# HV DC Contactor

# HEV300 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.

<u>HEV</u>	<u>300</u>	<u>-7</u>	<u>A</u>	D	<u>X</u>	L	- 🗆	<u>*</u>	<u>/12V</u>	
1	2	3	4	5	6	7	8	9	10	

- 1 Product type: HEV one group circuits; HEVJ two group circuit
- 2 Rated current
- 3 Contact Rated Voltage: 1:200V; 7:1000V
- 4 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)
- 5 Coil type: D single coil; H with coil economizer; K dual wire magnetic holding (single coil, dual wire self-locking); 2K three wire magnetic holding (double coil, three wire self-locking); P signal control; R built-in pre charging type [relay drive] (the left digit of the pre charging function is the pre charging delay time, used to control the coil; the right digit is the resistance value with resistance); Y: External pre charging [MOS driver] (The left digit of the pre charging function is the pre charging delay time, and the right digit is used as a lead for controlling the coil. If it is greater than 1, it is the resistance value of the live resistance)
- 6 Coil outgoing mode: X Wire (390mm); O Other
- 7 Mounting bracket type: L Vertical(default),M Horizontal
- 8 None: auxiliary switch and main contact have the same structure (default); 2: The structure of auxiliary switch and main contact is opposite; 3: Special auxiliary switch structure

**ORDER INSTRUCTION** 

- 9 Other special functions: V with capacitive type load
- 10 Coil rated voltage: DC6V,12V,24V,36V,48V,60V,72V,84V,120V,150V,DC220V,AC220V etc.

# USE OF THE ENVIRONMENT

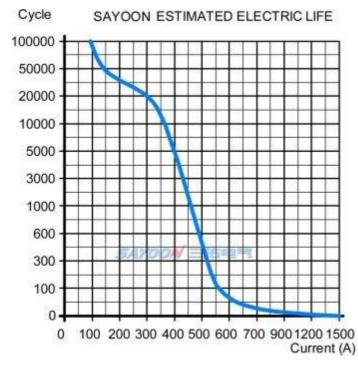
	Contact lead M8 tightening	>9.0 appropriate		U.N.W.
Coil lead mode		Wire dipping tin (Red positive		Package QTY.
Ambient temperature		<b>-40~+85</b> ℃		
Relative humidity		+20℃ 98%		
	Vibration freq. atthe fixed	3G, 1 $\sim$ 50Hz amplitude 0.5mm		
Concussion		(60 $\sim$ 100) time/minute 、		
Altitude		2000m		
	Installation direction	Random		
		G SAYOON ELECTRIC CO., LTD.		

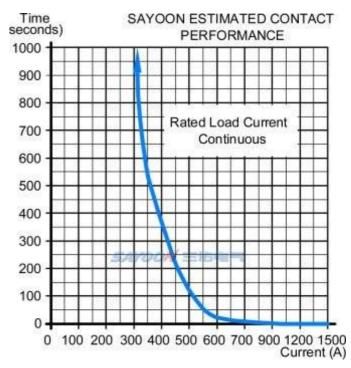
#### International Protection IP68 TECHNICAL PARAMETERS

(Version	3.01)
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SAYOON Product Type	HEV300		
Contact form	1 NO(SPST-NO) or 1NC(SPST-NC)		
Coil Rated voltage (DC V)	DC6V,12V,24V,36V,48V,60V,72V,84V,120V,150V,DC220V,A		
Contact voltage (DC V)	200V,1000V		
Contact circuit rated load current (DC-1)	300A		
Typical voltage drop across contacts per 100A	≯80mV		
The cooling pull-in voltage at (20±5) $^\circ\! { m C}$ (V)	≯70%		
The cooling drop-out voltage at (20±5) $^\circ\!\mathrm{C}$ (V)	<b>≯35%,≮5%</b>		
Working voltage range of 40 °C coil	0.8-1.2Us		
Drop-out time (n/o contacts to open)	30ms		
Pull-in time (n/o contacts to close)	5ms		
Maximum bounce time for contact connection	10ms		
Maximum bounce time for contact disconnection	7ms		
Insulation Resistance	100ΜΩ		
Electric strength to resist	50Hz/60Hz 2200VAC 1minute		
Typical fault currents which can be ruptured	1000A/5ms at 48V DC		
Coil power (W)	D: 8-20; H: Start 30-50,Keep1.5-4		
Temperature rise of coil (K)	≤55		
Temperature rise on outgoing terminal (K)	≤65		
Electrical life	20,000 times		
Mechanical life	300,000 times		
Work specification	Continuous		
Contact material	Alloy		
Inrush time(Max)	130ms		
Maximum switching current	2000A 320VDC (More than 1 times)		
Maximum switching power	640kW		
Load terminal type	M8 Screw		

# LOAD CHARACTERISTIC CURVE





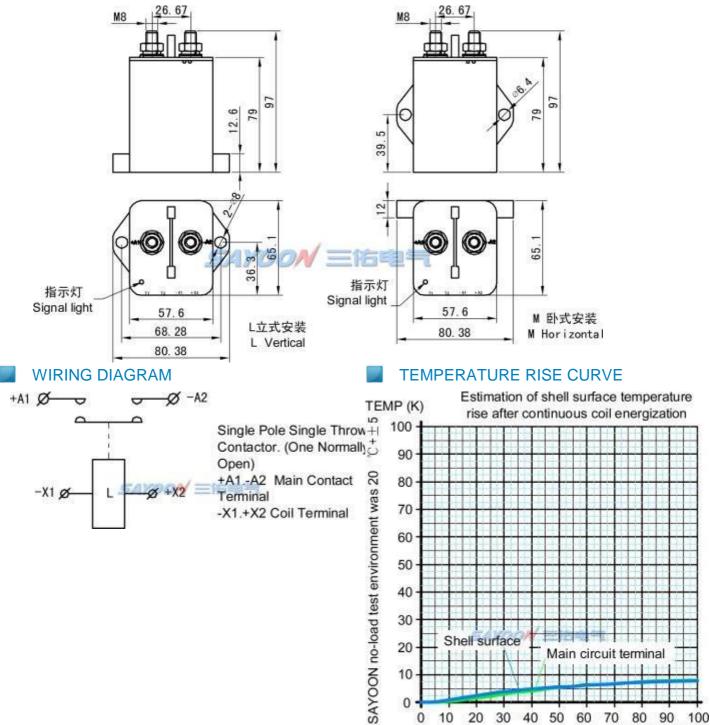
ZHEJIANG SAYOON ELECTRIC CO.,LTD. Tel:++86-577-62626292/62620707 Fax:++86-577-62620700 http://www.sayoon.com E-Mail: sayoon@sayoon.com

## OTHER TECHNICAL PARAMETERS

Coil terminal type	0.3 square silicone wire, 390mm long	
Auxiliary contact rated load (option)	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



Time (minute)

## 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 relevant test unit test, meet the requirements of the standard specification, users use for many years, maximum to meet user needs, quality and reliable.

## 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 HEV200-D-D/24V 100pcs, indicating the load rated current 200A, without auxiliary contact, default mounting bracket, coil control voltage 24V purchase 100pcs. Special voltage specification products, such as user needs can be special order.