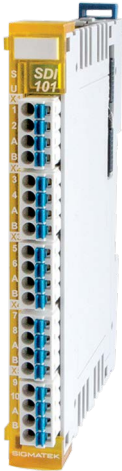


S-DIAS Safety Digital Input Module

SDI 101



with 10 secure inputs
1 redundant output signal (short-circuit proof)

The S-DIAS SDI 101 Safety digital input module has the safety integrity level SIL3 (EN / IEC 62061) or Performance level e (PL e) (EN ISO 13849-1/-2).

To test inputs and detect cross circuits (e.g. Emergency Stop), the SDI 101 has two non-safe signal outputs, TA and TB.

Input Specifications

Number	10	
Input voltage	+24 V DC	
Input voltage range	minimum +18 V	maximum +30 V
Signal level	low: $\leq +5$ V	high: $\geq +15$ V
Switching threshold	typically +11 V	
Input current	3 mA at +24 V	
Input delay	0.5 ms	

Signal Output Cross-Circuit Detection Specifications

Number	5x signal A	5x signal B
Rated output voltage	+24 V DC	
Output voltage range	minimum +18 V	maximum +30 V
Output current	100 mA at +24 V	
Miscellaneous	short-circuit proof	

Electrical Requirements

Voltage supply from Safety bus	+12 V	
Current consumption on the Safety bus (+12 V power supply)	typically 12 mA	maximum 15 mA
Voltage supply from Safety bus	+24 V	
Current consumption on the Safety bus (+24 V power supply)	typically 44 mA	maximum 50 mA

Article Number and Miscellaneous

Article number	20-891-101	
Dimensions	12.5 x 104.2 x 72 mm (W x H x D)	
Standard	UL 508 (E247993)	
Approvals	UL, cUL, CE	

Environmental Conditions

Storage temperature	-20 ... +85 °C	
Environmental temperature	0 ... +60 °C	
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 61000-6-7:2015 (Generic standards - Immunity requirements for equipment intended to perform functions in safety-related systems (functional safety) at industrial locations) in accordance with EN 61000-6-2:2007 (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