Product data sheet
Characteristics

RSB1A160B7
interface plug-in relay - Zelio RSB - 1 C/O - 24 V AC - 16 A

Main

Range of product	Zelio Relay
Series name	Interface relay
Product or component type	Plug-in relay
Device short name	RSB
Contacts type and composition	1 C/O
Contact operation	Standard
[Uc] control circuit voltage	24 V AC
[Ithe] conventional enclosed thermal current	16 A at -40…40 °C
Status LED	Without
Control type	Without push-button

Complementary

Shape of pin	Flat (PCB type)
Average coil resistance	368 Ohm network: AC at 20 °C +/- 10 %
[Ue] rated operational voltage	19.2...36 V AC 50/60 Hz
[Ui] rated insulation voltage	400 V conforming to EN/IEC 60947
[Uimp] rated impulse withstand voltage	IEC 61000-4-5 3.6 kV
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	250 V DC conforming to IEC
Minimum switching voltage	12 V
Maximum switching capacity	4000 VA/448 W
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

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

Operating rate	<= 600 cycles/hour under load <= 18000 cycles/hour no-load
Mechanical durability	10000000 cycles
Electrical durability	100000 cycles, 16 A at 250 V, AC-1 NO 100000 cycles, 8 A at 250 V, AC-1 NC
Operating time	20 ms operating 20 ms reset
Marking	CE
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 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 EN/IEC 61810-1 CSA C22.2 No 14
Product certifications	UL EAC CSA
Ambient air temperature for storage	-40…85 °C
Vibration resistance	+/- 1 mm (f= 10…55 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	-40…70 °C (AC)

Offer Sustainability

Sustainable offer status	Green Premium product
REACh Regulation	REACh Declaration
REACh free of SVHC	Yes
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
Circularity Profile	No need of specific recycling operations
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

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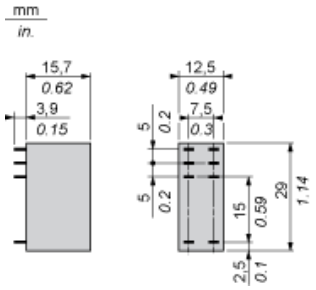
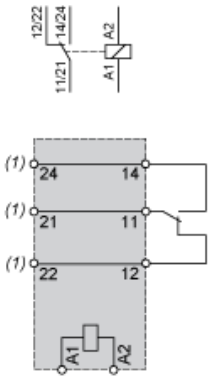
Dimensions



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

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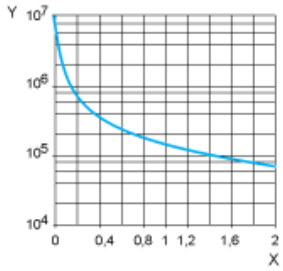
Electrical Durability of Contacts

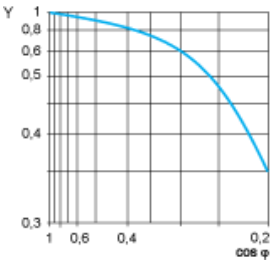
Durability (inductive load) = durability (resistive load) x reduction coefficient.

Resistive AC load



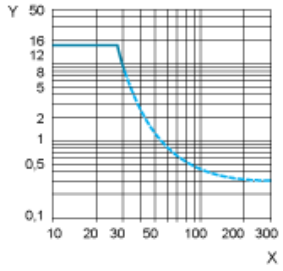
X Switching capacity (kVA)
Y Durability (Number of operating cycles)

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.