

# Product datasheet

Specifications



## Harmony Electromechanical Relays, Interface plug in relay, 10A, 1CO, with LED, lockable test button, 24V AC

RXG12B7

### Main

Range of product	Harmony Electromechanical Relays
Series name	Interface relay
Product or component type	Plug-in relay
Device short name	RXG
Contacts type and composition	1 C/O

### Complementary

Status LED	With
Contacts material	Silver alloy (AgSnO <sub>2</sub> In <sub>2</sub> O <sub>3</sub> )
Maximum contact resistance	100 mOhm
[I <sub>th</sub> e] conventional enclosed thermal current	10 A at -40...55 °C
[I <sub>e</sub> ] rated operational current	10 A at 30 V (DC) conforming to UL 10 A at 30 V (DC) conforming to IEC 10 A at 250 V (AC) conforming to IEC 10 A at 250 V (AC) conforming to UL
Maximum switching voltage	250 V AC 30 V DC
Load current	10 A at 250 V AC
Maximum switching capacity	2500 VA
Minimum switching capacity	500 mW at 100 mA, 5 V DC
Operating rate	<= 1800 cycles/hour under load <= 18000 cycles/hour no-load
Utilisation coefficient	20 %
Mechanical durability	10000000 cycles
Electrical durability	100000 cycles for NO resistive load at 55 °C 100000 cycles for NC resistive load at 55 °C
[U <sub>i</sub> ] rated insulation voltage	250 V conforming to IEC 300 V conforming to CSA 300 V conforming to UL
[U <sub>imp</sub> ] rated impulse withstand voltage	6 kV 1.2/50 µs
Dielectric strength	1000 V AC between contacts with micro disconnection 5000 V AC between coil and contact with reinforced insulation
Coil resistance	260 Ohm +/- 10 %

<b>Insulation resistance</b>	1000 MOhm at 500 V DC
<b>Test levels</b>	Level A group mounting
<b>Mounting position</b>	Any position
<b>Average consumption in VA</b>	0.82 VA 60 Hz
<b>Drop-out voltage threshold</b>	$\geq 0.3 U_c$ AC
<b>Control circuit voltage limits</b>	0.8...1.1 $U_c$ AC
<b>Coil insulation class</b>	Class F
<b>Operate time</b>	20 ms
<b>Release time</b>	20 ms
<b>[Uc] control circuit voltage</b>	24 V AC 50/60 Hz
<b>Safety reliability data</b>	B10d = 100000
<b>Colour of cover</b>	Standard
<b>Control type</b>	Lockable test button
<b>Local signalling</b>	Flag
<b>Torque value</b>	0.8 N.m
<b>Net weight</b>	0.02 kg
<b>Device presentation</b>	Complete product

## Environment

<b>Vibration resistance</b>	3 gn, amplitude = +/- 0.75 mm (f = 10...150 Hz)in operation 5 gn, amplitude = +/- 0.75 mm (f = 10...150 Hz)not in operation
<b>IP degree of protection</b>	IP40
<b>Shock resistance</b>	20 gn in operation 100 gn not in operation
<b>Protection category</b>	RT I
<b>Standards</b>	IEC 61810-1 CSA C22.2 No 14 UL 508
<b>Product certifications</b>	EAC CSA UL CE DNV-GL
<b>Pollution degree</b>	2
<b>Overvoltage category</b>	III
<b>Ambient air temperature for storage</b>	-40...85 °C
<b>Ambient air temperature for operation</b>	-40...70 °C
<b>Relative humidity</b>	10...85 %

## Packing Units

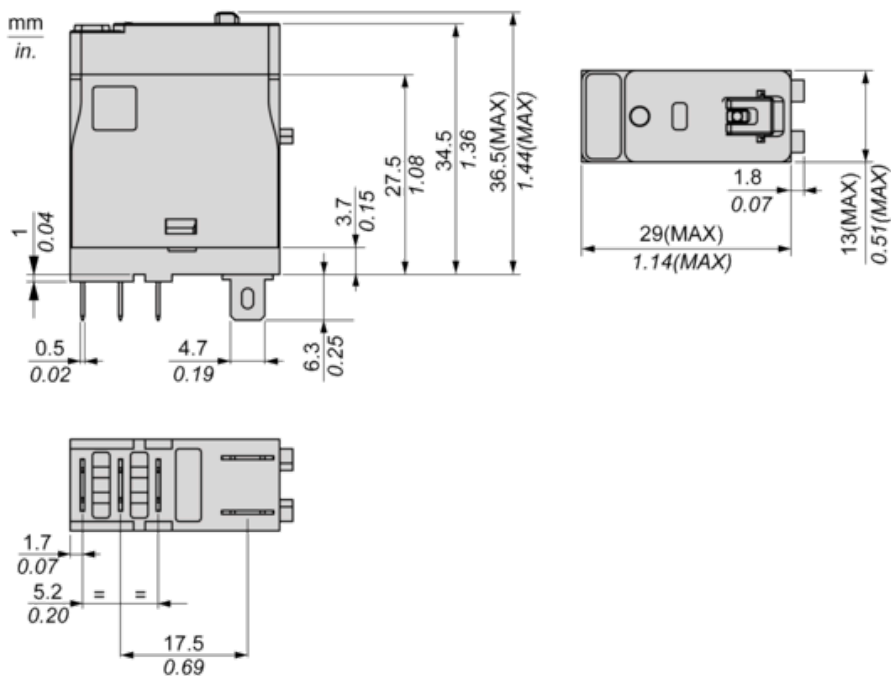
<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	4.2 cm
<b>Package 1 Width</b>	1.3 cm
<b>Package 1 Length</b>	2.9 cm
<b>Package 1 Weight</b>	22.0 g
<b>Unit Type of Package 2</b>	BB1

<b>Number of Units in Package 2</b>	10
<b>Package 2 Height</b>	3.5 cm
<b>Package 2 Width</b>	8.3 cm
<b>Package 2 Length</b>	9.1 cm
<b>Package 2 Weight</b>	226.0 g
<b>Unit Type of Package 3</b>	S01
<b>Number of Units in Package 3</b>	200
<b>Package 3 Height</b>	15.0 cm
<b>Package 3 Width</b>	15.0 cm
<b>Package 3 Length</b>	40.0 cm
<b>Package 3 Weight</b>	4.88 kg

## Offer Sustainability

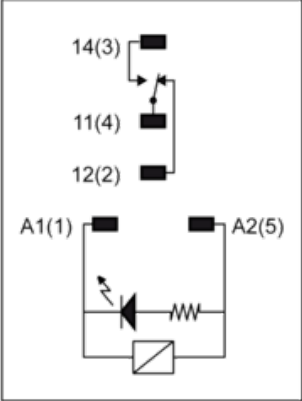
<b>Sustainable offer status</b>	Green Premium product
<b>REACH Regulation</b>	<a href="#">REACH Declaration</a>
<b>REACH free of SVHC</b>	Yes
<b>EU RoHS Directive</b>	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
<b>Toxic heavy metal free</b>	Yes
<b>Mercury free</b>	Yes
<b>China RoHS Regulation</b>	<a href="#">China RoHS declaration</a>
<b>RoHS exemption information</b>	<a href="#">Yes</a>
<b>Environmental Disclosure</b>	<a href="#">Product Environmental Profile</a>

**Dimensions**



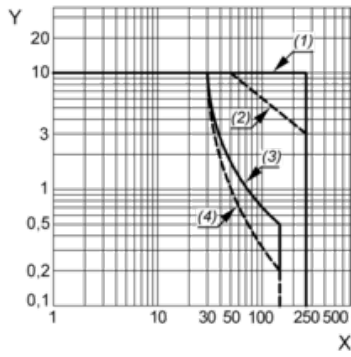
Wiring Diagram

---



**Performance Curves**

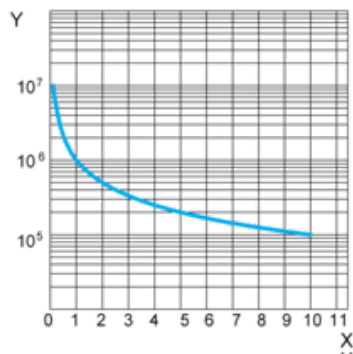
**Maximum Switching Capacity**



- X : Switching voltage (V)
- Y : Switching current (A)
- (1) AC Resistive Load
- (2) AC Inductive Load  $\cos(\phi)=0.4$
- (3) DC Resistive Load
- (4) DC Inductive Load (L/R=7ms)

**Life Expectancy**

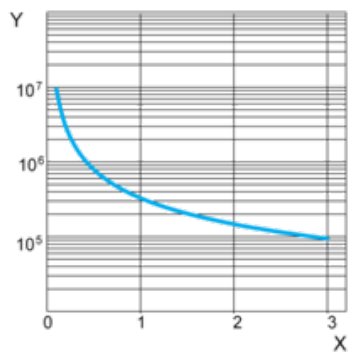
Resistive Load



- X : Contact Current (A)
- Y : Operating Cycle Number

**Life Expectancy**

Inductive Load



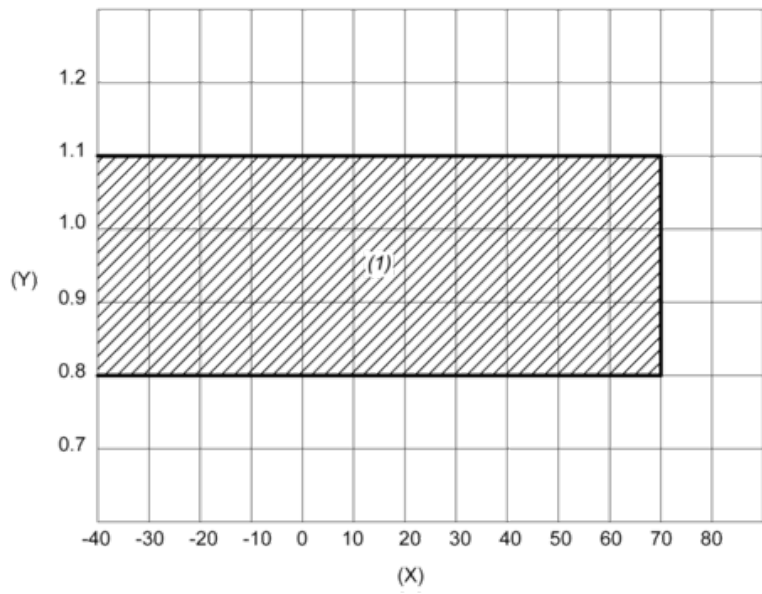
- X : Contact Current (A)
- Y : Operating Cycle Number

**NOTE:** These are typical curves, actual durability depends on load, environment, duty cycle, etc.

Coil Operating Range

---

AC Coil Operating Range VS Ambient Temperature



X : Ambient temperature (°C)

Y : Coil voltage (U/Uc)

(1) Permitted operating range area

Recommended replacement(s)