



- 1-channel
- Output field circuit Ex ia IIC
- Device installation permissible in zone 2
- Up to SIL3 acc. to IEC 61508 in preparation

Current limit 45 mA

KCD0-SD-Ex1.1245

Function

The device receives its power supply from the applied input signal.

At full load (45 mA), the available output voltage at the terminals is at least 12 V.

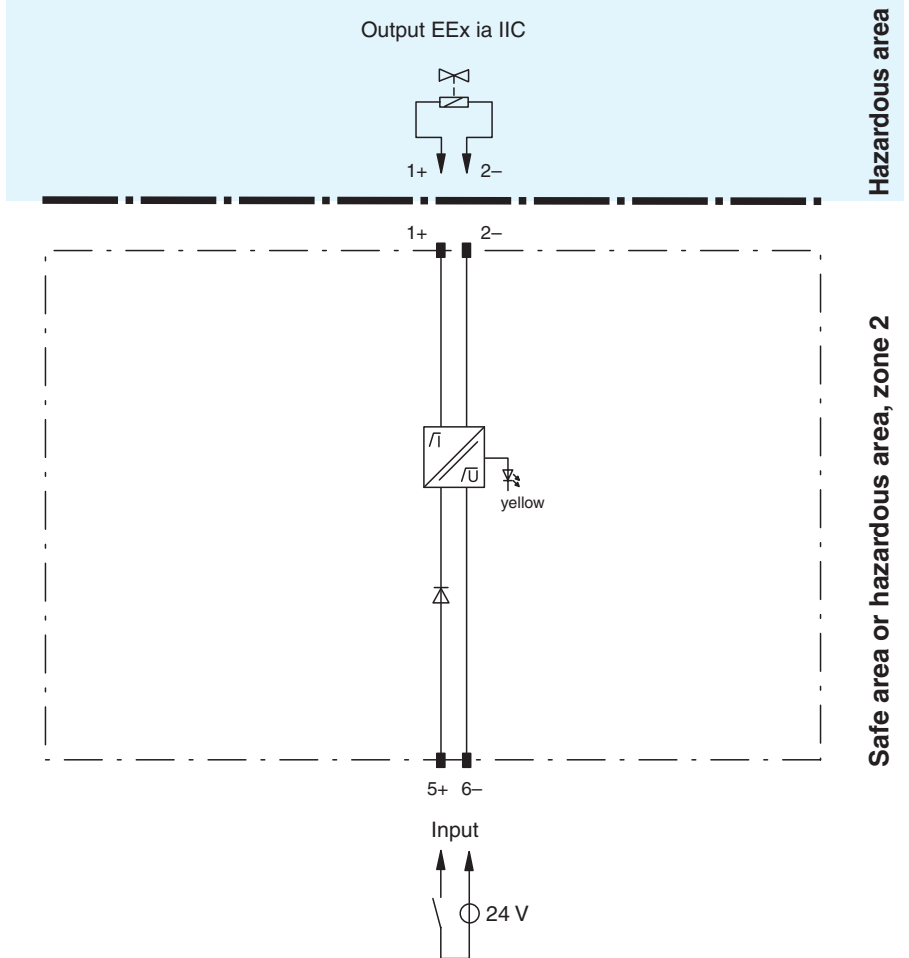
The output voltage and the output current are dependent on the load.

The input and output are galvanically isolated from each other.

Application

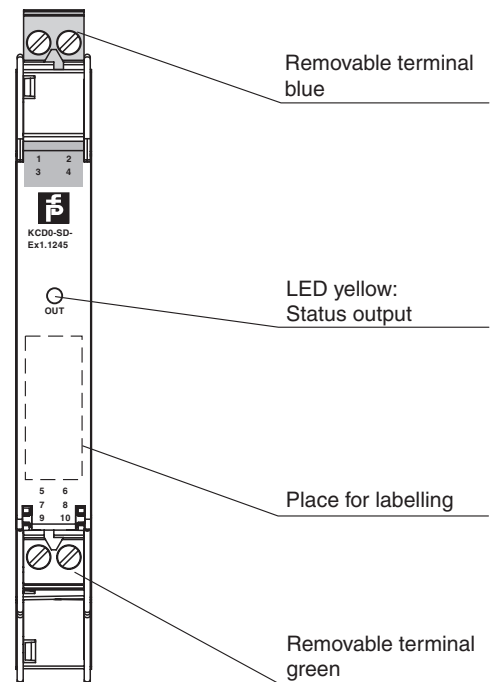
Control/supply for intrinsically safe valves, audible alarms, displays etc.

Connection



Composition

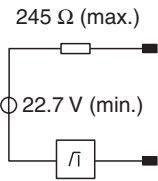
Front view



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 Ω output load 50 mA at 30 V input voltage and 265 Ω output load
Output	
Internal resistor	$\leq 245 \Omega$
Limit	current I_o : ≥ 45 mA voltage U_o : ≥ 12 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 19 ... 30 V DC
Energized/de-energized delay	single operation: 300 μ s; periodical: 5 μ s / 50 μ s
Indicators/settings	
Labelling	place for labelling on the front side
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	12.5 x 114 x 112 mm (0.5 x 4.5 x 4.4 in)
Data for application in conjunction with hazardous areas	
EC-Type Examination Certificate	BASEEFA 06 ATEX 0170 , for additional certificates see www.pepperl-fuchs.com
Group, category, type of protection	 II (1)GD [Ex ia] IIC; [Ex ia D] [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]	
Explosion group	I IIA IIB IIC
External capacitance	4.15 μ F 2.9 μ F 0.82 μ F 0.107 μ F
External inductance	38.56 mH 23.51 mH 11.75 mH 2.94 mH
Input	
Safety maximum voltage U_m	250 V (Attention! The rated voltage can be lower.)
Statement of conformity	
Group, category, type of protection, temperature classification	 II 3G Ex nA II T4 X
Electrical isolation	
Input/output	safe electrical 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
General information	
Supplementary information	EC-Type Examination Certificate, Statement of Conformity, Declaration of Conformity and instructions have to be observed. For information see www.pepperl-fuchs.com .

Notes

Output circuit diagramm



Output characteristic for input voltage
19 V ... 30 V
E: Curve angle point (U_E , I_E)

