



- 1-channel
- Output EEx ia IIC
- 24 V DC nominal supply voltage
- Logic input for connection and disconnection
- Usable up to SIL2 acc. to IEC 61508

Current limit 35 mA
KFD2-SL-Ex1.36

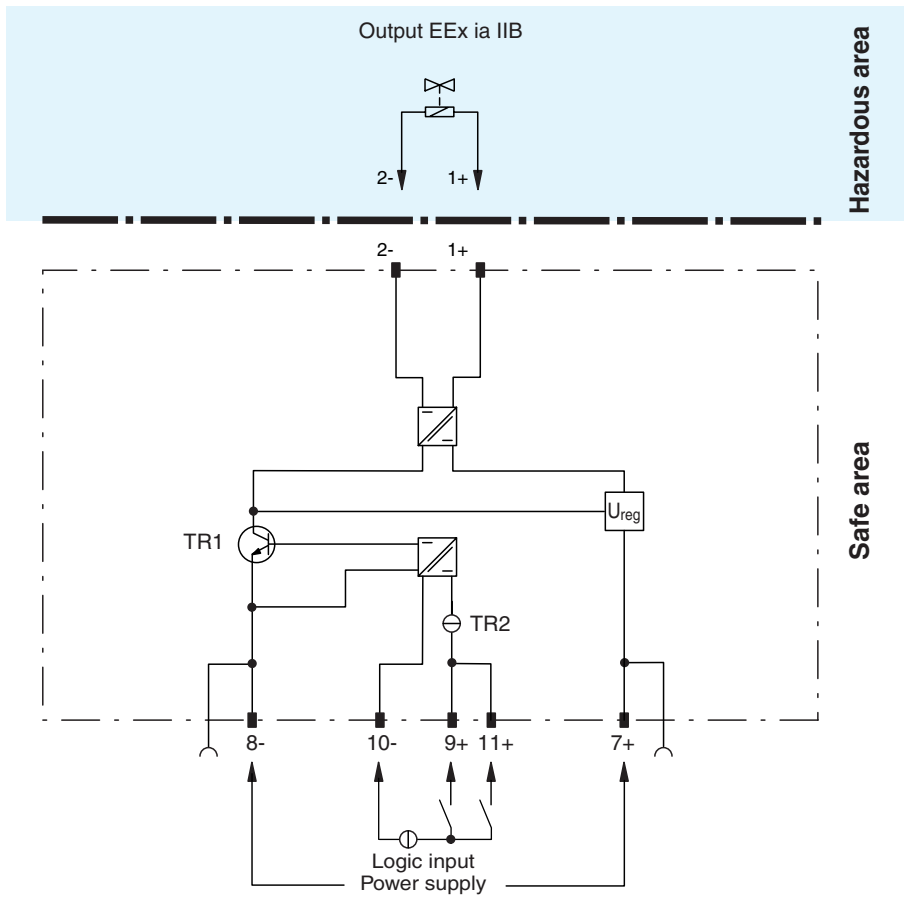
Function

The KFD2-SL-Ex1.36 solenoid driver contains a logic input, isolated from the power supply, which controls the hazardous field device (valve). Power is supplied through terminals 7 and 8 or Power Rail. Voltage applied to terminals 7 and 8 is transferred to terminals 1 and 2 by a DC/DC converter. This function can be controlled by a low voltage logic circuit, computer output or relay contact. For supply voltages up to 25V, the open circuit output voltage is approximately equal to the supply voltage. The resistance of the output circuit is about 160 Ohms and the output current is limited to 80 mA. For supply voltages above 25 V, the zener diodes begin to conduct, limiting the output voltage; any part of the 80 mA not used in the field is carried by the zener diodes.

Application

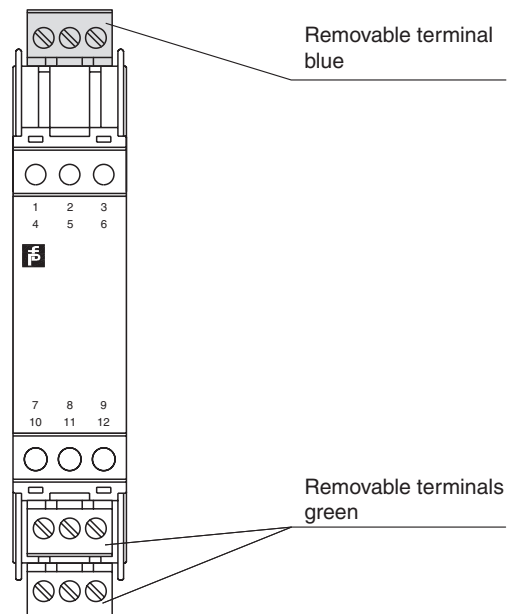
Control/ supply for intrinsically safe valves, audible alarms, indicators etc.

Connection



Composition

Front view



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Supply	
Connection	Power Rail or terminals 7+, 8-
Rated voltage	20 ... 35 V DC
Rated current	approx. 90 mA at 65mA output current
Input	
Connection	terminals 9+, 10-, 11+
Input current	≤ 1 mA
Signal level	1-signal: 3.6 ... 35 V DC 0-signal: 0 ... 2 V DC
Safety maximum voltage U_m	250 V
Output	
Internal resistor	approx. 160 Ohm
Open circuit voltage	24 V DC
Connection	terminals 1+, 2-
Output rated operating current	≤ 80 mA
Electrical isolation	
Input/output	safe electrical isolation acc. to EN 50020, voltage peak value 375 V
Input/power supply	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	
Electromagnetic compatibility	
Directive 89/336/EEC	EN 61326, EN 50081-2
Conformity	
Insulation coordination	EN 50178
Electrical isolation	EN 50178
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	20 x 107 x 115 mm (0.8 x 4.2 x 4.5 in) , housing type B1
Data for application in conjunction with hazardous areas	
EC-Type Examination Certificate	BASEEFA No. Ex 94C2427 ; for additional certificates see www.pepperl-fuchs.com
Group, category, type of protection	⊕ II (1)GD [Ex ia] IIC (-20 °C ≤ T _{amb} ≤ 60 °C)
Voltage U_o	28 V
Current I_o	185.5 mA
Power P_o	1.3 W
Supply	
Safety maximum voltage U_m	40 V DC
Type of protection [Ex ia]	
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, EN 50021
General information	
Supplementary information	EC-Type Examination Certificate, Statement of Conformity, Declaration of Conformity and instructions have to be observed where applicable. For information see www.pepperl-fuchs.com .

Accessories

Power feed modules 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.

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