

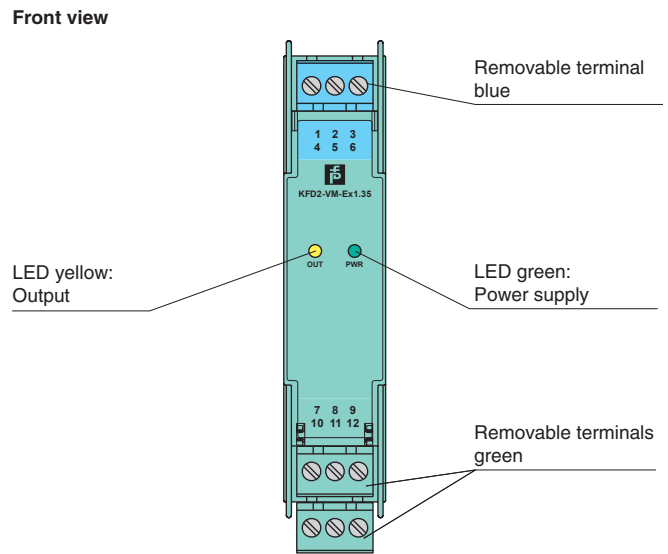
Features

- 1-channel isolated barrier
- 24 V DC supply (Power Rail)
- Output 15.3 V DC at 17 mA
- 2 logic inputs with OR logic

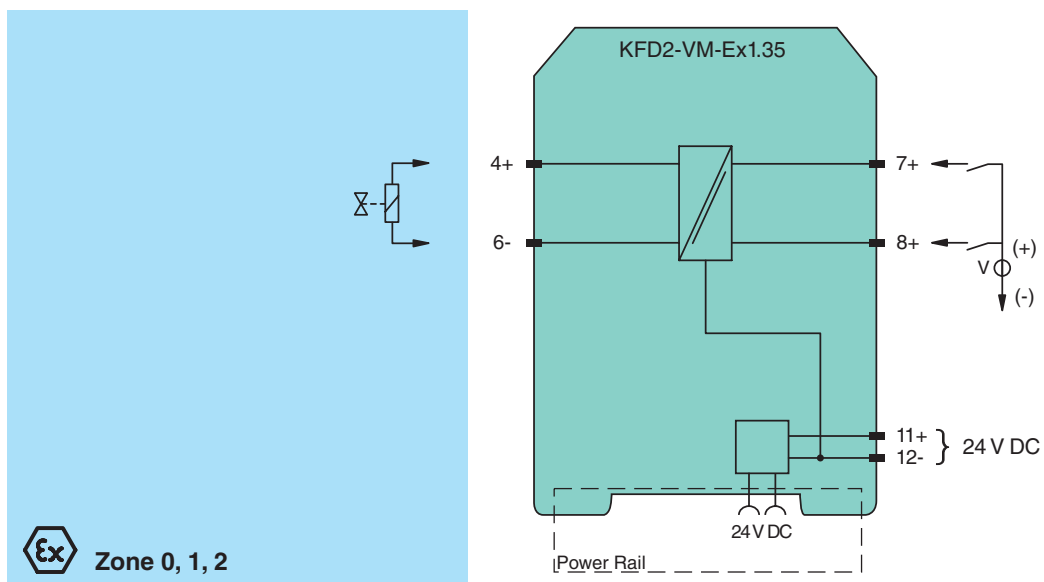
Function

This isolated barrier is used for intrinsic safety applications. It supplies power to solenoids and other similar loads. It is controlled by two "OR" configured logic inputs. At full load, 15.3 V at 17 mA is available for the hazardous area load. The output signal has a resistive characteristic.


Assembly



Connection



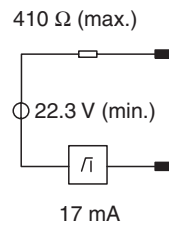
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General specifications	
Signal type	Digital output
Supply	
Connection	Power Rail or terminals 11+, 12-
Rated voltage	20 ... 30 V DC
Ripple	≤ 10 %
Rated current	≤ 52 mA
Power loss	typ. 1.2 W
Power consumption	< 1.5 W
Input	
Connection	terminals 7+, 8+
Signal level	1-signal: 15 ... 30 V DC ; input current: approx. 2.3 mA at 24 V DC 0-signal: 0 ... 5 V DC or open input
Response delay	5 ... 30 ms (typical 10 ms)
Output	
Internal resistor	≤ 410 Ω
Limit	Current I_E : ≥ 17 mA; typ. 18 mA voltage U_E : ≥ 15.3 V; typ. 16 V
Open loop voltage	≥ 22.3 V
Connection	terminals 4+, 6-
Output rated operating current	17 mA
Output signal	these values are valid for rated operational voltages from 20 ... 30 V DC
Transfer characteristics	
Switching frequency	15 Hz
Electrical isolation	
Input/power supply	not available
Directive conformity	
Electromagnetic compatibility	
Directive 89/336/EEC	EN 61326, EN 50081-2
Conformity	
Electromagnetic compatibility	NE 21
Protection degree	IEC 60529
Ambient conditions	
Ambient temperature	-25 ... 60 °C (-13 ... 140 °F)
Mechanical specifications	
Protection degree	IP20
Mass	approx. 150 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	PTB 00 ATEX 2132 , for additional certificates see www.pepperl-fuchs.com
Group, category, type of protection	 II (1)GD [EEx ia] IIC [circuit(s) in zone 0/1/2]
Output	EEx ia IIC
Voltage U_o	25.2 V DC
Current I_o	67.2 mA
Power P_o	423.5 mW (linear characteristic)
Supply	
Maximum safe voltage U_m	253 V AC / 125 V DC (Attention! U_m is no rated voltage.)
Input	
Maximum safe voltage U_m	60 V (Attention! The rated voltage can be lower.)
Electrical isolation	
Input/Output	safe galvanic isolation acc. to EN 50020, voltage peak value 375 V
Output/power supply	safe galvanic isolation acc. to EN 50020, voltage peak value 375 V
Directive conformity	
Directive 94/9/EC	EN 50014, EN 50020
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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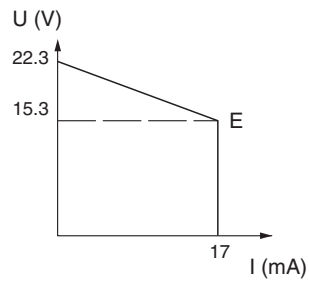
Notes

Output circuit diagram



Output characteristic for input voltage 20 V ... 30 V

E: Curve angle point (U_E, I_E)



Accessories

Power feed module KFD2-EB2

The power feed module is used to supply the devices with 24 V DC via the Power Rail. The fuse-protected power feed module can supply up to 100 individual devices depending on the power consumption of the devices. A galvanically isolated mechanical contact uses the Power Rail to transmit collective error messages.

Power Rail UPR-03

The Power Rail UPR-03 is a complete unit consisting of the electrical inset and an aluminium profile rail 35 mm x 15 mm. To make electrical contact, the devices are simply engaged.

Profile Rail K-DUCT with Power Rail

The profile rail K-DUCT is an aluminum profile rail with Power Rail insert and two integral cable ducts for system and field cables. Due to this assembly no additional cable guides are necessary.



Power Rail and Profile Rail must not be fed via the device terminals of the individual devices!