# Product data sheet Characteristics

### 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
Maximum [In] rated current	13.6 mA
Reverse polarity protection	Control circuit internal Output circuit internal
Short-circuit protection	0.25 A external fuse fast blow lk <= 100 A DC)
Local signalling	For control signal state 1 LED
Sale per indivisible quantity	5
Width pitch dimension	0.37 in (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 VDE 0110 group C 300 V IEC 60947-1
Connections - Terminals	Screw clamp terminal
Flame retardance	V0 conforming to UL 94
Cable cross section	0.000.00 In² (0.342.5 mm²), 1 or 2 wires flexible with cable end 0.000.00 In² (0.62.5 mm²), 1 or 2 wires flexible without cable end 0.000.01 in² (0.274 mm²), 1 wire rigid
Operating position	Any position
Installation category	II IEC 60947-1
Mounting Support	Asymmetrical DIN rail Combination rail Symmetrical DIN rail
Net Weight	0.06 lb(US) (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	CSA BV DNV LROS (Lloyds register of shipping) UL
IP degree of protection	IP20 conforming to IEC 60529
Protective treatment	TC
Fire resistance	1760 °F (960 °C) IEC 60695-2-1
Shock resistance	30 gn 11 ms IEC 60068-2-27
Vibration resistance	5 gn 10150 Hz)IEC 68-2-6
Electromagnetic compatibility	Electromagnetic field immunity test level 3 10 V/m between 271000 MHz IEC 61000-4-3 Electrostatic discharge immunity test level 3 8 kV IEC 61000-4-2 Fast transients immunity test level 3 on input/output 1 kV IEC 61000-4-4 Fast transients immunity test level 3 on power supply 2 kV IEC 61000-4-4 1.2/50 µs shock waves immunity test IEC 60947-1
Ambient Air Temperature for Operation	-13158 °F (-2570 °C) at Us 23131 °F (-555 °C) unrestricted operation
Ambient Air Temperature for Storage	-40176 °F (-4080 °C)
Operating altitude	<= 984.25 ft (300 m)
Pollution degree	2 IEC 60947-1

### Ordering and shipping details

Category	22375 - INTERFACE MODULE(ABA,R,S)
Discount Schedule	CP2
GTIN	3389110651539
Nbr. of units in pkg.	1
Package weight(Lbs)	1.27 oz (36 g)
Returnability	No
Country of origin	FR

#### Packing Units

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Unit Type of Package 1	PCE
Package 1 Height	2.76 in (7 cm)
Package 1 width	3.54 in (9 cm)
Package 1 Length	4.37 in (11.1 cm)
Unit Type of Package 2	BB1
Number of Units in Package 2	5
Package 2 Weight	6.46 oz (183 g)
Package 2 Height	2.76 in (7 cm)
Package 2 width	3.54 in (9 cm)
Package 2 Length	4.37 in (11.1 cm)
Unit Type of Package 3	S01
Number of Units in Package 3	25
Package 3 Weight	2.52 lb(US) (1.145 kg)
Package 3 Height	5.91 in (15 cm)
Package 3 width	5.91 in (15 cm)
Package 3 Length	15.75 in (40 cm)

### Offer Sustainability

California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov
REACh Regulation	☑ REACh Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EVEU RoHS
Mercury free	Yes
RoHS exemption information	₫Yes
China RoHS Regulation	☑ China RoHS Declaration
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.

### Contractual warranty

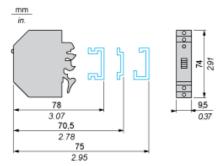
Warranty	18 months
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# Product data sheet Dimensions Drawings

## ABS2EC01EA

### Slim Solid-State Interface Module

### **Dimensions**

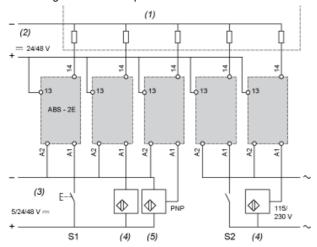


### ABS2EC01EA

### Slim Solid-State Interface Module

### Example of Application with PLC

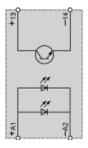
Interfacing PLC discrete inputs



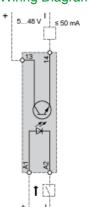
- S1, Pushbuttons series contacts
- S2
- (1) PLC positive logic discrete inputs
- (2) Processing power supply
- (3) Process power supply
- (4) 2-wire sensors
- (5) 3-wire sensors

### Solid-State Input Module

### Circuit Diagram



### Wiring Diagram



## **Mouser Electronics**

**Authorized Distributor** 

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ABS2EC01EA