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

Function

The KSD2-CI-2 is suited for the connection of 2-wire transmitters. It may also be used as a repeater for 0/4 mA ... 20 mA signals (current source). With a rated operational voltage of > 20 V DC it is guaranteed that for a transmitter with a current conduction of 20 mA at least 16.5 V is available. The circuits (terminals, 3+, 2- or 6+, 5-) are monitored for lead faults.

The two inputs are galvanically connected and have a common negative potential wich is decoupled by diodes.

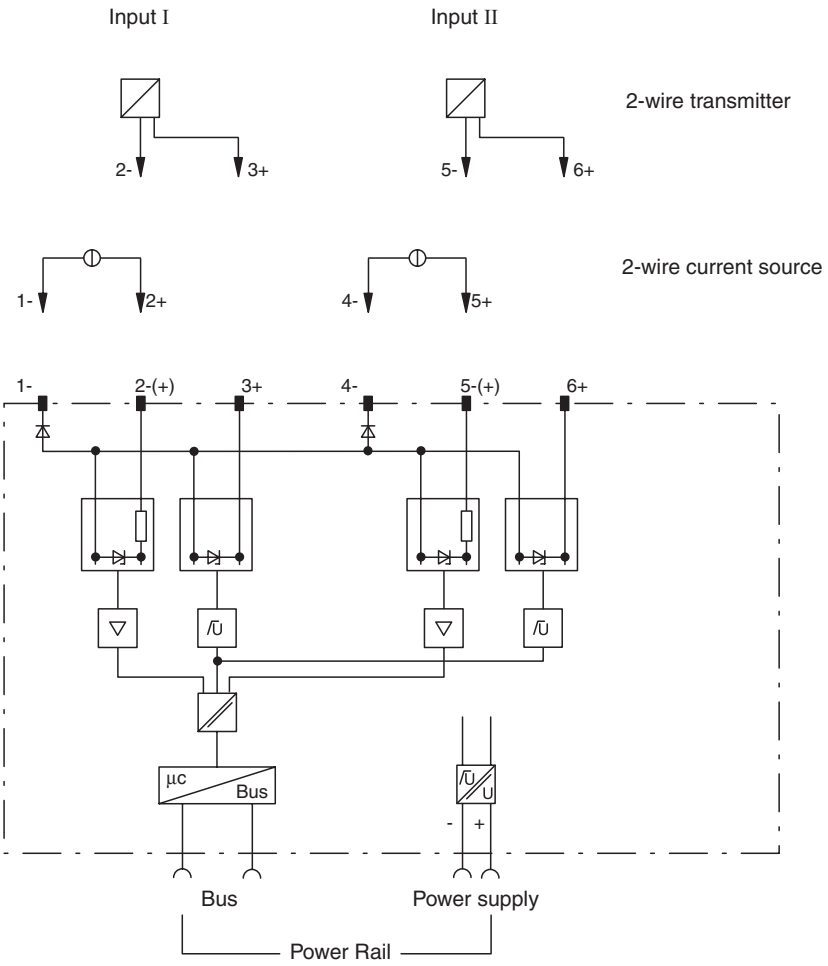
2-wire transmitters are connected to terminals 2- and 3+ or 5- and 6+. The input for the signal current is terminal 2 or 5.

Current sources which generate a signal in the range of 0/4 mA ... 20 mA, are connected to terminals 2+ and 1- or 5+ and 1-. Thus the current flows into the signal input and is transmitted to the output.

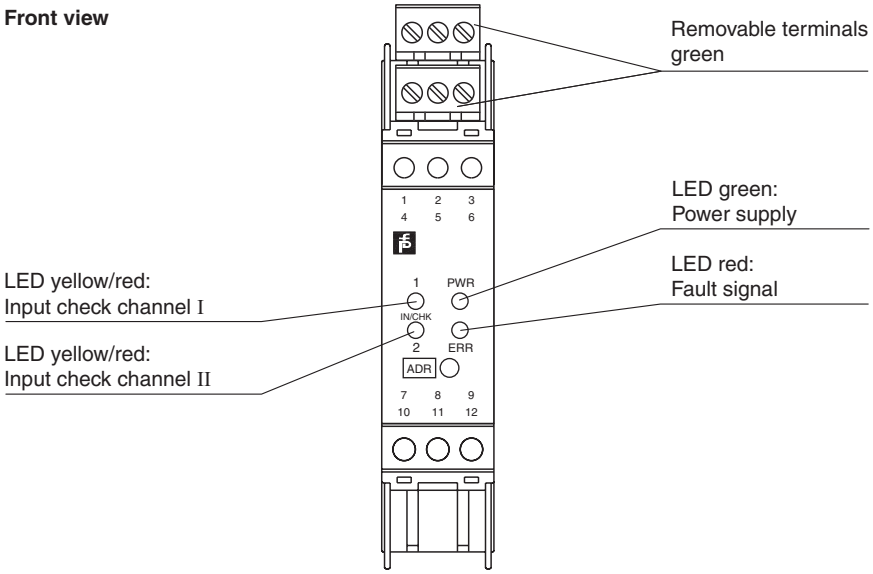
Application

- The supply of power to 2-wire transmitters and the transfer of the measurement current
- Current signal repeater

Connection



Composition



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Supply	
Connection	Power Rail
Rated voltage	20 ... 30 V DC
Ripple	< 10 %
Power loss	1.9 W
Power consumption	2.6 W
Input	
Connection	terminals 1, 2, 3; 4, 5, 6
Input signal	0 ... 20 mA or 4 ... 20 mA
Input resistance	approx. 325 Ω , terminals 1, 2 or 4, 5
Transmitter supply voltage	> 16.5 V at 20 mA
Line monitoring	breakage I ≤ 0.8 mA , short-circuit I > 23.2 mA
Output	
Connection	Power Rail
Interface	CAN protocol via Power Rail bus
Transfer characteristics	
Deviation	0.1 % of the input signal range at 20 °C (293 K)
Influence of ambient temperature	0.01 %/K of the input signal range
Electrical isolation	
Input/power supply, internal bus	basic insulation acc. to EN 50178:1997, rated insulation voltage 253 V AC
Directive conformity	
Electromagnetic compatibility	
Directive 2004/108/EC	EN 61326-1:2006
Conformity	
Insulation coordination	EN 50178:1997
Electrical isolation	EN 50178:1997
Electromagnetic compatibility	NE 21:2006
Protection degree	IEC 60529
Ambient conditions	
Ambient temperature	-20 ... 60 °C (253 ... 333 K)
Mechanical specifications	
Protection degree	IP20
Connection	terminal connection ≤ 2.5 mm^2
Mass	approx. 150 g
Dimensions	20 x 107 x 115 mm (0.8 x 4.2 x 4.5 in) , housing type B1
Mounting	DIN rail mounting
Data for application in connection with Ex-areas	
Statement of conformity	Pepperl+Fuchs
Group, category, type of protection, temperature classification	⟨Ex⟩ II 3G EEx nA II T4 X
Directive conformity	
Directive 94/9/EC	EN 60079-0:2006 , EN 60079-15:2005
General information	
Supplementary information	Statement of Conformity, Declaration of Conformity, Attestation of Conformity and instructions have to be observed where applicable. For information see www.pepperl-fuchs.com.

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Notes

Software functions

Adjustable by the **PACT***ware***™** 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
- Physical units are adjustable
  - list see system description RPI
- Lead monitoring selectable
- Separate detection and indication of lead breakage and lead short circuit
- 4 limit values
  - upper alarm level limit
  - upper warn level limit
  - lower warn level limit
  - lower alarm level limit
- Hysteresis adjustable
- Lower scale value and upper scale value of the measurement range
  - for the determination of the overflow and underflow range
  - for the configuration of the analogue monitor of the human machine interface
- Overrange and underrange alarm
- Malfunction output status
  - user defined
  - min.
  - max.
  - maintenance of the last accepted measurement value
- Simulation
  - of the input value
  - of the device diagnosis
  - of the process channel diagnosis

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