Features

- 1-channel isolated barrier
- 24 V DC supply (loop powered)
- Current limit 45 mA at 10 V DC
- Up to SIL3 acc. to IEC 61508

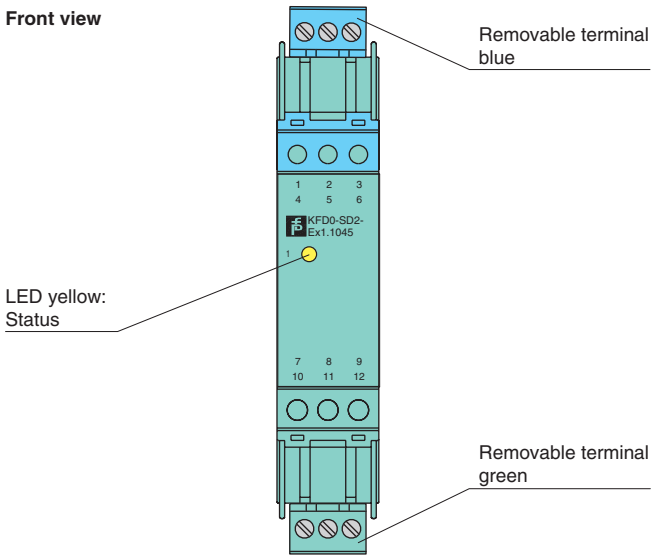
Function

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 dependant on the load and the input voltage.

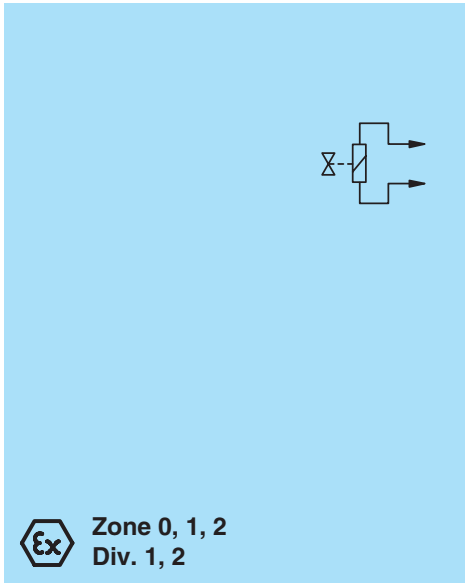
At full load, 10 V at 45 mA is available for the hazardous area application.

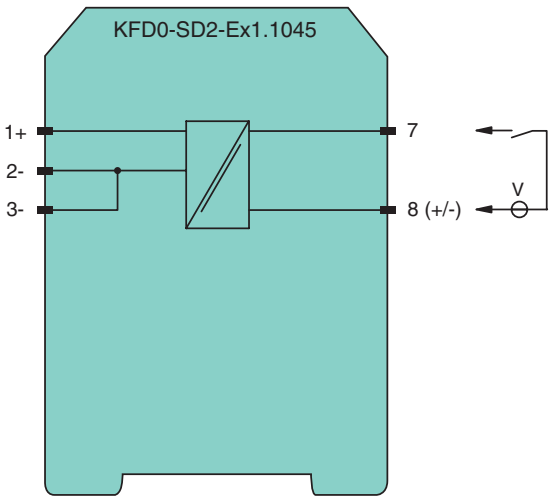
Assembly



SIL3

Connection





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General specifications	
Signal type	Digital output
Supply	
Rated voltage	loop powered
Power loss	< 1.05 W (≤ 30 V)
Input	
Connection	terminals 7, 8
Rated voltage U_i	20 ... 35 V DC
Current	72 mA at 20 V input voltage, load = 220 Ω 50 mA at 35 V input voltage, load = 220 Ω
Output	
Internal resistor	≤ 282 Ω
Limit	current I_E: ≥ 45 mA voltage U_E: ≥ 10 V
Open loop voltage	≥ 22.7 V
Connection	terminals 1+, 2-
Output rated operating current	45 mA
Output signal	these values are valid for the rated operational voltage 20 ... 35 V DC
Energized/de-energized delay	single operation: 300 µs; periodical: 5 µs / 50 µs
Directive conformity	
Electromagnetic compatibility	
Directive 89/336/EC	EN 61326, EN 50081-2
Conformity	
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 mm x 115 mm x 107 mm , housing type B1
Data for application in conjunction with hazardous areas	
EC-Type Examination Certificate	BASEEFA 06 ATEX 0252 , for additional certificates see www.pepperl-fuchs.com
Group, category, type of protection	⟨Ex⟩ II (1)GD [EEx ia] IIC (-20 °C ≤ T_{amb} ≤ 60 °C) [circuit(s) in zone 0/1/2]
Output	EEx ia IIC
Voltage U_o	25.2 V
Current I_o	93 mA
Power P_o	590 mW
Type of protection [EEx ia]	
Input	
Safety maximum voltage U_m	250 V (Attention! The rated voltage can be lower.)
Electrical isolation	
Input/output	safe electrical isolation acc. to EN 50020, voltage peak value 375 V
Directive conformity	
Directive 94/9 EC	EN 50014, EN 50020, EN 50021
International approvals	
FM approval	
Control drawing	266-031FM-12
General information	
Supplementary information	EC-Type Examination Certificate, 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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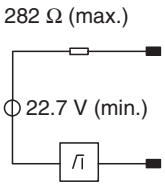
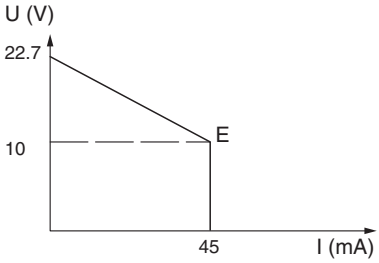
Notes

Output circuit diagram



Output characteristic for input voltage 20 V ... 35 V
E: Curve angle point (U_E, I_E)



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