### **Features**

- 2-channel isolated barrier
- 24 V DC supply (loop powered)
- Current limit 45 mA at 10 V DC
- Up to SIL 3 acc. to IEC 61508

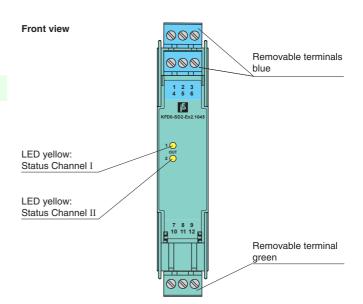
### **Function**

This isolated barrier is used for intrinsic safety applications. It supplies power to solenoids, LEDs, and audible alarms located in a hazardous area.

It is loop powered, so the available energy at the output is received from the input signal. The output signal has a resistive characteristic. As a result the output voltage and current are dependent on the load and the input voltage.

At full load, 10 V at 45 mA is available for the hazardous area application.

# **Assembly**

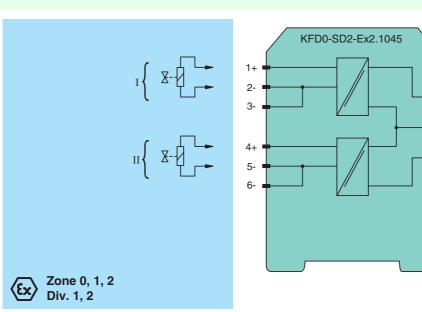






**SIL** 3

#### Connection

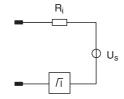


Consuel anneifications		
General specifications		Dishal O days
Signal type		Digital Output
Functional safety related parameters		011.0
Safety Integrity Level (SIL)		SIL 3
Supply		
Rated voltage	U <sub>r</sub>	loop powered
Power dissipation		< 1.05 W (≤ 30 V) per channel
Input		
Connection side		control side
Connection		terminals 7, 8; 8, 9
Rated voltage	U <sub>r</sub>	20 35 V DC
Current		72 mA at 20 V input voltage, load = 220 $\Omega$ 50 mA at 35 V input voltage, load = 220 $\Omega$
Inrush current		≤ 200 mA after 100 μs
Output		
Connection side		field side
Connection		terminals 1+, 2-; 4+, 5-
Internal resistor	$R_i$	≤ 282 Ω
Current	l <sub>e</sub>	≤ 45 mA
Voltage	Ü <sub>e</sub>	≥ 10 V
Open loop voltage	Us	≥ 22.7 V
Output rated operating current		45 mA
Output signal		These values are valid for the rated operating voltage 20 35 V DC.
Energized/De-energized delay		single operation: typ. 1.7 ms/50 µs; periodical: typ. 5 µs/50 µs
Indicators/settings	,	- 2 branches
Display elements		LEDs
Labeling		space for labeling at the front
Directive conformity		opaso is: lassing at the north
Electromagnetic compatibility		
Directive 2014/30/EU		EN 61326-1:2013 (industrial locations)
Conformity		EN 01020-1.2010 (industrial locations)
Electromagnetic compatibility		NE 21:2006
Degree of protection		IEC 60529:2001
Protection against electrical shock		UL 61010-1:2004
Ambient conditions		OL 61010-1.2004
		00 0000/4 44005
Ambient temperature		-20 60 °C (-4 140 °F)
Mechanical specifications		
Degree of protection		IP20
Connection		screw terminals
Mass		approx. 100 g
Dimensions		20 x 107 x 115 mm (0.8 x 4.2 x 4.5 inch) , housing type B1
Mounting		on 35 mm DIN mounting rail acc. to EN 60715:2001
Data for application in cor with hazardous areas		
EU-Type Examination Certifi	icate	BASEFA 06 ATEX 0252
Marking		(£x) II (1)G [Ex ia Ga] IIC, II (1)D [Ex ia Da] IIIC, I (M1) [Ex ia Ma] I (-20 °C ≤ T <sub>amb</sub> ≤ 60 °C)
Voltage	$U_{o}$	25.2 V
Current	I <sub>o</sub>	93 mA
Power	$P_{o}$	590 mW
Input		
Maximum safe voltage	U <sub>m</sub>	250 V (Attention! The rated voltage can be lower.)
Certificate		TÜV 99 ATEX 1499 X
Marking Galvanic isolation		(x) II 3G Ex nA II T4 [device in zone 2]
Input/Output		safe electrical isolation acc. to IEC/EN 60079-11, voltage peak value 375 V
Directive conformity		oute discussion accit to it of the outer of the voltage peak value 3/3 v
Directive conformity Directive 2014/34/EU		EN 60079-0:2012+A11:2013 , EN 60079-11:2012 , EN 60079-15:2010
		LIN 0007 0-0.2012TA11.2010 , LIN 0007 3-11.2012 , EIN 0007 3-13.2010
International approvals		
FM approval		110,0000
Control drawing		116-0309
UL approval		//a aara / III .
• •		
Control drawing		116-0316 (cULus)
• •		116-0316 (cULus) IECEx BAS 06.0058



# **Output characteristics**

## **Output circuit diagram**



## **Output characteristic**

