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# Industrial Relay Type RPY 4 10A Monostable





- High switching power
- Wide range of applications
- 10A switching capacity
- 4 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.

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

Available in 1, 2, 3, 4 pole

# **Approvals**











#### **Ordering Key**

**RPY A 004 A24 DLT** 

| Type —        |  |  |
|---------------|--|--|
| Terminal type |  |  |
| Contact code  |  |  |
| Coil code     |  |  |
| Options —     |  |  |
| Options       |  |  |

A = Plug in terminals, blades Terminal type:

B = PCB terminals

Box content: 10 relays

Box size: (W 240 x D 105 x H 38) mm Weight: 850g (W 9.45 x D 4.13 x H 1.50) inches Weight: 29.99oz

#### **Contact configuration Contact rating** Contact code 4 change over contacts (DPDT- 4 form C) 10A 004

## Coil Characteristics, DC @ +25°C (+77°F), coil power 1.5W

| Coil<br>Code | Nominal<br>Voltage VDC | Pick-up<br>Voltage VDC | Drop-out<br>Voltage VDC | Max. Allowed<br>Voltage VDC | Coil<br>Current mA | Coil<br>Resistance Ω |
|--------------|------------------------|------------------------|-------------------------|-----------------------------|--------------------|----------------------|
| 6            | 6                      | 4.5                    | 0.6                     | 6.6                         | 250                | 24                   |
| 9            | 9                      | 6.75                   | 0.9                     | 9.9                         | 170                | 54                   |
| 12           | 12                     | 9                      | 1.2                     | 13.2                        | 125                | 96                   |
| 24           | 24                     | 18                     | 2.4                     | 26.4                        | 70                 | 360                  |
| 36           | 36                     | 27                     | 3.6                     | 39.6                        | 42                 | 865                  |
| 48           | 48                     | 36                     | 4.8                     | 52.8                        | 31                 | 1540                 |
| 110          | 110                    | 82.5                   | 11                      | 121                         | 16                 | 6800                 |
| 120          | 115/120                | 86                     | 11.5                    | 132                         | 7.8                | 11000*               |
| 220          | 220                    | 165                    | 22                      | 242                         | 7.6                | 29000                |

<sup>\*</sup>coil power 0.9 W



## Coil Characteristics, AC @ +25°C (+77°F), coil power 2.5VA

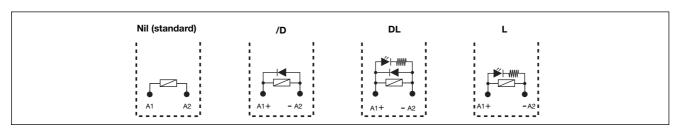
| Coil | Nominal     | Pick-up     | Drop-out    | Max. Allowed | Coil Cur | rent mA | Coil         |
|------|-------------|-------------|-------------|--------------|----------|---------|--------------|
| Code | Voltage VAC | Voltage VAC | Voltage VAC | Voltage VAC  | 50Hz     | 60Hz    | Resistance Ω |
| A6   | 6           | 4.8         | 1.8         | 6.6          | 420      | 360     | 5            |
| A12  | 12          | 9.6         | 3.6         | 13.2         | 210      | 180     | 20           |
| A24  | 24          | 19.2        | 7.2         | 26.4         | 100      | 85      | 80           |
| A36  | 36          | 28.8        | 10.8        | 39.6         | 70       | 60      | 180          |
| A48  | 48          | 38.4        | 14.4        | 52.8         | 52       | 44      | 320          |
| A110 | 100/110     | 88.0        | 30.0        | 121.0        | 25/23    | 21/19.5 | 1680         |
| A120 | 120         | 96.0        | 36.0        | 142.0        | 20       | 17      | 2000         |
| A220 | 220         | 176         | 66.0        | 242.0        | 12       | 10      | 6700         |
| A240 | 240         | 192         | 72.0        | 264.0        | 10       | 8.5     | 8000         |
| A380 | 380         | 304         | 114.0       | 418.0        | 6.5      | 5.5     | 29000        |

## **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

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



#### **Contact Characteristics**

| Contact Rating<br>(With resistive load)  | 10A - 250VAC                                      | Max Switching Power Life | 2500VA / 280W                               |
|--|---|--------------------------|---|
| Usually rating   | 10A-250VAC / 28VDC                                | Electrical life          | 1x105 cycles (3600ops/h)                    |
| Material   | AgSnO <sub>2</sub> In <sub>2</sub> O <sub>3</sub> | Mechanical               | 1x10 <sup>7</sup> cycles (18000ops/h)       |
| Contact Resistance   | ≤ <b>50m</b> Ω                                    | UL/CSA ratings           | 1/3Hp 120VAC                                |
| Current Max. switching current Min. switching current Min. switching current G version | 10A<br>10mA @ 12VDC<br>1mA @ 6VDC                 |                          | 1/2Hp 240VAC<br>10A @ 30VDC<br>10A @ 250VAC |

#### Insulation

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

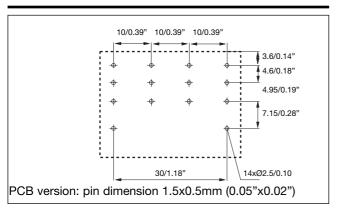


### **General Data**

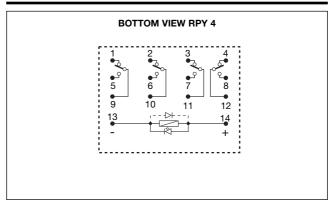
| Nominal coil power                   | 1.5W DC - 2.5VA AC             |
|--------------------------------------|--------------------------------|
| Operating time (at nominal voltage)  | ≤ <b>20ms</b>                  |
| Release time<br>(at nominal voltage) | ≤ <b>20ms</b>                  |
| Ambient temperature                  | -25° to +55°C (-13° to +131°F) |
| Ambient humidity                     | 35% to 85%                     |

| Vibration resistance | 10 to 55Hz 1mm (0.04")       |
|----------------------|------------------------------|
| Shock resistance     |                              |
| Functional           | 98m/s <sup>2</sup> (10G)     |
| Termination          | Flanges (blades) 5mm (0.20") |
| Construction         | Dust cover                   |
| Weight               | 65g (2.29oz)                 |

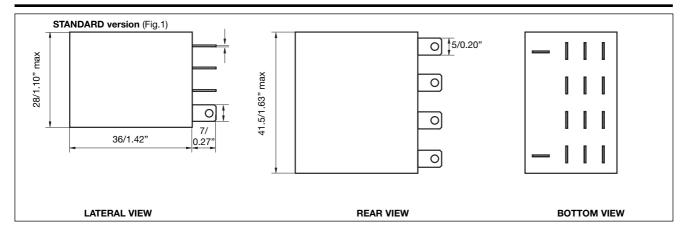
### Pin View mm/inches

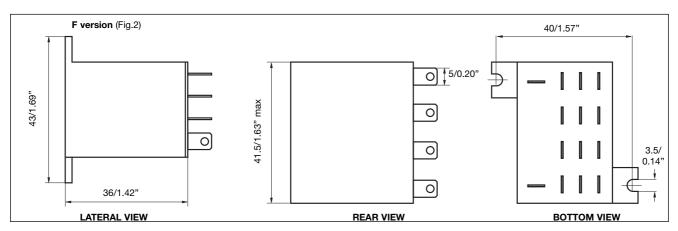


## **Wiring Diagram**



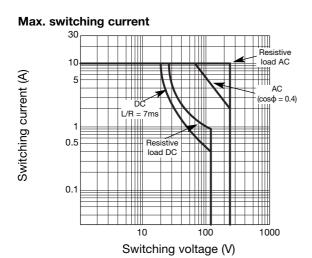
## Dimensions mm/inches

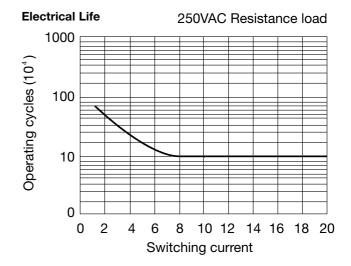




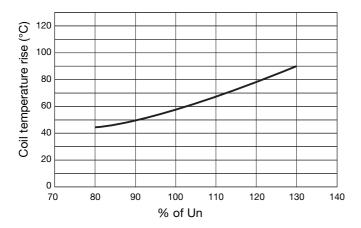


### **Diagrams**





#### Temperature curve of coil



#### **Bases and Sockets**

DIN rail sockets code is **ZPY14A** details and specifications on page 65 of industrial relays catalogue. PCB sockets code is **ZY14** details and specifications on page 67 of industrial relays catalogue.