Product data sheet

Specifications

Interface plug-in relay, Harmony electromechanical relays, pre-assembled, 8A, 2CO, with LED, 24V DC

RSB2A080BDPV

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	2 C/O
Contact Operation	Standard
[Uc] Control Circuit Voltage	24 V DC
[Ithe] Conventional Enclosed Thermal Current	8 A at -40…40 °C
Status Led	1 LED
Control Type	Without

Complementary

Average Coil Resistance	1440 Ohm network: DC at 20 °C +/- 15 %
[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	4 A (AC-1/DC-1) NC conforming to IEC 8 A (AC-1/DC-1) NO 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	2000 VA AC 224 W DC
Resistive Rated Load	8 A at 250 V AC 8 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	100000 cycles, 8 A at 250 V, AC-1 NO 100000 cycles, 4 A at 250 V, AC-1 NC
Operating Time	20 ms operating 20 ms reset

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

Average Coil Consumption	0.45 W DC
Drop-Out Voltage Threshold	>= 0.1 Uc 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 mm² (AWG 22...AWG 14) flexible with cable end Connector, 2 x 0.25...2 x 1 mm² (AWG 22...AWG 17) flexible with cable end Connector, 1 x 0.5...1 x 2.5 mm² (AWG 20...AWG 14) solid without cable end Connector, 2 x 0.5...2 x 1.5 mm² (AWG 20...AWG 16) solid without cable end
Net Weight	0.057 kg
Sale Per Indivisible Quantity	30
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	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	8.42 cm
Package 1 Width	1.56 cm
Package 1 Length	6.42 cm
Package 1 Weight	60 g
Unit Type Of Package 2	BB1
Number Of Units In Package 2	30
Package 2 Height	18 cm
Package 2 Width	9 cm
Package 2 Length	27 cm

Package 2 Weight	1.978 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	12.581 kg

Contractual warranty

Warranty	18 Months

Sustainability

Green Premium^{TM} 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

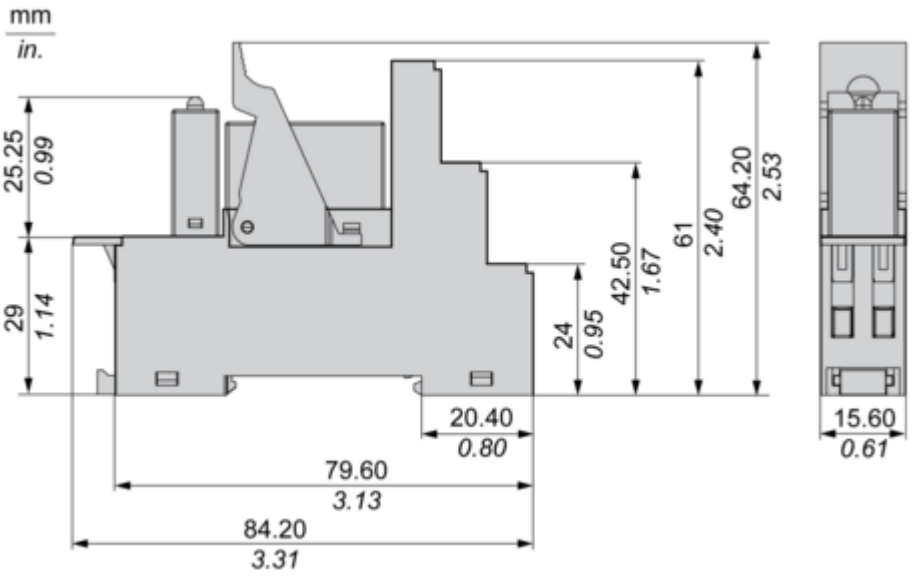
Well-being performance

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
Circularity Profile	No need of specific recycling operations
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

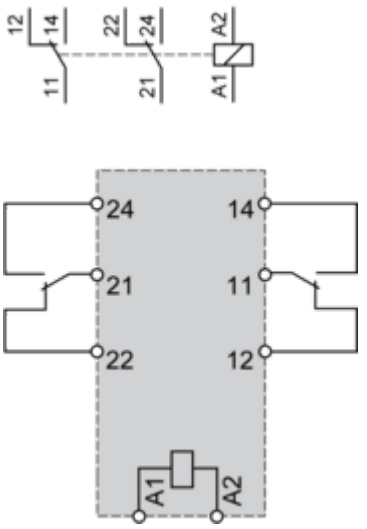
Dimensions Drawings

Dimensions



Connections and Schema

Wiring Diagram



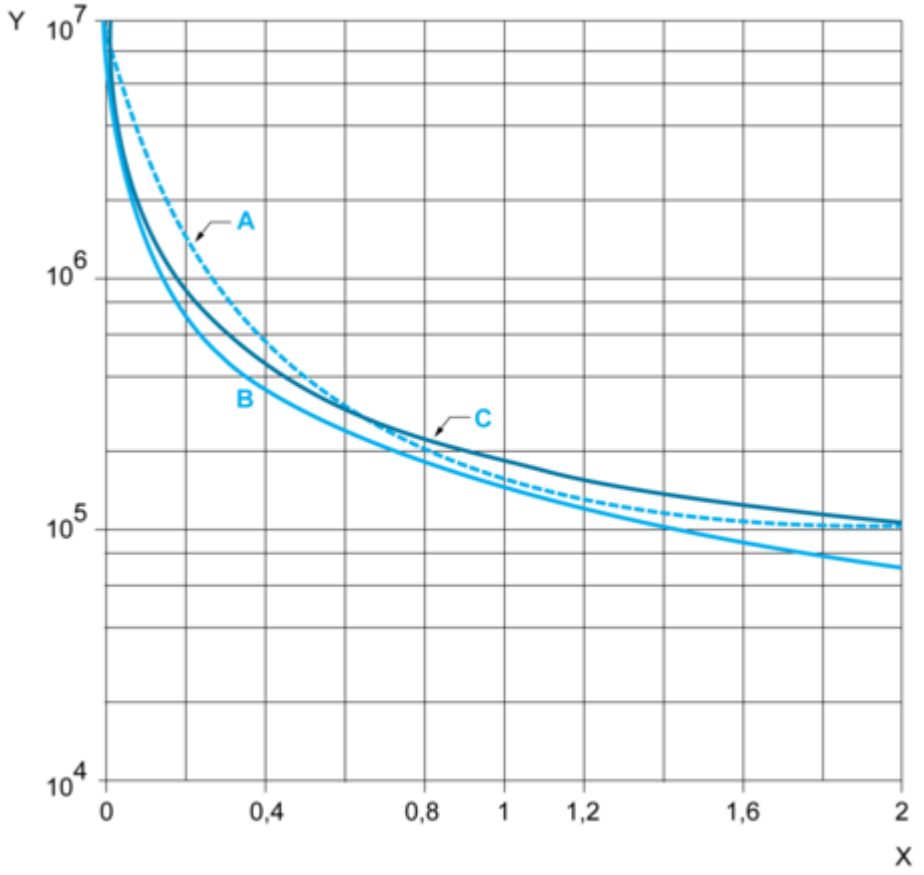
NOTE: For DC input, A1 have to be +, otherwise it would short circuit from protection module

Performance Curves

Electrical Durability of Contacts

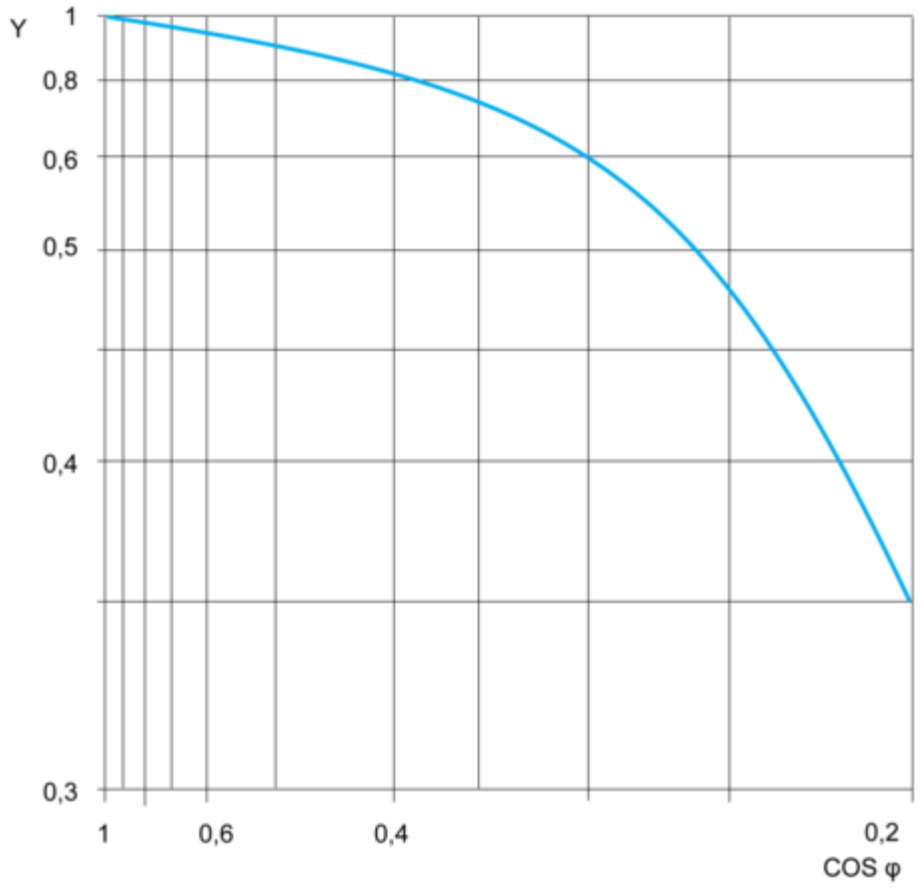
Durability (Inductive Load) = Durability (Resistive Load) x Reduction Coefficient.

Resistive AC Load



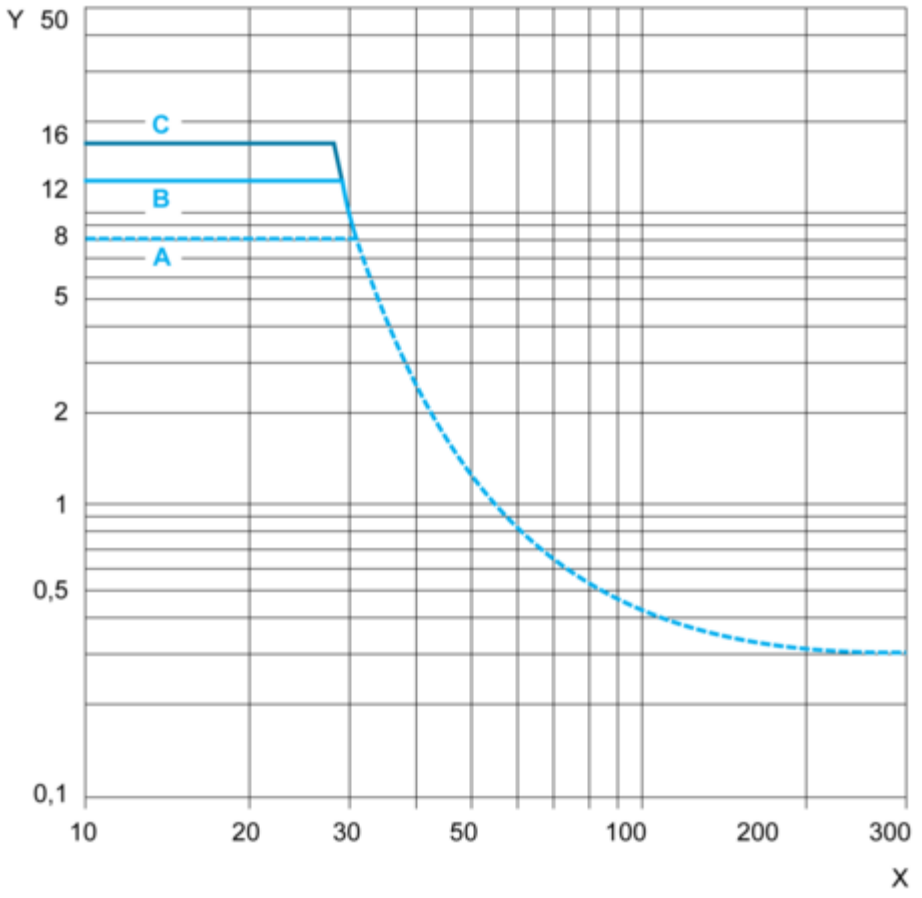
(y) Durability (Number of operating cycles)
(x) Switching capacity (kVA)
A : RSB2A080●●
B : RSB1A160●●
C : RSB1A120●●

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.