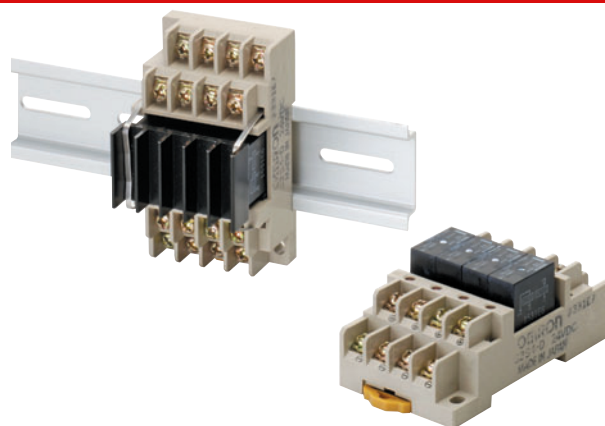


# Terminal SSR G3S4

CSM\_G3S4\_DS\_E\_3\_1

## 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

### 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	
						24 VDC	
	No				0.6 A at 75 to 264 VAC (See note 1.)	G3S4-A1	5 VDC
							12 VDC
							24 VDC
	Yes	G3SD-Z01P-PD			1 A at 3 to 26 VDC (See note 2.)	G3S4-D	5 VDC
							12 VDC
							24 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
	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

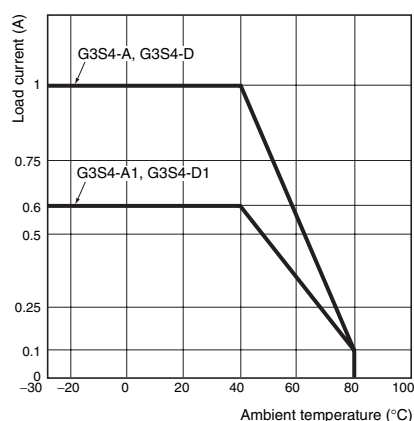
Item	Model	G3S4-A, G3S4-A1	G3S4-D, G3S4-D1
Must operate time		1 ms max.	
Release time		0.5 $\times$ load power cycle + 1 ms max.	1 ms max.
Output ON voltage drop		1.6 V max. (RMS)	1.5 V max.
Leakage current		2 mA max.	0.1 mA max. (at 26 VDC)
Insulation resistance		100 M $\Omega$ min. (at 500 VDC)	
Dielectric 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)

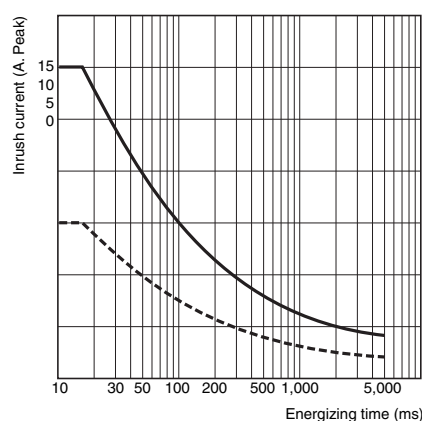
### Load Current vs. Ambient Rated Temperature



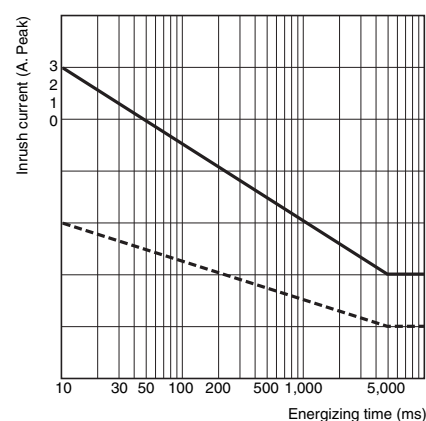
### Inrush Current Resistance

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.

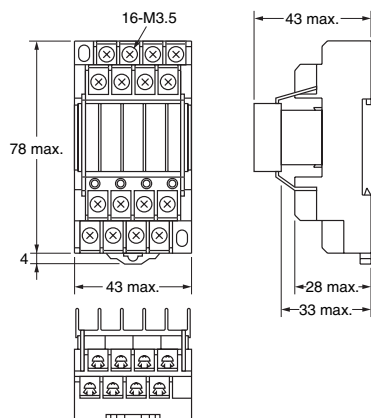
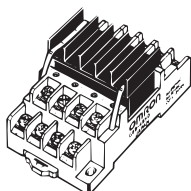
# Dimensions

**Note:** All units are in millimeters unless otherwise indicated.

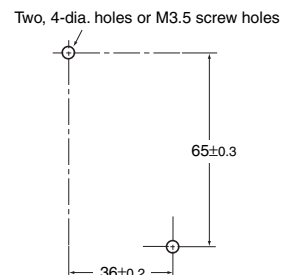
## Relays

### With Heat Sinks

G3S4-A  
G3S4-D

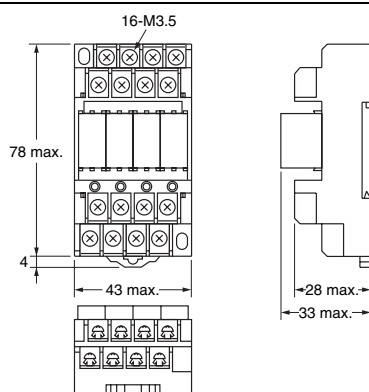
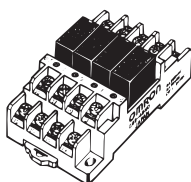


**Mounting Holes  
(Top View)**

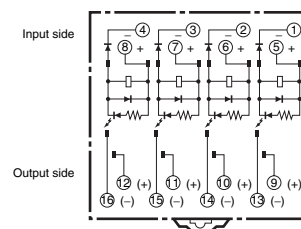


### Without Heat Sinks

G3S4-A1  
G3S4-D1



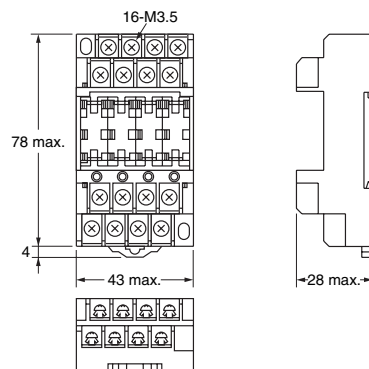
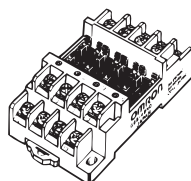
**Terminal Arrangement/Internal  
Connections  
(Top View)**



## Accessories (Order Separately)

### Connection Socket (Can be Purchased Individually)

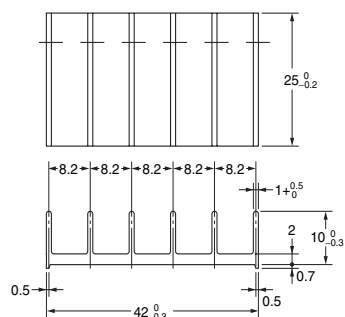
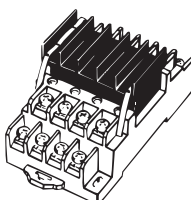
P6BF-4BND  
(with operation indicator)



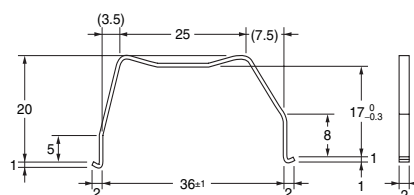
**Note:** Do not reverse coil polarity.  
The polarity given inside parentheses ( ) is for G3S4-D and G3S4-D1 Relays. There is no indication of polarity when Connection Sockets are used alone.

### Heat Sinks (Can be Purchased Individually)

Y92B-S10

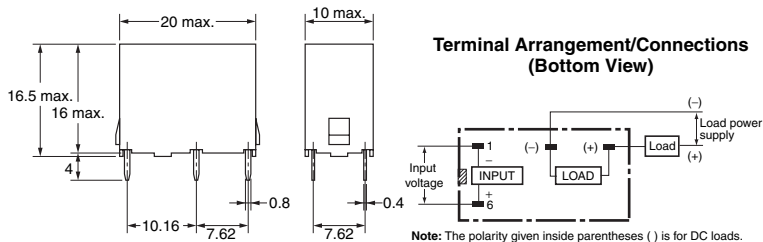
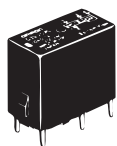


**Mounting Brackets**



## Replacement Relays

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



## 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.

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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