

Miniature Power Relays

MY/MYK/MYQ-MYH

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-□-PU) that feature light insertion force and strong pull-out strength to achieve less wiring work.
- In addition to our standard type (MY), 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 plug-in terminals).

* 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 *Safety Precautions* on pages 55 to 56 and *Safety Precautions for All Relays*.



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

Miniature Power Relay Types

| | |
|---|--------------|
| MY Miniature Power Relays | From page 3 |
| MYK Miniature Power Latching Relays..... | From page 25 |
| MYQ/MYH Miniature Power Sealed Relays | From page 30 |

Common Information

| | |
|--|--------------|
| Common Options (Order Separately)..... | From page 36 |
| Common Safety Precautions | From page 55 |

MY

MYK




MYQ-MYH

Common Options (Order Separately)

Common Precautions


Model List

Miniature Power Relays: MY


| Classification | | | Plug-in terminals | | | PCB terminals | Case-surface mounting |
|---|---------------------|------------|---|--------------------------|---------------------|---|---|
| | | |  | With operation indicator | |  |  |
| | | | | | With latching lever | | |
| Number of poles | Contacts | | | | | | |
| Standard models (compliant with Electrical Appliances and Material Safety Act) | 2 | Single | MY2 | MY2N | MY2IN(S) | MY2-02 | MY2F |
| | | Bifurcated | MY2Z | MY2ZN | | | |
| | 3 | Single | MY3 | MY3N | | MY3-02 | MY3F |
| | | | | | | | |
| | 4 | Single | MY4 | MY4N | MY4IN(S) | MY4-02 | MY4F |
| | | Bifurcated | MY4Z | MY4ZN | MY4ZIN(S) | MY4Z-02 | MY4ZF |
| | Crossbar bifurcated | MY4Z-CBG | MY4ZN-CBG | | | | |
| Models with built-in diode for coil surge absorption (compliant with Electrical Appliances and Material Safety Act) | 2 | Single | MY2-D | MY2N-D2 | MY2IN-D2(S) | | |
| | | Bifurcated | MY2Z-D | MY2ZN-D2 | | | |
| | 3 | Single | MY3-D | MY3N-D2 | | | |
| | | | | | | | |
| | 4 | Single | MY4-D | MY4N-D2 | MY4IN-D2(S) | | |
| | | Bifurcated | MY4Z-D | MY4ZN-D2 | MY4ZIN-D2(S) | | |
| Models with built-in CR circuit for coil surge absorption (compliant with Electrical Appliances and Material Safety Act) | 2 | Single | MY2-CR | MY2N-CR | | | |
| | | Bifurcated | MY2Z-CR | MY2ZN-CR | | | |
| | 4 | Single | MY4-CR | MY4N-CR | MY4IN-CR(S) | | |
| | | Bifurcated | MY4Z-CR | MY4ZN-CR | MY4ZIN-CR(S) | | |

Note: 1. The models in this table are UL/CSA certified. This is indicated with a certification mark on the products. (Except crossbar bifurcated models MY4Z-CBG and MY4ZN-CBG)
2. The standard models with plug-in terminals, models with built-in diodes for coil surge absorption, and models with built-in CR circuits for coil surge absorption were used in combination with the PYF□A-E, PYF□-S and PYF□-PU for the EU Declaration of Conformity. These products display the CE Marking.

Miniature Power Latching Relays (MYK)

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

Miniature Power Sealed Relays (MYQ/MYH)

| Classification | | | Plug-in terminals | | PCB terminals |
|----------------------------|---|------------|---|--------------------------|---------------|
| | | |  | With operation indicator | |
| Number of poles | | Contacts | | | |
| 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 36 and 38 for main unit and socket combinations.

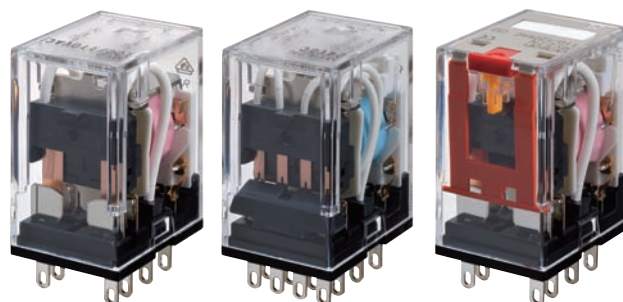
Best-selling, general-purpose relays

- 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 types equipped with mechanical operation indicators and operation indicators for monitoring operation status are also available.
- Contact materials and contact structures can be selected 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 55 to 56 and *Safety Precautions for All Relays*.



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

Features

1. More easily distinguished AC/DC coil voltage specifications

- Distinguished using color-coded coil tape*
- Distinguished using color-coded operation indicators (LED)

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

Example: MY2



Coil tape
Pink = AC voltage

Example: MY4



Coil tape
Blue = DC voltage

Example: MY4



Operation indicator (LED)
Red = AC voltage

Example: MY4



Operation indicator (LED)
Green = DC voltage

2. Latching levers convenient for circuit checking and types equipped with mechanical operation indicators and operation indicators for monitoring operation status are available.

- Latching lever operating procedure
- Mechanical operation indicator/LED operation indicator

Steady-state



Mode 1 (momentary)



Mode 2 (locked)



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

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

Mechanical operation indicator (two locations on left and right)

LED operation indicator
AC coil specification: Red
DC coil specification: Green

AC coil specification (LED: Red)

3. Contact materials and contact structures can be selected based on contact reliability and corrosion resistance.

| Contact reliability | | | Corrosion resistance | |
|---------------------|------------------------------|--|---|---------------|
| | Contact structure | | Contact material | Typical model |
| High ↑ | Crossbar bifurcated contacts | | Au cladding + AgPd | MY4Z-CBG |
| | Bifurcated contacts | | Au cladding + Ag alloy Au plating + Ag alloy | MY4Z MY2Z |
| | Single contacts | | Au cladding + Ag alloy | MY4 |
| Low ↓ | | | Ag alloy | MY2 |

Model Number Structure

Model Number Legend

● Plug-in Terminals

Standard models

M Y



(1)



(2)



(3)

(Example: MY4ZIN(S))

(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: None
- N: With operation indicator
- IN(S): With operation indicator/latching lever

Models with built-in diode for coil surge absorption

M Y



(1)



(2)

(Example: MY4ZIN-D2(S))

(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

- D: Models with built-in diode for coil surge absorption
- N-D2: Built-in diode for coil surge absorption, with operation indicator
- IN-D2(S): Built-in diode for coil surge absorption, with operation indicator/latching lever

Models with built-in CR circuit for coil surge absorption

M Y



(1)



(2)

(Example: MY4ZIN-CR(S))

(1) Number of poles/contacts

- 2: 2-pole, single contacts
- 2Z: 2-pole, bifurcated contacts
- 4: 4-pole, single contacts
- 4Z: 4-pole, bifurcated contacts

(2) Options

- CR: Models with built-in CR circuit for coil surge absorption
- N-CR: 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*
- *4-pole: Single/bifurcated contacts only

● PCB terminals/case surface mounted

M Y



(1)



(2)

(Example: MY2-02)

(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 (compliant with Electrical Appliances and Material Safety Act) | 2 | Single | MY2 | 12, 24, 100/110, 110/120, 200/220, 220/240 VAC |
| | | | | 12, 24, 48, 100/110 VDC |
| | | Bifurcated | MY2Z | 12, 24, 100/110, 110/120, 200/220, 220/240 VAC |
| | | | | 12, 24, 48, 100/110 VDC |
| | 3 | Single | MY3 | 12, 24, 100/110, 110/120, 200/220, 220/240 VAC |
| | | | | 12, 24, 48, 100/110 VDC |
| | | Single | MY4 | 12, 24, 100/110, 110/120, 200/220, 220/240 VAC |
| | | | | 12, 24, 48, 100/110 VDC |
| | 4 | Bifurcated | MY4Z | 100/110, 110/120, 200/220, 220/240 VAC |
| | | | | 12, 24, 48, 100/110 VDC |
| | | Crossbar bifurcated | MY4Z-CBG | 100/110, 110/120, 200/220 VAC |
| | | | | 12, 24, 48, 100/110 VDC |
| Models with built-in diode for coil surge absorption (DC coil specification only) | 2 | Single | MY2-D | 12, 24, 48, 100/110 VDC |
| | | Bifurcated | MY2Z-D | 12, 24, 100/110 VDC |
| | 3 | Single | MY3-D | 12, 24, 100/110 VDC |
| | 4 | Single | MY4-D | 12, 24, 48, 100/110 VDC |
| | | Bifurcated | MY4Z-D | 12, 24, 48, 100/110 VDC |
| Models with built-in CR circuit for coil surge absorption (AC coil specification only) | 2 | Single | MY2-CR | 100/110, 110/120, 200/220, 220/240 VAC |
| | | Bifurcated | MY2Z-CR | 100/110, 200/220 VAC, |
| | 4 | Single | MY4-CR | 100/110, 110/120, 200/220, 220/240 VAC |
| | | Bifurcated | MY4Z-CR | 100/110, 110/120, 200/220, 220/240 VAC |

MY

MYK

MYQ-MYH

Common Options (Order Separately)

Common Precautions

With operation indicator

| Classification | Number of poles | Contacts | Model | Rated voltage |
|--|-----------------|---------------------|-----------|--|
| Standard models (compliant with Electrical Appliances and Material Safety Act) | 2 | Single | MY2N | 12, 24, 100/110, 110/120, 200/220, 220/240 VAC |
| | | | | 12, 24, 48, 100/110 VDC |
| | | Bifurcated | MY2ZN | 12, 24, 100/110, 110/120, 200/220, 220/240 VAC |
| | | | | 12, 24, 48, 100/110 VDC |
| | 3 | Single | MY3N | 12, 24, 100/110, 110/120, 200/220, 220/240 VAC |
| | | | | 12, 24, 48, 100/110 VDC |
| | | Single | MY4N | 12, 24, 100/110, 110/120, 200/220, 220/240 VAC |
| | | | | 12, 24, 48, 100/110 VDC |
| | 4 | Bifurcated | MY4ZN | 24, 100/110, 110/120, 200/220, 220/240 VAC |
| | | | | 12, 24, 48, 100/110 VDC |
| | | Crossbar bifurcated | MY4ZN-CBG | 100/110, 200/220 VAC |
| | | | | 24 VDC |
| Models with built-in diode for coil surge absorption (DC coil specification only) | 2 | Single | MY2N-D2 | 12, 24, 48, 100/110 VDC |
| | | Bifurcated | MY2ZN-D2 | 12, 24, 100/110 VDC |
| | 3 | Single | MY3N-D2 | 12, 24, 100/110 VDC |
| | 4 | Single | MY4N-D2 | 12, 24, 48, 100/110 VDC |
| | | Bifurcated | MY4ZN-D2 | 12, 24, 48, 100/110 VDC |
| Models with built-in CR circuit for coil surge absorption (AC coil specification only) | 2 | Single | MY2N-CR | 100/110, 110/120, 200/220, 220/240 VAC |
| | | Bifurcated | MY2ZN-CR | 100/110, 200/220 VAC |
| | 4 | Single | MY4N-CR | 100/110, 110/120, 200/220, 220/240 VAC |
| | | Bifurcated | MY4ZN-CR | 100/110, 110/120, 200/220, 220/240 VAC |
| | | | | 100/110, 110/120, 200/220, 220/240 VAC |

With operation indicator/latching lever

| Classification | Number of poles | Contacts | Model | Rated voltage |
|---|-----------------|------------|--------------|----------------------|
| Standard models (compliant with Electrical Appliances and Material Safety Act) | 2 | Single | MY2IN(S) | 100/110, 200/220 VAC |
| | | | | 12, 24, 48 VDC |
| | 4 | Single | MY4IN(S) | 100/110, 200/220 VAC |
| | | | | 12, 24, 48 VDC |
| | | Bifurcated | MY4ZIN(S) | 100/110, 200/220 VAC |
| 12, 24, 48 VDC | | | | |
| Models with built-in diode for coil surge absorption (DC coil specification only) | 2 | Single | MY2IN-D2(S) | 12, 24, 48 VDC |
| | 4 | Single | MY4IN-D2(S) | 12, 24, 48 VDC |
| | | Bifurcated | MY4ZIN-D2(S) | 12, 24, 48 VDC |
| Models with built-in CR circuit for coil surge absorption (AC coil specification only) | 4 | Single | MY4IN-CR(S) | 100/110, 200/220 VAC |
| | | Bifurcated | MY4ZIN-CR(S) | 100/110, 200/220 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 | 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 |

MY

MYK

MYQ-MYH

Common Options (Order Separately)

Common Precautions

MY

Ratings and Specifications

Ratings Operating Coils

| Terminal Type | Classification | Number of poles | Contacts | Without operation indicator | With operation indicator |
|-------------------|--|-----------------|------------|-----------------------------|--------------------------|
| Plug-in terminals | Standard models | 2 | Single | MY2 | MY2N |
| | | 4 | Single | MY4 | MY4N |
| | | | Bifurcated | MY4Z | MY4ZN |
| | Models with built-in diode for coil surge absorption (DC coil specification only) | 2 | Single | MY2-D | MY2N-D2 |
| | | 4 | Single | MY4-D | MY4N-D2 |
| | | | Bifurcated | MY4Z-D | MY4ZN-D2 |
| | Models with built-in CR circuit for coil surge absorption (AC coil specification only) | 2 | Single | MY2-CR | MY2N-CR |
| | | 4 | Single | MY4-CR | MY4N-CR |
| | | | Bifurcated | MY4Z-CR | MY4ZN-CR |

| Item | | Rated current (mA) | | Coil resistance (Ω) | Coil inductance (H) | | Must operate voltage (V) | Must release voltage (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 | Approx. 0.9 at 60 Hz to 1.3 at 50 Hz |
| | 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 | 72.7 | | 165 | 0.73 | 1.37 | 80% max.*1 | 10% min.*2 | 110% of rated voltage | Approx. 0.9 |
| | 24 | 36.3 | | 662 | 3.2 | 5.72 | | | | |
| | 48 | 17.6 | | 2,725 | 10.6 | 21.0 | | | | |
| | 100/110 | 8.7/9.6 | | 11,440 | 45.6 | 86.2 | | | | |
| | | | | | | | | | | |

Note: 1. The rated current and coil resistance are measured at a coil temperature of 23°C with tolerances of +15%/-20% for AC rated current and ±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°C.
4. The maximum voltage capacity was measured at an ambient temperature of 23°C.

*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°C).

*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.

| Terminal Type | Classification | Number of poles | Contacts | Without operation indicator | With operation indicator |
|-------------------|--|-----------------|------------|-----------------------------|--------------------------|
| Plug-in terminals | Standard models | 2 | Bifurcated | MY2Z | MY2ZN |
| | Models with built-in diode for coil surge absorption (DC coil specification only) | 2 | Bifurcated | MY2Z-D | MY2ZN-D2 |
| | | 3 | Single | MY3-D | MY3N-D2 |
| | Models with built-in CR circuit for coil surge absorption (AC coil specification only) | 2 | Bifurcated | MY2Z-CR | MY2ZN-CR |

| Item | | Rated current (mA) | | Coil resistance (Ω) | Coil inductance (H) | | Must operate voltage (V) | Must release voltage (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 | Approx. 0.9 at 60 Hz to 1.3 at 50 Hz |
| | 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 | 80% max.*1 | 10% min.*2 | 110% of rated voltage | 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 | 86.2 | | | | |
| | | | | | | | | | | |

Note: 1. The rated current and coil resistance are measured at a coil temperature of 23°C with tolerances of +15%/-20% for AC rated current and ±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°C.
4. The maximum voltage capacity was measured at an ambient temperature of 23°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.

| Terminal Type | Classification | Number of poles | Contacts | With latching lever |
|-------------------|--|-----------------|------------|---------------------|
| Plug-in terminals | Standard models | 2 | Single | MY2IN(S) |
| | | 4 | Single | MY4IN(S) |
| | | | Bifurcated | MY4ZIN(S) |
| | Models with built-in diode for coil surge absorption (DC coil specification only) | 2 | Single | MY2IN-D2(S) |
| | | 4 | Single | MY4IN-D2(S) |
| | | | Bifurcated | MY4ZIN-D2(S) |
| | Models with built-in CR circuit for coil surge absorption (AC coil specification only) | 2 | Single | MY4IN-CR(S) |
| | | 4 | Bifurcated | MY4ZIN-CR(S) |

| Item | | Rated current (mA) | | Coil resistance (Ω) | Coil inductance (H) | | Must operate voltage (V) | Must release voltage (V) | Maximum voltage (V) | Power consumption (VA, W) | |
|------|---------|--------------------|---------|------------------------|---------------------|-------------|--------------------------------|--------------------------------|-----------------------------|--|-------------|
| | | 50 Hz | 60 Hz | | Armature OFF | Armature ON | | | | | |
| AC | 100/110 | 11.7/12.9 | 10/11 | 3,750 | 14.54 | 24.6 | 80% max.*1 | 30% min.*2 | 110% of rated voltage | Approx. 0.9 at 60 Hz to 1.3 at 50 Hz | |
| | 200/220 | 6.2/6.8 | 5.3/5.8 | 12,950 | 54.75 | 94.07 | | | | | |
| DC | 12 | 75 | | 160 | 0.73 | 1.37 | | 10% min.*2 | | | Approx. 0.9 |
| | 24 | 37.7 | | 636 | 3.2 | 5.72 | | | | | |
| | 48 | 18.8 | | 2,560 | 10.6 | 21 | | | | | |

Note: 1. The rated current and coil resistance are measured at a coil temperature of 23°C with tolerances of +15%/-20% for AC rated current and ±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°C.
 4. The maximum voltage capacity was measured at an ambient temperature of 23°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.

| Terminal Type | Classification | Number of poles | Contacts | Without operation indicator | With operation indicator |
|-----------------------|-----------------|-----------------|---------------------|-----------------------------|--------------------------|
| Plug-in terminals | Standard models | 3 | Single | MY3 | MY3N |
| | | 4 | Crossbar bifurcated | MY4Z-CBG | MY4ZN-CBG |
| 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 | — |

| Item | | Rated current (mA) | | Coil resistance (Ω) | Coil inductance (H) | | Must operate voltage (V) | Must release voltage (V) | Maximum voltage (V) | Power consumption (VA, W) |
|-------------------|---------|--------------------|---------|------------------------|---------------------|-------------|--------------------------------|--------------------------------|-----------------------------|-------------------------------------|
| | | 50 Hz | 60 Hz | | Armature OFF | Armature ON | | | | |
| Rated voltage (V) | | | | | | | | | | |
| AC | 12 | 106.5 | 91 | 46 | 0.17 | 0.33 | 80% max.*1 | 30% min.*2 | 110% of rated voltage | Approx. 0.9 to 1.3 (at 60 Hz) |
| | 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 | 18.5 | | 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°C with tolerances of +15%/-20% for AC rated current and ±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°C.
 4. The maximum voltage capacity was measured at an ambient temperature of 23°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

| Number of poles (contact configuration) | 2-pole (DPDT) | | | | | | 3-pole (3PDT) | |
|--|---------------------------------|--|---------------------------------|--|---------------------------------|--|---------------------------------|--|
| Contact structure | Single | | | | Bifurcated | | Single | |
| | With latching lever (S) | | | | | | | |
| Load | Resistive load | Inductive load (cos φ = 0.4, L/R = 7 ms) | Resistive load | Inductive load (cos φ = 0.4, L/R = 7 ms) | Resistive load | Inductive load (cos φ = 0.4, L/R = 7 ms) | Resistive load | Inductive load (cos φ = 0.4, L/R = 7 ms) |
| Rated load | 5 A at 220 VAC 5 A at 24 VDC | 2 A at 220 VAC 2 A at 24 VDC | 5 A at 250 VAC 5 A at 30 VDC | 2 A at 250 VAC 2 A at 30 VDC | 5 A at 220 VAC 5 A at 24 VDC | 2 A at 220 VAC 2 A at 24 VDC | 5 A at 220 VAC 5 A at 24 VDC | 2 A at 220 VAC 2 A at 24 VDC |
| Rated carry current*1 | 5 A (10 A*2) | | | | 5 A | | 5 A | |
| Maximum switching voltage | 250 VAC, 125 VDC | | | | | | 250 VAC, 125 VDC | |
| Maximum switching current | 5 A | | 10 A | | 5 A | | 5 A | |
| Maximum switching power | 1,100 VA 120 W | 440 VA 48 W | 2,500 VA 300 W | 500 VA 60 W | 1,100 VA 120 W | 440 VA 48 W | 1,100 VA 120 W | 440 VA 48 W |
| Contact material | Ag | | | | Au plating + Ag | | Ag | |

| Number of poles (contact configuration) | 4-pole (4PDT) | | | | | | | | | |
|--|--|--|---------------------------------|--|---------------------------------|--|---------------------------------|--|---------------------------------|--|
| Contact structure | Single | | | | Bifurcated | | | | Crossbar bifurcated (CBG) | |
| | | | With latching lever (S) | | | | With latching lever (S) | | | |
| Load | Resistive load | Inductive load (cos φ = 0.4, L/R = 7 ms) | Resistive load | Inductive load (cos φ = 0.4, L/R = 7 ms) | Resistive load | Inductive load (cos φ = 0.4, L/R = 7 ms) | Resistive load | Inductive load (cos φ = 0.4, L/R = 7 ms) | Resistive load | Inductive load (cos φ = 0.4, L/R = 7 ms) |
| Rated load | 3 A at 220 VAC 3 A at 24 VDC | 0.8 A at 220 VAC 1.5 A at 24 VDC | 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 220 VAC 3 A at 24 VDC | 0.8 A at 220 VAC 1.5 A at 24 VDC | 3 A at 250 VAC 3 A at 30 VDC | 0.8 A at 250 VAC 1.5 A at 30 VDC | 1 A at 220 VAC 1 A at 24 VDC | 0.3 A at 220 VAC 0.5 A at 24 VDC |
| Rated carry current*1 | 3 A (5 A*2) | | | | 3 A (5 A*2) | | | | 1 A | |
| Maximum switching voltage | 250 VAC, 125 VDC | | | | | | | | | |
| Maximum switching current | 3 A (5 A*2) | | | | | | | | 1 A | |
| Maximum switching power | 660 VA 72 W | 176 VA 36 W | 1,250 VA 150 W | 200 VA 45 W | 660 VA 72 W | 176 VA 36 W | 1,250 VA 150 W | 200 VA 45 W | 220 VA 24 W | 66 VA 12 W |
| Contact material | Au cladding + Ag alloy (Au plating + Ag*3) | | | | | | | | Au cladding + AgPd | |

*1. If you use a Socket, do not exceed the rated carry current of the Socket.
*2. Values shown in parentheses are for the MY□(S) model with latching lever.
*3. For MY□-02 relays with PCB terminals and MY□F case-surface-mounting relays.

Characteristics

| Number of poles (contact configuration) Contact structure | | 2-pole (DPDT) | | 3-pole (3PDT) | 4-pole (4PDT) | | |
|---|--|---|--|---|---|--|--|
| | | Single | Bifurcated | Single | Single | Bifurcated | Crossbar bifurcated (CBG) |
| Contact resistance*1 *2 | | 50 mΩ max. | | | | | 100 mΩ 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*5 | | 100 MΩ min. | | | | | |
| Dielectric strength | Between coil and contacts | 2,000 VAC, 50/60 Hz for 1 min | | | | | 700 VAC at 50/60 Hz for 1 min |
| | Between contacts of different polarity | | | | | | |
| | Between contacts of the same polarity | 1,000 VAC at 50/60 Hz for 1 min | | | | | |
| 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 | 200 m/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: 5,000,000 operations min. DC: 5,000,000 operations min. (switching frequency: 18,000 operations/h) |
| | Electrical*6 | 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 operations min. (rated load, switching frequency: 1,800 operations/h) | 200,000 operations min. (rated load, switching frequency: 1,800 operations/h) | 100,000 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)*7 | | 1 mA at 5 VDC | 100 μA at 1 VDC | 1 mA at 5 VDC | 1 mA at 1 VDC | 100 μA at 1 VDC | 100 μA 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 mΩ 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. Models with latching lever are 1,000 mΩ minimum.

*6. Ambient temperature condition: 23°C

*7. This value was measured at a switching frequency of 120 operations per minute.

| Classification | Standard models | | | | | Models with built-in diode for coil surge absorption (-D)/ Models with built-in CR circuit for coil surge absorption (-CR) | | |
|---------------------------------|-----------------------------|--------------------------|---------------------|-----------------------------|--------------------------|---|--------------------------|---------------------|
| Contacts | Single/bifurcated | | | Crossbar/bifurcated (CBG) | | Single/bifurcated | | |
| Features | Without operation indicator | With operation indicator | | Without operation indicator | With operation indicator | Without operation indicator | With operation indicator | |
| | | | With latching lever | | | | | With latching lever |
| Ambient operating temperature*1 | -55 to 70°C | -55 to 60°C*2 | -55 to 70°C | -25 to 70°C | -25 to 60°C | -55 to 60°C*2 | -55 to 60°C*2 | -55 to 70°C |
| Ambient operating humidity | 5% to 85% | | | | | 5% to 85% | | |

*1. With no icing or condensation.

*2. This limitation is due to the diode junction temperature and elements used.

MY

MYK

MYQ-MYH

Common Options (Order Separately)

Common Precautions

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 |
|---|-----------------|----------|--------------------|------------------------------|--------------|---|--------------------------------|
| MY2 MY2N MY2IN(S) MY2-D MY2N-D2 MY2IN-D2(S) MY2-CR MY2N-CR | UL508 | NRNT2 | Recognition | 6 to 240 VAC 6 to 125 VDC | 2 | 10 A, 250 VAC (General Use) 10 A, 30 VDC (General Use) 7 A, 240 VAC (General Use) 7 A, 24 VDC (Resistive) 5 A, 240 VAC (General Use) 5 A, 250 VAC (Resistive) 5 A, 30 VDC (Resistive) 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 MY2ZN MY2-02 MY2F MY2Z-D MY2ZN-D2 MY2Z-CR MY2ZN-CR | UL508 | NRNT2 | Recognition | 6 to 240 VAC 6 to 125 VDC | 2 | 7 A, 240 VAC (General Use) 7 A, 24 VDC (Resistive) 5 A, 240 VAC (General Use) 5 A, 250 VAC (Resistive) 5 A, 30 VDC (Resistive) 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 |
| | | | | | | | |
| MY3 MY3N MY3-D MY3N-D2 MY3-02 MY3F | UL508 | NRNT2 | Recognition | 6 to 240 VAC 6 to 125 VDC | 3 | 5 A, 28 VDC (Resistive) 5 A, 240 VAC (General Use) | 6,000 |
| | | | | | | 1/6 HP, 250 VAC | 1,000 |
| MY4 MY4N MY4IN(S) MY4-D MY4N-D2 MY4IN-D2(S) MY4Z MY4ZN MY4ZIN(S) MY4Z-D MY4ZN-D2 MY4ZIN-D2(S) MY4Z-CR MY4ZN-CR MY4ZIN-CR(S) MY4-02 MY4F MY4Z-02 MY4ZF | 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 |

MY

MYK

MYQ-MYH

Common Options (Order Separately)

Common Precautions

●CSA certification (File No. LR31928)

| Model | Standard number | Class number | Operating Coil ratings | No. of poles | Contact ratings | Certified number of operations |
|---|-------------------|--------------|------------------------------|--------------|--|--------------------------------|
| MY2 MY2N MY2IN(S) MY2-D MY2N-D2 MY2IN-D2(S) MY2-CR MY2N-CR | C22.2 No.0, No.14 | | 6 to 240 VAC 6 to 125 VDC | 2 | 7 A, 240 VAC (Resistive) 7 A, 24 VDC (Resistive) 5 A, 240 VAC (General Use) 5 A, 250 VAC (Resistive) 5 A, 30 VDC (Resistive) | 6,000 |
| | | | | | 1/6 HP, 250 VAC (Same polarity) 1/10 HP, 120 VAC (Same polarity) | 1,000 |
| MY2Z MY2ZN MY2-02 MY2F MY2Z-D MY2ZN-D2 MY2Z-CR MY2ZN-CR | C22.2 No.0, No.14 | | 6 to 240 VAC 6 to 125 VDC | 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 HP, 250 VAC 1/10 HP, 120 VAC | 1,000 |
| MY3 MY3N MY3-D MY3N-D2 MY3-02 MY3F | C22.2 No.0, No.14 | | 6 to 240 VAC 6 to 125 VDC | 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 |
| MY4 MY4N MY4N(S) MY4-D MY4N-D2 MY4IN-D2(S) MY4-CR MY4N-CR MY4IN-CR(S) MY4Z MY4ZN MY4ZIN(S) MY4Z-D MY4ZN-D2 MY4ZIN-D2(S) MY4Z-C MY4ZN-CR MY4ZIN-CR(S) | C22.2 No.14 | | 6 to 240 VAC 6 to 125 VDC | 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 |
| MY4-02 MY4F MY4Z-02 MY4ZF | C22.2 No.0, No.14 | 3211 07 | 6 to 240 VAC 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 |
|--|-------------------------------|--|--------------------------------|
| MY2Z MY2ZN MY2-02 MY2F MY2Z-D MY2ZN-D2 MY2Z-CR MY2ZN-CR | 6 to 125 VDC, 6 to 240 VAC | 5 A, 250 VAC (cos ϕ = 1.0) | 100,000 |
| MY3 MY3N MY3-D MY3N-D2 MY3-02 MY3F | | 5 A, 250 VAC (cos ϕ = 1.0) 0.8 A, 250 VAC (cos ϕ = 0.4) | |
| MY4-02 MY4F MY4Z-02 MY4ZF | | 3 A, 120 VAC (cos ϕ = 1.0) 0.8 A, 250 VAC (cos ϕ = 0.4) | |

MY

MYK

MYQ-MYH

Common Options (Order Separately)

Common Precautions

●CE Marking

| Model | EMC Directive | Low Voltage Directive | Machinery Directive | Safety Category |
|---|----------------|-----------------------|---------------------|-----------------|
| MY2 MY2N MY2IN(S) MY2Z MY2ZN MY2-D MY2N-D2 MY2IN-D2(S) MY2-CR MY2N-CR MY2Z-CR MY2ZN-CR MY2Z-D MY2ZN-D2 MY2F | Not applicable | Applicable | Not applicable | 1 |
| MY3 MY3N MY3-D MY3N-D2 MY3F | | | | |
| MY4 MY4N MY4IN(S) MY4Z MY4ZN MY4ZIN(S) MY4-D MY4N-D2 MY4IN-D2(S) MY4Z-D MY4ZN-D2 MY4ZIN-D2(S) MY4-CR MY4N-CR MY4Z-CR MY4ZN-CR MY4F MY4ZF | | | | |

●LR certification (Lloyd's Register)

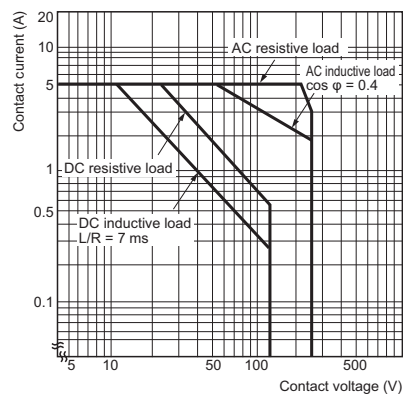
| Model | Environmental Category | Operating Coil ratings |
|---|------------------------|------------------------------|
| MY2 MY2N MY2IN(S) MY2-D MY2N-D2 MY2IN-D2(S) MY2-CR MY2N-CR | ENV2,3 | 6 to 240 VAC 6 to 125 VDC |
| MY2Z MY2ZN MY2Z-D MY2ZN-D2 | | |
| MY4 MY4N MY4IN(S) MY4-D MY4N-D2 MY4IN-D2(S) MY4-CR MY4N-CR MY4IN-CR(S) MY4Z MY4ZN MY4ZIN(S) MY4Z-D MY4ZN-D2 MY4ZIN-D2(S) MY4Z-CR MY4ZN-CR MY4ZIN-CR(S) | ENV2,3 | 6 to 240 VAC 6 to 125 VDC |

●VDE certification

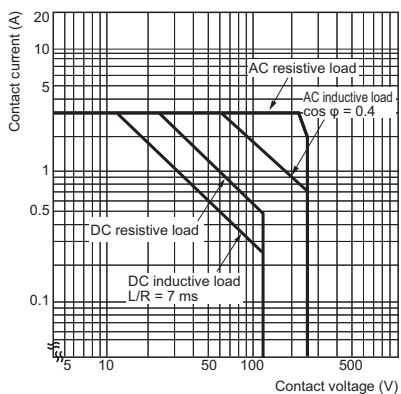
| Model | Standard number | Certification No. | Operating Coil ratings | Contact ratings | Certified number of operations |
|---|-----------------|-------------------|--|--|--|
| MY2 MY2N MY2IN(S) MY2-D MY2N-D2 MY2IN-D2(S) MY2-CR MY2N-CR | EN 61810-1 | 112467UG | 6, 12, 24, 48/50, 100/110, 110/120, 200/220, 220/240 VAC 6, 12, 24, 48, 100/110, 125 VDC | 10A, 250 VAC (cos φ = 1) 10A, 30 VDC (L/R = 0 ms) | MY2: 100,000 MY4: 100,000 MY4Z: 50,000 (AC) |
| MY4 MY4N MY4IN(S) MY4Z MY4ZN MY4ZIN(S) MY4-D MY4N-D2 MY4IN-D2(S) MY4Z-D MY4ZN-D2 MY4ZIN-D2(S) MY4-CR MY4N-CR MY4IN-CR(S) MY4Z-CR MY4ZN-CR MY4ZIN-CR(S) | | | 6, 12, 24, 48/50, 100/110, 110/120, 200/220, 220/240 VAC 6, 12, 24, 48, 100/110, 125 VDC | 5 A, 250 VAC (cos φ = 1) 5 A, 30 VDC (L/R = 0 ms) | |

●Maximum Switching Capacity

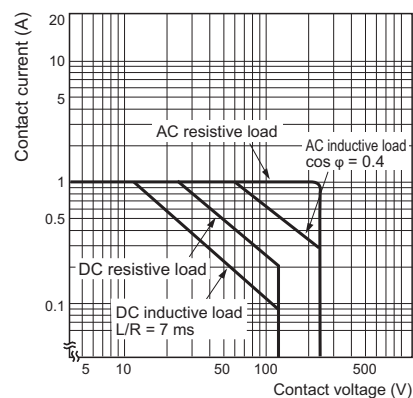
MY2 and MY3



MY4 and MY4Z

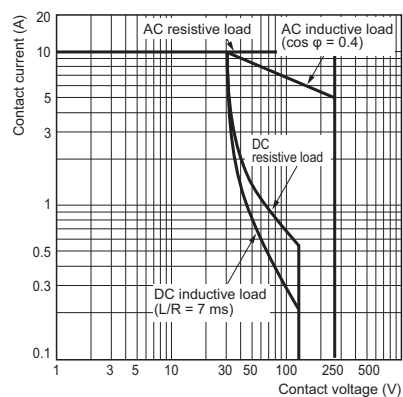


MY4Z-CBG

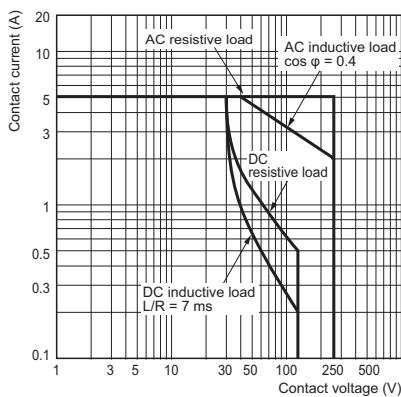


With latching lever

MY2(S)

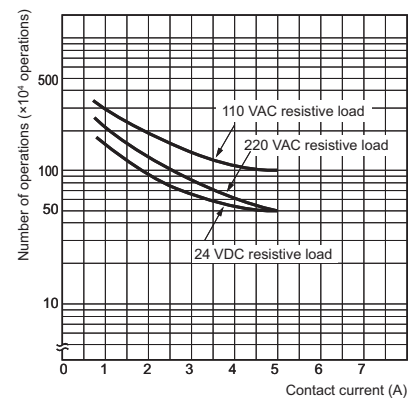


MY4(S) and MY4Z(S)

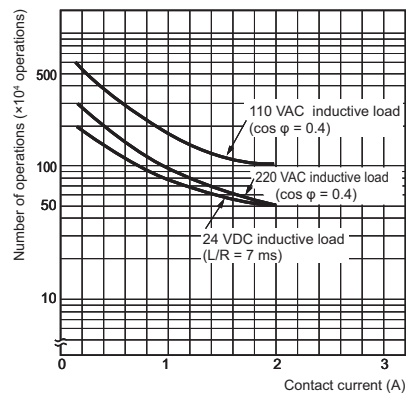


●Endurance Curve

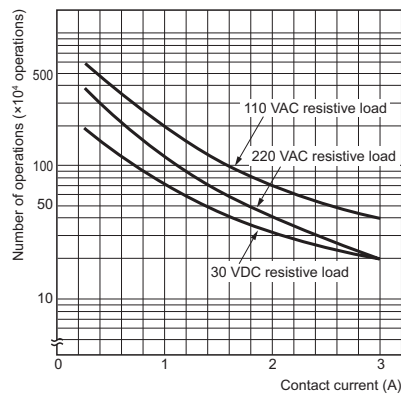
MY2 and MY3



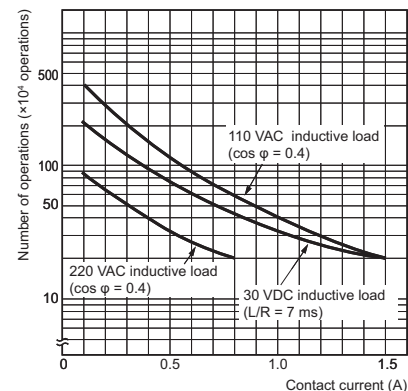
MY2 and MY3



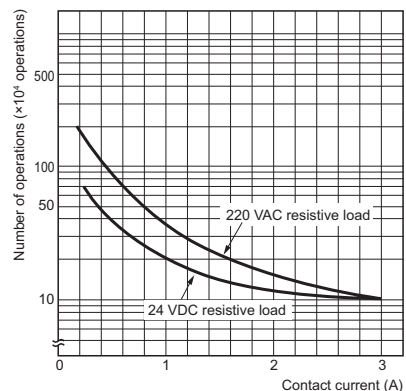
MY4



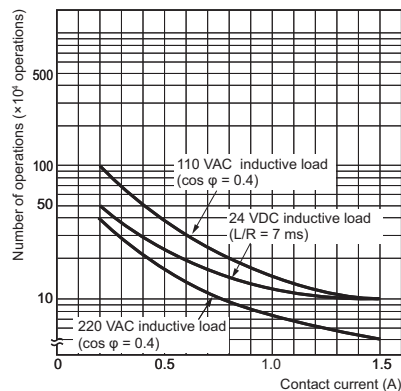
MY4



MY4Z

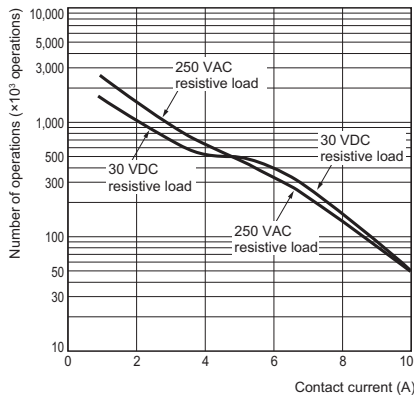


MY4Z

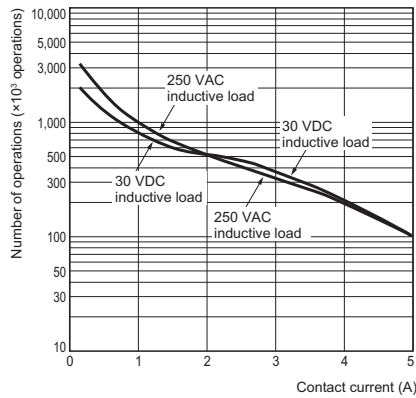


With latching lever

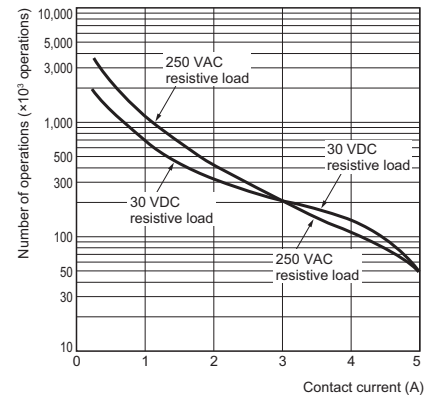
MY2(S)



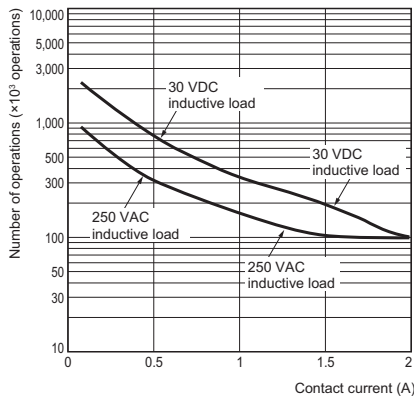
MY2(S)



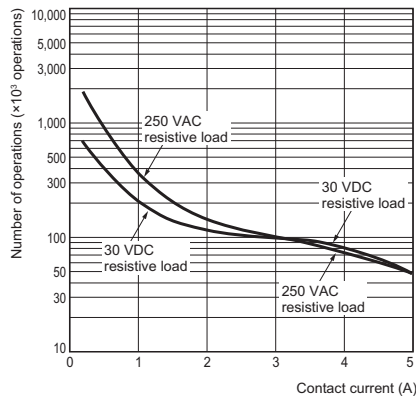
MY4(S)



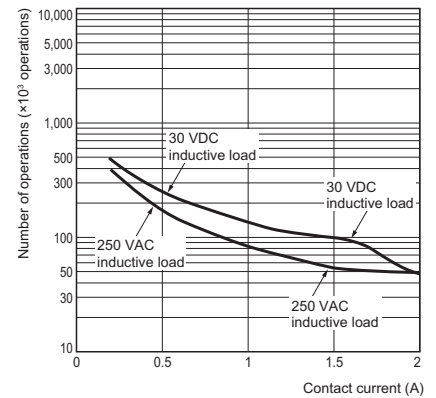
MY4(S)



MY4Z(S)

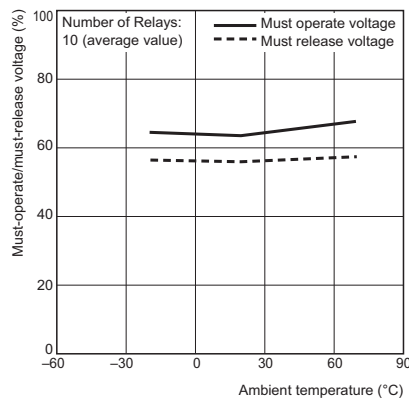


MY4Z(S)

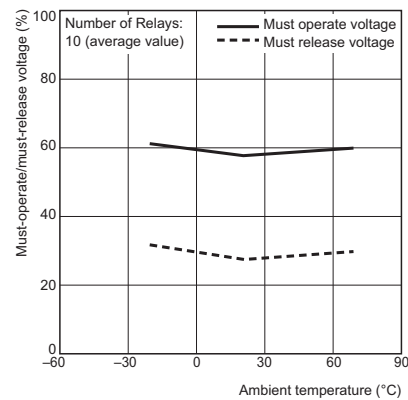


● Ambient Temperature vs. Must-operate and Must-release Voltage

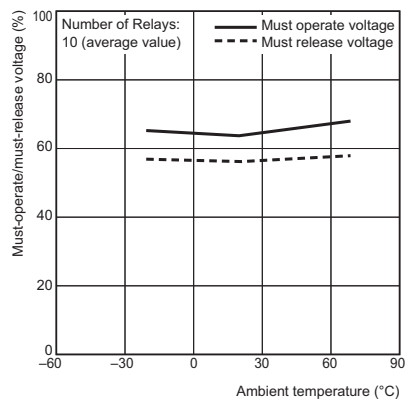
MY2 AC Models



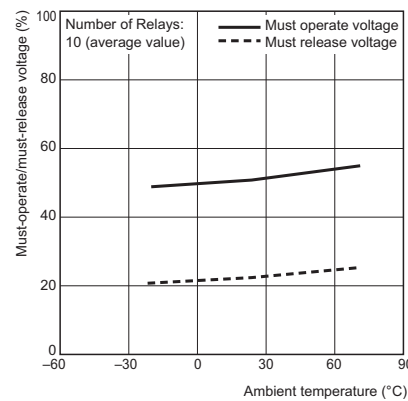
MY2 DC Models



MY4 AC Models



MY4 DC Models



MY

MYK

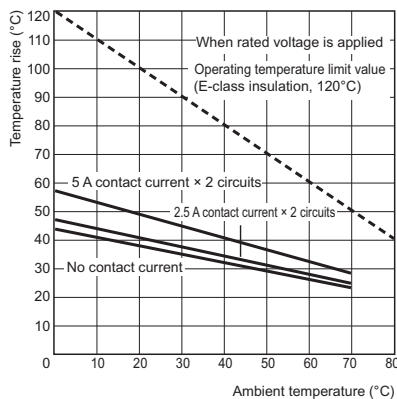
MYQ-MYH

Common Options (Order Separately)

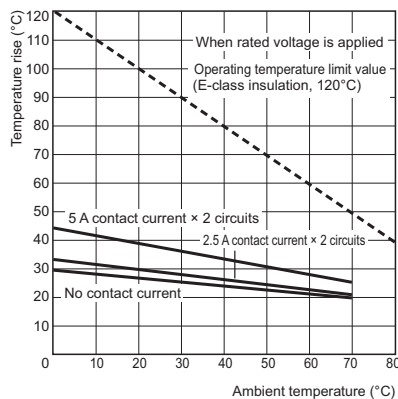
Common Precautions

● Ambient Temperature vs. Coil Temperature Rise

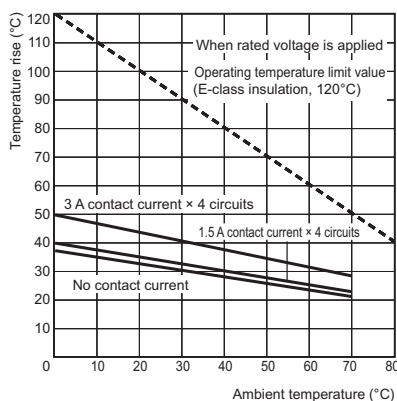
MY2 AC Models, 50 Hz



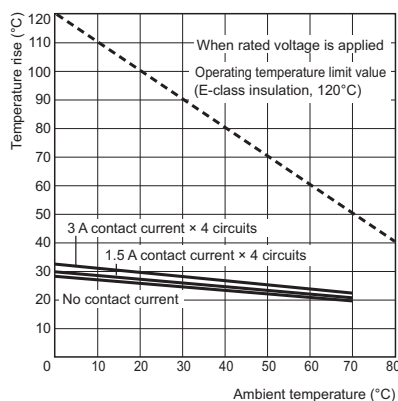
MY2 DC Models



MY4 AC Models, 50 Hz

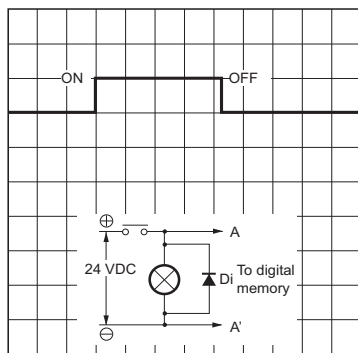


MY4 DC Models

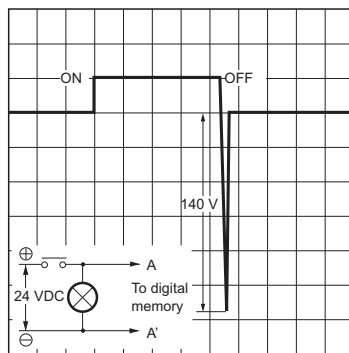


Models with built-in diode for coil surge absorption MY□-D

With Diode



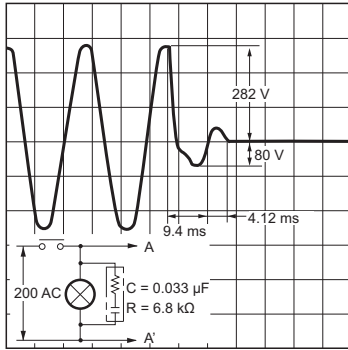
Without Diode



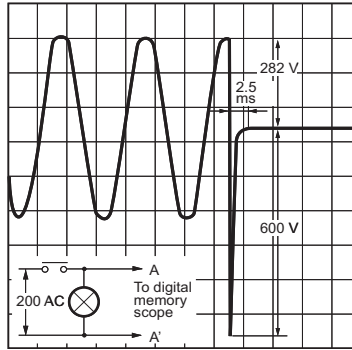
- Note:**
1. Make sure that the polarity is correct.
 2. The release time will increase, but the 20-ms specification for standard models is satisfied.
 3. Diode properties: The diode has a reversed dielectric strength of 1,000 V.
Forward current: 1 A

Models with built-in CR circuit for coil surge absorption MY□-CR

With CR



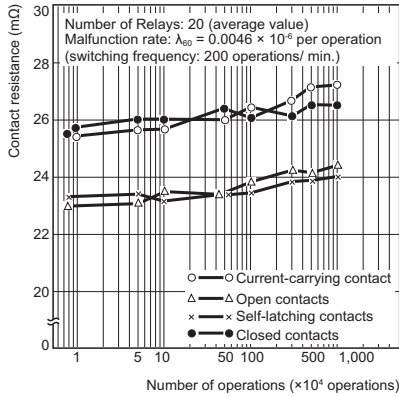
Without CR



●Contact Reliability Test MY4Z-CBG
(Modified Allen Bradley Circuit)

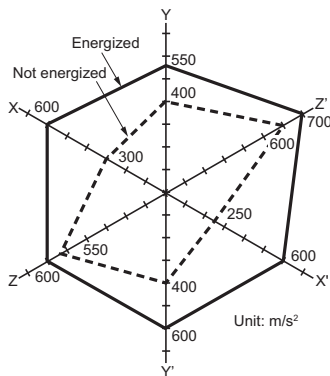
Contact load: 5 VDC, 1 mA resistive load

Malfunction level: Contact resistance of 100 Ω



Common Specifications for MY2, MY3, MY4, MY4Z, MY□-02, MY□F, and MY(S)

●Shock Malfunction

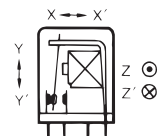


N = 20

Measurement: Shock was applied 3 times each in 6 directions along 3 axes with the Relay energized and not energized to check the shock values that cause the Relay to malfunction.

Criteria: Non-energized: 200 m/s²,
Energized: 200 m/s²

Shock direction



Dimensions

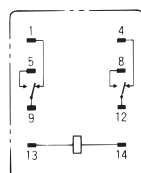
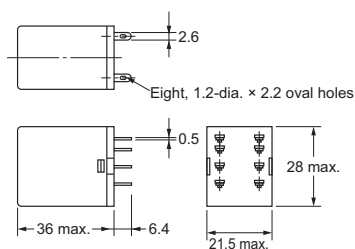
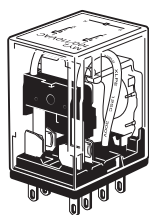
(Unit: mm)

● Plug-in terminals

MY2, MY2N, MY2-D and MY2N-D2

MY2-CR, MY2N-CR

Terminal Arrangement/ Internal Connection Diagram (Bottom View)

MY2
(AC/DC Models)

(Coil has no polarity)

MY2N

MY2-D

MY2N-D2

MY2-CR

MY2N-CR

DC Models

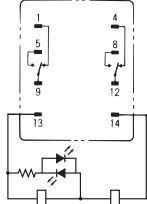
AC Models

(DC Models Only)

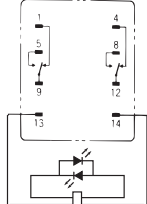
(DC Models Only)

(AC Models Only)

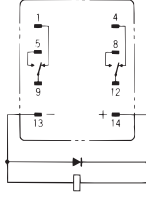
(AC Models Only)



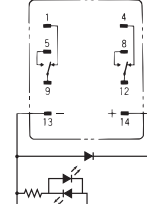
(Coil has no polarity)



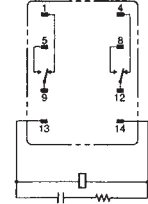
(Coil has no polarity)



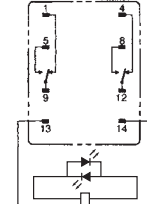
(Coil has polarity)



(Coil has polarity)



(Coil has no polarity)



(Coil has no polarity)

Note: 1. An AC model has coil disconnection self-diagnosis.

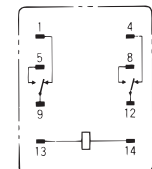
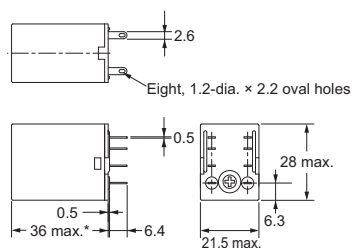
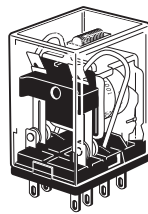
2. The indicator is red for AC and green for DC.

3. The operation indicator indicates the energization of the coil and does not represent contact operation.

MY2Z, MY2ZN, MY2Z-D and MY2ZN-D2

MY2Z-CR, MY2ZN-CR

Terminal Arrangement/Internal Connection Diagram (Bottom View)

MY2Z
(AC/DC Models)

(Coil has no polarity)

* For the MY2Z-CR and MY2ZN-CR,
this dimension is 53 mm maximum.

MY2ZN

MY2Z-D

MY2ZN-D2

MY2Z-CR

MY2ZN-CR

DC Models

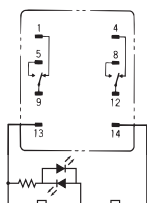
AC Models

(DC Models Only)

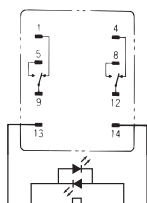
(DC Models Only)

(AC Models Only)

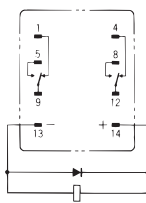
(AC Models Only)



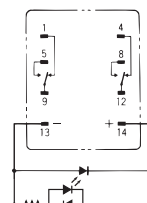
(Coil has no polarity)



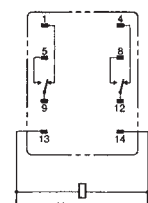
(Coil has no polarity)



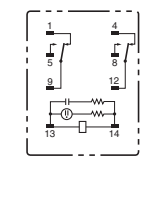
(Coil has polarity)



(Coil has polarity)



(Coil has no polarity)



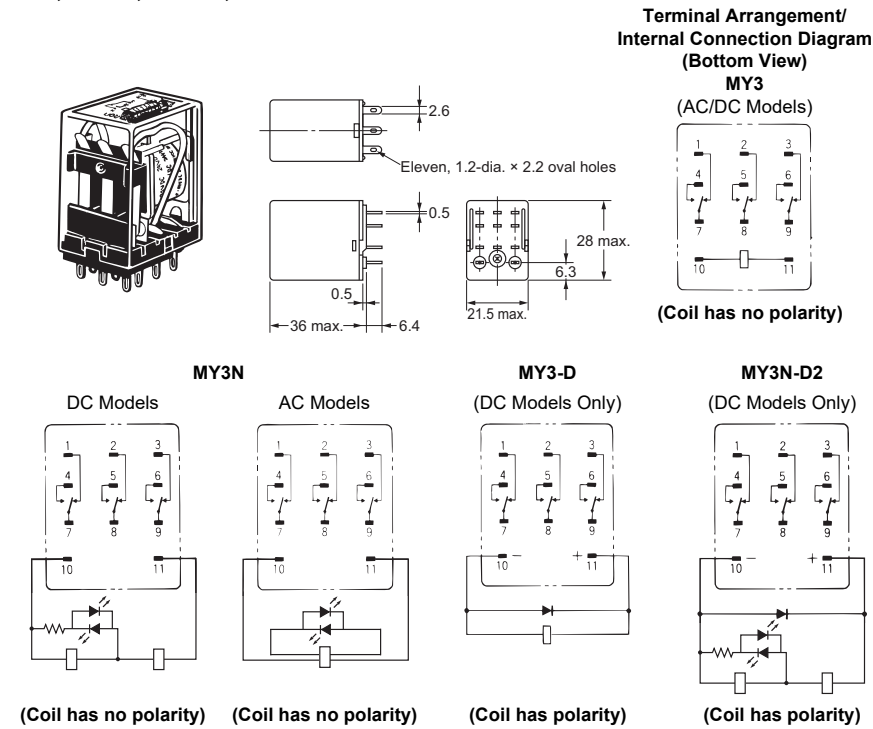
(Coil has no polarity)

Note: 1. An AC model has coil disconnection self-diagnosis.

2. The indicator is red for AC and green for DC.

3. The operation indicator indicates the energization of the coil and does not represent contact operation.

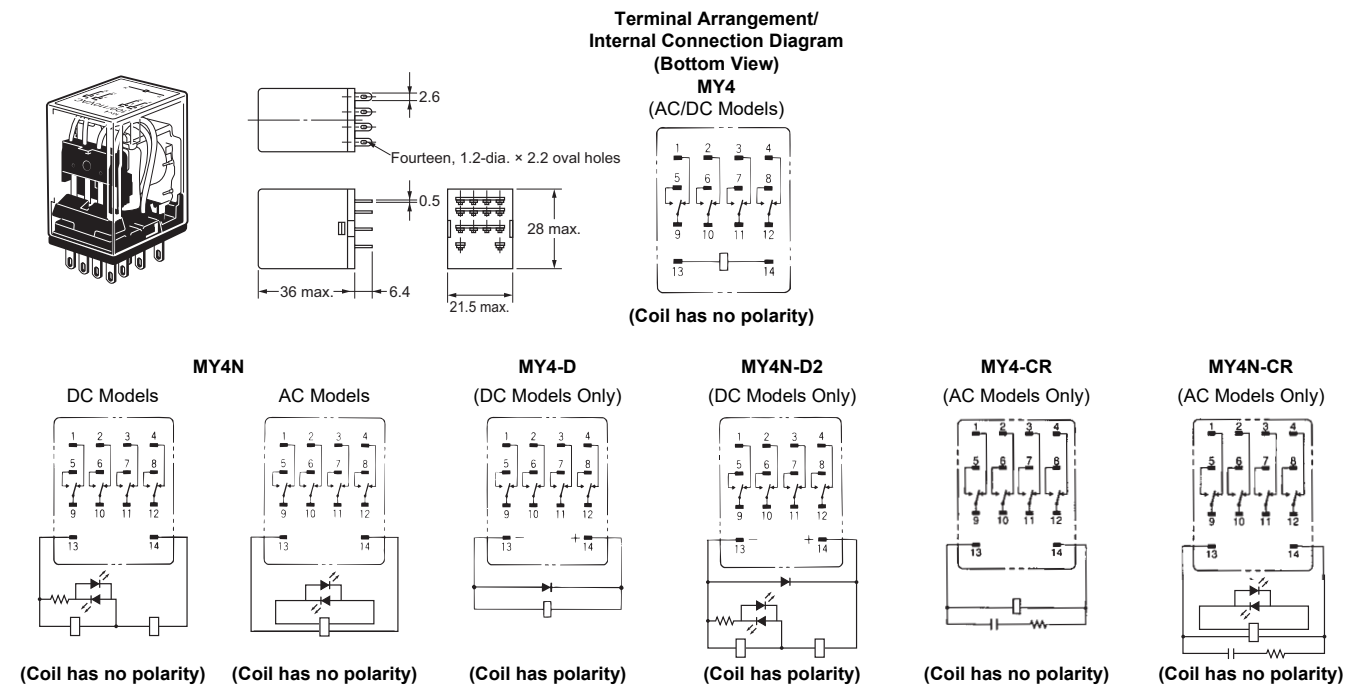
MY3, MY3N, MY3-D, and MY3N-D2



Note: 1. An AC model has coil disconnection self-diagnosis.
2. The indicator is red for AC and green for DC.
3. The operation indicator indicates the energization of the coil and does not represent contact operation.

MY4, MY4N, MY4-D and MY4N-D2

MY4-CR, MY4N-CR



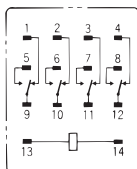
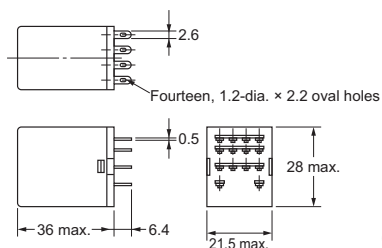
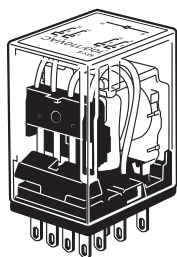
Note: 1. An AC model has coil disconnection self-diagnosis.
2. The indicator is red for AC and green for DC.
3. The operation indicator indicates the energization of the coil and does not represent contact operation.

MY4Z, MY4ZN, MY4Z-D, MY4ZN-D2
MY4Z-CR, MY4ZN-CR

Terminal Arrangement/Internal
Connection Diagram
(Bottom View)

MY4Z

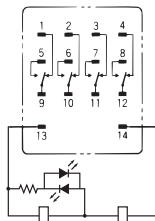
(AC/DC Models)



(Coil has no polarity)

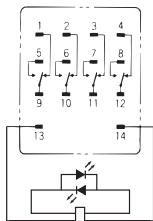
MY4ZN

DC Models



(Coil has no polarity)

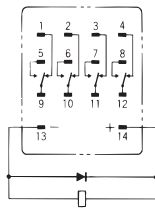
AC Models



(Coil has no polarity)

MY4Z-D

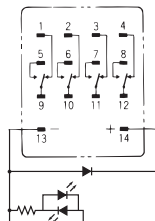
(DC Models Only)



(Coil has polarity)

MY4ZN-D2

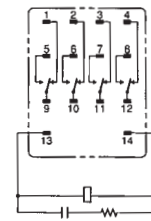
(DC Models Only)



(Coil has polarity)

MY4Z-CR

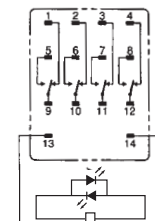
(AC Models Only)



(Coil has no polarity)

MY4ZN-CR

(AC Models Only)



(Coil has no polarity)

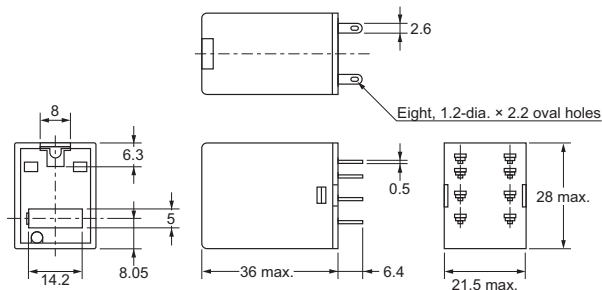
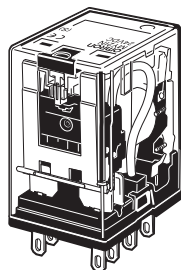
Note: 1. An AC model has coil disconnection self-diagnosis.

2. The indicator is red for AC and green for DC.

3. The operation indicator indicates the energization of the coil and does not represent contact operation.

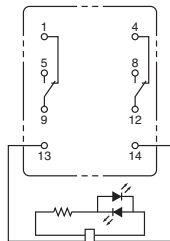
MY2IN(S)

MY2IN-D2(S)



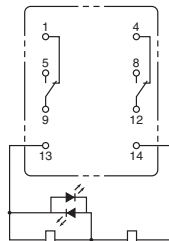
Terminal Arrangement/Internal Connections (Bottom View)

MY2IN(S)
(AC Models)



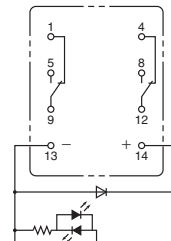
(Coil has no polarity)

MY2IN(S)
(DC Models)



(Coil has no polarity)

MY2IN-D2(S)
(DC Models Only)



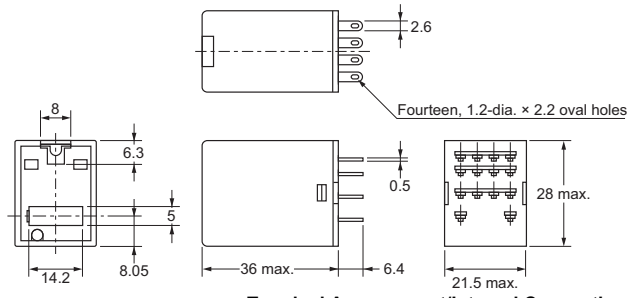
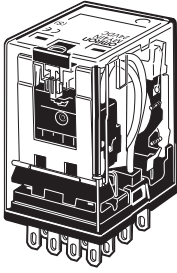
(Coil has polarity)

Note: 1. An AC model has coil disconnection self-diagnosis.

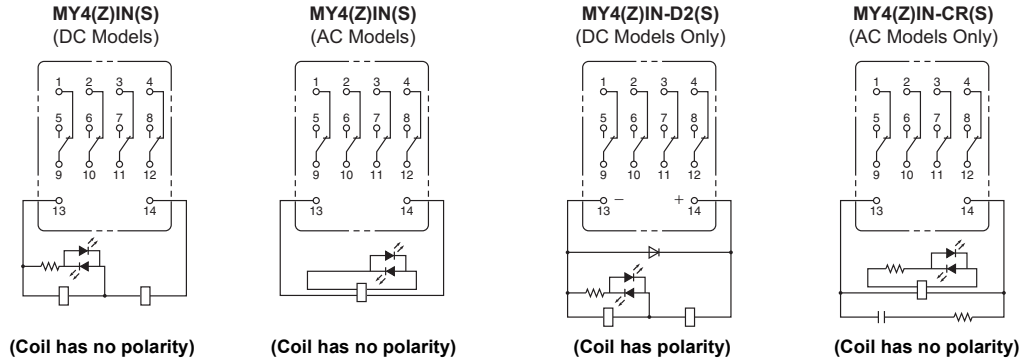
2. The indicator is red for AC and green for DC.

3. The operation indicator indicates the energization of the coil and does not represent contact operation.

MY(Z)IN(S)
MY4(Z)IN-D2(S)
MY4(Z)IN-CR(S)

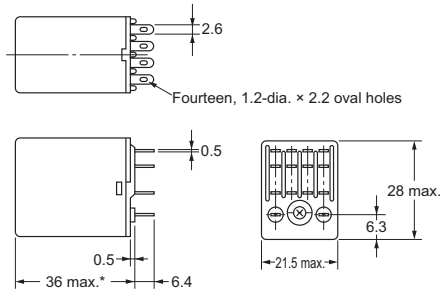
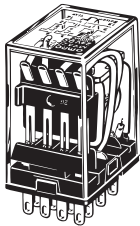


Terminal Arrangement/Internal Connections (Bottom View)



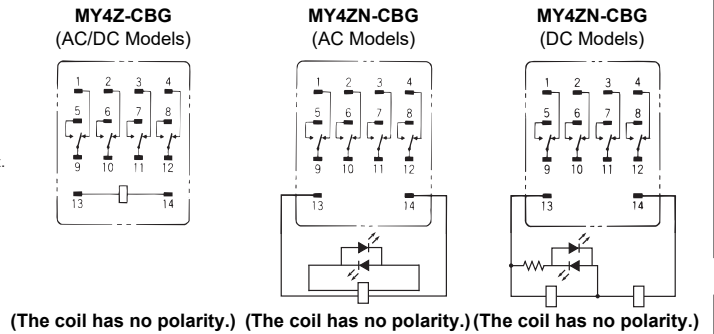
- Note:**
1. An AC model has coil disconnection self-diagnosis.
 2. The indicator is red for AC and green for DC.
 3. The operation indicator indicates the energization of the coil and does not represent contact operation.

MY4Z-CBG
MY4ZN-CBG



* For the MY4ZN-CBG-CR, this dimension is 53 mm max.

Terminal Arrangement/Internal Connection Diagram (Bottom View)

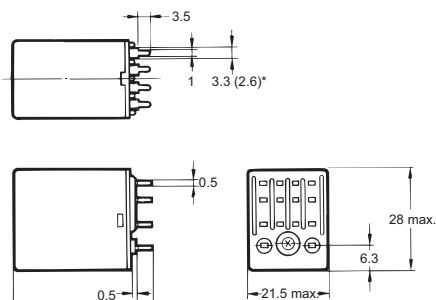


●PCB terminals

MY2-02
MY3-02
MY4-02
MY4Z-02

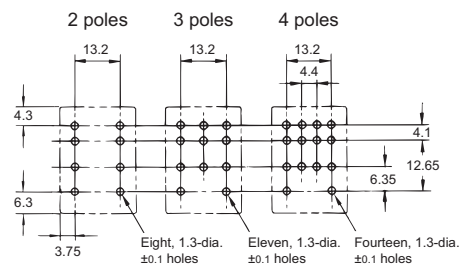


The figure and outline drawing show MY4-02. The 2-pole and 3-pole models conform to these dimensions.



* Dimensions in parentheses are for the MY4-02.

PCB Processing Dimensions (Bottom View)



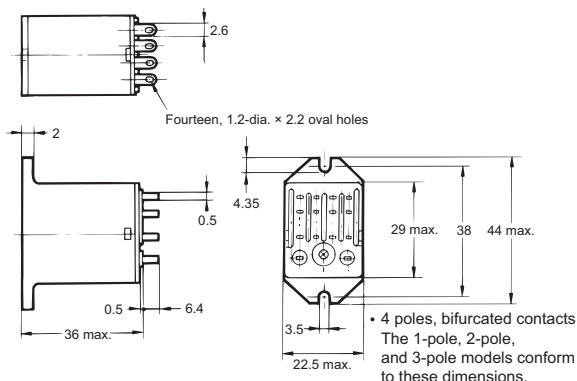
Note: 1. The dimensional tolerance is ± 0.1 .
2. Refer to the terminal arrangement and internal connections diagrams for the MY2, MY3, MY4, and MY4Z.

●Case-surface mounting

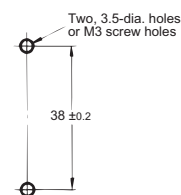
MY2F
MY3F
MY4F
MY4ZF



The above figure is for the MY4F. The 2-pole and 3-pole models conform to these dimensions.




Mounting Hole Dimensions



Note: Refer to the terminal arrangement and internal connections diagrams for the MY2, MY3, MY4, and MY4Z.

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.

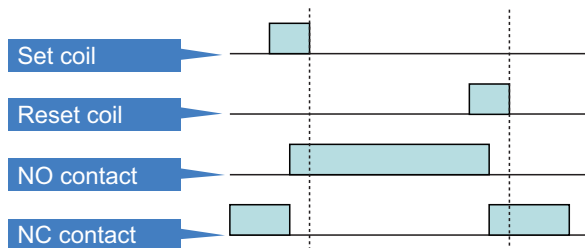
 Refer to *Safety Precautions* on pages 55 to 56 and *Safety Precautions for All Relays*.



Features

Latching Relays MYK

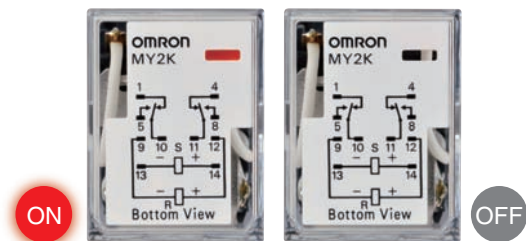
Retains contact operation status.



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.*

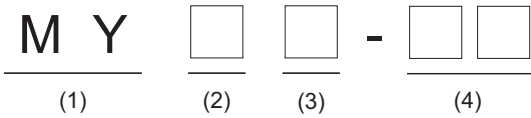
*MYK features a magnetic lock system.

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



Model Number Structure

Model Number Legend



(1) Basic model name

MY: Miniature Power Relays

(3) Type

K: Latching relay

(2) Number of poles/contacts

2: 2-pole, single

(4) Options, terminal type

None: Plug-in terminals

02: PCB terminals

Ordering Information

When your order, specify the rated voltage.

Main unit

●Plug-in terminals

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

●PCB terminals

| Classification | Number of poles | Contacts | Model | Rated voltage |
|---|-----------------|----------|---------|---------------|
| Standard models (compliant with Electrical Appliances and Material Safety Act) | 2 | Single | MY2K-02 | 24, 100 VAC |
| | | | | 12, 24 VDC |

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 (Ω) | Rated current (mA) | | Coil resistance (Ω) | | | | 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. | 110% max. of rated voltage | Approx. 0.6 to 0.9 (at 60 Hz) | Approx. 0.2 to 0.5 (at 60 Hz) |
| | 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 | 52 | | 470 | 25 | | 940 | | | | | |
| | 48 | 27 | | 1,800 | 16 | | 3,000 | | | | | |

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

● Contact Ratings

| Number of poles (contact configuration) Contact structure | 2-pole (DPDT) | |
|--|---------------------------------|--|
| | Single | |
| | Resistive load | Inductive load (cos φ = 0.4, L/R = 7 ms) |
| Rated load | 3 A at 220 VAC 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 | 660 VA 72 W | 176 VA 36 W |
| Contact material | Au plating + Ag | |

Characteristics

| | | |
|--|---|--|
| Contact resistance*1 | | 50 mΩ max. |
| Set | Operate time*2 | AC: 30 ms max., DC: 15 ms max. |
| | Minimum pulse width | AC: 60 ms, DC: 30 ms |
| Reset | Release time*2 | AC: 30 ms max., DC: 15 ms max. |
| | Minimum pulse width | AC: 60 ms, DC: 30 ms |
| Maximum switching frequency | Mechanical | 18,000 operations/h |
| | Rated load | 1,800 operations/h |
| Insulation resistance*3 | | 100 MΩ min. |
| Dielectric strength | Between coil and contacts Between contacts of different polarity | 1,500 VAC at 50/60 Hz for 1 min |
| | Between contacts of the same polarity | 1,000 VAC at 50/60 Hz for 1 min |
| | Between set/reset coils | |
| 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 | 200 m/s ² |
| Endurance | Mechanical | 100,000,000 operations min. (switching frequency: 18,000 operations/h) |
| | Electrical*4 | 200,000 operations min. (at rated load, switching frequency: 1,800 operations/h) |
| Failure rate P value (reference value)*5 | | 1 mA at 1 VDC |
| Ambient operating temperature*6 | | -55 to 60°C |
| Ambient operating humidity | | 5% to 85% |
| Weight | | 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.

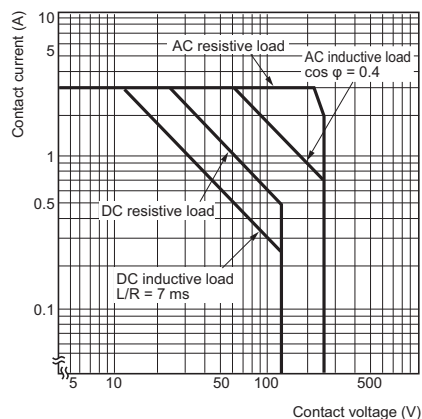
*3. Measurement conditions: For 500 VDC applied to the same location as for dielectric strength measurement.

*4. Ambient temperature condition: 23°C

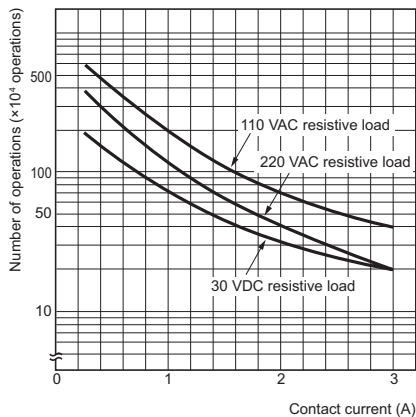
*5. This value was measured at a switching frequency of 120 operations per minute.

*6. With no icing or condensation.

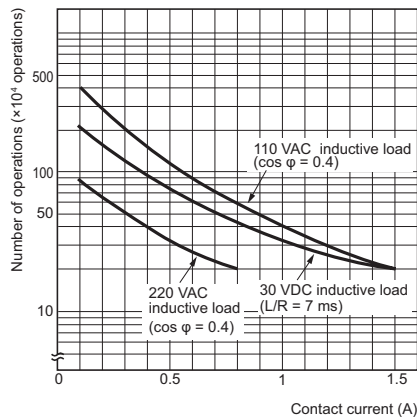
Maximum Switching Capacity MY2K(-02)



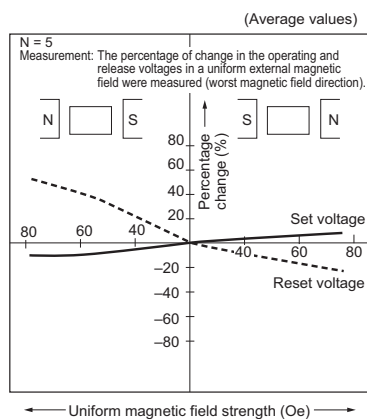
Endurance Curve MY2K(-02)



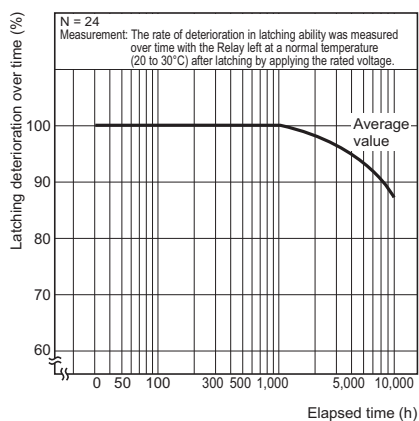
MY2K(-02)



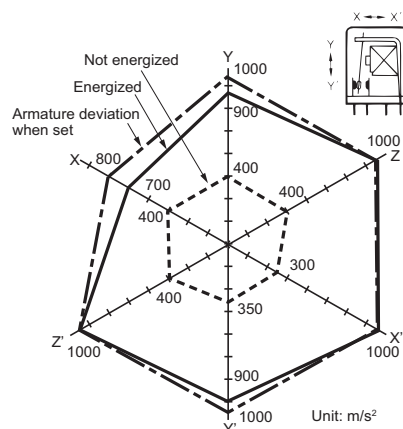
Magnetic Interference (External Magnetic Field) MY2K 24 VDC



Latching Deterioration Over Time MY2K 24 VDC



Shock Malfunction MY2K 100 VAC



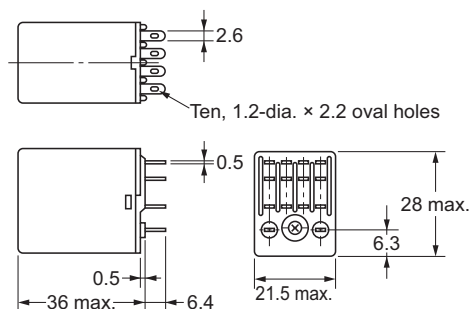
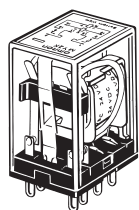
N = 20
Measurement: Shock was applied in 6 directions along 3 axes 2 times with the Relay energized and 3 times with the Relay not energized to check the shock values that cause the Relay to malfunction.

Criteria: Non-energized: 200 m/s²
Energized: 200 m/s²

Dimensions

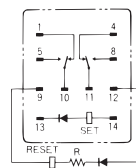
● Plug-in terminals

MY2K



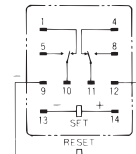
Terminal Arrangement/
Internal Connection Diagram
(Bottom View)

For AC



Note: R is a resistor for ampere-turn correction. Built into models with specifications of 50 VAC or more. (The coil has no polarity.)

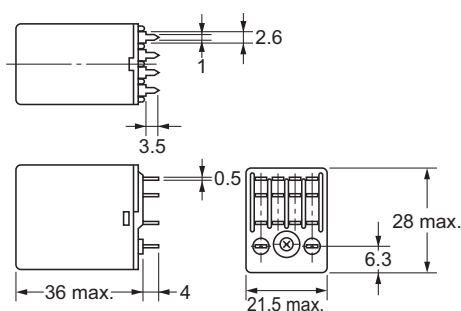
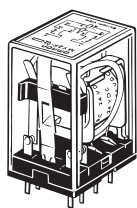
For DC



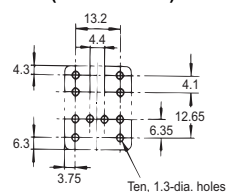
Note: Pay close attention to the set coil and reset coil polarities. If the connections are not correct, unintended operation may occur.

● PCB terminals

MY2K-02



PCB Processing Dimensions
(Bottom View)

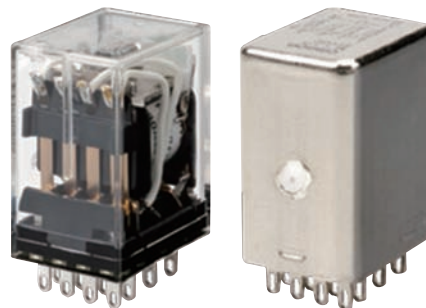


Note: The dimensional tolerance is ± 0.1 .

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.

Refer to *Safety Precautions* on pages 55 to 56 and *Safety Precautions for All Relays*.



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

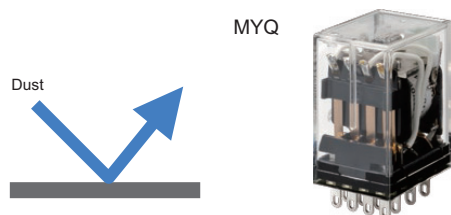
Features

Highly Airtight Relays (Plug-in Terminals)

| Seal performance | Degree of protection | Typical relay | Features |
|---|--------------------------------|---------------|---|
| <div>High</div> <div>↑</div> <div>Low</div> | <div>Hermetically sealed</div> | MYH | Sealing with metals, the glass case and base, etc. with inert gases (N ₂) inside makes it airtight structure which provides the external casing with durability against harmful corrosion, and prevents corrosive gases from intruding inside relays. |
| | <div>Plastic sealed</div> | MYQ | Structure that seals relays with the resin case and cover, etc., to prevent effects from corrosive environments. |
| | <div>Closed type (cased)</div> | MY, MY4Z-CBG | Relays in the case realize the structure that protects them from contact with foreign materials. |

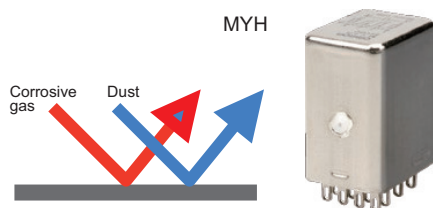
Plastic Sealed Relays: MYQ

These realize excellent reliability even in environments where salt damage occurs or where dust is generated.



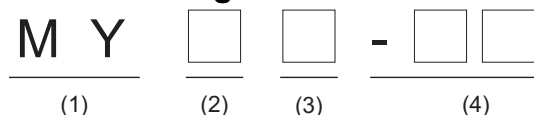
Hermetically Sealed Relays: MYH

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

(3) Type

None: None

N: With operation indicator*

*Only MYQ (plastic sealed relay)

(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

(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

● 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 | 100/110, 110/120, 200/220, 220/240 VAC | MYQ4N | 24, 100/110, 110/120, 200/220, 220/240 VAC |
| | | | | 24 VDC | | 12, 24, 48, 100/110 VDC |
| | | Bifurcated | MYQ4Z | 100/110, 110/120, 200/220 VAC | | |
| | | | | 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 of poles | Contacts | Model | Rated voltage |
|---|-----------------|------------|-------|--------------------------|
| Standard models (compliant with Electrical Appliances and Material Safety Act) | 4 | Single | MY4H | 24, 100/110, 110/120 VAC |
| | | | | 12, 24, 48, 100/110 VDC |
| | | Bifurcated | MY4ZH | 24, 100/110, 110/120 VAC |
| | | | | 12, 24, 48, 100/110 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 |
| | | | | |

MY

MYK

MYQ-MYH

Common Options (Order Separately)

Common Precautions

Ratings and Specifications

●Operating coil

| Rated voltage (V) | | Rated current (mA) | | Coil resistance (Ω) | 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 at 60 Hz to 1.3 at 50 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°C with tolerances of +15%/-20% for AC rated current and ±15% for DC 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°C.
4. The maximum voltage capacity was measured at an ambient temperature of 23°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) Contact structure Load | 4-pole (4PDT) | |
|--|---------------------------------|--|
| | Single/bifurcated | |
| | Resistive load | Inductive load (cos φ = 0.4, L/R = 7 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 | 250 VAC 125 VDC | |
| Maximum switching current | 1 A | |
| Maximum switching power | 220 VA 24 W | 110 VA 12 W |
| Contact material | Au plating + Ag | |

Hermetically Sealed Relays: MYH

| Number of poles (contact configuration) Contact structure Load | 4-pole (4PDT) | | | |
|--|---------------------------------|--|---------------------------------|--|
| | Single | | Bifurcated | |
| | Resistive load | Inductive load (cos φ = 0.4, L/R = 7 ms) | Resistive load | Inductive load (cos φ = 0.4, L/R = 7 ms) |
| Rated load | 3 A at 110 VAC 3 A at 24 VDC | 0.8 A at 110 VAC 1.5 A at 24 VDC | 3 A at 110 VAC 3 A at 24 VDC | 0.8 A at 110 VAC 1.5 A at 24 VDC |
| Rated carry current | 3 A | | | |
| Maximum switching voltage | 125 VAC 125 VDC | | | |
| Maximum switching current | 3 A | | | |
| Maximum switching power | 330 VA 72 W | 88 VA 36 W | 330 VA 72 W | 88 VA 36 W |
| Contact material | Au plating + Ag | | | |

Characteristics

| Model | | MYQ | MYH |
|--|--|--|---|
| Contact resistance*1 | | 50 mΩ 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 MΩ min. | |
| Dielectric strength | Between coil and contacts | 1,500 VAC at 50/60 Hz for 1 min | 1,000 VAC at 50/60 Hz for 1 min |
| | Between contacts of different polarity | 1,500 VAC at 50/60 Hz for 1 min | 1,000 VAC at 50/60 Hz for 1 min |
| | Between contacts of the same polarity | 1,000 VAC at 50/60 Hz for 1 min | 700 VAC at 50/60 Hz for 1 min |
| 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 | 200 m/s ² | |
| Endurance | Mechanical | Single contacts: AC: 50,000,000 operations min., DC: 100,000,000 operations min. Bifurcated contacts: 5,000,000 operations min., (switching frequency: 18,000 operations/h) | Single contacts: 50,000,000 operations min. Bifurcated contacts: 5,000,000 operations min. (switching frequency: 18,000 operations/h) |
| | Electrical*4 | Single contacts: 200,000 operations min. Bifurcated contacts: 100,000 operations min. (at rated load, switching frequency: 1,800 operations/h) | Single contacts: 100,000 operations min. Bifurcated contacts: 50,000 operations min. (at rated load, switching frequency: 1,800 operations/h) |
| Failure rate P Level (reference value)*5 | | Single contacts: 1 mA at 1 VDC Bifurcated contacts: 100 μA at 1 VDC | Single contacts: 100 μA at 1 VDC Bifurcated contacts: 100 μA at 100 mVDC |
| Ambient operating temperature*6 | | -55 to 60°C | -25 to 60°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°C

*3. Measurement conditions: For 500 VDC applied to the same location as for dielectric strength measurement.

*4. Ambient temperature condition: 23°C

*5. This value was measured at a switching frequency of 120 operations per minute.

*6. With no icing or condensation.

MY

MYK

MYQ·MYH

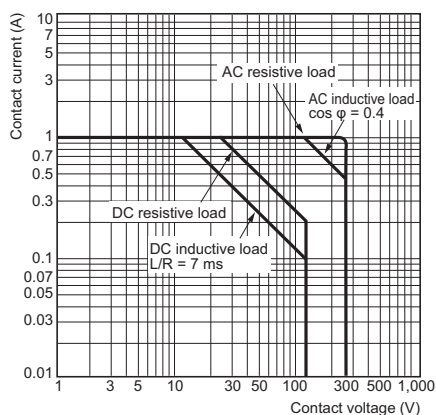
Common Options (Order Separately)

Common Precautions

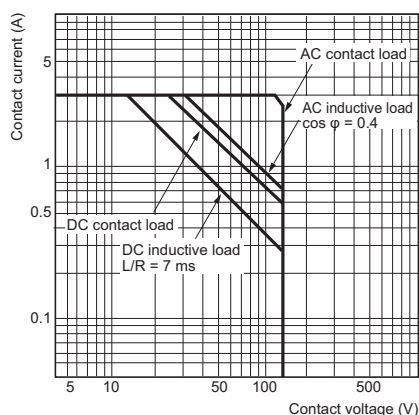
Engineering Data (Reference Value)

Maximum Switching Capacity

MYQ4(Z)

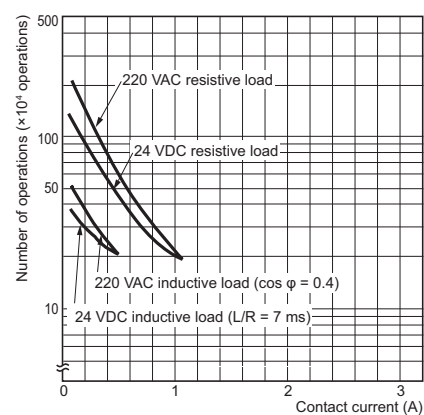


MY4(Z)H



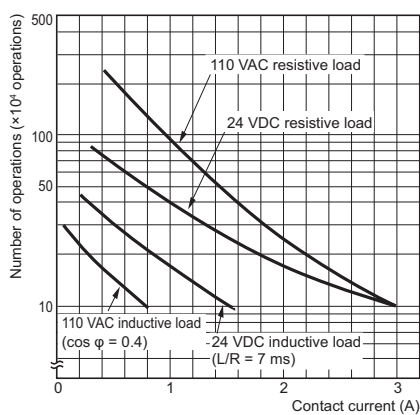
Endurance Curve

MYQ4



Note: The endurance of bifurcated contacts is one-half that of single contacts.

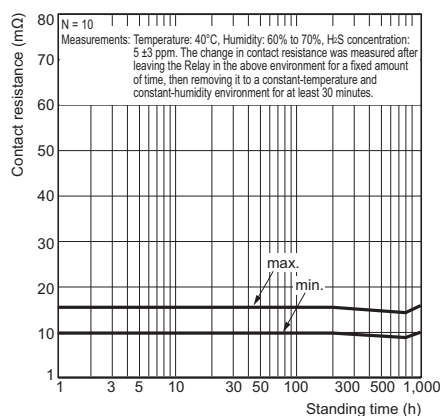
MY4H



Note: The endurance of bifurcated contacts is one-half that of single contacts.

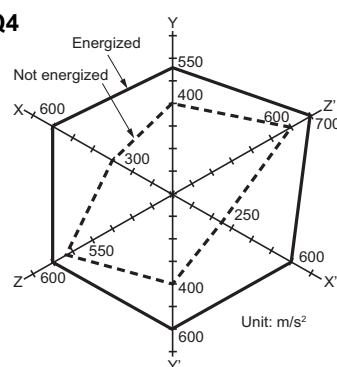
H₂S Gas Data

MYQ4



Shock Malfunction

MYQ4



N = 20

Measurement: Shock was applied 3 times each in 6 directions along 3 axes with the Relay energized and not energized to check the shock values that cause the Relay to malfunction.

Criteria: Non-energized: 200 m/s²
Energized: 200 m/s²

Shock direction

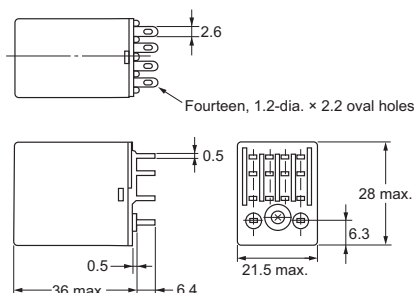
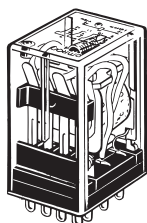


Dimensions

● Plug-in terminals

Plastic Sealed Relays

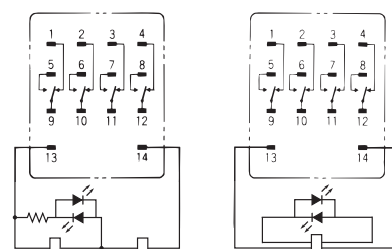
MYQ4(Z)(N)



MYQ4(Z)N

DC Models

AC Models



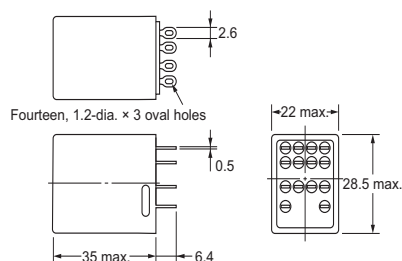
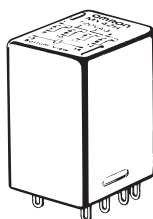
(Coil has no polarity)

(Coil has no polarity)

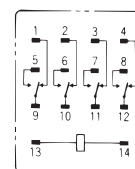
Note: An AC model has coil disconnection self-diagnosis.

Hermetically Sealed Relays

MY4(Z)H



Terminal Arrangement/ Internal Connection Diagram (Bottom View) MY4(Z)H

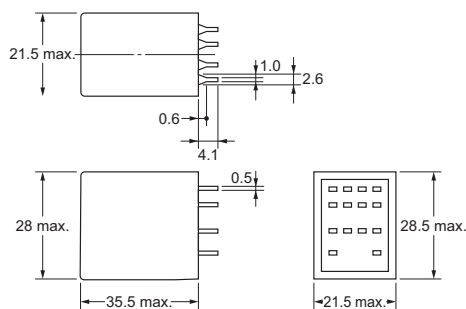
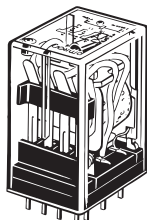


(Coil has no polarity)

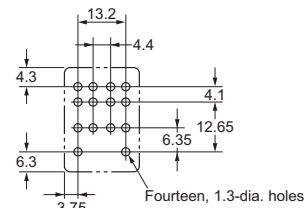
● PCB terminals

Plastic Sealed Relays

MYQ4(Z)-02



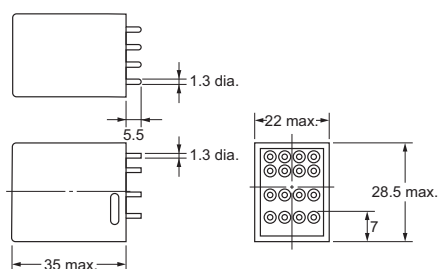
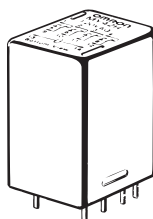
PCB Processing Dimensions (Bottom View)



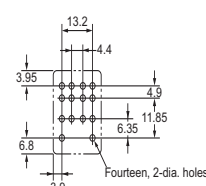
Note: The dimensional tolerance is ± 0.1 .

Hermetically Sealed Relays

MY4(Z)H-0



PCB Processing Dimensions (Bottom View)





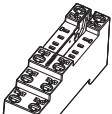
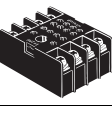
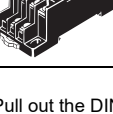


Common Options (Order Separately)

For details on Sockets and Hold-down Clips, refer to the data sheet for Common Sockets.

Ordering Information

Front-mounting Sockets





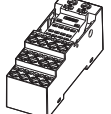
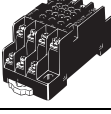
| Applicable relay model*1 | Mounting Method | Conductive part protection | Terminal Type | Applicable crimp terminal/ Electric wire | Appearance | Mode | Hold-down Clips/ Release Levers (Order Separately) |
|-----------------------------|---------------------------------------|--|-----------------------------------|--|---|---------------------------------------|--|
| MY2□ MY2□(S) MY2Z□-CR | Mounted on a DIN track or with screws | Available | Push-In Plus Terminal | Ferrules Solid wire Stranded wire |  | PYF-08-PU*2 | With release lever * Hold by release lever |
| | | | | |  | PYF-08-PU-L*2 | |
| | | | Screw terminal (M3 screw size) | Forked terminals Solid wire Stranded wire |  | PYFZ-08-E*4 | MY2□: PYC-A1 MY2IN(S): PYC-E1 |
| | | Option (Terminal cover sold separately) *3 | | Round terminals Forked terminals Solid wire Stranded wire |  | PYFZ-08 * Terminal cover: PYCZ-C08 | |
| | Mounted on a DIN track | Available | Screwless terminal (Clamp method) | Solid wire Stranded wire |  | PYF08S | PYCM-08S * Hold by release lever |
| MY3□ | Screw mounting only | None | Screw terminal (M3.5 screw size) | Round terminals Forked terminals Solid wire Stranded wire |  | PYF08M | PYC-P (MY2□ Only) |
| | Mounted on a DIN track or with screws | None | Screw terminal (M3 screw size) | Round terminals Forked terminals Solid wire Stranded wire |  | PYF11A | PYC-A1 |

*1. The applicable relay model is a plug-in terminal type.

*2. There are screw mounting holes in the DIN hooks on the PYF-□□-PU and P2RF-□□-PU. 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 44.

*4. The finger-protection type (PYFZ-□-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.

| Applicable relay model*1 | Mounting Method | Conductive part protection | Terminal Type | Applicable crimp terminal/ Electric wire | Appearance | Mode | Hold-down Clips/ Release Levers (Order Separately) |
|---|---------------------------------------|--|--------------------------------------|--|--|--|--|
| MY4□ MY4□(S) MY4□H MYQ4□ MY4Z□-CBG-CR MY2K | Mounted on a DIN track or with screws | Available | Push-In Plus Terminal | Ferrules Solid wire Stranded wire |  | PYF-14-PU*2 | With release lever * Hold by release lever |
| | | | | |  | PYF-14-PU-L*2 | |
| | | Option (Terminal cover sold separately) *3 | Screw terminal (M3 screw size) | Forked terminals Solid wire Stranded wire |  | PYFZ-14-E*4 | PYC-A1 |
| | | | | Round terminals Forked terminals Solid wire Stranded wire |  | PYFZ-14 * Terminal cover: PYCZ-C14 | |
| | Mounted on a DIN track | Available | Screwless terminal (Clamp method) | Solid wire Stranded wire |  | PYF14S | PYCM-14S * Hold by release lever |
| | Mounted on a DIN track or with screws | None | Screw terminal (M3.5 screw size) | Round terminals Forked terminals Solid wire Stranded wire |  | PYF14T | PYC-A1 |

*1. The applicable relay model is a plug-in terminal type.

*2. There are screw mounting holes in the DIN hooks on the PYF-□□-PU and P2RF-□□-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 44.

*4. The finger-protection type (PYFZ-□-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.

MY

MYK

MYQ-MYH

Common Options (Order Separately)

Common Precautions

MY


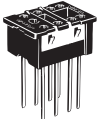
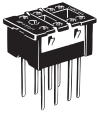

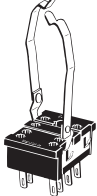
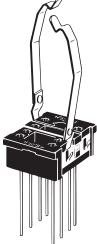

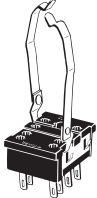
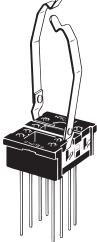
MYK

MYQ-MYH

Common Options (Order Separately)

Common Precautions

Back-mounting Sockets

| Applicable relay model*1 | Terminal Type | Hold-down Clips | Appearance | Mode |
|-----------------------------|--|--|---|------------|
| MY2□ MY2□(S) MY2Z□-CR | Solder terminals | Accessories (Order Separately) * MY2Z□-CR: PYC-1 Other than those above: PYC-P*3 |  | PY08 |
| | Wrapping terminals Terminal length: 25 mm | |  | PY08QN |
| | Wrapping terminals Terminal length: 20 mm | |  | PY08QN2 |
| | PCB terminals | |  | PY08-02 |
| MY2□ MY2□(S) | Solder terminals | With Hold-down Clips*2 |  | PY08-Y1 |
| | Wrapping terminals Terminal length: 25 mm | |  | PY08QN-Y1 |
| | Wrapping terminals Terminal length: 20 mm | |  | PY08QN2-Y1 |
| MY2Z□-CR | Solder terminals | |  | PY08-Y3 |
| | Wrapping terminals Terminal length: 25 mm | |  | PY08QN-Y3 |

*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.
*3. If an MY□(S) Relay with a Latching Lever is used in combination with a PY□□-02 Socket for Relays with PCB Terminals and a PYC-P Mounting Bracket, the lever will not operate.

*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/MYK/MYQ-MYH

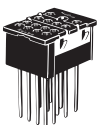

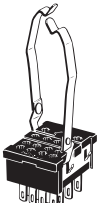
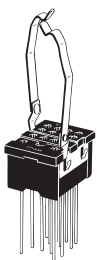
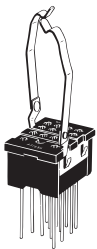
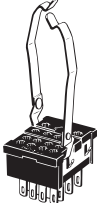
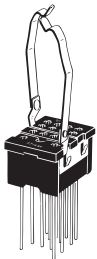
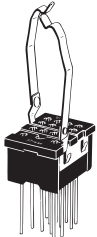
MY

MYK

MYQ-MYH

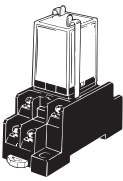

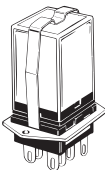
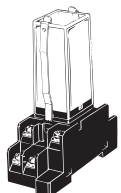

Common Options (Order Separately)

Common Precautions

| Applicable relay model*1 | Terminal Type | Hold-down Clips | Appearance | Mode |
|---|--|--|---|------------|
| MY4□ MY4□(S) MY4□H MYQ4□ MY4Z□-CBG-CR MY2K | Wrapping terminals Terminal length: 20 mm | Accessories (Order Separately) * MY4Z□-CBG-CR: PYC-1 Other than those above: PYC-P*3 |  | PY14QN2 |
| | PCB terminals | |  | PY14-02 |
| MY4□ MY4□(S) MY4□H MYQ4□ MY2K | Solder terminals | With Hold-down Clips*2 |  | PY14-Y1 |
| | Wrapping terminals Terminal length: 25 mm | |  | PY14QN-Y1 |
| | Wrapping terminals Terminal length: 20 mm | |  | PY14QN2-Y1 |
| MY4Z□-CBG-CR | Solder terminals | |  | PY14-Y3 |
| | Wrapping terminals Terminal length: 25 mm | |  | PY14QN-Y3 |
| | Wrapping terminals Terminal length: 20 mm | |  | PY14QN2-Y3 |

*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.
 *3. If an MY□(S) Relay with a Latching Lever is used in combination with a PY□□-02 Socket for Relays with PCB Terminals and a PYC-P Mounting Bracket, the lever will not operate.

Hold-down Clip

| Appearance*1 | Model*2 | Weight*3 | Application |
|---|---------|----------------|---|
|  | PYC-A1 | Approx. 0.54 g | For connecting relays and sockets |
| | PYC-E1 | Approx. 0.6 g | |
|  | PYC-P | Approx. 1.4 g | |
|  | PYC-S | Approx. 1.8 g | For connecting sockets, socket mounting plates, and relays |
|  | Y92H-3 | Approx. 0.7 g | For connecting models with built-in CR circuit for coil surge absorption (MY2Z□-CR) and sockets |
|  | PYC-1 | Approx. 6 g | |

*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.

MY

MYK

MYQ-MYH

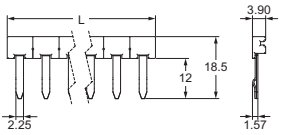
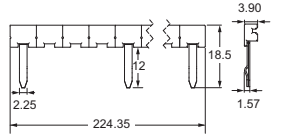
Common Options (Order Separately)

Common Precautions

●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 | L (Length) | Insulation color | Model*1 |
|-------------------------------|---------|-------------------------------------|---|-----------------|------------|----------------------------------|----------------|
| PYF-08-PU(-L) PYF-14PU(-L) | 7.75 mm | Bridging contact terminals (common) |  | 2 | 15.1 | Red (R) Blue (S) Yellow(Y) | PYDN-7.75-020□ |
| | | | | 3 | 22.85 | | PYDN-7.75-030□ |
| | | | | 4 | 30.6 | | PYDN-7.75-040□ |
| | | | | 20 | 154.6 | | PYDN-7.75-200□ |
| | 31.0 mm | For Coil terminals |  | 8 | 224.35 | | PYDN-31.0-080□ |

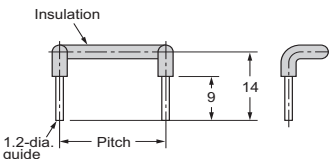
*1. Replace the box (□) in the model number with the code for the covering color. □Color selection: R = Red, S = Blue, Y = Yellow

Labels

| Applicable sockets | Model |
|-------------------------------|-------------------------------------|
| PYF-08-PU(-L) PYF-14PU(-L) | XW5Z-P4.0LB1 (1 sheet/60 pieces) |

For Screwless Terminal Sockets (PYF08S/PYF14S)

Short Bars

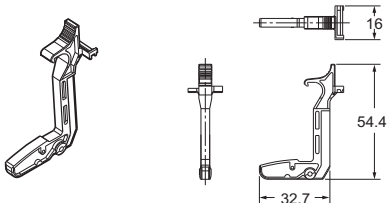
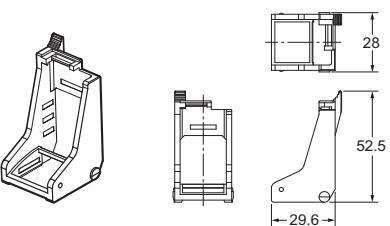
| Applicable sockets | Pitch | Application | Shape/external dimensions | Number of poles | Insulation color | Model*1 |
|--------------------|---------|------------------------------------|---|-----------------|---------------------|----------------------------|
| PYF08S | 19.7 mm | For bridging coils between sockets |  | 2 | Red (R) Blue (B) | PYDM-08S□ (50 pcs./bag) |
| PYF14S | 27.5 mm | | | 2 | | PYDM-14S□ (50 pcs./bag) |

*1. Replace the box (□) in the model number with the code for the covering color. □Color selection: R = Red, B = Blue

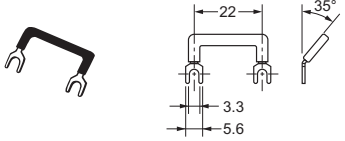
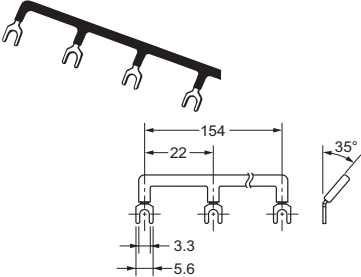
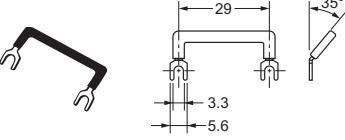
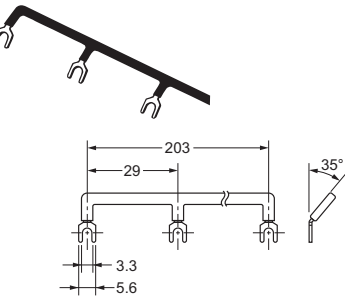
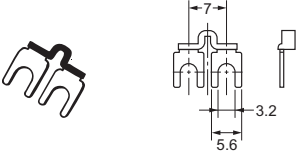
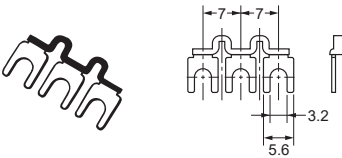
Labels

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

Release Levers

| Applicable sockets | Shape/external dimensions | Model |
|--------------------|---|----------|
| PYF08S |  | PYCM-08S |
| PYF14S |  | PYCM-14S |

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

| Applicable sockets | Pitch | Application | Shape/external dimensions | Number of poles | Insulation color | Model*1 |
|--------------------|-------|-----------------------------------|---|-----------------|----------------------------------|----------------------------|
| PYFZ-08 | 22 mm | For bridging adjacent sockets |  | 2 | B (Black) S (Blue) R (Red) | PYD-025B□ (10 pcs./bag) |
| | | |  | 8 | | PYD-085B□ (10 pcs./bag) |
| PYFZ-14 | 29 mm | For bridging adjacent sockets |  | 2 | | PYD-026B□ (10 pcs./bag) |
| | | |  | 8 | | PYD-086B□ (10 pcs./bag) |
| | 7 mm | For bridging with the same socket |  | 2 | B (Black) Y (Yellow) | PYD-020B□ (50 pcs./bag) |
| | | |  | 3 | | PYD-030B□ (10 pcs./bag) |

*1. Replace the box (□) in the model number with the code for the covering color.

MY

MYK


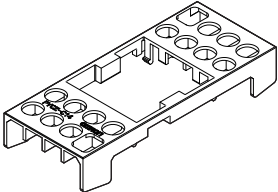
MYQ-MYH

Common Options (Order Separately)

Common Precautions

MY

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

| Applicable sockets | Appearance | Model |
|--------------------|---|-------------------------|
| PYFZ-08 |  | PYCZ-C08 (2 pcs/set) |
| PYFZ-14 |  | PYCZ-C14 (1 pcs/set) |

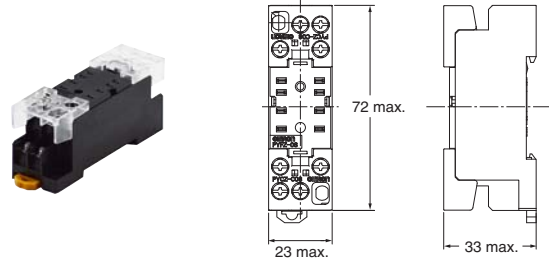
Note: 1. These covers cannot be used for PYF08A and PYF14A.
2. A short bar (optional) cannot be used attached to the upper section because it will interfere with the terminal cover.

MYK

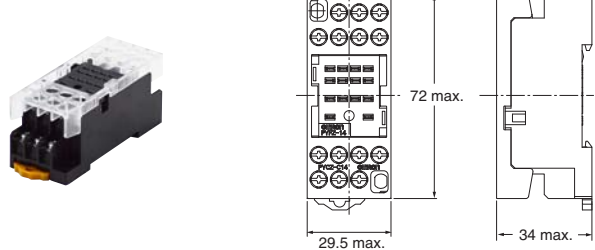
Dimensions with terminal cover

(Unit: mm)

PYCZ-C08


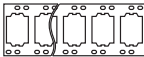
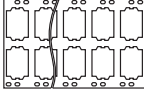


PYCZ-C14





MYQ-MYH

Socket Mounting Plates (For Back-connecting Socket PY□/Solder Terminals, PY□QN(2)/Wrapping Terminals)

| Applicable Sockets | | Socket Mounting Plates | | |
|---|--|---|-------------------|---------|
| Model | Models with hold-down clips | Appearance | Number of sockets | Model |
| PY08 PY08QN PY08QN2 PY11 PY11QN PY11QN2 PY14 PY14QN PY14QN2 | PY08-Y1, PY08-Y3 PY08QN-Y1, PY08QN-Y3 PY08QN2-Y1, PY08QN2-Y3 PY11-Y1 PY11QN-Y1 PY11QN2-Y1 PY14-Y1, PY14-Y3 PY14QN-Y1, PY14QN-Y3 PY14QN2-Y1, PY14QN2-Y3 |  | 1 | PYP-1 |
| | |  | 18 | PYP-18* |
| | |  | 36 | PYP-36* |

*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 | PFP-50N |
| End Plate* |  | PFP-M |
| Spacer |  | PFP-S |

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

Common Options (Order Separately)

Common Precautions

Ratings and Specifications

Characteristics

Sockets

| Model | Connection | Number of pins | Terminal Type | Ambient operating temperature | Ambient operating humidity | Rated carry current | Dielectric strength*4 | | | Insulation resistance *1*4 | Weight | | | | | | | | | | |
|------------|--|----------------|--|--|----------------------------|---------------------|--|---|------------------------------------|----------------------------|---------------------|---------------------|-------------|-------------|--|--|--|--|--|--|--|
| | | | | | | | Between contact terminals of same polarity | Between contact terminals of different polarity | Between coil and contact terminals | | | | | | | | | | | | |
| PYF-08-PU | Front | 8 | Push-In Plus Terminal | -40 to 70°C | 5% to 85% | 10 A*2 | 2,000 VAC for 1 min | 2,000 VAC for 1 min | 2,000 VAC for 1 min | 1,000 MΩ min. (500 VAC) | Approx. 80 g | | | | | | | | | | |
| PYF08S | | | Screwless terminal | -55 to 70°C | | | 10 A | 2,250 VAC for 1 min | 2,250 VAC for 1 min | | 2,250 VAC for 1 min | Approx. 46 g | | | | | | | | | |
| PYFZ-08 | | | Screw terminal | | | 2,250 VAC for 1 min | | 2,250 VAC for 1 min | 2,250 VAC for 1 min | | Approx. 32 g | | | | | | | | | | |
| PYFZ-08-E | | | | | | 2,250 VAC for 1 min | | 2,250 VAC for 1 min | 2,250 VAC for 1 min | | Approx. 32 g | | | | | | | | | | |
| PYF08M | | | 5 A | | | 1,500 VAC for 1 min | | 1,500 VAC for 1 min | 1,500 VAC for 1 min | | Approx. 26 g | | | | | | | | | | |
| PYF11A | | 11 | Screw terminal | | | 5 A | 2,000 VAC for 1 min | 2,000 VAC for 1 min | 2,000 VAC for 1 min | | Approx. 43 g | | | | | | | | | | |
| PYF-14-PU | | 14 | Push-In Plus Terminal | -40 to 70°C | | 6 A | 2,000 VAC for 1 min | 2,000 VAC for 1 min | 2,000 VAC for 1 min | | Approx. 87 g | | | | | | | | | | |
| PYF14S | | | Screwless terminal | 5 A | | 2,000 VAC for 1 min | 2,000 VAC for 1 min | 2,000 VAC for 1 min | Approx. 62 g | | | | | | | | | | | | |
| PYFZ-14 | | | Screw terminal | 6 A | | 2,250 VAC for 1 min | 2,250 VAC for 1 min | 2,250 VAC for 1 min | Approx. 50 g | | | | | | | | | | | | |
| PYFZ-14-E | | | | 2,250 VAC for 1 min | | 2,250 VAC for 1 min | 2,250 VAC for 1 min | Approx. 50 g | | | | | | | | | | | | | |
| PYF14T | | | 3 A | 2,000 VAC for 1 min | | 2,000 VAC for 1 min | 2,000 VAC for 1 min | Approx. 53 g | | | | | | | | | | | | | |
| PY08 | | Back | 8 | Solder terminals | | -55 to 70°C | 5% to 85% | 7 A | 1,500 VAC for 1 min | | 1,500 VAC for 1 min | 1,500 VAC for 1 min | 100 MΩ min. | Approx. 8 g | | | | | | | |
| PY08-Y1 | | | | Wrapping terminals (Terminal length: 25 mm) | | | | | | | | | | Approx. 9 g | | | | | | | |
| PY08-Y3 | | | | | | | | | | | | | | Approx. 9 g | | | | | | | |
| PY08QN | Approx. 12 g | | | | | | | | | | | | | | | | | | | | |
| PY08QN-Y1 | Wrapping terminals (Terminal length: 20 mm) | | | | | | | | | Approx. 13 g | | | | | | | | | | | |
| PY08QN-Y3 | | | | | | | | | | Approx. 13 g | | | | | | | | | | | |
| PY08QN2 | Approx. 11 g | | | | | | | | | | | | | | | | | | | | |
| PY08QN2-Y1 | PCB terminals | | | | | | | | | Approx. 12 g | | | | | | | | | | | |
| PY08QN2-Y3 | | | | | | | | | | Approx. 12 g | | | | | | | | | | | |
| PY08-02 | | | | Approx. 7 g | | | | | | | | | | | | | | | | | |
| PY11 | 11 | | Solder terminals | 5 A | 1,500 VAC for 1 min | | | 1,500 VAC for 1 min | 1,500 VAC for 1 min | 100 MΩ min. | Approx. 9 g | | | | | | | | | | |
| PY11-Y1 | | | Wrapping terminals (Terminal length: 25 mm) | | | | | | | | Approx. 10 g | | | | | | | | | | |
| PY11QN | | | | | | | | | | | Approx. 13 g | | | | | | | | | | |
| PY11QN-Y1 | | | Wrapping terminals (Terminal length: 20 mm) | | | | | | | | Approx. 14 g | | | | | | | | | | |
| PY11QN2 | | | | | | | | | | | Approx. 12 g | | | | | | | | | | |
| PY11QN2-Y1 | | | Approx. 13 g | | | | | | | | | | | | | | | | | | |
| PY11-02 | | | PCB terminals | | | | | | | | Approx. 8 g | | | | | | | | | | |
| PY14 | 14 | | Solder terminals | 3 A | 1,500 VAC for 1 min | | | 1,500 VAC for 1 min | 1,500 VAC for 1 min | 100 MΩ min. | Approx. 10 g | | | | | | | | | | |
| PY14-Y1 | | | Wrapping terminals (Terminal length: 25 mm) | | | | | | | | Approx. 11 g | | | | | | | | | | |
| PY14-Y3 | | | | | | | | | | | Approx. 11 g | | | | | | | | | | |
| PY14QN | | | | | | | | | | | Approx. 14 g | | | | | | | | | | |
| PY14QN-Y1 | | | Wrapping terminals (Terminal length: 20 mm) | | | | | | | | Approx. 15 g | | | | | | | | | | |
| PY14QN-Y3 | | | | | | | | | | | Approx. 15 g | | | | | | | | | | |
| PY14QN2 | | | Approx. 13 g | | | | | | | | | | | | | | | | | | |
| PY14QN2-Y1 | | | PCB terminals | | | | | | | | Approx. 14 g | | | | | | | | | | |
| PY14QN2-Y3 | | | | | | | | | | | Approx. 14 g | | | | | | | | | | |
| PY14-02 | | | Approx. 9 g | | | | | | | | | | | | | | | | | | |

*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°C or below. At an ambient temperature of 70°C, the value is 7 A.

*3. This model is a set including a socket and relay hold-down clips. This weight shown is the total including the socket and relay hold-down clips.

*4. The dielectric strength and insulation resistance values in the above table are for a single socket.

MY

MYK

MYQ-MYH

Common Options (Order Separately)

Common Precautions

Socket Accessories

●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□ | 20 A | -40 to 70°C | 5% to 85% |
| | | PYDN-7.75-030□ | | | |
| | | PYDN-7.75-040□ | | | |
| | | PYDN-7.75-200□ | | | |
| | PYFZ-08 | PYD-025B□ | 20 A (However, 18 A when 70°C) | -40 to 70°C (with no icing or condensation) | 45% to 85% (with no icing or condensation) |
| | | PYD-085B□ | | | |
| | PYFZ-14 | PYD-026B□ | | | |
| | | PYD-086B□ | | | |
| | | PYD-020B□ | | | |
| | | PYD-030B□ | | | |
| For Coil terminals | PYF-08-PU(-L) PYF-14-PU(-L) | PYDN-31.0-080□ | 20 A | -40 to 70°C | 5% to 85% |
| | PYF08S | PYDM-08S□ | 10 A | -40 to 70°C | 5% to 85% |
| | PYF14S | PYDM-14S□ | 10 A | -40 to 70°C | 5% to 85% |

Certified Standards

●CSA certification (File No. LR031928)

| Model | Ratings | Class number | Standard number |
|--------------|-------------|--------------|-----------------|
| PYF-08-PU | 10 A, 250 V | 3211 07 | CSA C22.2 No14 |
| PYF-14-PU | 6 A, 250 V* | | |
| PYF08S | 10 A, 250 V | | |
| PYF14S | 5 A, 250 V | | |
| PYFZ-08(-E) | 10 A, 250 V | | |
| PYFZ-14(-E) | 6 A, 250 V | | |
| PY□ PYF□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 | 10 A, 250 V | UL508 | SWIV2 | Recognition |
| PYF-14-PU | 6 A, 250 V* | | | |
| PYF08S PYF14S | 10 A, 250 V | | | |
| PYFZ-08(-E) | 10 A, 250 V | | | |
| PYFZ-14(-E) | 6 A, 250 V | | | |
| PY□ PYF□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.

●TÜV Rheinland certification

| Model | Ratings | Standard number | Certification No. |
|-------------|--------------|-----------------|-------------------|
| PYF-08-PU | 10 A, 250 V* | EN 61984 | R50327595 |
| PYF-14-PU | 6 A, 250 V | | R50405329 |
| PYFZ-08(-E) | 10 A, 250 V | | |
| PYFZ-14(-E) | 6 A, 250 V | | |

*Ratings are for an ambient temperature of 55°C or below. At an ambient temperature of 70°C, the value is 7 A.

●VDE certification

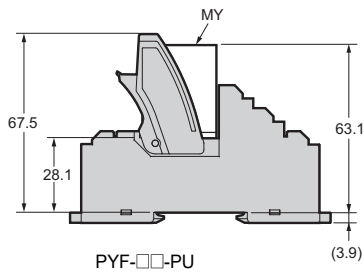
| Model | Standard number | Certification No. |
|-----------------|-------------------|-------------------|
| PYF08S PYF14 | VDE0627 (EN61984) | 40015509 |

Dimensions

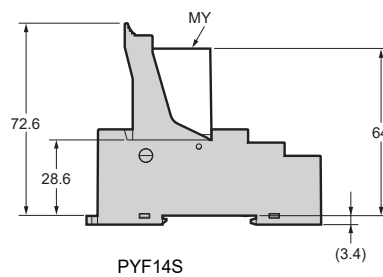
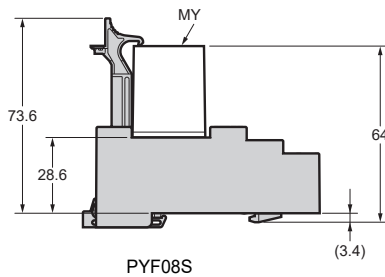
Height with Socket

●Front-connecting Sockets

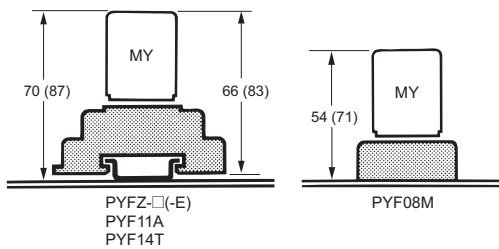
- Push-In Plus Terminal (PYF-□-PU)



- Screwless terminal (PYF08S, PYF14S)



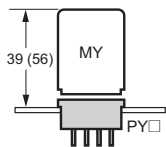
- Screw terminal (PYFZ-□(-E), PYF11A, PYF14T, PYF08M)



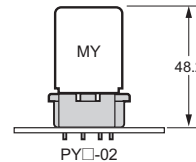
- Note:**
1. The PYF11A can be mounted on a track or with screws.
 2. The heights given in parentheses are the measurements for 53-mm-high Relays.
 3. Use the PYC-P Hold-down Clip for the PYF08M.

●Back-connecting Sockets

- Solder terminals/wrapping terminals (PY□)



- PCB terminals (PY□-02)



MY

MYK

MYQ-MYH

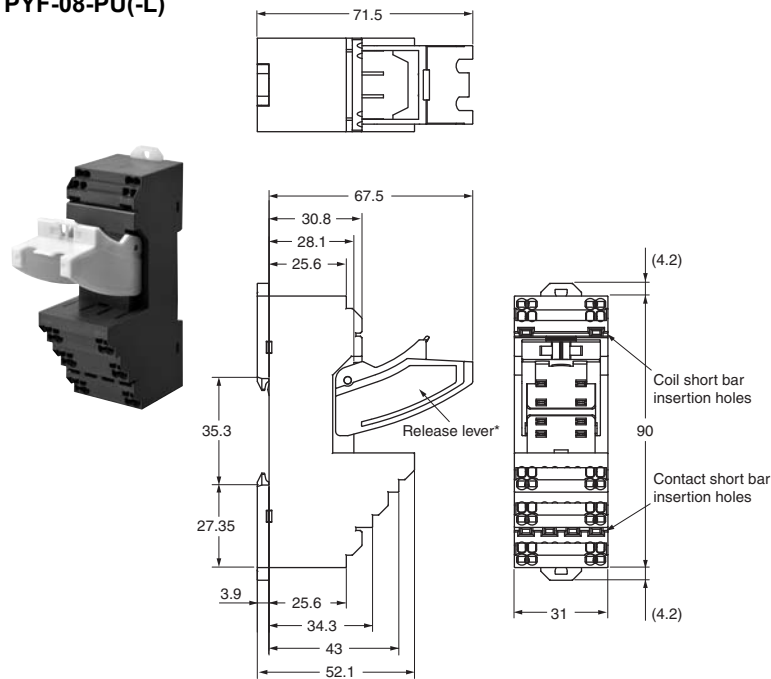
Common Options (Order Separately)

Common Precautions

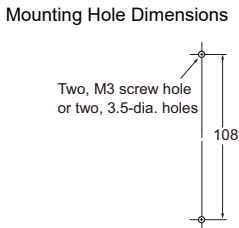
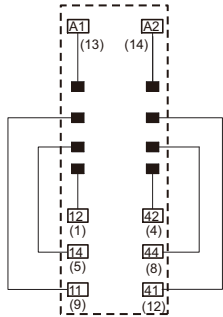
Front-connecting Sockets

●Push-In Plus Terminal

PYF-08-PU(-L)



Terminal Arrangement/Internal Connection Diagram (Top View)

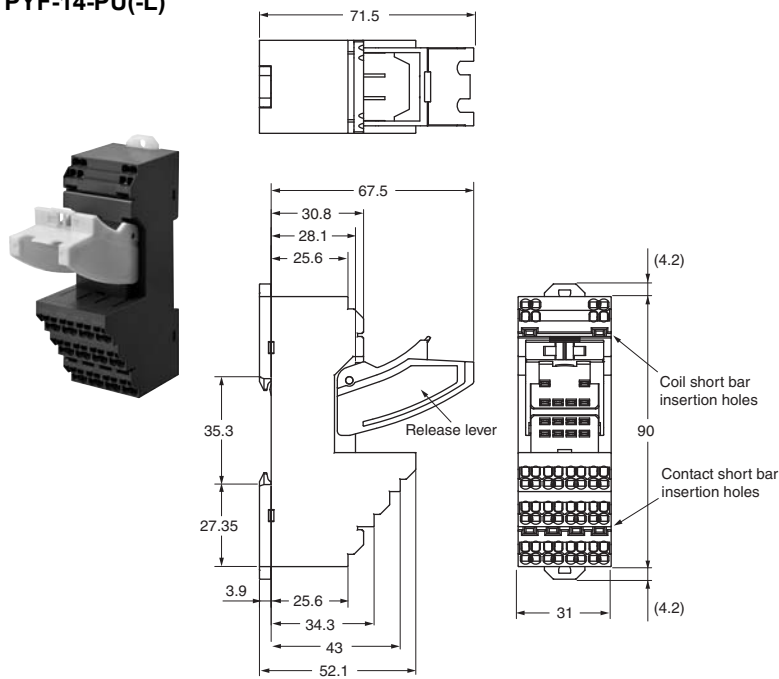


Note: Pull out the hooks to mount the Socket with screws.

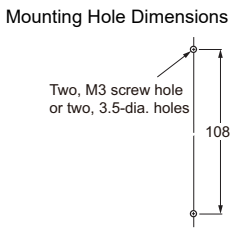
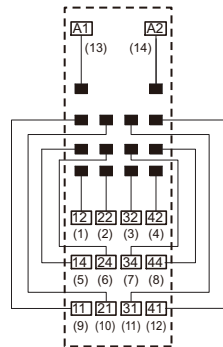
- Note:**
1. The numbers in parentheses are traditionally used terminal numbers.
 2. Insert the short bar into only the A1 or A2 side.
 3. Only the No. 11 and No. 41 terminals function as bridging contact terminals. The two insertion holes between the terminals are false terminals to allow for installation without having to fold out the short bar pins.

* The PYF-08-PU-L Sockets do not have release levers.

PYF-14-PU(-L)



Terminal Arrangement/Internal Connection Diagram (Top View)



Note: Pull out the hooks to mount the Socket with screws.

- Note:**
1. The numbers in parentheses are traditionally used terminal numbers.

* The PYF-14-PU-L Sockets do not have release levers.

MY

MYK

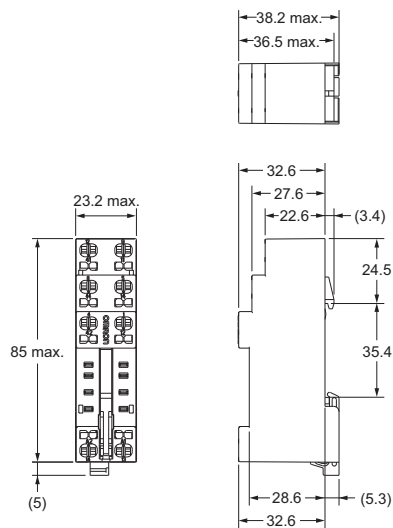
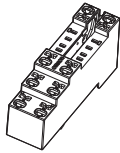
MYQ-MYH

Common Options (Order Separately)

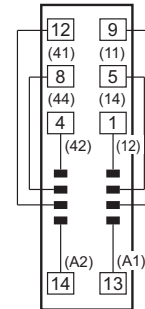
Common Precautions

● Screwless terminal

PYF08S



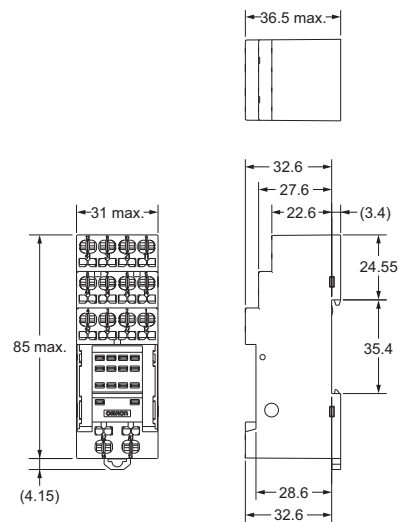
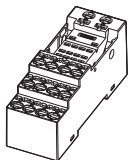
Terminal Arrangement/Internal Connection Diagram



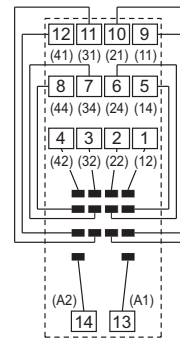
(Top View)

Note: The number shown in parentheses is the DIN standard.

PYF14S



Terminal Arrangement/Internal Connection Diagram



(Top View)

Note: The number shown in parentheses is the DIN standard.

MY

MYK

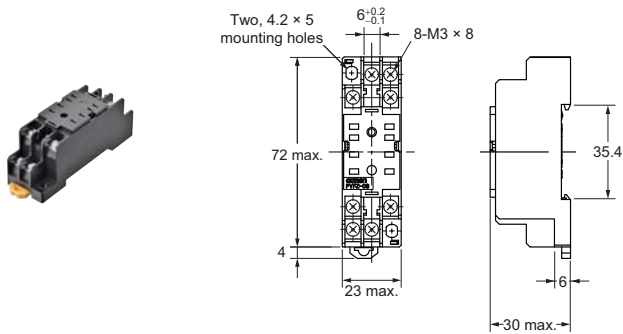
MYQ-MYH

Common Options (Order Separately)

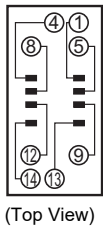
Common Precautions

Front-connecting Sockets
●Screw terminal

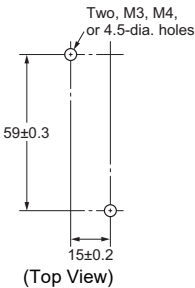
PYFZ-08



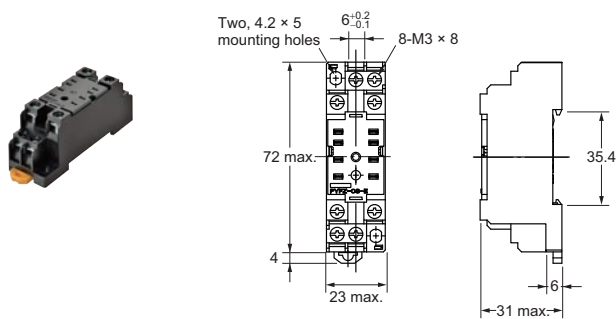
Terminal Arrangement/
Internal Connection Diagram



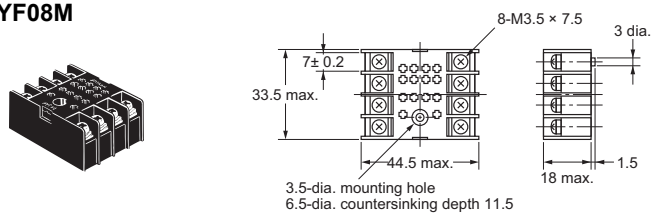
Mounting Hole Dimensions



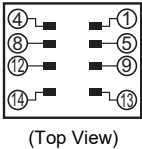
PYFZ-08-E
(Finger-protection structure)



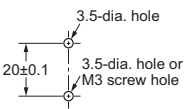
PYF08M



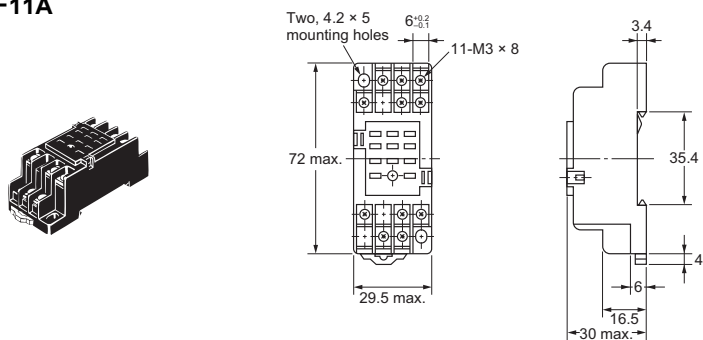
Terminal Arrangement/Internal
Connection Diagram



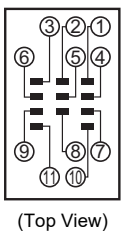
Mounting Hole Dimensions



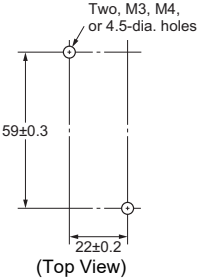
PYF11A



Terminal Arrangement/Internal
Connection Diagram



Mounting Hole Dimensions



Note: Track mounting is also possible.

MY

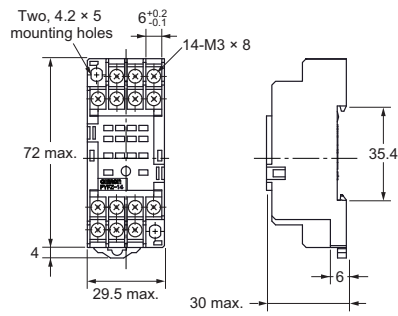
MYK

MYQ-MYH

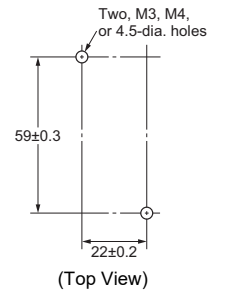
Common Options (Order Separately)

Common Precautions

PYFZ-14

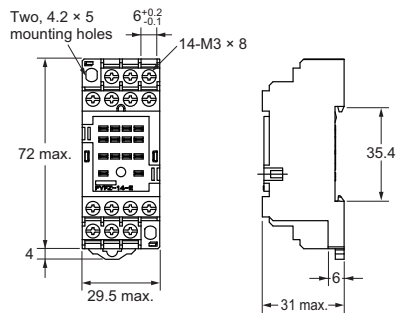


Mounting Hole Dimensions

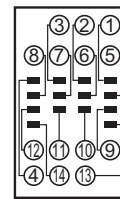


Note: Track mounting is also possible.

PYFZ-14-E
(Finger-protection structure)

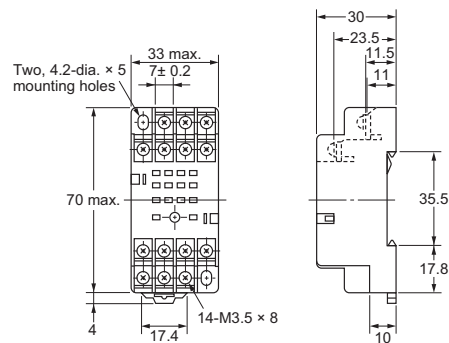
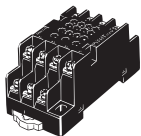


Terminal Arrangement/Internal Connection Diagram

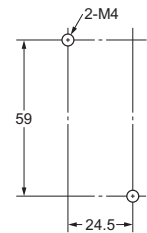


(Top View)

PYF14T



Mounting Hole Dimensions



MY

MYK

MYQ-MYH

Common Options (Order Separately)

Common Precautions

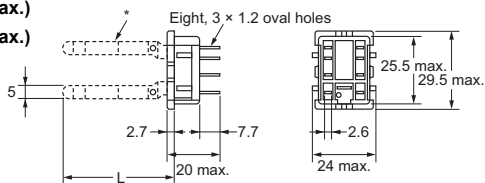
Back-connecting Socket

●Solder terminals

PY08

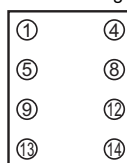
PY08-Y1 (L = 42 max.)

PY08-Y3 (L = 60 max.)



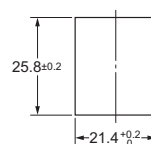
*PY08-Y□ includes the potion indicated by broken line.

Terminal Arrangement/Internal Connection Diagram



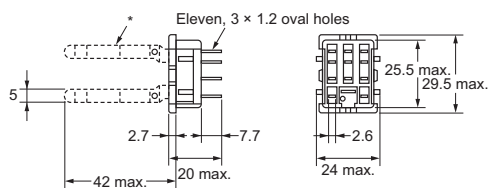
(Bottom View)

Mounting Hole Dimensions



PY11

PY11-Y1



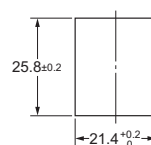
*PY11-Y1 includes the potion indicated by broken line.

Terminal Arrangement/Internal Connection Diagram



(Bottom View)

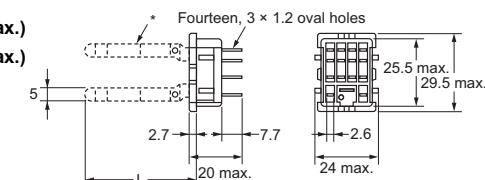
Mounting Hole Dimensions



PY14

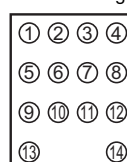
PY14-Y1 (L = 42 max.)

PY14-Y3 (L = 60 max.)



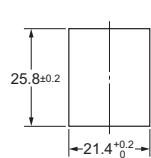
*PY14-Y□ includes the potion indicated by broken line.

Terminal Arrangement/Internal Connection Diagram



(Bottom View)

Mounting Hole Dimensions



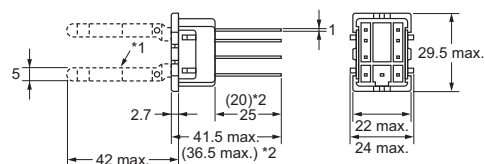
●Wrapping terminals

PY08QN

PY08QN2

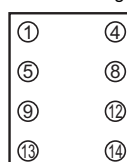
PY08QN-Y1

PY08QN2-Y1



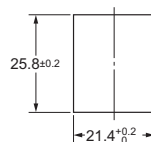
*1. PY08QN(2)-Y1 includes the potion indicated by broken line.
*2. Dimensions in parentheses are for PY08QN2(-Y1).

Terminal Arrangement/Internal Connection Diagram



(Bottom View)

Mounting Hole Dimensions

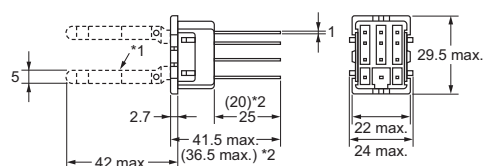
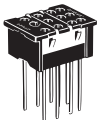


PY11QN

PY11QN2

PY11QN-Y1

PY11QN2-Y1



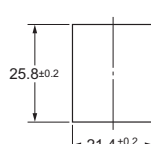
*1. PY11QN(2)-Y1 includes the potion indicated by broken line.
*2. Dimensions in parentheses are for PY11QN2(-Y1).

Terminal Arrangement/Internal Connection Diagram



(Bottom View)

Mounting Hole Dimensions



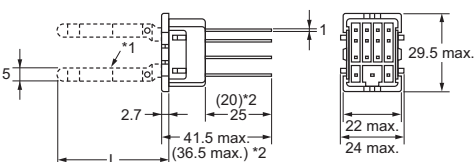
PY14QN/PY14QN2

PY14QN-Y1 (L = 42 max.)

PY14QN2-Y1 (L = 42 max.)

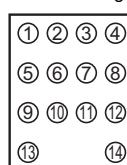
PY14QN-Y3 (L = 60 max.)

PY14QN2-Y3 (L = 60 max.)



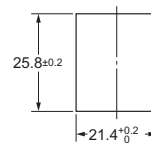
*1. PY14QN-Y□ and PY14QN2-Y□ include the potion indicated by broken line.
*2. Dimensions in parentheses are for PY14QN2(-Y□).

Terminal Arrangement/Internal Connection Diagram



(Bottom View)

Mounting Hole Dimensions



MY

MYK

MYQ-MYH

Common Options (Order Separately)

Common Precautions

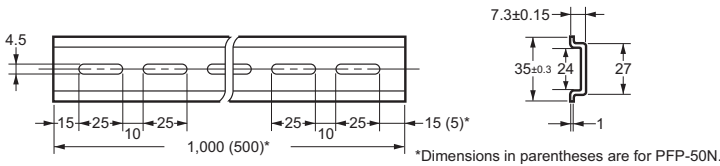
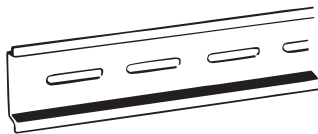
MY

●Accessories for DIN Track Mounting

DIN Tracks

PFP-100N

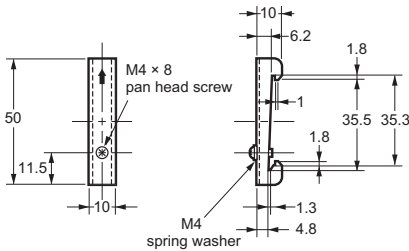
PFP-50N



MYK

End Plate

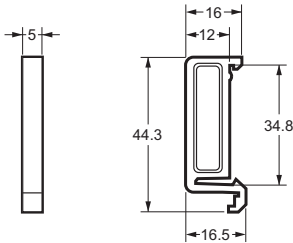
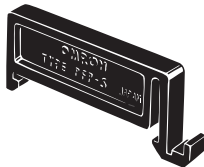
PFP-M



MYQ-MYH

Spacer

PFP-S



Common Options (Order Separately)



Common Precautions

Safety Precautions




Relays

Be sure to read the **Safety Precautions for All Relays** in the website at the following URL:
http://www.ia.omron.com/product/cautions/36/safety_precautions.html

Warning Indications

| | |
|---|---|
|  | WARNING Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury, or may result in serious injury or death. Additionally there may be significant property damage. |
|  | CAUTION Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury or in property damage. |
| Precautions for Correct Use | Supplementary comments on what to do or avoid doing, to prevent failure to operate, malfunction, or undesirable effects on product performance. |

Meaning of Product Safety Symbols

| | |
|---|---|
|  | <ul style="list-style-type: none"> ● General caution Indicates the possibility of non-specified general cautions, warnings, and danger. |
|  | <ul style="list-style-type: none"> ● Electric shock caution Used to warn of the risk of electric shock under specific conditions. |
|  | <ul style="list-style-type: none"> ● High temperature caution Indicates the possibility of injuries by high temperature under specific conditions. |

CAUTION

Do not touch terminal sections (i.e., current-carrying parts) while power is being supplied.
 Also, always mount the terminal cover.
 Touching current-carrying parts may result in electric shock.



Do not touch the main unit while power is being supplied or immediately after the power supply has been turned OFF. The main unit will be extremely hot and may result in burns.



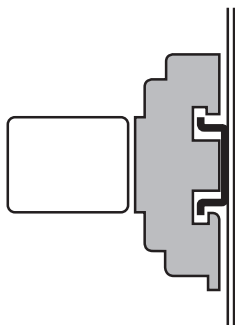
Precautions for Correct Use

● Handling

For models with a built-in operation indicator, models with a built-in diode, or high-sensitivity models, check the coil polarity when wiring and wire all connections correctly (DC operation).

● Installation

- There is no specifically required installation orientation, but make sure that the Relays are installed so that the contacts are not subjected to vibration or shock in their movement direction.



- Use two M3 screws to mount the case-surface mounting (MY□F) and tighten them securely. (Appropriate tightening torque: 0.98 N·m)

● Relay Replacement

To replace the Relay, turn OFF the power supply to the load and Relay coil sides to prevent unintended operation and possible electrical shock.

● Applicable Sockets

Use only combinations of OMRON Relays and Sockets.

● Attaching and Removing Relay Hold-down Clips

When you attach a Hold-down Clip to or remove it from a Socket, wear gloves or take other measures to prevent injuring your fingers on the Hold-down Clip.

● Compliance with Electrical Appliances and Material Safety Act

- MY standard models comply with the Electrical Appliances and Material Safety Act.
- Always protect any exposed terminals (including Socket terminals) after wiring with insulation tubes or resin coating on PCBs.

| Model | Number of poles | Operating Coil ratings | Contact ratings |
|-------|-----------------|------------------------------|-----------------|
| MY | 1 2 3 | 6 to 220 VAC 6 to 120 VDC | 5 A, 200 VAC |
| | 4* | 6 to 110 VAC 6 to 120 VDC | 3 A, 115 VAC |

*Under the Electrical Appliances and Material Safety Act, do not use the Type 4 model with a voltage that exceeds 150 VAC. However, this restriction can be ignored if compliance with the Electrical Appliances and Material Safety Act is not required.

● Miniature Power Relays: MY

Latching Levers

- Turn OFF the power supply when operating the latching lever. After you use the latching lever always return it to its original state.
- Do not use the latching lever as a switch.
- The latching lever can be used for 100 operations minimum.

About the Built-in Diode and CR Elements

The diode or CR element that are built into the Relay are designed to absorb the reverse voltage from the Relay coil. If a large surge in voltage is applied to the diode or CR element from an external source, the element will be destroyed.

If there is the possibility of large voltage surges that could be applied to the elements from an external source, take any necessary surge absorption measures.

Using Microloads with Infrequent Operation

If any standard MY-series Relays (e.g., MY4) are used infrequently to switch microloads, the contacts may become unstable and eventually result in failure contact. In this case, we recommend using the MY4Z-CBG Series, which has high contact reliability for microloads.

MY

MYK

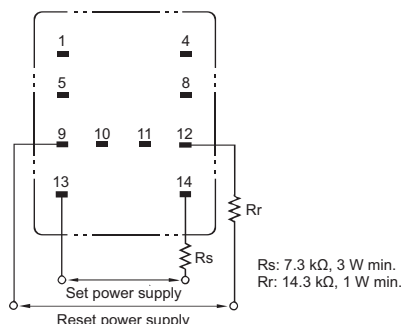
MYQ-MYH

Common Options (Order Separately)

Common Precautions

●Latching Relays (MYK)

- For applications that use a 200 VAC power supply, connect external resistors R_s and R_r to a 100 VAC Relay.



- Do not apply a voltage to the set and reset coils at the same time. If you apply the rated voltage to both coils simultaneously, the Relay will be set.
- The minimum pulse width in the performance column is the value for the following measurement conditions: an ambient temperature of 23°C with the rated operating voltage applied to the coil. Satisfactory performance may be unattainable due to decreased holding strength caused by changes in circuit conditions and ambient operating temperature, or due to changes caused by product aging. During actual use, apply a pulse width of the rated operating voltage suitable for the actual load to the coil and reset this at least once per year as a means of dealing with product aging.
- If the Relay is used in an environment with strong magnetic fields, the surrounding magnetic field can demagnetize the magnetic body and cause unintended operation. Therefore, do not use these Relays in environments with strong magnetic fields.

●Hermetically Sealed Relays (MYH)

Relays with PCB Terminals

When a Relay with PCB Terminals is mounted, a short-circuit can occur depending on the design of the PCB pattern because the Relay itself is made out of metal.

Solution

Refer to the external dimensions of the Relay and design the PCB pattern with enough space to prevent this problem.

Application Environments

Humid environments can cause insulation problems, which may result in short-circuiting or unintended operation.

Solution

Do not use these Relays in any environment where the Relay will come into contact with water vapor, condensation, or water droplets. This can reduce the surface tension of the terminal insulating beads and cause short-circuiting or unintended operation due to insulation problem.

Optional Sockets (Order Separately)

Be sure to read the *Safety Precautions for All Relays* in the website at the following URL:
http://www.ia.omron.com/product/cautions/36/safety_precautions.html

Front-connecting Sockets

●Push-In Plus Terminal Sockets (PYF-08-PU(-L), PYF-14-PU(-L))

Refer to *Safety Precautions* on the Push-In Plus Terminal Block Socket PYF-□□-PU/P2RF-□□-PU Data Sheet (Catalog No. SGFR-218).

●Screwless Terminal Sockets (PYF08S, PYF14S)

Refer to *Safety Precautions* on the Screwless Terminal Socket PYF□□S/P2RF-□□S Data Sheet (Catalog No. CDRR-011).

●Screw Terminal Sockets (PYFZ-08(-E), PYF08M, PYF11A, PYFZ-14(-E), PYF-14T)

Be sure to read the *Safety Precautions for All Relays*, 4-2-1 *Panel-mounting Sockets* and 4-2-2 *Relay Removal Direction* of the website at the following URL: http://www.ia.omron.com/product/cautions/36/safety_precautions.html

- Use the following tightening torque for screws during wiring.
- Use the following wire diameters as a guide for wiring. (Select the appropriate wire diameter for the current used.)

| Model | Tightening torque |
|--|--|
| PYFZ-08 PYFZ-14 PYF11A PYF14T | 0.78 to 1.18 N·m |
| PYFZ-08-E PYFZ-14-E | 0.59 to 0.88 N·m * Use a No. 1 screwdriver. |

| Model | Recommended wire diameter (mm ²) | |
|--|--|---|
| PYFZ-08 PYFZ-14 PYF11A PYF14T | Stranded wire | 0.75 to 2.5 mm ² AWG 18 to 14 |
| | Solid wire | 0.75 to 1.5 mm ² AWG 18 to 16 |
| PYFZ-08-E PYFZ-14-E | Stranded wire | 0.75 to 2.5 mm ² AWG 18 to 14 |
| | Solid wire | 0.75 to 1.5 mm ² AWG 18 to 16 |

Back-connecting Socket

●Solder Terminal Sockets (PY08(-Y1/-Y3), PY11(-Y1/-Y3))

●Wrapping Terminals Sockets (PY08QN(-Y1/-Y3), PY08QN2(-Y1/-Y3), PY11QN(-Y1), PY11QN2(-Y1))

●PCB Terminal Sockets (PY08-02, PY11-02)

Be sure to read the *Safety Precautions for All Relays*, 4-2-3 *Back-connecting Sockets* and 4-2-5 *Terminal Soldering* of the website at the following URL: http://www.ia.omron.com/product/cautions/36/safety_precautions.html

MY

MYK

MYQ-MYH

Common Options (Order Separately)

Common Precautions

MEMO

Terms and Conditions Agreement

Read and understand this catalog.

Please read and understand this catalog before purchasing the products. Please consult your OMRON representative if you have any questions or comments.

Warranties.

- (a) Exclusive Warranty. Omron's exclusive warranty is that the Products will be free from defects in materials and workmanship for a period of twelve months from the date of sale by Omron (or such other period expressed in writing by Omron). Omron disclaims all other warranties, express or implied.
- (b) Limitations. OMRON MAKES NO WARRANTY OR REPRESENTATION, EXPRESS OR IMPLIED, ABOUT NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OF THE PRODUCTS. BUYER ACKNOWLEDGES THAT IT ALONE HAS DETERMINED THAT THE PRODUCTS WILL SUITABLY MEET THE REQUIREMENTS OF THEIR INTENDED USE.

Omron further disclaims all warranties and responsibility of any type for claims or expenses based on infringement by the Products or otherwise of any intellectual property right. (c) Buyer Remedy. Omron's sole obligation hereunder shall be, at Omron's election, to (i) replace (in the form originally shipped with Buyer responsible for labor charges for removal or replacement thereof) the non-complying Product, (ii) repair the non-complying Product, or (iii) repay or credit Buyer an amount equal to the purchase price of the non-complying Product; provided that in no event shall Omron be responsible for warranty, repair, indemnity or any other claims or expenses regarding the Products unless Omron's analysis confirms that the Products were properly handled, stored, installed and maintained and not subject to contamination, abuse, misuse or inappropriate modification. Return of any Products by Buyer must be approved in writing by Omron before shipment. Omron Companies shall not be liable for the suitability or unsuitability or the results from the use of Products in combination with any electrical or electronic components, circuits, system assemblies or any other materials or substances or environments. Any advice, recommendations or information given orally or in writing, are not to be construed as an amendment or addition to the above warranty.

See <http://www.omron.com/global/> or contact your Omron representative for published information.

Limitation on Liability: Etc.

OMRON COMPANIES SHALL NOT BE LIABLE FOR SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, LOSS OF PROFITS OR PRODUCTION OR COMMERCIAL LOSS IN ANY WAY CONNECTED WITH THE PRODUCTS, WHETHER SUCH CLAIM IS BASED IN CONTRACT, WARRANTY, NEGLIGENCE OR STRICT LIABILITY.

Further, in no event shall liability of Omron Companies exceed the individual price of the Product on which liability is asserted.

Suitability of Use.

Omron Companies shall not be responsible for conformity with any standards, codes or regulations which apply to the combination of the Product in the Buyer's application or use of the Product. At Buyer's request, Omron will provide applicable third party certification documents identifying ratings and limitations of use which apply to the Product. This information by itself is not sufficient for a complete determination of the suitability of the Product in combination with the end product, machine, system, or other application or use. Buyer shall be solely responsible for determining appropriateness of the particular Product with respect to Buyer's application, product or system. Buyer shall take application responsibility in all cases.

NEVER USE THE PRODUCT FOR AN APPLICATION INVOLVING SERIOUS RISK TO LIFE OR PROPERTY OR IN LARGE QUANTITIES WITHOUT ENSURING THAT THE SYSTEM AS A WHOLE HAS BEEN DESIGNED TO ADDRESS THE RISKS, AND THAT THE OMRON PRODUCT(S) IS PROPERLY RATED AND INSTALLED FOR THE INTENDED USE WITHIN THE OVERALL EQUIPMENT OR SYSTEM.

Programmable Products.

Omron Companies shall not be responsible for the user's programming of a programmable Product, or any consequence thereof.

Performance Data.

Data presented in Omron Company websites, catalogs and other materials is provided as a guide for the user in determining suitability and does not constitute a warranty. It may represent the result of Omron's test conditions, and the user must correlate it to actual application requirements. Actual performance is subject to the Omron's Warranty and Limitations of Liability.

Change in Specifications.

Product specifications and accessories may be changed at any time based on improvements and other reasons. It is our practice to change part numbers when published ratings or features are changed, or when significant construction changes are made. However, some specifications of the Product may be changed without any notice. When in doubt, special part numbers may be assigned to fix or establish key specifications for your application. Please consult with your Omron's representative at any time to confirm actual specifications of purchased Product.

Errors and Omissions.

Information presented by Omron Companies has been checked and is believed to be accurate; however, no responsibility is assumed for clerical, typographical or proofreading errors or omissions.

Note: Do not use this document to operate the Unit.

OMRON Corporation Industrial Automation Company

Kyoto, JAPAN

Contact : www.ia.omron.com

Regional Headquarters

OMRON EUROPE B.V.

Wegalaan 67-69, 2132 JD Hoofddorp
The Netherlands
Tel: (31) 2356-81-300 Fax: (31) 2356-81-388

OMRON ASIA PACIFIC PTE. LTD.

438B Alexandra Road, #08-01/02 Alexandra
Technopark, Singapore 119968
Tel: (65) 6835-3011 Fax: (65) 6835-3011

OMRON ELECTRONICS LLC

2895 Greenspoint Parkway, Suite 200
Hoffman Estates, IL 60169 U.S.A.
Tel: (1) 847-843-7900 Fax: (1) 847-843-7787

OMRON (CHINA) CO., LTD.

Room 2211, Bank of China Tower,
200 Yin Cheng Zhong Road,
PuDong New Area, Shanghai, 200120, China
Tel: (86) 21-6023-0333 Fax: (86) 21-5037-2388

Authorized Distributor:

©OMRON Corporation 2018-2025 All Rights Reserved.
In the interest of product improvement,
specifications are subject to change without notice.

CSM_10_23

Cat. No. J219-E1-22 0525 (0618)