ABR1E118B

input interface module - 17.5 mm - electromechanical - 24 V AC/DC - 1 NO





Main

Range of product	Interface for discrete signals
Product or component type	Electromechanical input interface module
Contacts type and composition	1 NO
[Uc] control circuit voltage	24 V
Control circuit type	AC/DC
Control circuit frequency	50/60 Hz
Width pitch dimension	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)
[Ith] conventional free air thermal current	2 A conforming to IEC 60947-1
Local signalling	Green mechanical indicator for position of contacts and 1 green LED control signal state

Complementary

Complementary	
Control circuit voltage limits	30 V energization threshold: 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 conforming to IEC 60947-5-1
	<= 230 V AC conforming to IEC 60947-5-1
Network frequency	50/60 Hz
[le] rated operational current	1 A AC-13 Ue: 230 V per 1000000 cycles conforming to IEC 60947-5-1
	1 A AC-14 Ue: 230 V per 1000000 cycles conforming to IEC 60947-5-1
	1 A AC-15 Ue: 230 V per 1000000 cycles conforming to IEC 60947-5-1
	1 A DC-13 Ue: 24 V per 1000000 cycles conforming to IEC 60947-5-1
	2 A AC-12 Ue: 230 V per 1000000 cycles conforming to IEC 60947-5-1
	2 A DC-12 Ue: 24 V per 1000000 cycles conforming to 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

250 V conforming to VDE 0110 group C V0 conforming to UL 94
V0 conforming to UL 94
0.342.5 Mm², 1 or 2 wires flexible with cable end 0.62.5 Mm², 1 or 2 wires flexible without cable end 0.272.5 Mm², 2 wires rigid 0.274 mm², 1 wire rigid
Any position
II conforming to IEC 60947-1
Asymmetrical DIN rail Combination rail Symmetrical DIN rail
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	CSA BV DNV LROS (Lloyds register of shipping) UL
IP degree of protection	IP20 conforming to IEC 60529
Protective treatment	TC
Fire resistance	850 °C conforming to IEC 60695-2-1
Shock resistance	50 gn for 11 ms conforming to IEC 60068-2-27
Vibration resistance	6 gn conforming to IEC 60068-2-6 (f = 1055 Hz)
Electromagnetic compatibility	1.2/50 ms shock waves immunity test conforming to IEC 255-4 Electrostatic discharge immunity test, level 3 8 kV conforming to IEC 61000-4-2 Rapid transients immunity test on input/output 1 kV conforming to IEC 61000-4-4 Rapid transients immunity test on power supply 2 kV conforming to IEC 61000-4-4
Ambient air temperature for operation	-2060 °C at Un -540 °C unrestricted operation
Ambient air temperature for storage	-4070 °C
Operating altitude	<= 3000 m
Pollution degree	3 conforming to IEC 60947-5-1

Packing Units

Package 1 Weight	0.096 kg	
Package 1 Height	0.200 dm	
Package 1 width	0.750 dm	
Package 1 Length	0.700 dm	

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)
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
-	

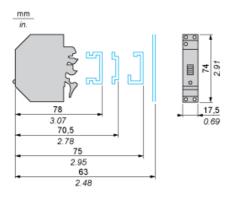
Warranty 18 months

Product data sheet Dimensions Drawings

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Electromechanical Interface Module

Dimensions

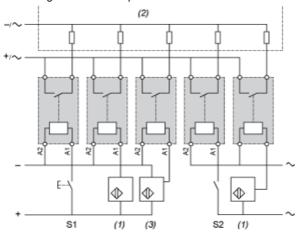


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Electromechanical Interface Module

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 N/O

