



Output 18 V, 35 mA

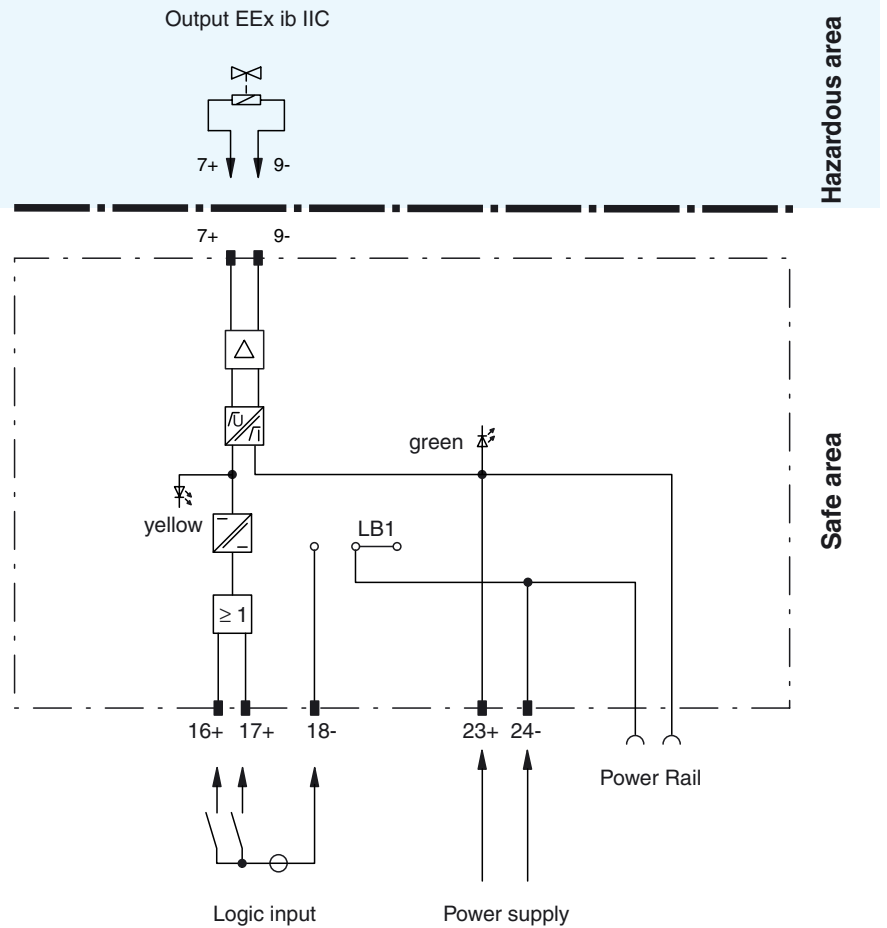
- 1-channel
- Output EEx ib IIC
- 24 V DC nominal supply voltage
- Logic input for connection and disconnection
- Signalling of the switch state

Function

The models each have two logic inputs that are isolated from the power supply. The field devices are controlled over these logic inputs. Voltage signals in a range of DC 15 V ... 35 V are accepted as Logic-1. Logic-0 must lie within the range of DC 0 V ... 5 V. Both inputs are combined internally by means of an OR gate. The outputs are limited to DC 17 V, 65 mA (KFD2-VD-Ex1.1560) or DC 20 V, 38 mA (KFD2-VD-Ex1.1835). The output, logic input and power supply are galvanically isolated from each other. The galvanic isolation between the logic input and power supply can be accomplished with solder bridge LB1.

Application

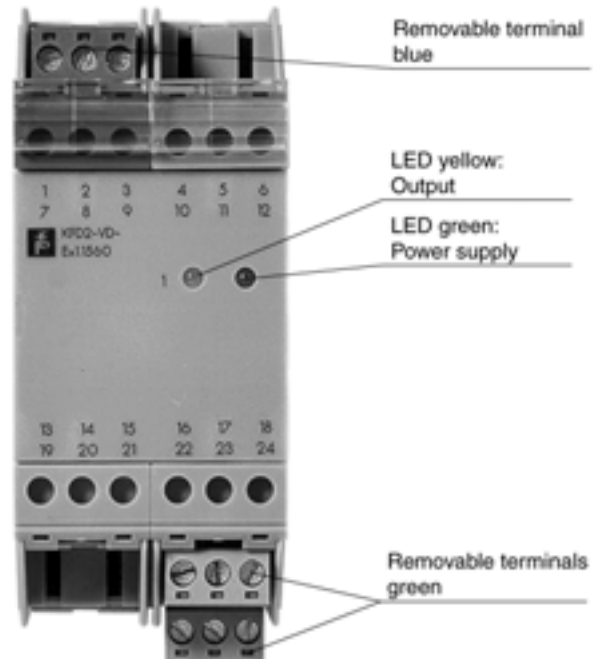
Control/Supply for intrinsically safe valves, audible alarms, LEDs etc. Especially suited for the control of solenoid drivers from Herion, Seitz, Honeywell-Lucifer, Asco, Telektron, RGS and Maxseal.



Composition

Front View

Housing type A3
(see system description)



Supply	
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
Input	
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
Output	
Internal resistor	0 Ω
Limit	current I_E : ≥ 35 mA voltage U_E : 18 V
Open loop voltage	≥ 18 V
Connection	terminals 7+, 9-
Output rated operating current	35 mA
Output signal	These values are valid for the rated operational voltage 20 ... 35 V DC.
Electrical isolation	
Input/Power supply	function insulation acc. to DIN EN 50178, rated insulation voltage 50 V _{eff}
Directive conformity	
Electromagnetic compatibility	
Directive 89/336/EC	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 2205 , for additional certificates see www.pepperl-fuchs.com
Group, category, type of protection	⊕ II (2) G D [EEx ib] IIC [circuit(s) in zone 1/2]
Output	EEx ib IIC
Voltage U_0	20,1 V
Current I_0	38 mA
Power P_0	765 mW (characteristic curve rectangular type)
Supply	
Safety maximum voltage U_m	40 V (Attention! The rated voltage can be lower)
Type of protection [EEx ib]	
Explosion group	IIB IIC
External capacitance	690 nF 140 nF
External inductance	5 mH 0,26 mH
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

Notes



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

PR-03 Power Rail

UPR-03 Power Rail

KFD2-EB2 power feed module

The devices are supplied with 24 V DC through the KFD2-EB2 power feed module and the PR-03 or the UPR-03 Power Rail. Each power feed module monitors and provides protection for groups of as many as 100 individual devices. The PR-03 Power Rail is an insert component for the DIN rail. The UPR-03 Power Rail is a complete unit consisting of an electrical insert and an aluminium DIN rail measuring 35 mm x 15 mm x 2000 mm. The devices are simply snapped in place to make electrical contact.

If a Power Rail is not being used, power can be supplied to the devices directly through the device terminals.