

# S-DIAS Safety Relay Output Module

## SRO 022



with 2 safe outputs

The S-DIAS Safety SRO 022 relay output module has the safety integrity level SIL3 (EN / IEC 62061) or Performancelevel e (PL e) (EN ISO 13849-1/-2).

Both outputs are used for the Safety-oriented closing (NO) of an electric circuit with a permissible rated voltage of 24 V DC / 230 V AC and a maximum continuous current of 6 A.

### Relay Output Specifications

Number	2	
Configuration	two-channel	
Contact	normally open	
Relay type	SIS212 21VDC SEN	
Nominal voltage	+24 V DC	230 V AC
Switching voltage	maximum +30 V DC	maximum 250 V AC
Maximum continuous current /channel	maximum 6 A at 55 °C maximum 4 A at 60 °C	maximum 6 A at 55 °C maximum 4 A at 60 °C
Short-circuit and overload protection	external fuse category gG, maximum 6 A	
Concurrence of all outputs	100 %	
Response time	typically 10 ms	
fall time	typically 3 ms	
Miscellaneous	no protective circuit	
Voltage range	maximum +30 V	
Contact current	maximum 6 A	
Miscellaneous	no protective circuit	

### Electrical Requirements

Voltage supply from Safety bus	+12 V	
Current consumption on the Safety bus (+12 V power supply)	typically 30 mA	maximum 40 mA
Voltage supply from Safety bus	+24 V	
Current consumption on the Safety bus (+24 V power supply)	typically 90 mA	maximum 110 mA

### Article Number and Miscellaneous

Article number	20-893-022	
Dimensions	25 x 104.2 x 72 mm (W x H x D)	
Standard	EN 62061 SIL 3 EN ISO 13849-1 PL e/Cat. 4	
Approvals	CE, UL in preparation, TÜV-Austria EG type tested	

### Environmental Conditions

Storage temperature	-20 ... +85 °C	
Environmental temperature	0 ... +55 °C +55 ... +60 °C with derating	
Humidity	0-95 %, non-condensing	
Operating conditions	0-2000 m without derating > 2000 m with derating of the maximum environmental temperature by 0.5 °C per 100 m Over voltage category II (up to 5000 hm) Over voltage category III (only up to 2000 hm)	
Operating conditions	pollution degree 2	
EMC resistance	in accordance with 61000-6-7:2015 (Generic standards – immunity requirements for equipment designed to perform functions in safety-based systems (functional safety) at industrial facilities) according to EN 61000-6-2:2007 (industrial area) (increased requirements in accordance with IEC 62061)	
EMC noise generation	in accordance with EN 61000-6-4:2007 (industrial area)	
Vibration resistance	EN 60068-2-6	3,5 mm from 5-8.4 Hz 1 g from 8.4-150 Hz
Shock resistance	EN 60068-2-27	15 g
Protection type	EN 60529	IP20