

# Industrial Relay Type RPY 3 10A Monostable

CARLO GAVAZZI



- High switching power
- Wide range of applications
- 10A switching capacity
- 3 pole configuration
- Flanged pins 5mm (0.20")
- DC coils from 6 to 220V
- AC coils from 6 to 380V
- Compliant with CE low voltage directive
- TÜV, UL, CSA approved

## Product Description

The RPY relay can be used for a wide range of industrial applications.

Available in a 1, 2, 3, 4 pole

change-over contact configuration. Its wide terminals allow reliability and big currents.

## Approvals



## Ordering Key

**RPY A 003 A24 DLT**

Type

Terminal type

Contact code

Coil code

Options

Terminal type: A= Plug in terminals, blades  
B= PCB terminals

Box content: 10 relays  
Box size: (W 240 x D 105 x H 38) mm Weight: 750g  
(W 9.45 x D 4.13 x H 1.50) inches Weight: 26.45oz

## Type Selection

Contact configuration

3 change over contact (DPDT- 3 form C)

Contact rating

10A

Contact code

003

## Coil Characteristics, DC @ +25°C (+77°F), coil power 1.4W

| Coil Code | Nominal Voltage VDC | Pick-up Voltage VDC | Drop-out Voltage VDC | Max.Allowed Voltage VDC | Coil Current mA | Coil Resistance Ω |
|-----------|---------------------|---------------------|----------------------|-------------------------|-----------------|-------------------|
| 6         | 6                   | 4.5                 | 0.60                 | 6.6                     | 240             | 25                |
| 9         | 9                   | 6.75                | 0.90                 | 9.9                     | 161             | 56                |
| 12        | 12                  | 9                   | 1.20                 | 13.2                    | 120             | 100               |
| 24        | 24                  | 18                  | 2.40                 | 26.4                    | 60              | 400               |
| 36        | 36                  | 27                  | 3.60                 | 39.6                    | 40              | 900               |
| 48        | 48                  | 36                  | 4.80                 | 52.8                    | 30              | 1600              |
| 110       | 110                 | 82.5                | 11.0                 | 121                     | 13              | 8400              |
| 220       | 220                 | 165                 | 22.0                 | 242                     | 6.67            | 33000             |

## Coil Characteristics, AC @ +25°C (77°F), coil power 2VA

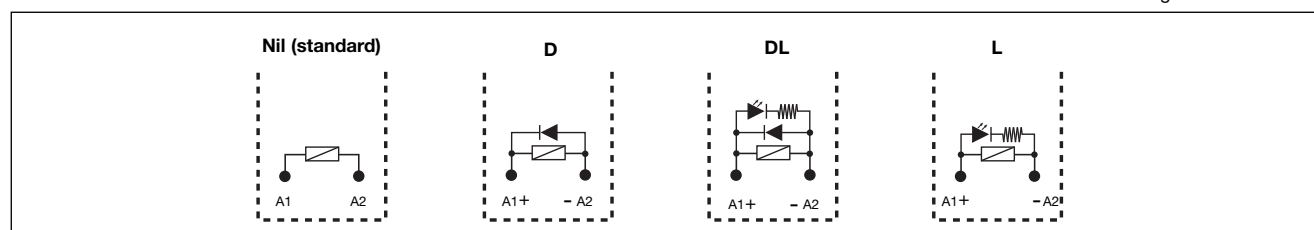
| Coil Code   | Nominal Voltage VAC | Pick-up Voltage VAC | Drop-out Voltage VAC | Max.Allowed Voltage VAC | Coil Current mA |      | Coil Resistance Ω |
|-------------|---------------------|---------------------|----------------------|-------------------------|-----------------|------|-------------------|
|             |                     |                     |                      |                         | 50Hz            | 60Hz |                   |
| <b>A6</b>   | 6                   | 4.8                 | 1.8                  | 6.6                     | 330             | 280  | 6.5               |
| <b>A12</b>  | 12                  | 9.6                 | 3.6                  | 13.2                    | 167             | 142  | 25.5              |
| <b>A24</b>  | 24                  | 19.2                | 7.2                  | 26.4                    | 83              | 70   | 102               |
| <b>A36</b>  | 36                  | 28.8                | 10.8                 | 39.6                    | 55              | 47   | 230               |
| <b>A48</b>  | 48                  | 38.4                | 14.4                 | 52.8                    | 42              | 36   | 410               |
| <b>A110</b> | 100/110             | 88                  | 33.0                 | 121                     | 18              | 15   | 2300              |
| <b>A120</b> | 120                 | 96                  | 36.0                 | 142                     | 17              | 14.5 | 2700              |
| <b>A220</b> | 220                 | 176                 | 66.0                 | 242                     | 9               | 7.7  | 8600              |
| <b>A240</b> | 240                 | 192                 | 72.0                 | 264                     | 8.3             | 7    | 10000             |
| <b>A380</b> | 380                 | 304                 | 114                  | 418                     | 5.2             | 4.4  | 27500             |

## Options

Nil = Standard (Fig.1)  
D = Free Wheeling diode (DC coil only)  
F = Flange Mount (Fig.2)  
G = Gold Plated contacts

L = LED  
T = Test Button

**Note:**  
In case of more options use the alphabetical order for coding.  
LED and test button are not available on flange mount version



## Contact Characteristics

|                                                |                                                     |                            |                                              |
|------------------------------------------------|-----------------------------------------------------|----------------------------|----------------------------------------------|
| <b>Contact Rating</b><br>(With resistive load) | <b>10A - 250VAC</b>                                 | <b>Max Switching Power</b> | <b>2500VA / 280W</b>                         |
| <b>Usually rating</b>                          | <b>10A-250VAC / 28VDC</b>                           | <b>Life</b>                |                                              |
| <b>Material</b>                                | <b>AgSnO<sub>2</sub>In<sub>2</sub>O<sub>3</sub></b> | Electrical life            | <b>1x10<sup>5</sup> cycles (3600ops/h)</b>   |
| <b>Contact Resistance</b>                      | <b>≤50mΩ</b>                                        | Mechanical                 | <b>1x10<sup>7</sup> cycles (18000 ops/h)</b> |
| <b>Current</b>                                 |                                                     | <b>UL/CSA ratings</b>      |                                              |
| Max. switching current                         | <b>10A</b>                                          |                            | <b>1/3Hp 120VAC</b>                          |
| Min. switching current                         | <b>10mA @ 12VDC</b>                                 |                            | <b>1/2Hp 240VAC</b>                          |
| Min. switching current G version               | <b>1mA @ 6VDC</b>                                   |                            | <b>10A @ 30VDC</b>                           |
|                                                |                                                     |                            | <b>10A @ 250VAC</b>                          |

## Insulation

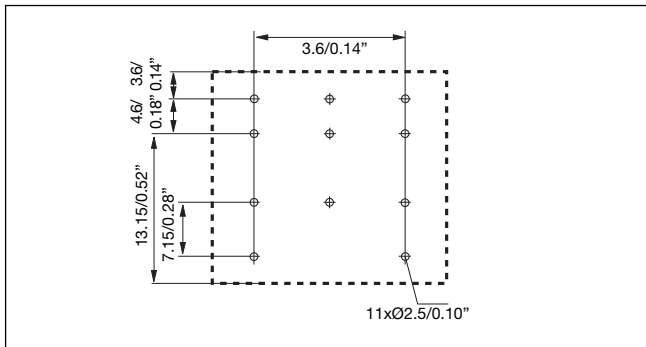
|                              |                       |                                          |             |
|------------------------------|-----------------------|------------------------------------------|-------------|
| <b>Test voltage</b> (1min.)  |                       | <b>Insulation According to EN61810-5</b> |             |
| Between coil and contacts    | <b>2000VAC</b>        | Rated insulation voltage                 | <b>250V</b> |
| Between open contacts        | <b>1200VAC</b>        | Impulsive insulation                     | <b>2kV</b>  |
| Contact / contact            | <b>1200VAC</b>        | Overvoltage categor                      | <b>II</b>   |
| <b>Insulation resistance</b> | <b>≥1000MΩ - 500V</b> |                                          |             |



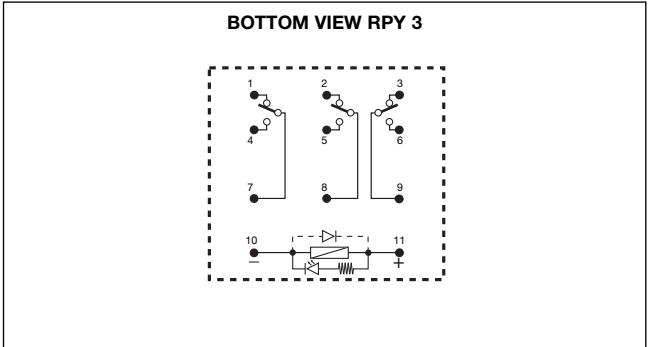
General Data

|                                        |                                |                      |                              |
|----------------------------------------|--------------------------------|----------------------|------------------------------|
| Nominal coil power                     | 1.4W DC – 1.2VA AC             | Vibration resistance | 10 to 55Hz 1mm (0.04")       |
| Operating time<br>(at nominal voltage) | ≤20ms                          | Shock resistance     |                              |
| Release time<br>(at nominal voltage)   | ≤20ms                          | Functional           | 98m/s <sup>2</sup> (10G)     |
| Ambient temperature                    | -25° to +55°C (-13° to +131°F) | Termination          | Flanges (blades) 5mm (0.20") |
| Ambient humidity                       | 35% to 85%                     | Construction         | Dust cover                   |
|                                        |                                | Weight               | 50g (1.76oz)                 |

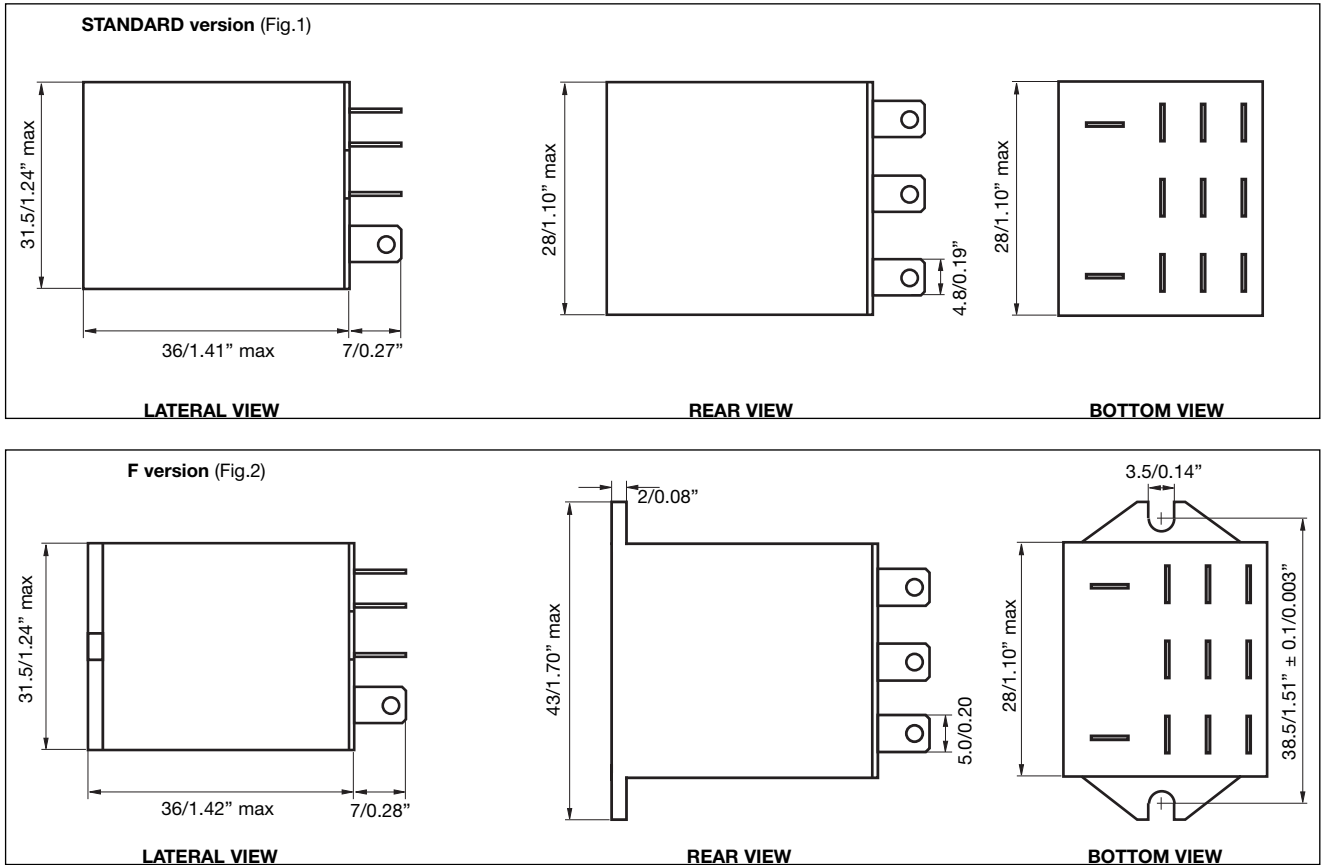
Pin View mm/inches



Wiring Diagram

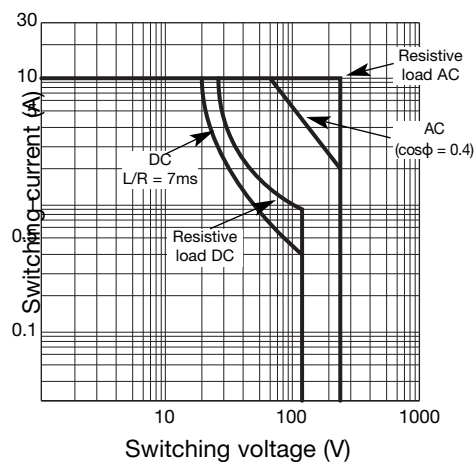


Dimensions mm/inches

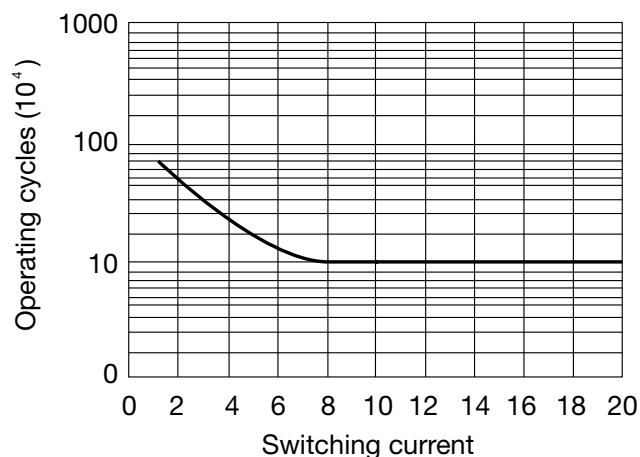


## Diagrams

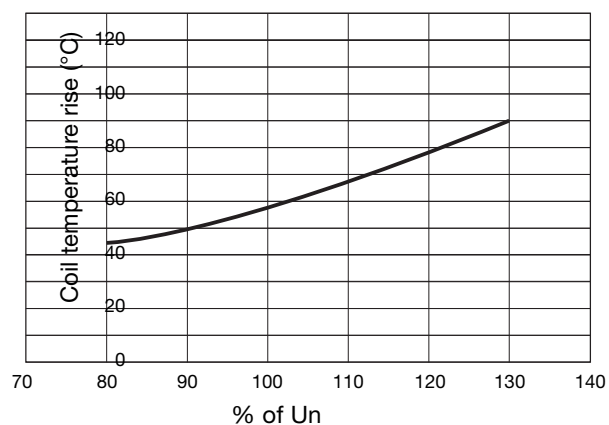
### Max. switching current



### Electrical life 250VAC Resistance load



### Temperature curve of coil



## Bases and Sockets

DIN rail sockets code is **ZPY11A** details and specifications on page 64 of industrial relays catalogue.