

Features

- 1-channel signal conditioner
- AC/DC wide range supply
- Input 2-wire and 3-wire transmitters and 2-wire current sources
- Output 0/4 mA ... 20 mA
- 2 relay contact outputs
- Programmable high/low alarm
- Linearization function (max 20 points)
- Line fault detection (LFD)
- Up to SIL2 acc. to IEC 61508/IEC 61511

Function

This signal conditioner provides the isolation for non-intrinsically safe applications.

The device supplies 2-wire and 3-wire transmitters, and can also be used with active current sources.

Two relays and an active 0/4 mA ... 20 mA current source are available as outputs.

The relay contacts and the current output can be integrated in security-relevant circuits. The current output is easily scaled.

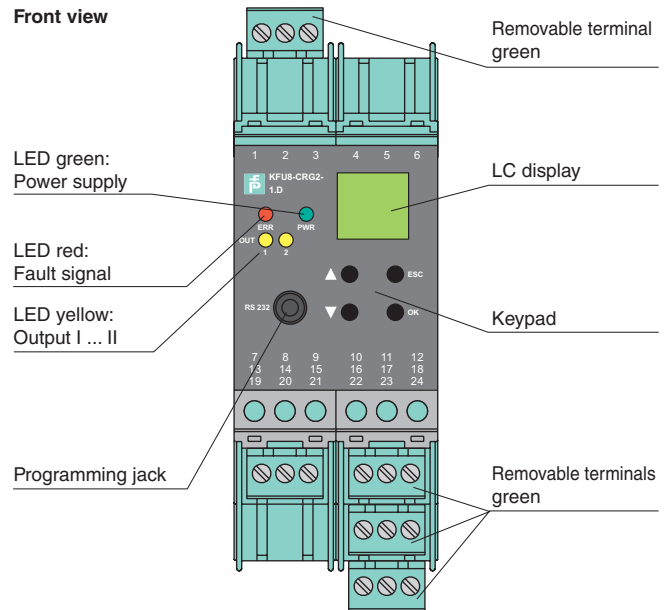
On the display the measured value can be indicated in various physical units.

The unit is easily programmed by the use of a keypad located on the front of the unit or with the **PACTware™** configuration software.

The input has a line fault detection.

For additional information, refer to the manual and www.pepperl-fuchs.com.

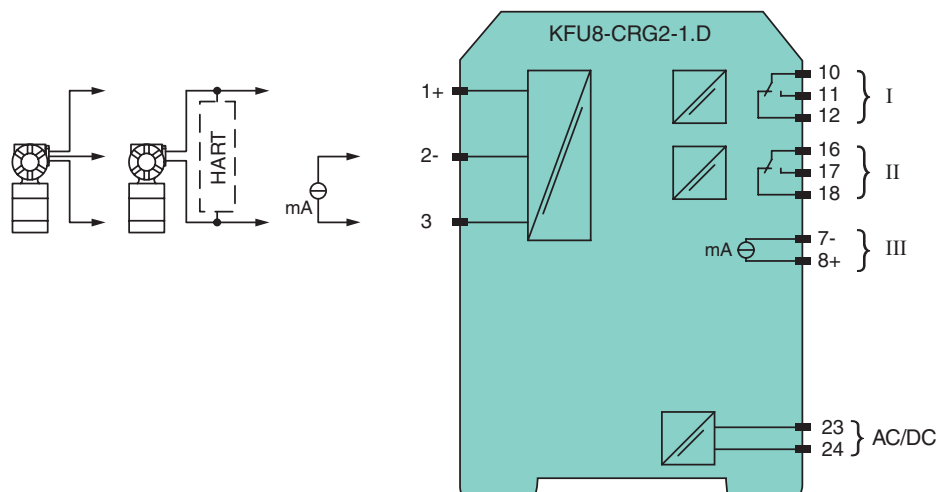
Assembly



CE

SIL2

Connection



General specifications	
Signal type	Analog input
Supply	
Connection	terminals 23, 24
Rated voltage	20 ... 90 V DC or 48 ... 253 V AC
Power loss	2 W / 3 VA
Power consumption	2.2 W / 4 VA
Input	
Connection	terminals 1, 2, 3
Input I	
Input signal	0/4 ... 20 mA
Available voltage	> 15 V at 20 mA
Open circuit voltage/short-circuit current	24 V / 33 mA
Input resistance	45 Ω (terminals 2, 3)
Lead monitoring	breakage I < 0.2 mA; short-circuit I > 22 mA acc. to NAMUR NE43
Output	
Connection	output I: terminals 10, 11, 12 output II: terminals 16, 17, 18 Output: analog terminals 8+, 7-
Output signal	0 ... 20 mA or 4 ... 20 mA
Output I, II	signal, relay
Contact loading	250 V AC / 2 A / $\cos \phi \geq 0.7$; 40 V DC / 2 A
Mechanical life	5 x 10 ⁷ switching cycles
Energized/De-energized delay	approx. 20 ms / approx. 20 ms
Output III	Signal, analog
Current range	0 ... 20 mA or 4 ... 20 mA
Open loop voltage	≤ 24 V DC
Load	≤ 650 Ω
Fault signal	downscale I ≤ 3.6 mA, upscale I ≥ 21.5 mA (acc. NAMUR NE43)
Transfer characteristics	
Input I	
Accuracy	< 30 μA
Measuring time	< 100 ms
Influence of ambient temperature	0.003 %/K (30 ppm)
Output I, II	
Response delay	≤ 200 ms
Output III	
Resolution	≤ 10 μA
Accuracy	< 20 μA
Influence of ambient temperature	0.005 %/K (50 ppm)
Electrical isolation	
Input/Other circuits	reinforced insulation according to IEC 61140, rated insulation voltage 300 V _{eff}
Output I, II/other circuits	reinforced insulation according to IEC 61140, rated insulation voltage 300 V _{eff}
Mutual output I, II, III	reinforced insulation according to IEC 61140, rated insulation voltage 300 V _{eff}
Output III/power supply	reinforced insulation according to IEC 61140, rated insulation voltage 300 V _{eff}
Interface/power supply	reinforced insulation according to IEC 61140, rated insulation voltage 300 V _{eff}
Directive conformity	
Electromagnetic compatibility	
Directive 2004/108/EC	EN 61326-1:2006 , EN 61000-6-4:2007
Low voltage	
Directive 2006/95/EC	EN 50178:1997
Conformity	
Insulation coordination	IEC 62103
Electrical isolation	IEC 62103
Electromagnetic compatibility	NE 21
Protection degree	IEC 60529
Protection against electric shock	IEC 61140
Input	EN 60947-5-6
Ambient conditions	
Ambient temperature	-20 ... 60 °C (-4 ... 140 °F)
Mechanical specifications	
Protection degree	IP20
Mass	300 g
Dimensions	40 x 119 x 115 mm (1.6 x 4.7 x 4.5 in) , housing type C3

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.

Accessories**PACTware™**

Device-specific drivers (DTM)

Adapter K-ADP1

Programming adapter for parameterisation via the serial RS 232 interface of a PC/Notebook

For programming, please use the new version of adapter K-ADP1 (part no. 181953, connector length 14mm). When using the previous version K-ADP1 (connector length 18 mm) the plug is exposed by approx. 3 mm. The function is not affected.

Adapter K-ADP-USB

Programming adapter for parameterisation via the serial USB interface of a PC/Notebook