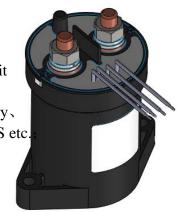


### ■ FEATURE

- 200A Contact switch capacity, Small volume;
- A set of bridge type N.O.contacts& a set of N.O. aux contact, contact circuit has "+", "-" polarity;
- Application: Telecom equipment, Solar system, Engineering machinery, Electromobile, Electric vehicle, Charging system, Train, Ships, UPS etc.
- Safety Approvals: CCC
- Comply with the ROHS



## ■ SPECIFICATION

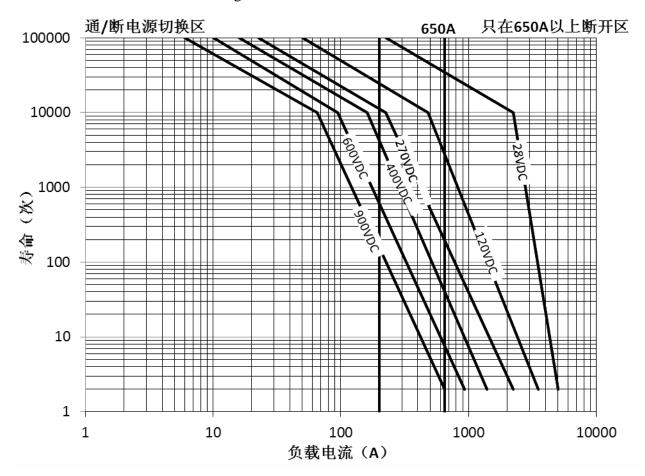
| Product No.  | DH200   |  |  |
|--|---|--|--|
| Contact type   | 1H(SPST-NO)   |  |  |
| Rated load current of contact(Resistive load)          | 200A (DC-1)   |  |  |
| The max switch current                                 | 2000A(320VDC) 1time   |  |  |
| Contact voltage drop                                   | ≤80mV@200A  |  |  |
| Switching voltage                                      | 12~900V DC  |  |  |
| Standard pick-up time (including contact bounce)       | Max. 40ms.  |  |  |
| Contact bounce time                                    | Max. 5ms.   |  |  |
| Release time   | Max. 10ms.  |  |  |
| Vibration (Sinusoid, 80~2000HZ, peak)                  | (80~2000)HZ, ≤20g   |  |  |
| Shock (11ms,1/2 Sinusoid, peak, pick-up)               | ≤20g  |  |  |
| Operating ambient temperature                          | -40℃~+85℃   |  |  |
| Storage ambient temperature                            | 20%~90% RH  |  |  |
| Relative humidity                                      | Min. 100M Ω @ 500VDC  |  |  |
| Dielectric strength (Between Insulated Electric Parts) | 2200VAC 50 Hz/60 Hz (1 minute)<br>1000VAC 50Hz/60Hz (1 minute) (between aux contacts)<br>Leak current<1mA |  |  |
| Electrical life  | Please refer to diagram of resistance load life   |  |  |
| Aux. contact type                                      | 1NO   |  |  |
| Rated load of aux. contact                             | 2A/24V  |  |  |
| Min. load of aux. contact                              | 100mA/8V  |  |  |
| Mechanical life  | 300,000 times   |  |  |
| Mounted direction                                      | Any direction   |  |  |
| Pollution level  | III   |  |  |
| Working duty   | Continuous  |  |  |
| Weight   | 0.62kg  |  |  |

### COIL DATA

| COLDINI |              |   |             |             |              |
|---------|--------------|---|-------------|-------------|--------------|
| P/N     | Coil voltage | Coil operating voltage                  | Pick-up     | Release     | Coil Power   |
|         | (V)          | (V)                                     | voltage (V) | voltage (V) | (W)          |
|         | 12           |   | ≪9          | ≥1          |              |
| DH200   | 24           | $0.85\mathrm{U_S}{\sim}1.2\mathrm{U_S}$ | ≤18         | ≥2          | $12 \sim 15$ |
|         | 48           |   | ≤36         | ≥4          |              |



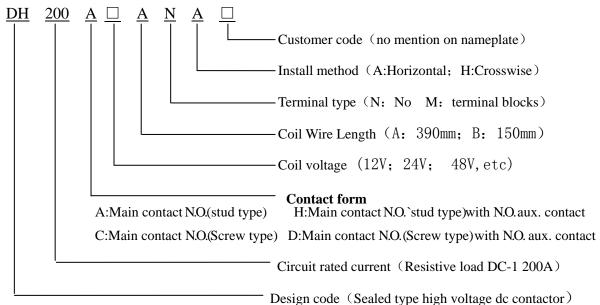
## Resistive load life at different voltages



### Remarks

- 1. The rated electrical life is based on resistance load test. The load max inductance  $\leq$  300  $\mu$  H; If used with inductive load, please do contact the factory first.
- 2. The above curve is drawn according to the test and infer data. Suggest users confirm in practical use.
- 3. When the product's Dielectric withstand voltage, insulation resistance is less than the product parameters in the table, the product is defined as a life to an end.
- 4. Product max pick-up current is 650A to avoid contact cold welding.

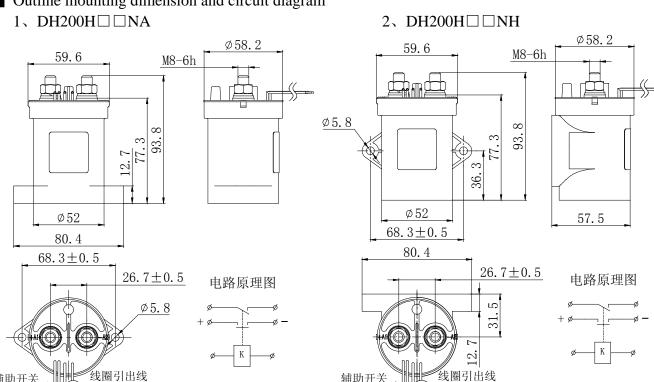
## ■ PRODUCT MODEL DEFINE





For example:DH200A12ANA means: Sealed type high voltage dc contactor, Rated current is 200A with DC-1 load, main contact N.O.(stud type), without aux. contact, coil voltage is DC12V, coil wire length is 390mm, horizontal installation.

# Outline mounting dimension and circuit diagram



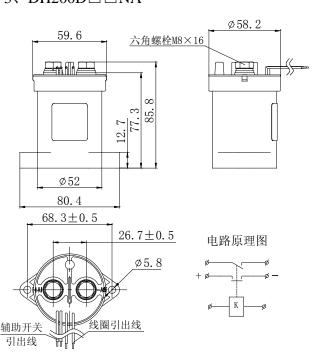
辅助开关 引出线

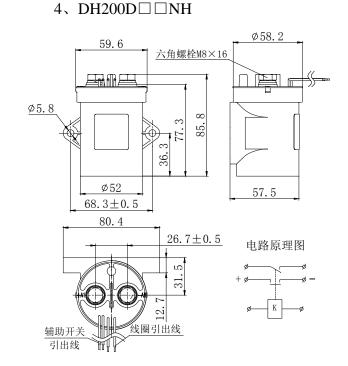
## P

## 3、DH200D□□NA

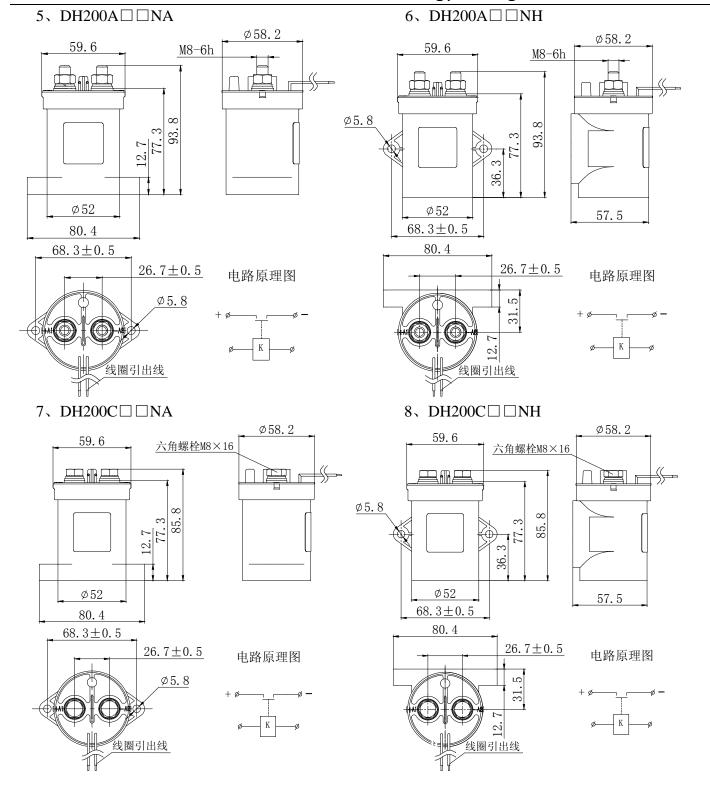
辅助开关

引出线









| Dimension (mm) | Tolerance grade not noted (mm) |  |
|----------------|--------------------------------|--|
| 0~30           | ±0.3                           |  |
| 30~60          | ±0.5                           |  |
| 60~100         | $\sim$ 100 $\pm$ 1             |  |
| >100           | ±2                             |  |

## Remarks:

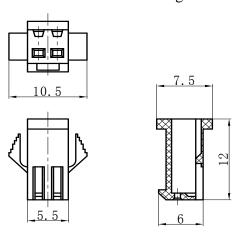
- 1. The outline mounting dimensions of products are same whether with or without aux. contact;
- 2. Both coil and main contact are polarized; The lead-out wire of coil, please connect red wire to "+" polarity black wire to "-" polarity; Connect "+" polarity to the main contact terminal with "+" mark, and connect "-" polarity to the main contact terminal with "-" mark.



## Accessory

DH200 series product with terminal part no is:DH200  $\square$   $\square$  M $\square$ , the additional code means terminal.

Additional code: M4
Plug type: SM-2Y-HW
Terminal type: SMA-HW
Terminal dimension figure:



Matched plug type: SM-2A-HW Matched terminal type: SMY-HW

#### ■ PRODUCT USE INSTRUCTIONS

1. Do use washer when installing the contactor in case the screw fall off. Refer to the following specified range of tighten screw torque, the products may be broken if exceed beyond the maximum torque:

The torque of contact (M8 nut):  $8\sim10$ N.m The torque of installing:  $1.7\sim3.5$  N.m

- 2. The coil is polarized, it should be wired according to the product mark; The contact points are also polarized; it should be also wired according to the product mark. There is a reverse surge absorbing circuit in the energized board, so there is no need to use surge protector any more. We suggest installing a piezoresistor as a surge protector in the contactor which without energized board. However, please avoid using diode, because it will reduce the contactor's switching capacity.
- 3. Do not use the product which have been dropped off.
- 4. Avoid to install the products in strong magnetic field (near the transformer or magnet), or close to the thermal radiation of the objects.
- 5. Electrical life

This contactor is a kind of high-voltage DC switch; it might be lost the function of cutting off in its final breakdown mode. Therefore, do not use in the condition of exceeding its' switching capacity and life parameters (please treat it as a product with a specified life and need to be replaced if necessary). Once the contactor loose the function of disconnect and cutting, it could cause the burning of surrounding parts, so it should have a good design of circuit diagram, ensure the power supply can be cut off in 1 second.

6. The diffusion life of internal gases

This contactor designed with gas-tight silo contact point, there is gas in the silo, the diffusion life of gas is decided by the silo temperature(that is Environment Temperature + Temperature rising of the contact electrical), therefore, please make sure the environment temperature should be between  $-40^{\circ}$ C and  $+85^{\circ}$ C.



# **DH200 Non Energy-Saving**

- 7. If the contactor's coil and contact point is energized continuously with rated voltage (or current), the power is cut off and turned on immediately, at this time due to the coil temperature increases, the resistance of the coil will increase too, so as to cause the pick-up voltage increased, it may cause beyond the rated pick-up voltage, in this case, please take following measures, such as: Reduce the load current, limited duration electricity or Use the higher coil voltage than the rated pick-up voltage.
- 8. The main contact rated parameters is available at resistance load, if use inductive load (L load) and at the same time the L/R > 1 ms, it should be paralleled a surge current protection device for the inductive load.
- 9. Product coil drive circuit of power must be larger than the product coil power, otherwise it will reduce the product's cutting ability.
- 10. Be careful not to let the debris or oil pollute the main terminal, and the lead-out wire terminal should be reliable contact with the main terminal, or the terminal would be highly heated. At the same time, the lead wire which connected to the product must achieve its conductive capability, to prevent overheating and impact the electrical life. (The wire sectional area of connecting main contact should be more than 95mm<sup>2</sup>).
- 11. After connect the contactor, the coil will start to switch automatically after around 0.1 second. Please don't switch (on/off) the contactor at that time, because this action maybe damages the contactor.