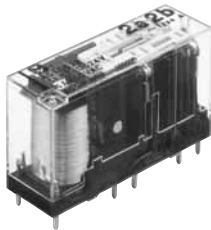




Slim type safety relays

SF RELAYS

Slim type



RoHS compliant

Protective construction: Flux-resistant type

FEATURES

- 1. Acquisition of Korean safety certification ("S" mark)**
Excluding with diode type
- 2. Forcibly guided contact structure**
- 3. Slim profile (mm inch)**
40/50 (L) × 13 (W) × 24 (H)
1.575/1.969 (L) × .512 (W) × .945 (H)
- 4. Fast response time is achieved (8 ms or less).**
- 5. With diode and LED indication type available**
- 6. Sockets and terminal sockets (spade and ring tongue terminal compatible) are available.**

TYPICAL APPLICATIONS

1. Machine tools
2. Robots
3. Safety PLCs
4. Circuits with stringent safety standard requirements such as those in motor vehicle production equipment.

ORDERING INFORMATION



- S: Slim type
- 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
 6: 3 Form A 3 Form B

- Operation indication
 Nil: Without LED indication
 L: With LED indication

- Nominal coil voltage
 12, 24, 48V DC

- Function
 Nil: None
 D: With diode

Notes: 1. Please consult us about other coil voltages.
 2. LED indication color is green.

TYPES

1. Standard type

| Contact arrangement | | Nominal coil voltage | Without LED indication | With LED indication |
|---------------------|-------------------|----------------------|------------------------|---------------------|
| | | | Part No. | Part No. |
| 4 poles | 2 Form A 2 Form B | 12 V DC | SFS2-DC12V | SFS2-L-DC12V |
| | | 24 V DC | SFS2-DC24V | SFS2-L-DC24V |
| | | 48 V DC | SFS2-DC48V | SFS2-L-DC48V |
| | 3 Form A 1 Form B | 12 V DC | SFS3-DC12V | SFS3-L-DC12V |
| | | 24 V DC | SFS3-DC24V | SFS3-L-DC24V |
| | | 48 V DC | SFS3-DC48V | SFS3-L-DC48V |
| 6 poles | 4 Form A 2 Form B | 12 V DC | SFS4-DC12V | SFS4-L-DC12V |
| | | 24 V DC | SFS4-DC24V | SFS4-L-DC24V |
| | | 48 V DC | SFS4-DC48V | SFS4-L-DC48V |
| | 5 Form A 1 Form B | 12 V DC | SFS5-DC12V | SFS5-L-DC12V |
| | | 24 V DC | SFS5-DC24V | SFS5-L-DC24V |
| | | 48 V DC | SFS5-DC48V | SFS5-L-DC48V |
| | 3 Form A 3 Form B | 12 V DC | SFS6-DC12V | SFS6-L-DC12V |
| | | 24 V DC | SFS6-DC24V | SFS6-L-DC24V |
| | | 48 V DC | SFS6-DC48V | SFS6-L-DC48V |

Standard packing: Carton: 50 pcs.; Case: 200 pcs.

* Sockets and terminal sockets available.

2. With diode and LED indication type

| Contact arrangement | | Nominal coil voltage | Part No. |
|---------------------|-------------------|----------------------|----------------|
| 4 poles | 2 Form A 2 Form B | 12 V DC | SFS2-L-DC12V-D |
| | | 24 V DC | SFS2-L-DC24V-D |
| | | 48 V DC | SFS2-L-DC48V-D |
| | 3 Form A 1 Form B | 12 V DC | SFS3-L-DC12V-D |
| | | 24 V DC | SFS3-L-DC24V-D |
| | | 48 V DC | SFS3-L-DC48V-D |
| 6 poles | 4 Form A 2 Form B | 12 V DC | SFS4-L-DC12V-D |
| | | 24 V DC | SFS4-L-DC24V-D |
| | | 48 V DC | SFS4-L-DC48V-D |
| | 5 Form A 1 Form B | 12 V DC | SFS5-L-DC12V-D |
| | | 24 V DC | SFS5-L-DC24V-D |
| | | 48 V DC | SFS5-L-DC48V-D |
| | 3 Form A 3 Form B | 12 V DC | SFS6-L-DC12V-D |
| | | 24 V DC | SFS6-L-DC24V-D |
| | | 48 V DC | SFS6-L-DC48V-D |

Standard packing: Carton: 50 pcs.; Case: 200 pcs.

* Sockets and terminal sockets available.

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 poles | 2 Form A 2 Form B | 12V DC | 75%V or less of nominal voltage (Initial) | 10%V or more of nominal voltage (Initial) | 30 mA | 400Ω | Approx. 360mW | 110%V of nominal voltage | | | |
| | | 24V DC | | | 15 mA | 1,600Ω | | | | | |
| | | 48V DC | | | 7.5mA | 6,400Ω | | | | | |
| | 3 Form A 1 Form B | 12V DC | | | 30 mA | 400Ω | | | | | |
| | | 24V DC | | | 15 mA | 1,600Ω | | | | | |
| | | 48V DC | | | 7.5mA | 6,400Ω | | | | | |
| 6 poles | 4 Form A 2 Form B | 12V DC | | | 75%V or less of nominal voltage (Initial) | 10%V or more of nominal voltage (Initial) | 41.7mA | | 288Ω | Approx. 500mW | 110%V of nominal voltage |
| | | 24V DC | | | | | 20.8mA | | 1,152Ω | | |
| | | 48V DC | | | | | 10.4mA | | 4,608Ω | | |
| | 5 Form A 1 Form B | 12V DC | | | | | 41.7mA | | 288Ω | | |
| | | 24V DC | | | | | 20.8mA | | 1,152Ω | | |
| | | 48V DC | | | | | 10.4mA | | 4,608Ω | | |
| | 3 Form A 3 Form B | 12V DC | 41.7mA | 288Ω | | | | | | | |
| | | 24V DC | 20.8mA | 1,152Ω | | | | | | | |
| | | 48V DC | 10.4mA | 4,608Ω | | | | | | | |

Note: The nominal operating current will increase by approximately 2mA due to the LED on the LED indication type.