OMRON

Hermetically Sealed Relay

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



- 1. Number of Poles
- 4: 4 poles

2. Contact

- Blank: Single
- Z: Bifurcated

3. Enclosure ratings

- 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

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

Specifications

Ratings

<u>Coil</u>

Rated voltage (V)		Rated current (mA)		Coil resistance	Must operate	Must release	Max. voltage	Power
		50 Hz	60 Hz	(Ω)	voltage	voltage		consumption
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.		0.9-1.1 VA
	24	53.8	46	180	1			(60 Hz)

Contact Ratings

Contact material		Ag alloy
Rated load	Resistive p.f.=1	110 VAC, 3 A 24 VDC, 3 A
	Inductive p.f.=0.4 L/R-7 ms	110 VAC, 8 A 24 VDC, 1.5 A
Rated carry current	t	3 A
Max. switching volt	age	125 VAC, 125 VDC
Max. switching current		3 A
Max. switching power		330 VA 72 W

■ Characteristics

Contact resistance	50 mΩ max.
Operate time	20 ms max.
Release time	20 ms max.
Max. operating frequency	Mechanical: 18,000 operations/hr Electrical: 1,800 operations/hr (under rated load)
Insulation resistance	100 MΩ 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	Destruction:10 to 55 to 10 Hz, 0.5 mm single amplitude (1.0 mm double amplitude)Malfunction:10 to 55 to 10 Hz, 0.5 mm single amplitude (1.0 mm double amplitude)
Shock resistance	Destruction: 1,000 m/s ² Malfunction:
Endurance	Mechanical: Single contact: 50,000,000 operations Bifurcated contact: 5,000,000 operations Electrical: 100,000 operations. (Single contact) 50,000 operations. (Bifurcated contact)
Ambient temperature	Operating: -25 to 60°C
Ambient humidity	Operating: 5% to 85%
Weight	Approx. 50 g

Engineering Data

Maximum Switching Power Endurance

MY4(Z)H



MY4H



Note: The endurance is half for bifurcated contact models.

Dimensions



Socket

Track-mounted Socket Conforming to 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
Track-mounted socket	4	PYF14A-E-US

Note: 1. Class 1 Division 2 approval is obtained for use with the MY4(Z)H Relay.

2. Clips are not included.

Dimensions



PYC-A1 (2 pcs per set)

1.2

ALL DIMENSIONS SHOWN ARE IN MILLIMETERS. To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.

Cat. No. J131-E1-02 In the interest of product improvement, specifications are subject to change without notice.

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