## Product data sheet Characteristics

# RSB1A160ED

# Interface plug-in relay, 16 A, 1 CO, 48 V DC





#### Main

Range of product	Harmony 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	48 V DC
[Ithe] conventional enclosed thermal current	16 A -40104 °F (-4040 °C)
Status LED	Without
Control type	Without push-button

#### Complementary

Shape of pin	Flat (PCB type)
Average coil resistance	5520 Ohm AC 20 °C +/- 10 %
[Ue] rated operational voltage	33.672 V DC
[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)
[le] rated operational current	16 A AC-1/DC-1) NO IEC 8 A AC-1/DC-1) NC IEC
Minimum switching current	10 mA
Maximum switching voltage	250 V DC IEC
Minimum switching voltage	12 V
Maximum switching capacity	4000 VA/448 W
Resistive rated load	16 A 250 V AC 16 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	30000000 cycles
Electrical durability	100000 Cycles, 16 A 250 V, AC-1 NO 100000 cycles, 8 A 250 V, AC-1 NC
Operating time	20 ms operating 20 ms reset
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
Operating position	Any position
Net Weight	0.03 lb(US) (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	EAC	
	UL	
	CSA	
Ambient air temperature for storage	-40185 °F (-4085 °C)	
Vibration resistance	+/- 1 mm 1055 Hz)EN/IEC 60068-2-6	
IP degree of protection	IP40 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	-40185 °F (-4085 °C) DC)	

## Ordering and shipping details

Category	21127 - ZELIO ICE CUBE RELAYS
Discount Schedule	CP2
GTIN	00785901525905
Nbr. of units in pkg.	10
Package weight(Lbs)	0.03 lb(US) (0.01 kg)
Returnability	No
Country of origin	AT

# Packing Units

Package 1 Height	0.170 dm
Package 1 width	3.310 dm
Package 1 Length	0.270 dm

## Offer Sustainability

Sustainable offer status	Green Premium product
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
REACh free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EVEN RoHS
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.

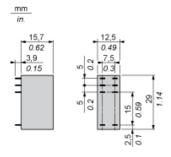
## Contractual warranty

Warranty 18 months	
--------------------	--

# Product data sheet Dimensions Drawings

# RSB1A160ED

#### **Dimensions**

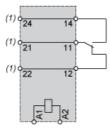


## Product data sheet Connections and Schema

# RSB1A160ED

### Wiring Diagram





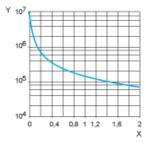
(1) Terminals 11 and 21,14 and 24,12 and 22 must be linked for this references

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

#### **Electrical Durability of Contacts**

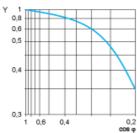
Durability (inductive load) = durability (resistive load) x reduction coefficient.

Resistive AC load



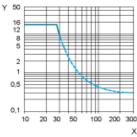
- X Switching capacity (kVA)
- Y Durability (Number of operating cycles)

Reduction coefficient for inductive AC load (depending on power factor  $\cos \varphi$ )



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.