## OmROn

## Miniature Power Relays

## MY Series

## Best-selling, general-purpose relays that can be selected based on operating environment and application

-Wiring work can be shortened by as much as $60 \%$ * compared to conventional screw terminal sockets by combining with push-in plus terminal sockets (PYF- $\square-P U$ ) that feature light insertion force and strong pull-out strength to achieve less wiring work.

- In addition to our standard type (MY-GS-R), an abundant lineup of models including latching relays that retain contact operation status (MYK) and sealed relays suitable for environments where dust and corrosive gases are present (MYQ/MYH) are also available.
- Selection is possible to suit the application, such as models with operation indicators and models with latching levers (MY-GS-R).
* When both push-in plus terminals and screw terminal sockets are combined with plug-in terminal types (according to actual OMRON measurements as of November 2015)


Refer to the standards certifications and compliance section of your OMRON website for the latest information on certified models.

## Miniature Power Relay Types

MY-GS-R Miniature Power Relays From page 4MY(S) Miniature Power Relays.From page 13
MYK Miniature Power Latching Relays ..... From page 32
MYQ/MYH Miniature Power Sealed Relays ..... From page 37
Common Information
Common Options (Order Separately) From page 43
Common Safety Precautions

$\qquad$
From page 62

MY/MYK/MYQ•MYH

## Model List

## Selection

Use this as reference when selecting the model.

MY-GS-R

## Firstly Choice!

This general-purpose model can be used for a wide range of applications
page 4


Choose this model if you want to properly control a microload!
$\mathbf{M Y} \square \mathbf{Z} \quad$ Bifurcated contacts
MY $\square Z-C B G$ Crossbar bifurcated contacts
page 13
page 32


Choose this model in an environment with a large amount of corrosive gases and dust!
MYQ Plastic Sealed Relays MYH Hermetically Sealed Relays page 37


## Miniature Power Relays: MY

| Classification |  | Number of poles | Contacts |  | Plug-in terminals |  |  | PCB terminals | Case-surface mounting |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Standard |  |  | With operation indicator | With latching lever |  |  |
| Standard models |  |  | 2 | Single |  | MY2-GS-R | MY2N-GS-R | MY2IN-GS-R | MY2-02 | MY2F |
|  |  | Bifurcated |  | MY2Z | MY2ZN |  |  |  |  |
|  |  | 3 |  | Single |  | MY3 | MY3N |  | MY3-02 | MY3F |
|  |  | 4 | Single |  | MY4-GS-R | MY4N-GS-R | MY4IN-GS-R | MY4-02 | MY4F |
|  |  | Bifurcated | Type 1 | MY4Z(S) | MY4ZN(S) | MY4ZIN(S) | MY4Z-02 | MY4ZF |  |
|  |  | Type 2 | MY4ZN1(S) |  | MY4ZIN1(S) |  |  |  |
|  |  | Crossbar bifurcated | MY4Z-CBG | MY4ZN-CBG |  |  |  |  |  |
| Models with built-in diode for coil surge absorption | Type 1 <br> $\underset{\substack{-13 \\ 1_{1}-\square-14 \\{ }_{A 2}^{14}}}{\oplus}$ |  | 2 | Single |  |  | MY2N-D2-GS-R | MY2IN-D2-GS-R | - | , |
|  |  | Bifurcated |  |  | MY2ZN-D2 |  | - | - |  |
|  |  | 3 |  | Single |  |  | MY3N-D2 |  |  | , |
|  |  | 4 | Single |  | , | MY4N-D2-GS-R | MY4IN-D2-GS-R | - | - |
|  |  |  | Bifurcated |  | - | MY4ZN-D2(S) | MY4ZIN-D2(S) | - | , |
|  | Type 2 | 2 | Single |  | - | MY2N1-D2(S) | MY2IN1-D2(S) | - | - |
|  |  | 4 | Single |  | - | MY4N1-D2(S) | MY4IN1-D2(S) | $\bigcirc$ | , |
|  |  |  | Bifurcated |  | - | MY4ZN1-D2(S) | MY4ZIN1-D2(S) | $\sim$ | - |
| Models with built-in CR circuit for coil surge absorption |  | 2 | Single |  | - | MY2N-CR-GS-R | MY2IN-CR-GS-R | - | - |
|  |  | 4 | Single |  | - | MY4N-CR-GS-R | MY4IN-CR-GS-R | - | - |
|  |  | Bifurcated | - | MY4ZN-CR(S) | MY4ZIN-CR(S) | - | - |  |  |

## Miniature Power Latching Relays (MYK)

| Classification | Number of poles | Contacts | Plug-in terminals |  | PCB terminals |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\square$ | With operation indicator |  |
| Standard models | 2 | Single | MY2K |  | MY2K-02 |

## Miniature Power Sealed Relays (MYQ/MYH)

| Classification | Number of poles | Contacts | Plug-in terminals |  | PCB terminals |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\square$ | With operation indicator |  |
| Plastic Sealed Relays | 4 | Single | MYQ4 | MYQ4N | MYQ4-02 |
|  |  | Bifurcated | MYQ4Z |  | MYQ4Z-02 |
| Hermetically Sealed Relays | 4 | Single | MY4H |  | MY4H-0 |
|  |  | Bifurcated | MY4ZH |  | MY4ZH-0 |

Refer to Front-connecting Sockets and Back-connecting Sockets in Common Options (Order Separately) on pages 43 and 45 for main unit and socket combinations.

## Miniature Power Relays

MY-GS-R

## Mechanical Indicators Added as a

 Standard Feature to Our Best-selling MY General-purpose Relays- A lineup of models with latching levers added for easier circuit checking.
- Reduces wiring work by $60 \%$ when combined with the PYF-PU Push-In Plus Socket (according to actual OMRON measurements).
- Relays with AC and DC coils have different colors of operating indicators (LEDs).
- Printing on the coil tape indicates the operating coil specification.
- Mechanical operation indicators are a standard feature on all models.

- UL, CSA, IEC (VDE certification), and CQC.

```
Refer to the Common Relay Precautions.
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## Features

## Common to all specifications

- Mechanical indicators are a standard feature on all models so that you can easily check the contact status.
- The color of the LED shows whether the coil voltage is AC or DC.



## With latching lever

- Useful for the operation check of relay sequence circuits.
- The coil voltage AC/DC can be identified by the color of the latching lever (AC coil specification: red, DC coil specification: Blue).

Latching lever operating method

|  | Normal State | Mode 1: Momentary State | Mode 2: Locked State |
| :---: | :---: | :---: | :---: |
| When seen from the top |  | Yellow button |  |
| When seen from the side |  |  |  |
| Operation Description | --- | Slide the lever one step and press the yellow button with an insulated tool to operate the contacts. | If you slide the lever two steps, the contacts lock in the operation position. |

## Model Number Structure

## Model Number Legend

## MY $\frac{\square}{1} \frac{\square}{2} \frac{\square}{3}-\frac{\square \square}{4}$-GS -R DC24

1. Number of Poles

2: 2 poles
4: 4 poles
2. Latching Lever

Blank:Without latching lever
I: With latching lever
3. LED Operation Indicator

Blank:Built-in mechanical indicators
N : LED operation indicator and built-in mechanical indicators
4. Coil Surge Absorption Blank:Standard models
D2: Models with built-in diodes
CR: Models with built-in CR circuits
5. Operating Coil Voltage

Display Example: DC24

## List of Models

## Miniature Power Relays (MY-GS-R)

| Category | Number of poles | Contact structure | Plug-in (octal pins) terminals |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | With operation indicator |  |
|  |  |  | $\square$ |  | With latching lever |
| Standard models | 2 | Single | MY2-GS-R | MY2N-GS-R | MY2IN-GS-R |
|  | 4 |  | MY4-GS-R | MY4N-GS-R | MY4IN-GS-R |
| Models with built-in diodes for coil surge absorption | 2 |  | --- | MY2N-D2-GS-R | MY2IN-D2-GS-R |
|  | 4 |  | --- | MY4N-D2-GS-R | MY4IN-D2-GS-R |
| Models with built-in CR circuits for coil surge absorption | 2 |  | --- | MY2N-CR-GS-R | MY2IN-CR-GS-R |
|  | 4 |  | --- | MY4N-CR-GS-R | MY4IN-CR-GS-R |

## MY-GS-R

## Ordering Information

## Main unit

Standard model without operation indicator

| Number of poles | Model | Rated voltage (V) |
| :---: | :--- | :--- |
| $\mathbf{2}$ | MY2-GS-R | $12,24,48,100 / 110,110 / 120,200 / 220,220 / 240 \mathrm{VAC}$ <br>  |
|  | MY4-GS-R | $12,24,48,100 / 110 \mathrm{VDC}$ |

## Standard model with operation indicator

| Number of poles | Model | Rated voltage (V) |
| :---: | :--- | :--- |
| $\mathbf{2}$ | MY2N-GS-R | $12,24,48,100 / 110,110 / 120,200 / 220,220 / 240 \mathrm{VAC}$ |
|  |  | $6,12,24,48,100 / 110,220 \mathrm{VDC}$ |
| $\mathbf{4}$ | MY4N-GS-R | $12,24,48,100 / 110,110 / 120,200 / 220,220 / 240 \mathrm{VAC}$ <br> $6,12,24,48,100 / 110,220 \mathrm{VDC}$ |

Standard model with operation indicator and latching lever

| Number of poles | Model | Rated voltage (V) |
| :---: | :--- | :--- |
| $\mathbf{2}$ | MY2IN-GS-R | $12,24,48,100 / 110,110 / 120,200 / 220,220 / 240$ VAC |
|  |  | $6,12,24,48,100 / 110,220$ VDC |
| $\mathbf{4}$ | MY4IN-GS-R | $12,24,48,100 / 110,110 / 120,200 / 220,220 / 240$ VAC |

Models with built-in diodes for coil surge absorption with operation indicator

| Number of poles | Model |  | Rated voltage (V) |
| :---: | :--- | :--- | :--- |
| $\mathbf{2}$ | MY2N-D2-GS-R | $12,24,48,100 / 110,220$ VDC |  |
| $\mathbf{4}$ | MY4N-D2-GS-R | $12,24,48,100 / 110,220$ VDC |  |

Models with built-in diodes for coil surge absorption with operation indicator and latching lever

| Number of poles | Model |  | Rated voltage (V) |
| :---: | :--- | :--- | :--- |
| $\mathbf{2}$ | MY2IN-D2-GS-R | $12,24,48,100 / 110,220$ VDC |  |
| $\mathbf{4}$ | MY4IN-D2-GS-R | $12,24,48,100 / 110,220$ VDC |  |

Models with built-in CR circuits for coil surge absorption with operation indicator

| Number of poles | Model | Rated voltage (V) |
| :---: | :--- | :--- |
| $\mathbf{2}$ | MY2N-CR-GS-R | $100 / 110,110 / 120,200 / 220,220 / 240$ VAC |
| $\mathbf{4}$ | MY4N-CR-GS-R | $100 / 110,110 / 120,200 / 220,220 / 240$ VAC |

Models with built-in CR circuits for coil surge absorption with operation indicator and latching lever

| Number of poles | Model | Rated voltage (V) |
| :---: | :--- | :--- |
| $\mathbf{2}$ | MY2IN-CR-GS-R | $100 / 110,110 / 120,200 / 220,220 / 240$ VAC |
| $\mathbf{4}$ | MY4IN-CR-GS-R | $100 / 110,110 / 120,200 / 220,220 / 240$ VAC |

Ratings and Specifications

## Ratings

## Main unit

Operating Coil

| Item |  | Rated cu | ent (mA) | Coil resistance | Coil induc | tance (H) | Must-operate voltage | Must-release voltage | Maximum voltage | Power consumption (VA, W) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rated voltage |  | 50 Hz | 60 Hz | ( $\Omega$ ) | Armature OFF | Armature ON | Percentage of rated voltage |  |  |  |
| AC | 12 | 106.5 | 91 | 46 | 0.17 | 0.33 | 80\% max. *1 | 30\% min. *2 | 110\% |  |
|  | 24 | 53.8 | 46 | 180 | 0.69 | 1.3 |  |  |  |  |
|  | 48 | 25.7 | 21.1 | 788 | 3.22 | 5.66 |  |  |  |  |
|  | 100/110 | 11.7/12.9 | 10.0/11.0 | 3,750 | 14.54 | 24.6 |  |  |  | Approx. 0.9 to |
|  | 110/120 | 9.9/10.8 | 8.4/9.2 | 4,430 | 19.2 | 32.1 |  |  |  |  |
|  | 200/220 | 6.2/6.8 | 5.3/5.8 | 12,950 | 54.75 | 94.07 |  |  |  |  |
|  | 220/240 | 5.2/6.2 | 4.3/5.0 | 15,920 | 83.5 | 136.4 |  |  |  |  |
| DC | 6 | 146 (151) |  | 41.0 (39.8) | 0.17 | 0.33 |  | 10\% min. $* 2$ |  | Approx. 0.9 |
|  | 12 | 72.7 (75) |  | 165 (160) | 0.73 | 1.37 |  |  |  |  |
|  | 24 | 36.3 (37.7) |  | 662 (636) | 3.2 | 5.72 |  |  |  |  |
|  | 48 | 17.6 (18.8) |  | 2,725 (2,560) | 10.6 | 21.0 |  |  |  |  |
|  | 100/110 | 8.7 (9.0)/9.6 (9.9) |  | $\begin{array}{\|l\|} \hline 11,440 \\ (11,100) \end{array}$ | 45.6 | 86.2 |  |  |  |  |
|  | 220 | 3.6 |  | 60,394 | 362.3 | 452.9 |  |  |  | Approx. 0.8 |

Note: 1. The rated current and coil resistance are measured at a coil temperature of $23^{\circ} \mathrm{C}$ with tolerances of $+15 \% /-20 \%$ for the $A C$ rated current and $+15 \%$ for the DC coil resistance.
2. The AC coil resistance and inductance values are reference values only (at 60 Hz ).
3. Operating characteristics were measured at a coil temperature of $23^{\circ} \mathrm{C}$.
4. The values in parentheses for the rated currents and coil voltages of DC coils are for models with LED operation indicators.
5. The maximum voltage capacity was measured at an ambient temperature of $23^{\circ} \mathrm{C}$.
*1. There is variation between products, but actual values are $80 \%$ max.
The Relay will operate if $80 \%$ or higher of the rated voltage is applied. However, to achieve the specified characteristics, apply the rated voltage to the coil.
*2. There is variation between products, but actual values are $30 \%$ minimum for AC and $10 \%$ minimum for DC. To ensure release, use a value that is lower than the specified value.

## Contacts

|  | 2 poles |  |  | 4 poles |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Resistive load |  | Inductive load $\begin{aligned} & (\cos \phi=0.4, \\ & L / R=7 \mathrm{~ms}) \end{aligned}$ | Resistive load |  | Inductive load $\begin{aligned} & (\cos \phi=0.4, \\ & L / R=7 \mathrm{~ms}) \end{aligned}$ |
| Contact configuration | DPDT |  |  | 4PDT |  |  |
| Contact structure | Single |  |  |  |  |  |
| Contact material | Ag |  |  |  |  |  |
| Rated load | 10 A at 250 VAC 10 A at 30 VDC | $\begin{aligned} & 5 \mathrm{~A} \text { at } 220 \text { VAC } \\ & 5 \mathrm{~A} \text { at } 24 \mathrm{VDC} \end{aligned}$ | $\begin{aligned} & 2 \mathrm{~A} \text { at } 220 \text { VAC } \\ & 2 \mathrm{~A} \text { at } 24 \mathrm{VDC} \end{aligned}$ | 6 A at 250 VAC 6 A at 30 VDC | $\begin{aligned} & 3 \mathrm{~A} \text { at } 220 \mathrm{VAC} \\ & 3 \mathrm{~A} \text { at } 24 \mathrm{VDC} \end{aligned}$ | $\begin{aligned} & \text { 0.8 A at } 220 \text { VAC } \\ & 1.5 \mathrm{~A} \text { at } 24 \mathrm{VDC} \end{aligned}$ |
| Electrical endurance *1 | 100,000 operations | 500,000 operatio |  | 30,000 operations | 200,000 operatio |  |
| Rated carry current | 10 A |  |  | 6 A *2 |  |  |
| Maximum contact voltage | 250 VAC, 220 VDC |  |  | 250 VAC, 220 VDC |  |  |
| Maximum contact current | 10 A |  |  | 6 A *2 |  |  |
| Maximum switching capacity | $\begin{aligned} & 2,500 \mathrm{VA} \\ & 300 \mathrm{~W} \end{aligned}$ |  | $\begin{aligned} & 440 \mathrm{VA} \\ & 48 \mathrm{~W} \end{aligned}$ | $\begin{aligned} & 1,500 \mathrm{VA} \\ & 180 \mathrm{~W} \end{aligned}$ |  | $\begin{aligned} & 176 \text { VA } \\ & 36 \mathrm{~W} \end{aligned}$ |
| Minimum load (reference values) *3 | 1 mA at 5 VDC |  |  |  |  |  |

*1. Rated load, switching frequency: 2,400 operations $/ \mathrm{h}$. Ambient temperature condition: $23^{\circ} \mathrm{C}$. Duty ratio: $33 \%$.
*2. 4 poles of 6 A is for an ambient temperature of $50^{\circ} \mathrm{C}$. At an ambient temperature of $70^{\circ} \mathrm{C}$, the value is 3 A .
$* 3$. These values are guides for the switchable limits for minute load levels, such as in electronic circuits. Actual characteristics may be different. These values will depend on the switching frequency, atmosphere, and expected reliability level. Confirm applicability in the actual system under actual application conditions.

## Characteristics

Main unit


Note: The above values are initial values.
*1. Measurement conditions: 1 A at 5 VDC using the voltage drop method.
*2. Measurement conditions: With rated operating power applied, not including contact bounce time
*3. Measurement conditions: For 500 VDC applied to the same location as for dielectric strength measurement.

## Certified Ratings for Models Certified for Safety Standards

The rated values for safety standard certification are not the same as individually defined performance values. Always check the specifications before use.

## Main unit

UL-certified Models: UL508

| MY-GS | Number of poles | Coil ratings | Contact ratings | Certified number of operations |
| :---: | :---: | :---: | :---: | :---: |
|  | 2 | 12 VAC, 24 VAC, 48 VAC, 100/110 VAC, 110/120 VAC, 200/220 VAC, or 220/240 VAC <br> 6 VDC, 12 VDC, 24 VDC, 48 VDC, 100/110 VDC, or 220 VDC | 5 A, 30 VDC (General Use) 10 A, 30 VDC (General Use) 5 A, 250 VAC (General Use) 10 A, 250 VAC (General Use) | 6,000 operations |
|  | 4 | 12 VAC, 24 VAC, 48 VAC, 100/110 VAC, 110/120 VAC, <br> 200/220 VAC, or 220/240 VAC <br> 6 VDC, 12 VDC, 24 VDC, 48 VDC, 100/110 VDC, or 220 VDC | 3 A, 30 VDC (General Use) 6 A, 30 VDC Resistive Load 3 A, 250 VAC (General Use) 6 A, 250 VAC Resistive Load | 6,000 operations |

CSA-certified Models: CSA C22.2 No. 14

| MY-GS | Number of poles | Coil ratings | Contact ratings | Certified number of operations |
| :---: | :---: | :---: | :---: | :---: |
|  | 2 | 12 VAC, 24 VAC, 48 VAC, 100/110 VAC, 110/120 VAC, 200/220 VAC, or 220/240 VAC <br> 6 VDC, 12 VDC, 24 VDC, 48 VDC, 100/110 VDC, or 220 VDC | $5 \mathrm{~A}, 30$ VDC (General Use) $10 \mathrm{~A}, 30$ VDC (General Use) $5 \mathrm{~A}, 250$ VAC (General Use) $10 \mathrm{~A}, 250$ VAC (General Use) | 6,000 operations |
|  | 4 | 12 VAC, 24 VAC, 48 VAC, 100/110 VAC, 110/120 VAC, <br> 200/220 VAC, or 220/240 VAC <br> 6 VDC, 12 VDC, 24 VDC, 48 VDC, 100/110 VDC, or 220 VDC | 3 A, 30 VDC (General Use) <br> 6 A, 30 VDC Resistive Load <br> 3 A, 250 VAC (General Use) <br> 6 A, 250 VAC Resistive Load | 6,000 operations |

## VDE-certified Models: EN 61810-1

| MY-GS | Number of poles | Coil ratings | Contact ratings | Certified number of operations |
| :---: | :---: | :---: | :---: | :---: |
|  | 2 | 12 VAC, 24 VAC, 48 VAC, 100/110 VAC, 110/120 VAC, 200/220 VAC, or 220/240 VAC <br> 6 VDC, 12 VDC, 24 VDC, 48 VDC, 100/110 VDC, or 220 VDC | $\begin{aligned} & 10 \mathrm{~A}, 30 \mathrm{VDC}(\mathrm{~L} / \mathrm{R}=0) \\ & 10 \mathrm{~A}, 250 \operatorname{VAC}(\cos \phi=1) \end{aligned}$ | 10,000 operations |
|  | 4 | 12 VAC, 24 VAC, 48 VAC, 100/110 VAC, 110/120 VAC, 200/220 VAC, or 220/240 VAC <br> 6 VDC, 12 VDC, 24 VDC, 48 VDC, 100/110 VDC, or 220 VDC | $6 \mathrm{~A}, 30 \mathrm{VDC}(\mathrm{L} / \mathrm{R}=0)$ <br> $6 \mathrm{~A}, 250 \mathrm{VAC}(\cos \phi=1)$ | 10,000 operations |

## CQC-certified Models

| Model | Standard number | Certification No. |
| :--- | :--- | :--- |
| MY-GS | GB/T 21711.1 | CQC18002198531 |

## Miniature Power Relays

## Best-selling, general-purpose relays

- AC/DC coil voltage specifications can now be more easily distinguished thanks to the use of color-coded coil tape and operation indicators (LED).
- Latching levers convenient for circuit checking and MY(S) models equipped with mechanical operation indicators and operation indicators for monitoring operation status are available.
- Contact materials and contact structures can be selected


Refer to the standards certifications and compliance section of your OMRON website for the latest information on certified models.
based on contact reliability and corrosion resistance.
*Voltage is printed on white tape in the case of the Standard 3-pole model (MY3).
Refer to Safety Precautions on pages 62 to 63 and Safety
Precautions for All Relays.

## Features

## 1. More easily distinguished AC/DC coil voltage specifications

- Distinguished using color-coded coil tape*
* Voltage is printed on white tape in the case of the Standard 3-pole model (MY3).

Example: MY2


Coil tape
Pink $=A C$ voltage $\begin{gathered}A C \text { cioll } \\ \text { specification }\end{gathered}$

Example: MY4


Coil tape
Blue = DC voltage

- Distinguished using color-coded operation indicators (LED)


Operation indicator (LED) Red = AC voltage


Example: MY4


Operation indicator (LED) Green = DC voltage

Sliding the lever to the first stage and pressing the yellow button using n insulated flat-blade screwdriver, etc., will operate the contacts.


Sliding the lever to the second stage will lock the contacts in the operating position. and corrosion resistance.

| Contact reliability |  |  | Corrosion resistance |  | Typical model |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Contact structure |  |  | Contact material |  |
| High | Crossbar bifurcated contacts |  | High $\uparrow$ | Au cladding + AgPd | MY4Z-CBG |
|  | Bifurcated contacts |  |  | Au cladding + Ag alloy <br> Au plating + Ag alloy | $\begin{aligned} & \text { MY4Z } \\ & \text { MY2Z } \end{aligned}$ |
|  | Single contacts |  |  | Au cladding + Ag alloy | MY4 |
| Low |  |  | Low | Ag alloy | MY2 |

## MY(S)

## Model Number Structure

## Model Number Legend

## - Plugin Terminals

## Standard models

M Y

(Example: MY4ZIN(S))
(1)
(2)
(3)
(1) Number of poles

2: 2-pole
3: 3-pole
4: 4-pole
(2) Contacts

None: Single
Z: Bifurcated
Z-CBG: Crossbar bifurcated
(3) Options

None, (S): None
$\mathrm{N}, \mathrm{N}(\mathrm{S}): \quad$ With operation indicator (A2/14: +)
N 1 (S): $\quad$ With operation indicator (A1/13: + )
$\operatorname{IN}(\mathrm{S}): \quad$ With operation indicator/latching lever (A2/14: +)
$\mathrm{IN} 1(\mathrm{~S}): \quad$ With operation indicator/latching lever (A1/13: +)

Models with builtin diode for coil surge absorption

$\square$ (Example: MY4ZIN-D2(S))
(1)
(2)
(1) Number of poles/contacts

2: 2-pole, single contacts
2Z: 2-pole, bifurcated contacts
3: 3-pole, single contacts
4: 4-pole, single contacts
4Z: 4-pole, bifurcated contacts
(2) Options

N-D2, N-D2(S): Built-in diode for coil surge absorption, with operation indicator (A2/14: +) N1-D2(S): $\quad$ Built-in diode for coil surge absorption, with operation indicator (A1/13: +) IN-D2(S): Built-in diode for coil surge absorption,
with operation indicator/latching lever (A2/14: +)
IN1-D2(S): Built-in diode for coil surge absorption, with operation indicator/latching lever (A1/13: +)

Models with built-in CR circuit for coil surge absorption

(1)
(2)
(2) Options
$\mathrm{N}-\mathrm{CR}, \mathrm{N}-\mathrm{CR}(\mathrm{S}): \quad$ Built-in CR circuit for coil surge absorption, with operation indicator
IN-CR(S): Built-in CR circuit for coil surge absorption, with operation indicator/latching lever

2: 2-pole, single contacts
2Z: 2-pole, bifurcated contacts
4: 4-pole, single contacts
4Z: 4-pole, bifurcated contacts
(Example: MY4ZIN-CR(S))
$\square$

## - PCB terminals/case surface mounted


$\square$ (Example: MY2-02)
(1)
(2)
(1) Number of poles/contacts

2: 2-pole, single contacts
3: 3-pole, single contacts
4: 4-pole, single contacts
4Z: 4-pole, bifurcated contacts
(2) Terminals
-02: PCB terminals
F: Case-surface mounting

Ordering Information When your order, specify the rated voltage.

- Plug-in Terminals

Without operation indicator

| Classification | Number of poles | Contacts | Model | Rated voltage |
| :---: | :---: | :---: | :---: | :---: |
| Standard models | 2 | Single | MY2(S) | 6, 12, 24, 48/50, 110/120, 220/240 VAC |
|  |  |  |  | 6, 12, 24, 48, 100/110 VDC |
|  |  | Bifurcated | MY2Z | 12, 24, 110/120, 220/240 VAC |
|  |  |  |  | 12, 24, 100/110 VDC |
|  | 3 | Single | MY3 | 12, 24, 110/120, 220/240 VAC |
|  |  |  |  | 12, 24, 48, 100/110 VDC |
|  | 4 | Single | MY4(S) | 6, 12, 24, 48/50, 110/120, 220/240 VAC |
|  |  |  |  | $6,12,24,48,100 / 110$ VDC |
|  |  | Bifurcated | MY4Z(S) | 6, 12, 24, 48/50, 110/120, 220/240 VAC |
|  |  |  |  | 6, 12, 24, 48, 100/110 VDC |
|  |  | Crossbar bifurcated | MY4Z-CBG | 100/110, 110/120, 200/220 VAC |
|  |  |  |  | 12, 24, 48, 100/110 VDC |

With operation indicator

| Classification | Number of poles | Con |  | Model | Rated voltage |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | 6, 12, 24, 48/50, 110/120, 220/240 VAC |
|  |  | Single | Type 1 |  | 6, 12, 24, 48, 100/110 VDC |
|  | 2 |  | Type 2 | MY2N1(S) | 6, 12, 24, 48, 100/110 VDC |
|  |  | Bifurcated |  | MY27N | 110/120, 220/240 VAC |
|  |  | Bfurcated |  | MY2ZN | 24 VDC |
|  | 3 |  |  | MY3N | 24, 110/120, 220/240 VAC |
|  | 3 | Single |  | MY3N | 12, 24, 48, 100/110 VDC |
| Standard models |  |  |  | 4N(S) | 6, 12, 24, 48/50, 110/120, 220/240 VAC |
|  |  | Single | Type 1 | MY4N(S) | 6, 12, 24, 48, 100/110 VDC |
|  |  |  | Type 2 | MY4N1(S) | 6, 12, 24, 48, 100/110 VDC |
|  | 4 |  |  |  | 6, 12, 24, 48/50, 110/120, 220/240 VAC |
|  | 4 | Bifurcated | Type 1 | MY4ZN(S) | 6, 12, 24, 48, 100/110 VDC |
|  |  |  | Type 2 | MY4ZN1(S) | 6, 12, 24, 48, 100/110 VDC |
|  |  | Crossbar | d | MY4ZN-CBG | 100/110, 200/220 VAC |
|  |  | Crossbar | ded | MY4ZN-CBG | 24 VDC |
|  | 2 | Single |  | MY2N-D2(S) | 6, 12, 24, 48, 100/110 VDC |
| Type 1 |  | Bifurcated |  | MY2ZN-D2 | 24 VDC |
| Models with | 3 | Single |  | MY3N-D2 | 12, 24, 48 VDC |
| built-in diode | 4 | Single |  | MY4N-D2(S) | 6, 12, 24, 48, 100/110 VDC |
| for coil surge | 4 | Bifurcated |  | MY4ZN-D2(S) | 6, 12, 24, 48, 100/110 VDC |
| absorption $\quad$ Type 2 | 2 | Single |  | MY2N1-D2(S) | 6, 12, 24, 48, 100/110 VDC |
| $\oplus \Theta$ | 4 | Single |  | MY4N1-D2(S) | 6, 12, 24, 48, 100/110 VDC |
| ${ }_{\text {A1 }} \square_{\text {A2 }}$ | 4 | Bifurcated |  | MY4ZN1-D2(S) | 6, 12, 24, 48, 100/110 VDC |
| Models with built-in CR circuit for coil surge absorption | 2 | Single |  | MY2N-CR(S) | 110/120, 220/240 VAC |
|  | 4 | Single |  | MY4N-CR(S) | 110/120, 220/240 VAC |
|  |  | Bifurcated |  | MY4ZN-CR(S) | 110/120, 220/240 VAC |

## With operation indicator/latching lever

| Classification |  | Number of poles | Contacts |  | Model | Rated voltage |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Standard models |  | 2 | Single |  | MY2IN(S) | 6, 12, 24, 48/50, 110/120, 220/240 VAC |
|  |  | Type 1 |  | 6, 12, 24, 48, 100/110 VDC |  |
|  |  | Type 2 |  | MY2IN1(S) | 6, 12, 24, 48, 100/110 VDC |
|  |  | 4 | Single |  | MY4IN(S) | 6, 12, 24, 48/50, 110/120, 220/240 VAC |
|  |  | Type 1 |  | 6, 12, 24, 48, 100/110 VDC |  |
|  |  | Type 2 |  | MY4IN1(S) | 6, 12, 24, 48, 100/110 VDC |
|  |  | Bifurcated |  | MY4ZIN(S) | 6, 12, 24, 48/50, 110/120, 220/240 VAC |
|  |  | Type 1 | MY4ZIN(S) | 6, 12, 24, 48, 100/110 VDC |  |
|  |  | Type 2 | MY4ZIN1(S) | 6, 12, 24, 48, 100/110 VDC |  |
| Models with built-in diode for coil surge absorption | Type 1 |  | 2 | Single |  | MY2IN-D2(S) | 6, 12, 24, 48, 100/110 VDC |
|  |  |  | 4 | Single |  | MY4IN-D2(S) | 6, 12, 24, 48, 100/110 VDC |
|  |  | Bifurcated |  |  | MY4ZIN-D2(S) | 6, 12, 24, 48, 100/110 VDC |
|  | Type 2$\underset{\substack{13 \\ A_{1}^{\prime}-\\ \hline} \underset{-14}{14}}{\ominus}$ | 2 | Single |  | MY2IN1-D2(S) | 6, 12, 24, 48, 100/110 VDC |
|  |  | 4 | Single |  | MY4IN1-D2(S) | 6, 12, 24, 48, 100/110 VDC |
|  |  |  | Bifurcated |  | MY4ZIN1-D2(S) | 6, 12, 24, 48, 100/110 VDC |
| Models with built-in CR circuit for coil surge absorption |  | 2 | Single |  | MY2IN-CR(S) | 110/120, 220/240 VAC |
|  |  | 4 | Single |  | MY4IN-CR(S) | 110/120, 220/240 VAC |
|  |  | Bifurcated |  | MY4ZIN-CR(S) | 110/120, 220/240 VAC |

## - PCB terminals

| Classification | Number of poles | Contacts | Model | Rated voltage |
| :---: | :---: | :---: | :---: | :---: |
| Standard models (compliant with Electrical Appliances and Material Safety Act) | 2 | Single | MY2-02 | 12, 24, 100/110, 110/120, 200/220, 220/240 VAC |
|  |  |  |  | 12, 24, 48, 100/110 VDC |
|  | 3 | Single | MY3-02 | 12, 24, 100/110, 110/120, 200/220, 220/240 VAC |
|  |  |  |  | 12, 24, 48, 100/110 VDC |
|  | 4 | Single | MY4-02 | 12, 24, 100/110, 110/120, 200/220, 220/240 VAC |
|  |  |  |  | 12, 24, 48, 100/110 VDC |
|  |  | Bifurcated | MY4Z-02 | 100/110, 110/120, 200/220 VAC |
|  |  |  |  | 12, 24, 48, 100/110 VDC |

## - Case-surface mounting

| Classification | Number of poles | Contacts | Model | Rated voltage |
| :---: | :---: | :---: | :---: | :---: |
| Standard models (compliant with Electrical Appliances and Material Safety Act) | 2 | Single | MY2F | 24, 100/110, 110/120, 200/220, 220/240 VAC |
|  |  |  |  | 12, 24, 48, 100/110 VDC |
|  | 3 | Single | MY3F | 24, 100/110, 200/220 VAC |
|  |  |  |  | 24, 100/110 VDC |
|  | 4 | Single | MY4F | 24, 100/110, 110/120, 200/220 VAC |
|  |  |  |  | 12, 24, 48, 100/110 VDC |
|  |  | Bifurcated | MY4ZF | 200/220 VAC |
|  |  |  |  | 12, 24 VDC |

Ratings and Specifications
Ratings
Operating Coils

| Terminal Type | Classification | Number of poles | Contacts | Without operation indicator | With operation indicator | With latching lever |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Plug-in terminals | Standard models | 2 | Single | MY2(S) | MY2N(S), MY2N1(S) | MY2IN(S), MY2IN1(S) |
|  |  | 4 | Single | MY4(S) | MY4N(S), MY4N1(S) | MY4IN(S), MY4IN1(S) |
|  |  |  | Bifurcated | MY4Z(S) | MY4ZN(S), MY4ZN1(S) | MY4ZIN(S), MY4ZIN1(S) |
|  | Models with built-in diode for coil surge absorption | 2 | Single |  | MY2N-D2(S), MY2N1-D2(S) | MY2IN-D2(S), MY2IN1-D2(S) |
|  |  | 4 | Single |  | MY4N-D2(S), MY4N1-D2(S) | MY4IN-D2(S), MY4IN1-D2(S) |
|  |  |  | Bifurcated |  | MY4ZN-D2(S), MY4ZN1-D2(S) | MY4ZIN-D2(S), MY4ZIN1-D2(S) |
|  | Models with built-in CR circuit for coil surge absorption | 2 | Single |  | MY2N-CR(S) | MY2IN-CR(S) |
|  |  | 4 | Single |  | MY4N-CR(S) | MY4IN-CR(S) |
|  |  |  | Bifurcated |  | MY4ZN-CR(S) | MY4ZIN-CR(S) |


|  | Item | Rated current (mA) |  | Coil resistance $(\Omega)$ | Coil inductance (H) |  | Must operate voltage (V) | Mustreleasevoltage (V) | Maximum voltage (V) | Power consumption (VA, W) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rated voltage (V) |  | 50 Hz | 60 Hz |  | Armature OFF | Armature ON |  |  |  |  |
|  | 6 | 214.1 | 183 | 12.2 | 0.04 | 0.08 | 80\% max.*1 | 30\% min. ${ }^{*} 2$ | $110 \%$ of rated voltage | $\begin{gathered} \text { Approx. } 0.9 \\ \text { to } 1.3 \\ \text { (at } 60 \mathrm{~Hz} \text { ) } \end{gathered}$ |
|  | 12 | 106.5 | 91 | 46 | 0.17 | 0.33 |  |  |  |  |
| AC | 24 | 53.8 | 46 | 180 | 0.69 | 1.30 |  |  |  |  |
| C | 48/50 | 24.7/25.7 | 21.1/22.0 | 788 | 3.22 | 5.66 |  |  |  |  |
|  | 110/120 | 9.9/10.8 | 8.4/9.2 | 4,430 | 19.20 | 32.1 |  |  |  |  |
|  | 220/240 | 4.8/5.3 | 4.2/4.6 | 18,790 | 83.50 | 136.4 |  |  |  |  |
|  | 6 |  |  | 39.8 | 0.17 | 0.33 |  |  |  |  |
|  | 12 |  |  | 160 | 0.73 | 1.37 |  |  |  |  |
| DC | 24 |  |  | 636 | 3.20 | 5.72 |  | 10\% min.*2 |  | Approx. 0.9 |
|  | 48 |  |  | 2,560 | 10.60 | 21.0 |  |  |  |  |
|  | 100/110 |  |  | 11,100 | 45.60 | 86.2 |  |  |  |  |

Note: 1. The rated current and coil resistance are measured at a coil temperature of $23^{\circ} \mathrm{C}$ with tolerances of $+15 \% /-20 \%$ for AC rated current and $\pm 15 \%$ for DC coil resistance.
2. The $A C$ coil resistance and inductance values are reference values only (at 60 Hz ).
3. Operating characteristics were measured at a coil temperature of $23^{\circ} \mathrm{C}$.
4. The maximum voltage capacity was measured at an ambient temperature of $23^{\circ} \mathrm{C}$.
5. Power consumption drop was measured for the above data. When driving transistors, check leakage current and connect a bleeder resistor if required.
*1. There is variation between products, but actual values are $80 \%$ maximum.
To ensure operation, apply at least $80 \%$ of the rated value (at a coil temperature of $23^{\circ} \mathrm{C}$ ).
*2. There is variation between products, but actual values are $30 \%$ minimum for $A C$ and $10 \%$ minimum for $D C$. To ensure release, use a value that is lower than the specified value

| $\begin{aligned} & \text { Terminal } \\ & \text { Type } \end{aligned}$ | Classification | Number of poles | Contacts | Without operation indicator | With operation indicator |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Plug-in terminals | Standard models | 2 | Bifurcated | MY2Z | MY2ZN |
|  |  | 3 | Single | MY3 | MY3N |
|  |  | 4 | Crossbar bifurcated | MY4Z-CBG | MY4ZN-CBG |
|  | Models with built-in diode for coil surge absorption | 2 | Bifurcated |  | MY2ZN-D2 |
|  |  | 3 | Single |  | MY3N-D2 |
| PCB terminals | Standard models | 2 | Single | MY2-02 |  |
|  |  | 3 | Single | MY3-02 | - |
|  |  | 4 | Single | MY4-02 | - |
|  |  |  | Bifurcated | MY4Z-02 | - |
| Case-surface mounting | Standard models | 2 | Single | MY2F | - |
|  |  | 3 | Single | MY3F | - |
|  |  | 4 | Single | MY4F | - |
|  |  |  | Bifurcated | MY4ZF | - |


| Rated voltage (V) |  | Rated current (mA) |  | Coil resistance $(\Omega)$ | Coil inductance (H) |  | Mustoperatevoltage (V) | Mustreleasevoltage (V) | Maximum voltage (V) | Power consumption (VA, W) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 50 Hz | 60 Hz |  | Armature OFF | Armature ON |  |  |  |  |
| AC | 12 | 106.5 | 91 | 46 | 0.17 | 0.33 | 80\% max.*1 | 30\% min.*2 | $110 \%$ of rated voltage | $\begin{gathered} \text { Approx. } 0.9 \\ \text { to } 1.3 \\ \text { (at } 60 \mathrm{~Hz} \text { ) } \end{gathered}$ |
|  | 24 | 53.8 | 46 | 180 | 0.69 | 1.3 |  |  |  |  |
|  | 100/110 | 11.7/12.9 | 10/11 | 3,750 | 14.54 | 24.6 |  |  |  |  |
|  | 110/120 | 9.9/10.8 | 8.4/9.2 | 4,430 | 19.2 | 32.1 |  |  |  |  |
|  | 200/220 | 6.2/6.8 | 5.3/5.8 | 12,950 | 54.75 | 94.07 |  |  |  |  |
|  | 220/240 | 4.8/5.3 | 4.2/4.6 | 18,790 | 83.5 | 136.4 |  |  |  |  |
| DC | 12 | 75 |  | 160 | 0.73 | 1.37 |  | 10\% min.*2 |  | Approx. 0.9 |
|  | 24 | 36.9 |  | 650 | 3.2 | 5.72 |  |  |  |  |
|  | 48 |  |  | 2,600 | 10.6 | 21.0 |  |  |  |  |
|  | 100/110 | 9.1/10 |  | 11,000 | 45.6 | 86.2 |  |  |  |  |

Note: 1. The rated current and coil resistance are measured at a coil temperature of $23^{\circ} \mathrm{C}$ with tolerances of $+15 \% /-20 \%$ for AC rated current and $\pm 15 \%$ for DC coil resistance.
2. The AC coil resistance and inductance values are reference values only (at 60 Hz )
3. Operating characteristics were measured at a coil temperature of $23^{\circ} \mathrm{C}$.
4. The maximum voltage capacity was measured at an ambient temperature of $23^{\circ} \mathrm{C}$
*1. There is variation between products, but actual values are $80 \%$ maximum.
To ensure operation, apply at least $80 \%$ of the rated value.
2. There is variation between products, but actual values are $30 \%$ minimum for $A C$ and $10 \%$ minimum for $D C$. To ensure release, use a value that is lower than the specified value.

## Contact Ratings

| Number of poles (contact configuration) Contact structure <br> Load | 2-pole (DPDT) |  |  |  | $\frac{3 \text {-pole (3PDT) }}{\text { Single }}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Single |  | Bifurcated |  |  |  |
|  | Resistive load | Inductive load $(\cos \varphi=0.4$, L/R = 7 ms ) | Resistive load | Inductive load $(\cos \varphi=0.4$, L/R = 7 ms ) | Resistive load | Inductive load ( $\cos \varphi=0.4$, $\mathrm{L} / \mathrm{R}=7 \mathrm{~ms}$ ) |
| Rated load | 5 A at 250 VAC 5 A at 30 VDC | $\begin{aligned} & 2 \mathrm{~A} \text { at } 250 \mathrm{VAC} \\ & 2 \mathrm{~A} \text { at } 30 \mathrm{VDC} \end{aligned}$ | $\begin{aligned} & 5 \mathrm{~A} \text { at } 220 \mathrm{VAC} \\ & 5 \mathrm{~A} \text { at } 24 \mathrm{VDC} \end{aligned}$ | $\begin{aligned} & 2 \mathrm{~A} \text { at } 220 \mathrm{VAC} \\ & 2 \mathrm{~A} \text { at } 24 \mathrm{VDC} \end{aligned}$ | 5 A at 220 VAC 5 A at 24 VDC | $\begin{aligned} & 2 \mathrm{~A} \text { at } 220 \mathrm{VAC} \\ & 2 \mathrm{~A} \text { at } 24 \mathrm{VDC} \end{aligned}$ |
| Rated carry current*1 | 10 A |  | 5 A |  | 5 A |  |
| Maximum switching voltage | 250 VAC, 125 VDC |  |  |  | 250 VAC, 125 VDC |  |
| Maximum switching current | 10 A |  | 5 A |  | 5 A |  |
| Maximum switching power | $\begin{aligned} & 2,500 \mathrm{VA} \\ & 300 \mathrm{~W} \end{aligned}$ | $\begin{aligned} & 500 \mathrm{VA} \\ & 60 \mathrm{~W} \end{aligned}$ | $\begin{array}{\|l} \hline 1,100 \mathrm{VA} \\ 120 \mathrm{~W} \\ \hline \end{array}$ | $\begin{aligned} & 440 \mathrm{VA} \\ & 48 \mathrm{~W} \end{aligned}$ | $\begin{aligned} & 1,100 \mathrm{VA} \\ & 120 \mathrm{~W} \end{aligned}$ | $\begin{aligned} & 440 \mathrm{VA} \\ & 48 \mathrm{~W} \end{aligned}$ |
| Contact material | Ag |  | Au plating + Ag |  | Ag |  |


| Number of poles (contact configuration) Contact structure | 4-pole (4PDT) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Single |  | Bifurcated |  | Crossbar bifurcated (CBG) |  |
|  | Resistive load | Inductive load $(\cos \varphi=0.4$, L/R = 7 ms ) | Resistive load | Inductive load ( $\cos \varphi=0.4$, $\mathrm{L} / \mathrm{R}=7 \mathrm{~ms}$ ) | Resistive load | Inductive load $(\cos \varphi=0.4$, L/R = 7 ms ) |
| Rated load | 3 A at 250 VAC 3 A at 30 VDC | 0.8 A at 250 VAC 1.5 A at 30 VDC | 3 A at 250 VAC <br> 3 A at 30 VDC | 0.8 A at 250 VAC 1.5 A at 30 VDC | 1 A at 220 VAC <br> 1 A at 24 VDC | $\begin{aligned} & 0.3 \mathrm{~A} \text { at } 220 \mathrm{VAC} \\ & 0.5 \mathrm{~A} \text { at } 24 \mathrm{VDC} \end{aligned}$ |
| Rated carry current*1 | 5 A |  |  |  | 1 A |  |
| Maximum switching voltage | 250 VAC, 125 VDC |  |  |  |  |  |
| Maximum switching current | 5 A |  |  |  | 1 A |  |
| Maximum switching power | $\begin{aligned} & 1,250 \mathrm{VA} \\ & 150 \mathrm{~W} \end{aligned}$ | $\begin{aligned} & 200 \mathrm{VA} \\ & 45 \mathrm{~W} \end{aligned}$ | $\begin{aligned} & \text { 1,250 VA } \\ & 150 \mathrm{~W} \end{aligned}$ | $\begin{aligned} & 200 \mathrm{VA} \\ & 45 \mathrm{~W} \end{aligned}$ | $\begin{aligned} & 220 \mathrm{VA} \\ & 24 \mathrm{~W} \end{aligned}$ | $\begin{aligned} & \hline 66 \mathrm{VA} \\ & 12 \mathrm{~W} \end{aligned}$ |
| Contact material | Au cladding + Ag alloy |  |  |  | Au cladding + AgPd |  |

*1. If you use a Socket, do not exceed the rated carry current of the Socket.

## Characteristics

| Number of poles (contact configuration) <br> Contact structure |  | 2-pole (DPDT) |  | 3-pole (3PDT) | 4-pole (4PDT) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Single | Bifurcated | Single | Single | Bifurcated | $\begin{gathered} \text { Crossbar } \\ \text { bifurcated (CBG) } \end{gathered}$ |
| Contact resistance*1 *2 |  | $100 \mathrm{~m} \Omega$ max. | $50 \mathrm{~m} \Omega$ max. | $50 \mathrm{~m} \Omega$ max. | $100 \mathrm{~m} \Omega$ max. | $100 \mathrm{~m} \Omega$ max. | $100 \mathrm{~m} \Omega$ max. |
| Operate time*3 |  | 20 ms max . |  |  |  |  |  |
| Release time*3 |  | 20 ms max . |  |  |  |  |  |
| Maximum switching frequency | Mechanical | 18,000 operations/h |  |  |  |  |  |
|  | Rated load | 1,800 operations/h |  |  |  |  |  |
| Insulation resistance*4 |  | $100 \mathrm{M} \Omega \mathrm{min}$. |  |  |  |  |  |
| Dielectric strength | Between coil and contacts <br> Between contacts of different polarity | 2,000 VAC, $50 / 60 \mathrm{~Hz}$ for 1 min |  |  |  |  |  |
|  | Between contacts of the same polarity | 1,000 VAC at $50 / 60 \mathrm{~Hz}$ for 1 min |  |  |  |  | 700 VAC at $50 / 60 \mathrm{~Hz}$ for 1 min |
| Vibration resistance | Destruction | 10 to 55 to $10 \mathrm{~Hz}, 0.5-\mathrm{mm}$ single amplitude (1.0-mm double amplitude) |  |  |  |  |  |
|  | Malfunction | 10 to 55 to $10 \mathrm{~Hz}, 0.5-\mathrm{mm}$ single amplitude (1.0-mm double amplitude) |  |  |  |  |  |
| Shock resistance | Destruction | $1,000 \mathrm{~m} / \mathrm{s}^{2}$ |  |  |  |  |  |
|  | Malfunction | $200 \mathrm{~m} / \mathrm{s}^{2}$ |  |  |  |  |  |
| Endurance | Mechanical | AC: $50,000,000$ operations min. DC: 100,000,000 operations min . (switching frequency: 18,000 operations/h) | AC: 50,000,000 operations min. DC: 50,000,000 operations min. (switching frequency: 18,000 operations/h) | AC: $50,000,000$ operations min. DC: 100,000,000 operations min. (switching frequency: 18,000 operations/h) | AC: $50,000,000$ operations min. DC: 100,000,000 operations min . (switching frequency: 18,000 operations/h) | AC: $20,000,000$ operations min. DC: 20,000,000 operations min. (switching frequency: 18,000 operations/h) | AC: $50,000,000$ operations min. DC: 50,000,000 operations min. (switching frequency: 18,000 operations $/ \mathrm{h}$ ) |
|  | Electrical*5 | 500,000 operations min. (rated load, switching frequency: 1,800 operations/h) | 200,000 operations min. (rated load, switching frequency: 1,800 operations/h) | $500,000$ <br> operations min. (rated load, switching frequency: 1,800 operations/h) | $200,000$ <br> operations min. (rated load, switching frequency: 1,800 operations/h) | $100,000$ <br> operations min. (rated load, switching frequency: 1,800 operations/h) | 50,000 operations min. (rated load, switching frequency: 1,800 operations/h) |
| Failure rate $P$ value (reference value)*6 |  | 1 mA at 5 VDC | $100 \mu \mathrm{~A}$ at 1 VDC | 1 mA at 5 VDC | 1 mA at 1 VDC | $100 \mu \mathrm{~A}$ at 1 VDC | $100 \mu \mathrm{~A}$ at 1 VDC |
| Weight |  | Approx. 35 g | Approx. 35 g | Approx. 35 g | Approx. 35 g | Approx. 35 g | Approx. 35 g |

Note: The data shown above are initial values.
*1. Models with latching lever are $100 \mathrm{~m} \Omega$ maximum.
*2. Measurement conditions: 1 A at 5 VDC using the voltage drop method
*3. Measurement conditions: With rated operating power applied, not including contact bounce.
*4. Measurement conditions: For 500 VDC applied to the same location as for dielectric strength measurement.
${ }^{*} 5$. Ambient temperature condition: $23^{\circ} \mathrm{C}$
*6. This value was measured at a switching frequency of 120 operations per minute

| Number of poles (contact configuration) | 2-pole (DPDT) |  |  |  | 3-pole (3PDT) |  | 4-pole (4PDT) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Contact structure | Single |  | Bifurcated |  | Single |  | Single/bifurcated |  | Crossbar bifurcated (CBG) |  |
| Operation indicator | Without operation indicator | With operation indicator | Without operation indicator | With operation indicator | Without operation indicator | With operation indicator | Without operation indicator | With operation indicator | Without operation indicator | With operation indicator |
| Ambient operating temperature*1 | -55 to $+70 \%$ |  | $\begin{aligned} & -55 \text { to } \\ & +70 \% \end{aligned}$ | $\begin{aligned} & -55 \text { to } \\ & +60 \% * 2 \end{aligned}$ | $\begin{aligned} & -55 \text { to } \\ & +70 \% \end{aligned}$ | $\begin{aligned} & -55 \text { to } \\ & +60 \% * 2 \end{aligned}$ | -55 to $+70 \%$ |  | $\begin{aligned} & -55 \text { to } \\ & +70 \% \end{aligned}$ | $\begin{aligned} & -55 \text { to } \\ & +60 \% \end{aligned}$ |
| Ambient operating humidity | 5 to $85 \%$ RH |  |  |  |  |  |  |  |  |  |

*1. With no icing or condensation.
*2. This limitation is due to the diode junction temperature and elements used.

## Certified Standards

-UL certification (File No. E41515)

| Model | Standard number | Category | Listed/ Recognized | Operating Coil ratings | No. of poles | Contact ratings | Certified number of operations |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \hline \text { MY2 } \square(\mathrm{S}) \\ & \text { MY2 } \square-\mathrm{D} 2(\mathrm{~S}) \\ & \text { MY2 } \square-\mathrm{CR}(\mathrm{~S}) \end{aligned}$ | UL508 | NRNT2 | Recognition | 6 to 240 VAC <br> 6 to 125 VDC | 2 | 10 A, 250 VAC (General Use) $10 \mathrm{~A}, 30$ VDC (General Use) <br> 7 A, 240 VAC (General Use) <br> 7 A, 24 VDC (Resistive) <br> 5 A, 240 VAC (General Use) <br> 5 A, 250 VAC (Resistive) <br> 5 A, 30 VDC (Resistive) <br> 3 A, 265 VAC (Resistive) | 6,000 |
|  |  |  |  |  |  | 1/6 HP, 250 VAC 1/8 HP, 265 VAC 1/10 HP, 120 VAC | 1,000 |
|  |  |  |  |  |  | B300 Pilot Duty (Same polarity) | 6,000 |
| MY2Z <br> MY2-02 <br> MY2F | UL508 | NRNT2 | Recognition | 6 to 240 VAC 6 to 125 VDC | 2 | 7 A, 240 VAC (General Use) <br> 7 A, 24 VDC (Resistive) <br> 5 A, 240 VAC (General Use) <br> 5 A, 250 VAC (Resistive) <br> 5 A, 30 VDC (Resistive) <br> 3 A, 265 VAC (Resistive) | 6,000 |
|  |  |  |  |  |  | 1/6 HP, 250 VAC $1 / 8 \mathrm{HP}, 265$ VAC 1/10 HP, 120 VAC | 1,000 |
|  |  |  |  |  |  | B300 Pilot Duty (Same polarity) | 6,000 |
| MY3 <br> MY3N-D2 <br> MY3-02 <br> MY3F | UL508 | NRNT2 | Recognition | $\begin{aligned} & 6 \text { to } 240 \text { VAC } \\ & 6 \text { to } 125 \text { VDC } \end{aligned}$ | 3 | 5 A, 28 VDC (Resistive) <br> 5 A, 240 VAC (General Use) | 6,000 |
|  |  |  |  |  |  | 1/6 HP, 250 VAC | 1,000 |
| ```MY4\square(S) MY4\square-D2(S) MY4\square-CR(S) MY4\square-02 MY4\squareF``` | UL508 | NRNT2 | Recognition | 6 to 240 VAC 6 to 125 VDC | 4 | 5 A, 28 VDC (General Use) (Same polarity) 5 A, 240 VAC (General Use) (Same polarity) 5 A, 30 VDC (Resistive) (Same polarity) 5 A, 250 VAC (Resistive) (Same polarity) 0.2 A, 120 VDC (Resistive) (Same polarity) | 6,000 |
|  |  |  |  |  |  | 1/6 HP, 250 VAC (Same polarity) 1/10 HP, 120 VAC (Same polarity) | 1,000 |
|  |  |  |  |  |  | B300 Pilot Duty (Same polarity) | 6,000 |


| - CSA certification (File No. LR31928) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Standard number | $\begin{gathered} \text { Class } \\ \text { number } \end{gathered}$ | Operating Coil ratings | No. of poles | Contact ratings | Certified number of operations |
| $\begin{aligned} & \hline \text { MY2 } \square(\mathrm{S}) \\ & \text { MY2 } \square-\mathrm{D} 2(\mathrm{~S}) \\ & \text { MY2 } \square-\mathrm{CR}(\mathrm{~S}) \end{aligned}$ | C22.2 NO.0, No. 14 |  | $\begin{aligned} & 6 \text { to } 240 \text { VAC } \\ & 6 \text { to } 125 \text { VDC } \end{aligned}$ | 2 | 7 A, 240 VAC (Resistive) <br> 7 A, 24 VDC (Resistive) <br> 5 A, 240 VAC (General Use) <br> 5 A, 250 VAC (Resistive) <br> 5 A, 30 VDC (Resistive) | 6,000 |
|  |  |  |  |  | 1/6 HP, 250 VAC (Same polarity) 1/10 HP, 120 VAC (Same polarity) | 1,000 |
| MY2Z <br> MY2-02 MY2F | C22.2 NO.0, No. 14 |  | $\begin{aligned} & 6 \text { to } 240 \text { VAC } \\ & 6 \text { to } 125 \text { VDC } \end{aligned}$ | 2 | 7 A, 240 VAC (General Use) (Same polarity) 7 A, 24 VDC (Resistive) (Same polarity) 5 A, 240 VAC (General Use) (Same polarity) 5 A, 30 VDC (Resistive) 5 A, 250 VAC (Resistive) (Same polarity) 0.2 A, 120 VDC (Resistive) | 6,000 |
|  |  |  |  |  | $1 / 6 \mathrm{HP}, 250$ VAC 1/10 HP, 120 VAC | 1,000 |
| MY3 <br> MY3N-D2 <br> MY3-02 MY3F | C22.2 NO.0, No. 14 |  | $\begin{aligned} & 6 \text { to } 240 \text { VAC } \\ & 6 \text { to } 125 \text { VDC } \end{aligned}$ | 3 | 5 A, 28 VDC (Resistive) 5 A, 240 VAC (General Use) 7 A, 240 VAC (General Use) 7 A, 24 VDC (Resistive) | 6,000 |
|  |  |  |  |  | 1/6 HP, 250 VAC | 1,000 |
| $\begin{aligned} & \text { MY4 } \square(\mathrm{S}) \\ & \text { MY4 } \square \text {-D2(S) } \\ & \text { MY4 } \square \text {-CR(S) } \end{aligned}$ | C22.2 No. 14 | 321107 | $\begin{aligned} & 6 \text { to } 240 \text { VAC } \\ & 6 \text { to } 125 \text { VDC } \end{aligned}$ | 4 | 5 A, 240 VAC (General Use) (Same polarity) 5 A, 28 VDC (General Use) (Same polarity) 5 A , 250 VAC (Resistive) (Same polarity) 5 A, 30 VDC (Resistive) (Same polarity) 0.2 A, 120 VDC (Resistive) (Same polarity) | 6,000 |
|  |  |  |  |  | 1/6 HP, 250 VAC (Same polarity) 1/10 HP, 120 VAC (Same polarity) | 1,000 |
|  |  |  |  |  | B300 Pilot Duty (Same polarity) | 6,000 |
| $\begin{aligned} & \text { MY4■-02 } \\ & \text { MY4 } \square \mathrm{F} \end{aligned}$ | C22.2 NO.0, No. 14 | 321107 | 6 to 240 VAC <br> 6 to 125 VDC | 4 | 7 A, 240 VAC (General Use) (Same polarity) 7 A, 24 VDC (Resistive) (Same polarity) 5 A, 240 VAC (General Use) (Same polarity) 5 A, 30 VDC (Resistive) 5 A, 250 VAC (Resistive) (Same polarity) 0.2 A, 120 VDC (Resistive) | 6,000 |
|  |  |  |  |  | 1/6 HP, 250 VAC 1/10 HP, 120 VAC | 1,000 |

## -TÜV Rheinland certification (Certification No. R50030059)

| Model | Operating Coil ratings | Contact ratings | Certified number of operations |
| :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { MY2Z } \\ & \text { MY2-02 } \end{aligned}$ MY2F | $\begin{aligned} & 6 \text { to } 125 \text { VDC, } \\ & 6 \text { to } 240 \text { VAC } \end{aligned}$ | $5 \mathrm{~A}, 250$ VAC $(\cos \varphi=1.0)$ | 100,000 |
| MY3 <br> MY3N-D2 <br> MY3-02 <br> MY3F |  | $\begin{aligned} & 5 \mathrm{~A}, 250 \mathrm{VAC}(\cos \varphi=1.0) \\ & 0.8 \mathrm{~A}, 250 \mathrm{VAC}(\cos \varphi=0.4) \end{aligned}$ |  |
| $\begin{aligned} & \text { MY4 } \square-02 \\ & \text { MY4 } \square \mathrm{F} \end{aligned}$ |  | $\begin{aligned} & 3 \mathrm{~A}, 120 \mathrm{VAC}(\cos \varphi=1.0) \\ & 0.8 \mathrm{~A}, 250 \mathrm{VAC}(\cos \varphi=0.4) \end{aligned}$ |  |

## - CE Marking

| Model | EMC Directive | Low Voltage Directive | Machinery Directive | Safety Category |
| :--- | :--- | :--- | :--- | :--- |
| MY2 $\square \square($ S) | Not applicable | Applicable | Not applicable | 1 |
| MY2 $\square-$ D2(S) |  |  |  |  |
| MY2 $\square \square-$ CR(S) |  |  |  |  |
| MY2Z |  |  |  |  |
| MY2ZN-D2 |  |  |  |  |
| MY2F |  |  |  |  |
| MY3 $\square$ |  |  |  |  |
| MY3N-D2 |  |  |  |  |
| MY3F |  |  |  |  |
| MY4 $\square$ (S) |  |  |  |  |
| MY4 $\square$-D2(S) |  |  |  |  |
| MY4 $\square$-CR(S) |  |  |  |  |

## -LR certification (Lloyd's Register)

| Model | File No. | Environmental Category | Operating Coil ratings | Contact ratings | Certified number of operations |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \hline \text { MY2 } \square(\mathrm{S}) \\ & \text { MY2 } \square-\mathrm{D} 2(\mathrm{~S}) \\ & \text { MY2 }-\mathrm{CR}(\mathrm{~S}) \end{aligned}$ | File No.98/10014 | ENV2,3 | 6 to 240 VAC <br> 6 to 125 VDC | 10 A, 250 VAC (Resistive) <br> 2 A, 250 VAC (PF0.4) <br> 10 A, 30 VDC (Resistive) <br> $2 \mathrm{~A}, 30 \mathrm{VDC}$ (L/R = 7 ms ) | $\begin{aligned} & \text { MY2: } \\ & 50,000 \end{aligned}$ |
| $\begin{aligned} & \hline \text { MY2Z } \square \\ & \text { MY2ZN-D2 } \end{aligned}$ | File No.90/10270 | ENV2,3 | 6 to 240 VAC <br> 6 to 125 VDC | $2 \mathrm{~A}, 30 \mathrm{VDC}$ inductive load $2 \mathrm{~A}, 200$ VAC inductive load | MY2: <br> 50,000 |
| MY4 $\square$ (S) <br> MY4 -D2(S) <br> MY4 $\square-\mathrm{CR}(\mathrm{S})$ | File No.98/10014 | ENV2,3 | 6 to 240 VAC <br> 6 to 125 VDC | 5 A, 250 VAC (Resistive) 0.8 A, 250 VAC (PF0.4) 5 A, 30 VDC (Resistive) $1.5 \mathrm{~A}, 30 \mathrm{VDC}(\mathrm{L} / \mathrm{R}=7 \mathrm{~ms})$ | MY4: $50,000$ |

$\bullet$ VDE certification

| Model | Standard number | Certification No. | Operating Coil ratings | Contact ratings | Certified number of operations |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \hline \text { MY2 } \square(\mathrm{S}) \\ & \text { MY2 } \square-\mathrm{D} 2(\mathrm{~S}) \\ & \text { MY2 }-\mathrm{CR}(\mathrm{~S}) \end{aligned}$ | EN 61810-1 | 112467UG | $\begin{aligned} & \hline 6,12,24, \\ & 48 / 50, \\ & 100 / 110, \\ & 110 / 120, \\ & 200 / 220, \\ & 220 / 240 \text { VAC } \\ & 6,12,24, \\ & 48,100 / 110, \\ & 125 \text { VDC } \end{aligned}$ | 10A, 250 VAC $(\cos \varphi=1)$ <br> $10 \mathrm{~A}, 30 \mathrm{VDC}(\mathrm{L} / \mathrm{R}=0 \mathrm{~ms})$ | MY2: <br> 100,000 <br> MY4: <br> 100,000 <br> MY4Z: <br> 50,000 (AC) |
| MY4 $\square$ (S) <br> MY4D-D2(S) <br> MY4 $\square$-CR(S) |  |  | $\begin{aligned} & \hline 6,12,24, \\ & 48 / 50, \\ & 100 / 110, \\ & 110 / 120, \\ & 200 / 220, \\ & 220 / 240 \text { VAC } \\ & 6,12,24, \\ & 48,100 / 110, \\ & 125 \text { VDC } \end{aligned}$ | $5 \mathrm{~A}, 250 \mathrm{VAC}(\cos \varphi=1)$ <br> $5 \mathrm{~A}, 30 \mathrm{VDC}(\mathrm{L} / \mathrm{R}=0 \mathrm{~ms})$ |  |

## Miniature Power Latching Relays

 MYK
## Latching miniature power relays that retain contact operation status

- A low power consumption type that retains contacts using a magnetic lock system.
- Equipped with mechanical operation indicators to make operation status easy-to-see.

Refer to Safety Precautions on pages 62 to 63 and Safety Precautions for All Relays.


## Features

## Latching Relays MYK

Retains contact operation status.

NO contact turns on when voltage is applied to the set coil and stays on even if voltage stops being applied to the set coil. NO contact turns off when voltage is applied to the reset coil, after which NC contact will turn on.*
*MYK features a magnetic lock system.


Contact operation status can be seen at a glance thanks to the mechanical operation indicator.


## Model Number Structure

## Model Number Legend


(1)

(2)

(3)

(4)
(1) Basic model name MY: Miniature Power Relays
(2) Number of poles/contacts

2: 2-pole, single
(4) Options, terminal type

None: Plug-in terminals
02: PCB terminals
(3) Type K : Latching relay

Ordering Information When your order, specify the rated voltage.

## Main unit

$\bullet$ Plug-in terminals

| Classification | Number <br> of poles | Contacts | Model | Rated voltage |
| :--- | :---: | :---: | :---: | :---: |
| Standard models <br> (compliant with Electrical | 2 | Single | MY2K | $12,24,100,100 / 110$ VAC |
| Appliances and Material <br> Safety Act) | 2 |  | $12,24,48$ VDC |  |

## -PCB terminals

| Classification | Number <br> of poles | Contacts | Model | Rated voltage |
| :--- | :---: | :---: | :---: | :---: |
| Standard models <br> (compliant with Electrical <br> Appliances and Material <br> Safety Act) | 2 | Single | MY2K-02 | 24,100 VAC |

## MYK

## Ratings and Specifications

## Ratings

## - Operating coil

| Rated voltage (V) |  | Set coil |  |  | Reset coil |  |  | Must operate voltage (V) | Must release voltage (V) | Maximum voltage (V) | Power consumption (VA, W) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Rated current (mA) |  | Coil resistance $(\Omega)$ | Rated current (mA) |  | Coil resistance $(\Omega)$ |  |  |  | Set coil | Reset coil |
|  |  | 50 Hz | 60 Hz |  | 50 Hz | 60 Hz |  |  |  |  |  |  |
| AC | 12 | 57 | 56 | 72 | 39 | 38.2 | 130 | 80\% max.* | 80\% max. | $\begin{aligned} & 110 \% \text { max. } \\ & \text { of rated } \\ & \text { voltage } \end{aligned}$ | $\begin{gathered} \text { Approx. } 0.6 \\ \text { to } 0.9 \\ \text { (at } 60 \mathrm{~Hz} \text { ) } \end{gathered}$ | $\begin{aligned} & \text { Approx. } 0.2 \\ & \text { to } 0.5 \\ & \text { (at } 60 \mathrm{~Hz} \text { ) } \end{aligned}$ |
|  | 24 | 27.4 | 26.4 | 320 | 18.6 | 18.1 | 550 |  |  |  |  |  |
|  | 100 | 7.1 | 6.9 | 5,400 | 3.5 | 3.4 | 3,000 |  |  |  |  |  |
| DC | 12 | 110 |  | 110 | 50 |  | 235 |  |  |  | Approx. 1.3 | Approx. 0.6 |
|  | 24 |  |  | 470 |  |  | 940 |  |  |  |  |  |
|  | 48 |  |  | 1,800 |  |  | 3,000 |  |  |  |  |  |

Note: 1. The rated current for $A C$ is the value measured with a $D C$ ammeter in half-wave rectification.
2. The rated current and coil resistance are measured at a coil temperature of $23^{\circ} \mathrm{C}$ with tolerances of $+15 \% /-20 \%$ for $A C$ rated current and $\pm 15 \%$ for $D C$ coil resistance.
3. The AC coil resistance is a reference value only.
4. Operating characteristics were measured at a coil temperature of $23^{\circ} \mathrm{C}$.
5. The maximum voltage capacity was measured at an ambient temperature of $23^{\circ} \mathrm{C}$
*There is variation between products, but actual values are $80 \%$ maximum.

## - Contact Ratings

| Number of poles (contact configuration) | 2-pole (DPDT) |  |
| :---: | :---: | :---: |
| Contact structure |  | gle |
| Load | Resistive load | Inductive load ( $\cos \varphi=0.4, \mathrm{~L} / \mathrm{R}=7 \mathrm{~ms}$ ) |
| Rated load | 3 A at 220 VAC <br> 3 A at 24 VDC | 0.8 A at 220 VAC 1.5 A at 24 VDC |
| Rated carry current | 3 A |  |
| Maximum switching voltage | 250 VAC, 125 VDC |  |
| Maximum switching current | 3 A |  |
| Maximum switching power | $\begin{aligned} & 660 \mathrm{VA} \\ & 72 \mathrm{~W} \end{aligned}$ | $\begin{aligned} & 176 \mathrm{VA} \\ & 36 \mathrm{~W} \end{aligned}$ |
| Contact material | Au plating + Ag |  |

## Characteristics

| Contact resistance*1 |  |
| :---: | :---: |
| Set | Operate time*2 |
|  | Minimum pulse width |
| Reset | Release time*2 |
|  | Minimum pulse width |
| Maximum switching frequency | Mechanical |
|  | Rated load |
| Insulation resistance*3 |  |
| Dielectric strength | Between coil and contacts Between contacts of different polarity |
|  | Between contacts of the same polarity |
|  | Between set/reset coils |
| Vibration resistance | Destruction |
|  | Malfunction |
| Shock resistance | Destruction |
|  | Malfunction |
| Endurance | Mechanical |
|  | Electrical*4 |
| Failure rate P value (reference value)*5 |  |
| Ambient operating temperature*6 |  |
| Ambient operating humidity |  |
| Weight |  |


| $50 \mathrm{~m} \Omega \mathrm{max}$. |
| :--- |
| AC: 30 ms max., DC: 15 ms max. |
| AC: 60 ms, DC: 30 ms |
| AC: 30 ms max., DC: 15 ms max. |
| AC: $60 \mathrm{~ms}, \mathrm{DC}: 30 \mathrm{~ms}$ |
| 18,000 operations/h |
| 1,800 operations $/ \mathrm{h}$ |
| $100 \mathrm{M} \Omega$ min. |
| $1,500 \mathrm{VAC}$ at $50 / 60 \mathrm{~Hz}$ for 1 min |
| $1,000 \mathrm{VAC}$ at $50 / 60 \mathrm{~Hz}$ for 1 min |
| 10 to 55 to $10 \mathrm{~Hz}, 0.5-\mathrm{mm}$ single amplitude (1.0-mm double amplitude) |
| 10 to 55 to $10 \mathrm{~Hz}, 0.5-\mathrm{mm}$ single amplitude (1.0-mm double amplitude) |
| $1,000 \mathrm{~m} / \mathrm{s}^{2}$ |
| $200 \mathrm{~m} / \mathrm{s}^{2}$ |
| $100,000,000$ operations min. (switching frequency: 18,000 operations $/ \mathrm{h})$ |
| 200,000 operations min. (at rated load, switching frequency: 1,800 operations $/ \mathrm{h})$ |
| 1 mA at 1 VDC |
| -55 to $60^{\circ} \mathrm{C}$ |
| $5 \%$ to $85 \%$ |
| Approx. 30 g |

Note: The data shown above are initial values.
*1. Measurement conditions: 1 A at 5 VDC using the voltage drop method.
*2. Measurement conditions: With rated operating power applied, not including contact bounce.
*3. Measurement conditions: For 500 VDC applied to the same location as for dielectric strength measurement
*4. Ambient temperature condition: $23^{\circ} \mathrm{C}$
*5. This value was measured at a switching frequency of 120 operations per minute
*6. With no icing or condensation.

## Miniature Power Sealed Relays MYQ/MYH

## Sealed relays that are tough in environments where dust or corrosive gases, etc., are present

- Plastic sealed relays (MYQ) and hermetically sealed relays (MYH) that are resistant to effects from the surrounding environment
- Highly airtight structures that are tough in environments where corrosive gases such as chloride gas, sulfuric gas, and silicone gas are generated. They are also resistant to environments where salt damage is occurred and where dust is generated.
- Prevent relay contact failures via a highly airtight structure.

[^0]

Refer to the standards certifications and compliance section of your OMRON website for the latest information on certified models.

## Features

Highly Airtight Relays (Plug-in Terminals)


Plastic Sealed Relays: MYQ
These realize excellent reliability even in environments where salt damage occurs or where dust is generated.


## Hermetically Sealed Relays: MYH

These realize excellent reliability even in environments where dust is generated or where corrosive gases (chloride gas, sulfuric gas, silicone gas, etc.) are present.


## Model Number Structure

## Model Number Legend


(1)
) Basic model name
MY: Miniature Power Sealed Relays
(2) Contacts/seals

Q4: 4-pole, single contacts, plastic sealed relays
Q4Z: 4-pole, bifurcated contacts, plastic sealed relays
4H: 4-pole, single contacts, hermetically sealed relays
4ZH: 4-pole, bifurcated contacts, hermetically sealed relays
(3) Type

None: None
N: With operation indicator* *Only MYQ (plastic sealed relay)
(4) Options, terminal type

None: Plug-in terminals
02: Plastic sealed relays, PCB terminals
0: Hermetically sealed relays, PCB terminals

## Ordering Information

When your order, specify the rated voltage.

## Plastic Sealed Relays

$\bullet$ Plug-in terminals

| Classification | Number of poles | Contacts | Model | Rated voltage | With operation indicator |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Model | Rated voltage |
| Standard models (compliant with Electrical Appliances and Material Safety Act) | 4 | Single | MYQ4 | $\begin{aligned} & \text { 100/110, 110/120, } \\ & 200 / 220,220 / 240 \text { VAC } \end{aligned}$ | MYQ4N | $\begin{aligned} & 24,100 / 110,110 / 120 \\ & 200 / 220,220 / 240 \text { VAC } \end{aligned}$ |
|  |  |  |  | 24 VDC |  | 12, 24, 48, 100/110 VDC |
|  |  | Bifurcated | MYQ4Z | $\begin{aligned} & \text { 100/110, 110/120, } \\ & 200 / 220 \text { VAC } \end{aligned}$ |  |  |
|  |  |  |  | 12, 24 VDC |  |  |

## -PCB terminals

| Classification | Number of poles | Contacts | Model | Rated voltage |
| :---: | :---: | :---: | :---: | :---: |
| Standard models (compliant with Electrical Appliances and Material Safety Act) | 4 | Single | MYQ4-02 | 50, 200/220, 220/240 VAC |
|  |  |  |  | 24 VDC |
|  |  | Bifurcated | MYQ4Z-02 | 100/110 VAC |
|  |  |  |  | 24, 48 VDC |

Hermetically Sealed Relays

- Plug-in terminals

| Classification | Number <br> of poles | Contacts | Model | Rated voltage |
| :--- | :---: | :--- | :--- | :--- |
| Standard models <br> (compliant with | Electrical Appliances <br> and Material Safety Act) | Single |  | $24,100 / 110,110 / 120$ VAC |
|  |  |  | MY4ZH | $24,24,48,100 / 110 \mathrm{VDC}$ |
|  |  |  |  |  |

## - PCB terminals

| Classification | Number of poles | Contacts | Model | Rated voltage |
| :---: | :---: | :---: | :---: | :---: |
| Standard models (compliant with Electrical Appliances and Material Safety Act) | 4 | Single | MY4H-0 | 110/120 VAC |
|  |  |  |  | 24 VDC |
|  |  | Bifurcated | MY4ZH-0 | 24, 100/110 VDC |

## Ratings and Specifications

- Operating coil

| Rated voltage (V) |  | Rated current (mA) |  | Coil resistance $(\Omega)$ | Coil inductance (H) |  | Must operate voltage (V)*1 | Must release voltage (V)*2 | Maximum voltage (V) | Power consumption (VA, W) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 50 Hz | 60 Hz |  | Armature OFF | Armature ON |  |  |  |  |
| AC | 24 | 53.8 | 46 | 180 | 0.69 | 1.3 | 80\% max. | 30\% min. | $110 \%$ max. of rated voltage | Approx. 0.9 to 1.3 (at 60 Hz ) |
|  | 100/110 | 11.7/12.9 | 10/11 | 3,750 | 14.54 | 24.6 |  |  |  |  |
|  | 110/120 | 9.9/10.8 | 8.4/9.2 | 4,430 | 19.2 | 32.1 |  |  |  |  |
|  | 200/220 | 6.2/6.8 | 5.3/5.8 | 12,950 | 54.75 | 91.07 |  |  |  |  |
|  | 220/240 | 4.8/5.3 | 4.2/4.6 | 18,790 | 83.5 | 136.4 |  |  |  |  |
| DC | 12 | 75 |  | 165 | 0.734 | 1.37 |  | 10\% min. |  | Approx. 0.9 |
|  | 24 | 36.9 |  | 650 | 3.2 | 5.72 |  |  |  |  |
|  | 48 | 18.5 |  | 2,600 | 10.6 | 21.0 |  |  |  |  |
|  | $100 / 110$ | 9.1/10 |  | 11,000 | 45.6 | 86.0 |  |  |  |  |

Note: 1. The rated current and coil resistance are measured at a coil temperature of $23^{\circ} \mathrm{C}$ with tolerances of $+15 \% /-20 \%$ for $A C$ rated current and $\pm 15 \%$ for $D C$ coil resistance.
2. The AC coil resistance and coil inductance values are for reference only.
3. Operating characteristics were measured at a coil temperature of $23^{\circ} \mathrm{C}$.
4. The maximum voltage capacity was measured at an ambient temperature of $23^{\circ} \mathrm{C}$.

1. There is variation between products, but actual values are $80 \%$ maximum. To ensure operation, apply at least $80 \%$ of the rated value.
*2. There is variation between products, but actual values are $30 \%$ minimum for AC and $10 \%$ minimum for DC. To ensure release, use a value that is lower than the specified value.

## -Contact Ratings

Plastic Sealed Relays: MYQ

| Number of poles (contact configuration) <br> Contact structure <br> Load | 4-pole (4PDT) |  |
| :---: | :---: | :---: |
|  | Single/bifurcated |  |
|  | Resistive load | Inductive load $(\cos \varphi=0.4, \mathrm{~L} / \mathrm{R}=7 \mathrm{~ms}$ ) |
| Rated load | 1 A at 220 VAC 1 A at 24 VDC | 0.5 A at 220 VAC 0.5 A at 24 VDC |
| Rated carry current | 1 A |  |
| Maximum switching voltage | $\begin{aligned} & 250 \text { VAC } \\ & 125 \text { VDC } \end{aligned}$ |  |
| Maximum switching current | 1 A |  |
| Maximum switching power | $\begin{aligned} & 220 \mathrm{VA} \\ & 24 \mathrm{~W} \end{aligned}$ | $\begin{aligned} & 110 \mathrm{VA} \\ & 12 \mathrm{~W} \end{aligned}$ |
| Contact material | Au plating + Ag |  |

Hermetically Sealed Relays: MYH

| Number of poles (contact configuration) Contact structure | 4-pole (4PDT) |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Single |  | Bifurcated |  |
|  | Resistive load | Inductive load $\begin{aligned} & (\cos \varphi=0.4, \\ & L / R=7 \mathrm{~ms}) \end{aligned}$ | Resistive load | Inductive load $\begin{aligned} & (\cos \varphi=0.4, \\ & L / R=7 \mathrm{~ms}) \end{aligned}$ |
| Rated load | $\begin{aligned} & 3 \mathrm{~A} \text { at } \\ & 110 \mathrm{VAC} \\ & 3 \mathrm{~A} \text { at } \\ & 24 \mathrm{VDC} \end{aligned}$ | 0.8 A at 110 VAC 1.5 A at 24 VDC | $\begin{aligned} & 3 \mathrm{~A} \text { at } \\ & 110 \mathrm{VAC} \\ & 3 \mathrm{~A} \text { at } \\ & 24 \mathrm{VDC} \end{aligned}$ | 0.8 A at 110 VAC 1.5 A at 24 VDC |
| Rated carry current | 3 A |  |  |  |
| Maximum switching voltage | $\begin{aligned} & 125 \text { VAC } \\ & 125 \text { VDC } \end{aligned}$ |  |  |  |
| Maximum switching current | 3 A |  |  |  |
| Maximum switching power | $\begin{aligned} & 330 \mathrm{VA} \\ & 72 \mathrm{~W} \end{aligned}$ | $\begin{aligned} & 88 \mathrm{VA} \\ & 36 \mathrm{~W} \end{aligned}$ | $\begin{aligned} & 330 \mathrm{VA} \\ & 72 \mathrm{~W} \end{aligned}$ | $\begin{aligned} & 88 \mathrm{VA} \\ & 36 \mathrm{~W} \end{aligned}$ |
| Contact material | Au plating + Ag |  |  |  |

Characteristics

| Model |  | MYQ |  | MYH |
| :---: | :---: | :---: | :---: | :---: |
| Contact resistance*1 |  | $50 \mathrm{~m} \Omega$ max. |  |  |
| Operate time*2 |  | 20 ms max. |  |  |
| Release time*2 |  | 20 ms max. |  |  |
| Maximum switching frequency | Mechanical | 18,000 operations/h |  |  |
|  | Rated load | 1,800 operations/h |  |  |
| Insulation resistance*3 |  | $100 \mathrm{M} \Omega$ min. |  |  |
| Dielectric strength | Between coil and contacts | 2,000 VAC at $50 / 60 \mathrm{~Hz}$ for 1 min | 1,000 VAC at $50 / 60 \mathrm{~Hz}$ for 1 min |  |
|  | Between contacts of different polarity | 2,000 VAC at $50 / 60 \mathrm{~Hz}$ for 1 min | $1,000 \mathrm{VAC}$ at $50 / 60 \mathrm{~Hz}$ for 1 min |  |
|  | Between contacts of the same polarity | 1,000 VAC at $50 / 60 \mathrm{~Hz}$ for 1 min | 700 VAC at $50 / 60 \mathrm{~Hz}$ for 1 min |  |
| Vibration resistance | Destruction | 10 to 55 to $10 \mathrm{~Hz}, 0.5-\mathrm{mm}$ single amplitude (1.0-mm double amplitude) |  |  |
|  | Malfunction | 10 to 55 to $10 \mathrm{~Hz}, 0.5-\mathrm{mm}$ single amplitude (1.0-mm double amplitude) |  |  |
| Shock resistance | Destruction | $1,000 \mathrm{~m} / \mathrm{s}^{2}$ |  |  |
|  | Malfunction | $200 \mathrm{~m} / \mathrm{s}^{2}$ |  |  |
| Endurance | Mechanical | Single contacts: AC: $50,000,000$ operations min., <br> DC: $100,000,000$ operations min. <br> Bifurcated contacts:  <br>  $5,000,000$ operations min., <br> DC: $5,000,000$ operations min. <br> (switching frequency: <br>  18,000 operations $/ \mathrm{h}$ ) |  |  |
|  | Electrical*4 | Single contacts: $\quad 200,000$ operations min. <br> Bifurcated contacts: 100,000 operations min. (at rated load, switching frequency: 1,800 operations/h) | Single contacts: Bifurcated contacts: | 100,000 operations min. <br> 50,000 operations min. <br> (at rated load, switching frequency: <br> 1,800 operations/h) |
| Failure rate P Level (reference value)*5 |  | Single contacts: 1 mA at 1 VDC Bifurcated contacts: $100 \mu \mathrm{~A}$ at 1 VDC | Single contacts: Bifurcated contacts: | $100 \mu \mathrm{~A}$ at 1 VDC <br> $100 \mu \mathrm{~A}$ at 100 mVDC |
| Ambient operating temperature*6 |  | -55 to $60^{\circ} \mathrm{C}$ | -25 to $60^{\circ} \mathrm{C}$ |  |
| Ambient operating humidity |  | 5\% to 85\% |  |  |
| Weight |  | Approx. 35 g | Approx. 50 g |  |

Note: The data shown above are initial values.
*1. Measurement conditions: 1 A at 5 VDC using the voltage drop method.
*2. Measurement conditions: With rated operating power applied, not including contact bounce.
Ambient temperature condition: $23^{\circ} \mathrm{C}$
*3. Measurement conditions: For 500 VDC applied to the same location as for dielectric strength measurement
*4. Ambient temperature condition: $23^{\circ} \mathrm{C}$
${ }^{*} 5$. This value was measured at a switching frequency of 120 operations per minute.
*6. With no icing or condensation.

## MY-GS/MY(S)/MYK/MYQ•MYH

## Common Options (Order Separately)

## Ordering Information

## Front-mounting Sockets



[^1]
*1. The applicable relay model is a plug-in terminal type
*2. There are screw mounting holes in the DIN hooks on the PYF- $\square \square-\mathrm{PU}$ and P2RF- $\square \square-\mathrm{PU}$. Pull out the DIN hook tabs to mount the Sockets with screws.
*3. Terminal cover type is PYCZ-C14. (Order Separately) For details, refer to the For Screw Terminal Sockets (PYFZ-08/PYFZ-14) Terminal covers on page 50.
*4. The finger-protection type (PYFZ- $\square$-E) is a type in which the terminal cover is integrated into the socket. Round terminals cannot be used. Use forked terminals or ferrules instead.

Back-mounting Sockets

| Applicable relay model*1 | Terminal Type | Hold-down Clips | Appearance | Model |
| :---: | :---: | :---: | :---: | :---: |
| MY2 $\square$ <br> MY2 $\square(S)$ <br> MY2Z口-CR | Solder terminals | Accessories (Order Separately) <br> * MY2Z $\square$-CR: PYC-1 <br> Other than those above: PYC-P |  | PY08 |
|  | Wrapping terminals <br> Terminal length: 25 mm |  |  | PY08QN |
|  | Wrapping terminals <br> Terminal length: 20 mm |  |  | PY08QN2 |
|  | PCB terminals |  |  | PY08-02 |
| $\begin{aligned} & \text { MY2 } \square \text { (S) } \\ & \text { MY2 } \square \end{aligned}$ | Solder terminals | With Hold-down Clips*2 |  | PY08-Y1 |
|  | Wrapping terminals <br> Terminal length: 25 mm |  |  | PY08QN-Y1 |
|  | Wrapping terminals Terminal length: 20 mm |  |  | PY08QN2-Y1 |

*1. The applicable relay model is a plug-in terminal type.
*2. The hold-down clips for connecting the relay and socket come as a set with the socket.

MY-GS/MY(S)/MYK/MYQ•MYH


Hold-down Clip
Appearance*1
*1. The appearance shown is one in which the relay, socket, and hold-down clip are assembled.
*2. Hold-down clips are used in sets of two. However, PYC-P and PYC-1.
*3. The weight shown above is the weight for one hold-down clip.
*4. MY2-CR 24 VAC, MY2N-CR 24 VAC, MY4-CR 24 VAC and MY4N-CR 24 VAC/115 VAC use in combination with hold-down clip Y92H-3.
*5. MY2-CR 24 VAC, MY2N-CR 24 VAC, MY4-CR 24 VAC and MY4N-CR 24 VAC/115 VAC use in combination with hold-down clip PYC-1.

## MY-GS/MY(S)/MYK/MYQ•MYH

-Front-connecting Socket Accessories
For Push-In Plus Terminal Sockets (PYF-08-PU(-L)/PYF-14-PU(-L))
Short Bars

| Applicable sockets | Pitch | Application | Shape/external dimensions | Number of poles | $\begin{gathered} \mathrm{L} \\ \text { (Length) } \end{gathered}$ | Insulati on color | Model*1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { PYF-08-PU(-L) } \\ & \text { PYF-14PU(-L) } \end{aligned}$ | 7.75 mm | Bridging contact terminals (common) | $3.90$ | 2 | 15.1 | $\operatorname{Red}(\mathrm{R})$ Blue (S) Yellow(Y) | PYDN-7.75-020 $\square$ |
|  |  |  | 1-1 5 | 3 | 22.85 |  | PYDN-7.75-030 $\square$ |
|  |  |  |  | 4 | 30.6 |  | PYDN-7.75-040 $\square$ |
|  |  |  | $\stackrel{\rightharpoonup}{2.25}$ | 20 | 154.6 |  | PYDN-7.75-200 $\square$ |
|  | 31.0 mm | For Coil terminals |  | 8 | 224.35 |  | PYDN-31.0-080 $\square$ |

*1. Replace the box $(\square)$ in the model number with the code for the covering color. $\square$ Color selection: $R=$ Red, $S=B l u e, Y=$ Yellow

## Labels

| Applicable sockets | Model | Manufacturer | Minimum order (Box) <br> (quantity per box) |
| :--- | :---: | :---: | :---: |
| PYF-08-PU(-L) <br> PYF-14PU(-L) | MG-CPM-04 41390N | Cembre | 1,680 <br> (35 sheet / 48 pieces) |

Note: PRINTER: MARKINGENIUS MG3 (Ask to your Omron contact for more details on printers)
For Screwless Terminal Sockets (PYF08S/PYF14S)
Short Bars

| Applicable sockets | Pitch | Application | Shape/external dimensions | Number of poles | Insulati on color | Mode** |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PYF08S | 19.7 mm | For bridging coils between sockets | Insulation $\qquad$ | 2 | Red (R) <br> Blue (B) | PYDM-08S $\square$ <br> (50 pcs./bag) |
| PYF14S | 27.5 mm |  |  | 2 |  | PYDM-14S $\square$ <br> (50 pcs./bag) |

*1. Replace the box $(\square)$ in the model number with the code for the covering color. $\square$ Color selection: $\mathrm{R}=\mathrm{Red}, \mathrm{B}=\mathrm{Blue}$
Labels

| Applicable sockets | Model |
| :--- | :---: |
| PYF08S | R99-11 |
| PYF14S | (100 pcs./bag $)$ |

Release Levers
Applicable sockets $\quad$ Shape/external dimensions $\quad$ Model

For Screw Terminal Sockets (PYFZ-08/PYFZ-14)
Short Bars

| Applicable sockets | Pitch | Application | Shape/external dimensions | Number of poles | Insulation color | Model*1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | For bridging adjacent sockets |  | 2 |  | $\begin{aligned} & \text { PYD-025B } \square \text { (2P) } \\ & \text { (10 pcs./bag) } \end{aligned}$ |
| PYFZ-08 | 22 mm |  |  | 8 |  | PYD-085B $\square$ ( 8 P ) (10 pcs./bag) |
| PYFZ-14 |  |  | 5) | 2 | S (Blue) <br> R (Red) | $\begin{gathered} \text { PYD-026B } \square(2 \mathrm{P}) \\ (10 \mathrm{pcs} . / \mathrm{bag}) \end{gathered}$ |
|  | 29 mm |  |  | 8 |  | PYD-086B $\square(8 \mathrm{P})$ $(10 \mathrm{pcs} . / \mathrm{bag})$ |
|  | 7 mm | For bridging with the same socket |  | 2 | B (Black) <br> Y (Yellow) | PYD-020B $\square$ (2P) $(50 \mathrm{pcs} . / \mathrm{bag})$ |
|  |  |  |  | 3 |  | PYD-030B $\square(3 P)$ $(10 \mathrm{pcs} . / \mathrm{bag})$ |

[^2]
## MY-GS/MY(S)/MYK/MYQ•MYH

For Screw Terminal Sockets (PYFZ-08/PYFZ-14)
Terminal covers

| Applicable sockets | Appearance | Model |
| :---: | :---: | :---: |
| PYFZ-08 |  | PYCZ-c08 <br> (2 pcs/set) |
| PYFZ-14 |  |  |

Note: These covers cannot be used for PYF08A and PYF14A.
Dimensions with terminal cover

## PYCZ-C08

Y YAW

(Unit: mm)


## Socket Mounting Plates (For Back-connecting Socket PY $\square /$ Solder Terminals, PY $\square \mathbf{Q N}(2) / W r a p p i n g ~ T e r m i n a l s) ~$


*You can cut the PYP-18 and PYP-36 to any required length.
Parts for Track Mounting

| Type |  | Appearance | Model |
| :--- | :--- | :--- | :--- |
| DIN Tracks | 1 m |  | PFP-100N |
|  | 0.5 m |  |  |
|  |  |  |  |

Note: The track conforms to DIN standards.
*When mounting DIN track, please use End Plate (Model PFP-M)

Ratings and Specifications
Characteristics

## Sockets



| Model | Connection | Number of pins | Terminal Type | Continuous carry <br> current | Dielectric strength | Insulation <br> resistance *1 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| PYF14-ESS-B | Front | 14 | Rise-Up terminal | 12 A | $>3 \mathrm{kV}$ | $>5 \mathrm{M} \Omega$ |
| PYF14-ESN-B |  |  |  |  |  |  |

*1. For 500 VDC applied to the same location as for dielectric strength measurement.
*2. The carrying current of 10 A is for an ambient temperature of $55^{\circ} \mathrm{C}$ or below. At an ambient temperature of $70^{\circ} \mathrm{C}$, the value is 7 A .
*3. When using the PYF08A-N or PYF14A-N at an ambient operating temperature exceeding $40^{\circ} \mathrm{C}$, reduce the continuous carry current to $60 \%$.
*4. The dielectric strength and insulation resistance values in the above table are for a single socket.

## MY-GS/MY(S)/MYK/MYQ•MYH

## Socket Accessories <br> -For Front-connecting Sockets

## Short Bars

| Application | Applicable sockets | Model | Maximum carry current | Ambient operating temperature | Ambient operating humidity |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Bridging contact terminals (common) | PYF-08-PU(-L) PYF-14-PU(-L) | PYDN-7.75-020 $\square$ | 20 A | -40 to $70^{\circ} \mathrm{C}$ | $5 \%$ to $85 \%$ |
|  |  | PYDN-7.75-030 $\square$ |  |  |  |
|  |  | PYDN-7.75-040 $\square$ |  |  |  |
|  |  | PYDN-7.75-200 $\square$ |  |  |  |
|  | PYFZ-08 | PYD-025B $\square$ | 20 A <br> (However, 18 A when $70^{\circ} \mathrm{C}$ ) | -40 to $70^{\circ} \mathrm{C}$ (with no icing or condensation) | $45 \%$ to $85 \%$ (with no icing or condensation) |
|  |  | PYD-085B $\square$ |  |  |  |
|  | PYFZ-14 | PYD-026B $\square$ |  |  |  |
|  |  | PYD-086B $\square$ |  |  |  |
|  |  | PYD-020B $\square$ |  |  |  |
|  |  | PYD-030B $\square$ |  |  |  |
| For Coil terminals | $\begin{aligned} & \text { PYF-08-PU(-L) } \\ & \text { PYF-14-PU(-L) } \end{aligned}$ | PYDN-31.0-080 $\square$ | 20 A | -40 to $70^{\circ} \mathrm{C}$ | 5\% to 85\% |
|  | PYF08S | PYDM-08S $\square$ | 10 A | -40 to $70^{\circ} \mathrm{C}$ | 5\% to 85\% |
|  | PYF14S | PYDM-14S $\square$ | 10 A | -40 to $70^{\circ} \mathrm{C}$ | 5\% to 85\% |

## Certified Standards

-CSA certification (File No. LR031928)

| Model | Ratings | Class number | Standard number |
| :---: | :---: | :---: | :---: |
| PYF-08-PU(-L) | $10 \mathrm{~A}, 250 \mathrm{~V}$ | 321107 | CSA C22.2 No14 |
| PYF-14-PU(-L) | $6 \mathrm{~A}, 250 \mathrm{~V}^{*}$ |  |  |
| PYF08S | $10 \mathrm{~A}, 250 \mathrm{~V}$ |  |  |
| PYF14S | $5 \mathrm{~A}, 250 \mathrm{~V}$ |  |  |
| PYFZ-08(-E) | $10 \mathrm{~A}, 250 \mathrm{~V}$ |  |  |
| PYFZ-14(-E) | $6 \mathrm{~A}, 250 \mathrm{~V}$ |  |  |
| PY $\square$ <br> PYF $\square A$ | 7 A, 250 V |  |  |

*When power is supplied to all four poles, use with a total power current that does not exceed 20 A .

## -UL certification (File No. E87929)

| Model | Ratings | Standard number | Category | Listed/Recognized |
| :---: | :---: | :---: | :---: | :---: |
| PYF-08-PU(-L) | $10 \mathrm{~A}, 250 \mathrm{~V}$ | UL508 | SWIV2 | Recognition |
| PYF-14-PU(-L) | $6 \mathrm{~A}, 250 \mathrm{~V}^{*}$ |  |  |  |
| PYF08S <br> PYF14S | $10 \mathrm{~A}, 250 \mathrm{~V}$ |  |  |  |
| PYFZ-08(-E) | $10 \mathrm{~A}, 250 \mathrm{~V}$ |  |  |  |
| PYFZ-14(-E) | $6 \mathrm{~A}, 250 \mathrm{~V}$ |  |  |  |
| $\begin{aligned} & \hline \text { PY } \square \\ & \text { PYF } \square \mathbf{A} \end{aligned}$ | $7 \mathrm{~A}, 250 \mathrm{~V}$ |  |  |  |

*When power is supplied to all four poles, use with a total power current that does not exceed 20 A .

## -TÜV Rheinland certification

| Model | Ratings | Standard number | Certification No. |
| :---: | :---: | :---: | :---: |
| PYF-08-PU(-L) | $10 \mathrm{~A}, 250 \mathrm{~V}^{*}$ | EN 61984 | R50327595 |
| PYF-14-PU(-L) | $6 \mathrm{~A}, 250 \mathrm{~V}$ |  |  |
| PYFZ-08(-E) | $10 \mathrm{~A}, 250 \mathrm{~V}$ |  | R50405329 |
| PYFZ-14(-E) | $6 \mathrm{~A}, 250 \mathrm{~V}$ |  |  |

*Ratings are for an ambient temperature of $55^{\circ} \mathrm{C}$ or below. At an ambient temperature of $70^{\circ} \mathrm{C}$, the value is 7 A .

- VDE certification

| Model | Standard number | Certification No. |
| :--- | :---: | :--- |
| PYF08S | VDE0627 (EN61984) | 40015509 |
| PYF14 |  |  |

-Others

| Model | Standards | File No. |
| :--- | :--- | :--- |
| PYF14-ESN-B <br> PYF14-ESS-B | UL508 | E244189 |
|  | CSA22.2 | LR225761 |


[^0]:    Refer to Safety Precautions on pages 62 to 63 and Safety Precautions for All Relays.

[^1]:    *1. The applicable relay model is a plug-in terminal type.
    *2. There are screw mounting holes in the DIN hooks on the PYF- $\square \square-P U$ and P2RF- $\square \square-P U$. Pull out the DIN hook tabs to mount the Sockets with screws.
    *3. Terminal cover type is PYCZ-C08. (Order Separately) For details, refer to the For Screw Terminal Sockets (PYFZ-08/PYFZ-14) Terminal covers on page 50.
    *4. The finger-protection type (PYFZ- $\square$-E) is a type in which the terminal cover is integrated into the socket. Round terminals cannot be used. Use forked terminals or ferrules instead.

[^2]:    *1. Replace the box ( $\square$ ) in the model number with the code for the covering color.

