

Isolation Switching Amplifier for NAMUR or mechanical contacts



measuring
•
monitoring
•
analyzing

KFD2 KFA5



- Single or Dual Channel
- Control Circuit EEx ia IIC
- Narrow Design
- Standard Rail Mounting
- Protection: IP 20
- 24 V_{DC} or 110 V_{AC} Power
- NAMUR or Dry Contact Inputs
- SPDT Relay Output



Order from: **C A Briggs Company**

622 Mary Street; Suite 101; Warminster, PA 18974

Phone: 267-673-8117 - Fax: 267-673-8118

Sales@cabriggs.com - www.cabriggs.com

Description

The KFD2 and KFA5 isolation switching amplifiers are typically used to transmit signals from hazardous to non-hazardous areas. Sensors in accordance with NAMUR or mechanical contacts can be used as signal inputs. The control circuit is monitored for line interruption (LB) and line short-circuit (LK). The input signal is isolated from both the output and the input power, according to DIN EN 60947-5-6 (NAMUR). Both the output and input power are isolated from each other according to IEC 60529:2001. Both models are fitted with detachable terminals, allowing for a simple installation.



Technical Details

Input (Intrinsically safe according to NAMUR and EN 60947-5-6)

- Floating Voltage:** appx. 8 V_{DC}
- Short-Circuit Current:** appx. 8 mA
- Switch Point:** 1.2...2.1 mA
- Switching Hysteresis:** appx. 0.2 mA
- Input Pulse Length:** ≥ 20 ms
- Input Interpulse Period:** ≥ 20 ms
- Power Monitoring:** rupture I ≤ 0.1 mA
short-circuit I > 6 mA
- Ex-Protection:** II (1) G [Ex ia] IIC, II (1) D [Ex ia] IIIC

Maximum Values (According to Certificate of Conformity)

- Voltage U₀:** 10.6 V (KFA5)
10.5 V (KFD2)
- Current I₀:** 19.1 mA (KFA5)
13 mA (KFD2)
- Power P₀:** 51 mW (KFA5)
34 mW (KFD2)
- Protection Type:** EEx ia and EEx ib

Output (SPDT contact, not intrinsically safe)

- Max. Contact Loading:** 253 V_{AC} / 2 A / cos φ > 0.7
40 V_{DC} / 2 A resistive load
- Service Life:** 10⁷ switching cycles
- Delay:** appx. 20 ms
- Switching Frequency:** < 10 Hz

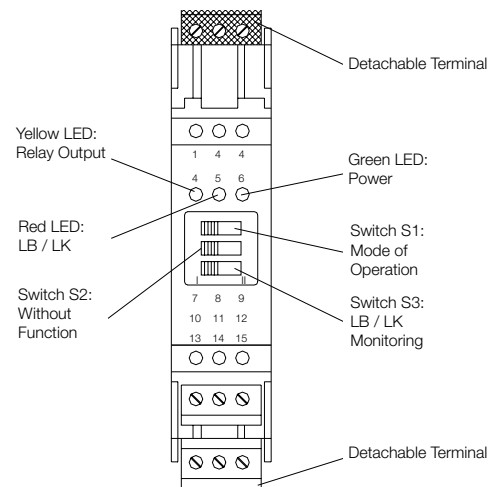
Electrical Isolation: According to IEC/EN 61010-1
Rated insulation voltage 300 V_{eff}

Directive Conformity

- Electromagnetic:** 2004/108/EC, EN 61326-1:2006
- Low Voltage:** 2006/95/EC, EN 6101091:2010

Conformity

- Electromagnetic:** NE 21:2006
- Protection Degree:** IEC 60529:2001
- Input:** EN 60947-5-6:2000



Technical Details

Input Power

- Nominal Voltage:** 115 V_{AC} ±10%, 60 Hz or 24 V_{DC}
- Power Consumption:** ≤ 1 W (KFA5), ≤ 0.9 W (KFD2)
- Ripple Factor:** ≤ 10% (KFD2)
- Case Material:** Macrolon®
- Dimensions:** 119 x 20 x 115 mm
- Protection:** IP 20
- Ambient Temperature:** -4...140 °F
- Weight:** 0.33 lb

Order Details

Description	24 V _{DC} Supply	110 V _{AC} Supply
Isolation Switching Amplifier, 1-Channel	KFD2-SR2-Ex1.W	KFA5-SR2-Ex1.W
Isolation Switching Amplifier, 2-Channels	KFD2-SR2-Ex2.W	KFA5-SR2-Ex2.W

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No responsibility taken for errors; subject to change without prior notice.