## **Features**

- 1-channel signal conditioner
- · Universal usage at different power supplies
- Scaleable current or voltage input
- · Current or voltage output
- · Relay contact output
- · Configurable by keypad
- · Line fault detection (LFD)

## **Function**

This signal conditioner is suitable for the connection of current and voltage signals and provides isolation for non-intrinsically safe applications.

The input ranges include 0 mA  $\dots$  20 mA, 0 V  $\dots$  10 V or 0 mV  $\dots$  60 mV. Subranges from the input ranges are selectable.

The output measuring signals are 0/4 mA  $\dots$  20 mA, 0/2 V  $\dots$  10 V or 0/1 V  $\dots$  5 V.

The output relay serves as trip value contact.

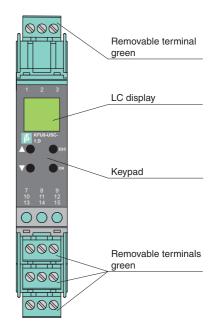
On the display the measured value can be indicated in various physical units.

The unit is easily programmed by the use of a keypad located on the front of the unit.

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

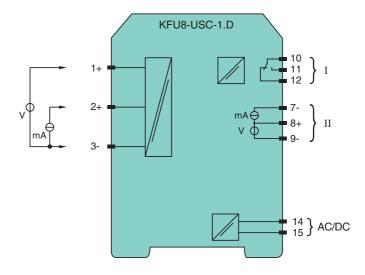
## **Assembly**

Front view



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## Connection



| General specifications           |                |  |
|----------------------------------|----------------|--|
| Signal type                      |                | Analog input   |
| · ,.                             |                | Analog input   |
| Supply                           |                | Assessments 4.4 AF   |
| Connection                       |                | terminals 14, 15   |
| Rated voltage                    | U <sub>r</sub> | 20 90 V DC / 48 253 V AC   |
| Rated current                    | l <sub>r</sub> | ≤ 80 mA DC / ≤ 45 mA AC  |
| Power consumption                |                | ≤ 1.6 W / ≤ 2.6 VA   |
| Input                            |                |  |
| Connection side                  |                | field side   |
| Connection                       |                | terminals 1+, 3-: mV, V; terminals 2+, 3-: mA  |
| Input resistance                 |                | voltage: 1 M $\Omega$ , current: $\leq$ 100 $\Omega$   |
| Limit                            |                | 30 V   |
| Current                          |                | 0 20 mA  |
| Voltage                          |                | 0 10 V / 0 60 mV   |
| Resolution                       |                | 15 Bit   |
| Output                           |                |  |
| Connection side                  |                | control side   |
| Connection                       |                | output I: terminals 10, 11, 12   |
|                                  |                | output II: terminals 7-, 8+, 9-  |
| Output I                         |                | signal, relay  |
| Contact loading                  |                | 250 V AC/2 A/cos φ 0.7; 40 V DC/2 A  |
| Mechanical life                  |                | 2 x 10 <sup>7</sup> switching cycles   |
|                                  |                |  |
| Energized/De-energized delay     |                | approx. 10 ms / approx. 10 ms  |
| Output II                        |                | analog   |
| Load                             |                | current: $\leq$ 550 $\Omega$ , voltage: $\geq$ 1 k $\Omega$  |
| Analog voltage output            |                | 0/1 5 V , 0/2 10 V   |
| Analog current output            |                | 0/4 20 mA  |
| Transfer characteristics         |                |  |
| Deviation                        |                | 0.1 % of full-scale value  |
| Resolution/accuracy              |                | current: 1 µA/20 µA<br>voltage: 0.5 mV/10 mV<br>mV: 3 µV/60 µV   |
| Influence of ambient temperature |                | 0.003 %/K (30 ppm)   |
| Reaction time                    |                | ≥ 150 ms/≤ 300 ms  |
| Galvanic isolation               |                |  |
| Input/Output                     |                | reinforced insulation according to IEC 61140, rated insulation voltage 300 V <sub>eff</sub>  |
| Input/power supply               |                | reinforced insulation according to IEC 61140, rated insulation voltage 300 V <sub>eff</sub>  |
| Output/power supply              |                | reinforced insulation according to IEC 61140, rated insulation voltage 300 V <sub>eff</sub>  |
| Indicators/settings              |                | To the state of th |
| Display elements                 |                | display  |
| Control elements                 |                | Control panel  |
| Configuration                    |                | ·  |
| -                                |                | via operating buttons  |
| Labeling                         |                | space for labeling at the front  |
| Directive conformity             |                |  |
| Electromagnetic compatibil       | ity            |  |
| Directive 2004/108/EC            |                | EN 61326-1:2006  |
| Low voltage                      |                |  |
| Directive 2006/95/EC             |                | EN 50178:1997  |
| Conformity                       |                |  |
| Electromagnetic compatibil       | ity            | NE 21  |
| Degree of protection             |                | IEC 60529  |
| Protection against electrical    | l shock        | IEC 61140  |
| Ambient conditions               |                |  |
| Ambient temperature              |                | -20 60 °C (-4 140 °F)  |
| Mechanical specification         | s              |  |
| Degree of protection             | -              | IP20   |
| * :                              |                |  |
| Connection                       |                | screw terminals  |
| Mass                             |                | 150 g  |
| Dimensions                       |                | 20 x 119 x 115 mm (0.8 x 4.7 x 4.5 inch) , housing type B3   |
|                                  |                |  |
| Mounting                         |                | on 35 mm DIN mounting rail acc. to EN 60715:2001   |
| Mounting General information     |                |  |
| Mounting                         |                | Observe the certificates, declarations of conformity, instruction manuals, and manuals where applicable. For information see www.pepperl-fuchs.com.  |

