



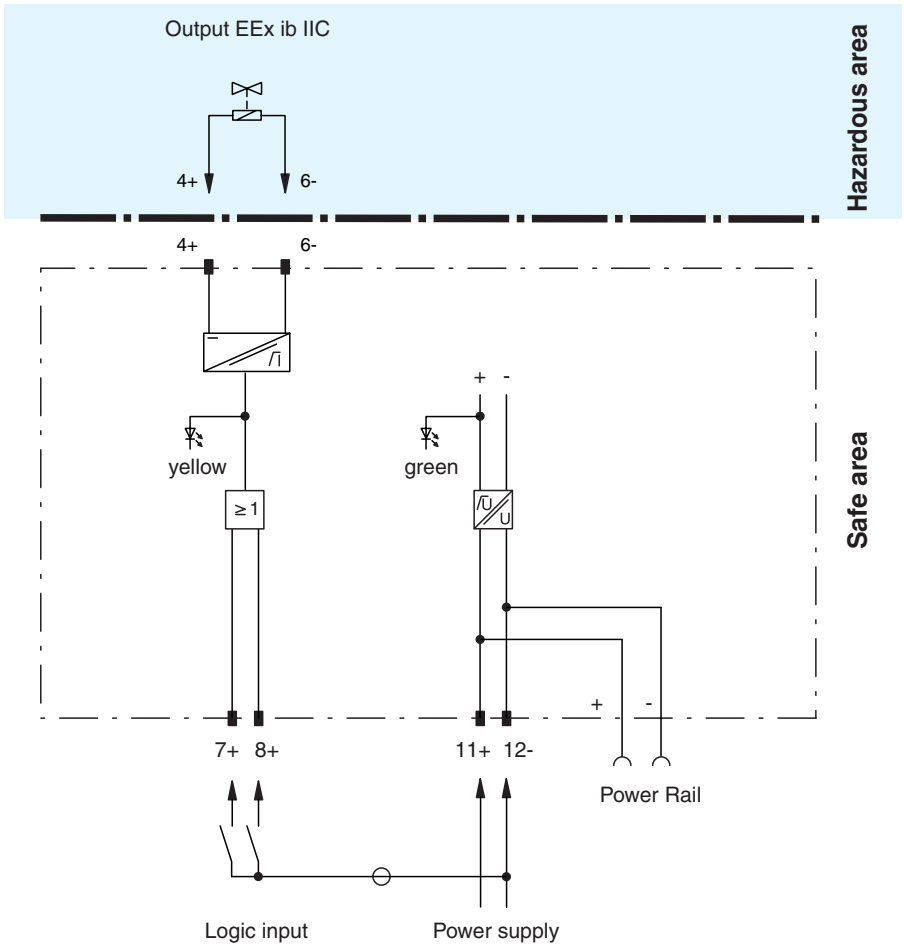
- 1-channel
- 2 logic inputs
- Output EEx ib IIC
- 24 V DC nominal supply voltage
- LED signalling of the switch state
- EMC acc. to NAMUR NE 21

**Output 14 V
KFD2-VM-Ex1.32**

Function

The logic control units have two logic inputs which are combined internally across an OR gate. The differences between the devices may be found in the technical data. The output acts as a proportional supply in the range of open circuit to the curve angle point and is galvanically isolated from the input and the power supply per EN 50020.

Connection



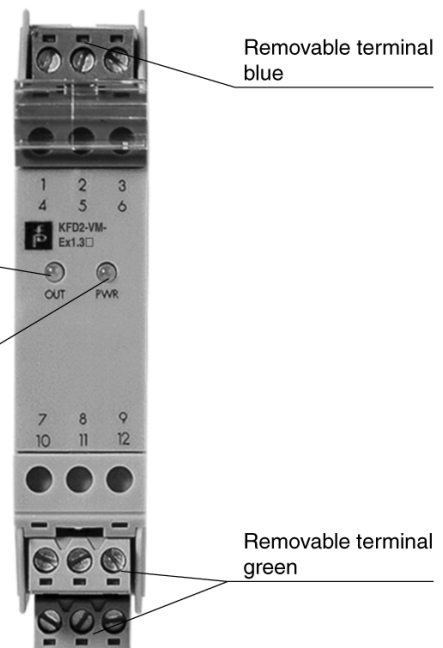
Composition

Front View

Housing type A2
(see system description)

LED yellow:
Output

LED green:
Power supply



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Supply	
Connection	Power Rail or terminals 11+, 12-
Rated voltage	20 ... 30 V DC
Ripple	≤ 10 %
Rated current	approx. 40 mA
Power loss	0.9 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	≤ 205 Ω
Limit	current I_E : ≥ 21 mA typ. 22 mA voltage U_E : ≥ 9.7 V typ. 10 V
Open circuit voltage	≥ 14 V
Connection	terminals 4+, 6-
Output rated operating current	21 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	standards
Directive 89/336/EEC	EN 61326, EN 50081-2, NE 21
Standard conformity	
Climatic conditions	acc. to DIN IEC 721
Ambient conditions	
Ambient temperature	-25 ... 60 °C (248 ... 333 K)
Mechanical specifications	
Protection degree	IP20
Mass	approx. 150 g
Data for application in conjunction with hazardous 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	15.8 V DC
Current I_o	86.1 mA
Power P_o	338.8 mW (linear characteristic)
Supply	
Safety maximum voltage U_m	253 V AC / 125 V DC (Attention! U_m is no rated voltage.)
Input	
Safety maximum voltage U_m	60 V (Attention! The rated voltage can be lower.)
Electrical isolation	
Input/output	safe electrical isolation acc. to EN 50020, voltage peak value 375 V
Output/power supply	safe electrical isolation acc. to EN 50020, voltage peak value 375 V
Directive conformity	
Directive 94/9/EC	EN 50014, EN 50020

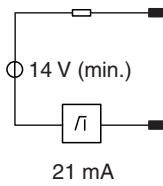
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Notes

Output circuit diagramm

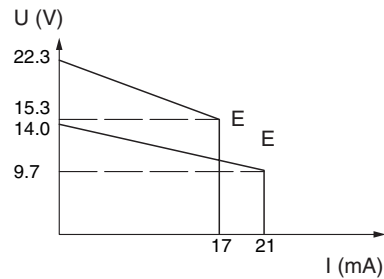
KFD2-VM-Ex1.32

205 Ohm (max.)



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

E: Curve angle point (U_E, I_E)



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.

Accessories

Power Rail PR-03

Power Rail UPR-03

Power feed module KFD2-EB2...

Using Power Rail PR-03 or UPR-03 the devices are supplied with 24 V DC by means of the power feed modules. If no Power Rails are used, power supply of the individual devices is possible directly via their device terminals.

Each power feed module is used for fusing and monitoring groups with up to 100 individual devices. The Power Rail PR-03 is an inset component for the DIN rail. The Power Rail UPR-03 is a complete unit consisting of the electrical inset and an aluminium profile rail 35 mm x 15 mm x 2000 mm. To make electrical contact, the devices are simply engaged.

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