

# Safety Key Selector Switch



## SF2KR Series CATALOG

For your safety, read and follow the considerations written in the instruction manual, other manuals and Autonics website.

The specifications, dimensions, etc. are subject to change without notice for product improvement. Some models may be discontinued without notice.

### Main Features

- Easy to check the lock / unlock status by the front solenoid operation indicator (lockable model: SF2KR-M)
- Various line-up of key free location, N.C. contact powered location, and lock location depending on the general / lockable type
- Contact block option up to 4 contacts  
: N.O. 1+N.C. 2, N.C. 3, N.O. 2+N.C. 2
- 10 different types of keys
- Sold separately  
: Name plate (SF2KR-□-NP□)  
: Contact block (SFEA-C□)

### Ordering Information

This is only for reference, the actual product does not support all combinations. For selecting the specified model, follow the Autonics website.

SF2KR - ① ② - ③ - ④

#### ① Key lock function

No mark: General type  
M: Lockable type

#### ③ Contact block

A2B: N.O. 1 + N.C. 2  
3B: N.C. 3  
2A2B: N.O. 2 + N.C. 2

#### ④ Key

No mark: Basic key  
01 to 09: Key number 1 to 9

#### ② Operation direction

##### General type

	Key free location	N.C. contact powered location
LL	↖	↖
RL	↗	↖
LR	↖	↗
RR	↗	↗

##### Lockable type

	Key free location	N.C. contact powered location	Lock location
RLR	↗	↖	↗
RLL	↗	↖	↖
RRR	↗	↗	↗
RLB	↗	↖	↗↖

### Product Components

- Product
- Key × 2
- Spring strap for key
- Instruction manual
- Bracket

### Specifications

Model	SF2KR-□-□-□	SF2KR-M□-□-□
Solenoid input voltage	-	Non-polar 24 VDC (= ± 10%)
Solenoid current consumption	-	38.7 mA ± 5%
Conditional short circuit current	100 A	
Indicator	-	Solenoid operation (green)
Applicable wire	Contact: AWG 18 (0.823 mm <sup>2</sup> )	Solenoid power: AWG 24 - 18 Contact: AWG 18 (0.823 mm <sup>2</sup> )
Allowable operation frequency <sup>01)</sup>	30 times/minute	
Life cycle	Mechanical: ≥ 100,000 times, electrical: ≥ 100,000 times	
Key pushing force	≥ 20 N	
Key rotating torque	0.2 to 1.8 N·m	
Insulation resistance	≥ 100 MΩ (500 VDC= megger)	
Dielectric strength	2,500 VAC ~ 50/60 Hz for 1 minute	
Vibration	1.5 mm double amplitude at frequency of 10 to 55 Hz (for 1 min) in each X, Y, Z direction for 2 hours	
Vibration (malfunction)	1.5 mm double amplitude at frequency of 10 to 55 Hz (for 1 min) in each X, Y, Z direction for 10 minutes	
Shock	300 m/s <sup>2</sup> (≈ 30 g) in each X, Y, Z direction for 3 times	
Shock (malfunction)	150 m/s <sup>2</sup> (≈ 15 g) in each X, Y, Z direction for 3 times	
Ambient temperature	-20 to 70°C <sup>02)</sup> , storage: -40 to 70°C	-10 to 55°C <sup>02)</sup> , storage: -20 to 70°C (at no freezing or condensation)
Ambient humidity	35 to 85%RH, storage: 35 to 85%RH (at no freezing or condensation)	
Protection structure	IP65 (front panel, IEC standard)	
Material	PC, POM	
Approval	CE (TUV NORD)	
Unit weight (packaged) <sup>03)</sup>	≈ 130 g (≈ 192 g)	≈ 152 g (≈ 213 g)

01) Rotating and retuning once is counted as one operation.

02) UL approved ambient temperature: 55 °C

03) It is switch with contact blocks.

### Contact capacity

• IEC (EN60947-5-1)

Rated current	10 A				
	24 V	110 V	220 V	380 V	
AC	Resistive load (AC-12)	10 A	10 A	6 A	3 A
	Inductive load (AC-15)	10 A	5 A	3 A	2 A
DC	Resistive load (DC-12)	10 A	2 A	0.6 A	0.2 A
	Inductive load (DC-13)	1.5 A	0.5 A	0.2 A	0.1 A

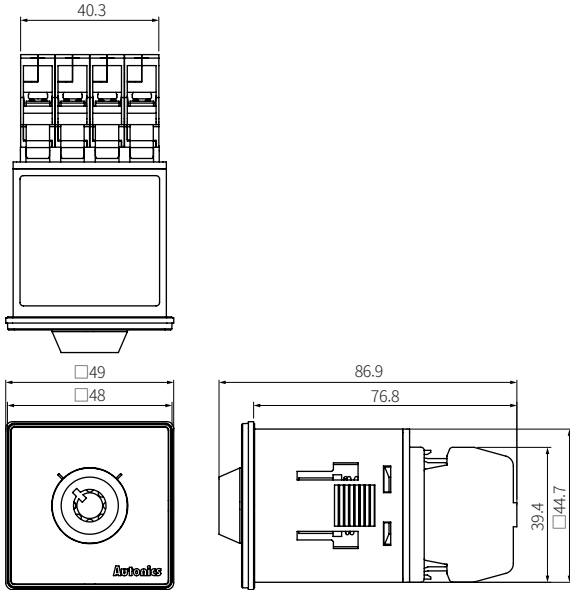
• UL / CSA (UL508, CSA C22.2 No. 14)

Rated voltage	Through current	Current (A)		Volt ampere (VA)	
		Making	Breaking	Making	Breaking
AC120 V	10 A	60	6	7,200	720
AC240 V		30	3		

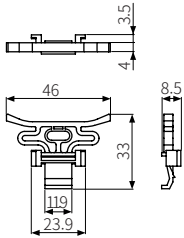
Rated voltage	Through current	Current (A)		Volt ampere (VA)	
		Making	Breaking	Making	Breaking
DC125 V	2.5 A	0.55	0.55	69	69
DC250 V		0.27	0.27		

## Dimensions

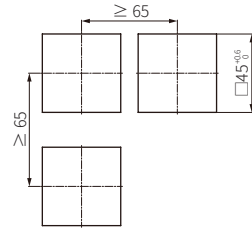
- Unit: mm, For the detailed drawings, follow the Autonics website.
- Drawings show the general type model.



### Bracket

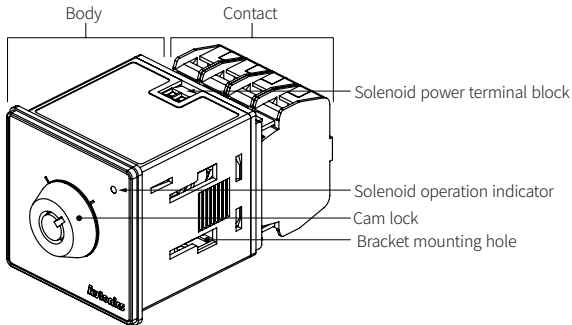


### Panel cut-out



## Unit Descriptions

- The below image are based on the lockable type model. There is no solenoid power terminal block and solenoid operation indicator in the general type model.



## Sold Separately

- Name plate: SF2KR-□-NP□
- Contact block: SFEA-□□

## Sold Separately: Name Plate

### General type

No.	Appearance	Model	Standard
1		SF2KR-NP1	V1-Nameplate
2		SF2KR-NP2	V1-Nameplate
3		SF2KR-NP3	V1-Nameplate
4		SF2KR-NP4	V1-Nameplate

### Lockable type

No.	Appearance	Model	Standard
1		SF2KR-M-NP1	V1-Nameplate
2		SF2KR-M-NP2	V1-Nameplate
3		SF2KR-M-NP3	V1-Nameplate
4		SF2KR-M-NP4	V1-Nameplate

## Sold Separately: Contact Block

Item	Appearance	Model
A contact (Normally Open)		SFEA-CA
B contact (Normally Closed)		SFEA-CB