ABR1E311F



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	115127 V
Control circuit type	AC
Control circuit frequency	50/60 Hz
Width pitch dimension	0.69 in (17.5 mm)
[In] rated current	<= 8 mA AC
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 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	140 V energization threshold: 86 V
Housing colour	Grey
Connections - terminals	Screw clamp terminal
Drop-out voltage	<= 34 V
Holding current	>= 2.4 mA AC
Power dissipation in W	<= 1.5 W
Maximum switching voltage	125 V DC 252 V AC
System 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	>= 10000000 cycles
[Ui] rated insulation voltage	250 V conforming to IEC 60947-1 250 V conforming to VDE 0110 group C
Flame retardance	V0 conforming to UL 94
Cable cross section	00.01 in² (0.274 mm²), 1 wire rigid 00 in² (0.342.5 mm²), 1 or 2 wires flexible with cable end 00 in² (0.62.5 mm²), 1 or 2 wires flexible without cable end 00 in² (0.272.5 mm²), 2 wires rigid

Operating position	Any position
Installation category	II conforming to IEC 60947-1
Mounting support	Asymmetrical DIN rail Combination rail Symmetrical DIN rail
Product weight	0.21 lb(US) (0.095 kg)

Environment

1500 V between independent contacts 2500 V between wired interface and earth 4000 V between coil circuit and contact circuits
IEC 60947-5-1
BV CSA DNV LROS (Lloyds register of shipping) UL
IP20 conforming to IEC 60529
TC
1562 °F (850 °C) conforming to IEC 60695-2-1
50 gn 11 ms conforming to IEC 60068-2-27
6 gn (f = 1055 Hz) conforming to IEC 60068-2-6
1.2/50 ms shock waves immunity test, 0.25 kV for U > 50 V conforming to IEC 255-4 1.2/50 ms shock waves immunity test, 0.5 kV for U < 50 V 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
-4140 °F (-2060 °C) at Un 23104 °F (-540 °C) unrestricted operation
-40158 °F (-4070 °C)
<= 9842.52 ft (3000 m)
3 conforming to IEC 60947-5-1

Offer Sustainability

WARNING: This product can expose you to chemicals including:	WARNING: This product can expose you to chemicals including:	
Nickel compounds, which is known to the State of California to cause cancer, and	Nickel compounds, which is known to the State of California to cause cancer, and	
Di-isodecyl phthalate (DIDP), which is known to the StateDi-isodecyl phthalate (DIDP), which is known to the State of California to cause birth of California to cause birth defects or other reproductive harm.		
For more information go to www.p65warnings.ca.gov	For more information go to www.p65warnings.ca.gov	

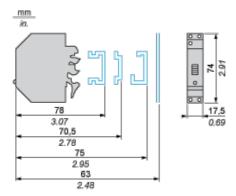
Contractual warranty

Warranty period	18 months

Electromechanical Interface Module

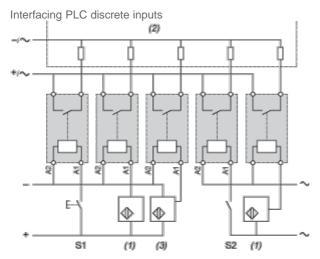
Dimensions





Electromechanical Interface Module

Example of Application with PLC



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

