

ABR2EB312B

input interface module - 9.5 mm - electromechanical -
24 V DC - 1 C/O low-level



Main

Range of product	Interface for discrete signals
Product or component type	Slim electromechanical input interface module
Product specific application	For very low level switching
Contacts type and composition	1 C/O
[Uc] control circuit voltage	24 V
Control circuit type	DC
Width pitch dimension	17.5 mm
[In] rated current	<= 0.023 A
Reverse polarity protection	Internal for control circuit
Short-circuit protection	0.4 A external fuse fast blow
[Ith] conventional free air thermal current	0.05 A conforming to IEC 60947-1
Local signalling	1 LED indicating control signal state

Complementary

Control circuit voltage limits	28.8 V
Connections - terminals	Screw clamp terminal
Operating threshold	16.9 V
Drop-out voltage	<= 3.8 V
Holding current	2 mA
Power dissipation in W	0.55 W
Maximum switching voltage	60 V AC 60 V DC
[Ue] rated operational voltage	<= 48 V AC conforming to IEC 60947-5-1 for built-in contacts <= 48 V DC conforming to IEC 60947-5-1 for built-in contacts
Network frequency	50/60 Hz
Minimum switching current	0.01 mA
Minimum switching voltage	0.01 V
Electrical reliability	1e-008
Operating time	<= 6 ms between de-energisation of coil and closing of NC contact <= 6 ms between de-energisation of coil and closing of NO contact DC <= 6 ms between energisation of coil and closing of NC contact <= 6 ms between energisation of coil and closing of NO contact DC
Contact bounce time	<= 2 ms
Non-overlap time	2 ms on de-energisation 5 ms on energisation
Operating rate in Hz	10 Hz at no-load
Mechanical durability	>= 20000000 cycles
[Ui] rated insulation voltage	250 V conforming to VDE 0110 group C 300 V conforming to IEC 60947-1
Flame retardance	V0 conforming to UL 94
Cable cross section	0.27...4 mm², 1 wire rigid 0.34...2.5 mm², 1 or 2 wires flexible with cable end 0.6...2.5 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	0.048 kg

The information provided in this documentation contains general descriptions and/or technical characteristics of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

Environment

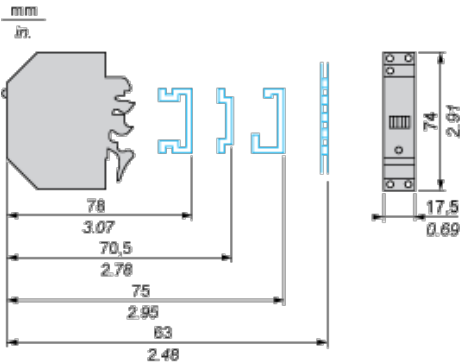
immunity to microbreaks	1 ms
dielectric strength	1000 V between open contacts 1500 V between coil circuit and contact circuits 2500 V between wired interface and earth
standards	IEC 60947-5-1
product certifications	BV CSA DNV LROS (Lloyds register of shipping) UL
IP degree of protection	IP20 conforming 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	3 gn (f = 10...150 Hz) conforming to IEC 60068-2-6
electromagnetic compatibility	1.2/50 µs shock waves immunity test, 0.5 kV for U < 50 V conforming to IEC 947-1 1.2/50 µs shock waves immunity test, 1.5 kV for U < 150 V conforming to IEC 947-1 1.2/50 µs shock waves immunity test, 2.5 kV for U < 300 V conforming to IEC 947-1 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 Rapid transients immunity test level 3, on input/output 1 kV conforming to IEC 61000-4-4 Rapid transients immunity test level 3, on power supply 2 kV conforming to IEC 61000-4-4
ambient air temperature for operation	-5...40 °C unrestricted operation -25...70 °C at Us -5...55 °C from 0.85...1.1 Us
ambient air temperature for storage	-40...80 °C
operating altitude	<= 3000 m
pollution degree	2 conforming to IEC 60947-1

Contractual warranty

Warranty period	18 months
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Slim Electromechanical Interface Module

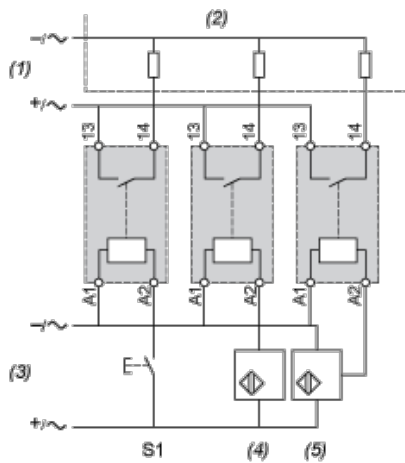
Dimensions



Slim Electromechanical Interface Module

Example of Application with PLC

Interfacing PLC discrete inputs



ABR 2E●●●●

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

Slim Electromechanical Interface Module

Circuit Diagram

