# **Miniature Power Relays**

CSM\_MY\_DS\_E\_9\_1

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

- Reduces wiring work by 60% when combined with the PYF-PU Push-In Plus Socket (according to actual OMRON measurements).
- 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**

	Structure	Relays with Plug-in Terminals		PCB terminals	Case-surface mounting	
Classification	Number of poles	With operation indicator	Without operation indicator	With latching lever		
	2	MY2N*	MY2*	MY2IN(S)*	MY2-02	MY2F
Standard models (compliant with	Bifurcated	MY2ZN	MY2Z			
Electrical Appliances and	3	MY3N	МҮЗ		MY3-02	MY3F
Material Safety Act)	4	MY4N*	MY4*	MY4IN(S)*	MY4-02	MY4F
	Bifurcated	MY4ZN*	MY4Z*	MY4ZIN(S)*	MY4Z-02	MY4ZF
	2	MY2N-D2*	MY2-D*	MY2IN-D2(S)*		
Models with diode for coil surge	Bifurcated	MY2ZN-D2	MY2Z-D		-	
absorption (DC coil specification only)	3	MY3N-D2	MY3-D			
<b>→</b>	4	MY4N-D2*	MY4-D*	MY4IN-D2(S)*		
	Bifurcated	MY4ZN-D2*	MY4Z-D*	MY4ZIN-D2(S)*		
Models with CR circuit for coil	2	MY2N-CR*	MY2-CR*			
surge absorption (AC coil specification only)	4	MY4N-CR*	MY4-CR*	MY4IN-CR(S)*		
	Bifurcated	MY4ZN-CR*	MY4Z-CR*	MY4ZIN-CR(S)*		
Models with high contact reliability	4 Bifurcated		MY4Z-CBG			
Plastic sealed models	4	MYQ4N	MYQ4		MYQ4-02	
Flastic Sedieu IIIOueis	Bifurcated		MYQ4Z		MYQ4Z-02	
Latching models (coil latching)	2		MY2K		MY2K-02	
Hermetic models	4		МҮ4Н		MY4H-0	
Tiermene mouera	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.)

    Models with an asterisk (\*) next to them are new versions.

    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□A-E, PYF□-S and PYF-□-PU for the EC Declaration of Conformity. These products display the CE Marking.

    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. 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)			
Classification	Model	Standard products	Made-to-order items		
Standard models	MY2	12, 24, 100/110, or 200/220 VAC	110/120 or 220/240 VAC		
Standard models	IVI Y Z	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			
Models with built-in operation indicators	IVI Y ZIN	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 current (mA)		Coil resistance	Coil inductance (H)		Must-	Must-	Maximum	Dower consumption		
Rate volta	ed age (V)	50 Hz	60 Hz	(Ω)	Armature OFF	Armature ON	operate voltage (V)	release voltage (V)	voltage (V)	Power consumption (VA, W)		
	12	106.5	91	46	0.17	0.33						
	24	53.8	46	180	0.69	0.69 1.3						
AC	100/110	11.7/12.9	10/11	3,750	14.54	24.6	80% max. *1			30% min. *2		Approx. 0.9 to 1.3
AC	110/120	9.9/10.8	8.4/9.2	4,430	19.2	32.1			30% IIIII. ·-	11IIII. ·-	(at 60 Hz)	
	200/220	6.2/6.8	5.3/5.8	12,950	54.75	94.07			110% of rated voltage			
	220/240	4.8/5.3	4.2/4.6	18,790	83.5	136.4	00 /6 IIIax.					
	12	72	2.7	165	0.73	1.37						
DC	24	36.3		662	3.2	5.72		10% min. *2		Approx. 0.9		
ЪС	48	17	'.6	2,725	10.6	21.0		10% 111111.		Арргох. 0.9		
	100/110	8.7/	9.6	11,440	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 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.

specified value.

#### Contact Patings

Contact natings						
Load Item	Resistive load	Inductive load (cos $\phi$ = 0.4, L/R = 7 ms)				
Rated load	5 A at 220 VAC 5 A at 24 VDC	2 A at 220 VAC 2 A at 24 VDC				
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					

Type Item	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.