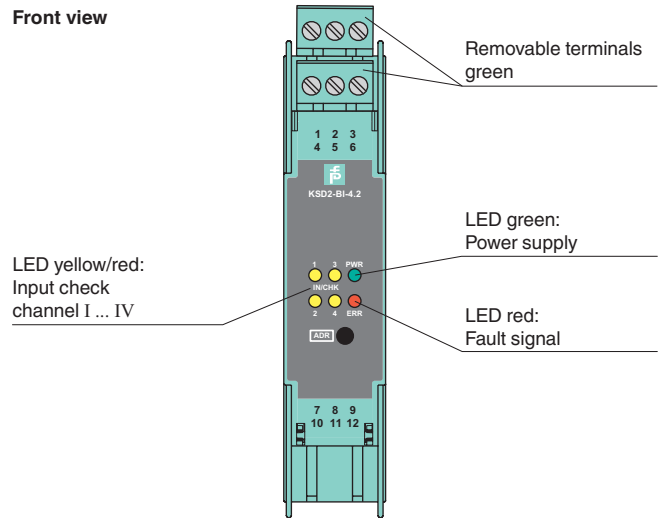
The KSD2-BI-4.2 transmits digital input signals via the Power Rail bus. Proximity sensors in accordance with EN 60947-5-6 (NAMUR) or mechanical contacts may be used as alarms.

The inputs have a common positive reference and are galvanically isolated from output and power supply in accordance to EN 50178.

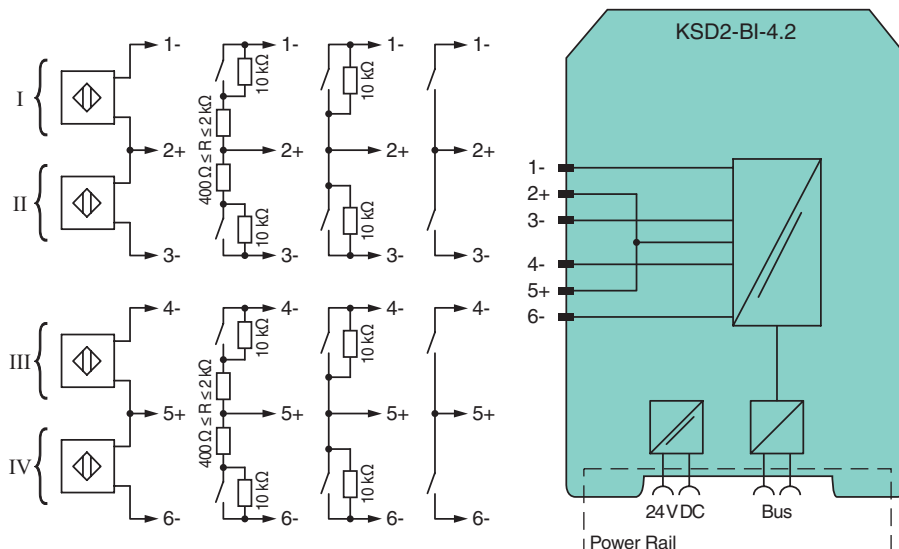
**Application**

The transfer of digital input signals of proximity sensors or dry contacts to the PLC or the DCS.

**Assembly**



**Connection**



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<b>Supply</b>	
Connection	Power Rail
Rated voltage	20 ... 30 V DC
Ripple	< 10 %
Power loss	0.8 W , increase up to 1.0 W in the case of short-circuit on all channels
Power consumption	1 W
<b>Input</b>	
Connection	terminals 1-, 2+, 3-; 4-, 5+, 6-
Rated values	acc. to EN 60947-5-6 (NAMUR)
Open circuit voltage/short-circuit current	approx. 8 V DC / approx. 8 mA
Switching point/switching hysteresis	1.2 ... 2.1 mA / approx. 0.2 mA
Pulse/Pause ratio	≥ 20 ms / ≥ 20 ms
Lead monitoring	breakage I < 0.1 mA , short-circuit I > 6 mA
<b>Output</b>	
Interface	CAN protocol via Power Rail bus
Connection	Power Rail
<b>Transfer characteristics</b>	
Switching frequency	≤ 10 Hz
<b>Electrical isolation</b>	
Input/power supply, internal bus	basic insulation acc. to EN 50178:1997, rated insulation voltage 253 V AC
<b>Directive conformity</b>	
Electromagnetic compatibility	
Directive 2004/108/EC	EN 61326-1:2006
<b>Conformity</b>	
Insulation coordination	EN 50178:1997
Electromagnetic compatibility	NE 21:2006
Protection degree	IEC 60529
<b>Ambient conditions</b>	
Ambient temperature	-20 ... 60 °C (-4 ... 140 °F)
<b>Mechanical specifications</b>	
Protection degree	IP20
Connection	terminal connection ≤ 2.5 mm <sup>2</sup>
Mass	approx. 100 g
Dimensions	20 x 100 x 115 mm (0.8 x 3.9 x 4.5 in)
Mounting	DIN rail mounting
<b>Data for application in connection with Ex-areas</b>	
Statement of conformity	Pepperl+Fuchs
Group, category, type of protection, temperature classification	⊕ II 3G Ex nA II T4 X
Directive conformity	
Directive 94/9/EC	EN 60079-0, EN 60079-15 , EN 61326-1
<b>General information</b>	
Supplementary information	Statement of Conformity, Declaration of Conformity, Attestation of Conformity and instructions have to be observed where applicable. For information see <a href="http://www.pepperl-fuchs.com">www.pepperl-fuchs.com</a> .

## Notes

### Software functions

Adjustable by the **PACTware™** human machine interface:

- Information on devices may be saved in PC memory

The following are separately adjustable for each channel:

- TAG numbers, 28 alphanumeric characters, can be programmed into device
- Commentary, may be saved in PC memory
- Input inversion
- Lead monitoring selectable
- Separate detection and indication of lead breakage and lead short circuit
- Malfunction output status
  - downscale
  - upscale
  - maintenance of the last accepted value
- Simulation
  - of the input value
  - of the device diagnosis
  - of the process channel diagnosis