

S-DIAS Safety Relay Output Module

SRO 021



with 2 safe outputs

The S-DIAS Safety SRO 021 relay output module has the safety integrity level SIL3 (EN/IEC 62061) or Performance level e (PL e) (EN ISO 13849-1/-2).

The safe outputs are used for the safety related output of two actuator signals, for example to control relays, valves, etc.

Relay Output Specifications

Number	2
Configuration	two-channel
Contact	normally open
Relay type	SIS212 21VDC SEN
Nominal voltage	+24 V DC
Voltage range	maximum +30 V
Contact current	maximum 6 A by 55 °C maximum 4 A by 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

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 100 mA

Article Number and Miscellaneous

Article number	20-893-021
Dimensions	25 x 104.2 x 72 mm (W x H x D)
Standard	EN 62061 SIL 3 EN ISO 13849-1 PL e/Kat. 4 UL 508 (E247993)
Approvals	CE, TÜV EG-Baumustergeprüft, _c UL _{US}

Environmental Conditions

Storage temperature	-20 ... +85 °C	
Environmental temperature	0 ... +55 °C (UL) +55 ... +60 °C with derating since HW version 3.10 (CE)	
Humidity	0-95 %, non-condensing	
Installation altitude above sea level	0-2000 m without derating > 2000 m with derating of the maximum environmental temperature by 0.5 °C per 100 m	
Operating conditions	pollution degree 2	
EMC resistance	in accordance with 61000-6-7 (Generic standards - Immunity requirements for equipment intended to perform functions in safety-related systems (functional safety) at industrial locations) in accordance with EN 61000-6-2 (industrial area) (increased requirements in accordance with IEC 62061)	
EMC noise generation	EN 61000-6-4 (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