Features

- 1-channel isolated barrier
- 24 V DC supply (loop powered)
- Current limit 100 mA at 10 V DC
- Up to SIL3 acc. to IEC 61508

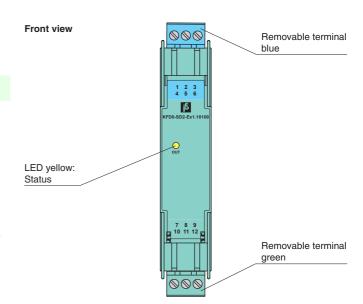
Function

This isolated barrier is used for intrinsic safety applications. It supplies power to solenoids, LEDs, and audible alarms located in a hazardous area.

It is loop powered, so the available energy at the output is received from the input signal. The output signal has a resistive characteristic. As a result the output voltage and current are dependent on the load and the input voltage.

At full load, $10\,\mathrm{V}$ at $100\,\mathrm{mA}$ is available for the hazardous area application.

Assembly

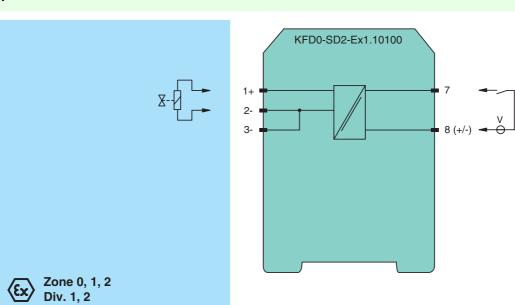






SIL3

Connection



| eng |
|------------------|
| 133237 |
| 2015-02-16 |
| Date of issue |
| 2013-08-07 15:40 |
| Release date |

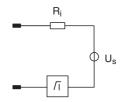
mx.

| Conoral considerations | | |
|--|----------------|--|
| General specifications | | District Outside |
| Signal type | | Digital Output |
| Supply | | |
| Rated voltage | U _n | loop powered |
| Power loss | | $< 1.2 \text{ W } (\text{U}_{\text{i}} \le 30 \text{ V})$ |
| Input | | |
| Connection | | terminals 7, 8 |
| Rated voltage | U_n | 20 35 V DC |
| Current | | 150 mA at 20 V input voltage, load = 100 Ω 100 mA at 35 V input voltage, load = 100 Ω |
| Output | | |
| Connection | | terminals 1+, 2- |
| Internal resistor | R_i | ≤ 68 Ω |
| Current | l _e | ≤100 mA |
| Voltage | U _e | ≥ 10 V |
| Open loop voltage | U _s | ≥16.2 V |
| Output rated operating current | | 100 mA |
| Output signal | | These values are valid for the rated operating voltage 20 35 V DC. |
| Energized/De-energized delay | | single operation: $300 \mu s/50 \mu s$; periodical: $5 \mu s/50 \mu s$ |
| Directive conformity | | |
| Electromagnetic compatibility | | |
| <u> </u> | | EN 61226 1,2006 |
| Directive 2004/108/EC | | EN 61326-1:2006 |
| Conformity | | NE 04.0000 |
| Electromagnetic compatibility | | NE 21:2006 |
| Degree of protection | | IEC 60529:2001 |
| Protection against electrical shock | | UL 61010-1:2004 |
| Ambient conditions | | |
| Ambient temperature | | -20 60 °C (-4 140 °F) |
| Mechanical specifications | | |
| Degree of protection | | IP20 |
| Mass | | approx. 100 g |
| Dimensions | | 20 x 107 x 115 mm (0.8 x 4.2 x 4.5 in) , housing type B1 |
| Mounting | | on 35 mm DIN mounting rail acc. to EN 60715:2001 |
| Data for application in connection with Ex-areas | | |
| EC-Type Examination Certificate | | BASEEFA 06 ATEX 0252, for additional certificates see www.pepperl-fuchs.com |
| Group, category, type of protection | | \textcircled{EX} II (1)G [Ex ia Ga] IIC, II (1)D [Ex ia Da] IIIC, I (M1) [Ex ia Ma] I (-20 °C \leq T _{amb} \leq 60 °C) |
| | | 17 V |
| • | U _o | |
| Current | l _o | 271 mA |
| Power | P _o | 1.152 W |
| Type of protection [EEx ia] | | |
| Input | | |
| Maximum safe voltage | U_m | 250 V (Attention! The rated voltage can be lower.) |
| Statement of conformity | | TÜV 99 ATEX 1499 X , observe statement of conformity |
| Group, category, type of protection, temperature class | | (x) II 3G Ex nA II T4 [device in zone 2] |
| Electrical isolation | | |
| Input/Output | | safe electrical isolation acc. to IEC/EN 60079-11, voltage peak value 375 V |
| Directive conformity | | |
| Directive 94/9/EC | | EN 60079-0:2012 , EN 60079-11:2012 , EN 60079-15:2010 |
| International approvals | | |
| FM approval | | |
| Control drawing | | 266-031FM-12 (cFMus) |
| UL approval | | |
| Control drawing | | 116-0316 (cULus) |
| IECEx approval | | IECEx BAS 06.0058 |
| | | 1202A 5/10 00.0000 |
| General information | | EC Type Evamination Cartificate Statement of Confermity Declaration of Confermity Attactation of |
| Supplementary information | | EC-Type Examination Certificate, Statement of Conformity, Declaration of Conformity, Attestation of Conformity and instructions have to be observed where applicable. For information see www.pepperl-fuchs.com. |
| | | |



Output characteristics

Output circuit diagram



Output characteristic

