



### Compact Relay Family with Forcibly Guided Contacts

# SF-Y RELAYS



4-pole  
(2 Form A 2 Form B, 3 Form A 1 Form B)



6-pole  
(4 Form A 2 Form B, 5 Form A 1 Form B)

**RoHS compliant**

### FEATURES

- Forcibly guided contact structure**  
Relay complies with EN 50205, Type A  
Equipped with forcibly guided contact structure that enables detection of contact welding and construction of safety circuit.
- Small size**
- Different contact configurations:**

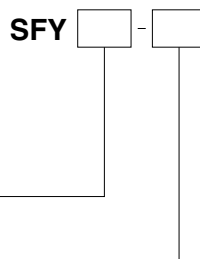
Type	L × W × H (mm inch)
2 Form A 2 Form B, 3 Form A 1 Form B	31.0 × 28.6 × 14.5 1.220 × 1.126 × .571
4 Form A 2 Form B, 5 Form A 1 Form B	39.0 × 28.6 × 14.5 1.535 × 1.126 × .571

- Low profile: 14.5 mm .571 inch**
- Insulation according to EN 60664-1:**  
Overvoltage category III, Pollution degree 2, 250V AC
  - Reinforced insulation:**  
Clearance and creepage 5.5 mm .217 inch  
(between all contacts and between contact NO4 and coil)
  - Basic insulation:**  
Clearance 3 mm .118 inch and creepage 4 mm .157 inch  
(between all contacts and between contact NC3 and coil)

### TYPICAL APPLICATIONS

- Emergency stop switches
- Machine safety engineering
- Safety control units
- Automation technology
- Elevators
- Escalators
- Overcurrent protection with monitor contact

### ORDERING INFORMATION



Contact arrangement  
2: 2 Form A 2 Form B  
3: 3 Form A 1 Form B  
4: 4 Form A 2 Form B  
5: 5 Form A 1 Form B

Nominal coil voltage  
DC 5, 12, 16, 18, 21, 24V

Notes: Please consult us about other coil voltages.  
Gold-clad contact type available on request.

## TYPES

Contact arrangement		Nominal coil voltage	Part No.
4-pole	2 Form A 2 Form B	5 V DC	SFY2-DC5V
		12 V DC	SFY2-DC12V
		16 V DC	SFY2-DC16V
		18 V DC	SFY2-DC18V
		21 V DC	SFY2-DC21V
		24 V DC	SFY2-DC24V
	3 Form A 1 Form B	5 V DC	SFY3-DC5V
		12 V DC	SFY3-DC12V
		16 V DC	SFY3-DC16V
		18 V DC	SFY3-DC18V
6-pole	4 Form A 2 Form B	21 V DC	SFY3-DC21V
		24 V DC	SFY3-DC24V
		5 V DC	SFY4-DC5V
		12 V DC	SFY4-DC12V
		16 V DC	SFY4-DC16V
		18 V DC	SFY4-DC18V
	5 Form A 1 Form B	21 V DC	SFY4-DC21V
		24 V DC	SFY4-DC24V
		5 V DC	SFY5-DC5V
		12 V DC	SFY5-DC12V
	16 V DC	SFY5-DC16V	
		SFY5-DC18V	
	21 V DC	SFY5-DC21V	
	24 V DC	SFY5-DC24V	

Standard packing: Tube 20 pcs.

## RATING

### 1. Coil data

Contact arrangement		Nominal coil voltage	Pick-up voltage (at 20°C 68°F)	Drop-out voltage (at 20°C 68°F)	Nominal operating current [±10%] (at 20°C 68°F)	Coil resistance [±10%] (at 20°C 68°F)	Nominal operating power (at 20°C 68°F)	Max. applied voltage (at 20°C 68°F)
4-pole	2 Form A 2 Form B	5V DC	75%V or less of nominal voltage (Initial)	15%V or more of nominal voltage (Initial)	134mA	38Ω	670mW	120%V of nominal voltage
		12V DC			56mA	215Ω		
		16V DC			42mA	380Ω		
		18V DC			37mA	483Ω		
		21V DC			32mA	666Ω		
		24V DC			28mA	864Ω		
	3 Form A 1 Form B	5V DC			134mA	38Ω		
		12V DC			56mA	215Ω		
		16V DC			42mA	380Ω		
		18V DC			37mA	483Ω		
6-pole	4 Form A 2 Form B	21V DC	32mA	666Ω				
		24V DC	28mA	864Ω				
		5V DC	134mA	38Ω				
		12V DC	56mA	215Ω				
		16V DC	42mA	380Ω				
		18V DC	37mA	483Ω				
	5 Form A 1 Form B	21V DC	32mA	666Ω				
		24V DC	28mA	864Ω				
		5V DC	134mA	38Ω				
		12V DC	56mA	215Ω				
	16V DC	42mA	380Ω					
		37mA	483Ω					
	21V DC	32mA	666Ω					
	24V DC	28mA	864Ω					