Product data sheet Characteristics

ABR1S318B

[In] rated current

output interface module - 17.5 mm - electromechanical - 24 V AC/DC - 1 OC



Main Interface for discrete signals Range of product Product or component Electromechanical output interface module type [Uc] control circuit volt-24 V age Control circuit type AC/DC 1 C/O Number and type of contact Width pitch dimension 17.5 mm

≤ 62 mA DC

Local signalling Green mechanical indicator for position of contacts and 1 green LED control signal state

≤ 55 mA AC

Complementary

Complementary	
Maximum switching voltage	125 V DC 252 V AC
Control circuit frequency	50/60 Hz
Control voltage limits	30 V energization threshold: 16.5 V
Housing colour	Grey
Connections - terminals	Screw clamp terminal
Drop-out voltage	≤ 3.8 V
Holding current	≥ 4.9 mA DC ≥ 5.2 mA AC
Power dissipation	≤ 1.5 W
Reverse polarity protection	Yes , circuit application: yes
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)
[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
[Ith] conventional free air thermal current	12 A conforming to IEC 60947-1
[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	≤ 0.5 Hz at le ≤ 6 Hz at no-load
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	0.272.5 mm ² , 2 wires rigid cable	
	0.274 mm ² , 1 wire rigid cable	
	0.342.5 mm ² , 1 or 2 wires flexible cable with cable end	
	0.62.5 mm ² , 1 or 2 wires flexible cable 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	0.095 kg	

Environment

Immunity to microbreaks	8 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 , 0.5 kV for U < 50 V conforming to IEC 255-4 1.2/50 ms shock waves immunity test , 0.25 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 power supply 2 kV conforming to IEC 61000-4-4 Rapid transients immunity test , on input/output 1 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
RoHS EUR status	Compliant
RoHS EUR conformity date	0616

