

# Product data sheet

Specifications



## interface plug in relay, Harmony Electromechanical Relays, 16A, 1CO, 24V DC

RSB1A160BD

**Product availability: Stock - Normally stocked in distribution facility**

**Price\*: 5.12 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	16 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	16 A AC-1/DC-1) NO IEC 8 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	4000 VA/448 W
resistive rated load	16 A 250 V AC 16 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.

<b>Electrical durability</b>	100000 cycles, 16 A at 250 V, AC-1 NO 100000 cycles, 8 A at 250 V, AC-1 NC
<b>Operating time</b>	20 ms operating 20 ms reset
<b>Marking</b>	CE
<b>average coil consumption</b>	0.45 W DC
<b>Drop-out voltage threshold</b>	>= 0.1 U <sub>c</sub> DC
<b>Safety reliability data</b>	B10d = 100000
<b>Protection category</b>	RT I
<b>Test levels</b>	Level A group mounting
<b>Operating position</b>	Any position
<b>Product Weight</b>	0.031 lb(US) (0.014 kg)
<b>Sale per indivisible quantity</b>	10
<b>Device presentation</b>	Complete product

## Environment

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

## Ordering and shipping details

<b>Category</b>	US10CP221127
<b>Discount Schedule</b>	0CP2
<b>GTIN</b>	3389110254464
<b>Returnability</b>	Yes
<b>Country of origin</b>	AT

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	0.67 in (1.700 cm)
<b>Package 1 Width</b>	0.98 in (2.500 cm)
<b>Package 1 Length</b>	12.20 in (31.000 cm)
<b>Package 1 Weight</b>	0.423 oz (12.000 g)

<b>Unit Type of Package 2</b>	BB1
<b>Number of Units in Package 2</b>	10
<b>Package 2 Height</b>	0.67 in (1.700 cm)
<b>Package 2 Width</b>	0.98 in (2.500 cm)
<b>Package 2 Length</b>	12.24 in (31.100 cm)
<b>Package 2 Weight</b>	5.150 oz (146.000 g)
<b>Unit Type of Package 3</b>	S01
<b>Number of Units in Package 3</b>	350
<b>Package 3 Height</b>	5.91 in (15.000 cm)
<b>Package 3 Width</b>	5.91 in (15.000 cm)
<b>Package 3 Length</b>	15.75 in (40.000 cm)
<b>Package 3 Weight</b>	11.464 lb(US) (5.200 kg)

## Contractual warranty

<b>Warranty</b>	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)	15
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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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China RoHS Regulation	<a href="#">China RoHS declaration</a>
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California proposition 65	<p><b>WARNING:</b> 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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a></p>
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## Use Again

### Repack and remanufacture

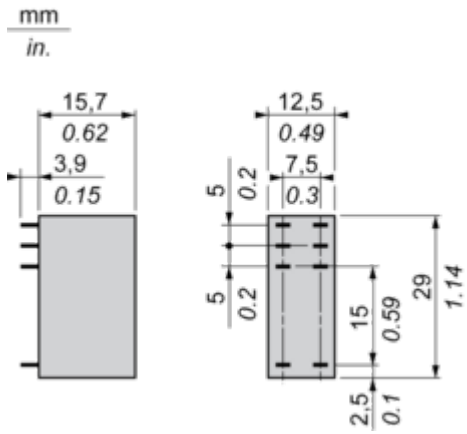
WEEE	 The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.
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Take-back	No
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Dimensions Drawings

Dimensions

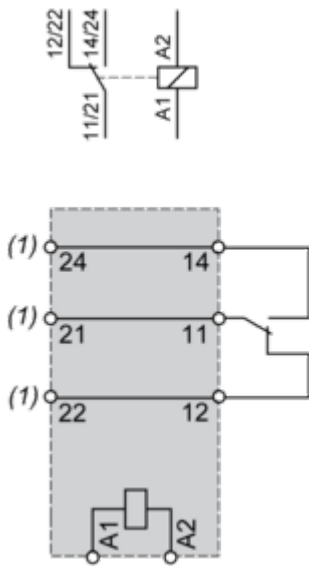
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Connections and Schema

Wiring Diagram

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(1) Terminals 11 and 21, 14 and 24, 12 and 22 must be linked for this references

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

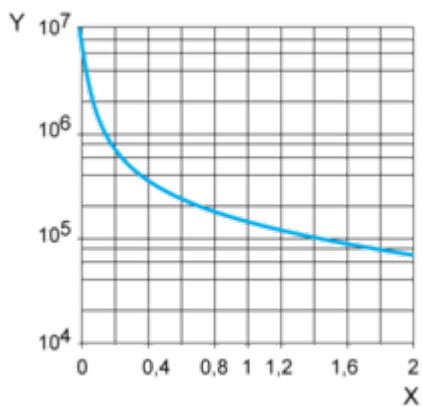
Performance Curves

**Electrical Durability of Contacts**

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

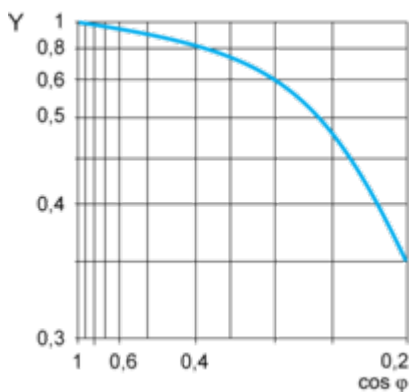
Resistive AC load



X Switching capacity (kVA)

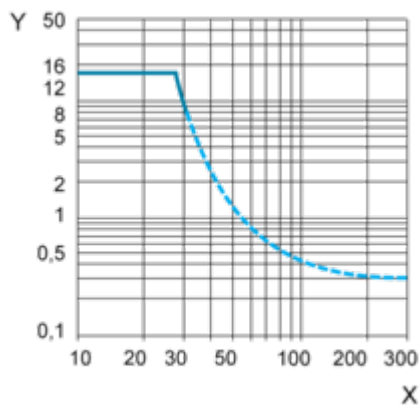
Y Durability (Number of operating cycles)

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

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mm  
in.

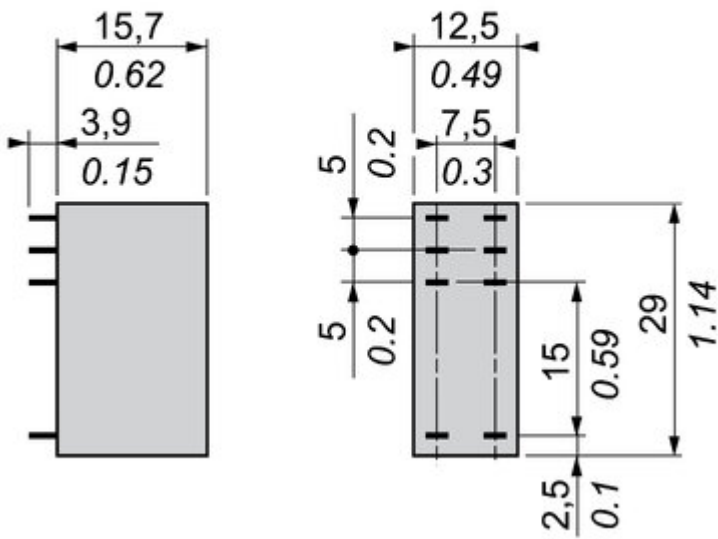


Image of product / Alternate images

Alternative

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