

Product data sheet

Specifications



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

RSB1A160B7S

 **Discontinued on:** Jun 30, 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 AC
Status LED	Without
Control Type	Without push-button
[Ithe] conventional enclosed thermal current	16 A -40...104 °F (-40...40 °C)

Complementary

Average resistance	400 Ohm AC 20 °C +/- 15 %
[Ue] rated operational voltage	19.2...26.4 V AC 50 Hz 20.4...26.4 V AC 60 Hz
[Uimp] rated impulse withstand voltage	3.6 kV IEC 61000-4-5
[Ie] rated operational current	16 A AC-1/DC-1) NO IEC 8 A AC-1/DC-1) NC IEC
[Ui] rated insulation voltage	400 V IEC 60947
Maximum switching voltage	300 V DC 400 V AC
Drop-out voltage threshold	$\geq 0.15 U_c$ AC
Load current	16 A 250 V AC 16 A 28 V DC
minimum switching current	5 mA
Maximum switching capacity	4000 VA AC 448 W DC
minimum switching voltage	5 V
Minimum switching capacity	300 mW 5 mA
Operating time	10 ms between coil de-energisation and making of the Off-delay contact 12 ms between coil energisation and making of the On-delay contact
Mechanical durability	30000000 cycles
Electrical durability	100000 cycles, 16 A at 250 V, AC-1 NO 100000 cycles, 8 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.

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

Safety reliability data	B10d = 100000
Operating rate	<= 600 cycles/hour under load <= 72000 cycles/hour no-load
Average coil consumption	0.75 VA AC 60 Hz
Protection category	RT I
Operating position	Any position
Device presentation	Complete product
Sale per indivisible quantity	10
Contacts material	Silver alloy (Ag/Ni)
Shape of pin	Flat
Compatibility code	RSB

Environment

Dielectric strength	1000 V AC between contacts 2500 V AC between poles 5000 V AC between coil and contact
Vibration resistance	+/- 1 mm (f= 10...55 Hz) conforming to IEC 60068-2-6
IP degree of protection	IP40 conforming to IEC 60529
Ambient air temperature for operation	-40...158 °F (-40...70 °C) AC -40...185 °F (-40...85 °C) DC
Standards	UL 508 IEC 61810-1 CSA C22.2 No 14
Product Certifications	UL GOST CSA
Marking	CE
Ambient Air Temperature for Storage	-40...185 °F (-40...85 °C)
Shock resistance	10 gn 11 ms) not operating IEC 60068-2-27 5 gn 11 ms) in operation IEC 60068-2-27

Ordering and shipping details

Category	US10CP221127
Discount Schedule	0CP2
GTIN	3389110255232
Returnability	No

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	3.0 in (7.5 cm)
Package 1 Width	4.1 in (10.5 cm)
Package 1 Length	13.4 in (34.0 cm)
Package weight(Lbs)	2.2 oz (61.0 g)
Unit Type of Package 2	BB1
Number of Units in Package 2	20

Package 2 Height	3.0 in (7.5 cm)
Package 2 Width	4.1 in (10.5 cm)
Package 2 Length	13.4 in (34.0 cm)
Package 2 Weight	2.718 lb(US) (1.233 kg)
Unit Type of Package 3	S02
Number of Units in Package 3	60
Package 3 Height	5.9 in (15.0 cm)
Package 3 Width	11.8 in (30.0 cm)
Package 3 Length	15.7 in (40.0 cm)
Package 3 Weight	8.858 lb(US) (4.018 kg)

Contractual warranty

Warranty (in months)	18
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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](#) >

Use Better

Materials and Substances	
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
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 Longer

Lifetime extension	
Repair	No

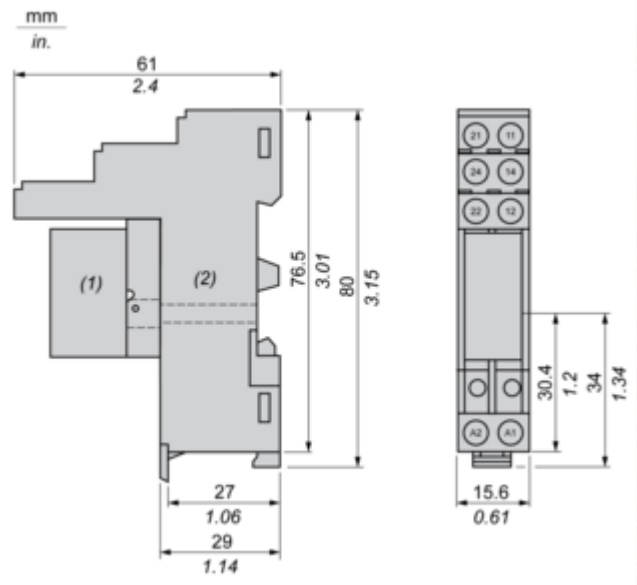
Use Again

Repack and remanufacture	
Circularity Profile	No need of specific recycling operations

Dimensions Drawings

Dimensions

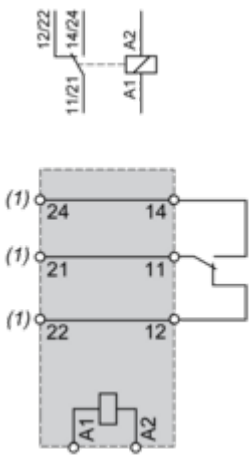
Relay Complete with Socket



- (1) Relays
- (2) Socket

Connections and Schema

Wiring Diagram



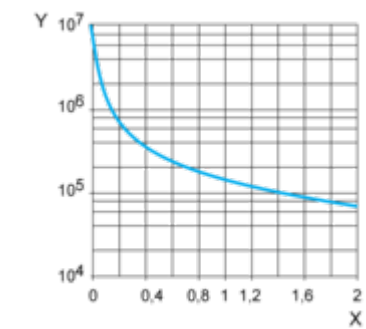
(1) Terminals 11 and 21,14 and 24,12 and 22 must be linked for this references

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

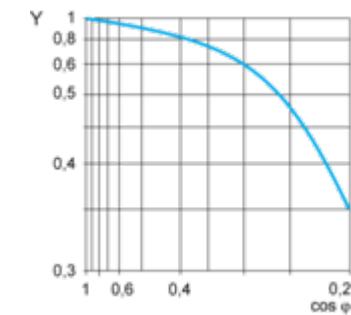
Performance Curves

Electrical Durability of Contacts

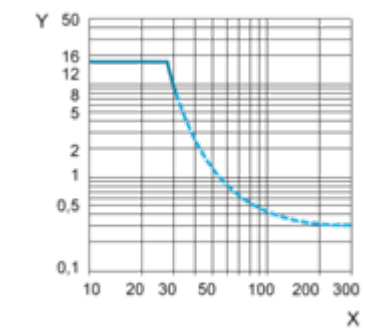
Durability (inductive load) = durability (resistive load) x reduction coefficient.
Resistive AC load



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.