Product data sheet

Specifications

interface plug-in relay, Harmony electromechanical relays, 16A, 1CO, 230V AC

RSB1A160P7

Product availability: Non-Stock - Not 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	230 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	33000 Ohm AC 20 °C +/- 10 %
[Ue] rated operational voltage	184...345 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)
Product 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	IEC 61810-1 CSA C22.2 No 14 UL 508
Product Certifications	UL CSA EAC
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	3389110260045
Returnability	No
Country of origin	AT

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	0.669 in (1.700 cm)
Package 1 Width	0.984 in (2.500 cm)
Package 1 Length	12.244 in (31.100 cm)
Package weight(Lbs)	0.423 oz (12.000 g)
Unit Type of Package 2	BB1
Number of Units in Package 2	10
Package 2 Height	0.669 in (1.700 cm)

Package 2 Width	1.142 in (2.900 cm)
Package 2 Length	13.031 in (33.100 cm)
Package 2 Weight	5.079 oz (144.000 g)
Unit Type of Package 3	S01
Number of Units in Package 3	350
Package 3 Height	5.906 in (15.000 cm)
Package 3 Width	5.906 in (15.000 cm)
Package 3 Length	15.748 in (40.000 cm)
Package 3 Weight	11.521 lb(US) (5.226 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**
SCIP Number	**45b41055-6c52-408d-9c0c-5c663b810f29**
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 Longer

Lifetime extension

Repair	**No**

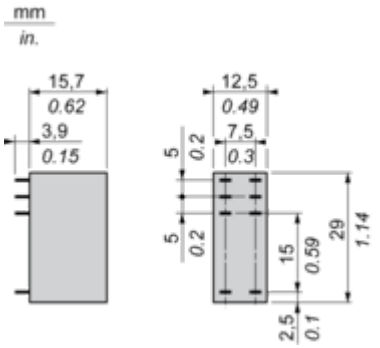
Use Again

Repack and remanufacture

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

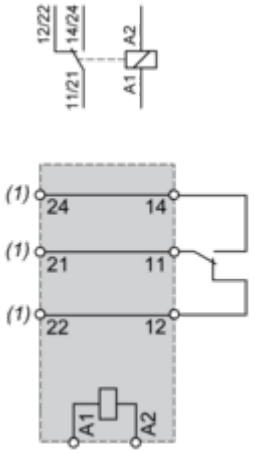
Dimensions Drawings

Dimensions



Connections and Schema

Wiring Diagram



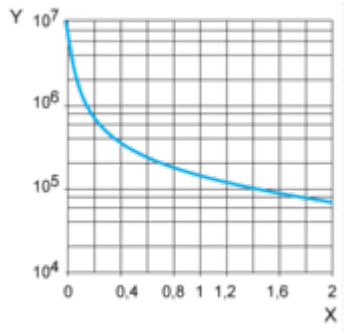
(1) Terminals 11 and 21,14 and 24,12 and 22 must be linked for this references

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

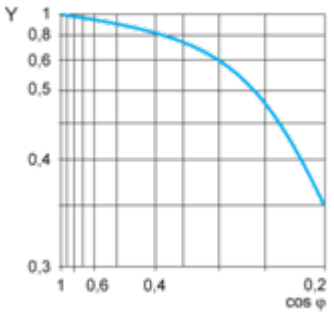
Performance Curves

Electrical Durability of Contacts

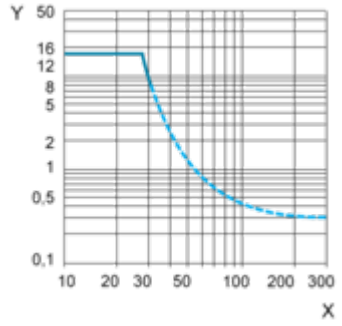
Durability (inductive load) = durability (resistive load) x reduction coefficient.
Resistive AC load



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.

Technical Illustration

Dimensions

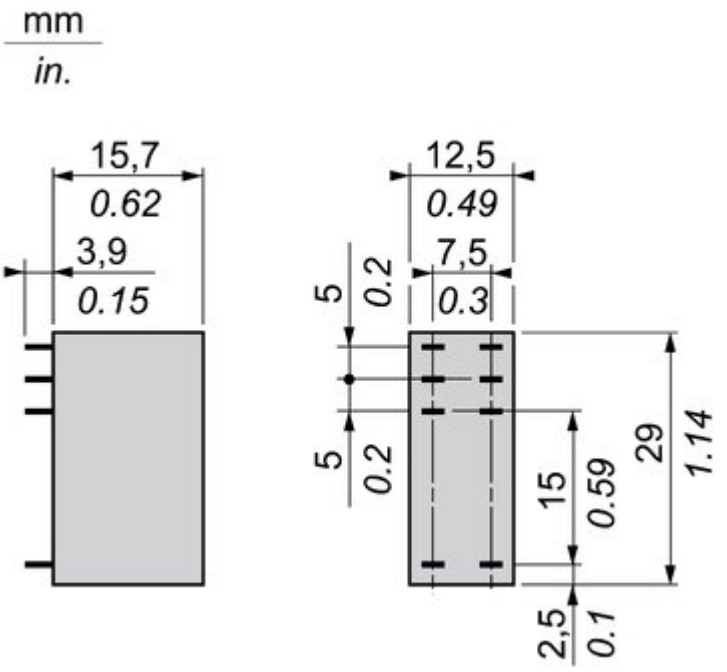
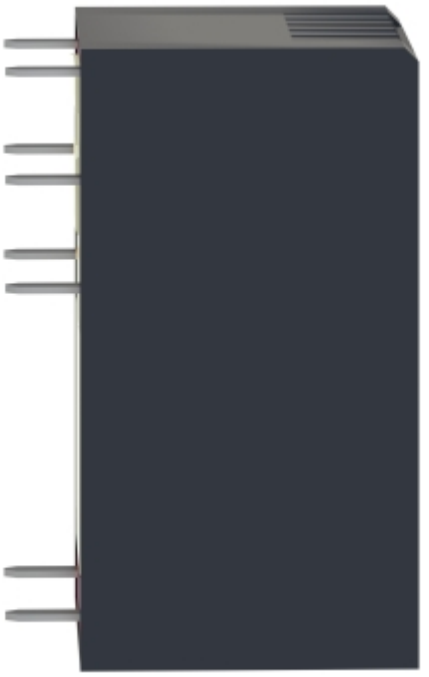
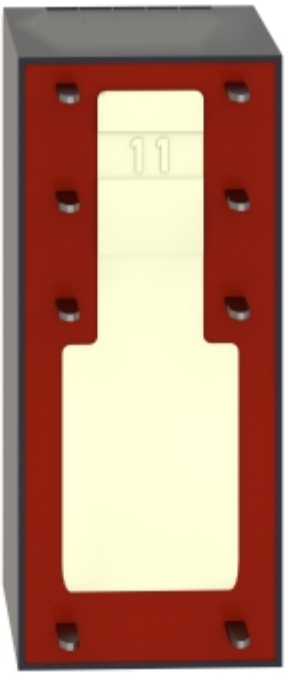


Image of product / Alternate images

Alternative




11

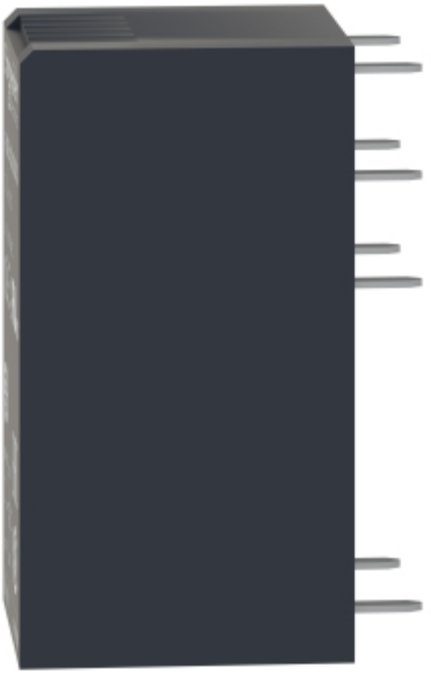


Image of product in real life situation