

Реле omron MY2, MY3, MY4 Минск тел.80447584780

www.fotorele.net www.tiristor.by радиодетали, электронные компоненты

email minsk17@tut.by tel.+375 29 758 47 80 МТС

Реле omron, омрон, MY2, MY2N, MY2IN, MY4, MY4N, MY4IN, 5а, 10а.

каталог, описание, технические, характеристики, datasheet, параметры, маркировка, габариты, фото

QR код



Реле общего назначения

СЕРИЯ MYS

Компактные размеры, превосходные характеристики



Advanced Industrial Automation

OMRON

Реле серии MYS компании Omron, ведущего изготовителя промышленных реле и реле общего назначения, устанавливает новые стандарты в отношении характеристик и надежности.

С начала производства было выпущено более 500 миллионов этих миниатюрных силовых реле.

Универсальные реле этой серии воплощают в себе знаменитые качество и надежность продукции Omron и стали признанным стандартом. Дополнительные возможности и гибкость

этих реле - это удобство монтажа, пуско-наладочных работ и эксплуатации. Реле MYS

идеально подходят для применения в системах промышленной автоматике,

а также в коммерческом и бытовом оборудовании.

Универсальное съемное реле, ставшее стандартом!

Тестовая кнопка
(Кодировка цветом:
синий - в моделях
постоянного тока,
красный - в моделях
переменного тока)

Контакты не содержат
кадмий (экологичность)

Резистивно-емкостной
или диодный фильтр

Технические сведения



Механический
индикатор

Номер изделия

Напряжение
срабатывания

Идентификационная
табличка

Двухпозиционная тестовая кнопка

Светодиодный индикатор
(Кодировка цветом:
зеленый - в моделях
постоянного тока,
красный - в моделях
переменного тока)



Реле в
нормальном
режиме работы



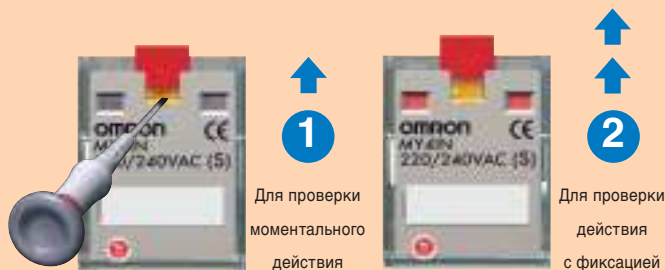
Тип	DPDT (10A)			4PDT (5A)		
	MY2	MY2N	MY2IN	MY4	MY4N	MY4IN
Идентификационная табличка / механический индикатор	Есть	Есть	Есть	Есть	Есть	Есть
Светодиодный индикатор	Нет	Есть	Есть	Нет	Есть	Есть
Светодиодный индикатор с тестовой кнопкой	Нет	Нет	Есть	Нет	Нет	Есть

Выпускаются модели со сдвоенными контактами, диодным фильтром (питание постоянного тока) или резистивно-емкостным фильтром (питание переменного тока).

Реле серии MYS – лучший выбор!

Непревзойденная надежность и эффективность - главные достоинства реле серии MYS для потребителей. Предусмотрены три вида реле с двух- и четырехполюсным перекидным контактом, с обмотками, рассчитанными на питание переменным или постоянным током. Все модели снабжены механическим индикатором и идентификационной табличкой, на которую можно нанести дополнительные данные. Модели как базовой, так и полной комплектации оснащены светодиодным индикатором (зеленым для моделей с питанием постоянным током и красным для моделей с питанием переменным током). Кроме того, реле полной комплектации оснащены двухпозиционной тестовой кнопкой для ручной проверки реле; кнопка также имеет цветовую кодировку.

Реле MYS созданы в строгом соответствии со стандартами высокого качества и с учетом требований компании Omron по защите окружающей среды, что гарантирует их долгую и бесперебойную работу. Они соответствуют всем необходимым международным стандартам, включая UL, CSA, VDE, LR и CE. Кроме того, для съемных реле серии MYS можно выбрать клеммы с винтовыми или с пружинными зажимами, что обеспечивает максимальное удобство при монтаже.



Передвиньте тестовую кнопку в позицию 1, затем нажмите инструментом с изолированной рукояткой желтую кнопку для приведения контакта в действие.

Передвиньте тестовую кнопку в позицию 2 (положение контактов зафиксировано).



PYF-S

Клеммы с пружинными зажимами

PYF

Клеммы с винтовыми зажимами

Miniature Power Relays MY(S)

MY(S) Versatile plug-in Relay



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



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

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

Model Number Structure

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

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

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

MY(S)

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Specifications

Coil Ratings

MY(S)

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

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

MY2ZN, MY□F, MY4(Z)H

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

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

*1. There is variation between products, but actual values are 80% max. To ensure operation, apply at least 80% of the rated value

*2. There is variation between products, but actual values are 30% minimum for AC and 10% minimum for DC. To ensure release, use a value that is lower than the specified value.

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

Miniature Power Relays: MY2(S)/MY4(S)/MY4Z(S)



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

Specifications

Contact Ratings

Item	DPDT		4PDT		4PDT (bifurcated)	
	Resistive load ($\cos \varphi = 1$)	Inductive load ($\cos \varphi = 0.4$, L/R = 7 ms)	Resistive load ($\cos \varphi = 1$)	Inductive load ($\cos \varphi = 0.4$, L/R = 7 ms)	Resistive load ($\cos \varphi = 1$)	Inductive load ($\cos \varphi = 0.4$, L/R = 7 ms)
Rated load	5A, 250 VAC 5A, 30 VDC	2A, 250 VAC 2 A, 30 VDC	3 A, 250 VAC 3 A, 30 VDC	0.8 A, 250 VAC 1.5 A, 30 VDC	3 A, 250 VAC 3 A, 30 VDC	0.8 A, 250 VAC 1.5 A, 30 VDC
Carry current	10 A (see note)		5 A (see note)			
Max. switching voltage	250 VAC 125 VDC					
Max. switching current	10 A		5 A			
Contact materials	Ag		Au cladding + Ag alloy			
Failure rate (reference value)	5 VDC, 1 mA		1 VDC, 1 mA		1 VDC, 100 μ A	

Note: Don't exceed the carry current of a Socket in use. Please see page 23.

Characteristics

Item	All Relays
Contact resistance	100 m Ω max. (50 m Ω : 4PDT bifurcated)
Operate time	20 ms max.
Release time	20 ms max.
Max. operating frequency	Mechanical:18,000 operations/hr Electrical:1,800 operations/hr (under rated load)
Insulation resistance	100 M Ω min. (at 500 VDC)
Dielectric strength	2,000 VAC, 50/60 Hz for 1.0 min (1,000 VAC between contacts of same polarity)
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	See the following table.
Ambient temperature	Operating: -55 to 70°C (with no icing)
Ambient humidity	Operating: 5 to 85% RH
Weight	Approx. 35 g

Note: The values given above are initial values.

Endurance Characteristics

Contact form	Mechanical life (at 18,000 operations/hr)	Electrical life (at 1,800 operations/hr under rated load)
DPDT	AC:50,000,000 operations min. DC:100,000,000 operations min.	500,000 operations min.
4PDT		200,000 operations min.
4PDT (bifurcated)	20,000,000 operations min.	100,000 operations min.

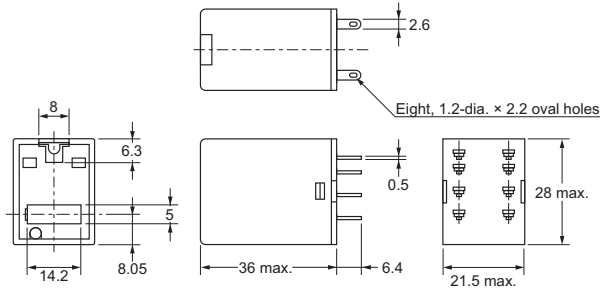
MY(S)

Dimensions

(Unit: mm)

List of Models

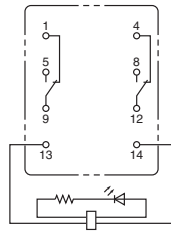
MY2□□(S) Series



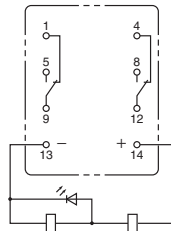
Note: The picture is lockable test button type.

Terminal Arrangement/Internal Connections (Bottom View)

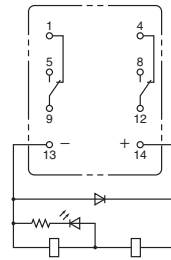
MY2IN(S)
(AC Model)



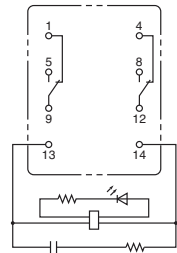
MY2IN(S)
(DC Models)



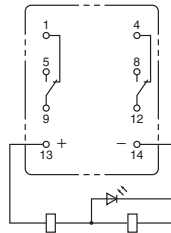
MY2IN-D2(S)
(DC Models Only)



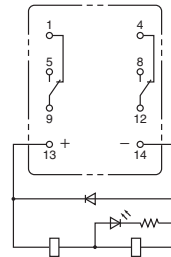
MY2IN-CR
(AC Models Only)



MY2IN1(S)
(DC Models)

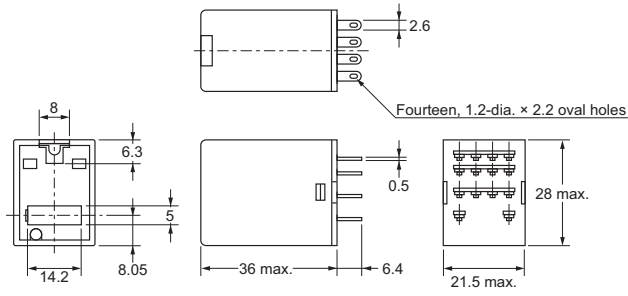


MY2IN1-D2(S)
(DC Models Only)



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

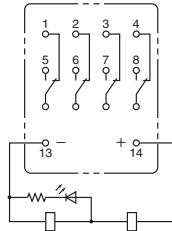
MY4□□(S) series



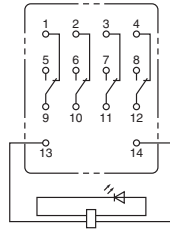
Note: The picture is lockable test button type.

Terminal Arrangement/Internal Connections (Bottom View)

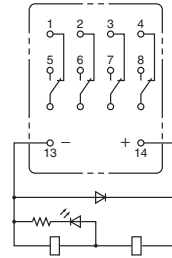
MY4(Z)IN(S)
(DC Models)



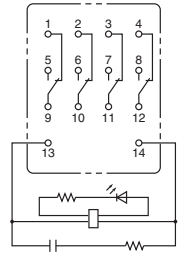
MY4(Z)IN(S)
(AC Models)



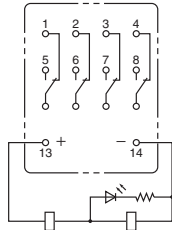
MY4(Z)IN-D2(S)
(DC Models Only)



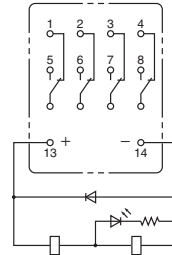
MY4(Z)IN-CR(S)
(AC Models Only)



MY4(Z)IN1(S)
(DC Models)



MY4(Z)IN1-D2(S)
(DC Models Only)

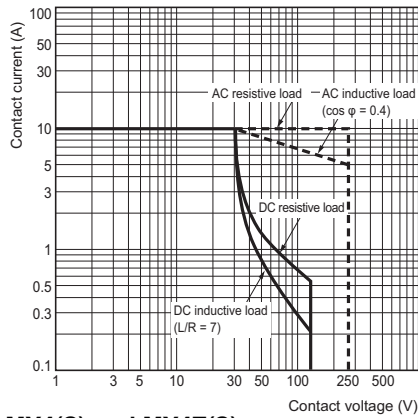


Note: For the DC models, check the coil polarity when wiring and wire all connections correctly.

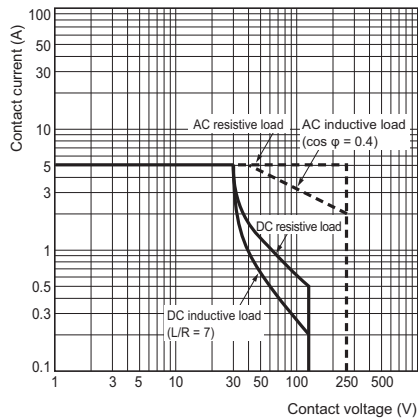
MY(S)

Engineering Data MY2(S)/ MY4(S)/MY4Z(S)

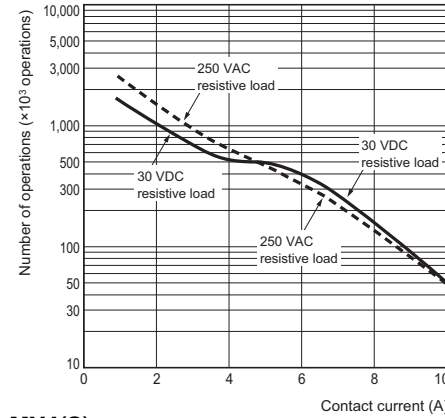
Maximum Switching Capacity MY2(S)



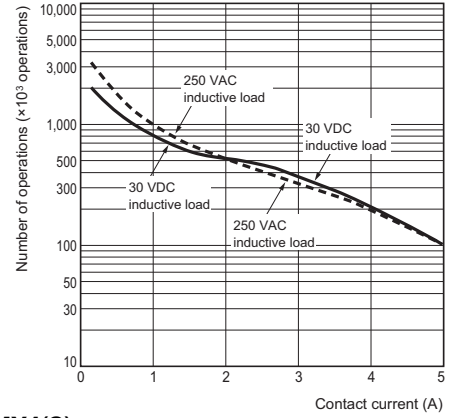
MY4(S) and MY4Z(S)



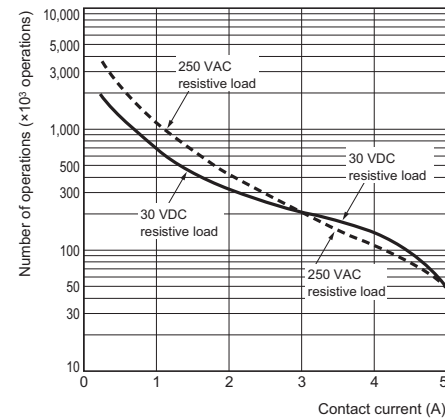
Endurance Curve MY2(S)



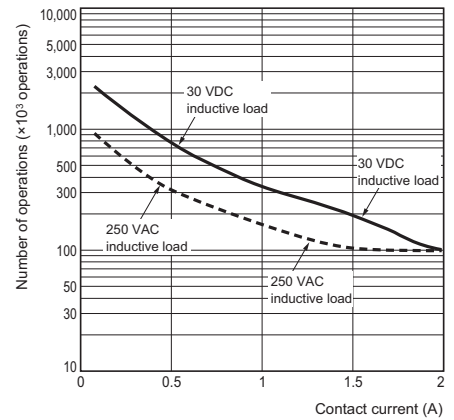
MY2(S)



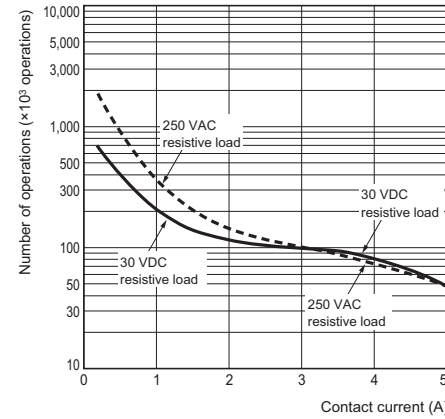
MY4(S)



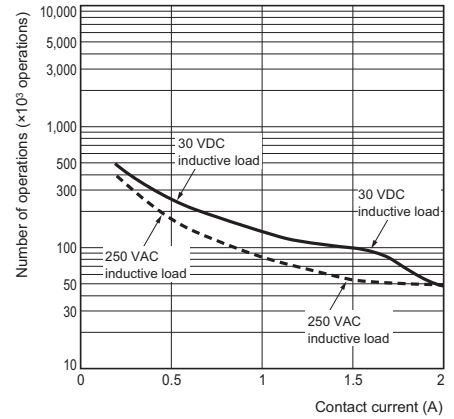
MY4(S)



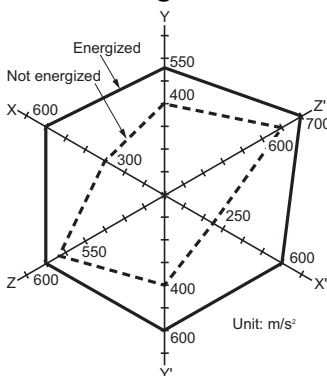
MY4Z(S)



MY4Z(S)



Common Specifications for MY2(S)/MY4(S)/MY4Z(S) Malfunctioning Shock



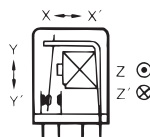
N = 20

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,

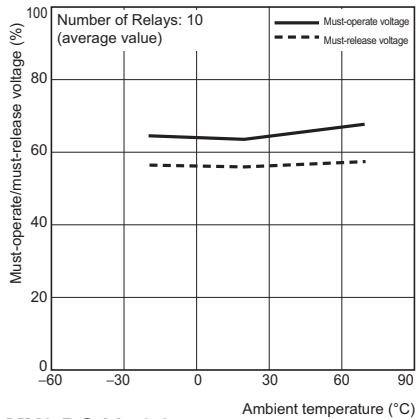
Energized: 200 m/s²

Shock direction

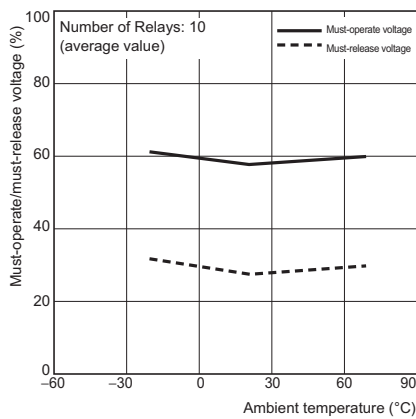


Engineering Data MY(S) (MY2ZN, MY□F)

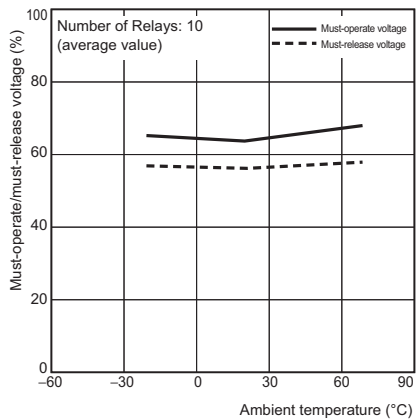
Ambient Temperature vs. Must-operate and Must-release Voltage MY2 AC Models



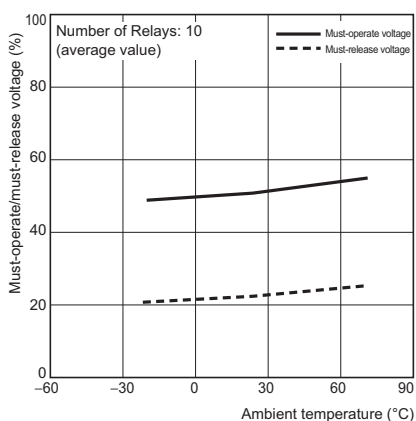
MY2 DC Models



MY4 AC Models

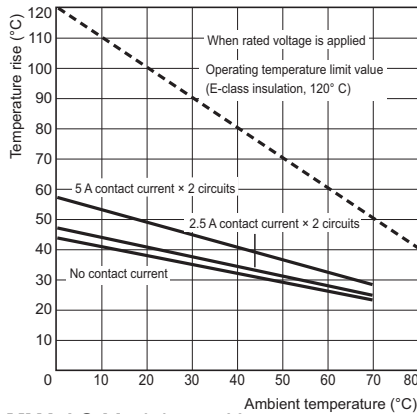


MY4 DC Models

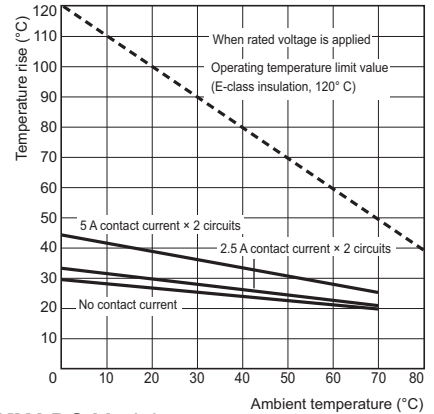


Ambient Temperature vs. Coil Temperature Rise

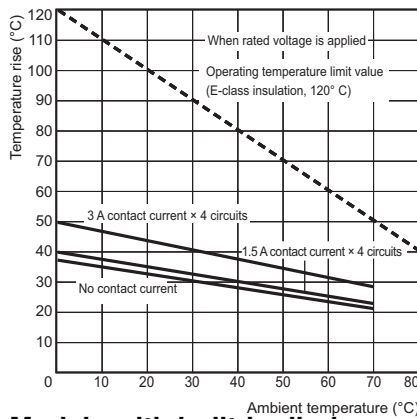
MY2 AC Models, 50 Hz



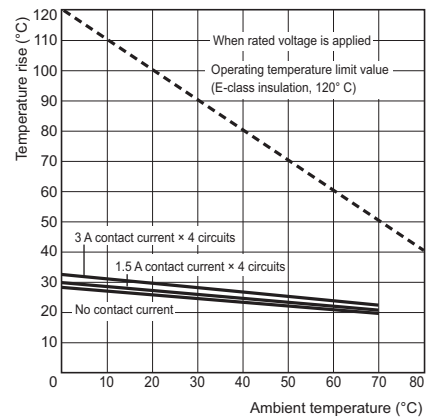
MY2 DC Models



MY4 AC Models, 50 Hz



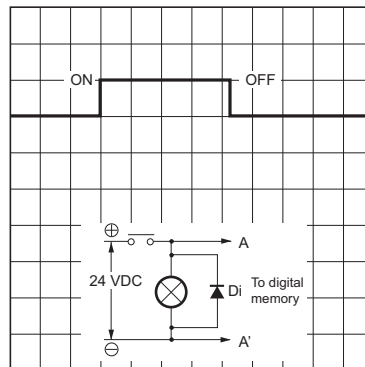
MY4 DC Models



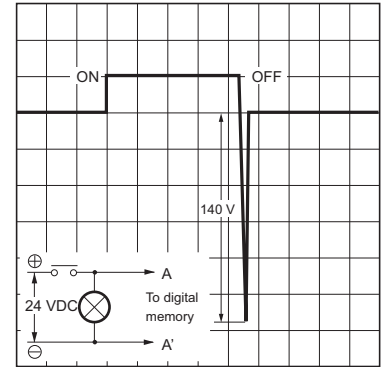
Models with built-in diodes

The diode absorbs surge from the coil. This type is best suited for applications with semiconductor circuits.

With Diode



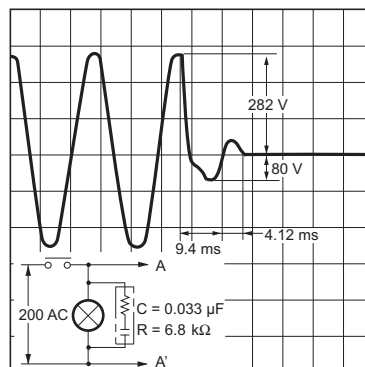
Without Diode



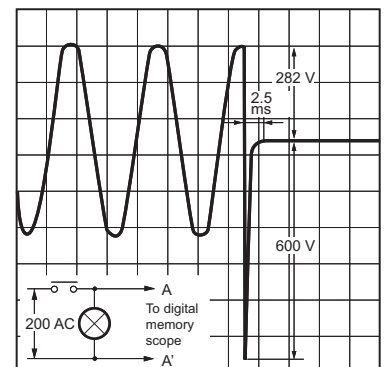
- Note:**
1. Make sure that the polarity is correct.
 2. The release time will increase, but the 20-ms specification for standard models is satisfied.
 3. Diode properties: The diode has a reversed dielectric strength of 1,000 V. Forward current: 1 A

Models with Built-in CR Circuits

With CR



Without CR



MY(S)

Detailed Information on Models Certified for Safety Standards, MY2(S)/MY4(S)/MY4Z(S)

VDE-certified Models (No. 112467UG, EN61810-1)

Model	Coil ratings	Contact form	Contact ratings	File No.	Certified number of operations
MY□	6, 12, 24, 48/50, 100/ 110, 110/120, 200/ 220, and 220/240 VAC 6, 12, 24, 48, 100/ 110, and 125 VDC	DPDT	10 A, 250 VAC (cos φ = 1) 10 A, 30 VDC (L/R = 0 ms)	6692 (VDE0435)	MY2: 10,000 operations MY4: 100,000 operations MY4Z: 50,000 operations (AC)
		4PDT	5 A, 250 VAC (cos φ = 1) 5 A, 30 VDC (L/R = 0 ms)		

UL508-certified Models (File No. 41515)

Model	Coil ratings	Contact form	Contact ratings	File No.	Certified number of operations
MY□	6 to 240 VAC 6 to 125 VDC	DPDT	10A, 250 VAC (General Use)	E41515 (UL508)	6,000
			10A, 30 VDC (General Use)		
			7A, 240 VAC (General Use)		
			7A, 24 VDC (Resistive)		
			5A, 240 VAC (General Use)		
			5A, 250 VAC (Resistive)		
			5A, 30 VDC (Resistive)		
			3A, 265 VAC (Resistive)		
			1/6HP, 250 VAC		
			1/8HP, 265 VAC		
			1/10HP, 120 VAC		
			B300 Pilot Duty (Same polarity)		
		4PDT	5A, 28 VDC (General Use) (Same polarity)		
			5A, 240 VAC (General Use) (Same polarity)		
			5A, 30 VDC (Resistive) (Same polarity)		
			5A, 250 VAC (Resistive) (Same polarity)		
			0.2A, 120 VDC (Resistive) (Same polarity)		
			1/6HP, 250 VAC (Same polarity)		
			1/10HP, 120 VAC (Same polarity)		
			B300 Pilot Duty (Same polarity)		1,000
	6,000				

CSA 22.2 No. 14-certified Models (File No. LR31928)

Model	Coil ratings	Contact form	Contact ratings	File No.	Certified number of operations		
MY□	6 to 240 VAC 6 to 125 VDC	DPDT	7A, 240 VAC (General Use)	LR31928 (CSA C22.2) (No. 14)	6,000		
			7A, 24 VDC (Resistive)				
			5A, 240 VAC (General Use)				
			5A, 250 VAC (Resistive)				
			5A, 30 VDC (Resistive)				
			3A, 265 VAC (Resistive)				
			1/6HP, 250 VAC				
			1/8HP, 265 VAC				
			1/10HP, 120 VAC				
			B300 Pilot Duty (Same polarity)			6,000	
			4PDT				5A, 240 VAC (General Use) (Same polarity)
							5A, 28 VDC (General Use) (Same polarity)
		5A, 250 VAC (Resistive) (Same polarity)					
		5A, 30 VDC (Resistive) (Same polarity)					
		0.2A, 120 VDC (Resistive) (Same polarity)					
		1/6HP, 250 VAC (Same polarity)					
		1/10HP, 120 VAC (Same polarity)					
		B300 Pilot Duty (Same polarity)			1,000		
			6,000				

LR-certified Models (File No. 98/10014)

Model	Coil ratings	Contact form	Contact ratings	File No.	Certified number of operations
MY□	6 to 240 VAC 6 to 125 VDC	DPDT	10 A, 250 VAC (resistive) 2 A, 250 VAC (PF0.4) 10 A, 30 VDC (resistive) 2 A, 30 VDC (L/R = 7 ms)	98/10014	MY2: 50,000 operations MY4: 50,000 operations
		4PDT	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)		

Miniature Power Relays: MY2ZN



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

Specifications

Contact Ratings

Item	Load	Resistive load	Inductive load ($\cos \phi = 0.4, L/R = 7 \text{ ms}$)
Rated load		5 A at 220 VAC 5 A at 24 VDC	2 A at 220 VAC 2 A at 24 VDC
Rated carry current		5 A	
Maximum contact voltage		250 VAC, 125 VDC	
Maximum contact current		5 A	
Contact form		DPDT (Bifurcated)	
Contact materials		Au plating + Ag	

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

*1. With no icing or condensation.

*2. This limitation is due to the diode junction temperature and elements used.

Characteristics

Item	MY2ZN series	
Contact resistance*1	50 mΩ max.	
Operation time*2	20 ms max.	
Release time*2	20 ms max.	
Maximum operating frequency	Mechanical	18,000 operations/h
	Rated load	1,800 operations/h
Insulation resistance*3	100 MΩ min.	
Dielectric strength	Between coil and contacts	
	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, 0.5-mm single amplitude (1.0-mm double amplitude)
	Malfunfunction	10 to 55 to 10 Hz, 0.5-mm single amplitude (1.0-mm double amplitude)
Shock resistance	Destruction	1,000 m/s ²
	Malfunfunction	200 m/s ²
Endurance	Mechanical	50,000,000 operations min. (operating frequency: 18,000 operations/h)
	Electrical*4	200,000 operations min. (rated load, switching frequency: 1,800 operations/h)

Item	MY2ZN
Failure rate P value (reference value)*5	100 μA at 1 VDC
Weight	Approx. 35 g

Note: These are initial values.

*1. Measurement conditions: 1 A at 5 VDC using the voltage drop method.

*2. Measurement conditions: With rated operating power applied.
Ambient temperature condition: 23° C

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

*4. Ambient temperature condition: 23° C

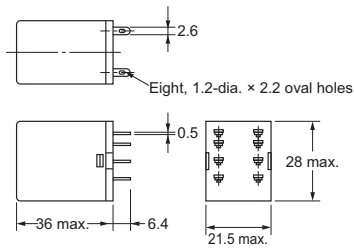
*5. This value was measured at a switching frequency of 120 operations per minute.

MY(S)

Dimensions

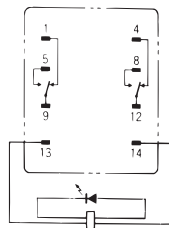
(Unit: mm)

MY2ZN, MY2ZN-D2



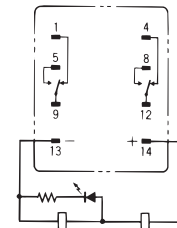
* For the MY2Z-CR and MY2ZN-CR, this dimension is 53 mm max.

MY2ZN
(AC Models)



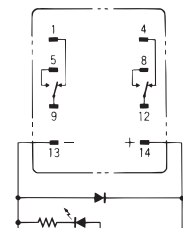
(The coil has no polarity.)

MY2ZN
(DC Models)



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

MY2ZN-D2
(DC Models Only)



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

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

Flange-mounting Relays: MY□F



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

Specifications

Contact Ratings

Item	Contact form Load	DPDT		4PDT, 4PDT (Bifurcated)	
		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 220 VAC 5 A at 24 VDC	2 A at 220 VAC 2 A at 24 VDC	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	5 A		3 A		
Maximum contact voltage	250 VAC, 125 VDC				
Maximum contact current	5 A		3 A		
Contact form	DPDT		4PDT, 4PDT (Bifurcated)		
Contact materials	Ag		Au plating + Ag		

Item	Type	MY□F
Ambient operating temperature*		-55 to 70° C
Ambient operating humidity		5% to 85%

* With no icing or condensation.

Characteristics

Item	Contact form	DPDT	4PDT, 4PDT (Bifurcated)
Contact resistance*1		50 mΩ max.	
Operation time*2		20 ms max.	
Release time*2		20 ms max.	
Maximum operating frequency	Mechanical	18,000 operations/h	
	Rated load	1,800 operations/h	
Insulation resistance*3		100 MΩ min.	
Dielectric strength	Between coil and contacts		
	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, 0.5-mm single amplitude (1.0-mm double amplitude)	
	Malfunction	10 to 55 to 10 Hz, 0.5-mm single amplitude (1.0-mm double amplitude)	
Shock resistance	Destruction	1,000 m/s ²	
	Malfunction	200 m/s ²	
Endurance	Mechanical	AC: 50,000,000 operations min. DC: 100,000,000 operations min. (switching frequency: 18,000 operations/h)	
	Electrical*4	500,000 operations min. (rated load, switching frequency: 1,800 operations/h)	200,000 operations min. (rated load, switching frequency: 1,800 operations/h)

Item	Contact form	DPDT	4PDT, 4PDT (Bifurcated)
Failure rate P value (reference value)		1 mA at 5 VDC	1 mA at 1 VDC
Weight		Approx. 35 g	

Note: These are initial values.

*1. Measurement conditions: 1 A at 5 VDC using the voltage drop method

*2. Measurement conditions: With rated operating power applied. Ambient temperature condition: 23° C

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

*4. Ambient temperature condition: 23° C

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

MY(S)

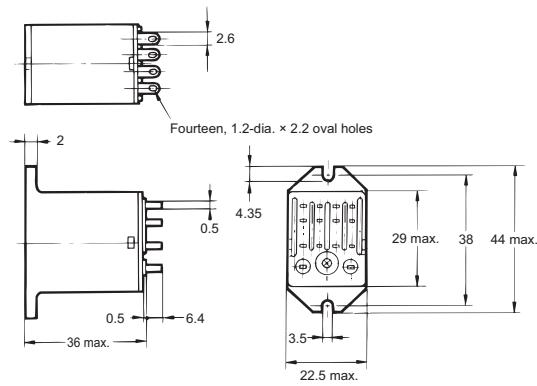
Dimensions

(Unit: mm)

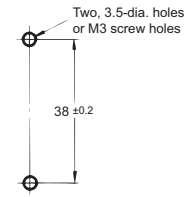
Flange mounting MY□F



The above figure is for the MY4F.



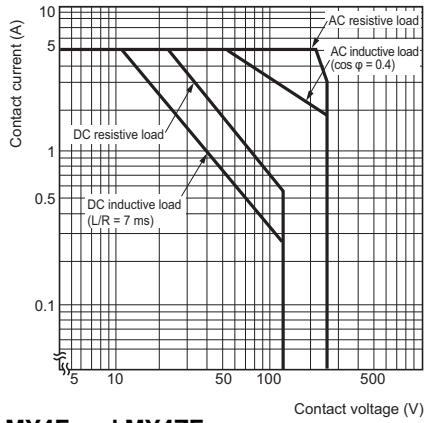
Mounting Hole Dimensions



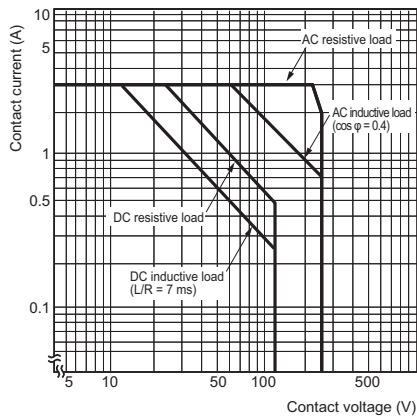
Note: Refer to the terminal arrangement and internal connections diagrams for the MY2(S), MY4(S) and MY4Z(S).

Engineering Data MY□F

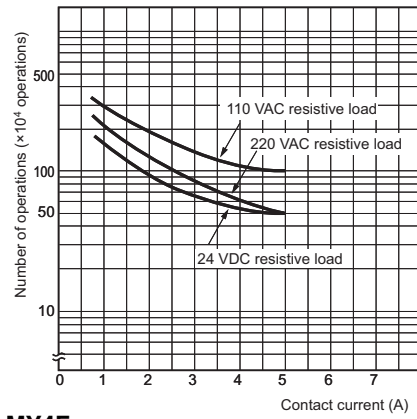
Maximum Switching Capacity MY2F



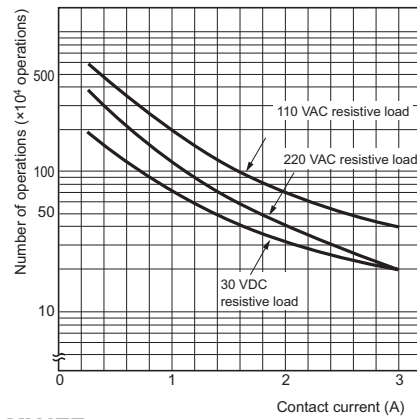
MY4F and MY4ZF



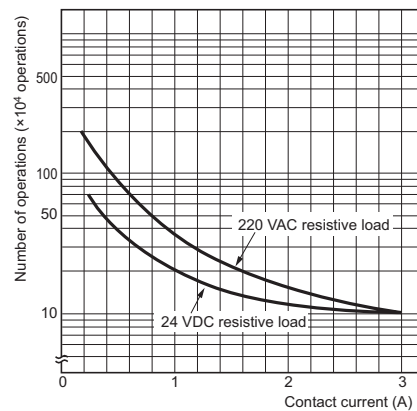
Endurance Curve MY2F



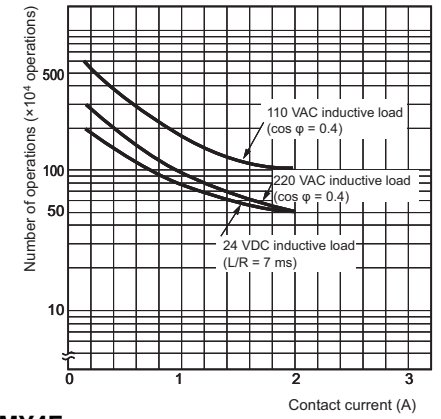
MY4F



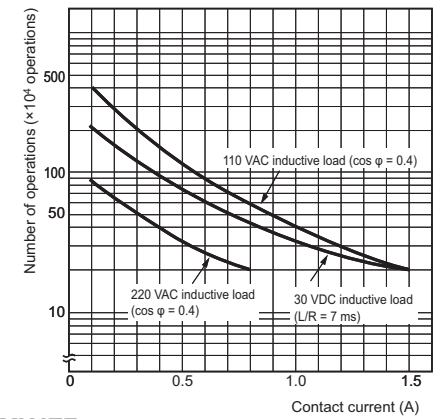
MY4ZF



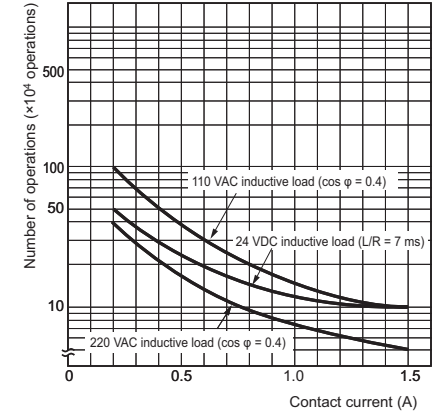
MY2F



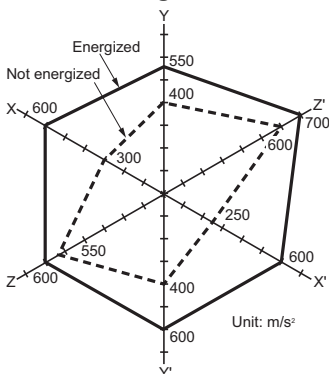
MY4F



MY4ZF



Common Specifications for MY□F Malfunctioning Shock



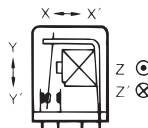
N = 20

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



MY(S)

Detailed Information on Models Certified for Safety Standards, MY2ZN and MY□F

- The standard models are certified for UL and CSA standards.
- The rated values for safety standard certification are not the same as individually defined performance values. Always check the specifications before use.

TÜV-certified Models (File No. R50030059)

Model	Coil ratings	Contact form	Contact ratings	Certified number of operations
MY□	6 to 125 VDC 6 to 240 VDC	DPDT	5 A, 250 VAC (cos φ = 1.0)	10,000 operations
		4PDT	3 A, 120 VAC (cos φ = 1.0) 0.8 A, 120 VAC (cos φ = 0.4)	

UL-certified Models (File No. E41515)

Model	Coil ratings	Contact form	Contact ratings	Certified number of operations
MY□	6 to 240 VAC 6 to 125 VDC	DPDT	7A, 240 VAC (General Use)	6,000
			7A, 24 VDC (Resistive)	
			5A, 240 VAC (General Use)	
			5A, 250 VAC (Resistive)	
			5A, 30 VDC (Resistive)	
			3A, 265 VAC (Resistive)	
			1/6HP, 250 VAC	
		1/8HP, 265 VAC		
		1/10HP, 120 VAC		
		B300 Pilot Duty	6,000	
		4PDT	5A, 28 VDC (General Use) (Same polarity)	6,000
			5A, 240 VAC (General Use) (Same polarity)	
			5A, 30 VDC (Resistive) (Same polarity)	
			5A, 250 VAC (Resistive) (Same polarity)	
0.2A, 120 VDC (Resistive) (Same polarity)				
1/6HP, 250 VAC (Same polarity)	1,000			
1/10HP, 120 VAC (Same polarity)				
B300 Pilot Duty (Same polarity)	6,000			

CSA-certified Models (File No. LR31928)

Model	Coil ratings	Contact form	Contact ratings	Certified number of operations	
MY□	6 to 240 VAC 6 to 125 VDC	DPDT	7A, 240 VAC (Resistive)	6,000	
			7A, 24 VDC (Resistive)		
			5A, 240 VAC (General Use)		
			5A, 250 VAC (Resistive)		
			5A, 30 VDC (Resistive)		
			1/6HP, 250 VAC		1,000
		1/10HP, 120 VAC			
		4PDT	7A, 240 VAC (General Use) (Same polarity)	6,000	
			7A, 24 VDC (Resistive) (Same polarity)		
			5A, 240 VAC (General Use) (Same polarity)		
			5A, 30 VDC (Resistive)		
			5A, 250 VAC (Resistive) (Same polarity)		
			0.2A, 120 VDC (Resistive)		1,000
			1/6HP, 250 VAC		
1/10HP, 120 VAC					

- When ordering models that are certified for Lloyd's Register (LR) Standards, be sure to specify "LR-certified Model" with your order.

LR-certified Models (File No. 90/10270)

Model	Coil ratings	Contact form	Contact ratings
MY□	6 to 240 VAC 6 to 125 VDC	DPDT	2 A, 30 VDC inductive load 2 A, 200 VAC inductive load
		4PDT	1.5 A, 30 VDC inductive load 0.8 A, 200 VAC inductive load 1.5 A, 115 VAC inductive load

Miniature Power Relays: MY4Z-CBG

Specifications

Contact Ratings

Item	Load	Resistive load	Inductive load ($\cos \varphi = 0.4, L/R = 7 \text{ ms}$)
Rated load		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 A	
Maximum contact voltage		250 VAC, 125 VDC	
Maximum contact current		1 A	
Contact form		4PDT (Crossbar bifurcated)	
Contact materials		Au cladding + AgPd	

Characteristics

Contact resistance*1		100 mΩ max.
Operation time*2		20 ms max.
Release time*2		20 ms max.
Maximum operating frequency	Mechanical	18,000 operations/h
	Electrical	1,800 operations/h
Insulation resistance*3		100 MΩ
Dielectric strength	Between coil and contacts	2,000 VAC at 50/60 Hz for 1 min.
	Between contacts of different polarity	
	Between contacts of the same polarity	700 VAC at 50/60 Hz for 1 min.
Vibration resistance	Destruction	10 to 55 to 10 Hz, 0.5-mm single amplitude (1.0-mm double amplitude)
	Malfunction	10 to 55 to 10 Hz, 0.5-mm single amplitude (1.0-mm double amplitude)
Shock resistance	Destruction	1,000 m/s ²
	Malfunction	200 m/s ²
Endurance	Mechanical	5,000,000 operations min. (operating frequency: 18,000 operations/hr)
	Electrical*4	50,000 operations min. (switching frequency: 1,800 operations/h) at rated load
Failure rate P value (reference value)*5		100 μA at 1 VDC
Ambient operating temperature		-25 to 70°C (with no icing or condensation)
Ambient operating 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.
 Ambient temperature condition: 23° C

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

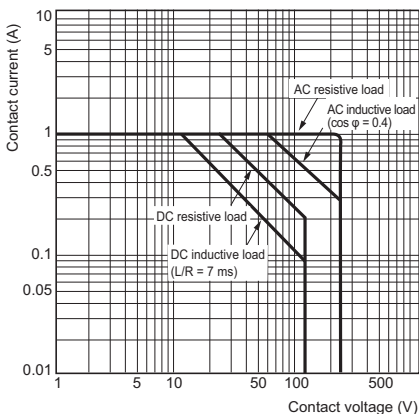
*4. Ambient temperature condition: 23° C

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

Engineering Data

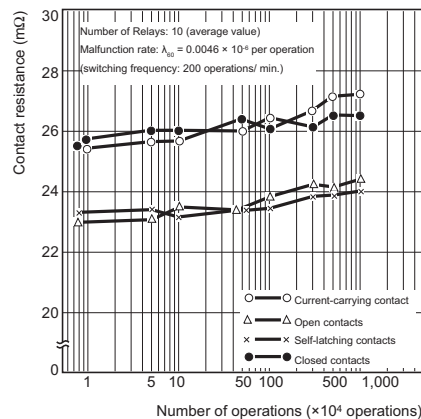
Maximum Switching Capacity

MY4Z-CBG



Contact Reliability Test (Modified Allen Bradley Circuit)

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

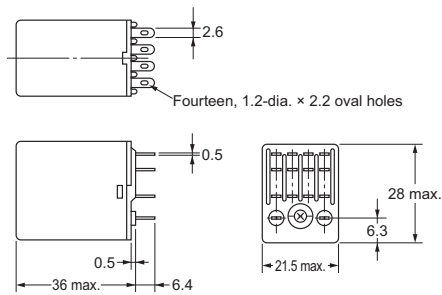


MY(S)

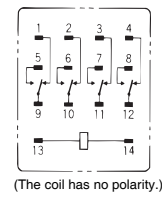
Dimensions

(Unit: mm)

MY4Z-CBG



Terminal Arrangement/Internal Connections (Bottom View) Standard Models



Safety Precautions

Refer to the *Common Relay Precautions*.

Applicable Sockets

Use only combinations of OMRON Relays and Sockets.

Plastic Sealed Relays: MYQ4

Specifications

Contact Ratings

Item	Type	Resistive load	Inductive load ($\cos \phi = 0.4, L/R = 7 \text{ ms}$)
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 contact voltage		250 VAC, 125 VDC	
Maximum contact current		1 A	
Maximum switching capacity (reference value)		220 VAC, 24 W	110 VAC, 12 W
Failure rate P value (reference value)		Single contacts: 1 mA at 1 VDC, Bifurcated contacts: 100 μA at 1 VDC	
Contact form		4PDT, 4PDT (Bifurcated)	
Contact materials		Au plating + Ag	

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

Ambient operating temperature	-55 to 60° C*
Ambient operating humidity	5% to 85%

* With no icing or condensation.

Characteristics

Contact resistance*1		50 m Ω max.
Operation time*2		20 ms max.
Release time*2		20 ms max.
Maximum operating frequency	Mechanical	18,000 operations/h
	Rated load	1,800 operations/h
Dielectric strength	Between coil and contacts	1,500 VAC at 50/60 Hz for 1 min.
	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.
Insulation resistance*3		100 M Ω min.
Vibration resistance	Destruction	10 to 55 to 10 Hz, 0.5-mm single amplitude (1.0-mm double amplitude)
	Malfunction	10 to 55 to 10 Hz, 0.5-mm single amplitude (1.0-mm double amplitude)
Shock resistance	Destruction	1,000 m/s ²
	Malfunction	200 m/s ²
Endurance	Mechanical	AC: 50,000,000 operations (5,000,000*4) min., DC: 100,000,000 operations (5,000,000*4) min. (switching frequency: 18,000 operations/h)
	Electrical*5	200,000 operations min. (100,000 operations*4) (rated load, switching frequency: 1,800 operations/h)
Weight		Approx. 35 g

Note: The values at the left 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. Ambient temperature condition: 23° C

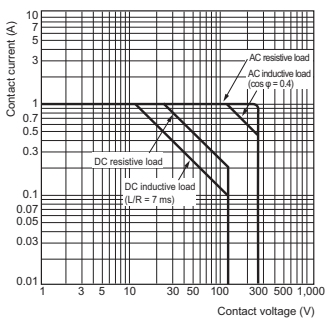
*3. Measurement conditions: For 500 VDC applied to the same location as for dielectric strength measurement.

*4. This value is for bifurcated contacts.

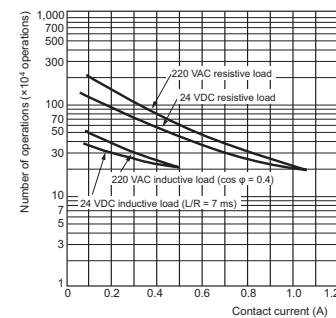
*5. Ambient temperature condition: 23° C

Engineering Data

Maximum Switching Capacity MYQ4(Z)

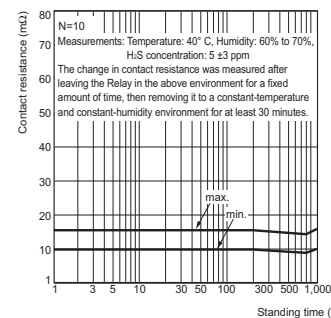


Endurance Curve MYQ4

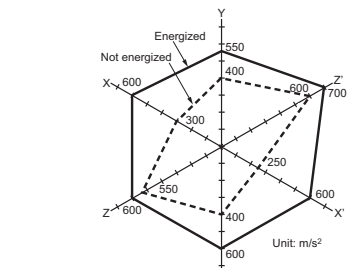


Note: The durability of bifurcated contacts is one-half that of single contacts.

H₂S Gas Data MYQ4



Malfunctioning Shock



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

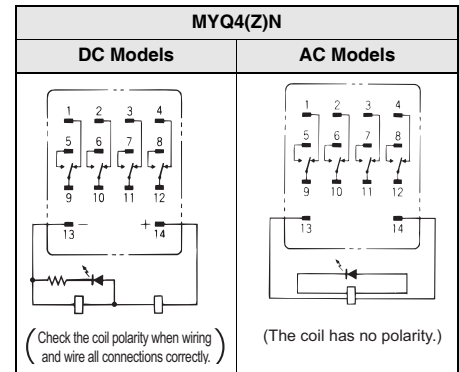
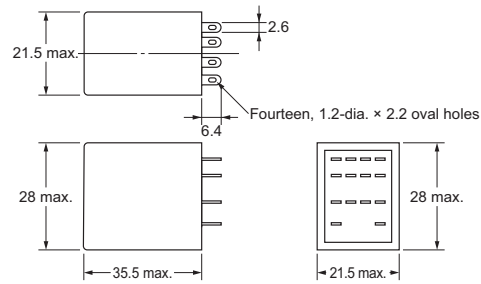


MY(S)

Dimensions

(Unit: mm)

Relays with Plug-in Terminals or Soldered Terminals 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.

Safety Precautions

- For models with built-in operation indicators, check the coil polarity when wiring and wire all connections correctly (DC operation).
- Use only combinations of OMRON Relays and Sockets.

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.

Latching Relays: MY2K

Specifications

Coil Rating

Item	Rated voltage (V)	Set coil			Reset coil			Set voltage (V)	Reset voltage (V)	Maximum voltage (V)	Power consumption (VA, W)	
		Rated current (mA)		Coil resistance (Ω)	Rated current (mA)		Coil resistance (Ω)				Set coil	Reset coil
		50 Hz	60 Hz		50 Hz	60 Hz						
AC	12	57	56	72	39	38.2	130	80% max.	80% max.	110% max. of rated voltage	Approx. 0.6 to 0.9 (at 60 Hz)	Approx. 0.2 to 0.5 (at 60 Hz)
	24	27.4	26.4	320	18.6	18.1	550					
	100	7.1	6.9	5,400	3.5	3.4	3,000					
DC	12	110		110	50		235	80% max.	80% max.	110% max. of rated voltage	Approx. 1.3	Approx. 0.6
	24	52		470	25		940					
	48	27		1,800	16		3,000					

- Note:**
1. The rated current for AC is the value measured with a DC ammeter in half-wave rectification.
 2. 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.
 3. The AC coil resistance is a reference value only.
 4. Operating characteristics were measured at a coil temperature of 23°C.
 5. The maximum voltage capacity was measured at an ambient temperature of 23°C.

Contact Ratings

Item	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 contact voltage		250 VAC, 125 VDC	
Maximum contact current		3 A	
Contact form		DPDT	
Contact materials		Au plating + Ag	
Ambient operating temperature		–55 to 60° C*	
Ambient operating humidity		5% to 85%	

* With no icing or condensation.

Characteristics

Contact resistance*1		50 mΩ max.
Set	Time*2	AC: 30 ms max., DC: 15 ms max.
	Minimum pulse width	AC: 60 ms, DC: 30 ms
Reset	Time*2	AC: 30 ms max., DC: 15 ms max.
	Minimum pulse width	AC: 60 ms, DC: 30 ms
Maximum operating frequency	Mechanical	18,000 operations/h
	Rated load	1,800 operations/h
Insulation resistance*3		100 MΩ
Dielectric strength	Between coil and contacts	1,500 VAC at 50/60 Hz for 1 min.
	Between contacts of different polarity	
	Between contacts of the same polarity	1,000 VAC at 50/60 Hz for 1 min.
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 1,800 operations/hr, rated load)
Failure rate P value (reference value)*5		1 mA at 1 VDC
Weight		Approx. 30 g

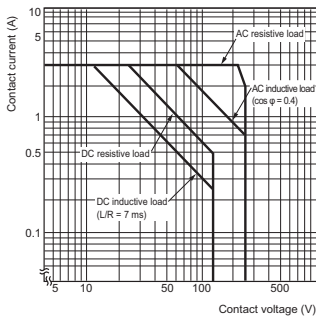
Note: The above values are initial values.

- *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.
- *3. Measurement conditions: For 500 VDC applied to the same location as for dielectric strength measurement.
- *4. Ambient temperature condition: 23° C
- *5. This value was measured at a switching frequency of 120 operations per minute.

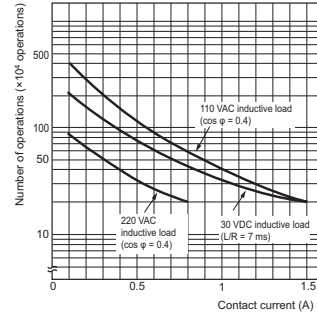
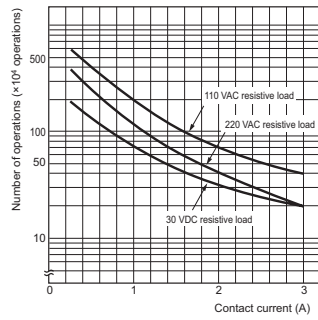
MY(S) Engineering Data

MY2K

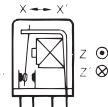
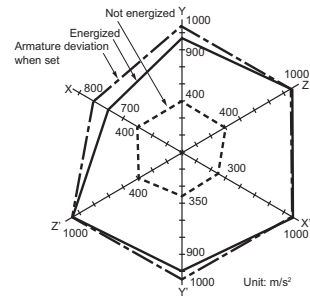
Maximum Switching Capacity



Endurance Curve

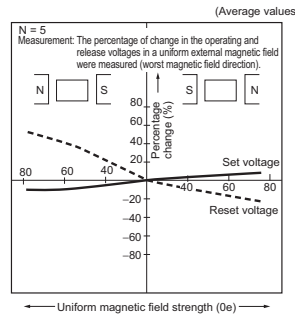


MY2K 100 VAC Malfunctioning Shock

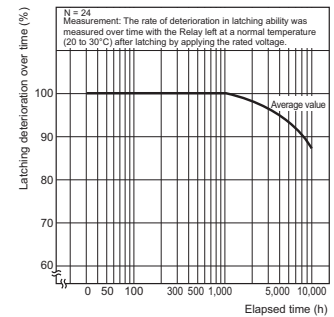


N = 20
Measurement: Shock was applied 2 times each in 6 directions along 3 axes with the Relay energized and not energized to check the shock values that cause the Relay to malfunction.
Criteria: Non-energized: 200 m/s²
Energized: 200 m/s²

MY2K 24 VDC Magnetic Interference (External Magnetic Field)



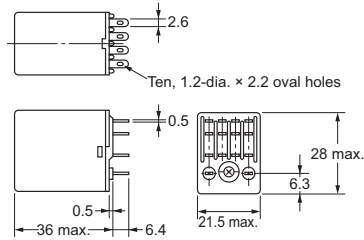
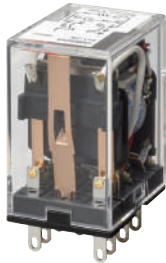
Latching Deterioration Over Time



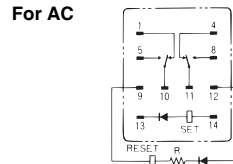
Dimensions

(Unit: mm)

Relays with Plug-in Terminals or Soldered Terminals MY2K



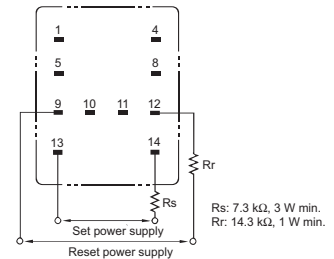
Terminal Arrangement/Internal Connections (Bottom View)



Note: R is a resistor for ampere-turn correction. This resistor is built-in to 50-VAC and higher models. (The coil has no polarity.)

Safety Precautions

- For applications that use a 200 VAC power supply, connect external resistors R_s and R_r 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. The performance values given here may not be satisfied due to use over time and a reduction in latching performance due to changes in the ambient temperature or in the conditions of the application circuit.
For actual use, apply the rated operating voltage with a pulse width based on the actual load and reset the Relay at least once per year to prevent degradation over time.
- 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.



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.

Hermetically Sealed Relays: MY4(Z)H

Specifications

Contact Ratings

Item	Load	MY4H		MY4ZH	
		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 110 VAC 3 A at 24 VDC	0.8 A at 110 VAC 1.5 A at 24 VDC	3 A at 110 VAC 3 A at 24 VDC	0.8 A at 110 VAC 1.5 A at 24 VDC	
Rated carry current	3 A				
Maximum contact voltage	125 VAC 125 VDC				
Maximum contact current	3 A				
Contact form	4DPDT		4DPDT (Bifurcated)		
Contact materials	Au plating + Ag				
Ambient operating temperature	-25 to 60° C*				
Ambient operating humidity	5% to 85%				

* With no icing or condensation.

Characteristics

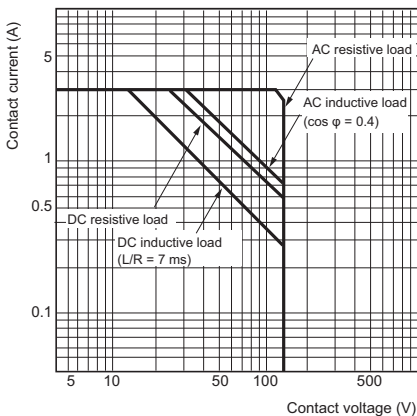
Contact resistance*1	50 mΩ max.	
Operation time*2	20 ms max.	
Release time*2	20 ms max.	
Maximum operating frequency	Mechanical	18,000 operations/h
	Rated load	1,800 operations/h
Insulation resistance*4	100 MΩ min.	
Dielectric strength	Between coil and contacts	1,000 VAC at 50/60 Hz for 1 min. (700 VAC between contacts of the same polarity.)
	Between contacts of different polarity	
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	50,000,000 operations (5,000,000 operations*4) min. (operating frequency: 18,000 operations/h)
	Electrical*5	100,000 operations (50,000 operations*4) min. rated load, switching frequency: 1,800 operations/h
Failure rate P value (reference value)*6	Single contacts: 100 μA at 1 VDC Bifurcated contacts: 100 μA at 100 mVDC	
Weight	Approx. 50 g	

Note: The above values are initial values.

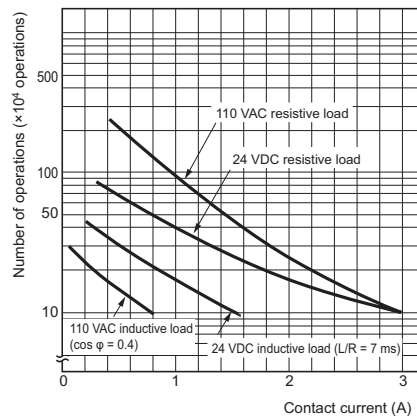
- *1. Measurement conditions: 1 A at 5 VDC using the voltage drop method
- *2. Measurement conditions: With rated operating power applied, not including contact bounce.
Ambient temperature condition: 23° C
- *3. Measurement conditions: For 500 VDC applied to the same location as for dielectric strength measurement.
- *4. This value is for bifurcated contacts.
- *5. Ambient temperature condition: 23° C
- *6. This value was measured at a switching frequency of 120 operations per minute.

Engineering Data

Maximum Switching Capacity MY4(Z)H



Endurance Curve MY4H



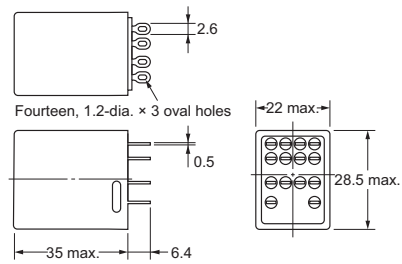
Note: The durability of bifurcated contacts is one-half that of single contacts.

MY(S)

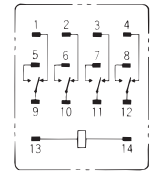
Dimensions

(Unit: mm)

Relays with Plug-in Terminals or Soldered Terminals MY4(Z)H



Terminal Arrangement/ Internal Connections (Bottom View)



(The coil has no polarity.)

Safety Precautions

Applicable Sockets

Use only combinations of OMRON Relays and Sockets.

Application Environment for Hermetically Sealed Relays

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 insulating beads and cause short-circuiting or unintended operation due to poor insulation.

Relay Replacement

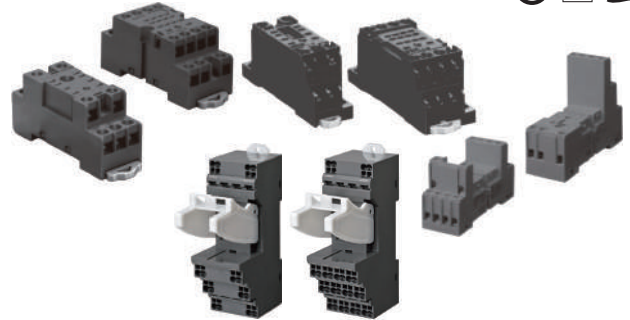
To replace the Relay, turn OFF the power supply to the load and Relay coil sides to prevent unintended operation and possible electrical shock.

Sockets for MY

DIN-rail-mounted (DIN-rail) Socket Conforms to VDE 0106, Part 100



- Snap into position along continuous sections of any mounting DIN-rail.
- Facilitates sheet metal design by standardized mounting dimensions.
- Design with sufficient dielectric separation between terminals eliminates the need of any insulating sheet.



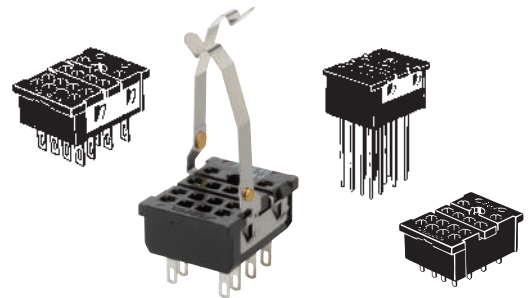
Safety Standards for Sockets

Front-mounted Sockets (PYF□)

Model	Standards	File No.
PYF-08-PU PYF-14-PU	TÜV (EN 61984)	---
	UL508	E87929
	CSA C22.2 No.14	---
PYF14A-E, PYF14A-N	VDE0627 (EN61984)	Nr.B387 (License No.)
PYF08A-E, PYF08A-N PYF14A-E, PYF14A-N	TÜV(EN 61984)	J50224549
	UL508	E87929
	CSA22.2	LR31928
PYF14-ESN-B PFY14-ESS-B	UL508	E244189
	CSA22.2	LR225761
PYF08A PFY14A	UL508	E87929
	CSA22.2	LR31928

Back-connecting Sockets (PY□)

Model	Standards	File No.
PY08(-02) PY14(-02)	UL508	E87929
	CSA C22.2	LR31928



Specifications

Mounting	Terminal type	No. of poles	Model	Carry current	Dielectric withstand voltage	Insulation resistance (see note 2)	
DIN-rail-mounted Socket	Push-In Plus terminals	2	PYF-08-PU	10 A	2,000 VAC, 1 min	1,000 MΩ min	
		4	PYF-14-PU	6 A			
	Screw terminals	2	PYF08A(-E)	7 A	2,000 VAC, 1 min	1,000 MΩ min	
			PYF08A-N (see note 3)	7 A (see note 4)			
			4	PYF14A(-E)	5 A	2,000 VAC, 1 min	1,000 MΩ min
				PYF14A-N (see note 3)	5 A (see note 4)		
Rise-Up terminals	2 and 4 Common		PYF14-ESS-B	12 A	> 3 KV	> 5 MΩ	
			PYF14-ESN-B				
Back-connecting	Solder terminals	2	PY08(-Y1)	7 A	1,500 VAC, 1 min	1000 MΩ min.	
		4	PY14(-Y1)	3 A		100 MΩ min.	
	Wrapping terminals	2	PY08QN(-Y1)	7 A			
		4	PY14QN(-Y1)	3 A			
	Relays with PCB terminals		2	PY08-02			7 A
			4	PY14-02		3 A	

- Note:** 1. The values given above are initial values.
 2. The values for insulation resistance were measured at 500 VDC at the same place as the dielectric strength.
 3. The maximum operating ambient temperature for the PYF08A-N and PYF14A-N is 55°C.
 4. When using the PYF08A-N or PYF14A-N at an operating ambient temperature exceeding 40°C, reduce the current to 60%.
 5. The MY2(S) can be used at 70°C with a carry current of 7 A.

Options (Order Separately)

Connection Socket and Mounting Bracket Selection Table

(The possible combinations of models with plug-in terminals and sockets)

Connecting method Mounting method		Front-mounting Sockets (PYF□)				Back-mounting Sockets (PY□)						
		Track or screw mounting				Wrapping terminals						
		Screw terminals	Screw terminals (finger protection structure) *2	Rise-Up terminals	Push-In Plus Terminal Block *3	Solder terminals		Terminal length: 25 mm		Terminal length: 20 mm		Relays with PCB Terminals *4
Without Mounting Brackets *1	With Mounting Brackets							Without Mounting Brackets *1	With Mounting Brackets	Without Mounting Brackets *1	With Mounting Brackets	
No. of poles	Model	(Sold separately: Hold-down Clips) *1	Without Release Lever	With Release Lever	Without Mounting Brackets *1	With Mounting Brackets	Without Mounting Brackets *1	With Mounting Brackets	Without Mounting Brackets *1	With Mounting Brackets	(Sold separately : Hold-down Clips) *1	
8	MY2(S), MY2ZN (except for MY2K□, MY2Z□-CR)	PYF08A (PYC-A1)	PYF08A-E (PYC-A1) PYF08A-N (PYC-A1)	PYF-08-PU	PY08 (PYC-P)	PY08-Y1	PY08QN (PYC-P)	PY08QN-Y1	PY08QN2 (PYC-P)	PY08QN2-Y1	PY08-02 (PYC-P)	
	MY2I(S) *5	PYF08A (PYC-E1)	PYF08A-E (PYC-E1) PYF08A-N (PYC-E1)		PY08 (PYC-1)	PY08-Y3	PY08QN (PYC-1)	/	PY08QN2 (PYC-1)	/	PY08-02 (PYC-1)	
	MY2Z□-CR *6	PYF08A (Y92H-3)	PYF08A-E (Y92H-3) PYF08A-N (Y92H-3)		PY08 (PYC-1)	PY08-Y3	PY08QN (PYC-1)	/	PY08QN2 (PYC-1)	/	PY08-02 (PYC-1)	
14	MY4(S), MY4I(S), MY4-CBG, MY4Q, MY4(Z)H, MY2K	PYF14A (PYC-A1)	PYF14A-E (PYC-A1) PYF14A-N (PYC-A1)	PYF-14-PU	PY14 (PYC-P)	PY14-Y1	PY14QN (PYC-P)	PY14QN-Y1	PY14QN2 (PYC-P)	PY14QN2-Y1	PY14-02 (PYC-P)	

- Note:** Refer to Common Socket and DIN Track Products for the external dimensions of the Socket Relays and details on Hold-down Clips.
 *1. The information in parentheses is the model number of the applicable Mounting Bracket. Mounting Brackets are sold in sets of two. However, the PYC-P is just one Mounting Bracket.
 *2. The PYF□A-E has a terminal cover with finger protection. The Socket and Terminal Cover are integrated into one unit. Round terminals cannot be used. Use forked terminals or ferrules instead.
 *3. A Push-In Plus Terminal Block Socket functions as a release lever to hold or remove a Relay. Refer to PYF-□□-PU/P2RF-□□-PU for details.
 *4. If an MYI□(S) Relay with a Latching Lever is used in combination with a PY□-02 Socket for Relays with PCB Terminal Socket and PYC-P Mounting Brackets, the lever will not operate.
 *5. We recommends using the PYC-E1 Mounting Bracket for a MY2I(S) Relay with Latching Lever. (If the PYC-A1 is used with the MY2I(S), the latching lever will be blocked by the Mounting Bracket and the lever will not operate.)
 *6. The Mounting Brackets are applicable for Relays with a height of 36 mm or less. If the Relay height is greater than 53 mm, use Y92H-3 for the Front-mounting Socket and PYC-1 for the Back-mounting Socket. (The Y92H-3 is a set of two Brackets and the PYC-1 is just one Bracket.)

Mounting Plates for Sockets

Socket model	For 1 Socket	For 18 Sockets	For 36 Sockets
PY08, PY08QN(2), PY14, PY14QN(2)	PYP-1	PYP-18	PYP-36

Note: PYP-18 and PYP-36 can be cut into any desired length in accordance with the number of Sockets.

DIN-rail and Accessories

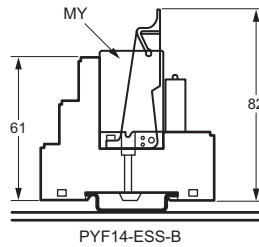
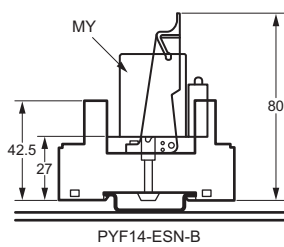
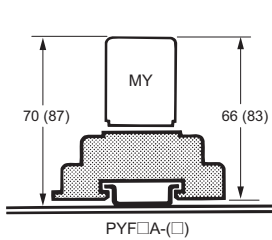
Supporting DIN-rail (length = 500 mm)	PFP-50N
Supporting DIN-rail (length = 1,000 mm) PFP	PFP-100N, PFP-100N2
End Plate	PFP-M
Spacer	PFP-S

Mounting Heights with Sockets (Unit: mm)

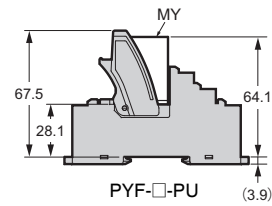
Front-mounting Sockets

Screw terminal

(PYF□A (-E), PYF□A-N, PYF14-ES□-B)



Push-In Plus Terminal Block Sockets (PYF□-PU)

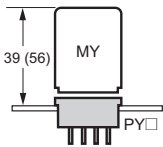


- Note:**
1. The PYF□A can be mounted on a track or with screws.
 2. The heights given in parentheses are the measurements for 53-mm-high Relays.

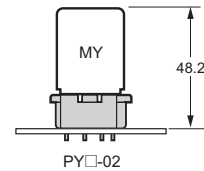
Back-mounting Sockets

Solder terminals/Wrapping terminals

(PY□)




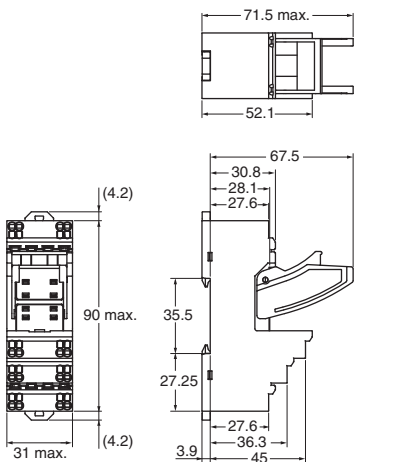
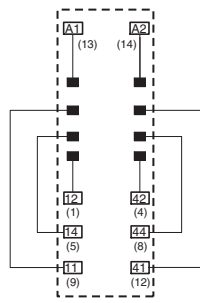
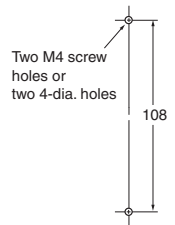

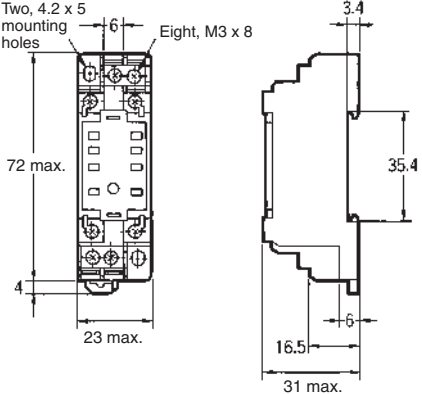
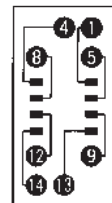
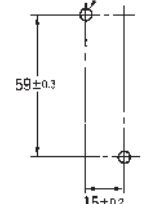
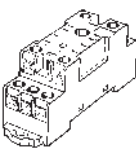
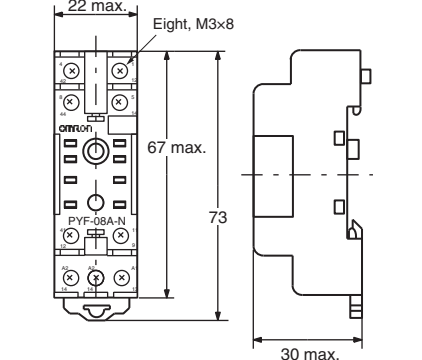
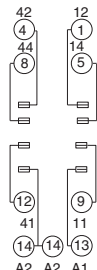
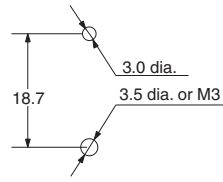
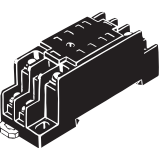
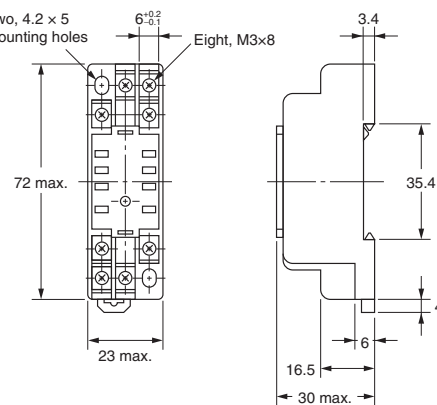
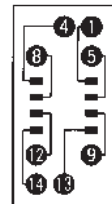
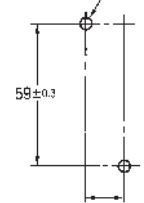
Relays with PCB Terminals (PY□-02)


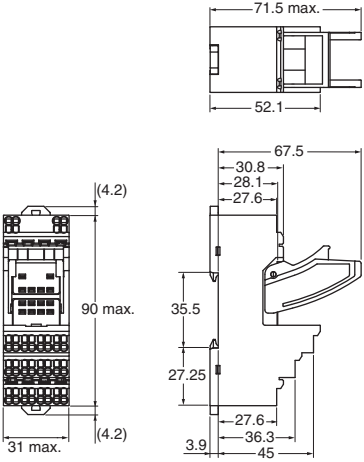
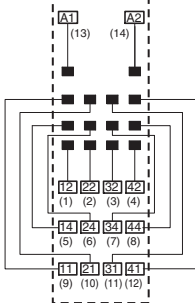
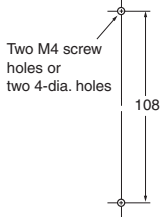

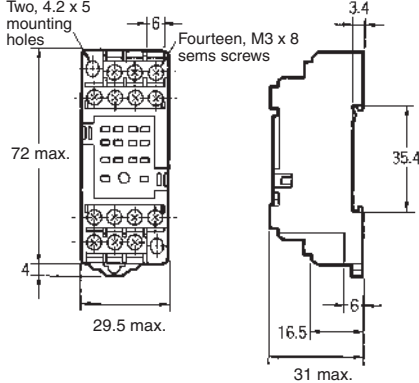
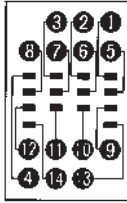
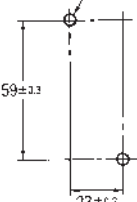
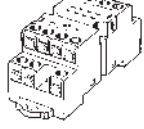
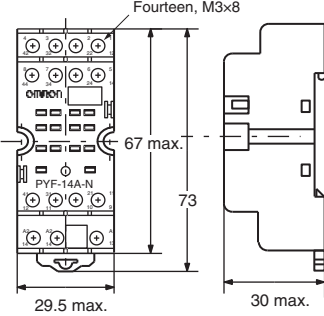
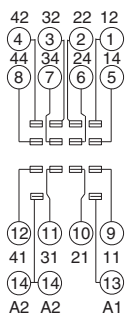
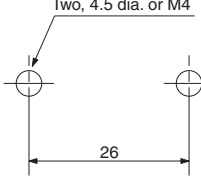
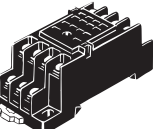
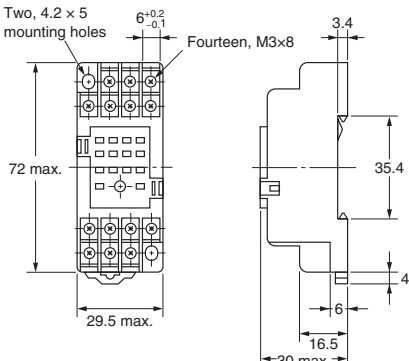
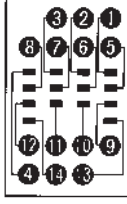
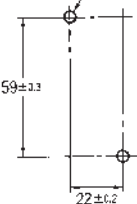


Dimensions


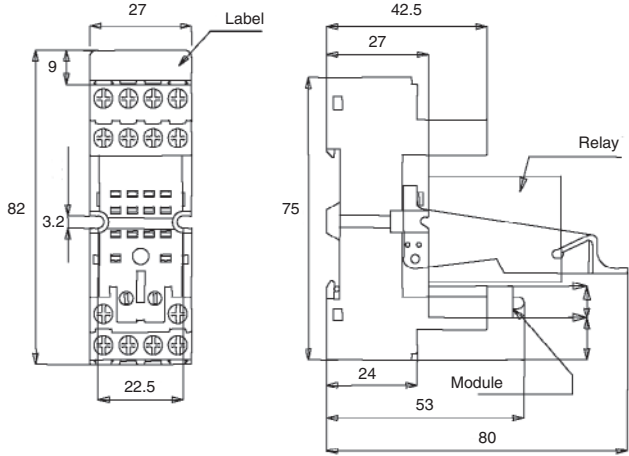
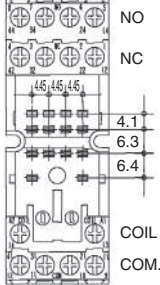

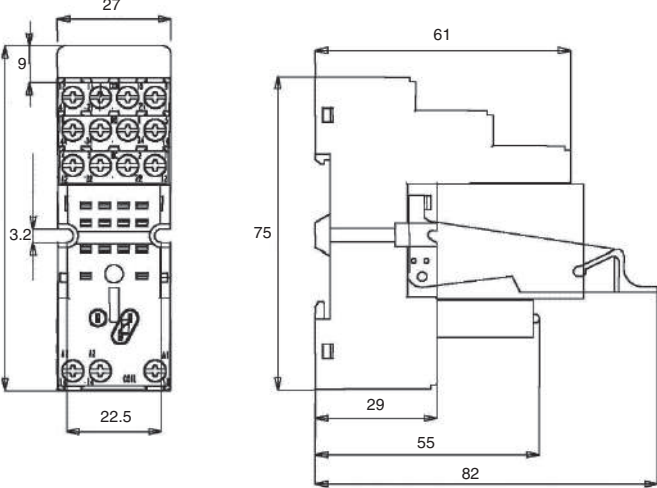


(Unit: mm)

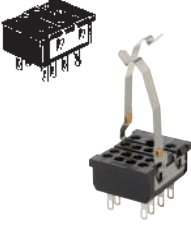
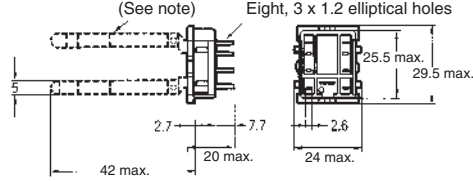
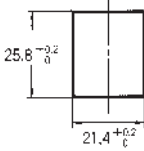
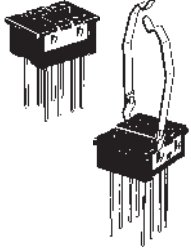
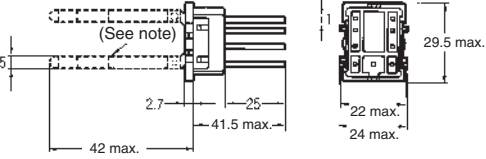
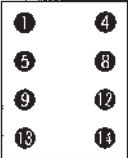

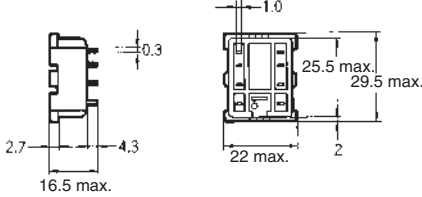
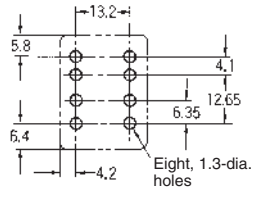
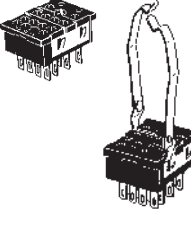
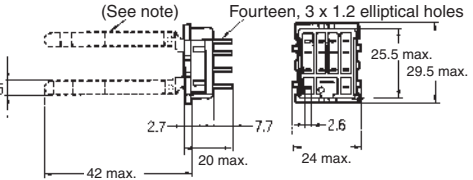
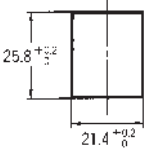
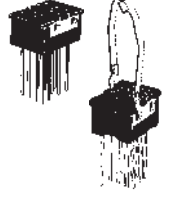
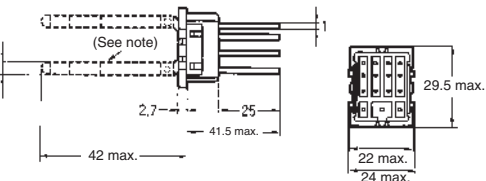
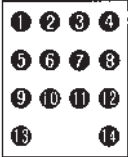

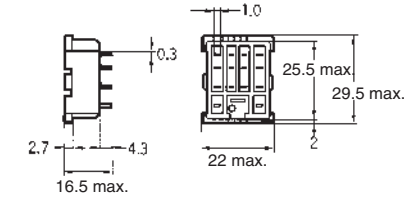
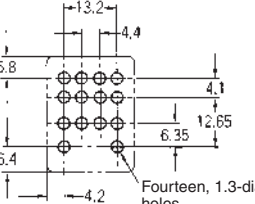
Note: All units are in millimeters unless otherwise indicated.

Socket	Dimensions	Terminal arrangement/ Internal connections (top view)	Mounting holes
<p>PYF-08-PU</p> 	 <p>71.5 max. 52.1 67.5 30.8 28.1 27.6 90 max. 35.5 27.25 31 max. (4.2) (4.2) 3.9 27.6 36.3 45</p>	 <p>Note: The numbers in parentheses are traditionally used terminal numbers.</p>	 <p>Two M4 screw holes or two 4-dia. holes 108</p> <p>Note 1: Pull out the hooks to mount the Relay with screws. Note 2: DIN-rail mounting is also possible. Refer to page 34 for supporting DIN-rails.</p>
<p>PYF08A-E</p> 	 <p>Two, 4.2 x 5 mounting holes Eight, M3 x 8 72 max. 4 23 max. 3.4 35.4 16.5 6 31 max.</p>		 <p>Two, M3, M4, or 4.5-dia. holes 59±0.3 15±0.2 (TOP VIEW)</p> <p>Note: DIN-rail mounting is also possible. Refer to page 34 for supporting DIN-rails.</p>
<p>PYF08A-N</p> 	 <p>22 max. Eight, M3x8 67 max. 73 30 max.</p>	 <p>Note: Figures in parentheses indicate DIN standard numbers.</p>	 <p>3.0 dia. 18.7 3.5 dia. or M3</p> <p>Note: DIN-rail mounting is also possible. Refer to page 34 for supporting DIN-rails.</p>
<p>PYF08A</p> 	 <p>Two, 4.2 x 5 mounting holes Eight, M3x8 72 max. 23 max. 3.4 35.4 4 6 16.5 30 max.</p>		 <p>Two, M3, M4, or 4.5-dia. holes 59±0.3 15±0.2 (TOP VIEW)</p> <p>Note: DIN-rail mounting is also possible. Refer to page 34 for supporting DIN-rails.</p>

Socket	Dimensions	Terminal arrangement/ Internal connections (top view)	Mounting holes
<p>PYF-14-PU</p> 		 <p>Note: The numbers in parentheses are traditionally used terminal numbers.</p>	 <p>Two M4 screw holes or two 4-dia. holes</p> <p>108</p> <p>Note 1: Pull out the hooks to mount the Relay with screws.</p> <p>Note 2: DIN-rail mounting is also possible. Refer to page 34 for supporting DIN-rails.</p>
<p>PYF14A-E</p> 	 <p>Two, 4.2 x 5 mounting holes</p> <p>Fourteen, M3 x 8 sems screws</p> <p>72 max.</p> <p>29.5 max.</p> <p>31 max.</p> <p>35.4</p> <p>16.5</p> <p>6</p> <p>3.4</p>		 <p>Two, M3, M4, or 4.5-dia. holes</p> <p>59±1.3</p> <p>22±0.2</p> <p>(TOP VIEW)</p> <p>Note: DIN-rail mounting is also possible. Refer to page 34 for supporting DIN-rails.</p>
<p>PYF14A-N</p> 	 <p>Fourteen, M3x8</p> <p>67 max.</p> <p>73</p> <p>29.5 max.</p> <p>30 max.</p>	 <p>Note: Figures in parentheses indicate DIN standard numbers.</p>	 <p>Two, 4.5 dia. or M4</p> <p>26</p> <p>Note: DIN-rail mounting is also possible. Refer to page 34 for supporting DIN-rails.</p>
<p>PYF14A</p> 	 <p>Two, 4.2 x 5 mounting holes</p> <p>Fourteen, M3x8</p> <p>72 max.</p> <p>29.5 max.</p> <p>35.4</p> <p>16.5</p> <p>6</p> <p>3.4</p> <p>30 max.</p>		 <p>Two, M3, M4, or 4.5-dia. holes</p> <p>59±1.3</p> <p>22±0.2</p> <p>(TOP VIEW)</p> <p>Note: DIN-rail mounting is also possible. Refer to page 34 for supporting DIN-rails.</p>

MY(S)

Socket	Dimensions	Terminal arrangement/ Internal connections (top view)/ mounting holes
<p>PYF14-ESN-B</p> 		
<p>PYC-35-B</p> 		
<p>PYF14-ESS-B</p> 	<p>PYC-35-B</p> 	

Socket	Dimensions	Terminal arrangement/ Internal connections (top view)	Mounting holes
<p>PY08/PY08-Y1</p> 	 <p>(See note) Eight, 3 x 1.2 elliptical holes</p> <p>Note: The PY08-Y1 includes sections indicated by dotted lines.</p>		
<p>PY08QN/ PY08QN-Y1</p> 	 <p>(See note)</p> <p>Note: The PY08QN-Y1 includes sections indicated by dotted lines.</p>		
<p>PY08-02</p> 			
<p>PY14/PY14-Y1</p> 	 <p>(See note) Fourteen, 3 x 1.2 elliptical holes</p> <p>Note: The PY14-Y1 includes sections indicated by dotted lines.</p>		
<p>PY14QN/ PY14QN-Y1</p> 	 <p>(See note)</p> <p>Note: The PY14QN-Y1 includes sections indicated by dotted lines.</p>		
<p>PY14-02</p> 			

Note: Use a panel with plate thickness of 1 to 2 mm for mounting the Sockets.

Short Bars for Relay Sockets and PYF Sockets

Short Bars for crossover wiring within one Socket or between Sockets

Application	Pitch	Applicable model	Appearance and dimensions (mm)	L (Length)	No. of poles	Model #	Specifications
For Contact terminals (common)	7.75 mm	PYF-□-PU		15.1	2	PYDN-7.75-020□	Max. carry current: 20 A Minimum order: 10
				22.85	3	PYDN-7.75-030□	
				30.6	4	PYDN-7.75-040□	
				154.6	20	PYDN-7.75-200□	
For Coil terminals	31.0 mm			224.35	8	PYDN-31.0-080□	

* Replace the box (□) in the model number with the specification code for the covering color. B: Black, S: Blue, R: Red

Note: When using short bar to coil terminals of PYF-□□-PU, make sure to use PYFDN-31.0-080□ (31mm).

Short bar correspondence table

	Contact terminal (Common)	Coil terminal	
		A1	A2
PYF-□□-PU	Available	○	○

Short Bars for within the Same Socket

Pitch	Applicable model	Appearance	Dimensions (mm)	No. of poles	Model #	Specifications
7 mm	PYF14A			2	PYD-020B□	Max. carry current: 20 A (18 A at 70°C) Ambient operating temp.: -40 to 70°C (with no icing or condensation) Ambient operating humidity: 45% to 85% (with no icing or condensation) Conductor material: Brass Conductor surface treatment: Nickel plating Qty per package: 50/bag
				3	PYD-030B□	

* Replace the box (□) in the model number with the specification code for the covering color. B: Black, Y: Yellow

Short Bars for Adjacent Sockets

Pitch	Applicable model	Appearance	Dimensions (mm)	No. of poles	Model #	Specifications
22 mm	PYF08A			2	PYD-025B□	Max. carry current: 20 A (18 A at 70°C) Ambient operating temp.: -40 to 70°C (with no icing or condensation) Ambient operating humidity: 45% to 85% (with no icing or condensation) Conductor material: Brass Conductor surface treatment: Nickel plating Qty per package: 10/bag
				8	PYD-085B□	
29 mm	PYF14A			2	PYD-026B□	Max. carry current: 20 A (18 A at 70°C) Ambient operating temp.: -40 to 70°C (with no icing or condensation) Ambient operating humidity: 45% to 85% (with no icing or condensation) Conductor material: Brass Conductor surface treatment: Nickel plating Qty per package: 10/bag
				8	PYD-086B□	

* Replace the box (□) in the model number with the specification code for the covering color. B: Black, S: Blue, R: Red

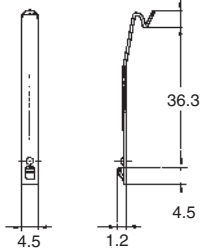
Safety Precautions

Maximum Carry Current

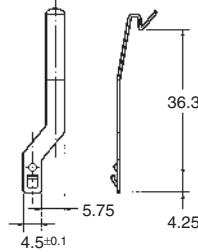
- Do not allow the total current for all shorted contact form to exceed the maximum carry current of the Short Bar.
- Do not exceed the maximum carry current of the relay contacts for individual contact form.
- If you use more than one Socket, use End Plates (PFP-M).

Hold-down Clips

PYC-A1
(2 pcs per set)



PYC-E1
(2 pcs per set)

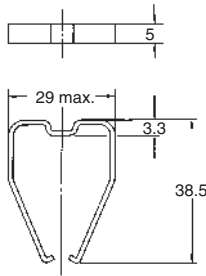


For sockets PYF14-ESN/ESS

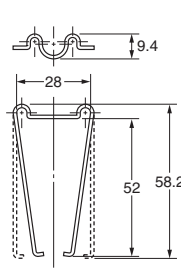
Model	Description
PYC-0	Metal spring clip (Used with Relay only)
PYC 35	Plastic holding clip (Used with Relay only)
PYC TR1	Thermoplastic writable label

Note: For total dimensions with plastic clip please refer to drawings of the sockets.

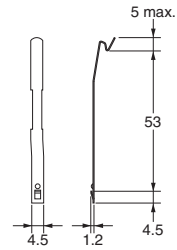
PYC-P



PYC-1

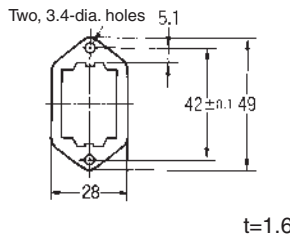


Y92H-3

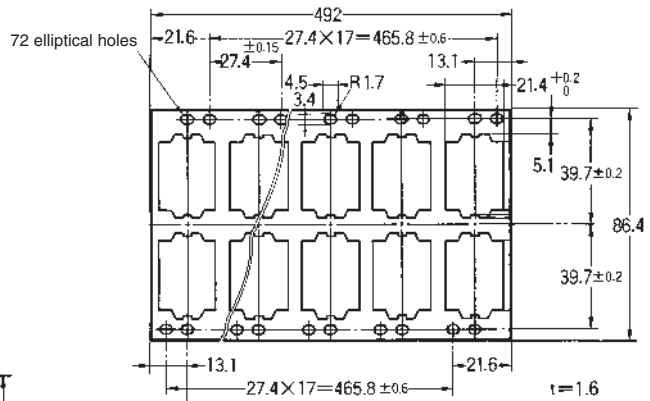


Mounting Plates for Back-connecting Sockets

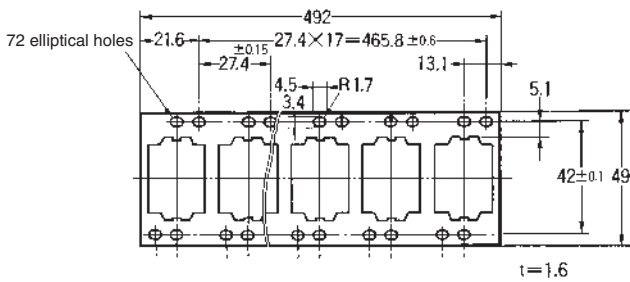
PYP-1



PYP-36



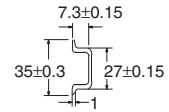
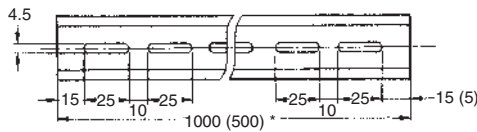
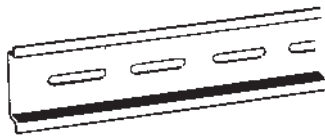
PYP-18



DIN-rails and Accessories

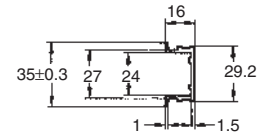
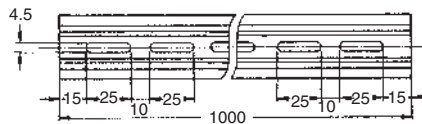
Supporting DIN-rails

PFP-50N/PFP-100N



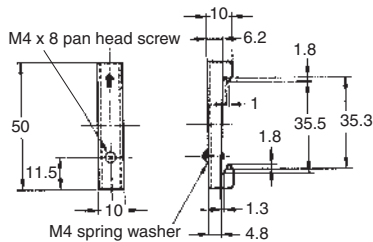
Note: The figure in the parentheses is for PFP-50N.

PFP-100N2



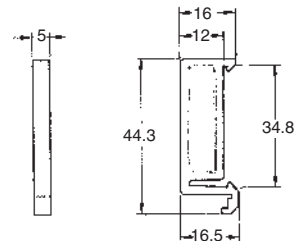
End Plate

PFP-M



Spacer

PFP-S



Safety Precautions

Refer to the *Common Relay Precautions*.

Refer to *Products Related to Common Sockets and DIN Tracks* for precautions on the applicable Sockets.

Refer to *PYF-□□-PU/P2RF-□□-PU* for precautions on Push-In Plus Terminal Block Sockets.

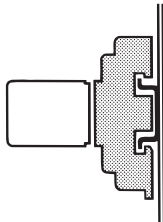
Precautions for Correct Use

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 attach Flange-mounted models (MY□F) and tighten the screws securely (tightening torque: 0.98 N•m).

Using MY-series Relays with 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 poor contact. In this case, we recommend using the MY4Z-CBG Series, which has high contact reliability for microloads (Refer to page 15.)

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.

Latching Levers

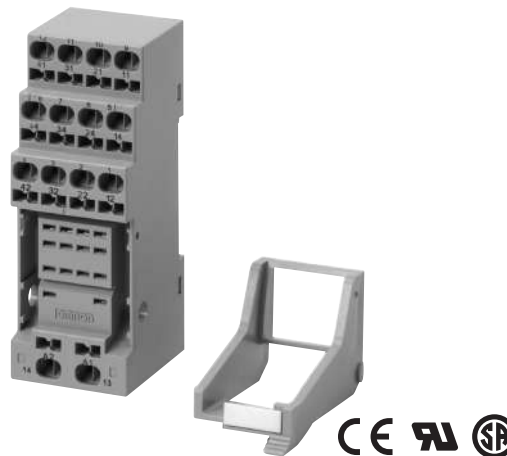
- Turn OFF the power supply when operating the latching lever. After you use the latching lever always return it to its original state.
- Do not use the latching lever as a switch.
- The latching lever can be used for 100 operations min.

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.

Screwless Clamp Terminal Socket PYF□□S

- Screwless clamping greatly contributes to reducing wiring time.
- No over or under tightening of cable connection so better contact reliability is achieved.
- Double wiring possible on all the terminals, and easy bridge and branch connections.
- Use either solid or stranded wires from 0.2 to 1.5 mm² (AWG24 to AWG16).
- Safe terminal arrangement: Coil terminals separated from contact terminals.
- Unique ejector enables easy relay replacement.
- Nameplate available
- Finger-protection



Ordering Information

■ List of Models

	4-pole for MY4/MY2	2-pole for MY2
Socket	PYF14S	PYF08S
Clip & Release Lever	PYCM-14S	PYCM-08S
Nameplate	R99-11	
Socket Bridge	PYDM-14SR, PYDM-14SB	PYDM-08SR, PYDM-08SB

Specifications

■ Ratings/Characteristics

Item	PYF14S	PYF08S	Remarks
Relay	MY2 Series MY4 Series	MY2 Series	---
Dimensions	31 × 85 × 36.5 mm max. (W × H × D)	23.2 × 85 × 36.5 mm max. (W × H × D)	---
Rated voltage	250 VAC		---
Rated carry current	10 A at 55°C with MY2 (S) 7 A at 70°C with MY2 (S) 5 A at 70°C with MY4 (S)	10 A at 55°C with MY2 (S) 7 A at 70°C with MY2 (S)	VDE0627
Applicable wires	0.2 to 1.5 mm ² (AWG24 to AWG16) Solid wire Stranded wire		---
Number of wire connections	2 wires per terminal (1 wire per hole)		---
Clamping force	10 N min. (0.2 mm ²) 40 N min. (1.5 mm ²)		EN60999

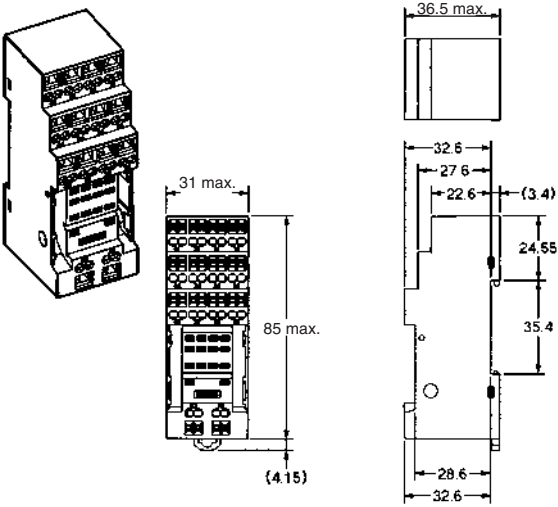
■ Approved Standards

Standard	File No.
VDE0627 (IEC664, EN60999)	112467UG
UL508 (UL1059)	E87929 Vol. 3
CSA C22.2 No. 14 (CSA C22.2 No. 158)	LR31928

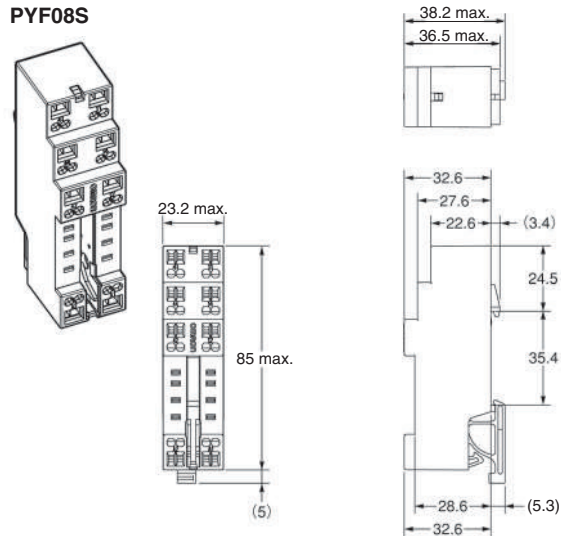
Dimensions

Note: All units are in millimeters unless otherwise indicated.

PYF14S

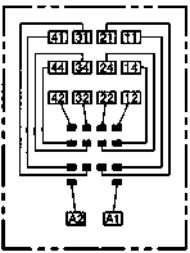


PYF08S

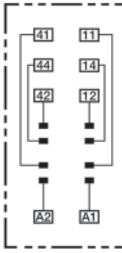


Terminal Arrangement

PYF14S



PYF08S

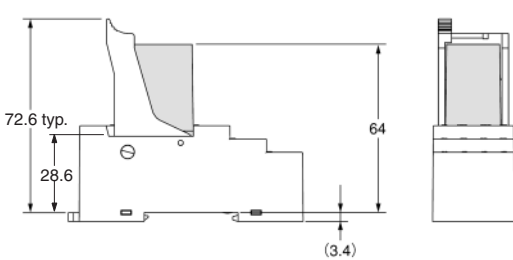


Common contacts
 Make contacts
 Break contacts
 Coil

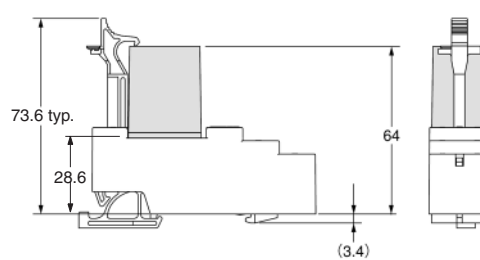
Note: In case MY2 relay will be used in combination with PYF14S terminals 21, 22, 24 and 31, 32, 34 are not connected.

Mounting Height (With Lever)

PYF14S

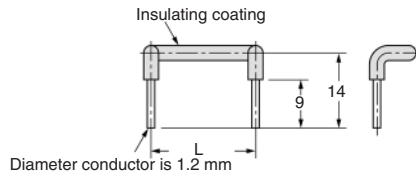


PYF08S



■ Accessories (Option)

Socket Bridge for PYF-S



List of models

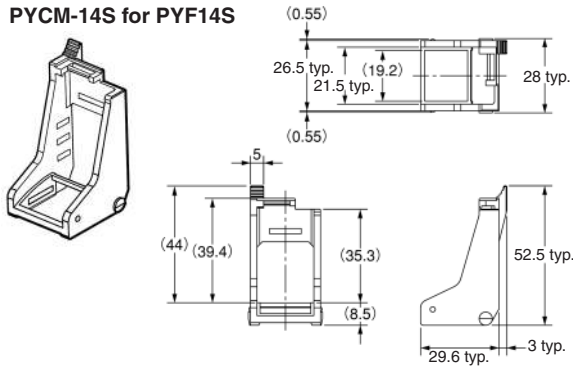
Socket	Model number	Length L (mm)	Color of insulating coating
PYF14S	PYDM-14SR	27.5	Red
	PYDM-14SB		Blue
PYF08S	PYDM-08SR	19.7	Red
	PYDM-08SB		Blue

Specification

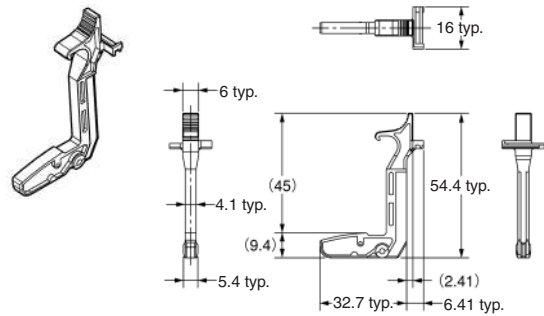
Item	Characteristic
Rated ON current	10 A
Rated insulation voltage	250 VAC
Temperature rise	35°C max.
Dielectric strength	1,500 VAC for 1 minute
Ambient operating temperature	-55 to 70°C

Levers for PYF-S

PYCM-14S for PYF14S



PYCM-08S for PYF08S



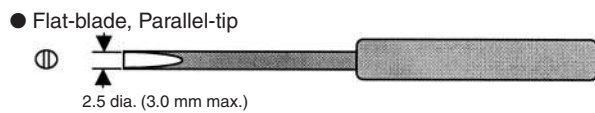
Installation

■ Tools

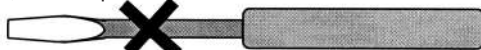
A flat-blade screwdriver should be used to mount the cables.

Applicable Screwdriver

- Flat-blade, Parallel-tip, 2.5 mm diameter (3.0 mm max.)



- Flat-blade, Flared-tip



Cannot be used.

Examples: FACOM AEF.2.5 × 75E (AEF. 3 × 75E)
 VESSEL No. 9900-(-)2.5 × 75 (No. 9900-(-)3 × 100)
 WAGO 210-119
 WIHA 260/2.5 × 40 (260/3 × 50)

*Chamfering the tip of the driver improves insertion when used as an exclusive tool.

■ Applicable Wires

Applicable Wire Sizes

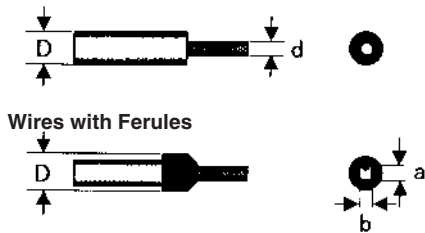
0.2 to 1.5 mm², AWG24 to AWG16

Applicable Wire Type

Solid wires, stranded wires, flexible wires, or wires with ferules can be used.

(See note 1.) $< 2.2 \leq \text{Diameter } D \text{ (mm)} \leq 3.2$ (3.5: see note 2.)

Conductor diameter d (mm) or length of sides a and b (mm) ≤ 1.9



Note: 1. If the outer diameter D of the wire is less than 2.2 mm and the exposed conductor length is less than 8 mm potentially bad connection might occur in case wire is pushed to far inside. Please see following drawing.



2. If the outer diameter D of the wire exceeds 3.2 mm, it might be difficult to use double wiring.

Examples of Applicable Wires (Confirmed Using Catalog Information)

Type of wire	Conductor type	See note 1, above.	Recommended wire sizes	See note 2, above.
Equipment wire 2491X	Flexible		0.5, 0.75, 1.0 mm ²	1.5 mm ²
BS6004	Solid	0.5 mm ²		
Switchgear BS6231	Solid		1.0 mm ²	1.5 mm ²
Switchgear BS6231	Flexible		0.5, 0.75 mm ²	1.0 mm ²
Tri-rated control and switchgear	Flexible		0.5, 0.75, 1.0, 1.5 mm ²	
Conduit	Stranded		1.5 mm ²	
UL1007	Flexible	18AWG	16AWG	
UL1015	Flexible		18AWG, 16AWG	
UL1061	Flexible	18AWG		
UL1430	Flexible	18AWG	16AWG	

■ Wiring

Use wires of the applicable sizes specified above. The length of the exposed conductor should be 8 to 9 mm.

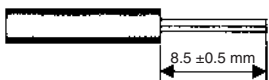


Fig. 1 Exposed Conductor Length

Use the following wiring procedure.

1. Insert the specified screwdriver into the release hole located beside the wire connection hole where the wire is to be inserted.

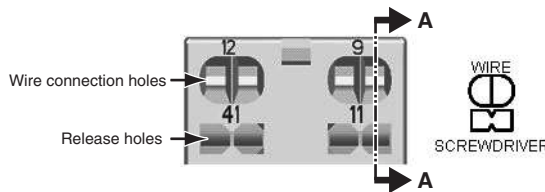


Fig. 2 Wire Connection Holes and Release Holes

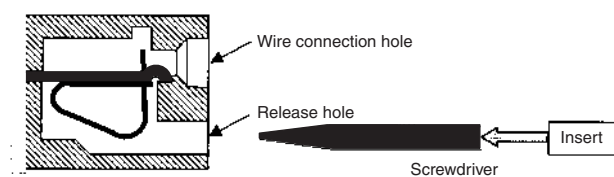
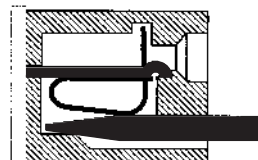


Fig. 3 Section A-A of Fig. 2



2. Insert the exposed conductor into the wire connection hole.



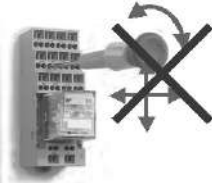
3. Pull out the screwdriver.



Precautions

Precautions for Connection

- Do not move the screwdriver up, down, or from side to side while it is inserted in the hole. Doing so may cause damage to internal components (e.g., deformation of the coil spring or cracks in the housing) or cause deterioration of insulation.
- Do not insert the screwdriver at an angle. Doing so may break the side of socket and result in a short-circuit.



- Do not insert two or more wires in the hole. Wires may come in contact with the spring causing a temperature rise or be subject to sparks. (There are two wiring holes for each terminal.)



- Insert the screwdriver along the hole wall as shown below.



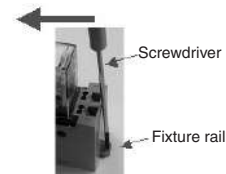
- If lubricating liquid, such as oil, is present on the tip of screwdriver, the screwdriver may fall out resulting in injury to the operator.
- Insert the screwdriver into the bottom of the hole. It may not be possible to connect cables properly if the screwdriver is inserted incorrectly.

General Precautions

- Use the clip to prevent relays floating or falling out of the socket.
- Do not use the product if it has been dropped on the ground. Dropping the product may adversely affect performance.
- Confirm that the socket is securely attached to the mounting track before wiring. If the socket is mounted insecurely it may fall and injure the operator.
- Ensure that the socket is not charged during wiring and maintenance. Not doing so may result in electric shock.
- Do not pour water or cleansing agents on the product. Doing so may result in electric shock.
- Do not use the socket in locations subject to solvents or alkaline chemicals.
- Do not use the socket in locations subject to ultraviolet light (e.g., direct sunlight). Doing so may result in markings fading, rust, corrosion, or resin deterioration.
- Do not dispose of the product in fire.

Removing from Mounting Rail

To remove the socket from the mounting rail, insert the tip of screwdriver in the fixture rail, and move it in the direction shown below.



ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.
To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.

ПРОМЫШЛЕННЫЕ РЕЛЕ

Надежные реле для любых промышленных целей



» Бескомпромиссное, высокое качество

» Гибкость конфигурации для Ваших задач

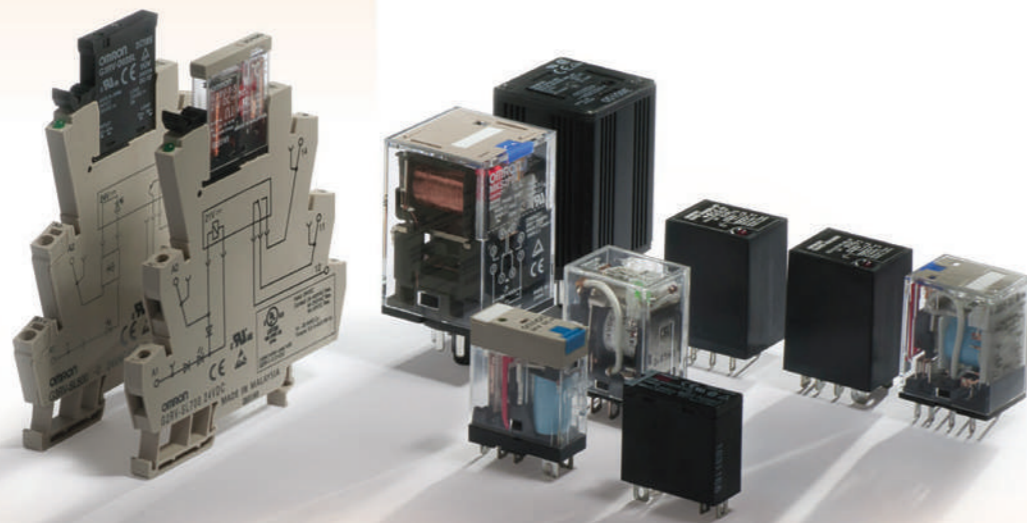
» Всегда безотказная коммутация

Реле «Omron» подразумевает больше, чем кажется на первый взгляд...

Хотя реле часто рассматриваются скорее как базовые элементы, их роль является критически важной для безаварийной работы систем, а используемые в них технологии далеко не так просты.

Компания «Omron» разрабатывает и изготавливает качественные реле более 50 лет и стала самым крупным монобрендовым производителем реле в мире. Мы постоянно внедряем новейшие технологии и следуем тенденциям рынка, производя, например, реле тяговых батарей гибридных автомобилей.

Мы выпускаем более 800 миллионов реле в год, и все они проходят проверку на нашем современном производстве в Японии, которое настолько велико, что занимает площадь 30 футбольных полей. В области производства реле занято около 9 000 сотрудников (из всего нашего штата в 36 000 человек) в пяти специализированных центрах, включая Кумамото (Kumamoto) – наше основное производство и штаб-квартиру. Отличные эксплуатационные характеристики наших реле являются результатом тщательного проектирования и строгой ориентации на качество.



По всему миру компания «Omron» продает 25 реле каждую секунду, 24 часа 7 дней в неделю.



Ведущие технологии производства реле в мире

Бескомпромиссно высокое качество

Компания «Omron» не идет на компромиссы в вопросах выбора конструкции и исходных материалов. Для компании «Omron» это значит, что каждое реле должно отлично выполнять минимум в 1,3 раза больше операций, чем указанный для него эксплуатационный ресурс. Например, благодаря превосходной конструкции, наше 6-мм реле G2RV имеет в два раза больший срок службы, чем принятый для обычных 6-мм реле (6 A; 250 В ~, нормально замкнутое/нормально разомкнутое)

Гибкость в соответствии с Вашими потребностями

Благодаря совместимости разъемов для модельного ряда как для электромеханических (EMR), так и твердотельных (SSR) реле, компания «Omron» всегда может предложить готовые решения в соответствии с Вашими потребностями. И если стандартное реле общего назначения

MY-S не подходит, компания «Omron» предлагает герметичные реле, реле с механической блокировкой и реле для печатного монтажа, а также идентичные модели с раздвоенными контактами, пригодными для коммутации слаботочной нагрузки.

Всегда безотказная коммутация

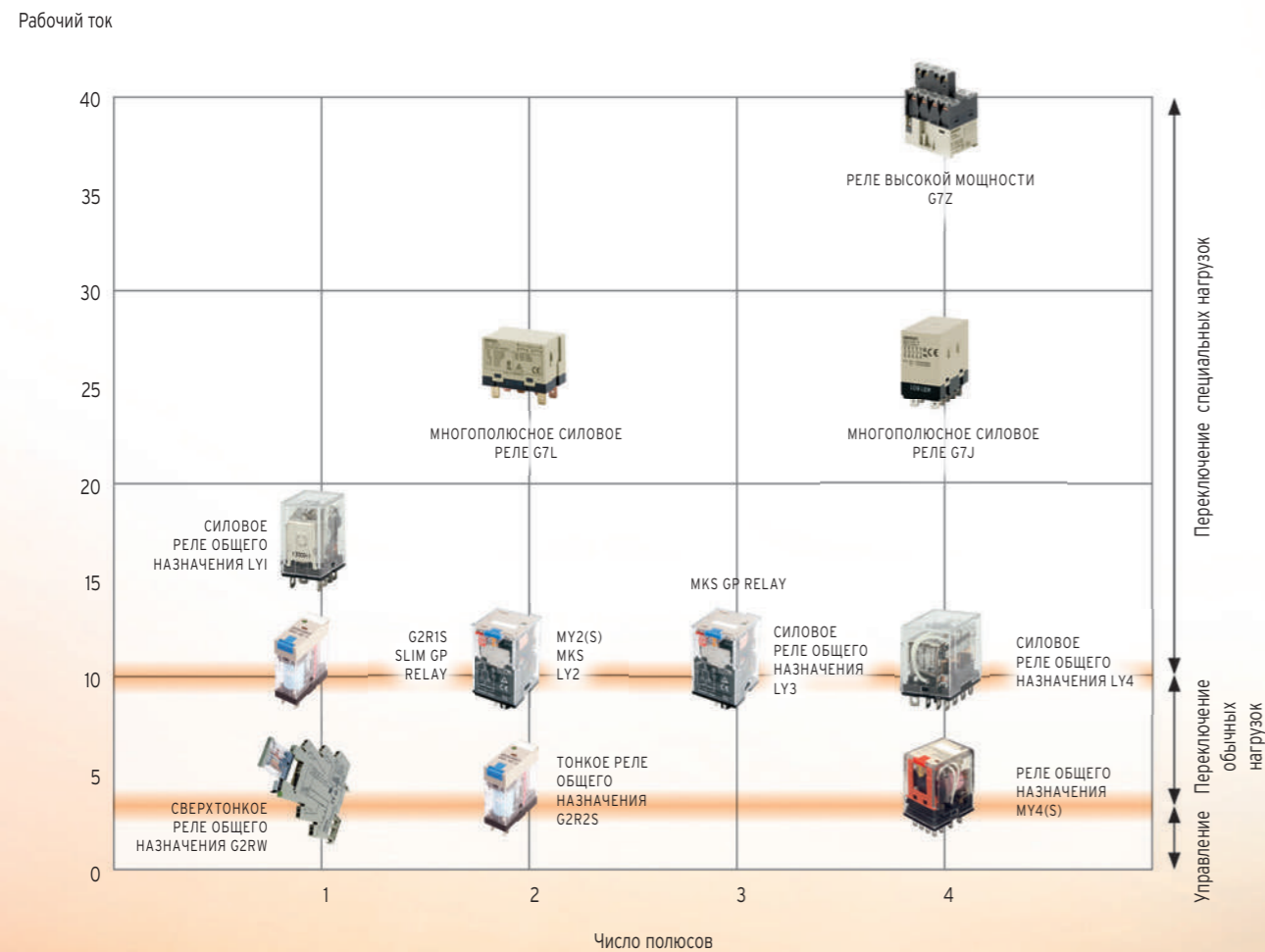
Внедрение более мощных реле с меньшими размерами для применения в качестве интерфейсов для ПЛК произвело революцию в промышленной автоматизации. Были внедрены системы электро монтажа, исключавшие ошибки, связанные с человеческим фактором. С помощью интерфейсного решения для промышленных реле G2RV Вы можете обеспечивать сопряжение реле с любым ПЛК, выполнив всего три быстрых и простых этапа подключения.

Не существует слишком неблагоприятных условий а надежность для нас всегда приоритет

Компания «Omron» производит большое число силовых реле и реле для коммутации слаботочных нагрузок для широкого спектра задач. Хотя данная брошюра описывает главным образом основные типы реле, монтируемые на DIN-рейке, все реле из нашего ассортимента имеют одну общую черту: непревзойденное качество, которое обеспечивает наивысшую надежность. Вместе с нашей системой

глобальной логистики это качество и надежность остаются неизменно высокими, где бы Вы ни купили или ни установили реле компании «Omron».

Ассортимент электромеханических реле



GP – общего назначения

Ветровые турбины подвергаются воздействию всех природных стихий, поэтому технические требования в этой отрасли очень высоки, а гарантийные сроки службы должны быть дольше стандартных. Расходы на техническое обслуживание также высоки, поскольку даже для выполнения регламентного техобслуживания ветровых электростанций морского базирования требуются вертолеты. В этой отрасли промышленности реле компании «Omron» обычно являются для заказчиков наиболее предпочтительными.

Модельный ряд, на который Вы можете рассчитывать

Компания «Omron» предлагает электромеханические реле для практических задач общего назначения и твердотельные реле для применений с тяжелыми условиями эксплуатации или с высокой частотой переключений. Наши реле исключительно прочны и способны противостоять самым неблагоприятным условиям окружающей среды. Возьмите, например, наше полностью герметичное реле MY4H, идеальное для использования в опасных зонах.

Различие в деталях

Реле компании «Omron» отличаются конструкцией и особыми мерами безопасности, предпринимаемыми при их изготовлении. Например, использование закругленных форм, стерильных условий и избегание заусенцев. Но отличия на этом не заканчиваются.



Герметичное реле MY4H

Электромеханические реле с наилучшей производительностью для нагрузок любого типа

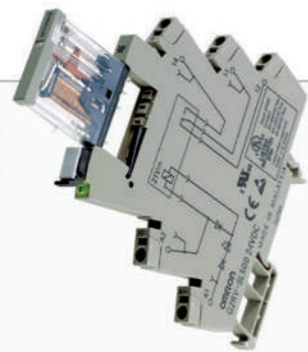
Электромеханические реле компании «Omron» являются отличным выбором для широкого диапазона применений. Они имеют специальные конструктивные особенности для увеличения производительности и срока службы. Например, контакты реле G2RS, изготовленные из сплава серебра с индием и оловом, имеют хорошо сбалансированную производительность для различных типов нагрузки, включая нагрузку с постоянным током и переключения пускового тока. Производительность такого реле намного выше по сравнению с альтернативными моделями, имеющими контакты из сплава серебра с никелем, поскольку они имеют неудовлетворительные характеристики для других нагрузок, отличных от стандартной нагрузки переменного тока (особенно переключения пускового тока). Контакты реле серии MY-S (4-полюсная версия) покрыты золотом для обеспечения наивысшей надежности соединения.



Покрытые золотом контакты для оптимальной защиты.



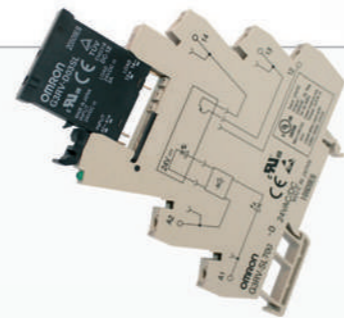
Промышленные (твердотельные) реле широко используются в таких отраслях, как пищевая промышленность, например, для переключения приводов на линии разлива в бутылки.



Реле G2RV Slim (6 мм) для установки в монтажную колодку

Единственное действительно отвечающее промышленным стандартам реле на рынке шириной 6 мм, гарантирующее значительную экономию места и времени без потери в надежности.

- SPDT тип на 6A
- В два раза больший срок службы, чем у обычных реле толщиной 6 мм (6A 250 В ~, норм. замкнутое / норм. разомкнутое)
- Большая площадь контактов и жесткие контактные выводы гарантируют безопасное и надежное соединение
- Светодиодный индикатор и прозрачный корпус облегчают проверку работы и состояния
- Механический индикатор указывает фактическое рабочее состояние контактов



Твердотельное реле G3RV Slim (6 мм) для установки в монтажную колодку - те же размеры, что и для реле G2RV

Прочное и компактное реле обеспечивает быстрое и легкое соединение с ПЛК. Коммутация нагрузки с выходами постоянного тока управляется МОП-транзисторами на выходе.

- Выходной ток 2A и 3A
- Встроенный светодиодный индикатор
- Простое соединение с ПЛК одним щелчком
- Безвинтовые клеммы и принадлежности для легкого подключения



Реле G2RS для установки в монтажную колодку с расширенной функциональностью

Реле с интерфейсом Slimline с расширенной функциональностью и гибкостью для простоты установки, ввода в эксплуатацию и работы.

- SPDT тип 10A, DPDT тип 5A
- Контакты из сплава AgSnIn обеспечивают отлично сбалансированные рабочие характеристики для различных типов нагрузки
- Промышленные выводы гарантируют более высокую проводимость и меньший нагрев



Компактное твердотельное реле G3R-1/-0 - совместимое с реле G2RS

Для сопряжения входов/выходов, требующих высокой электрической долговечности. Совместимо с электромеханическими реле G2RS. Имеются также быстродействующие модели с оптимальными входными характеристиками для различных датчиков.

- Выходной ток 1,5A и 2A
- Выходное напряжение от 5 до 200 В = / от 100 до 240 В ~.
- Монтаж на DIN-рейку с помощью монтажной колодки
- Индикатор состояния входа

Твердотельные реле с высокой коммутационной способностью для высокочастотных применений

Твердотельные реле от компании «Отгон» прочно укрепились на рынке и приобрели известность благодаря своей долговечности. Реле «Отгон» сегодня – это стандартный выбор для задач, требующих управления температурой и процессом. Твердотельные реле не содержат никаких подвижных деталей и поэтому являются исключительно надежными, быстрыми (высокая частота коммутации) и не требующими технического обслуживания.

Все реле от компании «Отгон» (как электромеханические, так и твердотельные) имеют прочные, широкие, негнущиеся контактные клеммы, которые обеспечивают площадь контакта на 125 % больше по сравнению с реле G3RV, что означает более высокую проводимость, более низкое сопротивление клемм и, соответственно, меньший нагрев.



Большие безвинтовые клеммы

Твердотельные реле идеальны для задач, требующих быстрого и многократного переключения нагрузки. Примером могут служить пневматические инструменты для забивания гвоздей в деревообрабатывающей промышленности.



Универсальное реле MY-S для установки в монтажную колодку

Миниатюрные силовые реле с улучшенными эксплуатационными характеристиками обеспечивают гибкость в применениях, которая сделала их стандартом. С начала производства было выпущено более 500 миллионов таких реле.

- Типы контактов 10A (DPDT) и 5A (4PDT)
- Покрытые золотом контакты (MY₄(S))
- (Блокируемая) тестовая кнопка
- Предлагаются герметичные реле, реле с механической блокировкой и для печатного монтажа.
- Безвинтовые клеммы шириной 2,6 мм обеспечивают более высокую проводимость и меньший нагрев.



Твердотельное реле G3FD для установки в монтажную колодку, совместимое с реле MY-S

Это твердотельное реле полностью совместимо по форме и размерам с силовыми электромеханическими реле серии MY.

- Выходной ток 2A и 3A
- Выходное напряжение от 4 до 110 В = / от 100 до 240 В ~.
- Монтаж на DIN-рейку с помощью монтажной колодки
- Индикатор состояния входа



Реле MK-S для установки в монтажную колодку

Надежные реле общего назначения, обеспечивающие такой же набор функций, как и реле линейки MY-S и G2RS.

- Конфигурация контактов: 8 выводов DPDT и 11 выводов 3PDT
- Коммутируемый ток до 10 А
- (Блокируемая) тестовая кнопка
- Диапазон рабочих температур от -40°C до 60°C



Твердотельное реле G3B для установки в монтажную колодку, совместимое с реле MK-S

Это твердотельное реле совместимо по форме и размеру с электромеханическим реле MK-S. Также предлагается модель на выходное напряжение постоянного тока для высоковольтных нагрузок.

- Выходной ток 3A и 5A
- Выходное напряжение от 5 до 110 В = / от 100 до 240 В ~.
- Монтаж на DIN-рейку с помощью монтажной колодки
- Индикатор срабатывания

Дополнительные принадлежности для любых задач

Компания «Omron» располагает полным спектром дополнительных принадлежностей для индивидуальной настройки Ваших реле и их адаптации к специфическим задачам.



Клеммные (монтажные) колодки

Мы предлагаем широкий выбор клеммных колодок в винтовом и безвинтовом исполнении. Сегодня безвинтовые пружинные зажимы представляют собой быструю и легкую альтернативу обычному подсоединению проводов с помощью винтов.



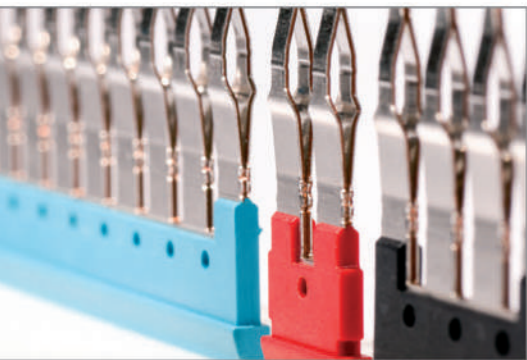
Зажимные хомуты

Зажимные хомуты предназначены для обеспечения дополнительной безопасности в средах с высокой вибрацией и для гарантии того, что реле останется закрепленным при транспортировке.



Этикетки

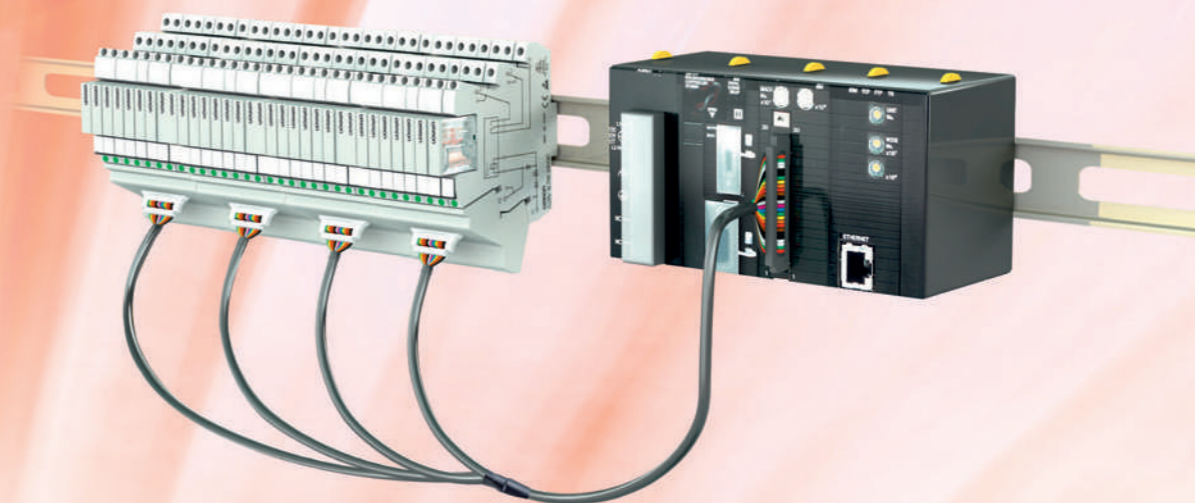
Идентификационные этикетки предлагаются для отдельных реле или клеммных колодок.



Соединительные мостики

Для реле G2RV/G3RV доступны соединительные мостики различного цвета и количества полюсов для облегчения соединения и сведения расходов к минимуму.

Выполнение промышленного электромонтажа стало намного проще



Компания «Omron» предлагает решения для промышленного подключения, которые существенно упрощают установку и замену реле. На основе серии тонких (6 мм) промышленных реле «Omron» требуется всего три легких шага для безопасного и надежного подключения разъемов к любому типу ПЛК.

- Экономия места
- Подсоединение к Вашему ПЛК блоков из 8 реле
- Отсутствие неправильных соединений
- Высокая коммутационная способность

- Двойной срок службы обычных реле толщиной 6 мм (6А, 250 В~, норм. замкнутые / норм. разомкнутые)
- Превосходный электрический контакт реле благодаря большим безвинтовым клеммам
- Легкость в техническом обслуживании



Больше информации

Для получения более подробной информации о нашем обширном ассортименте промышленных реле запросите наш справочник по промышленной автоматизации.

 industrial.omron.ru

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Реле omron, омрон, MY2, MY2N, MY2IN, MY4, MY4N, MY4IN, 5а, 10а.

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QR код

