



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
Maximum [In] rated current	0.023 A
Reverse polarity protection	Control circuit: internal
Short-circuit protection	0.4 A external fuse type fast blow
[Ith] conventional free air thermal current	0.05 A conforming to IEC 60947-1
Local signalling	Green LED for 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 NO contact DC <= 6 ms between energisation of coil and closing of NO contact DC <= 6 ms between de-energisation of coil and closing of NC contact <= 6 ms between energisation of coil and closing of NC contact
Contact bounce time	<= 2 ms
Non-overlap time	2 Ms de-energisation 5 ms 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	Symmetrical DIN rail Asymmetrical DIN rail Combination rail
Net weight	0.048 kg


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	LROS (Lloyds register of shipping) CSA BV DNV 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 conforming to IEC 60068-2-6 (f = 10...150 Hz)
Electromagnetic compatibility	1.2/50 µs shock waves immunity test 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	-25...70 °C at Us -5...40 °C unrestricted operation -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

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	54 g
Package 1 Height	7.5 cm
Package 1 width	8 cm
Package 1 Length	10.8 cm
Unit Type of Package 2	BB1
Number of Units in Package 2	5
Package 2 Weight	270 g
Package 2 Height	7.5 cm
Package 2 width	8 cm
Package 2 Length	10.8 cm
Unit Type of Package 3	S01
Number of Units in Package 3	25
Package 3 Weight	1.596 kg
Package 3 Height	15 cm
Package 3 width	15 cm
Package 3 Length	40 cm

Offer Sustainability

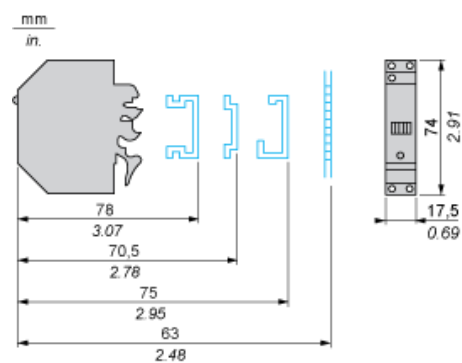
Sustainable offer status	Green Premium product
REACH Regulation	 REACH Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)  EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	 Yes
China RoHS Regulation	 China RoHS Declaration
Environmental Disclosure	 Product Environmental Profile
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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Slim Electromechanical Interface Module

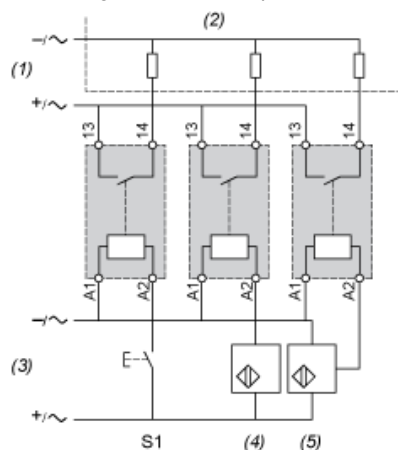
Dimensions



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

1 C/O

