## **ABR1S102B**

# output interface module - 17.5 mm - electromechanical - 24 V DC - 1 NO



#### Main

Range of product	Interface for discrete signals
Product or component type	Electromechanical output interface module
Contacts type and composition	1 NO
[Uc] control circuit voltage	24 V
Control circuit type	DC
Width pitch dimension	17.5 mm
[In] rated current	<= 62 mA DC
Reverse polarity protection	With, circuit application: no
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	12 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 voltage limits	30 V energization threshold: 15 V
Maximum switching voltage	125 V DC
Housing colour	Grey
Connections - terminals	Screw clamp terminal
Drop-out voltage	<= 3.2 V
Holding current	>= 6.6 mA DC
Power dissipation in W	<= 1.5 W
[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 4 A AC-12 Ue: 230 V per 1000000 cycles conforming to IEC 60947-5-1 5 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
[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	0.272.5 mm², 2 wires rigid	
	0.274 mm², 1 wire rigid	
	0.342.5 mm <sup>2</sup> , 1 or 2 wires flexible with cable end	
	0.62.5 mm <sup>2</sup> , 1 or 2 wires flexible without cable end	
Operating position	Any position	
Installation category	II conforming to IEC 60947-1	
Mounting support	Asymmetrical DIN rail	
	Combination rail	
	Symmetrical DIN rail	
Product weight	0.09 kg	

### Environment

Immunity to microbreaks	3 ms
Dielectric strength	1500 V for 1 minute between independent contacts
	2500 V for 1 minute between wired interface and earth
	4000 V for 1 minute between coil circuit and contact circuits
Standards	IEC 60947-5-1
Product certifications	BV
	CSA
	DNV (Det Norske Veritas)
	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 (f = 1055 Hz) conforming to IEC 60068-2-6
Electromagnetic compatibility	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
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

