# Product datasheet Characteristics

# RSB1A120ND



### Main

-

#### Complementary

Shape of pin	Flat (PCB type)	
Average resistance	9000 Ohm (AC) at 20 °C +/- 10 %	
System Voltage	4290 V DC	
[Ui] rated insulation voltage	400 V conforming to EN/IEC 60947	
[Uimp] rated impulse withstand voltage	3.6 kV conforming to IEC 61000-4-5	
Contacts material	Silver alloy (AgNi)	
[le] rated operational current	12 A, NO (AC-1/DC-1) conforming to IEC 6 A, NC (AC-1/DC-1) conforming to IEC	
Minimum switching current	100 mA	
Maximum switching voltage	250 V DC conforming to IEC	
Switching voltage	5 V	
Maximum switching capacity	3000 VA/336 W	
Load current	12 A at 250 V AC 12 A at 28 V DC	
Minimum switching capacity	500 mW at 100 mA / 5 V	
Operating rate	<= 600 cycles/hour under load <= 18000 cycles/hour no-load	
Mechanical durability	30000000 cycles	
Electrical durability	100000 cycles (12 A at 250 V, AC-1) NO 100000 cycles (6 A at 250 V, AC-1) NC	
Operating time	20 ms operating 20 ms reset	
Marking	CE	
Average coil consumption	0.45 W DC	
Drop-out voltage threshold	>= 0.1 Uc DC	
Safety reliability data	B10d = 100000	
Protection category	RTI	
Operating position	Any position	
Product weight	0.03 lb(US) (0.014 kg)	
Device presentation	Complete product	

# Environment dielectric strength

EN/IEC 61810-1



1000 V AC between contacts

2500 V AC between poles 5000 V AC between coil and contact

CSA C22.2 No 14
CSA UL EAC
-40185 °F (-4085 °C)
+/- 1 mm (f = 1055 Hz) conforming to EN/IEC 60068-2-6
IP40 conforming to EN/IEC 60529
10 gn for11 ms not operating conforming to EN/IEC 60068-2-27 5 gn for11 ms in operation conforming to EN/IEC 60068-2-27
-40185 °F (-4085 °C) (DC)
-

#### **Offer Sustainability**

WARNING: This product can expose you to chemicals WARNING: This product can expose you to chemicals including:

Nickel compounds, which is known to the State of California to cause cancer, and California to cause cancer, and

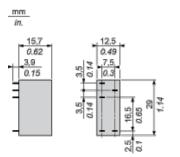
Di-isodecyl phthalate (DIDP), which is known to the StateDi-isodecyl phthalate (DIDP), which is known to the State of California to cause birth of California to cause birth defects or other reproductive defects or other reproductive harm. harm.

For more information go to www.p65warnings.ca.gov For more information go to www.p65warnings.ca.gov
---

#### Contractual warranty

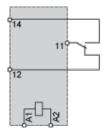
Warranty period 18 months

#### **Dimensions**



## Wiring Diagram

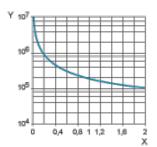




## **Electrical Durability of Contacts**

Durability (inductive load) = durability (resistive load) x reduction coefficient. Resistive AC load

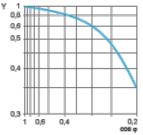




X Switching capacity (kVA)

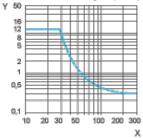
Y Durability (Number of operating cycles)

Reduction coefficient for inductive AC load (depending on power factor  $\cos \phi$ )



Y Reduction coefficient (A)

Maximum switching capacity on resistive DC load



X Voltage DC

Y Current DC

Note : These are typical curves, actual durability depends on load, environment, duty cycle, etc.

