



switching amplifier KFA6-SR2-Ex1.W

URL:<https://www.sxplc.com/switching-amplifier-kfa6-sr2-ex1-w>

Product data sheet

Technical Data

General specifications

Signal type Digital Input

Functional safety related parameters

Safety Integrity Level (SIL) SIL 2

Supply

Connection terminals 14, 15

Rated voltage U_r 207 ... 253 V AC, 45 ... 65 Hz

Power dissipation 1.2 W

Power consumption max. 1.3 W

Input

Connection side field side

Connection terminals 1+, 2+, 3-

Rated values acc. to EN 60947-5-6 (NAMUR)

Open circuit voltage/short-circuit current approx. 8 V DC / approx. 8 mA

Switching point/switching hysteresis 1.2 ... 2.1 mA / approx. 0.2 mA

Line fault detection breakage $I \leq 0.1 \text{ mA}$, short-circuit $I > 6 \text{ mA}$

Pulse/Pause ratio min. 20 ms / min. 20 ms

Output

Connection side control side

Connection output I: terminals 7, 8, 9 ; output II: terminals 10, 11, 12

Output I signal ; relay

Output II signal or fault message ; relay

Contact loading 253 V AC/2 A/cos $\varphi > 0.7$; 126.5 V AC/4 A/cos $\varphi > 0.7$; 40 V DC/2 A resistive load

Energized/De-energized delay approx. 20 ms / approx. 20 ms

Mechanical life 10⁷ switching cycles

Transfer characteristics

Switching frequency \leq 10 Hz

Galvanic isolation

Input/Output reinforced insulation according to IEC/EN 61010-1, rated insulation voltage 300 Veff

Input/power supply reinforced insulation according to IEC/EN 61010-1, rated insulation voltage 300 Veff

Output/power supply reinforced insulation according to IEC/EN 61010-1, rated insulation voltage 300 Veff

Output/Output reinforced insulation according to IEC/EN 61010-1, rated insulation voltage 300 Veff

Indicators/settings

Display elements LEDs

Labeling space for labeling at the front

Directive conformity

Electromagnetic compatibility

Directive 2014/30/EU EN 61326-1:2013 (industrial locations)

Low voltage

Directive 2014/35/EU EN 61010-1:2010

Conformity

Electromagnetic compatibility NE 21:2006

Degree of protection IEC 60529:2001

Input EN 60947-5-6:2000

Ambient conditions

Ambient temperature -20 ... 60 °C (-4 ... 140 °F)

Mechanical specifications

Degree of protection IP20

Connection screw terminals

Mass approx. 150 g

Dimensions 20 x 119 x 115 mm (0.8 x 4.7 x 4.5 inch) (W x H x D) , housing type B2

Mounting on 35 mm DIN mounting rail acc. to EN 60715:2001

Data for application in connection with hazardous areas

EU-type examination certificate PTB 00 ATEX 2081

Marking 1 II (1)G [Ex ia Ga] IIC

1 II (1)D [Ex ia Da] IIIC

1 I (M1) [Ex ia Ma] I

Input Ex ia

Voltage U_0 10.6 V

Current I_0 19.1 mA

Power P_0 51 mW (linear characteristic)

Supply

Maximum safe voltage U_m 253 V AC (Attention! U_m is no rated voltage.)

Output

Contact loading 253 V AC/2 A/ $\cos \varphi > 0.7$; 126.5 V AC/4 A/ $\cos \varphi > 0.7$; 40 V DC/2 A resistive load

