

Product data sheet

Specifications



Interface plug in relay with socket, Harmony, 16A, 1CO, 24V DC

RSB1A160BDS

 **Discontinued on:** Jun 15, 2023

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	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
Average Coil Resistance	1440 Ohm DC 20 °C +/- 10 %
[Ue] Rated Operational Voltage	19.2...26.4 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 (Ag/Ni)
[Ie] Rated Operational Current	16 A AC-1/DC-1) NO IEC 8 A AC-1/DC-1) NC IEC
Minimum Switching Current	5 mA
Maximum Switching Voltage	300 V DC 400 V AC
Minimum Switching Voltage	5 V
Maximum Switching Capacity	4000 VA AC 448 W DC
Resistive Rated Load	16 A 250 V AC 16 A 28 V DC
Minimum Switching Capacity	300 mW 5 mA
Operating Rate	<= 600 cycles/hour under load <= 72000 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.

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

Electrical Durability	100000 cycles, 16 A at 250 V, AC-1 NO 100000 cycles, 8 A at 250 V, AC-1 NC
Operating Time	4 ms between coil de-energisation and making of the Off-delay contact 9 ms between coil energisation and making of the On-delay contact
Marking	CE
Average Coil Consumption	0.45 W DC
Drop-Out Voltage Threshold	>= 0.1 Uc DC
Safety Reliability Data	B10d = 100000
Protection Category	RT I
Operating Position	Any position
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	EN/IEC 61810-1 CSA C22.2 No 14 UL 508
Product Certifications	CSA GOST UL
Ambient Air Temperature For Storage	-40...185 °F (-40...85 °C)
Vibration Resistance	+/- 1 mm 10...55 Hz)EN/IEC 60068-2-6
Ip Degree Of Protection	IP40 conforming to EN/IEC 60529
Shock Resistance	10 gn 11 ms) not operating EN/IEC 60068-2-27 5 gn 11 ms) in operation EN/IEC 60068-2-27
Ambient Air Temperature For Operation	-40...158 °F (-40...70 °C) AC) -40...185 °F (-40...85 °C) DC)

Ordering and shipping details

Category	US10CP221127
Discount Schedule	OCP2
Gtin	3389110251920
Returnability	No
Country Of Origin	FR

Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	3.15 in (8 cm)
Package 1 Width	3.94 in (10 cm)
Package 1 Length	13.39 in (34 cm)
Package 1 Weight	2.29 oz (65 g)
Unit Type Of Package 2	BB1

Number Of Units In Package 2	20
Package 2 Height	2.95 in (7.5 cm)
Package 2 Width	4.06 in (10.3 cm)
Package 2 Length	13.39 in (34 cm)
Package 2 Weight	2.89 lb(US) (1.31 kg)
Unit Type Of Package 3	S02
Number Of Units In Package 3	60
Package 3 Height	5.91 in (15 cm)
Package 3 Width	11.81 in (30 cm)
Package 3 Length	15.75 in (40 cm)
Package 3 Weight	8.82 lb(US) (4 kg)

Contractual warranty

Warranty	18 months
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Sustainability

Green Premium™ label is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO₂ products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

[Learn more about Green Premium >](#)

[Guide to assess a product's sustainability >](#)



Transparency

Well-being performance

✓ Toxic Heavy Metal Free

✓ Mercury Free

✓ Rohs Exemption Information Yes

Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
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China Rohs Regulation	China RoHS declaration
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Environmental Disclosure	Product Environmental Profile
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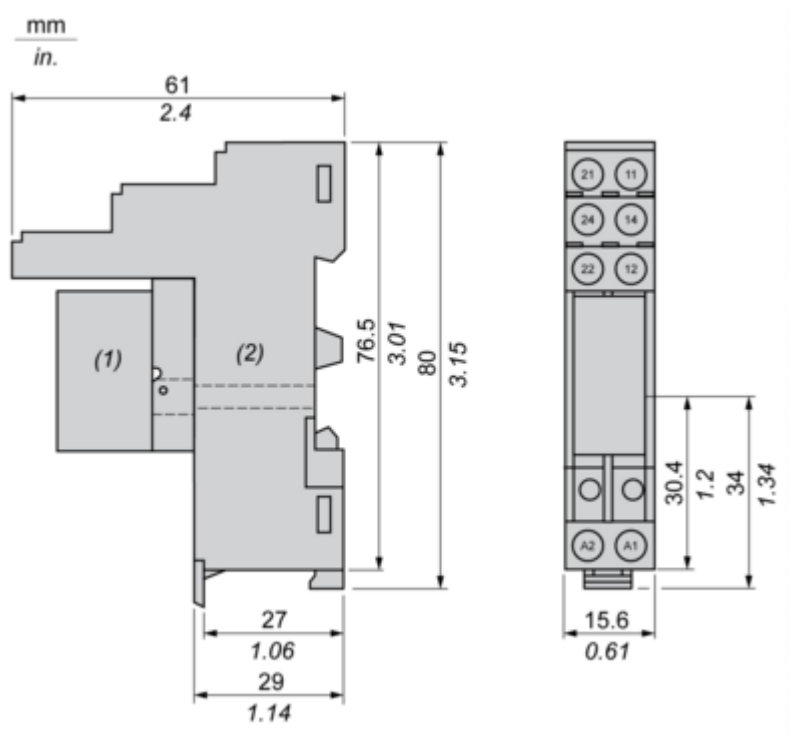
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.
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California Proposition 65	WARNING: This product can expose you to chemicals including: Nickel compounds, which is known 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
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Dimensions Drawings

Dimensions

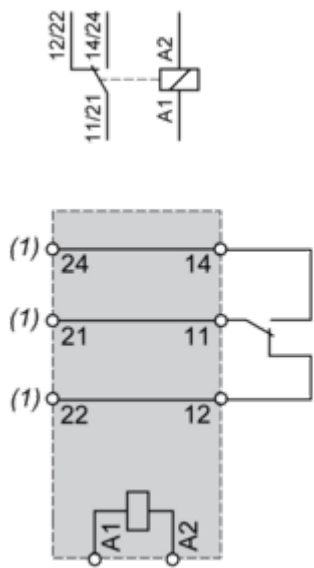
Relay Complete with Socket



- (1) Relays
- (2) Socket

Connections and Schema

Wiring Diagram



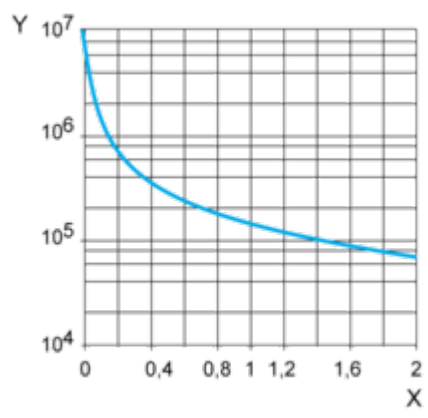
(1) Terminals 11 and 21, 14 and 24, 12 and 22 must be linked for this references

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

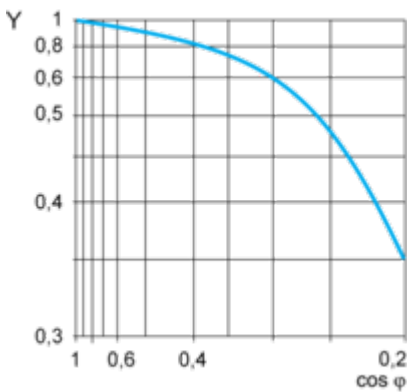
Performance Curves

Electrical Durability of Contacts

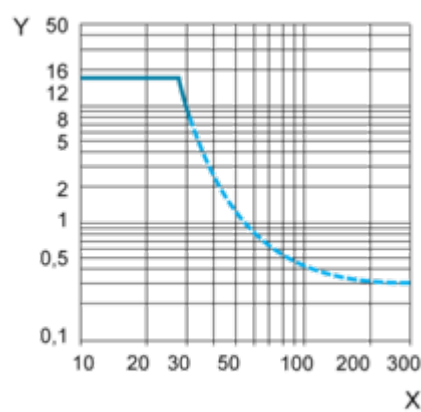
Durability (inductive load) = durability (resistive load) x reduction coefficient.
Resistive AC load



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.

