Characteristics

Item	Type	Standard models	Models with built-in operation indicators	Models with built-in CR circuits	Models with built-in diodes	Model with built-in operation indicator and diode	Model with built-in operation indicator and CR circuit
Contact resistance*1		50 mΩ max.					
Operation time*2		20 ms max.					
Release time*2		20 ms max.					
Maximum operating frequency	Mechanical	18,000 operations/h					
	Rated load	1,800 operations/h					
Insulation resistance*3		100 MΩ min.					
Dielectric strength	Between coil and contacts	2,000 VAC at 50/60 Hz for 1 min.					
	Between contacts of different polarity						
	Between contacts of the same polarity	1,000 VAC at 50/60 Hz for 1 min.					
Vibration resistance	Destruction	10 to 55 to 10 Hz, 0.5-mm single amplitude (1.0-mm double amplitude)					
	Malfunction	10 to 55 to 10 Hz, 0.5-mm single amplitude (1.0-mm double amplitude)					
Shock resistance	Destruction	1,000 m/s^2					
	Malfunction	200 m/s^2					
Endurance	Mechanical	AC: 50,000,000 operations min. DC: 100,000,000 operations min. (switching frequency: 18,000 operations/h)					
	Electrical*4	500,000 operations min. (rated load, switching frequency: 1,800 operations/h)					

Item / Number of poles	2 poles
Failure rate P value (reference value)*5	1 mA at 5 VDC
Weight	Approx. 35 g

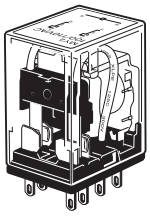
Note: These are initial values.

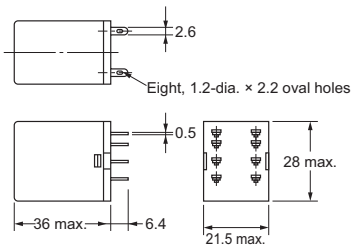
*1. Measurement conditions: 1 A at 5 VDC using the voltage drop method.
*2. Measurement conditions: With rated operating power applied.
Ambient temperature condition: 23° C
*3. Measurement conditions: For 500 VDC applied to the same location as for dielectric strength measurement.
*4. Ambient temperature condition: 23°C
*5. This value was measured at a switching frequency of 120 operations per minute.

Dimensions

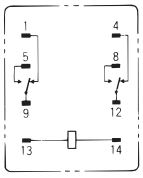
(Unit: mm)

MY2, MY2N, MY2-D, MY2N-D2, MY2-CR, and MY2N-CR

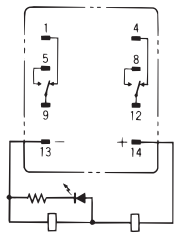
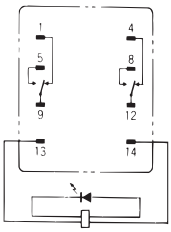




Terminal Arrangement/Internal Connections (Bottom View)
Standard Models

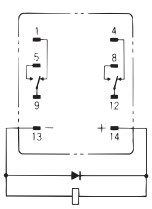


(The coil has no polarity.)

MY2N	
DC Models	AC Models
	
(Check the coil polarity when wiring and wire all connections correctly.)	(The coil has no polarity.)

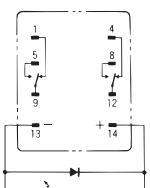
Note:
1. An AC model has coil disconnection self-diagnosis.
2. For the DC models, check the coil polarity when wiring and wire all connections correctly.
3. The indicator is red for AC and green for DC.
4. The operation indicator indicates the energization of the coil and does not represent contact operation.

MY2-D



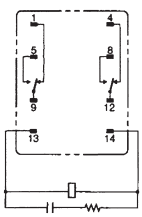
(Check the coil polarity when wiring and wire all connections correctly.)

MY2N-D2



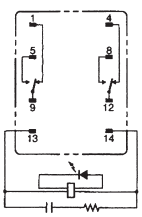
(Check the coil polarity when wiring and wire all connections correctly.)

MY2-CR



(The coil has no polarity.)

MY2N-CR



(The coil has no polarity.)

Miniature Power Relays: MY2Z

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	**MY2Z**	**100/110 or 200/220 VAC**	12, 24, 100/120, or 200/240 VAC
		12 or 24 VDC	48 or 100/110 VDC
Models with built-in operation indicators	**MY2ZN**	**100/110 or 200/220 VAC**	12, 24, 100/120, or 200/240 VAC
		24 VDC	12, 48, or 100/110 VDC
Models with built-in diodes	**MY2Z-D**	**24 VDC**	12 or 100/110 VDC
Models with built-in diodes and operation indicators	**MY2ZN-D2**	**24 or 100/110 VDC**	12 VDC
Models with built-in CR circuits	**MY2Z-CR**		100/110 or 200/220 VAC
Models with built-in CR circuits and operation indicators	**MY2ZN-CR**	**100/110 VAC**	200/220 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.

Ratings and Specifications

Ratings

Operating Coil (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				
	100/110	11.7/12.9	10/11	3,750	14.54	24.6				Approx. 0.9 to 1.1 (at 60 Hz)
	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.

Contact Ratings

Item / Load	Resistive load	Inductive load (cos φ = 0.4, L/R = 7 ms)
Rated load	5 A at 220 VAC 5 A at 24 VDC	2 A at 220 VAC 2 A at 24 VDC
Rated carry current	5 A	
Maximum contact voltage	250 VAC, 125 VDC	
Maximum contact current	5 A	
Contact configuration	DPDT	
Contact structure	Bifurcated	
Contact materials	Au plating + 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.