

**Features**

- 1-channel isolated barrier
- 24 V DC supply (loop powered)
- Current limit 45 mA at 12 V DC
- Housing width 12.5 mm
- Up to SIL3 acc. to IEC 61508

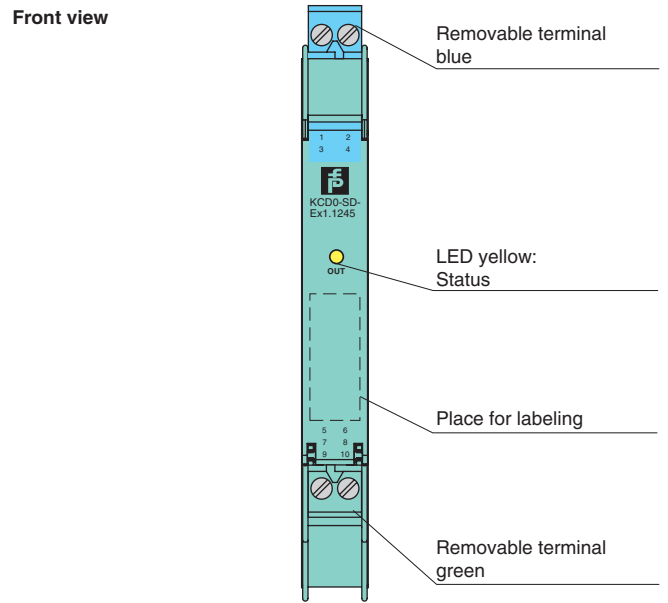
**Function**

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.

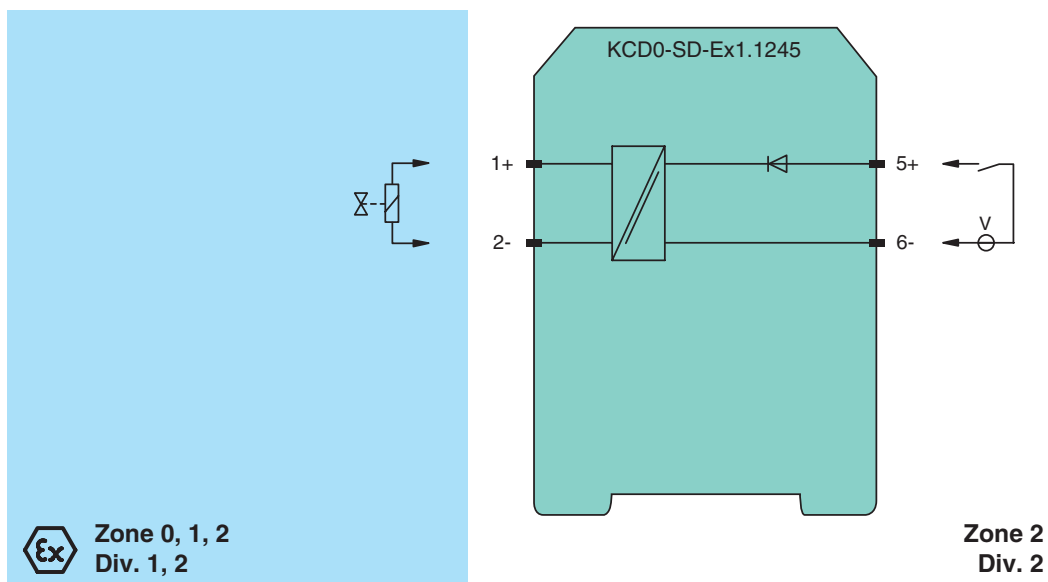
At full load, 12 V at 45 mA is available for the hazardous area application.

**Assembly**



**SIL3**

**Connection**



Release date 2015-04-07 11:17 Date of issue 2015-04-07 233601\_eng.xml

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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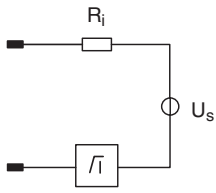
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<b>General specifications</b>		
Signal type		Digital Output
<b>Supply</b>		
Connection		loop powered
Power loss		< 1 W
<b>Input</b>		
Connection		terminals 5, 6
Rated voltage	$U_n$	19 ... 30 V DC
Current		≤ 72 mA at $U_i = 19$ V, ≤ 50 mA at $U_i = 30$ V with 265 Ω output load ≤ 45 mA at $U_i = 19$ V, ≤ 31 mA at $U_i = 30$ V with shorted output ≤ 14 mA at $U_i = 19$ V, ≤ 11 mA at $U_i = 30$ V no load at output
Inrush current		≤ 200 mA after 100 μs
<b>Output</b>		
Connection		terminals 1+, 2-
Internal resistor	$R_i$	≤ 238 Ω
Current	$I_e$	≤ 45 mA
Voltage	$U_e$	≥ 12 V
Open loop voltage	$U_s$	≥ 22.7 V
Output rated operating current		45 mA
Output signal		These values are valid for the rated operating voltage 19 ... 30 V DC.
Energized/De-energized delay		single operation: typ. 1.7 ms/50 μs; periodical: typ. 5 μs/50 μs
<b>Electrical isolation</b>		
Input/Output		reinforced insulation acc. to EN 50178, rated insulation voltage 300 V <sub>eff</sub>
<b>Directive conformity</b>		
Electromagnetic compatibility		
Directive 2004/108/EC		EN 61326-1:2013 (industrial locations)
<b>Conformity</b>		
Electromagnetic compatibility		NE 21
Degree of protection		IEC 60529
Protection against electrical shock		UL 61010-1
<b>Ambient conditions</b>		
Ambient temperature		-20 ... 60 °C (-4 ... 140 °F)
<b>Mechanical specifications</b>		
Degree of protection		IP20
Mass		approx. 100 g
Dimensions		12.5 x 114 x 119 mm (0.5 x 4.5 x 4.7 in) , housing type A2
Mounting		on 35 mm DIN mounting rail acc. to EN 60715:2001
<b>Data for application in connection with Ex-areas</b>		
EC-Type Examination Certificate		BASEEFA 06 ATEX 0170 , for additional certificates see <a href="http://www.pepperl-fuchs.com">www.pepperl-fuchs.com</a>
Group, category, type of protection		⊕ II (1)G [Ex ia Ga] IIC , ⊕ II (1)D [Ex ia Da] IIIC , ⊕ I (M1) [Ex ia Ma] I
Output		[Ex ia Ga] IIC, [Ex ia Da] IIIC, [Ex ia Ma] I
Voltage	$U_o$	25.2 V
Current	$I_o$	110 mA
Power	$P_o$	693 mW
<b>Input</b>		
Maximum safe voltage	$U_m$	250 V (Attention! The rated voltage can be lower.)
<b>Statement of conformity</b>		
Group, category, type of protection, temperature class		⊕ II 3G Ex nA IIC T4 Gc
<b>Electrical isolation</b>		
Input/Output		safe electrical isolation acc. to IEC/EN 60079-11, voltage peak value 375 V
<b>Directive conformity</b>		
Directive 94/9/EC		EN 60079-0:2012+A11:2013 , EN 60079-11:2012 , EN 60079-15:2010
<b>International approvals</b>		
<b>FM approval</b>		
Control drawing		16-533FM-12 (cFMus)
<b>UL approval</b>		
Control drawing		16-533UL-12 (cULus)
<b>IECEX approval</b>		
Approved for		[Ex ia Ga] IIC, [Ex ia Da] IIIC, [Ex ia Ma] I
<b>General information</b>		
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 <a href="http://www.pepperl-fuchs.com">www.pepperl-fuchs.com</a> .

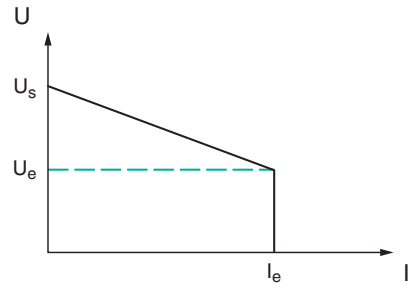
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Output characteristics

Output circuit diagram



Output characteristic



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