



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	0.69 in (17.5 mm)
Line Rated Current	<= 0.023 A
Reverse polarity protection	Internal 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
System Voltage	<= 48 V AC conforming to IEC 60947-5-1 built-in contacts <= 48 V DC conforming to IEC 60947-5-1 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...0.01 in ² (0.27...4 mm ²), 1 wire rigid 0...0 in ² (0.34...2.5 mm ²), 1 or 2 wires flexible with cable end 0...0 in ² (0.6...2.5 mm ²), 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	0.11 lb(US) (0.048 kg)

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Environment

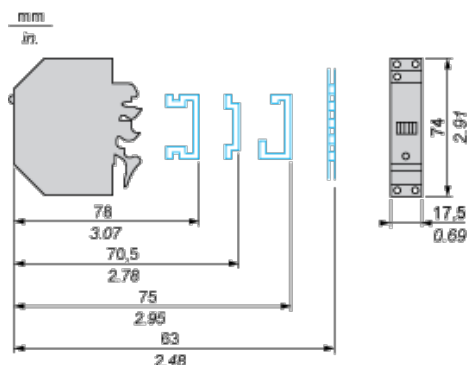
immunity to microbreaks	1 ms
dielectric strength	1000 V between open contacts 1500 V between coil circuit and contact circuits 2500 V between wired interface and earth
standards	IEC 60947-5-1
product certifications	BV CSA DNV LROS (Lloyds register of shipping) UL
IP degree of protection	IP20 conforming to IEC 60529
protective treatment	TC
fire resistance	1760 °F (960 °C) conforming to IEC 60695-2-1
shock resistance	30 gn 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	23...104 °F (-5...40 °C) unrestricted operation -13...158 °F (-25...70 °C) at Us 23...131 °F (-5...55 °C) from 0.85...1.1 Us
ambient air temperature for storage	-40...176 °F (-40...80 °C)
operating altitude	<= 9842.52 ft (3000 m)
pollution degree	2 conforming to IEC 60947-1

Contractual warranty

Warranty period	18 months
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Slim Electromechanical Interface Module

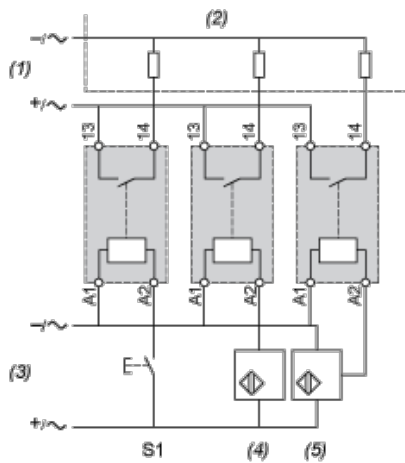
Dimensions



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

