

Product data sheet

Specifications



interface plug-in relay, Harmony electromechanical relays, 12A, 1CO, 48V DC

RSB1A120ED

Product availability: Non-Stock - Not normally stocked in distribution facility

⚠ Discontinued

Main

Range of Product	Harmony Electromechanical Relays
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	48 V DC
[Ithe] conventional enclosed thermal current	12 A -40...104 °F (-40...40 °C)
Status LED	Without
Control Type	Without push-button

Complementary

Shape of pin	Flat (PCB type)
average coil resistance	5520 Ohm AC 20 °C +/- 10 %
[Ue] rated operational voltage	33.6...72 V DC
[Ui] rated insulation voltage	400 V IEC 60947
[Uimp] rated impulse withstand voltage	3.6 kV IEC 61000-4-5
Contacts material	Silver alloy (AgNi)
[Ie] rated operational current	12 A AC-1/DC-1) NO IEC 6 A AC-1/DC-1) NC IEC
minimum switching current	10 mA
Maximum switching voltage	300 V DC IEC
minimum switching voltage	12 V
Maximum switching capacity	3000 VA/336 W
resistive rated load	12 A 250 V AC 12 A 28 V DC
Minimum switching capacity	120 mW 10 mA, 12 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

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

Operating time	20 ms operating 20 ms reset
average coil consumption	0.45 W DC
Drop-out voltage threshold	>= 0.1 U _c DC
Safety reliability data	B10d = 100000
Protection category	RT I
Test levels	Level A group mounting
Operating position	Any position
Product Weight	0.031 lb(US) (0.014 kg)
Sale per indivisible quantity	10
Device presentation	Complete product

Environment

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

Ordering and shipping details

Category	US10CP221127
Discount Schedule	0CP2
GTIN	3389110254167
Returnability	Yes
Country of origin	AT

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	0.87 in (2.2 cm)
Package 1 Width	0.98 in (2.5 cm)
Package 1 Length	12.24 in (31.1 cm)
Package 1 Weight	0.5 oz (14 g)
Unit Type of Package 2	BB1
Number of Units in Package 2	10

Package 2 Height	0.87 in (2.2 cm)
Package 2 Width	0.98 in (2.5 cm)
Package 2 Length	12.24 in (31.1 cm)
Package 2 Weight	5.7 oz (161 g)
Unit Type of Package 3	S01
Number of Units in Package 3	350
Package 3 Height	5.91 in (15 cm)
Package 3 Width	5.91 in (15 cm)
Package 3 Length	15.75 in (40 cm)
Package 3 Weight	12.92 lb(US) (5.86 kg)

Contractual warranty

Warranty	18 months
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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 >](#)

Environmental footprint

Carbon footprint (kg CO2 eq, Total Life cycle) 5

Environmental Disclosure [Product Environmental Profile](#)

Use Better

Materials and Substances

Packaging made with recycled cardboard Yes

Packaging without single use plastic Yes


China RoHS Regulation [China RoHS declaration](#)

California proposition 65 **WARNING:** This product can expose you to chemicals including: Nickel compounds, which is known to the State of California to cause cancer, and Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

Use Again

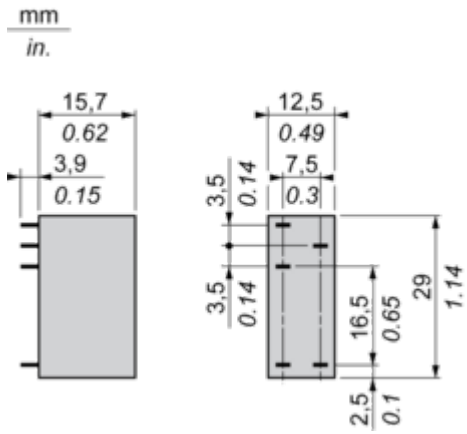
Repack and remanufacture

Circularity Profile No need of specific recycling operations

WEEE  The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.

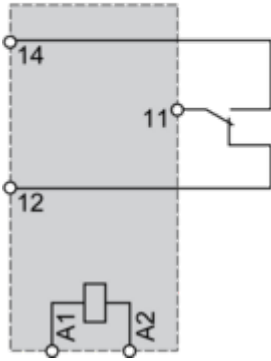
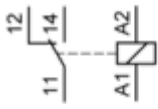
Dimensions Drawings

Dimensions



Connections and Schema

Wiring Diagram



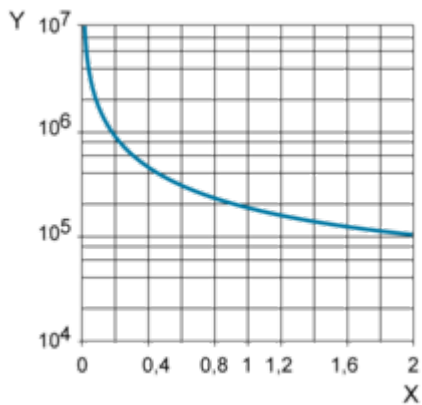
NOTE: For DC input, A1 have to be +, otherwise it would short circuit from protection module

Performance Curves

Electrical Durability of Contacts

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

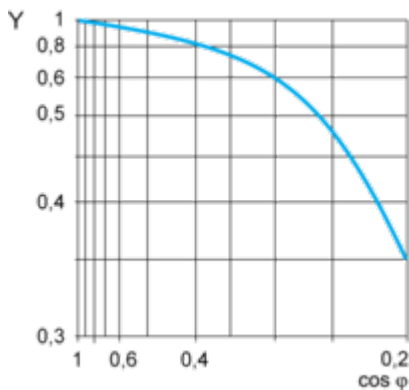
Resistive AC load



X Switching capacity (kVA)

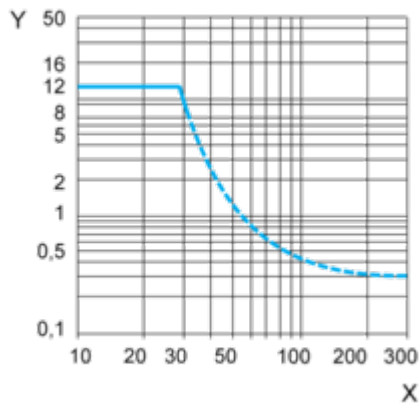
Y Durability (Number of operating cycles)

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

mm
in.

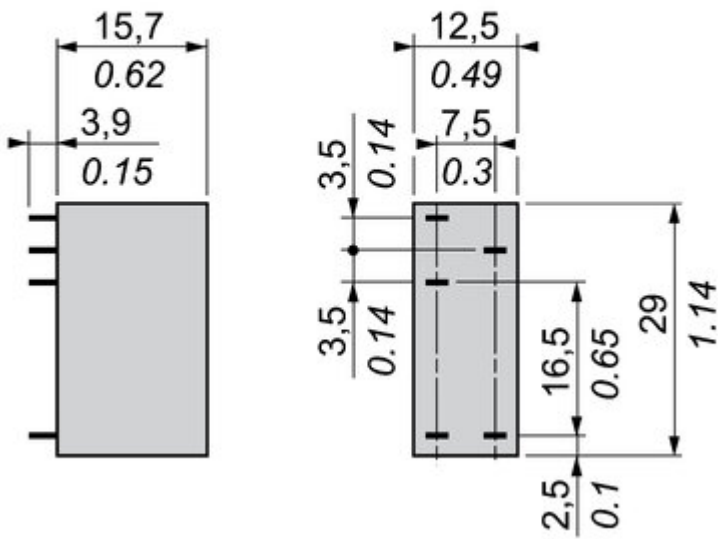


Image of product / Alternate images

Alternative

