

Miniature Power Relays MY(S)

MY(S) Versatile plug-in Relay

- Reduces wiring work by 60% when combined with the PYF-PU Push-In Plus Socket (according to actual OMRON measurements).
- 10 A (DPDT) and 5 A (4PDT)
- Gold-clad contacts (MY4(S))
- Test button (lockable)
- Wide portfolio includes hermetically sealed and latching types
- 2.6 mm wide pins offer higher conductivity and less temperature increase



The compliant standards depend on the model.
For details, refer to information provided for individual models.

Refer to the Common Relay Precautions and Safety Precautions on page 32.

Model Number Structure

Coil Polarity (DC case) *	Type	Contact form	Plug-In socket/solder terminals			Flange mounting
			With LED indicator	With LED Indicator and Lockable test button	Without LED Indicator	
	Standard model	DPDT	MY2N(S)	MY2IN(S)	MY2(S)	MY2F
		DPDT (Bifurcated)	MY2ZN	---	---	---
		4PDT	MY4N(S)	MY4IN(S)	MY4(S)	MY4F
		4PDT (Bifurcated)	MY4ZN(S)	MY4ZIN(S)	MY4Z(S)	MY4ZF
	With Built-in diode (DC only)	DPDT	MY2N-D2(S)	MY2IN-D2(S)	---	---
		DPDT (Bifurcated)	MY2ZN-D2	---	---	---
		4PDT	MY4N-D2(S)	MY4IN-D2(S)	---	---
		4PDT (Bifurcated)	MY4ZN-D2(S)	MY4ZIN-D2(S)	---	---
	With Built-in CR (AC only)	DPDT	MY2N-CR(S)	MY2IN-CR(S)	---	---
		4PDT	MY4N-CR(S)	MY4IN-CR(S)	---	---
		4PDT (Bifurcated)	MY4ZN-CR(S)	MY4ZIN-CR(S)	---	---
	High reliability contacts	4PDT (Crossbar Bifurcated)	---	---	MY4Z-CBG	---
	Plastic Sealed	4PDT	MYQ4N	---	---	---
		4PDT (Bifurcated)	---	---	MYQ4Z	---
	Latching (coil latching)	DPDT	---	---	MY2K	---
	Hermetic	4PDT	---	---	MY4H	---
		4PDT (Bifurcated)	---	---	MY4ZH	---
	Standard model	DPDT	MY2N1(S)	MY2IN1(S)	---	---
		4PDT	MY4N1(S)	MY4IN1(S)	---	---
		4PDT (Bifurcated)	MY4ZN1(S)	MY4ZIN1(S)	---	---
	With Built-in diode (DC only)	DPDT	MY2N1-D2(S)	MY2IN1-D2(S)	---	---
		4PDT	MY4N1-D2(S)	MY4IN1-D2(S)	---	---
		4PDT (Bifurcated)	MY4ZN1-D2(S)	MY4ZIN1-D2(S)	---	---

* In case of AC coil type relay, please select them from "Type 1" of Coil Polarity.

Refer to *Connection Socket and Mounting Bracket Selection Table* on page 24 in *Options* for information on the possible combinations of Models with Plug-in Terminals and Sockets.

Contents

Model Number Structure.....	1
Specifications	
Coil Ratings	2
MY2(S)/MY4(S)/MY4Z(S)	3
Engineering Data	6
Detailed Information on Models Certified for Safety Standards, MY2(S)/MY4(S)/MY4Z(S)	8
Models Other Than MY(S) Models	
MY2ZN	9
MY□F	11
Detailed Information on Models Certified for Safety Standards, MY2ZN and MY□F	14
MY4Z-CBG	15
MYQ4	17
MY2K	19
MY4(Z)H	21
Socket for MY	23
Options	24
Safety Precautions	32

Specifications

Coil Ratings

MY(S)

Rated voltage		Rated current		Coil resistance	Coil inductance (reference value)		Must operate voltage	Must release voltage	Max. voltage	Power consumption (approx.)
		50 Hz	60 Hz		Arm. OFF	Arm. ON				
AC	6 V	214.1 mA	183 mA	12.2 Ω	0.04 H	0.08 H	80% max.	30% min.	110%	Approx. 0.9 to 1.3 VA (60 Hz)
	12 V	106.5 mA	91 mA	46 Ω	0.17 H	0.33 H				
	24 V	53.8 mA	46 mA	180 Ω	0.69 H	1.30 H				
	48/50 V	24.7/25.7 mA	21.1/22.0 mA	788 Ω	3.22 H	5.66 H				
	110/120 V	9.9/10.8 mA	8.4/9.2 mA	4,430 Ω	19.20 H	32.1 H				
	220/240 V	4.8/5.3 mA	4.2/4.6 mA	18,790 Ω	83.50 H	136.4 H				
DC	6 V	151 mA		39.8 Ω	0.17 H	0.33 H	10% min.			0.9 W
	12 V	75 mA		160 Ω	0.73 H	1.37 H				
	24 V	37.7 mA		636 Ω	3.20 H	5.72 H				
	48 V	18.8 mA		2,560 Ω	10.60 H	21.0 H				
	100/110 V	9.0/9.9 mA		11,100 Ω	45.60 H	86.2 H				

Note: 1. The rated current and coil resistance are measured at a coil temperature of 23°C with tolerances of +15%/–20% for rated currents and ±15% for DC coil resistance.
2. Performance characteristic data are measured at a coil temperature of 23°C.
3. AC coil resistance and impedance are provided as reference values (at 60 Hz).
4. Power consumption drop was measured for the above data. When driving transistors, check leakage current and connect a bleeder resistor if required.

MY2ZN, MY□F, MY4(Z)H

Rated voltage (V)	Item	Rated current (mA)		Coil resistance (Ω)	Coil inductance (H)		Must-operate voltage (V)	Must-release voltage (V)	Maximum voltage (V)	Power consumption (VA, W)
		50 Hz	60 Hz		Armature OFF	Armature ON				
AC	12	106.5	91	46	0.17	0.33	80% max.*1	30% min.*2	110% of rated voltage	Approx. 0.9 to 1.3 VA (60 Hz)
	24	53.8	46	180	0.69	1.3				
	100/110	11.7/12.9	10/11	3,750	14.54	24.6				
	110/120	9.9/10.8	8.4/9.2	4,430	19.2	32.1				
	200/220	6.2/6.8	5.3/5.8	12,950	54.75	94.07				
	220/240	4.8/5.3	4.2/4.6	18,790	83.5	136.4				
DC	12	75		160	0.73	1.37	10% min.*2			Approx. 0.9
	24	36.9		650	3.2	5.72				
	48	18.5		2,600	10.6	21.0				
	100/110	9.1/10		11,000	45.6	86.2				

Note: 1. The rated current and coil resistance are measured at a coil temperature of 23°C with tolerances of +15%/–20% for 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

*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.

Note: Refer to page 19 for the coil specifications of the MY2K.