



- Signal transmission to 5 kHz
- Single channel
- Control circuit EEx ia IIC
- Reversible mode of operation
- Narrow design
- Standard rail mounting
- Protection IP 20



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**Model:**  
 KFD2-ST2-  
 Ex1.LB

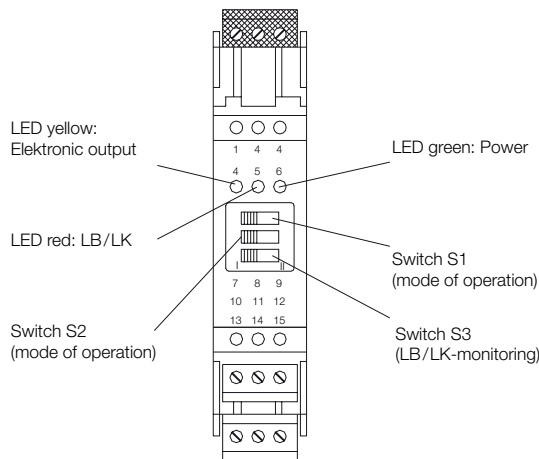


**Description**

The isolation switching amplifier transmits pulse signals of up to 5 kHz from hazardous areas. Sensors according to NAMUR or mechanical contacts may be used as signal transmitters. The control circuit is monitored for line interruption (LB) and line short-circuit (LK). The input is safely isolated from the output and mains according to DIN EN 50 020.

The devices are fitted with detachable terminals that greatly simplify installation.

**Front view**



**Order Details** (Example: KFD2-ST2-Ex1.LB)

Description	Order no.
Isolation switching amplifier, 1-channel, pulse signals to 5 kHz, supply 24 V <sub>DC</sub>	<b>KFD2-ST2-Ex1.LB</b>

**Technical Details**

Auxiliary power  
 Nominal voltage: 20...30 V<sub>DC</sub>  
 Maximum voltage satisfying safety requirements: 40 V<sub>DC</sub>  
 Ripple factor: ≤ 10%  
 Rated current: ≤ 50 mA

**Input**

*Intrinsically safe according to Namur and EN 60947-5-6*  
 Floating voltage: approximately 8 V<sub>DC</sub>  
 Short-circuit current: approximately 8 mA  
 Switch point: 1.2 - 2.1 mA  
 Switching hysteresis: approximately 0.2 mA  
 Power monitoring: rupture I ≤ 0.1 mA, short-circuit I > 6 mA  
 Ex-protection:  $\text{Ex} \text{II} (1) \text{GD} [\text{EEx ia}] \text{IIC}$

**Maximum values according to certificate of conformity**

Voltage U<sub>0</sub>: 10.5 V  
 Current I<sub>0</sub>: 13 mA  
 Power P<sub>0</sub>: 34 mW

**Allowed connected values**

Protection [EEx ia and EEx ib]			
Explosion category	IIA	IIB	IIC
Exterior capacitance	75 µF	16.8 µF	2.4 µF
Exterior inductivity	1000 mH	740 mH	200 mH

**Output**

*(not intrinsically safe)*

Output I: signal  
 electronic output, active  
 Output II: line interruption  
 electronic output, active

Maximum voltage satisfying safety requirements: 40 V  
 Rated current: 100 mA, short-circuit-proof  
 Disabled output off-state current: I ≤ 10 µA  
 Switched output voltage drop: 3.5 V for 100 mA  
 Acoustic frequency: ≤ 5 kHz  
 Dimensions: 118 x 20 x 115 mm (HxWxD)  
 Protection: IP 20  
 Case material: plastic  
 Ambient temperature: -20 to +60°C  
 Weight: approximately 150 g