Product datasheet Characteristics

RSB2A080B7S

Harmony, Interface plug-in relay with socket, 8 A, 2 CO, 24 V AC



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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	2 C/O
Contact operation	Standard
[Ithe] conventional enclosed thermal current	8 A at -4040 °C
Status LED	Without
Control type	Without push-button

Complementary

Shape of pin	Flat	
Average coil resistance	400 Ohm network: AC at 20 °C +/- 15 %	
[Ue] rated operational voltage	19.226.4 V AC 50 Hz 20.426.4 V AC 60 Hz	
[Ui] rated insulation voltage	400 V conforming to EN/IEC 60947	
[Uimp] rated impulse withstand voltage	3.6 kV IEC 61000-4-5	
Contacts material	Silver alloy (Ag/Ni)	_
[le] 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	5 mA	
Maximum switching voltage	300 V DC 400 V AC	
Minimum switching voltage	5 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	300 mW at 5 mA	
Operating rate	<= 600 cycles/hour under load <= 72000 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	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	UL 508 EN/IEC 61810-1 CSA C22.2 No 14
Product certifications	UL GOST CSA
Ambient air temperature for storage	-4085 °C
Vibration resistance	+/- 1 mm (f= 1055 Hz) conforming to EN/IEC 60068-2-6
IP degree of protection	IP40 conforming to EN/IEC 60529
Shock resistance	10 gn (duration = 11 ms) for not operating conforming to EN/IEC 60068-2-27 5 gn (duration = 11 ms) for in operation conforming to EN/IEC 60068-2-27
Ambient air temperature for operation	-4070 °C (AC) -4085 °C (DC)

Packing Units

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Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	59 g
Package 1 Height	7.8 cm
Package 1 width	10.4 cm
Package 1 Length	33.7 cm
Unit Type of Package 2	BB1
Number of Units in Package 2	20
Package 2 Weight	1.19 kg
Package 2 Height	7.8 cm
Package 2 width	10.4 cm
Package 2 Length	33.7 cm
Unit Type of Package 3	S02
Number of Units in Package 3	60
Package 3 Weight	4.016 kg
Package 3 Height	15 cm
Package 3 width	30 cm
Package 3 Length	40 cm

Offer Sustainability

EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
	EU RoHS Declaration

Toxic heavy metal free	Yes	
Mercury free	Yes	
RoHS exemption information	Yes	
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	

Contractual warranty

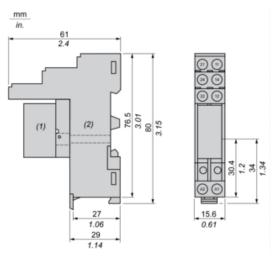
Warranty	18 months

Product datasheet Dimensions Drawings

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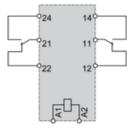
Dimensions

Relay Complete with Socket



- (1) Relays
- (2) Socket

Wiring Diagram



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

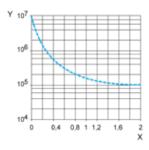
Product datasheet Performance Curves

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Electrical Durability of Contacts

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

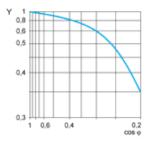
Resistive AC load



X Switching capacity (kVA)

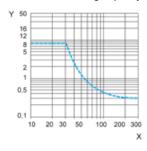
Y Durability (Number of operating cycles)

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.