

# Product data sheet

Specifications



interface plug-in relay, Harmony  
electromechanical relays, 12A, 1CO,  
230V AC

RSB1A120P7

**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	12 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
[Uiimp] rated impulse withstand voltage	3.6 kV IEC 61000-4-5
[Ie] rated operational current	12 A AC-1/DC-1) NO IEC 6 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	12 A 250 V AC 12 A 28 V DC
minimum switching current	10 mA
Maximum switching capacity	3000 VA/336 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, 12 A at 250 V, AC-1 NO 100000 cycles, 6 A at 250 V, AC-1 NC
Safety reliability data	B10d = 100000
Operating rate	<= 600 cycles/hour under load <= 18000 cycles/hour no-load

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

Average coil consumption	0.75 VA AC
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	CSA C22.2 No 14 IEC 61810-1 UL 508
Product Certifications	EAC UL 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	3389110257281
Returnability	Yes
Country of origin	AT

## Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	0.79 in (2.000 cm)
Package 1 Width	0.98 in (2.500 cm)
Package 1 Length	12.20 in (31.000 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	0.63 in (1.600 cm)
Package 2 Width	1.14 in (2.900 cm)
Package 2 Length	12.99 in (33.000 cm)
Package 2 Weight	5.044 oz (143.000 g)
Unit Type of Package 3	S01
Number of Units in Package 3	350
Package 3 Height	5.91 in (15.000 cm)
Package 3 Width	5.91 in (15.000 cm)
Package 3 Length	15.75 in (40.000 cm)
Package 3 Weight	12.679 lb(US) (5.751 kg)

## Contractual warranty

Warranty	18 months
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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

Carbon footprint (kg CO<sub>2</sub> eq, Total Life cycle) **7**

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](#) **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 Again

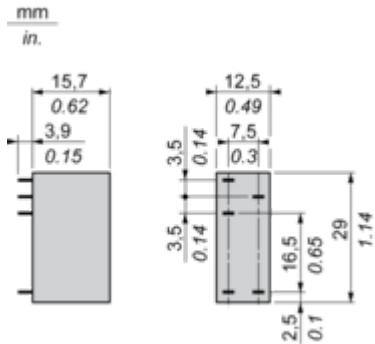
### Repack and remanufacture

Circularity Profile **No need of specific recycling operations**

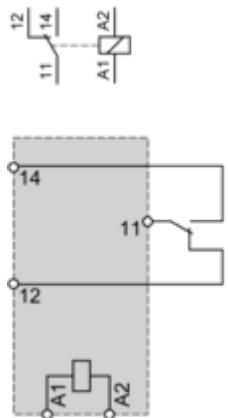
Take-back **No**

## Dimensions Drawings

## Dimensions



## Connections and Schema

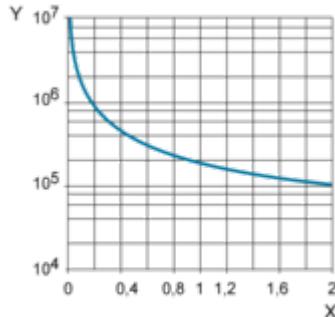
Wiring Diagram

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

## Performance Curves

Electrical Durability of Contacts

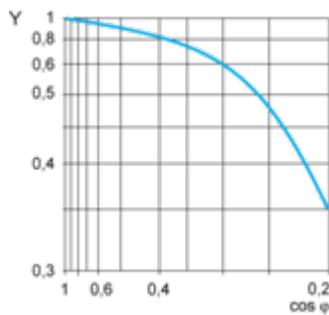
Durability (inductive load) = durability (resistive load) x reduction coefficient.  
Resistive AC load



X Switching capacity (kVA)

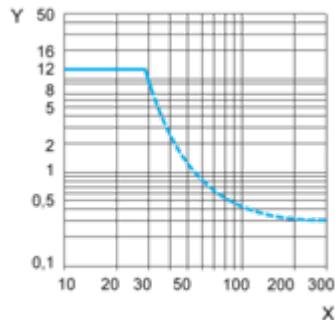
Y Durability (Number of operating cycles)

Reduction coefficient for inductive AC load (depending on power factor  $\cos \phi$ )



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

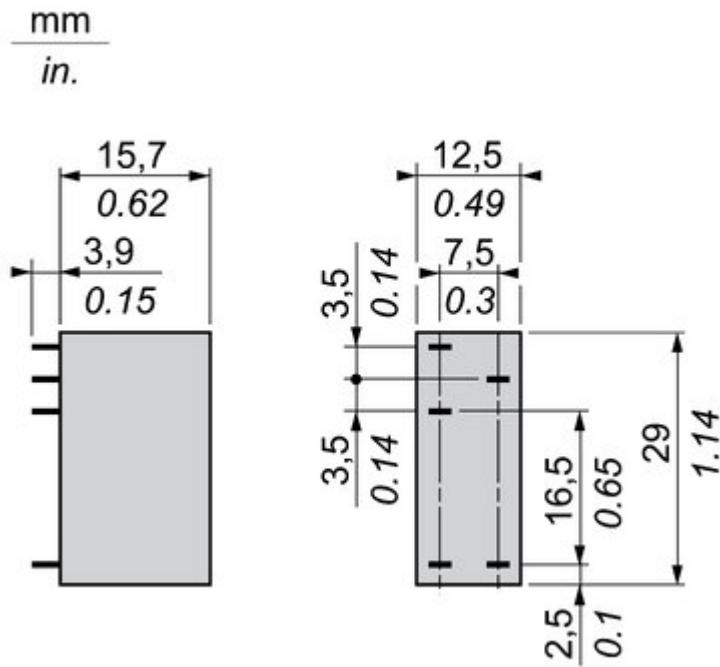
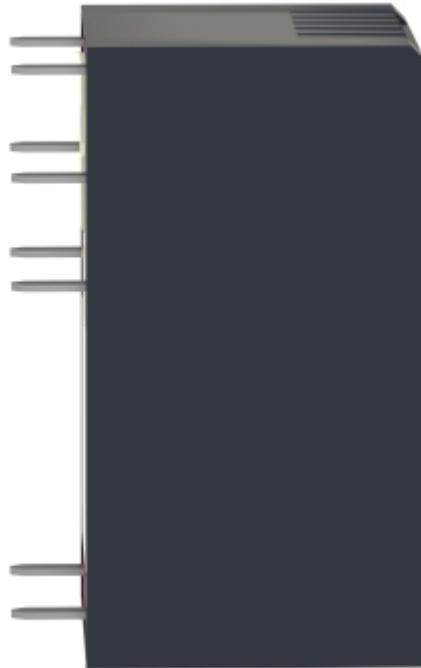


Image of product / Alternate images

Alternative

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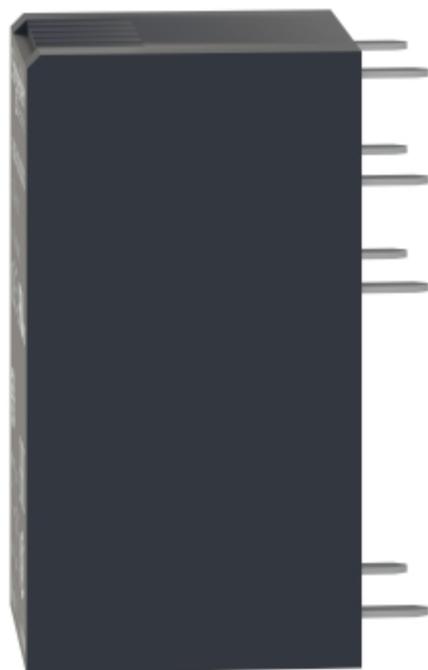
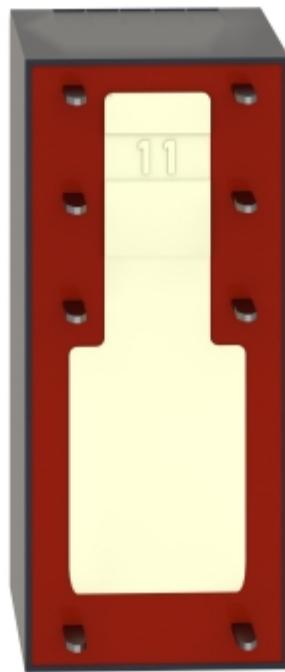


Image of product in real life situation

