

# Product data sheet

Specifications



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

RSB1A160BD

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

### 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 EN/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

<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
<b>Operating position</b>	Any position
<b>Net Weight</b>	0.03 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 EN/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 10...55 Hz)EN/IEC 60068-2-6
<b>IP degree of protection</b>	IP40 conforming to EN/IEC 60529
<b>Shock resistance</b>	10 gn 11 ms) not operating EN/IEC 60068-2-27 5 gn 11 ms) in operation EN/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>	21127-ZELIO ICE CUBE RELAYS
<b>Discount Schedule</b>	CP2
<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>	0.42 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>	5.15 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>	11.73 lb(US) (5.320 kg)

## Offer Sustainability

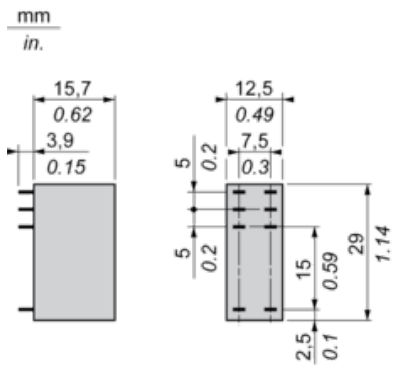
<b>California proposition 65</b>	WARNING: This product can expose you to chemicals including: Nickel compounds, which is known to the State of California to cause cancer, and Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>
<b>EU RoHS Directive</b>	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
<b>Toxic heavy metal free</b>	Yes
<b>Mercury free</b>	Yes
<b>China RoHS Regulation</b>	<a href="#">China RoHS declaration</a>
<b>RoHS exemption information</b>	<a href="#">Yes</a>
<b>Environmental Disclosure</b>	<a href="#">Product Environmental Profile</a>
<b>WEEE</b>	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.

## Contractual warranty

<b>Warranty</b>	18 months
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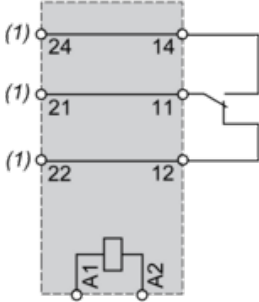
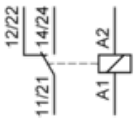
Dimensions

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## Wiring Diagram

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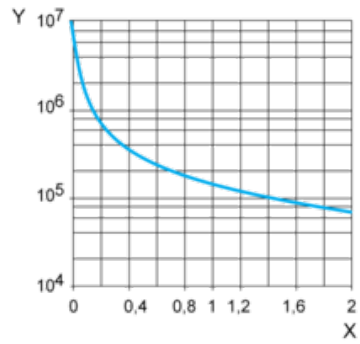
(1) Terminals 11 and 21, 14 and 24, 12 and 22 must be linked for this references

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

**Electrical Durability of Contacts**

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

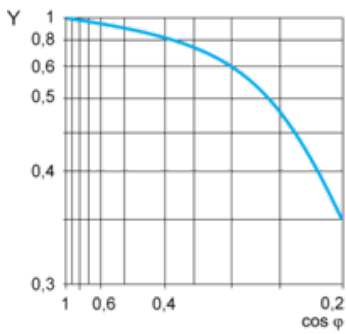
Resistive AC load



X Switching capacity (kVA)

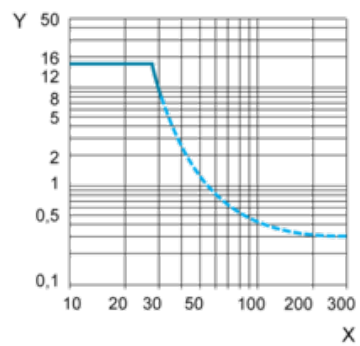
Y Durability (Number of operating cycles)

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.

**Recommended replacement(s)**