Product data sheet
Characteristics

RSB1A120F7PV
Interface plug in relay pre assembled, Harmony, 12A, 1CO, with LED, 120V AC

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	120 V AC 50/60 Hz
[Ithe] conventional enclosed thermal current	12 A -40…104 °F (-40…40 °C)
Status LED	1 LED
Control Type	Without

Complementary

Average coil resistance	8800 Ohm AC 20 °C +/- 15 %
[Ue] rated operational voltage	96...144 V AC 50/60 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 (AgNi)
[Ie] rated operational current	12 A AC-1/DC-1) NO IEC 6 A AC-1/DC-1) NC IEC
Minimum switching current	10 mA
Maximum switching voltage	300 V DC IEC
Minimum switching voltage	12 V
Maximum switching capacity	3000 VA AC 336 W DC
Resistive rated load	12 A 250 V AC 12 A 28 V DC
Minimum switching capacity	120 mW 10 mA, 12 V
Operating rate	<= 600 cycles/hour under load <= 18000 cycles/hour no-load
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
Operating time	20 ms operating 20 ms reset
Average coil consumption	0.75 VA AC
Drop-out voltage threshold	>= 0.15 Uc AC
Safety reliability data	B10d = 100000
Protection category	RT I
Test levels	Level A
Operating position	Any position
Torque Value	7.08 Lbf.In (0.8 N.m) 7.0 lbf.in (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	0.11 lb(US) (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	EN/IEC 61810-1 CSA C22.2 No 14 UL 508 IEC 61984
Product Certifications	CE UL CSA EAC
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	IP20 conforming to 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)

Ordering and shipping details

Category	21127-ZELIO ICE CUBE RELAYS
Discount Schedule	CP2
GTIN	3606489562700
Returnability	No

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	2.60 in (6.6 cm)
Package 1 Width	0.63 in (1.6 cm)
Package 1 Length	3.35 in (8.5 cm)
Package 1 Weight	1.73 oz (49 g)
Unit Type of Package 2	BB1
Number of Units in Package 2	30
Package 2 Height	7.09 in (18 cm)
Package 2 Width	3.15 in (8 cm)
Package 2 Length	10.63 in (27 cm)
Package 2 Weight	3.92 lb(US) (1.779 kg)
Unit Type of Package 3	S03
Number of Units in Package 3	180
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	26.81 lb(US) (12.16 kg)

Offer Sustainability

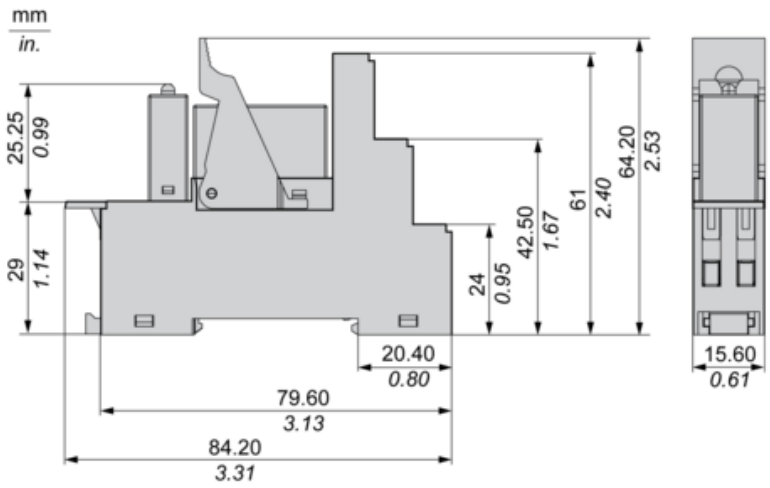
California proposition 65	WARNING: This product can expose you to chemicals including: Nickel compounds, which is known to the State of California to cause cancer, and Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Toxic heavy metal free	Yes
Mercury free	Yes
China RoHS Regulation	China RoHS Declaration

RoHS exemption information	Yes
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.

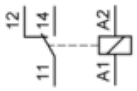
Contractual warranty

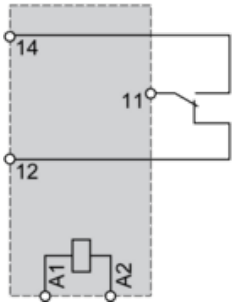
Warranty	18 Months

Dimensions


mm
in.
25.25
0.99
29
1.14
24
0.95
42.50
1.67
61
2.40
64.20
2.53
20.40
0.80
79.60
3.13
84.20
3.31
15.60
0.61

Wiring Diagram



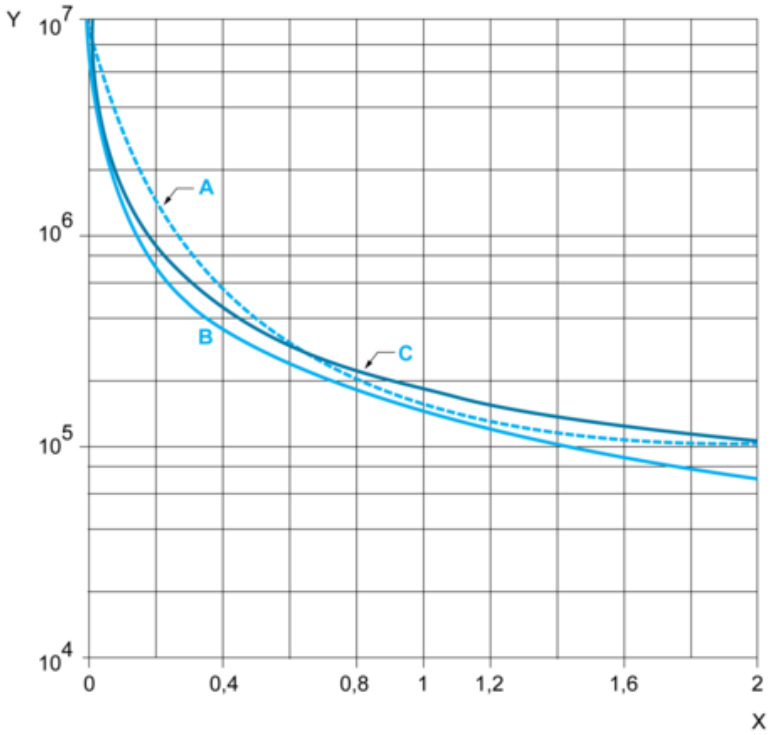


NOTE: For DC input, A1 have to be +, otherwise it would short circuit from protection module

Electrical Durability of Contacts

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

Resistive AC Load



(y) Durability (Number of operating cycles)

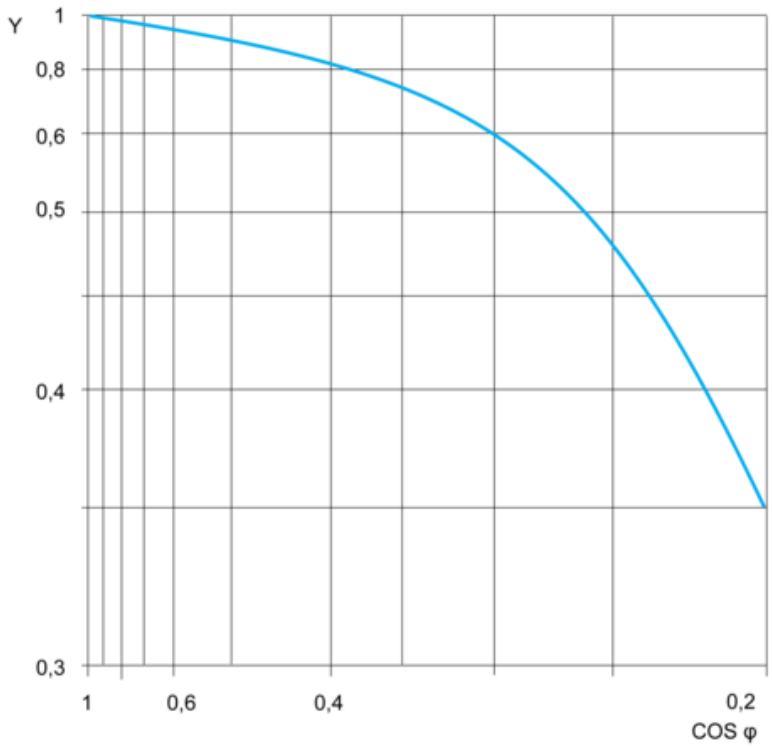
(x) Switching capacity (kVA)

A : RSB2A080●●

B : RSB1A160●●

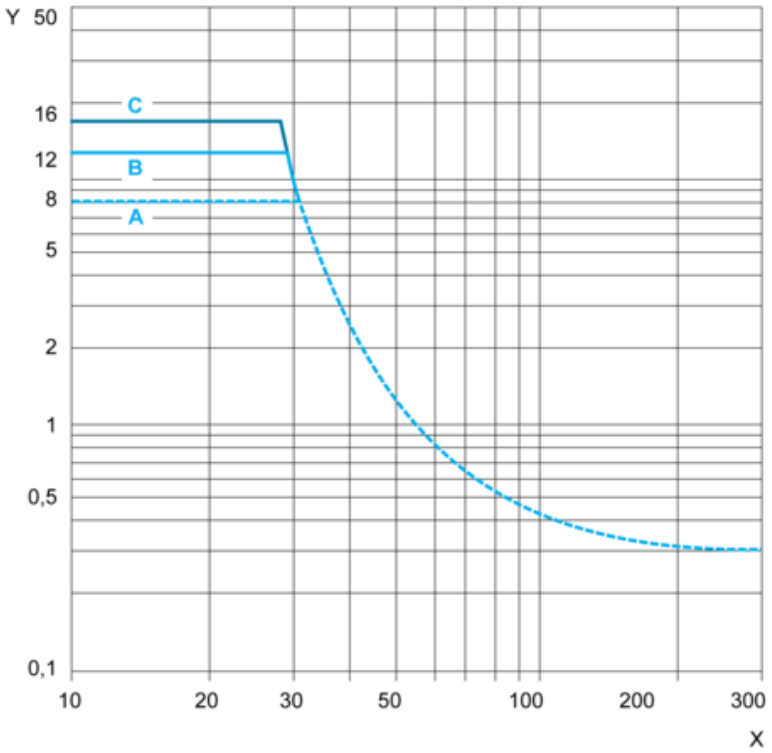
C : RSB1A120●●

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.