## Hermetically Sealed Relay MY4H

## Hermetically Sealed Relay Ideal for Hazardous Locations

- Class 1 Division 2 approved.
- Fully hermetically sealed for hazardous locations.
- Cadmium-free contacts for environment-friendly use.
- Models with bifurcated contact also available.
- Conforms to UL508 and CSA 22.2.



## 

## Model Number Structure

## Model Number Legend

MY $-\frac{\square}{1} \frac{\square}{2} \frac{\square}{3}-\frac{\square}{4}-\frac{\square}{5}$

1. Number of Poles 3. Enclosure ratings

4: 4 poles
2. Contact

Blank: Single
Z: Bifurcated
H: Hermetically sealed
4. Approval
US: Class 1 Division 2 approval
5. Rated voltage
12 VDC, 24 VDC, 24 VAC, 110/120 VAC

## Ordering Information

List of Models

| Type | Contact form | Plug-in socket/solder terminals |
| :--- | :--- | :--- |
| Hermetically sealed | 4PDT | MY4H-US |
|  | 4PDT (bifurcated) | MY4ZH-US |

## Specifications

■ Ratings

## Coil

| Rated voltage (V) |  | Rated current (mA) |  | Coil resistance $(\Omega)$ | Must operate voltage | Must release voltage | Max. voltage | Power consumption |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 50 Hz | 60 Hz |  |  |  |  |  |
| DC | 12 | 75 |  | 160 | 80\% max. | 10\% min. | 110\% | 900 mW |
|  | 24 | 36.9 |  | 650 |  |  |  |  |
| AC | 110/120 | 9.9/10.8 | 8.4/9.2 | 4,430 |  | 30\% min. |  | $\begin{aligned} & 0.9-1.1 \mathrm{VA} \\ & (60 \mathrm{~Hz}) \end{aligned}$ |
|  | 24 | 53.8 | 46 | 180 |  |  |  |  |

## Contact Ratings

| Contact material | Ag alloy |  |
| :--- | :--- | :--- |
| Rated load | Resistive <br> p.f. $=1$ | $110 \mathrm{VAC}, 3 \mathrm{~A}$ <br> $24 \mathrm{VDC}, 3 \mathrm{~A}$ |
|  | Inductive <br> p.f. $=0.4$ <br> L/R-7 ms | $110 \mathrm{VAC}, 8 \mathrm{~A}$ <br> $24 \mathrm{VDC}, 1.5 \mathrm{~A}$ |
| Rated carry current | 3 A |  |
| Max. switching voltage | $125 \mathrm{VAC}, 125 \mathrm{VDC}$ |  |
| Max. switching current | 3 A |  |
| Max. switching power | 330 VA <br> 72 W |  |

## Characteristics

| Contact resistance | $50 \mathrm{~m} \Omega$ max. |
| :---: | :---: |
| Operate time | 20 ms max . |
| Release time | 20 ms max . |
| Max. operating frequency | Mechanical: 18,000 operations $/ \mathrm{hr}$ <br> Electrical: 1,800 operations $/ \mathrm{hr}$ (under rated load) |
| Insulation resistance | $100 \mathrm{M} \Omega$ min. (at 500 VDC) |
| Dielectric strength | 1,000 VAC, 1 min between coil and contacts 1,000 VAC, 1 min between contacts of different polarity 700 VAC, 1 min between contacts of same polarity |
| Vibration resistance | $\begin{array}{ll}\text { Destruction: } & 10 \text { to } 55 \text { to } 10 \mathrm{~Hz}, 0.5 \mathrm{~mm} \text { single amplitude ( } 1.0 \mathrm{~mm} \text { double amplitude) } \\ \text { Malfunction: } & 10 \text { to } 55 \text { to } 10 \mathrm{~Hz}, 0.5 \mathrm{~mm} \text { single amplitude ( } 1.0 \mathrm{~mm} \text { double amplitude) }\end{array}$ |
| Shock resistance | Destruction: $1,000 \mathrm{~m} / \mathrm{s}^{2}$ <br> Malfunction:  <br> $\quad$ When energized: $200 \mathrm{~m} / \mathrm{s}^{2}$ <br> When not energized: $200 \mathrm{~m} / \mathrm{s}^{2}$ |
| Endurance | Mechanical: Single contact: $50,000,000$ operations <br> Electrical: Bifurcated contact: $5,000,000$ operations <br>  100,000 operations. (Single contact) <br>  50,000 operations. (Bifurcated contact) |
| Ambient temperature | Operating: -25 to $60^{\circ} \mathrm{C}$ |
| Ambient humidity | Operating: 5\% to 85\% |
| Weight | Approx. 50 g |

## Engineering Data



## Dimensions

| Solder Terminal Models |
| :--- |
| $\mathrm{MY} 4(\mathrm{Z}) \mathrm{H}$ |

(BOTTOM VIEW)
Internal Connections

## Socket

## DIN-rail-mounted Socket Conforming to <br> Class 1 Division 2

- Special Socket with Class 1 Division 2 approval.
- Holding clips contribute to safety by preventing the Relay falling out of the Socket due to vibration.



## Ordering Information

| Item | Pole | Mode |
| :---: | :--- | :--- |
| DIN-rail-mounted socket | 4 |  |

Note: 1. Class 1 Division 2 approval is obtained for use with the MY4(Z)H Relay.
2. Clips are not included.

Dimensions


Terminal Arrangement Internal Connections


Mounting Holes
Two, M3, M4, or 4.5-dia holes


Note: Track mounting is also possible.

## Accessory (Option)

PYC-A1
(2 pcs per set)


To convert millimeters into inches, multiply by 0.03937 . To convert grams into ounces, multiply by 0.03527 .

