

Product data sheet

Specifications



interface plug-in relay, Harmony
electromechanical relays, 12A, 1CO,
24V DC

RSB1A120BD

Product availability: Stock - Normally stocked in distribution facility

Price*: 4.27 USD

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	24 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	1440 Ohm AC 20 °C +/- 10 %
[Ue] rated operational voltage	16.8...36 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

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

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
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
Net 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	CSA C22.2 No 14 UL 508 IEC 61810-1
Product Certifications	UL CSA EAC
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	3389110254136
Returnability	Yes
Country of origin	PL

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	0.71 in (1.800 cm)
Package 1 Width	0.79 in (2.000 cm)
Package 1 Length	1.14 in (2.900 cm)
Package 1 Weight	0.459 oz (13.000 g)
Unit Type of Package 2	BB1

Number of Units in Package 2	10
Package 2 Height	0.67 in (1.700 cm)
Package 2 Width	0.98 in (2.500 cm)
Package 2 Length	12.20 in (31.000 cm)
Package 2 Weight	5.009 oz (142.000 g)
Unit Type of Package 3	S01
Number of Units in Package 3	350
Package 3 Height	5.91 in (15.000 cm)
Package 3 Width	5.91 in (15.000 cm)
Package 3 Length	15.75 in (40.000 cm)
Package 3 Weight	11.409 lb(US) (5.175 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 CO ₂ eq, Total Life cycle)	5
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Environmental Disclosure	Product Environmental Profile
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Use Better

Materials and Substances

Packaging made with recycled cardboard	Yes
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Packaging without single use plastic	Yes
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EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
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SCIP Number	45b41055-6c52-408d-9c0c-5c663b810f29
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REACH Regulation	REACH Declaration
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China RoHS Regulation	China RoHS declaration
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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 Diisodecyl 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



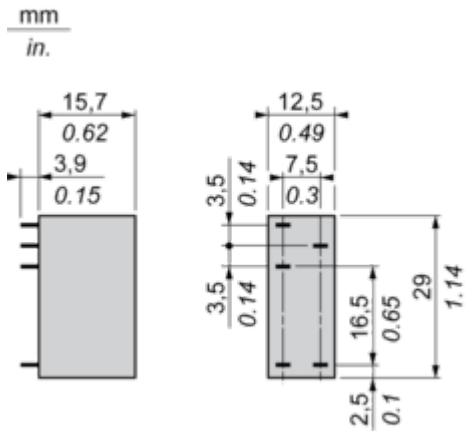
The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.

Take-back

No

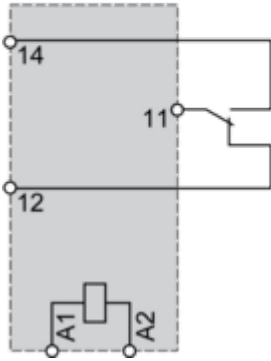
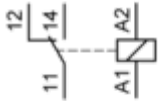
Dimensions Drawings

Dimensions



Connections and Schema

Wiring Diagram



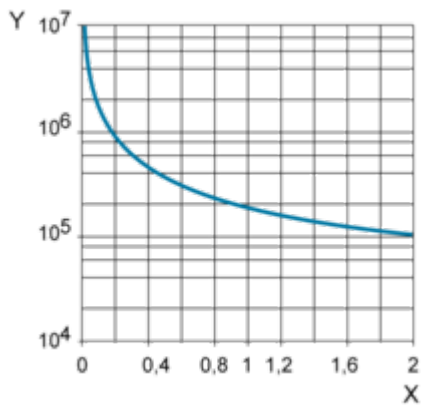
NOTE: For DC input, A1 have to be +, otherwise it would short circuit from protection module

Performance Curves

Electrical Durability of Contacts

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

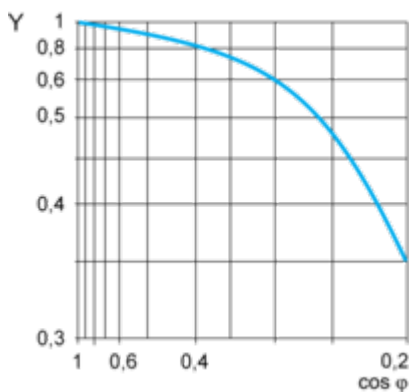
Resistive AC load



X Switching capacity (kVA)

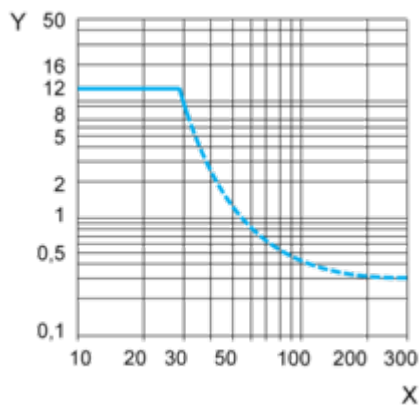
Y Durability (Number of operating cycles)

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

mm
in.

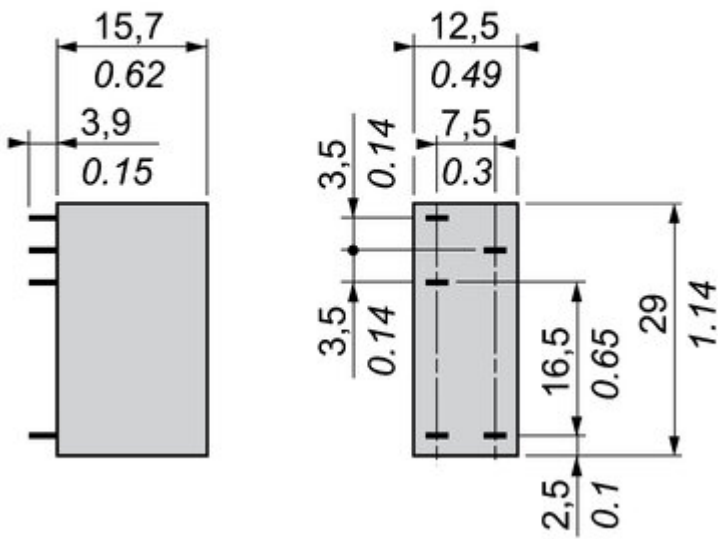


Image of product / Alternate images

Alternative

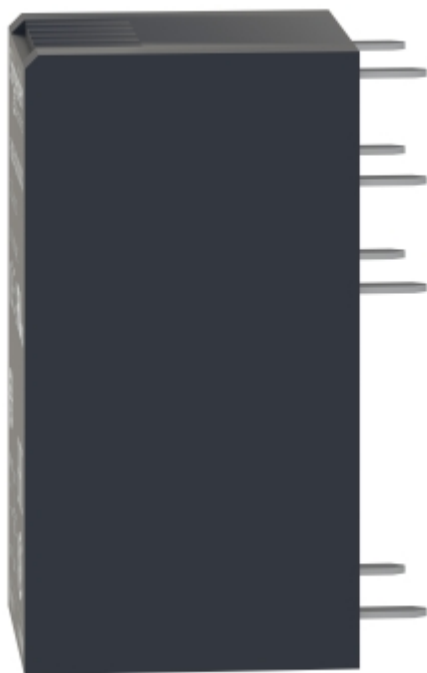
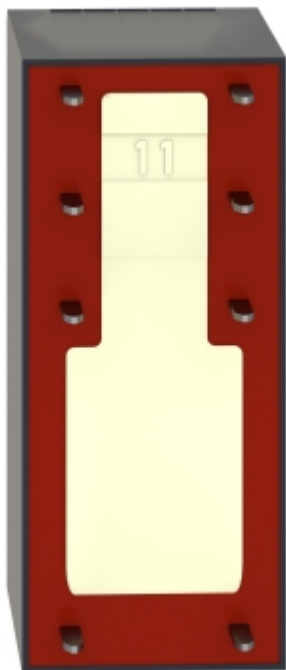




Image of product in real life situation

