## **ABR1E318B**

input interface module - 17.5 mm - electromechanical - 24 V AC/DC - 1 C/O





#### Main

Range of Product	Interface for discrete signals
Product or Component Type	Electromechanical input interface module
Contacts type and composition	1 C/O
[Uc] control circuit voltage	24 V
Control circuit type	AC/DC
Control circuit frequency	50/60 Hz
Width pitch dimension	0.69 in (17.5 mm)
Maximum [In] rated current	55 MA AC 62 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	30 V 16.5 V
Housing Colour	Grey
Connections - Terminals	Screw clamp terminal
Drop-out voltage	3.8 V
Minimum holding current	4.9 MA DC 5.2 mA AC
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	10000000 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 ln <sup>2</sup> (0.272.5 mm <sup>2</sup> ), 2 wires rigid
	0.000.01 in <sup>2</sup> (0.274 mm <sup>2</sup> ), 1 wire rigid
Operating position	Any position
Installation category	II IEC 60947-1
Mounting Support	Combination rail
	Asymmetrical DIN rail
	Symmetrical DIN rail
Net Weight	0.21 lb(US) (0.095 kg)

#### Environment

Immunity to microbreaks	8 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	UL LROS (Lloyds register of shipping) DNV BV CSA
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

#### Ordering and shipping details

Category	22375 - INTERFACE MODULE(ABA,R,S)
Discount Schedule	CP2
GTIN	3389110569551
Nbr. of units in pkg.	1
Package weight(Lbs)	3.49 oz (99 g)
Returnability	No
Country of origin	FR

#### Packing Units

Unit Type of Package 1	PCE	
Package 1 Height	0.79 in (2 cm)	
Package 1 width	2.76 in (7 cm)	
Package 1 Length	3.03 in (7.7 cm)	
Unit Type of Package 2	S02	
Number of Units in Package 2	50	
Package 2 Weight	11.18 lb(US) (5.07 kg)	
Package 2 Height	5.91 in (15 cm)	
Package 2 width	11.81 in (30 cm)	
Package 2 Length	15.75 in (40 cm)	

#### Offer Sustainability

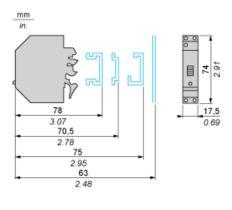
Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Nickel compounds, which is known to the State of California to cause cancer, and Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov
REACh Regulation	☑ REACh Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EV 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

# Product data sheet Dimensions Drawings

## ABR1E318B

#### Electromechanical Interface Module

#### **Dimensions**

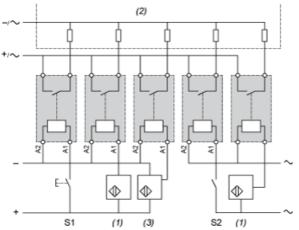


## **ABR1E318B**

#### 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

1 C/O



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