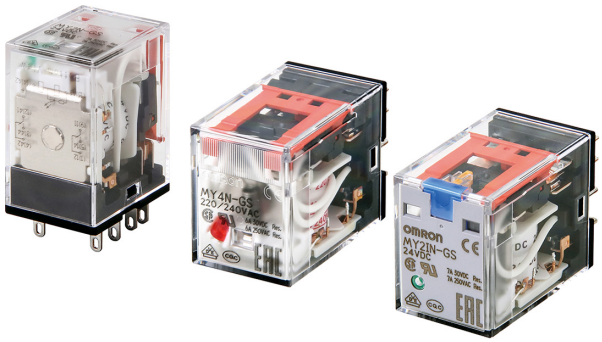
Miniature Power Relays

MY-GS

CSM_MY-GS_DS_E_6_1

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



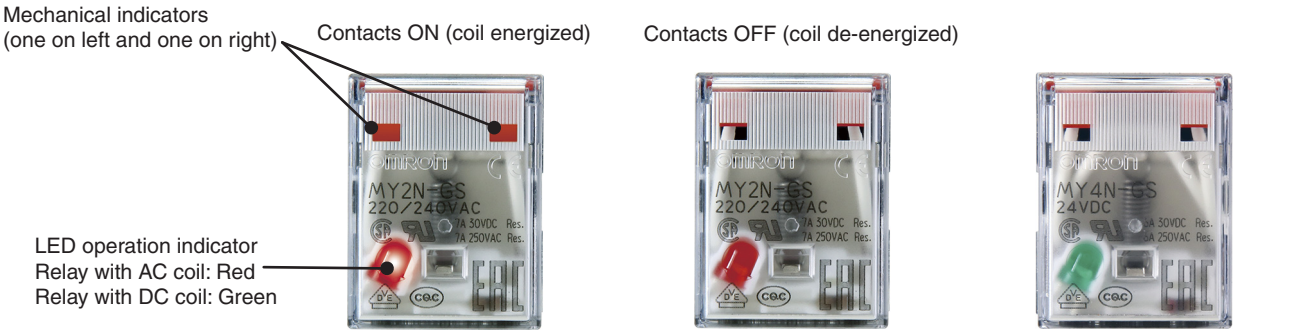
- A lineup of models with latching levers added for easier circuit checking.
- Reduces wiring work by 60% when combined with the PYF-PU Push-In Plus Socket (according to actual OMRON measurements).
- Relays with AC and DC coils have different colors of operating indicators (LEDs).
- Printing on the coil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

⚠ **Refer to the *Common Relay Precautions*.**

Features

Common to all specifications

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

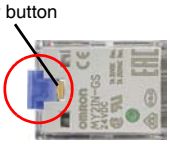
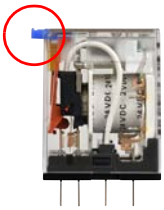


Relay with AC Coil (LED: Red) Relay with AC Coil (LED: Red) Relay with DC Coil (LED: Green)

With latching lever

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

Latching lever operating method

	Normal State	Mode 1: Momentary State	Mode 2: Locked State
When seen from the top			
When seen from the side			
Operation Description	---	Slide the lever one step and press the yellow button with an insulated tool to operate the contacts.	If you slide the lever two steps, the contacts lock in the operation position.

Model Number Structure

Model Number Legend

MY □ □ □ - □ □ -GS DC24

1 2 3 4 5

1. Number of Poles
   2: 2 poles
   4: 4 poles
2. Latching Lever
   Blank: Without latching lever
   I: With latching lever
3. LED Operation Indicator
   Blank: Built-in mechanical indicators
   N: LED operation indicator and built-in mechanical indicators
4. Coil Surge Absorption
   Blank: Standard models
   D2: Models with built-in diodes
   CR: Models with built-in CR circuits
5. Operating Coil Voltage
   Display Example: DC24

List of Models

Miniature Power Relays (MY-GS)

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

Ordering Information

Main unit

Standard model without operation indicator

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

Standard model with operation indicator

Number of poles	Model	Rated voltage (V)
2	MY2N-GS	12, 24, 48, 100/110, 110/120, 200/220, 220/240 VAC 6, 12, 24, 48, 100/110, 220 VDC
4	MY4N-GS	12, 24, 48, 100/110, 110/120, 200/220, 220/240 VAC 6, 12, 24, 48, 100/110, 220 VDC

Standard model with operation indicator and latching lever

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

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

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

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

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

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

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

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

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

Options (order separately)

Front-mounting Sockets

Number of Pins	Applicable Relay Model	Terminal Type	Mounting Method	Appearance	Model	Hold-down Clips
8	MY2-GS MY2N-GS MY2IN-GS MY2N-D2-GS MY2IN-D2-GS MY2N-CR-GS MY2IN-CR-GS	Screw terminal Finger protection structure ✻1 (Screw size M3)	DIN Track or screw mounting		**PYFZ-08-E**	PYC-A1 ✻3
		Screw terminal Finger protection structure ✻1 (Screw size M3)	DIN Track or screw mounting		**PYF08A-N**	PYC-A1✻ 3
		Push-In Plus Terminal (Integrated Socket with release lever)	DIN Track or screw mounting ✻2		**PYF-08-PU**	---
14	MY4-GS MY4N-GS MY4IN-GS MY4N-D2-GS MY4IN-D2-GS MY4N-CR-GS MY4IN-CR-GS	Screw terminal Finger protection structure ✻1 (Screw size M3)	DIN Track or screw mounting		**PYFZ-14-E**	PYC-A1 ✻3
		Screw terminal Finger protection structure ✻1 (Screw size M3)	DIN Track or screw mounting		**PYF14A-N**	PYC-A1 ✻3
		Push-In Plus Terminal (Integrated Socket with release lever)	DIN Track or screw mounting ✻2		**PYF-14-PU**	---

✻1. In the finger protection type (PYFZ-□-E, and PYF□A-N), the terminal cover is integrated into the Socket. Round terminals cannot be used. Use forked terminals or ferrules instead.
✻2. There are screw mounting holes in the DIN hooks on the PYF-□□-PU. Pull out the DIN hook tabs to mount the Sockets with screws.
✻3. Model number of the applicable Mounting Bracket. Sold in sets of two.

Back-mounting Sockets

Number of Pins	Applicable Relay Model	Terminal Type	Appearance	Model	Hold-down Clips
8	PY08-02	PCB terminals		**PY08-02**	PYC-P
14	PY14-02	PCB terminals		**PY14-02**	

Socket accessories
Mounting Bracket

Appearance ✻1	Model	Weight ✻2	Application
	**PYC-A1**	Approx. 0.54 g	For joining the Socket and Relay
	**PYC-P**	Approx. 1.4 g	For joining the Socket and Relay

✻**1.** Describes the appearance when the Relay, Socket, and Mounting Bracket have been combined together.
✻**2.** The PYC-A1 includes two Mounting Brackets in one set. The weight specified above is the weight of one Mounting Bracket.

Ratings and Specifications

Ratings

Main unit

Operating Coil

Item		Rated current (mA)		Coil resistance (Ω)	Coil inductance (H)		Must-operate voltage	Must-release voltage	Maximum voltage	Power consumption (VA, W)
Rated voltage		50 Hz	60 Hz		Armature OFF	Armature ON	Percentage of rated voltage			
AC	12	106.5	91	46	0.17	0.33	80% max. *1	30% min. *2	110%	Approx. 0.9 to 1.3 (at 60 Hz)
	24	53.8	46	180	0.69	1.3				
	48	25.7	21.1	788	3.22	5.66				
	100/110	11.7/12.9	10.0/11.0	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	5.2/6.2	4.3/5.0	15,920	83.5	136.4				
DC	6	146 (151)		41.0 (39.8)	0.17	0.33		10% min. *2		Approx. 0.9
	12	72.7 (75)		165 (160)	0.73	1.37				
	24	36.3 (37.7)		662 (636)	3.2	5.72				
	48	17.6 (18.8)		2,725 (2,560)	10.6	21.0				
	100/110	8.7 (9.0)/9.6 (9.9)		11,440 (11,100)	45.6	86.2				
	220	3.6		60,394	362.3	452.9				Approx. 0.8

Note: 1. The rated current and coil resistance are measured at a coil temperature of 23°C with tolerances of +15%/–20% for the AC rated current and +15% for the DC coil resistance.
2. The AC coil resistance and inductance values are reference values only (at 60 Hz).
3. Operating characteristics were measured at a coil temperature of 23°C.
4. The values in parentheses for the rated currents and coil voltages of DC coils are for models with LED operation indicators.
5. The maximum voltage capacity was measured at an ambient temperature of 23°C.

✻1. There is variation between products, but actual values are 80% max.
The Relay will operate if 80% or higher of the rated voltage is applied. However, to achieve the specified characteristics, apply the rated voltage to the coil.
✻2. There is variation between products, but actual values are 30% minimum for AC and 10% minimum for DC. To ensure release, use a value that is lower than the specified value.

Contacts

	2 poles			4 poles		
	Resistive load		Inductive load (cos ϕ = 0.4, L/R = 7 ms)	Resistive load		Inductive load (cos ϕ = 0.4, L/R = 7 ms)
Contact configuration	DPDT			4PDT		
Contact structure	Single					
Contact material	Ag					
Rated load	7 A at 250 VAC 7 A at 30 VDC	5 A at 220 VAC 5 A at 24 VDC	2 A at 220 VAC 2 A at 24 VDC	6 A at 250 VAC 6 A at 30 VDC	3 A at 220 VAC 3 A at 24 VDC	0.8 A at 220 VAC 1.5 A at 24 VDC
Electrical endurance *1	120,000 operations	500,000 operations		30,000 operations	200,000 operations	
Rated carry current *2	7 A			6 A		
Maximum contact voltage	250 VAC, 220 VDC			250 VAC, 220 VDC		
Maximum contact current *2	7 A			6 A		
Maximum switching capacity	1,750 VA 210 W		440 VA 48 W	1,500 VA 180 W		176 VA 36 W
Minimum load (reference values) *3	1 mA at 5 VDC					

✻1. Rated load, switching frequency: 2,400 operations/h. Ambient temperature condition: 23°C. Duty ratio: 33%.
✻2. 2 poles of 7 A is for an ambient temperature of 40°C. At an ambient temperature of 70°C, the value is 5 A.
4 poles of 6 A is for an ambient temperature of 50°C. At an ambient temperature of 70°C, the value is 3 A.
✻3. These values are guides for the switchable limits for minute load levels, such as in electronic circuits. Actual characteristics may be different. These values will depend on the switching frequency, atmosphere, and expected reliability level. Confirm applicability in the actual system under actual application conditions.

Characteristics

Main unit

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

Note: The above values are initial values.
✻1. Measurement conditions: 1 A at 5 VDC using the voltage drop method.
✻2. Measurement conditions: With rated operating power applied, not including contact bounce time.
✻3. Measurement conditions: For 500 VDC applied to the same location as for dielectric strength measurement.

Options (order separately)

Sockets

Model	Connection	Number of Pins	Terminal Type	Ambient operating temperature	Ambient humidity	Continuous carry current	Dielectric strength			Insulation resistance ✻1	Weight
							Between contact terminals of same polarity	Between contact terminals of different polarity	Between coil and contact terminals		
PYFZ-08-E	Front	8	Screw terminal	−55 to 70°C	5% to 85% RH	10 A	2,250 VAC 1 min	2,250 VAC 1 min	2,250 VAC 1 min	1,000 MΩ min. (500 VDC)	Approx. 32 g
PYF08A-N				−55 to 55°C	5% to 85% RH	7A ✻3	2,000 VAC 1 min	2,000 VAC 1 min	2,000 VAC 1 min	1,000 MΩ min. (500 VDC)	Approx. 32 g
PYF-08-PU			Push-In Plus Terminal	−40 to 70°C	5% to 85% RH	10A ✻2	2,000 VAC 1 min	2,000 VAC 1 min	2,000 VAC 1 min	1,000 MΩ min. (500 VDC)	Approx. 80 g
PYFZ-14-E		14	Screw terminal	−55 to 70°C	5% to 85% RH	6A	2,250 VAC 1 min	2,250 VAC 1 min	2,250 VAC 1 min	1,000 MΩ min. (500 VDC)	Approx. 50 g
PYF14A-N				−55 to 55°C	5% to 85% RH	5A ✻3	2,000 VAC 1 min	2,000 VAC 1 min	2,000 VAC 1 min	1,000 MΩ min. (500 VDC)	Approx. 50 g
PYF-14-PU			Push-In Plus Terminal	−40 to 70°C	5% to 85% RH	6A	2,000 VAC 1 min	2,000 VAC 1 min	2,000 VAC 1 min	1,000 MΩ min. (500 VDC)	Approx. 87 g
PY08-02	Back	8	PCB terminals	−55 to 70°C	5% to 85% RH	7A	1,500 VAC 1 min	1,500 VAC 1 min	1,500 VAC 1 min	100 MΩ min.	Approx. 7.2 g
PY14-02		14		−55 to 70°C	5% to 85% RH	3A	1,500 VAC 1 min	1,500 VAC 1 min	1,500 VAC 1 min	100 MΩ min.	Approx. 10 g

✻1. For 500 VDC applied to the same location as for dielectric strength measurement.
✻2. The continuous carry current of 10 A is for an ambient temperature of 55°C. At an ambient temperature of 70°C, the value is 7 A.
✻3. When using the PYF08A-N or PYF14A-N at an ambient operating temperature exceeding 40°C, reduce the continuous carry current to 60%.

Socket Accessories
For front-connecting Sockets

Short Bars

Application	Applicable sockets	Model	Maximum carry current	Ambient operating temperature	Ambient operating humidity
For Contact terminals (common)	PYF-08-PU(-L) PYF-14PU(-L)	PYDN-7.75-020□	20 A	−40 to 70°C	5% to 85%RH
		PYDN-7.75-030□			
		PYDN-7.75-040□			
		PYDN-7.75-200□			
For Coil terminals	PYF-08-PU(-L) PYF-14PU(-L)	PYDN-31.0-080□	20 A	−40 to 70°C	5% to 85%RH

Certified Ratings for Models Certified for Safety Standards

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

Main unit

UL-certified Models: UL508

MY-GS	Number of poles	Coil ratings	Contact ratings	Certified number of operations
	2	12 VAC, 24 VAC, 48 VAC, 100/110 VAC, 110/120 VAC, 200/220 VAC, or 220/240 VAC 6 VDC, 12 VDC, 24 VDC, 48 VDC, 100/110 VDC, or 220 VDC	5 A, 30 VDC (General Use) 7 A, 30 VDC Resistive Load 5 A, 250 VAC (General Use) 7 A, 250 VAC Resistive Load	6,000 operations
	4	12 VAC, 24 VAC, 48 VAC, 100/110 VAC, 110/120 VAC, 200/220 VAC, or 220/240 VAC 6 VDC, 12 VDC, 24 VDC, 48 VDC, 100/110 VDC, or 220 VDC	3 A, 30 VDC (General Use) 6 A, 30 VDC Resistive Load 3 A, 250 VAC (General Use) 6 A, 250 VAC Resistive Load	6,000 operations

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

MY-GS	Number of poles	Coil ratings	Contact ratings	Certified number of operations
	2	12 VAC, 24 VAC, 48 VAC, 100/110 VAC, 110/120 VAC, 200/220 VAC, or 220/240 VAC 6 VDC, 12 VDC, 24 VDC, 48 VDC, 100/110 VDC, or 220 VDC	5 A, 30 VDC (General Use) 7 A, 30 VDC Resistive Load 5 A, 250 VAC (General Use) 7 A, 250 VAC Resistive Load	6,000 operations
	4	12 VAC, 24 VAC, 48 VAC, 100/110 VAC, 110/120 VAC, 200/220 VAC, or 220/240 VAC 6 VDC, 12 VDC, 24 VDC, 48 VDC, 100/110 VDC, or 220 VDC	3 A, 30 VDC (General Use) 6 A, 30 VDC Resistive Load 3 A, 250 VAC (General Use) 6 A, 250 VAC Resistive Load	6,000 operations

VDE-certified Models: EN 61810-1

MY-GS	Number of poles	Coil ratings	Contact ratings	Certified number of operations
	2	12 VAC, 24 VAC, 48 VAC, 100/110 VAC, 110/120 VAC, 200/220 VAC, or 220/240 VAC 6 VDC, 12 VDC, 24 VDC, 48 VDC, 100/110 VDC, or 220 VDC	7 A, 30 VDC (L/R = 0) 7 A, 250 VAC ($\cos\phi$ = 1)	10,000 operations
	4	12 VAC, 24 VAC, 48 VAC, 100/110 VAC, 110/120 VAC, 200/220 VAC, or 220/240 VAC 6 VDC, 12 VDC, 24 VDC, 48 VDC, 100/110 VDC, or 220 VDC	6 A, 30 VDC (L/R = 0) 6 A, 250 VAC ($\cos\phi$ = 1)	10,000 operations

CQC-certified Models

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

Options (order separately)

Sockets

CSA certified (File No. LR031928)

Model	Ratings	Class number	Standard number
PYFZ-08-E	10A 250V	3211 07	CSA C22.2 No14
PYFZ-14-E	6A 250V ✻		
PYF08A-N	7A 250V		
PYF14A-N	7A 250V		
PYF-08-PU	10A 250V		
PYF-14-PU	6A 250V ✻		

✻ When power is supplied to all four poles, use with a total power current that does not exceed 20 A.

UL Standards Certification (File No. E87929)

Model	Ratings	Standard number	Category	Listed/ Recognized
PYFZ-08-E	10A 250V	UL 508	SWIV2	Recognition
PYFZ-14-E	6A 250V ✻			
PYF08A-N	7A 250V			
PYF14A-N	7A 250V			
PYF-08-PU	10A 250V			
PYF-14-PU	6A 250V ✻			

✻ When power is supplied to all four poles, use with a total power current that does not exceed 20 A.

TÜV Rheinland certification

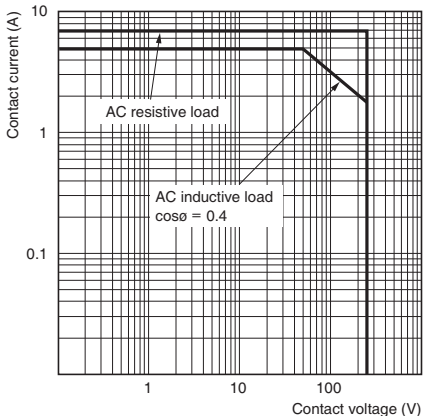
Model	Ratings	Standard number	Certification No.
PYFZ-08-E	10A 250V	EN 61984	R50405329
PYFZ-14-E	6A 250V		
PYF08A-N	7A 250V		J50224549
PYF14A-N			
PYF-08-PU	10A 250V ✻		R50327595
PYF-14-PU	6A 250V		

✻ Ratings are for an ambient temperature of up to 55°C. At an ambient temperature of 70°C, the value is 7A.

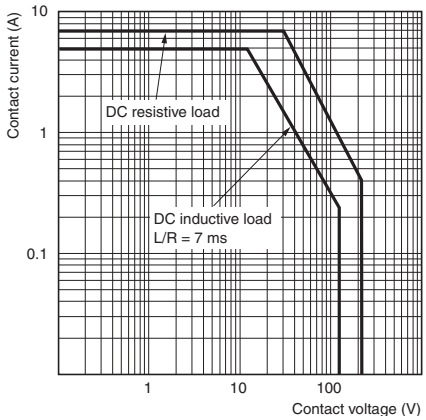
Engineering Data (Reference Value)

Maximum Switching Capacity

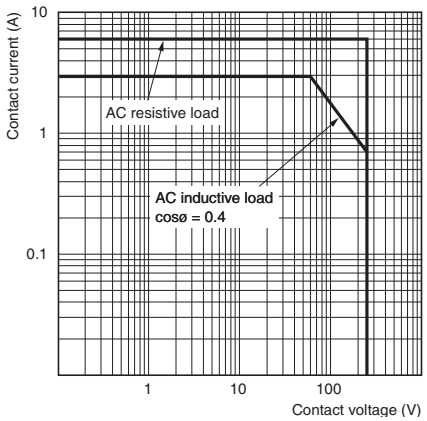
MY2□□-□□-GS (AC load)



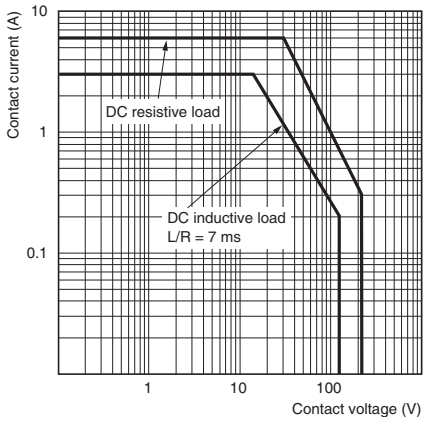
MY2□□-□□-GS (DC load)



MY4□□-□□-GS (AC load)

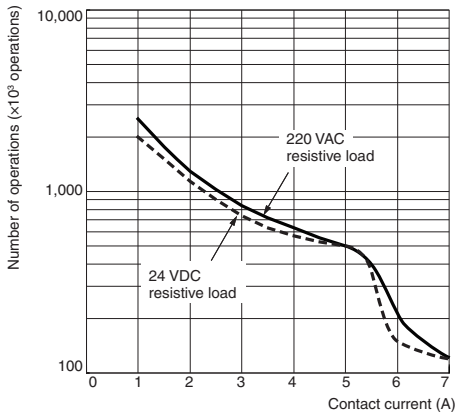


MY4□□-□□-GS (DC load)

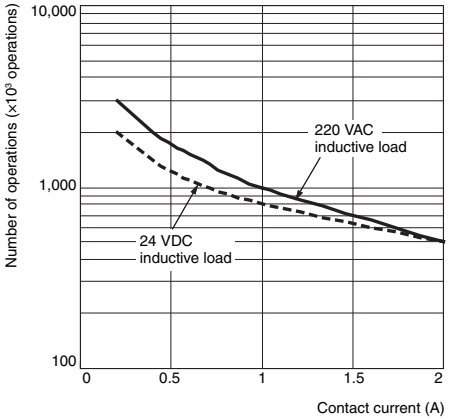


Endurance Curve

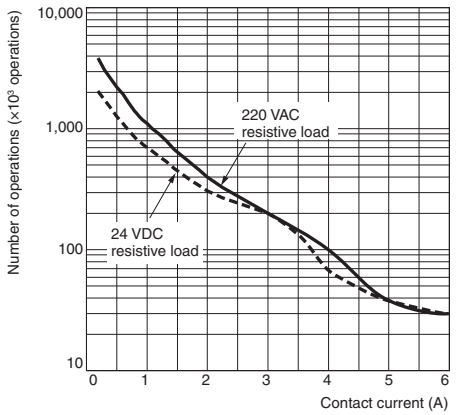
MY2□□-□□-GS (Resistive Load)



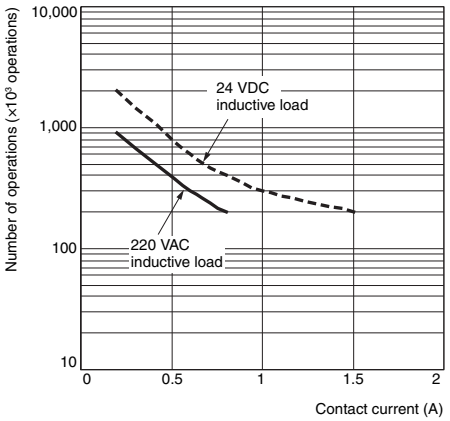
MY2□□-□□-GS (Inductive Load)



MY4□□-□□-GS (Resistive Load)



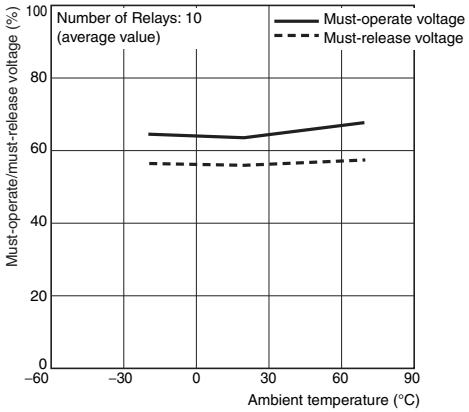
MY4□□-□□-GS (Inductive Load)



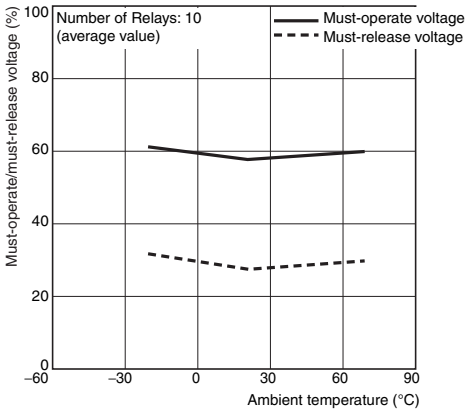
Note: 1. Number of operations: AC load, 50 Hz, 80%
2. Switching condition: NO or NC

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

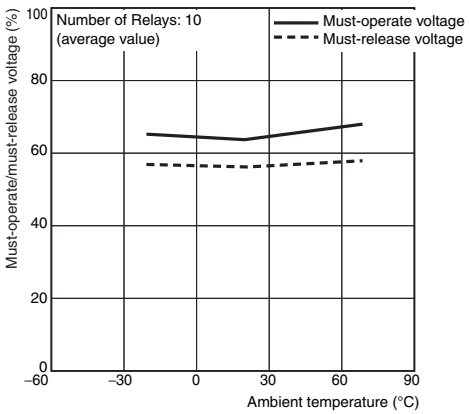
MY2□□-□□-GS AC Models



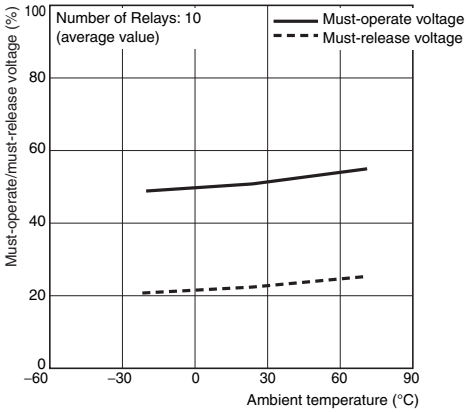
MY2□□-□□-GS DC Models



MY4□□-□□-GS AC Models

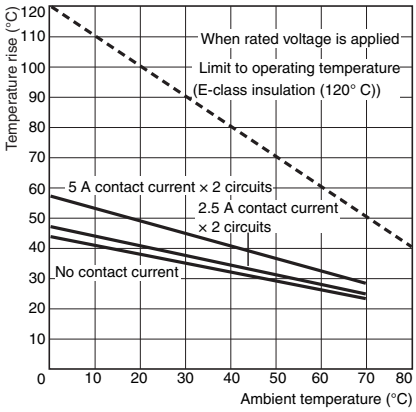


MY4□□-□□-GS DC Models

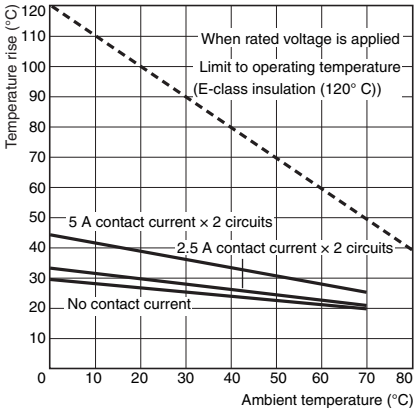


Ambient Temperature vs. Coil Temperature Rise

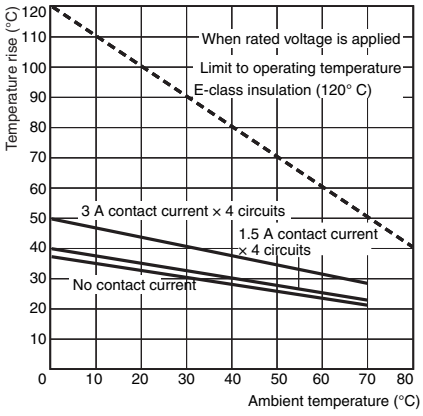
MY2□□-□□-GS AC Models, 50 Hz



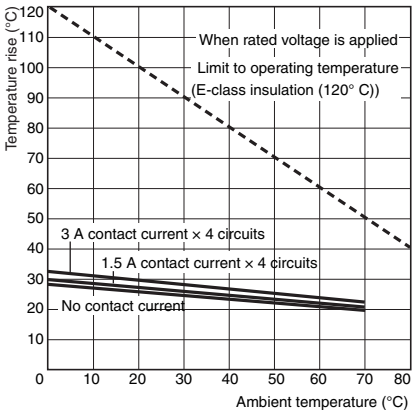
MY2□□-□□-GS DC Models



MY4□□-□□-GS AC Models, 50 Hz



MY4□□-□□-GS DC Models

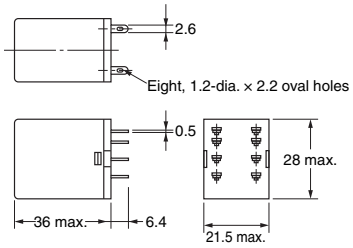


Dimensions

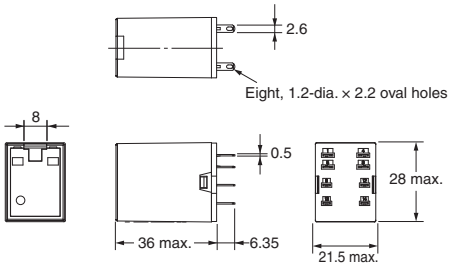
(Unit: mm)

Relays

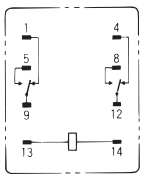
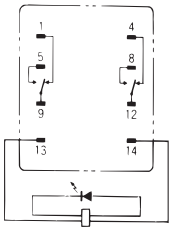
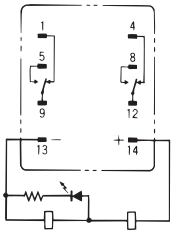
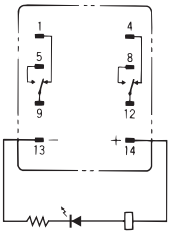
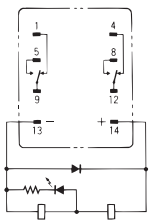
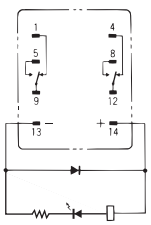
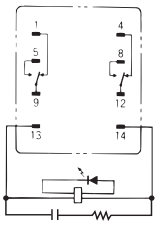
MY2-GS
MY2N-GS
MY2N-D2-GS
MY2N-CR-GS



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

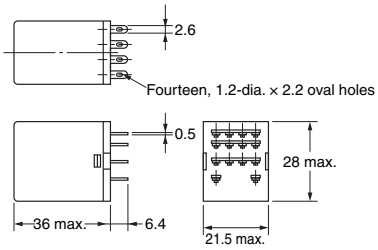


Terminal Arrangement/Internal Connections (Bottom View)

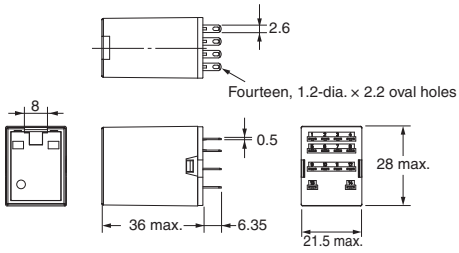
MY2-GS	MY2□N-GS			MY2□N-D2-GS		MY2□N-CR-GS
Standard Models	AC Models	DC Models (except 220 VDC)	DC Models (for 220 VDC)	DC Models (except 220 VDC)	DC Models (for 220 VDC)	AC Models
						
(The coil has no polarity.)	(The coil has no polarity.)	(The coil has polarity.)	(The coil has polarity.)	(The coil has polarity.)	(The coil has polarity.)	(The coil has no polarity.)

Note: 1. An AC model has coil disconnection self-diagnosis.
2. For 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 LED operation indicators indicate the energization of the coil and do not necessarily represent contact operation.

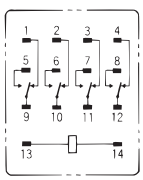
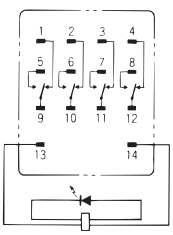
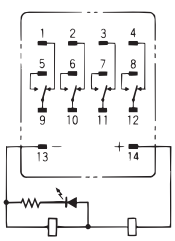
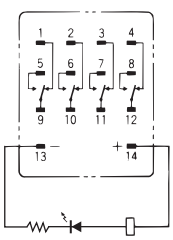
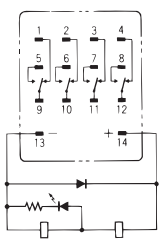
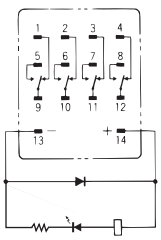
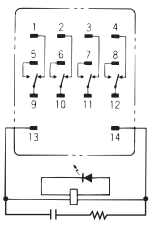
MY4-GS
MY4N-GS
MY4N-D2-GS
MY4N-CR-GS



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



Terminal Arrangement/Internal Connections(Bottom View)

MY4-GS	MY4□N-GS			MY4□N-D2-GS		MY4□N-CR-GS
Standard Models	AC Models	DC Models (except 220 VDC)	DC Models (for 220 VDC)	DC Models (except 220 VDC)	DC Models (for 220 VDC)	DC Models
						
(The coil has no polarity.)	(The coil has no polarity.)	(The coil has polarity.)	(The coil has polarity.)	(The coil has polarity.)	(The coil has polarity.)	(The coil has no polarity.)

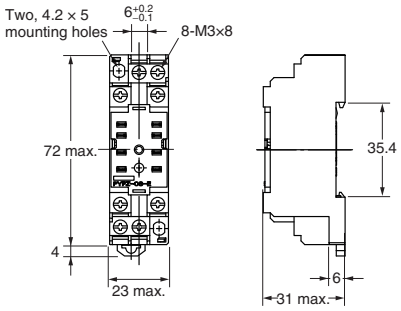
Note: 1. An AC model has coil disconnection self-diagnosis.
2. For the DC models, check the coil polarity when wiring and wire all connections correctly.
3. The indicator is red for AC and green for DC.
4. The LED operation indicators indicate the energization of the coil and do not necessarily represent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

Options (Order Separately)

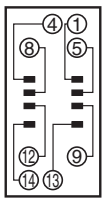
Connection Sockets

Front-mounting Sockets

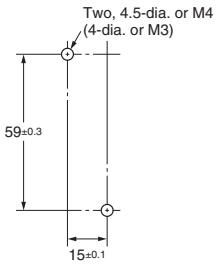
PYFZ-08-E



Terminal Arrangement/ Internal Connections (Top View)

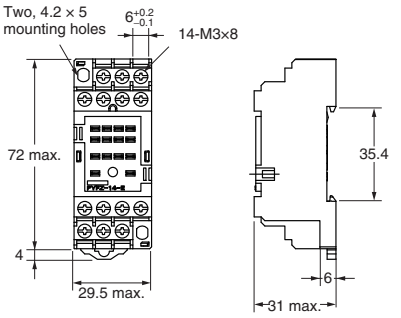


Mounting Hole Dimensions (Top View)

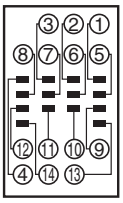


Note: Mounts to DIN Track.

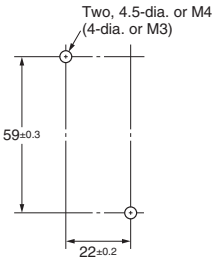
PYFZ-14-E



Terminal Arrangement/ Internal Connections (Top View)

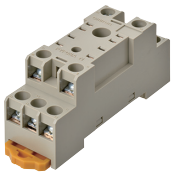


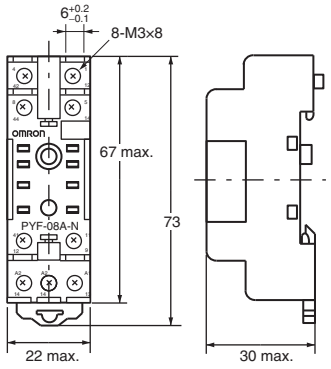
Mounting Hole Dimensions (Top View)



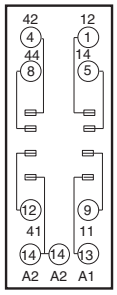
Note: Mounts to DIN Track.

PYF08A-N

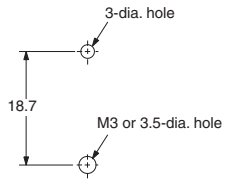




Terminal Arrangement/ Internal Connections (Top View)

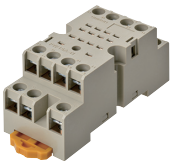


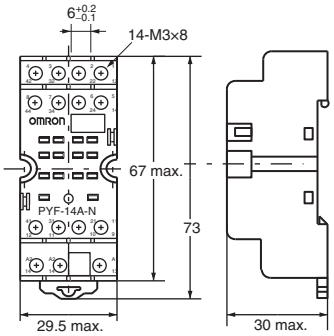
Mounting Hole Dimensions (Top View)



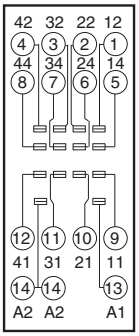
Note: Mounts to DIN Track.

PYF14A-N

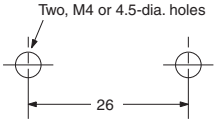




Terminal Arrangement/ Internal Connections (Top View)

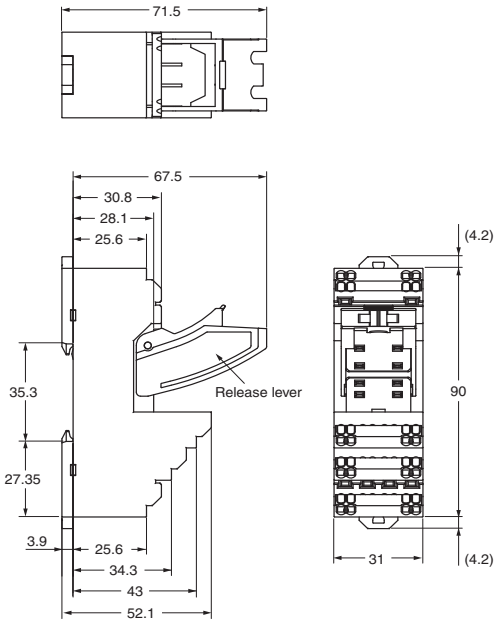


Mounting Hole Dimensions (Top View)

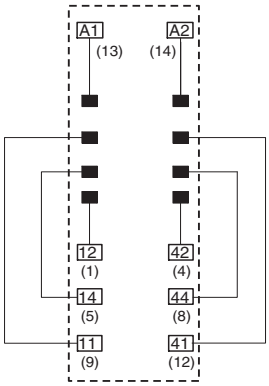


Note: Mounts to DIN Track.

PYF-08-PU

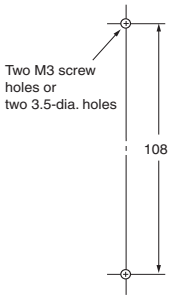


Terminal Arrangement/
Internal Connection Diagram
(TOP VIEW)



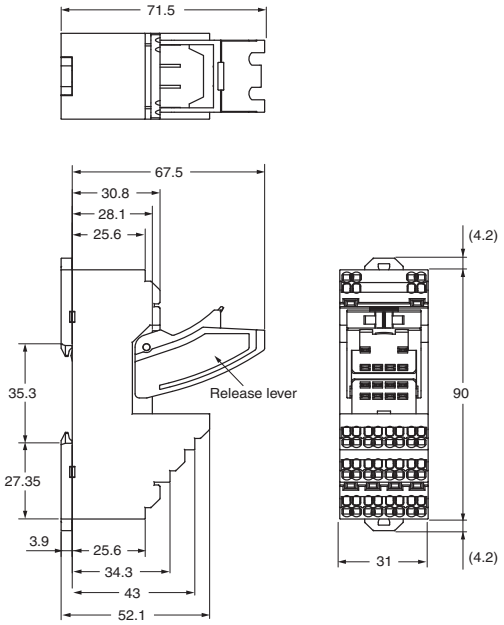
Note: The numbers in parentheses are traditionally used terminal numbers.

Mounting Hole Dimensions

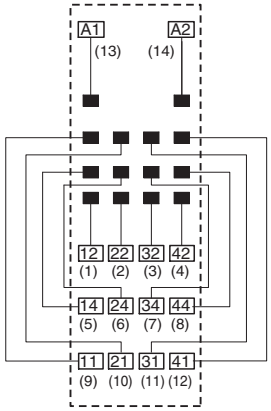


Note: Pull out the hooks to mount the Socket with screws.

PYF-14-PU

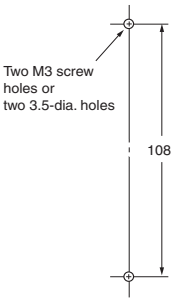


Terminal Arrangement/
Internal Connection Diagram
(TOP VIEW)



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

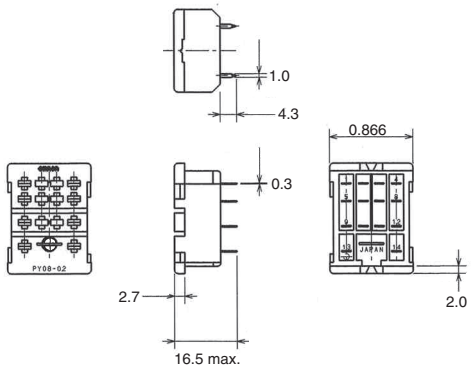
Mounting Hole Dimensions



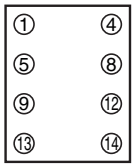
Note: Pull out the hooks to mount the Socket with screws.

Back-mounting Sockets

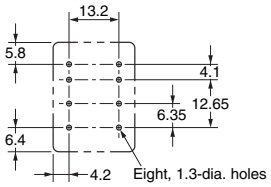
PY08-02



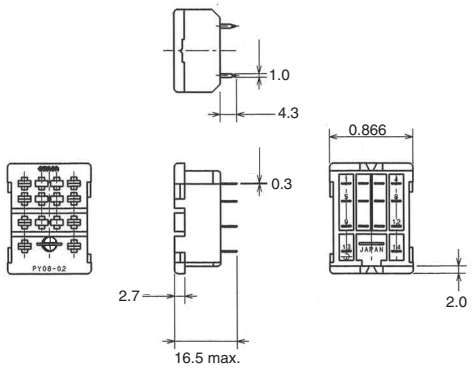
Terminal Arrangement/ Internal Connections (Bottom View)



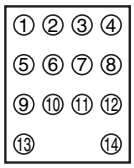
PCB Processing Dimensions



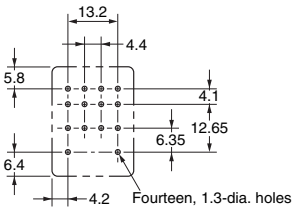
PY14-02



Terminal Arrangement/ Internal Connections (Bottom View)



PCB Processing Dimensions

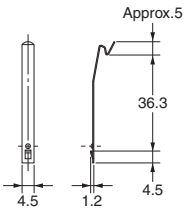


Socket Accessories

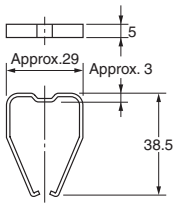
Hold-down Clips

PYC-A1

Set of 2 clips

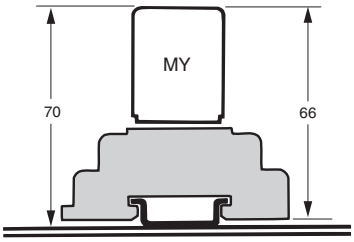


PYC-P

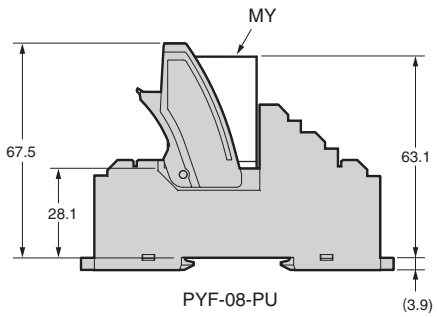


Mounting Heights with Sockets (Unit: mm)

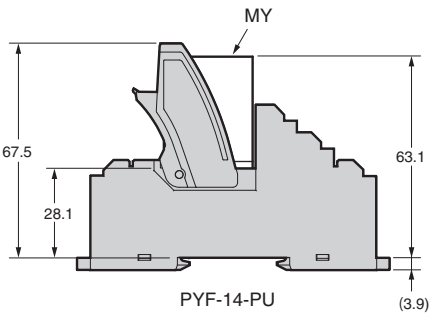
Front-mounting Sockets



PYFZ-□-E
PYF□□A-N

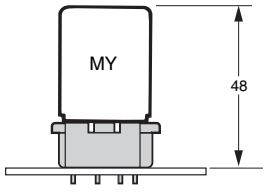


PYF-08-PU



PYF-14-PU

Back-mounting Sockets



PY□□-02

Safety Precautions

Refer to the *Common Relay Precautions* for precautions that apply to all Relays in the website at the following URL: http://www.ia.omron.com/.

Precautions for Correct Use

Handling

For models with built-in LED operation indicators, 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.

Using MY-GS Relays with Microloads with Infrequent Operation

If standard MYGS Relays are used to infrequently 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

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.

- Use the following tightening torque for screws during wiring.

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

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

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

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.

Terms and Conditions Agreement

Read and understand this catalog.
Please read and understand this catalog before purchasing the products. Please consult your OMRON representative if you have any questions or comments.

Warranties.
(a) Exclusive Warranty. Omron's exclusive warranty is that the Products will be free from defects in materials and workmanship for a period of twelve months from the date of sale by Omron (or such other period expressed in writing by Omron). Omron disclaims all other warranties, express or implied.
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Omron further disclaims all warranties and responsibility of any type for claims or expenses based on infringement by the Products or otherwise of any intellectual property right. (c) Buyer Remedy. Omron's sole obligation hereunder shall be, at Omron's election, to (i) replace (in the form originally shipped with Buyer responsible for labor charges for removal or replacement thereof) the non-complying Product, (ii) repair the non-complying Product, or (iii) repay or credit Buyer an amount equal to the purchase price of the non-complying Product; provided that in no event shall Omron be responsible for warranty, repair, indemnity or any other claims or expenses regarding the Products unless Omron's analysis confirms that the Products were properly handled, stored, installed and maintained and not subject to contamination, abuse, misuse or inappropriate modification. Return of any Products by Buyer must be approved in writing by Omron before shipment. Omron Companies shall not be liable for the suitability or unsuitability or the results from the use of Products in combination with any electrical or electronic components, circuits, system assemblies or any other materials or substances or environments. Any advice, recommendations or information given orally or in writing, are not to be construed as an amendment or addition to the above warranty.
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Omron Companies shall not be responsible for conformity with any standards, codes or regulations which apply to the combination of the Product in the Buyer's application or use of the Product. At Buyer's request, Omron will provide applicable third party certification documents identifying ratings and limitations of use which apply to the Product. This information by itself is not sufficient for a complete determination of the suitability of the Product in combination with the end product, machine, system, or other application or use. Buyer shall be solely responsible for determining appropriateness of the particular Product with respect to Buyer's application, product or system. Buyer shall take application responsibility in all cases.
NEVER USE THE PRODUCT FOR AN APPLICATION INVOLVING SERIOUS RISK TO LIFE OR PROPERTY OR IN LARGE QUANTITIES WITHOUT ENSURING THAT THE SYSTEM AS A WHOLE HAS BEEN DESIGNED TO ADDRESS THE RISKS, AND THAT THE OMRON PRODUCT(S) IS PROPERLY RATED AND INSTALLED FOR THE INTENDED USE WITHIN THE OVERALL EQUIPMENT OR SYSTEM.

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Omron Companies shall not be responsible for the user's programming of a programmable Product, or any consequence thereof.

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Change in Specifications.
Product specifications and accessories may be changed at any time based on improvements and other reasons. It is our practice to change part numbers when published ratings or features are changed, or when significant construction changes are made. However, some specifications of the Product may be changed without any notice. When in doubt, special part numbers may be assigned to fix or establish key specifications for your application. Please consult with your Omron's representative at any time to confirm actual specifications of purchased Product.

Errors and Omissions.
Information presented by Omron Companies has been checked and is believed to be accurate; however, no responsibility is assumed for clerical, typographical or proofreading errors or omissions.

2021.11

In the interest of product improvement, specifications are subject to change without notice.

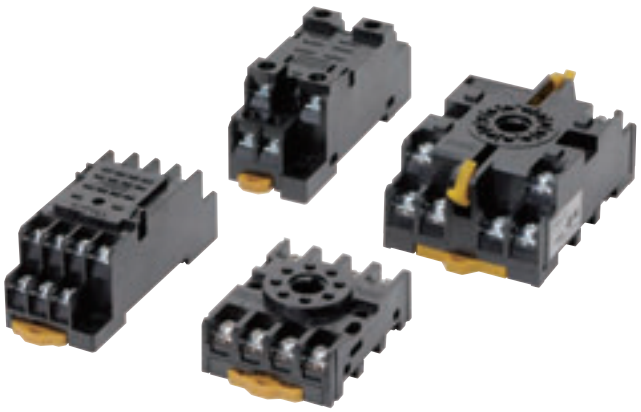
OMRON Corporation
Industrial Automation Company

http://www.ia.omron.com/

Common Sockets

A Wide Variety of Square and Round Sockets in Front-mounting and Back-mounting Models

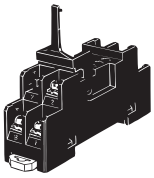
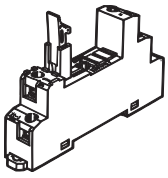
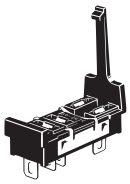
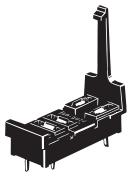
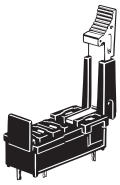
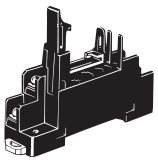
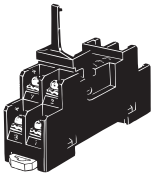
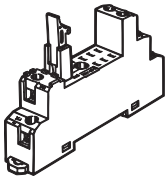
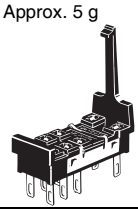
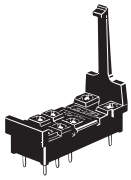
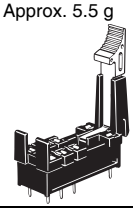
- Models available with finger protection.
- Hold-down Clips and Short Bars for PYFZ/PYF Sockets are also available.
- New screwless models available.



For the most recent information on models that have been certified for safety standards, refer to your OMRON website.

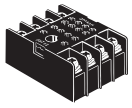
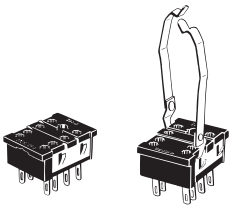
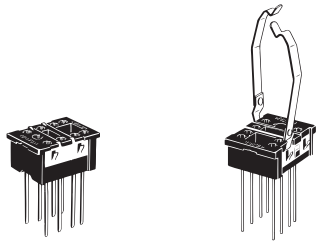
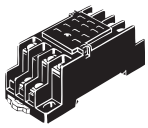
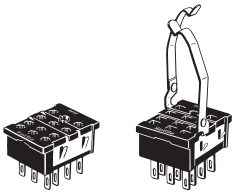
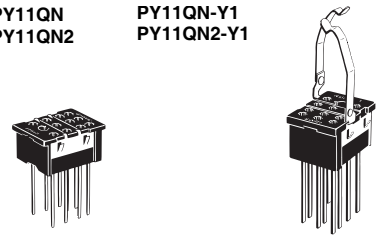
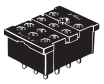
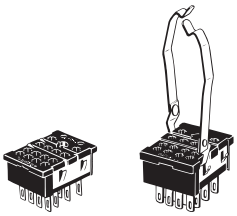
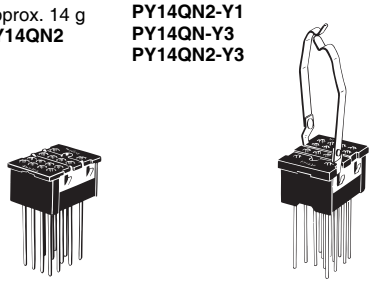
Ordering Information

Square Sockets

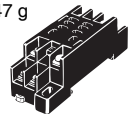
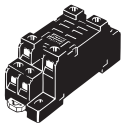
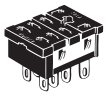
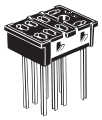
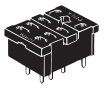
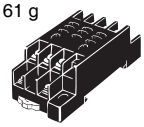
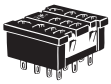
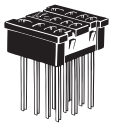
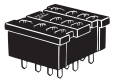
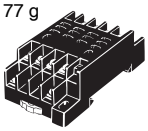
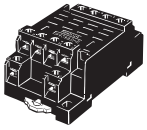
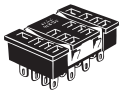
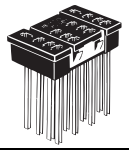
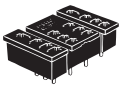
Model / Number of pins	P2RF (front-mounting), page 8			P2R (back-mounting), pages 11 and 12			P7TF (front-mounting), page 12
				Solder terminals	PCB terminals		
5 pins	**P2RF-05** Approx. 27 g	**P2RFZ-05-E** Approx. 30 g	**P2RF-05-E**✻ Approx. 38 g	**P2R-05A** Approx. 5 g	**P2R-05P** Approx. 5 g	**P2R-057P** Approx. 5.5 g	**P7TF-05** Approx. 28 g
							
8 pins	**P2RF-08** Approx. 33 g	**P2RFZ-08-E** Approx. 38 g	**P2RF-08-E**✻ Approx. 38 g	**P2R-08A** Approx. 5 g	**P2R-08P** Approx. 5 g	**P2R-087P** Approx. 5.5 g	—
							

Note: 1. The structure of □-E models provides finger protection. Round terminals cannot be used. Use forked crimp terminals.
2. To remove the Relay, pull the lever on the Socket with your fingers supporting the lever and the opposite side of the Relay case, and jiggle the Relay.

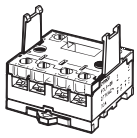
✻ Use a #1 Phillips screwdriver to tighten the screws on this Socket.

Model / Number of pins	PYF (front-mounting), pages 13 to 14	PY (back-mounting), pages 16 to 14		
		Solder terminals	Wrapping terminals	PCB terminals
8 pins	**PYF08A** Approx. 32 g  **PYF08M** Approx. 26 g  **PYF08A-E** ✻1  **PYFZ-08** Approx. 32 g  **PYFZ-08-E** ✻1 Approx. 32 g 	**PY08** Approx. 8 g **PY08-Y1** **PY08-Y3** 	**PY08QN** Approx. 12 g **PY08QN2** **PY08QN-Y1** **PY08QN2-Y1** 	**PY08-02** ✻2 Approx. 7.2 g 
11 pins	**PYF11A** Approx. 43 g 	**PY11** Approx. 9 g **PY11-Y1** 	**PY11QN** **PY11QN2** **PY11QN-Y1** **PY11QN2-Y1** 	**PY11-02** ✻2 
14 pins	**PYF14A** Approx. 49 g  **PYFZ-14** Approx. 50 g  **PYF14A-E** ✻1  **PYFZ-14-E** ✻1 Approx. 50 g 	**PY14** Approx. 10 g **PY14-Y1** **PY14-Y3** 	**PY14QN** Approx. 14 g **PY14QN2** **PY14QN-Y1** **PY14QN2-Y1** **PY14QN-Y3** **PY14QN2-Y3** 	**PY14-02** ✻2 

Note: The structure of □-E models provides finger protection. Round terminals cannot be used. Use forked crimp terminals.
✻**1.** Use a #1 Phillips screwdriver to tighten the screws on this Socket.
✻**2.** The structure does not resist flux. Manual soldering is recommended for this product.

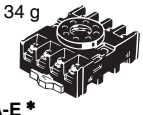
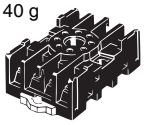
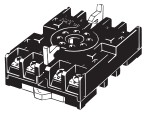
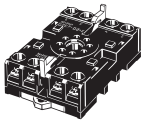
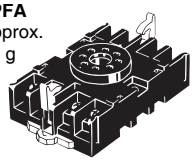
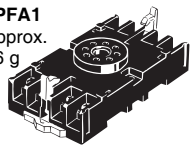
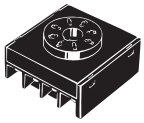
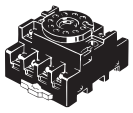
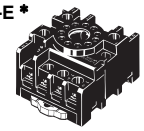
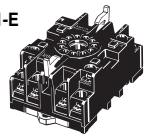
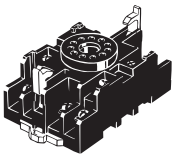
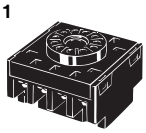
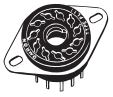
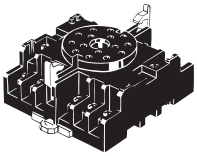
Model / Number of pins	PTF (front-mounting), pages 18 to 15	PT (back-mounting), pages 19 to 16		
		Solder terminals	Wrapping terminals	PCB terminals
8 pins	**PTF08A** Approx. 47 g  **PTF08A-E** ✻1 	**PT08** Approx. 11 g 	**PT08QN** Approx. 10.4 g 	**PT08-0** ✻2 Approx. 8 g 
11 pins	**PTF11A** Approx. 61 g 	**PT11** Approx. 13 g 	**PT11QN** 	**PT11-0** ✻2 Approx. 12.2 g 
14 pins	**PTF14A** Approx. 77 g  **PTF14A-E** ✻1 	**PT14** Approx. 17 g 	**PT14QN** Approx. 20 g 	**PT14-0** ✻2 Approx. 16.2 g 

Note: The structure of □-E models provides finger protection. Round terminals cannot be used. Use forked crimp terminals.
✻ Use a #1 Phillips screwdriver to tighten the screws on this Socket.
✻ The structure does not resist flux. Manual soldering is recommended for this product.

Model / Number of pins	P7LF (front-mounting), page 20
6 pins	**P7LF-06** Approx. 60 g 

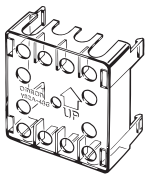
Note: Refer to *Models with Standards Certification* for detailed information on the models of Common Sockets that are certified for standards.

Round Sockets

Model / Number of pins	PF (front-mounting), page 21	P2CF (front-mounting), page 22	PFA (front-mounting), page 23	P3G (back-mounting), page 24	PL (back-mounting), page 25		
					Solder terminals	Wrapping terminals	PCB terminals
8 pins	**PF083A** Approx. 34 g  **PF083A-E** *  **PF085A** Approx. 40 g 	**P2CF-08** Approx. 55 g  **P2CF-08-E** 	**8PFA** Approx. 57 g  **8PFA1** Approx. 66 g 	**P3G-08** Approx. 40g  **Note:** The Y92A-48G Terminal Cover can be used to provide finger protection.	**PL08** Approx. 14 g 	**PL08-Q** Approx. 15 g 	**PLE08-0** Approx. 10.6g 
11 pins	**PF113A** Approx. 47 g  **PF113A-E** * 	**P2CF-11** Approx. 70g  **P2CF-11-E** 	**11PFA** Approx. 74 g 	**P3GA-11** Approx. 47 g  **Note:** The Y92A-48G Terminal Cover can be used to provide finger protection.	**PL11** Approx. 15 g 	**PL11-Q** Approx. 18.5A 	**PLE11-0** Approx. 10.8 g 
14 pins	---	---	**14PFA** Approx. 104 g 	---	**PL15** Approx. 28 g 	---	---
20 pins	---	---	---	---	**PL20** Approx. 17 g 	---	---

Note: The structure of □-E models provides finger protection. Round terminals cannot be used. Use forked crimp terminals.
* Use a #1 Phillips screwdriver to tighten the screws on this Socket.

Terminal Cover

Model	Y92A-48G
Appearance	

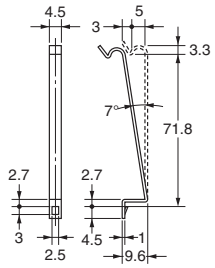
Note: Refer to Models with Standards Certification for detailed information on the models of Common Sockets that are certified for standards.

Hold-down Clips

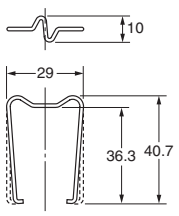
(Unit: mm)

For Square Sockets

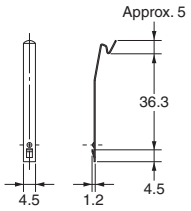
PKC One Set (2 Clips)



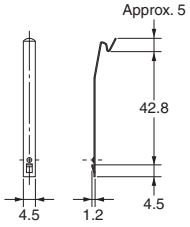
PTC-1



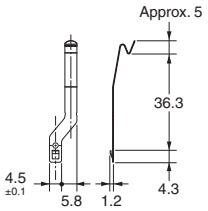
PYC-A1 Approx. 0.54 g
One Set (2 Clips)



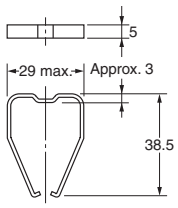
PYC-A2
One Set (2 Clips)



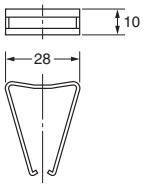
PYC-E1
One Set (2 Clips)



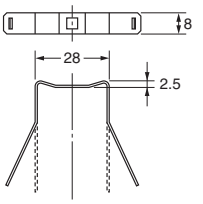
PYC-P Approx. 1.4 g



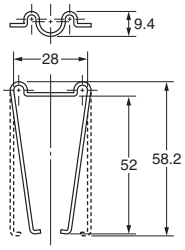
PYC-P2 Approx. 1.2 g



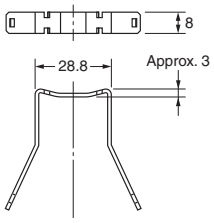
PYC-S Approx. 1.8 g



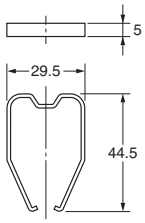
PYC-1 Approx. 6 g



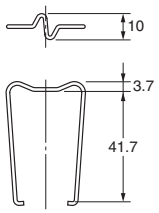
PYC-2



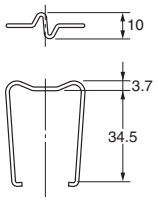
PYC-3



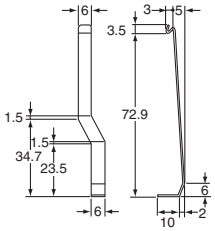
PYC-5



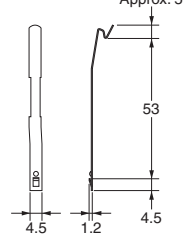
PYC Approx. 0.2 g



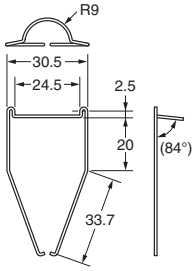
Y92H-1



Y92H-3
One Set (2 Clips)

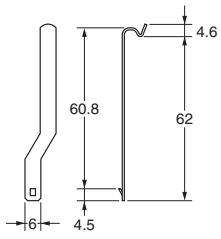


Y92H-4

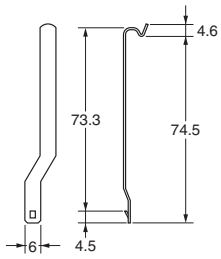


For Round Sockets

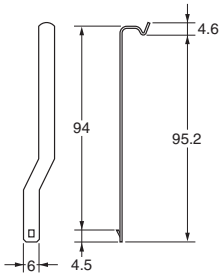
PFC-A1 Approx. 2.2 g
One Set (2 Clips)



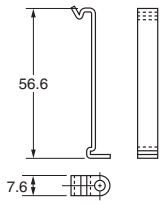
PFC-A6 Approx. 2.4 g
One Set (2 Clips)



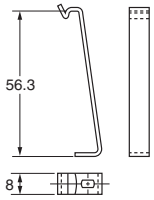
PFC-A7 Approx. 3.0 g
One Set (2 Clips)



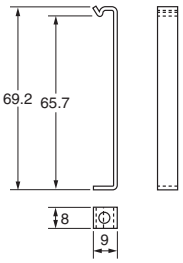
PLC Approx. 2.4 g
One Set (2 Clips)



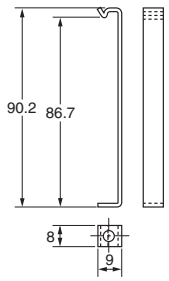
PLC-1 Approx. 2.6 g
One Set (2 Clips)



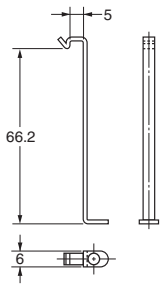
PLC-7 Approx. 3.0 g
One Set (2 Clips)



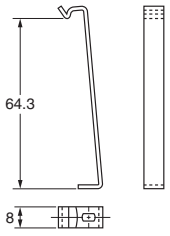
PLC-8 Approx. 6.4 g
One Set (2 Clips)



PLC-10 Approx. 2.0 g
One Set (2 Clips)



PLC-12 Approx. 5.4 g
One Set (2 Clips)



Applicable Hold-down Clips

For Square Sockets

Sockets / Applicable models	PYF□A PTF□A	PYF08M	PY□(QN) PT□(QN)	PY□-02 PT□-0
MY□, MY□N, MY□-D, MY2□-CR, MY4□-CR, MY4Z□-CR, MY□-TU, MY2K, MY□N-D2, LY□, LY□N, LY□-TU, MYQ□, G3H(D) Series, G3F(D) Series, G3FM, and G9H	PYC-A1	PYC PYC-P	PYC-P PYC-S	PYC-P
MY□I ✻ LY□I		---	PYC-P2	
MY4H		---	PYC-P	
MY2Z□-CR MY3□-CR LY□-CR	Y92H-3	---	PYC-1	
G7K	PKC	---		
H3Y	Y92H-3	Y92H-4		

Note: The □ in the model number is replaced with 08, 11, or 14.

✻ If you use a Hold-down Clip with the MY2I, you cannot use the PYF08A. Use the PYF14A.

For Round Sockets

Sockets / Applicable models	PF083A PF113A	PL08 (-Q) PL11 (-Q)	PLE08-0 PLE11-0	P2CF-11
61F-03B, -04B	PFC-A1	PLC	PLC-10	---
61F-GP-N, -GPN-BT 61F-GP-N8 ?61F-APN2	PFC-N8	PHC-5		
MK2P Series, MK2KP, MK3P□(-US), and G3B(D) Series	PFC-A1	PLC		
MK3ZP MK3LP		PLC-1		
MYA-NA1, -NB1 MYA-LA1, -LB1 MYA-NA2, -NB2 MYA-LA2, -LB2	PFC-A6	PLC-7	---	---
MYA-LA12, -LB12	PFC-A7	PLC-8	---	---
APR-S	PFC-A6	PLC-7	---	---
APR-S380/-S440	---	---	---	Y92H-1
LG2	PFC-A7	PLC-8	---	---
K6EL	---	Y92H-1	---	---

Note: 1. The 8PFA(1), 11PFA, and 14PFA are held with hooks.

2. The PL15, PL20, and PF202, as well as models not given in the above table, require panel processing for installation.

3. The PF085A Hold-down Clip is included with the H3M and H2A. It is an option (sold separately) for the H2C.

Specifications

Socket Characteristics

Model	Continuous carry current	Dielectric strength	Insulation resistance*	Remarks
P2RFZ-05-E	10 A	Between contact terminals of same polarity: 1,000 VAC for 1 min Between coil and contact terminals: 4,000 VAC for 1 min	1,000 MΩ min.	
P2RFZ-08-E	5 A	Between contact terminals of different polarity: 3,000 VAC for 1 min Between contact terminals of same polarity: 1,000 VAC for 1 min Between coil and contact terminals: 4,000 VAC for 1 min	1,000 MΩ min.	
P2RF-05(-E)	10 A	Between contact terminals of same polarity: 1,000 VAC for 1 min Between coil and contact terminals: 4,000 VAC for 1 min	1,000 MΩ min.	
P2RF-08(-E)	5 A	Between contact terminals of different polarity: 3,000 VAC for 1 min Between contact terminals of same polarity: 1,000 VAC for 1 min Between coil and contact terminals: 4,000 VAC for 1 min	1,000 MΩ min.	
P2R-05P	10 A	Between contact terminals of same polarity: 1,000 VAC for 1 min Between coil and contact terminals: 4,000 VAC for 1 min	1,000 MΩ min.	
P2R-08P	5 A	Between contact terminals of different polarity: 3,000 VAC for 1 min Between contact terminals of same polarity: 1,000 VAC for 1 min Between coil and contact terminals: 4,000 VAC for 1 min	1,000 MΩ min.	
P2R-057P	10 A	Between contact terminals of same polarity: 1,000 VAC for 1 min Between coil and contact terminals: 5,000 VAC for 1 min	1,000 MΩ min.	
P2R-087P	5 A	Between contact terminals of different polarity: 3,000 VAC for 1 min Between contact terminals of same polarity: 1,000 VAC for 1 min Between coil and contact terminals: 5,000 VAC for 1 min	1,000 MΩ min.	
P2R-05A	10 A	Between contact terminals of same polarity: 1,000 VAC for 1 min Between ground terminals: 1,500 VAC for 1 min Between coil and contact terminals: 4,000 VAC for 1 min	1,000 MΩ min.	
P2R-08A	5 A	Between contact terminals of different polarity: 3,000 VAC for 1 min Between contact terminals of same polarity: 1,000 VAC for 1 min Between ground terminals: 1,500 VAC for 1 min Between coil and contact terminals: 4,000 VAC for 1 min	1,000 MΩ min.	
P7TF-05	5 A	Between terminals: 2,000 VAC for 1 min	1,000 MΩ min.	
PYFZ-08(-E)	10 A	Between contact terminals of different polarity: 2,250 VAC for 1 min Between contact terminals of same polarity: 2,250 VAC for 1 min Between coil and contact terminals: 2,250 VAC for 1 min	1,000 MΩ min.	
PYF08A(-E)	7 A	Between terminals: 2,000 VAC for 1 min	1,000 MΩ min.	The continuous carry current of 10 A for the PYF08S is for an ambient temperature of 55°C. At an ambient temperature of 70°C, the value is 7 A.
PYF11A	5 A	Between terminals: 2,000 VAC for 1 min	1,000 MΩ min.	
PYFZ-14(-E)	6 A	Between contact terminals of different polarity: 2,250 VAC for 1 min Between contact terminals of same polarity: 2,250 VAC for 1 min Between coil and contact terminals: 2,250 VAC for 1 min	1,000 MΩ min.	
PYF14A(-E)	3 A	Between terminals: 2,000 VAC for 1 min	1,000 MΩ min.	
PY08(-Y1)(-Y3)	7 A	Between terminals: 1,500 VAC for 1 min	1,000 MΩ min.	
PY08QN(-Y1)	7 A	Between terminals: 1,500 VAC for 1 min	100 MΩ min.	
PY08-02	7 A	Between terminals: 1,500 VAC for 1 min	100 MΩ min.	
PY11(-Y1)	5 A	Between terminals: 1,500 VAC for 1 min	100 MΩ min.	
PY11QN(-Y1)	5 A	Between terminals: 1,500 VAC for 1 min	100 MΩ min.	
PY11-02	5 A	Between terminals: 1,500 VAC for 1 min	100 MΩ min.	
PY14(-Y1)(-Y3)	3 A	Between terminals: 1,500 VAC for 1 min	100 MΩ min.	
PY14QN(-Y1)	3 A	Between terminals: 1,500 VAC for 1 min	100 MΩ min.	
PY14-02	3 A	Between terminals: 1,500 VAC for 1 min	100 MΩ min.	
PTF□□A(-E)	10 A	Between terminals: 2,000 VAC for 1 min	100 MΩ min.	
PT□□	10 A	Between terminals: 2,000 VAC for 1 min	100 MΩ min.	
PT□□QN	10 A	Between terminals: 2,000 VAC for 1 min	100 MΩ min.	
PT□□-0	10 A	Between terminals: 2,000 VAC for 1 min	100 MΩ min.	
P7LF-06	30 A	Between contact terminals of different polarity: 2,000 VAC for 1 min Between contact terminals of same polarity: 2,000 VAC for 1 min Between coil and contact terminals: 4,000 VAC for 1 min	1,000 MΩ min.	
PF□□□A(-E)	5 A	Between terminals: 2,000 VAC for 1 min	1,000 MΩ min.	
P2CF-□(-E)	5 A	Between terminals: 2,000 VAC for 1 min	1,000 MΩ min.	
8PFA(1)	10 A	Between terminals: 2,000 VAC for 1 min	1,000 MΩ min.	
11PFA(1)	10 A	Between terminals: 2,000 VAC for 1 min	1,000 MΩ min.	
P3G(A)-□	6 A	Between terminals: 2,000 VAC for 1 min	1,000 MΩ min.	
PL□(-Q)	10 A	Between terminals: 2,000 VAC for 1 min	1,000 MΩ min.	
PLE□□-0	10 A	Between terminals: 2,000 VAC for 1 min	1,000 MΩ min.	

* The insulation resistance was measured with a 500-VDC insulation resistance meter at the same places as those used for measuring the dielectric strength.

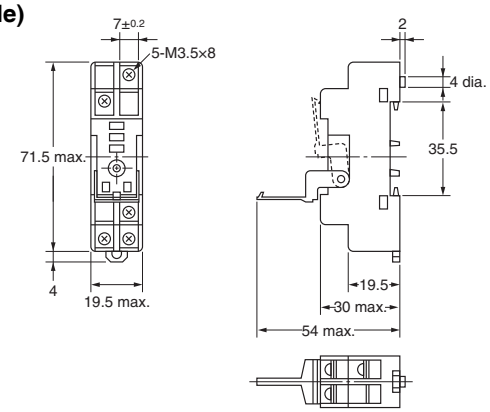
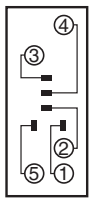
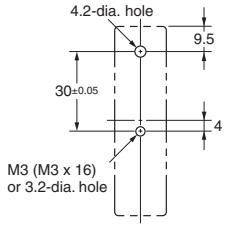
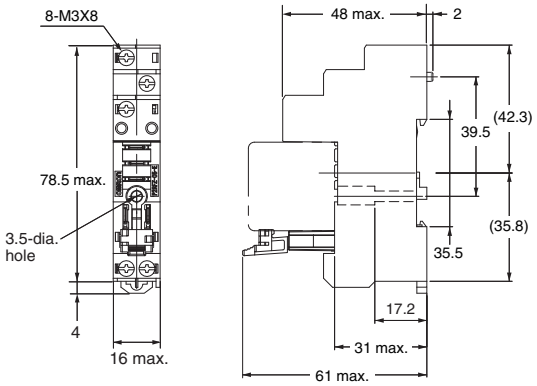
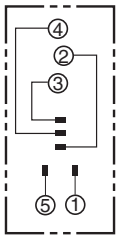
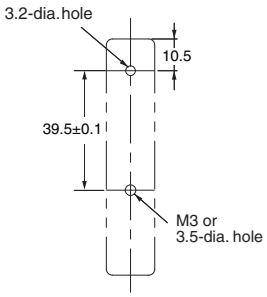
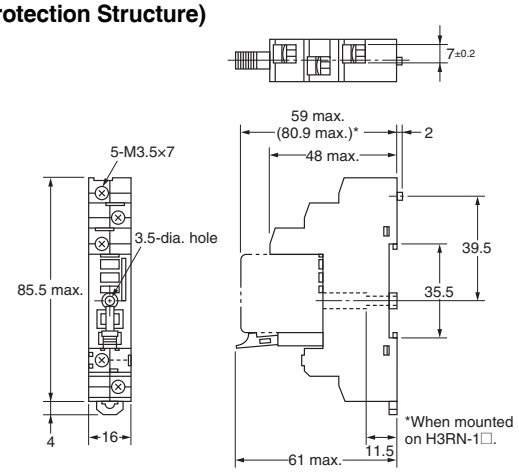
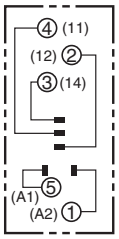
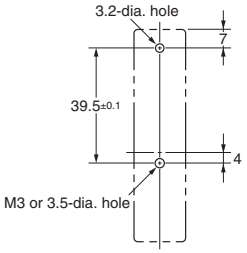
Safety Precautions

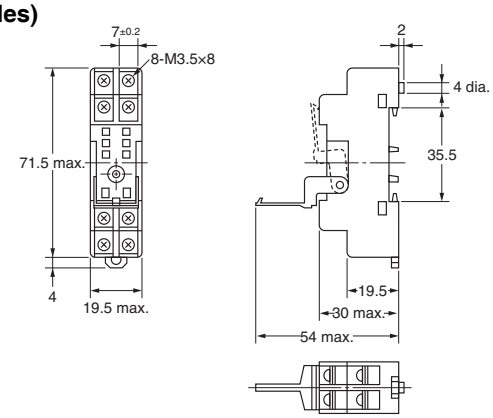
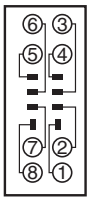
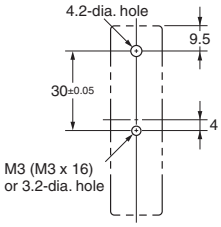
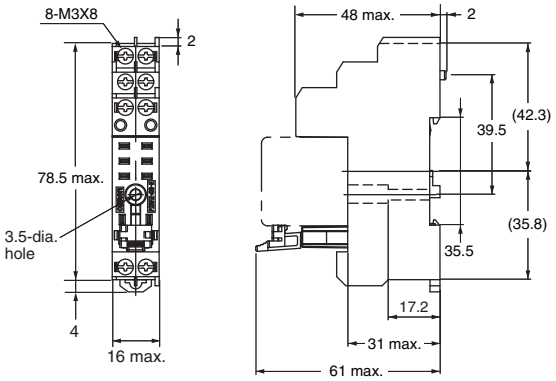
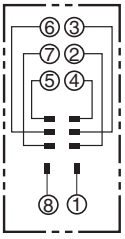
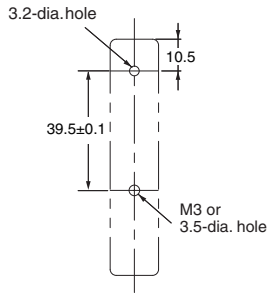
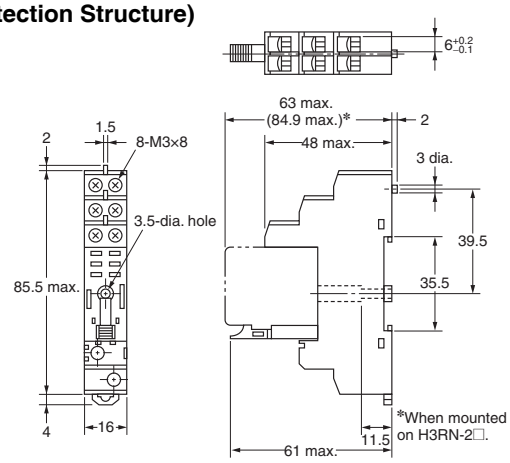
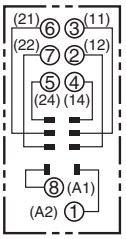
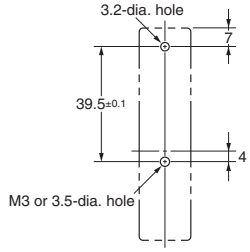
Refer to *Common Relay Precautions* for general precautions.

Dimensions

P2RF

(Unit: mm)

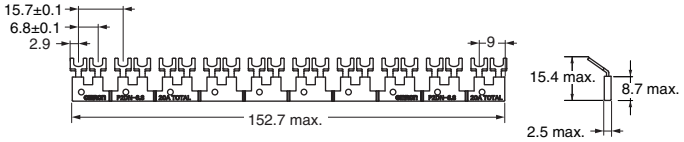
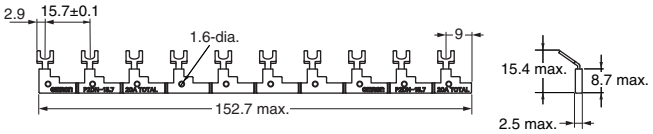
Dimensions	Terminal Arrangement/ Internal Connections	Mounting Hole Dimensions
P2RF-05 (One Pole) 	 (Top View)	 (Top View) **Note:** Track mounting is also possible.
P2RFZ-05-E (One Pole) (Finger Protection Structure) 	 (Top View)	 (Top View) **Note:** Track mounting is also possible.
P2RF-05-E (One Pole) (Finger Protection Structure) 	 (Top View) **Note:** Figures in parentheses indicate DIN standard numbers.	 (Top View) **Note:** Track mounting is also possible.

Dimensions	Terminal Arrangement/ Internal Connections	Mounting Hole Dimensions
P2RF-08 **(Two Poles)** 	 (Top View)	 (Top View) **Note:** Track mounting is also possible.
P2RFZ-08-E **(Two Poles)** **(Finger Protection Structure)** 	 (Top View)	 (Top View) **Note:** Track mounting is also possible.
P2RF-08-E **(Two Poles)** **(Finger Protection Structure)** 	 (Top View) **Note:** Figures in parentheses indicate DIN standard numbers.	 (Top View) **Note:** Track mounting is also possible.

Note: If an I/O SSR or Indicator Module is used, the polarity of terminal 1 is negative.

Accessories for Screw Terminal Sockets (P2RFZ-□-E)

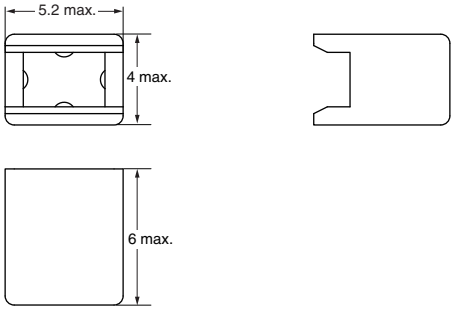
Short Bars

Pitch	Applicable models	Appearance	Dimensions (mm)	Model	Maximum carry current
6.8 mm	P2RFZ-05-E P2RFZ-08-E			P2DN-6.8-100S	20 A
15.7 mm				P2DN-15.7-100S	

Note: Each Short Bar set comes with 20 Caps.

Accessories for Short Bars (P2DN)

Cap

Applicable models	Appearance	Dimensions (mm)	Model
P2RFZ-05-E P2RFZ-08-E			P2DN-CP100

P2R

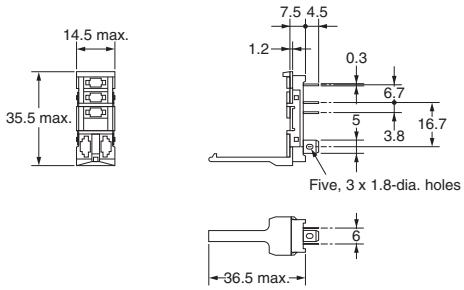
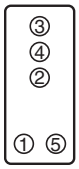
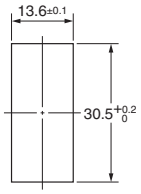
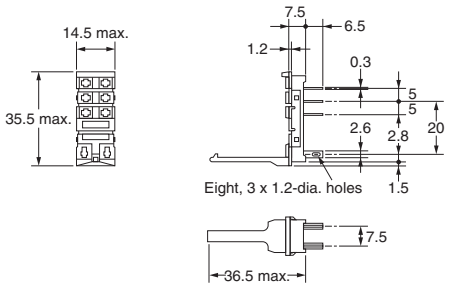
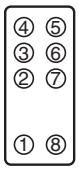
(Unit: mm)

Dimensions	Terminal Arrangement/ Internal Connections	PCB Dimensions
P2R-05P (One Pole)	(Bottom View)	(Bottom View)
P2R-08P (Two Poles)	(Bottom View)	(Bottom View)
P2R-057P (One Pole)	(Bottom View)	(Bottom View)
P2R-087P (Two Poles)	(Bottom View)	(Bottom View)

Note: If an I/O SSR or Indicator Module is used, the polarity of terminal 1 is negative.

P2R

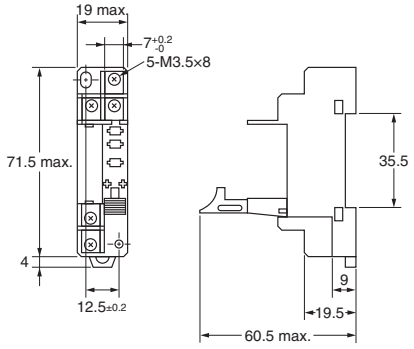
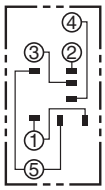
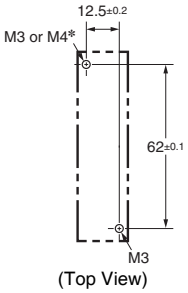
(Unit: mm)

Dimensions	Terminal Arrangement/ Internal Connections	Mounting Hole Dimensions
P2R-05A (One Pole) 	 (Bottom View)	 (Use panel with thickness of 1.6 to 2.0 mm.)
P2R-08A (Two Poles) 	 (Bottom View)	

Note: If an I/O SSR or Indicator Module is used, the polarity of terminal 1 is negative.

P7TF

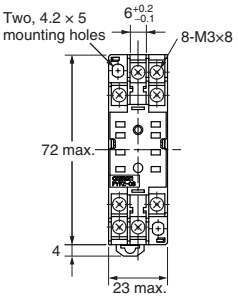
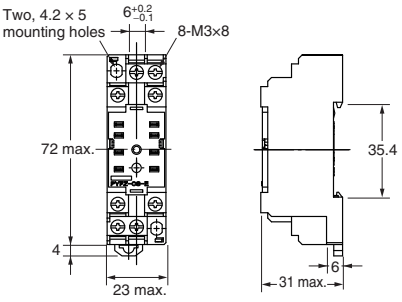
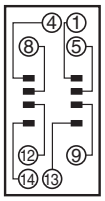
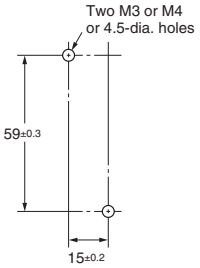
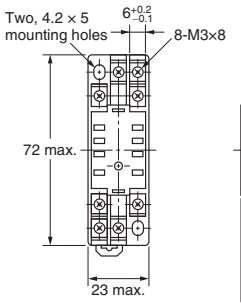
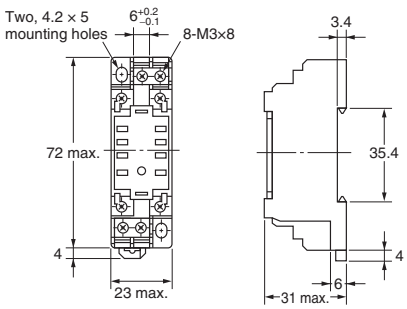
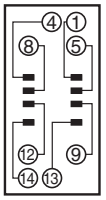
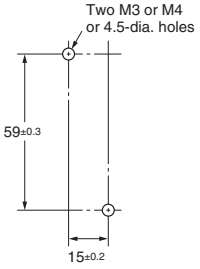
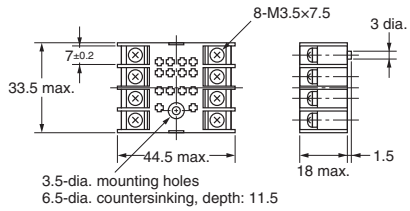
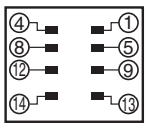
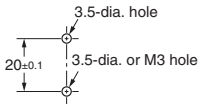
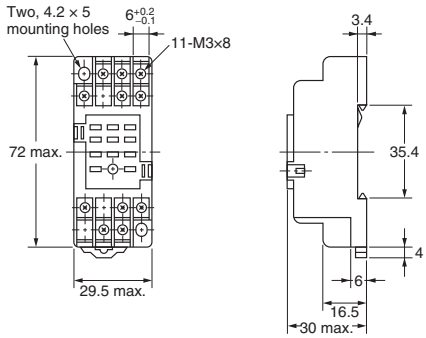
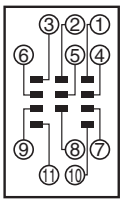
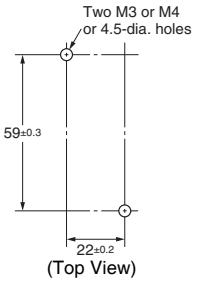
(Unit: mm)

Dimensions	Terminal Arrangement/ Internal Connections	Mounting Hole Dimensions
P7TF-05 	 (Top View)	 (Top View) **Note:** Track mounting is also possible. * We recommend that you use washers if you use M3 bolts or screws. Washers are not required with M4 bolts or screws.

Note: If an I/O SSR or Indicator Module is used, the polarity of terminal 1 is positive.

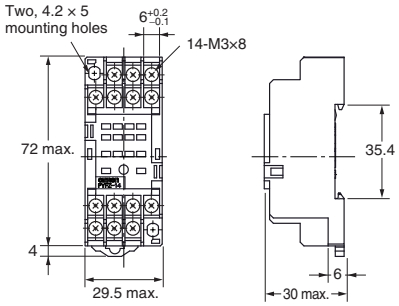
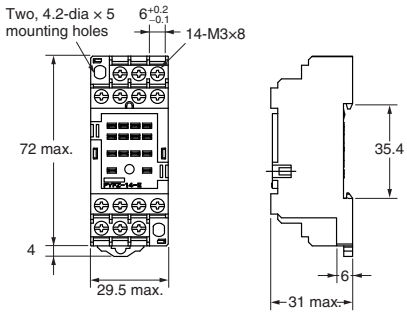
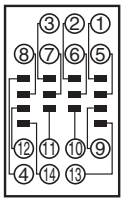
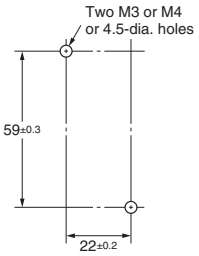
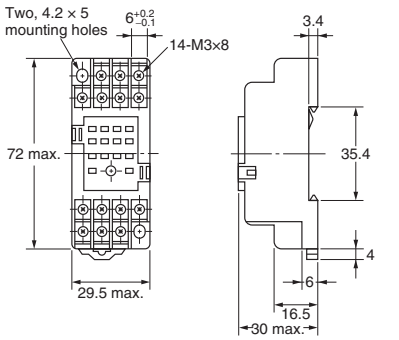
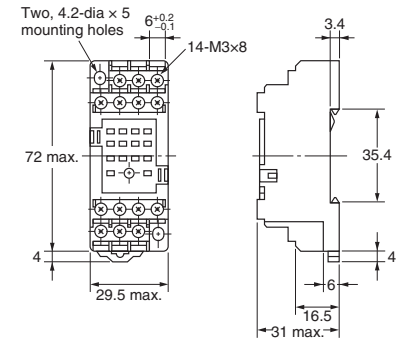
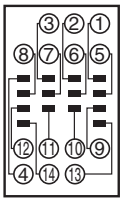
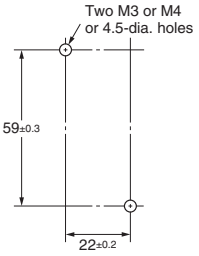
PYFZ/PYF

(Unit: mm)

Dimensions	Terminal Arrangement/Internal Connections	Mounting Hole Dimensions
PYFZ-08  **PYFZ-08-E** **(Finger Protection Structure)**  	 (Top View)	 (Top View) **Note:** Track mounting is also possible.
PYF08A  **PYF08A-E** **(Finger Protection Structure)**  	 (Top View)	 (Top View) **Note:** Track mounting is also possible.
PYF08M  	 (Top View)	
PYF11A  	 (Top View)	 (Top View) **Note:** Track mounting is also possible.

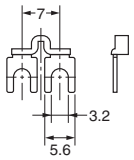
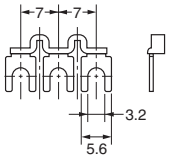
PYFZ/PYF

(Unit: mm)

Dimensions	Terminal Arrangement/Internal Connections	Mounting Hole Dimensions
PYFZ-14  **PYFZ-14-E (Finger Protection Structure)** 	 (Top View)	 (Top View) **Note:** Track mounting is also possible.
PYF14A  **PYF14A-E (Finger Protection Structure)** 	 (Top View)	 (Top View) **Note:** Track mounting is also possible.

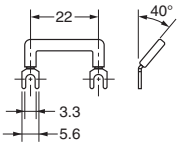
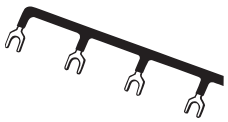
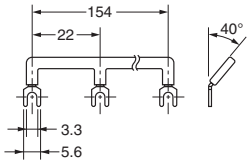
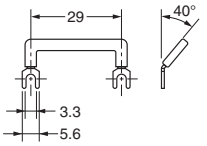
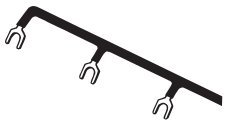
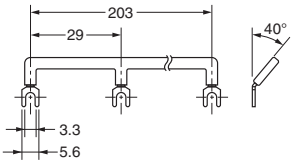
Relay Sockets and Short Bars for PYFZ/PYF

Bridges within the Same Socket

Pitch	Applicable models	Appearance	Dimensions (mm)	Model	Specifications
7 mm	PYFZ-14 PYF14A			PYD-020B□(2P)	Max. carry current: 20 A (18 A at 70°C) Ambient operating temperature: -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 Package qty: 50/bag
				PYD-030B□(3P)	

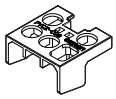
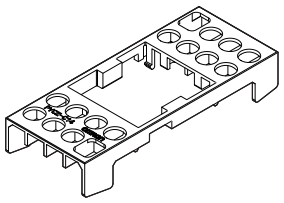
Note: The □ in the model number is replaced with the insulation color specification code. B: Black, Y: Yellow

Bridges between Adjacent Sockets

Pitch	Applicable models	Appearance	Dimensions (mm)	Model	Specifications
22 mm	PYFZ-08 PYF08A			PYD-025B□(2P)	Max. carry current: 20 A (18 A at 70°C) Ambient operating temperature: -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 Package qty: 10/bag
				PYD-085B□(8P)	
29 mm	PYFZ-14 PYF14A			PYD-026B□(2P)	Max. carry current: 20 A (18 A at 70°C) Ambient operating temperature: -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 Package qty: 10/bag
				PYD-086B□(8P)	

Note: The □ in the model number is replaced with the insulation color specification code. B: Black, S: Blue, R: Red

Terminal Covers for PYFZ-08/PYFZ-14

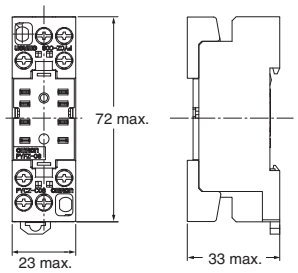
Applicable models	Appearance	Model
PYFZ-08		PYCZ-C08 (2 pcs/set)
PYFZ-14		PYCZ-C14 (1 pcs/set)

Note: These covers cannot be used for PYF08A and PYF14A.
Use these covers in a combination with PYFZ-08 and PYFZ-14.

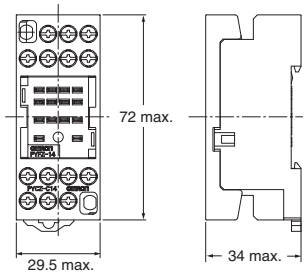
Dimensions with terminal cover

(Unit: mm)

PYCZ-C08

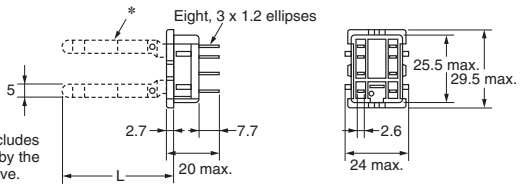
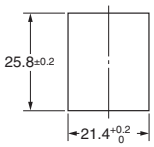
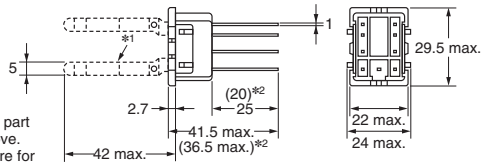
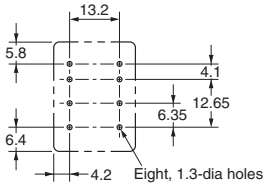
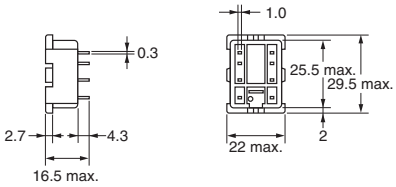
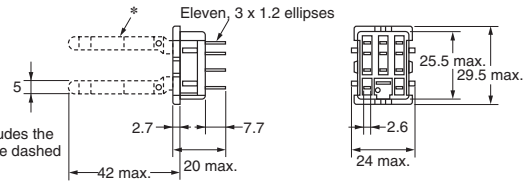
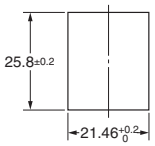
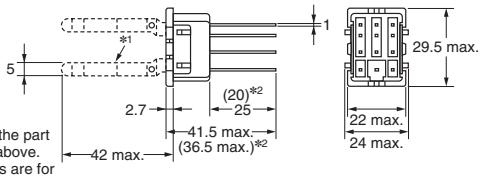
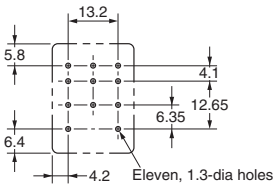
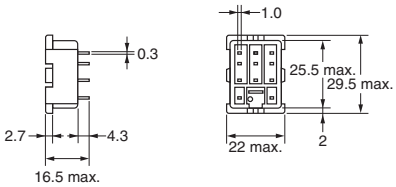


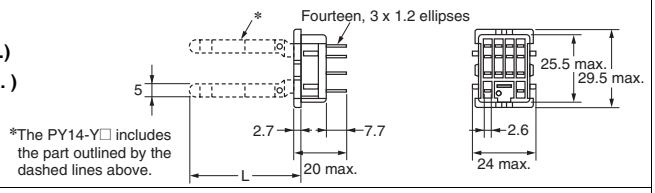
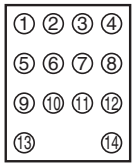
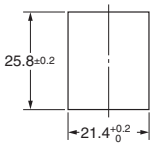
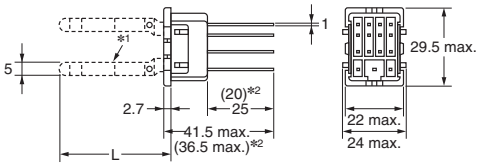
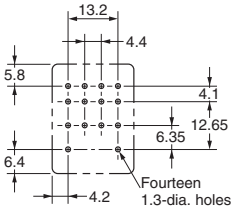
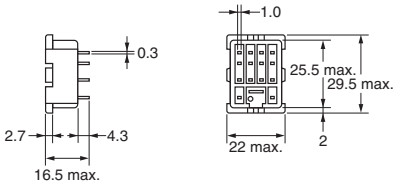
PYCZ-C14



PY

(Unit: mm)

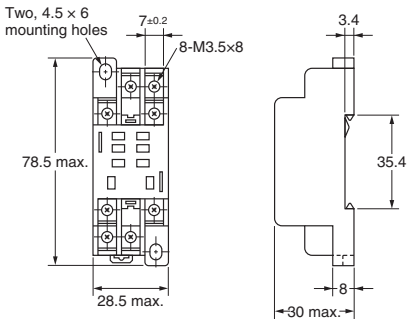
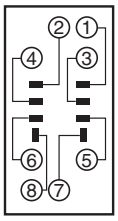
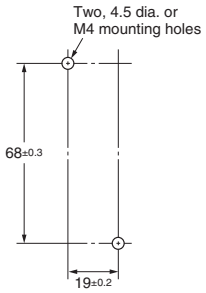
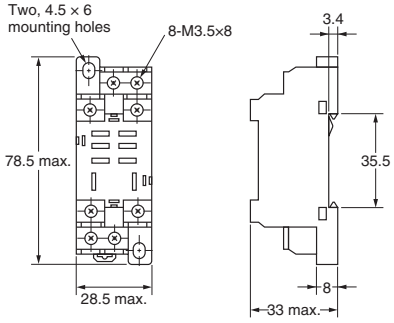
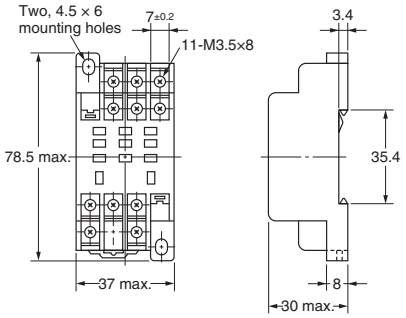
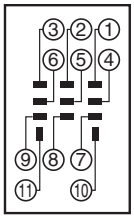
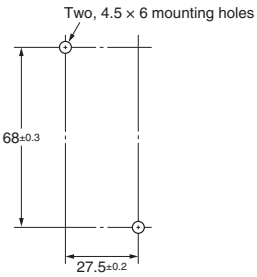
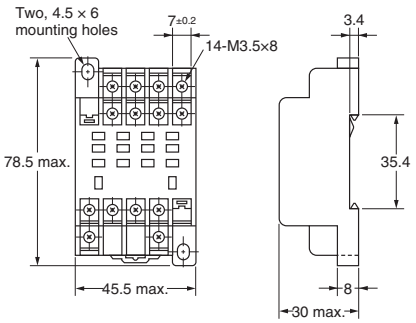
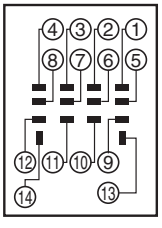
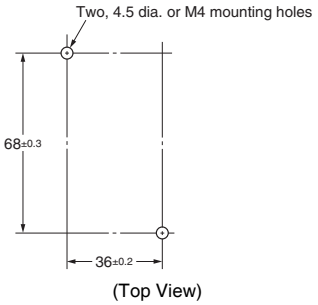
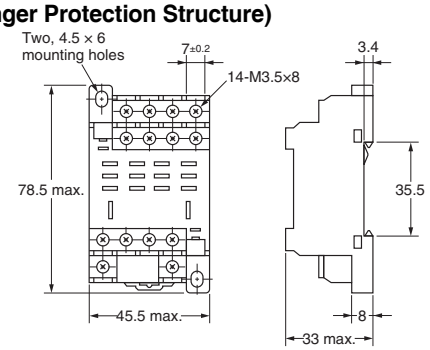
Dimensions	Terminal Arrangement/ Internal Connections	Mounting hole and PCB dimensions
PY08 **PY08-Y1** (L = 42 max.) **PY08-Y13** (L = 60 max.) *The PY08-Y□ includes the part outlined by the dashed lines above. 		
PY08QN **PY08QN2** **PY08QN-Y1** **PY08QN2-Y1** *1. The PY08QN(2)-Y1 includes the part outlined by the dashed lines above. *2. The figures in the parentheses are for the PY08QN2(-Y1). 	① ④ ⑤ ⑧ ⑨ ⑫ ⑬ ⑭ (Bottom View)	
PY08-02 * The structure does not resist flux. Manual soldering is recommended for this product. 		
PY11 **PY11-Y1** *The PY11-Y1 includes the part outlined by the dashed lines above. 		
PY11QN **PY11QN2** **PY11QN-Y1** **PY11QN2-Y1** *1. The PY11QN(2)-Y1 includes the part outlined by the dashed lines above. *2. The figures in the parentheses are for the PY11QN2(-Y1). 	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ (Bottom View)	
PY11-02 * The structure does not resist flux. Manual soldering is recommended for this product. 		

Dimensions	Terminal Arrangement/ Internal Connections	Mounting hole and PCB dimensions
PY14 **PY14-Y1** (L = 42 max.) **PY14-Y3** (L = 60 max.)  *The PY14-Y□ includes the part outlined by the dashed lines above.	 (Bottom View)	
PY14QN **PY14QN2** **PY14QN-Y1** (L = 42 max.) **PY14QN2-Y1** (L = 42 max.) **PY14QN-Y3** (L = 60 max.) **PY14QN2-Y3** (L = 60 max.)  ∗1. The PY14QN-Y□ and PY14QN2-Y□ include the part outlined by the dashed lines above. ∗2. The figures in the parentheses are for the PY14QN2(-Y□).		
PY14-02 ∗ The structure does not resist flux. Manual soldering is recommended for this product. 		

Note: 1. Use a panel with a thickness of 1 to 2 mm when mounting a Socket on it.
2. You can use the PY14-Y1 or PY14QN-Y1 for the MY4 Series, MY4H, MYQ4(Z), or MY2K.
3. You can use the PY14-Y3 or PY14QN-Y3 for H3Y Timers.

PTF

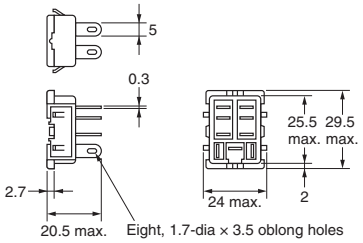
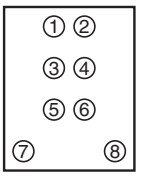
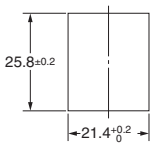
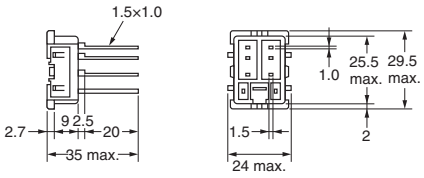
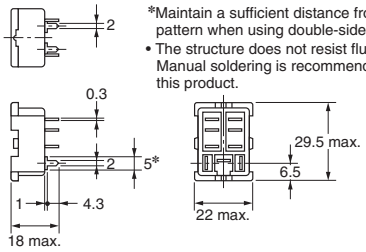
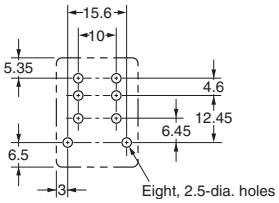
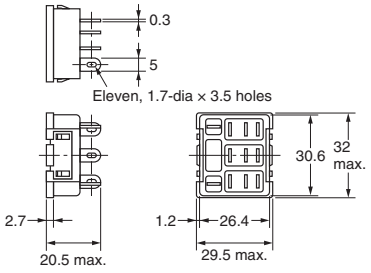
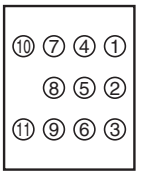
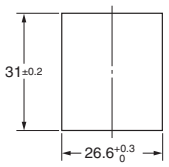
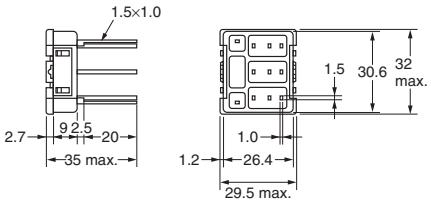
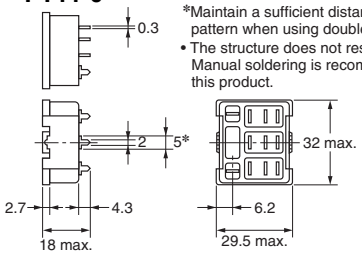
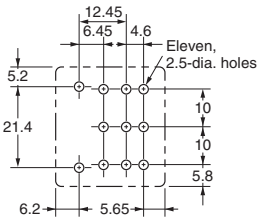
(Unit: mm)

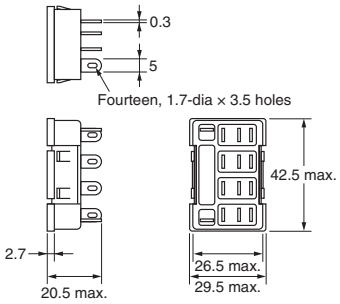
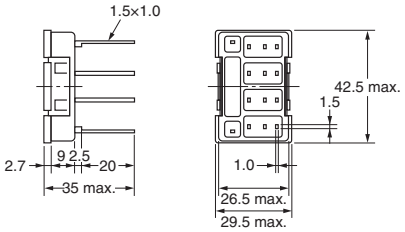
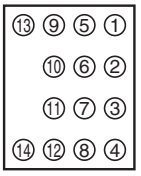
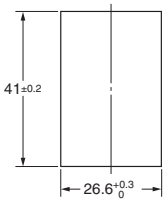
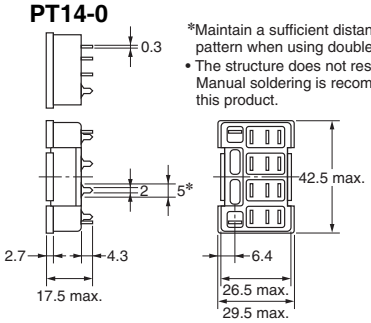
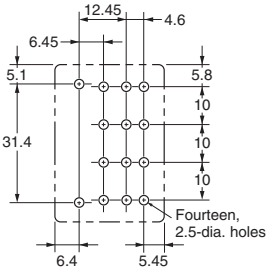
Dimensions	Terminal Arrangement/ Internal Connections	Mounting Hole Dimensions
PTF08A 	 (Top View)	 (Top View) **Note:** Track mounting is also possible.
PTF08A-E (Finger Protection Structure) 		
PTF11A 	 (Top View)	 (Top View) **Note:** Track mounting is also possible.
PTF14A 	 (Top View)	 (Top View) **Note:** Track mounting is also possible.
PTF14A-E (Finger Protection Structure) 		

Note: If you use the PTF08A, PTF08A-E, or PT08 with an LY1 Relay, connect the following terminal pairs: 1-2, 3-4, and 5-6 (for usage at 10 A or higher).

PT

(Unit: mm)

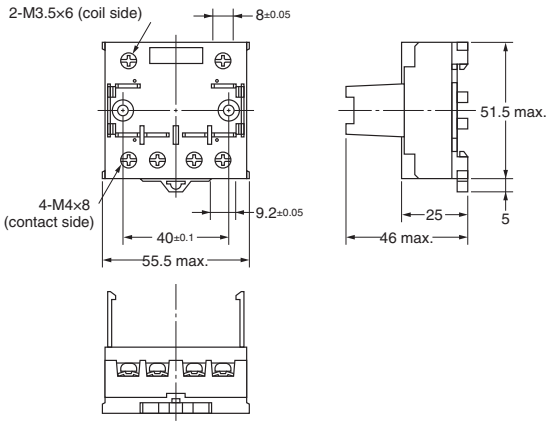
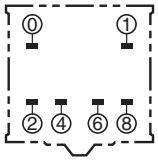
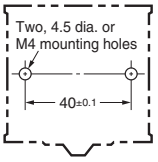
Dimensions	Terminal Arrangement/ Internal Connections	Mounting hole and PCB dimensions
PT08  	 (Bottom View)	
PT08QN  		
PT08-0  *Maintain a sufficient distance from the pattern when using double-sided PCBs. • The structure does not resist flux. Manual soldering is recommended for this product.		 (±0.1 tolerance)
PT11  	 (Bottom View)	
PT11QN  		
PT11-0  *Maintain a sufficient distance from the pattern when using double-sided PCBs. • The structure does not resist flux. Manual soldering is recommended for this product.		 (±0.1 tolerance)

Dimensions	Terminal Arrangement/ Internal Connections	Mounting hole and PCB dimensions
PT14  **PT14QN** 	 (Bottom View)	
PT14-0  *Maintain a sufficient distance from the pattern when using double-sided PCBs. • The structure does not resist flux. Manual soldering is recommended for this product.		 (±0.1 tolerance)

Note: Use a panel with a thickness of 1 to 2 mm when mounting a Socket on it.

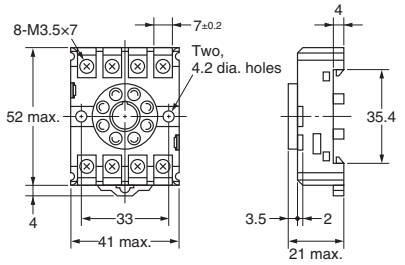
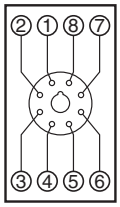
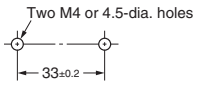
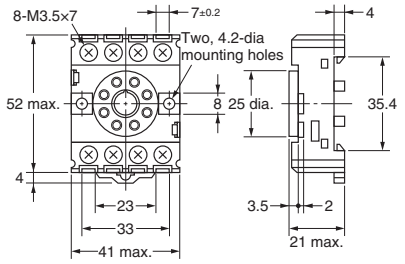
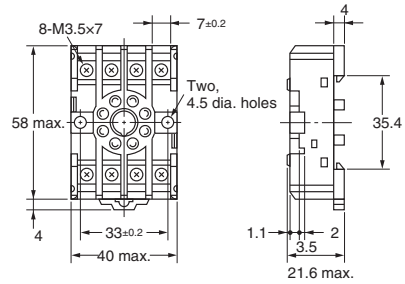
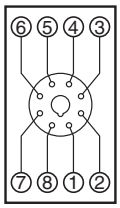
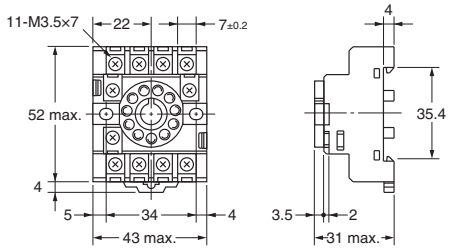
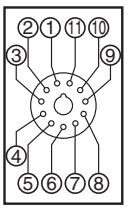
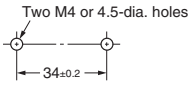
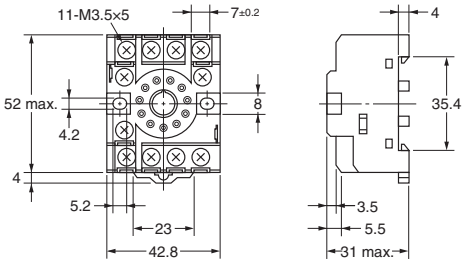
P7LF

(Unit: mm)

Dimensions	Terminal Arrangement/ Internal Connections	Mounting Hole Dimensions
P7LF-06 	 (Top View)	

PF

(Unit: mm)

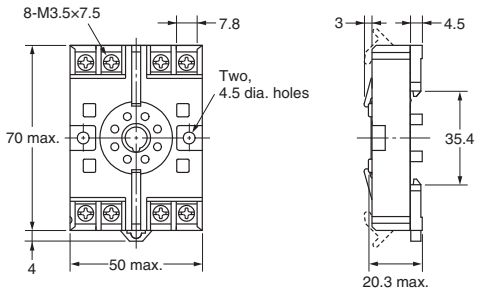
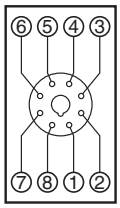
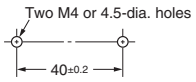
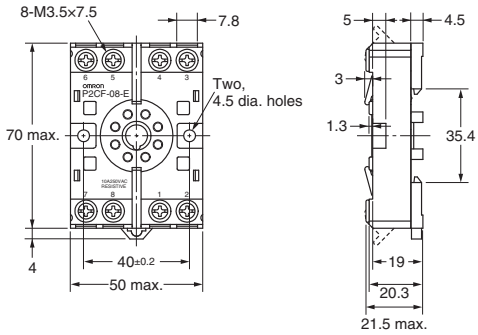
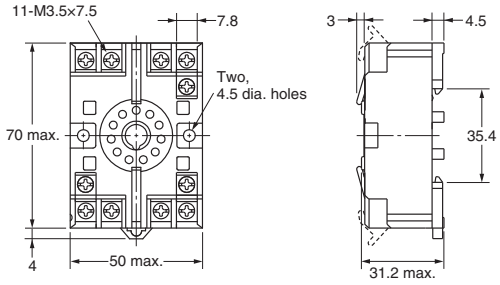
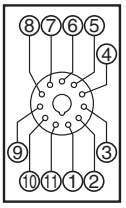
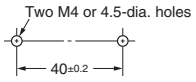
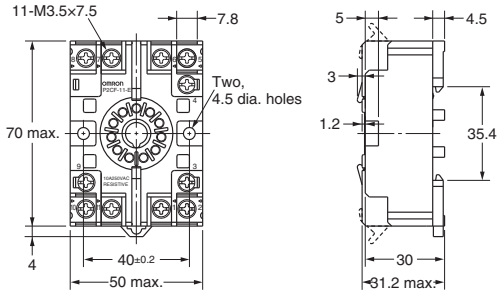
Dimensions	Terminal Arrangement/ Internal Connections	Mounting Hole Dimensions
PF083A 	 (Top View)	 **Note:** Track mounting is also possible.
PF083A-E 		
PF085A 	 (Top View)	
PF113A 	 (Top View)	 **Note:** Track mounting is also possible.
PF113A-E 		

Note: 1. For the PF083A and PF113A, the Socket key slot is on the top. (Applicable model: MK)

2. The structure of □-E models provides finger protection. Round terminals cannot be used. Use forked crimp terminals.

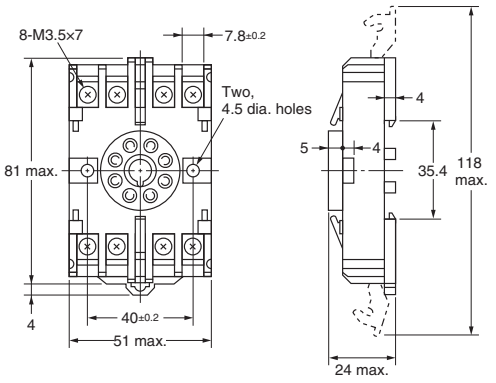
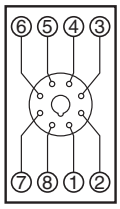
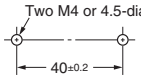
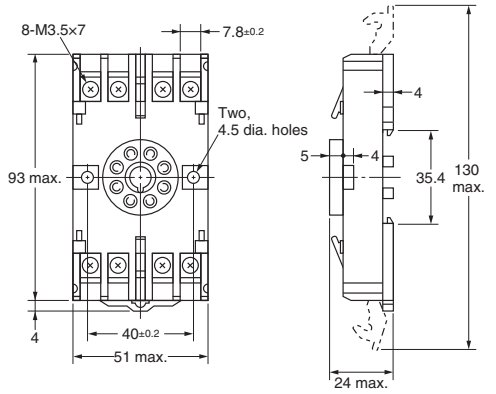
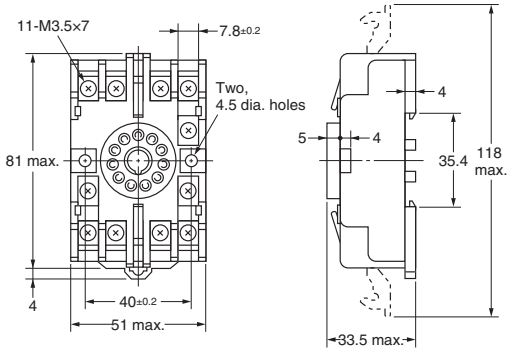
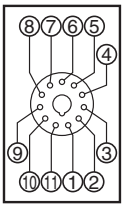
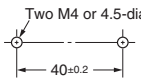
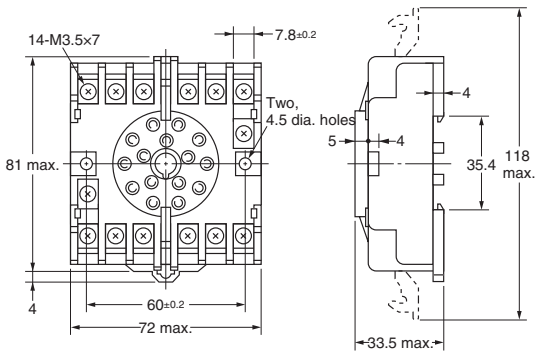
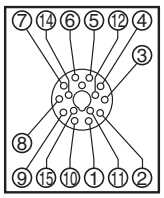
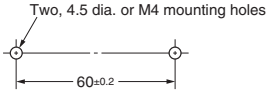
P2CF

(Unit: mm)

Dimensions	Terminal Arrangement/ Internal Connections	Mounting Hole Dimensions
P2CF-08 	 (Top View)	 **Note:** Track mounting is also possible.
P2CF-08-E 		
P2CF-11 	 (Top View)	 **Note:** Track mounting is also possible.
P2CF-11-E 		

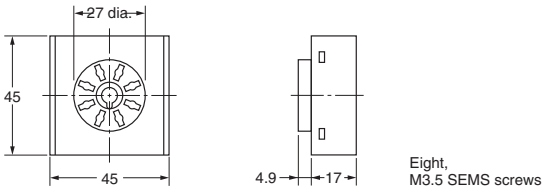
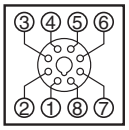
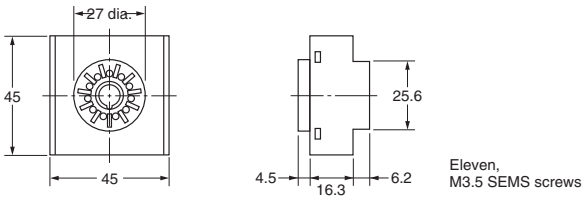
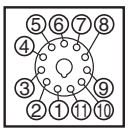
PFA

(Unit: mm)

Dimensions	Terminal Arrangement/ Internal Connections	Mounting Hole Dimensions
8PFA 	 (Top View)	 **Note:** Track mounting is also possible.
8PFA1 		
11PFA 	 (Top View)	 **Note:** Track mounting is also possible.
14PFA 	 (Top View)	 **Note:** Track mounting is also possible.

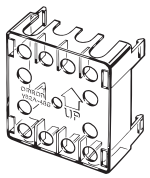
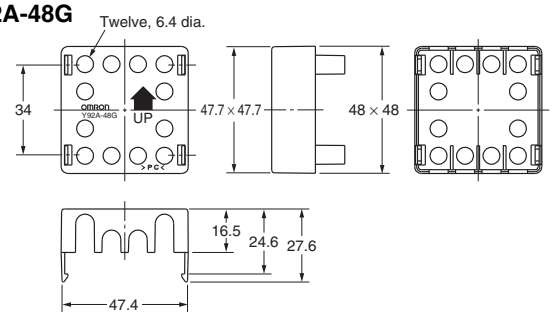
P3G/P3GA

(Unit: mm)

Dimensions	Terminal Arrangement/ Internal Connections	Mounting Hole Dimensions
P3G-08  **Note:** The Y92A-48G Terminal Cover can be used to implement finger protection.	 (Bottom View)	---
P3GA-11  **Note:** The Y92A-48G Terminal Cover can be used to implement finger protection.	 (Bottom View)	---

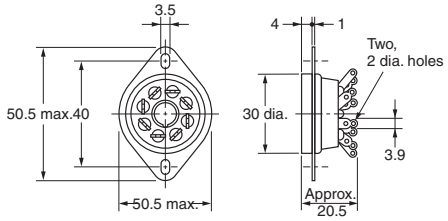
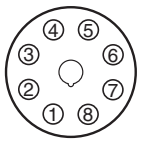
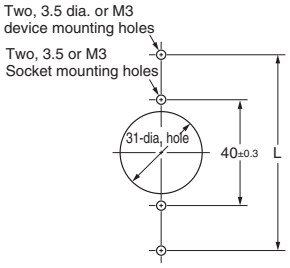
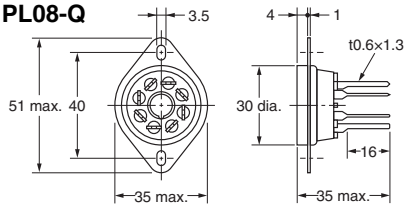
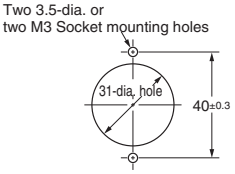
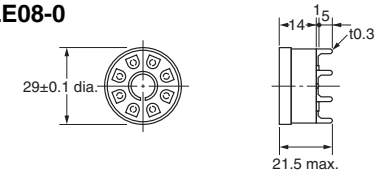
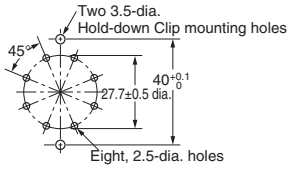
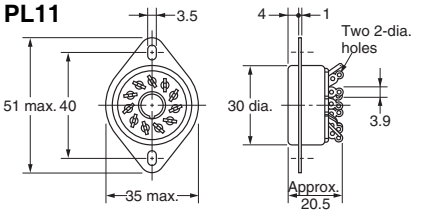
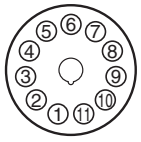
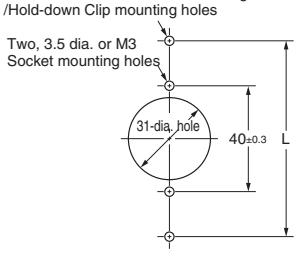
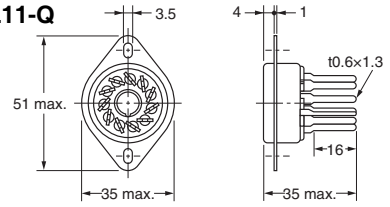
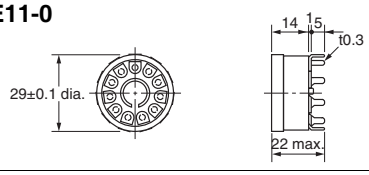
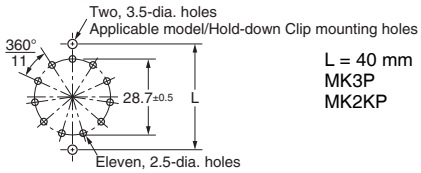
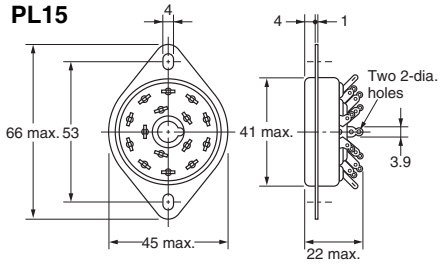
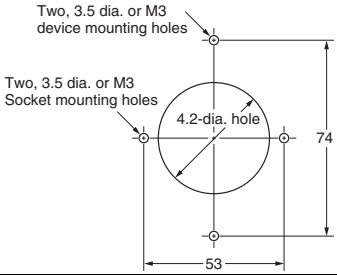
Terminal Cover

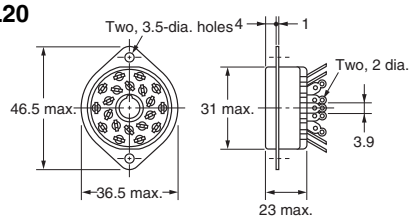
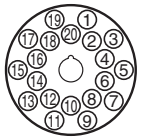
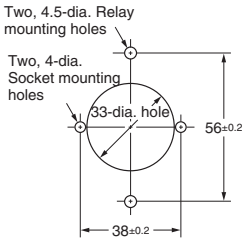
(Unit: mm)

Appearance	Dimensions
	**Y92A-48G** 

PL

(Unit: mm)

Dimensions	Terminal Arrangement/ Internal Connections	Mounting hole and PCB dimensions (bottom view)
PL08 	 (Bottom View)	 L = 40 mm MK2(Z)P L = 74 mm PU, AMD-S, MM2(X)P, CZ, STP, H3L, TDS, DTS, DSP, TDF, TDV L = 86 mm 61F-GP/-APN, G4Q-212S, RD2P, RDA, TDA, AGF, SE, SAD, K2CU, SDV-F
PL08-Q 		 MK2(Z)P
PLE08-0 		 MK2(Z)P
PL11 	 (Bottom View)	 L = 40 mm MK3P MK2KP L = 74 mm MM3P MK2(X)KP L = 42 mm MK3ZP MK3LP
PL11-Q 		
PLE11-0 		 L = 40 mm MK3P MK2KP L = 42 mm MK3ZP MK3LP
PL15 	 (Bottom View)	 MM3XP MM4(X)P MM3(X)KP MM4(X)KP

Dimensions	Terminal Arrangement/ Internal Connections	Mounting hole and PCB dimensions (bottom view)
PL20  	 (Bottom View)	 ✻ Relay mounting holes are not required for the LDNP.

Note: When mounting, pay due attention to the direction of the key groove of applicable Relays.

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2019.10

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Accessories (order separately)

■ Track-mounted Screwless Clamp Terminal Sockets

Item	Model	
	4-pole	2-pole
Socket	PYF14S	PYF08S
Clip & release lever	PYCM-14S	PYCM-08S
Nameplate	R99-11 nameplate for MY	
Socket bridge	PYDM-14SR, PYDM-14SB	PYDM-08SR, PYDM-08SB

Note: For complete specifications, see the datasheet at Omron's Knowledge Center on our website: www.knowledge.omron.com.

■ Sockets

Poles	Front-connecting socket (DIN-track/screw mounting)	Back-connecting socket		
		Solder terminals		PCB terminals
		Without clip	With clip	
2	PYF08A-E	PY08	PY08-Y1	PY08-02
	PYF08A-N			
4	PYF14A-E	PY14	PY14-Y1	PY14-02
	PYF14A-N			

■ Socket Specifications

Item	Pole	Model	Carry current	Dielectric withstand voltage	Insulation resistance (see note 2)
Screwless clamp terminal socket	2	PYF08S	10 A	2,000 VAC, 1 min	Less than 1,000 MΩ
	4	PYF14S	5 A		
Track-mounted socket	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		
		PYF14A-N (see note 3)	5 A (see note 4)		
Back-connecting socket	2	PY08(-Y1)	7 A	1,500 VAC, 1 min	100 MΩ min.
		PY08-02			
	4	PY14(-Y1)	3 A		
		PY14-02			

Note: 1. The values given above are initial values.

2. The values for insulation resistance were measured at 500 V 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.

■ Socket Hold-down Clip Pairing

Relay type	Poles	Front-connecting socket (DIN-track/screw mounting)		Back-connecting socket			
				Solder terminals		PCB terminals	
		Socket	Clip	Socket	Clip	Socket	Clip
Without 2-pole test button	2	PYF08A-E	PYC-A1	PY08	PYC-P PYC-P2	PY08-02	PYC-P PYC-P2
		PYF08A-N					
Without 2-pole test button	4	PYF14A-E	PYC-A1	PY14	PYC-P PYC-P2	PY14-02	PYC-P PYC-P2
		PYF14A-N					
2-pole test button	2	PYF08A-E	PYC-E1	PY08	PYC-P2	PY08-02	PYC-P2
		PYF08A-N					

■ Mounting Plates for Sockets

Socket model	For 1 socket	For 18 sockets	For 36 sockets
PY08, PY14	PYP-1	PYP-18	PYP-36

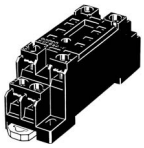
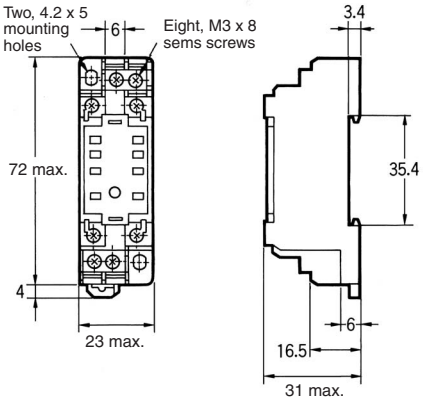
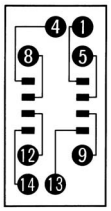
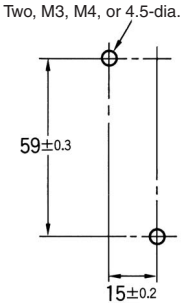
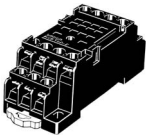
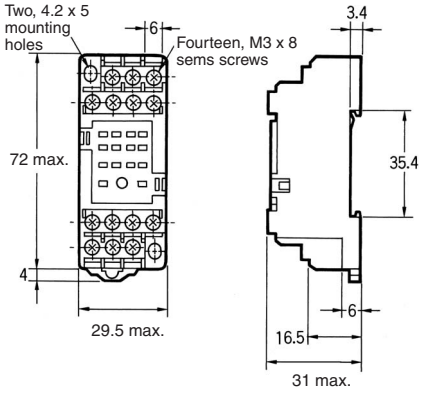
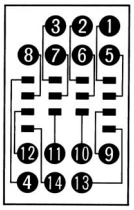
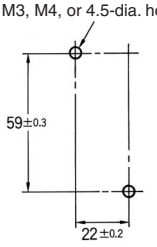
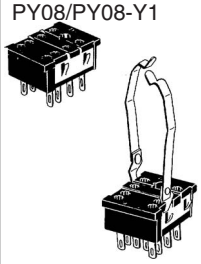
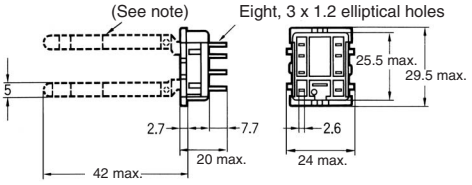
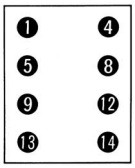
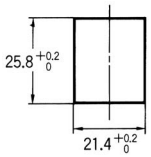
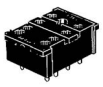
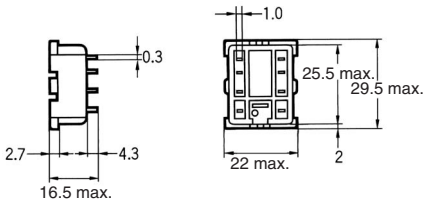
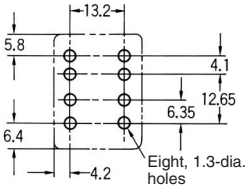
Note: PYP-18 and PYP-36 can be cut into any desired length in accordance with the number of Sockets.

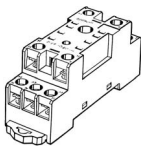
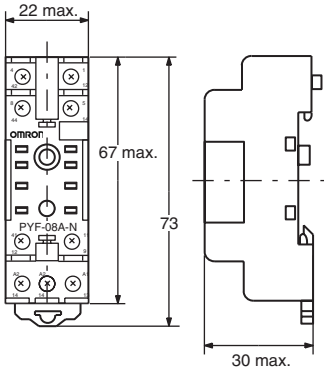
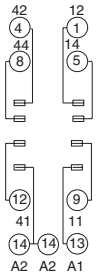
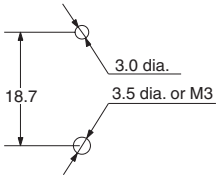
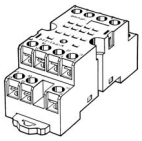
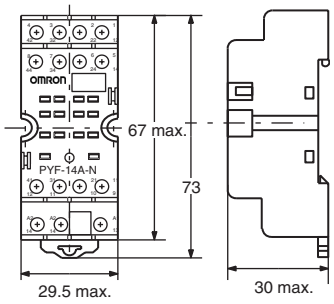
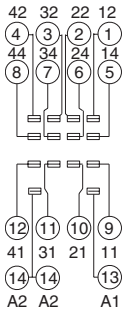
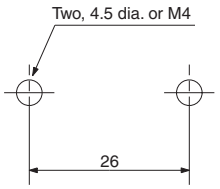
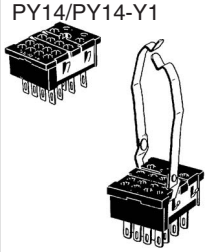
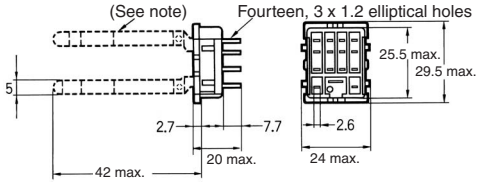
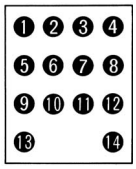
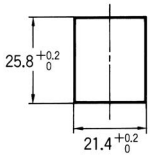
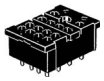
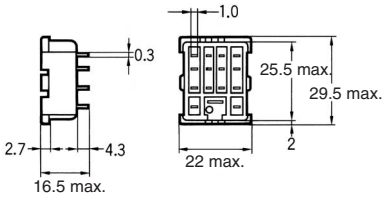
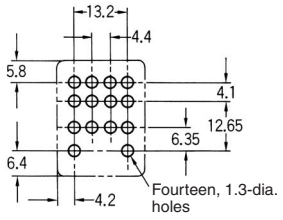
■ DIN Rail Track and Accessories

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

■ Dimensions

Unit: mm (inch)

Socket	Dimensions	Terminal arrangement/ internal connections (top view)	Mounting holes
PYF08A-E 			 (TOP VIEW) **Note:** Track mounting is also possible.
PYF14A-E 			 (TOP VIEW) **Note:** Track mounting is also possible.
PY08/PY08-Y1 	 **Note:** The PY08-Y1 includes sections indicated by dotted lines.		
PY08-02 			

Socket	Dimensions	Terminal arrangement/ internal connections (top view)	Mounting holes
PYF08A-N 			 **Note:** Track mounting is also possible.
PYF14A-N 			 **Note:** Track mounting is also possible.
PY14/PY14-Y1 	 **Note:** The PY14-Y1 includes sections indicated by dotted lines.		
PY14-02 			

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

Power Relay
G2A

CSM_G2A_DS_E_3_1

Highly Reliable, 4-pole Miniature Relay Ideal for Sequence Control

- Card lift-off employed for greater life and stable quality.
- Long endurance and stable quality are assured by card lift-off system.
- Mounting interchangeability with MY-series Relays.
- Operation indicator mechanism incorporated for at-a-glance monitoring of ON/OFF operation. In addition, a built-in operation indicator model is also included in this Relay Series.

Ordering Information

Classification	Plug-in terminals/Solder terminals	PCB terminals
Standard model	G2A-432A	G2A-4321P
Arc barrier equipped model	G2A-432AY	---
Built-in diode model	G2A-432A-D	G2A-4321P-D
Built-in operation indicator model	G2A-432A-N	---
Built-in operation indicator and diode model	G2A-432A-N1	---

Note: 1. When placing your order, add the coil voltage rating listed in the specifications to the model number as shown below.
Example: G2A-432A 100/110 VAC
└── Rated coil voltage
2. Built-in diode model and the operating coil of the G2A-432A-N1 are available only with DC ratings.
3. The Latching Relay (G2AK) and Fully sealed Relay (G2A-434A) developed based on the G2A are also available in this series.

Model Number Legend

G2A-□□□□□-□
1 2 3 4 5 6

1. Number of Poles and Contact Form
4: 4PDT

2. Contact Type
3: Crossbar bifurcated

3. Enclosure Construction
2: Casing

4. Terminal Shape
A: Plug-in
1P: PCB

5. Safety Breaking Mechanism
None: No
Y: Arc barrier

6. Special Element
None: Standard
D: Built-in diode
N: Built-in operation indicator
N1: Built-in operation indicator and diode

Note: 1. The coil of the G2A-432A-N1 or a built-in diode model operates with DC only.
2. The G2A Series include the G2A-434A Power Relay and G2AK Latching Relay. Refer to *G2A-434* and *G2AK* for details.

■ Relays Other than Standard Models

Arc barrier equipped	Built-in diode	Built-in operation indicator
G2A-432AY	**G2A-432A-D**	**G2A-432A-N**
The arc barrier equipped model is a relay designed to prevent arc short-circuiting between phases and can be used in a circuit which has potential difference between phases. The switching power of such a circuit with potential difference must be limited to less than 1/2 the rated load when using this Relay.	The built-in diode model is a relay which incorporates a diode for absorption of the reverse voltage that may be generated when the coil is de-energized. Because the release time of this model is longer than the standard model, pay adequate attention to this point in designing a circuit. Also, pay attention to the + polarity of the coil. The reverse-breakdown voltage of the diode is 1,000 V.	The built-in operation indicator model has a newly added operation indicator to the conventional operation indication mechanism and facilitates operation monitoring without being affected by ambient illumination. With the -N model (rated at 16, 12, 24, and 48 VDC) and -N1 model rated at 6, 12, 24, 48, and 100 VDC), pay attention to the + polarity of the coil.

■ Accessories

Sockets

Track mounting Screw terminals	Front-connecting Socket	Solder terminals		Wire-wrap terminals		PCB terminals
		Without Hold-down Clip	With Hold-down Clip	Without Hold-down Clip	With Hold-down Clip	
PYF14A	PYF14(-E), PYF14A-TU, PYF14T	PY14, PY14-3 (see note)	PY14-Y2	PY14QN(2)	PY14QN(2)-Y2	PY14-0, PY14-02

Note: With monitor terminal.

Relay Hold-down Clips

For Front-connecting Socket	PYC-A2
For Back-connecting Socket	PYC-3/PYC-5
For Socket Mounting Plate	PYC-2

Socket Mounting Plates

For one Socket	PYP-1
For 18 Sockets	PYP-18
For 36 Sockets	PYP-38

Specifications

■ Coil Ratings

The rated currents for some of the built-in operation indicator models differ from the values given in this table. Refer to note 5 below.

Rated voltage	Rated current		Coil resistance	Coil inductance (ref. value)		Must operate	Must release	Max. voltage	Power consumption
	50 Hz	60 Hz		Armature OFF	Armature ON	% of rated voltage			
6 VAC	295 mA	233 mA	8.9 Ω	0.048 H	0.065 H	80 % max.	30 % min.	110 %	Approx. 1.4 VA
12 VAC	148 mA	117 mA	34 Ω	0.166 H	0.257 H				
24 VAC	73 mA	58 mA	136 Ω	0.691 H	1.04 H				
50 VAC	35 mA	28 mA	530 Ω	3.08 H	4.53 H				
100/ 110 VAC	17.7/ 21.4 mA	14/ 16.8 mA	2,200 Ω	12.42/ 12.38 H	18/16.4 H				
200/ 220 VAC	8.9/ 10.8 mA	7/8.4 mA	8,800 Ω	42.2/ 41.8 H	72/65.5 H				
6 VDC	176 mA		34 Ω	0.14 H	0.26 H		10 % min.	110 %	Approx. 1.1 W
12 VDC	88 mA		136 Ω	0.6 H	1.0 H				
24 VDC	45 mA		530 Ω	2.7 H	4.6 H				
48 VDC	22 mA		2,200 Ω	11 H	19 H				
100 VDC	11.4 mA		8,800 Ω	43 H	73 H				

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

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

3. Performance characteristic data is measured at a coil temperature of 23°C.

4. The maximum voltage is one that is applicable instantaneously to the Relay coil at an ambient temperature of 23°C and not continuously.

5. For built-in operation indicator models rated at 6, 12, and 24 VDC, add an LED current of approx. 5 mA to the rated currents.

■ Contact Ratings

Load	Resistive load (cosϕ = 1)	Inductive load (cosϕ = 0.4) (L/R = 7 ms)
Contact type	Crossbar bifurcated	
Contact material	Movable: AgAu-clad AgPd Fixed: AgPd	
Rated load	0.3 A at 110 VAC 0.5 A at 24 VDC	0.2 A at 110 VAC 0.3 A at 24 VDC
Rated carry current	3 A	
Max. switching power	250 VAC, 125 VDC	

■ Characteristics

Classification	Standard/Acr barrier equipped/Built-in operation indicator models (G2A-□-N)	Built-in diode/Built-in operation indicator models (G2A-□-N1)
Contact resistance (see note 2)	100 mΩ max.	
Operate time (see note 3)	15 ms max.	
Release time (see note 3)	15 ms max.	30 ms max.
Max. operating frequency	Mechanical: 18,000 operations/hour Electrical: 1,800 operations/hour (under rated load)	
Insulation resistance (see note 4)	100 MΩ min. (at 500 VDC)	
Dielectric strength	1,500 VAC, 50/60 Hz for 1 min between coil and contacts and contacts of different polarities (700 VAC between contacts of same polarity)	
Vibration resistance	Destruction: 10 to 55 to 10 Hz, 0.75 mm single amplitude (1.5 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: 100 m/s^2	
Error rate (level P) (Reference value) (see note 6)	1 mA at 100 mVDC	
Endurance	Mechanical: 100,000,000 operations min. (at operating frequency of 18,000 operations/hour) Electrical: 5,000,000 operations min. (under rated load and at operating frequency of 1,800 operations/hour) (see note 5)	
Ambient temperature	Operating:–10°C to 40°C (with no icing or condensation)	
Ambient humidity	Operating:5% to 85%	
Weight	Approx. 38 g	

Note: 1. The data shown above are initial values.

2. The contact resistance was measured with 0.1 A at 5 VDC using the voltage drop method.

3. The operate or release time was measured with the rated voltage imposed with any contact bounce ignored at an ambient temperature of 23°C.

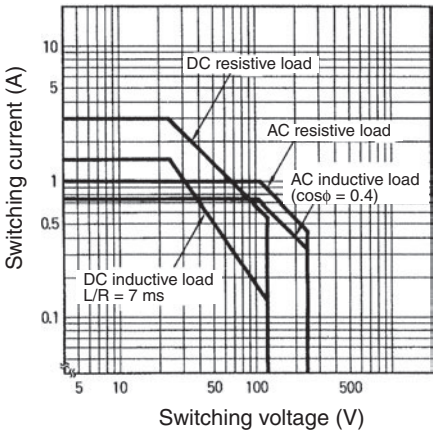
4. The insulation resistance was measured with a 500-VDC megger applied to the same places as those used for checking the dielectric strength.

5. The electrical endurance was measured at an ambient temperature of 23°C.

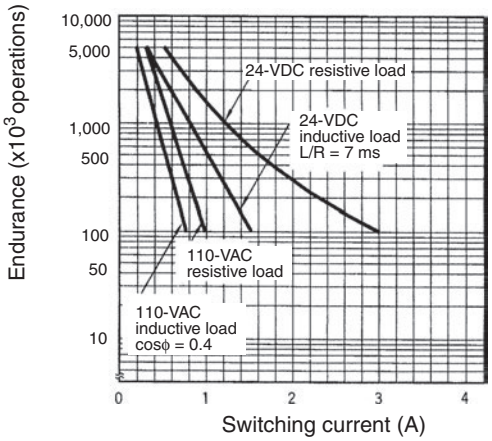
6. This value was measured at a switching frequency of 60 operations per minute.

Engineering Data

Maximum Switching Power

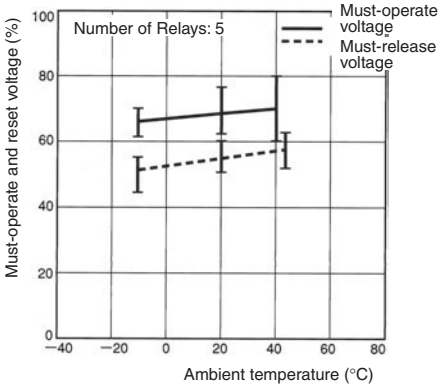


Endurance

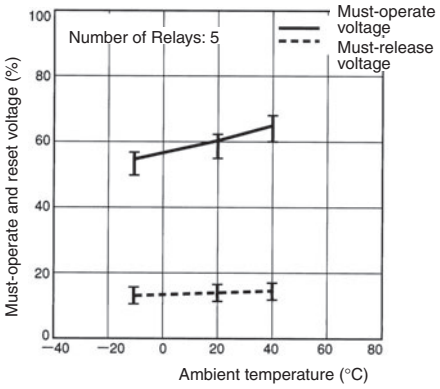


Ambient Temperature vs. Must-operate and Must-release Voltage

G2A AC (60 Hz)

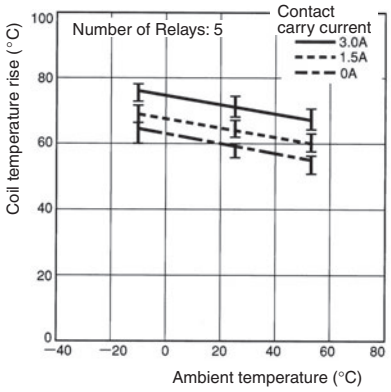


G2A DC

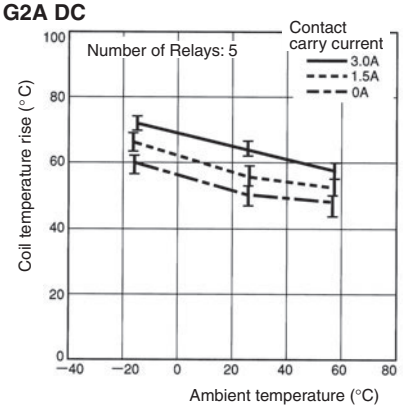


Ambient Temperature vs. Coil Temperature Rise

G2A 110 VAC (50 Hz)

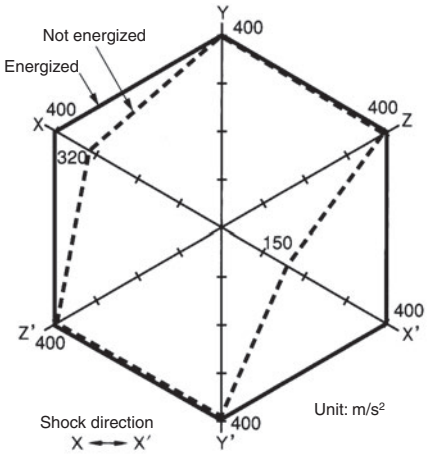


G2A DC

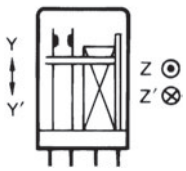


Malfunctioning Shock

G2A-432A 100/110 VAC



Shock direction
X ⟷ X'

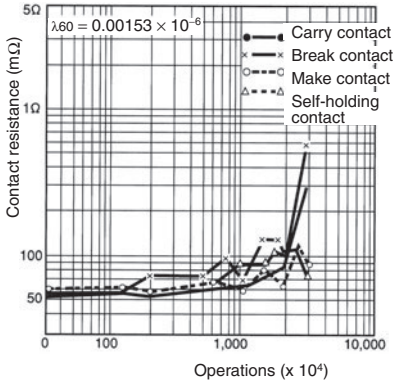


Number of samples = 5

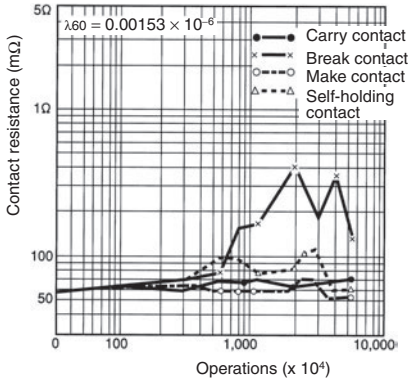
Measurement conditions: Impose a shock of 100 m/s² in the ±X, ±Y, and ±Z directions three times each with the Relay energized and not energized to check the shock values that cause the Relay to malfunction.

Contact Reliability (JIS C 4530 Allen-Bradley Test Circuit)

100 VAC

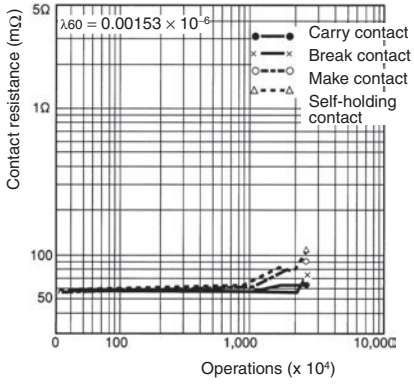


24 VDC



Contact Reliability (Improved Allen-Bradley Test Circuit)

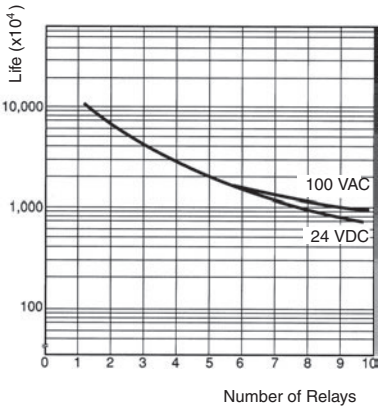
Contact load: 1 mA at 5 VDC (resistive load)
Failure criterion contact resistance: 100 Ω



Coil Self-load Life Curve

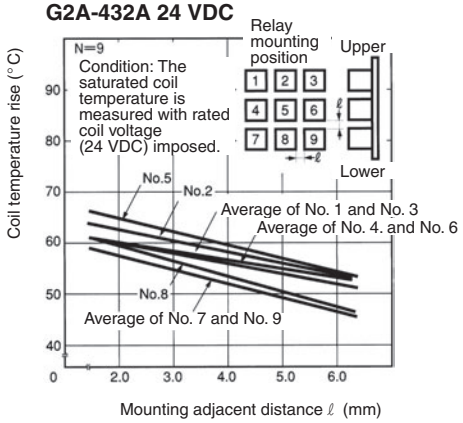
(Unit: mA)

Model	Specifications	No. of Relays				
		1	2	3	5	10
G2A-432A	100 VAC, 60 Hz	14	28	42	70	140
	24 VDC	45	90	135	225	450

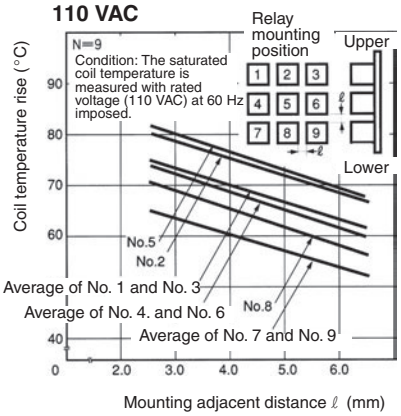


Relay Mounting Adjacent Distance vs. Coil Temperature Rise

G2A-432A 24 VDC

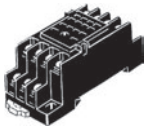


110 VAC



Accessories (Order Separately)

Connecting Sockets

Front-connecting Socket	Back-connecting Socket					
DIN track/screw mounting	Solder terminals		Wire-wrap terminals		PCB terminals	
PYF14A(-E) PYF14A-TU PYF14T	PY14 PY14-Y3	PY14-Y2 (with Relay Hold-down Clip)	PY14QN(2)	PY14QN(2)-Y2 (with Relay Hold-down Clip)	PY14-0	PY14-02
						

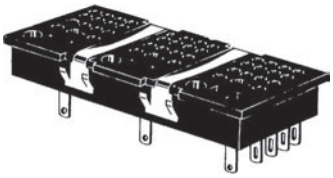
Note: 1. The PYF□A-TU is a high-humidity relay with nickel-plated rustproof terminal screws that are the same as the PYF□A in size.

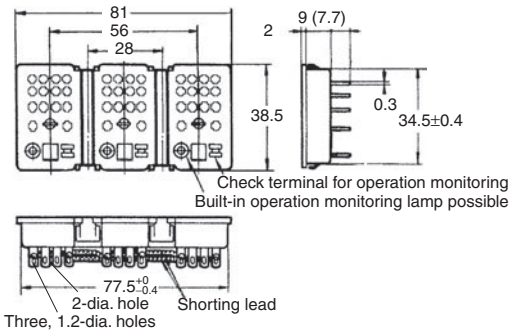
2. The PYF14T is slightly different from the PYF14A(-TU) in shape and size.

3. The PYF□A-E is a finger-protection model, for which round terminals are not available. Use fork-shaped terminals or equivalent ones instead.

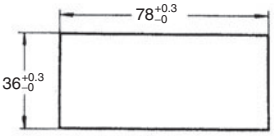
PY14-3 Back-connecting Socket

(with check terminals for operation monitoring)



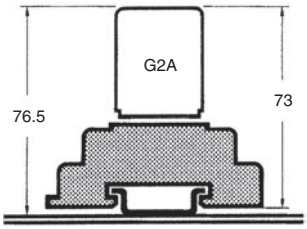


Panel Cutout



Relay Mounting Height with Socket

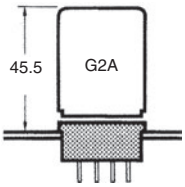
With Front-connecting Socket



PYF14A

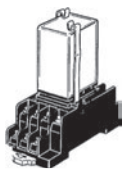
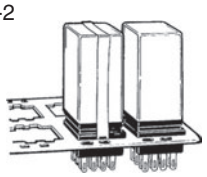
Note: PYF14A can be used for both DIN track mounting and screw mounting.

With Back-connecting Socket



PY14 Socket

Relay Hold-down Clips

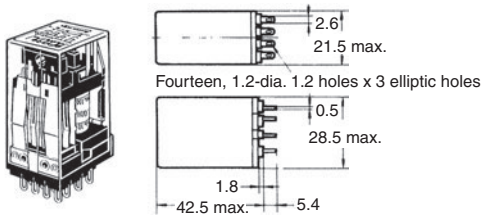
For Front-connecting Socket	For Back-connecting Socket		For Socket mounting plate
PYC-A2	PYC-3	PYC-5	PYC-2
			

Note: When using a Relay Hold-down Clip for the built-in operation indicator model, use of the PYC-A2 or PYC-5, which allows easy viewing of the indicator, is recommended.

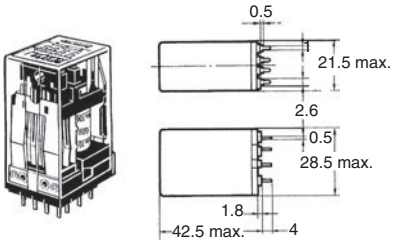
Dimensions

Note: 1. All units are in millimeters unless otherwise indicated.
2. Dimensional tolerances are ±0.1 mm.

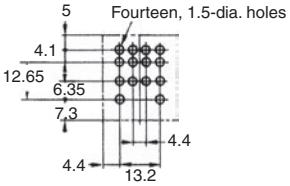
Solder Terminal Models



PCB Terminal Models

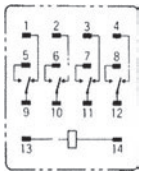


Mounting Holes on PCB (Bottom View)

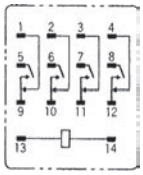


Terminal Arrangement/Internal Connections (Bottom View)

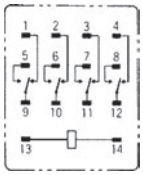
Standard Models



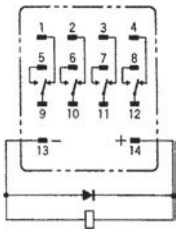
Make-before-break Contact Models



Arc Barrier Equipped Models

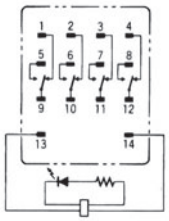
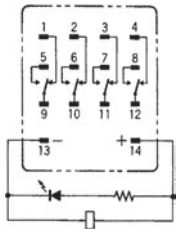
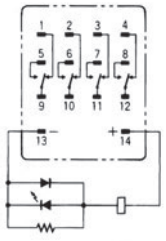


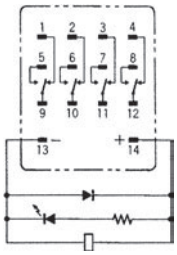
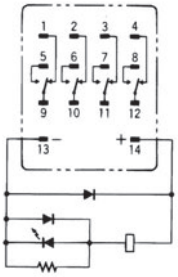
Built-in Diode Models



Built-in Operation Indicator Models

Color of operation indicator
AC model: Red
DC model: Green

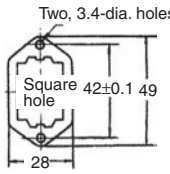
G2A-432A-N		
100/110, 200/220 VAC 6, 12, 24, 50 VDC	6, 12, 24 VDC	48, 100 VDC
		

G2A-432A-N1	
6, 12, 24 VDC	48, 100 VDC
	

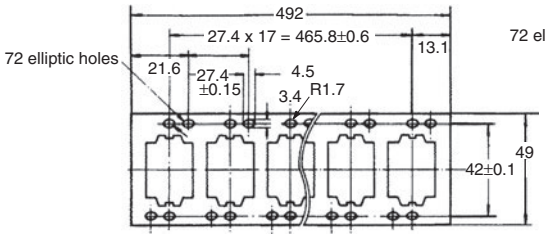
Note: Do not reverse the polarity of the coil of DC Relays that have a built-in indicator or diode.

Socket Mounting Plates (t = 1.6 mm)
Use any of these plates when mounting two or more Sockets side-by-side

PYP-1 (for Single Socket Mounting)

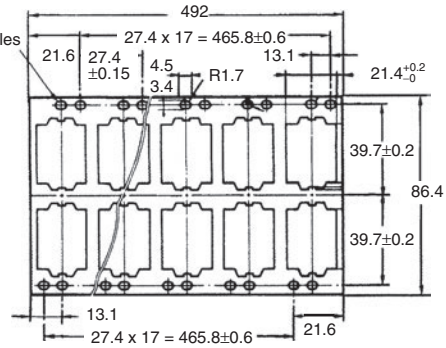


PYP-18 (for Mounting 18 Sockets)



Note: PYP-18 and PYP-36 can be cut to a desired length for mounting less than 18 or 36 Sockets, respectively.

PYP-36 (for Mounting 36 Sockets)



Safety Precautions

Refer to *Safety Precautions for All Relays*.

A DC coil model with a built-in indicator or built-in diode has coil polarity. Be sure to wire the terminals correctly, otherwise the diode may be broken or the operating indicator may not be lit. Furthermore, as a result of the short-circuiting of the built-in diode, the devices in the circuit may be damaged.

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

In the interest of product improvement, specifications are subject to change without notice.

Read and Understand This Catalog

Please read and understand this catalog before purchasing the products. Please consult your OMRON representative if you have any questions or comments.

Warranty and Limitations of Liability

WARRANTY

OMRON's exclusive warranty is that the products are free from defects in materials and workmanship for a period of one year (or other period if specified) from date of sale by OMRON.

OMRON MAKES NO WARRANTY OR REPRESENTATION, EXPRESS OR IMPLIED, REGARDING NON-INFRINGEMENT, MERCHANTABILITY, OR FITNESS FOR PARTICULAR PURPOSE OF THE PRODUCTS. ANY BUYER OR USER ACKNOWLEDGES THAT THE BUYER OR USER ALONE HAS DETERMINED THAT THE PRODUCTS WILL SUITABLY MEET THE REQUIREMENTS OF THEIR INTENDED USE. OMRON DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED.

LIMITATIONS OF LIABILITY

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In no event shall the responsibility of OMRON for any act exceed the individual price of the product on which liability is asserted.

IN NO EVENT SHALL OMRON BE RESPONSIBLE FOR WARRANTY, REPAIR, OR OTHER CLAIMS REGARDING THE PRODUCTS UNLESS OMRON'S ANALYSIS CONFIRMS THAT THE PRODUCTS WERE PROPERLY HANDLED, STORED, INSTALLED, AND MAINTAINED AND NOT SUBJECT TO CONTAMINATION, ABUSE, MISUSE, OR INAPPROPRIATE MODIFICATION OR REPAIR.

Application Considerations

SUITABILITY FOR USE

OMRON shall not be responsible for conformity with any standards, codes, or regulations that apply to the combination of products in the customer's application or use of the products.

At the customer's request, OMRON will provide applicable third party certification documents identifying ratings and limitations of use that apply to the products. This information by itself is not sufficient for a complete determination of the suitability of the products in combination with the end product, machine, system, or other application or use.

The following are some examples of applications for which particular attention must be given. This is not intended to be an exhaustive list of all possible uses of the products, nor is it intended to imply that the uses listed may be suitable for the products:

- Outdoor use, uses involving potential chemical contamination or electrical interference, or conditions or uses not described in this catalog.
- Nuclear energy control systems, combustion systems, railroad systems, aviation systems, medical equipment, amusement machines, vehicles, safety equipment, and installations subject to separate industry or government regulations.
- Systems, machines, and equipment that could present a risk to life or property.

Please know and observe all prohibitions of use applicable to the products.

NEVER USE THE PRODUCTS FOR AN APPLICATION INVOLVING SERIOUS RISK TO LIFE OR PROPERTY WITHOUT ENSURING THAT THE SYSTEM AS A WHOLE HAS BEEN DESIGNED TO ADDRESS THE RISKS, AND THAT THE OMRON PRODUCTS ARE PROPERLY RATED AND INSTALLED FOR THE INTENDED USE WITHIN THE OVERALL EQUIPMENT OR SYSTEM.

PROGRAMMABLE PRODUCTS

OMRON shall not be responsible for the user's programming of a programmable product, or any consequence thereof.

Disclaimers

CHANGE IN SPECIFICATIONS

Product specifications and accessories may be changed at any time based on improvements and other reasons.

It is our practice to change model numbers when published ratings or features are changed, or when significant construction changes are made. However, some specifications of the products may be changed without any notice. When in doubt, special model numbers may be assigned to fix or establish key specifications for your application on your request. Please consult with your OMRON representative at any time to confirm actual specifications of purchased products.

DIMENSIONS AND WEIGHTS

Dimensions and weights are nominal and are not to be used for manufacturing purposes, even when tolerances are shown.

PERFORMANCE DATA

Performance data given in this catalog is provided as a guide for the user in determining suitability and does not constitute a warranty. It may represent the result of OMRON's test conditions, and the users must correlate it to actual application requirements. Actual performance is subject to the OMRON Warranty and Limitations of Liability.

ERRORS AND OMISSIONS

The information in this document has been carefully checked and is believed to be accurate; however, no responsibility is assumed for clerical, typographical, or proofreading errors, or omissions.

2010.8

In the interest of product improvement, specifications are subject to change without notice.

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Omron:

PYF14T PY14-0 PYC-3

Miniature Power Relays
MY(S)

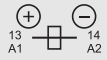
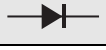
MY(S) Versatile plug-in Relay

- 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

⚠ **Refer to the Common Relay Precautions and Safety Precautions on page 34.**

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

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	
Type 1 	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	---
	Lactching (coil latching)	DPDT	---	---	MY2K-US	---
	Hermetic	4PDT	---	---	MY4H	---
		4PDT (Bifurcated)	---	---	MY4ZH	---
Type 2 	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 Polality.

Refer to *Connection Socket and Mounting Bracket Selection Table on page 25* in *Options* for information on the possible combinations of Models with Plug-in Terminals and Sockets.

Contents

Model Number Structure 1
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Detailed Information on Models Certified for Safety Standards, MY2(S)/MY4(S)/MY4Z(S) 8
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Safety Precautions 34

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

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

MY2ZN, MY□F, MY4(Z)H

Item / Rated voltage (V)		Rated current (mA)		Coil resistance (Ω)	Coil inductance (H)		Must-operate voltage (V)	Must-release voltage (V)	Maximum voltage (V)	Power consumption (VA, W)
		50 Hz	60 Hz		Armature OFF	Armature ON				
AC	12	106.5	91	46	0.17	0.33	80% max.*1	30% min.*2	110% of rated voltage	Approx. 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 φ = 1)	Inductive load (cos φ = 0.4, L/R = 7 ms)	Resistive load (cos φ = 1)	Inductive load (cos φ = 0.4, L/R = 7 ms)	Resistive load (cos φ = 1)	Inductive load (cos φ = 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 μA	

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

Characteristics

Item	All Relays
Contact resistance	100 mΩ max. (50 mΩ: 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 MΩ 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.

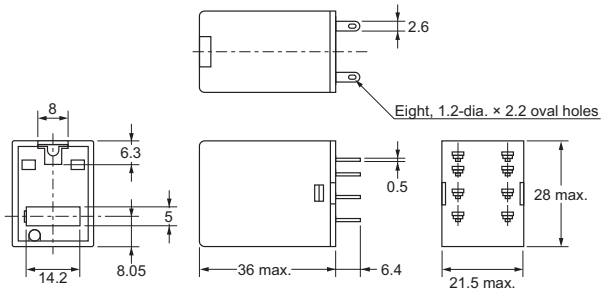
MY(S)

Dimensions

(Unit: mm)

List of Models

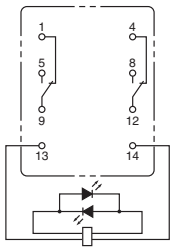
MY2□□(S) Series



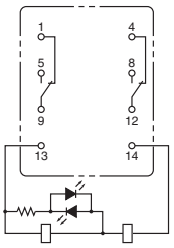
Note: The picture is lockable test button type.

Terminal Arrangement/Internal Connections (Bottom View)

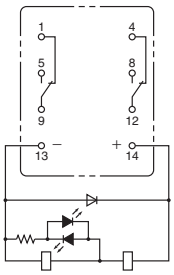
MY2IN(S)
(AC Model)



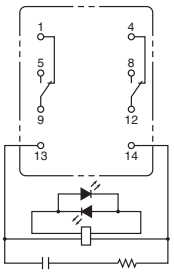
MY2IN(S)
(DC Models)



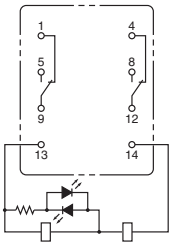
MY2IN-D2(S)
(DC Models Only)



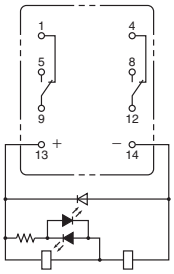
MY2IN-CR
(AC Models Only)



MY2IN1(S)
(DC Models)



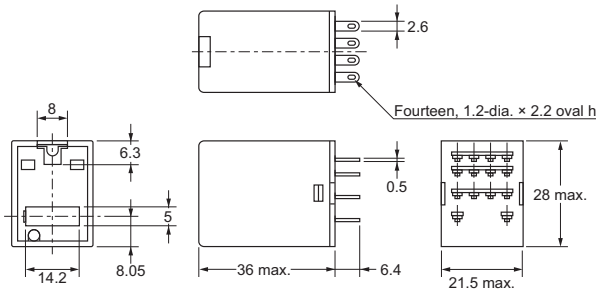
MY2IN1-D2(S)
(DC Models Only)



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

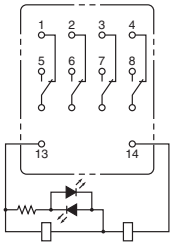
MY4□□(S) series

Note: The picture is lockable test button type.

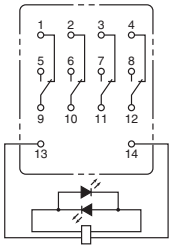


Terminal Arrangement/Internal Connections (Bottom View)

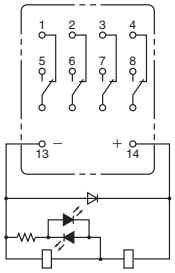
MY4(Z)IN(S)
(DC Models)



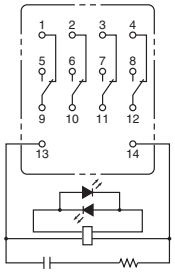
MY4(Z)IN(S)
(AC Models)



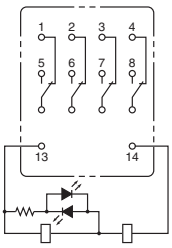
MY4(Z)IN-D2(S)
(DC Models Only)



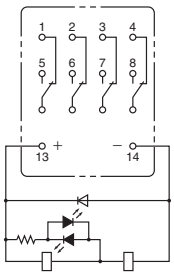
MY4(Z)IN-CR(S)
(AC Models Only)



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



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

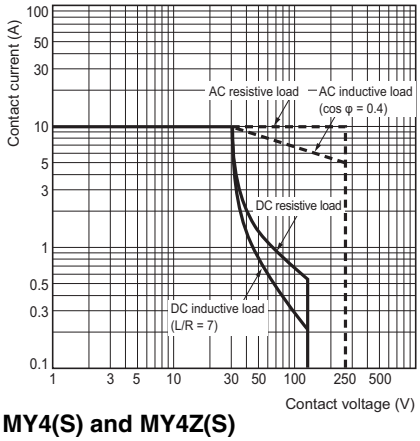


Note: For the DC models, check the coil polarity when wiring and wire all connections correctly.

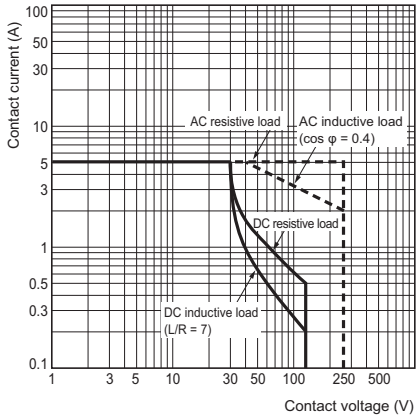
Engineering Data MY2(S)/ MY4(S)/MY4Z(S)

Maximum Switching Capacity

MY2(S)

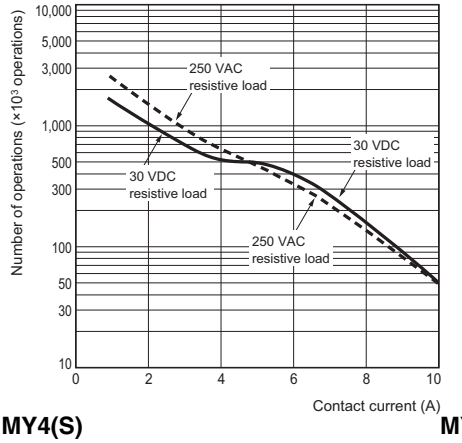


MY4(S) and MY4Z(S)

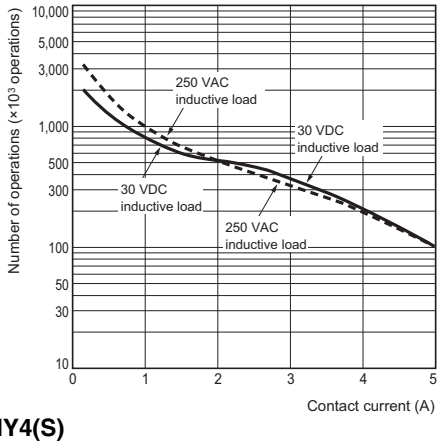


Endurance Curve

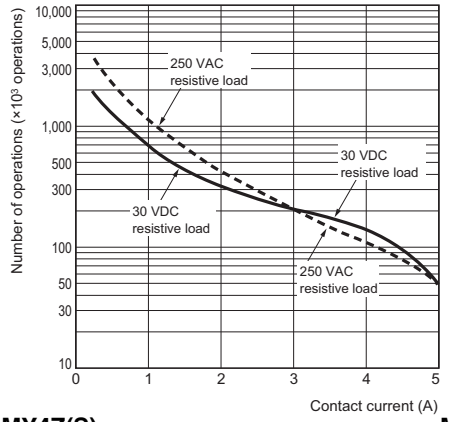
MY2(S)



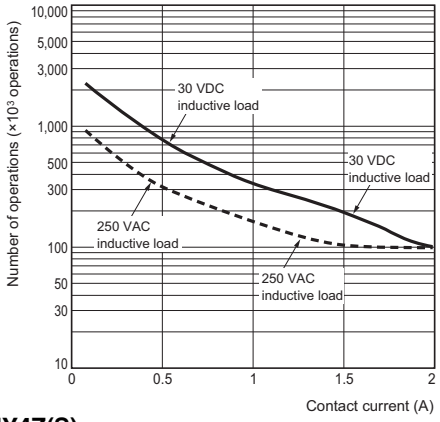
MY2(S)



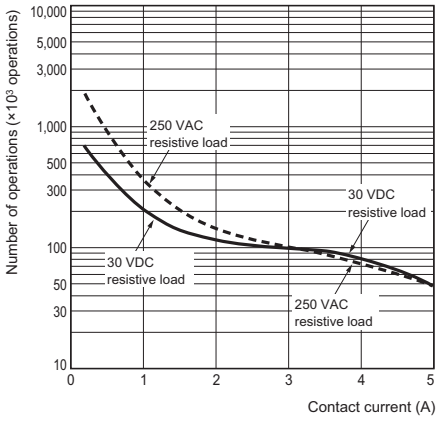
MY4(S)



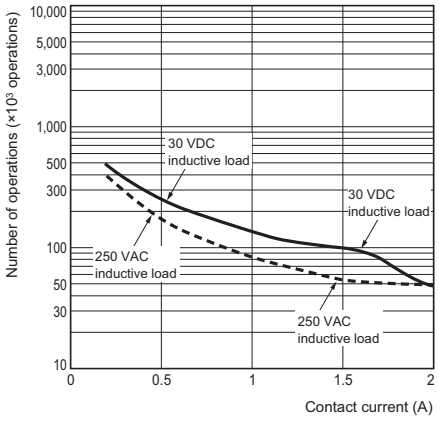
MY4(S)



MY4Z(S)

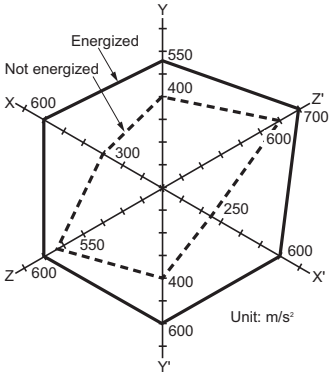


MY4Z(S)



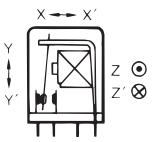
Common Specifications for MY2(S)/MY4(S)/MY4Z(S)

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

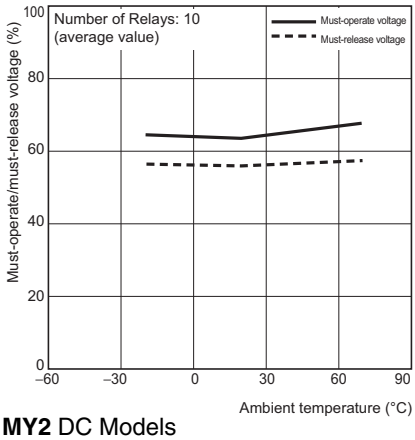
Shock direction



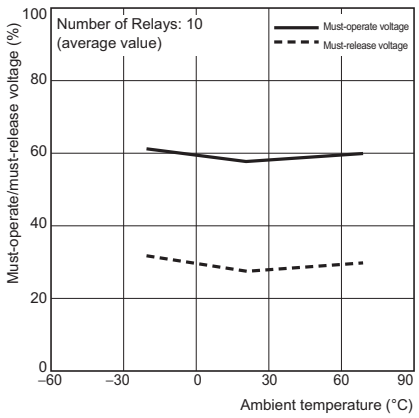
Engineering Data MY(S) (MY2ZN, MY□F)

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

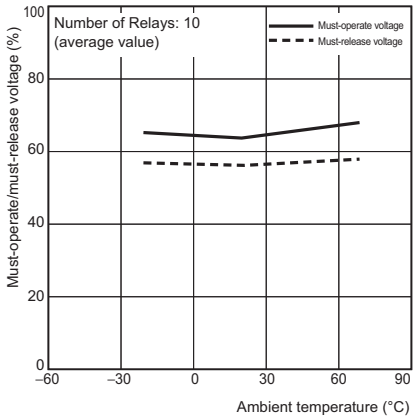
MY2 AC Models



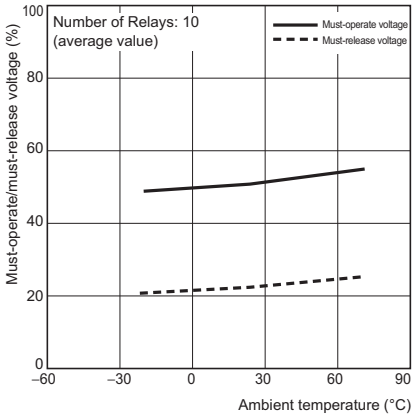
MY2 DC Models



MY4 AC Models

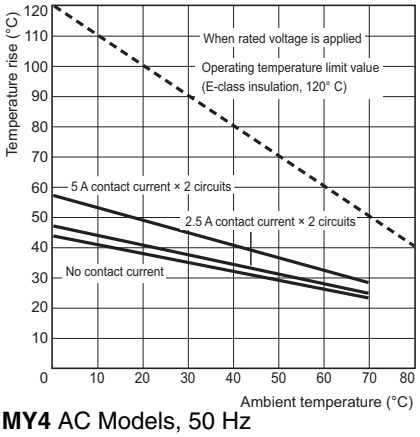


MY4 DC Models

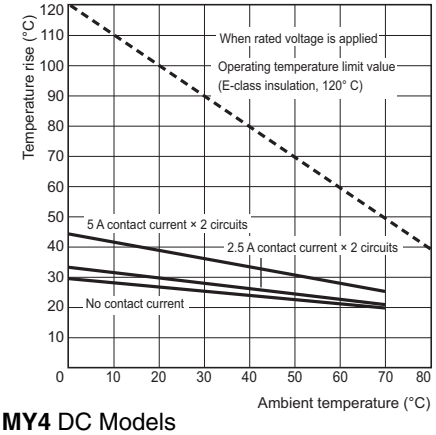


Ambient Temperature vs. Coil Temperature Rise

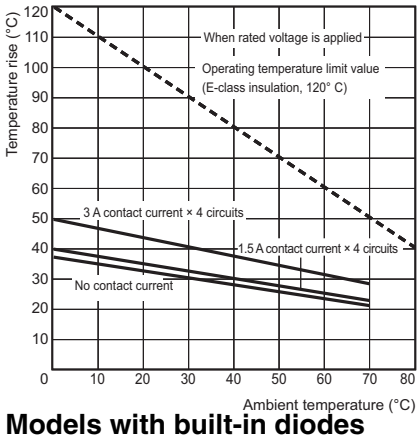
MY2 AC Models, 50 Hz



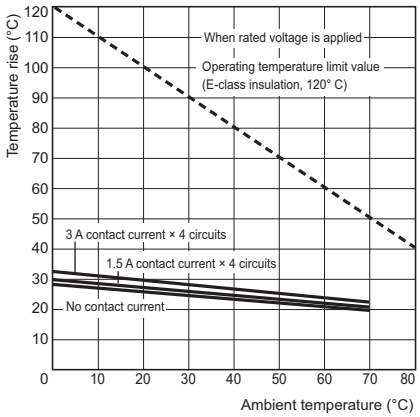
MY2 DC Models



MY4 AC Models, 50 Hz



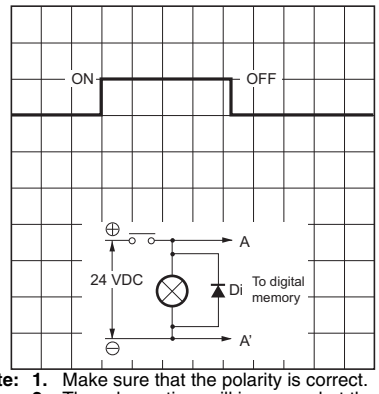
MY4 DC Models



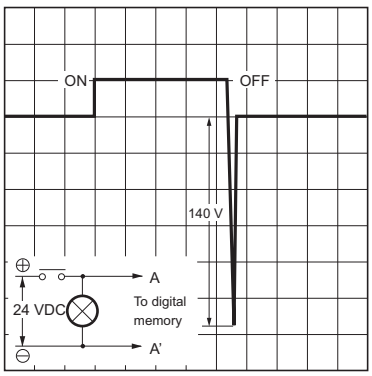
Models with built-in diodes

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

With Diode



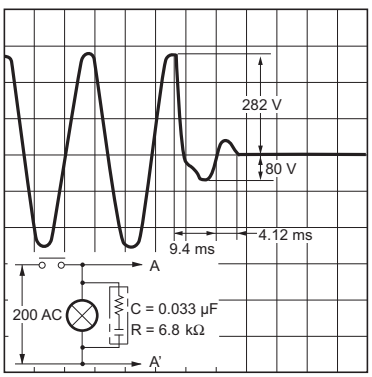
Without Diode



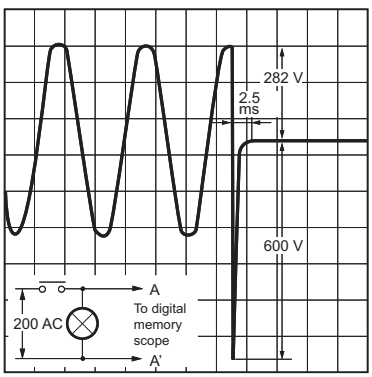
Note: **1.** Make sure that the polarity is correct.
2. The release time will increase, but the 20-ms specification for standard models is satisfied.
3. Diode properties:The diode has a reversed dielectric strength of 1,000 V.
Forward current: 1 A

Models with Built-in CR Circuits

With CR



Without CR



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		1,000
			1/8HP, 265 VAC		
			1/10HP, 120 VAC		
			B300 Pilot Duty (Same polarity)		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 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		1,000
			1/8HP, 265 VAC		
			1/10HP, 120 VAC		
			B300 Pilot Duty (Same polarity)		6,000
		4PDT	5A, 240 VAC (General Use) (Same polarity)		6,000
			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)		1,000
			1/10HP, 120 VAC (Same polarity)		
			B300 Pilot Duty (Same polarity)		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 φ = 0.4, L/R = 7 ms)
Rated load	5 A at 220 VAC 5 A at 24 VDC	2 A at 220 VAC 2 A at 24 VDC
Rated carry current	5 A	
Maximum contact voltage	250 VAC, 125 VDC	
Maximum contact current	5 A	
Contact 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**	2,000 VAC at 50/60 Hz for 1 min.
	Between contacts of different polarity	
	Between contacts of the same polarity	1,000 VAC at 50/60 Hz for 1 min.
Vibration resistance	**Destruction**	10 to 55 to 10 Hz, 0.5-mm single amplitude (1.0-mm double amplitude)
	Malfunction	10 to 55 to 10 Hz, 0.5-mm single amplitude (1.0-mm double amplitude)
Shock resistance	**Destruction**	1,000 m/s^2
	Malfunction	200 m/s^2
Endurance	**Mechanical**	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

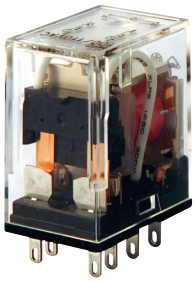
Note: These are initial values.
✻1. Measurement conditions: 1 A at 5 VDC using the voltage drop method.
✻2. Measurement conditions: With rated operating power applied.
Ambient temperature condition: 23° C
✻3. Measurement conditions: For 500 VDC applied to the same location as for dielectric strength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

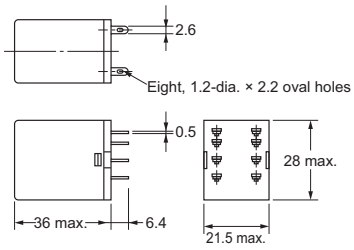
MY(S)

Dimensions

(Unit: mm)

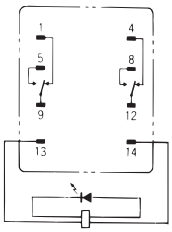
MY2ZN, MY2ZN-D2





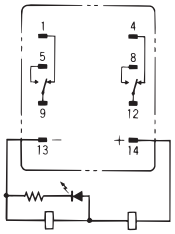
✻ For the MY2Z-CR and MY2ZN-CR, this dimension is 53 mm max.

MY2ZN
(AC Models)



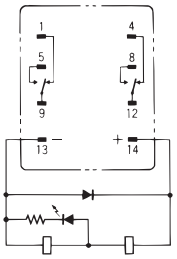
(The coil has no polarity.)

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	2,000 VAC at 50/60 Hz for 1 min.	
	Between contacts of different polarity		
	Between contacts of the same polarity	1,000 VAC at 50/60 Hz for 1 min.	
Vibration resistance	Destruction	10 to 55 to 10 Hz, 0.5-mm single amplitude (1.0-mm double amplitude)	
	Malfunction	10 to 55 to 10 Hz, 0.5-mm single amplitude (1.0-mm double amplitude)	
Shock resistance	Destruction	1,000 m/s^2	
	Malfunction	200 m/s^2	
Endurance	Mechanical	AC: 50,000,000 operations min. DC: 100,000,000 operations min. (switching frequency: 18,000 operations/h)	
	Electrical*4	500,000 operations min. (rated load, switching frequency: 1,800 operations/h)	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	

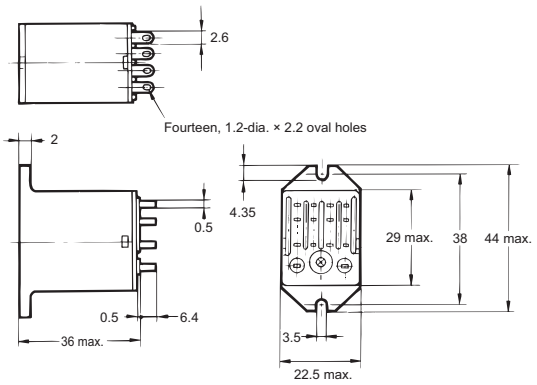
Note: These are initial values.
***1.** Measurement conditions: 1 A at 5 VDC using the voltage drop method
***2.** Measurement conditions: With rated operating power applied. Ambient temperature condition: 23° C
***3.** Measurement conditions: For 500 VDC applied to the same location as for dielectric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

Dimensions

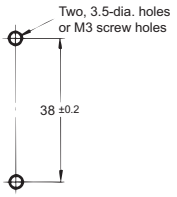
(Unit: mm)

Flange mounting
MY□F

The above figure is for the MY4F.



Mounting Hole Dimensions

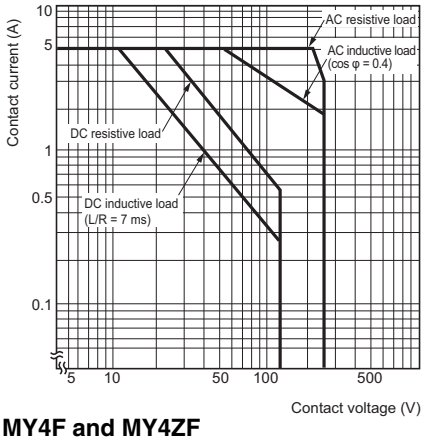


Note: Refer to the terminal arrangement and internal connections diagrams for the MY2(S), MY4(S) and MY4Z(S).

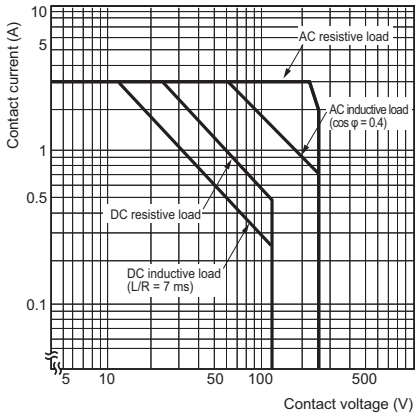
Engineering Data MY□F

Maximum Switching Capacity

MY2F

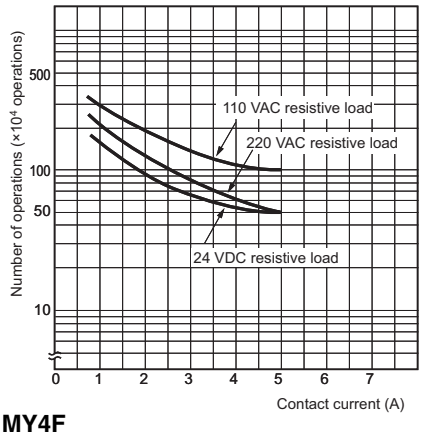


MY4F and MY4ZF

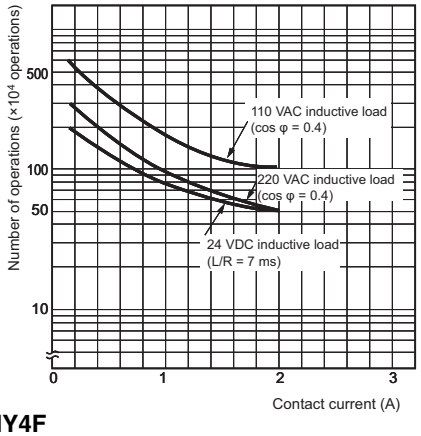


Endurance Curve

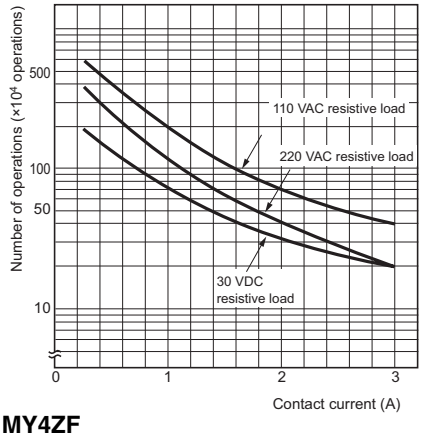
MY2F



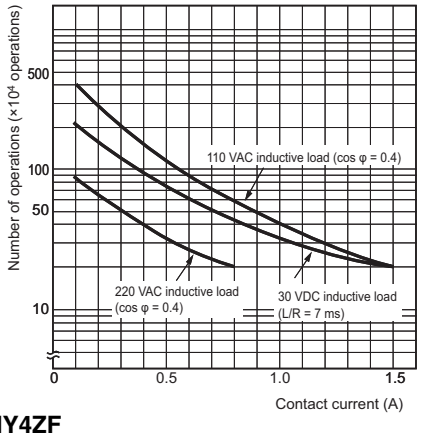
MY2F



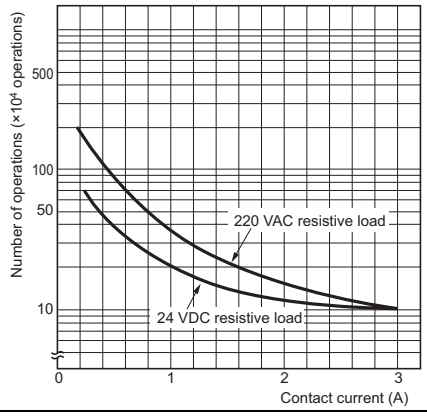
MY4F



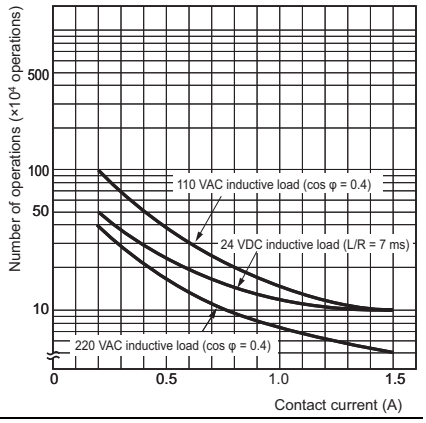
MY4F



MY4ZF

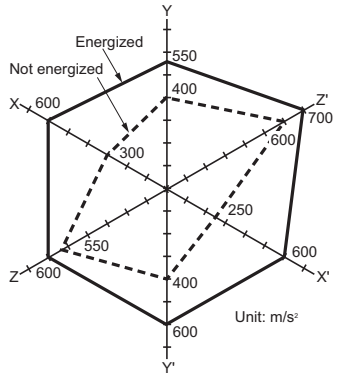


MY4ZF



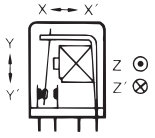
Common Specifications for MY□F

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



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)	100,000 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	1,000
			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)	
			1/6HP, 250 VAC	1,000
			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 φ = 0.4, L/R = 7 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

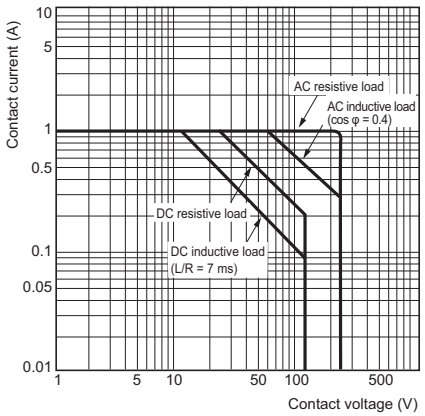
Contact resistance✻1		100 mΩ max.
Operation time✻2		20 ms max.
Release time✻2		20 ms max.
Maximum operating frequency	**Mechanical**	18,000 operations/h
	Electrical	1,800 operations/h
Insulation resistance✻3		100 MΩ
Dielectric strength	**Between coil and contacts**	2,000 VAC at 50/60 Hz for 1 min.
	Between 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

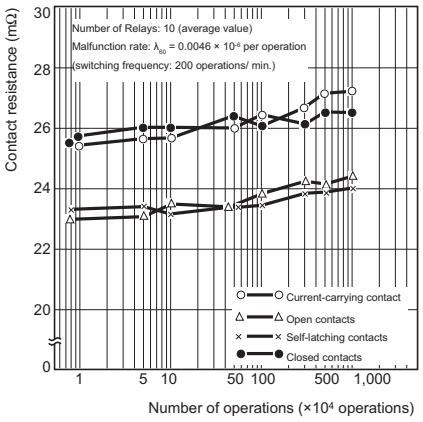
Maximum Switching Capacity

MY4Z-CBG



Contact Reliability Test (Modified Allen Bradley Circuit)

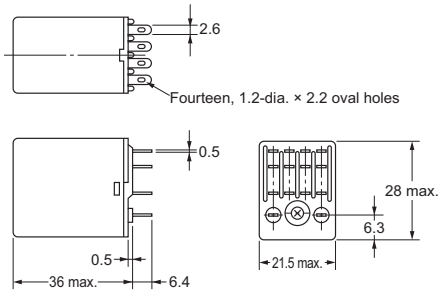
Contact load: 5 VDC, 1 mA resistive load
Malfunction criteria level: Contact resistance of 100 Ω



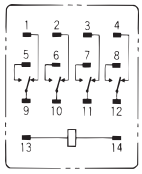
Dimensions

(Unit: mm)

MY4Z-CBG



Terminal Arrangement/Internal Connections (Bottom View)
Standard Models



(The coil has no polarity.)

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 φ = 0.4, L/R = 7 ms)
Rated load	1 A at 220 VAC, 1 A at 24 VDC	0.5 A at 220 VAC, 0.5 A at 24 VDC
Rated carry current	1 A	
Maximum 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 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
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 MΩ 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.

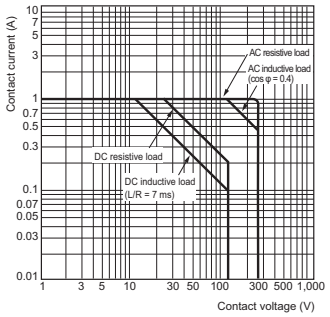
✻**4.** This value is for bifurcated contacts.

✻**5.** Ambient temperature condition: 23° C

Engineering Data

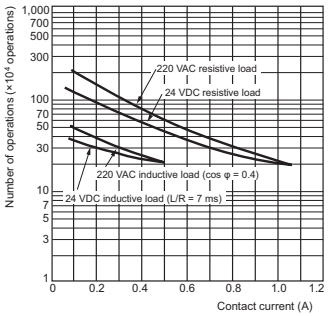
Maximum Switching Capacity

MYQ4(Z)



Endurance Curve

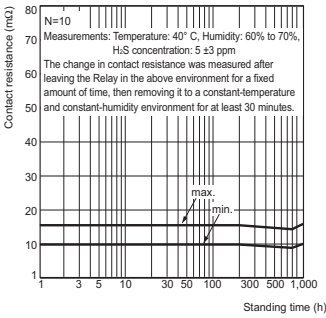
MYQ4



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

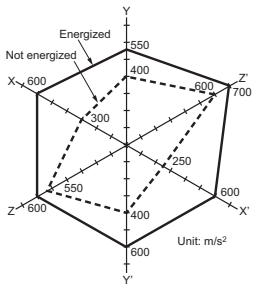
H_2S Gas Data

MYQ4



Malfunctioning Shock

MYQ4



N = 20

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

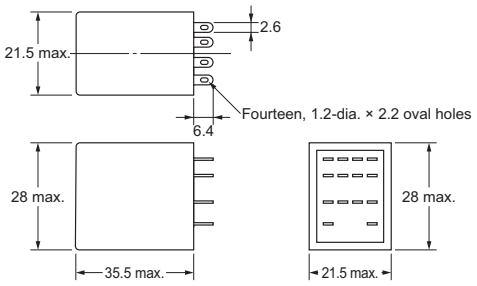
Criteria: Non-energized: 200 m/s^2
Energized: 200 m/s^2

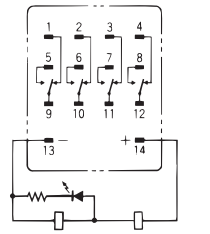
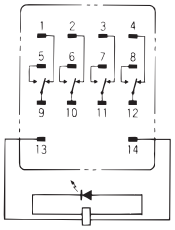
Shock direction

Dimensions

(Unit: mm)

Relays with Plug-in Terminals or Soldered Terminals
MYQ4(Z)(N)



MYQ4(Z)N	
DC Models	**AC Models**
	
(Check the coil polarity when wiring and wire all connections correctly.)	(The coil has no polarity.)

Note: **1.** An AC model has coil disconnection self-diagnosis.
2. For the DC models, check the coil polarity when wiring and wire all connections correctly.

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		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
Rated voltage (V)		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				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

Load / Item	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.

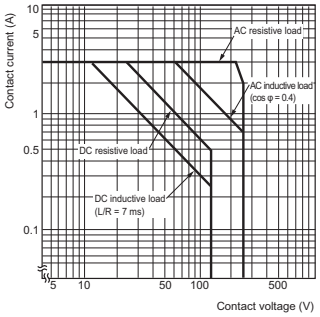
Characteristics

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

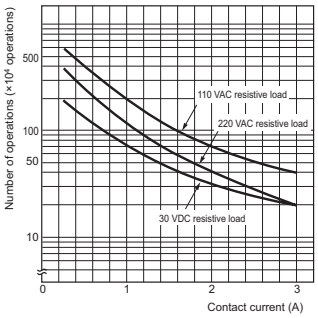
Note: The above values are initial values.
*1. Measurement conditions: 1 A at 5 VDC using the voltage drop method
*2. Measurement conditions: With rated operating power applied, not including contact bounce.
*3. Measurement conditions: For 500 VDC applied to the same location as for dielectric strength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

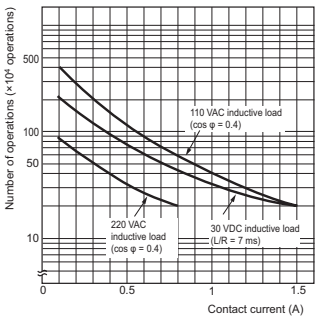
Engineering Data

MY2K
Maximum Switching Capacity

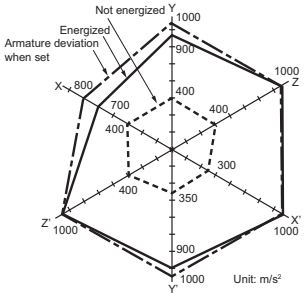


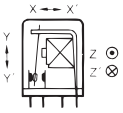
Endurance Curve





MY2K 100 VAC
Malfunctioning Shock

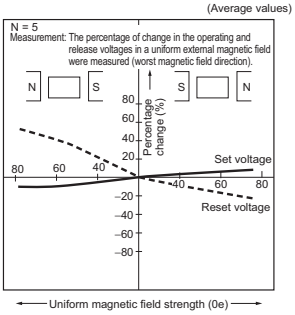




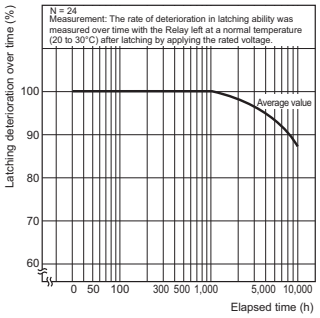
N = 20
Measurement: Shock was applied 2 times each in 6 directions along 3 axes with the Relay energized and not energized to check the shock values that cause the Relay to malfunction.

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

MY2K 24 VDC
Magnetic Interference (External Magnetic Field)



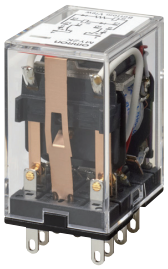
Latching Deterioration Over Time

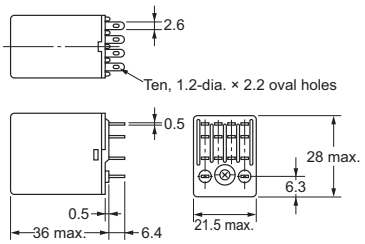


Dimensions

(Unit: mm)

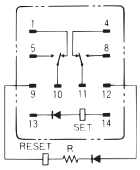
Relays with Plug-in Terminals or Soldered Terminals
MY2K





Terminal Arrangement/Internal Connections (Bottom View)

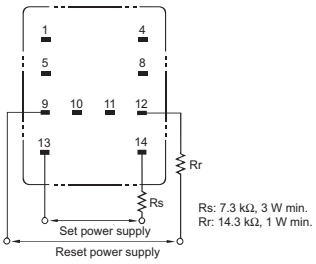
For AC



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 Rs and Rr to a 100 VAC Relay.
- Do not apply a voltage to the set and reset coils at the same time. If you apply the rated voltage to both coils simultaneously, the Relay will be set.
- The minimum pulse width in the performance column is the value for the following measurement conditions: an ambient temperature of 23° C with the rated operating voltage applied to the coil. 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.

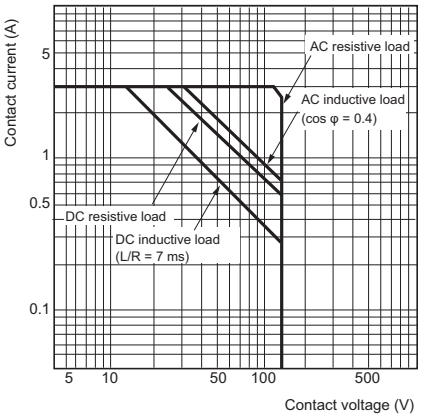
Characteristics

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*3		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

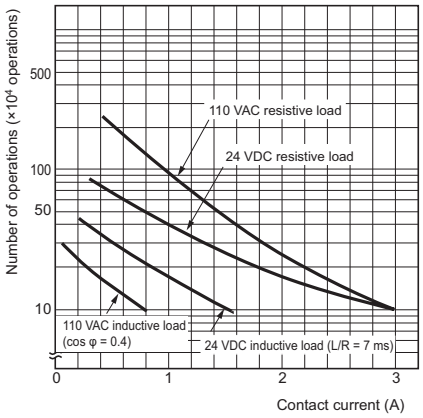
Note: The above values are initial values.
***1.** Measurement conditions: 1 A at 5 VDC using the voltage drop method
***2.** Measurement conditions: With rated operating power applied, not including contact bounce.
Ambient temperature condition: 23° C
***3.** Measurement conditions: For 500 VDC applied 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

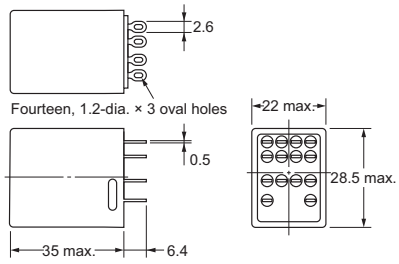


Note: The durability of bifurcated contacts is one-half that of single contacts.

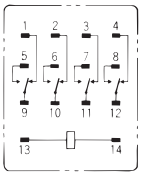
Dimensions

(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.

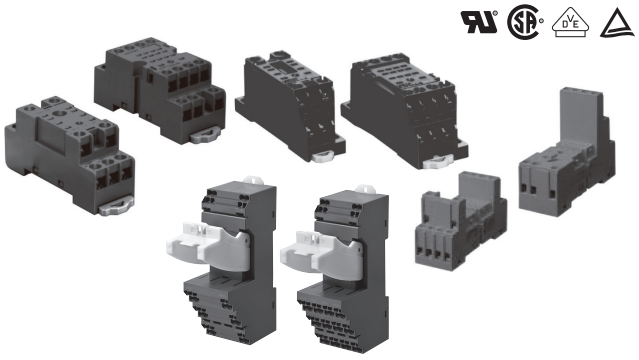
Relay Replacement

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

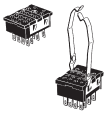
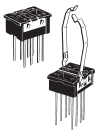
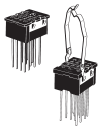
DIN-rail-mounted (DIN-rail) Socket Conforms to VDE 0106, Part 100

- 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.



Specifications

Mounting	Terminal type	No. of poles	Appearance	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		PYFZ-08-E/ PYFZ-08	10 A	2,250 VAC, 1 min	1,000 MΩ min
				PYF08A-N (see note 3)	7 A (see note 4)	2,000 VAC, 1 min	
		4		PYFZ-14-E/ PYFZ-14	6 A	2,250 VAC, 1 min	1,000 MΩ min
				PYF14A-N (see note 3)	5 A (see note 4)	2,000 VAC, 1 min	
	Rise-Up terminals	2 and 4 Common		PYF14-ESS-B	12 A	> 3 KV	> 5 MΩ
				PYF14-ESN-B			

Mounting	Terminal type	No. of poles	Appearance	Model	Carry current	Dielectric withstand voltage	Insulation resistance (see note 2)
Back-connecting	Solder terminals	2		PY08/ PY08-Y1	7 A	1,500 VAC, 1 min	1000 MΩ min.
		4		PY14/ PY14-Y1	3 A		100 MΩ min.
	Wrapping terminals	2		PY08QN/ PY08QN-Y1	7 A		
		4		PY14QN/ 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 / Terminal Type		Front-mounting Sockets (PYF□)				Back-mounting Sockets (PY□)						
		Track or screw mounting										
		Screw terminals	Screw terminals (finger protection structure)	Rise-Up terminals	Push-In Plus Terminal Block *2	Solder terminals		Wrapping terminals: Terminal length: 25 mm		Wrapping terminals: Terminal length: 20 mm		Relays with PCB Terminals *3
No. of poles	Model	(Order 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	(Order separately: Hold-down Clips) *1
8	MY2(S), MY2ZN (except for MY2K□, MY2Z□-CR)	PYFZ-08 (PYC-A1)	PYFZ-08-E (PYC-A1) PYF08A-N (PYC-A1)	PYF14-ESN-B (PYC-35-B) PYF14-ESS-B (PYC-35-B)	PYF-08-PU	PY08 (PYC-P)	PY08-Y1	PY08QN (PYC-P)	PY08QN-Y1	PY08QN2 (PYC-P)	PY08QN2-Y1	PY08-02 (PYC-P)
	MY2I(S) *4	PYFZ-08 (PYC-E1)	PYFZ-08-E (PYC-E1) PYF08A-N (PYC-E1)									
	MY2Z-□-CR *5	PYFZ-08 (Y92H-3)	PYFZ-08-E (Y92H-3) PFY08A-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	PYFZ-14 (PYC-A1)	PYFZ-14-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. 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.

*3. 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.

*4. 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.)

*5. 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.)

Terminal Covers for PYFZ-08/PYFZ-14 Sockets

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

Note: Use these covers in a combination with PYFZ-08 and PYFZ-14.

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

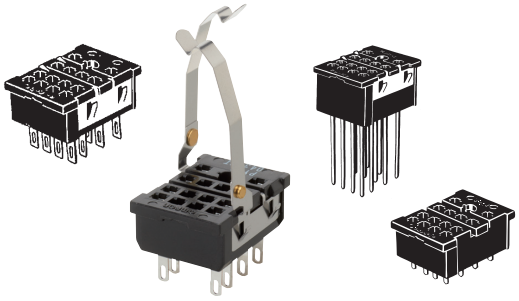
Safety Standards for Sockets

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.)
PYFZ-08-E, PYFZ-08 PYFZ-14-E, PYFZ-14	TÜV(EN 61984)	R50405329
	UL508	E87929
	CSA22.2	LR31928
PYF08A-N PYF14A-N	TÜV(EN 61984)	J50224549
	UL508	E87929
	CSA22.2	LR31928
PYF14-ESN-B PYF14-ESS-B	UL508	E244189
	CSA22.2	LR225761

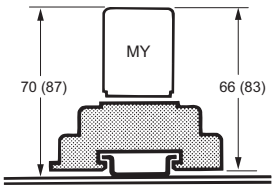
Back-connecting Sockets (PY□)

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

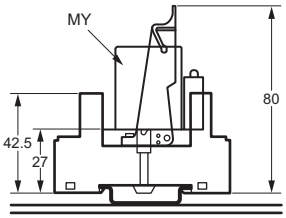


Mounting Heights with Sockets (Unit: mm)

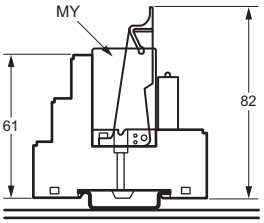
Front-mounting Sockets
Screw terminal
(PYFZ-□ (-E), PYF□A-N, PYF14-ES□-B)



PYFZ-□(-E)
PYF□A-(□)

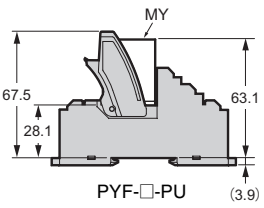


PYF14-ESN-B



PYF14-ESS-B

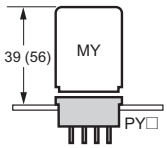
Push-In Plus Terminal Block Sockets
(PYF-□-PU)



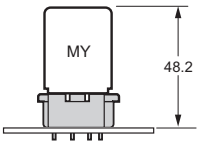
PYF-□-PU

Note: **1.** 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)

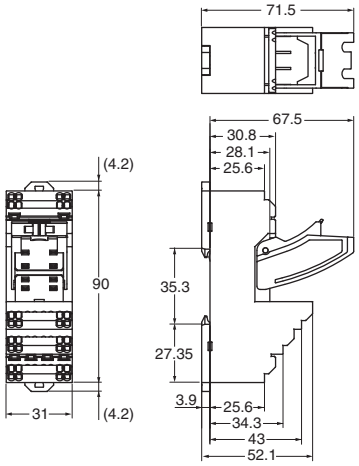
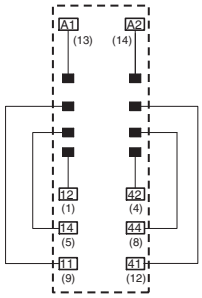
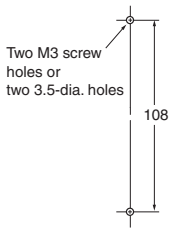
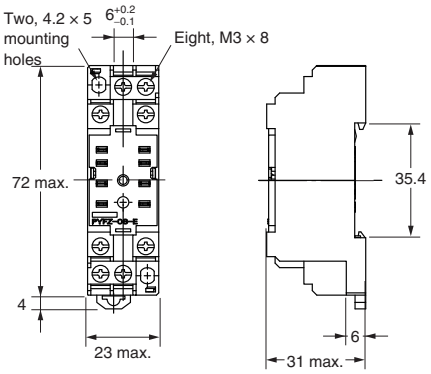
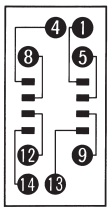
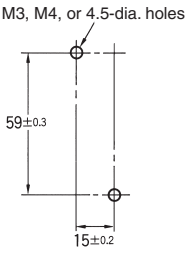
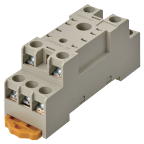
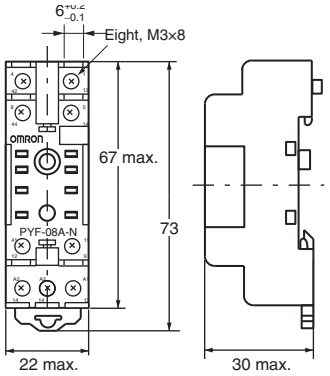
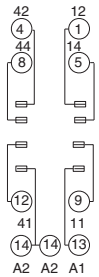
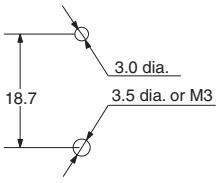
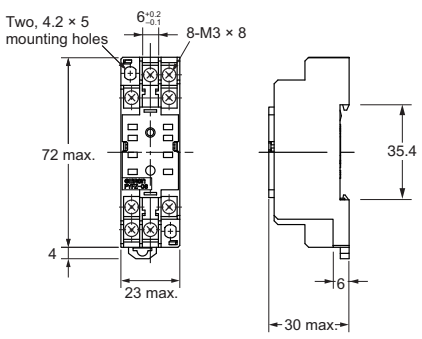
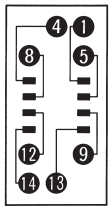
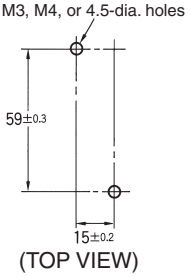


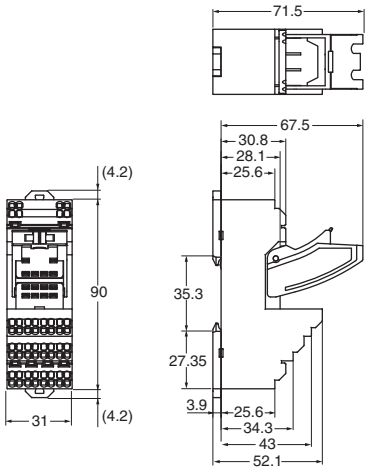
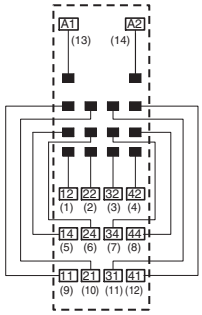
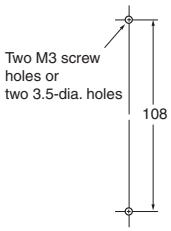
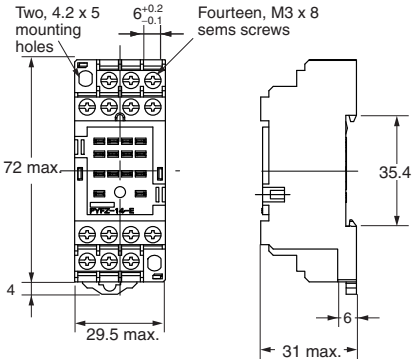
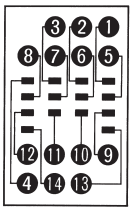
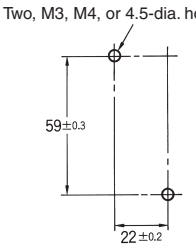
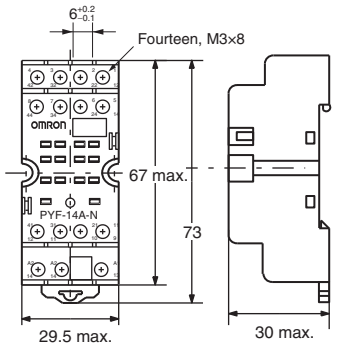
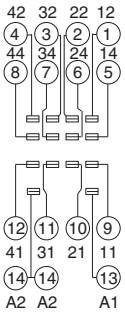
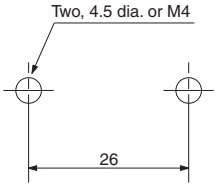
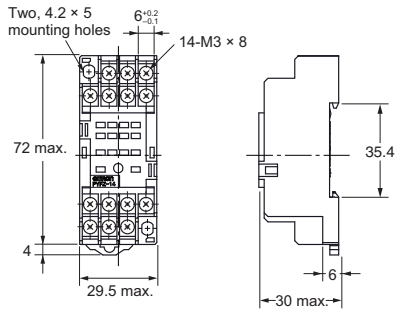
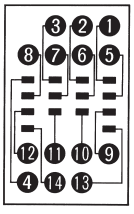
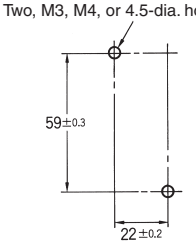
PY□-02

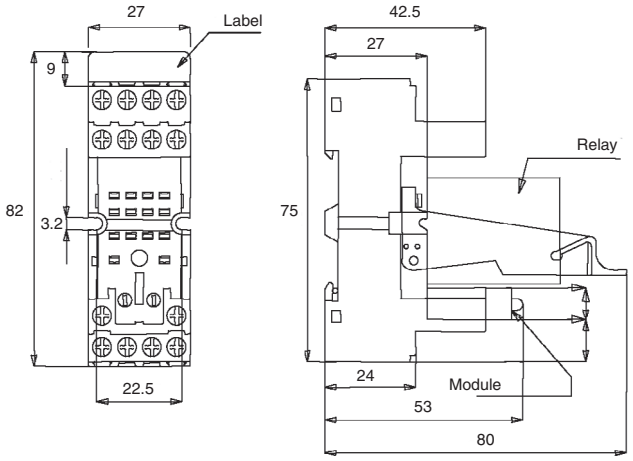
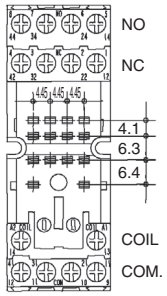
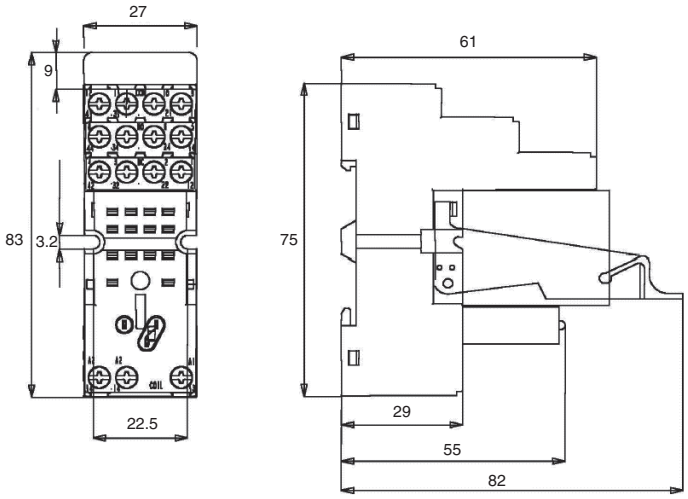
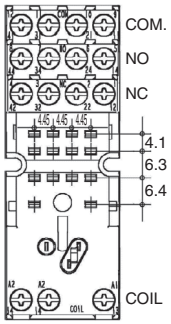
Dimensions

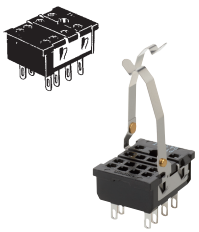
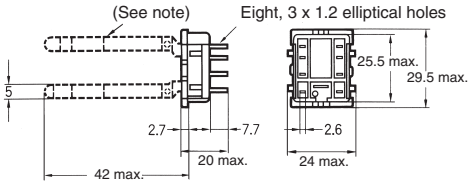
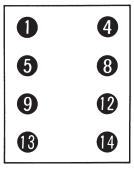
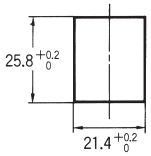
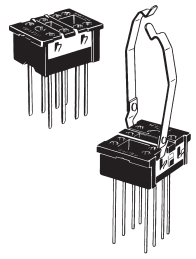
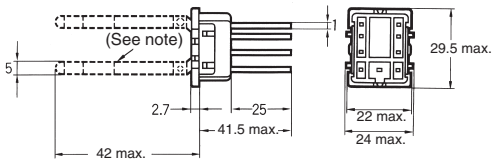
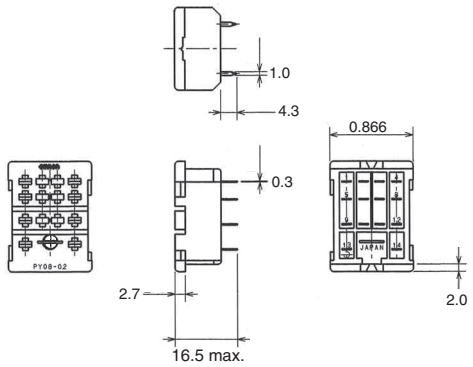
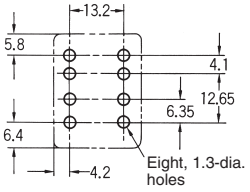
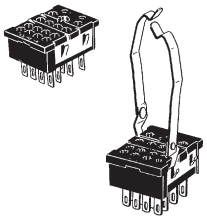
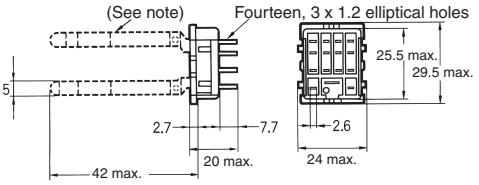
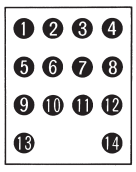
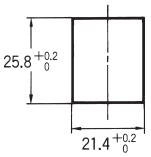
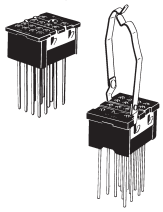
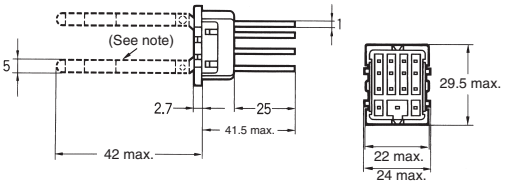
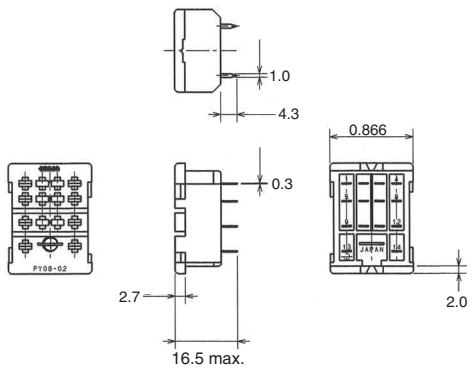
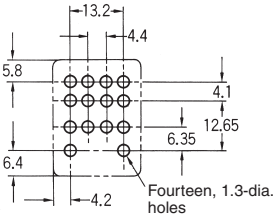
(Unit: mm)

Note: All units are in millimeters unless otherwise indicated.

Socket	Dimensions	Terminal arrangement/ Internal connections (top view)	Mounting holes
PYF-08-PU 		 **Note:** The numbers in parentheses are traditionally used terminal numbers.	 **Note 1:** Pull out the hooks to mount the Socket with screws. **Note 2:** DIN-rail mounting is also possible. Refer to page 34 for supporting DIN-rails.
PYFZ-08-E 			 (TOP VIEW) **Note:** DIN-rail mounting is also possible. Refer to page 34 for supporting DIN-rails.
PYF08A-N 		 **Note:** Figures in parentheses indicate DIN standard numbers.	 **Note:** DIN-rail mounting is also possible. Refer to page 34 for supporting DIN-rails.
PYFZ-08 			 (TOP VIEW) **Note:** DIN-rail mounting is also possible. Refer to page 34 for supporting DIN-rails.

Socket	Dimensions	Terminal arrangement/ Internal connections (top view)	Mounting holes
PYF-14-PU 		 **Note:** The numbers in parentheses are traditionally used terminal numbers.	 **Note 1:** Pull out the hooks to mount the Socket with screws. **Note 2:** DIN-rail mounting is also possible. Refer to page 34 for supporting DIN-rails.
PYFZ-14-E 			 (TOP VIEW) **Note:** DIN-rail mounting is also possible. Refer to page 34 for supporting DIN-rails.
PYF14A-N 		 **Note:** Figures in parentheses indicate DIN standard numbers.	 **Note:** DIN-rail mounting is also possible. Refer to page 34 for supporting DIN-rails.
PYFZ-14 			 (TOP VIEW) **Note:** DIN-rail mounting is also possible. Refer to page 34 for supporting DIN-rails.

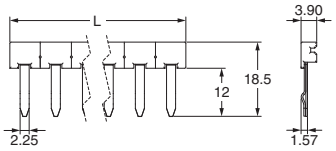
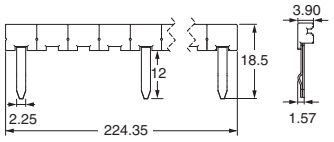
Socket	Dimensions	Terminal arrangement/ Internal connections (top view)/ mounting holes
PYF14-ESN-B  PYC-35-B 		
PYF14-ESS-B  PYC-35-B 		

Socket	Dimensions	Terminal arrangement/ Internal connections (top view)	Mounting holes
PY08/PY08-Y1 	 **Note:** The PY08-Y1 includes sections indicated by dotted lines.		
PY08QN/ PY08QN-Y1 	 **Note:** The PY08QN-Y1 includes sections indicated by dotted lines.		
PY08-02 			
PY14/PY14-Y1 	 **Note:** The PY14-Y1 includes sections indicated by dotted lines.		
PY14QN/ PY14QN-Y1 	 **Note:** The PY14QN-Y1 includes sections indicated by dotted lines.		
PY14-02 			

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

Short Bars for Relay Sockets and PYFZ/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□	

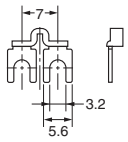
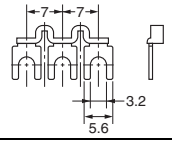
✻ Replace the box (□) in the model number with the specification code for the covering color. B: Black, S: Blue, R: Red
Note: When using short bar to coil terminals of PYF-□□-PU, make sure to use PYDN-31.0-080□ (31mm).

Labels

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

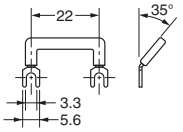
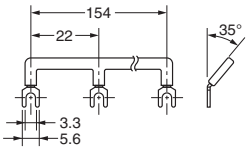
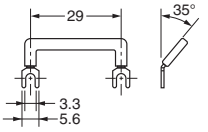
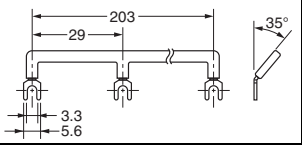
Note: PRINTER: MARKINGENIUS MG3 (Ask to your Omron contact for more details on printers)

Short Bars for within the Same Socket

Pitch	Applicable model	Appearance	Dimensions (mm)	No. of poles	Model ✻	Specifications
7 mm	PYFZ-14			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	PYFZ-08			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	PYFZ-14			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

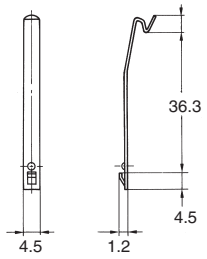
Safety Precautions

Maximum Carry Current

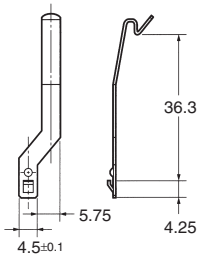
- Do not allow the total current for all shorted contact form to exceed the maximum carry current of the Short Bar.
- Do not exceed the maximum carry current of the relay contacts for individual contact form.
- If you use more than one Socket, use End Plates (PFP-M).

Hold-down Clips

PYC-A1
(2 pcs per set)



PYC-E1
(2 pcs per set)

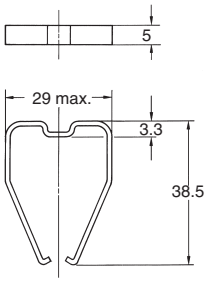


For sockets PYF14-ESN/-ESS

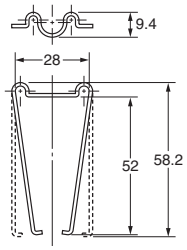
Model	Description
PYC-0	Metal spring clip (Used with Relay only)
PYC 35	Plastic holding clip (Used with Relay only)
PYC TR1	Thermoplastic writable label

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

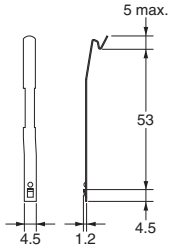
PYC-P



PYC-1

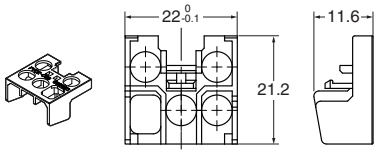


Y92H-3

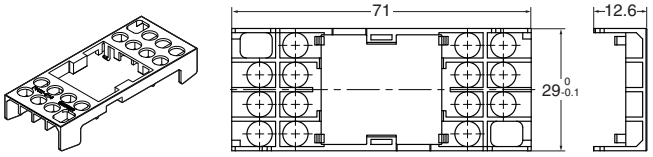


Terminal Covers for PYFZ-08/PYFZ-14 Sockets

PYCZ-C08
(for PYFZ-08)



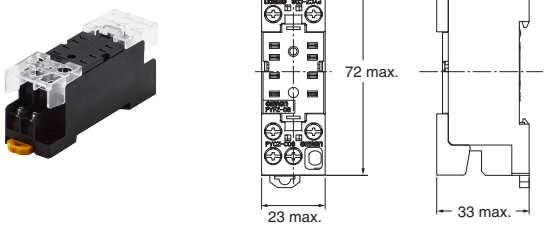
PYCZ-C14
(for PYFZ-14)



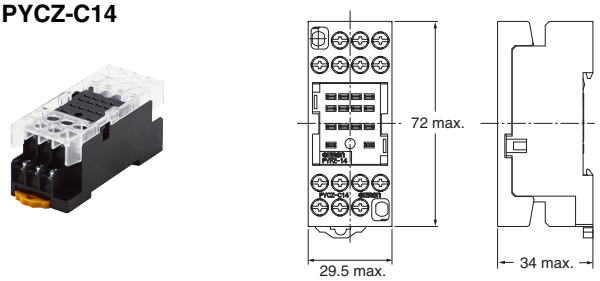
Dimensions with terminal cover

(Unit: mm)

PYCZ-C08

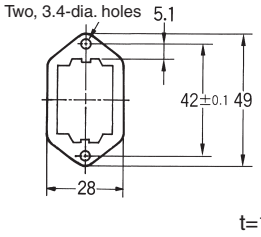


PYCZ-C14

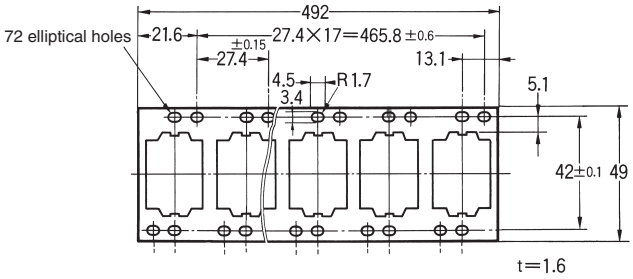


Mounting Plates for Back-connecting Sockets

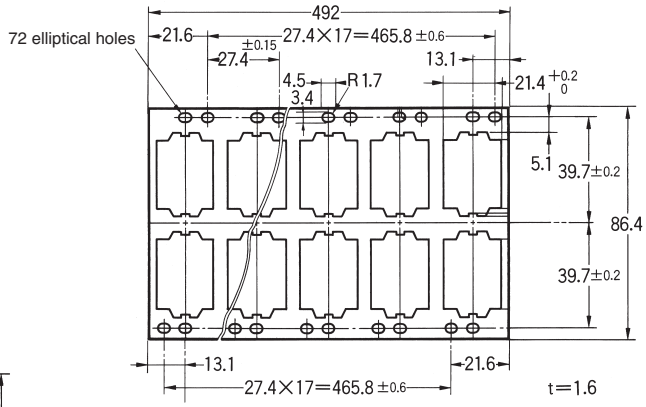
PYP-1



PYP-18



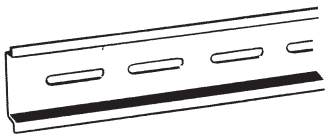
PYP-36

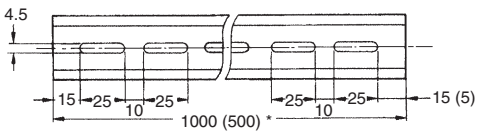


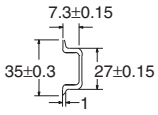
DIN-rails and Accessories

Supporting DIN-rails

PFP-50N/PFP-100N

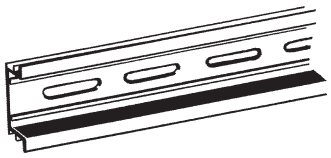


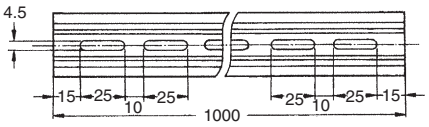


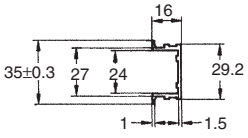


Note: The figure in the parentheses is for PFP-50N.

PFP-100N2

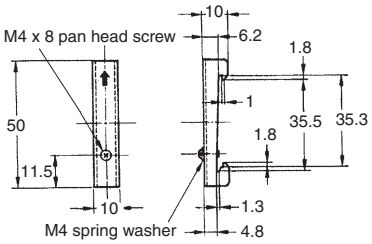






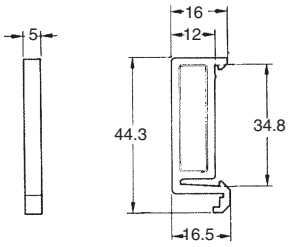
End Plate

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.

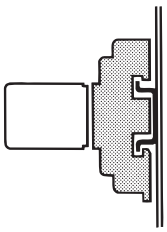
Precautions for Correct Use

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.

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Product specifications and accessories may be changed at any time based on improvements and other reasons. It is our practice to change part numbers when published ratings or features are changed, or when significant construction changes are made. However, some specifications of the Product may be changed without any notice. When in doubt, special part numbers may be assigned to fix or establish key specifications for your application. Please consult with your Omron's representative at any time to confirm actual specifications of purchased Product.

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OMRON

Sockets with Push-In Plus technology

PYF-□□-PU/PTF-□□-PU/P2RF-□□-PU

Sockets with Push-In Plus technology to Save Work Added to Series for MY, LY and G2R-S Relays

- Sockets with Push-In Plus technology are used to save wiring work in comparison with traditional screw terminals. (Wiring time is reduced by 60%✻ in comparison with traditional screw terminals.)
- No screw loosening means maintenance-free application.
- Light insertion force and strong pull-out strength to achieve both less wiring work and high reliability.
- 'Hand-free' structure that holds an inserted screwdriver to achieve easier wiring work for stranded wires.
- Each terminal includes two wiring holes and can be used for crossover wiring.
- DIN Track mounting or screw mounting.

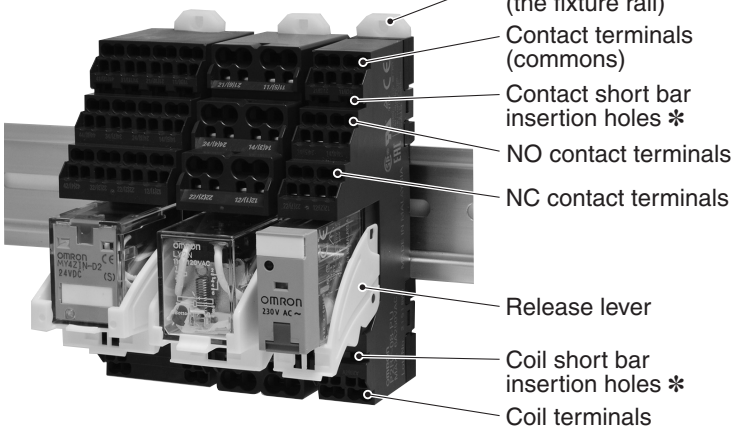
✻ According to OMRON actual measurement data from November 2015.

For the most recent information on models that have been certified for safety standards, refer to your OMRON website.

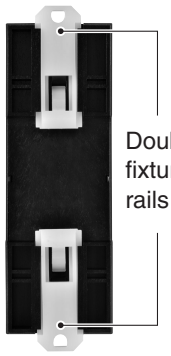
⚠ Refer to *Safety Precautions* on page 10.

Features

- Coil terminals and contact terminals are completely separated in an organized wiring layout.
- A Release Lever is provided as a standard feature. (except -L models)
- DIN terminal numbers are indicated.
- The double fixture rail with DIN hook tabs attached to the top and bottom lets you mount the Socket from either the top or bottom.
- One-touch Installation onto DIN-track.
- Front-in short bar enables easy installation without interference in duct when wiring.
- Please refer short bar correspondence table in page 9 for further information of short bar.
- There are screw mounting holes in the DIN hooks on the PYF-□□-PU, PTF-□□-PU and P2RF-□□-PU. Pull out the DIN hook tabs to mount the Sockets with screws.



✻ The PTF-□□-PU Sockets do not have short bar insertion holes.



Back of Push-In Plus Terminal Block Socket

The fixture rails can be pulled out to mount the Relays with screws.

Ordering Information

Sockets

PYF Series

Applicable model (typical example)			No. of poles	Socket
				Model ✻1
General Purpose Relays	MY Series	MY2□ MY2IN(S)	2	**PYF-08-PU**
		MY4□ MY4H MYQ4□ MY4□(S) MY2K	4	**PYF-14-PU**
		MY2(N)-CR AC24 MY2Z(N)-CR	2	**PYF-08-PU-L ✻2**
		MY4(N)-CR AC24 MY4N-CR AC115 MY4ZN-CBG-CR	4	**PYF-14-PU-L ✻2**
SSR	G3FM Series	G3FM	1	**PYF-08-PU**
	G3F/G3FD Series	G3F		
		G3FD		
Timers	H3Y Series H3YN Series	H3Y(N)-2-B	2	**PYF-08-PU-L**
		H3Y(N)-4-B	4	**PYF-14-PU-L**

✻**1.** The PYF-□□-PU-L Sockets do not have release levers.
✻**2.** Use with the hold-down clip (Y92H-3).

PTF Series

Applicable model (typical example)			No. of poles	Socket
				Model ✻
General Purpose Relays	LY Series	LY2□	2	**PTF-08-PU**
		LY2□-CR		**PTF-08-PU-L**
		LY4□	4	**PTF-14-PU-L**
SSR	G3H Series	G3H	1	**PTF-08-PU**
		G3HD		
	G9H Series **Note:** Hybrid Power Relay	G9H		
Temperature Controller	E5L	E5L-A □ E5L-C □	---	**PTF-14-PU-L**

✻ The PTF-□□-PU-L Sockets do not have release levers.

P2RF Series

Applicable model (typical example)			No. of poles	Socket
				Model
General Purpose Relays	G2R-□-S (S) Series	G2R-1-S (S)	1	**P2RF-05-PU**
SSR	G3R-I/O Series	G3R		
	G3RZ Series	G3RZ		
Timers	H3RN Series	H3RN-1-B		
General Purpose Relays	G2R-□-S (S) Series	G2R-2-S (S)	2	**P2RF-08-PU**
Timers	H3RN Series	H3RN-2-B		
Liquid Leakage Sensors	K7L Series	K7L-□B	---	

Accessories (Order Separately)

Short Bars

Pitch	Applicable models	No. of poles	Colors	Model ✻	Minimum order (quantity)
7.75 mm	PYF-□□-PU and P2RF-□□-PU	2	Red (R) Blue (S) Yellow (Y)	**PYDN-7.75-020□**	10
		3		**PYDN-7.75-030□**	
		4		**PYDN-7.75-040□**	
		20		**PYDN-7.75-200□**	
15.5 mm	P2RF-□□-PU	8		**PYDN-15.5-080□**	
31.0 mm	PYF-□□-PU	8		**PYDN-31.0-080□**	

Note: Use the Short Bars for crossover wiring within one Socket or between Sockets.
✻ Replace the box (□) in the model number with the code for the covering color.

Labels

Applicable models	Model	Manufacturer	Minimum order (Box) (quantity per Box)
PYF-□□-PU/ PTF-□□-PU/ P2RF-□□-PU	**MG-CPM-04 41390N**	Cembre	1,680 (35 sheet/48 pieces)

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

Hold-down Clip

Applicable models (Combinations)	Model	Minimum order (quantity)
PYF-08-PU-L H3Y(N)-2-B	**Y92H-3**	10
PYF-14-PU-L H3Y(N)-4-B		
PTF-08-PU-L LY2□-CR		
PTF-14-PU-L LY4□	**PYC-A1**	100
PTF-14-PU-L E5L	**Y92H-10 ✻**	1

✻ Included with the E5L unit.
If you lose or damage the hold-down clip (Y92H-10), order it separately.

Parts for DIN Track Mounting

Type		Model	Minimum order (quantity)
DIN Tracks	1 m	**PFP-100N**	1
	0.5 m	**PFP-50N**	
End Plate ✻		**PFP-M**	10
Spacer		**PFP-S**	

✻ When mounting DIN rail, please use End Plate (Model PFP-M).

Ratings/Characteristics

Characteristics

Sockets

PYF-□□-PU(-L)

Item	Model	PYF-08-PU (-L)	PYF-14-PU (-L)
Ambient operating temperature		-40 to 70°C	
Ambient operating humidity		5 to 85%	
Continuous carry current ✻		10 A	6 A
Dielectric strength	Between contact terminals of same polarity	2,000 VAC, 1 min	2,000 VAC, 1 min
	Between contact terminals of different polarity	2,000 VAC, 1 min	2,000 VAC, 1 min
	Between coil and contact terminals	2,000 VAC, 1 min	2,000 VAC, 1 min
Insulation resistance		1,000 MΩ min. (at 500 VDC)	
Weight (approx.)		80 g	87 g

✻ The continuous carry current of 10 A for PYF-08-PU(-L) is for an ambient temperature of 55°C. At an ambient temperature of 70°C, the value is 7 A.

PTF-□□-PU(-L)

Item	Model	PTF-08-PU (-L)	PTF-14-PU-L
Ambient operating temperature		-40 to 70°C	
Ambient operating humidity		5 to 85%	
Continuous carry current ✻		10 A	
Dielectric strength	Between contact terminals of same polarity	2,000 VAC, 1 min	2,000 VAC, 1 min
	Between contact terminals of different polarity	2,000 VAC, 1 min	2,000 VAC, 1 min
	Between coil and contact terminals	2,000 VAC, 1 min	2,000 VAC, 1 min
Insulation resistance		1,000 MΩ min. (at 500 VDC)	
Weight (approx.)		65 g	100 g

✻ The continuous carry current of 10 A for PTF-08-PU(-L) is for an ambient temperature of 55°C. At an ambient temperature of 70°C, the value is 7 A.
The continuous carry current of 10 A for PTF-14-PU-L is for an ambient temperature of 40°C. At an ambient temperature of 70°C, the value is 7 A.

P2RF-□□-PU

Item	Model	P2RF-05-PU	P2RF-08-PU
Ambient operating temperature		-40 to 70°C	
Ambient operating humidity		5 to 85%	
Continuous carry current ✻		10 A	6 A
Dielectric strength	Between contact terminals of same polarity	1,000 VAC, 1 min	1,000 VAC, 1 min
	Between contact terminals of different polarity	---	3,000 VAC, 1 min
	Between coil and contact terminals	4,000 VAC, 1 min	4,000 VAC, 1 min
Insulation resistance		1,000 MΩ min. (at 500 VDC)	
Weight (approx.)		40 g	45 g

✻ The continuous carry current of 10 A for P2RF-05-PU is for an ambient temperature of 55°C. At an ambient temperature of 70°C, the value is 7 A.
The continuous carry current of 6 A for P2RF-08-PU is for an ambient temperature of 55°C. At an ambient temperature of 70°C, the value is 5 A.

Accessories (Order Separately)

Short Bars

Application	Applicable sockets	Model	Maximum carry current	Ambient operating temperature	Ambient operating humidity
For Contact terminals (common)	PYF-08-PU(-L) PYF-14-PU(-L) P2RF-05-PU P2RF-08-PU	PYDN-7.75-020□	20 A	-40 to 70°C	5 to 85% Rh
		PYDN-7.75-030□			
		PYDN-7.75-040□			
		PYDN-7.75-200□			
For Coil terminals	P2RF-05-PU P2RF-08-PU	PYDN-15.5-080□	20 A	-40 to 70°C	5 to 85% Rh
	PYF-08-PU(-L) PYF-14-PU(-L)	PYDN-31.0-080□			

Approved Standards

CSA certification (File No. LR031928)

Model	Ratings	Class No.	Standard No.
PYF-08-PU (-L) PTF-08-PU (-L) P2RF-05-PU	10 A 250 V	3211 07	CSA C22.2 No14
PYF-14-PU (-L)	6A 250V ✻		
PTF-14-PU (-L)	10 A 250 V (Same polarity)		
P2RF-08-PU	6 A 250 V		

✻ When power is supplied to all four poles, use with a total power current that does not exceed 20 A.

UL standard certification (File No. E87929)

Model	Ratings	Standard No.	Category	Listed/ Recognized
PYF-08-PU (-L) PTF-08-PU (-L) P2RF-05-PU	10 A 250 V	UL508	SWIV2	Recognized
PYF-14-PU (-L)	6 A 250 V ✻			
PTF-14-PU (-L)	10 A 250 V (Same polarity)			
P2RF-08-PU	6 A 250 V			

✻ When power is supplied to all four poles, use with a total power current that does not exceed 20 A.

TÜV Rheinland certification

Model	Ratings	Standard No.	Certification No.
PYF-08-PU (-L) PTF-08-PU (-L) P2RF-05-PU	10 A 250 V ✻1	EN 61984	R50327595
PYF-14-PU (-L)	6 A 250 V		
PTF-14-PU (-L)	10 A 250 V ✻2		
P2RF-08-PU	6 A 250 V ✻3		

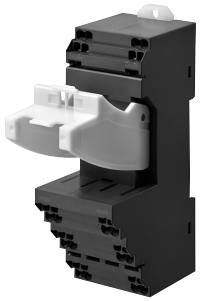
✻1. Ratings are for an ambient temperature of 55°C. At an ambient temperature of 70°C, the value is 7 A.
✻2. Ratings are for an ambient temperature of 40°C. At an ambient temperature of 70°C, the value is 7 A.
✻3. Ratings are for an ambient temperature of 55°C. At an ambient temperature of 70°C, the value is 5 A.

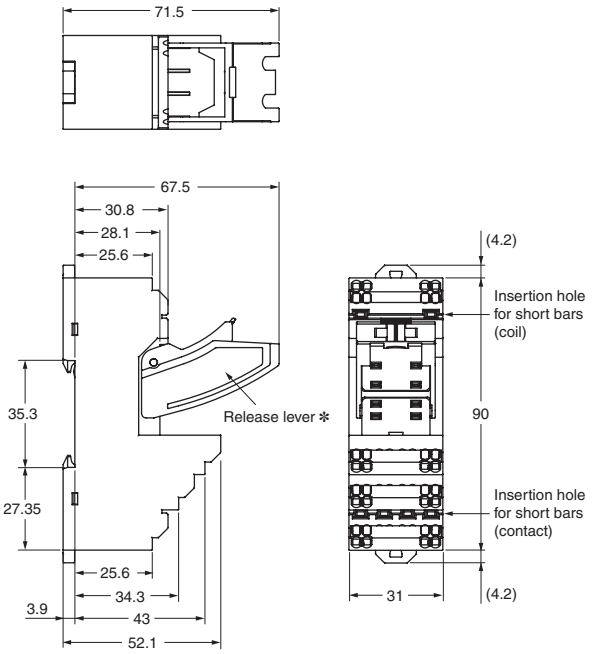
Dimensions

(Unit: mm)

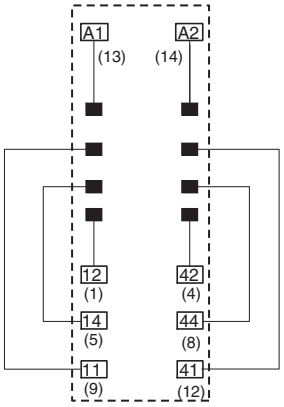
Sockets

PYF-08-PU(-L)



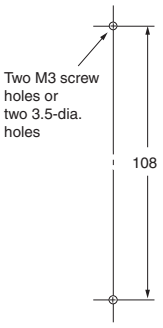


Terminal Arrangement/ Internal Connection Diagram (TOP VIEW)



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

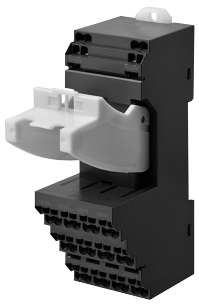
Mounting Hole Dimensions

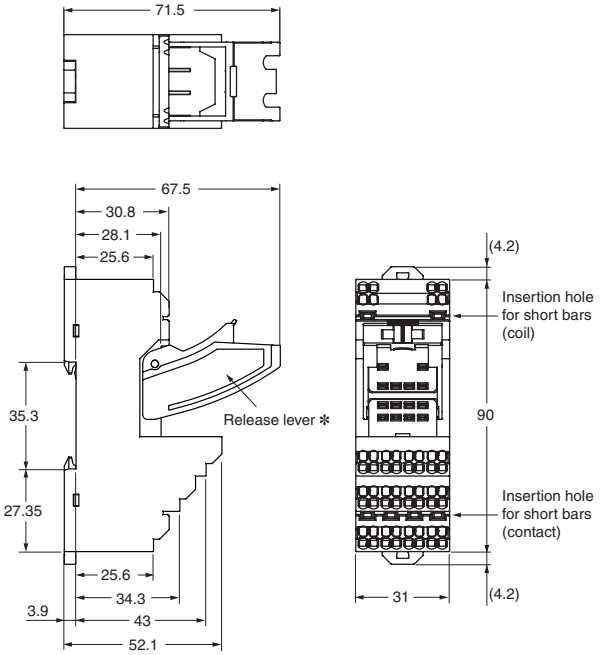


Note: Pull out the hooks to mount the Socket with screws.

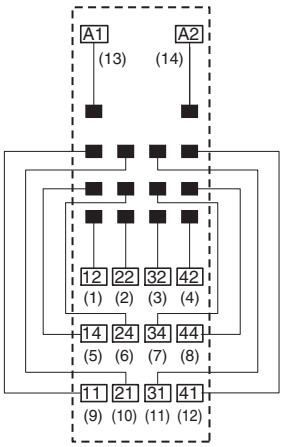
✻ The PYF-08-PU-L Sockets do not have release levers.

PYF-14-PU(-L)



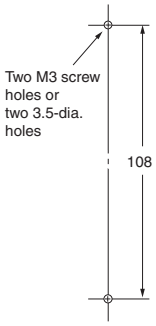


Terminal Arrangement/ Internal Connection Diagram (TOP VIEW)



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

Mounting Hole Dimensions

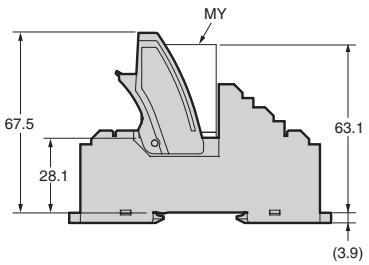


Note: Pull out the hooks to mount the Socket with screws.

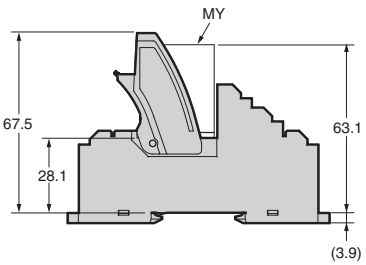
✻ The PYF-14-PU-L Sockets do not have release levers.

Mounting Heights

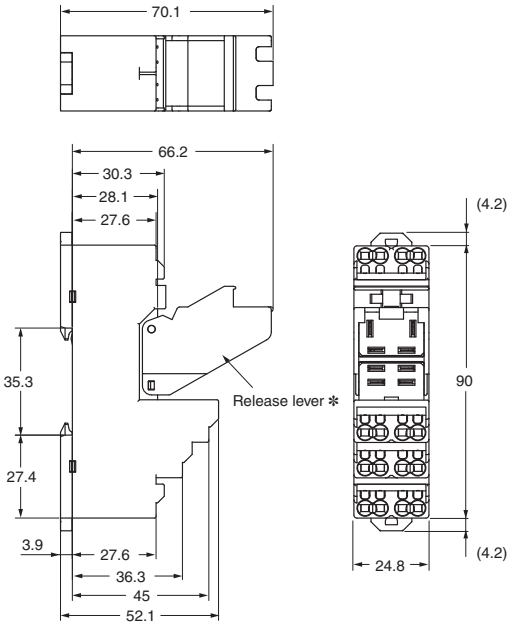
PYF-08-PU



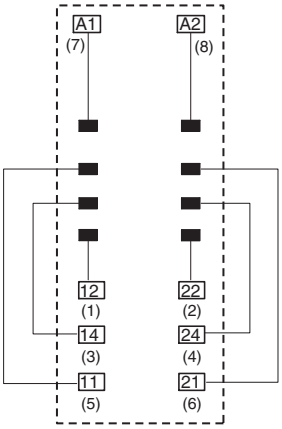
PYF-14-PU



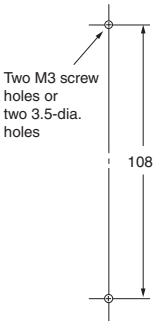
PTF-08-PU (-L)



Terminal Arrangement/
Internal Connection Diagram
(TOP VIEW)



Mounting Hole Dimensions

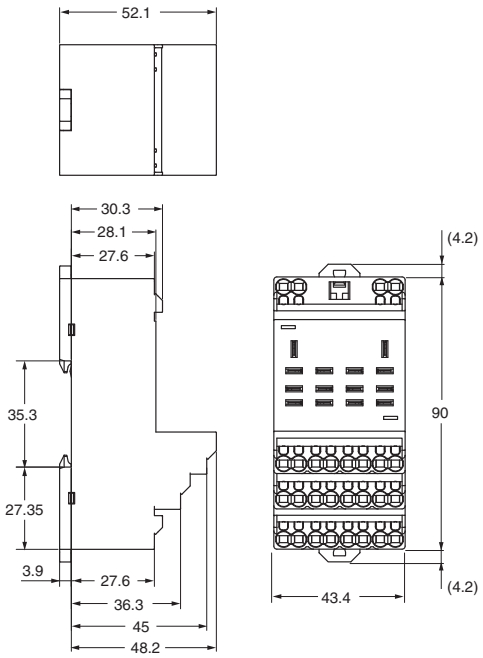


Note: When you apply a minimum of 10 A of current to an LY1 when it is used in combination with the PTF-08-PU(-L), connect each of the following terminal pairs: (1) to (2), (3) to (4), and (5) to (6).
✻ The PTF-08-PU-L Sockets do not have release levers.

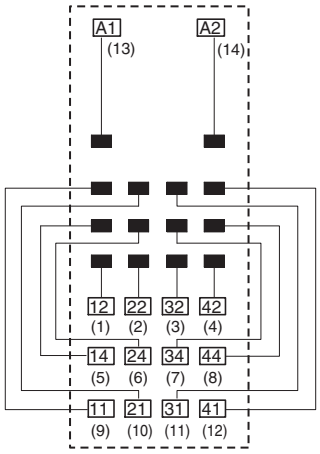
Note: The numbers in parentheses are traditionally used terminal numbers.

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

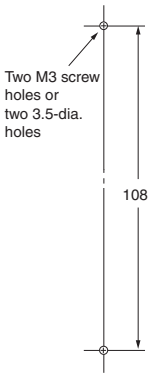
PTF-14-PU-L



Terminal Arrangement/
Internal Connection Diagram
(TOP VIEW)



Mounting Hole Dimensions

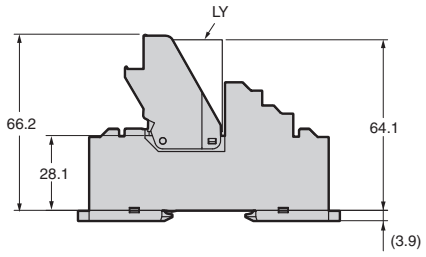


Note: The numbers in parentheses are traditionally used terminal numbers.

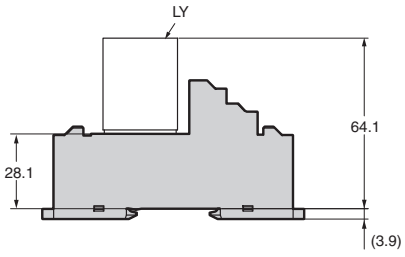
Note: Pull out the hooks to mount the Socket with screws.

Mounting Heights

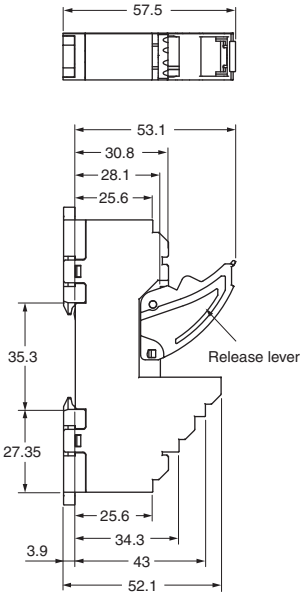
PTF-08-PU

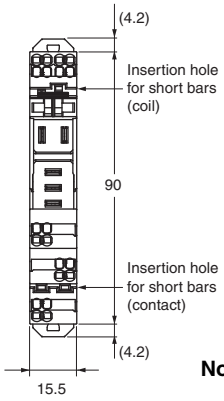


PTF-14-PU-L

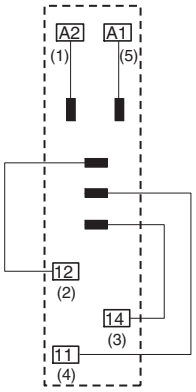


P2RF-05-PU

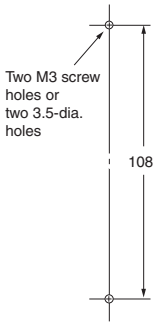




Terminal Arrangement/
Internal Connection Diagram
(TOP VIEW)



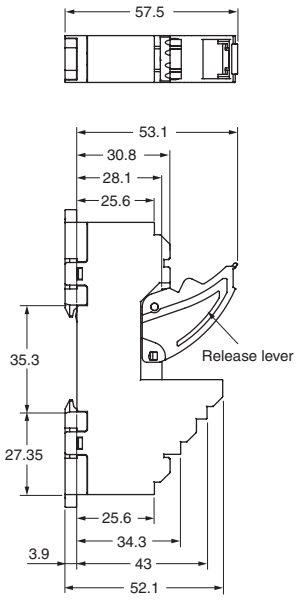
Mounting Hole Dimensions

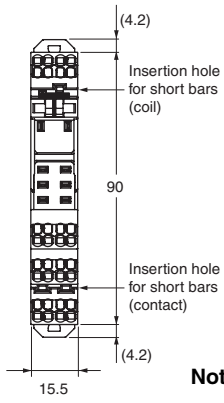


Note: 1. The numbers in parentheses are traditionally used terminal numbers.
2. Insert the short bar into only the A1 or A2 side.

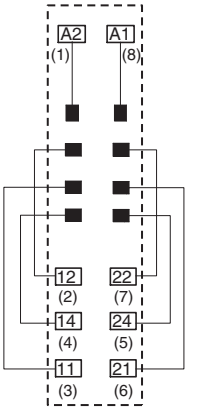
Note: Pull out the hooks to mount the Socket with screws.

P2RF-08-PU

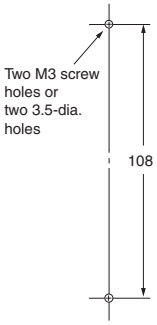




Terminal Arrangement/
Internal Connection Diagram
(TOP VIEW)



Mounting Hole Dimensions

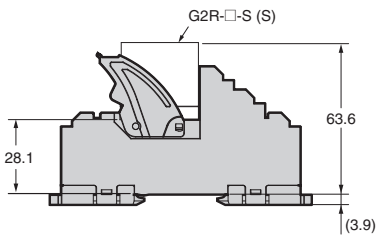


Note: 1. The numbers in parentheses are traditionally used terminal numbers.
2. Insert the short bar into only the A1 or A2 side.

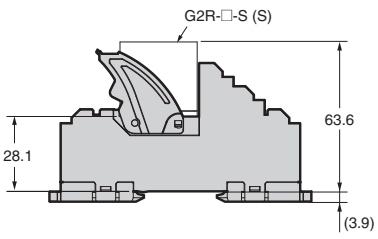
Note: Pull out the hooks to mount the Socket with screws.

Mounting Heights

P2RF-05-PU



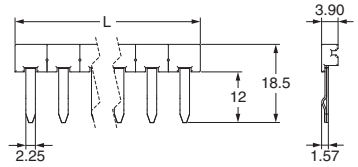
P2RF-08-PU



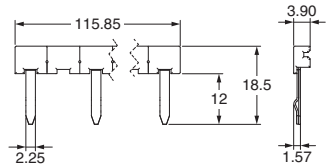
Accessories (Order Separately)

Short Bars

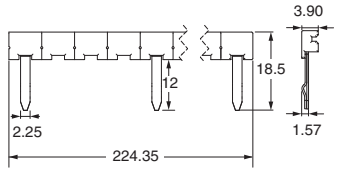
PYDN-7.75-□□ (7.75 mm)



PYDN-15.5-080□ (15.5mm)



PYDN-31.0-080□ (31mm)



Application	Pitch	Applicable sockets	No. of poles	L (Length)	Colors	Model ✻
For Contact terminals (common)	7.75 mm	PYF-□□-PU and P2RF-□□-PU	2	15.1	Red (R) Blue (S) Yellow (Y)	**PYDN-7.75-020□**
			3	22.85		**PYDN-7.75-030□**
			4	30.6		**PYDN-7.75-040□**
			20	154.6		**PYDN-7.75-200□**
For Coil terminals	15.5 mm	P2RF-□□-PU	8	115.85		**PYDN-15.5-080□**
	31 mm	PYF-□□-PU	8	224.35		**PYDN-31.0-080□**

Note: 1. Use the Short Bars for crossover wiring within one Socket or between Sockets.

2. When using short bar to coil terminals of P2RF-□□-PU, make sure to use PYDN-15.5-080□ (15.5 mm).
When using short bar to coil terminals of PYF-□□-PU (-L), make sure to use PYDN-31.0-080□ (31 mm).

✻ Replace the box (□) in the model number with the code for the covering color.

Parts for DIN Track Mounting

Refer to your OMRON website for details on the PFP-□.

Safety Precautions

Be sure to read the *Common Precautions for All Relays* in the website at the following URL: http://www.ia.omron.com/.

Warning Indications

⚠ WARNING	**Indicates a potentially hazardous situation which, if not avoided, will result in minor or moderate injury, or may result in serious injury or death. Additionally there may be significant property damage.**
Precautions for Safe Use	**Supplementary comments on what to do or avoid doing, to use the product safely.**
Precautions for Correct Use	**Supplementary comments on what to do or avoid doing, to prevent failure to operate, malfunction, or undesirable effects on product performance.**

Meaning of Product Safety Symbols

	**Used to warn of the risk of electric shock under specific conditions.**

⚠ WARNING

Make sure that the Socket does not have an electrical charge before you perform wiring or maintenance work. Electrical shock may occur.

Precautions for Safe Use

Transportation

- Do not use a Socket that has fallen to the floor or ground. The performance of a Socket that has been dropped may be reduced.
- Do not drop the Socket or subject it to abnormal vibration or shock during transportation or mounting. Doing so may result in deterioration of performance, malfunction, or failure.
- Do not transport a Socket when it is not packaged. Damage or failure may occur.

Operating and Storage Environments

- Do not use or store Sockets in the following locations. Doing so may result in deterioration of performance.
  - Locations subject to ambient storage temperatures outside the range • 40 to 70°C
  - Locations subject to relative humidity outside the range 5% to 85%
  - Locations subject to high temperature or high humidity
  - Locations in which condensation may occur due to rapid changes in temperature
- Do not use or store Sockets in environments that contain silicone gas, sulfidizing gas (e.g., SO_2 or H_2S), or organic gas, or near materials that contain silicone. Doing so may cause the contacts to be unstable or to fail.
- Do not use a Socket in a location subject to ultraviolet light (such as a location subject to direct sunlight). Printing may fade, the Socket may rust or corrode, and plastic parts may deteriorate.
- Before you start wiring, make sure that the Socket is securely attached and mounted to a DIN Track. If the Socket is not stable, it may fall and possibly injure a worker.
- Insert the flat-blade screwdriver fully to the bottom of the release hole. If the flat-blade screwdriver is not inserted correctly, the wire may not be connected correctly.
- If there is lubrication, such as oil, on the tip of the flat-blade screwdriver, the flat-blade screwdriver may fall and possibly injure a worker.
- When crossover wiring by wire and short bar, make sure not to insert wrong position, it may cause short circuit, malfunction or failure.
- Avoid using or storing in a location where the unit will be subject to direct vibration or shock. Risk of failure, malfunctioning, or deterioration of performance.

Push-In Plus Terminal Blocks

- Do not wire anything to the release holes.
- Do not tilt or twist a flat-blade screwdriver while it is inserted into a release hole on the terminal block. The terminal block may be damaged.
- Insert a screwdriver into the release holes at an angle. The terminal block may be damaged if the flat-blade screwdriver is inserted straight in.
- Do not allow the flat-blade screwdriver to fall when you are holding it in a release hole.
- Do not bend a wire past its natural bending radius or pull on it with excessive force. Doing so may cause the wire disconnection.
- Do not insert more than one wire into each terminal insertion hole.
- If you use wire or a short-circuit bar for crossover wiring, take care that there are no incorrect insertions. Incorrect insertion may cause short-circuiting, malfunctioning, or failure.
- To prevent wire materials from smoking or igniting, confirm wire ratings and use the wiring materials given in the following table.

Model	Recommended wires	Stripping length
PYF-□□-PU/ P2RF-□□-PU	0.5 to 1.5 mm^2 / AWG20 to AWG16 stranded wire, 0.8 to 1.3 mm^2 solid wire	8 mm
PTF-□□-PU	0.5 to 2.5 mm^2 / AWG20 to AWG14 stranded wire, 0.8 to 1.6 mm^2 solid wire	

Disposal

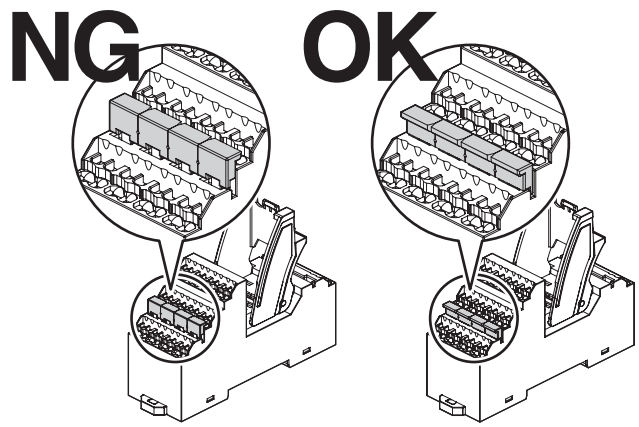
- If you dispose of any Sockets, do not place them in a fire.

Common connection method when using a short bar

- When connecting the P2RF-□□-PU input common, insert the short bar into only the A1 or A2 side.

Precautions for Correct Use

- Do not transport the Socket under the following conditions. Doing so may occasionally result in damage, malfunction, or deterioration of performance characteristics.
  - Locations subject to high temperature or high humidity
  - Locations subject to condensation due to rapid changes in temperature
- Do not use or store the Socket in the following locations. Doing so may occasionally result in damage, malfunction, or deterioration of performance characteristics.
  - Locations subject to shock or vibration
  - Conditions in which an external load may be applied
  - Locations subject to dust, salts, or iron, or locations where there is salt damage
- Do not use the Socket in a location where it may be subjected to solvents or alkali liquids.
- Do not insert short bar in the hole for wire or screw driver, it may cause the result of failure of pull out.
  If insert short bar in the hole for wire or screw driver and try to pull out, it may cause damage for short bar or socket.
- Insert the short bar so that the protrusion part of the short bar comes to the wire insertion side. Be sure to insert the short bar in the correct direction. Inserting the short bar in the opposite direction will prevent the short bar from being fully inserted, leading to contact failure or other problems.



- Do not use or store in an atmosphere in which ambient silicon gas, sulfuric gas (SO_2, H_2S), or organic gas is present, or near material that contains silicon. This may cause unstable contact or contact failure.
- Do not use or store in a location where water, chemicals, solvents, oil, or other substances may spray or splash on the Socket. Risk of failure, malfunctioning, or deterioration of performance.
- Avoid using or storing in a location where the ambient temperature exceeds -40 to 70°C. Risk of failure, malfunctioning, or deterioration of performance.

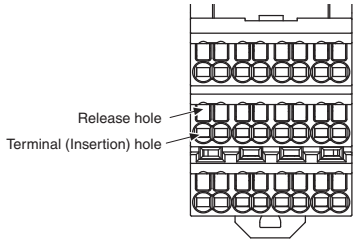
Applying 10 A or More When Using an LY1 with the Following Sockets

When you use an LY1 in combination with the PTF-08-PU(-L) connect each of the following terminal pairs: (1)to (2), (3) to (4), and (5) to (6).

Push-In Plus Terminal Blocks

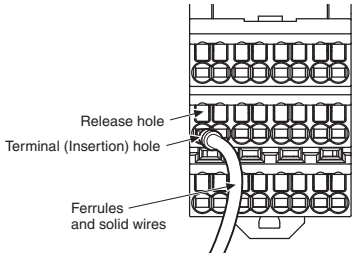
1. Connecting Wires to the Push-In Plus Terminal Block

Part Names of the Terminal Block



Connecting Wires with Ferrules and Solid Wires

Insert the solid wire or ferrule straight into the terminal block until the end strikes the terminal block.

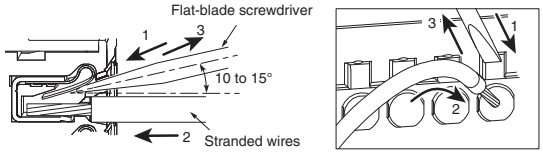


- If a wire is difficult to connect because it is too thin, use a flat-blade screwdriver in the same way as when connecting stranded wire.

Connecting Stranded Wires

Use the following procedure to connect the wires to the terminal block.

1. Hold a flat-blade screwdriver at an angle and insert it into the release hole.
   The angle should be between 10° and 15°. If the flat-blade screwdriver is inserted correctly, you will feel the spring in the release hole.
2. With the flat-blade screwdriver still inserted into the release hole, insert the wire into the terminal hole until it strikes the terminal block. At that time, to prevent from separating from one another, please insert in a twisted state.
3. Remove the flat-blade screwdriver from the release hole.



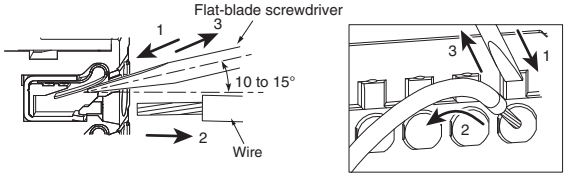
Checking Connections

- After the insertion, pull gently on the wire to make sure that it will not come off and the wire is securely fastened to the terminal block.
- If you use recommended ferrules, part of the conductor may be visible after the ferrule is inserted into the terminal block, but the product insulation distance will still be satisfied.

2. Removing Wires from the Push-In Plus Terminal Block

Use the following procedure to remove wires from the terminal block. The same method is used to remove stranded wires, solid wires, and ferrules.

1. Hold a flat-blade screwdriver at an angle and insert it into the release hole.
2. With the flat-blade screwdriver still inserted into the release hole, remove the wire from the terminal insertion hole.
3. Remove the flat-blade screwdriver from the release hole.



3. Recommended Ferrules and Crimp Tools

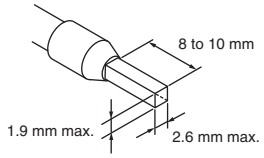
Recommended ferrules

Applicable wire		Ferrule Conductor length (mm)	Stripping length (mm) (Ferrules used)	Recommended ferrules		
(mm²)	(AWG)			Phoenix Contact product	Weidmuller product	Wago product
0.25 ✻1	24	8	10	AI 0,25-8	H0.25/12	216-301
		10	12	AI 0,25-10	---	---
0.34 ✻1	22	8	10	AI 0,34-8	H0.34/12	216-302
		10	12	AI 0,34-10	---	---
0.5	20	8	10	AI 0,5-8	H0.5/14	216-201
		10	12	AI 0,5-10	H0.5/16	216-241
0.75	18	8	10	AI 0,75-8	H0.75/14	216-202
		10	12	AI 0,75-10	H0.75/16	216-242
1/1.25	18/17	8	10	AI 1-8	H1.0/14	216-203
		10	12	AI 1-10	H1.0/16	216-243
1.25/1.5 ✻2	17/16	8	10	AI 1,5-8	H1.5/14	216-204
		10	12	AI 1,5-10	H1.5/16	216-244
2.5 ✻3	14	10	12	AI 2,5-10	H2.5/16DS	216-246
		12	14	AI 2,5-12	H2.5/19D	216-266
Recommended crimp tool				CRIMPFOX6 CRIMPFOX6T-F CRIMPFOX10S	PZ6 roto	Variocrimp4

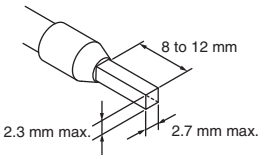
Note: 1. Make sure that the outer diameter of the wire coating is smaller than the inner diameter of the insulation sleeve of the recommended ferrule.

2. Make sure that the ferrule processing dimensions conform to the following figures.

PYF-□□-PU/P2RF-□□-PU



PTF-□□-PU



✻**1.** If you use AWG24 to AWG22 (0.25 to 0.34 mm²) wires, UL certification will not apply.

✻**2.** On the PYF-□□-PU / P2RF-□□-PU, do not connect ferrules for the applicable wires (AWG17 to AWG16 (1.25 to 1.5 mm²)) to adjacent terminal (insertion) holes.
However, when using a ferrule with no insulation sleeve, connecting to an adjacent terminal (insertion) hole is possible. (See the list below.)

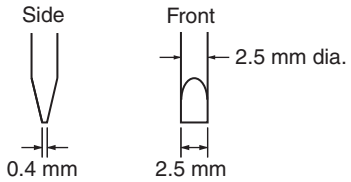
✻**3.** AWG14 wire can only be used on the PTF-□□-PU.

Ferrule with no insulation sleeve

Applicable wire		Ferrule Conductor length (mm)	Stripping length (mm) (Ferrules used)	Recommended ferrules		
(mm²)	(AWG)			Phoenix Contact product	Weidmuller product	Wago product
1.25/1.5	17/16	10	10	A 1,5-10	H1.5/10	216-144
Recommended crimp tool				CRIMPFOX6 CRIMPFOX6T-F CRIMPFOX10S	PZ6 roto	Variocrimp4

Recommended Flat-blade Screwdriver

Use a flat-blade screwdriver to connect and remove wires.
Use the following flat-blade screwdriver.
The following table shows manufacturers and models as of 2018/Dec.

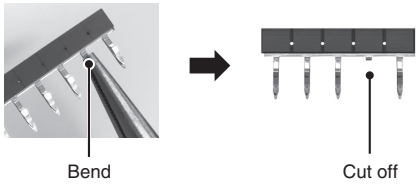


Model	Manufacturer
ESD 0,40×2,5	Wera
SZS 0,4×2,5 SZF 0-0,4×2,5 ✻	Phoenix Contact
0.4×2.5×75 302	Wiha
AEF.2,5×75	Facom
210-719	Wago
SDIS 0.4×2.5×75	Weidmuller
9900 (-2.5×75)	Vessel

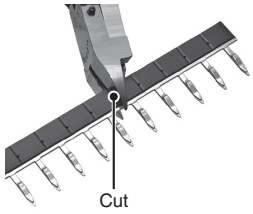
✻ OMRON's exclusive purchase model XW4Z-00B is available to order as SZF 0-0,4×2,5 (manufactured by Phoenix Contact).

When mounting a short bar

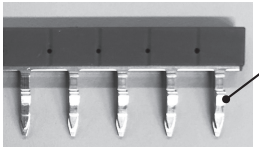
- Intermediate pins can be bent by a tool or by hand and cut off for use.

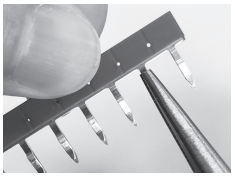


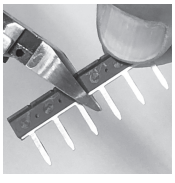
- The short bar can be cut to as many poles as needed. Insert the tool from the plastic part side, and cut along the groove in the plastic part between the terminals. When cutting, take care not to break or deform the terminals.
However, because the metal on the cut surface will be exposed, insulation countermeasures between adjacent products must be ensured. Such countermeasures include widening the intervals between products or using XW5Z-EP12 separate plates (order separately).



- When cutting the short bar or its pins, do not touch the conductive part. If the conductive part is deformed, contact failure may result.







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Miniature Power Relays

MY/MYK/MYQ-MYH

Best-selling, general-purpose relays that can be selected based on operating environment and application

- Wiring work can be shortened by as much as 60%* compared to conventional screw terminal sockets by combining with push-in plus terminal sockets (PYF-□-PU) that feature light insertion force and strong pull-out strength to achieve less wiring work.
- In addition to our standard type (MY), an abundant lineup of models including latching relays that retain contact operation status (MYK) and sealed relays suitable for environments where dust and corrosive gases are present (MYQ/MYH) are also available.
- Selection is possible to suit the application, such as models with operation indicators and models with latching levers (MY plug-in terminals).

* When both push-in plus terminals and screw terminal sockets are combined with plug-in terminal types (according to actual OMRON measurements as of November 2015)

⚠ Refer to *Safety Precautions* on pages 54 to 55 and *Safety Precautions for All Relays*.

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

Miniature Power Relay Types

MY Miniature Power Relays ..... **From page 3**
MYK Miniature Power Latching Relays ..... **From page 24**
MYQ/MYH Miniature Power Sealed Relays ..... **From page 29**

Common Information

Common Options (Order Separately) ..... **From page 35**
Common Safety Precautions ..... **From page 54**

Model List

Miniature Power Relays: MY

Classification	Number of poles	Contacts	Plug-in terminals	With operation indicator		PCB terminals	Case-surface mounting
					With latching lever		
Standard models (compliant with Electrical Appliances and Material Safety Act)	2	Single	MY2	MY2N	MY2IN(S)	MY2-02	MY2F
		Bifurcated	MY2Z	MY2ZN			
	3	Single	MY3	MY3N		MY3-02	MY3F
	4	Single	MY4	MY4N	MY4IN(S)	MY4-02	MY4F
		Bifurcated	MY4Z	MY4ZN	MY4ZIN(S)	MY4Z-02	MY4ZF
		Crossbar bifurcated	MY4Z-CBG	MY4ZN-CBG			
Models with built-in diode for coil surge absorption (compliant with Electrical Appliances and Material Safety Act)	2	Single	MY2-D	MY2N-D2	MY2IN-D2(S)		
		Bifurcated	MY2Z-D	MY2ZN-D2			
	3	Single	MY3-D	MY3N-D2			
	4	Single	MY4-D	MY4N-D2	MY4IN-D2(S)		
		Bifurcated	MY4Z-D	MY4ZN-D2	MY4ZIN-D2(S)		
Models with built-in CR circuit for coil surge absorption (compliant with Electrical Appliances and Material Safety Act)	2	Single	MY2-CR	MY2N-CR			
		Bifurcated	MY2Z-CR	MY2ZN-CR			
	4	Single	MY4-CR	MY4N-CR	MY4IN-CR(S)		
		Bifurcated	MY4Z-CR	MY4ZN-CR	MY4ZIN-CR(S)		

Note: 1. The models in this table are UL/CSA certified. This is indicated with a certification mark on the products. (Except crossbar bifurcated models MY4Z-CBG and MY4ZN-CBG)
2. The standard models with plug-in terminals, models with built-in diodes for coil surge absorption, and models with built-in CR circuits for coil surge absorption were used in combination with the PYF□A-E, PYF□-S and PYF-□-PU for the EC Declaration of Conformity. These products display the CE Marking.

Miniature Power Latching Relays (MYK)

Classification	Number of poles	Contacts	Plug-in terminals	With operation indicator	PCB terminals
Standard models	2	Single	MY2K		MY2K-02

Miniature Power Sealed Relays (MYQ/MYH)

Classification	Number of poles	Contacts	Plug-in terminals	With operation indicator	PCB terminals
Plastic Sealed Relays	4	Single	MYQ4	MYQ4N	MYQ4-02
		Bifurcated	MYQ4Z		MYQ4Z-02
Hermetically Sealed Relays	4	Single	MY4H		MY4H-0
		Bifurcated	MY4ZH		MY4ZH-0

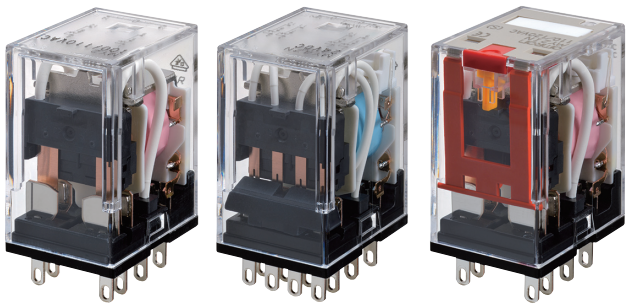
Refer to Front-connecting Sockets and Back-connecting Sockets in *Common Options (Order Separately)* on pages 35 and 37 for main unit and socket combinations.

Best-selling, general-purpose relays

- AC/DC coil voltage specifications can now be more easily distinguished thanks to the use of color-coded coil tape and operation indicators (LED).
- Latching levers convenient for circuit checking and MY(S) models equipped with mechanical operation indicators and operation indicators for monitoring operation status are available.
- Contact materials and contact structures can be selected based on contact reliability and corrosion resistance.

*Voltage is printed on white tape in the case of the Standard 3-pole model (MY3).

⚠ Refer to *Safety Precautions* on pages 54 to 55 and *Safety Precautions for All Relays*.



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

Features

1. More easily distinguished AC/DC coil voltage specifications

- Distinguished using color-coded coil tape*

* Voltage is printed on white tape in the case of the Standard 3-pole model (MY3).

Example: MY2

Coil tape
Pink = AC voltage [AC coil specification]

Example: MY4

Coil tape
Blue = DC voltage [DC coil specification]

- Distinguished using color-coded operation indicators (LED)

Example: MY4

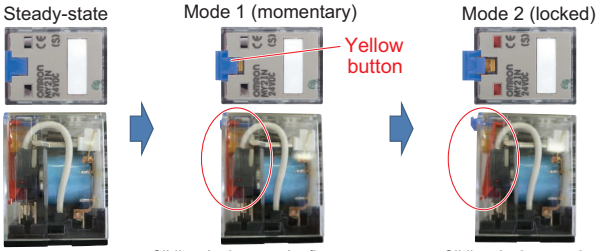
Operation indicator (LED)
Red = AC voltage [AC coil specification]

Example: MY4

Operation indicator (LED)
Green = DC voltage [DC coil specification]

2. Latching levers convenient for circuit checking and MY(S) models equipped with mechanical operation indicators and operation indicators for monitoring operation status are available.

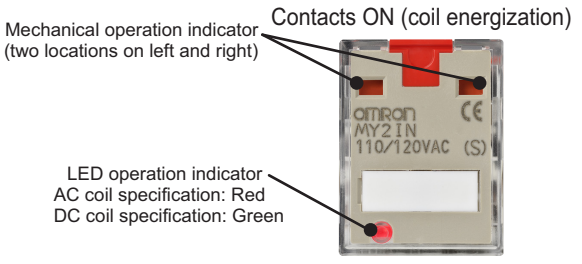
- Latching lever operating procedure



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

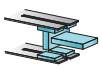
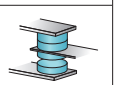
Sliding the lever to the second stage will lock the contacts in the operating position.

- Mechanical operation indicator/LED operation indicator



AC coil specification (LED: Red)

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

Contact reliability	Contact structure	Corrosion resistance	Contact material	Typical model
High ↑	Crossbar bifurcated contacts 	High ↑	Au cladding + AgPd	MY4Z-CBG
	Bifurcated contacts 		Au cladding + Ag alloy Au plating + Ag alloy	MY4Z MY2Z
Low ↓	Single contacts 	Low ↓	Au cladding + Ag alloy	MY4
			Ag alloy	MY2

Model Number Structure

Model Number Legend

●Plug-in Terminals

Standard models

M Y □ □ □ (Example: MY4ZIN(S))

(1) (2) (3)

(1) Number of poles

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

(2) Contacts

None: Single
Z: Bifurcated
Z-CBG: Crossbar bifurcated

(3) Options

None: None
N: With operation indicator
IN(S): With operation indicator/latching lever

Models with built-in diode for coil surge absorption

M Y □ □ (Example: MY4ZIN-D2(S))

(1) (2)

(1) Number of poles/contacts

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

(2) Options

-D: Models with built-in diode for coil surge absorption
N-D2: Built-in diode for coil surge absorption, with operation indicator
IN-D2(S): Built-in diode for coil surge absorption, with operation indicator/latching lever

Models with built-in CR circuit for coil surge absorption

M Y □ □ (Example: MY4ZIN-CR(S))

(1) (2)

(1) Number of poles/contacts

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

(2) Options

-CR: Models with built-in CR circuit for coil surge absorption
N-CR: Built-in CR circuit for coil surge absorption, with operation indicator
IN-CR(S): Built-in CR circuit for coil surge absorption, with operation indicator/latching lever*
*4-pole: Single/bifurcated contacts only

●PCB terminals/case surface mounted

M Y □ □ (Example: MY2-02)

(1) (2)

(1) Number of poles/contacts

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

(2) Terminals

-02: PCB terminals
F: Case-surface mounting

Ordering Information

When your order, specify the rated voltage.

●Plug-in Terminals

Without operation indicator

Classification	Number of poles	Contacts	Model	Rated voltage
Standard models (compliant with Electrical Appliances and Material Safety Act)	2	Single	MY2	12, 24, 100/110, 110/120, 200/220, 220/240 VAC
				12, 24, 48, 100/110 VDC
		Bifurcated	MY2Z	12, 24, 100/110, 110/120, 200/220, 220/240 VAC
				12, 24, 48, 100/110 VDC
	3	Single	MY3	12, 24, 100/110, 110/120, 200/220, 220/240 VAC
				12, 24, 48, 100/110 VDC
	4	Single	MY4	12, 24, 100/110, 110/120, 200/220, 220/240 VAC
				12, 24, 48, 100/110 VDC
		Bifurcated	MY4Z	100/110, 110/120, 200/220, 220/240 VAC
				12, 24, 48, 100/110 VDC
		Crossbar bifurcated	MY4Z-CBG	100/110, 110/120, 200/220 VAC
				12, 24, 48, 100/110 VDC
Models with built-in diode for coil surge absorption (DC coil specification only)	2	Single	MY2-D	12, 24, 48, 100/110 VDC
		Bifurcated	MY2Z-D	12, 24, 100/110 VDC
	3	Single	MY3-D	12, 24, 100/110 VDC
	4	Single	MY4-D	12, 24, 48, 100/110 VDC
		Bifurcated	MY4Z-D	12, 24, 48, 100/110 VDC
Models with built-in CR circuit for coil surge absorption (AC coil specification only)	2	Single	MY2-CR	100/110, 110/120, 200/220, 220/240 VAC
		Bifurcated	MY2Z-CR	100/110, 200/220 VAC,
	4	Single	MY4-CR	100/110, 110/120, 200/220, 220/240 VAC
		Bifurcated	MY4Z-CR	100/110, 110/120, 200/220, 220/240 VAC

With operation indicator

Classification	Number of poles	Contacts	Model	Rated voltage
Standard models (compliant with Electrical Appliances and Material Safety Act)	2	Single	MY2N	12, 24, 100/110, 110/120, 200/220, 220/240 VAC
				12, 24, 48, 100/110 VDC
		Bifurcated	MY2ZN	12, 24, 100/110, 110/120, 200/220, 220/240 VAC
				12, 24, 48, 100/110 VDC
	3	Single	MY3N	12, 24, 100/110, 110/120, 200/220, 220/240 VAC
				12, 24, 48, 100/110 VDC
	4	Single	MY4N	12, 24, 100/110, 110/120, 200/220, 220/240 VAC
				12, 24, 48, 100/110 VDC
		Bifurcated	MY4ZN	24, 100/110, 110/120, 200/220, 220/240 VAC
				12, 24, 48, 100/110 VDC
		Crossbar bifurcated	MY4ZN-CBG	100/110, 200/220 VAC
				24 VDC
Models with built-in diode for coil surge absorption (DC coil specification only)	2	Single	MY2N-D2	12, 24, 48, 100/110 VDC
		Bifurcated	MY2ZN-D2	12, 24, 100/110 VDC
	3	Single	MY3N-D2	12, 24, 100/110 VDC
	4	Single	MY4N-D2	12, 24, 48, 100/110 VDC
		Bifurcated	MY4ZN-D2	12, 24, 48, 100/110 VDC
Models with built-in CR circuit for coil surge absorption (AC coil specification only)	2	Single	MY2N-CR	100/110, 110/120, 200/220, 220/240 VAC
		Bifurcated	MY2ZN-CR	100/110, 200/220 VAC
	4	Single	MY4N-CR	100/110, 110/120, 200/220, 220/240 VAC
		Bifurcated	MY4ZN-CR	100/110, 110/120, 200/220, 220/240 VAC

With operation indicator/latching lever

Classification	Number of poles	Contacts	Model	Rated voltage
Standard models (compliant with Electrical Appliances and Material Safety Act)	2	Single	MY2IN(S)	100/110, 200/220 VAC
				12, 24, 48 VDC
	4	Single	MY4IN(S)	100/110, 200/220 VAC
				12, 24, 48 VDC
		Bifurcated	MY4ZIN(S)	100/110, 200/220 VAC
				12, 24, 48 VDC
Models with built-in diode for coil surge absorption (DC coil specification only)	2	Single	MY2IN-D2(S)	12, 24, 48 VDC
	4	Single	MY4IN-D2(S)	12, 24, 48 VDC
		Bifurcated	MY4ZIN-D2(S)	12, 24, 48 VDC
Models with built-in CR circuit for coil surge absorption (AC coil specification only)	4	Single	MY4IN-CR(S)	100/110, 200/220 VAC
		Bifurcated	MY4ZIN-CR(S)	100/110, 200/220 VAC

●PCB terminals

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

●Case-surface mounting

Classification	Number of poles	Contacts	Model	Rated voltage
Standard models (compliant with Electrical Appliances and Material Safety Act)	2	Single	MY2F	24, 100/110, 110/120, 200/220, 220/240 VAC
				12, 24, 48, 100/110 VDC
	3	Single	MY3F	24, 100/110, 200/220 VAC
				24, 100/110 VDC
	4	Single	MY4F	24, 100/110, 110/120, 200/220 VAC
				12, 24, 48, 100/110 VDC
		Bifurcated	MY4ZF	200/220 VAC
				12, 24 VDC

Ratings and Specifications

Ratings

Operating Coils

Terminal Type	Classification	Number of poles	Contacts	Without operation indicator	With operation indicator
Plug-in terminals	Standard models	2	Single	MY2	MY2N
		4	Single	MY4	MY4N
			Bifurcated	MY4Z	MY4ZN
	Models with built-in diode for coil surge absorption (DC coil specification only)	2	Single	MY2-D	MY2N-D2
		4	Single	MY4-D	MY4N-D2
			Bifurcated	MY4Z-D	MY4ZN-D2
	Models with built-in CR circuit for coil surge absorption (AC coil specification only)	2	Single	MY2-CR	MY2N-CR
		4	Single	MY4-CR	MY4N-CR
			Bifurcated	MY4Z-CR	MY4ZN-CR

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)
Rated voltage (V)		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 (at 60 Hz)
	24	53.8	46	180	0.69	1.3				
	100/110	11.7/12.9	10/11	3,750	14.54	24.6				
	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	72.7		165	0.73	1.37		10% min.*2		Approx. 0.9
	24	36.3		662	3.2	5.72				
	48	17.6		2,725	10.6	21.0				
	100/110	8.7/9.6		11,440	45.6	86.2				

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

*1. There is variation between products, but actual values are 80% maximum.
To ensure operation, apply at least 80% of the rated value (at a coil temperature of 23°C).
*2. There is variation between products, but actual values are 30% minimum for AC and 10% minimum for DC. To ensure release, use a value that is lower than the specified value.

Terminal Type	Classification	Number of poles	Contacts	Without operation indicator	With operation indicator
Plug-in terminals	Standard models	2	Bifurcated	MY2Z	MY2ZN
	Models with built-in diode for coil surge absorption (DC coil specification only)	2	Bifurcated	MY2Z-D	MY2ZN-D2
		3	Single	MY3-D	MY3N-D2
	Models with built-in CR circuit for coil surge absorption (AC coil specification only)	2	Bifurcated	MY2Z-CR	MY2ZN-CR

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)
Rated voltage (V)		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 (at 60 Hz)
	24	53.8	46	180	0.69	1.3				
	100/110	11.7/12.9	10/11	3,750	14.54	24.6				
	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 AC rated current and ±15% for DC coil resistance.
2. The AC coil resistance and inductance values are reference values only (at 60 Hz).
3. Operating characteristics were measured at a coil temperature of 23°C.
4. The maximum voltage capacity was measured at an ambient temperature of 23°C.

*1. There is variation between products, but actual values are 80% maximum.
To ensure operation, apply at least 80% of the rated value.
*2. There is variation between products, but actual values are 30% minimum for AC and 10% minimum for DC. To ensure release, use a value that is lower than the specified value.

Terminal Type	Classification	Number of poles	Contacts	With latching lever
Plug-in terminals	Standard models	2	Single	MY2IN(S)
		4	Single	MY4IN(S)
			Bifurcated	MY4ZIN(S)
	Models with built-in diode for coil surge absorption (DC coil specification only)	2	Single	MY2IN-D2(S)
		4	Single	MY4IN-D2(S)
			Bifurcated	MY4ZIN-D2(S)
	Models with built-in CR circuit for coil surge absorption (AC coil specification only)	2	Single	MY4IN-CR(S)
		4	Bifurcated	MY4ZIN-CR(S)

Item / Rated voltage (V)		Rated current (mA) 50 Hz	Rated current (mA) 60 Hz	Coil resistance (Ω)	Coil inductance (H) Armature OFF	Coil inductance (H) Armature ON	Must operate voltage (V)	Must release voltage (V)	Maximum voltage (V)	Power consumption (VA, W)
AC	100/110	11.7/12.9	10/11	3,750	14.54	24.6	80% max.*1	30% min.*2	110% of rated voltage	Approx. 0.9 to 1.3 (at 60 Hz)
	200/220	6.2/6.8	5.3/5.8	12,950	54.75	94.07				
DC	12	75		160	0.73	1.37		10% min.*2		Approx. 0.9
	24	37.7		636	3.2	5.72				
	48	18.8		2,560	10.6	21				

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

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

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

Terminal Type	Classification	Number of poles	Contacts	Without operation indicator	With operation indicator
Plug-in terminals	Standard models	3	Single	MY3	MY3N
		4	Crossbar bifurcated	MY4Z-CBG	MY4ZN-CBG
PCB terminals	Standard models	2	Single	MY2-02	—
		3	Single	MY3-02	—
		4	Single	MY4-02	—
			Bifurcated	MY4Z-02	—
Case-surface mounting	Standard models	2	Single	MY2F	—
		3	Single	MY3F	—
		4	Single	MY4F	—
			Bifurcated	MY4ZF	—

Item / Rated voltage (V)		Rated current (mA) 50 Hz	Rated current (mA) 60 Hz	Coil resistance (Ω)	Coil inductance (H) Armature OFF	Coil inductance (H) Armature ON	Must operate voltage (V)	Must release voltage (V)	Maximum voltage (V)	Power consumption (VA, W)
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 (at 60 Hz)
	24	53.8	46	180	0.69	1.3				
	100/110	11.7/12.9	10/11	3,750	14.54	24.6				
	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 AC rated current and ±15% for DC coil resistance.
2. The AC coil resistance and inductance values are reference values only (at 60 Hz).
3. Operating characteristics were measured at a coil temperature of 23°C.
4. The maximum voltage capacity was measured at an ambient temperature of 23°C.

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

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

Contact Ratings

Number of poles (contact configuration)	2-pole (DPDT)						3-pole (3PDT)	
Contact structure	Single		With latching lever (S)		Bifurcated		Single	
Load	Resistive load	Inductive load (cos φ = 0.4, L/R = 7 ms)	Resistive load	Inductive load (cos φ = 0.4, L/R = 7 ms)	Resistive load	Inductive load (cos φ = 0.4, L/R = 7 ms)	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	5 A at 250 VAC 5 A at 30 VDC	2 A at 250 VAC 2 A at 30 VDC	5 A at 220 VAC 5 A at 24 VDC	2 A at 220 VAC 2 A at 24 VDC	5 A at 220 VAC 5 A at 24 VDC	2 A at 220 VAC 2 A at 24 VDC
Rated carry current*1	5 A (10 A*2)				5 A		5 A	
Maximum switching voltage	250 VAC, 125 VDC						250 VAC, 125 VDC	
Maximum switching current	5 A		10 A		5 A		5 A	
Maximum switching power	1,100 VA 120 W	440 VA 48 W	2,500 VA 300 W	500 VA 60 W	1,100 VA 120 W	440 VA 48 W	1,100 VA 120 W	440 VA 48 W
Contact material	Ag				Au plating + Ag		Ag	

Number of poles (contact configuration)	4-pole (4PDT)									
Contact structure	Single		With latching lever (S)		Bifurcated		With latching lever (S)		Crossbar bifurcated (CBG)	
Load	Resistive load	Inductive load (cos φ = 0.4, L/R = 7 ms)	Resistive load	Inductive load (cos φ = 0.4, L/R = 7 ms)	Resistive load	Inductive load (cos φ = 0.4, L/R = 7 ms)	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 220 VAC 3 A at 24 VDC	0.8 A at 220 VAC 1.5 A at 24 VDC	3 A at 250 VAC 3 A at 30 VDC	0.8 A at 250 VAC 1.5 A at 30 VDC	3 A at 220 VAC 3 A at 24 VDC	0.8 A at 220 VAC 1.5 A at 24 VDC	3 A at 250 VAC 3 A at 30 VDC	0.8 A at 250 VAC 1.5 A at 30 VDC	1 A at 220 VAC 1 A at 24 VDC	0.3 A at 220 VAC 0.5 A at 24 VDC
Rated carry current*1	3 A (5 A*2)				3 A (5 A*2)				1 A	
Maximum switching voltage	250 VAC, 125 VDC									
Maximum switching current	3 A								1 A	
Maximum switching power	660 VA 72 W	176 VA 36 W	1,250 VA 150 W	200 VA 45 W	660 VA 72 W	176 VA 36 W	1,250 VA 150 W	200 VA 45 W	220 VA 24 W	66 VA 12 W
Contact material	Au cladding + Ag alloy								Au cladding + AgPd	

*1. If you use a Socket, do not exceed the rated carry current of the Socket.
*2. Values shown in parentheses are for the MY□(S) model with latching lever.

Characteristics

Number of poles (contact configuration)		2-pole (DPDT)		3-pole (3PDT)	4-pole (4PDT)		
Contact structure		Single	Bifurcated	Single	Single	Bifurcated	Crossbar bifurcated (CBG)
Contact resistance*1 *2		50 mΩ max.					100 mΩ max.
Operate time*3		20 ms max.					
Release time*3		20 ms max.					
Maximum switching frequency	Mechanical	18,000 operations/h					
	Rated load	1,800 operations/h					
Insulation resistance*4		100 MΩ min.					
Dielectric strength	Between coil and contacts	2,000 VAC, 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					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	AC: 50,000,000 operations min. DC: 100,000,000 operations min. (switching frequency: 18,000 operations/h)	AC: 50,000,000 operations min. DC: 50,000,000 operations min. (switching frequency: 18,000 operations/h)	AC: 50,000,000 operations min. DC: 100,000,000 operations min. (switching frequency: 18,000 operations/h)	AC: 50,000,000 operations min. DC: 100,000,000 operations min. (switching frequency: 18,000 operations/h)	AC: 20,000,000 operations min. DC: 20,000,000 operations min. (switching frequency: 18,000 operations/h)	AC: 50,000,000 operations min. DC: 50,000,000 operations min. (switching frequency: 18,000 operations/h)
	Electrical*5	500,000 operations min. (rated load, switching frequency: 1,800 operations/h)	200,000 operations min. (rated load, switching frequency: 1,800 operations/h)	500,000 operations min. (rated load, switching frequency: 1,800 operations/h)	200,000 operations min. (rated load, switching frequency: 1,800 operations/h)	100,000 operations min. (rated load, switching frequency: 1,800 operations/h)	50,000 operations min. (rated load, switching frequency: 1,800 operations/h)
Failure rate P value (reference value)*6		1 mA at 5 VDC	100 ?A at 1 VDC	1 mA at 5 VDC	1 mA at 1 VDC	100 ?A at 1 VDC	100 ?A at 1 VDC
Weight		Approx. 35 g	Approx. 35 g	Approx. 35 g	Approx. 35 g	Approx. 35 g	Approx. 35 g

Note: The data shown above are initial values.
*1. Models with latching lever are 100 mΩ maximum.
*2. Measurement conditions: 1 A at 5 VDC using the voltage drop method.
*3. Measurement conditions: With rated operating power applied, not including contact bounce.
*4. Measurement conditions: For 500 VDC applied to the same location as for dielectric strength measurement.
*5. Ambient temperature condition: 23°C
*6. This value was measured at a switching frequency of 120 operations per minute.

Classification	Standard models					Models with built-in diode for coil surge absorption (-D)/ Models with built-in CR circuit for coil surge absorption (-CR)		
Contacts	Single/bifurcated			Crossbar/bifurcated (CBG)		Single/bifurcated		
Features	Without operation indicator	With operation indicator	With latching lever	Without operation indicator	With operation indicator	Without operation indicator	With operation indicator	With latching lever
Ambient operating temperature*1	−55 to 70°C	−55 to 60°C*2	−55 to 70°C	−25 to 70°C	−25 to 60°C	−55 to 60°C*2	−55 to 60°C*2	−55 to 70°C
Ambient operating humidity	5% to 85%					5% to 85%		

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

Certified Standards

●UL certification (File No. E41515)

Model	Standard number	Category	Listed/ Recognized	Operating Coil ratings	No. of poles	Contact ratings	Certified number of operations
MY2 MY2N MY2IN(S) MY2N-D2 MY2-D2 MY2IN-D2(S) MY2-CR MY2N-CR	UL508	NRNT2	Recognition	6 to 240 VAC 6 to 125 VDC	2	10 A, 250 VAC (General Use) 10 A, 30 VDC (General Use) 7 A, 240 VAC (General Use) 7 A, 24 VDC (Resistive) 5 A, 240 VAC (General Use) 5 A, 250 VAC (Resistive) 5 A, 30 VDC (Resistive) 3 A, 265 VAC (Resistive)	6,000
						1/6 HP, 250 VAC 1/8 HP, 265 VAC 1/10 HP, 120 VAC	1,000
						B300 Pilot Duty (Same polarity)	6,000
MY2Z MY2ZN MY2-02 MY2F MY2Z-D MY2Z-D2 MY2Z-CR MY2ZN-CR	UL508	NRNT2	Recognition	6 to 240 VAC 6 to 125 VDC	2	7 A, 240 VAC (General Use) 7 A, 24 VDC (Resistive) 5 A, 240 VAC (General Use) 5 A, 250 VAC (Resistive) 5 A, 30 VDC (Resistive) 3 A, 265 VAC (Resistive)	6,000
						1/6 HP, 250 VAC 1/8 HP, 265 VAC 1/10 HP, 120 VAC	1,000
						B300 Pilot Duty (Same polarity)	6,000
MY3 MY3N MY3-D MY3N-D2 MY3-02 MY3F	UL508	NRNT2	Recognition	6 to 240 VAC 6 to 125 VDC	3	5 A, 28 VDC (Resistive) 5 A, 240 VAC (General Use)	6,000
						1/6 HP, 250 VAC	1,000
MY4 MY4N MY4IN(S) MY4-D MY4N-D2 MY4IN-D2(S) MY4Z MY4ZN MY4ZIN(S) MY4Z-D MY4ZN-D2 MY4ZIN-D2(S) MY4Z-CR MY4ZN-CR MY4ZIN-CR(S)	UL508	NRNT2	Recognition	6 to 240 VAC 6 to 125 VDC	4	5 A, 28 VDC (General Use) (Same polarity) 5 A, 240 VAC (General Use) (Same polarity) 5 A, 30 VDC (Resistive) (Same polarity) 5 A, 250 VAC (Resistive) (Same polarity) 0.2 A, 120 VDC (Resistive) (Same polarity)	6,000
MY4-02 MY4F MY4Z-02 MY4ZF						1/6 HP, 250 VAC (Same polarity) 1/10 HP, 120 VAC (Same polarity)	1,000
						B300 Pilot Duty (Same polarity)	6,000

●CSA certification (File No. LR31928)

Model	Standard number	Class number	Operating Coil ratings	No. of poles	Contact ratings	Certified number of operations
MY2 MY2N MY2IN(S) MY2N-D2 MY2-D2 MY2IN-D2(S) MY2-CR MY2N-CR	C22.2 NO.0, No.14		6 to 240 VAC 6 to 125 VDC	2	7 A, 240 VAC (Resistive) 7 A, 24 VDC (Resistive) 5 A, 240 VAC (General Use) 5 A, 250 VAC (Resistive) 5 A, 30 VDC (Resistive)	6,000
					1/6 HP, 250 VAC (Same polarity) 1/10 HP, 120 VAC (Same polarity)	1,000
MY2Z MY2ZN MY2-02 MY2F MY2Z-D MY2Z-D2 MY2Z-CR MY2ZN-CR	C22.2 NO.0, No.14		6 to 240 VAC 6 to 125 VDC	2	7 A, 240 VAC (General Use) (Same polarity) 7 A, 24 VDC (Resistive) (Same polarity) 5 A, 240 VAC (General Use) (Same polarity) 5 A, 30 VDC (Resistive) 5 A, 250 VAC (Resistive) (Same polarity) 0.2 A, 120 VDC (Resistive)	6,000
					1/6 HP, 250 VAC 1/10 HP, 120 VAC	1,000
MY3 MY3N MY3-D MY3N-D2 MY3-02 MY3F	C22.2 NO.0, No.14		6 to 240 VAC 6 to 125 VDC	3	5 A, 28 VDC (Resistive) 5 A, 240 VAC (General Use) 7 A, 240 VAC (General Use) 7 A, 24 VDC (Resistive)	6,000
					1/6 HP, 250 VAC	1,000
MY4 MY4N MY4N(S) MY4-D MY4N-D2 MY4IN-D2(S) MY4-CR MY4N-CR MY4IN-CR(S) MY4Z MY4ZN MY4ZIN(S) MY4Z-D MY4ZN-D2 MY4ZIN-D2(S) MY4Z-C MY4ZN-CR MY4ZIN-CR(S)	C22.2 No.14	3211 07	6 to 240 VAC 6 to 125 VDC	4	5 A, 240 VAC (General Use) (Same polarity) 5 A, 28 VDC (General Use) (Same polarity) 5 A, 250 VAC (Resistive) (Same polarity) 5 A, 30 VDC (Resistive) (Same polarity) 0.2 A, 120 VDC (Resistive) (Same polarity)	6,000
					1/6 HP, 250 VAC (Same polarity) 1/10 HP, 120 VAC (Same polarity)	1,000
					B300 Pilot Duty (Same polarity)	6,000
MY4-02 MY4F MY4Z-02 MY4ZF	C22.2 NO.0, No.14	3211 07	6 to 240 VAC 6 to 125 VDC	4	7 A, 240 VAC (General Use) (Same polarity) 7 A, 24 VDC (Resistive) (Same polarity) 5 A, 240 VAC (General Use) (Same polarity) 5 A, 30 VDC (Resistive) 5 A, 250 VAC (Resistive) (Same polarity) 0.2 A, 120 VDC (Resistive)	6,000
					1/6 HP, 250 VAC 1/10 HP, 120 VAC	1,000

●TÜV Rheinland certification (Certification No. R50030059)

Model	Operating Coil ratings	Contact ratings	Certified number of operations
MY2Z MY2ZN MY2-02 MY2F MY2Z-D MY2Z-D2 MY2Z-CR MY2ZN-CR	6 to 125 VDC, 6 to 240 VAC	5 A, 250 VAC (cos φ = 1.0)	100,000
MY3 MY3N MY3-D MY3N-D2 MY3-02 MY3F		5 A, 250 VAC (cos φ = 1.0) 0.8 A, 250 VAC (cos φ = 0.4)	
MY4-02 MY4F MY4Z-02 MY4ZF		3 A, 120 VAC (cos φ = 1.0) 0.8 A, 250 VAC (cos φ = 0.4)	

●CE Marking

Model	EMC Directive	Low Voltage Directive	Machinery Directive	Safety Category
MY2 MY2N MY2IN(S) MY2Z MY2ZN MY2-D MY2N-D2 MY2IN-D2(S) MY2-CR MY2N-CR MY2Z-CR MY2ZN-CR MY2Z-D MY2ZN-D2 MY2F	Not applicable	Applicable	Not applicable	1
MY3 MY3N MY3-D MY3N-D2 MY3F				
MY4 MY4N MY4IN(S) MY4Z MY4ZN MY4ZIN(S) MY4-D MY4N-D2 MY4IN-D2(S) MY4Z-D MY4ZN-D2 MY4ZIN-D2(S) MY4-CR MY4N-CR MY4Z-CR MY4ZN-CR MY4F MY4ZF				

●LR certification (Lloyd's Register)

Model	File No.	Environmental Category	Operating Coil ratings	Contact ratings	Certified number of operations
MY2 MY2N MY2IN(S) MY2-D MY2N-D2 MY2IN-D2(S) MY2-CR MY2N-CR	File No.98/10014	ENV2,3	6 to 240 VAC 6 to 125 VDC	10 A, 250 VAC (Resistive) 2 A, 250 VAC (PF0.4) 10 A, 30 VDC (Resistive) 2 A, 30 VDC (L/R = 7 ms)	MY2: 50,000
MY2Z MY2ZN MY2Z-D MY2ZN-D2	File No.90/10270	ENV2,3	6 to 240 VAC 6 to 125 VDC	2 A, 30 VDC inductive load 2 A, 200 VAC inductive load	MY2: 50,000
MY4 MY4N MY4IN(S) MY4-D MY4N-D2 MY4IN-D2(S) MY4-CR MY4N-CR MY4IN-CR(S) MY4Z MY4ZN MY4ZIN(S) MY4Z-D MY4ZN-D2 MY4ZIN-D2(S) MY4Z-CR MY4ZN-CR MY4ZIN-CR(S)	File No.98/10014	ENV2,3	6 to 240 VAC 6 to 125 VDC	5 A, 250 VAC (Resistive) 0.8 A, 250 VAC (PF0.4) 5 A, 30 VDC (Resistive) 1.5 A, 30 VDC (L/R = 7 ms)	MY4: 50,000

●VDE certification

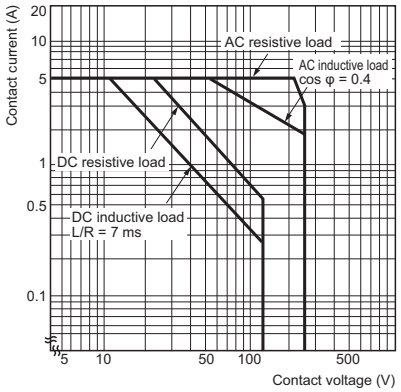
Model	Standard number	Certification No.	Operating Coil ratings	Contact ratings	Certified number of operations
MY2 MY2N MY2IN(S) MY2-D MY2N-D2 MY2IN-D2(S) MY2-CR MY2N-CR	EN 61810-1	112467UG	6, 12, 24, 48/50, 100/110, 110/120, 200/220, 220/240 VAC 6, 12, 24, 48, 100/110, 125 VDC	10A, 250 VAC (cos φ = 1) 10A, 30 VDC (L/R = 0 ms)	MY2: 100,000 MY4: 100,000 MY4Z: 50,000 (AC)
MY4 MY4N MY4IN(S) MY4Z MY4ZN MY4ZIN(S) MY4-D MY4ZN-D2 MY4IN-D2(S) MY4Z-D MY4Z-D2 MY4ZIN-D2(S) MY4-CR MY4N-CR MY4IN-CR(S) MY4Z-CR MY4ZN-CR MY4ZIN-CR(S)			6, 12, 24, 48/50, 100/110, 110/120, 200/220, 220/240 VAC 6, 12, 24, 48, 100/110, 125 VDC	5 A, 250 VAC (cos φ = 1) 5 A, 30 VDC (L/R = 0 ms)	

Engineering Data (Reference Value)

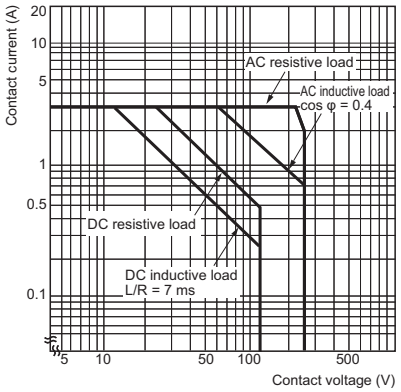
●Maximum Switching Capacity

Plug-in terminals

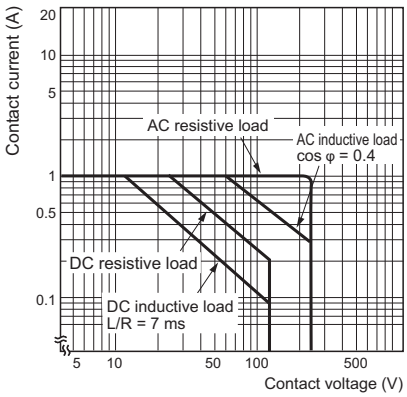
MY2 and MY3



MY4 and MY4Z

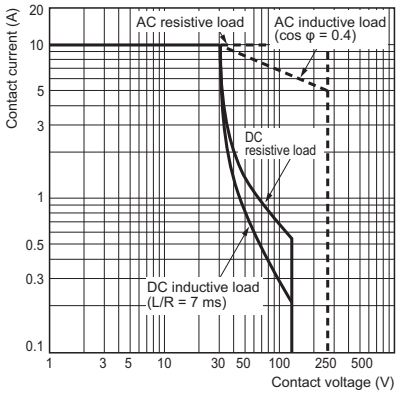


MY4Z-CBG

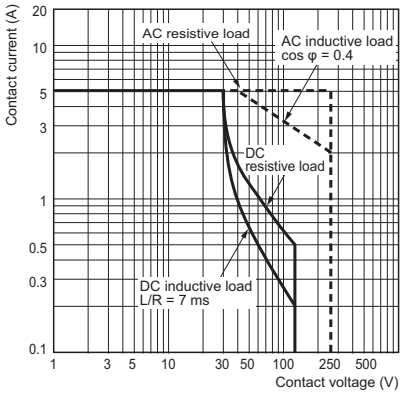


Plug-in Terminals, with latching lever

MY2(S)



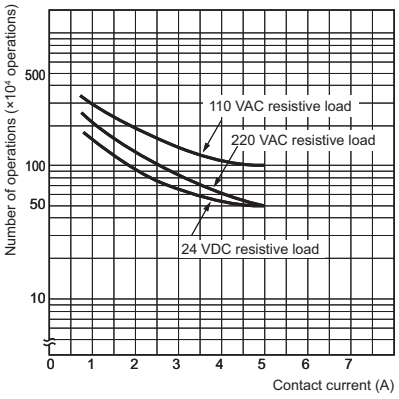
MY4(S) and MY4Z(S)



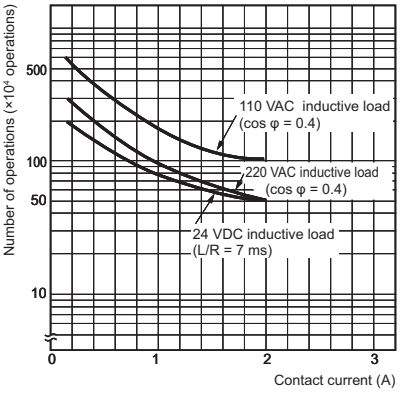
●Endurance Curve

Plug-in terminals

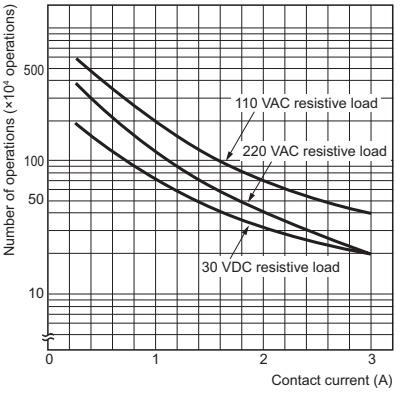
MY2 and MY3



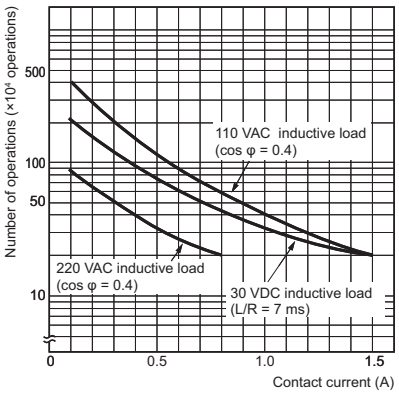
MY2 and MY3



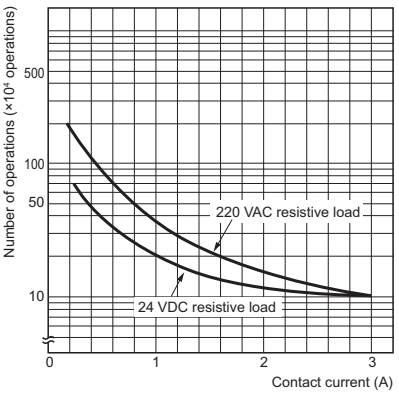
MY4



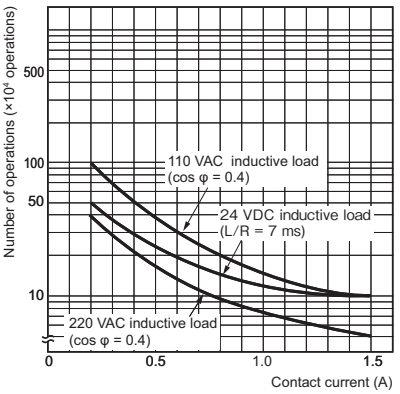
MY4



MY4Z

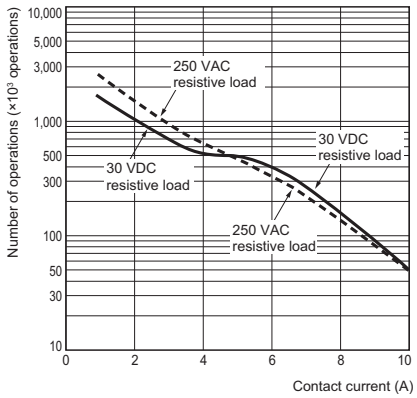


MY4Z

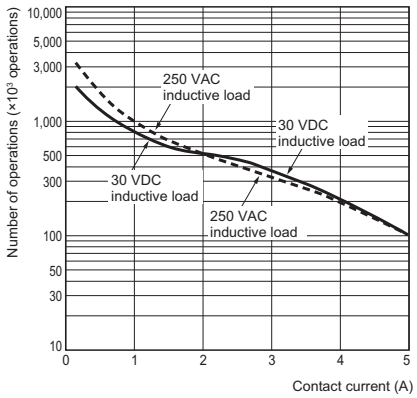


Plug-in Terminals, with latching lever

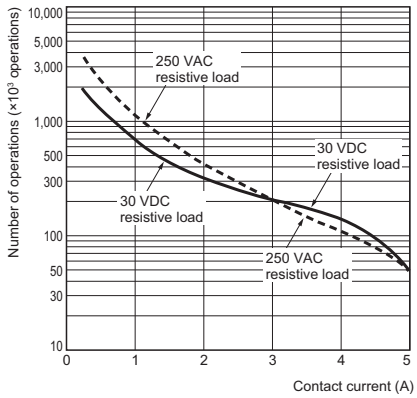
MY2(S)



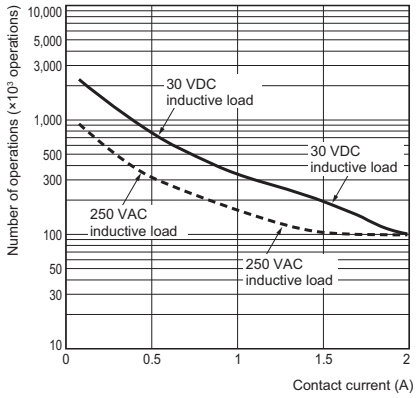
MY2(S)



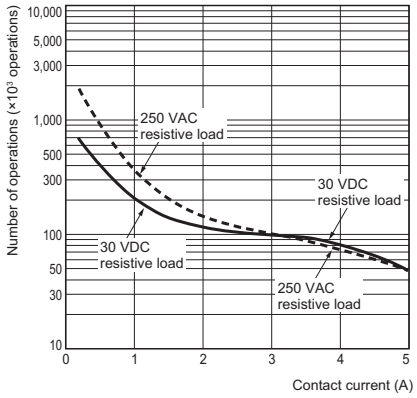
MY4(S)



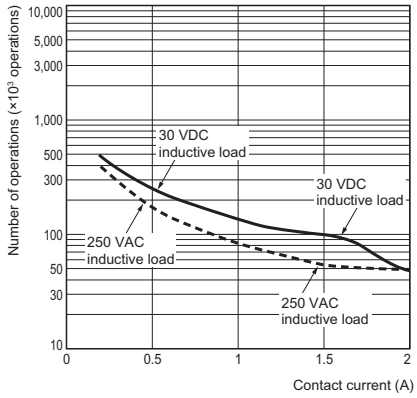
MY4(S)



MY4Z(S)

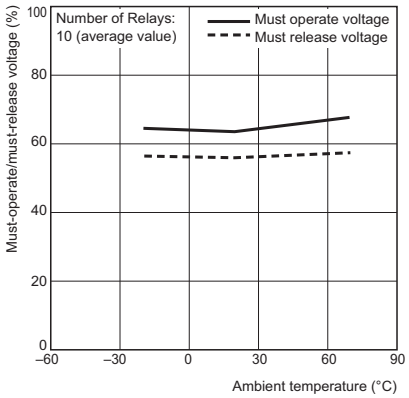


MY4Z(S)

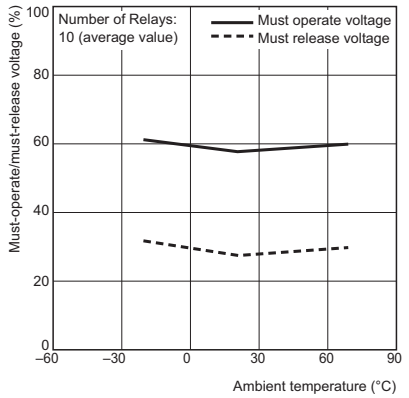


●Ambient Temperature vs. Must-operate and Must-release Voltage

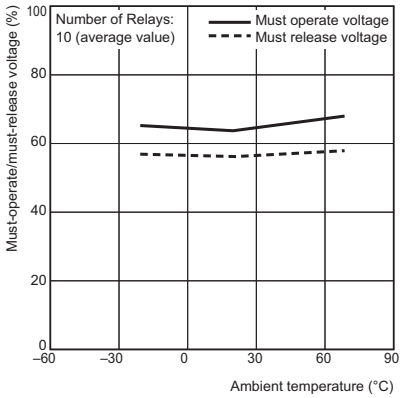
MY2 AC Models



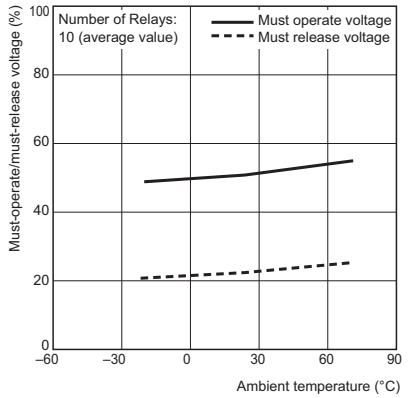
MY2 DC Models



MY4 AC Models

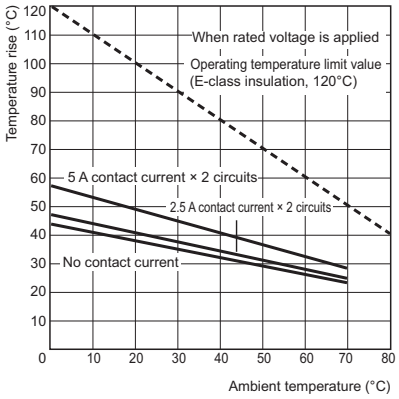


MY4 DC Models

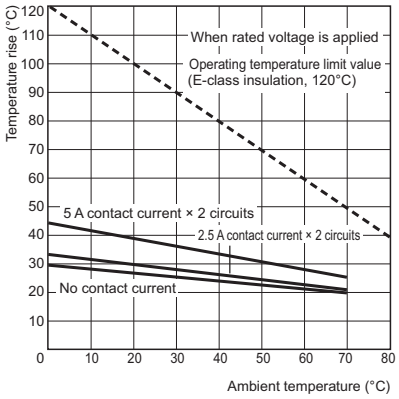


●Ambient Temperature vs. Coil Temperature Rise

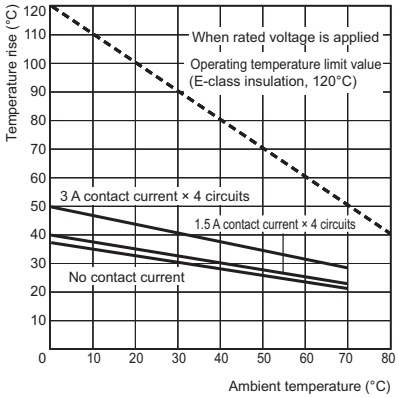
MY2 AC Models, 50 Hz



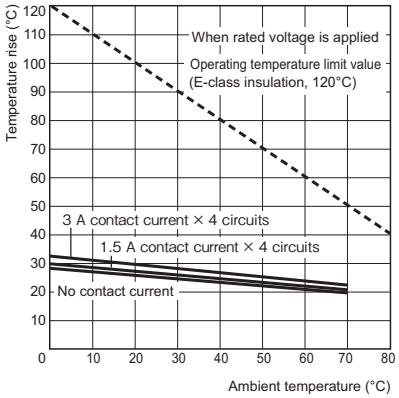
MY2 DC Models



MY4 AC Models, 50 Hz

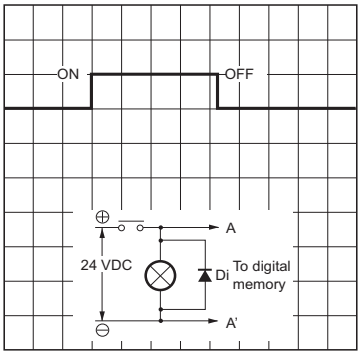


MY4 DC Models

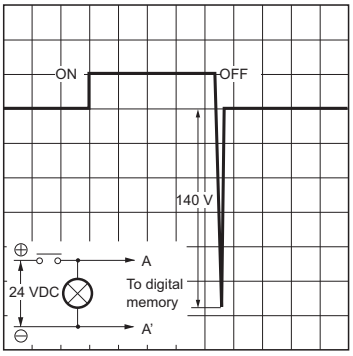


Models with built-in diode for coil surge absorption MY□-D

With Diode



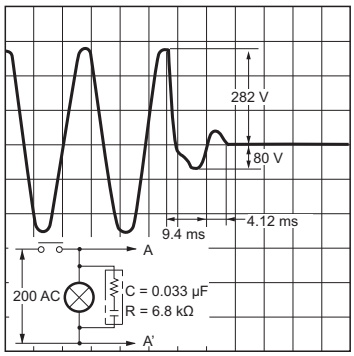
Without Diode



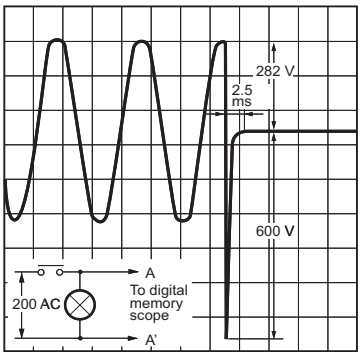
Note: **1.** Make sure that the polarity is correct.
2. The release time will increase, but the 20-ms specification for standard models is satisfied.
3. Diode properties: The diode has a reversed dielectric strength of 1,000 V.
Forward current: 1 A

Models with built-in CR circuit for coil surge absorption MY□-CR

With CR



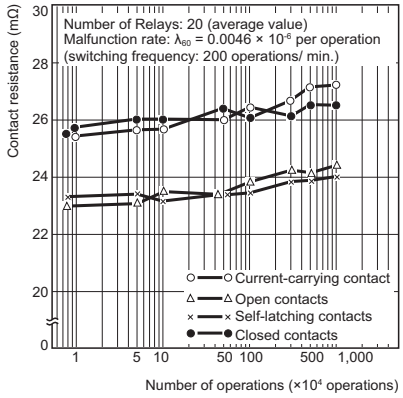
Without CR



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

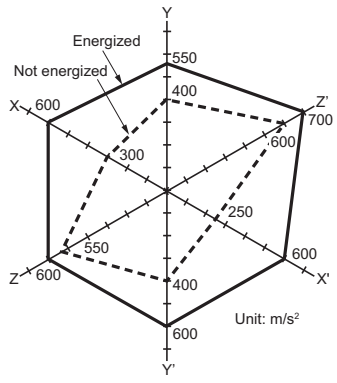
Contact load: 5 VDC, 1 mA resistive load

Malfunction level: Contact resistance of 100 Ω



Common Specifications for MY2, MY3, MY4, MY4Z, MY□-02, MY□F, and MY(S)

●Shock Malfunction

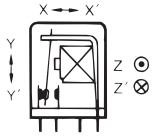


N = 20

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

Criteria: Non-energized: 200 m/s², Energized: 200 m/s²

Shock direction

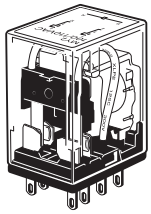


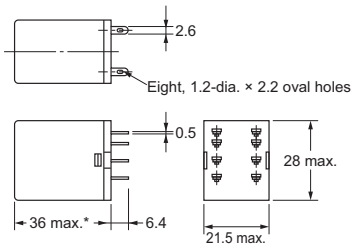
Dimensions

(Unit: mm)

●Plug-in terminals

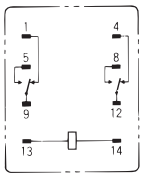
MY2, MY2N, MY2-D and MY2N-D2
MY2-CR, MY2N-CR





* For the MY2-CR 24 VAC and MY2N-CR 24 VAC, this dimension is 53 mm maximum.

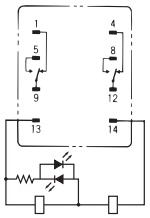
Terminal Arrangement/ Internal Connection Diagram (Bottom View)
MY2
(AC/DC Models)



(Coil has no polarity)

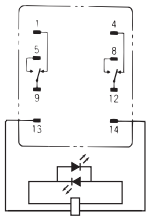
MY2N

DC Models



(Coil has no polarity)

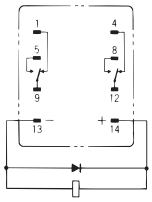
AC Models



(Coil has no polarity)

MY2-D

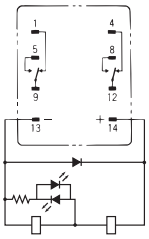
(DC Models Only)



(Coil has polarity)

MY2N-D2

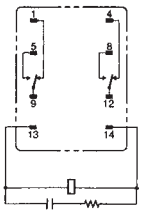
(DC Models Only)



(Coil has polarity)

MY2-CR

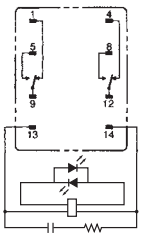
(AC Models Only)



(Coil has no polarity)

MY2N-CR

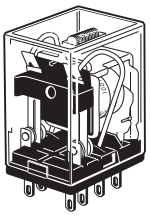
(AC Models Only)

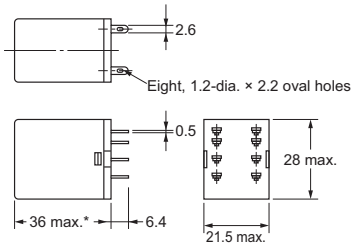


(Coil has no polarity)

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

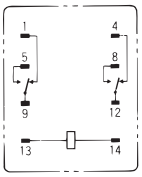
MY2Z, MY2ZN, MY2Z-D and MY2ZN-D2
MY2Z-CR, MY2ZN-CR





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

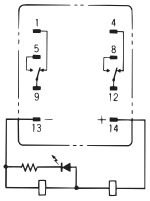
Terminal Arrangement/Internal Connection Diagram (Bottom View)
MY2Z
(AC/DC Models)



(Coil has no polarity)

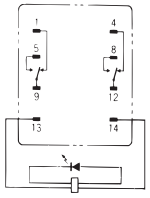
MY2ZN

DC Models



(Coil has polarity)

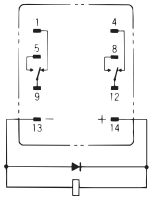
AC Models



(Coil has no polarity)

MY2Z-D

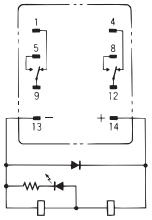
(DC Models Only)



(Coil has polarity)

MY2ZN-D2

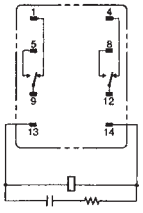
(DC Models Only)



(Coil has polarity)

MY2Z-CR

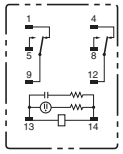
(AC Models Only)



(Coil has no polarity)

MY2ZN-CR

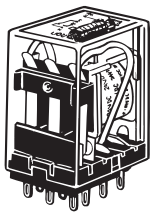
(AC Models Only)

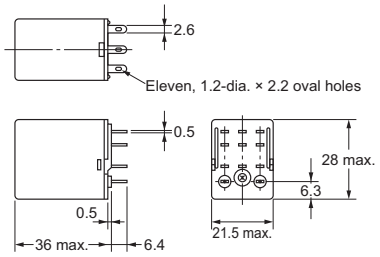


(Coil has no polarity)

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

MY3, MY3N, MY3-D, and MY3N-D2

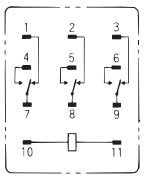




Terminal Arrangement/ Internal Connection Diagram (Bottom View)

MY3

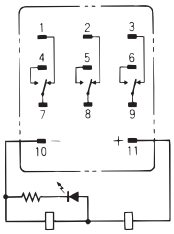
(AC/DC Models)



(Coil has no polarity)

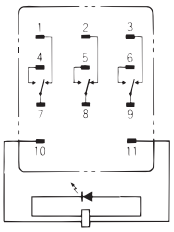
MY3N

DC Models



(Coil has polarity)

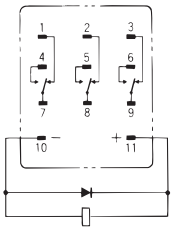
AC Models



(Coil has no polarity)

MY3-D

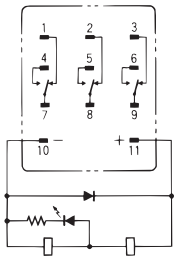
(DC Models Only)



(Coil has polarity)

MY3N-D2

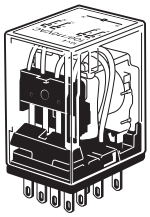
(DC Models Only)

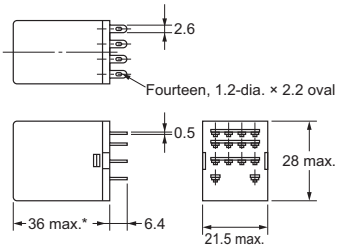


(Coil has polarity)

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

MY4, MY4N, MY4-D and MY4N-D2
MY4-CR, MY4N-CR



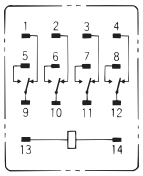


* For the MY4-CR 24 VAC and MY4N-CR 24 VAC/115 VAC, this dimension is 53 mm maximum.

Terminal Arrangement/ Internal Connection Diagram (Bottom View)

MY4

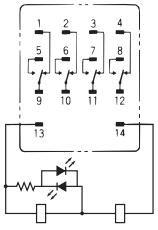
(AC/DC Models)



(Coil has no polarity)

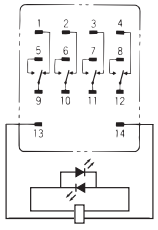
MY4N

DC Models



(Coil has no polarity)

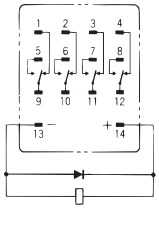
AC Models



(Coil has no polarity)

MY4-D

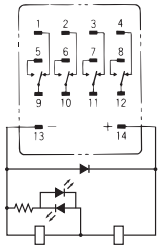
(DC Models Only)



(Coil has polarity)

MY4N-D2

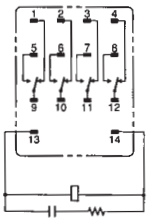
(DC Models Only)



(Coil has polarity)

MY4-CR

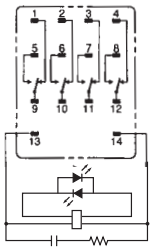
(AC Models Only)



(Coil has no polarity)

MY4N-CR

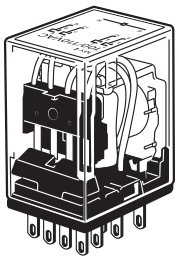
(AC Models Only)

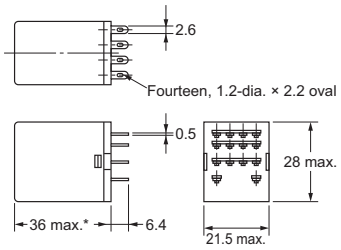


(Coil has no polarity)

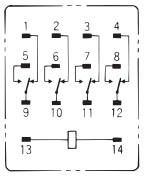
Note: **1.** An AC model has coil disconnection self-diagnosis.
2. For the DC models, check the coil polarity when wiring and wire all connections correctly.
3. The indicator is red for AC and green for DC.
4. The operation indicator indicates the energization of the coil and does not represent contact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

MY4Z, MY4ZN, MY4Z-D, MY4ZN-D2
MY4Z-CR, MY4ZN-CR



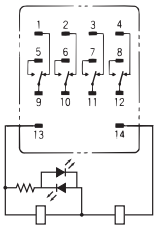


Terminal Arrangement/Internal Connection Diagram (Bottom View)
MY4Z
(AC/DC Models)



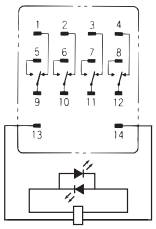
(Coil has no polarity)

MY4ZN
DC Models



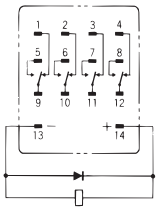
(Coil has no polarity)

MY4ZN
AC Models



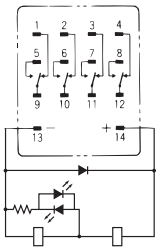
(Coil has no polarity)

MY4Z-D
(DC Models Only)



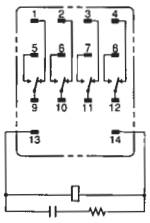
(Coil has polarity)

MY4ZN-D2
(DC Models Only)



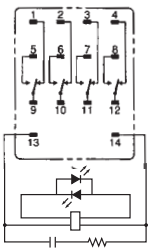
(Coil has polarity)

MY4Z-CR
(AC Models Only)



(Coil has no polarity)

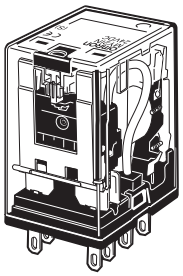
MY4ZN-CR
(AC Models Only)

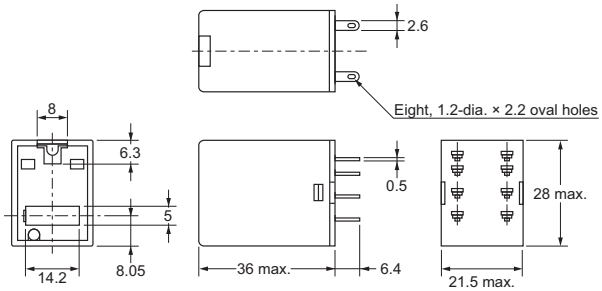


(Coil has no polarity)

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

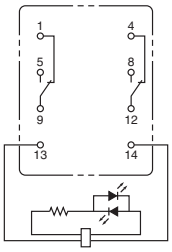
MY2IN(S)
MY2IN-D2(S)



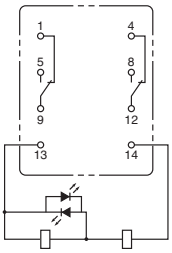


Terminal Arrangement/Internal Connections (Bottom View)

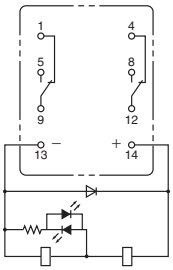
MY2IN(S)
(AC Models)



MY2IN(S)
(DC Models)

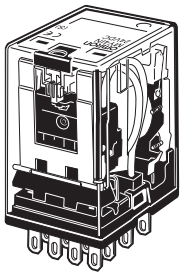


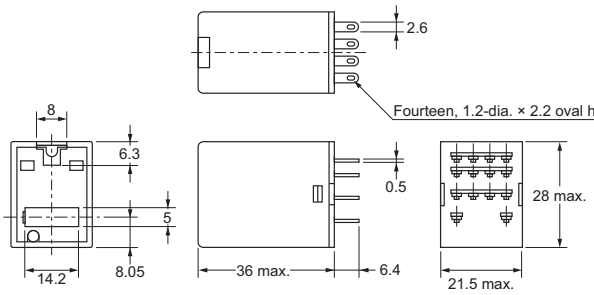
MY2IN-D2(S)
(DC Models Only)



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

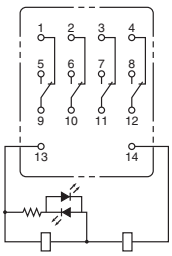
MY(Z)IN(S)
MY4(Z)IN-D2(S)
MY4(Z)IN-CR(S)



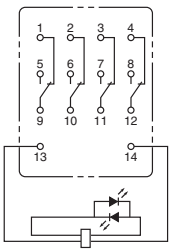


Terminal Arrangement/Internal Connections (Bottom View)

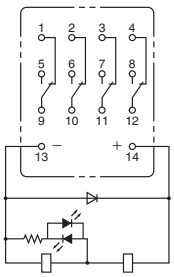
MY4(Z)IN(S)
(DC Models)



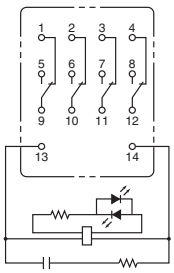
MY4(Z)IN(S)
(AC Models)



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

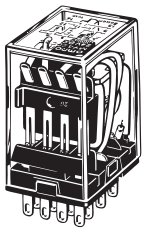


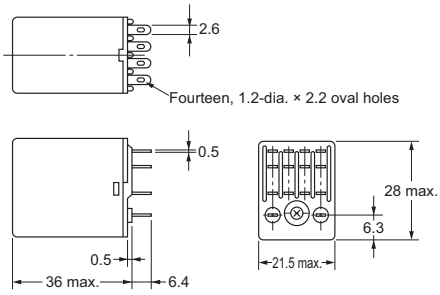
MY4(Z)IN-CR(S)
(AC Models Only)



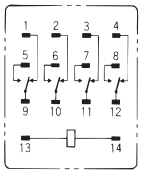
Note: For the DC models, check the coil polarity when wiring and wire all connections correctly.

MY4Z-CBG
MY4ZN-CBG





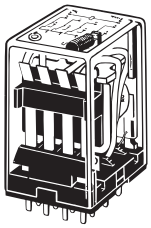
Terminal Arrangement/Internal Connection Diagram (Bottom View)
MY4Z-CBG
(AC/DC Models)



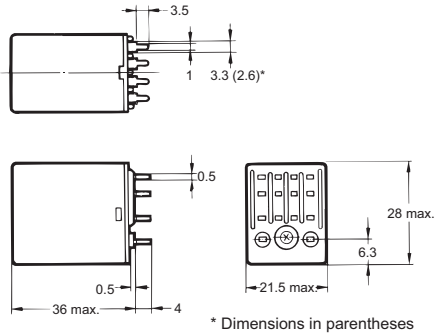
(The coil has no polarity.)

●PCB terminals

MY2-02
MY3-02
MY4-02
MY4Z-02

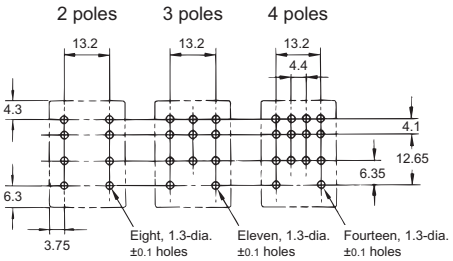


The figure and outline drawing show MY4-02.
The 2-pole and 3-pole models conform to these dimensions.



* Dimensions in parentheses are for the MY4-02.

PCB Processing Dimensions (Bottom View)

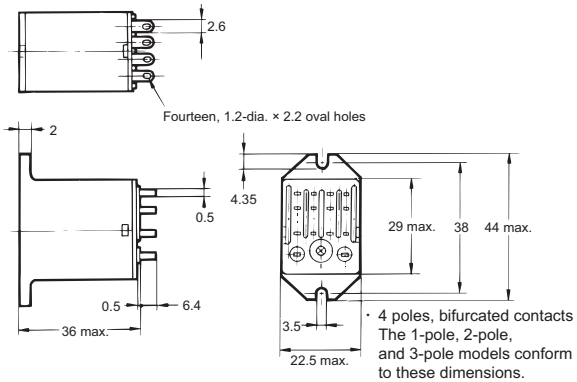


Note: 1. The dimensional tolerance is ±0.1.
2. Refer to the terminal arrangement and internal connections diagrams for the MY2, MY3, MY4, and MY4Z.

●Case-surface mounting

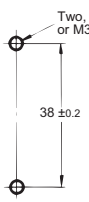
MY2F
MY3F
MY4F
MY4ZF

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



* 4 poles, bifurcated contacts
The 1-pole, 2-pole, and 3-pole models conform to these dimensions.

Mounting Hole Dimensions



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

Latching miniature power relays that retain contact operation status

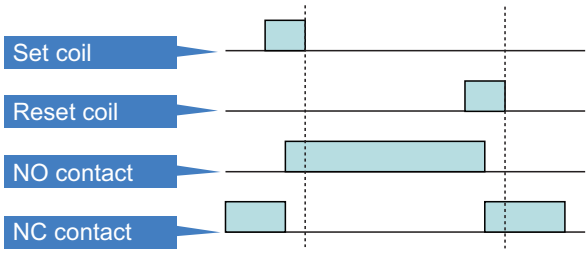
- A low power consumption type that retains contacts using a magnetic lock system.
- Equipped with mechanical operation indicators to make operation status easy-to-see.

⚠ Refer to *Safety Precautions* on pages 54 to 55 and *Safety Precautions for All Relays*.

Features

Latching Relays MYK

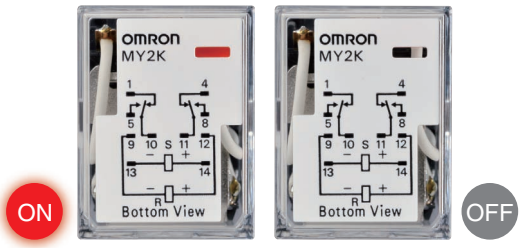
Retains contact operation status.



NO contact turns on when voltage is applied to the set coil and stays on even if voltage stops being applied to the set coil. NO contact turns off when voltage is applied to the reset coil, after which NC contact will turn on.*

*MYK features a magnetic lock system.

Contact operation status can be seen at a glance thanks to the mechanical operation indicator.



Model Number Structure

Model Number Legend

M Y □ □ - □ □

(1) (2) (3) (4)

(1) Basic model name
MY: Miniature Power Relays

(2) Number of poles/contacts
2: 2-pole, single

(3) Type
K: Latching relay

(4) Options, terminal type
None: Plug-in terminals
02: PCB terminals

Ordering Information

When your order, specify the rated voltage.

Main unit

●Plug-in terminals

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

●PCB terminals

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

Ratings and Specifications

Ratings

●Operating coil

Rated voltage (V)		Set coil			Reset coil			Must operate voltage (V)	Must release 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				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 AC rated current and ±15% for 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.
*There is variation between products, but actual values are 80% maximum.

●Contact Ratings

Number of poles (contact configuration)	2-pole (DPDT)	
Contact structure	Single	
Load	Resistive load	Inductive load (cos φ = 0.4, L/R = 7 ms)
Rated load	3 A at 220 VAC 3 A at 24 VDC	0.8 A at 220 VAC 1.5 A at 24 VDC
Rated carry current	3 A	
Maximum switching voltage	250 VAC, 125 VDC	
Maximum switching current	3 A	
Maximum switching power	660 VA 72 W	176 VA 36 W
Contact material	Au plating + Ag	

Characteristics

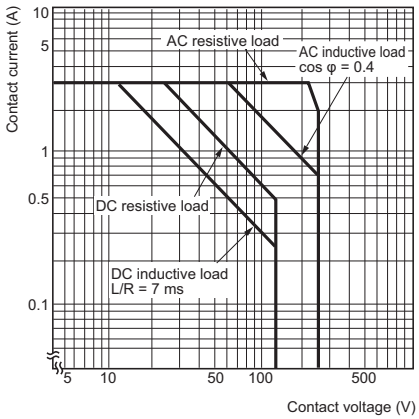
Contact resistance*1		50 mΩ max.
Set	Operate time*2	AC: 30 ms max., DC: 15 ms max.
	Minimum pulse width	AC: 60 ms, DC: 30 ms
Reset	Release time*2	AC: 30 ms max., DC: 15 ms max.
	Minimum pulse width	AC: 60 ms, DC: 30 ms
Maximum switching frequency	Mechanical	18,000 operations/h
	Rated load	1,800 operations/h
Insulation resistance*3		100 MΩ min.
Dielectric strength	Between coil and contacts Between contacts of different polarity	1,500 VAC at 50/60 Hz for 1 min
	Between contacts of the same polarity	1,000 VAC at 50/60 Hz for 1 min
	Between set/reset coils	
Vibration resistance	Destruction	10 to 55 to 10 Hz, 0.5-mm single amplitude (1.0-mm double amplitude)
	Malfunction	10 to 55 to 10 Hz, 0.5-mm single amplitude (1.0-mm double amplitude)
Shock resistance	Destruction	1,000 m/s^2
	Malfunction	200 m/s^2
Endurance	Mechanical	100,000,000 operations min. (switching frequency: 18,000 operations/h)
	Electrical*4	200,000 operations min. (at rated load, switching frequency: 1,800 operations/h)
Failure rate P value (reference value)*5		1 mA at 1 VDC
Ambient operating temperature*6		-55 to 60°C
Ambient operating humidity		5% to 85%
Weight		Approx. 30 g

Note: The data shown above are initial values.
*1. Measurement conditions: 1 A at 5 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.
*6. With no icing or condensation.

Engineering Data (Reference Value)

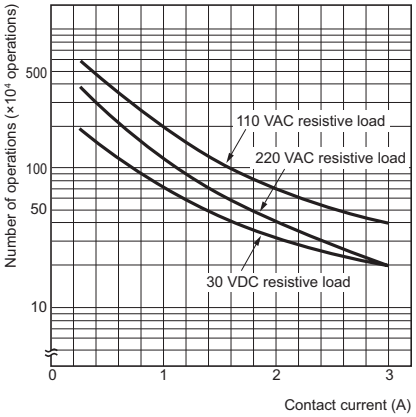
Maximum Switching Capacity

MY2K(-02)

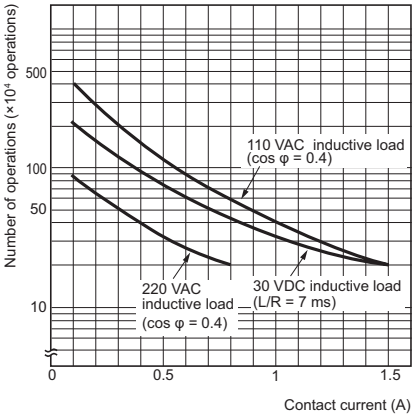


Endurance Curve

MYK(-02)

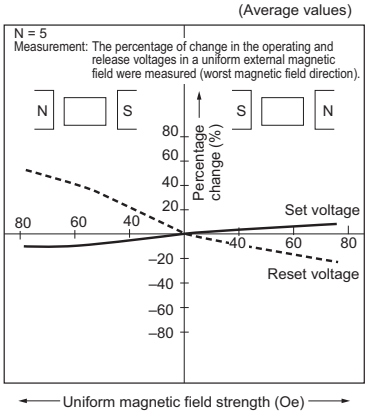


MYK(-02)



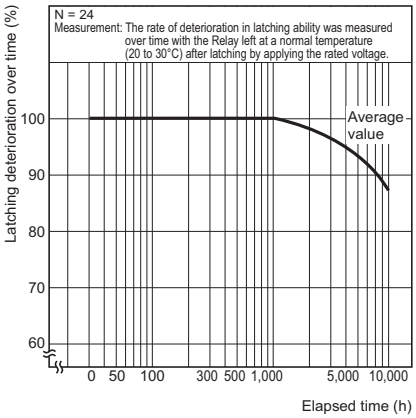
Magnetic Interference (External Magnetic Field)

MY2K 24 VDC



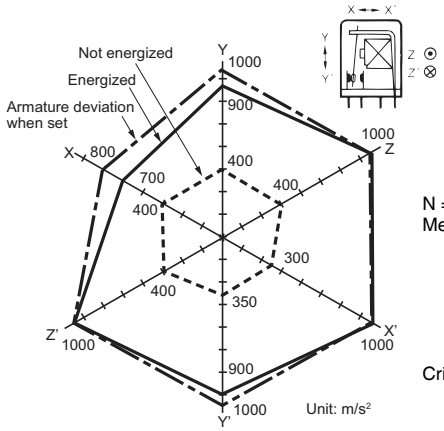
Latching Deterioration Over Time

MY2K



Shock Malfunction

MY2K 100 VAC



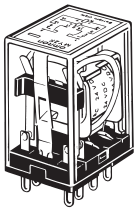
N = 20
Measurement: Shock was applied in 6 directions along 3 axes 2 times with the Relay energized and 3 times with the Relay not energized to check the shock values that cause the Relay to malfunction.
Criteria: Non-energized: 200 m/s²
Energized: 200 m/s²

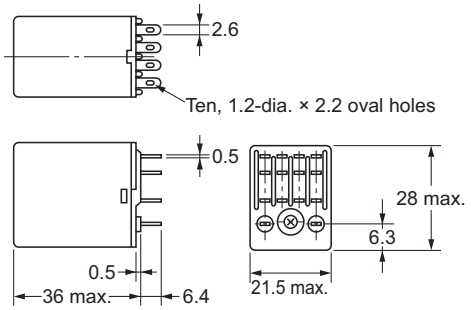
Dimensions

(Unit: mm)

●Plug-in terminals

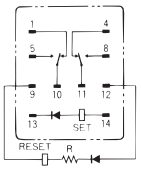
MY2K





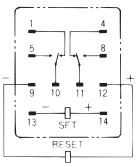
Terminal Arrangement/ Internal Connection Diagram (Bottom View)

For AC



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

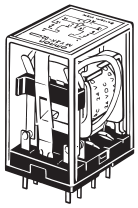
For DC

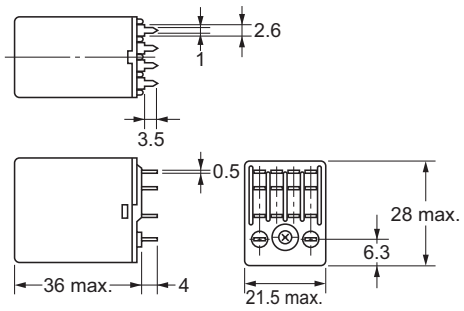


Note: Pay close attention to the set coil and reset coil polarities. If the connections are not correct, unintended operation may occur.

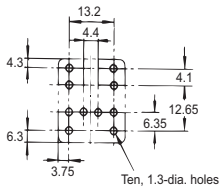
●PCB terminals

MY2K-02





PCB Processing Dimensions (Bottom View)



Note: The dimensional tolerance is ±0.1.

MYQ/MYH

Sealed relays that are tough in environments where dust or corrosive gases, etc., are present

- Plastic sealed relays (MYQ) and hermetically sealed relays (MYH) that are resistant to effects from the surrounding environment
- Highly airtight structures that are tough in environments where corrosive gases such as chloride gas, sulfuric gas, and silicone gas are generated. They are also resistant to environments where salt damage is occurred and where dust is generated.
- Prevent relay contact failures via a highly airtight structure.

⚠ Refer to *Safety Precautions* on pages 54 to 55 and *Safety Precautions for All Relays*.

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

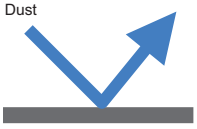
Features

Highly Airtight Relays (Plug-in Terminals)

Seal performance	Degree of protection	Typical relay	Features
High ↑ Low	 Hermetically sealed	MYH	Sealing with metals, the glass case and base, etc. with inert gases (N2) inside makes it airtight structure which provides the external casing with durability against harmful corrosion, and prevents corrosive gases from intruding inside relays.
	 Plastic sealed	MYQ	Structure that seals relays with the resin case and cover, etc., to prevent effects from corrosive environments.
	 Closed type (cased)	MY, MY4Z-CBG	Relays in the case realize the structure that protects them from contact with foreign materials.

Plastic Sealed Relays: MYQ

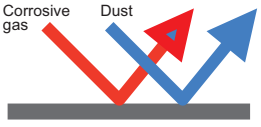
These realize excellent reliability even in environments where salt damage occurs or where dust is generated.



MYQ

Hermetically Sealed Relays: MYH

These realize excellent reliability even in environments where dust is generated or where corrosive gases (chloride gas, sulfuric gas, silicone gas, etc.) are present.



MYH

Model Number Structure

Model Number Legend

M Y □ □ - □ □

(1) (2) (3) (4)

(1) Basic model name
MY: Miniature Power Sealed Relays

(2) Contacts/seals
Q4: 4-pole, single contacts, plastic sealed relays
Q4Z: 4-pole, bifurcated contacts, plastic sealed relays
4H: 4-pole, single contacts, hermetically sealed relays
4ZH: 4-pole, bifurcated contacts, hermetically sealed relays

(3) Type
None: None
N: With operation indicator*
*Only MYQ (plastic sealed relay)

(4) Options, terminal type
None: Plug-in terminals
02: Plastic sealed relays, PCB terminals
0: Hermetically sealed relays, PCB terminals

Ordering Information

When your order, specify the rated voltage.

Plastic Sealed Relays

●Plug-in terminals

Classification	Number of poles	Contacts	Model	Rated voltage	With operation indicator: Model	With operation indicator: Rated voltage
Standard models (compliant with Electrical Appliances and Material Safety Act)	4	Single	MYQ4	100/110, 110/120, 200/220, 220/240 VAC	MYQ4N	24, 100/110, 110/120, 200/220, 220/240 VAC
				24 VDC		12, 24, 48, 100/110 VDC
		Bifurcated	MYQ4Z	100/110, 110/120, 200/220 VAC		
				12, 24 VDC		

●PCB terminals

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

Hermetically Sealed Relays

●Plug-in terminals

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

●PCB terminals

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

Ratings and Specifications

●Operating coil

Rated voltage (V)		Rated current (mA)		Coil resistance (Ω)	Coil inductance (H)		Must operate voltage (V)*1	Must release voltage (V)*2	Maximum voltage (V)	Power consumption (VA, W)
		50 Hz	60 Hz		Armature OFF	Armature ON				
AC	24	53.8	46	180	0.69	1.3	80% max.	30% min.	110% max. of rated voltage	Approx. 0.9 to 1.3 (at 60 Hz)
	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	91.07				
	220/240	4.8/5.3	4.2/4.6	18,790	83.5	136.4				
DC	12	75		165	0.734	1.37		10% min.		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	86.0				

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

*1. There is variation between products, but actual values are 80% maximum. To ensure operation, apply at least 80% of the rated value.
*2. There is variation between products, but actual values are 30% minimum for AC and 10% minimum for DC. To ensure release, use a value that is lower than the specified value.

●Contact Ratings

Plastic Sealed Relays: MYQ

Number of poles (contact configuration)	4-pole (4PDT)	
Contact structure	Single/bifurcated	
Load	Resistive load	Inductive load (cos φ = 0.4, L/R = 7 ms)
Rated load	1 A at 220 VAC 1 A at 24 VDC	0.5 A at 220 VAC 0.5 A at 24 VDC
Rated carry current	1 A	
Maximum switching voltage	250 VAC 125 VDC	
Maximum switching current	1 A	
Maximum switching power	220 VA 24 W	110 VA 12 W
Contact material	Au plating + Ag	

Hermetically Sealed Relays: MYH

Number of poles (contact configuration)	4-pole (4PDT)			
Contact structure	Single		Bifurcated	
Load	Resistive load	Inductive load (cos φ = 0.4, L/R = 7 ms)	Resistive load	Inductive load (cos φ = 0.4, L/R = 7 ms)
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 switching voltage	125 VAC 125 VDC			
Maximum switching current	3 A			
Maximum switching power	330 VA 72 W	88 VA 36 W	330 VA 72 W	88 VA 36 W
Contact material	Au plating + Ag			

Characteristics

Model		MYQ	MYH
Contact resistance*1		50 mΩ max.	
Operate time*2		20 ms max.	
Release time*2		20 ms max.	
Maximum switching frequency	Mechanical	18,000 operations/h	
	Rated load	1,800 operations/h	
Insulation resistance*3		100 MΩ min.	
Dielectric strength	Between coil and contacts	2,000 VAC at 50/60 Hz for 1 min	1,000 VAC at 50/60 Hz for 1 min
	Between contacts of different polarity	2,000 VAC at 50/60 Hz for 1 min	1,000 VAC at 50/60 Hz for 1 min
	Between contacts of the same polarity	1,000 VAC at 50/60 Hz for 1 min	700 VAC at 50/60 Hz for 1 min
Vibration 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	Single contacts: AC: 50,000,000 operations min., DC: 100,000,000 operations min. Bifurcated contacts: 5,000,000 operations min., DC: 5,000,000 operations min. (switching frequency: 18,000 operations/h)	Single contacts: 50,000,000 operations min. Bifurcated contacts: 5,000,000 operations min. (switching frequency: 18,000 operations/h)
	Electrical*4	Single contacts: 200,000 operations min. Bifurcated contacts: 100,000 operations min. (at rated load, switching frequency: 1,800 operations/h)	Single contacts: 100,000 operations min. Bifurcated contacts: 50,000 operations min. (at rated load, switching frequency: 1,800 operations/h)
Failure rate P Level (reference value)*5		Single contacts: 1 mA at 1 VDC Bifurcated contacts: 100 μA at 1 VDC	Single contacts: 100 μA at 1 VDC Bifurcated contacts: 100 μA at 100 mVDC
Ambient operating temperature*6		-55 to 60°C	-25 to 60°C
Ambient operating humidity		5% to 85%	
Weight		Approx. 35 g	Approx. 50 g

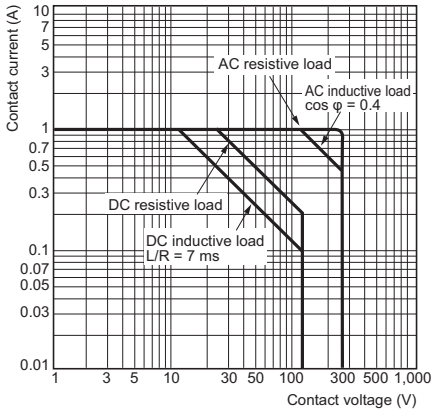
Note: The data shown above are initial values.

*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.
*6. With no icing or condensation.

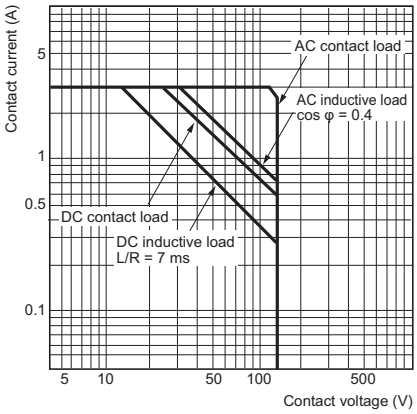
Engineering Data (Reference Value)

Maximum Switching Capacity

MYQ4(Z)

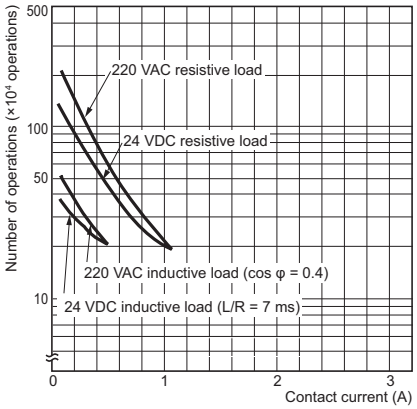


MY4(Z)H



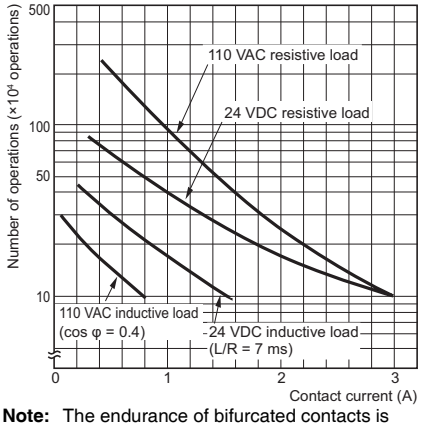
Endurance Curve

MYQ4



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

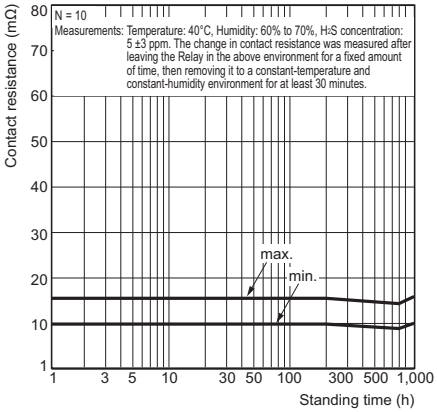
MY4H



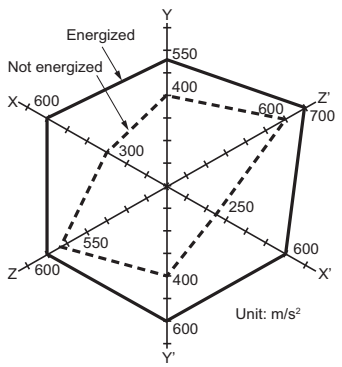
Note: The endurance of bifurcated contacts is one-half that of single contacts.

H_2S Gas Data

MYQ4



Shock Malfunction



N = 20

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

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

Shock direction

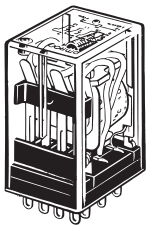
Dimensions

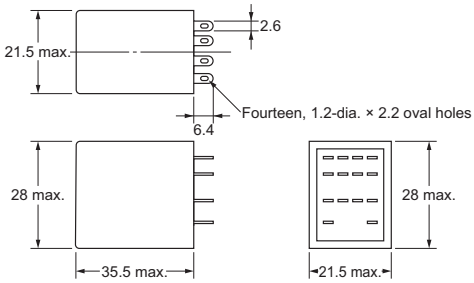
(Unit: mm)

●Plug-in terminals

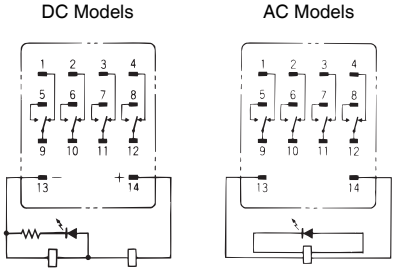
Plastic Sealed Relays

MYQ4(Z)(N)





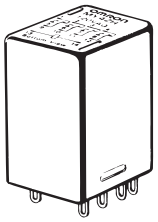
MYQ4(Z)N

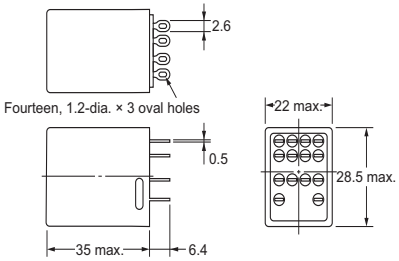


Note: **1.** An AC model has coil disconnection self-diagnosis.
2. For the DC models, check the coil polarity when wiring and wire all connections correctly.

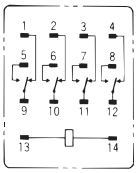
Hermetically Sealed Relays

MY4(Z)H





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

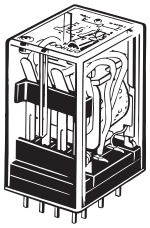


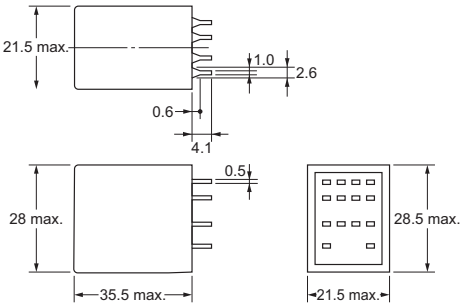
(Coil has no polarity)

●PCB terminals

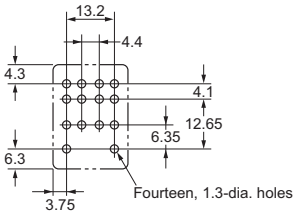
Plastic Sealed Relays

MYQ4(Z)-02





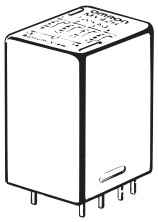
PCB Processing Dimensions (Bottom View)

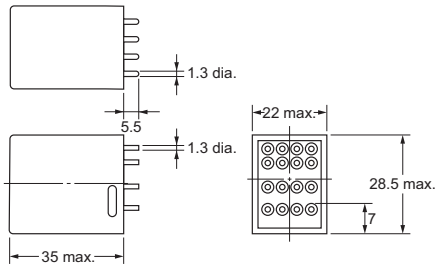


Note: The dimensional tolerance is ±0.1.

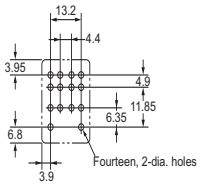
Hermetically Sealed Relays

MY4(Z)H-0





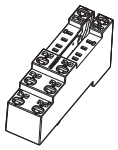
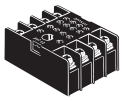
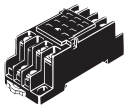
PCB Processing Dimensions (Bottom View)



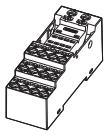
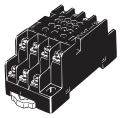
Common Options (Order Separately)

Ordering Information

Front-mounting Sockets

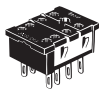
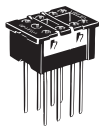
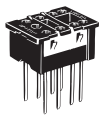
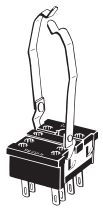
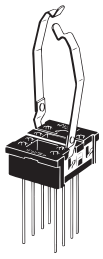
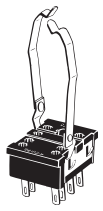
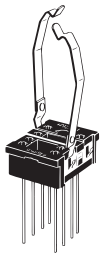
Applicable relay model*1	Mounting Method	Conductive part protection	Terminal Type	Applicable crimp terminal/ Electric wire	Appearance	Mode	Hold-down Clips/ Release Levers (Order Separately)
MY2□ MY2□(S) MY2Z□-CR	Mounted on a DIN track or with screws	Available	Push-In Plus Terminal	Ferrules Solid wire Stranded wire	*NEW* 	**PYF-08-PU*2** * MY2Z□-CR, MY2□-CR 24 VAC cannot be used	With release lever * Hold by release lever
					NEW 	**PYF-08-PU-L*2**	MY2□: PYC-A1 MY2IN(S): PYC-E1 MY2Z□-CR, MY2□-CR 24 VAC: Y92H-3
			Screw terminal (M3 screw size)	Forked terminals Solid wire Stranded wire	*NEW* 	**PYFZ-08-E*4**	
		Option (Terminal cover sold separately) *3		Round terminals Forked terminals Solid wire Stranded wire	*NEW* 	**PYFZ-08** * Terminal cover: PYCZ-C08	
	Mounted on a DIN track	Available	Screwless terminal (Clamp method)	Solid wire Stranded wire		**PYF08S**	PYCM-08S * MY2Z□-CR, MY2□-CR 24 VAC cannot be used * Hold by release lever
	Screw mounting only	None	Screw terminal (M3.5 screw size)	Round terminals Forked terminals Solid wire Stranded wire		**PYF08M**	PYC-P (MY2□ Only) * MY2□-CR 24 VAC cannot be used
MY3□	Mounted on a DIN track or with screws	None	Screw terminal (M3 screw size)	Round terminals Forked terminals Solid wire Stranded wire		**PYF11A**	PYC-A1

*1. The applicable relay model is a plug-in terminal type.
*2. There are screw mounting holes in the DIN hooks on the PYF-□□-PU and P2RF-□□-PU. Pull out the DIN hook tabs to mount the Sockets with screws.
*3. Terminal cover type is PYCZ-C08. (Order Separately) For details, refer to the *For Screw Terminal Sockets (PYFZ-08/PYFZ-14) Terminal covers* on page 43.
*4. The finger-protection type (PYFZ-□-E) is a type in which the terminal cover is integrated into the socket. Round terminals cannot be used. Use forked terminals or ferrules instead.

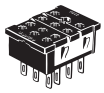
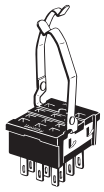
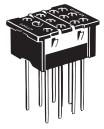
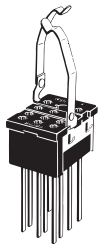
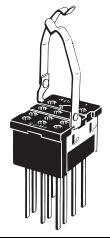
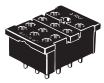
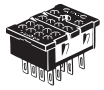
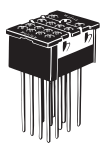
Applicable relay model*1	Mounting Method	Conductive part protection	Terminal Type	Applicable crimp terminal/ Electric wire	Appearance	Mode	Hold-down Clips/ Release Levers (Order Separately)
MY4□ MY4□(S) MY4□H MYQ4□ MY4Z□-CBG-CR MY2K	Mounted on a DIN track or with screws	Available	Push-In Plus Terminal	Ferrules Solid wire Stranded wire	*NEW* 	**PYF-14-PU*2** * MY4Z□-CBG-CR, MY4-CR 24 VAC, MY4N-CR 24 VAC/115 VAC cannot be used	With release lever * Hold by release lever
					NEW 	**PYF-14-PU-L*2**	MY4Z□-CBG-CR, MY4-CR 24 VAC, MY4N-CR 24 VAC/115 VA: Y92H-3 Other than those above: PYC-A1
			Screw terminal (M3 screw size)	Forked terminals Solid wire Stranded wire	*NEW* 	**PYFZ-14-E*4**	
		Option (Terminal cover sold separately) *3		Round terminals Forked terminals Solid wire Stranded wire	*NEW* 	**PYFZ-14** * Terminal cover: PYCZ-C14	
	Mounted on a DIN track	Available	Screwless terminal (Clamp method)	Solid wire Stranded wire		**PYF14S**	PYCM-14S * MY4Z□-CBG-CR, MY4-CR 24 VAC, MY4N-CR 24 VAC/115 VAC cannot be used * Hold by release lever
	Mounted on a DIN track or with screws	None	Screw terminal (M3.5 screw size)	Round terminals Forked terminals Solid wire Stranded wire		**PYF14T**	MY4Z□-CBG-CR: Y92H-3 Other than those above: PYC-A1

*1. The applicable relay model is a plug-in terminal type.
*2. There are screw mounting holes in the DIN hooks on the PYF-□□-PU and P2RF-□□-PU. Pull out the DIN hook tabs to mount the Sockets with screws.
*3. Terminal cover type is PYCZ-C14. (Order Separately) For details, refer to the *For Screw Terminal Sockets (PYFZ-08/PYFZ-14) Terminal covers* on page 43.
*4. The finger-protection type (PYFZ-□-E) is a type in which the terminal cover is integrated into the socket. Round terminals cannot be used. Use forked terminals or ferrules instead.

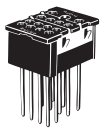
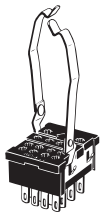
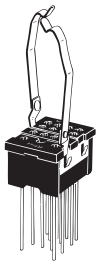
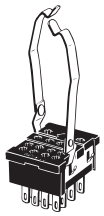
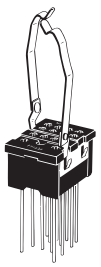
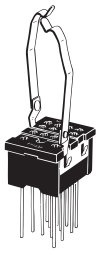
Back-mounting Sockets

Applicable relay model*1	Terminal Type	Hold-down Clips	Appearance	Mode
MY2□ MY2□(S) MY2Z□-CR	Solder terminals	Accessories (Order Separately) * MY2Z□-CR: PYC-1 Other than those above: PYC-P		**PY08**
	Wrapping terminals Terminal length: 25 mm			**PY08QN**
	Wrapping terminals Terminal length: 20 mm			**PY08QN2**
	PCB terminals			**PY08-02**
MY2□ MY2□(S)	Solder terminals	With Hold-down Clips*2		**PY08-Y1**
	Wrapping terminals Terminal length: 25 mm			**PY08QN-Y1**
	Wrapping terminals Terminal length: 20 mm			**PY08QN2-Y1**
MY2Z□-CR	Solder terminals			**PY08-Y3**
	Wrapping terminals Terminal length: 25 mm			**PY08QN-Y3**

*1. The applicable relay model is a plug-in terminal type.
*2. The hold-down clips for connecting the relay and socket come as a set with the socket.

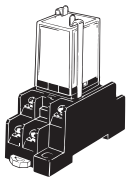
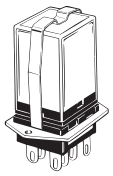
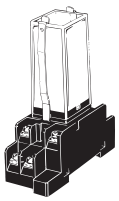
Applicable relay model*1	Terminal Type	Hold-down Clips	Appearance	Mode
MY2Z□-CR	Wrapping terminals Terminal length: 20 mm	With Hold-down Clips*2		**PY08QN2-Y3**
MY3□	Solder terminals	Accessories (Order Separately) * PYC-P		**PY11**
		With Hold-down Clips*2		**PY11-Y1**
	Wrapping terminals Terminal length: 25 mm	Accessories (Order Separately) * PYC-P		**PY11QN**
		With Hold-down Clips*2		**PY11QN-Y1**
	Wrapping terminals Terminal length: 20 mm	Accessories (Order Separately) * PYC-P		**PY11QN2**
		With Hold-down Clips*2		**PY11QN2-Y1**
	PCB terminals	Accessories (Order Separately) * PYC-P		**PY11-02**
MY4□ MY4□(S) MY4□H MYQ4□ MY4Z□-CBG-CR MY2K	Solder terminals	Accessories (Order Separately) * MY4Z□-CBG-CR: PYC-1 Other than those above: PYC-P		**PY14**
	Wrapping terminals Terminal length: 25 mm			**PY14QN**

*1. The applicable relay model is a plug-in terminal type.
*2. The hold-down clips for connecting the relay and socket come as a set with the socket.

Applicable relay model*1	Terminal Type	Hold-down Clips	Appearance	Mode
MY4□ MY4□(S) MY4□H MYQ4□ MY4Z□-CBG-CR MY2K	Wrapping terminals Terminal length: 20 mm	Accessories (Order Separately) * MY4Z□-CBG-CR: PYC-1 Other than those above: PYC-P		**PY14QN2**
	PCB terminals			**PY14-02**
MY4□ MY4□(S) MY4□H MYQ4□ MY2K	Solder terminals	With Hold-down Clips*2		**PY14-Y1**
	Wrapping terminals Terminal length: 25 mm			**PY14QN-Y1**
	Wrapping terminals Terminal length: 20 mm			**PY14QN2-Y1**
MY4Z□-CBG-CR	Solder terminals			**PY14-Y3**
	Wrapping terminals Terminal length: 25 mm			**PY14QN-Y3**
	Wrapping terminals Terminal length: 20 mm			**PY14QN2-Y3**

*1. The applicable relay model is a plug-in terminal type.
*2. The hold-down clips for connecting the relay and socket come as a set with the socket.

Hold-down Clip

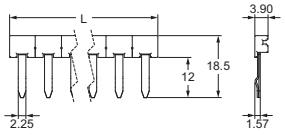
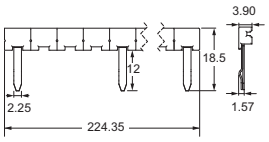
Appearance*1	Model*2	Weight*3	Application
	**PYC-A1**	Approx. 0.54 g	For connecting relays and sockets
	PYC-E1	Approx. 0.6 g	
	**PYC-P**	Approx. 1.4 g	
	**PYC-S**	Approx. 1.8 g	For connecting sockets, socket mounting plates, and relays
	**Y92H-3*4**	Approx. 0.7 g	For connecting models with built-in CR circuit for coil surge absorption (MY2Z□-CR) and sockets
	**PYC-1*5**	Approx. 6 g	

*1. The appearance shown is one in which the relay, socket, and hold-down clip are assembled.
*2. Hold-down clips are used in sets of two. However, PYC-P and PYC-1.
*3. The weight shown above is the weight for one hold-down clip.
*4. MY2-CR 24 VAC, MY2N-CR 24 VAC, MY4-CR 24 VAC and MY4N-CR 24 VAC/115 VAC use in combination with hold-down clip Y92H-3.
*5. MY2-CR 24 VAC, MY2N-CR 24 VAC, MY4-CR 24 VAC and MY4N-CR 24 VAC/115 VAC use in combination with hold-down clip PYC-1.

●Front-connecting Socket Accessories

For Push-In Plus Terminal Sockets (PYF-08-PU(-L)/PYF-14-PU(-L))

Short Bars

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

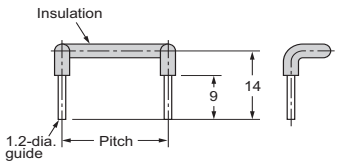
*1. Replace the box (□) in the model number with the code for the covering color. □Color selection: R = Red, S = Blue, Y = Yellow

Labels

Applicable sockets	Model
PYF-08-PU(-L) PYF-14PU(-L)	XW5Z-P4.0LB1 (1 sheet/60 pieces)

For Screwless Terminal Sockets (PYF08S/PYF14S)

Short Bars

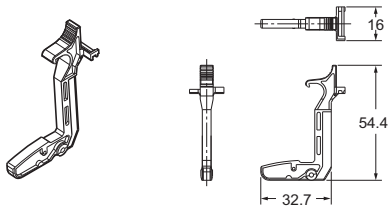
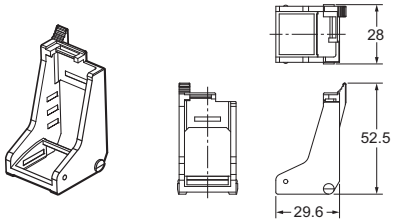
Applicable sockets	Pitch	Application	Shape/external dimensions	Number of poles	Insulation color	Model*1
PYF08S	19.7 mm	For bridging coils between sockets		2	Red (R) Blue (B)	PYDM-08S□ (50 pcs./bag)
PYF14S	27.5 mm			2		PYDM-14S□ (50 pcs./bag)

*1. Replace the box (□) in the model number with the code for the covering color. □Color selection: R = Red, B = Blue

Labels

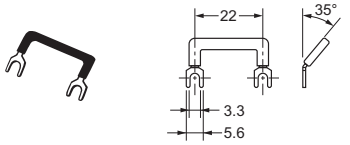
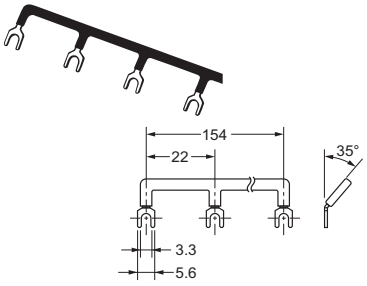
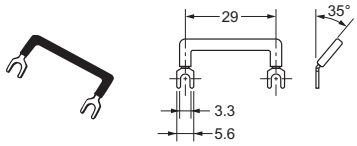
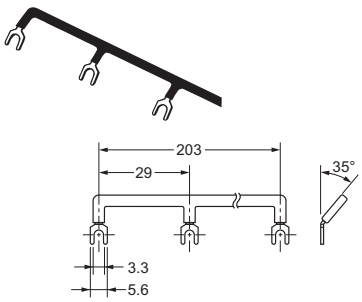
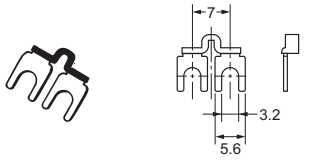
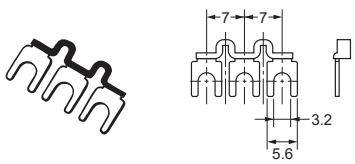
Applicable sockets	Model
PYF08S PYF14S	R99-11 (100 pcs./bag)

Release Levers

Applicable sockets	Shape/external dimensions	Model
PYF08S		PYCM-08S
PYF14S		PYCM-14S

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

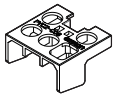
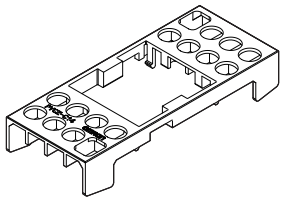
Short Bars

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

*1. Replace the box (□) in the model number with the code for the covering color.

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

Terminal covers

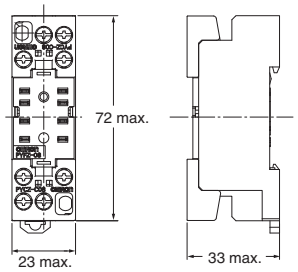
Applicable sockets	Appearance	Model
PYFZ-08		PYCZ-C08 (2 pcs/set)
PYFZ-14		PYCZ-C14 (1 pcs/set)

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

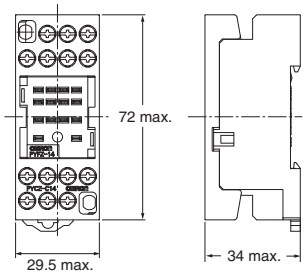
Dimensions with terminal cover

(Unit: mm)

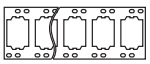
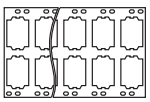
PYCZ-C08



PYCZ-C14

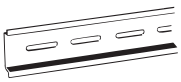
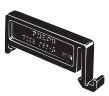


Socket Mounting Plates (For Back-connecting Socket PY□/Solder Terminals, PY□QN(2)/Wrapping Terminals)

Applicable Sockets		Socket Mounting Plates		
Model	Models with hold-down clips	Appearance	Number of sockets	Model
PY08 PY08QN PY08QN2 PY11 PY11QN PY11QN2 PY14 PY14QN PY14QN2	PY08-Y1, PY08-Y3 PY08QN-Y1, PY08QN-Y3 PY08QN2-Y1, PY08QN2-Y3 PY11-Y1 PY11QN-Y1 PY11QN2-Y1 PY14-Y1, PY14-Y3 PY14QN-Y1, PY14QN-Y3 PY14QN2-Y1, PY14QN2-Y3		1	PYP-1
			18	PYP-18*
			36	PYP-36*

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

Parts for Track Mounting

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

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

Ratings and Specifications

Characteristics

Sockets

Model	Connection	Number of pins	Terminal Type	Ambient operating temperature	Ambient operating humidity	Continuous carry current	Dielectric strength			Insulation resistance *1	Weight
							Between contact terminals of same polarity	Between contact terminals of different polarity	Between coil and contact terminals		
PYF-08-PU	Front	8	Push-In Plus Terminal	−40 to 70°C	5% to 85%	10 A*2	2,000 VAC for 1 min	2,000 VAC for 1 min	2,000 VAC for 1 min	1,000 MΩ min. (500 VAC)	Approx. 80 g
PYF08S			Screwless terminal	−55 to 70°C							Approx. 46 g
PYFZ-08			Screw terminal			10 A	2,250 VAC for 1 min	2,250 VAC for 1 min	2,250 VAC for 1 min		Approx. 32 g
PYFZ-08-E											Approx. 32 g
PYF08M						5 A	1,500 VAC for 1 min	1,500 VAC for 1 min	1,500 VAC for 1 min		Approx. 26 g
PYF11A		11	Screw terminal			5 A	2,000 VAC for 1 min	2,000 VAC for 1 min	2,000 VAC for 1 min		Approx. 43 g
PYF-14-PU		14	Push-In Plus Terminal	−40 to 70°C		6 A	2,000 VAC for 1 min	2,000 VAC for 1 min	2,000 VAC for 1 min		Approx. 87 g
PYF14S			Screwless terminal	−55 to 70°C		5 A					Approx. 62 g
PYFZ-14			Screw terminal			6 A	2,250 VAC for 1 min	2,250 VAC for 1 min	2,250 VAC for 1 min		Approx. 50 g
PYFZ-14-E											Approx. 50 g
PYF14T						3 A	2,000 VAC for 1 min	2,000 VAC for 1 min	2,000 VAC for 1 min		Approx. 53 g
PY08	Back	8	Solder terminals	−55 to 70°C		7 A	1,500 VAC for 1 min	1,500 VAC for 1 min	1,500 VAC for 1 min	100 MΩ min.	Approx. 8 g
PY08-Y1											Approx. 9 g
PY08-Y3											Approx. 9 g
PY08QN			Wrapping terminals (Terminal length: 25 mm)								Approx. 12 g
PY08QN-Y1											Approx. 13 g
PY08QN-Y3											Approx. 13 g
PY08QN2			Wrapping terminals (Terminal length: 20 mm)								Approx. 11 g
PY08QN2-Y1											Approx. 12 g
PY08QN2-Y3											Approx. 12 g
PY08-02			PCB terminals								Approx. 7 g
PY11		11	Solder terminals			5 A	1,500 VAC for 1 min	1,500 VAC for 1 min	1,500 VAC for 1 min	100 MΩ min.	Approx. 9 g
PY11-Y1											Approx. 10 g
PY11QN			Wrapping terminals (Terminal length: 25 mm)								Approx. 13 g
PY11QN-Y1											Approx. 14 g
PY11QN2			Wrapping terminals (Terminal length: 20 mm)								Approx. 12 g
PY11QN2-Y1											Approx. 13 g
PY11-02			PCB terminals								Approx. 8 g
PY14		14	Solder terminals			3 A	1,500 VAC for 1 min	1,500 VAC for 1 min	1,500 VAC for 1 min	100 MΩ min.	Approx. 10 g
PY14-Y1											Approx. 11 g
PY14-Y3											Approx. 11 g
PY14QN			Wrapping terminals (Terminal length: 25 mm)								Approx. 14 g
PY14QN-Y1											Approx. 15 g
PY14QN-Y3											Approx. 15 g
PY14QN2			Wrapping terminals (Terminal length: 20 mm)								Approx. 13 g
PY14QN2-Y1											Approx. 14 g
PY14QN2-Y3											Approx. 14 g
PY14-02			PCB terminals								Approx. 9 g

*1. For 500 VDC applied to the same location as for dielectric strength measurement.
*2. The carrying current of 10 A is for an ambient temperature of 55°C or below. At an ambient temperature of 70°C, the value is 7 A.
*3. This model is a set including a socket and relay hold-down clips. This weight shown is the total including the socket and relay hold-down clips.

Socket Accessories

●For Front-connecting Sockets

Short Bars

Application	Applicable sockets	Model	Maximum carry current	Ambient operating temperature	Ambient operating humidity
Bridging contact terminals (common)	PYF-08-PU(-L) PYF-14-PU(-L)	PYDN-7.75-020□	20 A	-40 to 70°C	5% to 85%
		PYDN-7.75-030□			
		PYDN-7.75-040□			
		PYDN-7.75-200□			
	PYFZ-08	PYD-025B□	20 A (However, 18 A when 70°C)	-40 to 70°C (with no icing or condensation)	45% to 85% (with no icing or condensation)
		PYD-085B□			
	PYFZ-14	PYD-026B□			
		PYD-086B□			
		PYD-020B□			
		PYD-030B□			
For Coil terminals	PYF-08-PU(-L) PYF-14-PU(-L)	PYDN-31.0-080□	20 A	-40 to 70°C	5% to 85%
	PYF08S	PYDM-08S□	10 A	-40 to 70°C	5% to 85%
	PYF14S	PYDM-14S□	10 A	-40 to 70°C	5% to 85%

Certified Standards

●CSA certification (File No. LR031928)

Model	Ratings	Class number	Standard number
PYF-08-PU	10 A, 250 V	3211 07	CSA C22.2 No14
PYF-14-PU	6 A, 250 V*		
PYF08S	10 A, 250 V		
PYF14S	5 A, 250 V		
PYFZ-08(-E)	10 A, 250 V		
PYFZ-14(-E)	6 A, 250 V		
PY□ PYF□A	7 A, 250 V		

*When power is supplied to all four poles, use with a total power current that does not exceed 20 A.

●UL certification (File No. E87929)

Model	Ratings	Standard number	Category	Listed/Recognized
PYF-08-PU	10 A, 250 V	UL508	SWIV2	Recognition
PYF-14-PU	6 A, 250 V*			
PYF08S PYF14S	10 A, 250 V			
PYFZ-08(-E)	10 A, 250 V			
PYFZ-14(-E)	6 A, 250 V			
PY□ PYF□A	7 A, 250 V			

*When power is supplied to all four poles, use with a total power current that does not exceed 20 A.

●TÜV Rheinland certification

Model	Ratings	Standard number	Certification No.
PYF-08-PU	10 A, 250 V*	EN 61984	R50327595
PYF-14-PU	6 A, 250 V		
PYFZ-08(-E)	10 A, 250 V		R50405329
PYFZ-14(-E)	6 A, 250 V		

*Ratings are for an ambient temperature of 55°C or below. At an ambient temperature of 70°C, the value is 7 A.

●VDE certification

Model	Standard number	Certification No.
PYF08S	VDE0627 (EN61984)	40015509
PYF14		

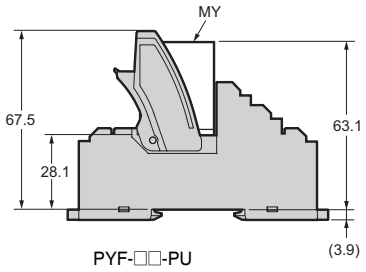
Dimensions

(Unit: mm)

Height with Socket

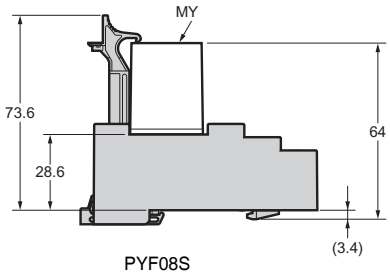
●Front-connecting Sockets

- Push-In Plus Terminal
  (PYF-□-PU)

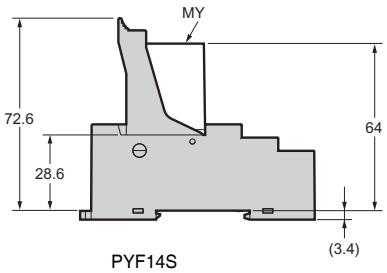


PYF-□□-PU

- Screwless terminal
  (PYF08S, PYF14S)

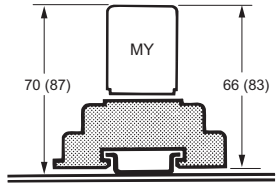


PYF08S

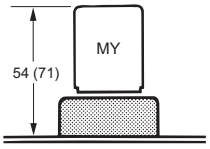


PYF14S

- Screw terminal
  (PYFZ-□(-E), PYF11A, PYF14T, PYF08M)



PYFZ-□(-E)
PYF11A
PYF14T

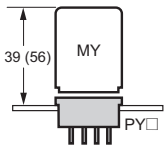


PYF08M

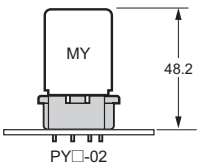
Note: **1.** The PYF11A can be mounted on a track or with screws.
2. The heights given in parentheses are the measurements for 53-mm-high Relays.
3. Use the PYC-P Hold-down Clip for the PYF08M.

●Back-connecting Sockets

- Solder terminals/wrapping terminals
  (PY□)



- PCB terminals
  (PY□-02)

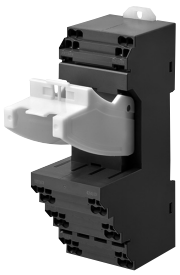


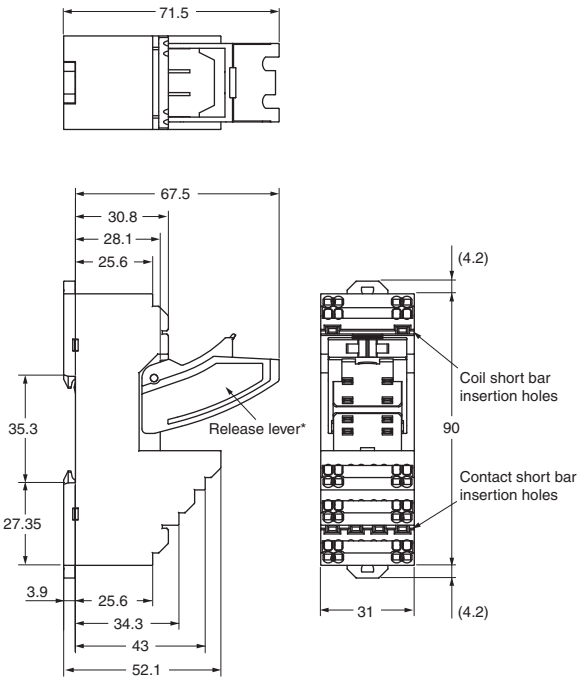
PY□-02

Front-connecting Sockets

●Push-In Plus Terminal

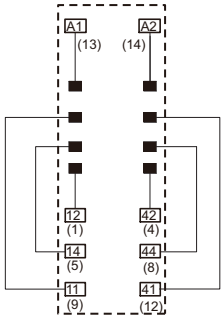
PYF-08-PU(-L)





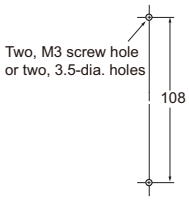
Terminal Arrangement/Internal Connection Diagram

(Top View)



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

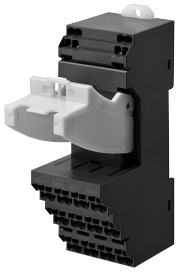
Mounting Hole Dimensions

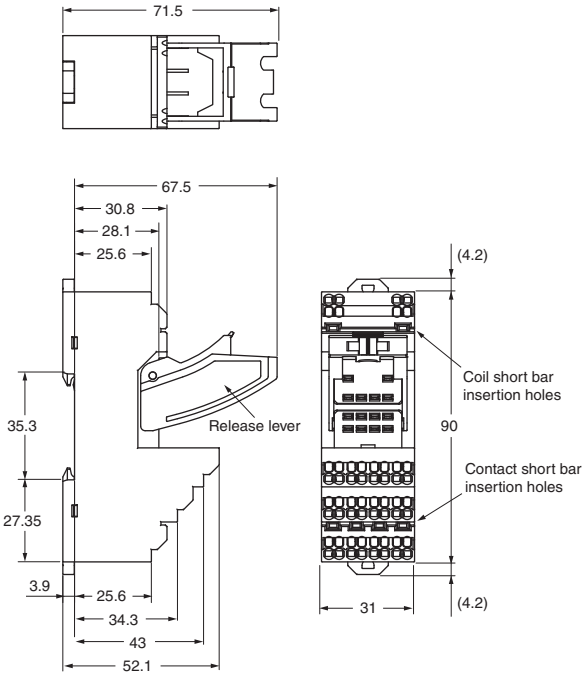


Note: Pull out the hooks to mount the Socket with screws.

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

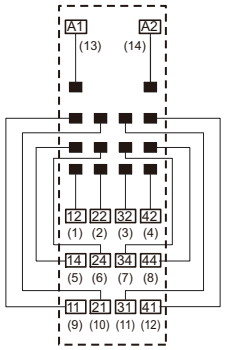
PYF-14-PU(-L)





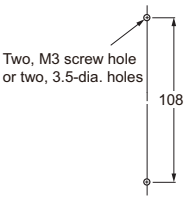
Terminal Arrangement/Internal Connection Diagram

(Top View)



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

Mounting Hole Dimensions

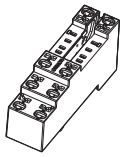


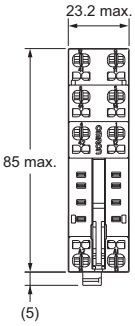
Note: Pull out the hooks to mount the Socket with screws.

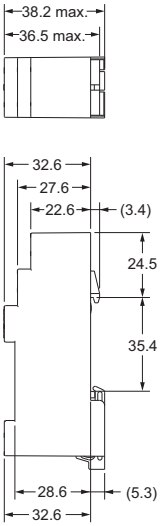
✻The PYF-14-PU-L Sockets do not have release levers.

●Screwless terminal

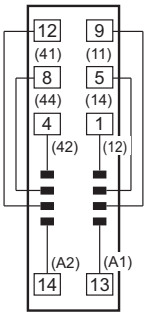
PYF08S







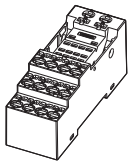
Terminal Arrangement/Internal Connection Diagram

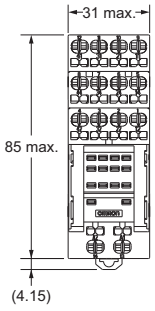


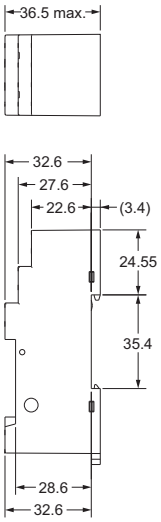
(Top View)

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

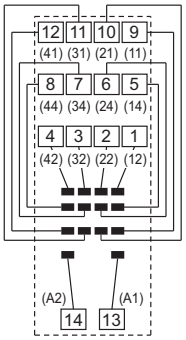
PYF14S







Terminal Arrangement/Internal Connection Diagram

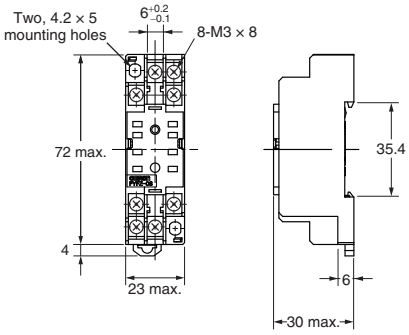


(Top View)

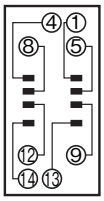
Note: The number shown in parentheses is the DIN standard.

Front-connecting Sockets
●Screw terminal

PYFZ-08

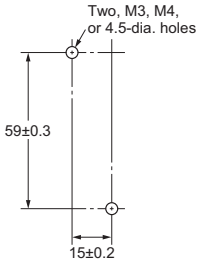


Terminal Arrangement/
Internal Connection Diagram



(Top View)

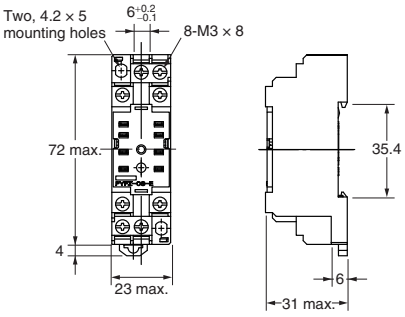
Mounting Hole Dimensions



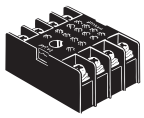
(Top View)

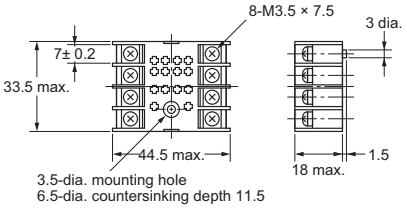
Note: Track mounting is also possible.

PYFZ-08-E
(Finger-protection structure)

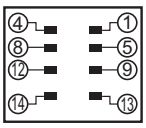


PYF08M



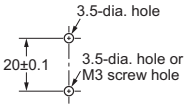


Terminal Arrangement/Internal
Connection Diagram

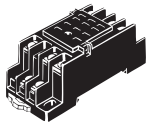


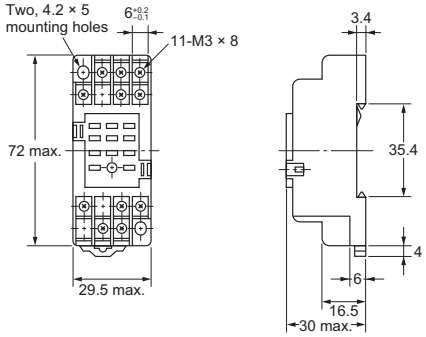
(Top View)

Mounting Hole Dimensions

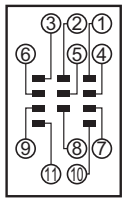


PYF11A



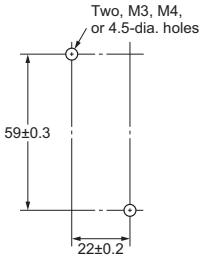


Terminal Arrangement/Internal
Connection Diagram



(Top View)

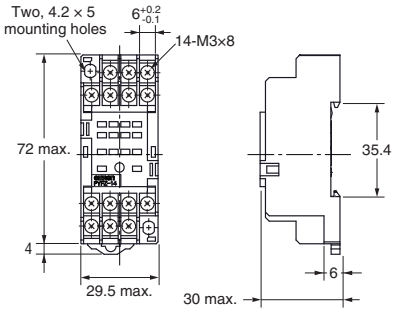
Mounting Hole Dimensions



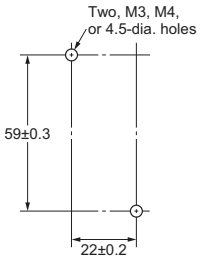
(Top View)

Note: Track mounting is also possible.

PYFZ-14



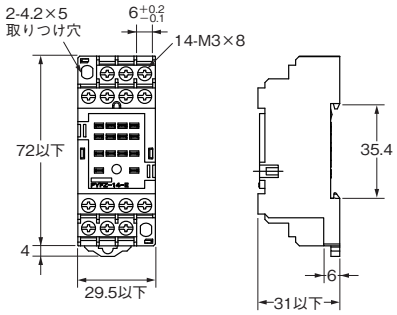
Mounting Hole Dimensions



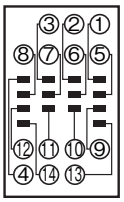
(Top View)

Note: Track mounting is also possible.

PYFZ-14-E
(Finger-protection structure)

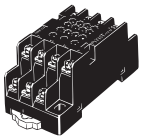


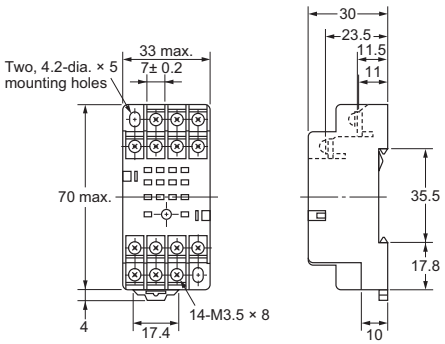
Terminal Arrangement/Internal Connection Diagram



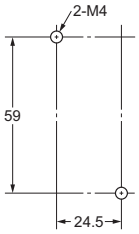
(Top View)

PYF14T





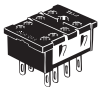
Mounting Hole Dimensions

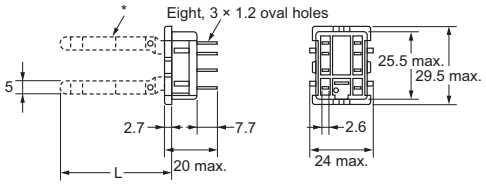


Back-connecting Socket

●Solder terminals

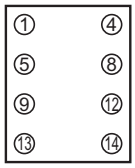
PY08





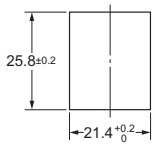
*PY08-Y□ includes the potion indicated by broken line.

Terminal Arrangement/Internal Connection Diagram

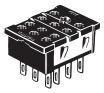


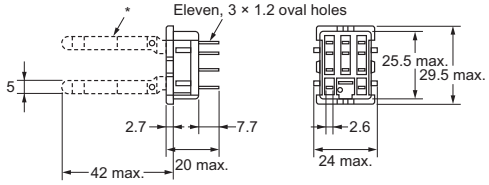
(Bottom View)

Mounting Hole Dimensions



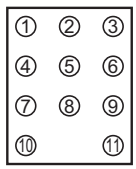
PY11
PY11-Y1





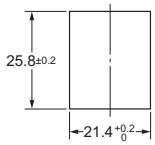
*PY11-Y1 includes the potion indicated by broken line.

Terminal Arrangement/Internal Connection Diagram

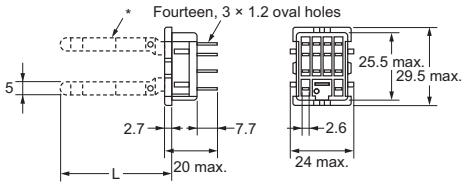


(Bottom View)

Mounting Hole Dimensions

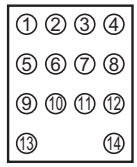


PY14
PY14-Y1
PY14-Y3



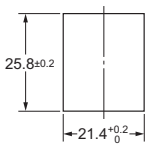
*PY14-Y□ includes the potion indicated by broken line.

Terminal Arrangement/Internal Connection Diagram



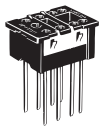
(Bottom View)

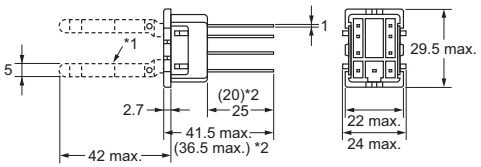
Mounting Hole Dimensions



●Wrapping terminals

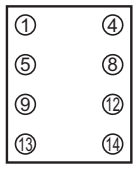
PY08QN
PY08QN2
PY08QN2-Y1
PY08QN2-Y3





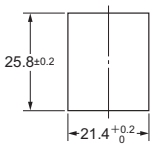
*1. PY08QN(2)-Y1 includes the potion indicated by broken line.
*2. Dimensions in parentheses are for PY08QN2(-Y1).

Terminal Arrangement/Internal Connection Diagram

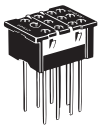


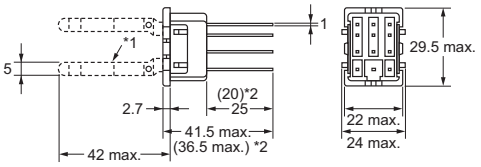
(Bottom View)

Mounting Hole Dimensions



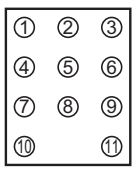
PY11QN
PY11QN2
PY11QN-Y1
PY11QN2-Y1





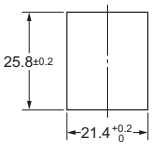
*1. PY11QN(2)-Y1 includes the potion indicated by broken line.
*2. Dimensions in parentheses are for PY11QN2(-Y1).

Terminal Arrangement/Internal Connection Diagram

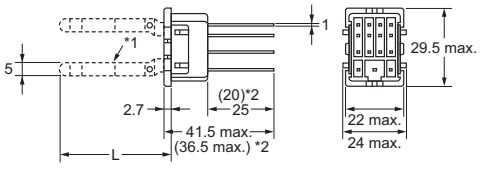


(Bottom View)

Mounting Hole Dimensions

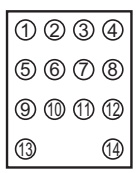


PY14QN/PY14QN2
PY14QN-Y1/PY14QN2-Y1
PY14QN-Y3 (L = 60 max.)
PY14QN2-Y3 (L = 60 max.)



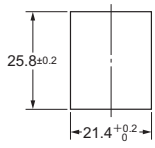
*1. PY14QN-Y□ and PY14QN2-Y□ include the potion indicated by broken line.
*2. Dimensions in parentheses are for PY14QN2(-Y□).

Terminal Arrangement/Internal Connection Diagram



(Bottom View)

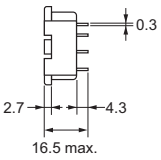
Mounting Hole Dimensions

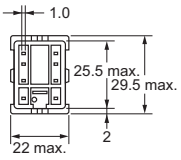


●PCB terminals

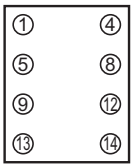
PY08-02

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



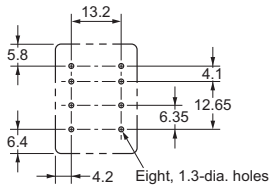


Terminal Arrangement/Internal Connection Diagram



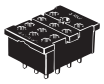
(Bottom View)

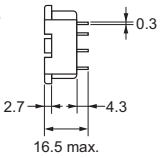
Mounting Hole and PCB Dimensions

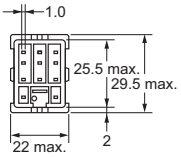


PY11-02

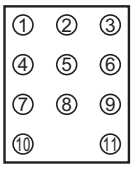
- This is not a flux-tight structure. We recommend manual soldering for this product.





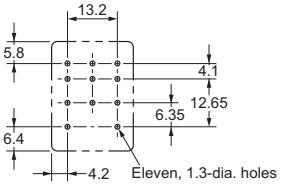


Terminal Arrangement/Internal Connection Diagram



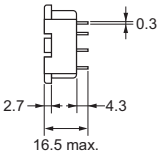
(Bottom View)

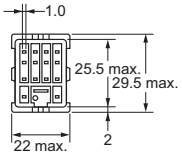
Mounting Hole and PCB Dimensions



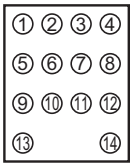
PY14-02

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



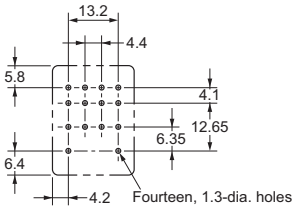


Terminal Arrangement/Internal Connection Diagram



(Bottom View)

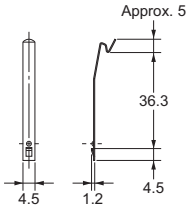
Mounting Hole and PCB Dimensions



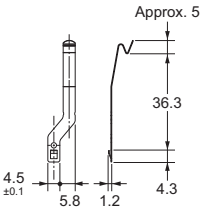
Socket Accessories

●Hold-down Clip

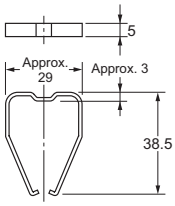
- PYC-A1
  1 set (2 pcs.)



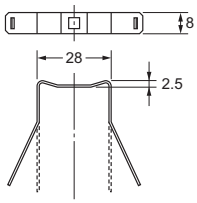
- PYC-E1
  1 set (2 pcs.)



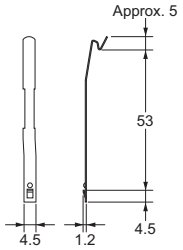
- PYC-P



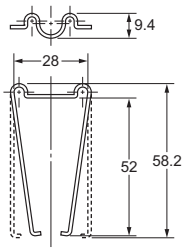
- PYC-S
  1 set (2 pcs.)



- Y92H-3
  1 set (2 pcs.)

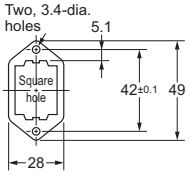


- PYC-1

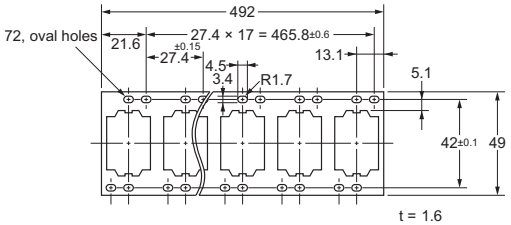


●Socket Mounting Plates

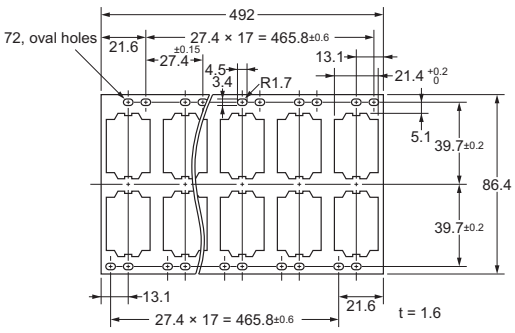
PYP-1



PYP-18



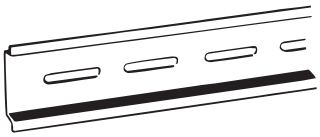
PYP-36

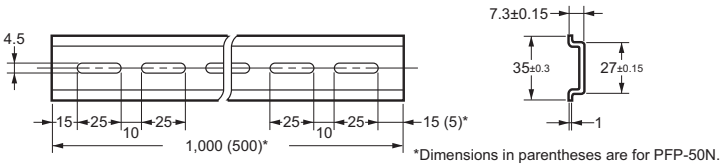


●Accessories for DIN Track Mounting

DIN Tracks

PFP-100N
PFP-50N

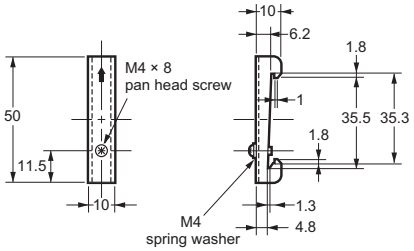




*Dimensions in parentheses are for PFP-50N.

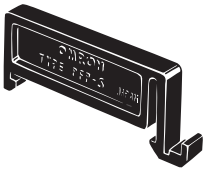
End Plate

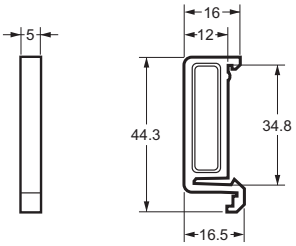
PFP-M



Spacer

PFP-S





Safety Precautions

Relays

Be sure to read the *Safety Precautions for All Relays* in the website at the following URL: http://www.ia.omron.com/product/cautions/36/safety_precautions.html

Warning Indications

⚠ WARNING	Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury, or may result in serious injury or death. Additionally there may be significant property damage.
⚠ CAUTION	Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury or in property damage.
Precautions for Correct Use	Supplementary comments on what to do or avoid doing, to prevent failure to operate, malfunction, or undesirable effects on product performance.

Meaning of Product Safety Symbols

	● General caution Indicates the possibility of non-specified general cautions, warnings, and danger.
	● Electric shock caution Used to warn of the risk of electric shock under specific conditions.
	● High temperature caution Indicates the possibility of injuries by high temperature under specific conditions.

⚠ CAUTION

Do not touch terminal sections (i.e., current-carrying parts) while power is being supplied.
Also, always mount the terminal cover.
Touching current-carrying parts may result in electric shock.

Do not touch the main unit while power is being supplied or immediately after the power supply has been turned OFF. The main unit will be extremely hot and may result in burns.

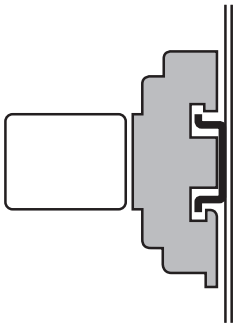
Precautions for Correct Use

●Handling

For models with a built-in operation indicator, models with a built-in diode, or high-sensitivity models, check the coil polarity when wiring and wire all connections correctly (DC operation).

●Installation

- There is no specifically required installation orientation, but make sure that the Relays are installed so that the contacts are not subjected to vibration or shock in their movement direction.



- Use two M3 screws to mount the case-surface mounting (MY□F) and tighten them securely. (Appropriate tightening torque: 0.98 N·m)

●Relay Replacement

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

●Applicable Sockets

Use only combinations of OMRON Relays and Sockets.

●Attaching and Removing Relay Hold-down Clips

When you attach a Hold-down Clip to or remove it from a Socket, wear gloves or take other measures to prevent injuring your fingers on the Hold-down Clip.

●Compliance with Electrical Appliances and Material Safety Act

- MY standard models comply with the Electrical Appliances and Material Safety Act.
- Always protect any exposed terminals (including Socket terminals) after wiring with insulation tubes or resin coating on PCBs.

Model	Number of poles	Operating Coil ratings	Contact ratings
MY	1 2 3	6 to 220 VAC 6 to 120 VDC	5 A, 200 VAC
	4*	6 to 110 VAC 6 to 120 VDC	3 A, 115 VAC

*Under the Electrical Appliances and Material Safety Act, do not use the Type 4 model with a voltage that exceeds 150 VAC. However, this restriction can be ignored if compliance with the Electrical Appliances and Material Safety Act is not required.

●Miniature Power Relays: MY

Latching Levers

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

About the Built-in Diode and CR Elements

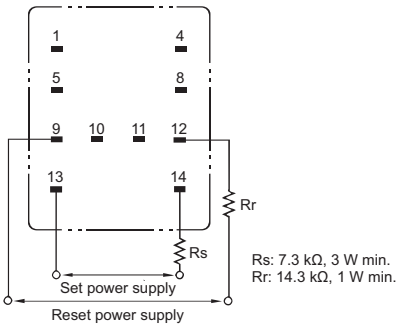
The diode or CR element that are built into the Relay are designed to absorb the reverse voltage from the Relay coil. If a large surge in voltage is applied to the diode or CR element from an external source, the element will be destroyed.
If there is the possibility of large voltage surges that could be applied to the elements from an external source, take any necessary surge absorption measures.

Using Microloads with Infrequent Operation

If any standard MY-series Relays (e.g., MY4) are used infrequently to switch microloads, the contacts may become unstable and eventually result in failure contact. In this case, we recommend using the MY4Z-CBG Series, which has high contact reliability for microloads.

●Latching Relays (MYK)

- For applications that use a 200 VAC power supply, connect external resistors Rs and Rr to a 100 VAC Relay.



- Do not apply a voltage to the set and reset coils at the same time. If you apply the rated voltage to both coils simultaneously, the Relay will be set.
- The minimum pulse width in the performance column is the value for the following measurement conditions: an ambient temperature of 23°C with the rated operating voltage applied to the coil. Satisfactory performance may be unattainable due to decreased holding strength caused by changes in circuit conditions and ambient operating temperature, or due to changes caused by product aging.
  During actual use, apply a pulse width of the rated operating voltage suitable for the actual load to the coil and reset this at least once per year as a means of dealing with product aging.

●Hermetically Sealed Relays (MYH/MYQ)

Relays with PCB Terminals

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

Solution

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

Application Environments

Humid environments can cause insulation problems, which may result in short-circuiting or unintended operation.

Solution

Do not use these Relays in any environment where the Relay will come into contact with water vapor, condensation, or water droplets. This can reduce the surface tension of the terminal insulating beads and cause short-circuiting or unintended operation due to insulation problem.

Optional Sockets (Order Separately)

Be sure to read the *Safety Precautions for All Relay*s in the website at the following URL: http://www.ia.omron.com/product/cautions/36/safety_precautions.html

Front-connecting Sockets

●Push-In Plus Terminal Sockets (PYF-08-PU(-L), PYF-14-PU(-L))

Refer to *Safety Precautions* on the Push-In Plus Terminal Block Socket PYF-□□-PU/P2RF-□□-PU Data Sheet (Catalog No. SGFR-218).

●Screwless Terminal Sockets (PYF08S, PYF14S)

Refer to *Safety Precautions* on the Screwless Terminal Socket PYF□□S/P2RF-□□S Data Sheet (Catalog No. CDRR-011).

●Screw Terminal Sockets (PYFZ-08(-E), PYF08M, PYF11A, PYFZ-14(-E), PYF-14T)

Be sure to read the *Safety Precautions for All Relays*, 4-2-1 *Panel-mounting Sockets* and 4-2-2 *Relay Removal Direction* of the website at the following URL: http://www.ia.omron.com/product/cautions/36/safety_precautions.html

- Use the following tightening torque for screws during wiring.

Model	Tightening torque
PYFZ-08 PYFZ-14 PYF08A PYF14A	0.78 to 1.18 N·m
PYFZ-08-E PYFZ-14-E PYF08A-E PYF14A-E	0.59 to 0.88 N·m * Use a No. 1 screwdriver.

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

Model	Recommended wire diameter (mm^2)	
PYFZ-08 PYFZ-14 PYF08A PYF14A	Stranded wire	0.75 to 2.5 mm^2 AWG 18 to 14
	Solid wire	0.75 to 1.5 mm^2 AWG 18 to 16
PYFZ-08-E PYFZ-14-E PYF08A-E PYF14A-E	Stranded wire	0.75 to 2.5 mm^2 AWG 18 to 14
	Solid wire	0.75 to 1.5 mm^2 AWG 18 to 16

Back-connecting Socket

●Solder Terminal Sockets (PY08(-Y1/-Y3), PY11(-Y1/-Y3))

●Wrapping Terminals Sockets (PY08QN(-Y1/-Y3), PY08QN2(-Y1/-Y3), PY11QN(-Y1), PY11QN2(-Y1))

●PCB Terminal Sockets (PY08-02, PY11-02)

Be sure to read the *Safety Precautions for All Relays*, 4-2-3 *Back-connecting Sockets* and 4-2-5 *Terminal Soldering* of the website at the following URL: http://www.ia.omron.com/product/cautions/36/safety_precautions.html

MEMO

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CSM_10_10
Cat. No. J219-E1-09 0721 (0618) (O)

Accessories (order separately)

■ Track-mounted Screwless Clamp Terminal Sockets

Item	Model	
	4-pole	2-pole
Socket	PYF14S	PYF08S
Clip & release lever	PYCM-14S	PYCM-08S
Nameplate	R99-11 nameplate for MY	
Socket bridge	PYDM-14SR, PYDM-14SB	PYDM-08SR, PYDM-08SB

Note: For complete specifications, see the datasheet at Omron's Knowledge Center on our website: www.knowledge.omron.com.

■ Sockets

Poles	Front-connecting socket (DIN-track/screw mounting)	Back-connecting socket		
		Solder terminals		PCB terminals
		Without clip	With clip	
2	PYF08A-E	PY08	PY08-Y1	PY08-02
	PYF08A-N			
4	PYF14A-E	PY14	PY14-Y1	PY14-02
	PYF14A-N			

■ Socket Specifications

Item	Pole	Model	Carry current	Dielectric withstand voltage	Insulation resistance (see note 2)
Screwless clamp terminal socket	2	PYF08S	10 A	2,000 VAC, 1 min	Less than 1,000 MΩ
	4	PYF14S	5 A		
Track-mounted socket	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		
		PYF14A-N (see note 3)	5 A (see note 4)		
Back-connecting socket	2	PY08(-Y1)	7 A	1,500 VAC, 1 min	100 MΩ min.
		PY08-02			
	4	PY14(-Y1)	3 A		
		PY14-02			

Note: 1. The values given above are initial values.

2. The values for insulation resistance were measured at 500 V 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.

■ Socket Hold-down Clip Pairing

Relay type	Poles	Front-connecting socket (DIN-track/screw mounting)		Back-connecting socket			
				Solder terminals		PCB terminals	
		Socket	Clip	Socket	Clip	Socket	Clip
Without 2-pole test button	2	PYF08A-E	PYC-A1	PY08	PYC-P PYC-P2	PY08-02	PYC-P PYC-P2
		PYF08A-N					
Without 2-pole test button	4	PYF14A-E	PYC-A1	PY14	PYC-P PYC-P2	PY14-02	PYC-P PYC-P2
		PYF14A-N					
2-pole test button	2	PYF08A-E	PYC-E1	PY08	PYC-P2	PY08-02	PYC-P2
		PYF08A-N					

■ Mounting Plates for Sockets

Socket model	For 1 socket	For 18 sockets	For 36 sockets
PY08, PY14	PYP-1	PYP-18	PYP-36

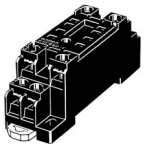
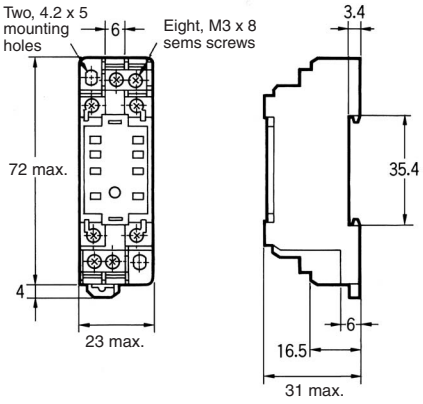
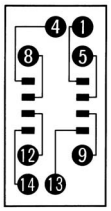
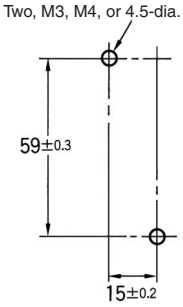
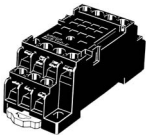
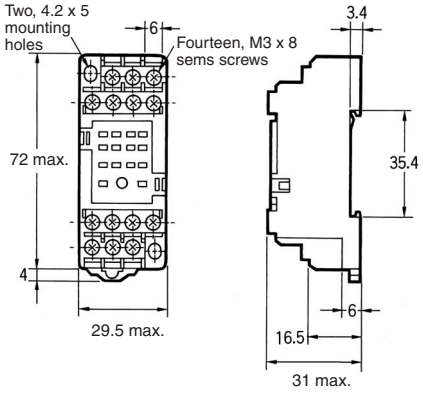
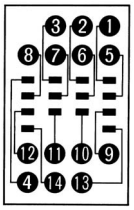
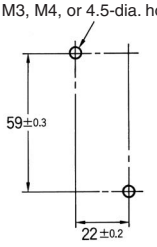
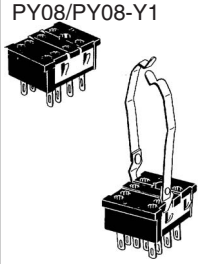
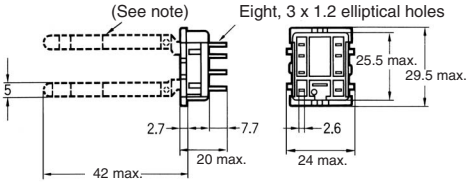
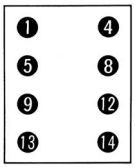
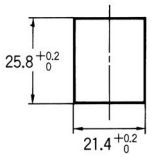
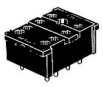
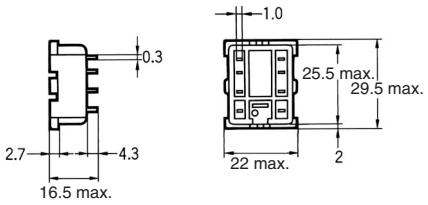
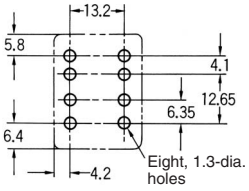
Note: PYP-18 and PYP-36 can be cut into any desired length in accordance with the number of Sockets.

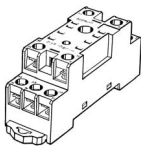
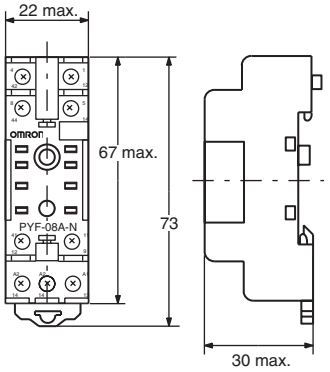
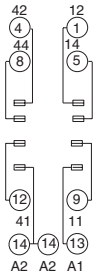
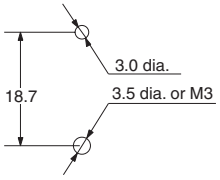
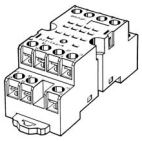
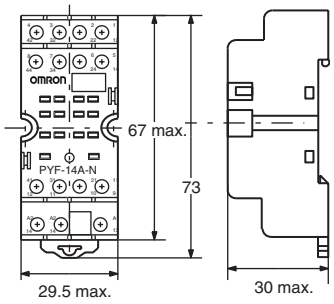
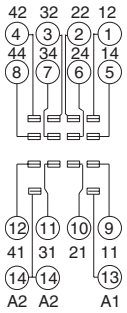
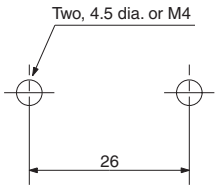
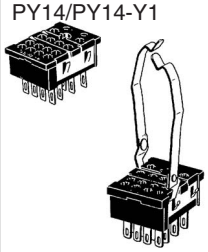
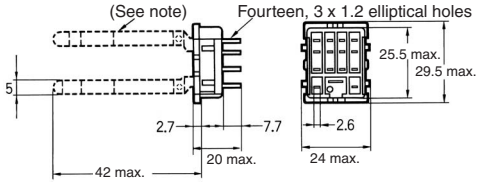
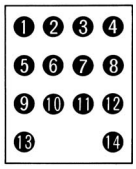
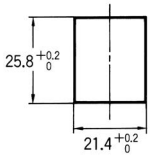
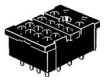
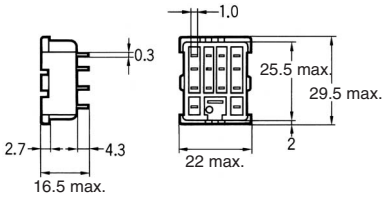
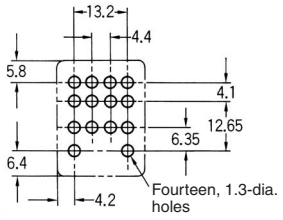
■ DIN Rail Track and Accessories

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

■ Dimensions

Unit: mm (inch)

Socket	Dimensions	Terminal arrangement/ internal connections (top view)	Mounting holes
PYF08A-E 			 (TOP VIEW) **Note:** Track mounting is also possible.
PYF14A-E 			 (TOP VIEW) **Note:** Track mounting is also possible.
PY08/PY08-Y1 	 **Note:** The PY08-Y1 includes sections indicated by dotted lines.		
PY08-02 			

Socket	Dimensions	Terminal arrangement/ internal connections (top view)	Mounting holes
PYF08A-N 			 **Note:** Track mounting is also possible.
PYF14A-N 			 **Note:** Track mounting is also possible.
PY14/PY14-Y1 	 **Note:** The PY14-Y1 includes sections indicated by dotted lines.		
PY14-02 			

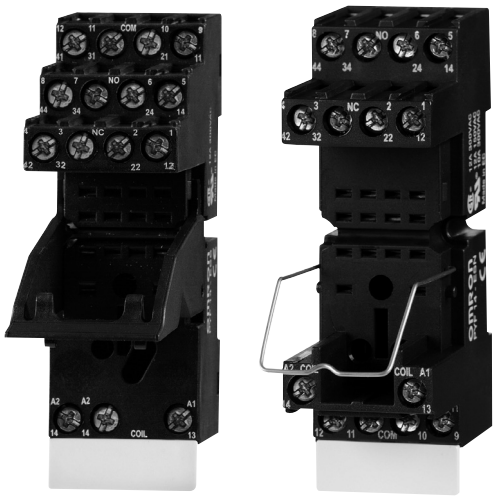
Note: Use a panel with plate thickness of 1 to 2 mm for mounting the Sockets.

DIN rail mounted sockets

PYF 14-ESN/-ESS

Versatile Socket which can be used with the MY2 and MY4 relays

- Rising up terminals, easy labelling and quick connection
- Double terminal numbering
- Operating temperatures -40 to to 85 °C
- Rated current 12A @ 300V
- Insulation voltage > 3kV
- Conforms to relevant International standards
- PYF14-ESS: Output terminals separate from input terminals



Ordering Information

Model	Applicable relays*1
PYF 14-ESN	MY2 / MY4 Relays
PYF 14-ESS	MY2 / MY4 Relays

*1) H3Y timers can also be fitted into these sockets. For information about the timers please refer to appropiate data sheet

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

Technical Specification

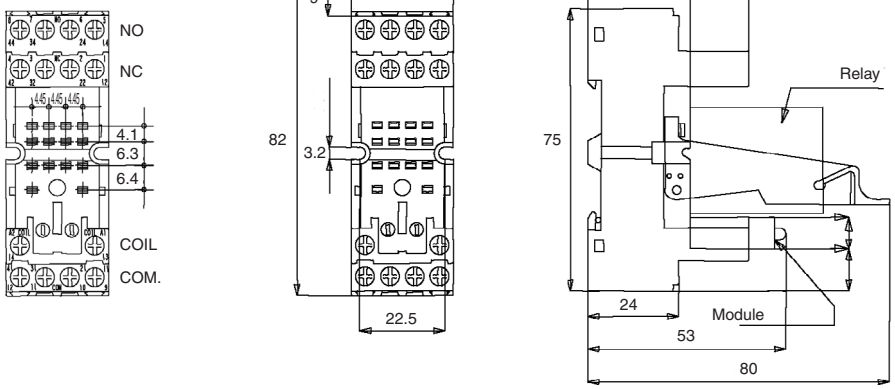
Model		PYF 14-ESN / PYF 14-ESS
Electrical Data		
Rated Voltage		300V
Rated current		12A
Dielectric strength		>3kV
Insulation resistance		> 5MΩ
Insulation group		C250 to VDE 0110
Creepage & clearance distance		Compliant with VDE 0110
Tracking resistance		500V
Protection category		IP 20 B (EN60529)
Thermal Data		
Ambient Temp Specification		
	Operating	-40 °C to +85 °C
	With Thermoplastic Clip	-25 °C to +85 °C
	With Metal clip	-40 °C to +85 °C
Mechanical Data		
Material of socket (body)		Thermoplastic PA 6+GF - V2
Material of socket (Contact)		Cu Zn 33 (contact surface 5 micron tin plated)
Material of socket (Terminal)		8 micron zinc plated steel
Material of socket (screw)		5 micron nickel plated 8.8 steel
Materials of clips:		
	- PYC-35 (plastic)	Thermoplastic PA 6+GF-V2
	- PYC-0 (metal)	X Cr - Ni Stell
Material of label - PYC-TR1		Thermoplastic PA 6+GF-V2

Model		PYF 14-ESN / PYF 14-ESS
Max Screw Torque		0.8Nm
Max wire section		
	Compact	2 x 2.5mm
	Flexible	2 x 2.5mm
	Cable end	2 x 1.5mm
Wire strip length		5 to 8mm
Double Terminal Numbering		DIN 46199, IEC67
Mounting		EN 50022 Din rail, Central Screw M4, Board Back or protrude 2 screws M3
Compliance with Standards		
CE, UL, CSA, VDE EN 61984		

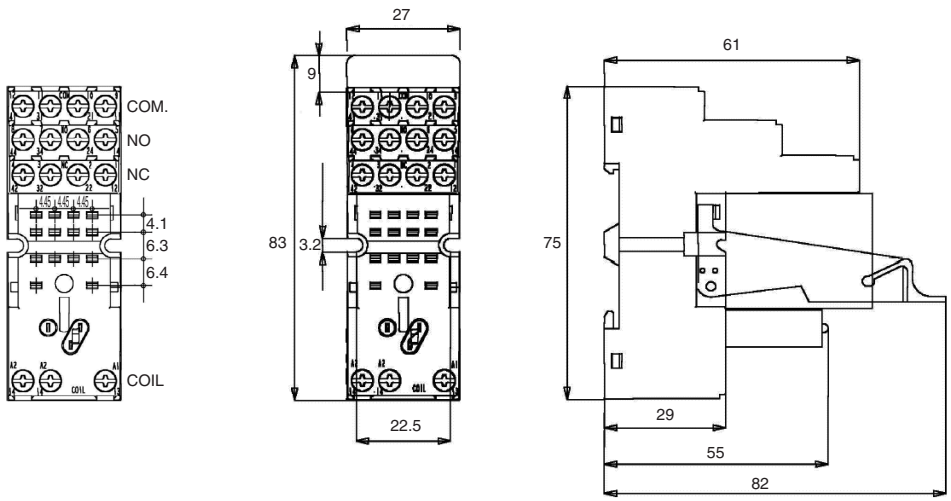
Dimensions

(All units are in millimetres unless otherwise indicated)

PYF 14-ESN



PYF 14-ESS



Cat. No. J01E-EN-01A **In the interest of product improvement, specifications are subject to change without notice.**

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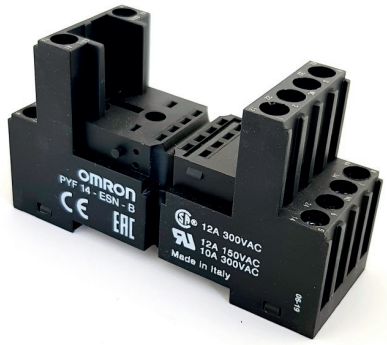
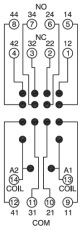


Specifications

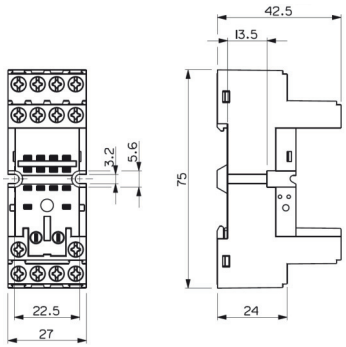
Mechanical data	Max. torque on the screws	0.8 Nm
	Wire section solid and stranded	Min. 0.5 mm^2 – AWG 20
		Max 2.5 mm^2 – AWG 14
	Weight	70 g
Wire strip	Length	6 – 7 mm
Electrical data	Terminal protection degree	IP 20
	Rated voltage IEC	300 VAC
	Rated current IEC	12 A
	Rated voltage UL	300 VAC
	Rated current UL	10 A (or 12 A at 150 VAC)
Thermal data	Operating temperatures	–25°C… + 85°C
Conformity		RoHS compliant (Directive 2011/65/EU and Delegated Directive 2015/863)

Wire locking systems

Electrical scheme



Dimensions



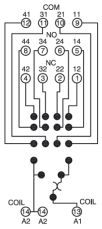
Approvals

Specifications

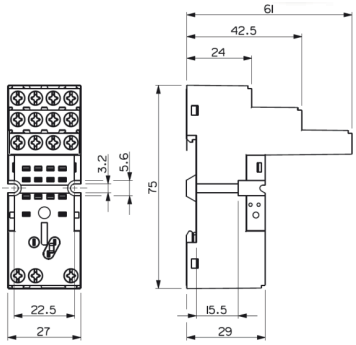
Mechanical data	Max. torque on the screws	0.8 Nm
	Wire section solid and stranded	Min. 0.5 mm² – AWG 20
		Max 2.5 mm² – AWG 14
	Weight	66 g
Wire strip	Length	6 – 7 mm
Electrical data	Terminal protection degree	IP 20
	Rated voltage IEC	300 VAC
	Rated current IEC	12 A
	Rated voltage UL	300 VAC
	Rated current UL	12 A
Thermal data	Operating temperatures	–25°C… + 85°C
Conformity		RoHS compliant (Directive 2011/65/EU and Delegated Directive 2015/863)

Wire locking systems

Electrical scheme



Dimensions



Approvals

Sockets with Push-In Plus technology

PYF-□□-PU/PTF-□□-PU/P2RF-□□-PU

Sockets with Push-In Plus technology to Save Work Added to Series for MY, LY and G2R-S Relays

- Sockets with Push-In Plus technology are used to save wiring work in comparison with traditional screw terminals. (Wiring time is reduced by 60%✻ in comparison with traditional screw terminals.)
- No screw loosening means maintenance-free application.
- Light insertion force and strong pull-out strength to achieve both less wiring work and high reliability.
- 'Hand-free' structure that holds an inserted screwdriver to achieve easier wiring work for stranded wires.
- Each terminal includes two wiring holes and can be used for crossover wiring.
- DIN Track mounting or screw mounting.

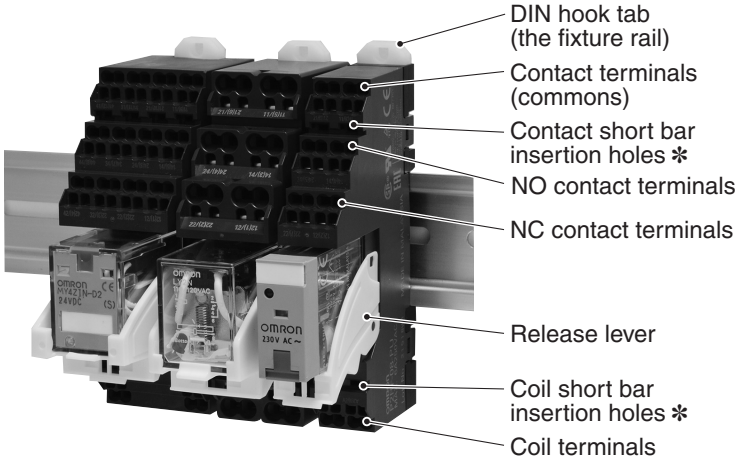
✻ According to OMRON actual measurement data from November 2015.

⚠ Refer to *Safety Precautions* on page 10.

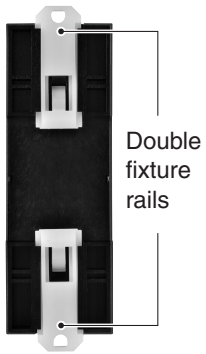
For the most recent information on models that have been certified for safety standards, refer to your OMRON website.

Features

- Coil terminals and contact terminals are completely separated in an organized wiring layout.
- A Release Lever is provided as a standard feature. (except -L models)
- DIN terminal numbers are indicated.
- The double fixture rail with DIN hook tabs attached to the top and bottom lets you mount the Socket from either the top or bottom.
- One-touch Installation onto DIN-track.
- Front-in short bar enables easy installation without interference in duct when wiring.
- Please refer short bar correspondence table in page 9 for further information of short bar.
- There are screw mounting holes in the DIN hooks on the PYF-□□-PU, PTF-□□-PU and P2RF-□□-PU. Pull out the DIN hook tabs to mount the Sockets with screws.



✻ The PTF-□□-PU Sockets do not have short bar insertion holes.



Back of Push-In Plus Terminal Block Socket

The fixture rails can be pulled out to mount the Relays with screws.

Ordering Information

Sockets

PYF Series

Applicable model (typical example)			No. of poles	Socket
				Model ✻1
General Purpose Relays	MY Series	MY2□ MY2IN(S)	2	**PYF-08-PU**
		MY4□ MY4H MYQ4□ MY4□(S) MY2K	4	**PYF-14-PU**
		MY2(N)-CR AC24 MY2Z(N)-CR	2	**PYF-08-PU-L ✻2**
		MY4(N)-CR AC24 MY4N-CR AC115 MY4ZN-CBG-CR	4	**PYF-14-PU-L ✻2**
SSR	G3FM Series	G3FM	1	**PYF-08-PU**
	G3F/G3FD Series	G3F		
		G3FD		
Timers	H3Y Series H3YN Series	H3Y(N)-2-B	2	**PYF-08-PU-L**
		H3Y(N)-4-B	4	**PYF-14-PU-L**

✻**1.** The PYF-□□-PU-L Sockets do not have release levers.
✻**2.** Use with the hold-down clip (Y92H-3).

PTF Series

Applicable model (typical example)			No. of poles	Socket
				Model ✻
General Purpose Relays	LY Series	LY2□	2	**PTF-08-PU**
		LY2□-CR		**PTF-08-PU-L**
		LY4□	4	**PTF-14-PU-L**
SSR	G3H Series	G3H	1	**PTF-08-PU**
		G3HD		
	G9H Series **Note:** Hybrid Power Relay	G9H		
Temperature Controller	E5L	E5L-A □ E5L-C □	---	**PTF-14-PU-L**

✻ The PTF-□□-PU-L Sockets do not have release levers.

P2RF Series

Applicable model (typical example)			No. of poles	Socket
				Model
General Purpose Relays	G2R-□-S (S) Series	G2R-1-S (S)	1	**P2RF-05-PU**
SSR	G3R-I/O Series	G3R		
	G3RZ Series	G3RZ		
Timers	H3RN Series	H3RN-1-B		
General Purpose Relays	G2R-□-S (S) Series	G2R-2-S (S)	2	**P2RF-08-PU**
Timers	H3RN Series	H3RN-2-B		
Liquid Leakage Sensors	K7L Series	K7L-□B	---	

Accessories (Order Separately)

Short Bars

Pitch	Applicable models	No. of poles	Colors	Model ✻	Minimum order (quantity)
7.75 mm	PYF-□□-PU and P2RF-□□-PU	2	Red (R) Blue (S) Yellow (Y)	**PYDN-7.75-020□**	10
		3		**PYDN-7.75-030□**	
		4		**PYDN-7.75-040□**	
		20		**PYDN-7.75-200□**	
15.5mm	P2RF-□□-PU	8		**PYDN-15.5-080□**	
31.0 mm	PYF-□□-PU	8		**PYDN-31.0-080□**	

Note: Use the Short Bars for crossover wiring within one Socket or between Sockets.
✻ Replace the box (□) in the model number with the code for the covering color.

Labels

Applicable models	Model	Minimum order (sheet) (quantity per sheet)
PYF-□□-PU/ PTF-□□-PU/ P2RF-□□-PU	**XW5Z-P4.0LB1**	5 (1 sheet/60 pieces)

Hold-down Clip

Applicable models (Combinations)	Model	Minimum order (quantity)
PYF-08-PU-L H3Y(N)-2-B	**Y92H-3**	10
PYF-14-PU-L H3Y(N)-4-B		
PTF-08-PU-L LY2□-CR		
PTF-14-PU-L LY4□	**PYC-A1**	100
PTF-14-PU-L E5L	**Y92H-10 ✻**	1

✻ Included with the E5L unit.
If you lose or damage the hold-down clip (Y92H-10), order it separately.

Parts for DIN Track Mounting

Type		Model	Minimum order (quantity)
DIN Tracks	1 m	**PFP-100N**	1
	0.5 m	**PFP-50N**	
End Plate ✻		**PFP-M**	10
Spacer		**PFP-S**	

✻ When mounting DIN rail, please use End Plate (Model PFP-M).

Ratings/Characteristics

Characteristics

Sockets

PYF-□□-PU(-L)

Item	Model	PYF-08-PU (-L)	PYF-14-PU (-L)
Ambient operating temperature		-40 to 70°C	
Ambient operating humidity		5 to 85%	
Continuous carry current ✻		10 A	6 A
Dielectric strength	Between contact terminals of same polarity	2,000 VAC, 1 min	2,000 VAC, 1 min
	Between contact terminals of different polarity	2,000 VAC, 1 min	2,000 VAC, 1 min
	Between coil and contact terminals	2,000 VAC, 1 min	2,000 VAC, 1 min
Insulation resistance		1,000 MΩ min. (at 500 VDC)	
Weight (approx.)		80 g	87 g

✻ The continuous carry current of 10 A for PYF-08-PU(-L) is for an ambient temperature of 55°C. At an ambient temperature of 70°C, the value is 7 A.

PTF-□□-PU(-L)

Item	Model	PTF-08-PU (-L)	PTF-14-PU-L
Ambient operating temperature		-40 to 70°C	
Ambient operating humidity		5 to 85%	
Continuous carry current ✻		10 A	
Dielectric strength	Between contact terminals of same polarity	2,000 VAC, 1 min	2,000 VAC, 1 min
	Between contact terminals of different polarity	2,000 VAC, 1 min	2,000 VAC, 1 min
	Between coil and contact terminals	2,000 VAC, 1 min	2,000 VAC, 1 min
Insulation resistance		1,000 MΩ min. (at 500 VDC)	
Weight (approx.)		65 g	100 g

✻ The continuous carry current of 10 A for PTF-08-PU(-L) is for an ambient temperature of 55°C. At an ambient temperature of 70°C, the value is 7 A.
The continuous carry current of 10 A for PTF-14-PU-L is for an ambient temperature of 40°C. At an ambient temperature of 70°C, the value is 7 A.

P2RF-□□-PU

Item	Model	P2RF-05-PU	P2RF-08-PU
Ambient operating temperature		-40 to 70°C	
Ambient operating humidity		5 to 85%	
Continuous carry current ✻		10 A	6 A
Dielectric strength	Between contact terminals of same polarity	1,000 VAC, 1 min	1,000 VAC, 1 min
	Between contact terminals of different polarity	---	3,000 VAC, 1 min
	Between coil and contact terminals	4,000 VAC, 1 min	4,000 VAC, 1 min
Insulation resistance		1,000 MΩ min. (at 500 VDC)	
Weight (approx.)		40 g	45 g

✻ The continuous carry current of 10 A for P2RF-05-PU is for an ambient temperature of 55°C. At an ambient temperature of 70°C, the value is 7 A.
The continuous carry current of 6 A for P2RF-08-PU is for an ambient temperature of 55°C. At an ambient temperature of 70°C, the value is 5 A.

Accessories (Order Separately)

Short Bars

Application	Applicable sockets	Model	Maximum carry current	Ambient operating temperature	Ambient operating humidity
For Contact terminals (common)	PYF-08-PU(-L) PYF-14-PU(-L) P2RF-05-PU P2RF-08-PU	PYDN-7.75-020□	20 A	-40 to 70°C	5 to 85% Rh
		PYDN-7.75-030□			
		PYDN-7.75-040□			
		PYDN-7.75-200□			
For Coil terminals	P2RF-05-PU P2RF-08-PU	PYDN-15.5-080□	20 A	-40 to 70°C	5 to 85% Rh
	PYF-08-PU(-L) PYF-14-PU(-L)	PYDN-31.0-080□			

Approved Standards

CSA certification (File No. LR031928)

Model	Ratings	Class No.	Standard No.
PYF-08-PU (-L) PTF-08-PU (-L) P2RF-05-PU	10 A 250 V	3211 07	CSA C22.2 No14
PYF-14-PU (-L)	6A 250V ✻		
PTF-14-PU (-L)	10 A 250 V (Same polarity)		
P2RF-08-PU	6 A 250 V		

✻ When power is supplied to all four poles, use with a total power current that does not exceed 20 A.

UL standard certification (File No. E87929)

Model	Ratings	Standard No.	Category	Listed/ Recognized
PYF-08-PU (-L) PTF-08-PU (-L) P2RF-05-PU	10 A 250 V	UL508	SWIV2	Recognized
PYF-14-PU (-L)	6 A 250 V ✻			
PTF-14-PU (-L)	10 A 250 V (Same polarity)			
P2RF-08-PU	6 A 250 V			

✻ When power is supplied to all four poles, use with a total power current that does not exceed 20 A.

TÜV Rheinland certification

Model	Ratings	Standard No.	Certification No.
PYF-08-PU (-L) PTF-08-PU (-L) P2RF-05-PU	10 A 250 V ✻1	EN 61984	R50327595
PYF-14-PU (-L)	6 A 250 V		
PTF-14-PU (-L)	10 A 250 V ✻2		
P2RF-08-PU	6 A 250 V ✻3		

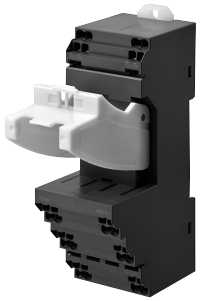
✻1. Ratings are for an ambient temperature of 55°C. At an ambient temperature of 70°C, the value is 7 A.
✻2. Ratings are for an ambient temperature of 40°C. At an ambient temperature of 70°C, the value is 7 A.
✻3. Ratings are for an ambient temperature of 55°C. At an ambient temperature of 70°C, the value is 5 A.

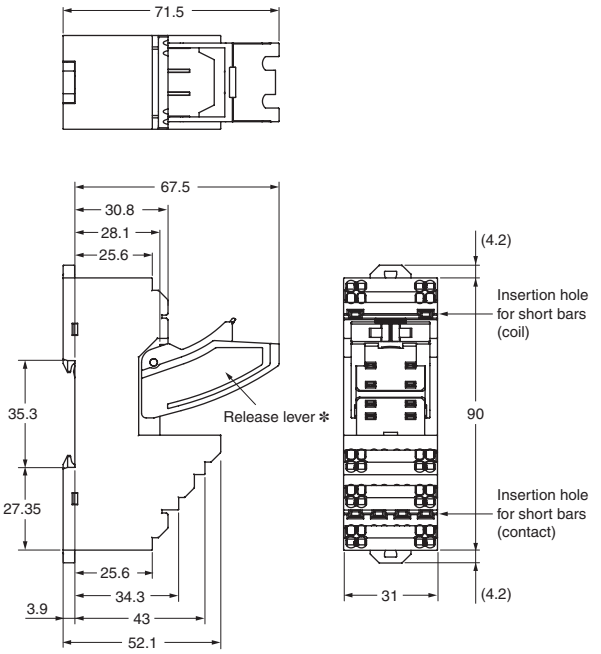
Dimensions

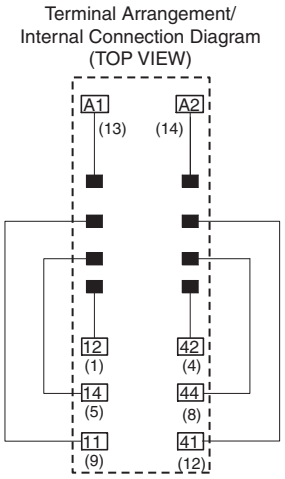
(Unit: mm)

Sockets

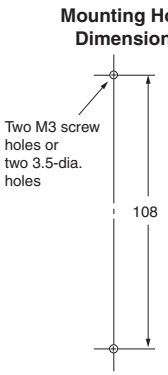
PYF-08-PU(-L)







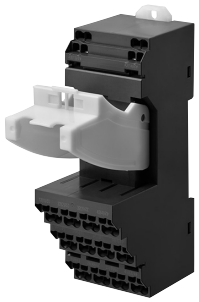
Note: The numbers in parentheses are traditionally used terminal numbers.

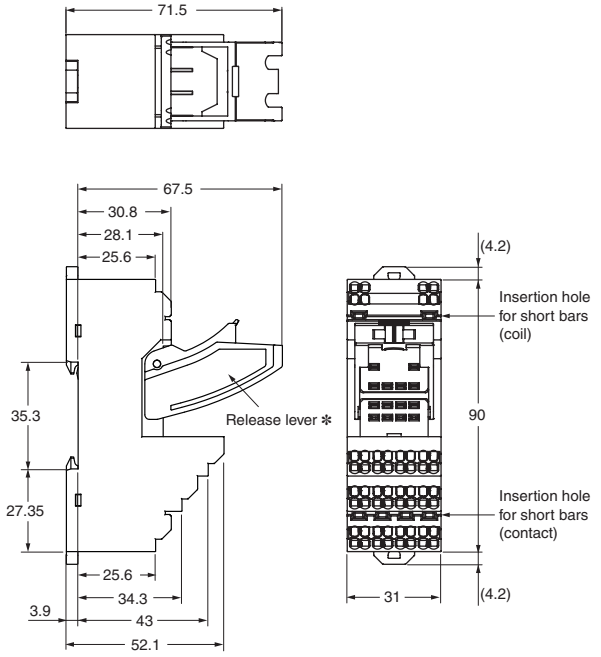


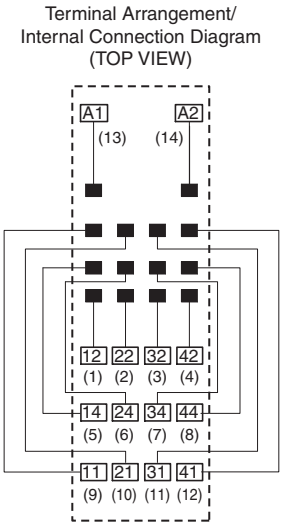
Note: Pull out the hooks to mount the Socket with screws.

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

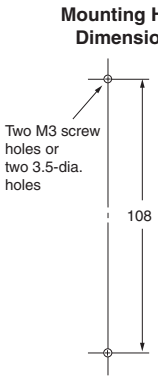
PYF-14-PU(-L)







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

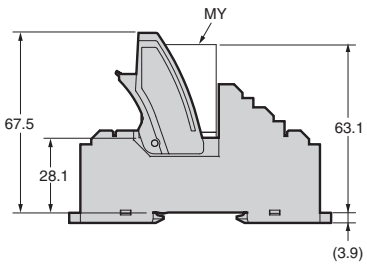


Note: Pull out the hooks to mount the Socket with screws.

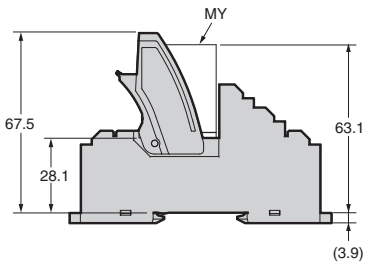
✻ The PYF-14-PU-L Sockets do not have release levers.

Mounting Heights

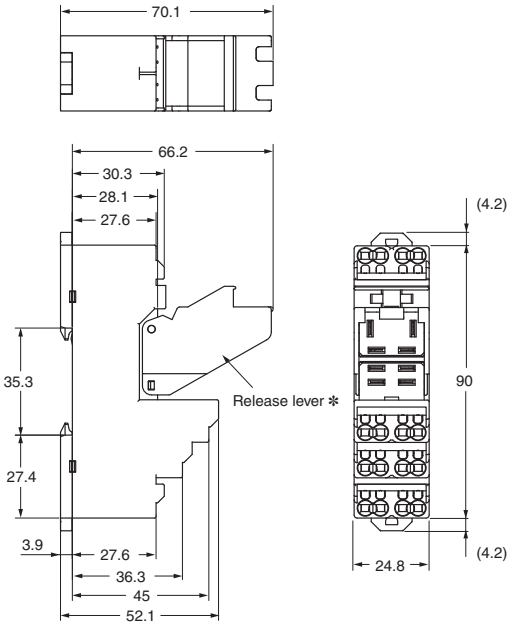
PYF-08-PU



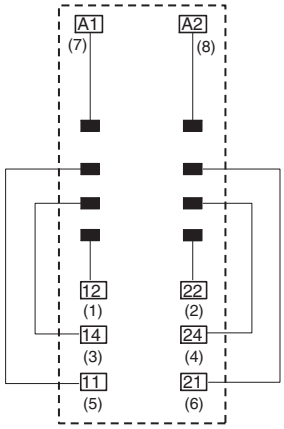
PYF-14-PU



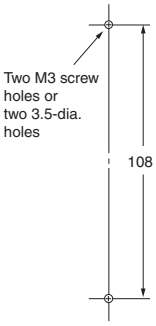
PTF-08-PU (-L)



Terminal Arrangement/
Internal Connection Diagram
(TOP VIEW)



Mounting Hole Dimensions

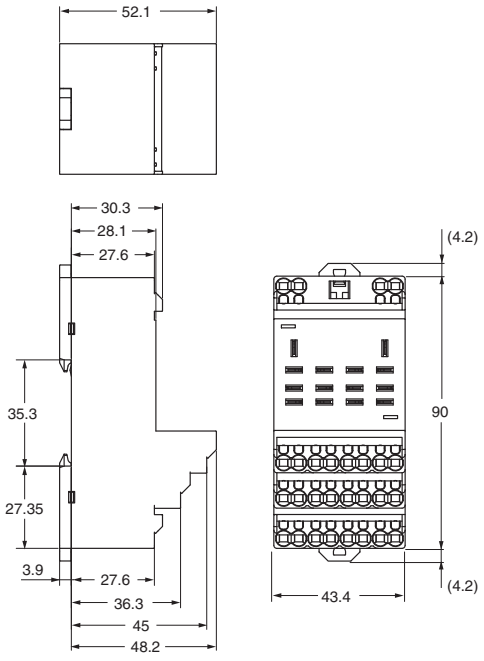


Note: When you apply a minimum of 10 A of current to an LY1 when it is used in combination with the PTF-08-PU(-L), connect each of the following terminal pairs: (1) to (2), (3) to (4), and (5) to (6).
✻ The PTF-08-PU-L Sockets do not have release levers.

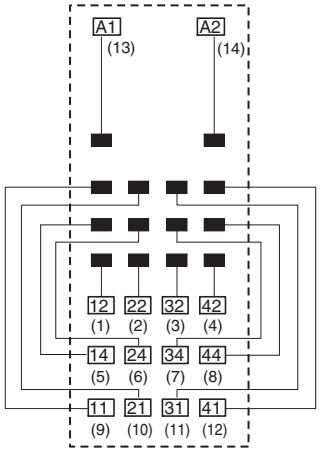
Note: The numbers in parentheses are traditionally used terminal numbers.

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

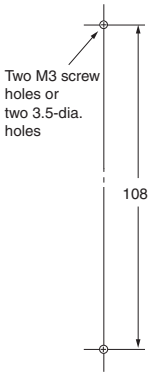
PTF-14-PU-L



Terminal Arrangement/
Internal Connection Diagram
(TOP VIEW)



Mounting Hole Dimensions

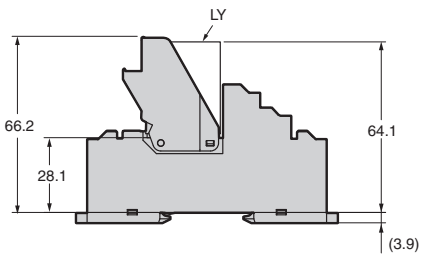


Note: The numbers in parentheses are traditionally used terminal numbers.

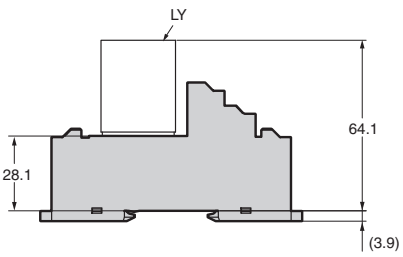
Note: Pull out the hooks to mount the Socket with screws.

Mounting Heights

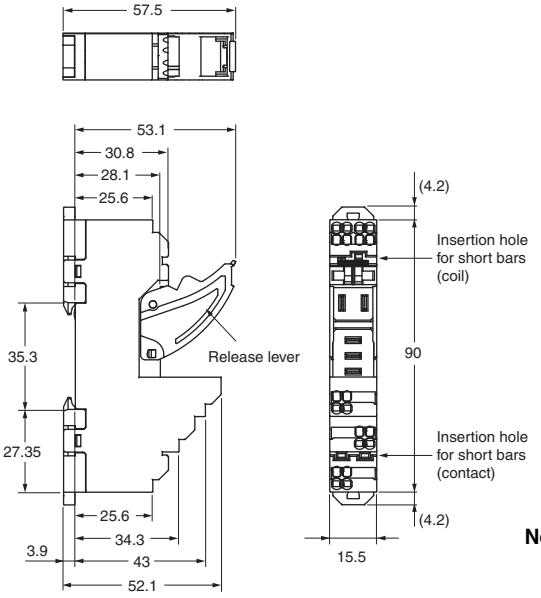
PTF-08-PU



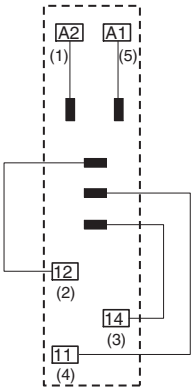
PTF-14-PU-L



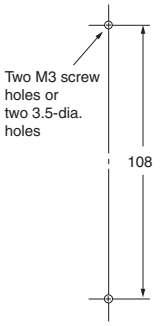
P2RF-05-PU



Terminal Arrangement/ Internal Connection Diagram (TOP VIEW)



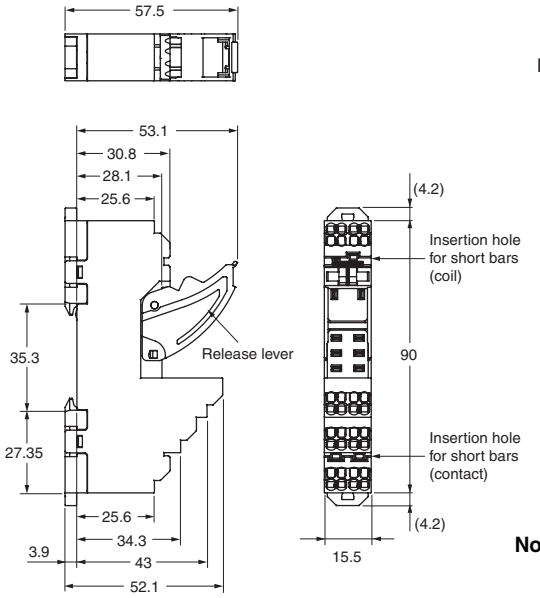
Mounting Hole Dimensions



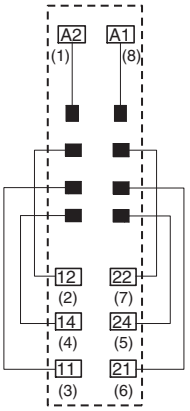
Note: 1. The numbers in parentheses are traditionally used terminal numbers.
2. Insert the short bar into only the A1 or A2 side.

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

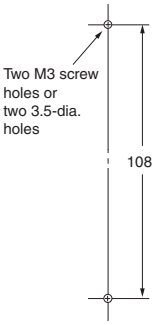
P2RF-08-PU



Terminal Arrangement/ Internal Connection Diagram (TOP VIEW)



Mounting Hole Dimensions

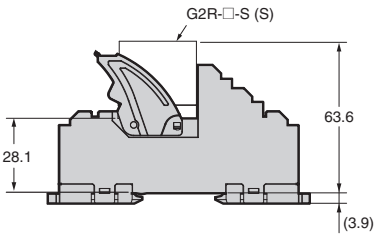


Note: 1. The numbers in parentheses are traditionally used terminal numbers.
2. Insert the short bar into only the A1 or A2 side.

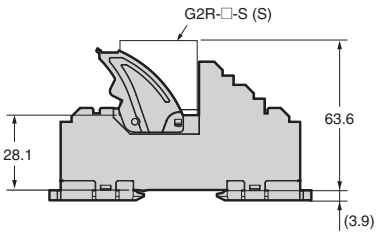
Note: Pull out the hooks to mount the Socket with screws.

Mounting Heights

P2RF-05-PU



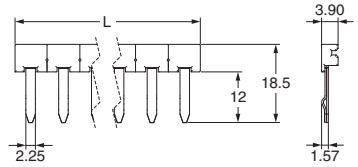
P2RF-08-PU



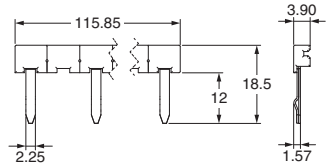
Accessories (Order Separately)

Short Bars

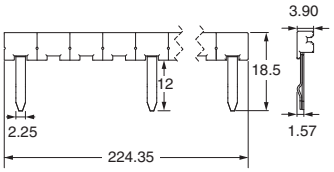
PYDN-7.75-□□ (7.75 mm)



PYDN-15.5-080□ (15.5mm)



PYDN-31.0-080□ (31mm)



Application	Pitch	Applicable sockets	No. of poles	L (Length)	Colors	Model ✻
For Contact terminals (common)	7.75 mm	PYF-□□-PU and P2RF-□□-PU	2	15.1	Red (R) Blue (S) Yellow (Y)	**PYDN-7.75-020□**
			3	22.85		**PYDN-7.75-030□**
			4	30.6		**PYDN-7.75-040□**
			20	154.6		**PYDN-7.75-200□**
For Coil terminals	15.5 mm	P2RF-□□-PU	8	115.85		**PYDN-15.5-080□**
	31 mm	PYF-□□-PU	8	224.35		**PYDN-31.0-080□**

Note: 1. Use the Short Bars for crossover wiring within one Socket or between Sockets.

2. When using short bar to coil terminals of P2RF-□□-PU, make sure to use PYDN-15.5-080□ (15.5 mm).
When using short bar to coil terminals of PYF-□□-PU (-L), make sure to use PYDN-31.0-080□ (31 mm).

✻ Replace the box (□) in the model number with the code for the covering color.

Parts for DIN Track Mounting

Refer to your OMRON website for details on the PFP-□.

Safety Precautions

Be sure to read the *Common Precautions for All Relays* in the website at the following URL: http://www.ia.omron.com/.

Warning Indications

⚠ WARNING	**Indicates a potentially hazardous situation which, if not avoided, will result in minor or moderate injury, or may result in serious injury or death. Additionally there may be significant property damage.**
Precautions for Safe Use	**Supplementary comments on what to do or avoid doing, to use the product safely.**
Precautions for Correct Use	**Supplementary comments on what to do or avoid doing, to prevent failure to operate, malfunction, or undesirable effects on product performance.**

Meaning of Product Safety Symbols

	**Used to warn of the risk of electric shock under specific conditions.**

⚠ WARNING

Make sure that the Socket does not have an electrical charge before you perform wiring or maintenance work. Electrical shock may occur.

Precautions for Safe Use

Transportation

- Do not use a Socket that has fallen to the floor or ground. The performance of a Socket that has been dropped may be reduced.
- Do not drop the Socket or subject it to abnormal vibration or shock during transportation or mounting. Doing so may result in deterioration of performance, malfunction, or failure.
- Do not transport a Socket when it is not packaged. Damage or failure may occur.

Operating and Storage Environments

- Do not use or store Sockets in the following locations. Doing so may result in deterioration of performance.
  - Locations subject to ambient storage temperatures outside the range • 40 to 70°C
  - Locations subject to relative humidity outside the range 5% to 85%
  - Locations subject to high temperature or high humidity
  - Locations in which condensation may occur due to rapid changes in temperature
- Do not use or store Sockets in environments that contain silicone gas, sulfidizing gas (e.g., SO_2 or H_2S), or organic gas, or near materials that contain silicone. Doing so may cause the contacts to be unstable or to fail.
- Do not use a Socket in a location subject to ultraviolet light (such as a location subject to direct sunlight). Printing may fade, the Socket may rust or corrode, and plastic parts may deteriorate.
- Before you start wiring, make sure that the Socket is securely attached and mounted to a DIN Track. If the Socket is not stable, it may fall and possibly injure a worker.
- Insert the flat-blade screwdriver fully to the bottom of the release hole. If the flat-blade screwdriver is not inserted correctly, the wire may not be connected correctly.
- If there is lubrication, such as oil, on the tip of the flat-blade screwdriver, the flat-blade screwdriver may fall and possibly injure a worker.
- When crossover wiring by wire and short bar, make sure not to insert wrong position, it may cause short circuit, malfunction or failure.
- Avoid using or storing in a location where the unit will be subject to direct vibration or shock. Risk of failure, malfunctioning, or deterioration of performance.

Push-In Plus Terminal Blocks

- Do not wire anything to the release holes.
- Do not tilt or twist a flat-blade screwdriver while it is inserted into a release hole on the terminal block. The terminal block may be damaged.
- Insert a screwdriver into the release holes at an angle. The terminal block may be damaged if the flat-blade screwdriver is inserted straight in.
- Do not allow the flat-blade screwdriver to fall when you are holding it in a release hole.
- Do not bend a wire past its natural bending radius or pull on it with excessive force. Doing so may cause the wire disconnection.
- Do not insert more than one wire into each terminal insertion hole.
- If you use wire or a short-circuit bar for crossover wiring, take care that there are no incorrect insertions. Incorrect insertion may cause short-circuiting, malfunctioning, or failure.
- To prevent wire materials from smoking or igniting, confirm wire ratings and use the wiring materials given in the following table.

Model	Recommended wires	Stripping length
PYF-□□-PU/ P2RF-□□-PU	0.5 to 1.5 mm^2 / AWG20 to AWG16 stranded wire, 0.8 to 1.3 mm^2 solid wire	8 mm
PTF-□□-PU	0.5 to 2.5 mm^2 / AWG20 to AWG14 stranded wire, 0.8 to 1.6 mm^2 solid wire	

Disposal

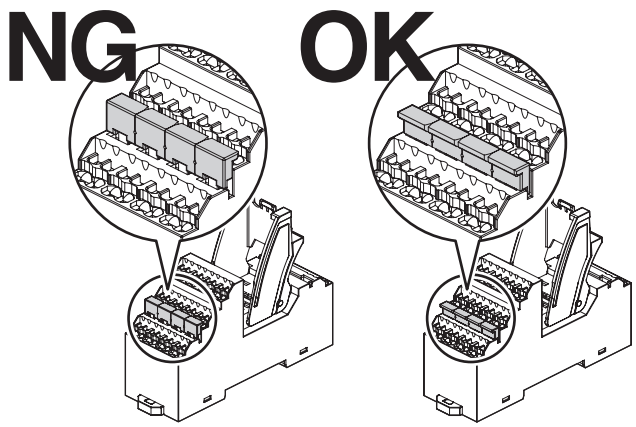
- If you dispose of any Sockets, do not place them in a fire.

Common connection method when using a short bar

- When connecting the P2RF-□□-PU input common, insert the short bar into only the A1 or A2 side.

Precautions for Correct Use

- Do not transport the Socket under the following conditions. Doing so may occasionally result in damage, malfunction, or deterioration of performance characteristics.
  - Locations subject to high temperature or high humidity
  - Locations subject to condensation due to rapid changes in temperature
- Do not use or store the Socket in the following locations. Doing so may occasionally result in damage, malfunction, or deterioration of performance characteristics.
  - Locations subject to shock or vibration
  - Conditions in which an external load may be applied
  - Locations subject to dust, salts, or iron, or locations where there is salt damage
- Do not use the Socket in a location where it may be subjected to solvents or alkali liquids.
- Do not insert short bar in the hole for wire or screw driver, it may cause the result of failure of pull out.
  If insert short bar in the hole for wire or screw driver and try to pull out, it may cause damage for short bar or socket.
- Insert the short bar so that the protrusion part of the short bar comes to the wire insertion side. Be sure to insert the short bar in the correct direction. Inserting the short bar in the opposite direction will prevent the short bar from being fully inserted, leading to contact failure or other problems.



- Do not use or store in an atmosphere in which ambient silicon gas, sulfuric gas (SO_2, H_2S), or organic gas is present, or near material that contains silicon. This may cause unstable contact or contact failure.
- Do not use or store in a location where water, chemicals, solvents, oil, or other substances may spray or splash on the Socket. Risk of failure, malfunctioning, or deterioration of performance.
- Avoid using or storing in a location where the ambient temperature exceeds -40 to 70°C. Risk of failure, malfunctioning, or deterioration of performance.

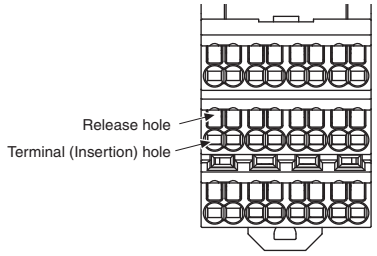
Applying 10 A or More When Using an LY1 with the Following Sockets

When you use an LY1 in combination with the PTF-08-PU(-L) connect each of the following terminal pairs: (1)to (2), (3) to (4), and (5) to (6).

Push-In Plus Terminal Blocks

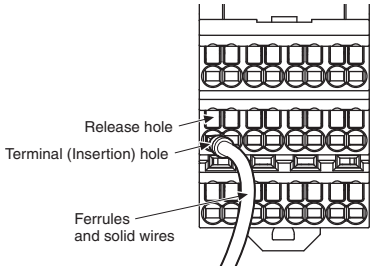
1. Connecting Wires to the Push-In Plus Terminal Block

Part Names of the Terminal Block



Connecting Wires with Ferrules and Solid Wires

Insert the solid wire or ferrule straight into the terminal block until the end strikes the terminal block.

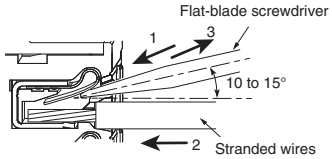


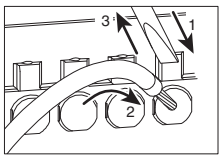
- If a wire is difficult to connect because it is too thin, use a flat-blade screwdriver in the same way as when connecting stranded wire.

Connecting Stranded Wires

Use the following procedure to connect the wires to the terminal block.

1. Hold a flat-blade screwdriver at an angle and insert it into the release hole.
   The angle should be between 10° and 15°. If the flat-blade screwdriver is inserted correctly, you will feel the spring in the release hole.
2. With the flat-blade screwdriver still inserted into the release hole, insert the wire into the terminal hole until it strikes the terminal block.
   At that time, to prevent from separating from one another, please insert in a twisted state.
3. Remove the flat-blade screwdriver from the release hole.





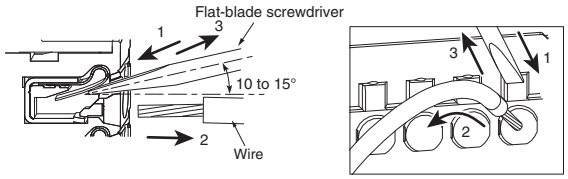
Checking Connections

- After the insertion, pull gently on the wire to make sure that it will not come off and the wire is securely fastened to the terminal block.
- If you use recommended ferrules, part of the conductor may be visible after the ferrule is inserted into the terminal block, but the product insulation distance will still be satisfied.

2. Removing Wires from the Push-In Plus Terminal Block

Use the following procedure to remove wires from the terminal block.
The same method is used to remove stranded wires, solid wires, and ferrules.

1. Hold a flat-blade screwdriver at an angle and insert it into the release hole.
2. With the flat-blade screwdriver still inserted into the release hole, remove the wire from the terminal insertion hole.
3. Remove the flat-blade screwdriver from the release hole.



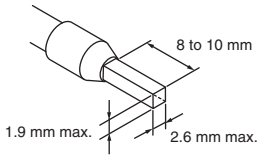
3. Recommended Ferrules and Crimp Tools

Recommended ferrules

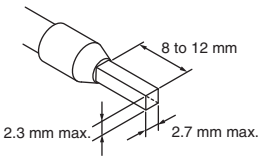
Applicable wire		Ferrule Conductor length (mm)	Stripping length (mm) (Ferrules used)	Recommended ferrules		
(mm²)	(AWG)			Phoenix Contact product	Weidmuller product	Wago product
0.25 ✻1	24	8	10	AI 0,25-8	H0.25/12	216-301
		10	12	AI 0,25-10	---	---
0.34 ✻1	22	8	10	AI 0,34-8	H0.34/12	216-302
		10	12	AI 0,34-10	---	---
0.5	20	8	10	AI 0,5-8	H0.5/14	216-201
		10	12	AI 0,5-10	H0.5/16	216-241
0.75	18	8	10	AI 0,75-8	H0.75/14	216-202
		10	12	AI 0,75-10	H0.75/16	216-242
1/1.25	18/17	8	10	AI 1-8	H1.0/14	216-203
		10	12	AI 1-10	H1.0/16	216-243
1.25/1.5 ✻2	17/16	8	10	AI 1,5-8	H1.5/14	216-204
		10	12	AI 1,5-10	H1.5/16	216-244
2.5 ✻3	14	10	12	AI 2,5-10	H2.5/16DS	216-246
		12	14	AI 2,5-12	H2.5/19D	216-266
Recommended crimp tool				CRIMPFOX6 CRIMPFOX6T-F CRIMPFOX10S	PZ6 roto	Variocrimp4

Note: 1. Make sure that the outer diameter of the wire coating is smaller than the inner diameter of the insulation sleeve of the recommended ferrule.
2. Make sure that the ferrule processing dimensions conform to the following figures.

PYF-□□-PU/P2RF-□□-PU



PTF-□□-PU



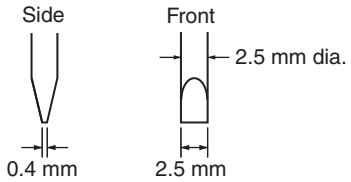
✻**1.** If you use AWG24 to AWG22 (0.25 to 0.34 mm²) wires, UL certification will not apply.
✻**2.** On the PYF-□□-PU / P2RF-□□-PU, do not connect ferrules for the applicable wires (AWG17 to AWG16 (1.25 to 1.5 mm²)) to adjacent terminal (insertion) holes.
However, when using a ferrule with no insulation sleeve, connecting to an adjacent terminal (insertion) hole is possible. (See the list below.)
✻**3.** AWG14 wire can only be used on the PTF-□□-PU.

Ferrule with no insulation sleeve

Applicable wire		Ferrule Conductor length (mm)	Stripping length (mm) (Ferrules used)	Recommended ferrules		
(mm²)	(AWG)			Phoenix Contact product	Weidmuller product	Wago product
1.25/1.5	17/16	10	10	A 1,5-10	H1.5/10	216-144
Recommended crimp tool				CRIMPFOX6 CRIMPFOX6T-F CRIMPFOX10S	PZ6 roto	Variocrimp4

Recommended Flat-blade Screwdriver

Use a flat-blade screwdriver to connect and remove wires.
Use the following flat-blade screwdriver.
The following table shows manufacturers and models as of 2018/Dec.

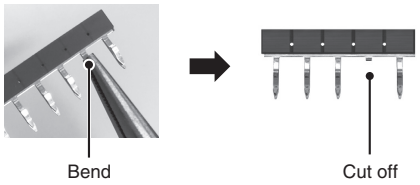


Model	Manufacturer
ESD 0,40×2,5	Wera
SZS 0,4×2,5 SZF 0-0,4×2,5 ✻	Phoenix Contact
0.4×2.5×75 302	Wiha
AEF.2,5×75	Facom
210-719	Wago
SDIS 0.4×2.5×75	Weidmuller
9900 (-2.5×75)	Vessel

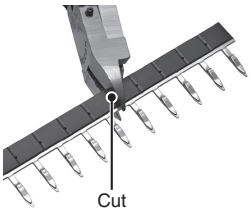
✻OMRON's exclusive purchase model XW4Z-00B is available to order as SZF 0-0,4×2,5 (manufactured by Phoenix Contact).

When mounting a short bar

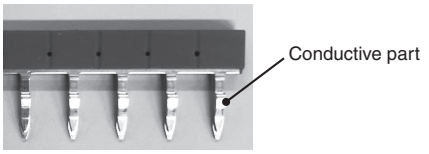
- Intermediate pins can be bent by a tool or by hand and cut off for use.

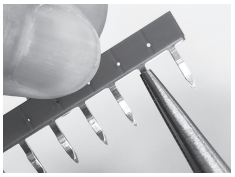


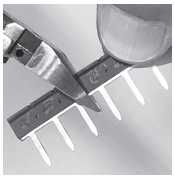
- The short bar can be cut to as many poles as needed. Insert the tool from the plastic part side, and cut along the groove in the plastic part between the terminals. When cutting, take care not to break or deform the terminals.
However, because the metal on the cut surface will be exposed, insulation countermeasures between adjacent products must be ensured. Such countermeasures include widening the intervals between products or using XW5Z-EP12 separate plates (order separately).



- When cutting the short bar or its pins, do not touch the conductive part. If the conductive part is deformed, contact failure may result.







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CSM_6_11
Cat. No. J212-E1-05 1021(0316)

PRODUCT NEWS

OMRON

NO: **RL-176** **PRODUCT:** **PYF series socket**
DATE: **May 2020** **TYPE:** **Discontinuation Notice**

Discontinuation notice of PYF series sockets for MY(S) relays

Product Discontinuation

Common sockets

Model PYF08A Series
Model PYF08A-E
Model PYF14A Series
Model PYF14A-E

Recommended Replacement

Common sockets

Model PYFZ-08 series
Model PYFZ-08-E
Model PYFZ-14 series
Model PYFZ-14-E

Discontinuation Date: March 2021

[Final order entry date]
The end of March, 2021

[Last shipping date]
The end of June, 2021

[Difference from discontinued product]

Recommended replacement Model	Body Color	Dimen-sions	Wire connection	Mounting Dimensions	Charac-teristics	Operation ratings	Operation methods
PYFZ-08 series	**	**	**	**	**	-	-
PYFZ-08-E	**	**	**	**	**	-	-
PYFZ-14 series	**	**	**	**	**	-	-
PYFZ-14-E	**	**	**	**	**	-	-

** : Compatible
* : The change is a little/Almost compatible
-- : Not compatible
- : No corresponding specification

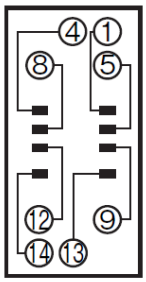
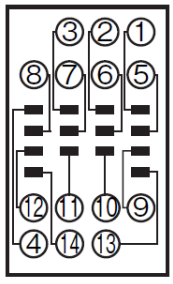
Product Discontinuation and recommended replacement

Product discontinuation	Recommended replacement
PYF08A	PYFZ-08
PYF08A-E	PYFZ-08-E
PYF08A-TU	PYFZ-08-TU
PYF08A-W	PYFZ-08-W
PYF14A	PYFZ-14
PYF14A-C	PYFZ-14-C
PYF14A-E	PYFZ-14-E
PYF14A-E-US	No recommended replacement
PYF14A-TU	PYFZ-14-TU

Body color

Product discontinuation **Model PYF08A series, PYF08A-E** **Model PYF14A series, PYF14A-E**		**Recommendable replacement** **Model PYFZ-08 series, PYFZ-08-E** **Model PYFZ-14 series, PYFZ-14-E**	
		No changing	
Body coler : Black PYF08A series PYFZ-08 series	Body coler : Black PYF14A series PYFZ-14 series	Body coler : Black PYF08A-E PYFZ-08-E	Body coler : Black PYF14A-E PYFZ-14-E
			
*Photo : PYFZ series	*Photo : PYFZ series	*Photo : PYFZ series	*Photo : PYFZ series

Wire connection

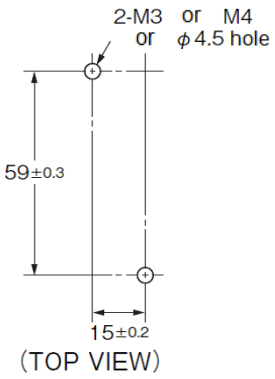
Product discontinuation **Model PYF08A series, PYF08A-E** **Model PYF14A series, PYF14A-E**	**Recommendable replacement** **Model PYFZ-08 series, PYFZ-08-E** **Model PYFZ-14 series, PYFZ-14-E**
PYF08A series, PYF08A-E PYFZ-08 series, PYFZ-08-E	PYF14A series, PYF14A-E PYFZ-14 series, PYFZ-14-E **No changing**
 (TOP VIEW)	 (TOP VIEW)

Mounting dimensions

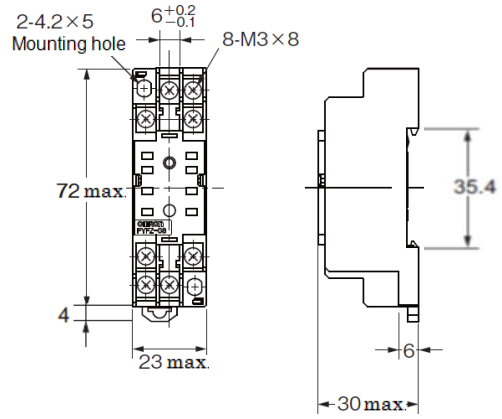
Product discontinuation Model PYF08A series, PYF08A-E Model PYF14A series, PYF14A-E	Recommendable replacement Model PYFZ-08 series, PYFZ-08-E Model PYFZ-14 series, PYFZ-14-E

No changing

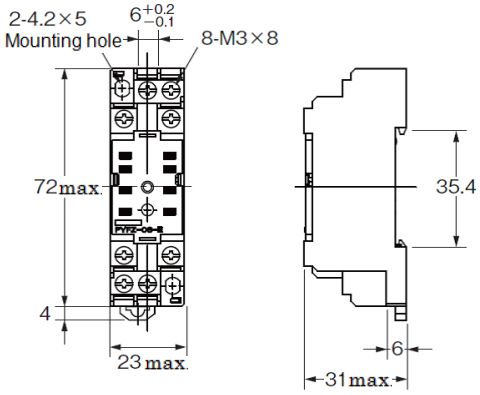
Mounting hole
PYF08A series
PYF08A-E
PYFZ-08 serie
PYFZ-08-E



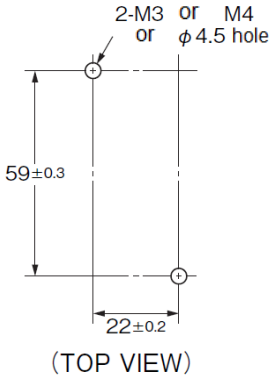
Screw wiring/Fixture rail/Dimensions
PYF08A series
PYFZ-08 series



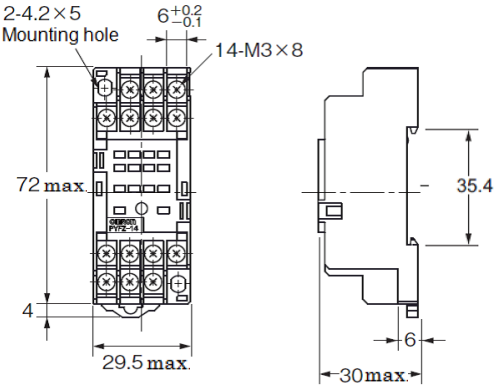
Screw wiring/Fixture rail/Dimensions
PYF08A-E
PYFZ-08-E



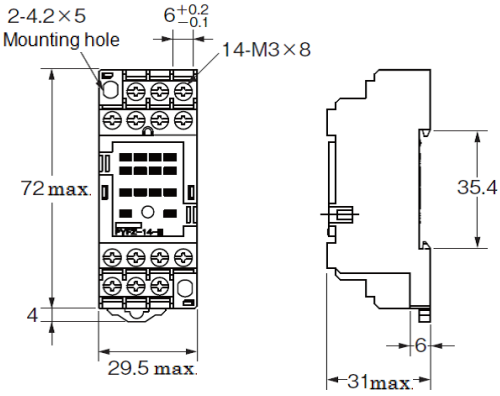
Mounting hole
PYF14A series
PYF14A-E
PYFZ-14 serie
PYFZ-14-E



Screw wiring/Fixture rail/Dimensions
PYF14A series
PYFZ-14 series

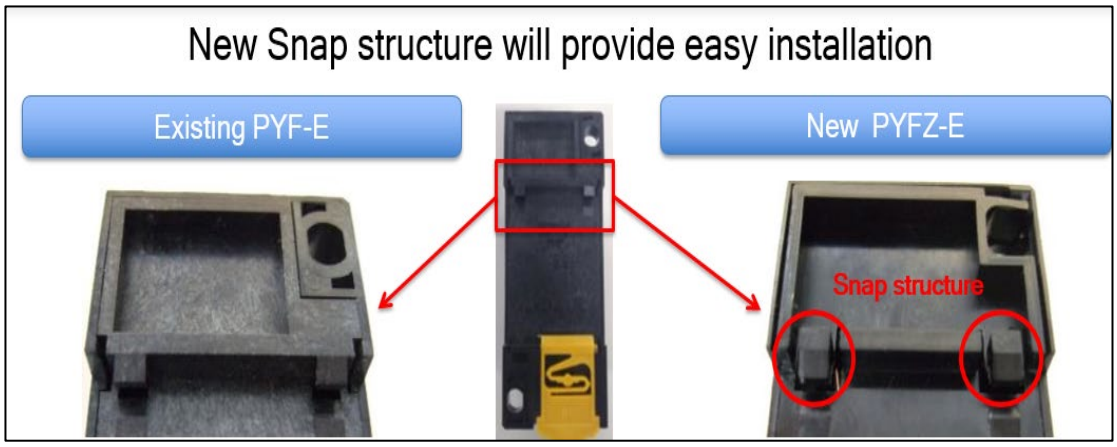


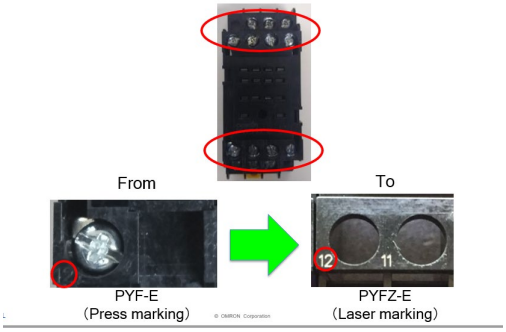
Screw wiring/Fixture rail/Dimensions
PYF14A-E
PYFZ-14-E



Characteristics

Item	Product discontinuation Model PYF08A series, PYF08A-E Model PYF14A series, PYF14A-E	Recommendable replacement Model PYFZ-08 series, PYFZ-08-E Model PYFZ-14 series, PYFZ-14-E
Ambient using temperature	-55～+70℃	
Ambient using humidity	5～85%RH	
Rated carry current	PYF08A series, PYF08A-E :7A PYF14A series, PYF14A-E :3A	PYFZ-08 series, PYFZ-08-E : **10A** PYFZ-14 series, PYFZ-14-E : **6A**
Dielectric strength	Between same pole contact : AC2,000V/1min Between different pole contact : AC2,000V/1min Between coil and contact : AC2,000V/1min	Between same pole contact : AC**2,250**V/1min Between different pole contact : AC**2,250**V/1min Between coil and contact : AC**2,250**V/1min
Insulation resistance	1,000MΩMin. (DC500V)	
Weight	PYF08A series, PYF08A-E: Approx.32g PYF14A series, PYF14A-E: Approx.49g	PYFZ-08 series, PYFZ-08-E: Approx.32g PYFZ-14 series, PYFZ-14-E: Approx.**50**g
Safety standard certified	UL、CSA	UL、CSA、**TUV**





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