



# **Product Features**

- The imported epoxy resin sealant has high and low temperature resistance and good safety, is adopted to ensure no arc leakage, and the contact point can meet the protection grade of IP6K9K.
- The mixed gas mainly filled with hydrogen can prevent the contact from oxidation and burning
- 30A 85°C long time current carrying capacity
- The rated voltage of cut-off load is 12-750VDC
- The insulation resistance reaches 1000m  $\Omega$  (1000VDC) and meets the requirements of IEC 60664-1
- There is no polarity requirement for load and coil.

		Contact Parameters				
Contact Forn	n	1a				
Contact Resista	nce	≤5mΩ (at 30A)				
Contact Rated L	oad	30A				
Mechanical Dura	bility	2×10 <sup>s</sup> times				
		450V Type	750V Type			
Max. Switching Vo	oltage	1000VDC	1000VDC			
Max. Breaking Current		300A(320VDC)1 times	300A(320VDC)1 times			
Max. Switching Power		13.5kW	22.5kW			
		Switchover: 2×10 <sup>4</sup> times (450VDC, 30A)	Switchover: 1×10 <sup>4</sup> times (750VDC, 30A)			
The Durability Of Electricity (1)	Resistive Load	Switch on: 7.5×10 <sup>4</sup> times (450VDC, 30A)	Switch on: 7.5×10 <sup>4</sup> times (450VDC, 30A)			
		30A:last; sustain				
Current Tolerance (2)		60A:60min				
		80A:20min				
		160A:30s				
		300A:0.6S				

Remarks: (1) Unless otherwise indicated, the test temperature is 23 °C, the on-off ratio is 0.6s: 5.4s. During the test, the coil is not connected with surge suppression device.

Please note that if the coil parallel diode is used, the release time of the contactor will be greatly prolonged and the service life will be reduced.

(2) The ambient temperature is 85 °C, and the cross-sectional area of the conductor is ≥ 10 mm². For detailed current loading conditions, please refer to the attached figure "tolerance curve".

Performance Parameters						
Ins	ulation Resistance	1000MΩ(1000VDC)				
Dielectric	Between Contacts and Coil	3000VAC 1min				
Withstand Voltage	Between Open Contacts	3000VAC 1min				
Operating	g Time (at rated voltage)	≤30ms				
Release	Time (at rated voltage)	≤10ms				
lucus est	Stability	196m/s²				
Impact	Strength	490m/s²				
	Vibration	10Hz ~ 500Hz 49m/s²				
	Fumidity	5% ~ 85%RH				
	Temperature	-40°C ~ 85°C				
Foi	rm Of Load Outlet	4M Internal Thread				
	Weight	About 130g				
Dimensions		53.7mm×36.2mm×39.5mm				

ALC: TILL	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4		
Note: The above	values are the initia	I values at ro	om temperature.

Coil Parameters							
Rated Voltage VDC	Operating Voltage VDC	Release Voltage VDC	Coil Power Consumption W				
12	≤9	≥1.2	3.6W				
24	≤18	≥2.4	3.8W				

Note: The above values are conservative values in the full temperature range (-40°C  $\sim$  85°C).

#### **Example Of Order Marking**

HFEVC -	Н	Y	030	/	<u>750</u> -	· <u>12</u> -	c	Ν	<u>SM</u> -		
1	2	3	4		5	6	7	8	9	10	

 1、Product Model
 HFEVC: Huanfang High Pressure Contactor

 2、Product Type
 T: Ceramic Seal Type
 H: Epoxy Sealed Type

 3、Product Appearance
 F: Square Product
 Y: Circular Products

4. Series Code 030: 30A

 5. Voltage Classes
 DC Blank: 450V
 750: 750V

 6. Coil Voltage
 12: DC12V
 24: DC24V
 PWM: 9V~24V

7、Coil Lead - out Mode C: Connector; L: Outlet;

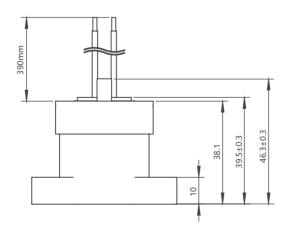
8, With Auxiliary Contact Or Not 9, Installation Mode Blank: Without N: With Normally Open Auxiliary Contacts 9, Installation Mode Slank: Vertical Installation SM: Horizontal Installation

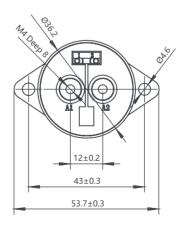
10、Customer Characteristics Code Subject To Customer Requirements

Remarks:(1) special requirements of customers shall be marked in the form of special number after review by our company.

## Outline drawing, mounting hole size

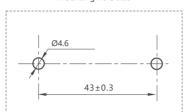
Unit: mm



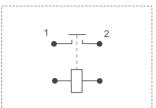


## Mounting hole size/Wiring diagram

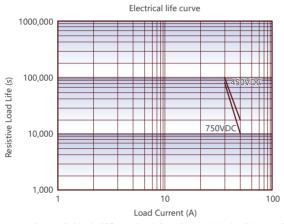
Mounting hole size



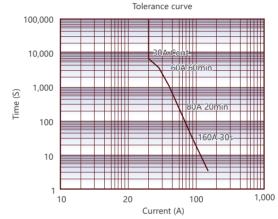
Wiring diagram



### Performance graph



Remark: Rated electrical life number is based on resistive load. Test under switch on/off. Switch on for 0.6s and off for 5.4s.



Note: The above data is measured under the conditions of ambient temperature 85°C and the sectional area of conductor wire ≥10mm². The data is for reference only, do not use it to select fuse directly.



### Precautions for use

1. To prevent looseness, please use gasket when installing contactor. Please install the contactor and load outlet in the way specified in the table below, and control the torque within the required range. In case of exceeding the range, the contactor may be damaged.

	Contactor m	ounting part			
Installation	Aperture of copper bar	Copper bar thickness	Installation	Torque requirement	
M4 Screw (Internal thread type) 1.8N·m ~ 2.7N·m		Ø4.0~Ø4.5mm	3mm	M4 Screw	1.8N·m~2.7N·m

- 2.Please to avoid sticking grease and other foreign bodies on the leading-out piece, and use the connection wire of 10mm<sup>2</sup> or above, otherwise abnormal heating may be caused at the leading-out end.
- 3. It is suggested that the thickness of copper strip is 3mm, otherwise it will cause the problem of thread sliding teeth or loose installation.



#### Statement:

- 1. The document is for customer reference only. Huanfang has made every effort to ensure the accuracy of the information in this document. However, mistakes are inevitable, and the products, specifications and parameters may be changed due to product improvement. For the specific parameters and performance of each product, please refer to the specifications and samples provided by Huanfang without further notice.
- 2. As for the application field, it is impossible for Huanfang to evaluate all performance parameters of contactor in each specific application field. Therefore, customers should select the products matching with the contactor according to the specific service conditions. If the requirements are not specified clearly, please contact Huanfang for more technical support. Huanfang clearly states that the information in this document is only for selection reference, and the responsibility of product selection is only the responsibility of the customer.