

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

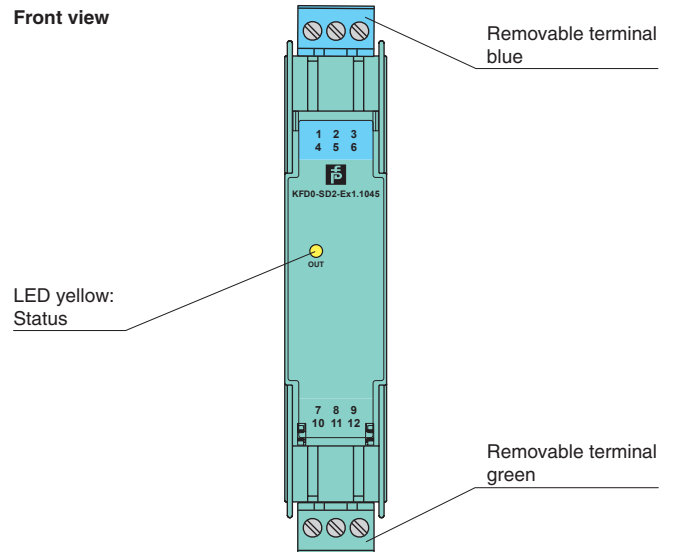
Function

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 dependent on the load and the input voltage.

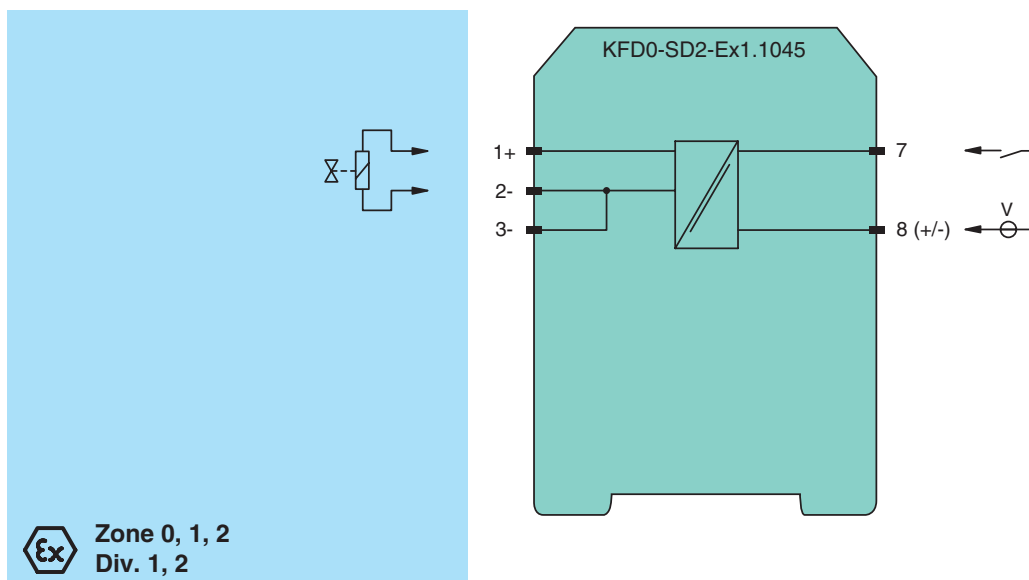
At full load, 10 V at 45 mA is available for the hazardous area application.

Assembly



SIL3

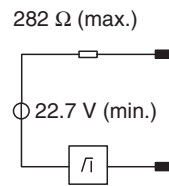
Connection



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	$\leq 282 \Omega$
Limit	Current $I_E \geq 45$ mA voltage $U_E \geq 10$ 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 μ s / 50 μ s; periodical: 5 μ s / 50 μ s
Directive conformity	
Electromagnetic compatibility	
Directive 2004/108/EC	EN 61326-1:2006
Conformity	
Electromagnetic compatibility	NE 21
Protection degree	IEC 60529
Ambient conditions	
Ambient temperature	-20 ... 60 °C (-4 ... 140 °F)
Mechanical specifications	
Protection degree	IP20
Mass	approx. 100 g
Dimensions	20 x 107 x 115 mm (0.8 x 4.2 x 4.5 in) , housing type B1
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	Ex II (1)GD [Ex ia] IIC; [Ex iaD] [circuit(s) in zone 0/1/2/20/21/22] Ex I (M1) [Ex ia] I
Output	Ex ia IIC, Ex iaD
Voltage U_o	25.2 V
Current I_o	93 mA
Power P_o	590 mW
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 classification	Ex II 3G Ex nA II T4
Electrical isolation	
Input/Output	safe galvanic isolation acc. to EN 50020, voltage peak value 375 V
Directive conformity	
Directive 94/9/EC	EN 60079-0, EN 50020, EN 60079-26, EN 61241-11, EN 60079-15
International approvals	
FM approval	
Control drawing	266-031FM-12 (cFMus)
UL approval	
Control drawing	116-0316 (cULus)
IECEx approval	
	IECEx BAS 06.0058
General information	
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 .

Notes

Output circuit diagram



Output characteristic for input voltage

20 V ... 35 V

E: Curve angle point (U_E , I_E)