

Product data sheet

Specifications



input interface module - 9.5 mm - solid state - 24 V DC

ABS2EC01EB

! Discontinued on: 01 October 2021

! Discontinued

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	24 V
Control circuit type	DC
Maximum [In] rated current	12 mA
Reverse polarity protection	Control circuit: internal Output circuit: internal
Short-circuit protection	0.25 A external fuse fast blow (Ik <= 100 A DC)
Local signalling	1 LED for control signal state
Sale per indivisible quantity	5
Width pitch dimension	9.5 mm

Complementary

Control circuit voltage limits	28.8 V
Voltage state 1 guaranteed	16.9 V
Current state 1 guaranteed	7.7 mA
Voltage state 0 guaranteed	5.6 V
Current state 0 guaranteed	2 mA
[Ue] rated operational voltage	5...48 V
Output circuit type	DC
Rated operational voltage limits	2...60 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 Ie >= 5 mA <= 0.4 ms from state 1 to state 0 Ue <= 30 V and Ie >= 5 mA
Switching frequency	<= 1000 Hz 50 % Ue <= 30 V and Ie >= 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	0.34...2.5 mm ² , 1 or 2 wires flexible with cable end 0.6...2.5 mm ² , 1 or 2 wires flexible without cable end 0.27...4 mm ² , 1 wire rigid
Operating position	Any position
Installation category	II conforming to IEC 60947-1
Mounting support	Symmetrical DIN rail Asymmetrical DIN rail Combination rail
Net 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	DNV LROS (Lloyds register of shipping) CSA BV 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 conforming to IEC 68-2-6 (f = 10...150 Hz)
Electromagnetic compatibility	Electromagnetic field immunity test: level 3 10 V/m between 27...1000 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 1.2/50 µs shock waves immunity test conforming to IEC 60947-1
Ambient air temperature for operation	-25...70 °C at Us -5...55 °C unrestricted operation
Ambient air temperature for storage	-40...80 °C
Operating altitude	<= 300 m
Pollution degree	2 conforming to IEC 60947-1

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	7 cm
Package 1 Width	9 cm
Package 1 Length	11.1 cm
Package 1 Weight	36 g

Offer Sustainability

REACH Regulation	REACH Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration

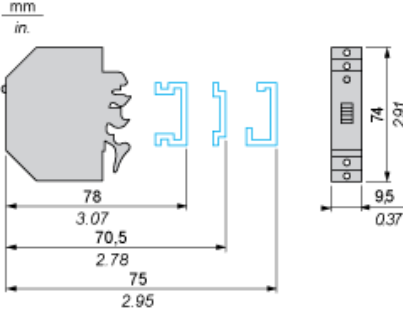
Mercury free	Yes
China RoHS Regulation	China RoHS declaration
RoHS exemption information	Yes
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
California proposition 65	WARNING: This product can expose you to chemicals including: 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

Contractual warranty

Warranty	18 months
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Slim Solid-State Interface Module

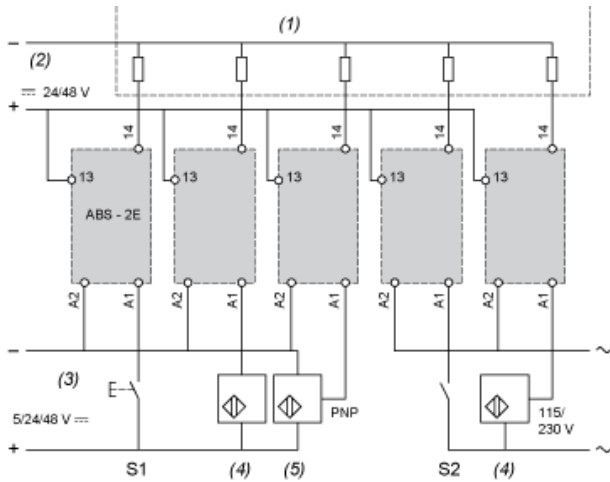
Dimensions



Slim Solid-State Interface Module

Example of Application with PLC

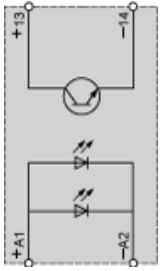
Interfacing PLC discrete inputs



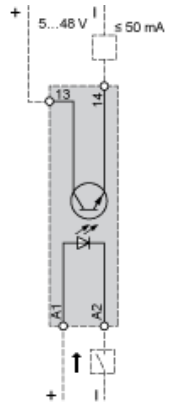
- S1, S2 Pushbuttons series contacts
- (1) PLC positive logic discrete inputs
- (2) Processing power supply
- (3) Process power supply
- (4) 2-wire sensors
- (5) 3-wire sensors

Solid-State Input Module

Circuit Diagram



Wiring Diagram



Recommended replacement(s)