

## New Latching Levers for Circuit Checking Added to Our Best-selling MY General-purpose Relays

- Now lead-free to protect the environment.
- VDE certification (Germany).
- Different colors of coil tape for AC and DC models to more easily distinguish them.
- MY(S) models with latching levers added for easier circuit checking.



 Refer to the *Common Relay Precautions*.

## Model Number Structure

| Classification                                                                 | Structure<br>Number of poles | Relays with Plug-in Terminals |                             |                     | PCB terminals | Case-surface mounting |
|--------------------------------------------------------------------------------|------------------------------|-------------------------------|-----------------------------|---------------------|---------------|-----------------------|
|                                                                                |                              | With operation indicator      | Without operation indicator | With latching lever |               |                       |
| Standard models (compliant with Electrical Appliances and Material Safety Act) | 2                            | MY2N*                         | MY2*                        | MY2IN(S)*           | MY2-02        | MY2F                  |
|                                                                                | Bifurcated                   | MY2ZN                         | MY2Z                        |                     |               |                       |
|                                                                                | 3                            | MY3N                          | MY3                         |                     | MY3-02        | MY3F                  |
|                                                                                | 4                            | MY4N*                         | MY4*                        | MY4IN(S)*           | MY4-02        | MY4F                  |
| Models with diode for coil surge absorption (DC coil specification only)       | Bifurcated                   | MY4ZN*                        | MY4Z*                       | MY4ZIN(S)*          | MY4Z-02       | MY4ZF                 |
|                                                                                | 2                            | MY2N-D2*                      | MY2-D*                      | MY2IN-D2(S)*        | ---           | ---                   |
|                                                                                | Bifurcated                   | MY2ZN-D2                      | MY2Z-D                      |                     |               |                       |
|                                                                                | 3                            | MY3N-D2                       | MY3-D                       |                     |               |                       |
|                                                                                | 4                            | MY4N-D2*                      | MY4-D*                      | MY4IN-D2(S)*        |               |                       |
| Models with CR circuit for coil surge absorption (AC coil specification only)  | Bifurcated                   | MY4ZN-D2*                     | MY4Z-D*                     | MY4ZIN-D2(S)*       | ---           |                       |
|                                                                                | 2                            | MY2N-CR*                      | MY2-CR*                     |                     |               |                       |
|                                                                                | 4                            | MY4N-CR*                      | MY4-CR*                     | MY4IN-CR(S)*        |               |                       |
| Models with high contact reliability                                           | Bifurcated                   |                               | MY4Z-CBG                    |                     |               |                       |
|                                                                                | 4                            | MYQ4N                         | MYQ4                        |                     | MYQ4-02       |                       |
| Plastic sealed models                                                          | Bifurcated                   |                               | MYQ4Z                       |                     | MYQ4Z-02      |                       |
| Latching models (coil latching)                                                | 2                            |                               | MY2K                        |                     | MY2K-02       |                       |
| Hermetic models                                                                | 4                            |                               | MY4H                        |                     | MY4H-0        |                       |
|                                                                                | Bifurcated                   |                               | MY4ZH                       |                     | MY4ZH-0       |                       |

- Note:** 1. The models in this table are UL/CSA certified. This is indicated with a certification mark on the products.  
(This does not include models with high contact reliability or plastic sealed, latching, or hermetically sealed models.)
2. Models with an asterisk (\*) next to them are new versions.
3. The standard models with plug-in terminals, models with coil surge absorption diodes, and models with coil surge absorption CR circuits were used in combination with the PYF-E and PYFS (2-pole and 4-pole) for the EC Declaration of Conformity. These products display the CE Marking.
4. Products cannot be manufactured for the cells with a diagonal line. Ask your OMRON representative for details on manufacturing products for cells containing "—" in the above table.

Refer to *Connection Socket and Mounting Bracket Selection Table* on page 33 in *Options* for information on the possible combinations of Models with Plug-in Terminals and Sockets.

# Miniature Power Relays: MY2



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

## Ordering Information

When your order, specify the rated voltage.

| Classification                                            | Model   | Rated voltage (V)                                 |                        |
|-----------------------------------------------------------|---------|---------------------------------------------------|------------------------|
|                                                           |         | Standard products                                 | Made-to-order items    |
| Standard models                                           | MY2     | 12, 24, 100/110, or 200/220 VAC                   | 110/120 or 220/240 VAC |
|                                                           |         | 12, 24, 48, or 100/110 VDC                        |                        |
| Models with built-in operation indicators                 | MY2N    | 12, 24, 100/110, 110/120, 200/220, or 220/240 VAC |                        |
|                                                           |         | 12, 24, 48, or 100/110 VDC                        |                        |
| Models with built-in diodes                               | MY2-D   | 12, 24, or 100/110 VDC                            | 48 VDC                 |
| Models with built-in diodes and operation indicators      | MY2N-D2 | 12, 24, 48, or 100/110 VDC                        |                        |
| Models with built-in CR circuits                          | MY2-CR  | 100/110 or 200/220 VAC                            | 110/120 or 220/240 VAC |
| Models with built-in CR circuits and operation indicators | MY2N-CR | 100/110 or 200/220 VAC                            | 110/120 or 220/240 VAC |

- Note:**
1. Ask your OMRON representative for details on the time required to deliver made-to-order products.
  2. Ask your OMRON representative for details on product specifications and the ability to manufacture products with voltages other than the above coil specifications.
  3. The above models and specifications are new versions in the MY Series.
  4. Except for MY2(N)-CR Relays with the above voltage specifications, all Relays have a height of 53 mm or less. If Mounting Brackets are required, refer to page 33 for selection information.

## Ratings and Specifications

### Ratings

#### Operating Coils (Standard Models)

| Item | Rated voltage (V) | Rated current (mA) |         | Coil resistance (Ω) | Coil inductance (H) |             | Must-operate voltage (V) | Must-release voltage (V) | Maximum voltage (V)   | Power consumption (VA, W)     |
|------|-------------------|--------------------|---------|---------------------|---------------------|-------------|--------------------------|--------------------------|-----------------------|-------------------------------|
|      |                   | 50 Hz              | 60 Hz   |                     | Armature OFF        | Armature ON |                          |                          |                       |                               |
| AC   | 12                | 106.5              | 91      | 46                  | 0.17                | 0.33        | 80% max. *1              | 30% min. *2              | 110% of rated voltage | Approx. 1.0 to 1.2 (at 60 Hz) |
|      | 24                | 53.8               | 46      | 180                 | 0.69                | 1.3         |                          |                          |                       | Approx. 0.9 to 1.1 (at 60 Hz) |
|      | 100/110           | 11.7/12.9          | 10/11   | 3,750               | 14.54               | 24.6        |                          |                          |                       |                               |
|      | 110/120           | 9.9/10.8           | 8.4/9.2 | 4,430               | 19.2                | 32.1        |                          |                          |                       |                               |
|      | 200/220           | 6.2/6.8            | 5.3/5.8 | 12,950              | 54.75               | 94.07       |                          |                          |                       |                               |
|      | 220/240           | 4.8/5.3            | 4.2/4.6 | 18,790              | 83.5                | 136.4       |                          |                          |                       |                               |
| DC   | 12                | 72.7               |         | 165                 | 0.73                | 1.37        | 10% min. *2              | 10% min. *2              |                       | Approx. 0.9                   |
|      | 24                | 36.3               |         | 662                 | 3.2                 | 5.72        |                          |                          |                       |                               |
|      | 48                | 17.6               |         | 2,725               | 10.6                | 21.0        |                          |                          |                       |                               |
|      | 100/110           | 8.7/9.6            |         | 11,440              | 45.6                | 86.2        |                          |                          |                       |                               |

- Note:**
1. The rated current and coil resistance are measured at a coil temperature of 23°C with tolerances of +15%/–20% for the AC rated current and ±15% for the DC coil resistance.
  2. The AC coil resistance and inductance values are reference values only (at 60 Hz).
  3. Operating characteristics were measured at a coil temperature of 23°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% max.  
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.

### Contact Ratings

| Item                    | Load | Resistive load                  | Inductive load (cos φ = 0.4, L/R = 7 ms) |
|-------------------------|------|---------------------------------|------------------------------------------|
|                         |      |                                 |                                          |
| Rated load              |      | 5 A at 220 VAC<br>5 A at 24 VDC | 2 A at 220 VAC<br>2 A at 24 VDC          |
| Rated carry current     |      | 5 A                             |                                          |
| Maximum contact voltage |      | 250 VAC, 125 VDC                |                                          |
| Maximum contact current |      | 5 A                             |                                          |
| Contact configuration   |      | DPDT                            |                                          |
| Contact structure       |      | Single                          |                                          |
| Contact materials       |      | Ag                              |                                          |

| Item                            | Type | Standard models | Model with built-in operation indicator, diode, or CR circuit |
|---------------------------------|------|-----------------|---------------------------------------------------------------|
| Ambient operating temperature*1 |      | –55 to 70°C     | –55 to 60°C*2                                                 |
| Ambient operating humidity      |      | 5% to 85%       |                                                               |

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