Product data sheet

Specifications



interface plug in relay, Harmony Electromechanical Relays, 16A, 1CO, 120V AC

RSB1A160F7

Product availability: Stock - Normally stocked in distribution facility

Main

Range of Product	Harmony Electromechanical Relays
Series name	RSB series
Product or Component Type	Plug-in relay
Relay Type	Interface relay
Contacts type and composition	1 C/O
Status LED	Without
[Uc] control circuit voltage	120 V AC 50/60 Hz
Control Type	Without lockable test button
[Ithe] conventional enclosed thermal current	16 A -40…104 °F (-40…40 °C)

Complementary

Average resistance	8360 Ohm AC 20 °C +/- 10 %
[Ue] rated operational voltage	96...180 V AC 50/60 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 IEC
Drop-out voltage threshold	>= 0.15 Uc AC
Load current	16 A 250 V AC 16 A 28 V DC
minimum switching current	10 mA
Maximum switching capacity	4000 VA/448 W
minimum switching voltage	12 V
Minimum switching capacity	120 mW 10 mA, 12 V
Operating time	20 ms operating 20 ms reset
Mechanical durability	10000000 cycles
Electrical durability	100000 cycles, 16 A at 250 V, AC-1 NO 100000 cycles, 8 A at 250 V, AC-1 NC
Safety reliability data	B10d = 100000
Operating rate	<= 600 cycles/hour under load <= 18000 cycles/hour no-load
Average coil consumption	0.75 VA AC

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

Removable legend	Without
Protection category	RT I
Operating position	Any position
Test levels	Level A group mounting
Device presentation	Complete product
Sale per indivisible quantity	10
Contacts material	Silver alloy (AgNi)
Shape of pin	Flat (PCB type)
Net Weight	0.031 lb(US) (0.014 kg)
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)
Standards	UL 508 IEC 61810-1 CSA C22.2 No 14
Product Certifications	EAC CSA UL
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	3389110257465
Returnability	Yes
Country of origin	AT

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	0.7 in (1.7 cm)
Package 1 Width	1.0 in (2.5 cm)
Package 1 Length	12.2 in (31.1 cm)
Package weight(Lbs)	0.5 oz (13.0 g)
Unit Type of Package 2	BB1
Number of Units in Package 2	10
Package 2 Height	0.7 in (1.7 cm)

Package 2 Width	1.0 in (2.5 cm)
Package 2 Length	12.2 in (31.1 cm)
Package 2 Weight	5.6 oz (160.0 g)
Unit Type of Package 3	S01
Number of Units in Package 3	350
Package 3 Height	5.9 in (15.0 cm)
Package 3 Width	5.9 in (15.0 cm)
Package 3 Length	15.7 in (40.0 cm)
Package 3 Weight	12.763 lb(US) (5.789 kg)

Contractual warranty

Warranty (in months)	18

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

Total lifecycle Carbon footprint	**8 kg CO2 eq.**
Carbon footprint of the manufacturing phase [A1 to A3]	**0.1 kg CO2 eq.**
Carbon footprint of the distribution phase [A4]	**0 kg CO2 eq.**
Carbon footprint of the installation phase [A5]	**0 kg CO2 eq.**
Carbon footprint of the use phase [B2, B3, B4, B6]	**8 kg CO2 eq.**
Carbon footprint of the end-of-life phase [C1 to C4]	**0 kg CO2 eq.**
Environmental Disclosure	**Product Environmental Profile**

Use Better

Materials and Substances

Packaging made with recycled cardboard	**Yes**
Packaging without single use plastic	**No**
EU RoHS Directive	**Compliant**
REACh Regulation	**Free of Substances of Very High Concern above the threshold**
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**

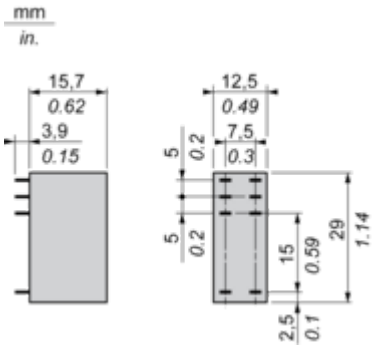
Use Again

Repack and remanufacture

Recyclability potential, in %	**75**
Circularity Profile	**No need of specific recycling operations**
Take-back	**No**

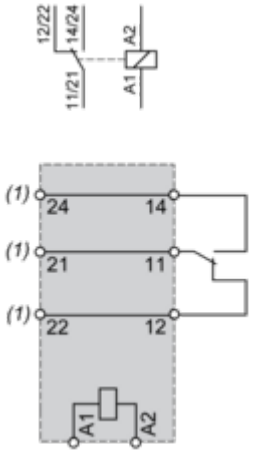
Dimensions Drawings

Dimensions



Connections and Schema

Wiring Diagram



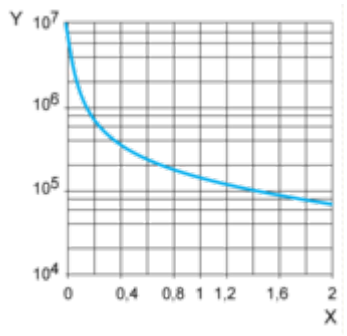
(1) Terminals 11 and 21,14 and 24,12 and 22 must be linked for this references

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

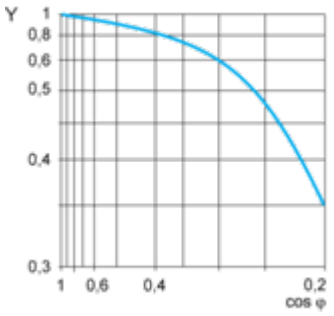
Performance Curves

Electrical Durability of Contacts

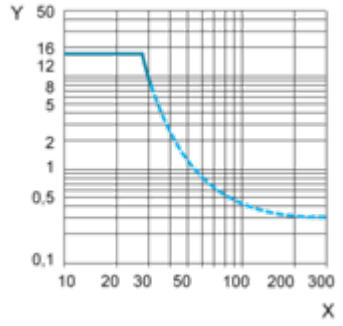
Durability (inductive load) = durability (resistive load) x reduction coefficient.
Resistive AC load



X Switching capacity (kVA)
Y Durability (Number of operating cycles)
Reduction coefficient for inductive AC load (depending on power factor cos ϕ)



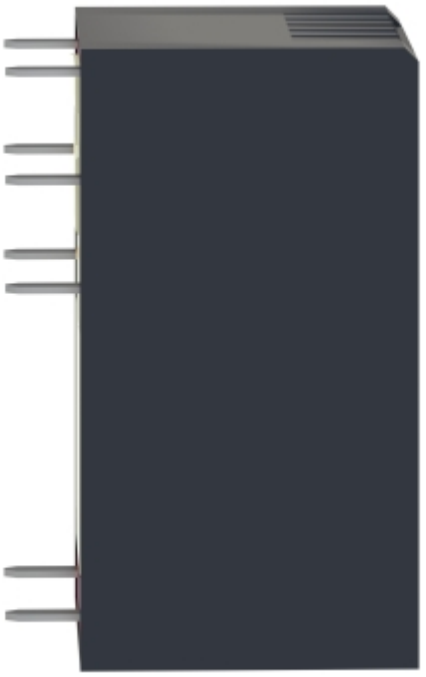
Y Reduction coefficient (A)
Maximum switching capacity on resistive DC load



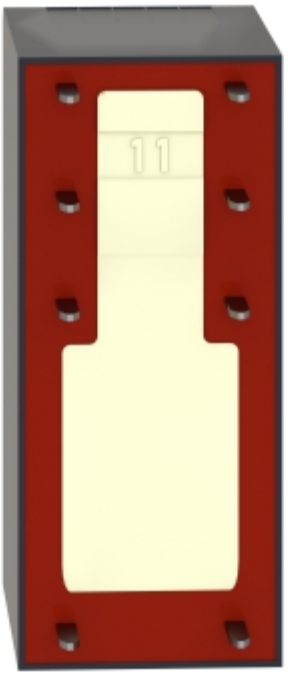
X Voltage DC
Y Current DC
Note : These are typical curves, actual durability depends on load, environment, duty cycle, etc.

Image of product / Alternate images

Alternative






11

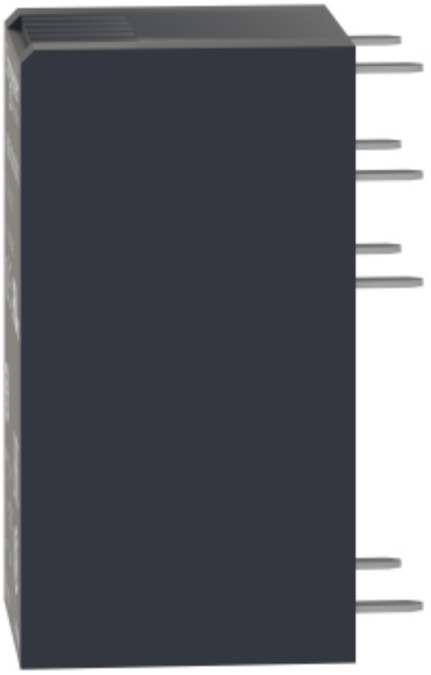


Image of product in real life situation

