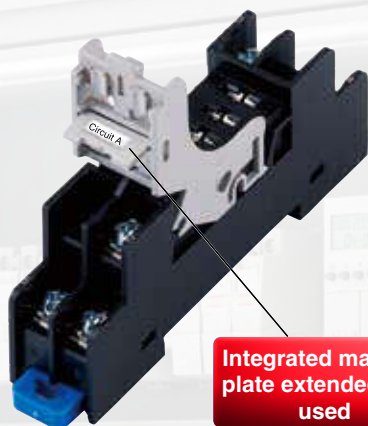


# SJ Series Relay Socket (With Marking Plate)

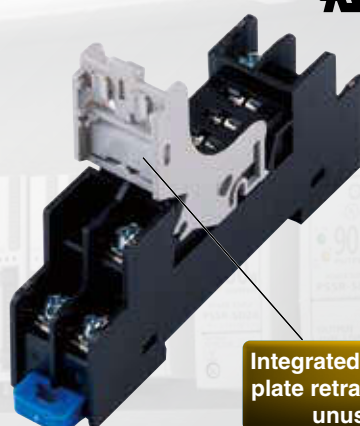


## Upgraded SJ series relay socket for RJ series relays

Marking plates for easy identification of relays/connections.



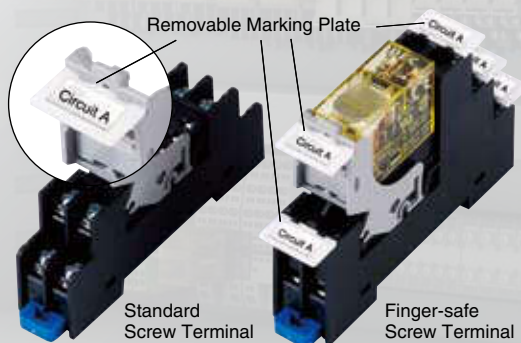
Integrated marking  
plate extended and  
used



Integrated marking  
plate retracted and  
unused

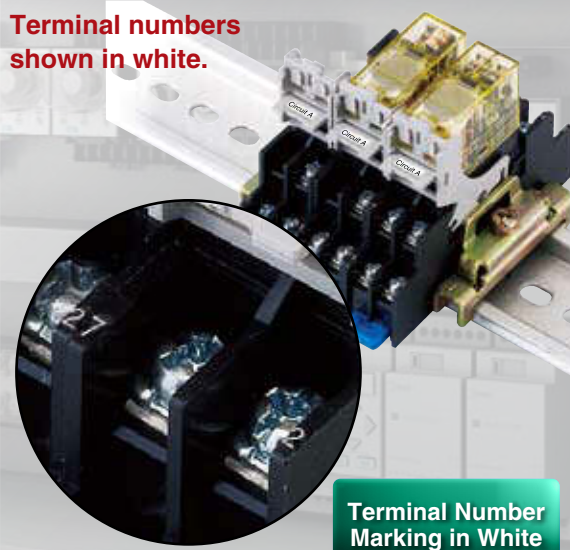
## Removable marking plates are also available.

Can be attached to the release lever and socket (finger-safe screw terminal models only).



Removable  
Marking Plate

## Terminal numbers shown in white.



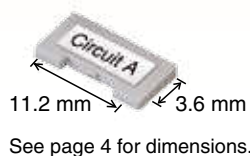
Terminal Number  
Marking in White

Identify relays/connections easily using the marking plate.

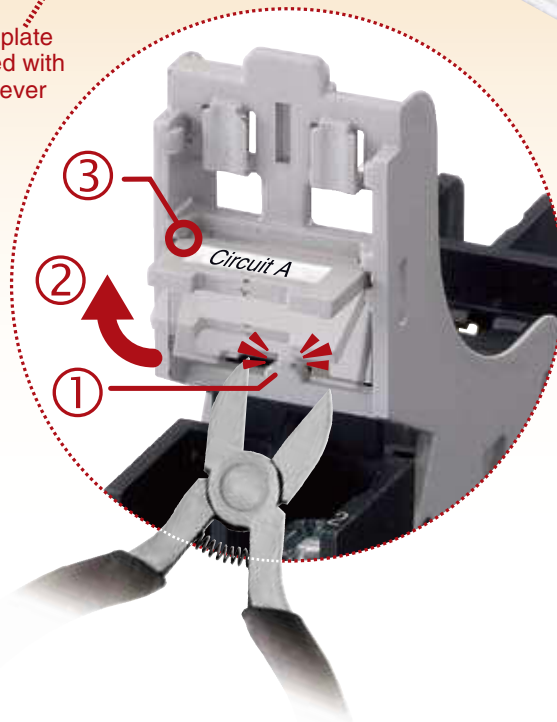
### Marking Plate integrated with Release Lever

- ① Cut the tab using nippers.
- ② Lift the marking plate.
- ③ Lock the marking plate into grooves.

Marking area



Marking plate integrated with release lever



### Removable Marking Plate

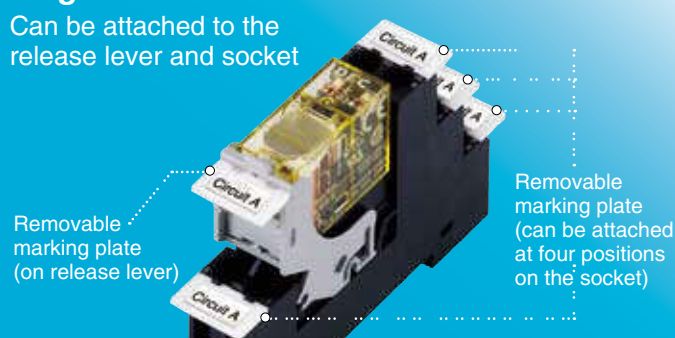
#### Standard Screw Terminal

Can be attached to the release lever

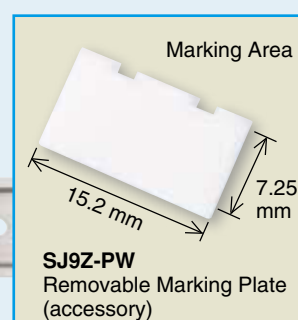
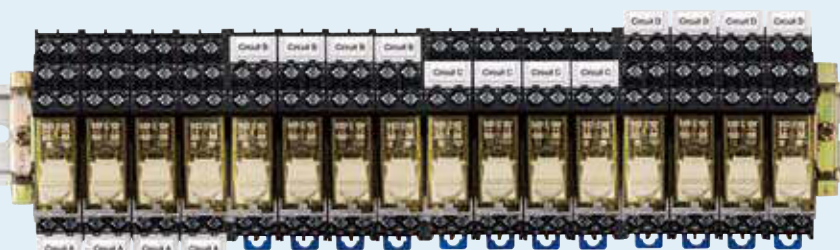


#### Finger-safe Screw Terminal

Can be attached to the release lever and socket



Coil voltage, signal name, circuit, etc. can be marked on the removable marking plate for easy identification of connections.



# SJ Series Relay Sockets (with Marking Plate)

## Safety Precautions

- Turn off power to the relay and the socket before starting installation, removal, wiring, maintenance, and inspection of the relay sockets. Failure to turn power off may cause electrical shock or fire hazard.
- Use wires of the proper size to meet the voltage and current requirements.
- Make sure that relay and output equipment are wired correctly. Incorrect wiring causes overheating resulting in possible fire hazard.
- Prevent metal fragments and pieces of wire from dropping inside the socket. Ingress of such fragments and chips may cause fire hazard, damage, or malfunction.

## Operating Instructions

### Installing the Relay

The relay is installed on the socket using the release lever. Leaf spring is not necessary.

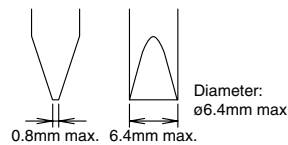
### Rail Mounting and Removing

Do not mount or remove the socket in cold temperature (below  $-20^{\circ}\text{C}$ ), otherwise the socket may be damaged.

### Applicable Screwdriver

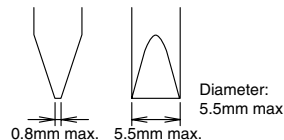
#### Standard Screw Terminal

Phillips:  $\phi 6.4$  mm maximum  
Slotted: Shown at right



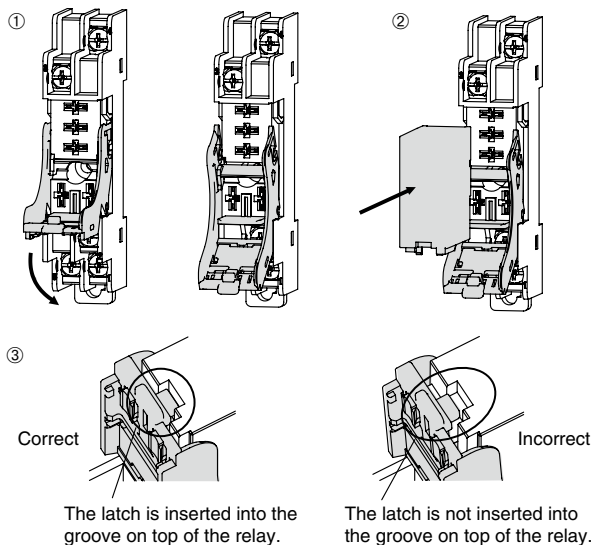
#### Finger-safe Screw Terminal

Phillips:  $\phi 5.5$  mm maximum  
Slotted: Shown at right



### Installing the Relay

1. Unlock the release lever by pulling down as shown with arrow (①).
2. Press the relay into the socket as shown with arrow (②). Make sure that the relay is firmly in place.
3. Confirm that the relay is securely installed in the socket. When installed properly, the relay and the socket look as shown in the figure ③.

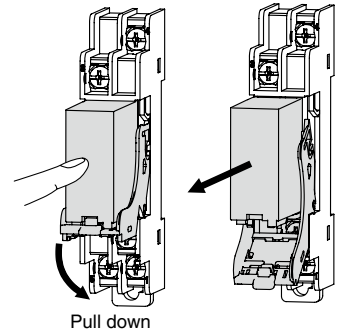


### Caution

Ensure that the relay is installed in the socket completely.

### Removing the relay

- ① Lightly press the relay to prevent it from falling off.
- ② Pull down the release lever to the direction shown by the arrow until it touches the socket. Pull down further, and the lever will be detached from the socket.



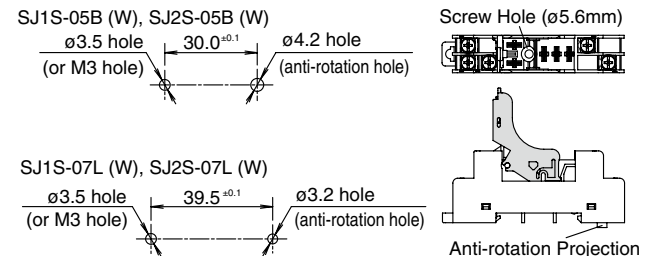
### Caution

- Make sure that wire or finger is not caught between the release lever and socket.
- The release lever is detachable. Do not to apply excessive force, otherwise the relay may fall and result in damage.

### Panel Mounting

Insert the anti-rotation projection into the anti-rotation hole. Mount the socket onto the panel using M3 screws. Use a screwdriver with a maximum diameter of  $\phi 5.5$ mm.

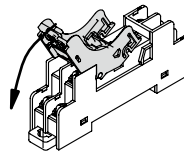
### Mounting Hole Layout



- Tighten the mounting screws to a torque of 1.0 N·m maximum. Do not tighten with excessive torque, otherwise the socket will be damaged.
- The round rib projecting from the socket bottom prevents rotation when the socket is mounted on the panel directly. Ensure to insert the rib into the anti-rotation hole, otherwise the socket may be damaged.

### Removing the Release Lever

Pull down the release lever to the direction shown by the arrow until it touches the socket. Pull down further, and the release lever will be detached from the socket.



### Caution

Make sure that the relay has been removed from the socket before removing the release lever. If the release lever is removed when the relay is installed on the socket, the relay may fall out.






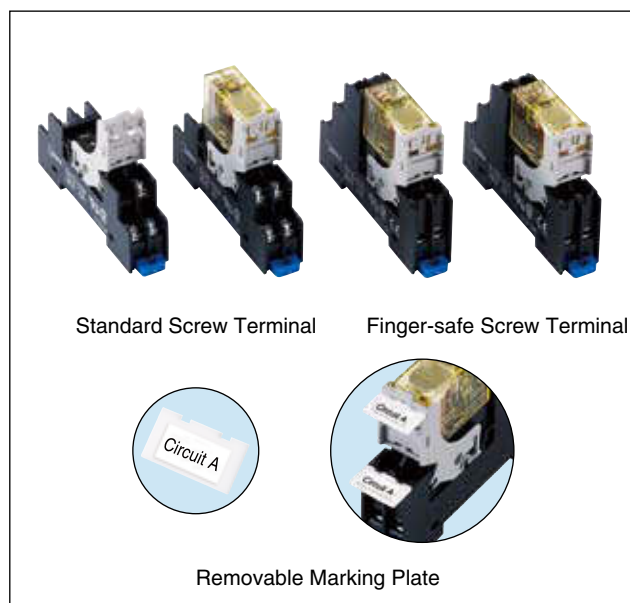
# SJ series Relay Sockets (with Marking Plate)

**Slim, space-saving relay sockets.**

**Release lever with an integrated marking plate is provided.**

- Release lever is integrated with a marking plate.
- The integrated marking plate can be retracted when not needed.
- Slim, 15.5-mm wide design is suitable for small control panel.
- Removable marking plate is also available. Can be attached to the release lever and the socket (at four positions, finger-safe screw terminal only).
- Standard screw terminal and finger-safe screw terminals are available.
- Degree of protection IP20 (finger-safe screw terminal)
- UL recognized, CSA certified, EN compliant.

Applicable Standard	Mark	Certification Organization / File No.
UL508		UL recognized, File No. E62437
CSA C22.2 No. 14		CSA File No. LR84913
EN60999-1		EU Low Voltage Directive (Finger-safe screw terminal only)



Terminal Style	Part No.			
	1-pole		2-pole	
Terminal No. Color	Black	White	Black	White
Standard Screw Terminal	<b>SJ1S-05B</b>	<b>SJ1S-05BW</b>	<b>SJ2S-05B</b>	<b>SJ2S-05BW</b>
Finger-safe Screw Terminal	<b>SJ1S-07L</b>	<b>SJ1S-07LW</b>	<b>SJ2S-07L</b>	<b>SJ2S-07LW</b>

Note: Release lever is supplied with each socket.

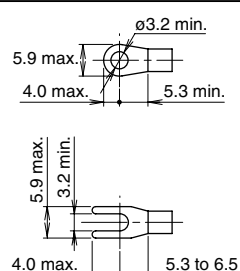
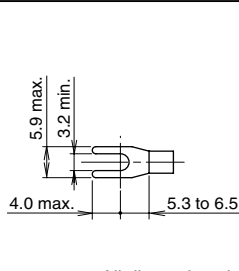
## Specifications

Model	SJ1S	SJ2S
Rated Current	12A	8A
Rated Insulation Voltage	250V AC/DC	
Applicable Wire	2 mm <sup>2</sup> maximum (14AWG)	
Applicable Crimping Terminal	2 mm <sup>2</sup> × 2	
Recommended Tightening Torque	1.0 N·m	
Screw Terminal Style	M3 slotted Phillips screw	
Terminal Strength	Wire tensile strength: 50N minimum	
Insulation Resistance	100MΩ minimum (500V DC megger)	
Dielectric Strength	Between live and dead metal parts: 2000V AC, 1 minute Between contact and coil: 4000V AC, 1 minute Between contacts of the same pole: 1000V AC, 1 minute Between contacts of the different poles: 3000V AC, 1 minute	
Vibration Resistance	Damage limits: 90 m/s <sup>2</sup> Resonance: 10 to 55 Hz, amplitude 0.75 mm	
Shock Resistance	Damage limits: 1,000 m/s <sup>2</sup>	
Operating Temperature	-40 to +70°C (no freezing)	
Storage Temperature	-55 to +85°C (no freezing)	
Operating Humidity	5 to 85% RH (no condensation)	
Storage Humidity	5 to 85% RH (no condensation)	
Degree of Protection	IP20 (IEC 60529) (finger-safe screw terminal)	
Weight (approx.)	30g	34g

## Applicable Relays

Terminal Style	1-pole		2-pole	
	Socket	Relay	Socket	Relay
Standard Screw Terminal	<b>SJ1S-05B</b> <b>SJ1S-05BW</b>	<b>RJ1S</b>	<b>SJ2S-05B</b> <b>SJ2S-05BW</b>	<b>RJ2S</b> <b>RJ22S</b>
Finger-safe Screw Terminal	<b>SJ1S-07L</b> <b>SJ1S-07LW</b>		<b>SJ2S-07L</b> <b>SJ2S-07LW</b>	

## Applicable Crimping Terminals

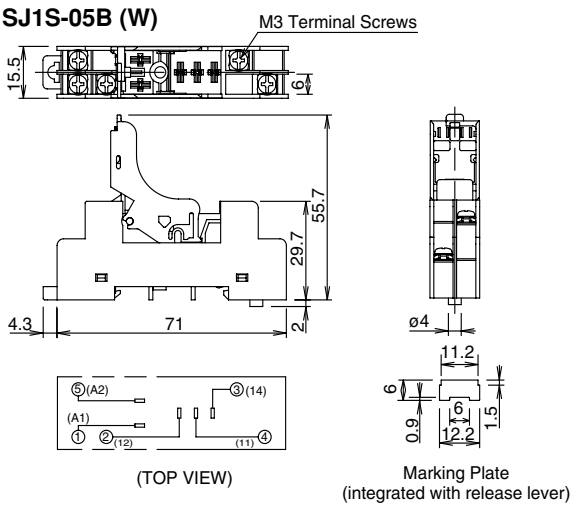
Standard Screw Terminal	Finger-safe Screw Terminal
	
All dimensions in mm.	

Note: Ring tongue terminals cannot be used on finger-safe screw terminal sockets.

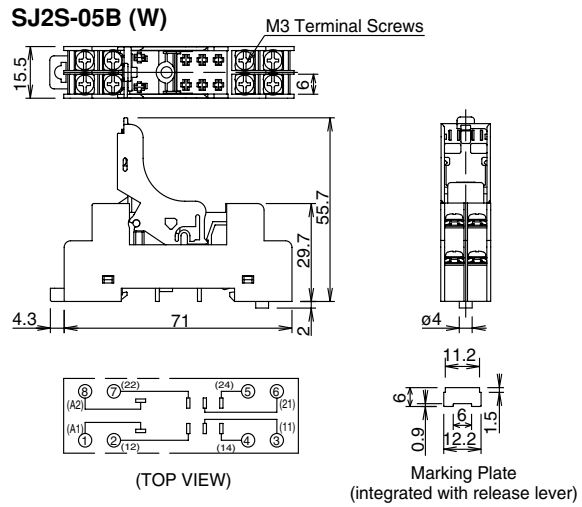
# SJ Series Relay Sockets (with Marking Plate)

## Dimensions

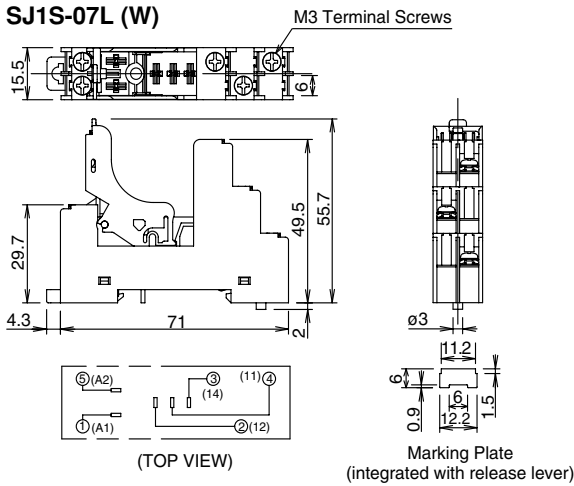
### SJ1S-05B (W)



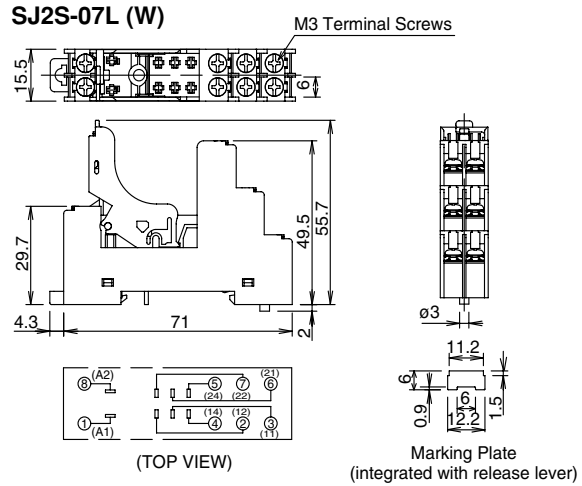
### SJ2S-05B (W)



### SJ1S-07L (W)



### SJ2S-07L (W)



## Replacement Parts

Description	Material	Part No.	Ordering Part No.	Package Quantity	Dimensions
Release Lever (with integrated marking plate)	Plastic (gray)	<b>SJ9Z-CM</b>	<b>SJ9Z-CMPN05</b>	5	 (When not using marking plate)

## Accessories

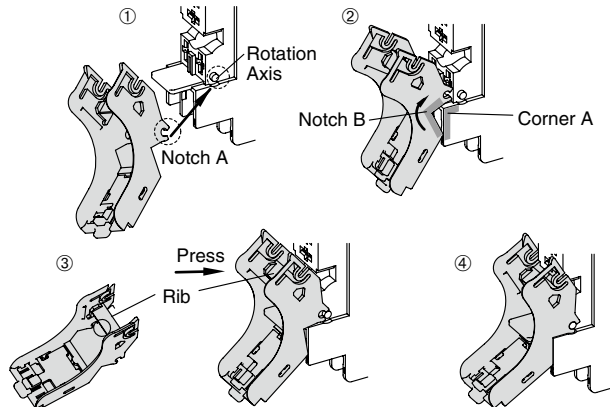
Description	Material	Part No.	Ordering Part No.	Package Quantity	Dimensions
Removable Marking Plate	Plastic (white)	<b>SJ9Z-PW</b>	<b>SJ9Z-PWPN10</b>	10	 Marking area: 15.2 x 7.25 mm
Jumper	Nickel-coated brass with polypropylene coating	For 2 sockets <b>SJ9Z-JF2</b>	<b>SJ9Z-JF2PN10</b>	10	Terminal centers: 15.5mm Rated current: 12A Ensure that the total current to the jumper does not exceed the maximum current.
		For 5 sockets <b>SJ9Z-JF5</b>	<b>SJ9Z-JF5PN10</b>		
		For 8 sockets <b>SJ9Z-JF8</b>	<b>SJ9Z-JF8PN10</b>		
		For 10 sockets <b>SJ9Z-JF10</b>	<b>SJ9Z-JF10PN10</b>		

# SJ Series Relay Sockets (with Marking Plate)

## Operating Instructions

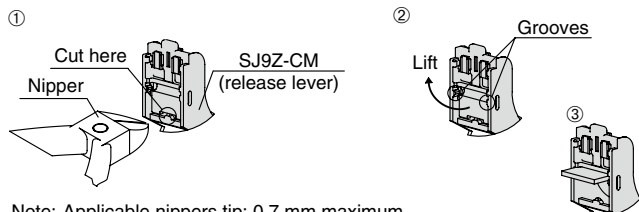
### Installing the Release Lever

- ① Lightly attach notches A (right and left) of the release lever to the rotation axes of the socket.
- ② Tilt the release lever so that the angles of notch B and corner A are aligned.
- ③ Press the rib on the release lever firmly against the socket to attach notches A to the rotation axes.
- ④ Release lever is installed on the socket.

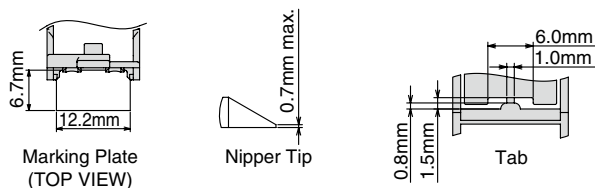


### Using Marking Plate integrated with SJ9M-CM Release Lever

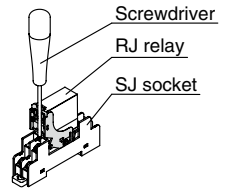
- ① Cut the tab using nippers (Note).
- ② Lift the marking plate as shown with the arrow.
- ③ Latch the marking plate into the grooves.



Note: Applicable nippers tip: 0.7 mm maximum.  
Make sure to cut the tab before installing the relay.

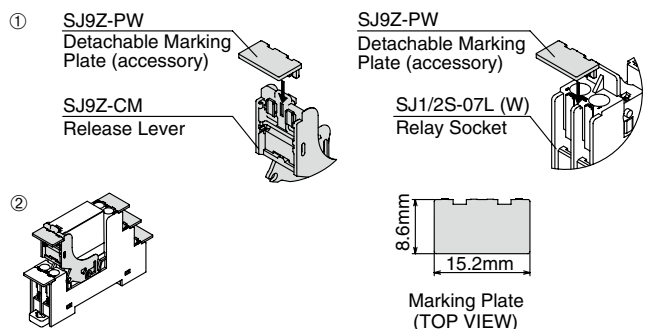


- The SJ9Z-CM integrated marking plate must be retracted to the original position before wiring.
- The SJ9Z-CM integrated marking plate can be lifted and retracted 50 times maximum.



### Using SJ9Z-PW Removable Marking Plate (optional)

- ① Insert the marking plate into the slot on the release lever or the socket.
- ② The marking plate is installed.



Note: SJ9Z-PW removable marking plate cannot be installed on the SJ1S-05B (W)/SJ2B-05B (W) socket.

### Current

Check the current of relay and ensure that the current is maintained below the values shown in the following table.

	SJ1S-05B (W)			SJ1S-07L (W)			SJ2S-05B (W)			SJ2S-07L (W)		
Ambient Temperature	70°C	55°C	40°C	70°C	55°C	40°C	70°C	55°C	40°C	70°C	55°C	40°C
Single Mount	12A			12A			8A			8A		
Collective Mount	11A*	12A		10A*	11A	11A	7A*	8A		6A*	7A	8A

\* When installing AC relays, maintain at least 4mm between the sockets.

Specifications and other descriptions in this catalog are subject to change without notice.



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