











## SEV100FD HV DC Contactor



## **USES**

The utility model has the advantages that the utility model is provided with one normally open contact, which is suitable for charging piles, electric four wheeled vehicles, new energy vehicles, energy saving and environmental protection systems, road traffic lighting systems, programmable power supply and uninterruptible power supply equipment.

SEV	<u>100</u>	<u>F</u>	<u>D</u>	<u>X</u>	<u>L</u>	<u>-D</u>	<u> </u>	<u>/12V</u>
1	2	3	4	5	6	7	8	9

- 1 Product type
- 2 Rated current
- 3 Circuit structure: A - normally open; B - normally closed; F - normally open with one auxiliary switch (the auxiliary switch and main contact have the same structure); G - one normally closed with one auxiliary (auxiliary switch and main contact have the same structure). (For other auxiliary switch structures, add 2 or 3 numbers after the model to describe the auxiliary switch structure)
- 4 Coil type: D single coil; K Two joint magnetic retention(Single coil, Two joint self-locking); 2K Three joint magnetic retention(Double coil, Three joint self-locking)
- 5 Coil outgoing mode: X Wire (390mm); O Other
- 6 Mounting bracket type: L Vertical(default)
- None: auxiliary switch and main contact have the same structure (default); 2: The structure of auxiliary switch and main 7 contact is opposite; 3: Special auxiliary switch structure
- 8 Other special functions: V with capacitive type load; N no polarity
- 9 Coil rated voltage: 6V,12V,24V,36V,48V,60V,72V,84V,120V,150V,220V etc.

## **USE OF THE ENVIRONMENT**

### ORDER INSTRUCTION

Contact lead M5 tightening	≯2.5 appropriate	U.N.W.	197g	
Coil lead mode	Wire dipping tin (black: coil,	Package QTY.	50PCS	
Ambient temperature	-40~+85℃			
Relative humidity	+20℃ 98%			
Vibration freq. atthe fixed	3G, 1 $\sim$ 50Hz amplitude 0.5mm			
Concussion	(60 $\sim$ 100) time/minute $\sim$			
Altitude	2000m			
Installation direction	Random	Mounting bracket type	L Vertical(default)	
International Protection IP68				









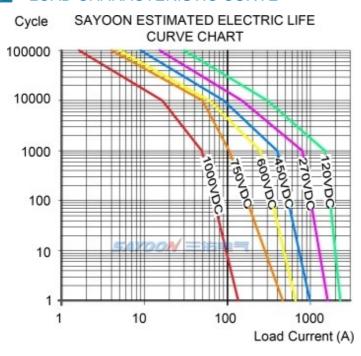


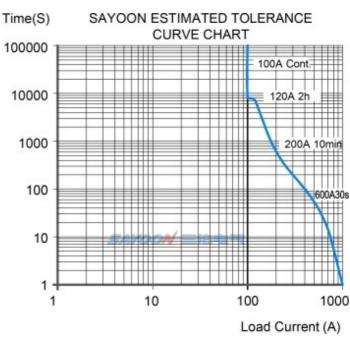
## TECHNICAL PARAMETERS

(Version 2.88)

SAYOON Product Type	SEV100FD			
Contact form	1 NO(SPST-NO) with auxiliary or 1NC(SPST-NC)			
Coil Rated voltage (DC V)	6V,12V,24V,36V,48V,60V,72V,84V,120V,150V,220V etc.			
Contact voltage (DC V)	5-1000V			
Contact circuit rated load current (DC-1)	100A			
Typical voltage drop across contacts per 100A	≤80mV			
The cooling pull-in voltage at (20±5)℃ (V)	≤70%			
The cooling drop-out voltage at (20±5)℃ (V)	≤35%, ≥5%			
Working voltage range of 40°C coil	0.8-1.2Us			
Drop-out time (n/o contacts to open)	20ms			
Pull-in time (n/o contacts to close)	10ms			
Maximum bounce time for contact connection	10ms			
Maximum bounce time for contact disconnection	7ms			
Insulation Resistance	100ΜΩ			
Electric strength to resist	50Hz/60Hz 1800VAC 1minute			
Typical fault currents which can be ruptured	800A/5ms at 48V DC			
Coil power (W)	4-10			
Temperature rise of coil (K)	≤55			
Temperature rise on outgoing terminal (K)	≤65			
Electrical life	Reference load characteristic curve			
Mechanical life	300,000 times			
Work specification	Continuous			
Contact material	Alloy			
Inrush time (max)	130ms			
Maximum switching current	1000A 320VDC (more than once)			
Maximum switching power	320kW			
Load terminal type	M5 Screw			

#### LOAD CHARACTERISTIC CURVE















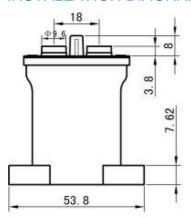


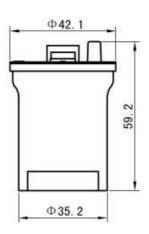
## OTHER TECHNICAL PARAMETERS

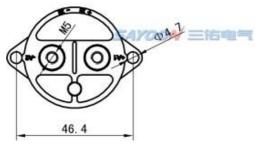
Coil terminal type	0.3 square silicone wire, 390mm long
Auxiliary contact rated load (optional)	3A/30VDC
Testing organization certification	CCC,CE,FCC,RoHS

Note: As regarding to the different using environments of customers which requires different focus of the functions, and in order to improve the comprehensive properties of our products, sayoon may adjust the coil parameters, temperature rise and so on. The above parameters are for reference only, For details, please refer to the guidelines for selection and use of the SAYOON DC contactor.

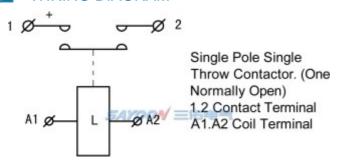
## **INSTALLATION DIAGRAM**



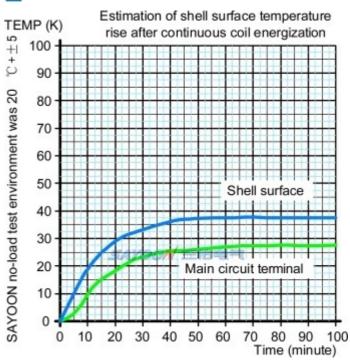




## WIRING DIAGRAM



## TEMPERATURE RISE CURVE

















#### **FEATURES**

Suitable for new energy electric vehicles, charging facilities, photovoltaic, wind power generation systems, automotive air conditioning, communication power, UPS, power and other electrical control circuit of the switch control, with small size, large load capacity, no spark, long service life, maintenance simple and other characteristics, by users. 1 DC high voltage power: the product cavity filled with rare mixed gas, arc cooling capacity, 2 control load capacity: with 30A-1000A, working voltage range of 5-1000VDC load capacity; 3 safety: insulation structure, can be in flammable or hazardous environment work, coil and contacts will not oxidation and pollution; 4, compared with similar products small size, light weight, power consumption. The product in accordance with the standard JB2286-78, JB3974-85, YD / 585-92, YD / T512-92 requirements after the factory and research the requirements of the standard specification, users use

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# ORDER FORM DESCRIPTION

When ordering, please state the following: name, full model, control coil voltage specification, installation frame type, whether with auxiliary contact, order quantity. For example: HV DC Contactor SEV100FD- $\Box$ - $\Box$ /24V 100pcs, indicating the load rated current 100A, without auxiliary contact, default mounting bracket, coil control voltage 24V purchase 100pcs. Special voltage specification products, such as user needs can be special order.