## ABR1E412F

input interface module - 17.5 mm - electromechanical - 110..127 V DC - 2 NO





#### Main

Range of Product	Interface for discrete signals
Product or Component Type	Electromechanical input interface module
Contacts type and composition	2 NO
[Uc] control circuit voltage	110127 V
Control circuit type	DC
Width pitch dimension	0.69 in (17.5 mm)
Maximum [In] rated current	15 mA DC
Reverse polarity protection	with
Short-circuit protection	16 A external fuse gF lk <= 2.5 kA AC and lk <= 100 A DC)
	16 A external fuse gG lk <= 2.5 kA AC and lk <= 100 A DC)
[lth] conventional free air thermal current	2 A IEC 60947-1
Local signalling	Green mechanical indicator for position of contacts 1 green LED control signal state

#### Complementary

Complementary		
Control circuit voltage limits	264 V 75 V	
Housing Colour	Grey	
Connections - Terminals	Screw clamp terminal	
Drop-out voltage	16 V	
Minimum holding current	1.5 mA DC	
Maximum power dissipation in W	1.5 W	
Maximum switching voltage	125 V DC 252 V AC	
[Ue] rated operational voltage	<= 125 V DC IEC 60947-5-1 <= 230 V AC IEC 60947-5-1	
Network Frequency	50/60 Hz	
[le] rated operational current	1 A AC-13 Ue: 230 V 1000000 cycles IEC 60947-5-1 1 A AC-14 Ue: 230 V 1000000 cycles IEC 60947-5-1 1 A AC-15 Ue: 230 V 1000000 cycles IEC 60947-5-1 1 A DC-13 Ue: 24 V 1000000 cycles IEC 60947-5-1 2 A AC-12 Ue: 230 V 1000000 cycles IEC 60947-5-1 2 A DC-12 Ue: 24 V 1000000 cycles IEC 60947-5-1	
Minimum switching current	3 mA	
Minimum switching voltage	17 V	
Electrical reliability	<= 0.00000001	
Operating time	<= 12 ms between de-energisation of coil and closing of NC contact <= 12 ms between de-energisation of coil and closing of NO contact <= 12 ms between energisation of coil and closing of NC contact <= 12 ms between energisation of coil and closing of NO contact	
Contact bounce time	<= 3 ms	
Operating rate in Hz	6 Hz at no-load 0.5 Hz at le	
Mechanical durability	20000000 cycles	
[Ui] rated insulation voltage	250 V IEC 60947-1 250 V VDE 0110 group C	

Flame retardance	V0 conforming to UL 94	
Cable cross section	0.000.00 ln² (0.342.5 mm²), 1 or 2 wires flexible with cable end 0.000.00 ln² (0.62.5 mm²), 1 or 2 wires flexible without cable end 0.000.00 ln² (0.272.5 mm²), 2 wires rigid 0.000.01 in² (0.274 mm²), 1 wire rigid	
Operating position	Any position	
Installation category	II IEC 60947-1	
Mounting Support	Asymmetrical DIN rail Combination rail Symmetrical DIN rail	
Net Weight	0.21 lb(US) (0.095 kg)	

#### Environment

Livioninent	
Immunity to microbreaks	10 ms
Dielectric strength	1500 V between independent contacts 2500 V between wired interface and earth 4000 V between coil circuit and contact circuits
Standards	IEC 60947-5-1
Product Certifications	DNV CSA UL BV LROS (Lloyds register of shipping)
IP degree of protection	IP20 conforming to IEC 60529
Protective treatment	TC
Fire resistance	1562 °F (850 °C) IEC 60695-2-1
Shock resistance	50 gn 11 ms IEC 60068-2-27
Vibration resistance	6 gn 1055 Hz)IEC 60068-2-6
Electromagnetic compatibility	1.2/50 ms shock waves immunity test IEC 255-4 Electrostatic discharge immunity test, level 3 8 kV IEC 61000-4-2 Rapid transients immunity test on input/output 1 kV IEC 61000-4-4 Rapid transients immunity test on power supply 2 kV IEC 61000-4-4
Ambient Air Temperature for Operation	-4140 °F (-2060 °C) at Un 23104 °F (-540 °C) unrestricted operation
Ambient Air Temperature for Storage	-40158 °F (-4070 °C)
Operating altitude	<= 9842.52 ft (3000 m)
Pollution degree	3 IEC 60947-5-1
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## Ordering and shipping details

Category	22375 - INTERFACE MODULE(ABA,R,S)	
Discount Schedule	CP2	
GTIN	3389110569490	
Nbr. of units in pkg.	1	
Package weight(Lbs)	3.39 oz (96 g)	
Returnability	No	
Country of origin	FR	
Oddrill y or origin	111	

## Packing Units

•		
Unit Type of Package 1	PCE	
Package 1 Height	2.95 in (7.5 cm)	
Package 1 width	0.91 in (2.3 cm)	
Package 1 Length	3.46 in (8.8 cm)	
Unit Type of Package 2	BB1	
Number of Units in Package 2	5	
Package 2 Weight	17.85 oz (506 g)	
Package 2 Height	3.54 in (9 cm)	
Package 2 width	2.76 in (7 cm)	
Package 2 Length	4.25 in (10.8 cm)	
Unit Type of Package 3	S02	
Number of Units in Package 3	50	

California proposition 65	WARNING: This product can expose you to chemicals including: Nickel	
Sustainable offer status	stainable offer status Green Premium product	
Offer Sustainability		
Package 3 Length	15.75 in (40 cm)	
	, ,	
Package 3 width	11.81 in (30 cm)	
Package 3 Height	5.91 in (15 cm)	
Package 3 Weight	12.15 lb(US) (5.512 kg)	

Sustainable offer status	Green Premium product	
Alifornia proposition 65  WARNING: This product can expose you to chemicals including: N compounds, which is known to the State of California to cause can Di-isodecyl phthalate (DIDP), which is known to the State of Califor cause birth defects or other reproductive harm. For more informatic www.P65Warnings.ca.gov		
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	<b>⊈</b> 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	warrantv

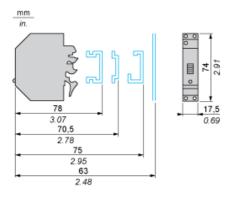
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# Product data sheet Dimensions Drawings

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#### Electromechanical Interface Module

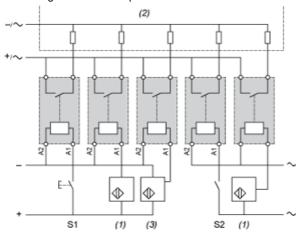
#### **Dimensions**



#### Electromechanical Interface Module

#### Example of Application with PLC

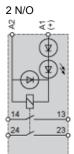
Interfacing PLC discrete inputs



- S1, Pushbuttons series contacts
- S2
- (1) 2-wire sensors
- (2) PLC positive logic discrete inputs
- (3) 3-wire sensors

#### Interface with Mechanical Indication + LED

#### Circuit Diagram



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