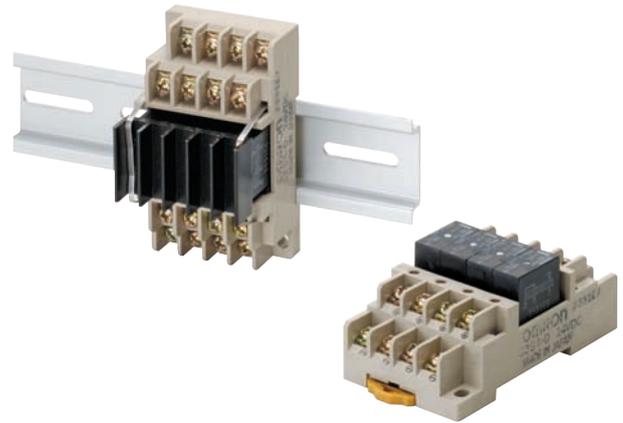


# Terminal SSR G3S4

CSM\_G3S4\_DS\_E\_7\_2

## Compact Terminal SSR with 4 Outputs

- Easy-to-use SSR block that combines four compact G3S SSRs, sockets, and heat sink in one unit.
- Easy wiring with separate I/O terminal construction.
- LED operation indicator.
- Special socket used for easy Relay replacement.
- Mounts either on DIN track or with screws.



## Ordering Information

When your order, specify the rated voltage.

### List of Models

Contact configuration	Heat sink	Built-in SSRs	Zero cross function	Applicable output load	Model	Rated voltage
Four SPST-NO relays	Yes	G3S-201PL-PD	No	1 A at 75 to 264 VAC (See note 1.)	G3S4-A	5 VDC
						12 VDC
	No			0.6 A at 75 to 264 VAC (See note 1.)	G3S4-A1	5 VDC
						12 VDC
	Yes	G3SD-Z01P-PD		1 A at 3 to 26 VDC (See note 2.)	G3S4-D	5 VDC
						12 VDC
	No			0.6 A at 3 to 26 VDC (See note 2.)	G3S4-D1	5 VDC
						12 VDC
				24 VDC		

**Note:** 1. Given as "250 VAC" on the G3S4.

2. Given as "24 VDC" on the G3S4.

### Accessories (Order Separately)

#### Connection Sockets (Can be Purchased Individually)

Model	Rated voltage
P6BF-4BND	5 VDC
	12 VDC
	24 VDC

#### Heat Sinks (Can be Purchased Individually)

Model
Y92B-S10

#### Replacement Relays

Model	Rated voltage
G3S-201PL-PD	5 VDC
	12 VDC
	24 VDC
G3SD-Z01P-PD	5 VDC
	12 VDC
	24 VDC

# Specifications

## ■ Ratings

### Input (per G3S Relay)

Rated voltage	Operating voltage	Must operate level	Must release voltage level	Input impedance		Rated current		
				G3S4-A, G3S4-A1	G3S4-D, G3S4-D1	G3S4-A, G3S4-A1	G3S4-D, G3S4-D1	
DC	5 V	4 to 6 VDC	4 VDC max.	1 VDC min.	440 Ω±20%	550 Ω±20%	19.2 mA±20%	15.8 mA±20%
	12 V	9.6 to 14.4 VDC	9.6 VDC max.		1 kΩ±20%	1.2 kΩ±20%	15.8 mA±20%	12.5 mA±20%
	24 V	19.2 to 28.8 VDC	19.2 VDC max.		2.1 kΩ±20%	2.3 kΩ±20%	15.7 mA±20%	13.2 mA±20%

Note: The rated current includes the terminal's LED current.

### Output (per G3S Relay)

Model	Applicable load	Load voltage	Load current	Inrush current resistance
G3S4-A	75 to 264 VAC		0.1 to 1 A	15 A (60 Hz, 1 cycle)
G3S4-A1			0.1 to 0.6 A	
G3S4-D	3 to 26 VDC		0.01 to 1 A	3 A (10 ms)
G3S4-D1			0.01 to 0.6 A	

## ■ Characteristics

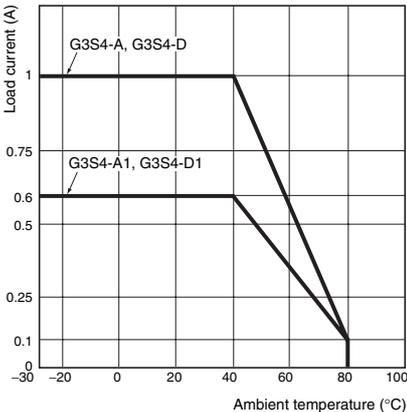
Item	Model	G3S4-A, G3S4-A1	G3S4-D, G3S4-D1
Must operate time		1 ms max.	
Release time		0.5 × load power cycle + 1 ms max.	1 ms max.
Output ON voltage drop		1.6 V max. (RMS)	1.5 V max.
Leakage current		2 mA max.	0.1 mA max. (at 26 VDC)
Insulation resistance		100 MΩ min. (at 500 VDC)	
Dielectric strength		2,000 VAC, 50/60 Hz for 1 min	
Vibration resistance		10 to 55 to 10 Hz, 0.75-mm single amplitude (1.5-mm double amplitude)	
Shock resistance		1,000 m/s <sup>2</sup>	
Storage temperature		-30 to 100°C (with no icing)	
Ambient operating temperature		-30 to 80°C (with no icing)	
Ambient operating humidity		45% to 85%	
Weight		Approx. 95 g (-A model)	Approx. 95 g (-D model)

# Engineering Data

## ■ Reference Data

(per G3S Relay)

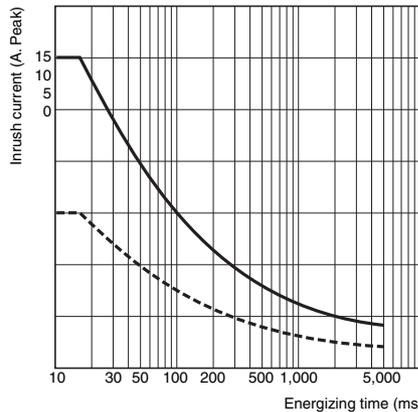
### Load Current vs. Ambient Rated Temperature



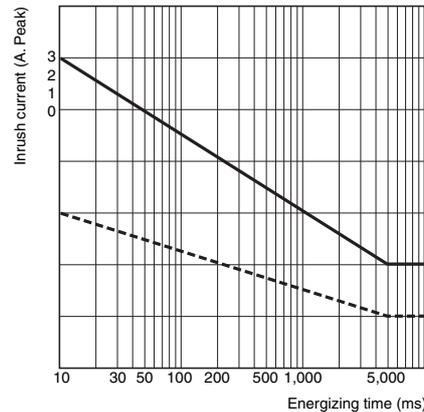
### Inrush Current Resistance

Non-repetitive (Keep the inrush current to half the rated value if inrush current occurs repetitively.)

#### G3S4-A, G3S4-A1



#### G3S4-D, G3S4-D1



Note: Measurement values taken from production line samples have been plotted in graphs to provide this data. Use this data only as a guide. Relays are mass-produced, so allowances must be made for a certain amount of variation in measurement data.

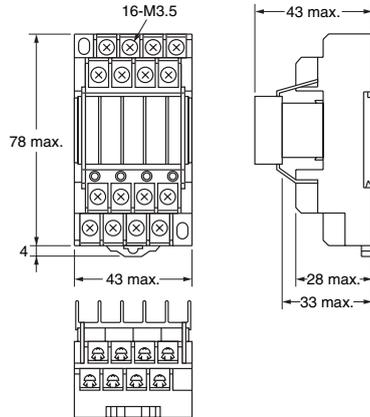
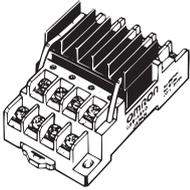
# Dimensions

Note: All units are in millimeters unless otherwise indicated.

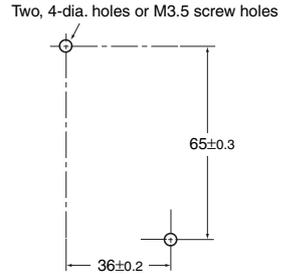
## Relays

### With Heat Sinks

G3S4-A  
G3S4-D

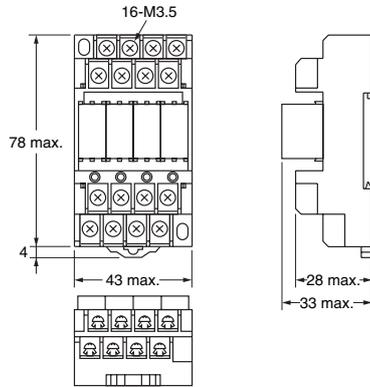
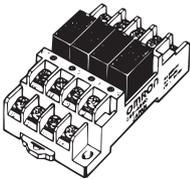


Mounting Holes  
(Top View)

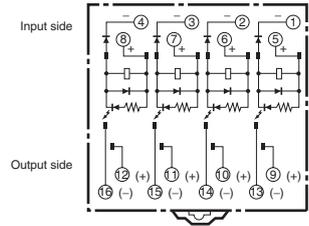


### Without Heat Sinks

G3S4-A1  
G3S4-D1



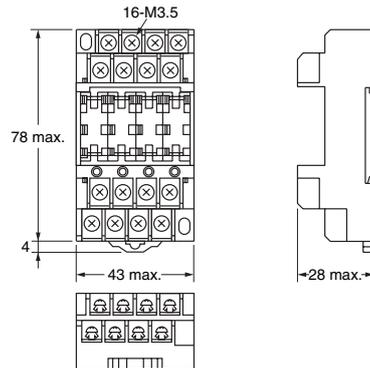
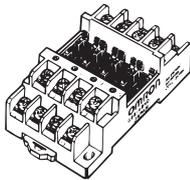
Terminal Arrangement/Internal  
Connections  
(Top View)



## Accessories (Order Separately)

### Connection Socket (Can be Purchased Individually)

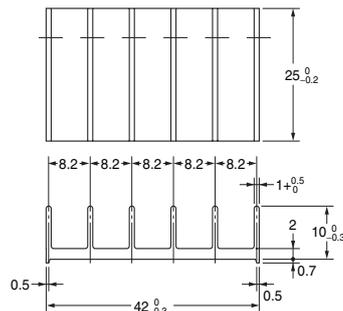
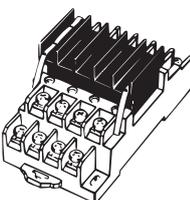
P6BF-4BND  
(with operation indicator)



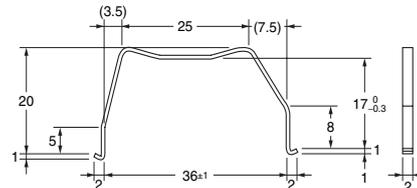
Note: Make sure that the polarity of the input terminal is correct. The polarity given inside parentheses ( ) is for G3S4-D and G3S4-D1 Relays. There is no indication of polarity when Connection Sockets are used alone.

### Heat Sinks (Can be Purchased Individually)

Y92B-S10

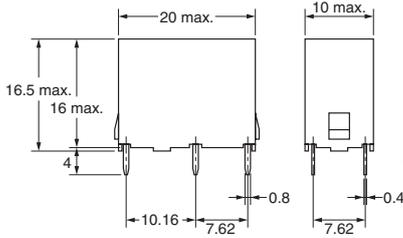


Mounting Brackets

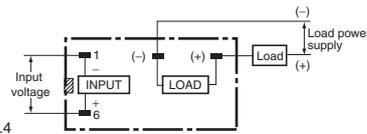


## Replacement Relays

G3S-201PL-PD  
G3SD-201P-PD



Terminal Arrangement/Connections  
(Bottom View)



- Note:**
1. The polarity given inside parentheses ( ) is for DC loads.
  2. The load can be connected to either the positive or negative SSR output terminal.

## Relay Removal Tool and Short Bar (Order Separately)

Refer to *Options for the G6B-4CB, G6B-4□□ND, and G3S4.*

## Relay Mounting Products (Order Separately)

## Safety Precautions

Refer to *Safety Precautions for All Relays.*

### ■ Precautions for Correct Use

- The four SSRs are mounted individually. Use standard SSR connection methods.
- There is almost no differences based on the mounting direction. Mount the Terminal SSR with the best air flow.
- Apply a silicon grease for heat radiation (e.g., YG6260 or G746 from Shin-Etsu Chemical Co. Ltd.) between the heat sink and the SSR if the heat sink is removed during maintenance of the G3S4-A or G3S4-D Terminal SSR (with external heat sinks) or if an external heat sink that was purchased separately is mounted.
- The load voltage cannot be increased by connecting the G3S4 load terminals in serial. This is because there is a small difference in the SSR operating time.
- The load current cannot be increased by connecting the G3S4 load terminal in parallel. This is because there is a small difference in the SSR operating time.
- The P6BF-4BND Connection Socket has an operation indicator and is available in 5-VDC, 12-VDC, and 24-VDC models.
- Use the P6B-Y1 Relay Removal Tool to remove SSRs.

### Mounted Relays

Relays and SSRs cannot be mounted together.

ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.

To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.

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