

## Product data sheet

### Characteristics

# RXG22JD

Harmony, Interface plug-in relay, 5 A, 2 CO, with LED, with lockable test button, 12 V DC



### 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 | 2 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> ] conventional enclosed thermal current | 5 A at -40...55 °C  |
| [I <sub>e</sub> ] rated operational current              | 5 A at 30 V (DC) conforming to UL<br>5 A at 30 V (DC) conforming to IEC<br>5 A at 250 V (AC) conforming to IEC<br>5 A at 250 V (AC) conforming to UL                  |
| Maximum switching voltage                                | 250 V AC<br>30 V DC   |
| Load current   | 5 A at 250 V AC   |
| Maximum switching capacity                               | 1250 VA   |
| Minimum switching capacity                               | 50 mW at 10 mA, 5 V DC  |
| Operating rate   | <= 1800 cycles/hour under load<br><= 18000 cycles/hour no-load  |
| Utilisation coefficient                                  | 20 %  |
| Mechanical durability                                    | 10000000 cycles   |
| Electrical durability                                    | 100000 Cycles for NO resistive load at 55 °C<br>100000 cycles for NC resistive load at 55 °C  |
| [U <sub>i</sub> ] rated insulation voltage               | 250 V conforming to IEC<br>300 V conforming to CSA<br>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<br>5000 V AC between coil and contact with reinforced insulation<br>3000 V AC between poles with basic insulation |
| Coil resistance  | 270 Ohm +/- 10 %  |
| Insulation resistance                                    | 1000 MOhm at 500 V DC   |
| Test levels  | Level A group mounting  |
| Mounting position  | Any position  |
| Drop-out voltage threshold                               | >= 0.1 U <sub>c</sub> DC  |
| Coil insulation class                                    | Class F   |
| Operate time   | 20 ms   |
| Release time   | 20 ms   |

|                              |                      |
|------------------------------|----------------------|
| [Uc] control circuit voltage | 12 V DC              |
| Safety reliability data      | B10d = 100000        |
| Colour of cover              | Standard             |
| Control type                 | Lockable test button |
| Local signalling             | Flag                 |
| Torque value                 | 0.8 N.m              |
| Net weight                   | 0.02 kg              |
| Device presentation          | Complete product     |






## Environment

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

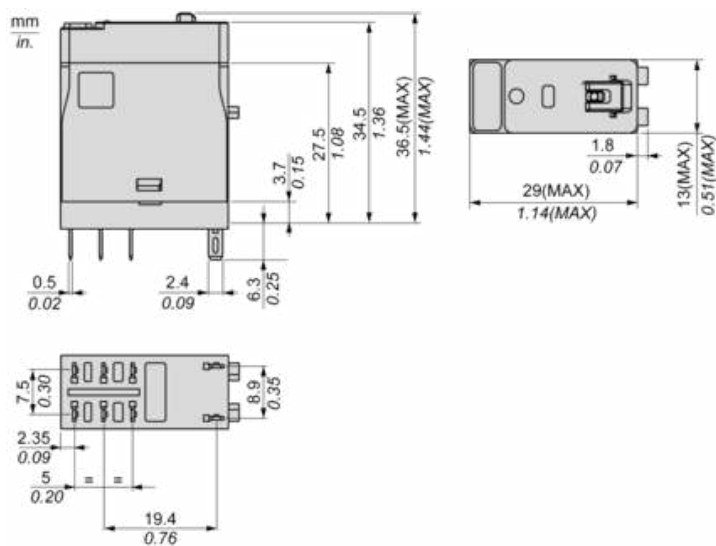
## Packing Units

|                  |           |
|------------------|-----------|
| Package 1 Weight | 20.300 g  |
| Package 1 Height | 35.500 mm |
| Package 1 width  | 13.000 mm |
| Package 1 Length | 29.000 mm |

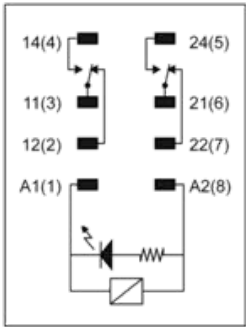
## Offer Sustainability

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

Dimensions

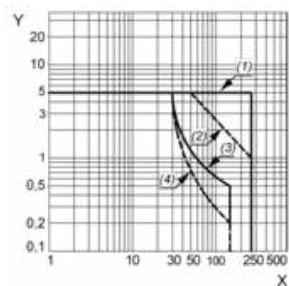


Wiring Diagram



## Performance Curves

### Maximum Switching Capacity



X : Switching voltage (V)

Y : Switching current (A)

(1) AC Resistive Load

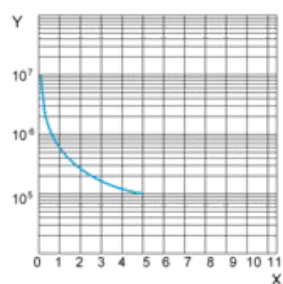
(2) AC Inductive Load  $\cos(\phi)=0.4$

(3) DC Resistive Load

(4) DC Inductive Load ( $L/R=7\text{ms}$ )

### Life Expectancy

Resistive Load

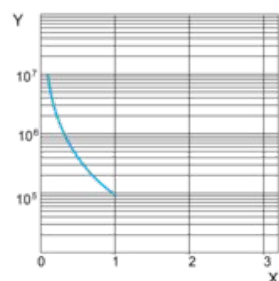


X : Contact Current (A)

Y : Operating Cycle Number

### Life Expectancy

Inductive Load



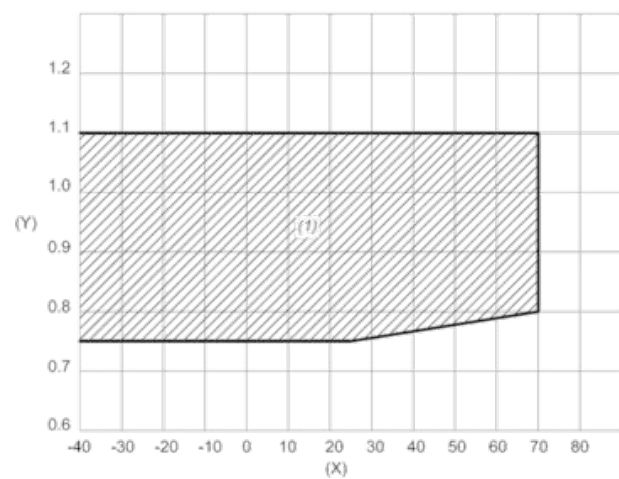
X : Contact Current (A)

Y : Operating Cycle Number

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

### Coil Operating Range

## DC Coil Operating Range VS Ambient Temperature



X : Ambient temperature (°C)

Y : Coil voltage (U/Uc)

(1) Permitted operating range area