

## Main

Range of product	Interface for discrete signals
Product or component type	Slim electromechanical output 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	23 mA
Reverse polarity protection	With
Short-circuit protection	0.4 A external fuse fast blow (Ik ≤ 1 kA AC and Ik ≤ 100 A DC)
[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 energization threshold: 16.9 V
Connections - terminals	Screw clamp terminal
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 ≤ 48 V DC conforming to IEC 60947-5-1
Network frequency	50/60 Hz
Minimum switching current	0.01 mA
Minimum switching voltage	0.01 V
Electrical reliability	≤ 0.00000001
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
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	0.34...2.5 mm <sup>2</sup> , 1 or 2 wires flexible with cable end 0.6...2.5 mm <sup>2</sup> , 1 or 2 wires flexible without cable end 0.27...4 mm <sup>2</sup> , 1 wire rigid
Operating position	Any position
Installation category	II conforming to IEC 60947-1

Mounting support	Combination rail Symmetrical DIN rail Asymmetrical DIN rail
Net weight	0.048 kg


## Environment

Immunity to microbreaks	1 ms
Dielectric strength	1000 V for 1 minute between open contacts 1500 V between coil circuit and contact circuits 2500 V for 1 minute between wired interface and earth
Standards	IEC 60947-5-1
Product certifications	DNV CSA LROS (Lloyds register of shipping) UL BV
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	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...55 °C at Us -25...70 °C at Us with 8 mm space between ABR2S1... -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	58 g
Package 1 Height	7 cm
Package 1 width	9 cm
Package 1 Length	10.8 cm
Unit Type of Package 2	BB1
Number of Units in Package 2	5
Package 2 Weight	294 g
Package 2 Height	7 cm
Package 2 width	9 cm
Package 2 Length	10.8 cm
Unit Type of Package 3	S01
Number of Units in Package 3	25
Package 3 Weight	1.699 kg
Package 3 Height	15 cm
Package 3 width	15 cm
Package 3 Length	40 cm

## Offer Sustainability

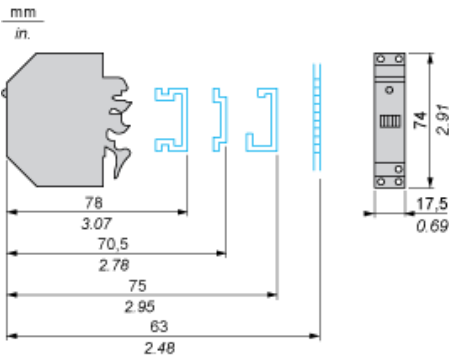
Sustainable offer status	Green Premium product
REACH Regulation	 <a href="#">REACH Declaration</a>
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)  <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
RoHS exemption information	 <a href="#">Yes</a>
China RoHS Regulation	 <a href="#">China RoHS Declaration</a>
Environmental Disclosure	 <a href="#">Product Environmental Profile</a>
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

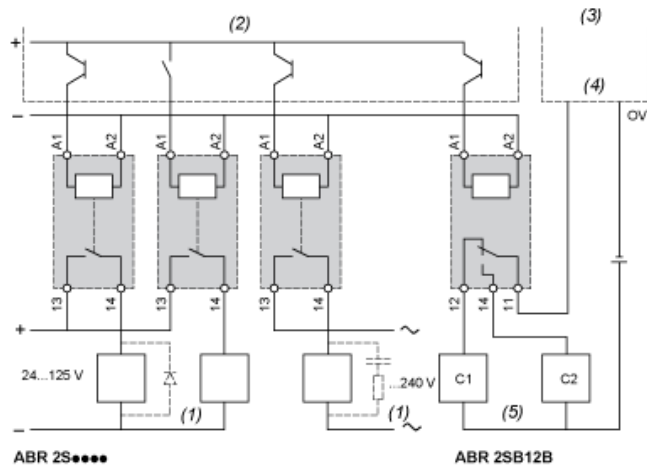
Dimensions



## Slim Electromechanical Interface Module

### Example of Application with PLC

Interfacing PLC discrete outputs



- (1) Essential on inductive loads (can be replaced with peak limiter)
- (2) PLC positive logic transistor (or relay) outputs
- (3) PLC analog inputs
- (4) Channel X
- (5) Analog sensors

## Slim Electromechanical Interface Module

### Circuit Diagram

1 C/O

