# ABS2EC01EA

input interface module - 9.5 mm - solid state - 5 V DC



#### Main

Range of product	Interface for discrete signals
Product or component type	Slim solid state input interface module
Contacts type and composition	1 NC
[Uc] control circuit voltage	5 V
Control circuit type	DC
[In] rated current	<= 13.6 mA
Reverse polarity protection	Internal for control circuit Internal for output circuit
Short-circuit protection	0.25 A external fuse fast blow (lk <= 100 A DC)
Local signalling	1 LED indicating control signal state
Sale per indivisible quantity	5
Width pitch dimension	9.5 mm

## Complementary

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Control circuit voltage limits	6 V negative TTL	
Voltage state 1 guaranteed	3.75 V	
Current state 1 guaranteed	4.5 mA	
Voltage state 0 guaranteed	2 V	
Current state 0 guaranteed	0.09 mA	
[Ue] rated operational voltage	548 V	
Output circuit type	DC	
Rated operational voltage limits	260 V	
Maximum switching current	50 mA	
Minimum switching current	1 mA	
Residual current	0.1 mA at state 0	
Drop-out voltage	<= 1 V at state 1	
Response time	<= 0.05 ms from state 0 to state 1 Ue <= 30 V and le >= 5 mA <= 0.4 ms from state 1 to state 0 Ue <= 30 V and le >= 5 mA	
Switching frequency	<= 1000 Hz 50 % Ue <= 30 V and le >= 5 mA	
[Ui] rated insulation voltage	250 V conforming to VDE 0110 group C 300 V conforming to IEC 60947-1	
Connections - terminals	Screw clamp terminal	
Flame retardance	V0 conforming to UL 94	
Cable cross section	0.274 mm², 1 wire rigid 0.342.5 mm², 1 or 2 wires flexible with cable end 0.62.5 mm², 1 or 2 wires flexible without cable end	
Operating position	Any position	
Installation category	II conforming to IEC 60947-1	
Mounting support	Asymmetrical DIN rail Combination rail Symmetrical DIN rail	
Product weight	0.029 kg	

#### **Environment**

dielectric strength	2500 V between wired interface and earth for 1 minute 4000 V between I/O for 1 minute
standards	IEC 60947-5-1
product certifications	BV CSA DNV LROS (Lloyds register of shipping)

	UL
IP degree of protection	IP20 conforming to IEC 60529
protective treatment	TC
fire resistance	960 °C conforming to IEC 60695-2-1
shock resistance	30 gn for 11 ms conforming to IEC 60068-2-27
vibration resistance	5 gn (f = 10150 Hz) conforming to IEC 68-2-6
electromagnetic compatibility	1.2/50 µs shock waves immunity test, 0.5 kV for U < 50 V conforming to IEC 60947-1 1.2/50 µs shock waves immunity test, 1.5 kV for U < 150 V conforming to IEC 60947-1 1.2/50 µs shock waves immunity test, 2.5 kV for U < 300 V conforming to IEC 60947-1 Electromagnetic field immunity test level 3, 10 V/m between 271000 MHz conforming to IEC 61000-4-3 Electrostatic discharge immunity test level 3, 8 kV conforming to IEC 61000-4-2 Fast transients immunity test level 3, on input/output 1 kV conforming to IEC 61000-4-4 Fast transients immunity test level 3, on power supply 2 kV conforming to IEC 61000-4-4
ambient air temperature for operation	-2570 °C at Us -555 °C unrestricted operation
ambient air temperature for storage	-4080 °C
operating altitude	<= 300 m

## Contractual warranty

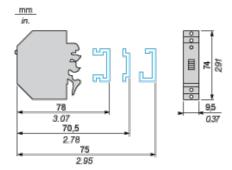
pollution degree

Warranty period	18 months
varianty poriod	To months

2 conforming to IEC 60947-1

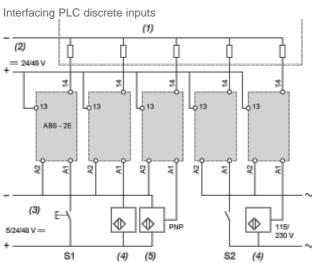
#### Slim Solid-State Interface Module

#### **Dimensions**



## **Slim Solid-State Interface Module**

## **Example of Application with PLC**



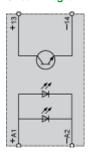
\$1, Pushbuttons series contacts



- S2
- (1) PLC positive logic discrete inputs
- (2) Processing power supply
- (3) Process power supply
- (4) 2-wire sensors
- (5) 3-wire sensors

## **Solid-State Input Module**

## **Circuit Diagram**



## **Wiring Diagram**

