₩ (LR

Miniature Power Relays

MY Series

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-GS-R), 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-GS-R).
- * 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 62 to 63 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.

Miniature Power Relay Types

MY-GS-R Miniature Power Relays	From page 4
MY(S) Miniature Power Relays	From page 13
MYK Miniature Power Latching Relays	From page 32
MYQ/MYH Miniature Power Sealed Relays	From page 37

Common Information

Common Options (Order Separately)	From	page 43
Common Safety Precautions	From	page 62

Selection

Use this as reference when selecting the model.

Firstly Choice!

This general-purpose model can be used for a wide range of applications

MY-GS-R page 4



Choose this model if you want to properly control a microload!

 $MY \square Z$

Bifurcated contacts MY Z-CBG Crossbar bifurcated contacts

page 13



Choose this model if you want to maintain the operation status of the contact!

MYK Latching Relays

page 32



Choose this model in an environment with a large amount of corrosive gases and dust!

MYQ Plastic Sealed Relays MYH Hermetically Sealed Relays page 37





Miniature Power Relays: MY

Classification Number of poles		Number				Plug-in terminals			Case-surface
		Contacts		Standard	With operation indicator	With latching lever	PCB terminals	mounting	
			Single		MY2-GS-R	MY2N-GS-R	MY2IN-GS-R	MY2-02	MY2F
		2	Bifurcated		MY2Z	MY2ZN			
		3	Single		MY3	MY3N		MY3-02	MY3F
Standard mod	els		Single		MY4-GS-R	MY4N-GS-R	MY4IN-GS-R	MY4-02	MY4F
			Bifurcated	Type 1	MV47(C)	MY4ZN(S)	MY4ZIN(S)	MV47.02	MY4ZF
		4	Difurcated	Type 2	MY4Z(S)	MY4ZN1(S)	MY4ZIN1(S)	MY4Z-02	
		Cross	Crossbar bit	furcated	MY4Z-CBG	MY4ZN-CBG			
		2 Single Bifurcate	Single			MY2N-D2-GS-R	MY2IN-D2-GS-R		
	Models with built-in diode for coil surge		Bifurcated			MY2ZN-D2			
Modele with		3	Single			MY3N-D2			
		4	Single			MY4N-D2-GS-R	MY4IN-D2-GS-R		
		ge	4	Bifurcated			MY4ZN-D2(S)	MY4ZIN-D2(S)	
absorption	Type 2	2	Single			MY2N1-D2(S)	MY2IN1-D2(S)		
	(+) (-) 13 14 A2	4	Single			MY4N1-D2(S)	MY4IN1-D2(S)		
		14 A2 4	Bifurcated			MY4ZN1-D2(S)	MY4ZIN1-D2(S)		
Models with	Models with		Single			MY2N-CR-GS-R	MY2IN-CR-GS-R		
built-in CR circ		4	Single			MY4N-CR-GS-R	MY4IN-CR-GS-R		
coil surge abs	orption	4	Bifurcated			MY4ZN-CR(S)	MY4ZIN-CR(S)		

Miniature Power Latching Relays (MYK)

			Plug-in terminals		PCB terminals
Classification	Number of poles	Contacts		With operation indicator	P
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	T
Plastic Sealed Relays		Single	MYQ4	MYQ4N	MYQ4-02
Plastic Sealed Relays	4	Bifurcated	MYQ4Z		MYQ4Z-02
Hermetically Sealed	4	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 43 and 45 for main unit and socket combinations.

Miniature Power Relays

MY-GS-R

Mechanical Indicators Added as a Standard Feature to Our Best-selling MY General-purpose Relays

- A lineup of models with latching levers added for easier circuit checking.
- Reduces wiring work by 60% when combined with the PYF-PU Push-In Plus Socket (according to actual OMRON measurements).
- Relays with AC and DC coils have different colors of operating indicators (LEDs).
- Printing on the coil tape indicates the operating coil specification.
- Mechanical operation indicators are a standard feature on all models.
- UL, CSA, IEC (VDE certification), and CQC.







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Refer to the Common Relay Precautions.

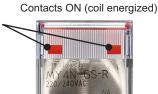
Features

Common to all specifications

- · Mechanical indicators are a standard feature on all models so that you can easily check the contact status.
- The color of the LED shows whether the coil voltage is AC or DC.

Mechanical indicators (one on left and one on right)

LED operation indicator Relay with AC coil: Red — Relay with DC coil: Green



Relay with AC Coil (LED: Red)





Relay with AC Coil (LED: Red)



Relay with DC Coil (LED: Green)

With latching lever

- Useful for the operation check of relay sequence circuits.
- The coil voltage AC/DC can be identified by the color of the latching lever (AC coil specification: red, DC coil specification: Blue).

Latching lever operating method

	Normal State	Mode 1: Momentary State	Mode 2: Locked State
When seen from the top	CONTROL OF THE PROPERTY OF THE	Yellow button	O omnon C E E E E E E E E E E E E E E E E E E
When seen from the side	AND THE CONTRACT OF THE CONTRA	AND STATE OF THE PROPERTY OF T	A STATE OF THE STA
Operation Description		Slide the lever one step and press the yellow button with an insulated tool to operate the contacts.	If you slide the lever two steps, the contacts lock in the operation position.

Model Number Structure

Model Number Legend

$$\mathbf{MY} \stackrel{\square}{\underset{1}{\square}} \stackrel{\square}{\underset{2}{\square}} \stackrel{\square}{\underset{3}{\square}} - \stackrel{\square}{\underset{4}{\square}} - \mathbf{GS} - \mathbf{R} \quad \frac{\mathbf{DC24}}{5}$$

1. Number of Poles

2: 2 poles 4: 4 poles

 Latching Lever
 Blank:Without latching lever With latching lever

3. LED Operation Indicator

Blank: Built-in mechanical indicators

LED operation indicator and built-in mechanical indicators

4. Coil Surge Absorption

Blank: Standard models
D2: Models with built-in diodes
CR: Models with built-in CR circuits

Operating Coil Voltage Display Example: DC24

List of Models

Miniature Power Relays (MY-GS-R)

			Plug-in (octal pins) terminals			
Catagoni	Number of	Contact	4	With operation indicator		
Category	poles structure				With latching lever	
Standard models	2		MY2-GS-R	MY2N-GS-R	MY2IN-GS-R	
	4		MY4-GS-R	MY4N-GS-R	MY4IN-GS-R	
Models with built-in diodes	2	Cim min		MY2N-D2-GS-R	MY2IN-D2-GS-R	
for coil surge absorption	4	Single		MY4N-D2-GS-R	MY4IN-D2-GS-R	
Models with built-in CR circuits for coil surge absorption	2			MY2N-CR-GS-R	MY2IN-CR-GS-R	
	4			MY4N-CR-GS-R	MY4IN-CR-GS-R	

Ordering Information

Main unit

Standard model without operation indicator

Number of poles	Model	Rated voltage (V)
2	MY2-GS-R	12, 24, 48, 100/110, 110/120, 200/220, 220/240 VAC 6, 12, 24, 48, 100/110 VDC
4	MY4-GS-R	12, 24, 48, 100/110, 110/120, 200/220, 220/240 VAC 6, 12, 24, 48, 100/110 VDC

Standard model with operation indicator

Number of poles	Model	Rated voltage (V)
2	MY2N-GS-R	12, 24, 48, 100/110, 110/120, 200/220, 220/240 VAC 6, 12, 24, 48, 100/110, 220 VDC
4		12, 24, 48, 100/110, 110/120, 200/220, 220/240 VAC 6, 12, 24, 48, 100/110, 220 VDC

Standard model with operation indicator and latching lever

Number of poles	Model	Rated voltage (V)
2	MY2IN-GS-R	12, 24, 48, 100/110, 110/120, 200/220, 220/240 VAC 6, 12, 24, 48, 100/110, 220 VDC
4	MY4IN-GS-R	12, 24, 48, 100/110, 110/120, 200/220, 220/240 VAC 6, 12, 24, 48, 100/110, 220 VDC

Models with built-in diodes for coil surge absorption with operation indicator

Number of poles	Model	Rated voltage (V)
2	MY2N-D2-GS-R	12, 24, 48, 100/110, 220 VDC
4	MY4N-D2-GS-R	12, 24, 48, 100/110, 220 VDC

Models with built-in diodes for coil surge absorption with operation indicator and latching lever

Number of poles	Model	Rated voltage (V)
2	MY2IN-D2-GS-R	12, 24, 48, 100/110, 220 VDC
4	MY4IN-D2-GS-R	12. 24. 48. 100/110. 220 VDC

Models with built-in CR circuits for coil surge absorption with operation indicator

Number of poles Model Rated voltage (V)				
2	MY2N-CR-GS-R	100/110, 110/120, 200/220, 220/240 VAC		
4	MY4N-CR-GS-R	100/110, 110/120, 200/220, 220/240 VAC		

Models with built-in CR circuits for coil surge absorption with operation indicator and latching lever

Number of poles	Model	Rated voltage (V)
2	MY2IN-CR-GS-R	100/110, 110/120, 200/220, 220/240 VAC
4	MY4IN-CR-GS-R	100/110, 110/120, 200/220, 220/240 VAC

Ratings and Specifications

Ratings

Main unit Operating Coil

Item		Rated current (mA)		Coil resistance	Coil inductance (H)		Con muuclance (n)	•		Maximum voltage	Power consumption
Rated	d voltage	50 Hz	60 Hz	(Ω)	Armature OFF	Armature ON	Percentage of rated voltage		oltage	(VA, W)	
	12	106.5	91	46	0.17	0.33					
	24	53.8	46	180	0.69	1.3	1				
	48	25.7	21.1	788	3.22	5.66	1				
AC	100/110	11.7/12.9	10.0/11.0	3,750	14.54	24.6	1	30% min. *2	30% min. * 2	Approx. 0.9 to 1.3 (at 60 Hz)	
	110/120	9.9/10.8	8.4/9.2	4,430	19.2	32.1	1			1.0 (dt 00 112)	
	200/220	6.2/6.8	5.3/5.8	12,950	54.75	94.07	1				
	220/240	5.2/6.2	4.3/5.0	15,920	83.5	136.4	80% max. * 1				
	6	146 (151)		41.0 (39.8)	0.17	0.33	- 00 /0 max. *1				
	12	72.7 (75)		165 (160)	0.73	1.37	1				
	24	36.3 (37.7)		662 (636)	3.2	5.72	1			Approx. 0.9	
DC	48	17.6 (18.8)		2,725 (2,560)	10.6	21.0	1	10% min. * 2		, ppiox. 0.0	
	100/110	8.7 (9.0)/9.6	8.7 (9.0)/9.6 (9.9)		45.6	86.2					
	220	3.6		60,394	362.3	452.9	1			Approx. 0.8	

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 values in parentheses for the rated currents and coil voltages of DC coils are for models with LED operation indicators.
- 5. 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.

The Relay will operate if 80% or higher of the rated voltage is applied. However, to achieve the specified characteristics, apply the rated voltage to the coil.

*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.

Contacts

		2 poles			4 poles		
	Resistin	ve load	Inductive load (cos φ = 0.4, L/R = 7 ms)	Resist	ive load	Inductive load (cos φ = 0.4, L/R = 7 ms)	
Contact configuration	DPDT			4PDT			
Contact structure	Single						
Contact material	Ag						
Rated load	10 A at 250 VAC 10 A at 30 VDC	5 A at 220 VAC 5 A at 24 VDC	2 A at 220 VAC 2 A at 24 VDC	6 A at 250 VAC 6 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	
Electrical endurance *1	100,000 operations	500,000 operations	s	30,000 operations	200,000 operations	S	
Rated carry current	10 A			6 A *2			
Maximum contact voltage	250 VAC, 220 VDC			250 VAC, 220 VDC			
Maximum contact current	10 A			6 A *2			
Maximum switching capacity	2,500 VA 300 W	1,750 VA 210 W	440 VA 48 W	1,500 VA 180 W		176 VA 36 W	
Minimum load (reference values) *3	1 mA at 5 VDC	mA at 5 VDC					

- *1. Rated load, switching frequency: 2,400 operations/h. Ambient temperature condition: 23°C. Duty ratio: 33%.
- *2.4 poles of 6 A is for an ambient temperature of 50°C. At an ambient temperature of 70°C, the value is 3 A.
- *3. These values are guides for the switchable limits for minute load levels, such as in electronic circuits. Actual characteristics may be different. These values will depend on the switching frequency, atmosphere, and expected reliability level. Confirm applicability in the actual system under actual application conditions.

Characteristics Main unit

		2 poles	4 poles			
Contact resistance *1		100 mΩ max.				
Operation time *2		20 ms max.				
Release time *2		20 ms max.				
Maximum operating	Mechanical	18, 000 operations/h				
frequency	Rated load	2,400 operations/h				
Insulation resistance	*3	1,000 MΩ min.				
	Between coil and contacts	2,000 VAC at 50/60 Hz for 1 min.				
Dielectric strength	Between contacts of different polarity	2,000 VAC at 50/60 Hz for 1 min.				
	Between contacts of the same polarity	1,000 VAC at 50/60 Hz for 1 min.				
Vibration resistance	Destruction	10 to 55 to 10 Hz, Double amplitude: 1.0 mm				
VIDIALIOII TESISLATICE	Malfunction	10 to 55 to 10 Hz, Double amplitude: 1.0 mm				
Shock resistance	Destruction	1,000 m/s² (approx. 100 G)				
SHOCK resistance	Malfunction	200 m/s ² (Approx. 20 G)				
Mechanical endurance)	50,000,000 operations (switching frequency: 18,000 operations/h)				
Ambient operating temperature		Standard models: –55 to 70°C (with no icing or condensation) Models with LED operation indicators: –40 to 70°C (with no icing or condensation)				
Ambient humidity		5% to 85%				
Weight		Approx. 35 g				

Note: The above values 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 time.

*3. Measurement conditions: For 500 VDC applied to the same location as for dielectric strength measurement.

Certified Ratings for Models Certified for Safety Standards

The rated values for safety standard certification are not the same as individually defined performance values. Always check the specifications before use.

Main unit

UL-certified Models: UL508

MY-GS	Number of poles	Coil ratings	Contact ratings	Certified number of operations
	2	12 VAC, 24 VAC, 48 VAC, 100/110 VAC, 110/120 VAC, 200/220 VAC, or 220/240 VAC 6 VDC, 12 VDC, 24 VDC, 48 VDC, 100/110 VDC, or 220 VDC	5 A, 30 VDC (General Use) 10 A, 30 VDC Resistive Load 5 A, 250 VAC (General Use) 10 A, 250 VAC Resistive Load	6,000 operations
	4	12 VAC, 24 VAC, 48 VAC, 100/110 VAC, 110/120 VAC, 200/220 VAC, or 220/240 VAC 6 VDC, 12 VDC, 24 VDC, 48 VDC, 100/110 VDC, or 220 VDC	3 A, 30 VDC (General Use) 6 A, 30 VDC Resistive Load 3 A, 250 VAC (General Use) 6 A, 250 VAC Resistive Load	6,000 operations

CSA-certified Models: CSA C22.2 No.14

MY-GS	Number of poles	Coil ratings	Contact ratings	Certified number of operations
	2 200/220 VAC, 48 VAC, 48 VAC, 100/110 VAC, 110/120 VAC, 200/220 VAC, or 220/240 VAC		5 A, 30 VDC (General Use) 10 A, 30 VDC Resistive Load 5 A, 250 VAC (General Use) 10 A, 250 VAC Resistive Load	6,000 operations
	4	12 VAC, 24 VAC, 48 VAC, 100/110 VAC, 110/120 VAC, 200/220 VAC, or 220/240 VAC 6 VDC, 12 VDC, 24 VDC, 48 VDC, 100/110 VDC, or 220 VDC	3 A, 30 VDC (General Use) 6 A, 30 VDC Resistive Load 3 A, 250 VAC (General Use) 6 A, 250 VAC Resistive Load	6,000 operations

VDE-certified Models: EN 61810-1

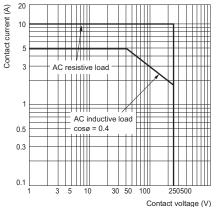
MY-GS	Number of poles	Coil ratings	Contact ratings	Certified number of operations
	2	12 VAC, 24 VAC, 48 VAC, 100/110 VAC, 110/120 VAC, 200/220 VAC, or 220/240 VAC 6 VDC, 12 VDC, 24 VDC, 48 VDC, 100/110 VDC, or 220 VDC	10 A, 30 VDC (L/R = 0) 10 A, 250 VAC (cos\(\phi = 1 \)	10,000 operations
	4	12 VAC, 24 VAC, 48 VAC, 100/110 VAC, 110/120 VAC, 200/220 VAC, or 220/240 VAC 6 VDC, 12 VDC, 24 VDC, 48 VDC, 100/110 VDC, or 220 VDC	6 A, 30 VDC (L/R = 0) 6 A, 250 VAC (cosφ = 1)	10,000 operations

CQC-certified Models

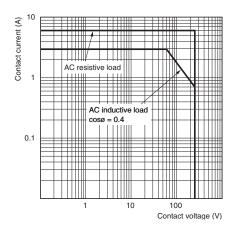
Model	Standard number	Certification No.	
MY-GS	GB/T 21711.1	CQC18002198531	

Engineering Data (Reference Value)

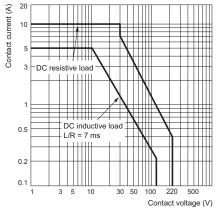
Maximum Switching Capacity MY2□□-□□-GS-R (AC load)



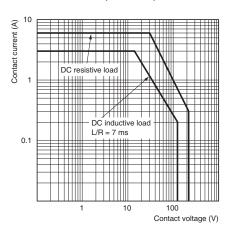
MY4□□-□□-GS-R (AC load)



MY2□□-□□-GS-R (DC load)

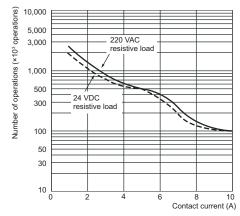


MY4□□-□□-GS-R (DC load)

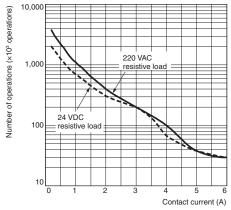


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Endurance Curve MY2□□-□□-GS-R (Resistive Load)



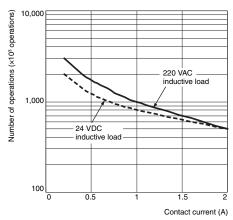
MY4□□-□□-GS-R (Resistive Load)



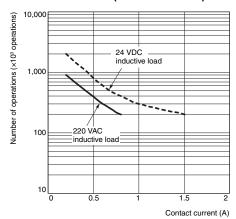
Note: 1. Number of operations: AC load, 50 Hz, 80%

2. Switching condition: NO or NC

MY2□□-□□-GS-R (Inductive Load)

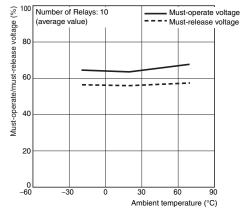


MY4□□-□□-GS-R (Inductive Load)

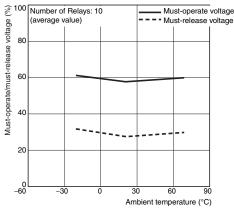


Ambient Temperature vs. Must-operate and Must-release Voltage

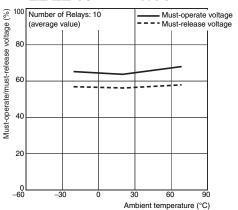
MY2□□-□□-GS-R AC Models



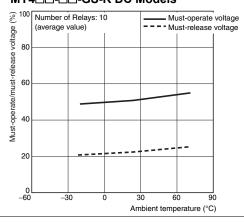
MY2□□-□□-GS-R DC Models



MY4□□-□□-GS-R AC Models

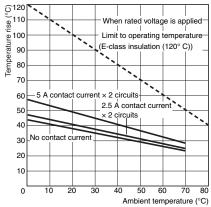


MY4□□-□□-GS-R DC Models

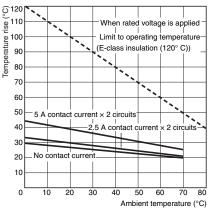


Ambient Temperature vs. Coil Temperature Rise

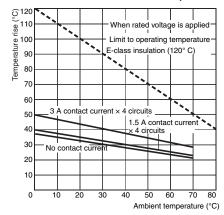




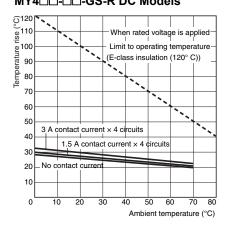
MY2□□-□□-GS-R DC Models



MY4□□-□□-GS-R AC Models, 50 Hz



MY4□□-□□-GS-R DC Models

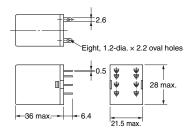


Dimensions (Unit: mm)

Relays

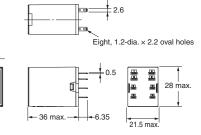
MY2-GS-R MY2N-GS-R MY2N-D2-GS-R MY2N-CR-GS-R





MY2IN-GS-R MY2IN-D2-GS-R MY2IN-CR-GS-R





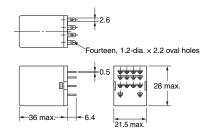
Terminal Arrangement/Internal Connections (Bottom View)

MY2-GS-R		MY2□N-GS-R		MY2□N-	D2-GS-R	MY2□N-CR-GS-R
Standard Models	AC Models	DC Models (except 220 VDC)	DC Models (for 220 VDC)	DC Models (except 220 VDC)	DC Models (for 220 VDC)	AC Models
5 8 9 12	9 12	1 4 8 8 9 9 12 12 13 14	1 4 8 8 9 12 12 13 14	1 4 8 9 12 12 13 14 14 14 14 14 14 14 14 14 14 14 14 14	1 8 8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 4 8 8 12 13 14 14 14 15 15 15 15 15 15 15 15 15 15 15 15 15
(The coil has no polarity.)	(The coil has no polarity.)	(The coil has no polarity.)	(The coil has no polarity.)	(The coil has polarity.)	(The coil has polarity.)	(The coil has no polarity.)

- Note: 1. An AC model has coil disconnection self-diagnosis.
 - 2. For models with built-in diodes for coil surge absorption, check the coil polarity when wiring and wire all connections correctly.
 - 3. The indicator is red for AC and green for DC.
 - 4. The LED operation indicators indicate the energization of the coil and do not necessarily represent contact operation.

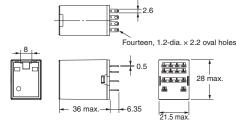






MY4IN-GS-R MY4IN-D2-GS-R MY4IN-CR-GS-R





Terminal Arrangement/Internal Connections (Bottom View)

MY4-GS-R		MY4□N-GS-R		MY4□N-	D2-GS-R	MY4□N-CR-GS-R
Standard Models	AC Models	DC Models (except 220 VDC)	DC Models (for 220 VDC)	DC Models (except 220 VDC)	DC Models (for 220 VDC)	DC Models
1 2 3 4 5 6 7 8 9 10 11 12	1 2 3 4 5 6 7 8 9 10 11 12	1 2 3 4 5 6 7 8 9 10 11 12 13 14	1 2 3 4 5 6 7 8 9 10 11 12	5 6 7 8 9 10 11 12 13 14 14 14 14 14 14 14 14 14 14 14 14 14	5 6 7 8 9 10 11 12 13 14 14	3 10 11 12 13 14 14 14 14 14 14 14 14 14 14 14 14 14
(The coil has no polarity.)	(The coil has polarity.)	(The coil has polarity.)	(The coil has no polarity.)			

- Note: 1. An AC model has coil disconnection self-diagnosis.
 - 2. For models with built-in diodes for coil surge absorption, check the coil polarity when wiring and wire all connections correctly.
 - 3. The indicator is red for AC and green for DC.
 - 4. The LED operation indicators indicate the energization of the coil and do not necessarily represent contact operation.

Miniature Power Relays

MY(S)

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 62 to 63 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.

Features

1. More easily distinguished AC/DC coil voltage specifications

Example: MY4

- Distinguished using color-coded coil tape*
- * Voltage is printed on white tape in the case of the Standard 3-pole model (MY3).
- · Distinguished using color-coded operation indicators (LED)



Operation indicator (LED) Red = AC voltage



Operation indicator (LED) Green = DC voltage



Example: MY2



Coil tape Pink = AC voltage



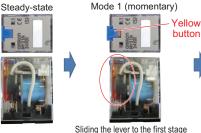


Coil tape Blue = DC voltage



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.

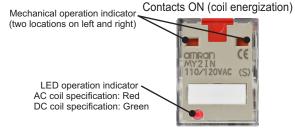
· Latching lever operating procedure



Sliding the lever to the first stage and pressing the yellow button using an insulated flat-blade screwdriver, etc., will operate the contacts



· Mechanical operation indicator/LED operation indicator



AC coil specification (LED: Red)

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

Contact relia	Contact reliability		sistance	
	Contact structure		Contact material	Typical model
High 1	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	Single contacts	Low	Ag alloy	MY2

Model Number Structure

Model Number Legend

Plug-in Terminals

Standard models

(Example: MY4ZIN(S)) (1)(2)(3)

(1) Number of poles

2: 2-pole 3: 3-pole 4: 4-pole

(2) Contacts

None: Single Bifurcated Z-CBG: Crossbar bifurcated

(3) Options

None, (S): None N, N(S): With operation indicator (A2/14: +)

N1(S): With operation indicator (A1/13: +) IN(S): With operation indicator/latching lever (A2/14: +) IN1(S): With operation indicator/latching lever (A1/13: +)

Models with built-in diode for coil surge absorption



(1) Number of poles/contacts

2: 2-pole, single contacts 2Z: 2-pole, bifurcated contacts 3: 3-pole, single contacts 4: 4-pole, single contacts 4Z: 4-pole, bifurcated contacts

(2) Options

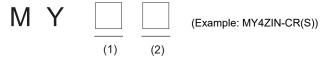
N-D2, N-D2(S): Built-in diode for coil surge absorption, with operation indicator (A2/14: +) N1-D2(S): Built-in diode for coil surge absorption, with operation indicator (A1/13: +) IN-D2(S): Built-in diode for coil surge absorption,

with operation indicator/latching lever (A2/14: +)

IN1-D2(S): Built-in diode for coil surge absorption,

with operation indicator/latching lever (A1/13: +)

Models with built-in CR circuit for coil surge absorption



(1) Number of poles/contacts

- 2: 2-pole, single contacts 2Z: 2-pole, bifurcated contacts
- 4: 4-pole, single contacts 4Z: 4-pole, bifurcated contacts

(2) Options

N-CR, N-CR(S): Built-in CR circuit for coil surge absorption, with operation indicator IN-CR(S): Built-in CR circuit for coil surge absorption, with operation indicator/latching lever

PCB terminals/case surface mounted

M	Y			(Example: MY2-02)
		(1)	(2)	

(1) Number of poles/contacts

- 2: 2-pole, single contacts 3-pole, single contacts
- 4: 4-pole, single contacts
- 4Z: 4-pole, bifurcated contacts

(2) Terminals

-02: PCB terminals

Case-surface mounting

Ordering Information When your order, specify the rated voltage.

●Plug-in Terminals Without operation indicator

Classification	Number of poles	Contacts	Model	Rated voltage
		Cinalo	MV2(C)	6, 12, 24, 48/50, 110/120, 220/240 VAC
	2	Single	MY2(S)	6, 12, 24, 48, 100/110 VDC
		Bifurcated	MY2Z	12, 24, 110/120, 220/240 VAC
		Bilurcated	IVI T ZZ	12, 24, 100/110 VDC
	3	Single	MY3	12, 24, 110/120, 220/240 VAC
Standard models			WITS	12, 24, 48, 100/110 VDC
Standard models		Cinala	MY4(S)	6, 12, 24, 48/50, 110/120, 220/240 VAC
		Single	W114(3)	6, 12, 24, 48, 100/110 VDC
	4	Bifurcated	MY4Z(S)	6, 12, 24, 48/50, 110/120, 220/240 VAC
	7	Billurcateu	W1142(3)	6, 12, 24, 48, 100/110 VDC
		Crossbar bifurcated	MY4Z-CBG	100/110, 110/120, 200/220 VAC
		Olossual bilulcateu	W1142-0BG	12, 24, 48, 100/110 VDC

With operation indicator

Classific	ation	Number of poles	Cont	acts	Model	Rated voltage
					MYONIO	6, 12, 24, 48/50, 110/120, 220/240 VAC
			Single	Type 1	MY2N(S)	6, 12, 24, 48, 100/110 VDC
		2		Type 2	MY2N1(S)	6, 12, 24, 48, 100/110 VDC
			Diferential	- !	MAN (0.71)	110/120, 220/240 VAC
			Bifurcated		MY2ZN	24 VDC
			Single		MYON	24, 110/120, 220/240 VAC
		3			MY3N	12, 24, 48, 100/110 VDC
Standard mode	els				MYANGO	6, 12, 24, 48/50, 110/120, 220/240 VAC
			Single	Type 1	MY4N(S)	6, 12, 24, 48, 100/110 VDC
				Type 2	MY4N1(S)	6, 12, 24, 48, 100/110 VDC
					MY4ZN(S)	6, 12, 24, 48/50, 110/120, 220/240 VAC
	4	Bifurcated	Type 1	WIT4ZN(3)	6, 12, 24, 48, 100/110 VDC	
			Type 2	MY4ZN1(S)	6, 12, 24, 48, 100/110 VDC	
			Crossbar bifurcated		MY4ZN-CBG	100/110, 200/220 VAC
					WIT4ZN-CBG	24 VDC
		2	Single		MY2N-D2(S)	6, 12, 24, 48, 100/110 VDC
	Type 1	2	Bifurcated		MY2ZN-D2	24 VDC
Models with	(-)	3	Single		MY3N-D2	12, 24, 48 VDC
built-in diode	13 14 A1 A2	4	Single		MY4N-D2(S)	6, 12, 24, 48, 100/110 VDC
for coil surge		1	Bifurcated		MY4ZN-D2(S)	6, 12, 24, 48, 100/110 VDC
absorption	Type 2	2	Single		MY2N1-D2(S)	6, 12, 24, 48, 100/110 VDC
	⊕ ⊝	4	Single		MY4N1-D2(S)	6, 12, 24, 48, 100/110 VDC
	13 14 A1 A2	7	Bifurcated		MY4ZN1-D2(S)	6, 12, 24, 48, 100/110 VDC
Models with		2	Single		MY2N-CR(S)	110/120, 220/240 VAC
built-in CR circ		4	Single		MY4N-CR(S)	110/120, 220/240 VAC
coil surge abso	orption	7	Bifurcated		MY4ZN-CR(S)	110/120, 220/240 VAC

With operation indicator/latching lever

Classific	ation	Number of poles	Contacts		Model	Rated voltage
					MY2IN(S)	6, 12, 24, 48/50, 110/120, 220/240 VAC
		2	Single	Type 1	WITZIN(3)	6, 12, 24, 48, 100/110 VDC
				Type 2	MY2IN1(S)	6, 12, 24, 48, 100/110 VDC
					MY4IN(S)	6, 12, 24, 48/50, 110/120, 220/240 VAC
Standard mode	ls		Single	Type 1	WIT 4IN(S)	6, 12, 24, 48, 100/110 VDC
		4		Type 2	MY4IN1(S)	6, 12, 24, 48, 100/110 VDC
		4			MY4ZIN(S)	6, 12, 24, 48/50, 110/120, 220/240 VAC
			Bifurcated	Type 1	WIT4ZIN(3)	6, 12, 24, 48, 100/110 VDC
				Type 2	MY4ZIN1(S)	6, 12, 24, 48, 100/110 VDC
	Type 1	2	Single		MY2IN-D2(S)	6, 12, 24, 48, 100/110 VDC
Models with	⊕ ⊕	4	Single		MY4IN-D2(S)	6, 12, 24, 48, 100/110 VDC
built-in diode	13 14 A1 A2		Bifurcated		MY4ZIN-D2(S)	6, 12, 24, 48, 100/110 VDC
for coil surge	Type 2	2	Single		MY2IN1-D2(S)	6, 12, 24, 48, 100/110 VDC
absorption		4	Single		MY4IN1-D2(S)	6, 12, 24, 48, 100/110 VDC
	13 14 A1 A2	4	Bifurcated		MY4ZIN1-D2(S)	6, 12, 24, 48, 100/110 VDC
Models with		2	Single		MY2IN-CR(S)	110/120, 220/240 VAC
built-in CR circ		4	Single		MY4IN-CR(S)	110/120, 220/240 VAC
coil surge abso	rption	4	Bifurcated		MY4ZIN-CR(S)	110/120, 220/240 VAC

●PCB terminals

Classification	Number of poles	Contacts	Model	Rated voltage	
	2	Single	MY2-02	12, 24, 100/110, 110/120, 200/220, 220/240 VAC	
Standard models	2	Single	IVI Y 2-U2	12, 24, 48, 100/110 VDC	
	3	Single	MY3-02	12, 24, 100/110, 110/120, 200/220, 220/240 VAC	
(compliant with Electrical			WI 1 3-02	12, 24, 48, 100/110 VDC	
Appliances and Material		01	MY4-02	12, 24, 100/110, 110/120, 200/220, 220/240 VAC	
Safety Act)	4	Single	IVI 1 4-02	12, 24, 48, 100/110 VDC	
	4	Bifurcated	MY4Z-02	100/110, 110/120, 200/220 VAC	
			IVI I 42-U2	12, 24, 48, 100/110 VDC	

● Case-surface mounting

Classification	Number of poles	Contacts	Model	Rated voltage
	2	Single	MY2F	24, 100/110, 110/120, 200/220, 220/240 VAC
Otan dand madela		Single	IVI T Z F	12, 24, 48, 100/110 VDC
	3	Single	MY3F	24, 100/110, 200/220 VAC
Standard models (compliant with Electrical			INITSE	24, 100/110 VDC
Appliances and Material		Cimala	MV4F	24, 100/110, 110/120, 200/220 VAC
Safety Act)		Single	MY4F	12, 24, 48, 100/110 VDC
	4	Bifurcated	MV47F	200/220 VAC
			MY4ZF	12, 24 VDC

Ratings and Specifications

Ratings Operating Coils

Terminal Type	Classification	Number of poles	Contacts	Without operation indicator	With operation indicator	With latching lever
		2	Single	MY2(S)	MY2N(S), MY2N1(S)	MY2IN(S), MY2IN1(S)
Standard models	4	Single	MY4(S)	MY4N(S), MY4N1(S)	MY4IN(S), MY4IN1(S)	
		4	Bifurcated	MY4Z(S)	MY4ZN(S), MY4ZN1(S)	MY4ZIN(S), MY4ZIN1(S)
	Models with	2	Single		MY2N-D2(S), MY2N1-D2(S)	MY2IN-D2(S), MY2IN1-D2(S)
Plug-in terminals	built-in diode for		Single		MY4N-D2(S), MY4N1-D2(S)	MY4IN-D2(S), MY4IN1-D2(S)
torminaio	coil surge absorption		Bifurcated		MY4ZN-D2(S), MY4ZN1-D2(S)	MY4ZIN-D2(S), MY4ZIN1-D2(S)
	Models with	2	Single		MY2N-CR(S)	MY2IN-CR(S)
	built-in CR circuit for	4	Single		MY4N-CR(S)	MY4IN-CR(S)
	coil surge absorption		Bifurcated		MY4ZN-CR(S)	MY4ZIN-CR(S)

	Item	Rated cur	rrent (mA)	Coil resistance	Coil induc	tance (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)
	6	214.1	183	12.2	0.04	0.08				
	12	106.5	91	46	0.17	0.33				
AC	24	53.8	46	180	0.69	1.30		30% min.*2	110% of rated	Approx. 0.9 to 1.3 (at 60 Hz)
AC	48/50	24.7/25.7	21.1/22.0	788	3.22	5.66]	50% IIIII. Z		
	110/120	9.9/10.8	8.4/9.2	4,430	19.20	32.1]			
	220/240	4.8/5.3	4.2/4.6	18,790	83.50	136.4	80% max.*1			
	6	15	51	39.8	0.17	0.33	1		voltage	
	12	7	75	160	0.73	1.37]			
DC	24	37	7.7	636	3.20	5.72]	10% min.*2		Approx. 0.9
	48	18.8		2,560	10.60	21.0	1			
	100/110	9.0	/9.9	11,100	45.60	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.
- 5. Power consumption drop was measured for the above data. When driving transistors, check leakage current and connect a bleeder resistor if required.
- *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
		2	Bifurcated	MY2Z	MY2ZN
	Standard models	3	Single	MY3	MY3N
		4	Crossbar bifurcated	MY4Z-CBG	MY4ZN-CBG
	Models with built-in diode	2	Bifurcated		MY2ZN-D2
	for coil surge absorption	3	Single		MY3N-D2
		2	Single	MY2-02	
РСВ	Standard models	3	Single	MY3-02	
terminals	Standard models		Single	MY4-02	
		4	Bifurcated	MY4Z-02	
		2	Single	MY2F	
Case-surface	Oten dend medale	3	Single	MY3F	
mounting	Standard models		Single	MY4F	
		4	Bifurcated	MY4ZF	

	Item	Rated cur	rent (mA)	Coil resistance	Coil induc	tance (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				Approx. 0.9 to 1.3
	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		
AC	110/120 9.9/10	9.9/10.8	8.4/9.2	4,430	19.2	32.1			(at 60 Hz)	
	200/220	6.2/6.8	5.3/5.8	12,950	54.75	94.07	80% max.*1		110% of rated voltage	,
	220/240	4.8/5.3	4.2/4.6	18,790	83.5	136.4	00 % IIIax. I			
	12	7	5	160	0.73	1.37				
DC	24	36	5.9	650	3.2	5.72		10% min.*2		Approx. 0.9
ЪС	48	18	1.5	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 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.

Contact Ratings

Number of poles (contact configuration)		2-pole	(DPDT)		3-pole	3-pole (3PDT)	
Contact structure	Sir	ngle	Bifur	cated	Sir	ngle	
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)	Resistive load	Inductive load (cos φ = 0.4, L/R = 7 ms)	
Rated load	5 A at 250 VAC 5 A at 30 VDC	2 A at 250 VAC 2 A at 30 VDC	5 A at 220 VAC 5 A at 24 VDC	2 A at 220 VAC 2 A at 24 VDC	5 A at 220 VAC 5 A at 24 VDC	2 A at 220 VAC 2 A at 24 VDC	
Rated carry current*1	10 A		5 A		5 A		
Maximum switching voltage	250 VAC, 125 VDC				250 VAC, 125 VDC		
Maximum switching current	10 A		5 A		5 A		
Maximum switching power	timum switching power 2,500 VA 500 VA 60 W		1,100 VA 120 W	440 VA 48 W	1,100 VA 120 W	440 VA 48 W	
Contact material	Ag		Au plating + Ag		Ag		

Number of poles (contact configuration)	4-noia (4PI) I)							
Contact structure	Sir	igle	Bifur	cated	Crossbar bif	urcated (CBG)		
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)	Resistive load	Inductive load (cos φ = 0.4, L/R = 7 ms)		
Rated load	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 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	5 A				1 A			
Maximum switching voltage	250 VAC, 125 VDC							
Maximum switching current	5 A				1 A			
Maximum switching power	1,250 VA 200 VA 150 W 45 W		1,250 VA 150 W	200 VA 45 W	220 VA 24 W	66 VA 12 W		
Contact material	Au cladding + Ag all	loy			Au cladding + AgPo	d		

^{*1.} If you use a Socket, do not exceed the rated carry current of the Socket.

Characteristics

(cont	Number of poles act configuration)	2-pole	(DPDT)	3-pole (3PDT)		4-pole (4PDT)				
	Contact structure	Single	Bifurcated	Single	Single	Bifurcated	Crossbar bifurcated (CBG)			
Contact res	istance*1 *2	100 mΩ max.	50 mΩ max.	50 mΩ max.	100 mΩ max.	100 m Ω max. 100 m Ω max. 100 m Ω max.				
Operate tim	e*3	20 ms max.								
Release tim	e*3	20 ms max.								
Maximum switching	Mechanical	18,000 operations/h								
frequency	Rated load	1,800 operations/h								
Insulation r	esistance*4	100 MΩ min.								
	Between coil and contacts									
Dielectric strength	Between contacts of different polarity	2,000 VAC, 50/60 Hz	for 1 min							
	Between contacts of the same polarity	1,000 VAC at 50/60 H	Hz for 1 min				700 VAC at 50/60 Hz for 1 min			
Vibration	Destruction	10 to 55 to 10 Hz, 0.5	5-mm single amplitude	(1.0-mm double amp	litude)					
resistance	Malfunction	10 to 55 to 10 Hz, 0.5	5-mm single amplitude	(1.0-mm double amp	litude)					
Shock	Destruction	1,000 m/s ²								
resistance	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)			
Failure rate (reference v		1 mA at 5 VDC	100 μA at 1 VDC	1 mA at 5 VDC	1 mA at 1 VDC	100 μA at 1 VDC	100 μA at 1 VDC			
Weight		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.
 *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: With rated operating power applied, not including contact bounce.
 *4. Measurement conditions: For 500 VDC applied to the same location as for dielectric strength measurement.
 *5. Ambient temperature condition: 23°C
 *6. This value was measured at a switching frequency of 120 operations per minute.

Number of poles (contact configuration)		2-pole (DPDT)		3-pole	(3PDT)	4-pole (4PDT)				
Contact structure	Sin	gle	Bifurcated Single		Single/bifurcated		Crossbar bifurcated (CBG)			
Operation indicator	Without operation indicator	With operation indicator	Without operation indicator	With operation indicator	Without operation indicator	With operation indicator	Without operation indicator	With operation indicator	Without operation indicator	With operation indicator
Ambient operating temperature*1	-55 to +70%	1	-55 to +70%	-55 to +60%*2	-55 to +70%	-55 to +60% *2	-55 to +70%	1	-55 to +70%	-55 to +60%
Ambient operating humidity	5 to 85%RH			•	•					•

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

Certified Standards

●UL certification (File No. E41515)

Model	Standard number	Category	Listed/ Recognized	Operating Coil ratings	No. of poles	Contact ratings	Certified number of operations
MY2□(S) MY2□-D2(S) MY2□-CR(S)	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
MY2Z□ MY2-02 MY2F	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
						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-D2	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
MY3-02 MY3F						1/6 HP, 250 VAC	1,000
MY4□(S) MY4□-D2(S) MY4□-CR(S) MY4□-02 MY4□F	UL508	NRNT2	Recognition	ecognition 6 to 240 VAC 4 6 to 125 VDC		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
				1/6 HP, 250 VAC (Same polarity) 1/10 HP, 120 VAC (Same polarity)	1,000		
						B300 Pilot Duty (Same polarity)	6,000

●CSA certification (File No. LR31928)

Model	Standard number	Class number	Operating Coil ratings	No. of poles	Contact ratings	Certified number of operations
MY2□(S) MY2□-D2(S) MY2□-CR(S)	C22.2 NO.0, No.14		6 to 125 VDC		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
					1/6 HP, 250 VAC (Same polarity) 1/10 HP, 120 VAC (Same polarity)	1,000
MY2Z□ MY2-02 MY2F	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
					1/6 HP, 250 VAC 1/10 HP, 120 VAC	1,000
MY3□ MY3N-D2 MY3-02 MY3F	C22.2 NO.0, No.14		6 to 125 VDC		5 A, 28 VDC (Resistive) 5 A, 240 VAC (General Use) 7 A, 240 VAC (General Use) 7 A, 24 VDC (Resistive)	6,000
					1/6 HP, 250 VAC	1,000
MY4□(S) MY4□-D2(S) MY4□-CR(S)	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
					1/6 HP, 250 VAC (Same polarity) 1/10 HP, 120 VAC (Same polarity)	1,000
					B300 Pilot Duty (Same polarity)	6,000
MY4□-02 MY4□F	C22.2 NO.0, No.14	14 3211 07 6 to 240 VAC 4 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

●TÜV Rheinland certification (Certification No. R50030059)

_		,	,
Model	Operating Coil ratings	Contact ratings	Certified number of operations
MY2Z□ MY2-02 MY2F	6 to 125 VDC, 6 to 240 VAC	5 A, 250 VAC (cos φ = 1.0)	100,000
MY3□ MY3N-D2 MY3-02 MY3F			
MY4□-02 MY4□F		3 A, 120 VAC ($\cos \varphi = 1.0$) 0.8 A, 250 VAC ($\cos \varphi = 0.4$)	

●CE Marking

Model	EMC Directive	Low Voltage Directive	Machinery Directive	Safety Category
MY2□□(S) MY2□□-D2(S) MY2□□-CR(S) MY2Z□ MY2ZN-D2 MY2F	Not applicable	Applicable	Not applicable	1
MY3□ MY3N-D2 MY3F				
MY4□(S) MY4□-D2(S) MY4□-CR(S) MY4□F				

●LR certification (Lloyd's Register)

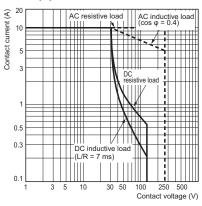
Model	File No.	Environmental Category	Operating Coil ratings	Contact ratings	Certified number of operations
MY2□(S) MY2□-D2(S) MY2□-CR(S)	File No.98/10014	ENV2,3	6 to 240 VAC 6 to 125 VDC	10 A, 250 VAC (Resistive) 2 A, 250 VAC (PF0.4) 10 A, 30 VDC (Resistive) 2 A, 30 VDC (L/R = 7 ms)	MY2: 50,000
MY2Z□ MY2ZN-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□(S) MY4□-D2(S) MY4□-CR(S)	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

●VDE certification

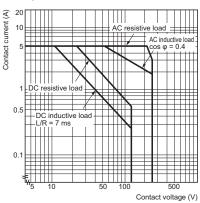
Model	Standard number	Certification No.	Operating Coil ratings	Contact ratings	Certified number of operations
MY2□(S) MY2□-D2(S) MY2□-CR(S)	EN 61810-1	112467UG	6, 12, 24, 48/50, 100/110, 110/120, 200/220, 220/240 VAC	10A, 250 VAC (cos φ = 1) 10A, 30 VDC (L/R = 0 ms)	MY2: 100,000 MY4: 100,000 MY4Z: 50,000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

Engineering Data (Reference Value)

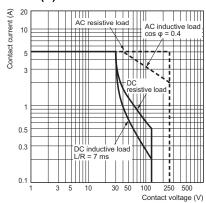
Maximum Switching Capacity MY2(S)



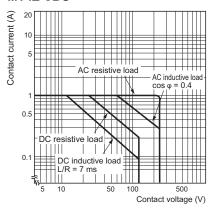
MY3



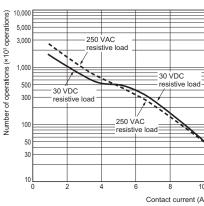
MY4(S)



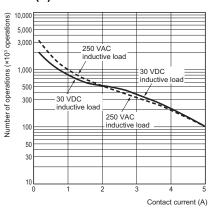
MY4Z-CBG



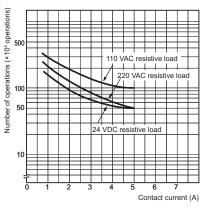
Endurance Curve MY2(S)



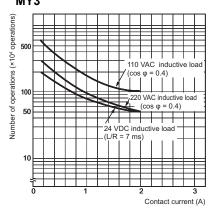




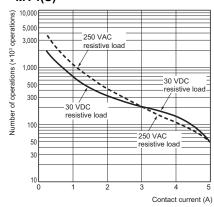
MY3



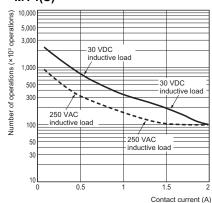
MY3

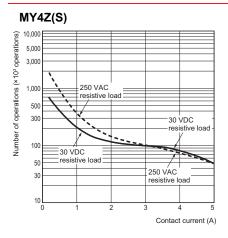


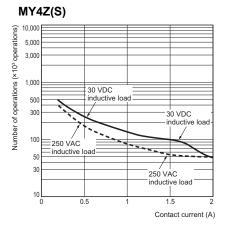
MY4(S)



MY4(S)

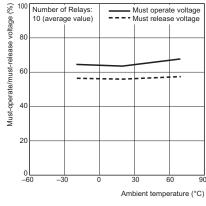




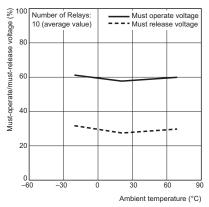


● Ambient Temperature vs. Must-operate and Must-release Voltage

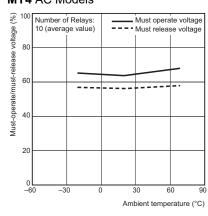
MY2 AC Models



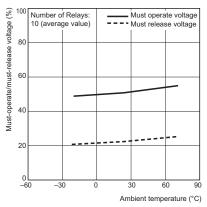
MY2 DC Models



MY4 AC Models

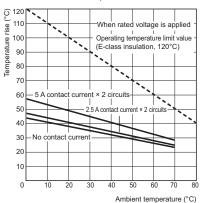


MY4 DC Models

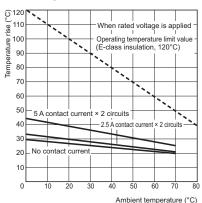


● Ambient Temperature vs. Coil Temperature Rise

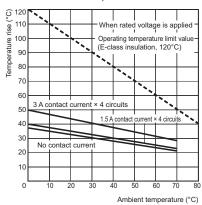
MY2 AC Models, 50 Hz



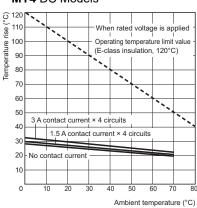
MY2 DC Models



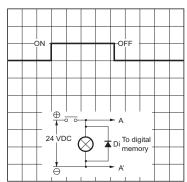
MY4 AC Models, 50 Hz

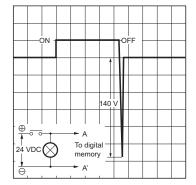


MY4 DC Models



Models with built-in diode for coil surge absorption MY□-D With Diode **Without Diode**

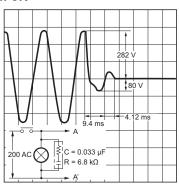


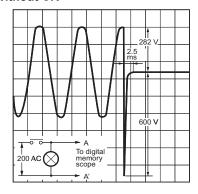


Note: 1. 2.

- 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

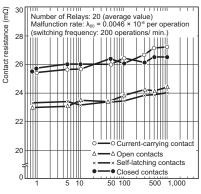
Models with built-in CR circuit for coil surge absorption MY□-CR With CR Without CR





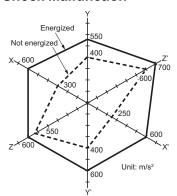
Contact Reliability Test MY4Z-CBG (Modified Allen Bradley Circuit)

Contact load: 5 VDC, 1 mA resistive load Malfunction level: Contact resistance of 100 Ω



Number of operations (×10⁴ operations)

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



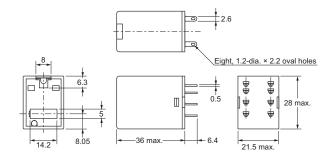
Dimensions (Unit: mm)

Plug-in terminals

MY2□(S)

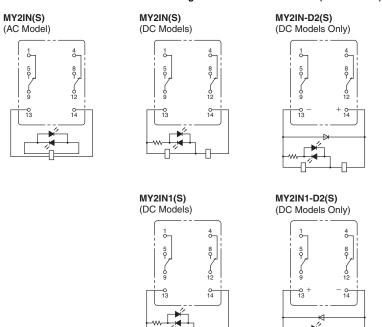


Note: The picture is lockable test button type.



Terminal Arrangement/Internal Connections (Bottom View)

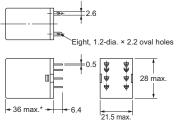
MY2IN-CR (AC Models Only)



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

MY2Z□ MY2ZN-D2

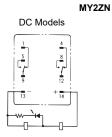




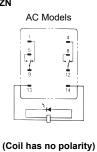
* For the MY2Z-CR and MY2ZN-CR, this dimension is 53 mm maximum.

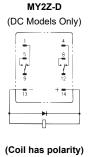
Terminal Arrangement/Internal **Connection Diagram** (Bottom View) MY2Z (AC/DC Models)

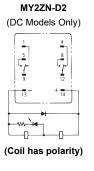
(Coil has no polarity)



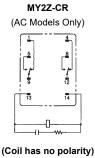
(Coil has polarity)

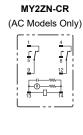






Terminal Arrangement/





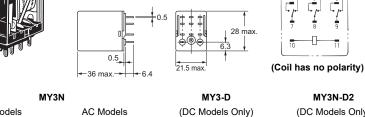
(Coil has no polarity)

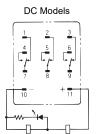
An AC model has coil disconnection self-diagnosis. Note: 1.

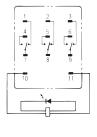
- For the DC models, check the coil polarity when wiring and wire all connections correctly.
- The indicator is red for AC and green for DC.
- The operation indicator indicates the energization of the coil and does not represent contact operation.

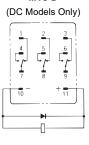


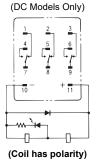
Internal Connection Diagram (Bottom View) MY3 (AC/DC Models) Eleven, 1.2-dia. × 2.2 oval holes











MY3N-D2

(Coil has polarity)

(Coil has no polarity)

(Coil has polarity)

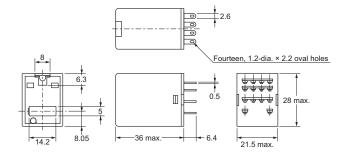
Note: 1. An AC model has coil disconnection self-diagnosis.

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

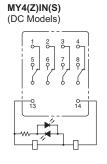
MY4□(S)

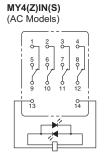


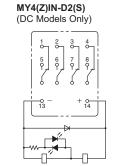
Note: The picture is lockable test button type.

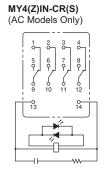


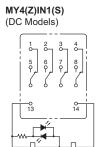
Terminal Arrangement/Internal Connections (Bottom View)

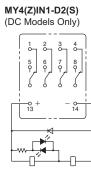








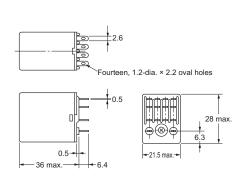


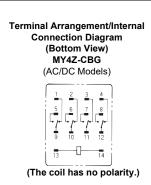


Note: For the DC models, check the coil polarity when wiring and wire all connections correctly.

MY4□-CBG







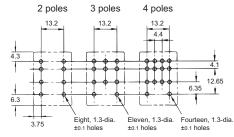
●PCB terminals

MY2-02 MY3-02 MY4□-02



The figure and outline drawing show MY4-02. The 2-pole and 3-pole models conform to these dimensions.

PCB Processing Dimensions (Bottom View)



Note: 1. The dimensional tolerance is ±0.1.

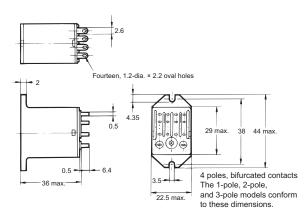
 Refer to the terminal arrangement and internal connections diagrams for the MY2, MY3, MY4, and MY4Z.

●Case-surface mounting

MY2F MY3F MY4□F

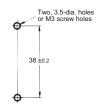


The above figure is for the MY4F. The 2-pole and 3-pole models conform to these dimensions.



* Dimensions in parentheses are for the MY4-02.

Mounting Hole Dimensions



Note: Refer to the terminal arrangement and internal connections diagrams for the MY2, MY3, MY4, and MY4Z.

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.

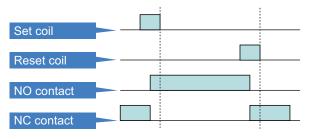
Refer to Safety Precautions on pages 62 to 63 and Safety Precautions for All Relays.



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

Model Number Legend



(1) Basic model name

MY: Miniature Power Relays

(3) Type

K: Latching relay

(2) Number of poles/contacts

2: 2-pole, single

(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

Classification	Number of poles	Contacts	Model	Rated voltage	
Standard models (compliant with Electrical	2	Single	MY2K	12, 24, 100, 100/110 VAC	
Appliances and Material Safety Act)		Siligle	WITZK	12, 24, 48 VDC	

PCB terminals

Classification	Number of poles	Contacts	Model	Rated voltage
Standard models (compliant with Electrical	2	Single	MY2K-02	24, 100 VAC
Appliances and Material Safety Act)		Siligle	WITZK-UZ	12, 24 VDC

Ratings and Specifications

Ratings

Operating coil

			Set	coil		Rese	t coil				Power consumption (VA, W)	
Rated v	oltage (V)	Rated (m		Coil resistance		current A)	Coil resistance	Must operate voltage (V)	Must release voltage (V)	Maximum voltage (V)	Set coil	Reset coil
		50 Hz	60 Hz	(Ω)	50 Hz	60 Hz	(Ω)	voltage (v)	ronago (r)			
	12	57	56	72	39	38.2	130		80% max.	110% max. of rated voltage	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.*			(at 60 Hz)	(at 60 Hz)
	12	11	10	110	5	0	235	80% max."	00% IIIax.			
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.

- 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.

- 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 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				
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

Contact resistance*1		50 m $Ω$ max.
Set	Operate time*2	AC: 30 ms max., DC: 15 ms max.
	Minimum pulse width	AC: 60 ms, DC: 30 ms
Reset	Release time*2	AC: 30 ms max., DC: 15 ms max.
	Minimum pulse width	AC: 60 ms, DC: 30 ms
Maximum switching frequency	Mechanical	18,000 operations/h
	Rated load	1,800 operations/h
Insulation resistance*3		100 MΩ min.
Dielectric strength	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	
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	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)
Failure rate P value (reference value)*5		1 mA at 1 VDC
Ambient operating temperature*6		-55 to 60°C
Ambient operating humidity		5% to 85%
Weight		Approx. 30 g

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

1 A at 5 VDC using the voltage drop method.

*2. Measurement conditions:

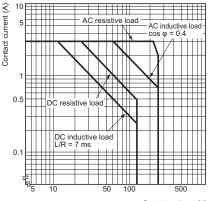
With rated operating power applied, not including contact bounce.
For 500 VDC applied to the same location as for dielectric strength measurement. *3. *4. *5. Measurement conditions:

Ambient temperature condition: 23°C

- This value was measured at a switching frequency of 120 operations per minute.
- With no icing or condensation.

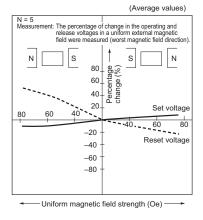
Engineering Data (Reference Value)

Maximum Switching Capacity MY2K(-02)

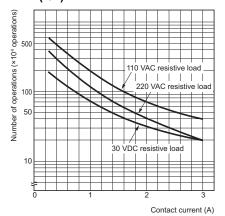


Contact voltage (V)

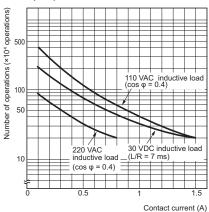
Magnetic Interference (External Magnetic Field) MY2K 24 VDC



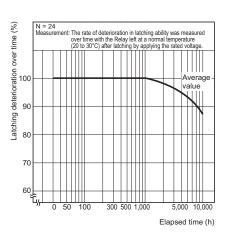
Endurance Curve MYK(-02)



MYK(-02)

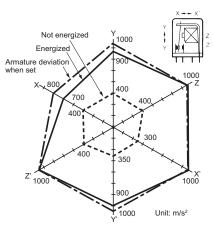


Latching Deterioration Over Time MY2K 24 VDC



Shock Malfunction

MY2K 100 VAC



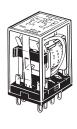
N = 20

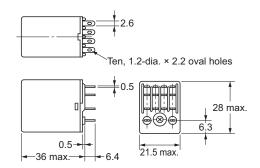
Measurement: Shock was applied in 6 directions along 3 axes 2 times with the Relay energized and 3 times with the Relay not energized to check the shock values that cause the Relay to

malfunction.
Criteria: Non-energized: 200 m/s²
Energized: 200 m/s²

Dimensions (Unit: mm)

●Plug-in terminals MY2K





Terminal Arrangement/ Internal Connection Diagram (Bottom View)

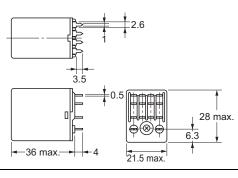
Note: R is a resistor for ampereturn correction. Built into models with specifications of 50 VAC or more. (The coil has no polarity.)

For DC

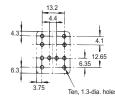
Note: Pay close attention to the set coil and reset coil polarities. If the connections are not correct, unintended operation may occur.

●PCB terminals MY2K-02





PCB Processing Dimensions (Bottom View)



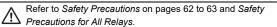
Note: The dimensional tolerance is ±0.1.

Miniature Power Sealed Relays

MYQ/MYH

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

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

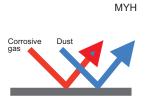
These realize excellent reliability even in environments where salt damage occurs or where dust is generated.





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.





Model Number Structure

Model Number Legend



(1) Basic model name

MY: Miniature Power 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 terminals0: Hermetically sealed relays, PCB terminals

(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

Ordering Information

When your order, specify the rated voltage.

Plastic Sealed Relays

Plug-in terminals

Classification	Number	0			With operation indicator		
Classification	ion of poles Contacts		Model	Rated voltage	Model	Rated voltage	
Standard models		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)	4	Bifurcated	MYQ4Z	100/110, 110/120, 200/220 VAC			
			472	12 24 VDC			

PCB terminals

Classification	Number of poles	Contacts	Model	Rated voltage	
Standard models	4	Single	MYQ4-02	50, 200/220, 220/240 VAC	
(compliant with			W 1 Q4-02	24 VDC	
Electrical Appliances	4	Bifurcated	MVO47 02	100/110 VAC	
and Material Safety Act)			MYQ4Z-02	24, 48 VDC	

Hermetically Sealed Relays

Plug-in terminals

Classification	Number of poles	Contacts Model		Rated voltage
Standard models		Single	MY4H	24, 100/110, 110/120 VAC
(compliant with	4	Siligle	WITTH	12, 24, 48, 100/110 VDC
Electrical Appliances		Bifurcated	MY4ZH	24, 100/110, 110/120 VAC
and Material Safety Act)			WII4ZH	12, 24, 48, 100/110 VDC

PCB terminals

Classification	Number of poles	Contacts	Model	Rated voltage
Standard models		Single	MY4H-0	110/120 VAC
(compliant with Electrical Appliances	4		W114H-0	24 VDC
and Material Safety Act)		Bifurcated	MY4ZH-0	24, 100/110 VDC

Ratings and Specifications

Operating coil

		Rated cur	rent (mA)	Coil	Coil indu	ctance (H)	Must anarota	Must release	Maximum	Power
Rated	voltage (V)	50 Hz	60 Hz	resistance (Ω)	Armature OFF	Armature ON	Must operate voltage (V)*1	voltage (V)*2	voltage (V)	consumption (VA, W)
	24	53.8	46	180	0.69	1.3			110% max. of rated voltage	
	100/110	11.7/12.9	10/11	3,750	14.54	24.6				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				
	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	3.9	650	3.2	5.72		10% min.		Approx. 0.9
ЪС	48 18.5	3.5	2,600	10.6	21.0		1070 Min.		дриох. 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

- The AC coil resistance and coil inductance values are for reference only.
- 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.

Contact Ratings

Plastic Sealed Relays: MYQ

Number of poles (contact configuration)	4-pole (4PDT)				
Contact structure	Single/b	ifurcated			
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 12 W				
Contact material	Au plating + Ag				

Hermetically Sealed Relays: MYH

Number of poles (contact configuration)	4-pole (4PDT)					
Contact structure	Siı	ngle	Bifu	rcated		
Load	Resistive 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	VAC 110 VAC at 1.5 A at		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					
		_=				

Characteristics

Model			MYQ		MYH			
Contact resistance	e*1	50 m $Ω$ 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 resista	nce*3	100 M Ω min.						
	Between coil and contacts	2,000 VAC at 50/60	Hz for 1 min	1,000 VAC at 50/60	Hz for 1 min			
Dielectric strength	Between contacts of different polarity	2,000 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	Destruction	10 to 55 to 10 Hz, 0.5-mm single amplitude (1.0-mm double amplitude)						
resistance	Malfunction	10 to 55 to 10 Hz, 0.	5-mm single amplitude (1.0-mm doubl	louble amplitude)				
Shock resistance	Destruction	1,000 m/s ²						
SHOCK resistance	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)			
Failure rate P Level (reference value)*5		Single contacts: Bifurcated contacts:	1 mA at 1 VDC 100 μA at 1 VDC	Single contacts: Bifurcated contacts:	100 μA at 1 VDC 100 μA at 100 mVDC			
Ambient operating	g temperature*6	-55 to 60°C		-25 to 60°C	-			
Ambient operating	g humidity	5% to 85%						
Weight		Approx. 35 g		Approx. 50 g				

Note: The data shown above are initial values.

Measurement conditions:

1 A at 5 VDC using the voltage drop method.

With rated operating power applied, not including contact bounce. Measurement conditions:

Ambient temperature condition: 23°C

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

Ambient temperature condition: For 500 VDC applied to the same location as for dielectric strength measurement.

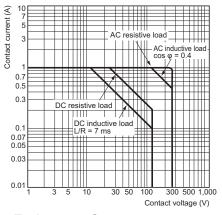
Ambient temperature condition: 23°C

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

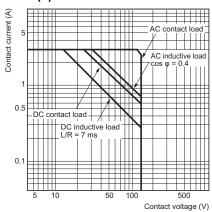
With no icing or condensation.

Engineering Data (Reference Value)

Maximum Switching Capacity MYQ4(Z)

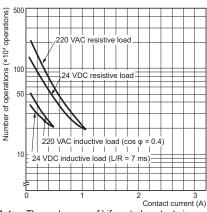


MY4(Z)H



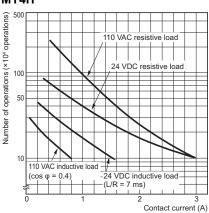
Endurance Curve

MYQ4



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

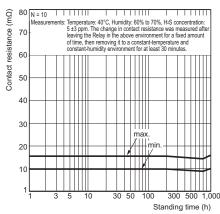
MY4H



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

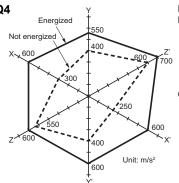
H₂S Gas Data

MYQ4



Shock Malfunction

MYQ4



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

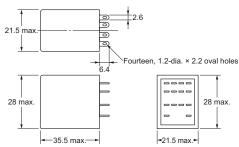
Shock direction



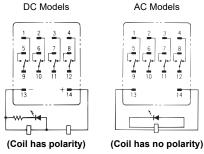
Plug-in terminals

Plastic Sealed Relays MYQ4(Z)(N)



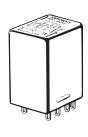


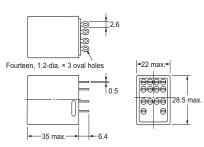
MYQ4(Z)N



- 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.

Hermetically Sealed Relays MY4(Z)H





Terminal Arrangement/ Internal Connection Diagram (Bottom View) MY4(Z)H

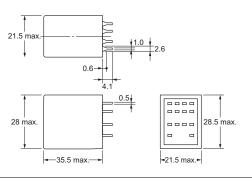


(Coil has no polarity)

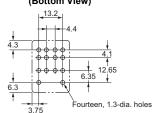
PCB terminals

Plastic Sealed Relays MYQ4(Z)-02



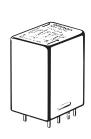


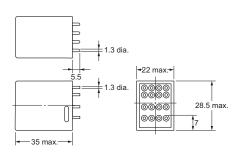
PCB Processing Dimensions (Bottom View)



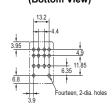
The dimensional Note: tolerance is ±0.1.

Hermetically Sealed Relays MY4(Z)H-0





PCB Processing Dimensions (Bottom View)



Common Options (Order Separately)

Ordering Information

Front-mounting Sockets

Applicable relay model*1	Mounting Method	Conductive part protection	Terminal Type	Applicable crimp terminal/ Electric wire	Appearance	Model	Hold-down Clips/ Release Levers (Order Separately)
			Push-In Plus	Ferrules Solid wire Stranded wire		PYF-08-PU*2 * MY2Z□-CR, MY2□-CR 24 VAC cannot be used	With release lever * Hold by release lever
DIN track			Terminal			PYF-08-PU-L*2	
	Mounted on a DIN track or with screws	DIN track or vith screws		Forked terminals		PYFZ-08-E*4	MY2□: PYC-A1 . MY2IN(S): PYC-E1
MY2□ MY2□(S) MY2Z□-CR				Stranded wire		PYF08A-N	MY2Z□-CR, MY2□-CR 24 VAC: Y92H-3
				Round terminals Forked terminals Solid wire Stranded wire		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
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

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 50.

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.

Applicable relay model*1	Mounting Method	Conductive part protection	Terminal Type	Applicable crimp terminal/ Electric wire	Appearance	Model	Hold-down Clips/ Release Levers (Order Separately)
			Push-In Plus	Ferrules Solid wire		PYF-14-PU*2 * MY4ZN-CBG-CR, MY4-CR 24 VAC, MY4N-CR 24 VAC/115 VAC cannot be used	With release lever * Hold by release lever
		Available	Terminal	Stranded wire		PYF-14-PU-L*2	
	Mounted on a DIN track or with screws			Forked terminals		PYFZ-14-E*4	MY4Z□-CBG-CR, MY4-CR 24 VAC, MY4N-CR 24 VAC/115 VA:
MY4□ MY4□(S) MY4□H MYQ4□ MY4Z□-CBG-CR			Screw terminal (M3 screw size)	Solid wire Stranded wire		PYF14A-N	Y92H-3 Other than those above: PYC-A1
MY2K		Option (Terminal cover sold separately) *3		Round terminals Forked terminals Solid wire Stranded wire		PYFZ-14 * Terminal cover: PYCZ-C14	
	Mounted on a DIN track	Available	Screwless terminal (Clamp method)	Solid wire Stranded wire		PYF14S	PYCM-14S * MY4Z□-CBG-CR, MY4-CR 24 VAC, MY4N-CR 24 VAC/115 VAC cannot be used * Hold by release lever
	Mounted on a DIN track or with screws	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
MY2 and MY4	Mounted on a DIN track or with screws	OIN track or Available Rise-Up		Solid wire Stranded wire		PYF14-ESS-B	PYC-35-B
			·		111	PYF14-ESN-B	. PTC-35-B

^{*1.} The applicable relay model is a plug-in terminal type.
*2. 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.
*3. 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 50.

The finger-protection type (PYFZ- \Box -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	Model
	Solder terminals			PY08
MY2□ MY2□(S) MY2Z□-CR	Wrapping terminals Terminal length: 25 mm	ping terminals inal length: 25 mm Accessories (Order Separately) * MY2Z□-CR: PYC-1		PY08QN
	Wrapping terminals Terminal length: 20 mm	Other than those above: PYC-P		PY08QN2
	PCB terminals			PY08-02
MY2□ MY2□(S)	Solder terminals			PY08-Y1
	Wrapping terminals Terminal length: 25 mm	With Hold-down Clips*2		PY08QN-Y1
	Wrapping terminals Terminal length: 20 mm			PY08QN2-Y1

^{*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	Model
	Solder terminals	Accessories (Order Separately) * PYC-P		PY11
1Y3□	Wrapping terminals Terminal length: 25 mm	Accessories (Order Separately) *PYC-P	7	PY11QN
	Wrapping terminals Terminal length: 20 mm	Accessories (Order Separately) *PYC-P		PY11QN2
	PCB terminals	Accessories (Order Separately) *PYC-P		PY11-02
MY4□ MY4□(S) MY4□H MY4Z□-CBG-CR MY4Z□-CBG-CR	Solder terminals			PY14
	Wrapping terminals Terminal length: 25 mm	Accessories (Order Separately) * MY4Z□-CBG-CR: PYC-1		PY14QN
	Wrapping terminals Terminal length: 20 mm	Other than those above: PYC-P		PY14QN2
	PCB terminals			PY14-02
	Solder terminals			PY14-Y1
MY4□ MY4□(S) MY4□H MYQ4□ MY2K	Wrapping terminals Terminal length: 25 mm	With Hold-down Clips*2		PY14QN-Y1
	Wrapping terminals Terminal length: 20 mm			PY14QN2-Y1

^{*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.

Hold-down Clip

Appearance*1	Model*2	Weight*3	Application			
	PYC-A1	Approx. 0.54 g				
	PYC-E1	Approx. 0.6 g	For connecting relays and sockets			
	PYC-P	Approx. 1.4 g	Tor connecting relays and sockets			
	PYC-S	Approx. 1.8 g	For connecting sockets, socket mounting plates, and relays			
	Y92H-3*4	Approx. 0.7 g	For connecting models with built-in CR circuit for coil surge absorption			
	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.

●Front-connecting Socket Accessories For Push-In Plus Terminal Sockets (PYF-08-PU(-L)/PYF-14-PU(-L)) Short Bars

Applicable sockets	Pitch	Application		Number of poles	L (Length)	Insulati on color	Model*1
			3.90	2	15.1		PYDN-7.75-020□
		Bridging contact terminals (common)	18.5	3	22.85		PYDN-7.75-030□
PYF-08-PU(-L) PYF-14PU(-L)	7.75 mm			4	30.6	Red (R)	PYDN-7.75-040□
			2.25	20	154.6		PYDN-7.75-200□
	31.0 mm	For Coil terminals	3.90 118.5 12 12 1.57	8	224.35	Blue (S) Yellow(Y)	PYDN-31.0-080□

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

Labels

Applicable sockets	Model	Manufacturer	Minimum order (Box) (quantity per box)
PYF-08-PU(-L) PYF-14PU(-L)	MG-CPM-04 41390N	Cembre	1,680 (35 sheet / 48 pieces)

Note: PRINTER: MARKINGENIUS MG3 (Ask to your Omron contact for more details on printers)

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	Insulation	2	Red (R)	PYDM-08S □ (50 pcs./bag)
	PYF14S	27.5 mm	coils between sockets	1.2-dia	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	54.4	PYCM-08S
PYF14S	52.5	PYCM-14S

For Screw Terminal Sockets (PYFZ-08/PYFZ-14) Short Bars

Applicable sockets	Pitch	Application	Shape/external dimensions	Number of poles	Insulation color	Model*1
		For bridging	3.3	2		PYD-025B □ (2P) (10 pcs./bag)
PYFZ-08	22 mm		3.3 -3.3 -5.6	8	B (Black)	PYD-085B □ (8P) (10 pcs./bag)
PYFZ-14		For bridging with the same socket	3.3 3.5 5.6	2	S (Blue) R (Red)	PYD-026B □ (2P) (10 pcs./bag)
	29 mm		29 203 35°	8		PYD-086B⊡ (8P) (10 pcs./bag)
	7 mm		3.2	2	B (Black)	PYD-020B □ (2P) (50 pcs./bag)
			77-+77- 5.6 3.2	3	Y (Yellow)	PYD-030B □ (3P) (10 pcs./bag)

^{*1.} Replace the box (\square) in the model number with the code for the covering color.

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

Terminal covers

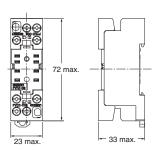
Applicable sockets	Appearance	Model
PYFZ-08		PYCZ-C08 (2 pcs/set)
PYFZ-14		PYCZ-C14 (1 pcs/set)

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

Dimensions with terminal cover

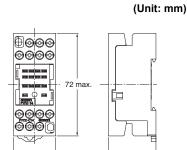
PYCZ-C08





PYCZ-C14





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 PY08QN2 PY11 PY11QN PY11QN2 PY14 PY14QN PY14QN2	DV00 V4		1	PYP-1		
	PY08-Y1 PY08QN-Y1 PY08QN2-Y1 PY14-Y1 PY14QN-Y1 PY14QN-Y1		18	PYP-18*		
			36	PYP-36*		

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

Parts for Track Mounting

Туре		Appearance	Model
DIN Tracks	1 m		PFP-100N
DIN Tracks	0.5 m		PFP-50N
End Plate*		5 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 -	PFP-M
Spacer			PFP-S

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

Ratings and Specifications

Characteristics

Sockets

							Dielectric strength				
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		−55 to 70°C		10 A	2,250 VAC	2,250 VAC	2,250 VAC		Approx. 32 g
PYFZ-08-E			Screw terminal			10 A	for 1 min	for 1 min	for 1 min		Approx. 32 g
PYF08A-N				−55 to 55°C		7 A*3	2,000 VAC for 1 min	2,000 VAC for 1 min	2,000 VAC for 1 min		Approx. 32 g
PYF11A	Frant	11	Screw terminal	−55 to 70°C		5 A	2,000 VAC for 1 min	2,000 VAC for 1 min	2,000 VAC for 1 min	1,000 MΩ	Approx. 43 g
PYF-14-PU	Front		Push-In Plus Terminal	-40 to 70°C		6 A	2,000 VAC	2,000 VAC	2,000 VAC	min. (500 VAC)	Approx. 87 g
PYF14S			Screwless terminal			5 A	for 1 min	for 1 min	for 1 min	,	Approx. 62 g
PYFZ-14				−55 to 70°C		6 A	2,250 VAC	2,250 VAC	2,250 VAC for 1 min		Approx. 50 g
PYFZ-14-E		14	Screw terminal			0 /	for 1 min	for 1 min			Approx. 50 g
PYF14A-N				−55 to 55°C		5 A*3	2,000 VAC for 1 min	2,000 VAC for 1 min	2,000 VAC for 1 min		Approx. 50 g
PYF14T				−55 to 70°C		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	85%			1,500 VAC for 1 min		C 1,500 VAC for 1 min	100 M Ω min.	Approx. 8 g
PY08-Y1			Solder terminals								Approx. 9 g
PY08QN		8	Wrapping terminals (Terminal length: 25 mm)								Approx. 12 g
PY08QN-Y1					85%	7 A					Approx. 13 g
PY08QN2			Wrapping terminals								Approx. 11 g
PY08QN2-Y1			(Terminal length: 20 mm)							Approx. 12 g	
PY08-02			PCB terminals								Approx. 7 g
PY11			Solder terminals								Approx. 9 g
PY11QN	David	44	Wrapping terminals (Terminal length: 25 mm)	-		5 A	1,500 VAC	1,500 VAC	1,500 VAC	100 MΩ min.	Approx. 13 g
PY11QN2	Back	11	Wrapping terminals (Terminal length: 20 mm)	−55 to 70°C		5 A	for 1 min	for 1 min	for 1 min		Approx. 12 g
PY11-02			PCB terminals								Approx. 8 g
PY14			Colder terminals								Approx. 10 g
PY14-Y1			Solder terminals								Approx. 11 g
PY14QN			Wrapping terminals								Approx. 14 g
PY14QN-Y1		14	(Terminal length: 14 25 mm)			3 A	1,500 VAC for 1 min	1,500 VAC for 1 min	1,500 VAC for 1 min	100 MΩ min.	Approx. 15 g
PY14QN2			Wrapping terminals				.5	.5	.51 1 111111		Approx. 13 g
PY14QN2-Y1			(Terminal length: 20 mm)								Approx. 14 g
PY14-02			PCB terminals								Approx. 9 g

Model	Connection	Number of pins	Terminal Type	Continuous carry current	Dielectric strength	Insulation resistance *1
PYF14-ESS-B PYF14-ESN-B	Front	14	Rise-Up terminal	12 A	>3 kV	>5 MΩ

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.

When using the PYF08A-N or PYF14A-N at an ambient operating temperature exceeding 40°C, reduce the continuous carry current to 60%.

Socket Accessories

●For Front-connecting Sockets

Short Bars

Application	Applicable sockets	Model	Maximum carry current	Ambient operating temperature	Ambient operating humidity
	PYF-08-PU(-L) PYF-14-PU(-L)	PYDN-7.75-020□	20 A	-40 to 70°C	5% to 85%
		PYDN-7.75-030□			
		PYDN-7.75-040□			
		PYDN-7.75-200□			
Bridging contact terminals	PYFZ-08	PYD-025B□		-40 to 70°C (with no icing or condensation)	45% to 85% (with no icing or condensation)
(common)		PYD-085B□	20 A (However, 18 A when 70°C)		
	PYFZ-14	PYD-026B□			
		PYD-086B□			
		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(-L)	10 A, 250 V		
PYF-14-PU(-L)	6 A, 250 V*		
PYF08S	10 A, 250 V		CSA C22.2 No14
PYF14S	5 A, 250 V	3211 07	
PYFZ-08(-E)	10 A, 250 V	52.7.0.	00/1022211011
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(-L)	10 A, 250 V			
PYF-14-PU(-L)	6 A, 250 V*			
PYF08S PYF14S	10 A, 250 V	LII 500	SWIV2	Decemition
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(-L)	10 A, 250 V*		R50327595	
PYF-14-PU(-L)	6 A, 250 V	EN 61984	R30327393	
PYFZ-08(-E)	10 A, 250 V		R50405329	
PYFZ-14(-E)	6 A, 250 V		K0U4U0329	

^{*}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)	40015500
PYF14	VDE0027 (EN01904)	40015509

●Others

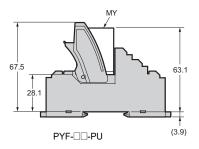
Model	Standards	File No.
PYF14-ESN-B	UL508	E244189
PYF14-ESS-B	CSA22.2	LR225761

Height with Socket

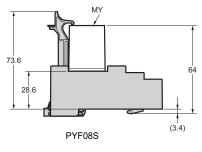
Dimensions

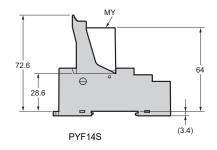
Front-connecting Sockets

 Push-In Plus Terminal (PYF
-PU)

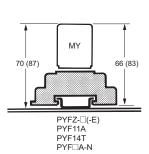


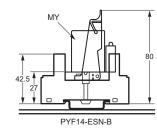
 Screwless terminal (PYF08S, PYF14S)

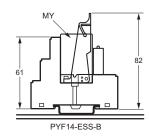




 Screw terminal (PYFZ-□(-E), PYF11A, PYF14T, PYF□A-N, PYF14-ES□-B)







Note: 1. The PYF11A can be mounted on a track or with screws.

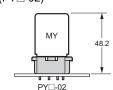
2. The heights given in parentheses are the measurements for 53-mm-high Relays.

Back-connecting Sockets

• Solder terminals/wrapping terminals (PY□)





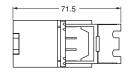


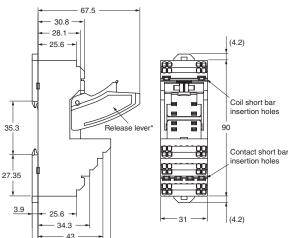
Front-connecting Sockets

●Push-In Plus Terminal

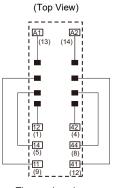


PYF-08-PU(-L)



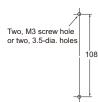


Terminal Arrangement/Internal Connection Diagram



Note: The numbers in parentheses are traditionally used terminal numbers.

Mounting Hole Dimensions

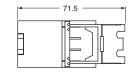


Note: Pull out the hooks to mount the Socket with screws.

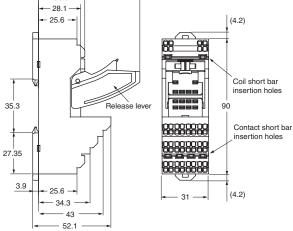
*The PYF-08-PU-L Sockets do not have release levers.

PYF-14-PU(-L)

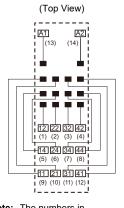




52.1

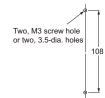


Terminal Arrangement/Internal Connection Diagram



Note: The numbers in parentheses are traditionally used terminal numbers.

Mounting Hole Dimensions



Note: Pull out the hooks to mount the Socket with screws.

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

Screwless terminal PYF08S **-**38.2 max.-Terminal Arrangement/Internal Connection Diagram −36.5 max.→ (41) (11) 8 5 32.6 (44) (14) -27.6-4 1 23.2 max -22.6--(3.4) (42) 24.5 85 max. 35.4 14 13 (Top View) Note: The number shown in parentheses is the DIN standard. -28.6 (5) 32.6 Terminal Arrangement/Internal Connection Diagram PYF14S 36.5 max.→ 12 11 10 9 8765 --- 32.6 -- (44) (34) (24) (14) --- 27.6 -**-** 22.6 **-**24.55 85 max 14 13 0 (Top View)

-28.6

(4.15)

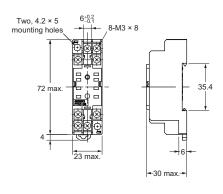
Note: The number shown in parentheses is the DIN standard.

Front-connecting Sockets

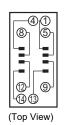
Screw terminal

PYFZ-08

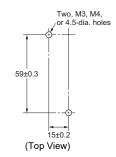




Terminal Arrangement/ Internal Connection Diagram



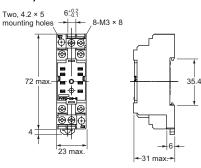
Mounting Hole Dimensions



Note: Track mounting is also possible.

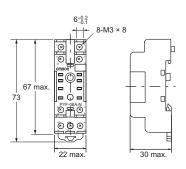
PYFZ-08-E (Finger-protection structure)



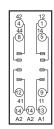


PYF08A-N



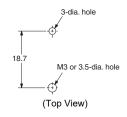


Terminal Arrangement/ Internal Connections



(Top View)

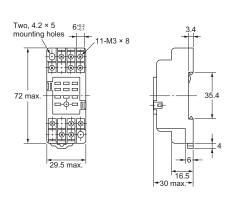
Mounting Hole Dimensions



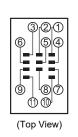
Note: Mounts to DIN Track.

PYF11A

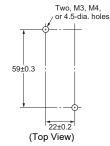




Terminal Arrangement/Internal Connection Diagram



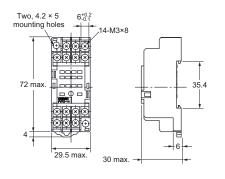
Mounting Hole Dimensions
Two, M3, M4,



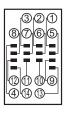
Note: Track mounting is also possible.

PYFZ-14



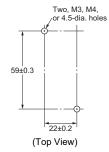


Terminal Arrangement/Internal Connection Diagram





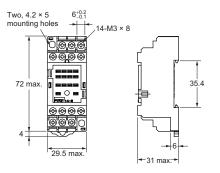
Mounting Hole Dimensions



Note: Track mounting is also possible.

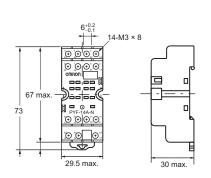
PYFZ-14-E (Finger-protection structure)



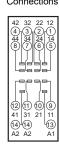


PYF14A-N



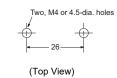


Terminal Arrangement/Internal Connections



(Top View)

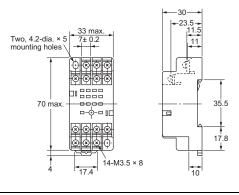
Mounting Hole Dimensions



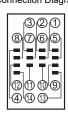
Note: Mounts to DIN Track.

PYF14T



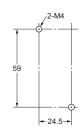


Terminal Arrangement/Internal Connection Diagram



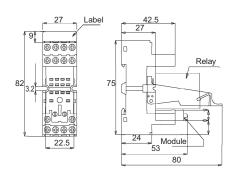
(Top View)

Mounting Hole Dimensions

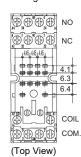


PYF14-ESN-B



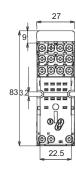


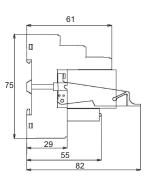
Terminal arrangement/ Internal connections/ mounting holes



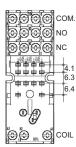
PYF14-ESS-B







Terminal arrangement/ Internal connections/ mounting holes

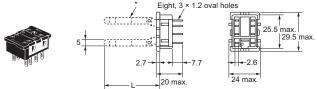


(Top View)

Back-connecting Socket

Solder terminals





*PY08-Y□ includes the potion indicated by broken line

Terminal Arrangement/Internal Connection Diagram

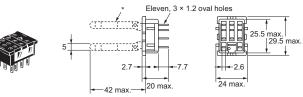


(Bottom View)

Mounting Hole Dimensions



PY11



*PY11-Y1 includes the potion indicated by broken line.

Terminal Arrangement/Internal Connection Diagram



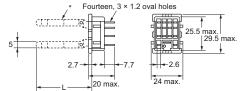
(Bottom View)

Mounting Hole Dimensions



PY14 PY14-Y1





*PY14-Y includes the potion indicated by broken line.

Terminal Arrangement/Internal Connection Diagram



(Bottom View)

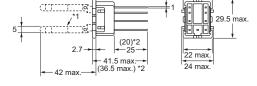
Mounting Hole Dimensions



Wrapping terminals

PY08QN PY08QN2





- *1. PY08QN(2)-Y1 includes the potion indicated by broken line *2. Dimensions in parentheses are for PY08QN2(-Y1).

Terminal Arrangement/Internal Connection Diagram



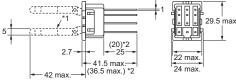
(Bottom View)

Mounting Hole Dimensions



PY11QN **PY11QN2**





*1. PY11QN(2)-Y1 includes the potion indicated by broken line.
*2. Dimensions in parentheses are for PY11QN2(-Y1).

Terminal Arrangement/Internal Connection Diagram



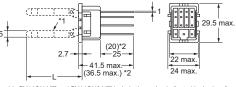
(Bottom View)

Mounting Hole Dimensions



PY14QN/PY14QN2 PY14QN-Y1/PY14QN2-Y1





*1. PY14QN-Y□ and PY14QN2-Y□ include the potion indicated by broken line. *2. Dimensions in parentheses are for PY14QN2(-Y□).

Terminal Arrangement/Internal Connection Diagram



(Bottom View)

Mounting Hole Dimensions

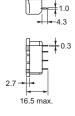


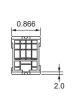
PCB terminals

PY08-02

• This is not a flux-tight structure. We recommend manual soldering for this product.





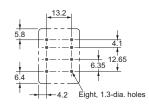


Terminal Arrangement/Internal Connection Diagram



(Bottom View)

Mounting Hole and PCB Dimensions

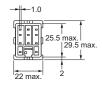


PY11-02

• This is not a flux-tight structure. We recommend manual soldering for this





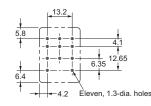


Terminal Arrangement/Internal Connection Diagram



(Bottom View)

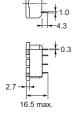




PY14-02

• This is not a flux-tight structure. We recommend manual soldering for this product.





• PYC-E1

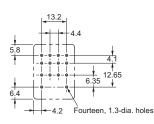


PYC-P

Terminal Arrangement/Internal Connection Diagram



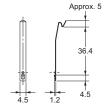
Mounting Hole and PCB Dimensions

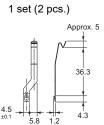


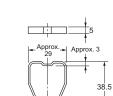
Socket Accessories

●Hold-down Clip

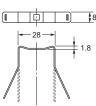
• PYC-A1 1 set (2 pcs.)







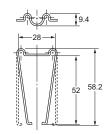
• PYC-S 1 set (2 pcs.)



• Y92H-3 1 set (2 pcs.)

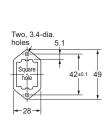


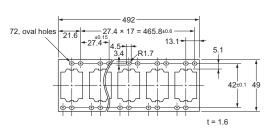
• PYC-1

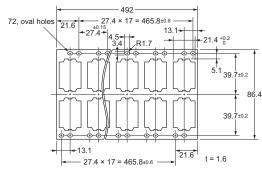


Socket Mounting Plates

PYP-1 **PYP-18 PYP-36**



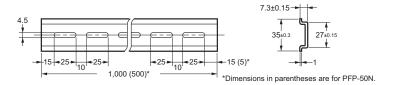




•Accessories for DIN Track Mounting

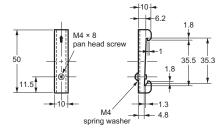
DIN Tracks PFP-100N PFP-50N





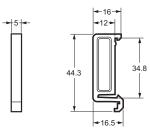
End Plate PFP-M





Spacer PFP-S





MY-GS/MY(S)/MYK/MYQ·MYH

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



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 potenti10_ally 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



General caution

Indicates the possibility of non-specified general cautions, warnings, and danger.



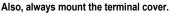
Electric shock caution

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.

Do not touch terminal sections (i.e., current-carrying parts) while power is being supplied.



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.



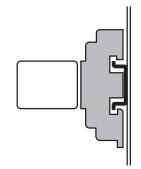
Precautions for Correct Use

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.

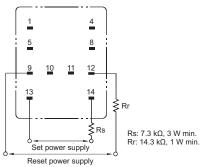
If there is the possibility of large voltage surges that could be applied to the elements from an external source, take any necessary surge absorption measures.

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.

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.

 If the Relay is used in an environment with strong magnetic fields, the surrounding magnetic field can demagnetize the magnetic body and cause unintended operation.

Therefore, do not use these Relays in environments with strong magnetic fields.

Hermetically Sealed Relays (MYH/MYQ)

Relays with PCB Terminals

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

Solution

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

Application Environments

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.

Optional Sockets (Order Separately)

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

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 SP2RF-S Data Sheet (Catalog No. CDRR-011).

●Screw Terminal Sockets (PYFZ-08(-E), 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.

Model	Tightening torque	
PYFZ-08 PYFZ-14	0.78 to 1.18 N·m	
PYFZ-08-E	0.59 to 0.88 N·m	
PYFZ-14-E	* Use a No. 1 screwdriver.	

 Use the following wire diameters as a guide for wiring. (Select the appropriate wire diameter for the current used.)

Model	Recommended wire diameter (mm²)		
PYFZ-08	Stranded wire	0.75 to 2.5 mm ² AWG 18 to 14	
PYFZ-14	Solid wire	0.75 to 1.5 mm ² AWG 18 to 16	
PYFZ-08-E	Stranded wire	0.75 to 2.5 mm ² AWG 18 to 14	
PYFZ-14-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

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