

HIGH VOLTAGE DC CONTACTOR

Product catalog



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Dongya specializes in designing, manufacturing and selling High & Low Voltage DC Contactor, Shunt and Hydraulic Circuit Breaker.



About Dongya



About Dongya

Dongya was founded in Y1984. We specialize in designing, manufacturing and selling High & Low Voltage DC Contactor, Shunt and Hydraulic Circuit Breaker.

We rely on the expertise gained through many years of experience and a desire to produce pioneering products that meet customer demand. Our products are widely used in Telecommunications, EVs, Mechanical Engineerings, Power Distributions, etc.

We aim to provide world class quality products and services to each of our valued customer.

Choosing Dongya

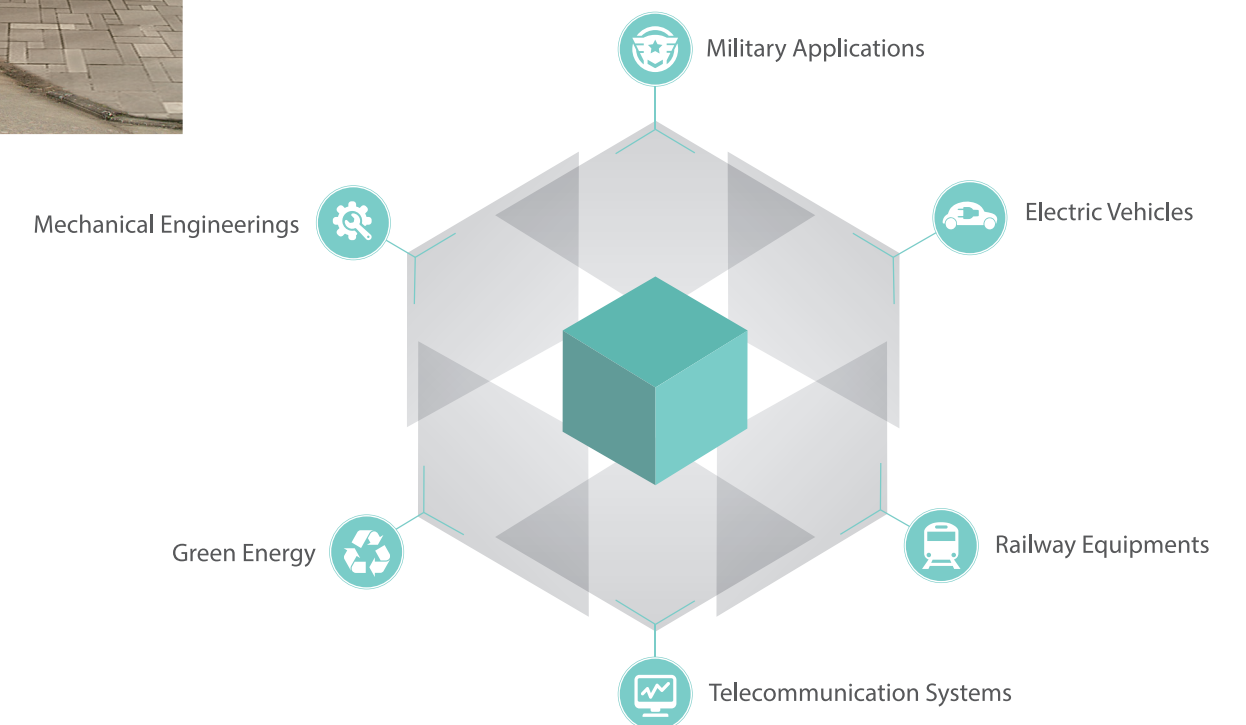
- Short L/T
- Quick response
- Product customization service available
- All RoHS material

Product Range & Applications

- Low voltage DC Contactor: 50A~3000A/12VDC~220VDC
- High voltage DC Contactor: 20A~400A/450VDC~1200VDC
- DC Shunt: 1A~12000A/20mV~1000mV
- Hydraulic Circuit Breaker: DC: 0.5A~400A/80V~220V
AC: 0.5A~100A/220V~480V

For an overview of our products, please refer to our product catalogue datasheets, both are available to download from our website <https://en.cndongya.com/>

Our complete range of products are available for use in a wide variety of applications, which include:



Dongya Strength

Engineering Process

To support our innovative approach and remain at the forefront of industry technology, Dongya has maintained its investment in the latest 3D CAD and Solidwork systems as well as developing further progressive production techniques and introducing advanced manufacturing systems. We can quickly provide our customers with 3 dimensional data and/or physical samples from our rapid prototyping facilities which enables concepts to be incorporated into their designs for easy visualisation and assessment.

Our approach to customers and their requirements has always been to provide a complete solution. Should our customer require a product developed for a particular application, depending on overall requirements and volume, Dongya can engineer specific designs for customers. These can be a distinct variation of an existing product, or a complete new product range.

Technical Support

Dongya provides a unique service to customers with the provision of our Technical Support teams. Our teams are available to offer advice to assist in choosing the correct product for your application, help resolve problems and to answer any queries which you may have before, during or after your purchase.

Offering our Technical Support to existing and potential customers from the outset ensures the correct product selection is made and assists in preventing issues. Our support service provides vital assistance to our customers who benefit by knowing they have bought the right product to the correct specification for their application.



Standard & Accreditation

Quality and the Environment are key concerns at Dongya. We are accredited with:

- IATF 16949:2016 (Quality Management System)
- ISO 9001:2015 (Quality Management System)
- ISO14001:2015 (Environmental Management System)
- OHSAS18001:2007 (Occupational Health and Safety Management System)

Further more, to aid customers, selected products have 3rd party Certification/Recognition, as follows:

Underwriters laboratories:

- UL583 Industrial Truck Accessories, Battery Powered- Component/ AU5128
- UL508 Switches, Industrial Control – Component/ E145623
- UL1801 Power Distribution Centers for Communications Equipment - Component/E346304
- UL489 Molded-Case Circuit Breakers/ E358988
- UL489A Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures/ E361056
- UL1077 Supplementary Protectors for Use in Electrical Equipment/ E357198

European Directive EN60947-4-1& EN60947-5-1

- CE
- TUV

Chinese Standard(GB14048.4(IEC60947-4-1):

- Chinese Compulsory Certification - CCC





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DH SERIES

Product Instruction

Vibration(Sinusoid、80 ~ 2000HZ、peak)	(10~500)HZ, ≤5g
Shock(11ms,1/2 Sinusoid、peak、pick-up)	≤20g
Operating ambient temperature	-40 C ~+85 C
Relative humidity	20%~90% RH
Insulation resistance	Min. 100MΩ @ 500VDC
Dielectric strength (Between Insulated Electric Parts)	2200VAC 50 Hz/60 Hz (1 minute) 1000VAC 50Hz/60Hz (1 minute)(between aux contacts)
Mounted direction	Any direction
Pollution level	III
Working duty	Uninterrupted

DH Series 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:

(M4 countersunk bolts):1N.m~1.5N.m;

(M5 Nut):3.5N.m~4.5N.m

(M5 countersunk bolts):8N.m~10N.m;

(M8 Nut):8N.m~10N.m.

The tor que of installing:

M4 countersunk bolts:2.3N.m max;

M5 countersunk bolts:3.5N.m max;

2. DH polarity series' both coil and main contact are polarized; Please connect coil red wire to "+" polarity& coil black wire to "-" polarity; Connect "+" polarity to the main contact terminal with "A1+" mark, and connect "-" polarity to the main contact terminal with "A2-" mark.

DHV non-polarity series, only coil are polarized, please connect coil red wire to "+" polarity& coil black wire to "-" polarity; While the contact circuit are non-polar and marked "A1","A2" beside the main terminal.

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 endurance

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 C and +85 C .

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 Nominal 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 Rated 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 endurance.

11.The rated Electrical endurance is based on resistance load test.The load max inductance≤300 μH;If used with inductive load,please do contact the factory first.

DH20



Feature

- 20A Contact switch capacity, Small volume
- A set of bridge type N.O.contacts ; contact circuit has "+", "-" polarity
- Application: New energy vehicles pre-charge

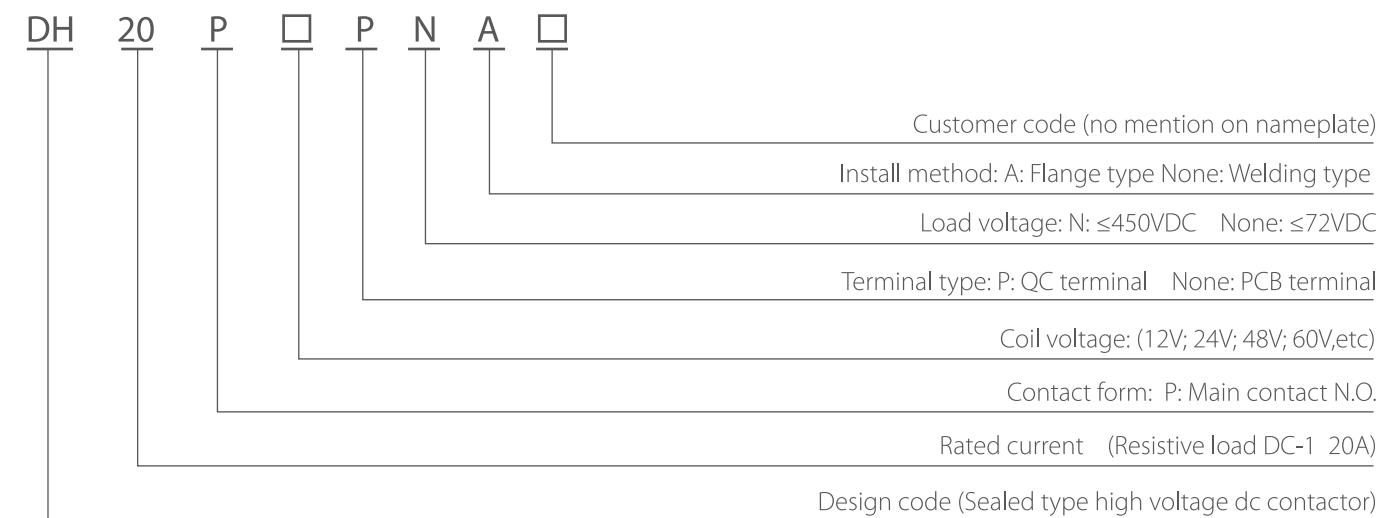
Performance Data

Product No.	DH20	
Contact arrangement	1H(SPST-NO)	
Rated load current of contact(At resistive load)	20A(DC-1)	
Load type	450V type	60V type
Max switching voltage	450V DC	72 V DC
Max breaking current	35A(450VDC, > 1 cycle)	30A(72VDC, > 1 cycle)
Max switching power	9kW	1.44kW
Electrical endurance(At resistive load)	Switch: 1×10 ⁴ ops (450VDC, 20A)	Switch: 1×10 ⁵ ops (72VDC, 20A)
	Switch: 5×10 ⁴ ops (450VDC, 10A)	Connect: 1×10 ⁵ ops (450VDC, 20A)
Contact resistance	≤10mΩ(20A)	
Pick-up time(At rated voltage)	Max. 20ms.	
Drop-out time (At rated voltage)	Max. 7ms.	
Dielectric strength	Between contacts& coil	3000VAC 50 Hz/60 Hz(1 minute)
	Between open contacts	2000VAC 50 Hz/60 Hz(1 minute)
Current carrying capacity	20A: Uninterrupted / 30A: 1h / 40A: 20min	
	80A: 30s / 120A: 0.6s / 200A: 0.6s	
Mechanical endurance	300,000 ops	

Coil Data

Part No.	Nominal coil voltage (V)	Coil operating voltage(V)	Pick-up voltage (V)	Drop-out voltage (V)	Maintain current (A)	Rated power (W)
DH20	12	0.85US-1.1US	≤9	≥1	≤0.3	2.5-3.5W
	24		≤18	≥2	≤0.15	
	48		≤36	≥4	≤0.1	
	60		≤45	≥5	≤0.06	

Part Numbering System

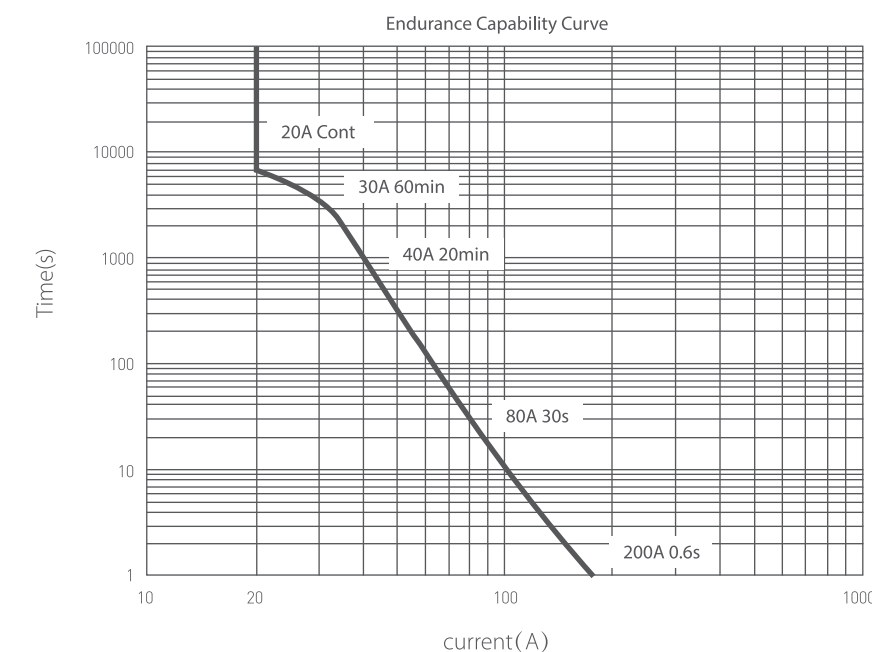


For example:DH20P12PNA means: Sealed type high voltage dc contactor, rated current is 20A with DC-1 load, main contact N.O., Nominal coil voltage is 12VDC, QC terminal(strip type), load voltage≤450VDC, flange type.

Power Switching Capacity for Resistive Load

Remarks

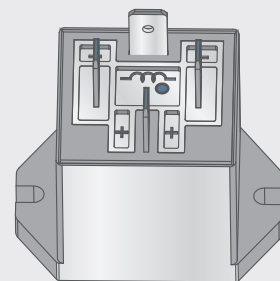
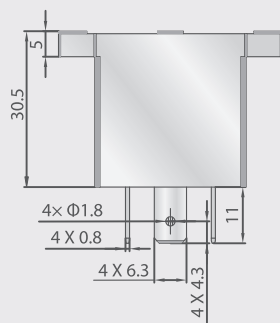
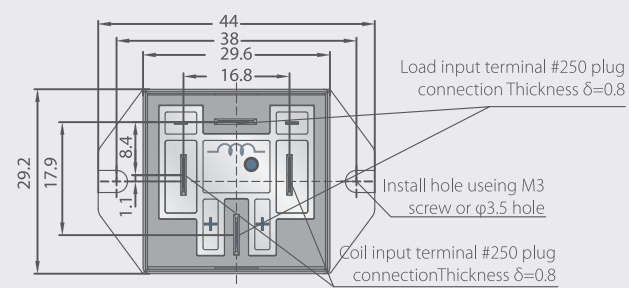
1. The above data is tested at the condition of environment temperature of 85 °C and wire cross-sectional area ≥2.5mm².
2. The data is for reference only, please do not use for selecting fuse.



Outline Mounting Dimension

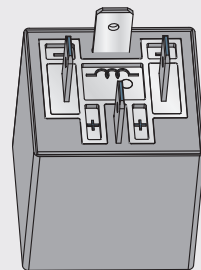
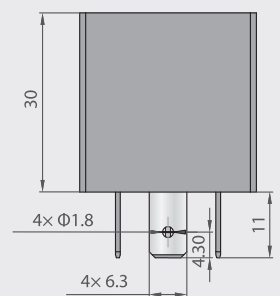
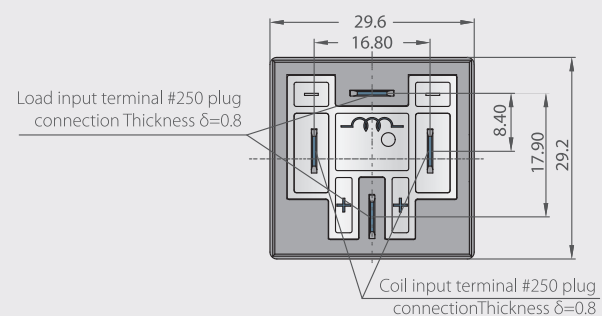
1 DH20P□□PNA

DH20P□□PA



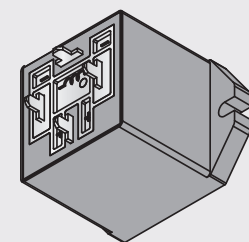
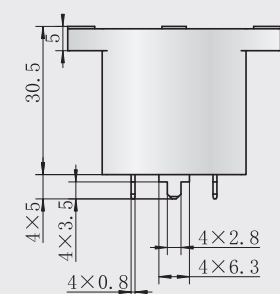
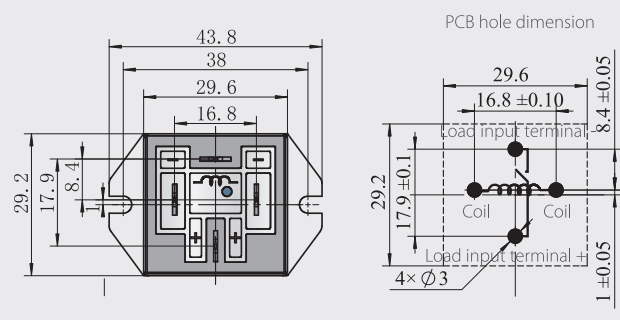
2 DH20P□□PN

DH20P□□P



3 DH20P□□NA

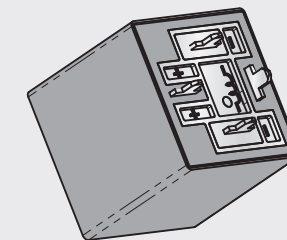
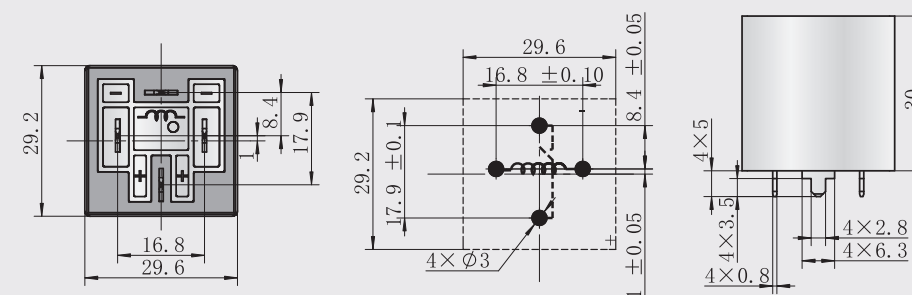
DH20P□□A



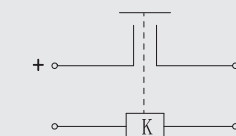
Outline Mounting Dimension

4 DH20P□□N

DH20P□□



Circuit Diagram



Dimension (mm)

< 1

1-5

> 5

Tolerance grade not noted (mm)

±0.2

±0.3

±0.4

NOTE:

The main contact are polarized; Connect "+" polarity to the QC terminal with "+" mark, and connect "-" polarity to the QC terminal with "-" mark.

DH50



Feature

- 50A Contact switch capacity, Small volume;
- A set of bridge type N.O.contacts contact circuit has "+", "-" polarity
- The product is sealed and the contact chamber is filled with inert gas.

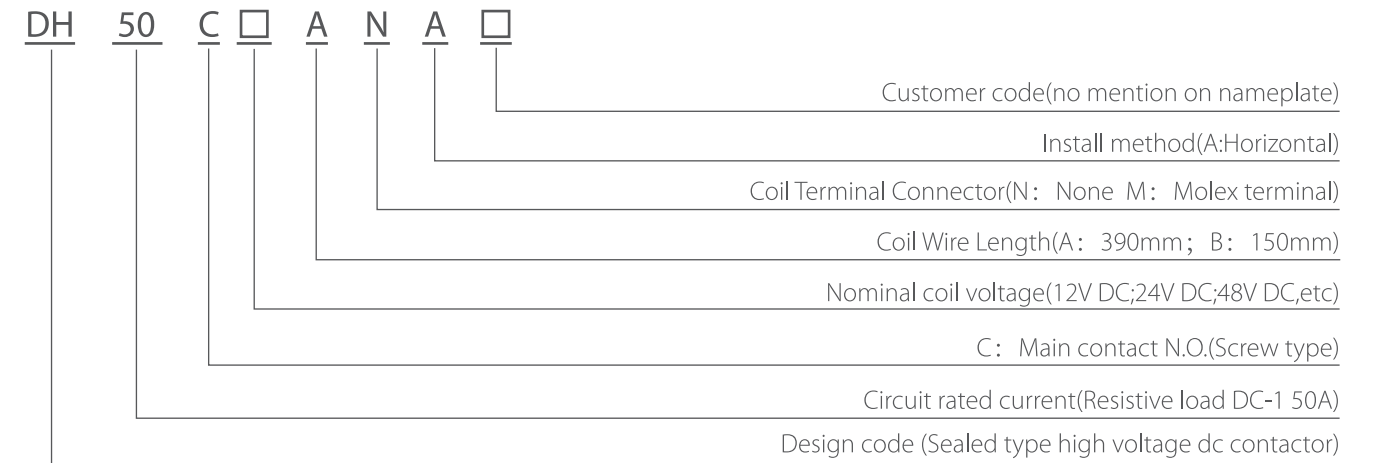
Performance Data

Product No.	DH50
Contact arrangement	1H (SPST-NO)
Rated load current of contact(Resistive load)	50A (DC-1)
Max Switch current	250A (320V DC) 1 cycle
Contact voltage drop	≤80mV@50A
Switching voltage	12 ~ 900VDC
Standard pick-up time(including contact bounce)	Max. 30ms.
Contact bounce time	Max. 5ms.
Drop-out time	Max. 10ms.
Electrical endurance	Please refer to diagram of resistance load life
Mechanical endurance	300,000 ops

Coil Data

Part No.	Nominal coil voltage (V)	Coil operating voltage(V)	Pick-up voltage (V)	Drop-out voltage (V)	Maintain current (A)	Rated power (W)
DH50	12	0.85US-1.2US	≥9	0.6-3.6	0.33	3-5W
	24		≥18	1.2-7.2	0.17	
	48		≥36	2.4-14.2	0.09	

Part Numbering System

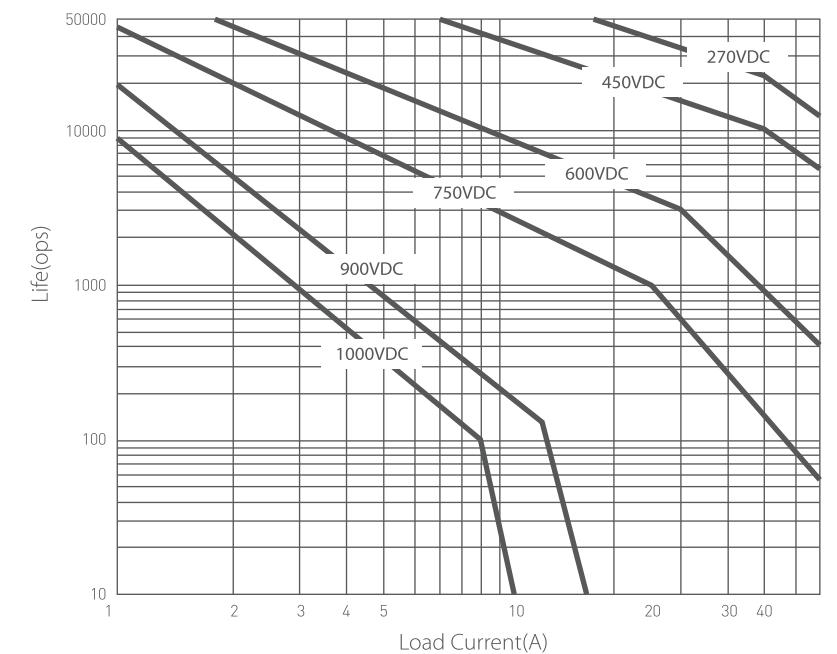


For example:DH50C12ANA means: Sealed type high voltage dc contactor. Rated current is 50A at DC-1 load, main contact N.O.(screw type), Nominal coil voltage is 12VDC,coil wire length is 390mm,horizontal installation.

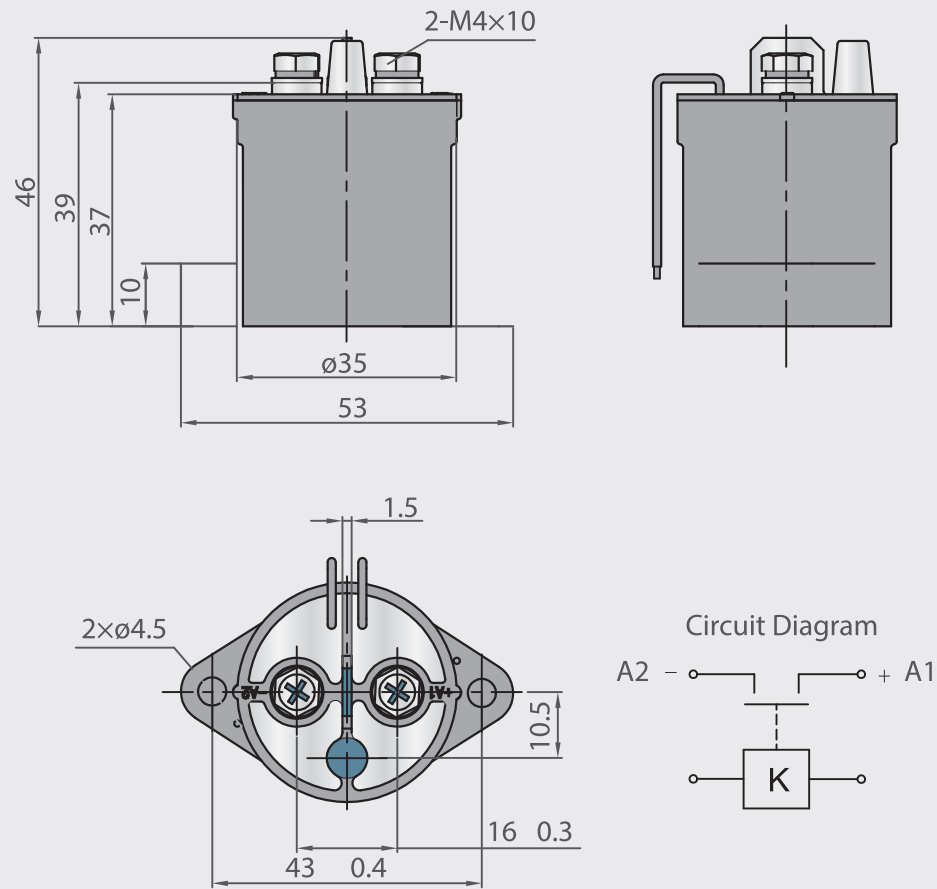
Power Switching Capacity for Resistive Load

Remarks

1. The rated Electrical endurance is based on resistance load test. The load max inductance ≤300μH; 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.



Outline Mounting Dimension and Circuit Diagram



Dimension (mm)	0-30	30-60	60-100
Tolerance grade not noted (mm)	±0.3	±0.5	±0.1

NOTE:

The main contact are polarized; Connect "+" polarity to the QC terminal with "+" mark, and connect "-" polarity to the QC terminal with "-" mark.

DH100
DHV100



Feature

- 100A Contact switch capacity, Small volume
- This series covers both polar and non-polar series. Polar type has a set of bridge N.O. contacts, contact circuit has "+", "-" polarity. Non-polar type contact circuit is non-polar and can be connected in any direction.
- The product is sealed and the contact chamber is filled with inert gas.

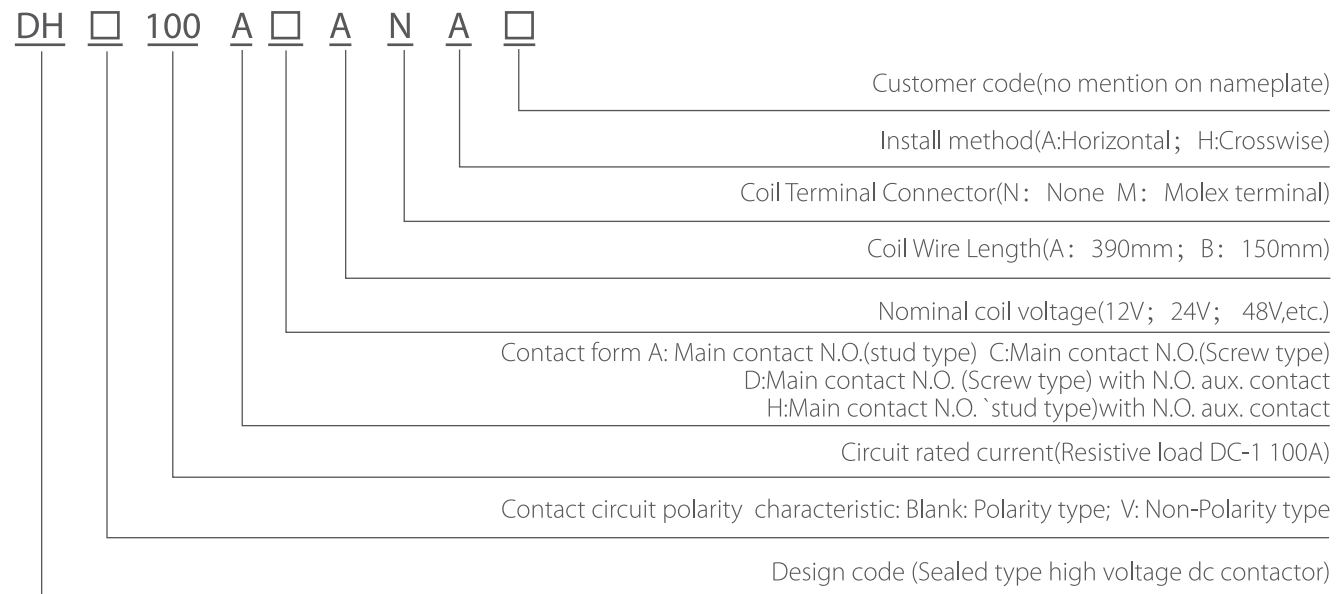
Performance Data

Product No.	DH100 DHV100
Contact arrangement	1H(SPST-NO)
Rated load current of contact(Resistive load)	100A(DC-1)
The max switch current	1000A(320VDC) 1cycle
Contact voltage drop	≤80mV@100A
Switching voltage	12 ~ 900V DC
Pick-up time(including contact bounce)	Max. 30ms.
Contact bounce time	Max. 5ms.
Drop-out time	Max. 10ms.
Electrical endurance	Please refer to diagram of resistance load life
Mechanical endurance	300,000 ops
Aux. Contact arrangement	1NO
Rated load of aux. contact	2A/24V
Min. load of aux. contact	100mA/8V

Coil Data

Part No.	Nominal coil voltage (V)	Coil operating voltage(V)	Pick-up voltage (V)	Drop-out voltage (V)	Maintain current (A)	Rated power (W)
DH100 DHV100	12	0.85US-1.2US	≤9	≥1	≤0.6	5-7
	24		≤18	≥2	≤0.3	
	48		≤36	≥4	≤0.16	

Part Numbering System

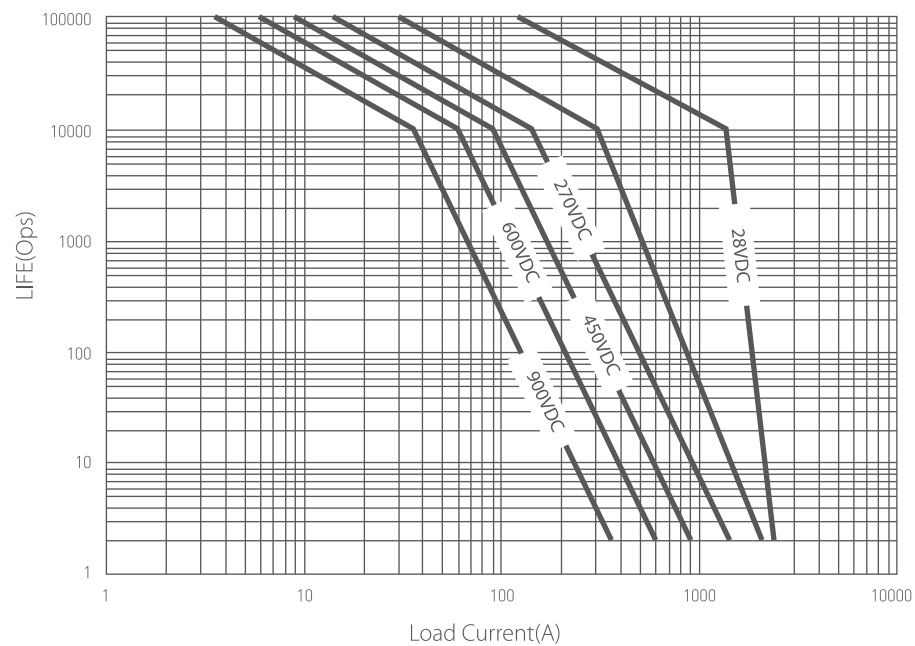


For example:DH100A12ANA means: Sealed type polarity high voltage dc contactor. Rated current is 100A with DC-1 load, main contact N.O.(stud type), Nominal coil voltage is DC12V,coil wire length is 390mm,horizontal installation.

Power Switching Capacity for Resistive Load

Remarks

1. The rated Electrical endurance is based on resistance load test. The load max inductance $\leq 300\mu\text{H}$; 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 300A to avoid contact cold welding.



Outline Mounting Dimension and Circuit Diagram

1 DH100A□□NA DHV100A□□NA

Dimensions: 41.6, 52.3, 8, 54, 17.8±0.3, 46±0.5, 63.3, M5-6h, ø35.4

Circuit Diagrams: DH100, DHV100

2 DH100A□□NH DHV100A□□NH

Dimensions: 41.6, 52.3, 21.4, 46±0.5, 63.3, M5-6h, ø35.4, 38.7, 17.8±0.3, 54

Circuit Diagrams: DH100, DHV100

3 DH100C□□NA DHV100C□□NA

Dimensions: 41.6, 52.3, 8, 54, 17.8±0.3, 46±0.5, 58, M5x 10 Hex bolt, ø35.4

Circuit Diagrams: DH100, DHV100

4 DH100C□□NH DHV100C□□NH

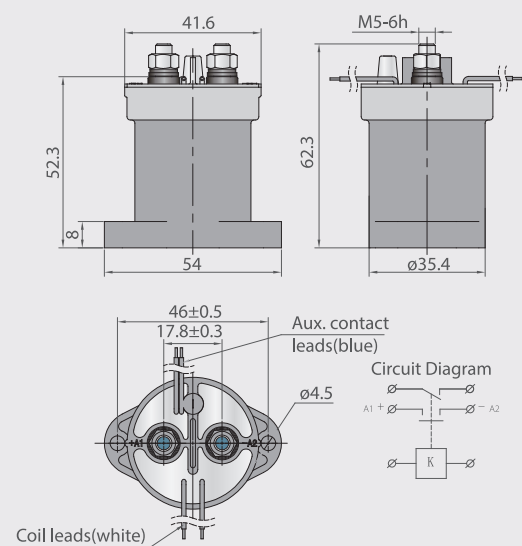
Dimensions: 41.6, 52.3, 21.4, 46±0.5, 58, Hex bolt, ø35.4, 38.7, 17.8±0.3, 54

Circuit Diagrams: DH100, DHV100

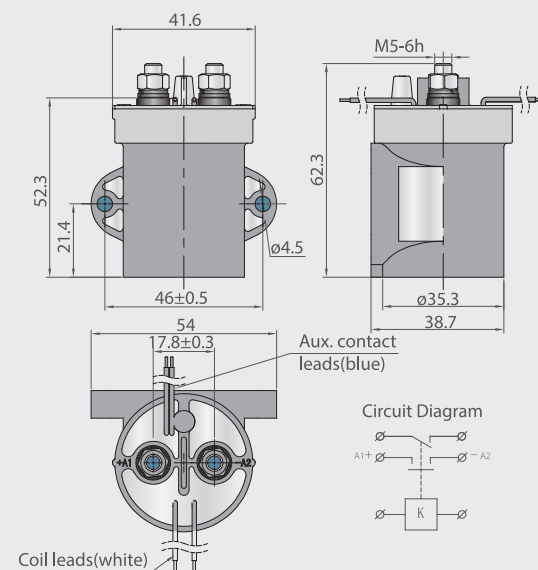
Dimension (mm)	0 ~ 30	30 ~ 60	60 ~ 100	Above 100
Tolerance grade not noted (mm)	±0.3	±0.5	±1	±2

Outline Mounting Dimension and Circuit Diagram

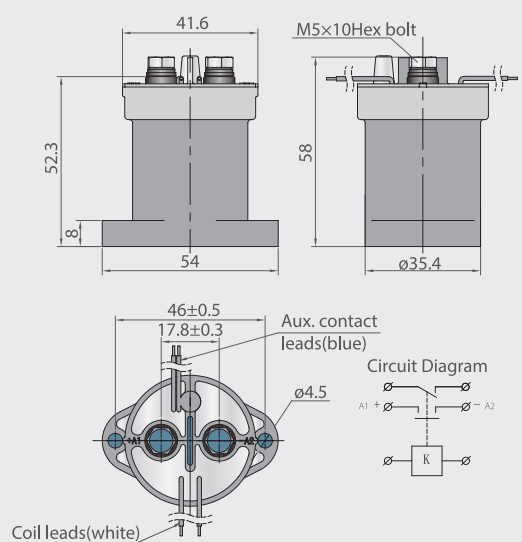
5 DH100H□□NA



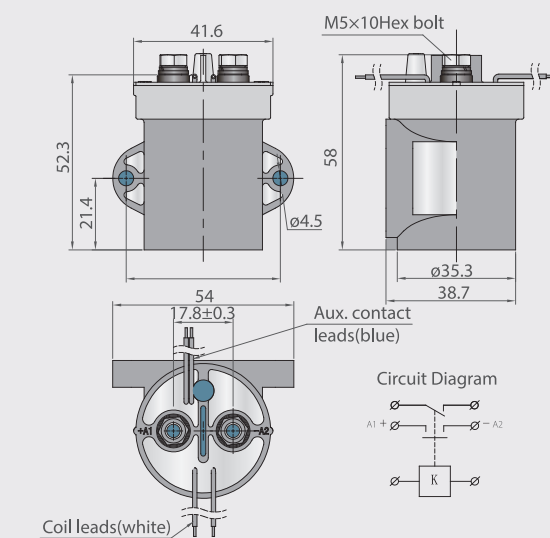
6 DH100H□□NH



7 DH100D□□NA



8 DH100D□□NH



NOTE:

- DH100 polarity series' contact circuit are polarized; Connect "+" polarity to the main contact terminal with "A1+" mark and connect "-" polarity to the main contact terminal with "A2-" mark.
- DHV100 non-polarity series' contact circuit are non-polar, and marked "A1", "A2" beside the main terminal.

DH200 DHV200
DH250 DHV250



Feature

- 200A / 250A Contact switch capacity, Small volume
- This series covers both polar and non-polar series. Polar type has a set of bridge N.O. contacts, contact circuit has "+", "-" polarity. Non-polar type contact circuit is non-polar and can be connected in any direction.
- The product is sealed and the contact chamber is filled with inert gas.

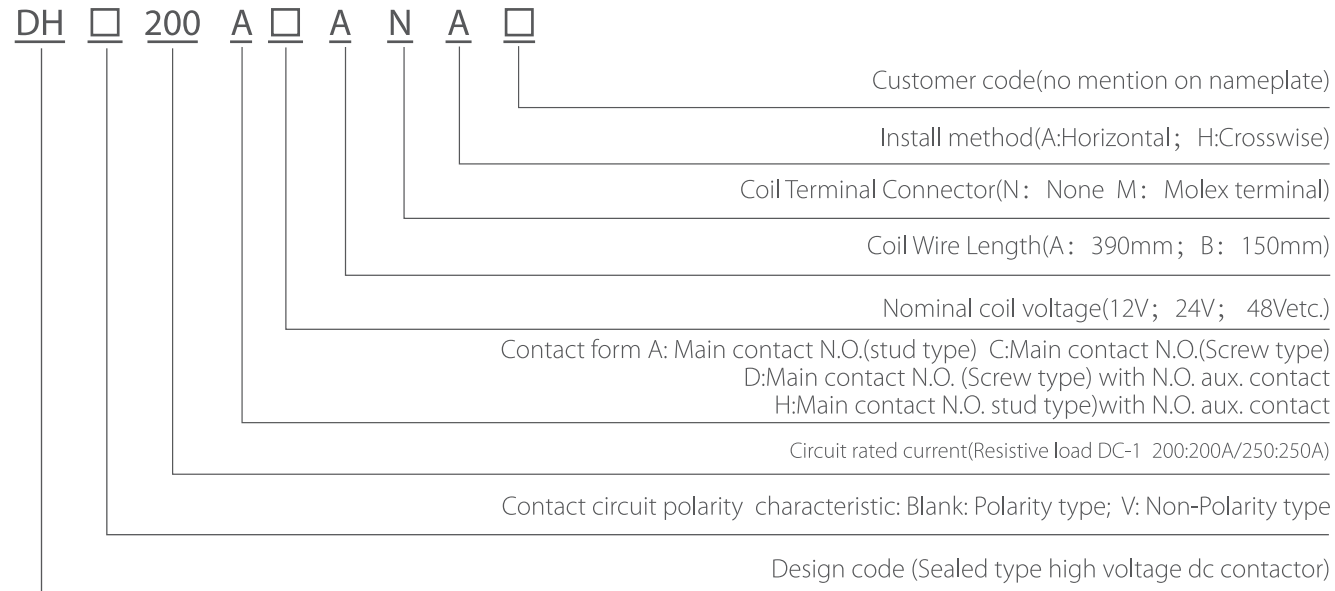
Performance Data

Product No.	DH200	DHV200	DH250	DHV250
Contact arrangement	1H(SPST-NO)			
Rated load current of contact(Resistive load)	200A(DC-1)		250A(DC-1)	
The max switch current	2000A(320VDC) 1cycle			
Contact voltage drop	≤80mV@200A		≤80mV@250A	
Switching voltage	12 ~ 900V DC			
Pick-up time(including contact bounce)	Max. 40ms.			
Contact bounce time	Max. 5ms.			
Drop-out time	Max. 10ms.			
Electrical endurance	Please refer to diagram of resistance load life			
Mechanical endurance	300,000 ops			
Aux. Contact arrangement	1NO			
Rated load of aux. contact	2A/24V			
Min. load of aux. contact	100mA/8V			

Coil Data

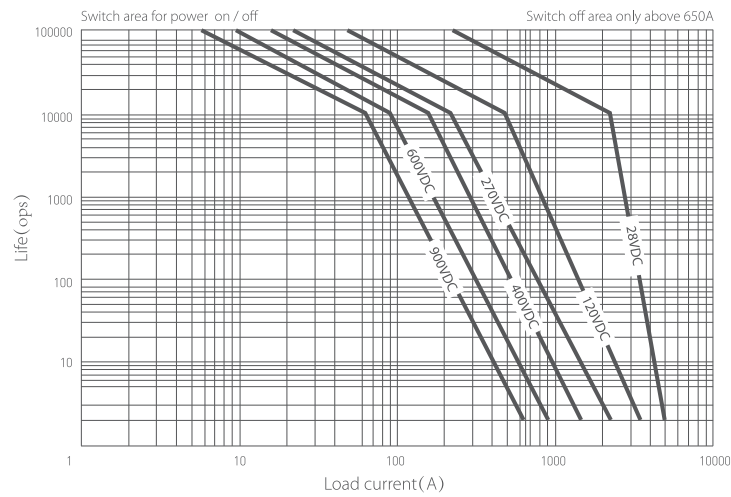
Part No.	Nominal coil voltage (V)	Coil operating voltage(V)	Pick-up voltage (V)	Drop-out voltage (V)	Rated power (W)
DH200 DHV200 DH250 DHV250	12	0.85US-1.2US	≤9	≥1	12-15
	24		≤18	≥2	
	48		≤36	≥4	

Part Numbering System

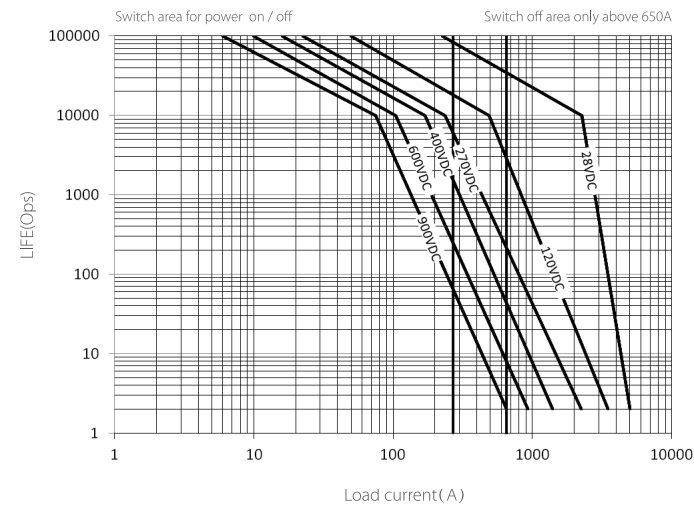


For example:DH200A12ANA means: Sealed type polarity high voltage dc contactor, Rated current is 200A with DC-1 load, main contact N.O.(stud type),without aux. contact, Nominal coil voltage is DC12V,coil wire length is 390mm,horizontal installation.

DH200,DHV200 Power Switching Capacity for Resistive Load



DH250,DHV250 Power Switching Capacity for Resistive Load



Remarks

1. The rated Electrical endurance is based on resistance load test. The load max inductances≤300μH; 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.

Outline Mounting Dimension and Circuit Diagram

1	DH200A□□NA	DHV200A□□NA
	DH250A□□NA	DHV250A□□NA

2	DH200A□□NH	DHV200A□□NH
	DH250A□□NH	DHV250A□□NH

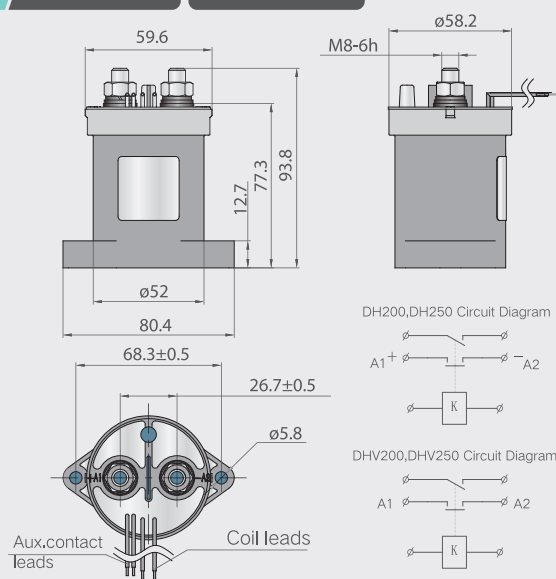
3	DH200C□□NA	DHV200C□□NA
	DH250C□□NA	DHV250C□□NA

4	DH200C□□NH	DHV200C□□NH
	DH250C□□NH	DHV250C□□NH

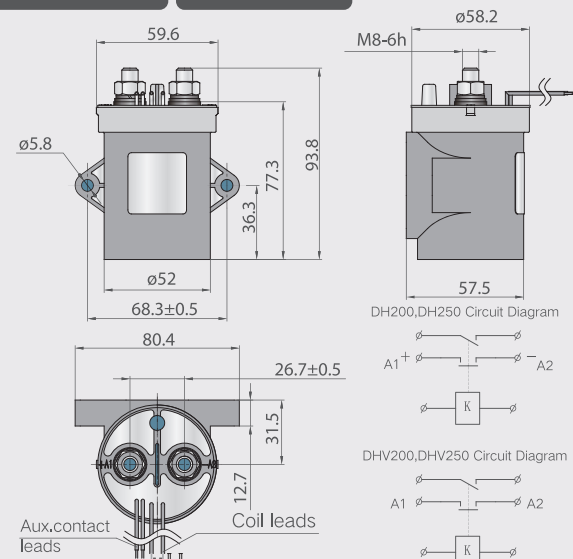
Dimension (mm)	0 ~ 30	30 ~ 60	60 ~ 100	Above 100
Tolerance grade not noted (mm)	±0.3	±0.5	±1	±2

Outline Mounting Dimension and Circuit Diagram

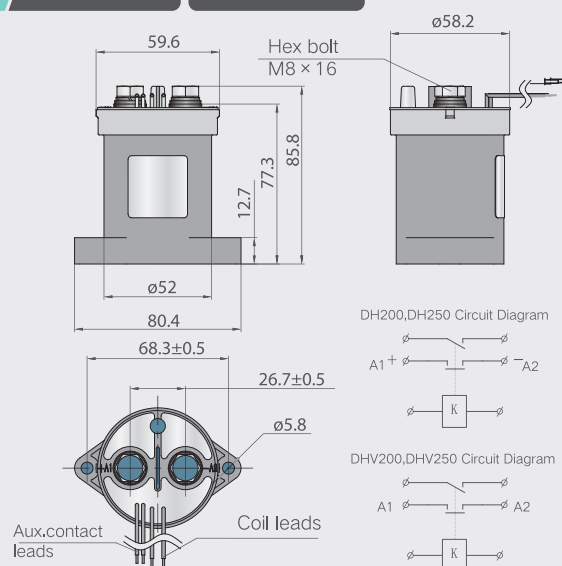
5 DH200H□□NA DHV200H□□NA
DH250H□□NA DHV250H□□NA



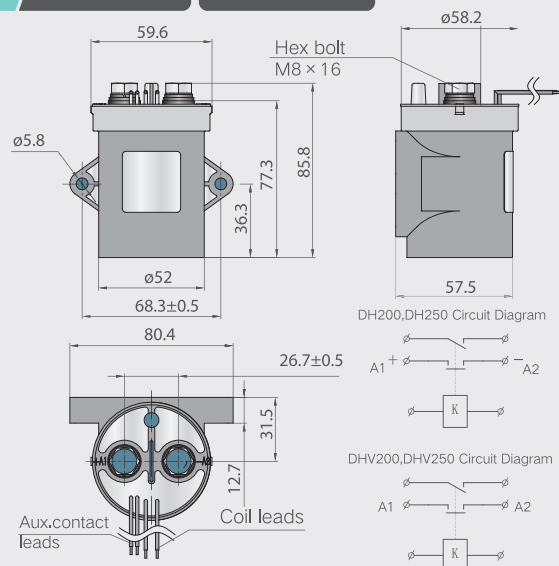
6 DH200H□□NH DHV200H□□NH
DH250H□□NH DHV250H□□NH



5 DH200D□□NA DHV200D□□NA
DH250D□□NA DHV250D□□NA



5 DH200D□□NH DHV200D□□NH
DH250D□□NH DHV250D□□NH



Remarks:

- DH polarity series' both coil and main contact are polarized; Please connect coil red wire to "+" polarity & coil black wire to "-" polarity; Connect "+" polarity to the main contact terminal with "A1+" mark, and connect "-" polarity to the main contact terminal with "A2-" mark.
- DHV non-polarity series, only coil are polarized, please connect coil red wire to "+" polarity & coil black wire to "-" polarity; While the contact circuit are non-polar and marked "A1", "A2" beside the main terminal.

Energy Saving Type

DH150 DHV150
DH200 DHV200
DH250 DHV250



Feature

- 150A/200A/250A Contact switch capacity, Small volume
- This series covers both polar and non-polar series. Polar type has a set of bridge N.O. contacts, contact circuit has "+", "-" polarity. Non-polar type contact circuit is non-polar and can be connected in any direction.
- Rated power is very low, coil maintain power Max 1.8W
- The product is sealed and the contact chamber is filled with inert gas.

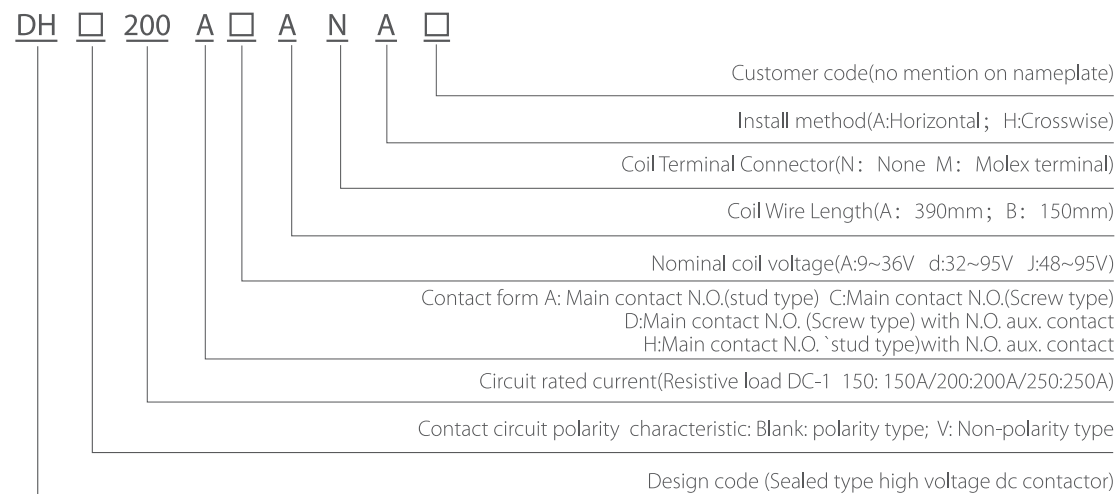
Performance Data

Product No.	DH150	DHV150 / DH200	DHV200 / DH250	DH250	DHV250
Contact arrangement	1H(SPST-NO)				
Rated load current of contact(Resistive load)	150A	200A	250A		
The max switch current	2000A(320VDC) 1cycle				
Contact voltage drop	≤80mV@150A	≤80mV@200A	≤80mV@250A		
Switching voltage	12 ~ 900V DC				
Pick-up time(including contact bounce)	Max. 30ms.				
Contact bounce time	Max. 5ms.				
Drop-out time	Max. 10ms.				
Electrical endurance	Please refer to diagram of resistance load life				
Mechanical endurance	300,000 ops				
Aux. Contact arrangement	1NO				
Rated load of aux. contact	2A/24V				
Min. load of aux. contact	100mA/8V				

Coil Date

Part No.	Nominal coil voltage (V)	Coil operating voltage(V)	Pick-up voltage (V)	Drop-out voltage (V)	Starting current (A)	Maintain current (A)
DH150 DHV150	9-36	9-36	8-9	5.5-7	3.8	0.18@12V 0.09@24V
DH200 DHV200	32-95	32-95	29-31	23-25	1.3	0.03@48V

Part Numbering System

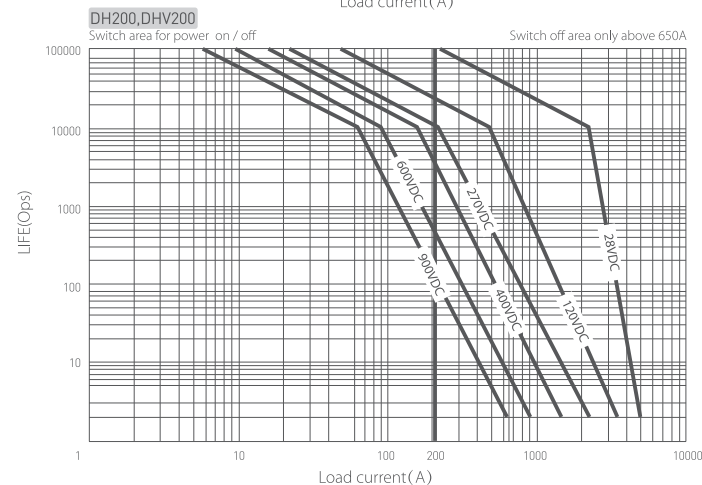
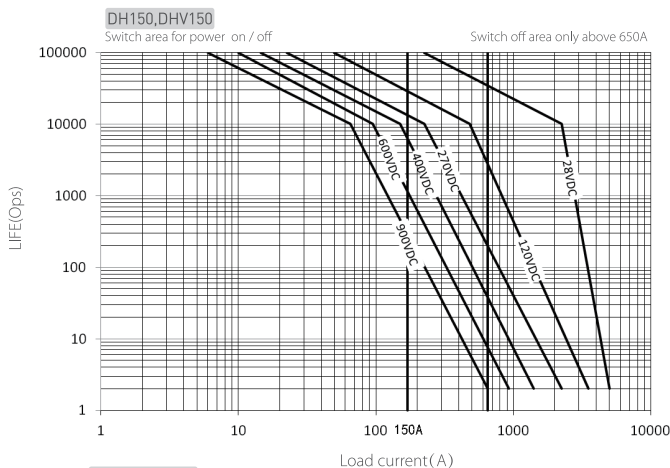
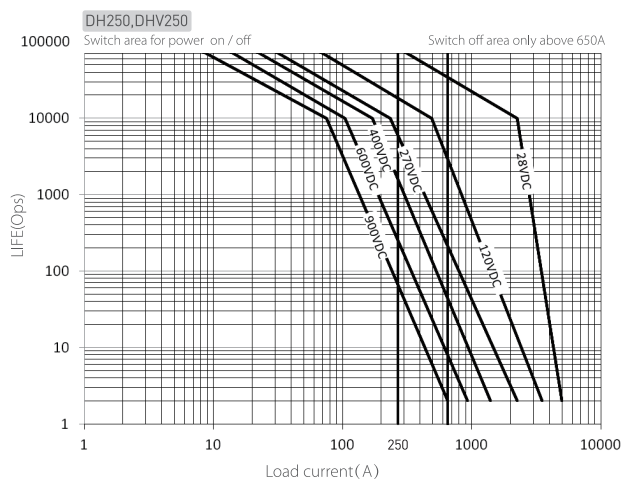


For example:DH200AAANA means: Sealed type polarity high voltage dc contactor. Rated current is 200A at DC-1 load, main contact N.O.(stud type),without aux. contact, Nominal coil voltage is DC 9 ~ 36V,coil wire length is 390mm,horizontal installation.

Power Switching Capacity for Resistive Load

Remarks

- 1.The rated Electrical endurance is based on resistance load test. The load max inductance≤300μH; 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.



Outline Mounting Dimension and Circuit Diagram

1	DH150A□□NA	DH200A□□NA	DH250A□□NA
	DHV150A□□NA	DHV200A□□NA	DHV250A□□NA

2	DH150A□□NH	DH200A□□NH	DH250A□□NH
	DHV150A□□NH	DHV200A□□NH	DHV250A□□NH

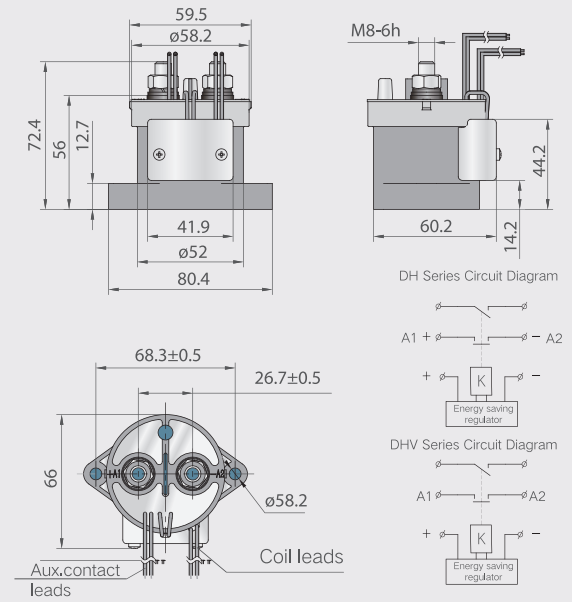
3	DH150C□□NA	DH200C□□NA	DH250C□□NA
	DHV150C□□NA	DHV200C□□NA	DHV250C□□NA

4	DH150C□□NH	DH200C□□NH	DH250C□□NH
	DHV150C□□NH	DHV200C□□NH	DHV250C□□NH

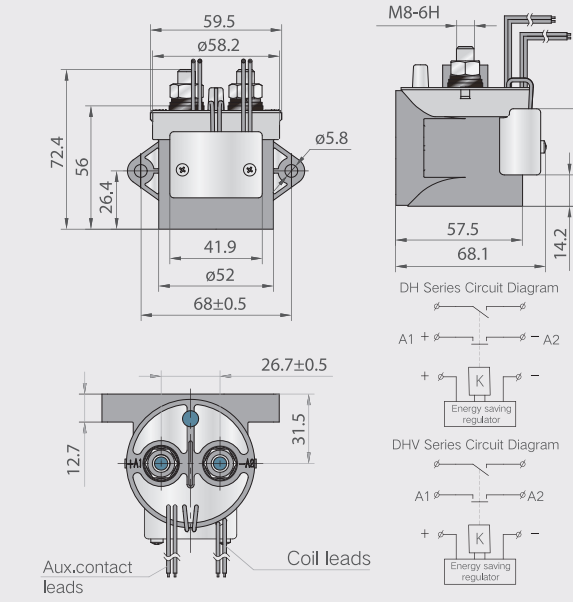
Dimension (mm)	0 ~ 30	30 ~ 60	60 ~ 100	Above 100
Tolerance grade not noted (mm)	±0.3	±0.5	±1	±2

Outline Mounting Dimension and Circuit Diagram

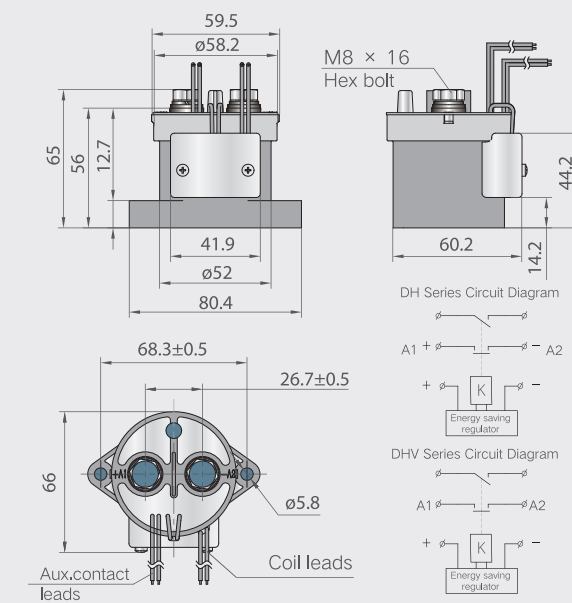
- 5 DH150H□□NA DH200H□□NA DH250H□□NA
- DHV150H□□NA DHV200H□□NA DHV250H□□NA



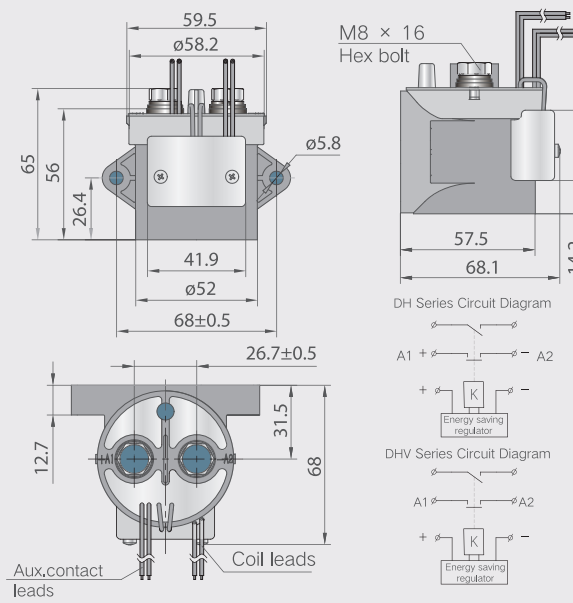
- 6 DH150H□□NH DH200H□□NH DH250H□□NH
- DHV150H□□NH DHV200H□□NH DHV250H□□NH



- 7 DH150D□□NA DH200D□□NA DH250D□□NA
- DHV150D□□NA DHV200D□□NA DHV250D□□NA



- 8 DH150D□□NH DH200D□□NH DH250D□□NH
- DHV150D□□NH DHV200D□□NH DHV250D□□NH



Remarks:

- The outline mounting dimensions of products are same whether with or without aux. contact;
- DH polarity series' both coil and main contact are polarized; Please connect coil red wire to "+" polarity & coil black wire to "-" polarity; Connect "+" polarity to the main contact terminal with "A1+" mark, and connect "-" polarity to the main contact terminal with "A2-" mark.
- DHV non-polarity series, only coil are polarized, please connect coil red wire to "+" polarity & coil black wire to "-" polarity; While the contact circuit are non-polar and marked "A1", "A2" beside the main terminal.

DH300 DH400



Feature

- 300A/400A Contact switch capacity, Small volume
- A set of bridge type N.O. contacts & a set of N.O. aux contact, contact circuit has "+", "-" polarity
- Rated power is very low, coil maintain power Max 4W

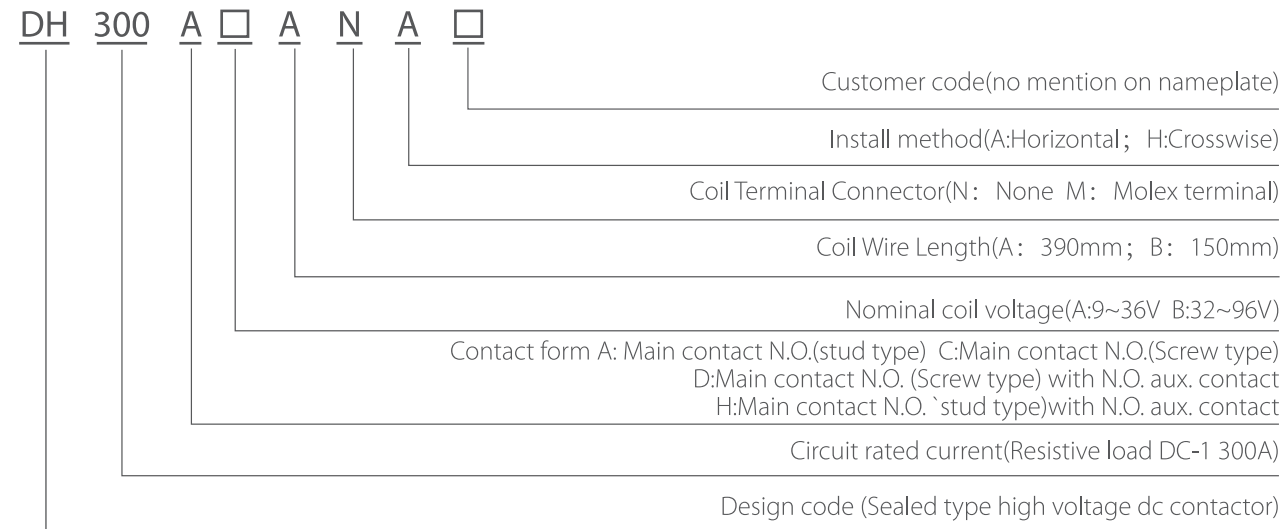
Performance Data

Product No.	DH300	DH400
Contact arrangement	1H(SPST-NO)	
Rated load current of contact(Resistive load)	300A(DC-1)	400A(DC-1)
The max switch current	2500A(320VDC) 1cycle	
Contact voltage drop	≤80mV@300A	
Switching voltage	12 ~ 900V DC	
Pick-up time(including contact bounce)	Max. 40ms.	
Contact bounce time	Max. 5ms.	
Drop-out time	Max. 10ms.	
Electrical endurance	Please refer to diagram of resistance load life	
Mechanical endurance	300,000 ops	
Aux. Contact arrangement	1NO	
Rated load of aux. contact	2A/24V	
Min. load of aux. contact	100mA/8V	

Coil Data

Part No.	Nominal coil voltage (V)	Coil operating voltage(V)	Pick-up voltage (V)	Drop-out voltage (V)	Starting current (A)	Maintain current (A)
DH300	9-36	9-36	8-9	5.5-7	3.8	0.33@12V 0.17@24V
DH400	32-95	32-95	29-31	23-25	1.3	0.1A@48V

Part Numbering System

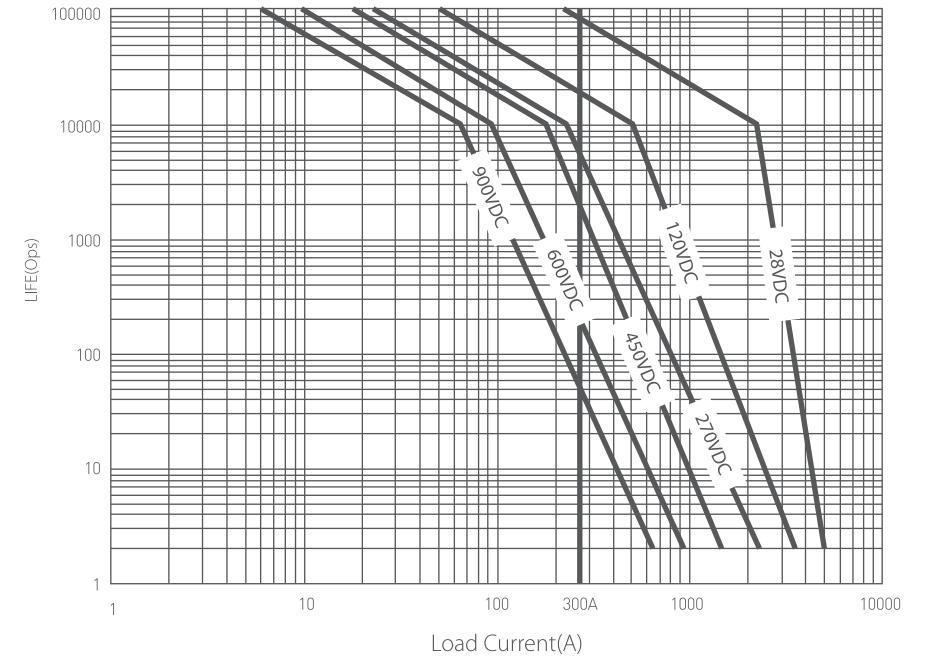


For example:DH300AAANA means: Sealed type high voltage dc contactor. Rated current is 300A at DC-1 load, main contact N.O.(stud type),without aux. contact, Nominal coil voltage is DC 9 ~ 36V,- coil wire length is 390mm,horizontal installation.

DH300 Power Switching Capacity for Resistive Load

Remarks

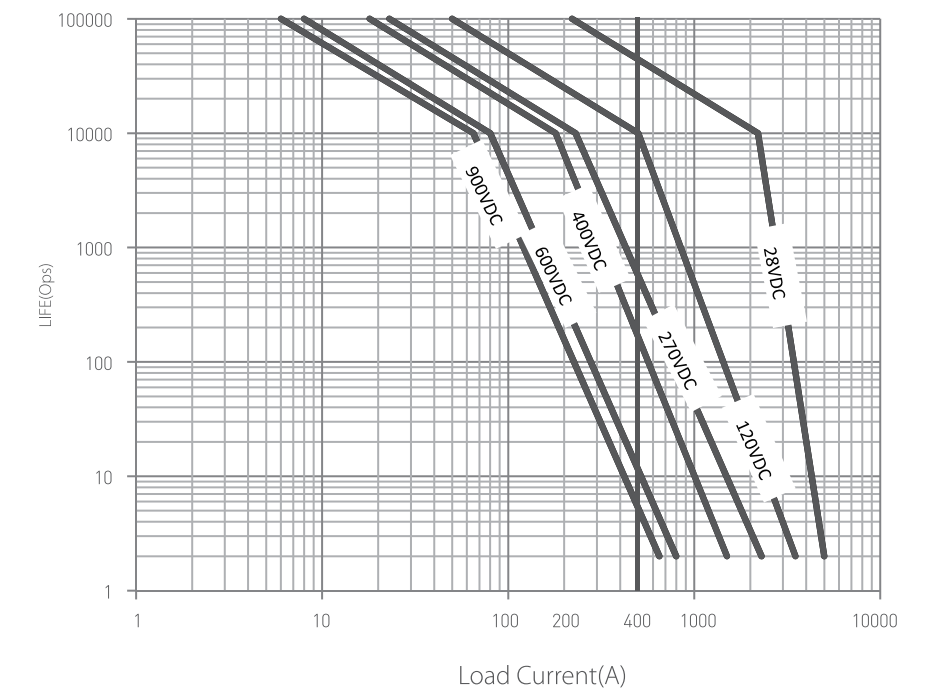
- 1.The rated Electrical endurance is based on resistance load test. The load max inductance $\leq 300\mu\text{H}$; If used with inductive load, please do contact the factory first.
- 2.The above curve is drawn according to the test and infer data. Suggest users confirm in practical use.
- 3.When the 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.



DH400 Power Switching Capacity for Resistive Load

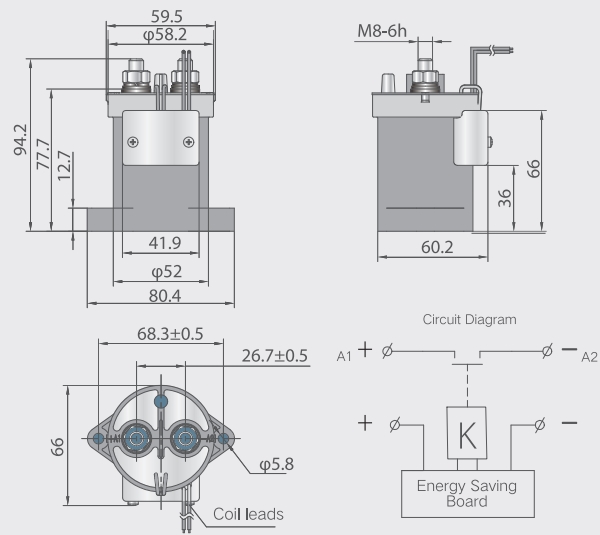
Remarks

- 1.The rated Electrical endurance is based on resistance load test. The load max inductance $\leq 300\mu\text{H}$; 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.

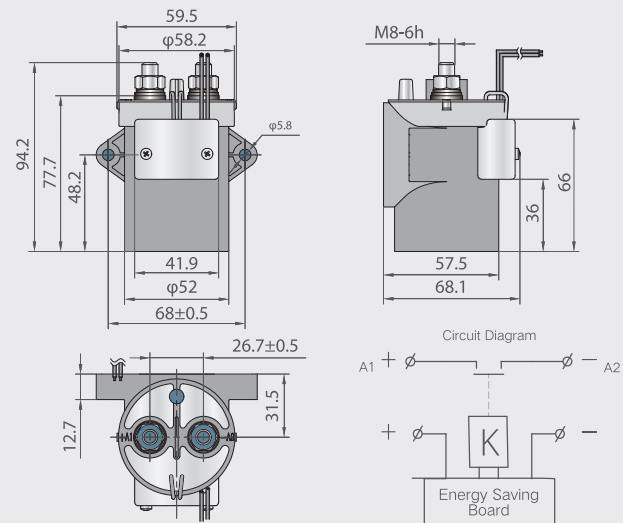


Outline Mounting Dimension and Circuit Diagram

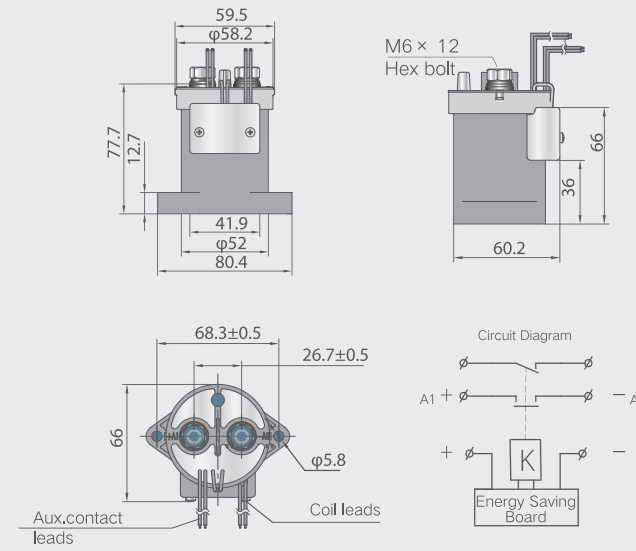
1 DH300A□□NA DH400A□□NA



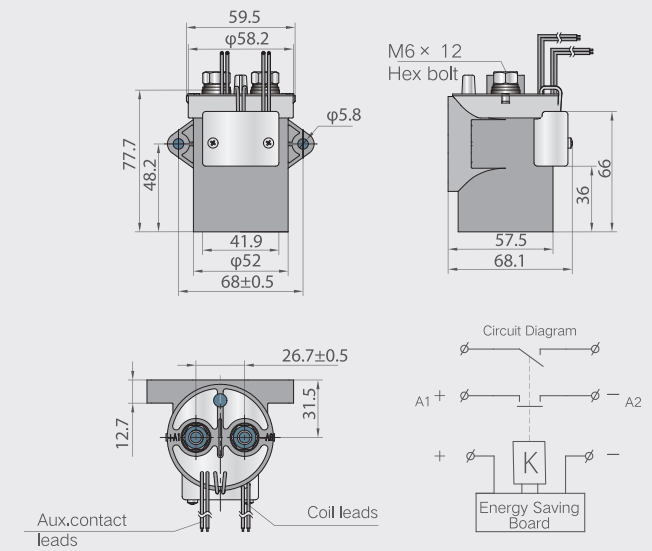
2 DH300A□□NH DH400A□□NH



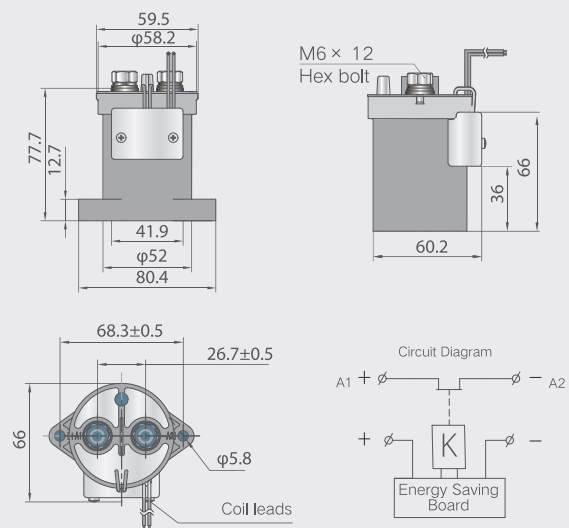
5 DH300C□□NA DH400C□□NA



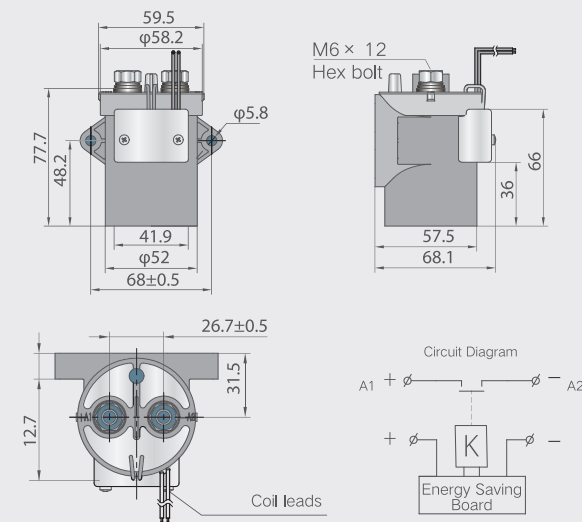
6 DH300C□□NH DH400C□□NH



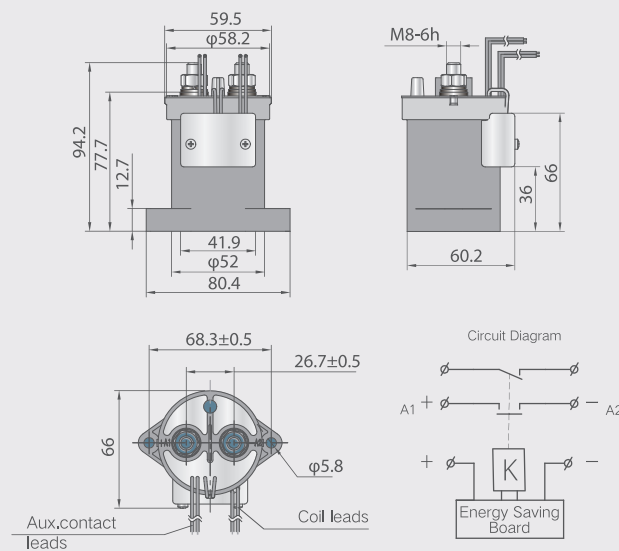
3 DH300H□□NA DH400H□□NA



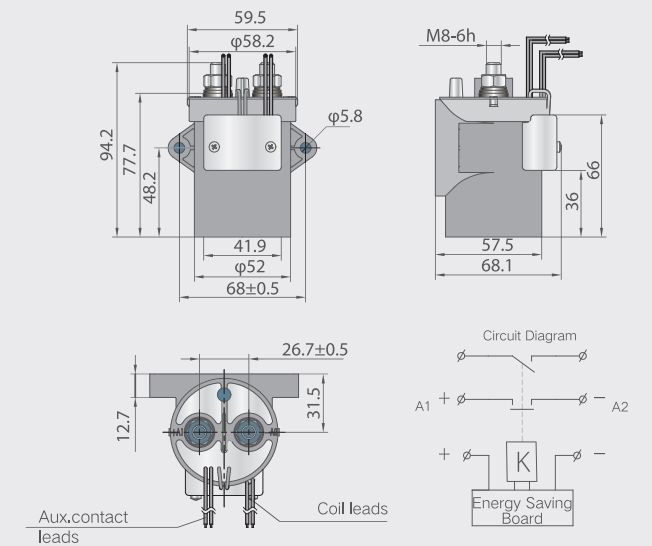
4 DH300H□□NH DH400H□□NH



7 DH300D□□NA DH400D□□NA



8 DH300D□□NH DH400D□□NH



Dimension (mm)	0-30	30-60	60-100	> 100
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Tolerance grade not noted (mm)	±0.3	±0.5	±1	±2
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Remarks:

- The outline mounting dimensions of products are same whether with or without aux. contact;
- 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 "A1+" mark, and connect "-" polarity to the main contact terminal with "A2-" mark.

DHC SERIES

Product Instruction

Insulation resistance		≥100MΩ(1000VDC)	
Impact resistance	Stability	Half-sine shock pulse:11ms Test time:10μs	ON: 196m/s ² (above 20G) OFF: 98 m/s ² (above 10G)
	Strength	Half-sine shock pulse:6ms	590 m/s ² (above 50G)
Vibration resistance		10Hz~500Hz 49 m/s ² (above 5G)	
Conditions of usage	Operating environment、transport、storage environment.		Temperature -40℃~+85℃ Humidity5%~85%RH(No ice, no condensation)
Product installation mode		Arbitrarily	

Product Use Instructions

- In order to prevent looseness, please use the gaskets correctly when installing the contactor. Please use suitable screws and locking torque to install the contactor, otherwise the product may be damaged in the case of excessive torque. Please refer to following torsion list:
M4 Screw/Nut: 2N.m~3N.m
M5 Screw/Nut: 3N.m~4N.m
M6 screw/Nut: 6N.m ~ 8N.m
M8 Screw/Nut: 9N.m ~ 11N.m
Insertion and extrPick-up force : (1) Load lead-out pin: 49N;(2) Coil lead-out pin: 49N (Only available for DHC20)
- Please avoid grease and other foreign matter attached to the terminals. Please use the suitable connection wire; otherwise it may lead to abnormal heating of the terminals. Please refer to following advised connecting wire:
DHC20:≥4.0mm² DHC40: ≥10mm² DHC100:≥40mm² DHC150:≥50mm² DHC200:≥60mm²
DHC300:≥100mm² DHC400:≥120mm² DHC600:≥200mm² DHC800:≥300mm²
- The contactor is a high-voltage DC switching device. In the final state, it may not be able to connect or cut off. Once the product cannot be cut off, may lead to abnormal heat and smoke, fire or other accidents. Therefore, please avoid the use of the above Performance Datas (including but not limited to coil rating, load ratings and Electrical endurance, etc.). Please use a circuit that can quickly cut off the load in an emergency; To ensure safety, the product should be replaced regularly.
- The contact terminal and coil are including both polarity and non-polarity series, please ensure they would be connected correctly according to the product mark; If the terminals are connected to the opposite direction, the electrical characteristics that are promised in this Performance Data will not be guaranteed.
- Contact rating is the value under resistive load. Please take measure of surge absorption device together with inductive load when using the L/R≥1ms inductive load (L load), otherwise it may lead to the decrease of electrical endurance and defective switch.
- This point only available for contactor below 150A(DHC20~DHC150)
It is recommended to install the nonlinear resistance (recommend using variable resistance) in order to suppress the reverse electromotive force of coil. But please do not use diode; otherwise it will lead to the decline of contactor performance.
- This point only available for contactor above 150A(DHC200~DHC400)
This product includes reverse EMF circuit restrained in coil, so there is no need to use surge suppression device. Do not make the voltage rise slowly when testing the pick-up voltage, please drive the coil by the quick rising edge (step power supply), otherwise the contactor will not work. The coil current of the product will be switched automatically after connected about 0.2s, and the repeated on-off operation of < 0.2s will cause the contactor failure.
- It is strictly prohibited to place the contactor for a long time in the environment beyond the operating temperature (-40℃ ~+ 85℃) of the product.
- Please do not install the product in a strong magnetic field (the periphery of a transformer, or magnet) or near the heating object.
- Please use the specified connector when connecting to the connector.
- In principle, please do not use it when the contactor has fallen down.

DHC20



Feature

- 20A Contact switch capacity, Small volume;
- A set of bridge type N.O.contacts; Non-polarity of contact circuit;
- Using ceramic brazing technology, the contact part is sealed with hydrogen gas. The contact does not oxidize, can quickly cut off in the dc high voltage;

Performance Data

Contact Data	Contact arrangement	1H(SPST-NO)	
	Rated load(Resistive load)	20A	
	Min applicable load (Resistive load)	1A/12VDC	
	Max switch voltage	1000VDC	
	Contact voltage drop(initial)	≤80mV@20A	
Electrical endurance	Current carrying capacity(a)	20A : continued	
		30A : 1h	
		40A: 20min	
		80A: 30s	
		120A: 10s	
Ops	Mechanical endurance	200A: 0.6s	
		Pick-up time (at 20℃ rated volt.)	≤30ms (Excluding contact bounce)
		Drop-out time (at 20℃ rated volt.)	≤10ms
		Contact bounce time (at 20℃ rated volt.)	≤5ms
		Dielectric strength	Between open contact
Between contact and coil	4000VAC 1min		
Electrical endurance	20A 450VDC	≥100,000 ops	
	20A 750VDC	≥75,000 ops	
		≥200,000 ops	

Note: (a): The above data is tested at ambient temperature, connecting wire cross section area≥4mm²

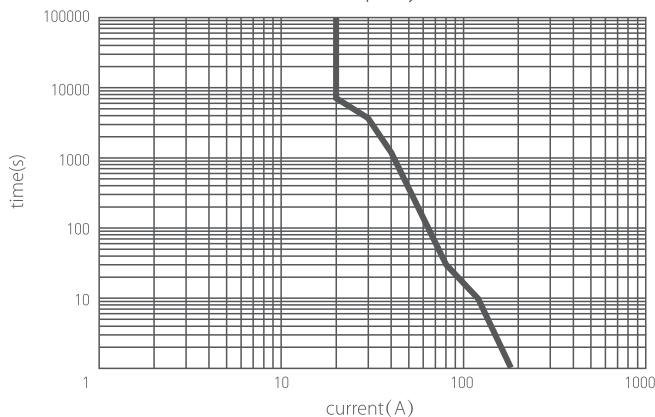
(b): Except for special instructions, the Electrical endurance On-off ratio is 1s:9s

Coil Data

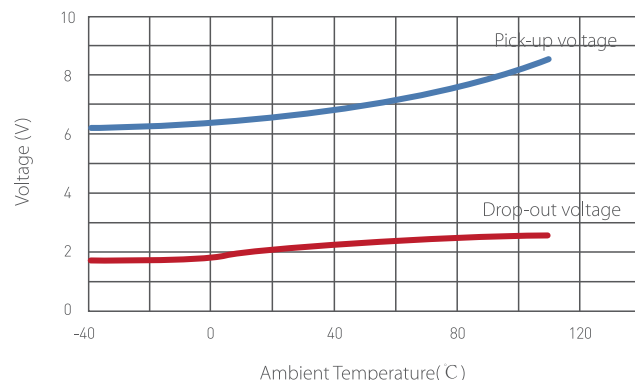
P/N	Nominal coil volt	Pick-up volt	Drop-out volt	Max operate volt	Rated current (±10%)	Rated power
DHC20	12V DC	≤9V DC	≥1V DC	16V DC	0.25A	3W
	24V DC	≤18V DC	≥2V DC	32V DC	0.125A	3W

Power Switching Capacity for Resistive Load

Endurance Capability Curve



Pick-up /Drop-out voltage curve



Note: The above data is tested at 85 C ambient temperature, connecting wire cross section area $\geq 4\text{mm}^2$. The data is for reference only; please do not use to select the fuse directly.

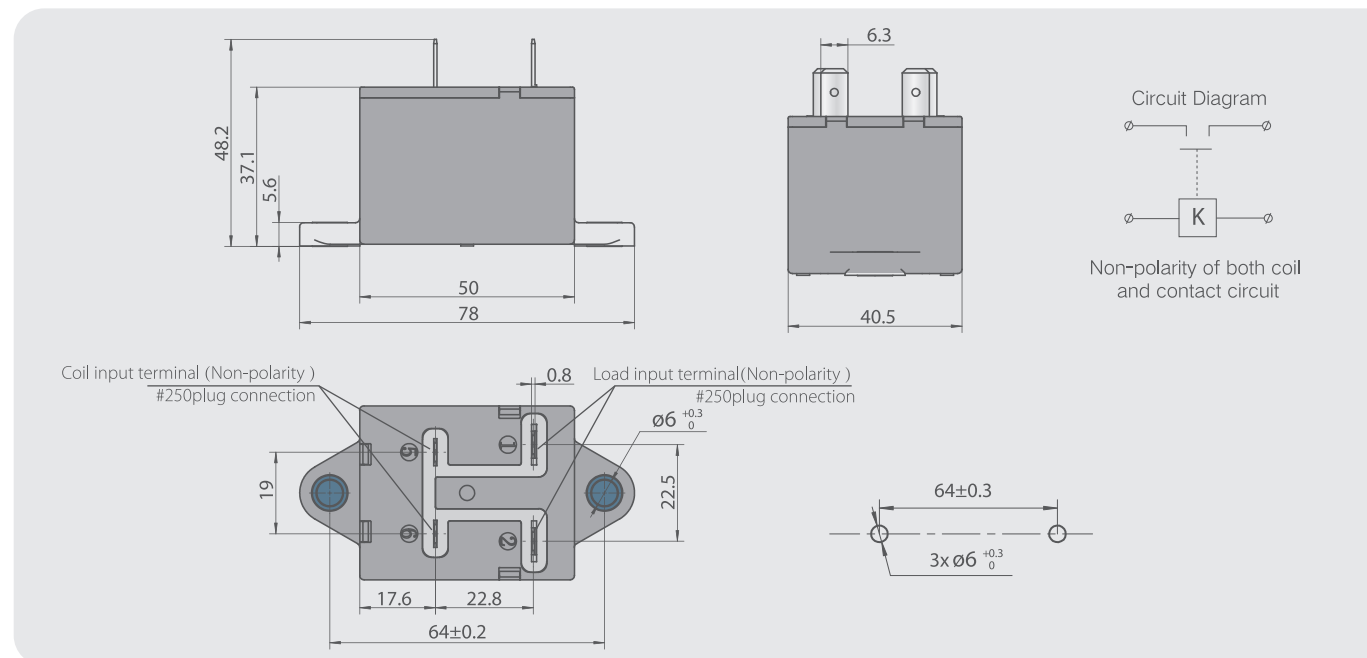
Note: The above data are tested by random sampling of coil volt. 12V DC product. The data is for reference only, (test qty: n=3)

Part Numbering System

DHC 20 N P □ C A (XYZ)



Outline mounting dimension and circuit diagram



Tolerance grade not noted

<10mm	±0.3
10~50mm	±0.6
>50mm	±1.0

DHC40



Feature

- 40A Contact switch capacity, Small volume;
- A set of bridge type N.O.contacts; Non-polarity of contact circuit;
- Using ceramic brazing technology, the contact part is sealed with hydrogen gas. The contact does not oxidize, can quickly cut off in the dc high voltage;

Performance Data

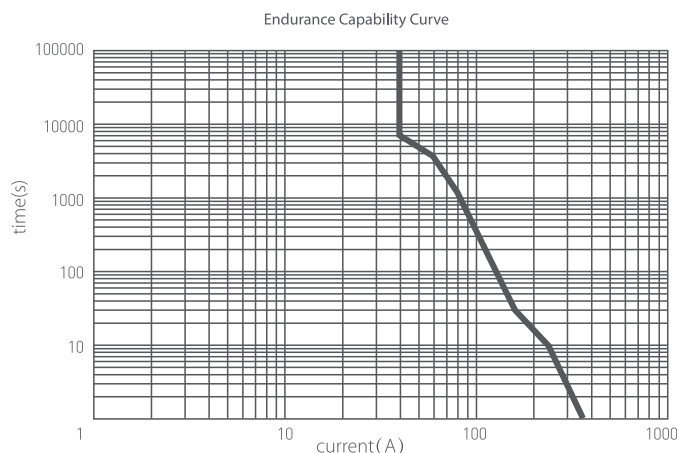
Category	Parameter	Value	
Contact Data	Contact arrangement	1H(SPST-NO)	
	Rated load(Resistive load)	40A	
	Min applicable load (Resistive load)	1A/12VDC	
	Max switch current	400A(300VDC)1cycle	
	Max switch voltage	1000VDC	
	Contact voltage drop(initial)	≤80mV@40A	
	Current carrying capacity(a)	40A:continued	
		60A : 1h	
		80A : 20min	
		160A: 30s	
Electrical endurance	Pick-up time (at 20 C rated volt.)	≤30ms (Excluding contact bounce)	
	Drop-out time (at 20 C rated volt.)	≤10ms	
	Contact bounce time (at 20 C rated volt.)	≤5ms	
	Dielectric strength	Between open contact	3000VAC 1min
		Between contact and coil	4000VAC 1min
Ops	Electrical endurance	40A 450VDC	≥20,000 ops
		40A 750VDC	≥1,000 ops
	Mechanical endurance		≥200,000 ops

Note: (a): The above data is tested at ambient temperature, connecting wire cross section area 10mm².
(b): Except for special instructions, the electric life On-off ratio is 1s:9s

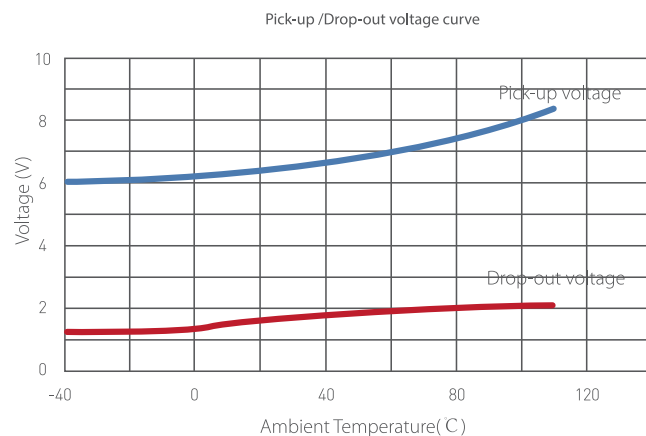
Coil Data

P/N	Nominal coil volt	Pick-up volt	Drop-out volt	Max operate volt	Rated current (±10%)	Rated power
DHC40	12V DC	≤9V DC	≥1V DC	16V DC	0.45A	5W
	24V DC	≤18V DC	≥2V DC	32V DC	0.23A	5W

Power Switching Capacity for Resistive Load

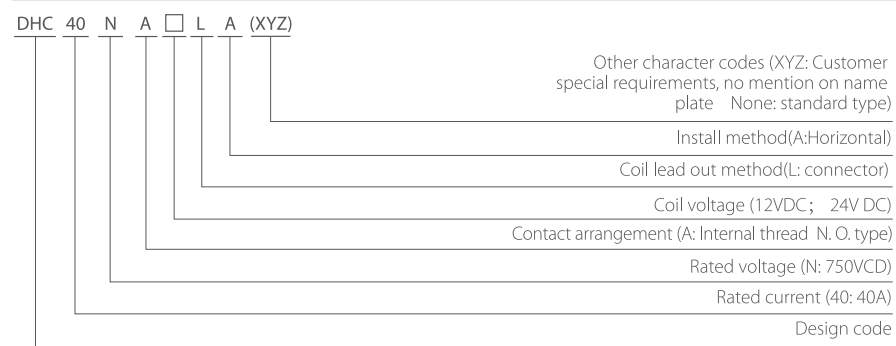


Note: The above data is tested at 85°C ambient temperature, connecting wire cross section area $\geq 10\text{mm}^2$. The data is for reference only; please do not use to select the fuse directly.

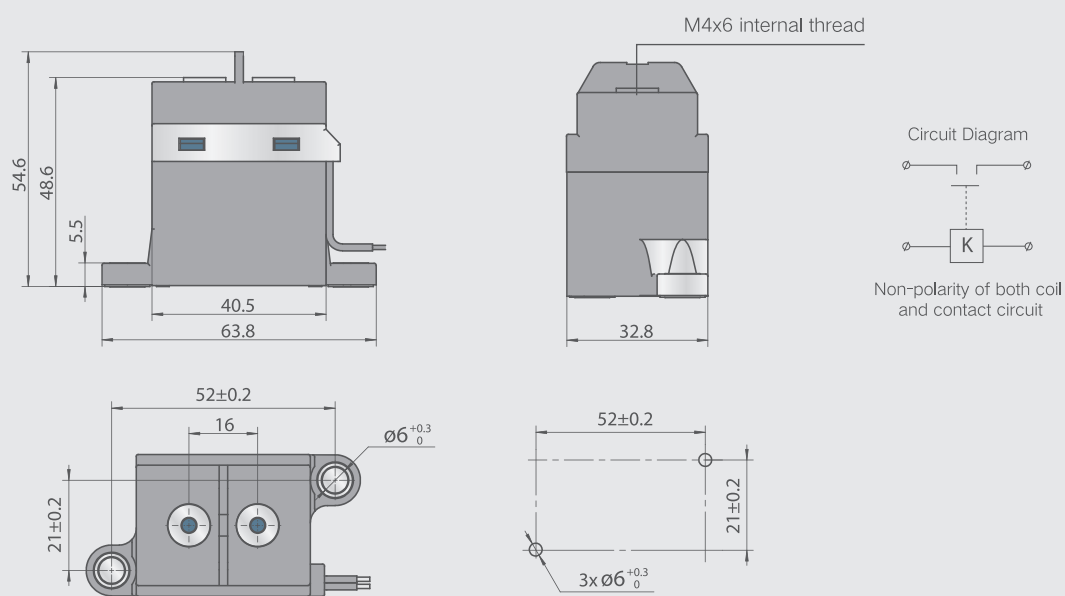


Note: The above data are tested by random sampling of coil volt. 12V DC product. The data is for reference only, (test qty: n=3)

Part Numbering System



Outline mounting dimension and circuit diagram



Tolerance grade not noted

<10mm	±0.3
10~50mm	±0.6
>50mm	±1.0

DHC100
DHC150



Feature

- 100A、150A Contact switch capacity, Small volume;
- A set of bridge type N.O. contacts; contact circuit has "+", "-" polarity;
- Using ceramic brazing technology, the contact part is sealed with hydrogen gas. The contact does not oxidize, can quickly cut off in the dc high voltage;

Performance Data

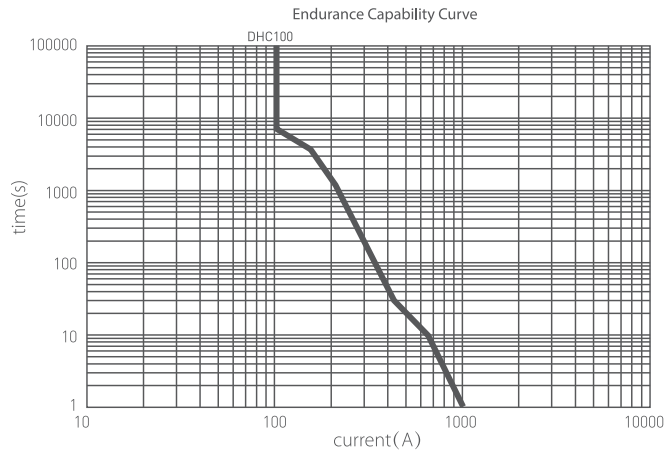
Contact Data	Contact arrangement	1H(SPST-NO)	1H(SPST-NO)	
	Rated load(Resistive load)	100A	150A	
Min applicable load (Resistive load)	1A/12VDC	1A/12VDC		
Max switch current	1000A(300VDC)1cycle	1500A(300VDC)1cycle		
Max switch voltage	1000VDC	1000VDC		
Contact voltage drop(initial)	≤60mV@100A	≤60mV@150A		
Current carrying capacity(a)	100A : continued	150A : continued		
	120A : 2h	180A : 2h		
	200A : 10min	300A : 10min		
	400A : 2min	600A : 2min		
	600A : 30s	900A : 30s		
	900A : 30s	900A : 30s		
Electrical endurance	Pick-up time (at 20°C rated volt.)	≤30ms(Excluding contact bounce)	≤30ms(Excluding contact bounce)	
	Drop-out time (at 20°C rated volt.)	≤10ms	≤10ms	
	Contact bounce time (at 20°C rated volt.)	≤5ms	≤5ms	
	Dielectric strength	Between open contact	3000VAC 1min	3000VAC 1min
		Between contact and coil	4000VAC 1min	4000VAC 1min
Ops	Electrical endurance	100A 450VDC/150 450VDC	≥3,000 ops	
		100A 750VDC/150 750VDC	≥1,000 ops	
	Mechanical endurance	≥200,000 ops	≥200,000 ops	

Note: (a): The above data is tested at ambient temperature, connecting wire cross section area DHC100 $\geq 40\text{mm}^2$, DHC150 $\geq 50\text{mm}^2$
(b): Except for special instructions, the electric life On-off ratio is 1s:9s

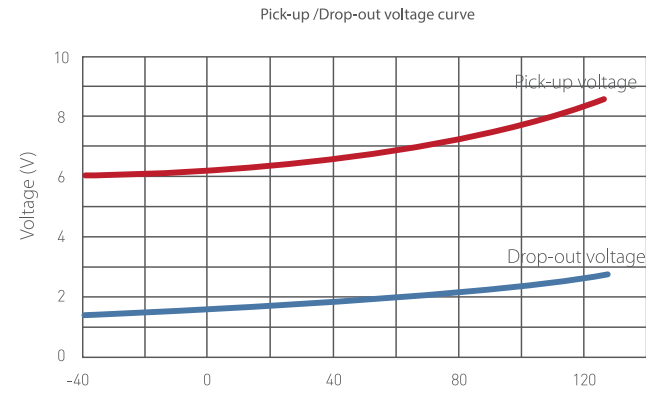
Coil Data

P/N	Nominal coil volt	Pick-up volt	Drop-out volt	Max operate volt	Rated current (±10%)	Rated power
DHC100	12V DC	≤9V DC	≥1V DC	16V DC	0.55A	6.5W
DHC150	24V DC	≤18V DC	≥2V DC	32V DC	0.26A	6.5W

DHC100 Power Switching Capacity for Resistive Load

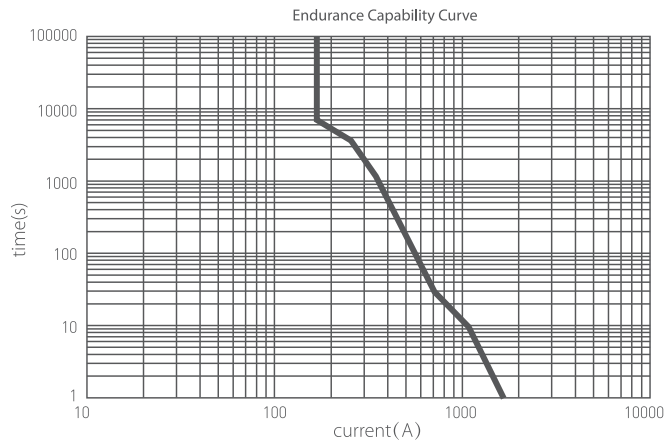


Note: The above data is tested at 85 C DHC100 ambient temperature, connecting wire cross section area $\geq 40\text{mm}^2$. The data is for reference only, please do not use to select the fuse directly.

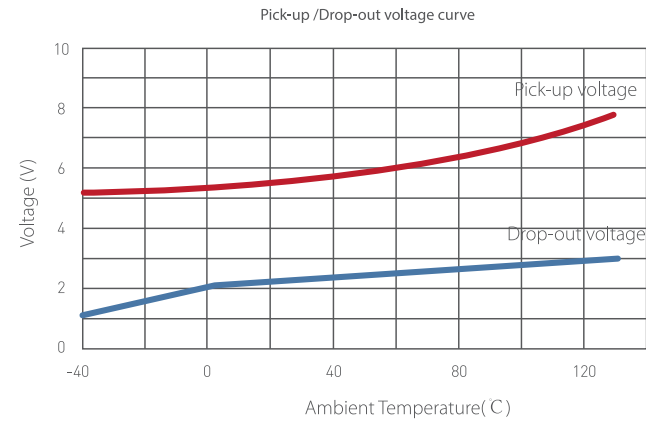


Note: The above data are tested by random sampling of coil volt. 12VDC product. The data is for reference only, (test qty:n=3)

DHC150 Power Switching Capacity for Resistive Load

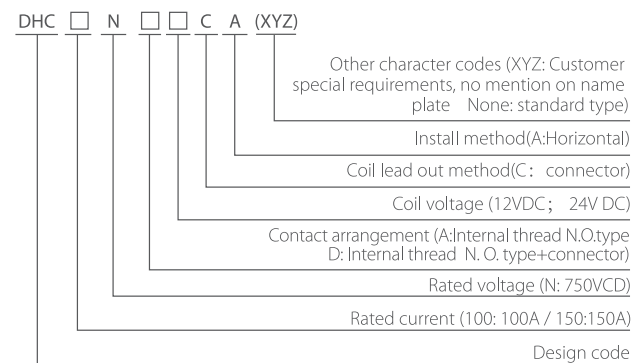


Note: The above data is tested at 85 C DHC150 ambient temperature, connecting wire cross section area $\geq 50\text{mm}^2$. The data is for reference only, please do not use to select the fuse directly.

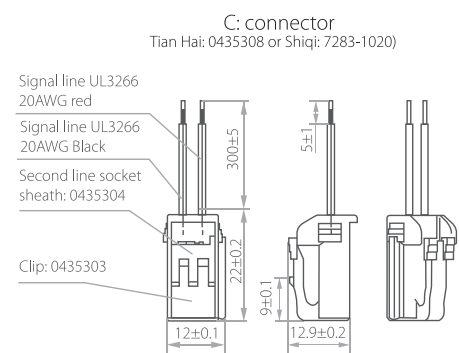


Note: The above data are tested by random sampling of coil volt. 12VDC product. The data is for reference only, (test qty:n=3)

Part Numbering System



Coil lead-out method



Outline mounting dimension and circuit diagram

1 DHC100NA DHC150NA

Circuit Diagram

Contact circuit is polarity
Coil circuit is non-polarity

Note: The main contact connect "+" polarity to the main contact terminal with "1+" mark, and connect "-" polarity to the main contact terminal with "2-" mark.

Outline mounting dimension and circuit diagram

2 DHC100ND DHC150ND

Circuit Diagram

Contact circuit is polarity
Coil circuit is non-polarity

Note: The main contact connect "+" polarity to the main contact terminal with "1+" mark, and connect "-" polarity to the main contact terminal with "2-" mark.

Tolerance grade not noted	<10mm	±0.3
	10~50mm	±0.6
	>50mm	±1.0

DHC200



Feature

- 200A Contact switch capacity, Small volume;
- A set of bridge type N.O.contacts; contact circuit has "+", "-" polarity;
- Coil with energy saving device, the max holding power consumption is 4.5W.
- Using ceramic brazing technology, the contact part is sealed with hydrogen gas. The contact does not oxidize, can quickly cut off in the dc high voltage;

Performance Data

Contact Data	Contact arrangement		1H(SPST-NO)
	Rated load(Resistive load)		200A
	Min applicable load (Resistive load)		1A/12VDC
	Max switch current		2000A(300VDC)1cycle
	Max switch voltage		1000VDC
	Contact voltage drop(initial)		≤80mV@200A
Electrical endurance	Current carrying capacity(a)		200A : continued 300A : 60min 400A : 20min 800A : 30s 2000A : 0.6s
	Pick-up time (at 20 °C rated volt.)		≤30ms (Excluding contact bounce)
	Drop-out time (at 20 °C rated volt.)		≤10ms
	Contact bounce time (at 20 °C rated volt.)		≤5ms
	Dielectric strength	Between open contact	3000VAC 1min
		Between contact and coil	2500VAC 1min
Ops	Electrical endurance	200A 450VDC	≥3,000 ops
		200A 750VDC	≥1,000 ops
	Mechanical endurance		≥200,000 ops

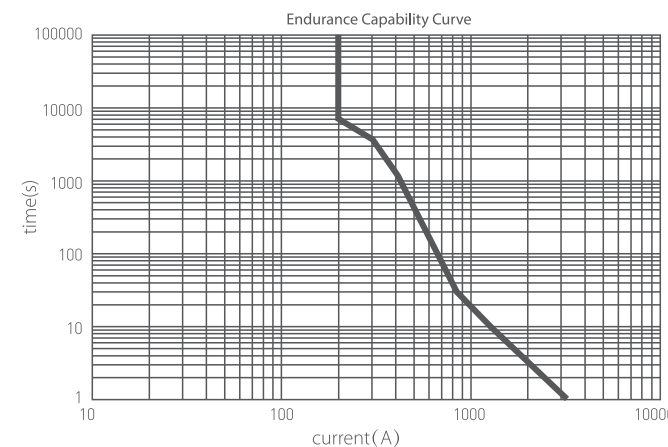
Note: (a): The above data is tested at ambient temperature, connecting wire cross section area≥60mm²

(b): Except for special instructions, the Electrical endurance On-off ratio is 1s:9s

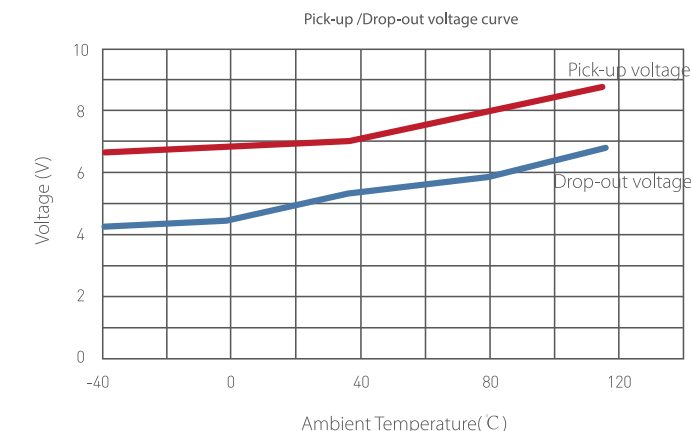
Coil Data

P/N	Nominal coil volt	Pick-up volt	Drop-out volt	Max operate volt	Rated current (±10%)	Rated power
DHC200	12V DC	≤9V DC	≥1V DC	16V DC	Pick-up: 3.33A Hold-in: 0.333A	Pick-up: 40W(0.2s Pick-up) Hold-in: 4W
	24V DC	≤18V DC	≥2V DC	32V DC	Pick-up: 1.67A Hold-in: 0.167A	Pick-up: 40W(0.2s Pick-up) Hold-in: 4W

Power Switching Capacity for Resistive Load

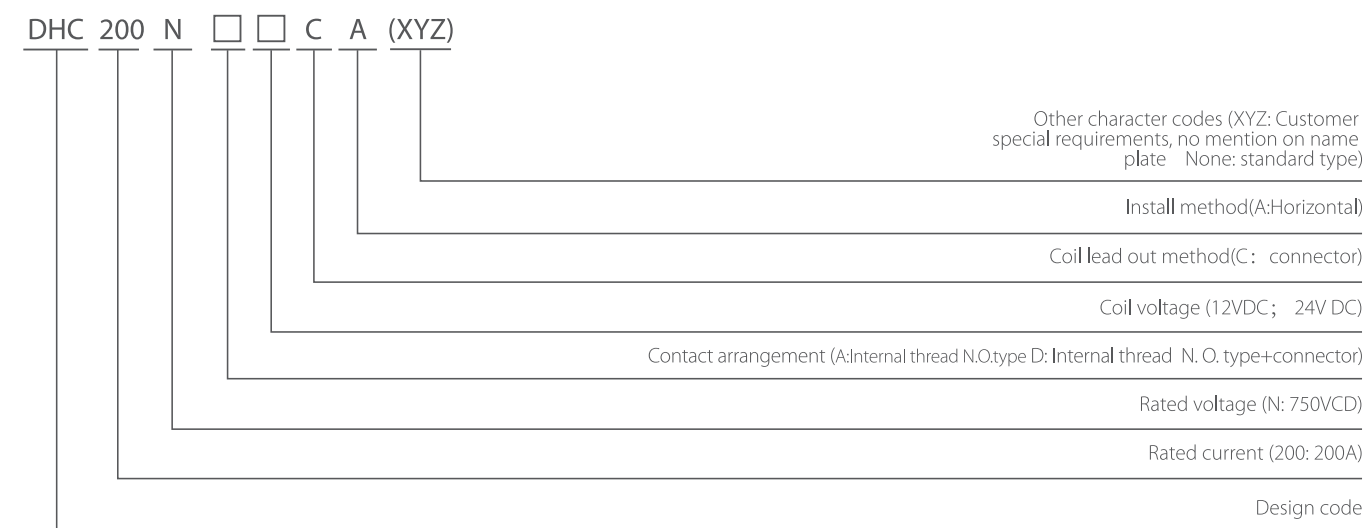


Note: The above data is tested at 85 °C ambient temperature, connecting wire cross section area≥60mm². The data is for reference only; please do not use to select the fuse directly.

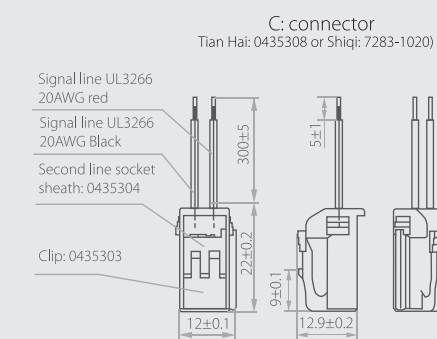


Note: The above data are tested by random sampling of coil volt. 12V DC product. The data is for reference only, (test qty: n=3)

Part Numbering System



Coil lead-out method



Outline mounting dimension and circuit diagram

1 DHC200NA

Coil V + (red)
Coil GND (black)

Circuit Diagram

1+ 2-
K
RED(+) BLACK(-)

Polarity of both coil and contact circuit

Note: The main contact terminal connect "+" polarity which marked "1+", and connect "-" polarity which marked "2-".

Outline mounting dimension and circuit diagram

2 DHC200ND

M8 external thread

Coil V + (red)
Coil GND (black)

Circuit Diagram

1+ 2-
K
RED(+) BLACK(-)

Polarity of both coil and contact circuit

Note: The main contact terminal connect "+" polarity which marked "1+", and connect "-" polarity which marked "2-".

Tolerance grade not noted

<10mm	±0.3
10~50mm	±0.6
>50mm	±1.0



DHC250

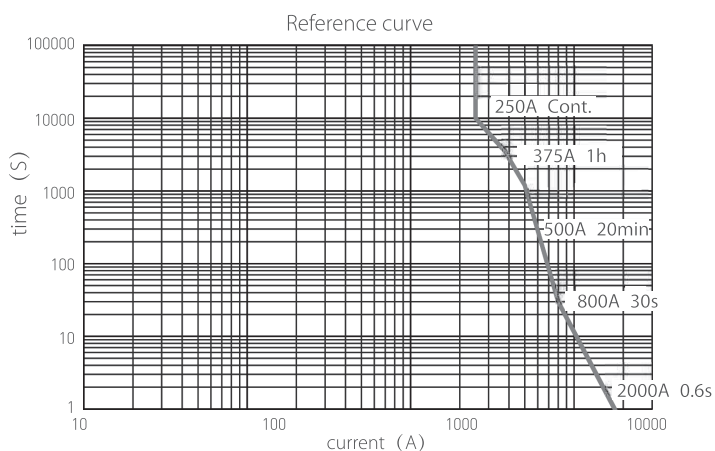
Performance Data

Contact Data	Contact form	1H (SPST-NO)
	Rated load(Resistive load)	250A
	Min applicable load (Resistive load)	1A/12VDC
	Max switch current	2000A (300VDC) 1次
Impact resistance	Stability	Half-sine shock pulse:11ms
	Strength	Half-sine shock
Vibration resistance	Stability	Half-sine shock
	Strength	Half-sine shock
Product installation mode	Stability	Half-sine shock
	Strength	Half-sine shock
Contact voltage drop(initial)		≤80mV@250A
Current carrying capacity(a)		250A: continued 375A: 1h 500A: 20min 800A: 30s 2000A: 0.6s
ON: 196m/s² (> 20G)		
OFF: 98 m/s² (> 10G)		
490 m/s² (> 50G)		
10Hz~500Hz 49 m/s² (> 5G)		
Arbitrarily		

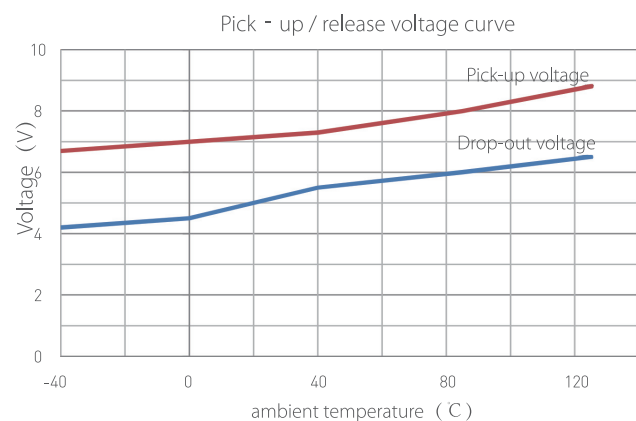
Coil Data

Model	Coil rated volt.	Pick-up volt.	Release volt.	Max operate volt.	Rated current (±10%)	Rated coil power
DHC250	12V DC	≤9V DC	≥1V DC	16V DC	Pick-up:2.92A Hold-in:0.375A	Pick-up:35W(0.2s Pick-up) Hold-in:4.5W
	24V DC	≤18V DC	≥2V DC	32V DC	Pick-up:1.46A Hold-in: 0.188A	Pick-up:35W(0.2s Pick-up) Hold-in:4.5W

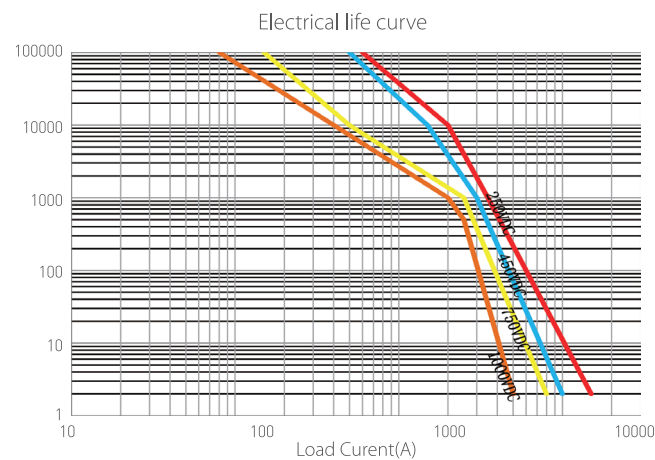
Current tolerance curve



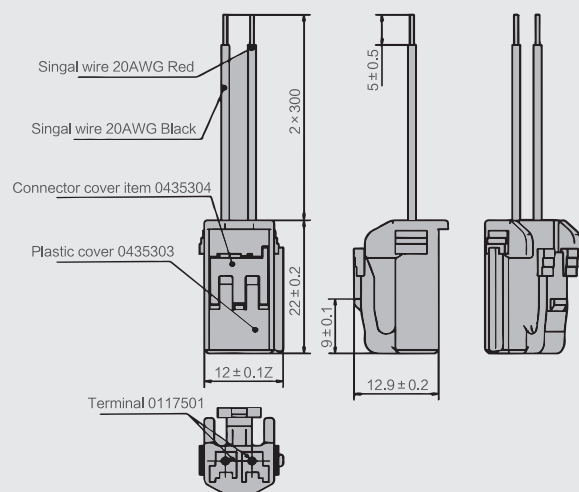
Note: The above data is tested at 85°C ambient temperature, Traverse area ≥ 95mm². The data is for reference only, please do not use to select the fuse directly.



The above data are tested by random sampling of coil volt. 12VDC product. The data is for reference only, (test qty:n=3)



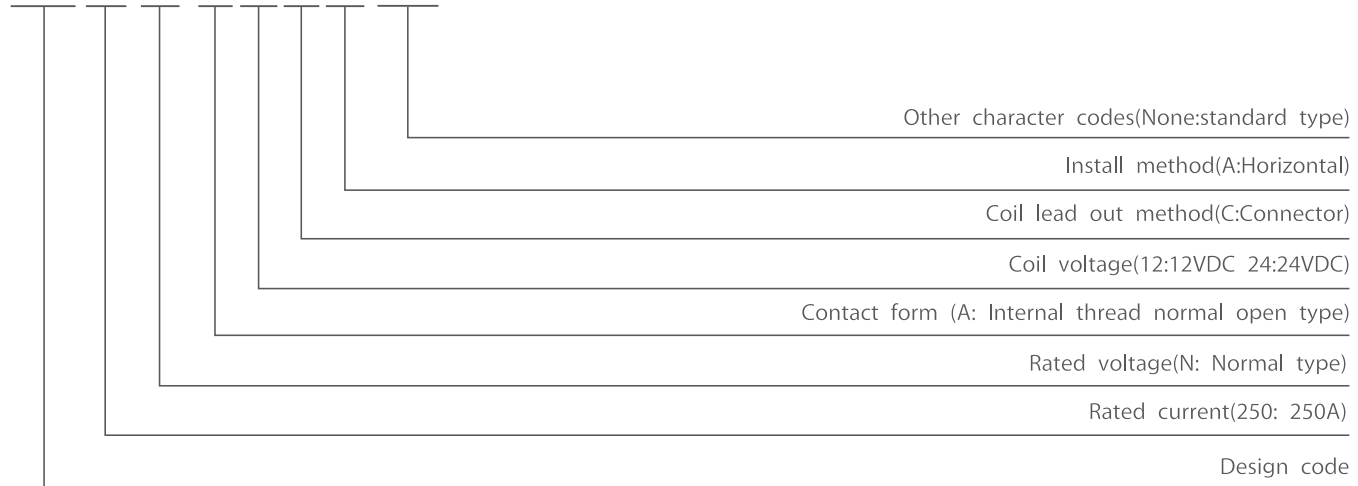
Coil lead out mode (Tianhai: 0435308 or Yazaki: 7283-1020)



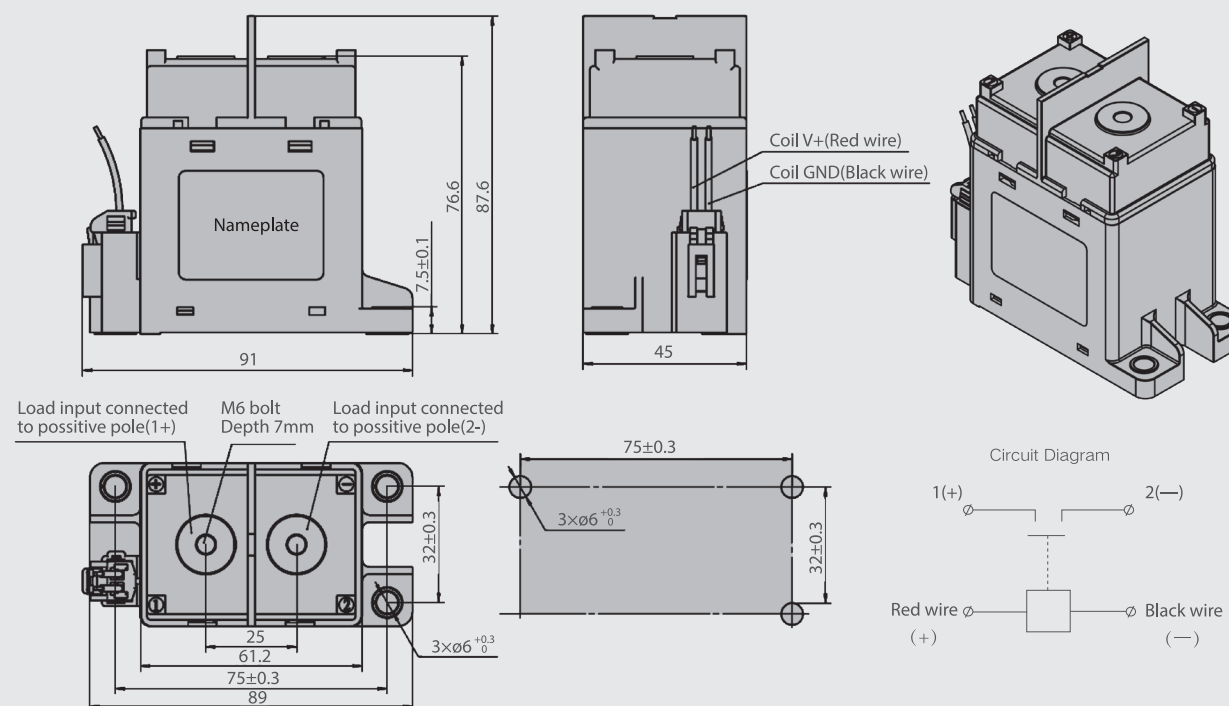
Note: The main contact connect “+” polarity to the main contact terminal with “1+” mark, and connect “-” polarity to the main contact terminal with “2-” mark.

Part Numbering System

DHC 250 N A □ C A (XYZ)



Shape installation and circuit diagram



DHC300 DHC400



Feature

- 300A-400A Contact switch capacity, Small volume;
- A set of bridge type N.O.contacts contact circuit has "+", "-" polarity;
- Coil with energy saving device, the max hold in power consumption is 4.5W.
- Using ceramic brazing technology, the contact part is sealed with hydrogen gas, the contact would not oxidize, can quickly switch off the dc high voltage;

Performance Data

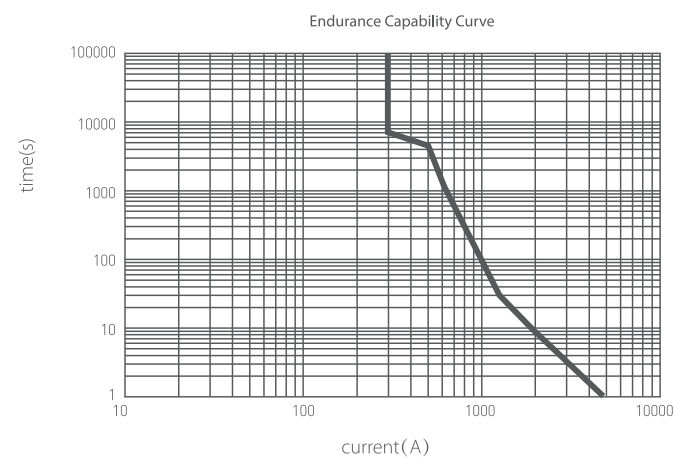
Contact Data	Contact arrangement	1H(SPST-NO)	1H(SPST-NO)
	Rated load(Resistive load)	300A	400A
	Min applicable load (Resistive load)	1A/12VDC	1A/12VDC
	Max switch current	2500A(320VDC)1cycle	2500A(320VDC)1cycle
	Max switch voltage	1000VDC	1000VDC
	Contact voltage drop(initial)	≤80mV@300A	≤80mV@400A
Current carrying capacity(a)	300A : continued	300A : continued	400A : continued
	450A : 60min	600A : 60min	600A : 60min
	600A : 20min	1200A : 20min	1200A : 20min
	1200A : 30s	3000A : 30s	3000A : 30s
	3000A : 0.6s		
Electrical endurance	Pick-up time (at 20 °C rated volt.)	≤30ms(Excluding contact bounce)	≤30ms(Excluding contact bounce)
	Drop-out time (at 20 °C rated volt.)	≤30ms	≤30ms
	Contact bounce time (at 20 °C rated volt.)	≤10ms	≤10ms
	Dielectric strength	Between open contact	3000VAC 1min
Between contact and coil		4000VAC 1min	4000VAC 1min
Ops	Electrical endurance	300A 450VDC/400 450VDC	≥3,000 ops
		300A 750VDC/400 750VDC	≥1,000 ops
	Mechanical endurance		≥200,000 ops

Note: (a): The above data is tested at ambient temperature, connecting wire cross section area DHC300≥100mm²,DHC400≥120mm²
(b): Except for special instructions, the Electrical endurance On-off ratio is 1s:9s

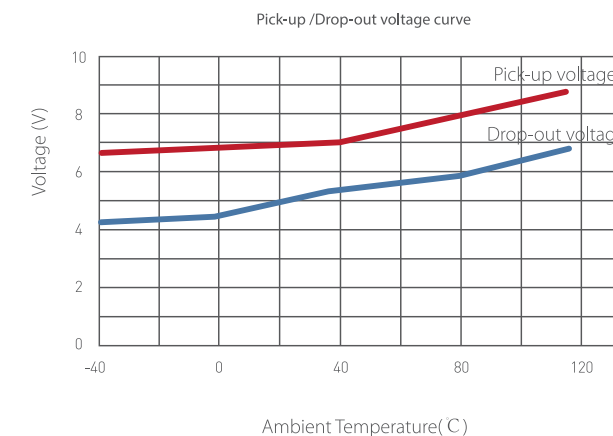
Coil Data

P/N	Nominal coil volt	Pick-up volt	Drop-out volt	Max operate volt	Rated current (±10%)	Rated power
DHC300	12V DC	≤9V DC	≥1V DC	16V DC	Pick-up: 3.75A Hold-in: 0.375A	Pick-up: 45W(0.2s Pick-up) Hold-in: 4.5W
DHC400	24V DC	≤18V DC	≥2V DC	32V DC	Pick-up: 1.88A Hold-in: 0.188A	Pick-up: 40W(0.2s Pick-up) Hold-in: 4W

DHC300 Power Switching Capacity for Resistive Load

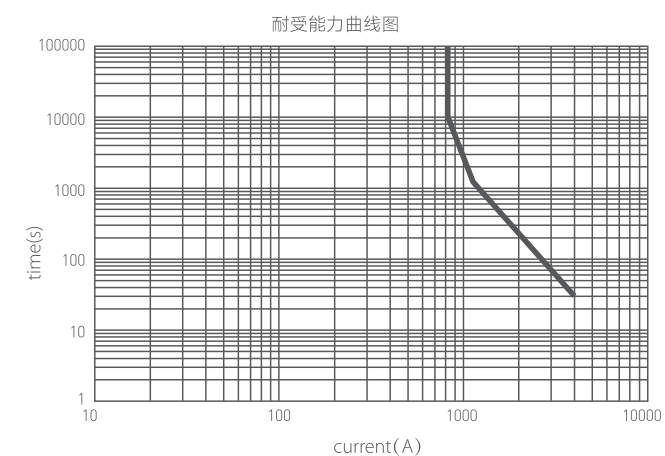


Note: The above data is tested at 85 °C DHC300 ambient temperature, connecting wire cross section area≥100mm². The data is for reference only, please do not use to select the fuse directly.

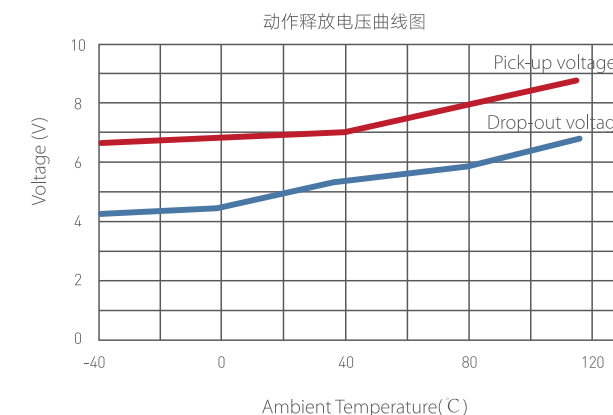


Note: The above data are tested by random sampling of coil volt. 12VDC product. The data is for reference only, (test qty:n=3)

DHC4000 Power Switching Capacity for Resistive Load

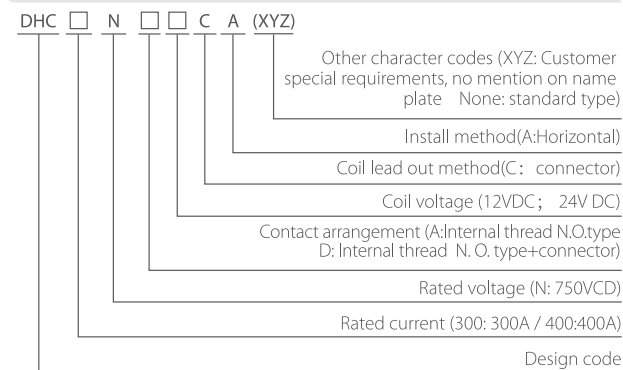


Note: The above data is tested at 85 °C DHC400 ambient temperature, connecting wire cross section area≥120mm². The data is for reference only, please do not use to select the fuse directly.

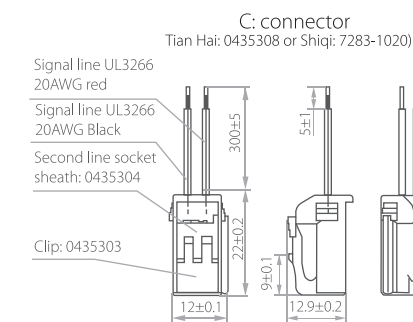


Note: The above data are tested by random sampling of coil volt. 12VDC product. The data is for reference only, (test qty:n=3)

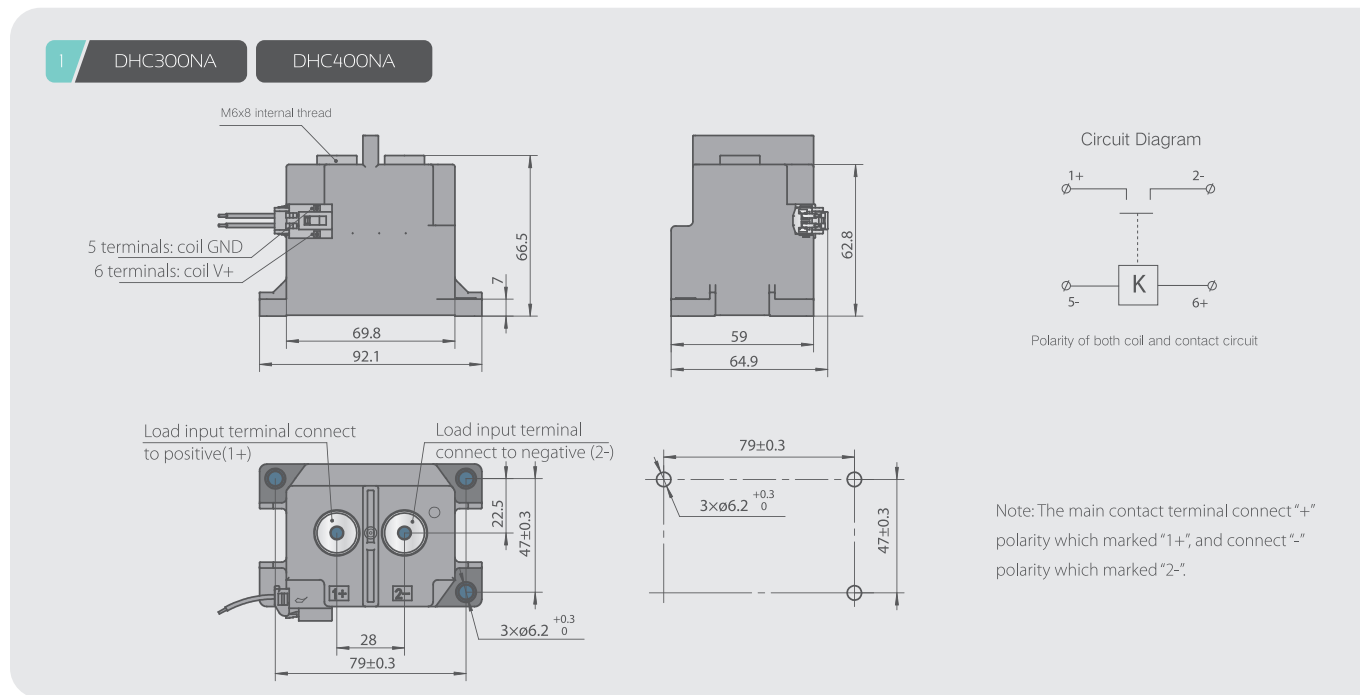
Part Numbering System



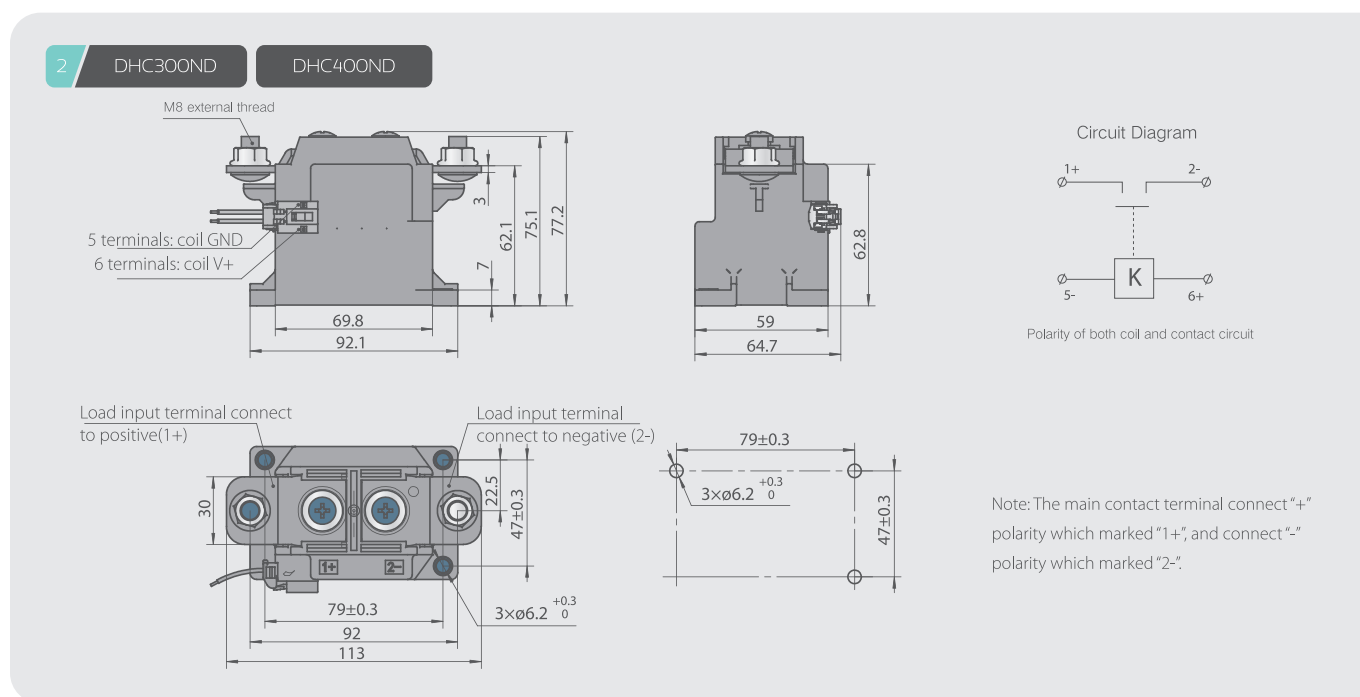
Coil lead-out method



Outline mounting dimension and circuit diagram



Outline mounting dimension and circuit diagram



Tolerance grade not noted

<10mm	±0.3
10~50mm	±0.6
>50mm	±1.0

DHCH300



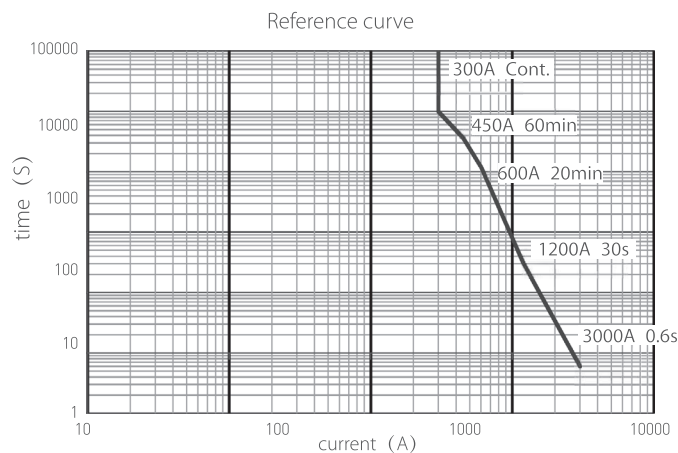
Performance Data

Contact Data	Contact form	1H (SPST-NO)	
	Rated load(Resistive load)	300A	
Impact resistance	Min applicable load (Resistive load)	1A/12VDC	
	Max switch current	2000A (750VDC) 1 time	
	Max switch voltage	1000VDC	
	Contact voltage drop(initial)	≤150mV@300A	
	Current carrying capacity(a)	300A: continued	
		450A: 60min	
		600A: 20min	
		1200A: 30s	
		3000A: 0.6s	
	Stability	Half-sine shock pulse:11ms	ON: 196m/s ² (>20G) OFF: 98 m/s ² (> 10G)
Strength		Half-sine shock	
Vibration resistance		490 m/s ² (> 50G)	
Product installation mode		10Hz~500Hz 49 m/s ² (> 5G) Arbitrarily	

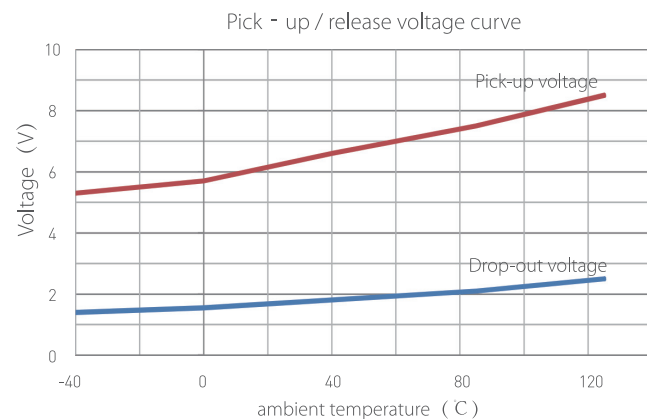
Coil Data

Model	Coil rated volt.	Pick-up volt.	Release volt.	Max operate volt.	Rated current (±10%)	Rated coil power
DHCH300	12V DC	≤9V DC	≥1V DC	16V DC	0.5A	6W
	24V DC	≤18V DC	≥2V DC	32V DC	0.25A	6W

Current tolerance curve



Note: The above data is tested at 85°C ambient temperature, Traverse area ≥ 100mm. The data is for reference only, please do not use to select the fuse directly.



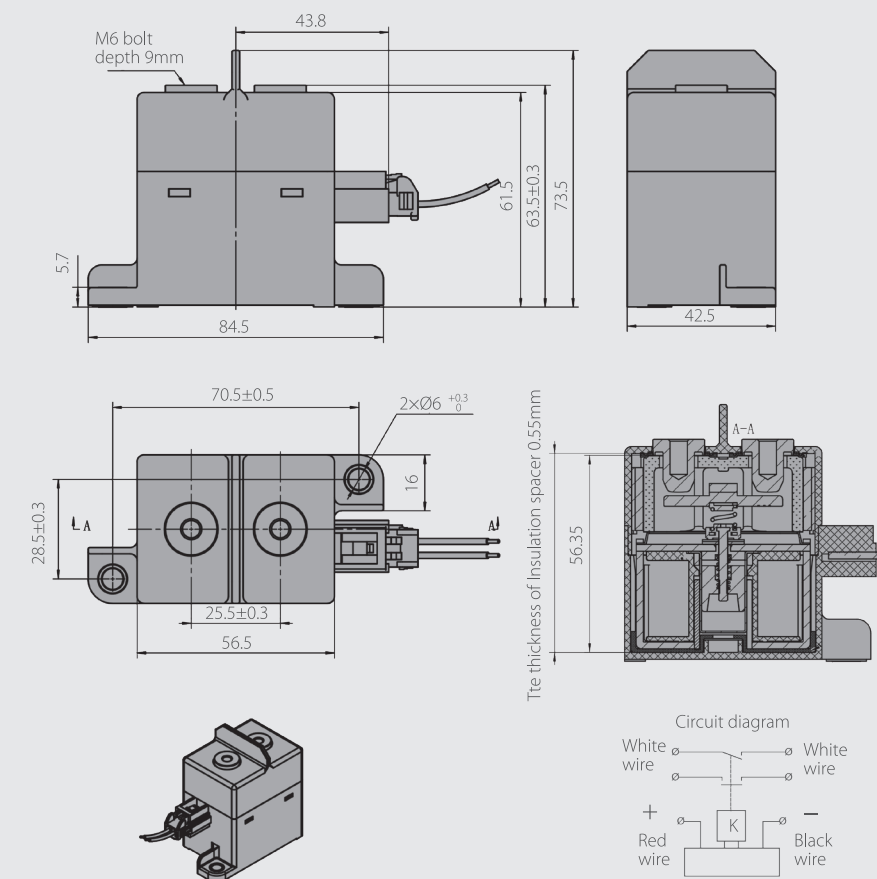
The above data are tested by random sampling of coil volt. 12VDC product. The data is for reference only, (test qty:n=3)

Part Numbering System

DHCH 300 N A □ C A (XYZ)

- XYZ: Customer special requirements
- Other character codes (None: standard type)
- Install method (A: Horizontal)
- Coil lead out method (C: Connector)
- Coil voltage (12: 12VDC 24: 24VDC)
- Contact form (A: Internal thread normal open type)
- Rated voltage (N: Normal type)
- Rated current (300: 300A)
- Design code

Shape installation and circuit diagram



DHC600

Feature

- 600A Contact switch capacity, Small volume;
- This product is non-polar type, the contact circuit is non-polar and can be connected in any direction while coil circuit is polar, please connect coil red wire to "+" & black wire to "-"
- Coil with energy saving device, the max hold in power consumption is 9W.
- Using ceramic brazing technology, the contact part is sealed with hydrogen gas, the contact would not oxidize and can quickly switch off the dc high voltage;

Performance Data

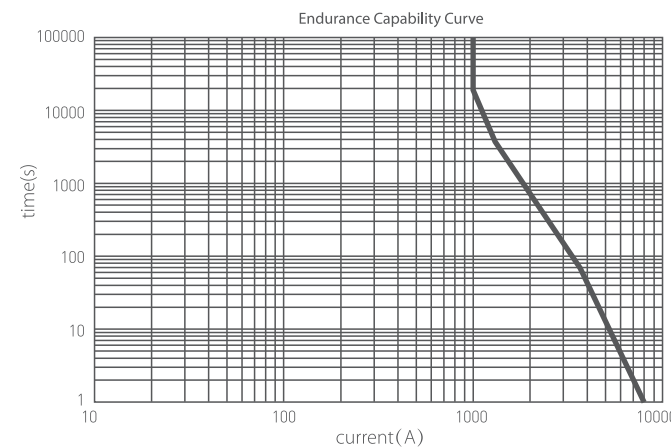
Contact Data	Contact arrangement	1H(SPST-NO)	
	Rated load(Resistive load)	600A	
	Min applicable load (Resistive load)	1A/12VDC	
	Max switch current	2500A(800VDC)1cycle	
	Max switch voltage	1000VDC	
Electrical endurance	Contact voltage drop(initial)	≤120mV@600A	
	Current carrying capacity(a)	600A : continued	
		3000A : 4s	
		8000A : 10ms	
	Pick-up time (at 20 C rated volt.)	≤50ms (Excluding contact bounce)	
Ops	Drop-out time (at 20 C rated volt.)	≤30ms	
	Contact bounce time (at 20 C rated volt.)	≤10ms	
	Dielectric strength	Between open contact	3000VAC 1min
		Between contact and coil	4000VAC 1min
Electrical endurance	300A 750VDC	≥2,000 ops	
	600A 750VDC	≥500 ops	
	600A 1000VDC	≥100 ops	
Mechanical endurance		≥200,000 ops	

Note: (a): The above data is tested at ambient temperature, connecting wire cross section area≥300mm²
 (b): Except for special instructions, the electric life On-off ratio is 1s:9s

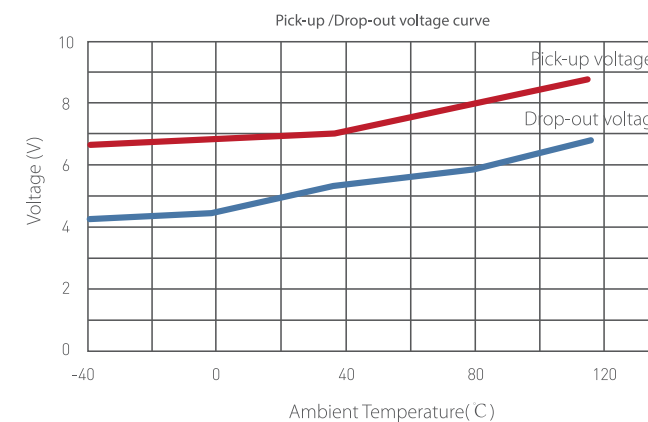
Coil Data

P/N	Nominal coil volt	Pick-up volt	Drop-out volt	Max operate volt	Rated current (±10%)	Rated power
DHC600	12V DC	≤9V DC	≥1V DC	16V DC	Pick-up: 4.2A Hold-in: 0.75A	Pick-up: 50W(0.2s Pick-up) Hold-in: 9W
	24V DC	≤18V DC	≥2V DC	32V DC	Pick-up: 2.1A Hold-in: 0.375A	Pick-up: 50W(0.2s Pick-up) Hold-in: 9W

Power Switching Capacity for Resistive Load

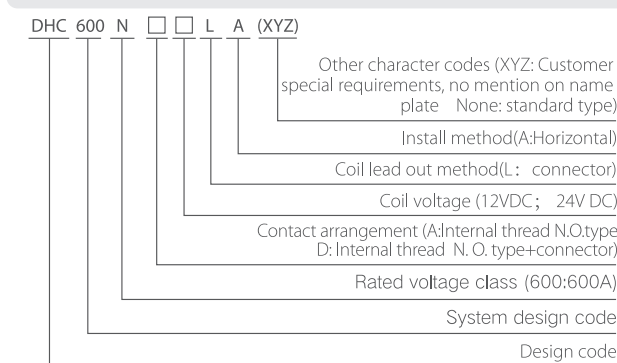


Note: The above data is tested at 85 C ambient temperature, connecting wire cross section area≥200mm². The data is for reference only, please do not use to select the fuse directly.

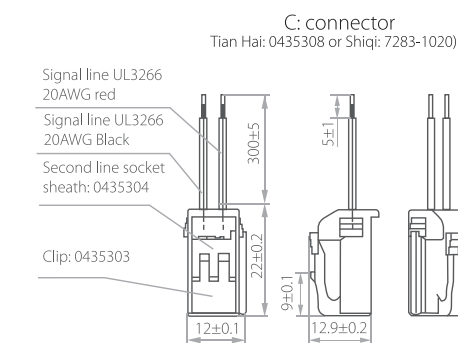


Note: The above data are tested by random sampling of coil volt. 12VDC product. The data is for reference only, (test qty:n=3)

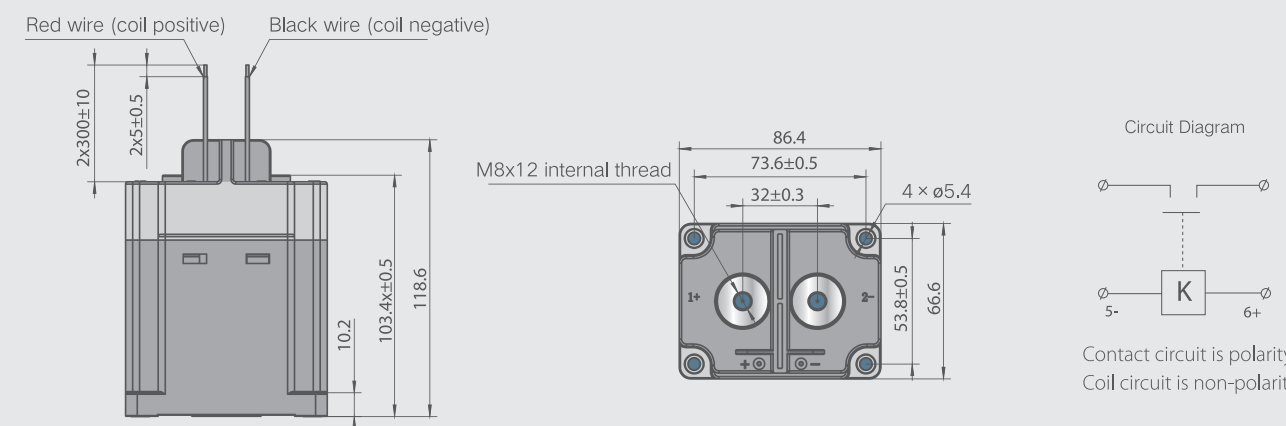
Part Numbering System



Coil lead-out method



Outline mounting dimension and circuit diagram



Tolerance grade not noted

<10mm	±0.3
10~50mm	±0.6
>50mm	±1.0

DHC800

Feature

- 800A Contact switch capacity, Small volume;
- This product is non-polar type, the contact circuit is non-polar and can be connected in any direction while coil circuit is polar, please connect coil red wire to "+" & black wire to "-"
- Coil with energy saving device, the max hold in power consumption is 9W.
- Using ceramic brazing technology, the contact part is sealed with hydrogen gas, the contact would not oxidize, can quickly switch off the dc high voltage;

Performance Data

Contact Data	Contact arrangement	1H(SPST-NO)	
	Rated load(Resistive load)	800A	
	Min applicable load (Resistive load)	1A/12VDC	
	Max switch current	3000A(300VDC)1cycle	
	Max switch voltage	1000VDC	
Electrical endurance	Contact voltage drop(initial)	≤120mV@800A	
	Current carrying capacity(a)	800A : continued	
		1000A : 10min	
		3000A : 4s	
	Pick-up time (at 20 C rated volt.)	≤50ms (Excluding contact bounce)	
Ops	Drop-out time (at 20 C rated volt.)	≤30ms	
	Contact bounce time (at 20 C rated volt.)	≤10ms	
	Dielectric strength	Between open contact	3000VAC 1min
		Between contact and coil	4000VAC 1min
	Mechanical endurance	Electrical endurance	300A 750VDC 600A 750VDC 800A 1000VDC
		≥6,000 ops ≥500 ops ≥50 ops	
		≥200,000ops	

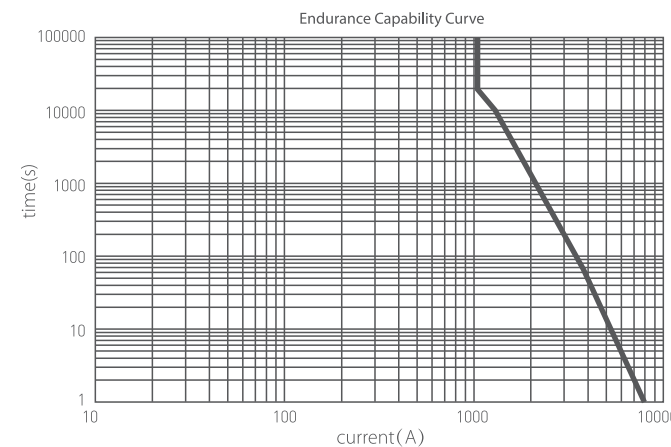
Note: (a): The above data is tested at ambient temperature, connecting wire cross section area≥300mm²
 (b): Except for special instructions, the electric life On-off ratio is 1s:9s

Coil Data

P/N	Nominal coil volt	Pick-up volt	Drop-out volt	Max operate volt	Rated current (±10%)	Rated power
DHC800	12V DC	≤9V DC	≥1V DC	16V DC	Pick-up: 4.2A Hold-in: 0.75A	Pick-up: 50W(0.2s Pick-up) Hold-in: 9W
	24V DC	≤18V DC	≥2V DC	32V DC	Pick-up: 2.1A Hold-in: 0.375A	Pick-up: 50W(0.2s Pick-up) Hold-in: 9W

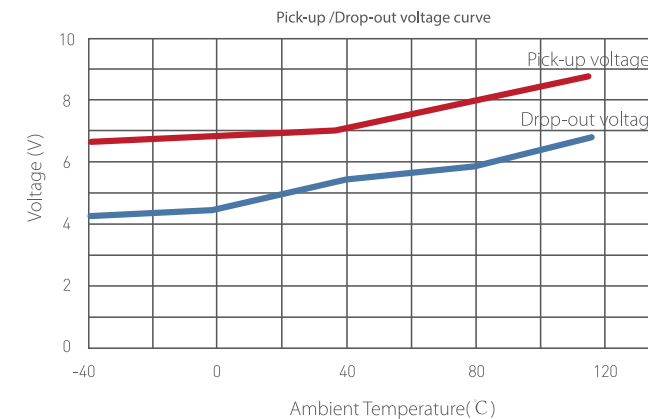
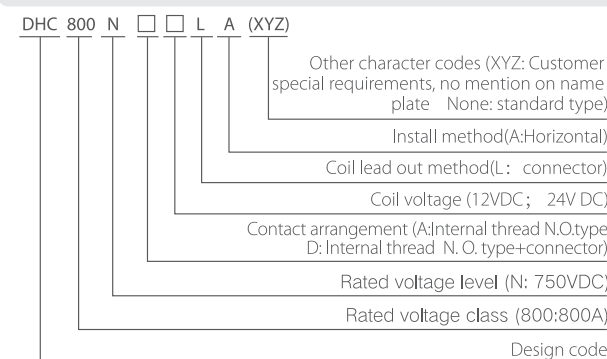
For more information, please visit : www.cndongya.com

阻性负载下的切换能力



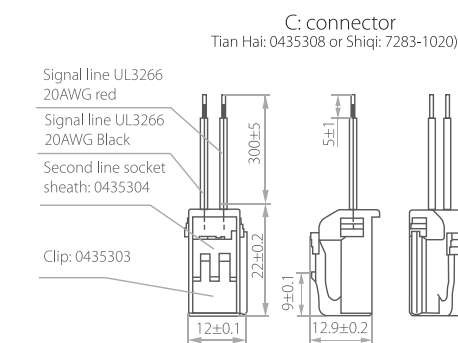
Note: The above data is tested at 85 C ambient temperature, connecting wire cross section area≥300mm². The data is for reference only, please do not use to select the fuse directly.

Part Numbering System

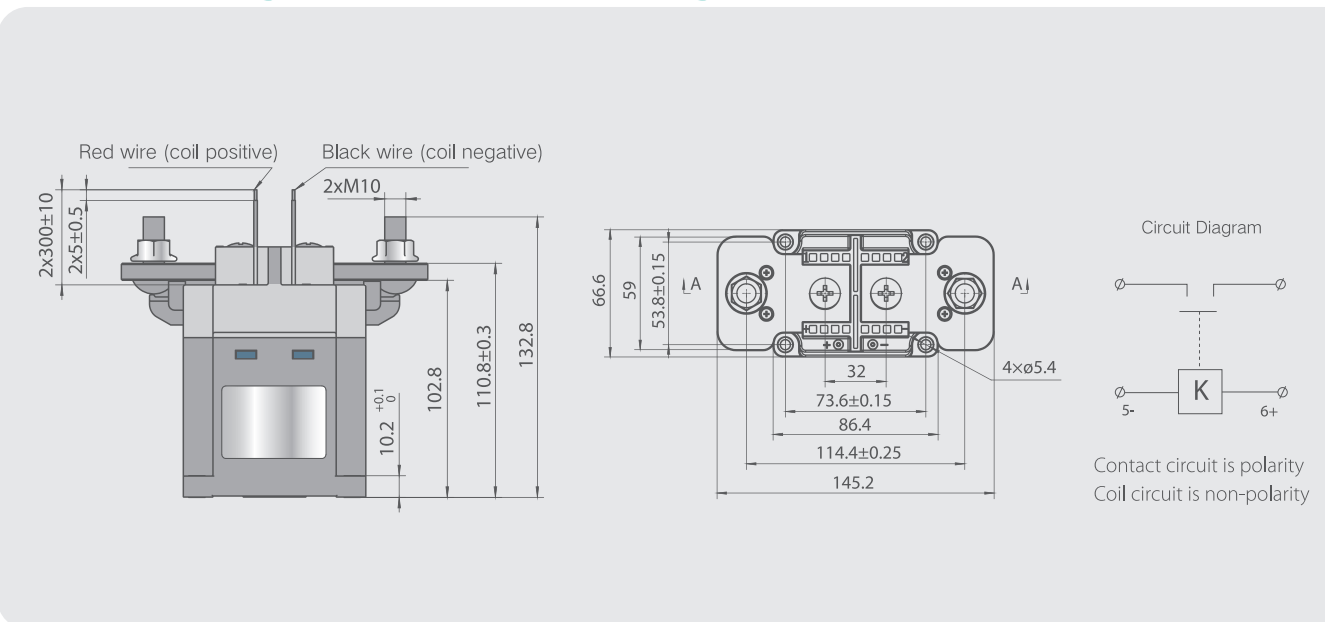


Note: The above data are tested by random sampling of coil volt. 12VDC product. The data is for reference only, (test qty:n=3)

Coil lead-out method



Outline mounting dimension and circuit diagram



Tolerance grade not noted	<10mm	±0.3
	10~50mm	±0.6
	>50mm	±1.0

Declaration: This product catalog is only for customers' reference. The products are constantly updated. If there is any change, no further notice will be given.

DHC350P



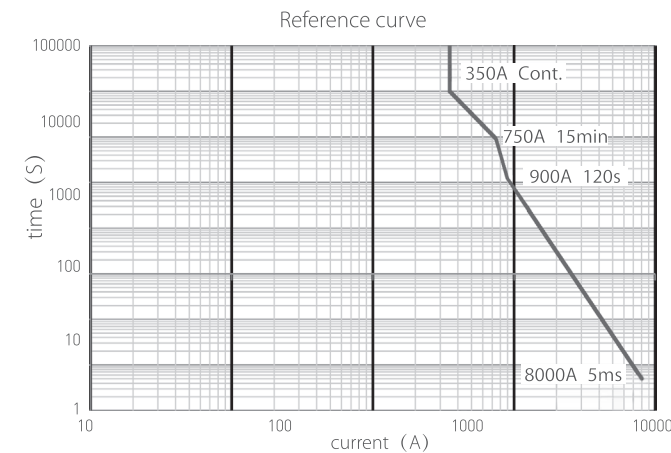
Performance Data

Contact Data	Contact form		1H (SPST-NO)
	Aux. contact form		1NO
	Min load of Aux. contact		6VDC/ 0.1A
	Rated load(Resistive load)		350A
	Min applicable load (Resistive load)		1A/12VDC
	Max switch current		2500A (800VDC) 1 ops
	Max switch voltage		1500VDC
	Contact voltage drop(initial)		≤6mV@20A
	Current carrying capacity(a)		350A : continued
			750A: 15min
900A: 120s			
8000A: 5ms			
Impact resistance	Stability	Half-sine shock pulse:11ms Test time:10 μs	ON: 196m/s ² (> 20G) OFF: 98 m/s ² (> 10G)
	Strength	Half-sine shock pulse:6ms	490 m/s ² (> 50G)
Vibration resistance		10Hz~500Hz 49 m/s ² (>5G)	
Product installation mode		Arbitrarily	

Coil Data

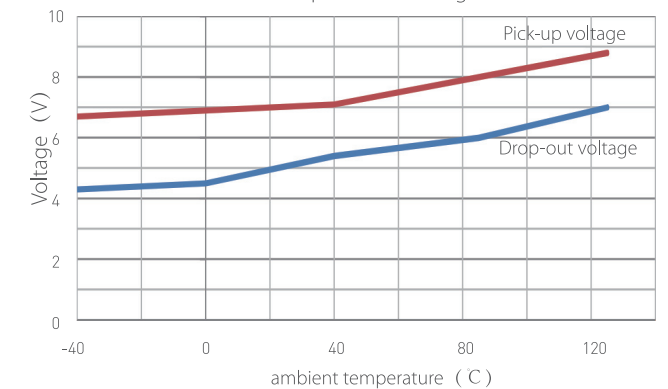
Model	Coil rated volt.	Pick-up volt.	Release volt.	Max operate volt.	Rated current (±10%)	Rated coil power
DHC350P	12V DC	≤9V DC	≥1V DC	16V DC	Pick-up:4.2A Hold-in:0.42A	Pick-up:50W(0.2s Pick-up) Hold-in:5W
	24V DC	≤18V DC	≥2V DC	32V DC	Pick-up:2.1A Hold-in: 0.21A	Pick-up:50W(0.2s Pick-up) Hold-in:5W

Current tolerance curve



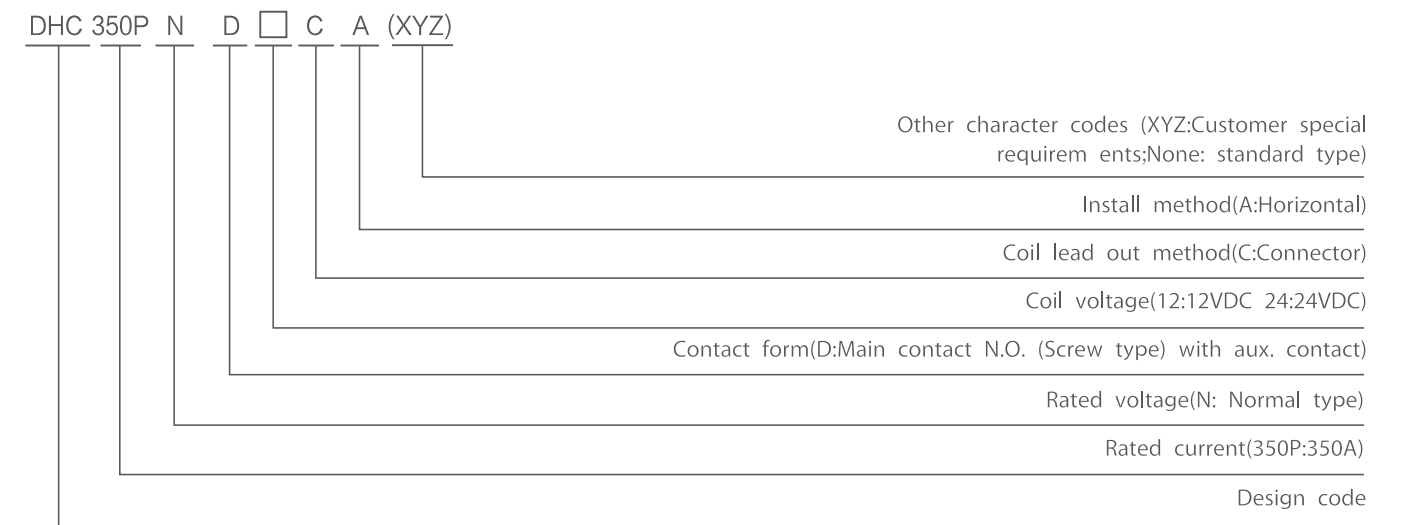
Note: The above data is tested at 85°C ambient temperature, Traverse area≥120mm². The data is for reference only, please do not use to select the fuse directly.

Pick - up / release voltage curve

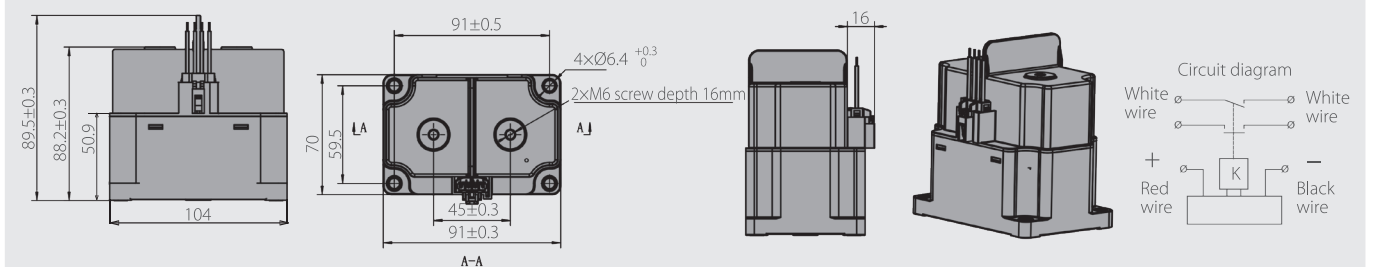


The above data are tested by random sampling of coil volt. 12VDC product. The data is for reference only, (test qty:n=3)

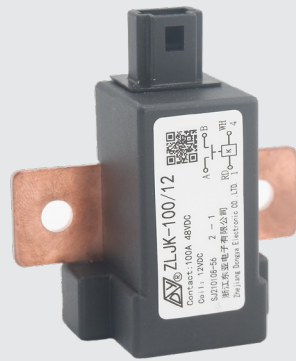
Part Numbering System



Shape installation and circuit diagram



ZLJK-100



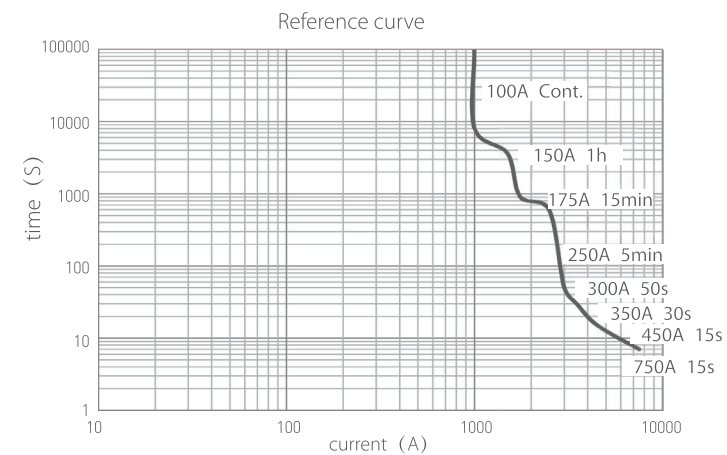
Performance Data

Contact Data	Contact form	1H (SPST-NO)
	Rated load(Resistive load)	100A
	Max switch current	1000A (48VDC) 1 1op
	Contact voltage drop(initial)	≤75mV@100A
	Current carrying capacity (@65°C)	100A: continued
		150A: 1h
		175A: 15 min
		250A:5 min
		300A 50 s
		350A 30 s
450A 15 s		
Impact resistance	Stability	ON: Half-sine shock pulse, 15ms, 25G
	Strength	Half-sine shock pulse, 6ms, 50G
Vibration resistance		10-1000Hz, 2.78G
Product installation mode		Arbitrarily

Coil Data

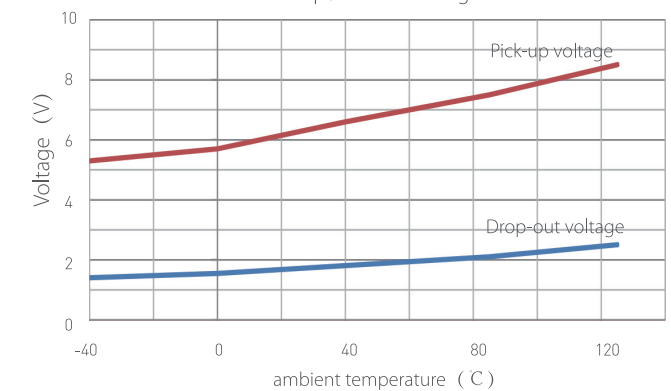
Model	Coil Rated Voltage	Pick-up volt.	Release volt.	Max Working Voltage	Coil Resistance	Rated coil power(W)
ZLJK-100	12VDC (Special)	≤9VDC	≥1VDC	16V DC	50 (±10%) Ω	2.9
	24VDC (Special)	≤18VDC	≥2VDC	32V DC	190 (±10%) Ω	3
	12VDC (Special)	≤18VDC	≥2VDC	32V DC	22 (±10%) Ω	6.5

Current tolerance curve



Note: The above data is tested at 85°C ambient temperature, Traverse area ≥ 25mm². The data is for reference only, please do not use to select the fuse directly.

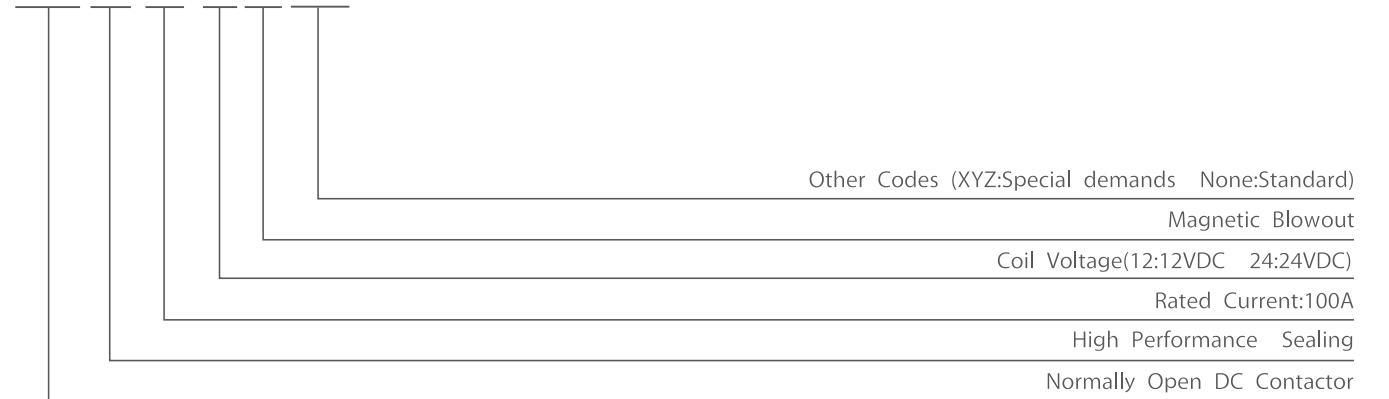
Pick - up / release voltage curve



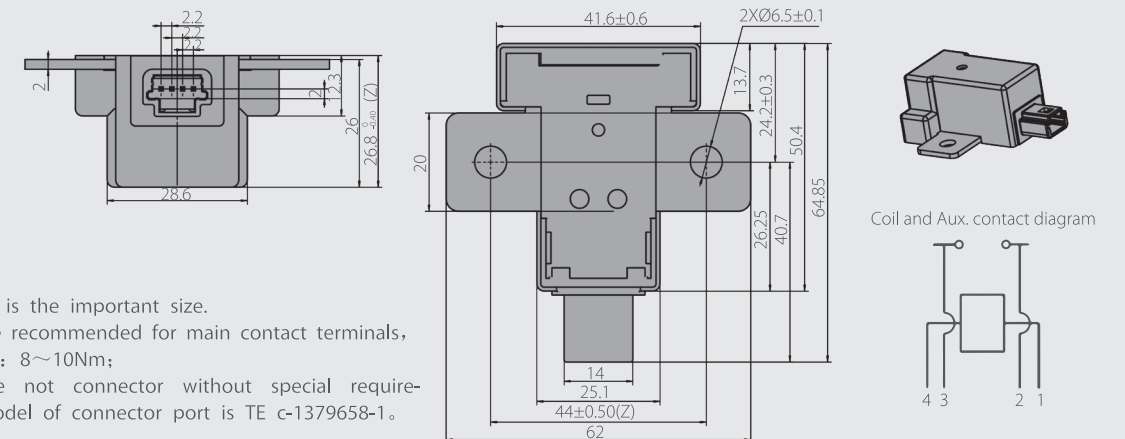
The above data are tested by random sampling of coil volt. 12VDC product. The data is for reference only, (test qty:n=3)

Part Numbering System

ZLJ K -100 /12 B (XYZ)



Shape installation and circuit diagram



Note:

- The (Z) size is the important size.
- M6 bolts are recommended for main contact terminals, Locking torque: 8~10Nm;
- Product have not connector without special requirements, the model of connector port is TE c-1379658-1.