

# SF-M Series Safety Relays

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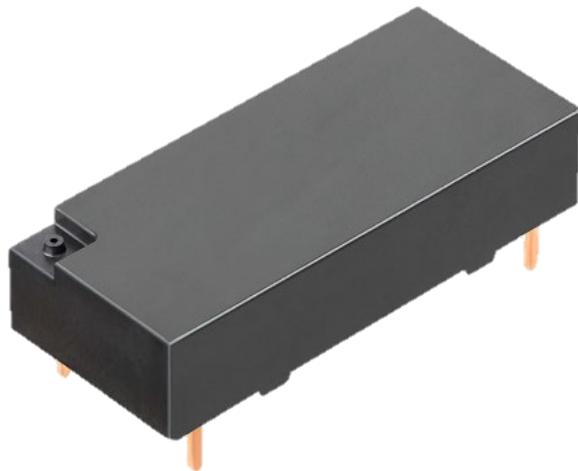




# SF-M Series Safety Relay

## Dimensions

33(L) × 14(W) × 7.8(H) mm



## Features

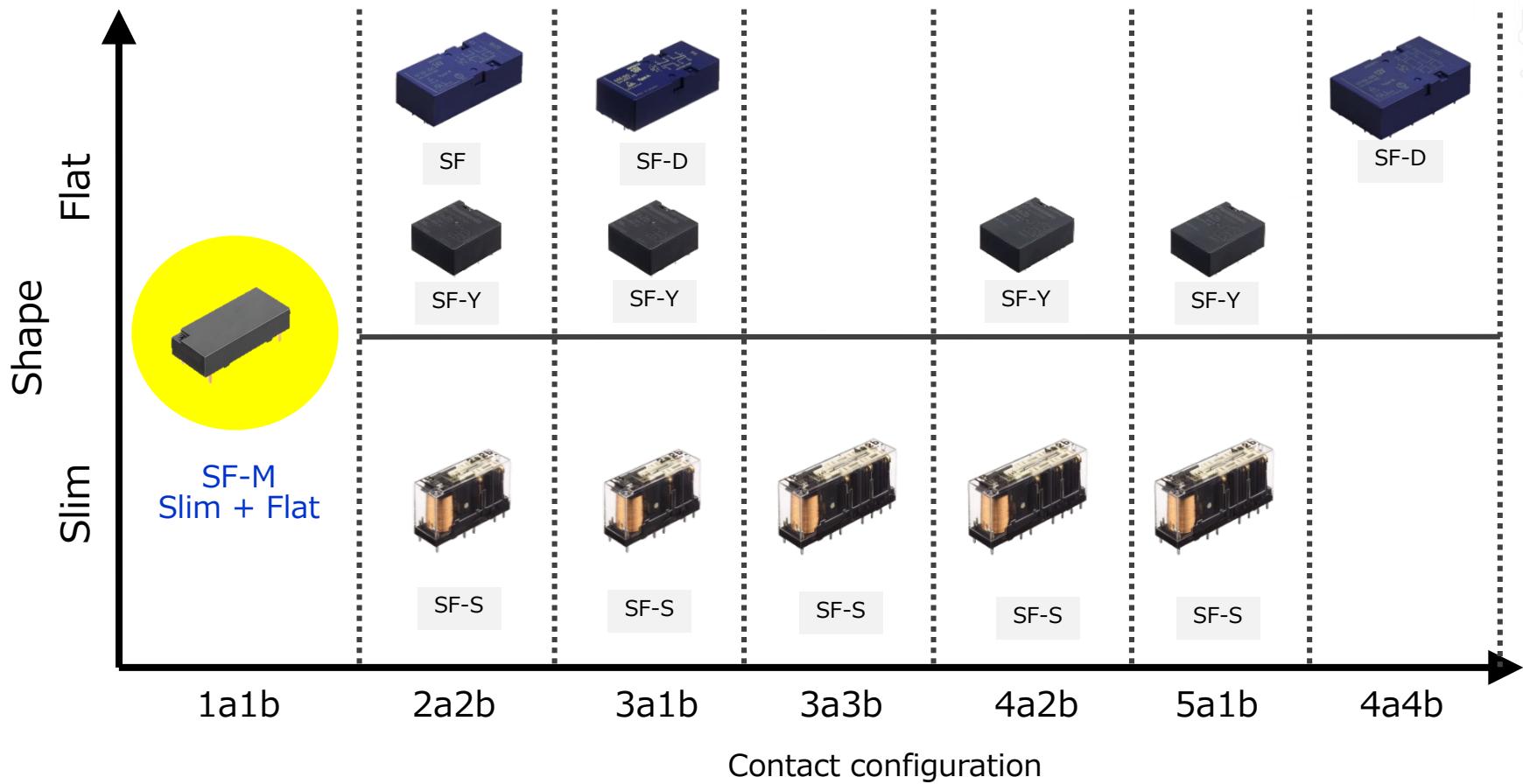
- **1 Form A 1 Form B contact arrangement**  
Forcibly guided contact structure  
compliant with IEC61810-3 (EN50205)
- **Low profile and slim footprint**  
Save space on the circuit board
- **Low holding power (100mW)**  
Reduces power consumption and  
contributes to overall energy savings
- **Sealed or flux-resistant construction**  
Reflow capable for flux-resistant



**Panasonic**

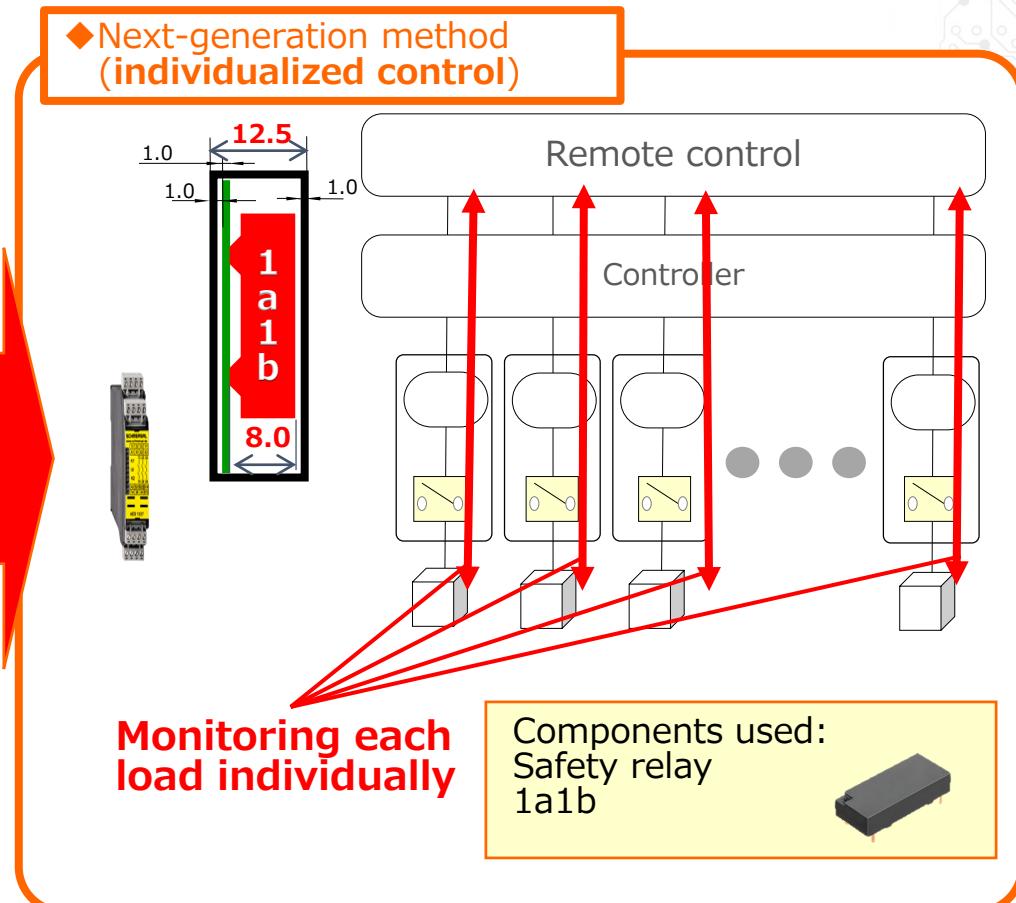
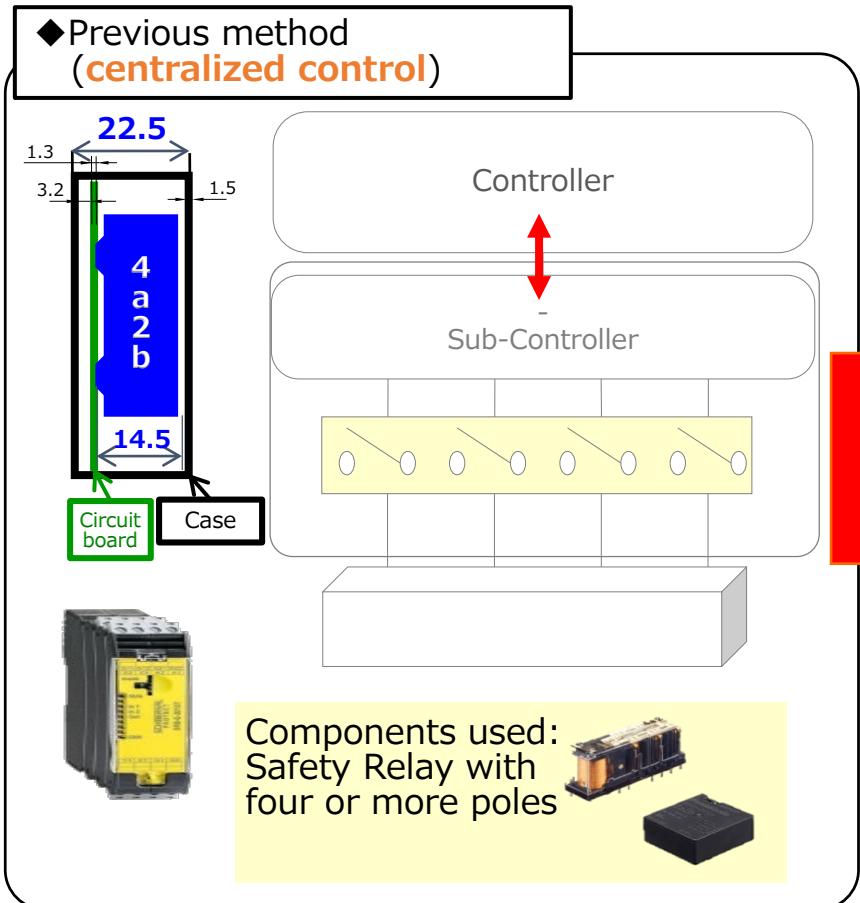


# Safety Relay Lineup



# Market Trends

- Individualized Control & Standard Adoption

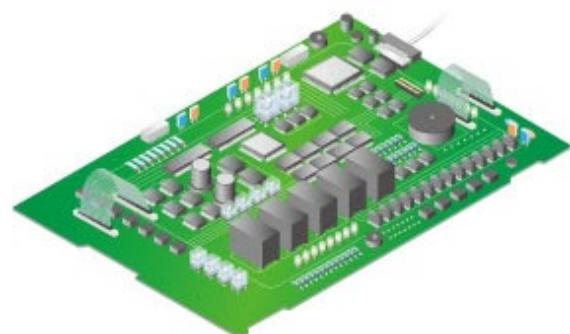




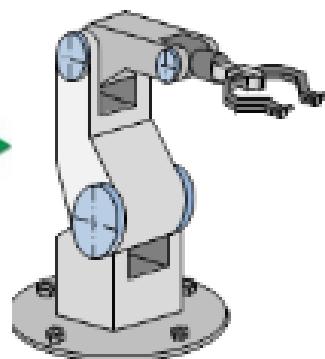
# Target Market and Applications

## ■ Safety Circuit Boards & Industrial Equipment

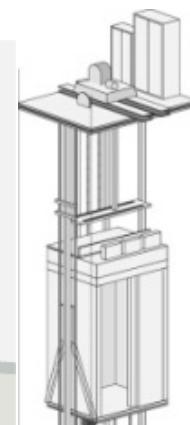
◆ Robots



◆ Machine tools



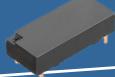
◆ Elevators



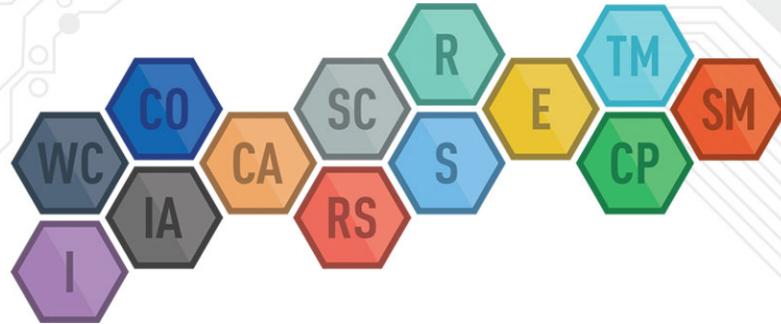
## ■ Safety Relay Units



# Competitor Comparison

	Panasonic	Company A	Company B
	<b>SF-M</b> (Flat type) 	Slim type	Slim type
<b>Dimension</b>	<b>33 (W) × 14 (L) × 7.8 (H) mm</b>	<b>28 (W) × 6 (L) × 15.5 (H) mm</b>	<b>28 (W) × 12.7 (L) × 25.4 (H) mm</b>
<b>Assembly area</b>	462 mm <sup>2</sup> × 2	168 mm <sup>2</sup> Sideways 434 mm <sup>2</sup> + bent terminals	355 mm <sup>2</sup>
<b>Contact Arrangement</b>	1a1b	1a1b	1a1b, 2c
<b>Electrical life (Resistance load)</b>	NO contact: 6 A/250 VAC, 100,000 ops 6 A 30 VDC 100,000 ops NC contact: 4 A/250 VAC, 100,000 ops 4 A 30 VDC 100,000 ops	6 A 250 V AC 10,000 operations	NO contact: 6A 240 V AC, 100,000 ops 6A 24 V DC 10,000 ops NC contact: 3A 240 V AC, 100,000 ops 3A 24V DC 10,000 ops
<b>Rated operating power</b>	270 mW	210 mW	Approx. 700 mW
<b>Holding power</b>	100 mW and over	-	-
<b>Ambient temperature</b>	-40 to <b>+85°C</b>	-40 to +80°C	-40 to +70°C
<b>Insulation distance (Between contact and coil)</b>	Form A contact: Reinforced insulation 5.5 mm/5.5 mm (clearance/creepage) Form B contact : Basic insulation 4 mm/4 mm (clearance/creepage)	-	-
<b>Protection structure</b>	RTII, RTIII	RTIII	RTII, RTIII





# Thank You!

SF-M Series  
Safety Relays

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