Product data sheet

Specifications

Interface plug in relay with socket, Harmony, 16A, 1CO, 230V AC

RSB1A160P7S

Discontinued on: Jun 15, 2023

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	230 V AC
[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	38500 Ohm AC 20 °C +/- 15 %
[Ue] Rated Operational Voltage	184...276 V AC 50 Hz 195.5...276 V AC 60 Hz
[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

Electrical Durability	100000 cycles, 16 A 250 V, AC-1 NO 100000 cycles, 8 A 250 V, AC-1 NC
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
Marking	CE
Average Coil Consumption	0.75 VA AC 60 Hz
Drop-Out Voltage Threshold	>= 0.15 Uc AC
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	CSA C22.2 No 14 EN/IEC 61810-1 UL 508
Product Certifications	CSA UL GOST
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 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)

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	2.47 oz (70 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	4.09 in (10.4 cm)
Package 2 Length	13.39 in (34 cm)
Package 2 Weight	3.09 lb(US) (1.4 kg)
Unit Type Of Package 3	S03
Number Of Units In Package 3	140

Package 3 Height	11.81 in (30 cm)
Package 3 Width	11.81 in (30 cm)
Package 3 Length	15.75 in (40 cm)
Package 3 Weight	22.05 lb(US) (10 kg)

Contractual warranty

Warranty	18 months

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-CO_2 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

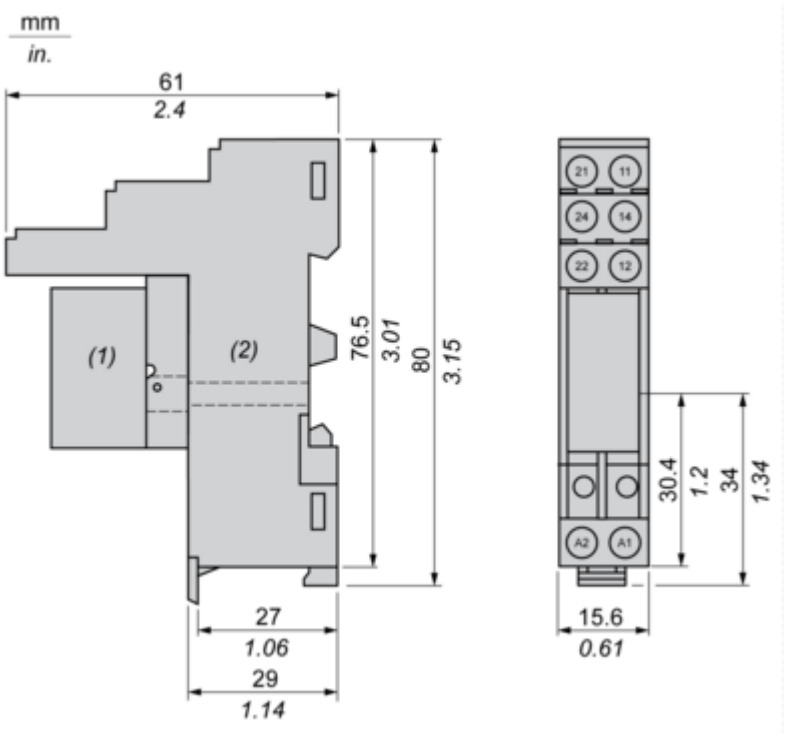
Toxic Heavy Metal Free	
Mercury Free	
Rohs Exemption Information	Yes

Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
China Rohs Regulation	China RoHS declaration
Environmental Disclosure	Product Environmental Profile
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Dimensions Drawings

Dimensions

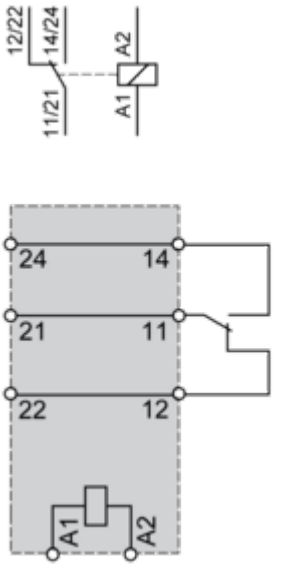
Relay Complete with Socket



(1) Relays
(2) Socket

Connections and Schema

Wiring Diagram



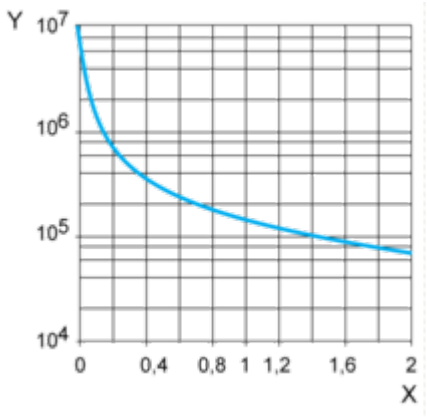
(1) Terminals 11 and 21,14 and 24,12 and 22 must be linked for this references

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

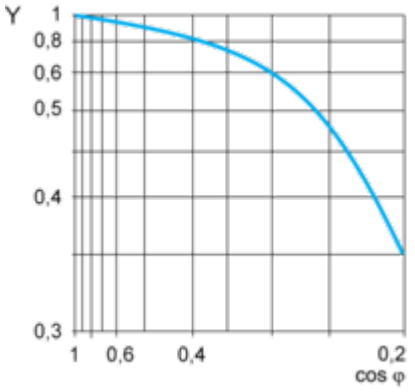
Performance Curves

Electrical Durability of Contacts

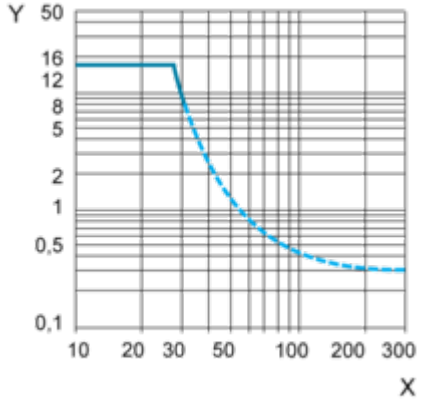
Durability (inductive load) = durability (resistive load) x reduction coefficient.
Resistive AC load



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.