

Features

- 1-channel isolated barrier
- 24 V DC supply (loop powered)
- Current limit 80 mA at 11 V DC
- Up to SIL3 acc. to IEC 61508

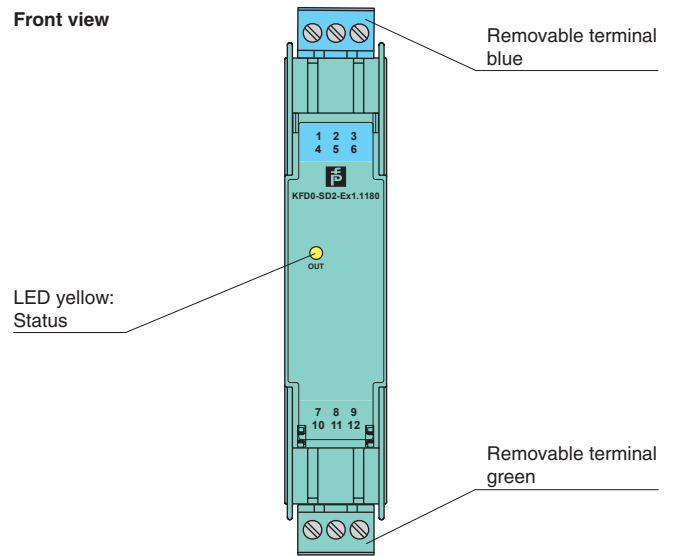
Function

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

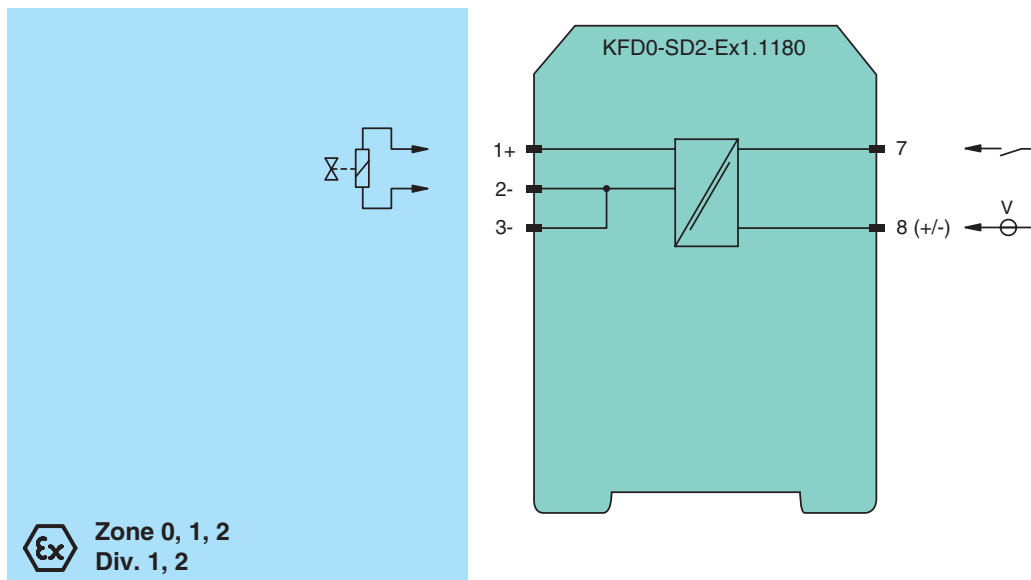
It is loop powered, so the available energy at the output is received from the input signal. The output signal has a resistive characteristic. As a result the output voltage and current are dependent on the load and the input voltage.

At full load, 11 V at 80 mA is available for the hazardous area application.

Assembly



Connection



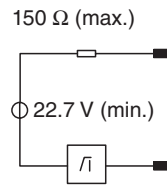
Release date 2011-08-12 16:41 Date of issue 2011-08-12 133239_eng.xml

General specifications		
Signal type		Digital Output
Supply		
Rated voltage		loop powered
Power loss		< 1 W (≤ 30 V)
Input		
Connection		terminals 7, 8
Rated voltage	U_i	20 ... 35 V DC
Current		140 mA at 20 V input voltage, load = 140 Ω 100 mA at 35 V input voltage, load = 140 Ω
Output		
Internal resistor	R_i	$\leq 150 \Omega$
Limit		current $I_E: \geq 80$ mA voltage $U_E: \geq 11$ V
Open loop voltage	U_s	≥ 22.7 V
Connection		terminals 1+, 2-
Output rated operating current		80 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 $^{\circ}$ C (-4 ... 140 $^{\circ}$ 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] IIB, [Ex ia D] [circuit(s) in zone 0/1/2/20/21/22] Ex I (M1) [Ex ia] I
Output		Ex ia IIB, Ex iaD
Voltage	U_o	25.2 V
Current	I_o	184 mA
Power	P_o	1.159 W
Type of protection [EEx ia]		
Input		
Maximum safe voltage	U_m	250 V (Attention! The rated voltage can be lower.)
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 .

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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)

