Product data sheet Characteristics

RSB2A080BD

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





Main

Man		
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

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	2 C/O	
Contact operation	Standard	
[Ithe] conventional enclosed thermal current	8 A at -4040 °C	
Otatua I ED	Without	
Status LED	Williodt	
Control type Complementary	Without push-button	
Control type	1 111	
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Control type Complementary Shape of pin	Without push-button	
Control type Complementary Shape of pin Average coil resistance	Without push-button Flat (PCB type)	
Control type Complementary Shape of pin Average coil resistance [Ue] rated operational voltage	Without push-button Flat (PCB type) 1440 Ohm network: DC at 20 °C +/- 10 %	
Control type Complementary Shape of pin Average coil resistance [Ue] rated operational voltage [Ui] rated insulation voltage	Without push-button Flat (PCB type) 1440 Ohm network: DC at 20 °C +/- 10 % 16.836 V DC	
Control type Complementary Shape of pin Average coil resistance [Ue] rated operational voltage [Ui] rated insulation voltage [Uimp] rated impulse withstand voltage	Without push-button Flat (PCB type) 1440 Ohm network: DC at 20 °C +/- 10 % 16.836 V DC 400 V conforming to EN/IEC 60947	
Control type Complementary Shape of pin Average coil resistance [Ue] rated operational voltage [Uir] rated insulation voltage [Uimp] rated impulse withstand voltage Contacts material	Without push-button Flat (PCB type) 1440 Ohm network: DC at 20 °C +/- 10 % 16.836 V DC 400 V conforming to EN/IEC 60947 IEC 61000-4-5 3.6 kV	
Control type Complementary Shape of pin Average coil resistance [Ue] rated operational voltage [Ui] rated insulation voltage [Uimp] rated impulse withstand voltage Contacts material [le] rated operational current	Without push-button Flat (PCB type) 1440 Ohm network: DC at 20 °C +/- 10 % 16.836 V DC 400 V conforming to EN/IEC 60947 IEC 61000-4-5 3.6 kV Silver alloy (AgNi) 4 A (AC-1/DC-1) NC conforming to IEC	
Control type Complementary Shape of pin Average coil resistance [Ue] rated operational voltage [Uii] rated insulation voltage [Uimp] rated impulse withstand voltage Contacts material [le] rated operational current Minimum switching current	Without push-button Flat (PCB type) 1440 Ohm network: DC at 20 °C +/- 10 % 16.836 V DC 400 V conforming to EN/IEC 60947 IEC 61000-4-5 3.6 kV Silver alloy (AgNi) 4 A (AC-1/DC-1) NC conforming to IEC 8 A (AC-1/DC-1) NO conforming to IEC	
Control type Complementary Shape of pin Average coil resistance [Ue] rated operational voltage [Uii] rated insulation voltage [Uimp] rated impulse withstand voltage Contacts material [Ie] rated operational current Minimum switching current Maximum switching voltage	Without push-button Flat (PCB type) 1440 Ohm network: DC at 20 °C +/- 10 % 16.836 V DC 400 V conforming to EN/IEC 60947 IEC 61000-4-5 3.6 kV Silver alloy (AgNi) 4 A (AC-1/DC-1) NC conforming to IEC 8 A (AC-1/DC-1) NO conforming to IEC 10 mA	
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Control type Complementary	Without push-button Flat (PCB type) 1440 Ohm network: DC at 20 °C +/- 10 % 16.836 V DC 400 V conforming to EN/IEC 60947 IEC 61000-4-5 3.6 kV Silver alloy (AgNi) 4 A (AC-1/DC-1) NC conforming to IEC 8 A (AC-1/DC-1) NO conforming to IEC 10 mA 300 V DC conforming to IEC	

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		
Marking	CE		
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		
Net weight	0.014 kg		
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 CSA C22.2 No 14 EN/IEC 61810-1	
Product certifications	UL CSA EAC	
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	
mbient air temperature for operation -4085 °C (DC)		

Packing Units

Package 1 Weight	0.016 kg	
Package 1 Height	0.170 dm	
Package 1 width	3.330 dm	
Package 1 Length	0.260 dm	

Offer Sustainability

Sustainable offer status	Green Premium product	
REACh Regulation	REACh Declaration	
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	
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	

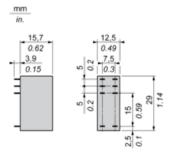
Contractual warranty

Warranty 18 months

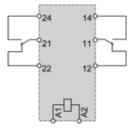
Product data sheet Dimensions Drawings

RSB2A080BD

Dimensions



Wiring Diagram



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

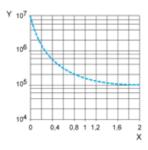
Product data sheet Performance Curves

RSB2A080BD

Electrical Durability of Contacts

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

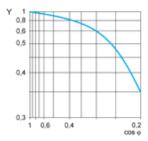
Resistive AC load



X Switching capacity (kVA)

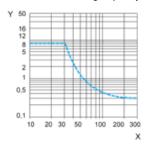
Y Durability (Number of operating cycles)

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.