



- 1-channel
- Output EEx ib IIC
- 24 V DC supply voltage
- Logic input to switch the field voltage
- LED signalling of the switch state

**Output 15 V, 60 mA**  
**KFD2-VD-Ex1.1560**

**Function**

The model has two logic inputs. Both inputs are isolated from the power supply. The field devices are controlled over these logic inputs.

Voltage signals in a range of 15 V DC ... 35 V DC are accepted as logic "1". Logic "0" must be within the range of 0 V DC... 5 V DC. Both inputs are combined internally by means of an OR gate.

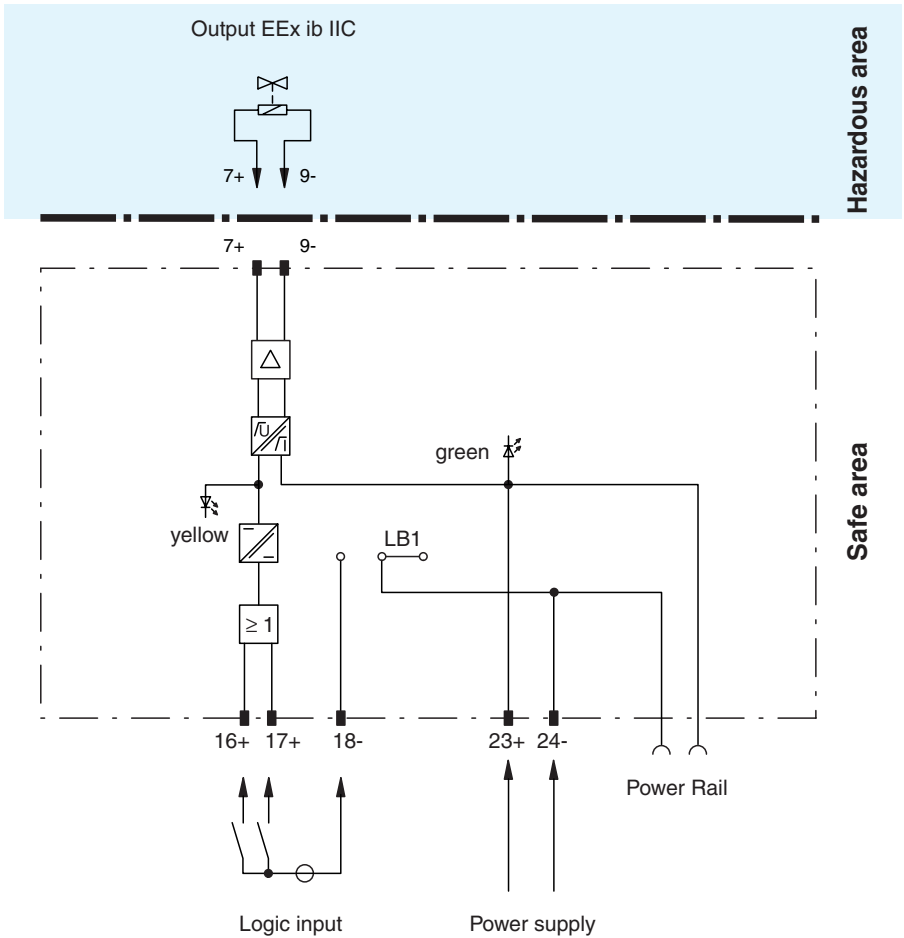
The outputs are limited to 17 V DC, 65 mA.

The output, logic input and power supply are galvanically isolated from each other. Via the solder bridge LB1 the logic input and the power supply can be connected.

**Application**

Control/Supply for intrinsically safe valves, audible alarms, LEDs etc. Especially suited for the control of solenoid drivers from Herion, Seitz, Honeywell-Lucifer, Asco, Telektron, RGS and Maxseal.

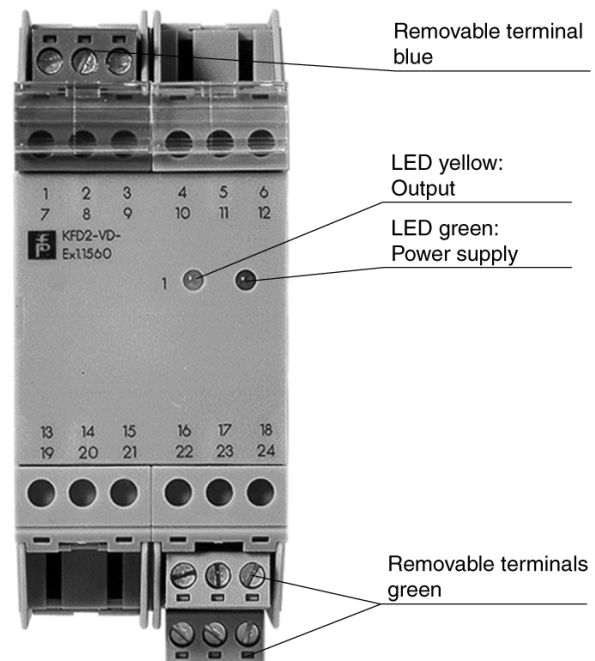
**Connection**



**Composition**

**Front View**

Housing type B2  
 (see system description)



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<b>Supply</b>	
Connection	Power Rail or terminals 23+, 24-
Rated voltage	20 ... 35 V DC
Ripple	< 10 %
Rated current	approx. 120 mA at 20 V DC rated operational voltage approx. 90 mA at 35 V DC rated operational voltage
Power loss	2.1 W
<b>Input</b>	
Connection	terminals 16+, 17+, 18-
Signal level	1-signal: 15 ... 35 V 0-signal: 0 ... 5 V input current: approx. 5 mA at 24 V DC
<b>Output</b>	
Internal resistor	0 Ω
Limit	current $I_o$ : ≥ 60 mA voltage $U_o$ : 15 V
Open loop voltage	≥ 15 V
Connection	terminals 7+, 9-
Output rated operating current	60 mA
Output signal	these values are valid for the rated operational voltage 20 ... 35 V DC
<b>Electrical isolation</b>	
Input/power supply	function insulation acc. to EN 50178, rated insulation voltage 50 V <sub>eff</sub>
<b>Directive conformity</b>	
Electromagnetic compatibility	
Directive 89/336/EC	EN 61326, EN 50081-2
<b>Conformity</b>	
Electromagnetic compatibility	NE 21
Protection degree	IEC 60529
<b>Ambient conditions</b>	
Ambient temperature	-25 ... 60 °C (248 ... 333 K)
<b>Mechanical specifications</b>	
Protection degree	IP20
Mass	approx. 150 g
Dimensions	40 x 100 x 115 mm (1.6 x 3.9 x 4.5 in)
<b>Data for application in conjunction with hazardous areas</b>	
EC-Type Examination Certificate	PTB 00 ATEX 2205 , for additional certificates see <a href="http://www.pepperl-fuchs.com">www.pepperl-fuchs.com</a>
Group, category, type of protection	Ⓧ II (2)GD [EEx ib] IIC [circuit(s) in zone 1/2]
Output	EEx ib IIC
Voltage $U_o$	17.2 V
Current $I_o$	65 mA
Power $P_o$	1110 mW (characteristic curve rectangular type)
<b>Supply</b>	
Safety maximum voltage $U_m$	40 V (Attention! The rated voltage can be lower.)
<b>Type of protection [EEx ib]</b>	
Explosion group	IIB      IIC
External capacitance	see EC-Type Examination Certificate
External inductance	see EC-Type Examination Certificate
<b>Input</b>	
Safety maximum voltage $U_m$	60 V (Attention! The rated voltage can be lower.)
<b>Electrical isolation</b>	
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
<b>Directive conformity</b>	
Directive 94/9 EC	EN 50014, EN 50020

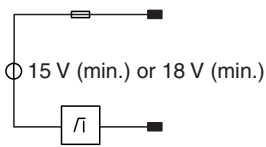
**Supplementary information**

EC-Type Examination Certificate, Statement of Conformity, Declaration of Conformity and instructions have to be observed. For information see [www.pepperl-fuchs.com](http://www.pepperl-fuchs.com).

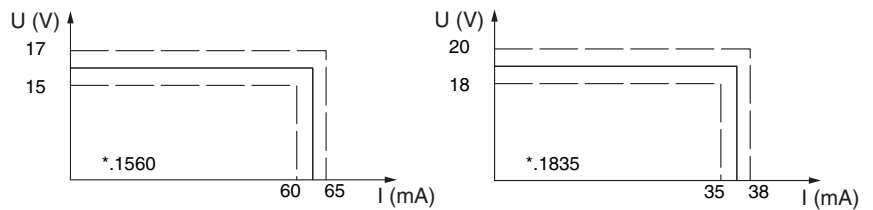
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Notes

Output circuit diagram



Output characteristic for input voltage  
20 V ... 35 V



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!**