

## 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

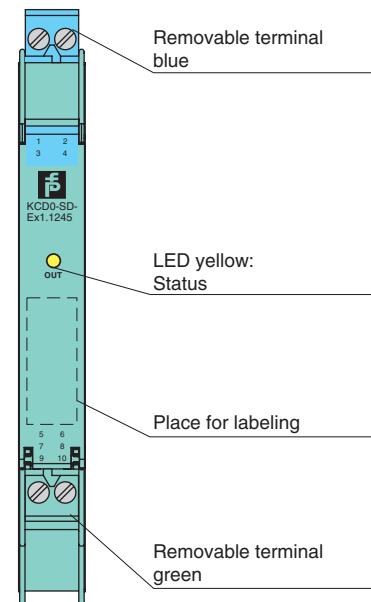
This isolated barrier is used for intrinsic safety applications. It supplies power to solenoids, LEDs, and audible alarms located in a hazardous area.

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.

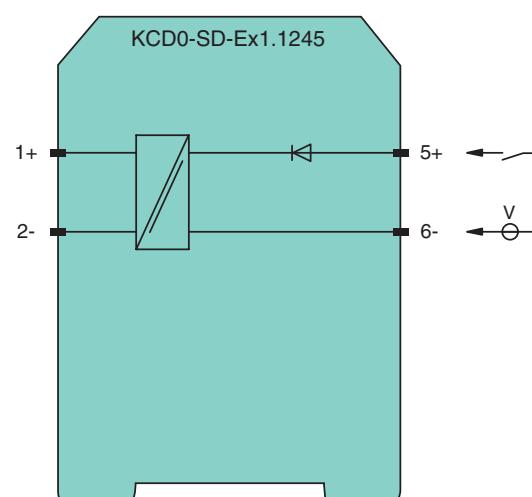
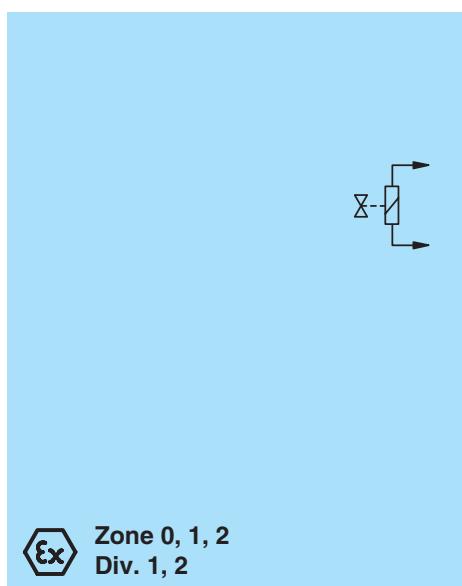
## Assembly

Front view



SIL3

## Connection

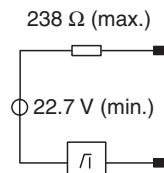


Zone 2  
Div. 2

General specifications	
Signal type	Digital output
Supply	
Connection	loop powered
Power loss	< 1 W
Input	
Connection	terminals 5, 6
Rated voltage $U_i$	19 ... 30 V DC
Current	72 mA at 19 V input voltage and 265 $\Omega$ output load 50 mA at 30 V input voltage and 265 $\Omega$ output load
Output	
Internal resistor	$\leq 238 \Omega$
Limit	Current $I_E: \geq 45$ mA voltage $U_E: \geq 12$ V
Open loop voltage	$\geq 22.7$ V
Connection	terminals 1+, 2-
Output rated operating current	45 mA
Output signal	These values are valid for the rated operational voltage 19 ... 30 V DC.
Energized/De-energized delay	single operation: 300 $\mu$ s / 50 $\mu$ s; periodical: 5 $\mu$ s / 50 $\mu$ s
Indicators/settings	
Labeling	space for labeling at the front
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	12.5 x 114 x 119 mm (0.5 x 4.5 x 4.7 in), housing type A2
Data for application in connection with Ex-areas	
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)GD [Ex ia] IIC; [Ex iaD] [circuit(s) in zone 0/1/2/20/21/22]  I (M1) [Ex ia] I
Output	Ex ia IIC, Ex iaD
Voltage $U_o$	25.2 V
Current $I_o$	110 mA
Power $P_o$	693 mW
Type of protection [EEx ia]	
Input	
Maximum safe voltage $U_m$	250 V (Attention! The rated voltage can be lower.)
Statement of conformity	Pepperl+Fuchs
Group, category, type of protection, temperature classification	 II 3G Ex nA II T4 X
Electrical isolation	safe galvanic isolation acc. to EN 50020, voltage peak value 375 V
Input/Output	
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	16-533FM-12 (cFMus)
UL approval	
Control drawing	16-533UL-12 (cULus)
IECEx approval	
Approved for	[Ex ia] IIC , [Ex ia] I
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 <a href="http://www.pepperl-fuchs.com">www.pepperl-fuchs.com</a> .

## Notes

## Output circuit diagramm



## Output characteristic for input voltage

19 V ... 30 V

E: Curve angle point ( $U_E$ ,  $I_E$ )