



- 1-channel
- 24 V DC supply voltage
- Galvanic isolated measuring circuits
- Output: allowable load $\leq 1 \text{ k}\Omega$
- EMC acc. to NAMUR NE 21

KFD2-CR-1.300

Function

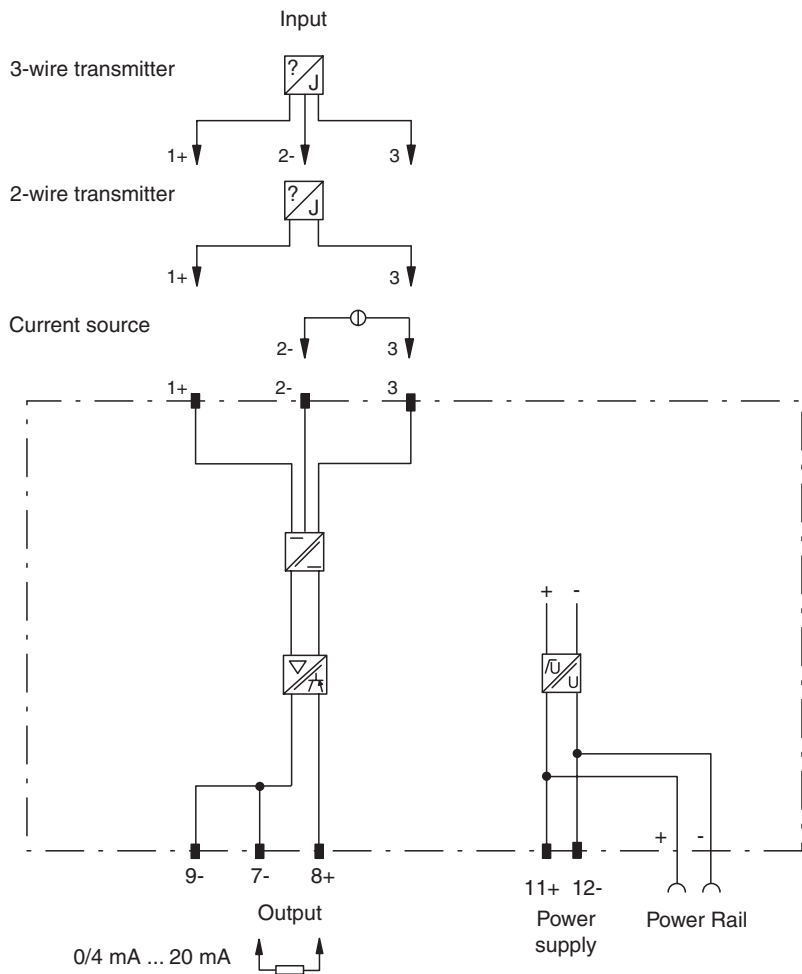
The device is suited for the connection of 2- and 3-wire transmitters. It may also be employed as a repeater for 0/4 mA ... 20 mA signals (current source). The input circuit's current is transferred to the output.

2-wire transmitters are connected to terminals 1 and 3. The input for the signal current is terminal 3. The minimum available voltage is 17.5 V at 20 mA.

The power supply is provided to terminals 1+ and 2- for 3-wire transmitters. The supply voltage is 16.5 V at a supply current of 25 mA.

Current sources are connected to terminals 2- and 3. The source is not supplied with energy via terminal 1+ which is not used.

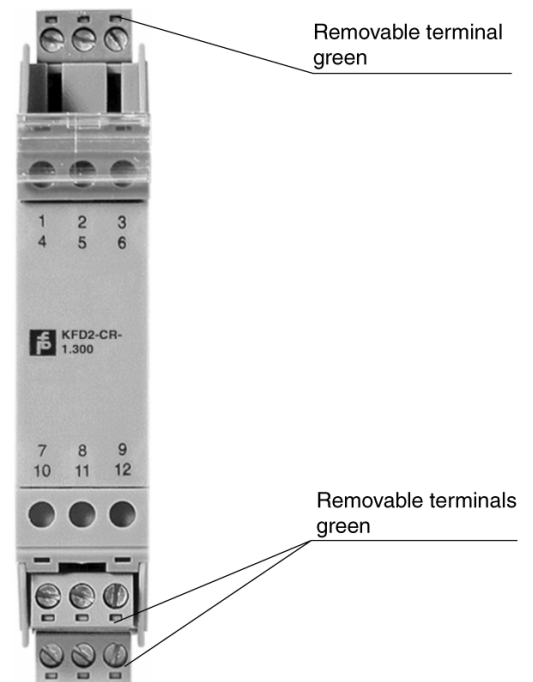
Connection



Composition

Front View

Housing type A4
(see system description)



Supply	
Connection	Power Rail or terminals 11+, 12-
Rated voltage	20 ... 35 V DC
Ripple	within the supply tolerance
Power loss	1.2 W
Power consumption	approx. 1.7 W
Input	
Connection	terminals 1+, 2-, 3
Open loop voltage	2-wire: 17.5 V at 20 mA 3-wire: 16.5 V at 25 mA
Input resistance	approx. 20 Ω (terminals 2, 3)
Output	
Connection	terminals 7-, 8+, 9-
Load	0 ... 1000 Ω
Output signal	0 ... 20 mA / 4 ... 20 mA
Ripple	≤ 20 μA _{eff}
Available voltage	20 V DC
Transfer characteristics	
Deviation	
After calibration	≤ ± 10 μA incl. non-linearity and load fluctuations at 20 °C (293 K)
Influence of ambient temperature	≤ ± 0.2 μA/K (0 ... +60 °C); ± 1.0 μA/K (-20 ... 0 °C)
Rise time	approx. 50 μs
Electrical isolation	
Input/output	safe electrical isolation acc. to EN 50020, voltage peak value 375 V
Input/power supply	safe electrical isolation acc. to EN 50020, voltage peak value 375 V
Output/power supply	function insulation acc. to EN 50178, rated insulated voltage 250 VAC
Directive conformity	
Electromagnetic compatibility	
Directive 89/336/EC	EN 50081-2, EN 50082-2, IEC 801-4, 801-5 and 801-6, intensity level 3
Conformity	
Insulation coordination	EN 50178
Electrical isolation	EN 50178
Electromagnetic compatibility	NE 21
Protection degree	IEC 60529
Ambient conditions	
Ambient temperature	-20 ... 60 °C (253 ... 333 K)
Mechanical specifications	
Protection degree	IP20
Mass	approx. 100 g
Dimensions	20 x 118 x 115 mm (0.8 x 4.6 x 4.5 in)

Supplementary information

Statement of Conformity, Declaration of Conformity and instructions have to be observed. For information see www.pepperl-fuchs.com.

Accessories

- Power Rail PR-03**
- Power Rail UPR-03**
- Power feed module KFD2-EB2...**

Using Power Rail PR-03 or UPR-03 the devices are supplied with 24 V DC by means of the power feed modules. If no Power Rails are used, power supply of the individual devices is possible directly via their device terminals.

Each power feed module is used for fusing and monitoring groups with up to 100 individual devices. The Power Rail PR-03 is an inset component for the DIN rail. The Power Rail UPR-03 is a complete unit consisting of the electrical inset and an aluminium profile rail 35 mm x 15 mm x 2000 mm. To make electrical contact, the devices are simply engaged.

The Power Rail must not be fed via the device terminals of the individual devices!