

Miniature Power Relays

MY4Z AC24



Image

Mini power relay, 4 poles, Twin contacts, Plug-in terminal, 24 VAC

| | |
|--------------------|--|
| Coil ratings | 24 VAC 50 Hz 53.8 mA 24 VAC 60 Hz 46 mA |
| Contact form | 4PDT |
| Contact method | Bifurcated |
| Contact material | Au clad + Ag alloy |
| Contact rated load | 220 VAC 3 A (Resistive load) 220 VAC 0.8 A (Inductive load (cosφ = 0.4)) 24 VDC 3 A (Resistive load) 24 VDC 1.5 A (Inductive load (L/R = 7 ms)) |
| Terminal structure | Plug-in terminal |

Ratings / Performance

As of November 20, 2023

Ratings

| | | |
|----------------------|---------------------------------|--|
| Degree of protection | | Closed type (cover) |
| Terminal structure | | Plug-in terminal |
| Coil | Coil ratings | 24 VAC 50 Hz 53.8 mA 24 VAC 60 Hz 46 mA |
| | Coil resistance | 180 Ω |
| | Operate voltage (Set voltage) | 80 % max. |
| | Release voltage (Reset voltage) | 30 % min. |
| | Maximum voltage | 110 % (23 °C) |
| | Power consumption | Approx. 0.9 to 1.3 VA 60 Hz |
| Contact | Contact rated load | 220 VAC 3 A (Resistive load) 220 VAC 0.8 A (Inductive load (cosφ = 0.4)) 24 VDC 3 A (Resistive load) 24 VDC 1.5 A (Inductive load (L/R = 7 ms)) |
| | Max. contact voltage | 250 VAC 125 VDC |
| | Max. contact current | AC: 3 A DC: 3 A |
| | Maximum switching power | 660 VA (Resistive load) 176 VA (Inductive load (cosφ = 0.4)) 72 W (Resistive load) 36 W (Inductive load (L/R = 7 ms)) |
| | Contact form | 4PDT |
| | Contact method | Bifurcated |
| | Contact material | Au clad + Ag alloy |

Performance

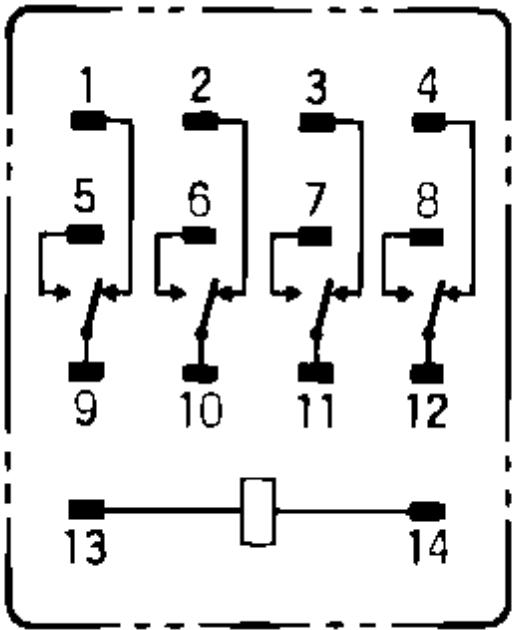
| | |
|------------------------------------|--|
| Contact resistance | 50 mΩ max. (Voltage drop method with 5 VDC 1 A) |
| Operating time | 20 ms max. (With rated operating power applied, not including contact bounce) |
| Reset time | 20 ms max. (With rated operating power applied, not including contact bounce) |
| Maximum operating frequency | Mechanical: 18000 time/hour Rated load: 1800 time/hour |
| Insulation resistance | Between coil and contacts: 100 MΩ min. (at 500 VDC) Between contacts of different polarity: 100 MΩ min. (at 500 VDC) Between contacts of same polarity: 100 MΩ min. (at 500 VDC) |
| Dielectric strength | Between coil and contacts: 2000 VAC 50/60 Hz 1 min Between contacts of different polarity: 2000 VAC 50/60 Hz 1 min Between contacts of same polarity: 1000 VAC 50/60 Hz 1 min |
| Vibration resistance (destruction) | 10 to 55 to 10 Hz, 0.5-mm single amplitude (1-mm double amplitude) |
| Vibration resistance (Malfunction) | 10 to 55 to 10 Hz, 0.5-mm single amplitude (1-mm double amplitude) |
| Shock resistance (destruction) | 1000 m/s ² |
| Shock resistance (Malfunction) | 200 m/s ² |
| Endurance (Mechanical) | 20 million operations min. (switching frequency 18,000 operations/h) |
| Endurance (Electrical) | 100,000 operations min. (23 °C, Rated load, switching frequency 1,800 operations/h) |
| Failure rate | 1 VDC 100 μA (failure level: Preference value, Switching frequency: 120 operations per minute) |
| Ambient temperature (Operating) | -55 to 70 °C (with no freezing or condensation) |
| Ambient humidity (Operating) | 5 to 85 % |
| Weight | Approx. 35 g |
| Mounting method | Socket |

As of November 20, 2023

Terminal arrangement and internal connection

As of November 20, 2023

Terminal arrangement and internal connection



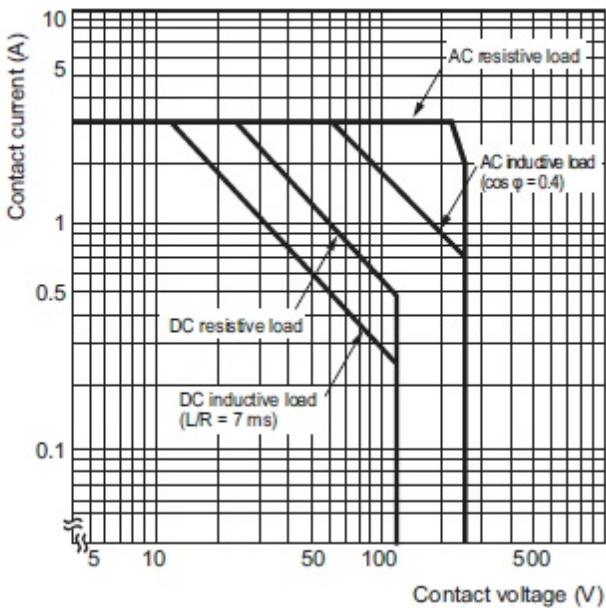
As of November 20, 2023

Characteristic chart

As of November 20, 2023

Switching capacities

MY4 and MY4Z



As of November 20, 2023

