

# Product data sheet

Specifications



Harmony, Interface plug-in relay pre-assembled, 5 A, 2 CO, with lockable test button, with protection circuit, 230 V AC

RXG21P7PV

## Main

|                               |   |
|-------------------------------|---|
| Range of product              | Harmony Electromechanical Relays        |
| Series name                   | Interface relay                         |
| Product or component type     | Pre-assembled plug-in relay with socket |
| Device short name             | RXG                                     |
| Contacts type and composition | 2 C/O                                   |

## Complementary

|  |   |
|--|---|
| Status LED                                   | Without   |
| Contacts material                            | Silver alloy (AgSnO2In2O3)  |
| Maximum contact resistance                   | 100 mOhm  |
| [Ithe] conventional enclosed thermal current | 5 A   |
| [Ie] 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   |
| Load current                                 | 5 A   |
| Maximum switching capacity                   | 1250 VA AC<br>150 W DC  |
| 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 resistive load  |
| [Ui] rated insulation voltage                | 250 V conforming to IEC   |
| [Uimp] rated impulse withstand voltage       | 6 kV 1.2/50 µs between coil and contact<br>4 kV 1.2/50 µs between poles<br>1.2 kV 1.2/50 µs between contacts<br>2.5 kV 1.2/50 µs between terminals and LTB area<br>1.5 kV 1.2/50 µs between terminals and base  |
| Dielectric strength                          | 1000 V AC between contacts with micro disconnection<br>1300 V between terminals and base with basic insulation<br>3000 V between terminals and LTB area with basic insulation<br>3000 V AC between poles with basic insulation<br>5000 V AC between coil and contact with reinforced insulation |

|                              |  |
|------------------------------|--|
| Coil resistance              | 23500 Ohm +/- 15 %   |
| Insulation resistance        | 1000 MOhm at 500 V DC  |
| Test levels                  | Level A group mounting   |
| Mounting position            | Any position   |
| Average coil consumption     | 0.96 VA AC 50...60 Hz  |
| Drop-out voltage threshold   | >= 0.3 Uc AC   |
| Coil insulation class        | Class F  |
| Operate time                 | 20 ms  |
| Release time                 | 20 ms  |
| [Uc] control circuit voltage | 230 V AC 50/60 Hz  |
| Safety reliability data      | B10d = 100000  |
| Colour of cover              | Transparent  |
| Control type                 | Lockable test button   |
| Torque value                 | 0.8 N.m<br>0.79 N.m  |
| Connections - terminals      | Connector, 1 x 0.25...1 x 2.5 mm² (AWG 22...AWG 14) flexible with cable end<br>Connector, 2 x 0.25...2 x 1 mm² (AWG 22...AWG 17) flexible with cable end<br>Connector, 1 x 0.5...1 x 2.5 mm² (AWG 20...AWG 14) solid without cable end<br>Connector, 2 x 0.5...2 x 1.5 mm² (AWG 20...AWG 16) solid without cable end |
| Net weight                   | 0.065 kg   |
| Device presentation          | Complete product   |

## Environment

|                                       |  |
|---------------------------------------|--|
| Vibration resistance                  | 3 gn, amplitude = +/- 1.5 mm (f = 10...150 Hz)in operation<br>5 gn, amplitude = +/- 1.5 mm (f = 10...150 Hz)not in operation |
| IP degree of protection               | IP20   |
| Shock resistance                      | 20 gn in operation<br>100 gn not in operation  |
| Protection category                   | RT I   |
| Standards                             | IEC 61810-1<br>CSA C22.2 No 14<br>UL 508<br>IEC 61984  |
| Product certifications                | EAC<br>CSA<br>UL<br>CE<br>DNV-GL   |
| 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

|                              |         |
|------------------------------|---------|
| Unit Type of Package 1       | PCE     |
| Number of Units in Package 1 | 1       |
| Package 1 Weight             | 67 g    |
| Package 1 Height             | 7.96 cm |

|                              |          |
|------------------------------|----------|
| Package 1 width              | 1.56 cm  |
| Package 1 Length             | 7.2 cm   |
| Unit Type of Package 2       | BB1      |
| Number of Units in Package 2 | 30       |
| Package 2 Weight             | 2.13 kg  |
| Package 2 Height             | 1 cm     |
| Package 2 width              | 17 cm    |
| Package 2 Length             | 27 cm    |
| Unit Type of Package 3       | S03      |
| Number of Units in Package 3 | 180      |
| Package 3 Weight             | 13.42 kg |
| Package 3 Height             | 30 cm    |
| Package 3 width              | 30 cm    |
| Package 3 Length             | 40 cm    |

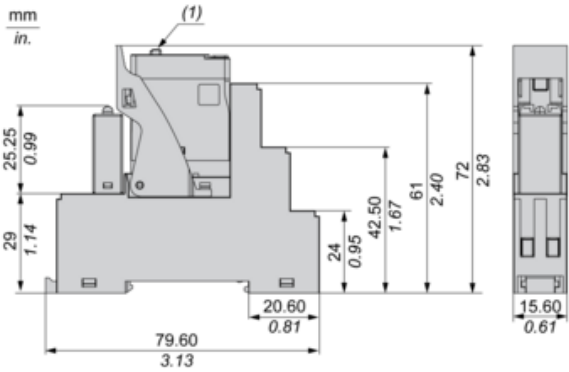
### Offer Sustainability

|                            |  |
|----------------------------|--|
| EU RoHS Directive          | Pro-active compliance (Product out of EU RoHS legal scope)<br><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>  |
| 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 State of California to cause birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> |

### Contractual warranty

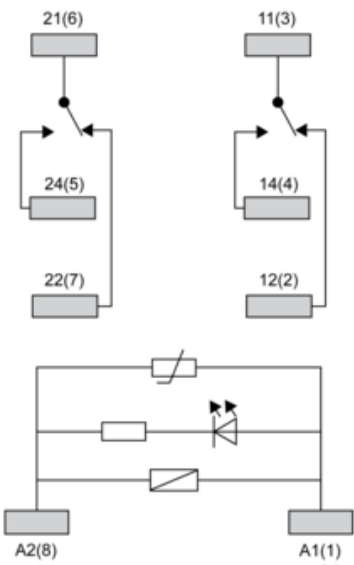
|          |           |
|----------|-----------|
| Warranty | 18 months |
|----------|-----------|

Dimensions



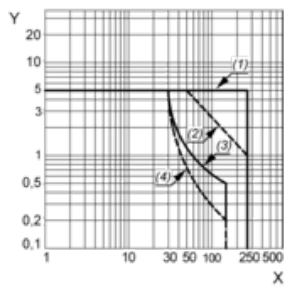
(1) Push button (if any)

Wiring Diagram



Performance Curves

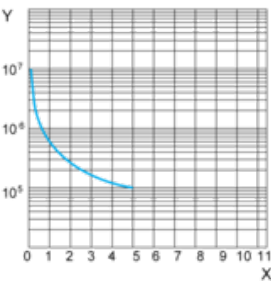
Maximum Switching Capacity



- 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

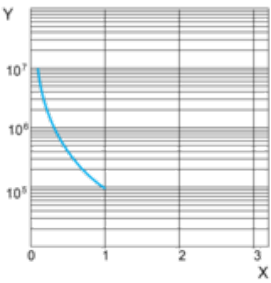
Resistive Load



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

Life Expectancy

Inductive Load

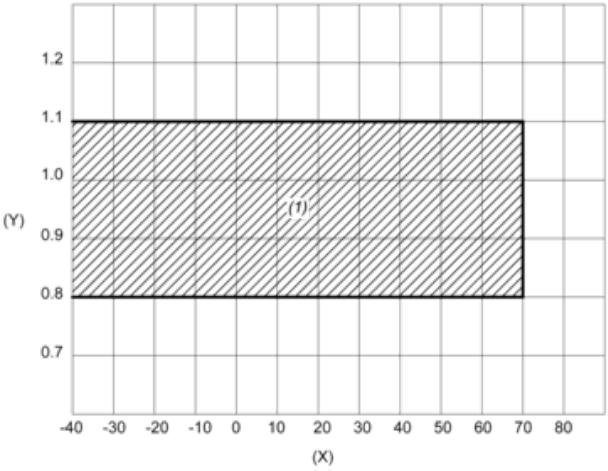


- X : Contact Current (A)  
Y : Operating Cycle Number

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

Coil Operating Range

AC Coil Operating Range VS Ambient Temperature



X : Ambient temperature (°C)  
Y : Coil voltage (U/Uc)  
(1) Permitted operating range area