

Product datasheet

Specifications



Harmony. Interface plug-in relay pre-assembled. 16 A. 1 CO. with LED. with protection circuit. 24 V DC

RSB1A160BDPV

Price: 354.52 ZAR

Main

Range Of Product	Harmony Electromechanical Relays
Series Name	Interface relay
Product Or Component Type	Pre-assembled plug-in relay with socket
Device Short Name	RSB
Contacts Type And Composition	1 C/O
Contact Operation	Standard
[Uc] Control Circuit Voltage	24 V DC
[Ithe] Conventional Enclosed Thermal Current	16 A at -40...40 °C
Status Led	1 LED
Control Type	Without

Complementary

Average Coil Resistance	1440 Ohm network: DC at 20 °C +/- 10 %
[Ue] Rated Operational Voltage	19.2...26.4 V DC
[Ui] Rated Insulation Voltage	400 V conforming to IEC 60947
[Uimp] Rated Impulse Withstand Voltage	3.6 kV conforming to IEC 61000-4-5
Contacts Material	Silver alloy (AgNi)
[Ie] Rated Operational Current	16 A (AC-1/DC-1) NO conforming to IEC 8 A (AC-1/DC-1) NC conforming to IEC
Minimum Switching Current	10 mA
Maximum Switching Voltage	300 V DC conforming to IEC
Minimum Switching Voltage	12 V
Maximum Switching Capacity	4000 VA AC 448 W DC
Resistive Rated Load	16 A at 250 V AC 16 A at 28 V DC
Minimum Switching Capacity	120 mW at 10 mA, 12 V
Operating Rate	<= 600 cycles/hour under load <= 18000 cycles/hour no-load
Mechanical Durability	30000000 cycles
Electrical Durability	70000 cycles, 16 A at 250 V, AC-1 NO 70000 cycles, 8 A at 250 V, AC-1 NC
Operating Time	20 ms operating 20 ms reset

Excluding VAT and subject to change. Please check with your local distributor through "Where to buy"

Average Coil Consumption	0.45 W DC
Drop-Out Voltage Threshold	>= 0.1 U _c DC
Safety Reliability Data	B10d = 100000
Protection Category	RT I
Test Levels	Level A group mounting
Operating Position	Any position
Torque Value	0.8 N.m 0.79 N.m
Connections - Terminals	Connector, 1 x 0.25...1 x 2.5 mm ² (AWG 22...AWG 14) flexible with cable end Connector, 2 x 0.25...2 x 1 mm ² (AWG 22...AWG 17) flexible with cable end Connector, 1 x 0.5...1 x 2.5 mm ² (AWG 20...AWG 14) solid without cable end Connector, 2 x 0.5...2 x 1.5 mm ² (AWG 20...AWG 16) solid without cable end
Net Weight	0.050 kg
Sale Per Indivisible Quantity	30
Device Presentation	Complete product

Environment

Dielectric Strength	1000 V AC between contacts 5000 V AC between coil and contact
Standards	IEC 61810-1 CSA C22.2 No 14 UL 508 IEC 61984
Product Certifications	CE UL CSA EAC
Ambient Air Temperature For Storage	-40...85 °C
Vibration Resistance	+/- 1 mm (f= 10...55 Hz) conforming to IEC 60068-2-6
Ip Degree Of Protection	IP20 conforming to IEC 60529
Shock Resistance	10 gn (duration = 11 ms) for not operating conforming to IEC 60068-2-27 5 gn (duration = 11 ms) for in operation conforming to IEC 60068-2-27
Ambient Air Temperature For Operation	-40...85 °C (DC)

Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	1.778 cm
Package 1 Width	6.604 cm
Package 1 Length	8.636 cm
Package 1 Weight	54.432 g
Unit Type Of Package 2	BB1
Number Of Units In Package 2	30
Package 2 Height	19 cm
Package 2 Width	9 cm
Package 2 Length	27 cm
Package 2 Weight	1.988 kg

Unit Type Of Package 3	S03
Number Of Units In Package 3	180
Package 3 Height	30 cm
Package 3 Width	30 cm
Package 3 Length	40 cm
Package 3 Weight	12.762 kg

Contractual warranty

Warranty	18 Months
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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-CO₂ 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](#)

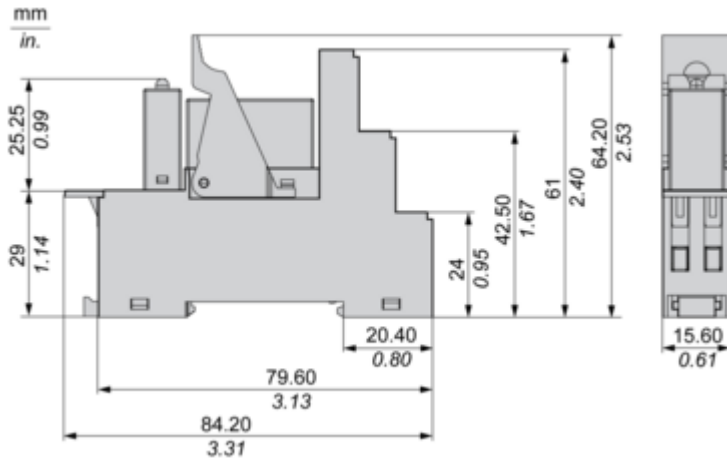
Environmental Disclosure [Product Environmental Profile](#)

Weee The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Circularity Profile No need of specific recycling operations

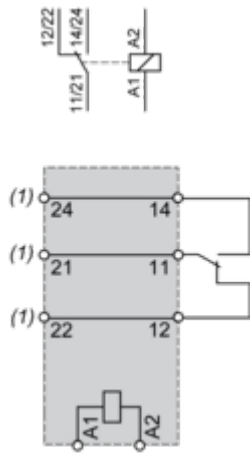
Dimensions Drawings

Dimensions



Connections and Schema

Wiring Diagram



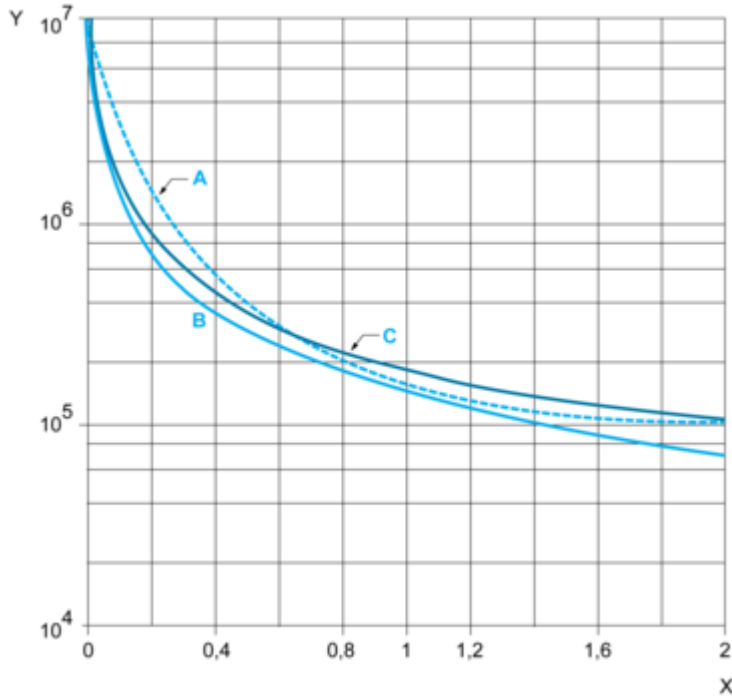
(1) Terminals 11 and 21, 14 and 24, 12 and 22 must be linked for this references

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



(y) Durability (Number of operating cycles)

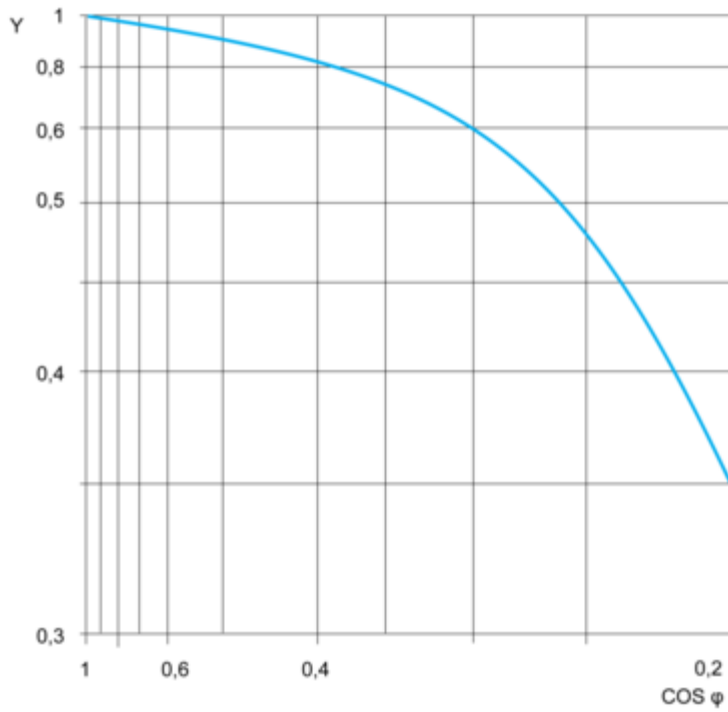
(x) Switching capacity (kVA)

A : RSB2A080●●

B : RSB1A160●●

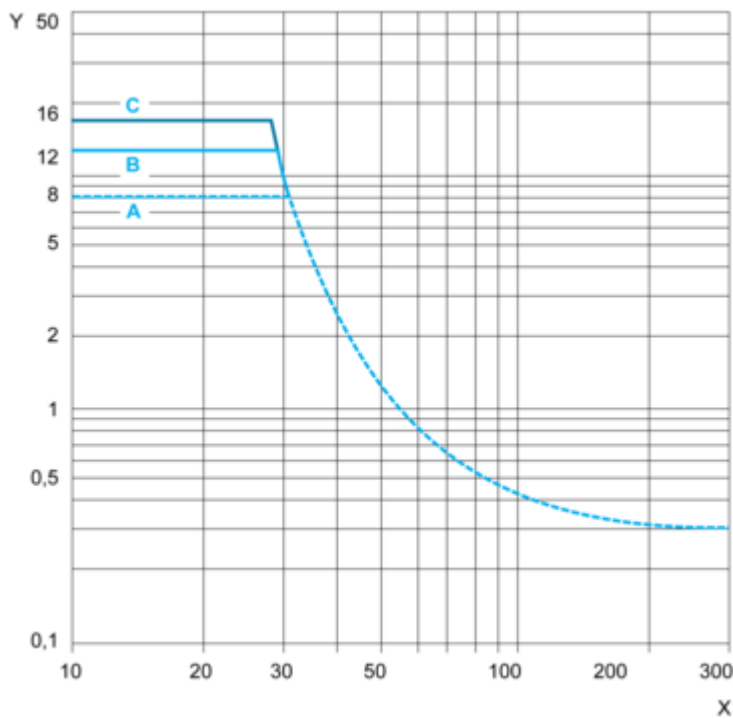
C : RSB1A120●●

Reduction Coefficient for Inductive AC Load (Depending on Power Factor cos φ)



(y) Reduction coefficient (A)

Maximum Switching Capacity on Resistive DC Load



(y) Current DC

(x) Voltage DC

A : RSB2A080●●

B : RSB1A160●●

C : RSB1A120●●

NOTE: These are typical curves, actual durability depends on load, environment, duty cycle, etc.

