OMRON

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Miniature Power Relays

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 54 to 55 and Safety Precautions for All Relays.







MY

MYK

MYQ·MYH







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 24 |
| MYQ/MYH Miniature Power Sealed Relays | From page 29 |

Common Information

| Common Options (Order Separately) | From page 35 |
|-----------------------------------|--------------|
| Common Safety Precautions | From page 54 |

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Model List

Miniature Power Relays: MY

| | | | | Plug-in terminals | | | PCB terminals | Case-surface |
|----|---|-----------------------------|---------------------|--------------------------|-----------|---------------------|---------------|--------------|
| 2 | | | L _{TT} | With operation indicator | | | mounting | |
| MΥ | Classification | Number of poles Contacts | | | | With latching lever | Г | |
| | | | Single | MY2 | MY2N | MY2IN(S) | MY2-02 | MY2F |
| | Other dead me dela | 2 | Bifurcated | MY2Z | MY2ZN | | | |
| | Standard models (compliant with | 3 | Single | МҮЗ | MY3N | | MY3-02 | MY3F |
| | Electrical Appliances | | Single | MY4 | MY4N | MY4IN(S) | MY4-02 | MY4F |
| | and Material Safety Act) | | Bifurcated | MY4Z | MY4ZN | MY4ZIN(S) | MY4Z-02 | MY4ZF |
| | | | Crossbar bifurcated | MY4Z-CBG | MY4ZN-CBG | | | |
| | Models with built-in | 2 | Single | MY2-D | MY2N-D2 | MY2IN-D2(S) | | |
| | diode for coil surge | | Bifurcated | MY2Z-D | MY2ZN-D2 | | | |
| | absorption (compliant with | 3 | Single | MY3-D | MY3N-D2 | | | |
| ΝY | Electrical Appliances | | Single | MY4-D | MY4N-D2 | MY4IN-D2(S) | | |
| ≤ | and Material Safety Act) | 4 | Bifurcated | MY4Z-D | MY4ZN-D2 | MY4ZIN-D2(S) | | |
| N | Models with built-in CR | • | Single | MY2-CR | MY2N-CR | | | |
| | circuit for coil surge absorption | 2 | Bifurcated | MY2Z-CR | MY2ZN-CR | | | |
| | (compliant with | | Single | MY4-CR | MY4N-CR | MY4IN-CR(S) | | |
| | Electrical Appliances and Material Safety Act) | 4 | 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) 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 $PYF\squareA-E$, $PYF\square-S$ and $PYF-\square-PU$ for the EC Declaration of Conformity. These products display the CE Marking. 2.

Miniature Power Latching Relays (MYK)

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

Miniature Power Sealed Relays (MYQ/MYH)

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

Refer to Front-connecting Sockets and Back-connecting Sockets in Common Options (Order Separately) on pages 35 and 37 for main unit and socket combinations.

MYQ·MYH

Best-selling, general-purpose relays

- AC/DC coil voltage specifications can now be more easily distinguished thanks to the use of color-coded coil tape and operation indicators (LED).
- Latching levers convenient for circuit checking and MY(S) models equipped with mechanical operation indicators and operation indicators for monitoring operation status are available.
- Contact materials and contact structures can be selected 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 54 to 55 and Safety

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



Pink = AC voltage

Precautions for All Relays.



Distinguished using color-coded operation indicators (LED)

Example: MY4



Example: MY4

Operation indicator (LED) Red = AC voltage

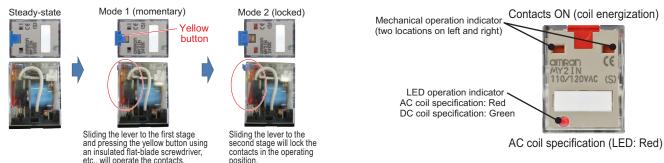
Operation indicator (LED) Green = DC voltage

MY

MYK

Common Options (Order Separately)

- 2. Latching levers convenient for circuit checking and MY(S) models equipped with mechanical operation indicators and operation indicators for monitoring operation status are available. Mechanical operation indicator/LED operation indicator
 - · Latching lever operating procedure



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

| Contact relia | bility | Corrosion re | sistance | |
|---------------|------------------------------|--------------|---|---------------|
| | Contact structure | | Contact material | Typical model |
| High 🛧 | Crossbar bifurcated contacts | High | 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 | | Low | Ag alloy | MY2 |



MY

Model Number Structure

| | Model Number Leg | end |
|-----------------------------------|---|---|
| | ●Plug-in Terminals | |
| MY | Standard models | |
| ~ | M Y | (Example: MY4ZIN(S)) |
| | (1) | |
| | (1) Number of poles | (2) Contacts (3) Options |
| | 2: 2-pole 3: 3-pole | None:SingleNone:NoneZ:BifurcatedN:With operation indicator |
| | 4: 4-pole | Z-CBG: Crossbar bifurcated IN(S): With operation indicator/latching lever |
| МҮК | Models with built-in diode M Y (1) (1) Number of poles/contact 2: 2-pole, single contacts | (Example: MY4ZIN-D2(S)) |
| | 2Z: 2-pole, bifurcated contain | cts N-D2: Built-in diode for coil surge absorption, with operation indicator |
| | 3: 3-pole, single contacts4: 4-pole, single contacts | IN-D2(S): Built-in diode for coil surge absorption, with operation indicator/latching lever |
| | 4Z: 4-pole, bifurcated conta | cts |
| ϺϒϘ·ϺϒΗ | Models with built-in CR cir MY (1) (1) Number of poles/contacts 2: 2-pole, single contacts 2Z: 2-pole, bifurcated contacts | -CR: Models with built-in CR circuit for coil surge absorption |
|] | 4: 4-pole, single contacts | IN-CR(S): Built-in CR circuit for coil surge absorption, with operation indicator/latching lever* |
| Common Options (Order Separately) | 4Z: 4-pole, bifurcated conta | |
| ption | ●PCB terminals/case s | surface mounted |
| ıs (Order | M Y | (Example: MY2-02) |
| Sepa | (1) Number of poles/contact | |
| Irate | 2: 2-pole, single contacts | -02: PCB terminals |
| ly) | 3: 3-pole, single contacts4: 4-pole, single contacts4Z: 4-pole, bifurcated contacts | F: Case-surface mounting |

Ordering Information When your order, specify the rated voltage.

●Plug-in Terminals

Without operation indicator

| (lassification | Number of poles | Contacts | Model | Rated voltage |
|------------------------------------|--------------------|------------|----------|--|
| | | Single | MY2 | 12, 24, 100/110, 110/120, 200/220, 220/240 VAC |
| | 2 | Single | | 12, 24, 48, 100/110 VDC |
| | 2 | Bifurcated | MY2Z | 12, 24, 100/110, 110/120, 200/220, 220/240 VAC |
| | | Bilurcaleu | | 12, 24, 48, 100/110 VDC |
| Standard models | 3 | Single | MY3 | 12, 24, 100/110, 110/120, 200/220, 220/240 VAC |
| (compliant with | 3 | Single | INI 1 S | 12, 24, 48, 100/110 VDC |
| Electrical Appliances | | Single | MY4 | 12, 24, 100/110, 110/120, 200/220, 220/240 VAC |
| and Material Safety Act) | | Single | IVI ¥ 4 | 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 | MY4Z-CBG | 100/110, 110/120, 200/220 VAC |
| | | bifurcated | MT42-CBG | 12, 24, 48, 100/110 VDC |
| | 2 | Single | MY2-D | 12, 24, 48, 100/110 VDC |
| Models with built-in | 2 | Bifurcated | MY2Z-D | 12, 24, 100/110 VDC |
| diode for coil surge absorption | 3 | Single | MY3-D | 12, 24, 100/110 VDC |
| (DC coil specification only) | 4 | Single | MY4-D | 12, 24, 48, 100/110 VDC |
| | 4 | Bifurcated | MY4Z-D | 12, 24, 48, 100/110 VDC |
| Models with built-in CR | 2 | Single | MY2-CR | 100/110, 110/120, 200/220, 220/240 VAC |
| circuit for coil surge | 2 | Bifurcated | MY2Z-CR | 100/110, 200/220 VAC, |
| absorption | 4 | Single | MY4-CR | 100/110, 110/120, 200/220, 220/240 VAC |
| (AC coil specification only) | 4 | Bifurcated | MY4Z-CR | 100/110, 110/120, 200/220, 220/240 VAC |

MY

With operation indicator

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

With operation indicator/latching lever

| | Classification | Number of poles | Contacts | Model | Rated voltage |
|---------------|---|--------------------|-----------------|----------------------|----------------------|
| | | 2 | Single | MY2IN(S) | 100/110, 200/220 VAC |
| | Standard models | 2 | Single | WITZIN(3) | 12, 24, 48 VDC |
| - | (compliant with | | Single MY4IN(S) | 100/110, 200/220 VAC | |
| | Electrical Appliances and Material Safety Act) | 4 | | IVI I 4114(S) | 12, 24, 48 VDC |
| | | | Bifurcated | MY4ZIN(S) | 100/110, 200/220 VAC |
| | | | | | 12, 24, 48 VDC |
| 2 | Models with built-in | 2 | Single | MY2IN-D2(S) | 12, 24, 48 VDC |
| 8 | diode for coil surge absorption | | Single | MY4IN-D2(S) | 12, 24, 48 VDC |
| Common | (DC coil specification only) | 4 | Bifurcated | MY4ZIN-D2(S) | 12, 24, 48 VDC |
| 1 Options (Or | Models with built-in CR circuit for coil surge | 4 | Single | MY4IN-CR(S) | 100/110, 200/220 VAC |
| | absorption (AC coil specification only) | 4 | Bifurcated | MY4ZIN-CR(S) | 100/110, 200/220 VAC |

PCB terminals

| Classification | Number of poles | | 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 |
| | | Single Bifurcated | MY4-02 | 12, 24, 100/110, 110/120, 200/220, 220/240 VAC |
| | | | | 12, 24, 48, 100/110 VDC |
| | 4 | | MY4Z-02 | 100/110, 110/120, 200/220 VAC |
| | | | | 12, 24, 48, 100/110 VDC |

•Case-surface mounting

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

MY

Ratings and Specifications

Ratings **Operating Coils**

| -< | |
|----|--|
| | |
| | |

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

| _ | | ltem | Rated cur | rrent (mA) | Coil resistance | Coil induc | ctance (H) | Must | Must | Maximum | Power |
|--------------|-------|-------------|-----------|-------------|-----------------|--|------------|------------------------|------------|------------------|-------------------------------------|
| M | Rated | voltage (V) | 50 Hz | 60 Hz | (Ω) | Armature OFF Armature ON voltage (V) voltage (V) | | consumption (VA, W) | | | |
| \mathbf{x} | | 12 | 106.5 | 91 | 46 | 0.17 | 0.33 | | | | |
| | | 24 | 53.8 | 46 | 180 | 0.69 | 1.3 | | | | |
| | AC | 100/110 | 11.7/12.9 | 10/11 | 3,750 | 14.54 | 24.6 | | 30% min.*2 | | Approx. 0.9 to 1.3 (at 60 Hz) |
| | AC | 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 | 80% max.*1 | | 110% of | |
| | | 220/240 | 4.8/5.3 | 4.2/4.6 | 18,790 | 83.5 | 136.4 | 80% max. 1 | | rated voltage | |
| | | 12 | 72 | 2.7 | 165 | 0.73 | 1.37 | | | Ŭ | |
| | DC | 24 | 36 | 6.3 | 662 | 3.2 | 5.72 | | 100/ | | Ammany 0.0 |
| | DC | 48 | 17 | 7 .6 | 2,725 | 10.6 | 21.0 | | 10% min.*2 | | Approx. 0.9 |
| | | 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).

Operating characteristics were measured at a coil temperature of 23°C 3.

The maximum voltage capacity was measured at an ambient temperature of 23°C. 4.

*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 |
|-------------------|--|--------------------|------------|-----------------------------|--------------------------|
| | Standard models | 2 | Bifurcated | MY2Z | MY2ZN |
| | Models with built-in diode for coil surge absorption | 2 | Bifurcated | MY2Z-D | MY2ZN-D2 |
| Plug-in terminals | (DC coil specification only) | 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 |

| | ltem | Rated cur | rrent (mA) | Coil resistance | Coil indu | ctance (H) | Must | Must | Maximum | Power |
|------|---------------|-----------|------------|-----------------|--------------|-------------|------------------------|------------------------|------------------|-------------------------------------|
| Rate | d voltage (V) | 50 Hz | 60 Hz | (Ω) | Armature OFF | Armature ON | operate voltage (V) | release voltage (V) | voltage (V) | consumption (VA, W) |
| | 12 | 106.5 | 91 | 46 | 0.17 | 0.33 | | | | |
| | 24 | 53.8 | 46 | 180 | 0.69 | 1.3 | | | | |
| AC | 100/110 | 11.7/12.9 | 10/11 | 3,750 | 14.54 | 24.6 | | 30% min.*2 | | Approx. 0.9 to 1.3 (at 60 Hz) |
| AC | 110/120 | 9.9/10.8 | 8.4/9.2 | 4,430 | 19.2 | 32.1 | | 30% mm. 2 | in. 2 | |
| | 200/220 | 6.2/6.8 | 5.3/5.8 | 12,950 | 54.75 | 94.07 | 80% max.*1 | | 110% of | |
| | 220/240 | 4.8/5.3 | 4.2/4.6 | 18,790 | 83.5 | 136.4 | 80% max. 1 | | rated voltage | |
| | 12 | 7 | 5 | 160 | 0.73 | 1.37 | | | Ŭ | |
| DC | 24 | 36 | 6.9 | 650 | 3.2 | 5.72 | | 400/ | | Approx. 0.9 |
| DC | 48 | 18 | 3.5 | 2,600 | 10.6 | 21.0 | | 10% min.*2 | | |
| | 100/110 | 9.1 | /10 | 11,000 | 45.6 | 86.2 | 1 | | | |

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.

The AC coil resistance and inductance values are reference values only (at 60 Hz). Operating characteristics were measured at a coil temperature of 23°C. The maximum voltage capacity was measured at an ambient temperature of 23°C. 2.

3. 4.

*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.

Common Options (Order Separately)

MYQ·MYH

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

| | Item | Rated cur | rent (mA) | Coil resistance | Coil induc | ctance (H) | Must | Must | Maximum | Power |
|-------|-------------|-----------|-----------|-----------------|--------------|-------------|------------------------|------------------------|-------------|------------------------|
| Rated | voltage (V) | 50 Hz | 60 Hz | (Ω) | Armature OFF | Armature ON | operate voltage (V) | release voltage (V) | voltage (V) | consumption (VA, W) |
| | 100/110 | 11.7/12.9 | 10/11 | 3,750 | 14.54 | 24.6 | | | | Approx.0.9 |
| AC | 200/220 | 6.2/6.8 | 5.3/5.8 | 12,950 | 54.75 | 94.07 | | 30% min.*2 | 110% of | to 1.3 (at 60 Hz) |
| | 12 | 7 | 5 | 160 | 0.73 | 1.37 | 80% max.*1 | | rated | |
| DC | 24 | 37 | .7 | 636 | 3.2 | 5.72 | | 10% min.*2 voltage | vollage | Approx. 0.9 |
| | 48 | 18 | 9.8 | 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 |
|--------------------------|-----------------|--------------------|------------------------|-----------------------------|--------------------------|
| | | 3 | Single | MY3 | MY3N |
| Plug-in terminals | Standard models | 4 | Crossbar bifurcated | MY4Z-CBG | MY4ZN-CBG |
| | Standard models | 2 | Single | MY2-02 | _ |
| PCB terminals | | 3 | Single | MY3-02 | _ |
| POD terminals | Stanuaru models | 4 | Single | MY4-02 | _ |
| | | 4 | Bifurcated | MY4Z-02 | _ |
| | | 2 | Single | MY2F | _ |
| Case-surface mounting | Standard models | 3 | Single | MY3F | _ |
| | Standard models | 4 | Single | MY4F | _ |
| | | | Bifurcated | MY4ZF | — |

| | Item | Item Rated current (mA) Coll | | Coil resistance | Coil indu | ctance (H) | Must | Must | Maximum | Power |
|------------|-------------|------------------------------|---------|-----------------|--------------|-------------|------------------------|------------------------|----------------------|------------------------|
| Rated | voltage (V) | 50 Hz | 60 Hz | (Ω) | Armature OFF | Armature ON | operate voltage (V) | release voltage (V) | voltage (V) | consumption (VA, W) |
| | 12 | 106.5 | 91 | 46 | 0.17 | 0.33 | | | | |
| | 24 | 53.8 | 46 | 180 | 0.69 | 1.3 | | | | |
| ••• | 100/110 | 11.7/12.9 | 10/11 | 3,750 | 14.54 | 24.6 | | 000/ | | Approx.0.9 |
| AC | 110/120 | 9.9/10.8 | 8.4/9.2 | 4,430 | 19.2 | 32.1 | | 30% min.*2 | to 1.3 (at 60 Hz) | |
| | 200/220 | 6.2/6.8 | 5.3/5.8 | 12,950 | 54.75 | 94.07 | 000/ | | 110% of | . , |
| | 220/240 | 4.8/5.3 | 4.2/4.6 | 18,790 | 83.5 | 136.4 | 80% max.*1 | | rated voltage | |
| | 12 | 7 | 5 | 160 | 0.73 | 1.37 | | | Ŭ | |
| D O | 24 | 36 | .9 | 650 | 3.2 | 5.72 | | 100/ | | A |
| DC | 48 | 18 | .5 | 2,600 | 10.6 | 21.0 | | 10% min.*2 | | Approx. 0.9 |
| | 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. The AC coil resistance and inductance values are reference values only (at 60 Hz).

2.

Operating characteristics were measured at a coil temperature of 23°C 3.

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.

MY

MYK

Common Options (Order Separately)

| ontact | Ratings | |
|--------|---------|--|

Single

Resistive load

5 A at 220 VAC 5 A at 24 VDC

5 A (10 A*2)

5 A

Ag

1,100 VA

120 W

250 VAC, 125 VDC

Inductive load

 $\begin{array}{l} (\cos \phi = 0.4, \\ \text{L/R} = 7 \text{ ms}) \end{array}$

2 A at 220 VAC 2 A at 24 VDC

440 VA

48 W

Co

| < | |
|-----|--|
| | |
| | |
| = < | |
| | |

| Number of poles |
|-------------------------|
| (contact configuration) |
| Contact structure |

Rated load Rated carry

current*1 Maximum

switching voltage

MY

Load

| | Maximum switching current |
|---------------|------------------------------|
| Z | Maximum switching power |
| $\overline{}$ | Contact material |
| X | |
| | |

| Number of poles (contact configuration) | | | | | 4-pole | (4PDT) | | | | |
|--|---------------------------------|---|---------------------------------|--|---------------------------------|---|---------------------------------|--|---------------------------------|--|
| Contact structure | Single | | With Istabi | With latching lever (S) | | Bifurcated | | ng lever (S) | Crossbar bifurcated (CBG) | |
| Load | Resistive Ioad | 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, 12 | 250 VAC, 125 VDC | | | | | | | | |
| Maximum switching current | 3 A | | | | | | | | 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 cladding - | - AgPd |

2-pole (DPDT)

With latching lever (S)

Resistive load

5 A at 250 VAC 5 A at 30 VDC

10 A

2,500 VA

300 W

Inductive load

(cos φ = 0.4, L/R = 7 ms)

2 A at 250 VAC 2 A at 30 VDC

500 VA

60 W

3-pole (3PDT)

Single

Resistive load

5 A at 220 VAC 5 A at 24 VDC

250 VAC, 125 VDC

5 A

5 A

Ag

1,100 VA

120 W

Inductive load

(cos φ = 0.4, L/R = 7 ms)

2 A at 220 VAC 2 A at 24 VDC

440 VA

48 W

Bifurcated

Resistive load

5 A at 220 VAC 5 A at 24 VDC

5 A

5 A

1,100 VA

Au plating + Ag

120 W

Inductive load

 $\begin{array}{l} (\cos \phi = 0.4, \\ \text{L/R} = 7 \text{ ms}) \end{array}$

2 A at 220 VAC 2 A at 24 VDC

440 VA

48 W

ct material Au cladding + Ag alloy

*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.

M V

MYK

Characteristics

| Number of poles (contact configuration) | | 2-pole | (DPDT) | 3-pole (3PDT) | 4-pole (4PDT) | | | | |
|--|---|--|---|--|--|---|---|--|--|
| | Contact tructure | Single | Bifurcated | Single | Single | Bifurcated | Crossbar bifurcated (CBG) | | |
| Contact resistanc | e*1 *2 | 50 mΩ max. | | | | | 100 mΩ max. | | |
| Operate t | ime*3 | 20 ms max. | | | | | | | |
| Release t | ime*3 | 20 ms max. | | | | | | | |
| | Mechanical | 18,000 operations/h | | | | | | | |
| witching requency | Rated load | 1,800 operations/h | | | | | | | |
| nsulatior resistanc | | 100 M Ω min. | | | | | | | |
| c c | Between coil and contacts | | | | | | | | |
| Dielectric | Between contacts of different polarity | 2,000 VAC, 50/60 Hz fc | or 1 min | | | | | | |
| c t | 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 | | |
| /ibration | Destruction | 10 to 55 to 10 Hz, 0.5-r | nm single amplitude (1.0 |)-mm double amplitude) | | | | | |
| esistance | Malfunction | 10 to 55 to 10 Hz, 0.5-r | nm single amplitude (1.0 |)-mm double amplitude) | | | | | |
| hock I | Destruction | 1,000 m/s ² | | | | | | | |
| esistance | 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: 50,000,000 operations min. DC: 50,000,000 operations min. (switching frequency: 18,000 operations/h) | | |
| | Electrical*5 | 500,000 operations min. (rated load, switching frequency: 1,800 operations/h) | 200,000 operations min. (rated load, switching frequency: 1,800 operations/h) | 500,000 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) | | |
| ailure rate | | 1 mA at 5 VDC | 100 ?A at 1 VDC | 1 mA at 5 VDC | 1 mA at 1 VDC | 100 ?A at 1 VDC | 100 ?A at 1 VDC | | |
| Veight | | 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.

Note: The data shown above are find 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: For 500 VDC applied to the same location as for dielectric strength measurement.
*4. Measurement conditions: For 500 VDC applied to the same location as for dielectric strength measurement.

Ambient temperature condition: 23°C This value was measured at a switching frequency of 120 operations per minute. *5. *6.

| Classification | | Standard models | | | | | in diode for coil sur CR circuit for coil su | |
|------------------------------------|------------------------|-----------------|------------------------|------------------------|----------------------------------|------------------------|---|------------------------|
| Contacts | Single/bifurcated | | | Crossbar/bifu | urcated (CBG) | | Single/bifurcated | I |
| | Without | | | Without With operation | Without With operation indicator | | | |
| Features | operation indicator | | With latching lever | operation indicator | indicator | operation indicator | | 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.

OMRON

Certified Standards •UL certification (File No. E41515)

| | | • | | - | | | | |
|---------|--|--------------------|----------|-----------------------|------------------------------|--------------|---|--------------------------------------|
| MY | Model | Standard number | Category | Listed/ Recognized | Operating Coil ratings | No. of poles | Contact ratings | Certified number of operations |
| | MY2 MY2N MY2IN(S) MY2N-D2 MY2-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 |
| MYK | MY2Z MY2ZN MY2-02 MY2F MY2Z-D MY2Z-D2 | 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 |
| | MY2Z-CR MY2ZN-CR | | | | | | 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 | 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 |
| | MY3N-D2 MY3-02 MY3F | | | | | | 1/6 HP, 250 VAC | 1,000 |
| MYQ·MYH | MY4 MY4N MY4IN(S) MY4-D MY4IN-D2 MY4IN-D2(S) MY4Z MY4ZN MY4ZIN(S) MY4Z-D MY4Z-D MY4Z-D2 MY4ZIN-D2 MY4ZIN-D2(S) MY4Z-CR MY4ZN-CR | 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 |
| | MY4ZIN-CR(S) | | | | | | | |
| Commor | MY4-02 MY4F MY4Z-02 | | | | | | 1/6 HP, 250 VAC (Same polarity) 1/10 HP, 120 VAC (Same polarity) | 1,000 |
| Ξ I | MY4ZF | | 1 | | | | B300 Pilot Duty (Same polarity) | 6,000 |

non Options (Order Separately)

●CSA certification (File No. LR31928)

| Model | Standard number | Class number | Operating Coil ratings | No. of poles | Contact ratings | Certified number of operations | Z |
|--|-------------------|-----------------|------------------------------|--------------|--|--------------------------------------|----------|
| MY2 MY2N MY2IN(S) MY2N-D2 MY2-D2 MY2IN-D2(S) | 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 | YM |
| MY2-CR MY2N-CR | | | | | 1/6 HP, 250 VAC (Same polarity) 1/10 HP, 120 VAC (Same polarity) | 1,000 | |
| MY2Z MY2ZN MY2-02 MY2F MY2Z-D MY2Z-D2 | 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 | |
| MY2Z-CR MY2ZN-CR | | | | | 1/6 HP, 250 VAC 1/10 HP, 120 VAC | 1,000 | |
| MY3 MY3N MY3-D MY3N-D2 MY3-02 | 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 | MYK |
| MY3F | | | | | 1/6 HP, 250 VAC | 1,000 | _ |
| MY4 MY4N(S) MY4-D MY4-D2 MY4N-D2(S) MY4-CR | C22.2 No.14 | 3211 07 | 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 | |
| MY4N-CR MY4IN-CR(S) MY4Z MY4ZN MY4ZIN(S) MY4Z-D MY4ZN-D2 MY4ZN-D2 | | | | | | | MYQ·MYH |
| MY4ZIN-D2(S) MY4Z-C MY4ZN-CR | | | | | 1/6 HP, 250 VAC (Same polarity) 1/10 HP, 120 VAC (Same polarity) | 1,000 | X |
| MY4ZIN-CR(S) | | | | | 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 | Comm |

•TÜV Rheinland certification (Certification No. R50030059)

| Model | Operating Coil ratings | Contact ratings | Certified number of operations |
|---|-------------------------------|--|--------------------------------|
| MY2Z MY2ZN MY2-02 MY2F MY2Z-D MY2Z-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 ($\cos \phi = 1.0$) 0.8 A, 250 VAC ($\cos \phi = 0.4$) | |

Common Options (Order Separately)

| | Model | EMC Directiv | e Low Voltage Direct | ive Machinery Directiv | /e Safety Category |
|--|---|----------------|------------------------|------------------------|--------------------|
| MY MY MY MY MY MY MY MY | 2N 2IN(S) 2Z 2D 2N-D2 2N-D2 2IN-D2(S) 2-CR 2N-CR 2Z-CR 2ZN-CR 2ZN-CR 2ZN-CR | Not applicable | Applicable | Not applicable | 1 |
| MY MY MY MY MY | 3 3N 3-D 3N-D2 | - | | | |
| MY MY MY MY MY | 4 4N 4IN(S) 4Z 4ZN 4ZIN(S) 4-D 4N-D2 4IN-D2(S) | | | | |
| MY MY MY MY MY MY MY | 4Z-D 4ZN-D2 4ZIN-D2(S) 4-CR 4N-CR 4Z-CR 4Z-CR 4ZN-CR | | | | |
| ●L | .R certifi | cation (Lloyd | 's Register) | 1 | I |
| | Model | File No. | Environmental Category | Operating Coil ratings | Contact ratings |
| | woder | File NO. | Environmental Category | Operating Contrainings | Contact ratings |

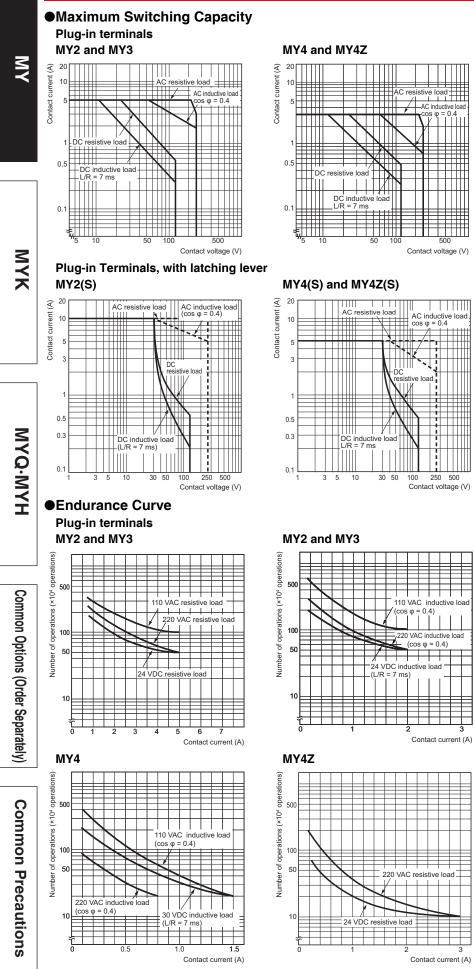
●LR certification (Lloyd's Register)

| Model | File No. | Environmental Category | Operating Coil ratings | Contact ratings | Certified number of operations |
|--|------------------|------------------------|------------------------------|---|--------------------------------|
| MY2 MY2N MY2IN(S) MY2-D MY2N-D2 MY2IN-D2(S) MY2-CR MY2N-CR | File No.98/10014 | ENV2,3 | 6 to 240 VAC 6 to 125 VDC | 10 A, 250 VAC (Resistive) 2 A, 250 VAC (PF0.4) 10 A, 30 VDC (Resistive) 2 A, 30 VDC (L/R = 7 ms) | MY2: 50,000 |
| MY2Z MY2ZN MY2Z-D MY2ZN-D2 | File No.90/10270 | ENV2,3 | 6 to 240 VAC 6 to 125 VDC | 2 A, 30 VDC inductive load 2 A, 200 VAC inductive load | MY2: 50,000 |
| MY4 MY4IN(S) MY4-D MY4IN-D2 MY4IN-D2 MY4IN-D2(S) MY4-CR MY4IN-CR MY4IN-CR MY4ZN MY4ZN MY4ZN MY4ZN-D2 MY4ZIN-D2 MY4ZIN-D2(S) MY4Z-CR MY4ZIN-CR MY4ZIN-CR MY4ZIN-CR MY4ZIN-CR | File No.98/10014 | ENV2,3 | 6 to 240 VAC 6 to 125 VDC | 5 A, 250 VAC (Resistive) 0.8 A, 250 VAC (PF0.4) 5 A, 30 VDC (Resistive) 1.5 A, 30 VDC (L/R = 7 ms) | MY4: 50,000 |

OMRON

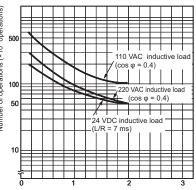
| Model | Standard number | Certification No. | Operating Coil ratings | Contact ratings | Certified number of operations |
|--|-----------------|-------------------|---|---|--|
| MY2 MY2N MY2IN(S) MY2-D MY2N-D2 MY2IN-D2(S) | EN 61810-1 | 112467UG | 6, 12, 24, 48/50, 100/110, 110/120, 200/220, 220/240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

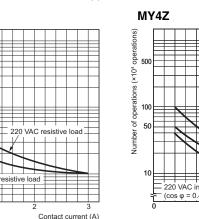
Engineering Data (Reference Value)

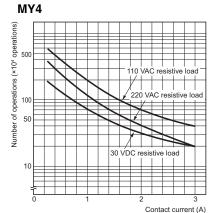


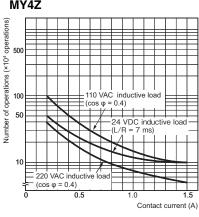
MY4Z-CBG € 20 Contact current 10 5 AC resistive load AC inductive load $\cos \varphi = 0.4$ N 0.5 DC resistive load 0.1 DC inductive loa 倝 5 10 50 100 500

Contact voltage (V)





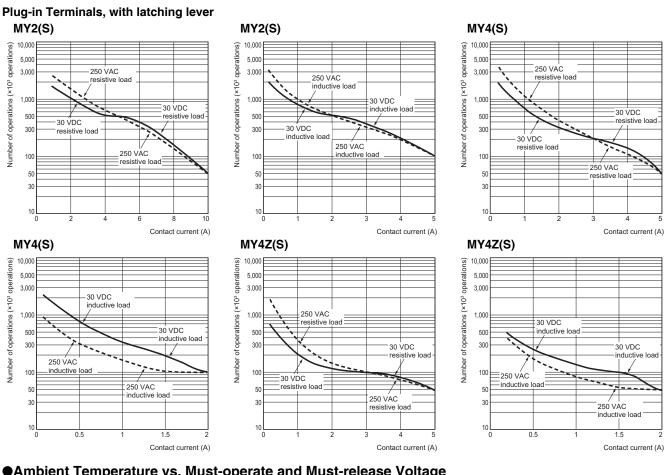




MY

MYK

MYQ·MYH



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

MY2 AC Models

MY2(S)

10,000

5,000

3,000

1,000

500

300

100

50

30

10

n

MY4(S)

10,000

5.000

3,000

1,000

500

300

100

50

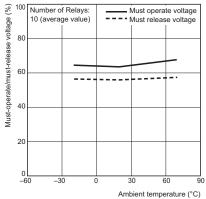
30

10

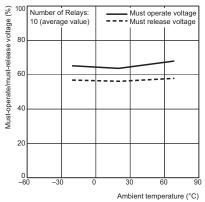
0

Number of operations (×10³ operations)

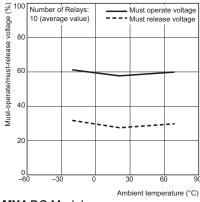
Number of operations (×10³ operations)



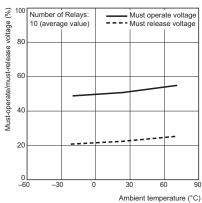
MY4 AC Models



MY2 DC Models



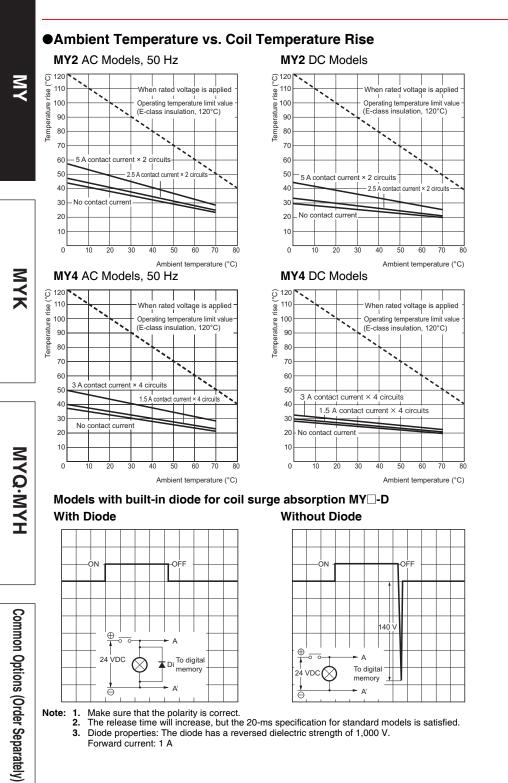
MY4 DC Models





Common Precautions

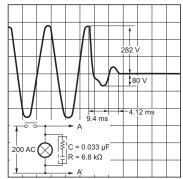
Common Options (Order Separately)

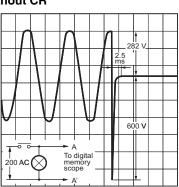


Note: 1.

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

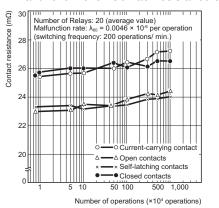
Models with built-in CR circuit for coil surge absorption MY -CR With CR Without CR



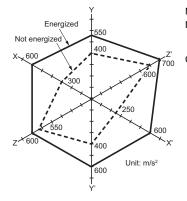


Contact Reliability Test MY4Z-CBG (Modified Allen Bradley Circuit) Contact load: 5 VDC, 1 mA resistive load

Malfunction level: Contact resistance of 100 Ω



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



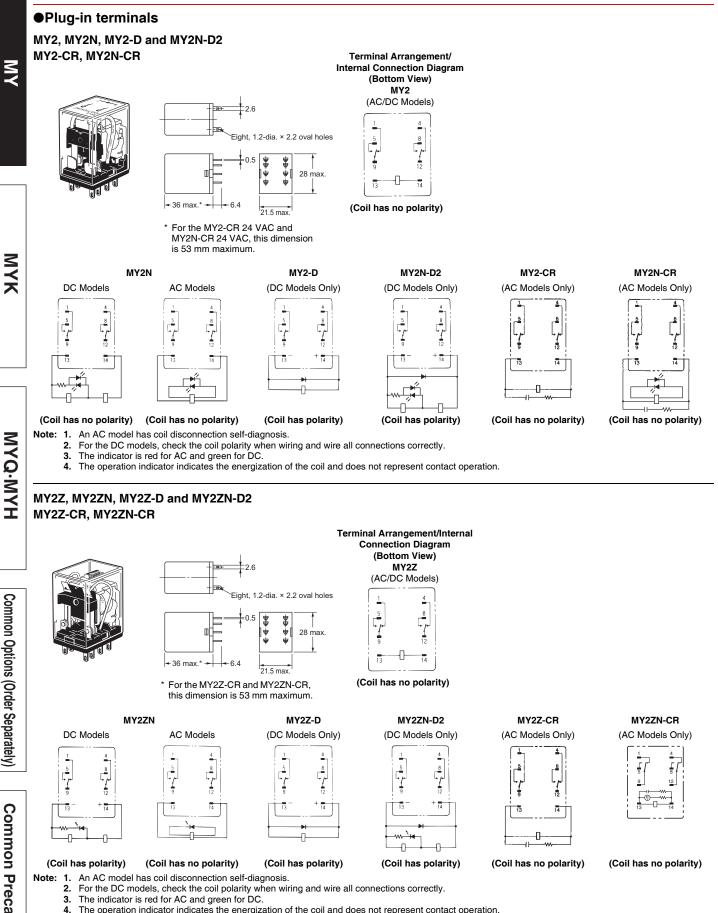
N = 20

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

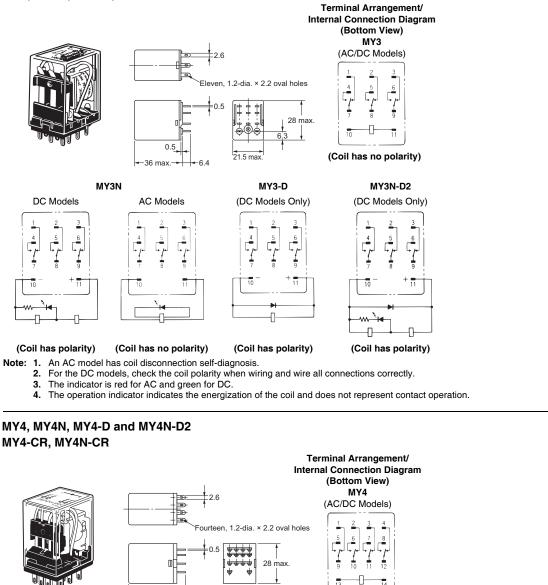


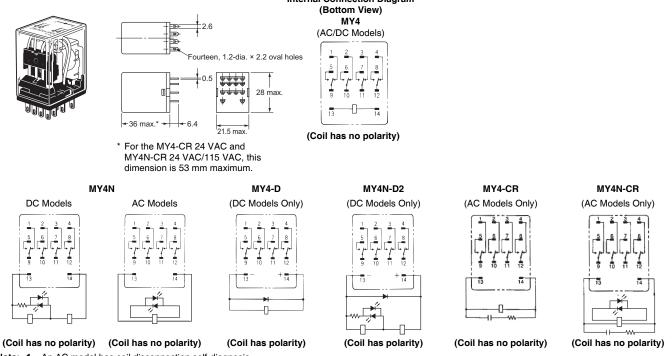
Dimensions



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

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





MY

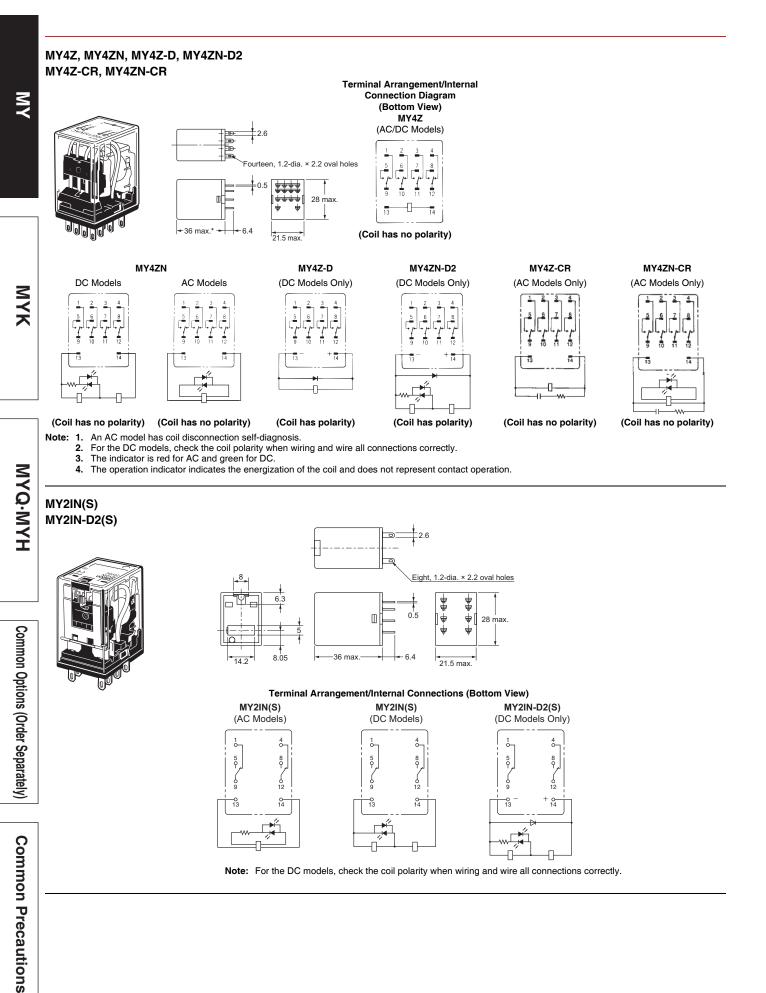
21

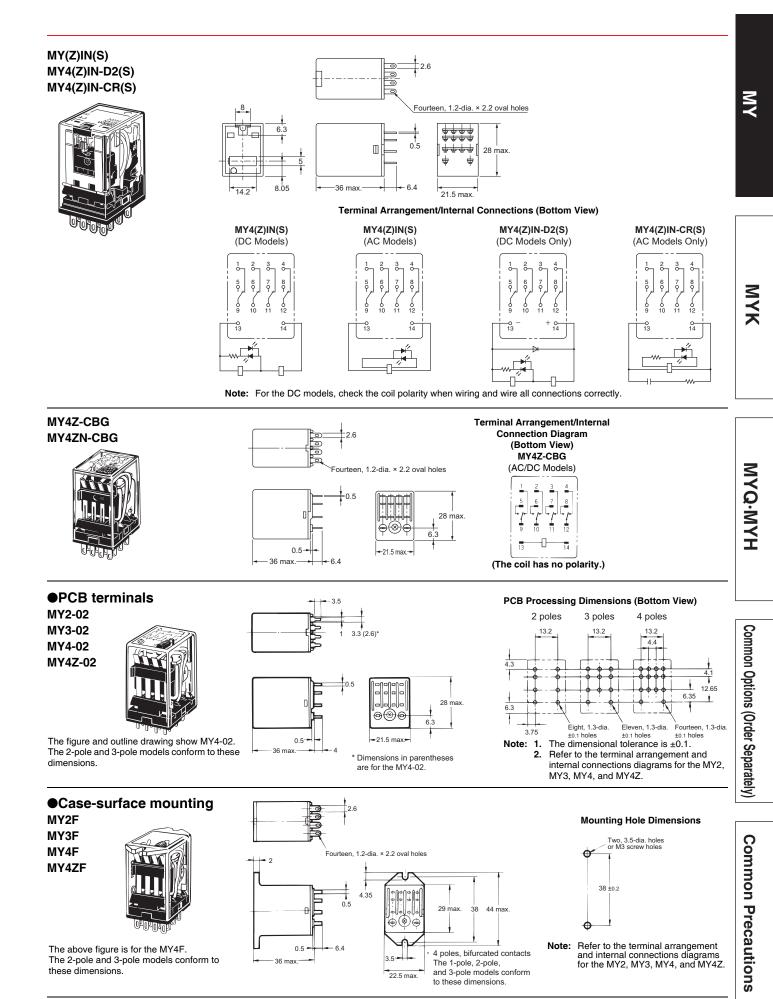
Note: 1. An AC model has coil disconnection self-diagnosis.

For the DC models, check the coil polarity when wiring and wire all connections correctly. 2.

The indicator is red for AC and green for DC. 3.

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





OMRON

Miniature Power Latching Relays

MYK

Latching miniature power relays that retain contact operation status

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

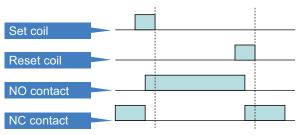
Refer to Safety Precautions on pages 54 to 55 and Safety Precautions for All Relays.

Features



Latching Relays MYK

Retains contact operation status.



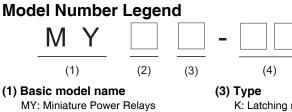
NO contact turns on when voltage is applied to the set coil and stays on even if voltage stops being applied to the set coil. NO contact turns off when voltage is applied to the reset coil, after which NC contact will turn on.*

*MYK features a magnetic lock system.

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



Model Number Structure



(2) Number of poles/contacts 2: 2-pole, single

| | (4) |
|------------|----------------------------------|
| (3) T ⊮ | 'ype K: Latching relay |

(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

| (laceitication | Number of poles | Contacts | Model | Rated voltage | |
|---|--------------------|----------|-------|--------------------------|--|
| Standard models (compliant with Electrical | 0 | Single | МҮ2К | 12, 24, 100, 100/110 VAC | |
| Appliances and Material Safety Act) | 2 | Siligie | WIZK | 12, 24, 48 VDC | |

PCB terminals

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

MYK

MΥ

MYK

Ratings and Specifications

Ratings

Operating coil (AC)

| \leq | | | Set coil | | | Reset coil | | | | | Power consumption (VA, W) | | | |
|--------|----|-------------------|----------|-----------------------------------|-------|----------------------|-------|-------------------------|--------------------------------|------------------------|----------------------------------|-----------------------|-----------------------|------------|
| < | | Rated voltage (V) | | voltage (V) Rated current (mA) | | Coil resistance (mA) | | Coil resistance Operate | Must release voltage (V) | Maximum voltage (V) | Set coil | Reset coil | | |
| | | | 50 Hz | 60 Hz | (Ω) | 50 Hz | 60 Hz | (Ω) | voltage (v) | voltage (v) | | | | |
| | | 12 | 57 | 56 | 72 | 39 | 38.2 | 130 | | | 110% max. of rated voltage | Approx. 0.6 to 0.9 | Approx. 0.2 to 0.5 | |
| | AC | 24 | 27.4 | 26.4 | 320 | 18.6 | 18.1 | 550 | | | | | | |
| | | 100 | 7.1 | 6.9 | 5,400 | 3.5 | 3.4 | 3,000 | 80% max.* | 80% max. | | | (at 60 Hz) | (at 60 Hz) |
| | | 12 | 11 | 10 | 110 | 5 | 0 | 235 | 00 % IIIax. | 00 % max. | | | | |
| | DC | 24 | 5 | 2 | 470 | 2 | 5 | 940 | | | _ | Approx. 1.3 | Approx. 0.6 | |
| | | 48 | 2 | 7 | 1,800 | 1 | 6 | 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. The AC coil resistance is a reference value only. Operating characteristics were measured at a coil temperature of 23°C.

3.

4.

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) | 2-pole (DPDT) | | | | | |
|---|---|-------------------------------------|--|--|--|--|
| Contact structure | Single | | | | | |
| Load | Resistive loadInductive load ($\cos \varphi = 0.4$, L/R = 7 | | | | | |
| 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

| ance*1 | 50 mΩ max. | | | | |
|--|--|--|--|--|--|
| Operate time*2 | AC: 30 ms max., DC: 15 ms max. | | | | |
| Minimum pulse width | AC: 60 ms, DC: 30 ms | | | | |
| Release time*2 | AC: 30 ms max., DC: 15 ms max. | | | | |
| Minimum pulse width | AC: 60 ms, DC: 30 ms | | | | |
| Mechanical | 18,000 operations/h | | | | |
| Rated load | 1,800 operations/h | | | | |
| stance*3 | 100 MΩ min. | | | | |
| 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 | | | | | |
| 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) | | | | |
| Destruction | 1,000 m/s ² | | | | |
| Malfunction | 200 m/s ² | | | | |
| 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) | | | | |
| value (reference value)*5 | 1 mA at 1 VDC | | | | |
| ating temperature*6 | -55 to 60°C | | | | |
| ating humidity | 5% to 85% | | | | |
| | Approx. 30 g | | | | |
| | Minimum pulse width Release time*2 Minimum pulse width Mechanical Rated load stance*3 Between coil and contacts of different polarity Between contacts of the same polarity Between set/reset coils Destruction Malfunction Malfunction Electrical*4 value (reference value)*5 sting temperature*6 | | | | |

Note: The data shown above are initial values. *1. Measurement conditions: 1 A at 5 VI

1 A at 5 VDC using the voltage drop method.

With rated operating power applied, not including contact bounce. For 500 VDC applied to the same location as for dielectric strength measurement.

Ambient temperature condition: 23°C

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

 Measurement conditions:
 *2. Measurement conditions:
 *3. Measurement conditions:
 *4. Ambient temperature cond
 *5. This value was measured
 *6. With no icing or condensa With no icing or condensation.

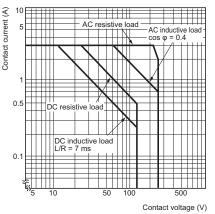
OMRON

MYK

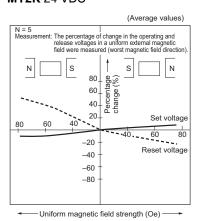
MYK

Engineering Data (Reference Value)

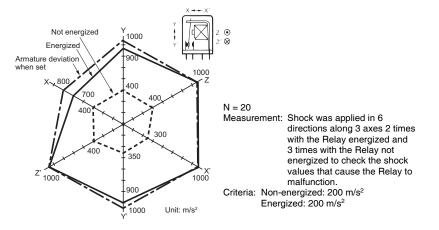
Maximum Switching Capacity MY2K(-02)



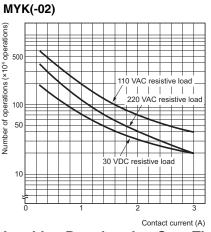
Magnetic Interference (External Magnetic Field) MY2K 24 VDC



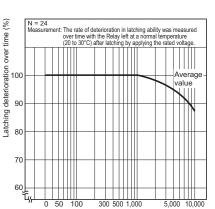
Shock Malfunction MY2K 100 VAC



Endurance Curve









MYK(-02)

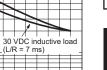
Number of operations (×10⁴ operations)

500

100

50

10



110 VAC inductive load $(\cos \varphi = 0.4)$

220 VAC inductive load

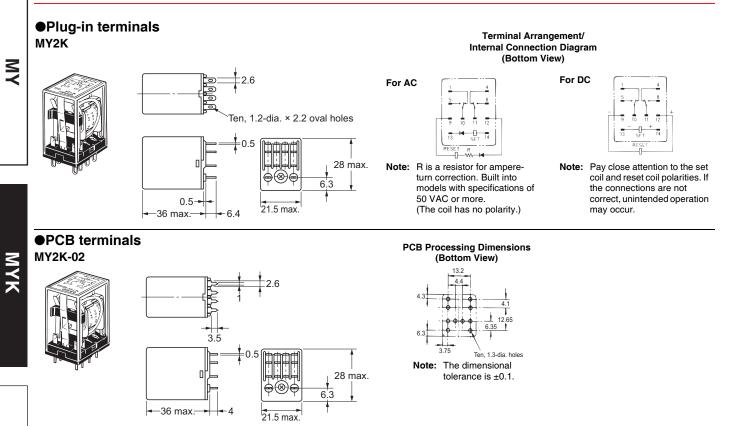
 $(\cos \varphi = 0.4)$

Contact current (A)

MY

MYK

Dimensions



Miniature Power Sealed Relays ΜΥQ/ΜΥΗ

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 54 to 55 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.

MYK

ϺϒႭ·ϺϒΗ

MY

FL' (SP

Features

Highly Airtight Relays (Plug-in Terminals)

| Seal performance | Degree of protection | Typical relay | Features |
|------------------|------------------------|---------------|--|
| High | Hermetically sealed | МҮН | Sealing with metals, the glass case and base, etc. with inert gases (N2) inside makes it airtight structure which provides the external casing with durability against harmful corrosion, and prevents corrosive gases from intruding inside relays. |
| | Plastic sealed | MYQ | Structure that seals relays with the resin case and cover, etc., to prevent effects from corrosive environments. |
| Low | Closed type (cased) | MY, MY4Z-CBG | Relays in the case realize the structure that protects them from contact with foreign materials. |

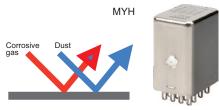
Plastic Sealed Relays: MYQ

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.



Common Options (Order Separately)

MYQ·MYH

Model Number Structure

Model Number Legend



(1) Basic model name

MY: Miniature Power Sealed Relays

(2) Contacts/seals

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

(3) Type

- None: None
- N: With operation indicator* *Only MYQ (plastic sealed relay)
- (4) Options, terminal type
 - None: Plug-in terminals
 - 02: Plastic sealed relays, PCB terminals
 - 0: Hermetically sealed relays, PCB terminals

Ordering Information

When your order, specify the rated voltage.

Plastic Sealed Relays

Plug-in terminals

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

PCB terminals

| Classification | Number of poles | Contacts | Model | Rated voltage |
|--------------------------|--------------------|-------------|--------------|--------------------------|
| Standard models | | Single | MYQ4-02 | 50, 200/220, 220/240 VAC |
| (compliant with | | | WIT Q4-02 | 24 VDC |
| Electrical Appliances | 4 | D '' | MYQ4Z-02 | 100/110 VAC |
| and Material Safety Act) | | Bifurcated | IVI T Q4Z-02 | 24, 48 VDC |

Hermetically Sealed Relays ●Plug-in terminals

| Classification | Number of poles | Contacts | Model | Rated voltage | |
|---|-----------------|------------|--------|---|--|
| Standard models (compliant with | | Single | MY4H | 24, 100/110, 110/120 VAC 12, 24, 48, 100/110 VDC | |
| Electrical Appliances and Material Safety Act) | 4 | Bifurcated | MY4ZH | 24, 100/110, 110/120 VAC | |
| | | | W14211 | 12, 24, 48, 100/110 VDC | |

PCB terminals

| Classification | Number of poles | Contacts | Model | Rated voltage |
|--|--------------------|------------|---------|-----------------|
| Standard models | | Sinale | MY4H-0 | 110/120 VAC |
| (compliant with Electrical Appliances | 4 | Single | W1411-0 | 24 VDC |
| and Material Safety Act) | | Bifurcated | MY4ZH-0 | 24, 100/110 VDC |

MY

MYK

MYQ·MYH

Ratings and Specifications

Operating coil (AC)

| | | Rated current (mA) | | Coil | Coil indu | ctance (H) | Must snowsta | Mustralages | Maximum | Power | |
|-------|-------------|--------------------|-----------------|-------------------|-----------------|----------------|-------------------------------|-------------------------------|-------------------------------|----------------------------------|----------|
| Rated | voltage (V) | 50 Hz | 60 Hz | resistance (Ω) | Armature OFF | Armature ON | Must operate voltage (V)*1 | Must release voltage (V)*2 | Maximum voltage (V) | consumption (VA, W) | |
| | 24 | 53.8 | 46 180 0.69 1.3 | | | | ~ | | | | |
| | 100/110 | 11.7/12.9 | 10/11 | 3,750 | 14.54 | 24.6 | | | 110% max. of rated voltage | Approx. 0.9 to 1.3 (at 60 Hz) | |
| AC | 110/120 | 9.9/10.8 | 8.4/9.2 | 4,430 | 19.2 | 32.1 | | 30% min. | | | |
| | 200/220 | 6.2/6.8 | 5.3/5.8 | 12,950 | 54.75 | 91.07 | | | | 1.0 (ut 00 112) | <i>′</i> |
| | 220/240 | 4.8/5.3 | 4.2/4.6 | 18,790 | 83.5 | 136.4 | 80% max. | | | | |
| | 12 | 7 | '5 | 165 | 0.734 | 1.37 | | | | | |
| DC | 24 | 36 | 5.9 | 650 | 3.2 | 5.72 | | 10% min. | | | |
| DC | 48 | 18 | 3.5 | 2,600 | 10.6 | 21.0 | | 10% 11111. | | Approx. 0.9 | |
| | 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. Operating characteristics were measured at a coil temperature of 23°C. 3.

4. The maximum voltage capacity was measured at an ambient temperature of 23°C.

 There is variation between products, but actual values are 80% maximum. To ensure operation, apply at least 80% of the rated value.
 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) | 4-pole (4PDT) | | | | | |
|---|---------------------------------|--|--|--|--|--|
| Contact structure | Single/bifurcated | | | | | |
| Load | 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 110 VA 24 W 12 W | | | | | |
| Contact material | Au plating + Ag | | | | | |

Hermetically Sealed Relays: MYH

| Number of poles (contact configuration) | 4-pole (4PDT) | | | | | | | |
|---|---------------------------------------|---|---------------------------------------|---|--|--|--|--|
| Contact structure | Si | ngle | Bifurcated | | | | | |
| 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) | | | | |
| 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 | | | | | | |

MYK

Characteristics

| | Model | | | МҮН | | | | |
|-----|--|---|--|--|--|--|--|--|
| ΥM | Contact resistance*1 | | 50 mΩ max. | | | | | |
| | Operate time*2 | | 20 ms max. | | | | | |
| | Release time*2 | | 20 ms max. | | | | | |
| | Maximum | Mechanical | 18,000 operations/h | | | | | |
| | switching frequency | Rated load | 1,800 operations/h | | | | | |
| | Insulation resistance*3 | | 100 MΩ min. | | | | | |
| | | Between coil and contacts | 1,500 VAC at 50/60 Hz for 1 min | | 1,000 VAC at 50/60 Hz for 1 min | | | |
| МүК | Dielectric strength | 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: Bifurcated contacts: | AC: 50,000,000 operations min., DC: 100,000,000 operations min. 5,000,000 operations min., DC: 5,000,000 operations min. (switching frequency: 18,000 operations/h) | Single contacts: Bifurcated contacts: | 50,000,000 operations min. 5,000,000 operations min. (switching frequency: 18,000 operations/h) | | |
| | | Electrical*4 | Single contacts: Bifurcated contacts: | 200,000 operations min. 100,000 operations min. (at rated load, switching frequency: 1,800 operations/h) | Single contacts: Bifurcated contacts: | 100,000 operations min. 50,000 operations min. (at rated load, switching frequency: 1,800 operations/h) | | |
| MYQ | Failure rate P Level (reference value)*5 | | Single contacts: Bifurcated contacts: | 1 mA at 1 VDC 100 ?A at 1 VDC | Single contacts: Bifurcated contacts: | 100 ?A at 1 VDC 100 ?A 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.

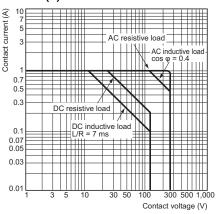
IntersectionWith rated operating power applied, not including contact bounce.Ambient temperature condition:23°CMeasurement conditions:For 500 VDC applied to the same location as for dielectric strength measurement.Ambient temperature condition:23°CThis value was measured at a switching frequency of 120 operations per minute.With no icing or condensation.

*3. *4. *5. *6.

MYQ·MYH

Engineering Data (Reference Value)

Maximum Switching Capacity MYQ4(Z)



Endurance Curve

220 VAC

resistive load

24 VDC resistive load

220 VAC inductive load (cos $\phi = 0.4$)

Contact current (A)

24 VDC inductive load (L/R = 7 ms)

MYQ4

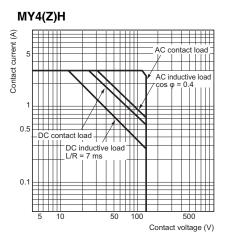
500

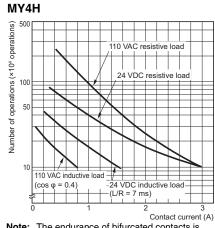
operations)

Number of operations (x10⁴

50

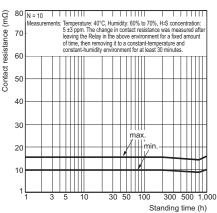
10



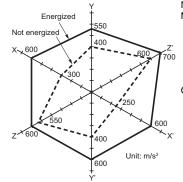


Note: The endurance of bifurcated contacts is one-half that of single contacts.

Note: The endurance of bifurcated contacts is one-half that of single contacts. H₂S Gas Data MYQ4



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

Shock direction

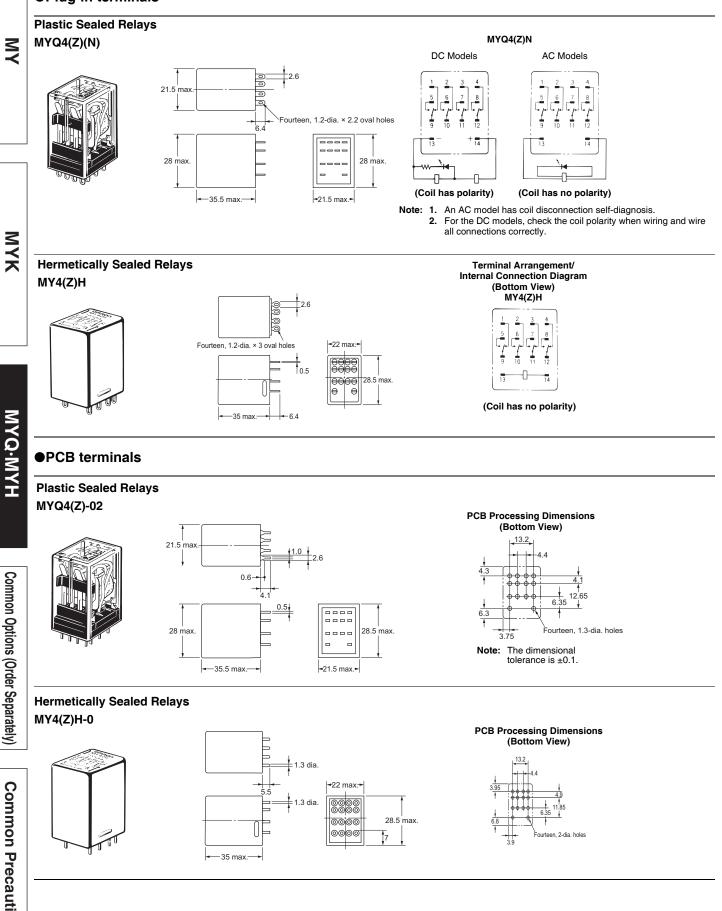




MYQ·MYH

Dimensions

Plug-in terminals



OMRON

MY/MYK/MYQ·MYH

Common Options (Order Separately)

Ordering Information

Front-mounting Sockets

| Front-mounting Sockets | | | | | | | | ΥM |
|-----------------------------|---|----------------------------|---|--|------------|--|--|----------|
| 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) | |
| | | or | Push-In Plus Terminal | Ferrules Solid wire Stranded wire | <u>NEW</u> | PYF-08-PU*2 * MY2Z□-CR, MY2□-CR 24 VAC cannot be used | With release lever * Hold by release lever | |
| | Mounted on a | | | | NEW | PYF-08-PU-L*2 | | MYK |
| MY2⊟ MY2⊡(S) MY2Z□-CR | DIN track or with screws | | Screw terminal (M3 screw size) | Forked terminals Solid wire Stranded wire | NEW | PYFZ-08-E*4 | MY2⊡: PYC-A1 MY2IN(S): PYC-E1 MY2Z⊡-CR, MY2⊡-CR 24 VAC: Y92H-3 | ĸ |
| MY2ZU-CR | | | | Round terminals Forked terminals Solid wire Stranded wire | NEW | PYFZ-08 * Terminal cover: PYCZ-C08 | | |
| | | | | | | | | |
| | Mounted on a DIN track | Available | Screwless terminal (Clamp method) | Solid wire Stranded wire | | PYF08S | PYCM-08S * MY2Z□-CR, MY2□-CR 24 VAC cannot be used * Hold by release lever | ϺϒϘ·ϺϒΗ |
| | Screw mounting only | None | Screw terminal (M3.5 screw size) | Round terminals Forked terminals Solid wire Stranded wire | | PYF08M | PYC-P (MY2 Only) * MY2 - CR 24 VAC cannot be used | |
| MY3 | 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 | Common C |

 The applicable relay model is a plug-in terminal type.
 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.
 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 43. *2. *3.

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

| | 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) |
|---------|--|---|--|---|--|------------|---|--|
| ΥM | MY4 MY4 (S) MY4 H MYQ4 MY4Z -CBG-CR MY2K | Mounted on a DIN track or with screws | Available Option (Terminal cover sold separately) *3 | Push-In Plus Terminal | Ferrules Solid wire Stranded wire | <u>NEW</u> | PYF-14-PU*2 * MY4Z□-CBG-CR, MY4-CR 24 VAC, MY4N-CR 24 VAC/115 VAC cannot be used | With release lever * Hold by release lever |
| | | | | | | <u>NEW</u> | PYF-14-PU-L*2 | MY4Z□-CBG-CR, MY4-CR 24 VAC, MY4N-CR 24 VAC/115 VA: Y92H-3 Other than those above: PYC-A1 |
| МҮК | | | | – Screw terminal (M3 screw size) | Forked terminals Solid wire Stranded wire | NEW | PYFZ-14-E*4 | |
| | | | | | Round terminals Forked terminals Solid wire Stranded wire | <u>NEW</u> | PYFZ-14 * Terminal cover: PYCZ-C14 | |
| N | | Mounted on a DIN track | Available | Screwless terminal (Clamp method) | Solid wire Stranded wire | A A | PYF14S | PYCM-14S * MY4Z -CBG-CR, MY4-CR 24 VAC, MY4N-CR 24 VAC/115 VAC cannot be used * Hold by release lever |
| MYQ·MYH | | Screw mounting only | None | Screw terminal (M3.5 screw size) | Round terminals Forked terminals Solid wire Stranded wire | | PYF14T | MY4Z⊡-CBG-CR: Y92H-3 Other than those above: PYC-A1 |

The applicable relay model is a plug-in terminal type.
 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.
 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 43.
 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.

| Back-mounting Sockets Applicable relay model*1 | Terminal Type | Hold-down Clips | Appearance | Mode | |
|--|--|---|------------|------------|-----------------------------------|
| | Solder terminals | | | PY08 | MY |
| MY2□ MY2□(S) | Wrapping terminals Terminal length: 25 mm | Accessories (Order Separately) - * MY2Z⊡-CR: PYC-1 | | PY08QN | _ |
| MY2ZU-CR | Wrapping terminals Terminal length: 20 mm | Other than those above: PYC-P | | PY08QN2 | _ |
| | PCB terminals | | | PY08-02 | МҮК |
| | Solder terminals | | | PY08-Y1 | |
| MY2□ MY2□(S) | Wrapping terminals Terminal length: 25 mm | | | PY08QN-Y1 | MYQ·MYH |
| | Wrapping terminals Terminal length: 20 mm | With Hold-down Clips*2 | | PY08QN2-Y1 | Common Option |
| | Solder terminals | | | РҮ08-Ү3 | Common Options (Order Separately) |
| MY2ZCR | Wrapping terminals Terminal length: 25 mm | | | PY08QN-Y3 | Common Preca |

*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.

| | Applicable relay model*1 | Terminal Type | Hold-down Clips | Appearance | Mode |
|-----------------------------------|--|--|--|------------|------------|
| ΥM | MY2Z□-CR | Wrapping terminals Terminal length: 20 mm | With Hold-down Clips*2 | | PY08QN2-Y3 |
| | | | Accessories (Order Separately) * PYC-P | | PY11 |
| МҮК | | Solder terminals | With Hold-down Clips*2 | | РҮ11-Ү1 |
| | | | Accessories (Order Separately) * PYC-P | | PY11QN |
| МҮQ·МҮН | МҮЗ□ | Wrapping terminals Terminal length: 25 mm | With Hold-down Clips*2 | | PY11QN-Y1 |
| Cor | | | Accessories (Order Separately) * PYC-P | | PY11QN2 |
| Common Options (Order Separately) | | Wrapping terminals Terminal length: 20 mm | With Hold-down Clips*2 | | PY11QN2-Y1 |
| arately) | | PCB terminals | Accessories (Order Separately) * PYC-P | | PY11-02 |
| Comm | MY4□ MY4□(S) MY4□H | Solder terminals | Accessories (Order Separatelv) | | PY14 |
| Common Precautions | MYQ4⊟ MY4Z⊟-CBG-CR MY2K | Wrapping terminals Terminal length: 25 mm | Accessories (Order Separately) * MY4Z□-CBG-CR: PYC-1 Other than those above: PYC-P | | PY14QN |
| tions | *1. The applicable relay model is a *2. The hold-down clips for connect | a plug-in terminal type. ting the relay and socket come | e as a set with the socket. | | |

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| Applicable relay model*1 | Terminal Type | Hold-down Clips | Appearance | Mode | |
|--|--|--|------------|------------|-----------------------------------|
| MY4□ MY4□(S) MY4□H MYQ4□ MY4Z□-CBG-CR | Wrapping terminals Terminal length: 20 mm | Accessories (Order Separately) * MY4Z□-CBG-CR: PYC-1 Other than those above: PYC-P | | PY14QN2 | MΥ |
| MY2K | PCB terminals | | | PY14-02 | |
| | Solder terminals | | | PY14-Y1 | МҮК |
| MY4□ MY4□(S) MY4□H MYQ4□ MY2K | Wrapping terminals Terminal length: 25 mm | | | PY14QN-Y1 | K |
| | Wrapping terminals Terminal length: 20 mm | | | PY14QN2-Y1 | MYQ-MYH |
| | Solder terminals | - With Hold-down Clips*2 | | PY14-Y3 | Common Opti |
| MY4Z⊡-CBG-CR | Wrapping terminals Terminal length: 25 mm | | | PY14QN-Y3 | Common Options (Order Separately) |
| *1 The applicable rolay model is | Wrapping terminals Terminal length: 20 mm | | | PY14QN2-Y3 | Common Precautions |
| *1. The applicable relay model is*2. The hold-down clips for connection | a plug-in terminal type. ecting the relay and socket come | e as a set with the socket. | | | ons |

| | Hold-down Clip | | | | | |
|---------|----------------|----------|----------------|--|--|--|
| | Appearance*1 | Model*2 | Weight*3 | Application | | |
| ΜY | | РҮС-А1 | Approx. 0.54 g | _ | | |
| | | PYC-E1 | Approx. 0.6 g | For connecting relays and sockets | | |
| | | РҮС-Р | Approx. 1.4 g | | | |
| МҮК | PYC-S | | Approx. 1.8 g | For connecting sockets, socket mounting plates, and relays | | |
| YM | | Y92H-3*4 | Approx. 0.7 g | For connecting models with built-in CR circuit for coil surge absorption | | |
| МҮQ·МҮН | | PYC-1*5 | Approx. 6 g | ─ (MY2Z□-CR) and sockets | | |

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

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•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) | Insulati on color | Model*1 |
|--------------------|---------|-----------------------|--|--------------------|---------------|-----------------------|----------------|
| | | | 3.90 | 2 | 15.1 | | PYDN-7.75-020 |
| | | Bridging contact | | 3 | 22.85 | | PYDN-7.75-030 |
| | 7.75 mm | terminals (common) | | 4 | 30.6 | | PYDN-7.75-040 |
| PYF-08-PU(-L) | | | 2.25 1.57 | 20 | 154.6 | Blue (S) Yellow(Y) | PYDN-7.75-200 |
| PYF-14PU(·L) | 31.0 mm | For Coil terminals | 3.90 18.5 2.25 224.35 224.35 | 8 | 224.35 | | PYDN-31.0-080□ |

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

Labels

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

For Screwless Terminal Sockets (PYF08S/PYF14S)

Short Bars

| Applicable sockets | Pitch | Application | Shape/external dimensions | Number of poles | Insulati on color | Model*1 |
|--------------------|---------|--------------------------|---------------------------|--------------------|----------------------|------------------------------------|
| PYF08S | 19.7 mm | For bridging | | 2 | Red (R) | PYDM-08S □ (50 pcs./bag) |
| PYF14S | 27.5 mm | coils between sockets | 1.2-dia. ← Pitch → | 2 | Blue (B) | PYDM-14S □ (50 pcs./bag) |

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

Labels

| Applicable sockets | Model |
|--------------------|----------------|
| PYF08S | R99-11 |
| PYF14S | (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

| ΥM | Applicable sockets | Pitch | Application | Shape/external dimensions | Number of poles | Insulation color | Model*1 |
|----------------------------|-----------------------|-------|---------------------------|---|--------------------|---------------------|--|
| ~ | | | | | 2 | | PYD-025B⊡ (2P) (10 pcs./bag) |
| МАК | PYFZ-08 | 22 mm | For bridging | | 8 | B (Black) | PYD-085B⊡ (8P) (10 pcs./bag) |
| | | | adjacent sockets | | 2 | S (Blue) R (Red) | PYD-026B⊡ (2P) (10 pcs./bag) |
| MYQ-MYH | PYFZ-14 | 29 mm | | $\begin{array}{c} & & & \\ & & & & \\ & & & \\ &$ | 8 | | PYD-086B⊡ (8P) (10 pcs./bag) |
| Common Option | | | For bridging | | 2 | B (Black) | PYD-020B⊡ (2P) (50 pcs./bag) |
| Options (Order Separately) | | | 7 mm with the same socket | | 3 | Y (Yellow) | PYD-030B⊡ (3P) (10 pcs./bag) |

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

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

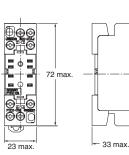
| Applicable sockets | Appearance | Model |
|--------------------|------------|-------------------------|
| PYFZ-08 | | PYCZ-C08 (2 pcs/set) |
| PYFZ-14 | | PYCZ-C14 (1 pcs/set) |

Note: These covers cannot be used for PYF08A and PYF14A.

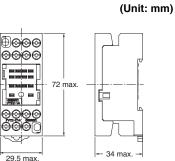
Dimensions with terminal cover

PYCZ-C08









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 | PY08-Y1, PY08-Y3 PY08QN-Y1, PY08QN-Y3 | | 1 | PYP-1 | |
| PY08QN2 PY11 PY11QN PY11QN2 | PY08QN2-Y1, PY08QN2-Y3 PY11-Y1 PY11QN-Y1 | PY11-Y1 | | 18 | PYP-18* |
| PY14 PY14QN PY14QN2 | PY14-Y1, PY14-Y3 PY14QN-Y1, PY14QN-Y3 PY14QN2-Y1, PY14QN2-Y3 | | 36 | PYP-36* | |

*You can cut the PYP-18 and PYP-36 to any required length.

Parts for Track Mounting

| Туре | | Appearance | Model |
|------------|-------|---------------------------|----------|
| | 1 m | | PFP-100N |
| DIN Tracks | 0.5 m | | PFP-50N |
| End Plate* | | Contraction of the second | PFP-M |
| Spacer | | | PFP-S |

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

MYK

MY

Ratings and Specifications

Characteristics

Sockets

| \leq | | | | | | | | Di | electric stren | gth | | | | | | | | | | | | | |
|-----------------------------|--------------------|------------|-------------------|--|-------------------------------------|----------------------------------|--------------------------------|---|---|---|--------------------------------|------------------------------|-----------|------|--------------------|--|--|--|-----------|-----------|-----------|--------|--------------|
| ΥM | Model | Connection | Number of pins | Terminal Type | Ambient operating temperature | Ambient operating humidity | Continuous carry current | Between contact terminals of same polarity | Between contact terminals of different polarity | Between coil and contact terminals | Insulation resistance *1 | Weight | | | | | | | | | | | |
| | PYF-08-PU | | | Push-In Plus Terminal | -40 to 70°C | | 10 A*2 | 2,000 VAC | 2,000 VAC | 2,000 VAC | | Approx. 80 g | | | | | | | | | | | |
| | PYF08S | | | Screwless terminal | | | 10 A 2 | for 1 min | for 1 min | for 1 min | | Approx. 46 g | | | | | | | | | | | |
| | PYFZ-08 | | 8 | | | | 10 A | 2,250 VAC | 2,250 VAC | 2,250 VAC | | Approx. 32 g | | | | | | | | | | | |
| | PYFZ-08-E | | _ | Screw terminal | 55 to 7000 | | | for 1 min | for 1 min | for 1 min | | Approx. 32 g | | | | | | | | | | | |
| | PYF08M | | | | –55 to 70°C | | 5 A | 1,500 VAC for 1 min | 1,500 VAC for 1 min | 1,500 VAC for 1 min | | Approx. 26 g | | | | | | | | | | | |
| | PYF11A | Front | 11 | Screw terminal | | | 5 A | 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. 43 g | | | | | | | | | | | |
| | PYF-14-PU | | | Push-In Plus Terminal | -40 to 70°C | | 6 A | 2,000 VAC | 2,000 VAC | 2,000 VAC | (000 170) | Approx. 87 g | | | | | | | | | | | |
| 2 | PYF14S | | | Screwless terminal | | | 5 A | for 1 min | for 1 min | for 1 min | | Approx. 62 g | | | | | | | | | | | |
| MYK | PYFZ-14 | | 14 | | | | 6 A | 2,250 VAC | 2,250 VAC | 2,250 VAC | | Approx. 50 g | | | | | | | | | | | |
| X | PYFZ-14-E | | | Screw terminal | –55 to 70°C | | U.A. | for 1 min | for 1 min | 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 | | | Solder terminals | | | | д 1,500 VAC | 1,500 VAC | 1,500 VAC | 100 ΜΩ | Approx. 8 g | | | | | | | | | | | |
| | PY08-Y1 | | | | | | | | | | | Approx. 9 g | | | | | | | | | | | |
| | PY08-Y3 | | | | | | | | | | | Approx. 9 g | | | | | | | | | | | |
| | PY08QN | | | Wrapping terminals (Terminal length: 25 mm) Wrapping terminals (Terminal length: 20 mm) | | | | | | | | Approx. 12 g | | | | | | | | | | | |
| | PY08QN-Y1 | | 8 | | | | | | | | | Approx. 13 g | | | | | | | | | | | |
| | PY08QN-Y3 | | | | | 5% to 85% | for 1 min | for 1 min | for 1 min | min. | Approx. 13 g | | | | | | | | | | | | |
| | PY08QN2 | | | | | | | | | | | Approx. 11 g | | | | | | | | | | | |
| \leq | PY08QN2-Y1 | _ | | | | | | | | | | Approx. 12 g | | | | | | | | | | | |
| \leq | PY08QN2-Y3 | _ | | 20 mm) | | | | | | | | Approx. 12 g | | | | | | | | | | | |
| MYQ-MYH | PY08-02 | _ | | PCB terminals | | | | | | | Approx. 7 g | | | | | | | | | | | | |
| S | PY11 | _ | | Solder terminals | | | | | | | | Approx. 9 g | | | | | | | | | | | |
| \leq | PY11-Y1 | - | < 11 | | | | | | | | | Approx. 10 g | | | | | | | | | | | |
| T | PY11QN | | | 11 | 11 | 11 | | | | | | | | | Wrapping terminals | | | | 1,500 VAC | 1,500 VAC | 1,500 VAC | 100 MΩ | Approx. 13 g |
| | PY11QN-Y1 | Back | | | | | (Terminal length: 25 mm) | –55 to 70°C | | 5 A | for 1 min | for 1 min | for 1 min | min. | Approx. 14 g | | | | | | | | |
| | PY11QN2 | - | | Wrapping terminals (Terminal length: 20 mm) | | | | | | | | Approx. 12 g | | | | | | | | | | | |
| | PY11QN2-Y1 | - | | 、 、 , | - | | | | | | | Approx. 13 g | | | | | | | | | | | |
| | PY11-02 PY14 | - | | PCB terminals | 1 | | | | | | | Approx. 8 g | | | | | | | | | | | |
| 8 | PY14 PY14-Y1 | - | | Solder terminals | | | | | | | | Approx. 10 g | | | | | | | | | | | |
| mm | PY14-Y1 PY14-Y3 | - | | Soluer terminals | | | | | | | | Approx. 11 g Approx. 11 g | | | | | | | | | | | |
| lon | PY14QN | - | | | | | | | | | | Approx. 11 g | | | | | | | | | | | |
| မ္မ | PY14QN-Y1 | 1 | | Wrapping terminals (Terminal length: | | | | 1,500 VAC | 1,500 VAC | 1.500 VAC | 100 MΩ | Approx. 14 g | | | | | | | | | | | |
| Common Options (Order Separ | PY14QN-Y3 | 1 | 14 | 25 mm) | | | 3 A | for 1 min | for 1 min | for 1 min | min. | Approx. 15 g | | | | | | | | | | | |
| าร (| PY14QN2 | 1 | , | - | | | | | | | Approx. 13 g | | | | | | | | | | | | |
| Ord | PY14QN2-Y1 | | | Wrapping terminals (Terminal length: | | | | | | | | Approx. 10 g | | | | | | | | | | | |
| er (| PY14QN2-Y3 | 1 | | 20 mm) | | | | | | | | Approx. 14 g | | | | | | | | | | | |
| Sep | PY14-02 | 1 | | PCB terminals | 1 | | | | | | | Approx. 9 g | | | | | | | | | | | |
| ar | | | I | 32 10 10 10 | 1 | 1 | 1 | L | 1 | 1 | 1 | | | | | | | | | | | | |

*1. *2. *3.

For 500 VDC applied to the same location as for dielectric strength measurement. 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. 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.

Socket Accessories •For Front-connecting Sockets Short Bars

| Application | Applicable sockets | Model | Maximum carry current | Ambient operating temperature | Ambient operating humidity |
|-------------------------------------|--------------------------------|---------------|---------------------------|--|---|
| | | PYDN-7.75-020 | | | |
| | PYF-08-PU(-L) | PYDN-7.75-030 | 20 A | 40 to 70°C | E% to 95% |
| | PYF-14-PU(-L) | PYDN-7.75-040 | 20 A | -40 to 70°C -40 to 70°C (with no icing or condensation) | 5% to 85% 45% to 85% (with no icing or condensation) |
| | | PYDN-7.75-200 | | | |
| Bridging contact terminals (common) | PYFZ-08 PYFZ-14 | PYD-025B | | | |
| | | PYD-085B | | | |
| | | PYD-026B□ | 20 A | | |
| | | PYD-086B | (However, 18 A when 70°C) | | |
| | | PYD-020B | , , | | |
| | | PYD-030B | | | |
| | PYF-08-PU(-L) PYF-14-PU(-L) | PYDN-31.0-080 | 20 A | -40 to 70°C | 5% to 85% |
| For Coil terminals | 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 | | | |
| PYF-14-PU | 6 A, 250 V* | 3211 07 CSA C22.2 No | | |
| PYF08S | 10 A, 250 V | | | |
| PYF14S | 5 A, 250 V | | CSA C22.2 No14 | |
| PYFZ-08(-E) | 10 A, 250 V | | 007 022.2 1014 | |
| 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 | | | |
| PYF-14-PU | 6 A, 250 V* | | | |
| PYF08S PYF14S | 10 A, 250 V | | | |
| PYFZ-08(-E) | 10 A, 250 V | UL508 | SWIV2 | Recognition |
| 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* | | R50327595 | |
| PYF-14-PU | 6 A, 250 V | EN 61984 | R50327595 | |
| PYFZ-08(-E) | 10 A, 250 V | EN 01984 | B50405329 | |
| PYFZ-14(-E) | 6 A, 250 V | | H30403329 | |

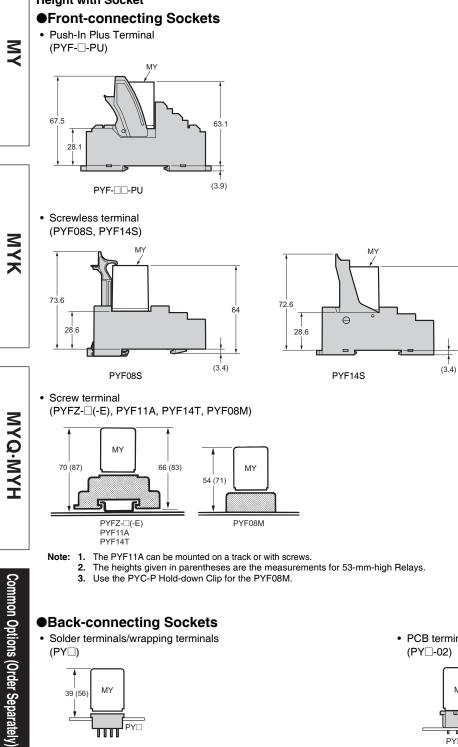
*Ratings are for an ambient temperature of 55°C or below. At an ambient temperature of 70°C, the value is 7 A.

VDE certification

| Model | Standard number | Certification No. |
|--------|-------------------|-------------------|
| PYF08S | VDE0627 (EN61984) | 40015509 |
| PYF14 | VDE0027 (EN01904) | 40015509 |

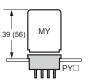
Dimensions

Height with Socket

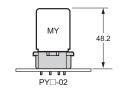


Back-connecting Sockets

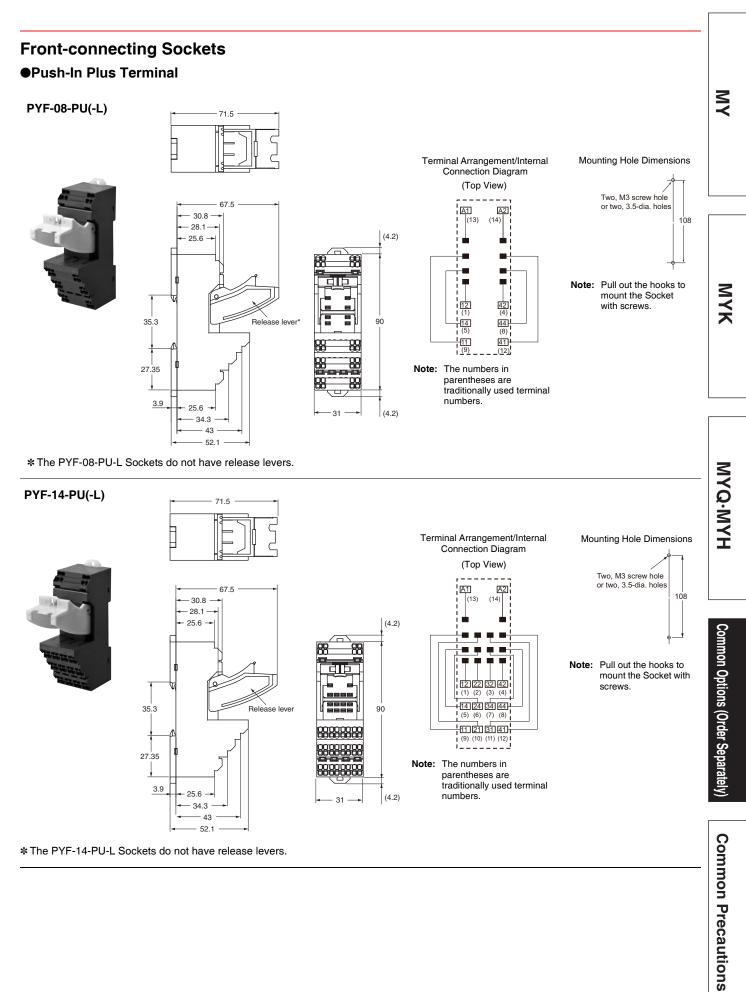
• Solder terminals/wrapping terminals (PY□)



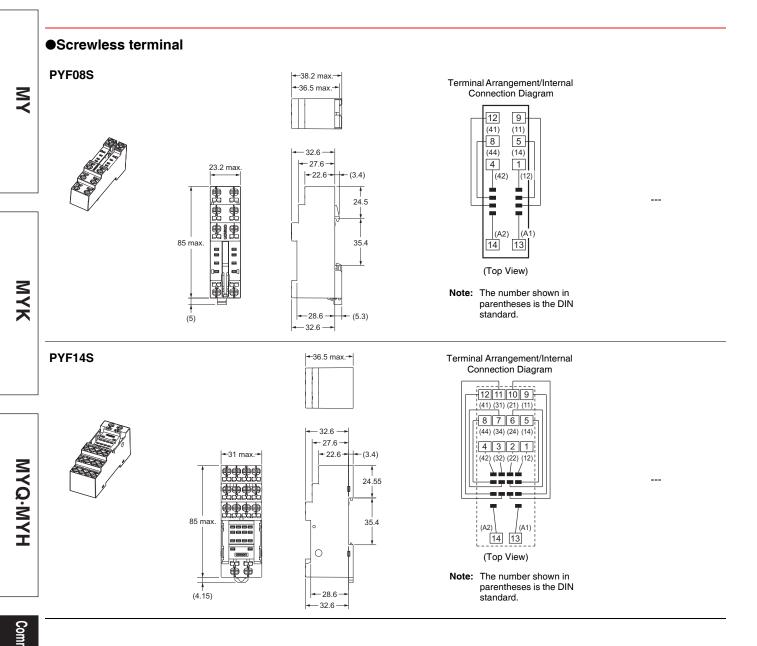




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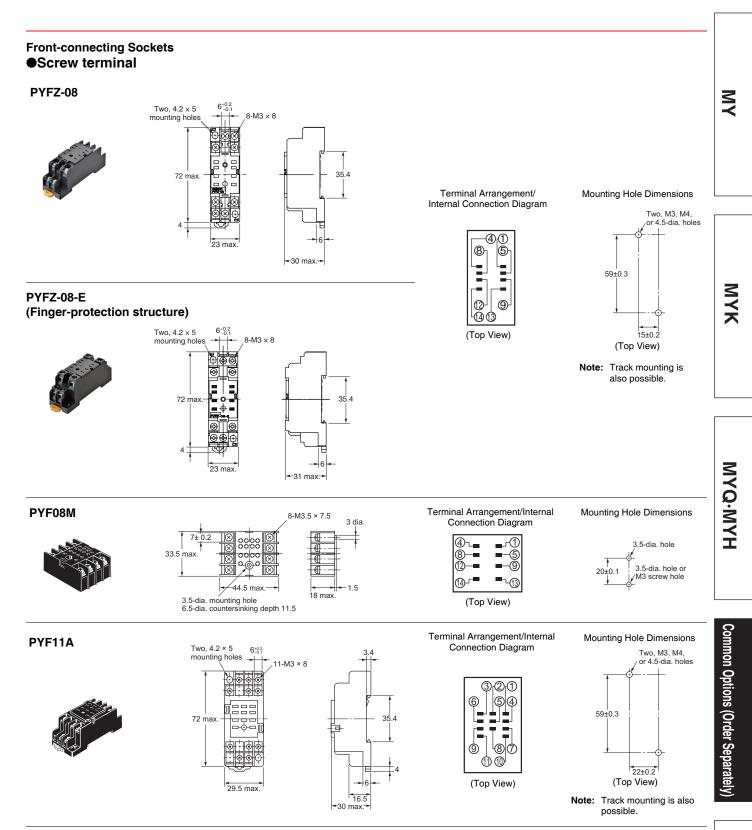


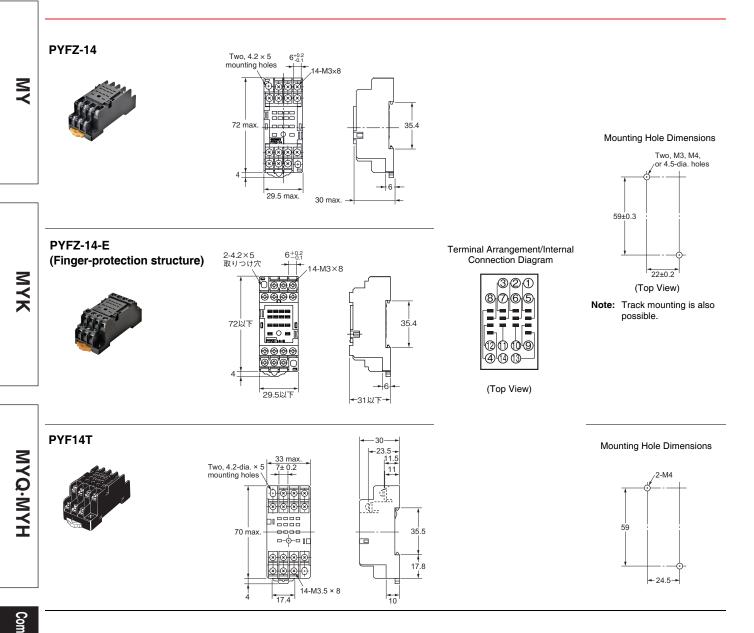
* The PYF-14-PU-L Sockets do not have release levers.



Common Options (Order Separately)

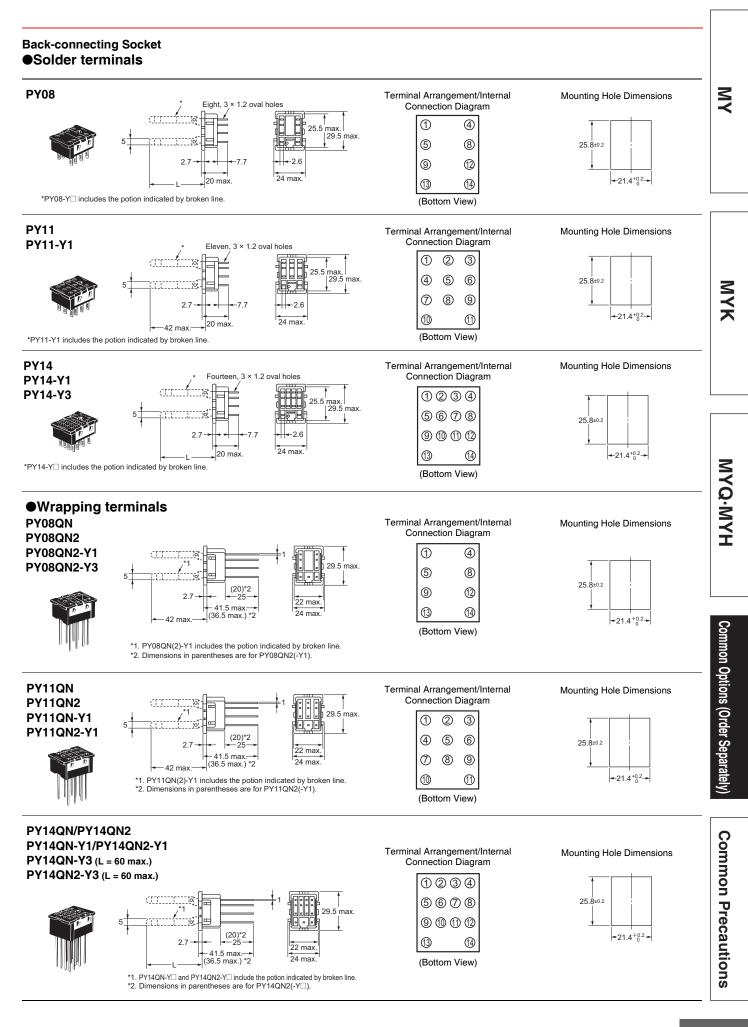
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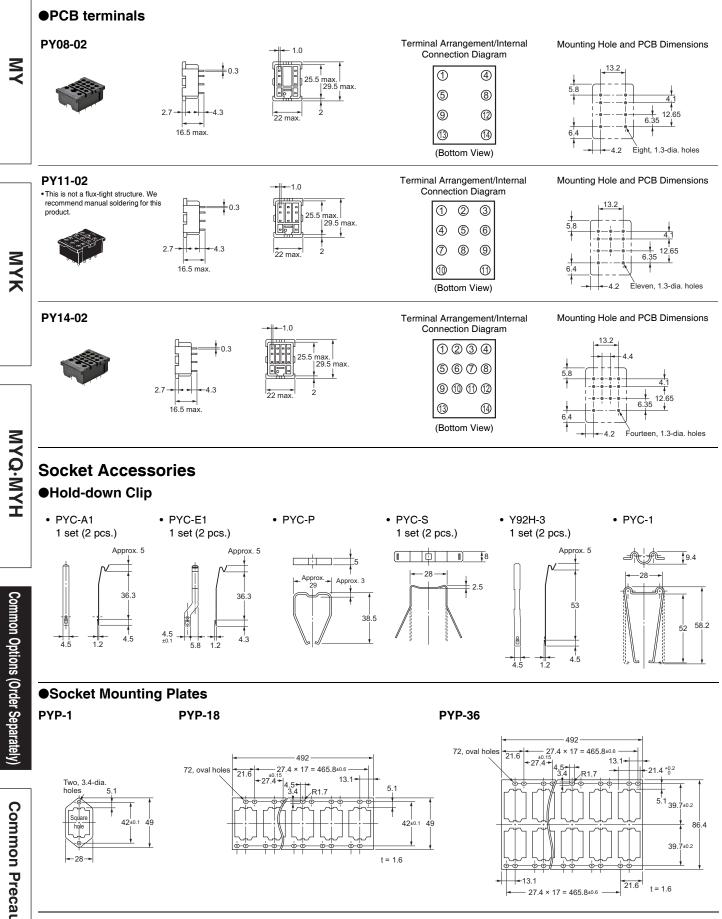




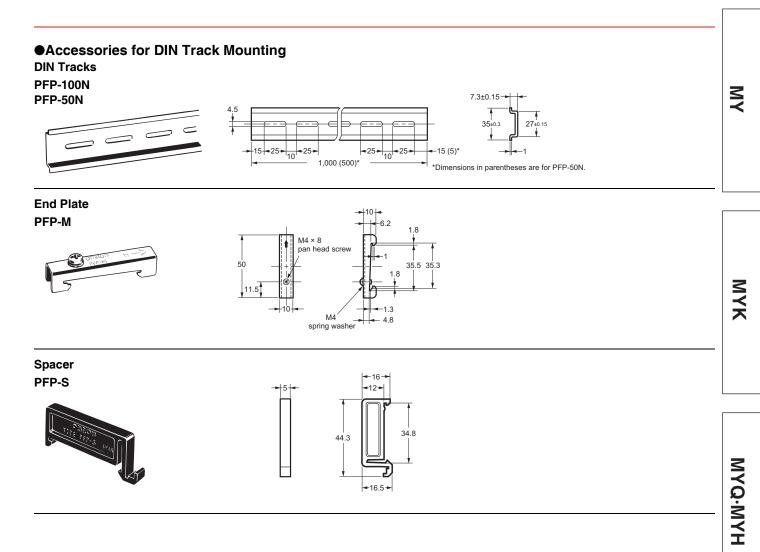
Common Options (Order Separately)

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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. |
|--------------------------------|--|
| | 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

| \triangle | General caution Indicates the possibility of non-specified general cautions, warnings, and danger. | | | |
|------------------|---|--|--|--|
| | • Electric shock caution Used to warn of the risk of electric shock under specific conditions. | | | |
| | High temperature caution Indicates the possibility of injuries by high temperature under specific conditions. | | | |
| | | | | |
| <u>∧</u> 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.



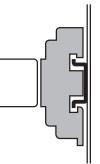
Precautions for Correct Use

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

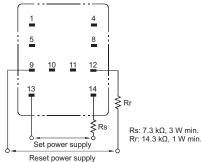
If any standard MY-series Relays (e.g., MY4) are used infrequently to switch microloads, the contacts may become unstable and eventually result in failure contact. In this case, we recommend using the MY4Z-CBG Series, which has high contact reliability for microloads.

Common Options (Order Separately)

MYQ·MYH

•Latching Relays (MYK)

• For applications that use a 200 VAC power supply, connect external resistors Rs and Rr 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.

Optional Sockets (Order Separately)

Be sure to read the *Safety Precautions for All Relay*s 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-D-PU/P2RF-D-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 | Model | Recommen | ded wire diameter (mm ²) |
| PYFZ-08 PYFZ-14 | 0.78 to 1.18 N·m | PYFZ-08 PYFZ-14 | Stranded wire | 0.75 to 2.5 mm ² AWG 18 to 14 |
| PYF08A PYF14A | | PYF08A PYF14A | Solid wire | 0.75 to 1.5 mm ² AWG 18 to 16 |
| PYFZ-08-E PYFZ-14-E | 0.59 to 0.88 N·m * Use a No. 1 screwdriver. | PYFZ-08-E PYFZ-14-E | Stranded wire | 0.75 to 2.5 mm ² AWG 18 to 14 |
| PYF08A-E PYF14A-E | | PYF08A-E PYF14A-E | 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

NΝ

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

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

Hermetically Sealed Relays (MYH/MYQ)

Application Environments

Relays with PCB Terminals

itself is made out of metal.

Solution

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.

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