



## Feature

- 200 amps continuous carry
- Load wiring no polarity requirements, coil drive no polarity requirements
- RoHS compliant

Contact Data

Item		Information	
Contact arrangement		Power Contact:1 Form A	
Current rating		200A	
Contact resistance		$\leq 1\text{m}\Omega$ (@6V 20A)	
Max. Switching voltage		450VDC	
Max. Breaking current		400A	
Max. Switching power		90KW	
Electrical life <sup>(1)</sup>	Resistive load	200VDC 200V type	450VDC 400V type
		200VDC,200A 1000 cycles	450VDC,200A 500 cycles
		Refer to the switchover life line chart	
	Capacitive load	7.5×10 <sup>4</sup> cycles 10VDC,τ=1ms inrush 400A steady 200A	

Parameters Table

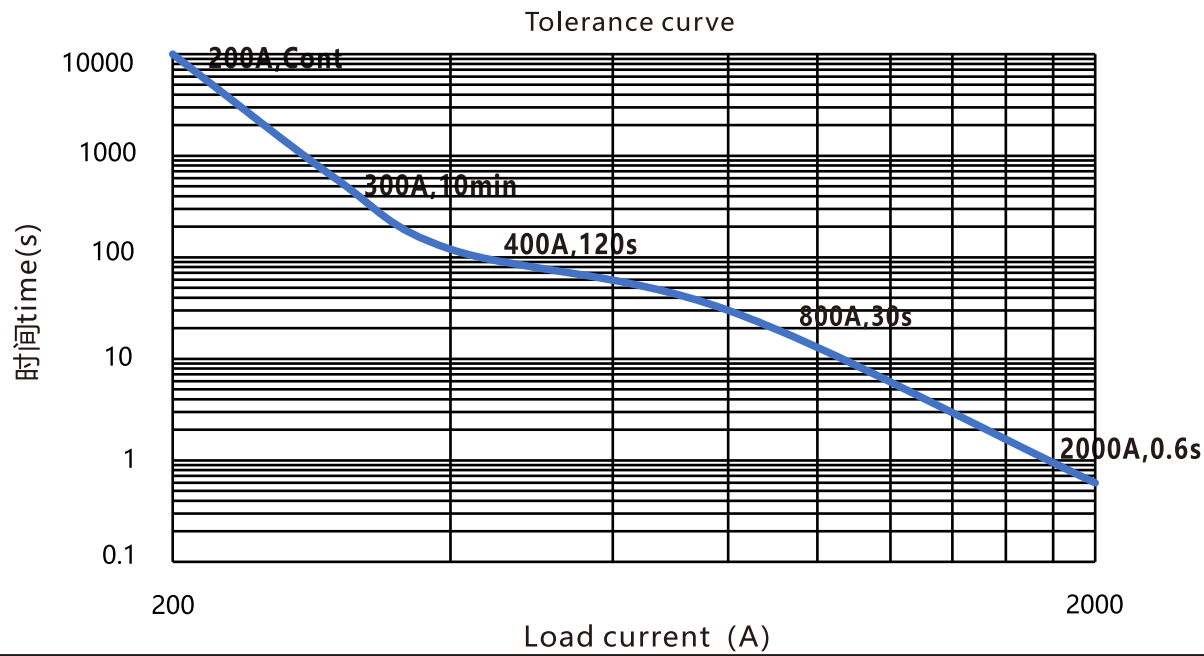
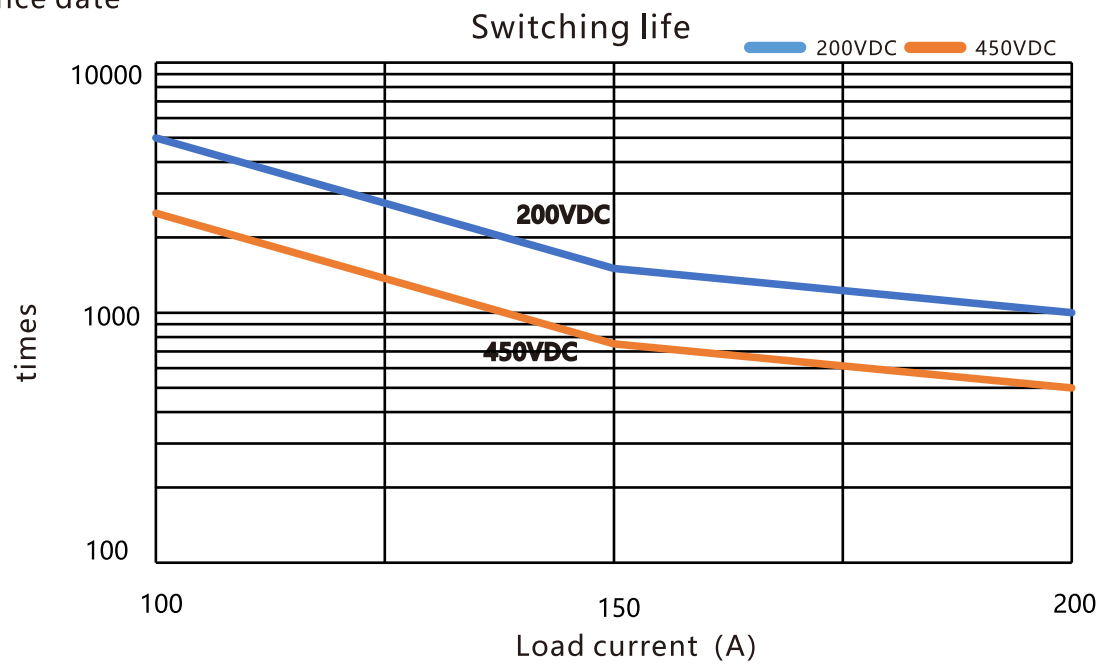
Item		Information	
Mechanical life		2×10 <sup>5</sup> cycles	
Insulation resistance		1000MΩ(1000VDC)	
Dielectric strength	Between open contacts	3000VAC 1min 1mA	
	Between contact and coil	4000VAC 1min 1mA	
(at rated coil voltage)		$\leq 30\text{ms}$	
Release time (at rated coil voltage)		$\leq 10\text{ms}$	
Shock resistance	Functional	196m/s <sup>2</sup> (20G)	
	Destructive	490m/s <sup>2</sup> (50G)	
Vibration resistance		10Hz~500Hz 49m/s <sup>2</sup> (5G)	
Ambient temperature		-40℃~ +85℃	
Ambient humidity		5%~95% RH	
Weight		370g	
External dimension		88×42.5×87.3	

CoilData <sup>(3)</sup>

Rated voltage (VDC)	Operation voltage (VDC)	Max. voltage (VDC)	Pick-up voltage (VDC)	Drop-out voltage (VDC)	Coil resistance (±10%)(Ω)	Operating power (inrush, W)	Operating power (stable, W)
12	12	16	≤9	≥1.0	24	6	6
24	24	32	≤18	≥2.0	96	6	6

- NOTES:
- (1) Ambient temperature:23°C, L/R≤1ms.
  - (2) Ambient temperature:23°C, 60mm<sup>2</sup>conductor.
  - (3) Other types of rated voltage,please contact us.

Reference date



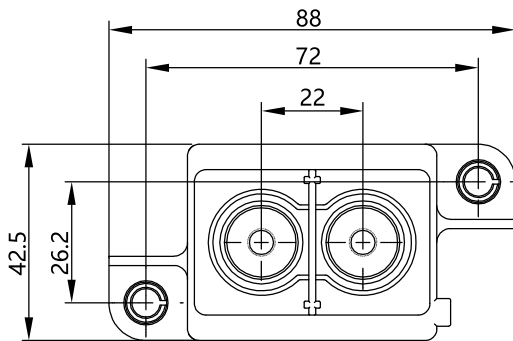
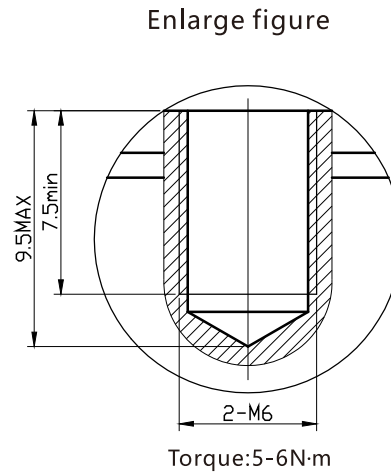
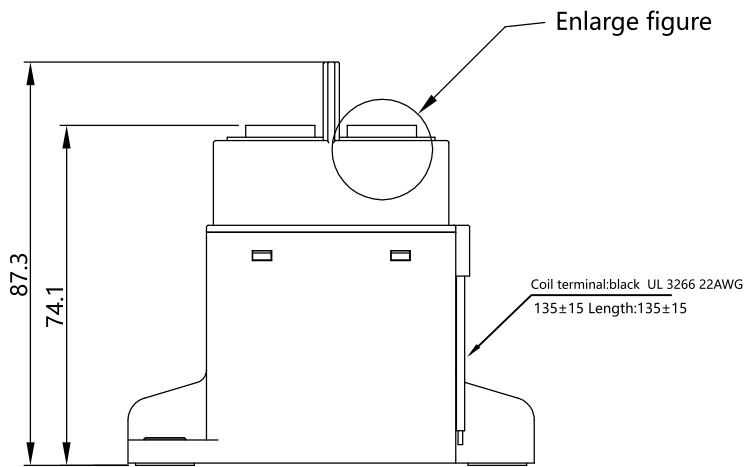
Ordering Information

Nomenclature

SEF200 -			M				
Customer special code		Nil: No customer special requirement Numbers or Letters: Customer special requirement					
Load connection type		2: Internal thread					
Coil connection type		Nil: Outgoing line C: Outgoing line+connector					
Coil voltage		24: 24VDC					
Contact arrangement		M: 1 Form A					
Voltage rating		450: 12~450VDC					
Load current		200: 200A					
Type designation		SEF					

Packing style:24pcs / box

## 外形尺寸(标准型) Outline Dimensions(standard type )

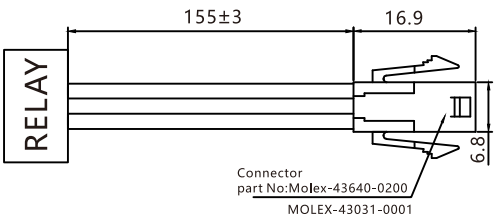


Size	tolerance
Less than 10mm:	±0.3
10 to 50mm:	±0.5
More than 50mm:	±0.8

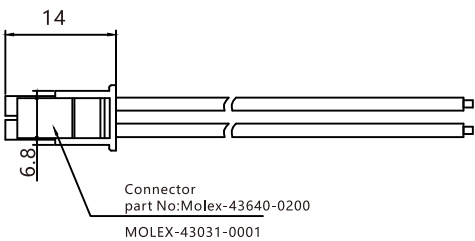
# Coil Connection Type

## Coil Connection Type

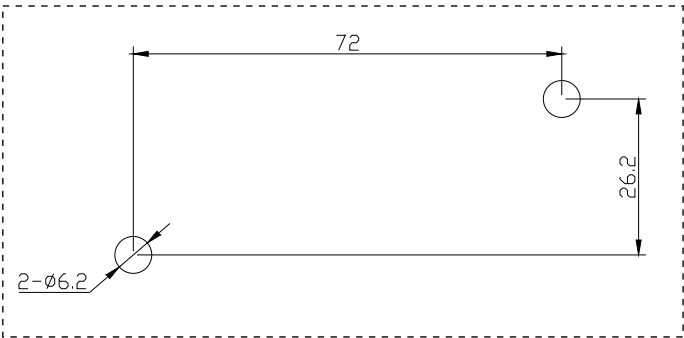
C: Outgoing Line+Connector



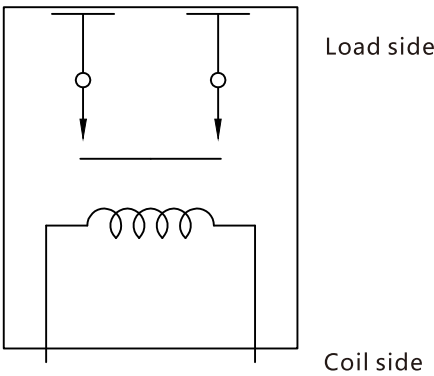
Connector (No accessories)



Installation Size Chart



Schematic Diagram



Note: The contacts are nonpolarized

NOTES:

●Mounting Attention

- 1. In principle, please do not use it when the relay has fallen down.
- 2 The relay contacts are sealed and filled with gas. When the contact temperature changes, there is internal gas penetrating characteristic.SANYOU relays are forbidden to be used at the temperature beyond our suggestion -40 °C ~ 85 °C for long time.
- 3.When installing the relay, always use washers to prevent the screws from loosening.
- 4 Tighten each screw within the rated range given in the outline dimensions. Exceeding the maximum torque may result in breakage.
- 5. Avoid mounting the relay in strong magnetic fields (near a transformer or magnet) or close to an object that radiates heat.

●Electrical Life Attention

- 1. This relay is a DC high-voltage switch. In its final breakdown mode, it may lose the ability to provide the proper cut-off.Therefore, do not exceed the indicated switching capacity and life.
- 2. Please treat the relay as a product with limited life and replace it when necessary.
- 3. The contacts of the relay are polarized. Please follow instructions in the connection schematic when connecting the contacts.
- 4. Be careful that foreign matter and oils and fats kind, don't stick to the main terminal parts because it is likely to cause terminal parts to give off unusual heat. Also, please use the following specifications of conductor.

10A	公称截面积	≥2mm <sup>2</sup>	Min. 2mm <sup>2</sup> nominal cross-sectional area
20A	公称截面积	≥3mm <sup>2</sup>	Min. 3mm <sup>2</sup> nominal cross-sectional area
40A	公称截面积	≥10mm <sup>2</sup>	Min. 10mm <sup>2</sup> nominal cross-sectional area
60A	公称截面积	≥15mm <sup>2</sup>	Min. 15mm <sup>2</sup> nominal cross-sectional area
100A	公称截面积	≥35mm <sup>2</sup>	Min. 35mm <sup>2</sup> nominal cross-sectional area
150A	公称截面积	≥45mm <sup>2</sup>	Min. 45mm <sup>2</sup> nominal cross-sectional area
200A	公称截面积	≥60mm <sup>2</sup>	Min. 60mm <sup>2</sup> nominal cross-sectional area
250A	公称截面积	≥80mm <sup>2</sup>	Min. 80mm <sup>2</sup> nominal cross-sectional area
300A	公称截面积	≥100mm <sup>2</sup>	Min. 100mm <sup>2</sup> nominal cross-sectional area

**●Coil Attention**

1. Please note that when using a diode, the switching speed may decrease and cause a reduction in cut-off performance, we recommend installing a surge protector varistor.
2. The pick-up voltage and drop-out voltage will change with ambient temperature, please use rated voltage to make sure the relay operate reliable. Don't exceed maximum coil voltage.
3. Please do not continuously load the maximum voltage on the coil.
4. The 250A and 300A types have built-in dedicated drive circuit, please drive the coil with a quick startup (Built-in one-shot pulse generator circuit)
5. After the ON signal enters the 250A and 300A types, automatic coil current switching occurs after approximately 0.1 seconds. Do not repeatedly turn it OFF within that 0.1seconds interval, as doing so may damage the relay.

**Disclaimer:**

This datasheet is the customers' reference. All the specification are subject to change without notice.

We could not evaluate all the performance and parameters for every possible application. Thus the users should be in a right position to choose the suitable product for their own application. If there is any query, please contact Sanyou for technical service. However it is the users' responsibility to determine which product should be used only.

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