

Features

- 1-channel signal conditioner
- AC/DC wide range supply
- 2-wire transmitters or current sources
- Output 0/4 mA ... 20 mA
- 2 relay contact outputs
- Programmable high/low alarm
- Configurable by **PACTware™** or keypad
- Line fault detection (LFD)
- Up to SIL2 acc. to IEC 61508

Function

This isolated signal conditioner is used in non hazardous area applications. It is suitable for a variety of measuring tasks.

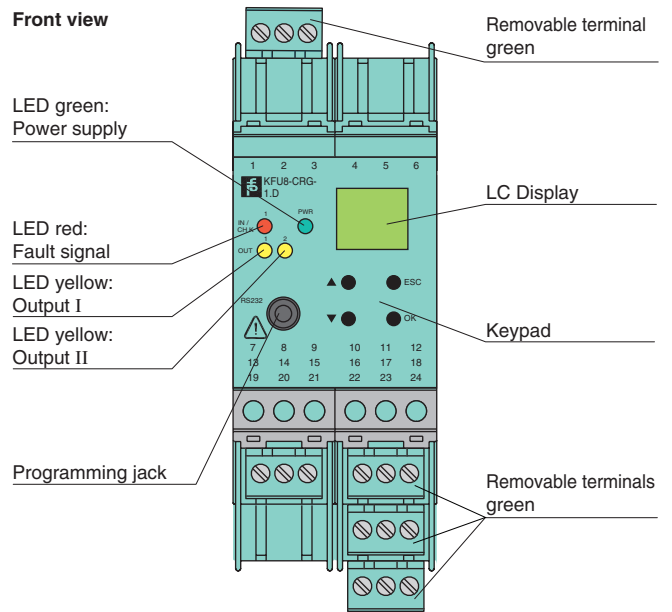
Active power supplies as well as 2-wire transmitters can be connected. Two relays and an active 0/4 mA ... 20 mA current source are available as outputs.

The relay contacts and the current output can be integrated in security-relevant circuits. The trip values of the relays are derived from the transmitter signal or the signal of a connected power source. The current output is easily scaled. The input has lead breakage and short circuit monitoring.

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

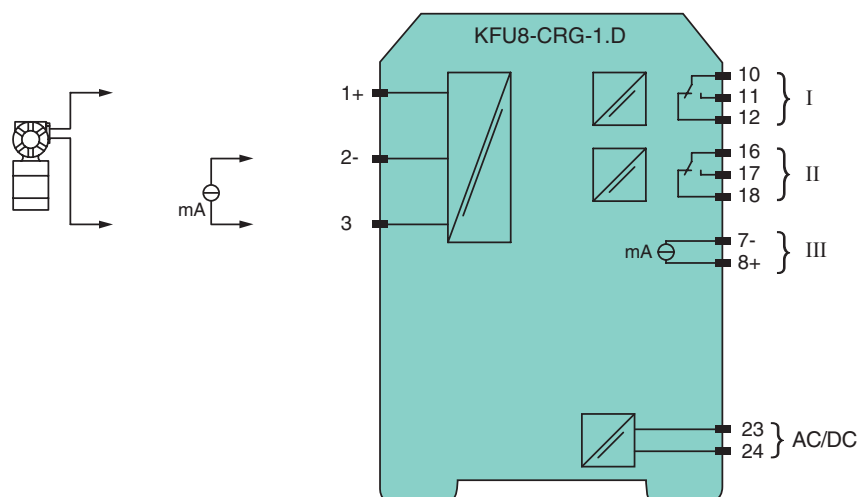
For additional information, refer to the manual and www.pepperl-fuchs.com.

Assembly



SIL2

Connection



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| | |
|--------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 ... 20 mA or 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: analogue, terminals 8+, 7- |
| Output signal | 0 ... 20 mA or 4 ... 20 mA |
| Output I, II | |
| Contact loading | 250 V AC / 2 A / $\cos \phi \geq 0.7$; 40 V DC / 2 A |
| Mechanical life | 5×10^7 switching cycles |
| Energized/de-energized delay | approx. 20 ms / approx. 20 ms |
| Output III | |
| 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 %/°C (30 ppm) |
| Output III | |
| Resolution | ≤ 10 μA |
| Accuracy | < 20 μA |
| Influence of ambient temperature | 0.005 %/°C (50 ppm) |
| Electrical isolation | |
| Input/other circuits | safe electrical isolation acc. to EN 50178 , voltage peak value 375 V |
| Output I, II/other circuits | reinforced insulation acc. to IEC 61140, rated insulation voltage 300 V _{eff} |
| Mutual output I, II, III | reinforced insulation acc. to IEC 61140, rated insulation voltage 300 V _{eff} |
| Output III/power supply | reinforced insulation acc. to IEC 61140, rated insulation voltage 300 V _{eff} |
| Interface/power supply | reinforced insulation acc. to IEC 61140, rated insulation voltage 300 V _{eff} |
| Directive conformity | |
| Electromagnetic compatibility | |
| Directive 89/336/EC | EN 50081-2, EN 50082-2 |
| Conformity | |
| Insulation coordination | EN 50178 |
| Electrical isolation | EN 50178 |
| Protection degree | IEC 60529 |
| Input | EN 60947-5-6 |
| Ambient conditions | |
| Ambient temperature | -20 ... 60 °C (253 ... 333 K) |
| 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 and instructions have to be observed where applicable. For information see www.pepperl-fuchs.com . |

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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