

Product data sheet

Specifications



Interface plug-in relay, 12 A, 1 CO, 60 V DC

RSB1A120ND

⚠ Discontinued on: Oct 20, 2020

⚠ End-of-service on: Jan 22, 2021

⚠ Discontinued

Main

Range of product	Harmony Relay
Series name	Interface relay
Product or component type	Plug-in relay
Device short name	RSB
Contacts type and composition	1 C/O
Contact operation	Standard
[Uc] control circuit voltage	60 V DC
status LED	Without
Control type	Without push-button
[Ithe] conventional enclosed thermal current	12 A -40...104 °F (-40...40 °C)

Complementary

Average resistance	9000 Ohm AC 20 °C +/- 10 %
[Ue] rated operational voltage	42...90 V DC
[Uimp] rated impulse withstand voltage	3.6 kV IEC 61000-4-5
[Ie] rated operational current	12 A AC-1/DC-1) NO IEC 6 A AC-1/DC-1) NC IEC
[Ui] rated insulation voltage	400 V IEC 60947
Maximum switching voltage	300 V DC IEC
Drop-out voltage threshold	>= 0.1 Uc DC
Load current	12 A 250 V AC 12 A 28 V DC
minimum switching current	10 mA
Maximum switching capacity	3000 VA/336 W
minimum switching voltage	12 V
Minimum switching capacity	120 mW 10 mA, 12 V
Operating time	20 ms operating 20 ms reset
Mechanical durability	30000000 cycles
Electrical durability	100000 cycles, 12 A 250 V, AC-1 NO 100000 cycles, 6 A 250 V, AC-1 NC
Safety reliability data	B10d = 100000

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Operating rate	<= 600 cycles/hour under load <= 18000 cycles/hour no-load
Average coil consumption	0.45 W DC
Protection category	RT I
Operating position	Any position
Test levels	Level A group mounting
Device presentation	Complete product
Sale per indivisible quantity	10
Contacts material	Silver alloy (AgNi)
Shape of pin	Flat (PCB type)
Net weight	0.031 lb(US) (0.014 kg)
Compatibility code	RSB

Environment

Dielectric strength	1000 V AC between contacts 2500 V AC between poles 5000 V AC between coil and contact
Vibration resistance	+/- 1 mm (f= 10...55 Hz) conforming to IEC 60068-2-6
IP degree of protection	IP40 conforming to IEC 60529
Ambient air temperature for operation	-40...185 °F (-40...85 °C) DC)
Standards	IEC 61810-1 CSA C22.2 No 14 UL 508
Product certifications	CSA UL EAC
Marking	CE
Ambient air temperature for storage	-40...185 °F (-40...85 °C)
Shock resistance	10 gn 11 ms) not operating IEC 60068-2-27 5 gn 11 ms) in operation IEC 60068-2-27

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	0.7 in (1.7 cm)
Package 1 Width	1.0 in (2.5 cm)
Package 1 Length	1.2 in (3.1 cm)
Package 1 Weight	0.5 oz (15 g)

Contractual warranty

Warranty (in months)	18
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Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

Use Better

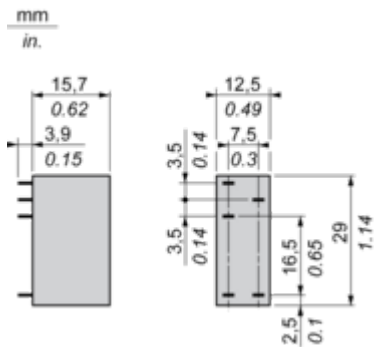
Materials and Substances	
SCIP Number	45b41055-6c52-408d-9c0c-5c663b810f29
EU RoHS Directive	Compliant

Use Longer

Lifetime extension	
Repair	No

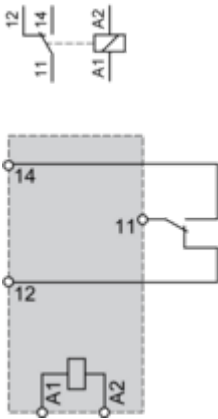
Dimensions Drawings

Dimensions



Connections and Schema

Wiring Diagram

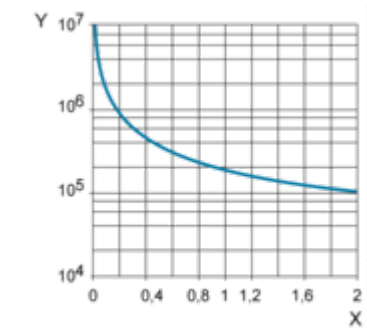


NOTE: For DC input, A1 have to be +, otherwise it would short circuit from protection module

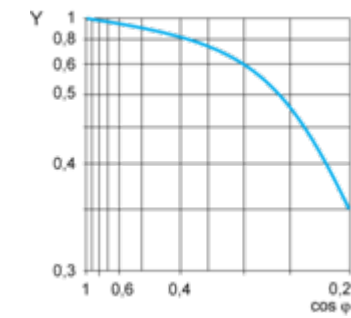
Performance Curves

Electrical Durability of Contacts

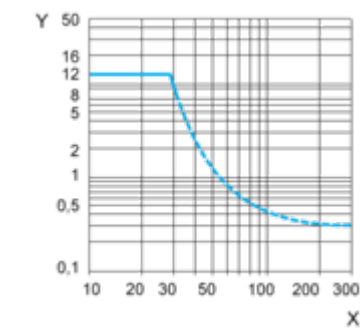
Durability (inductive load) = durability (resistive load) x reduction coefficient.
Resistive AC load



X Switching capacity (kVA)
Y Durability (Number of operating cycles)
Reduction coefficient for inductive AC load (depending on power factor cos φ)



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.

Technical Illustration

Dimensions

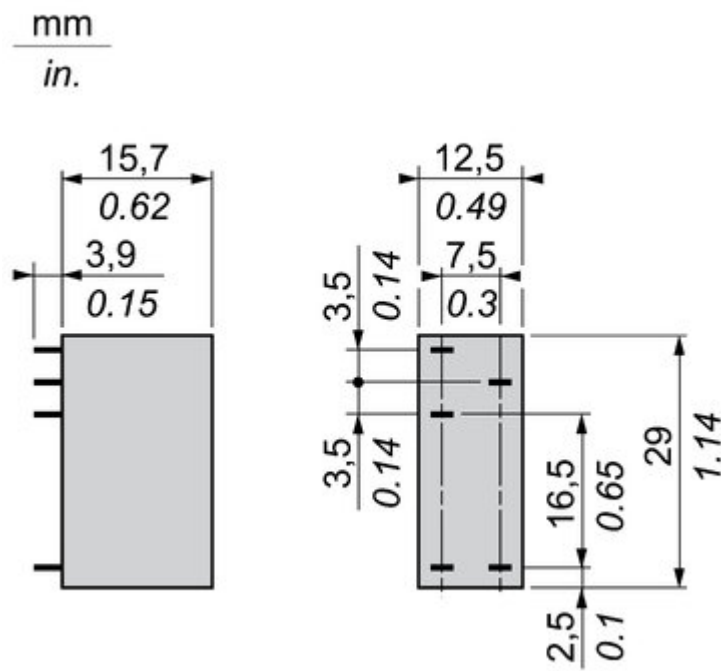


Image of product / Alternate images

Alternative

