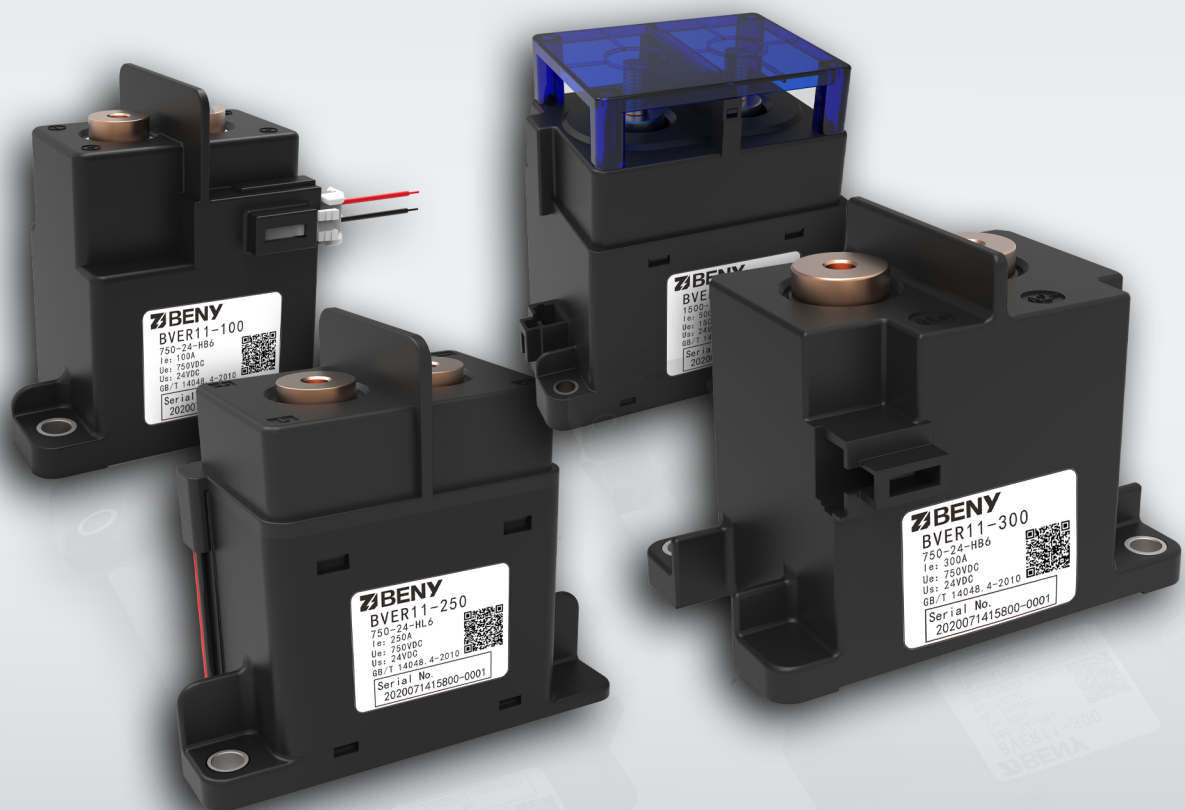


# BEVR SERIES

High voltage DC contactors

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# BEVR11-100A

## High Voltage DC contactor



### ✧ FEATURES:

1. ceramic brazing sealing technology.
2. Potting with hydrogen in case of electric shock and oxidative damage, low and stable contact resistance, contacts meets the standards of IP67 protection degree.
3. long current-carrying capability under 100 A 85 °C
4. Flexible respond to emergencies with the capability of switching 10times of over current.
5. insulating resistance up to 1000VDC, contacts and coil can endure 4KV conform to the requirements of IEC 60664-1

### ✧ CONTACT DATA

	450V	750V
Contact arrangement	1 Form A	
Contact resistance	$\leq 1.5\text{m}\Omega$	
Rated operational current	100A	
Mechanical endurance	$2 \times 10^5$	
Max switching voltage	750VDC	750VDC
Max. breaking current	1000A(300VDC, $\geq 1$ op)	1000A(300VDC, $\geq 1$ op)
Max switching power	45kw	75kw
Capacitive loads	Switching: $2.5 \times 10^4$ ops (22.5VDC, $\tau = 1\text{ms}$ , Inrush: 400A, Steady:100A)	Switching: $2.5 \times 10^4$ ops (37.5VDC, $\tau = 1\text{ms}$ , Inrush: 400A, Steady :100A
	Making:1 op (450VDC, $\tau = 1\text{ms}$ , Inrush:1350A, Steady:100A)	
Resistive loads	Breaking: $1 \times 10^4$ ops (360VDC, 50A)	Breaking: $6 \times 10^3$ ops (600VDC, 50A)
	Switching: $3 \times 10^3$ ops (450VDC, 100A)	Switching: $1 \times 10^3$ ops (750VDC, 100A)
Current-carrying capacity	100A : Continuous; 120A: 2h; 200A: 10min 400A: 2min; 600A: 30s; 1000A: 0.6s	

Note: 1) Unless otherwise specified, the temperature of electrical endurance is at 23°C and the on-off ratio is 0.6s:5.4s.

## ✧ CHARACTERISTICS

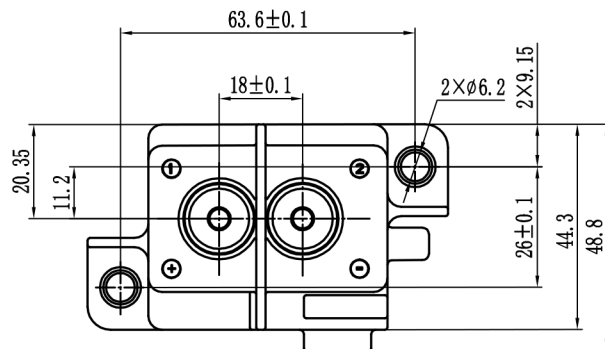
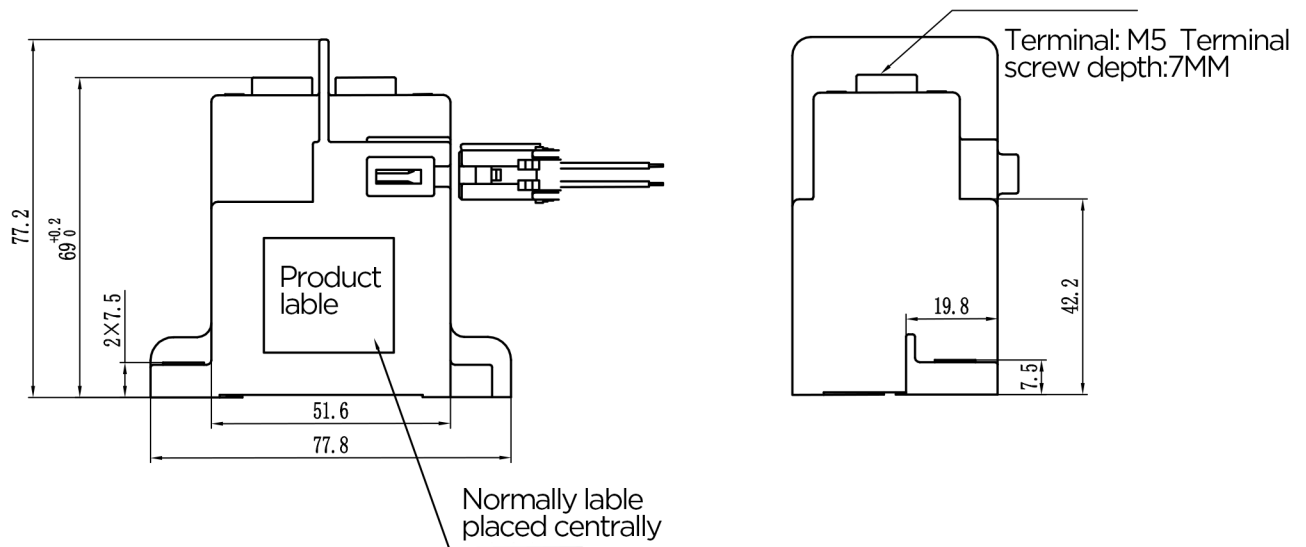
Insulation resistance	1000M $\Omega$ (1000VDC)
Dielectric strength between open contacts	3000VAC,1min
Dielectric strength between contacts and coil	4000VAC,1min
Operate time	$\leq 30\text{ms}$
Release time	$\leq 10\text{ms}$
Shock resitsance(functional)	196m/s <sup>2</sup>
Shock Resistance(distructive)	490m/s <sup>2</sup>
Vibration resistance	10~55Hz 1.5mm DA
Humidity	5%~85%RH
Ambient temperature	-40°C~+85°C
Load terminal structure	M5 Screw terminal female
Unit Weight	Approx. 350g
Size	77.8mm×44.8mm×77.2mm

## ✧ ENVIRONMENTAL REQUIREMENTS

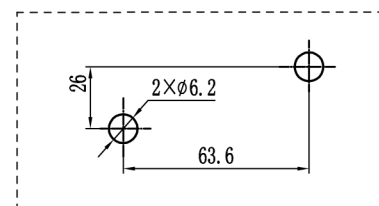
Environmental requirements	-40°C~+85°C
Humidity	5%~95%RH



## ✧ OUTLINE DIMENSIONS&WIRING DIAGRAM

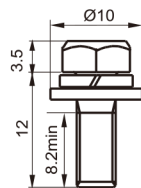


Mounting hole size

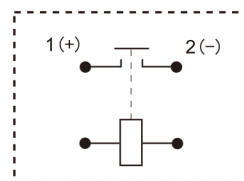


NOTICE: When size  $\leq 10\text{mm}$ , tolerance  $\pm 0.3\text{mm}$ , when size 10-50mm, tolerance  $\pm 0.5\text{mm}$ , when size  $> 50\text{mm}$ , tolerance  $\pm 0.8\text{mm}$

Assembling Screws (Optional)



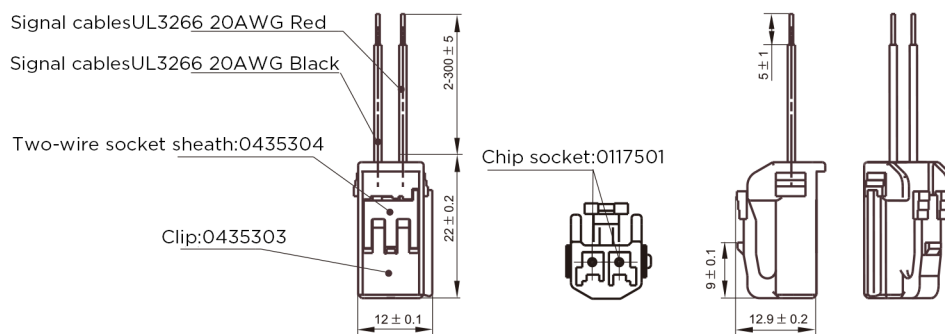
Terminal Arrangement



Note: The load side has polarity.  
No polarity on the coil side.

Coil terminal

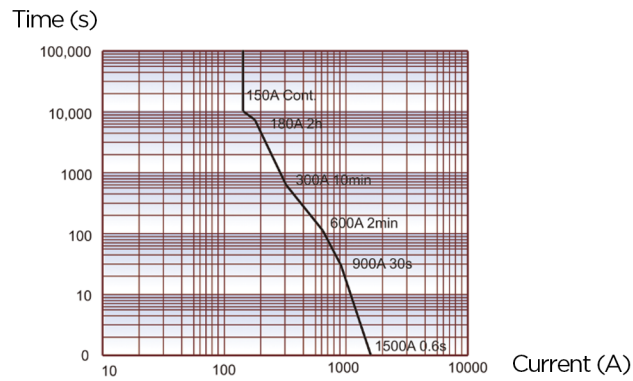
C: connector(Tianhai:0435308)



Note: Customers can self-configured connectors: style No:7283-1020

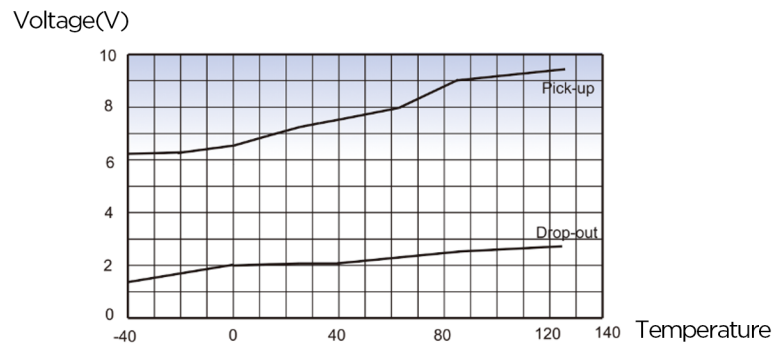
## ✧ CHARACTERISTIC CURVES

Endurance Capacity Curve



**Note :** measured under 85°C, cable cross-sectional area  $\geq 50\text{mm}^2$ , Pls kindly note it is for reference only, do not refer this when you choose a fuse holder

Operated/Release Voltage Change Graph



**Note :** Coil voltage 12V: pls kindly note it is for reference only (sample qty:n=3)

## ✧ NOTIFICATION

1. In case of loosening, please use washer when mount the contactor with M5 screw, and the torque within 3N.m to 4N.m, The screw tightening torque at terminals shall be within 3N.m to 4N.m. The torque beyond the range may cause damage.

Mounting for load terminal			Torque Damage		
Mount Method	Torque Requirement	Torque Damage	Mount Method	Torque Requirement	Torque Damage
M5 Screw	3N.m~4N.m	7N.m	M5 Screw	3N.m~4N.m	16N.m

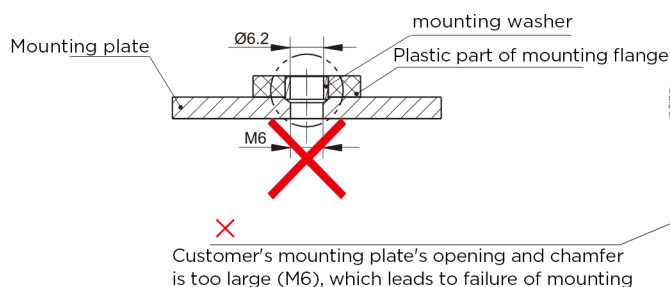
2. Be careful that oils and foreign matter do not stick to the main terminal part and please use the wire with min. cross section area 50mm<sup>2</sup>, otherwise the terminal parts may have abnormal heating.

3. Recommended thickness of copper row: 3mm, Otherwise the threads may slip or not fit tightly.

4. Cautions of mounting

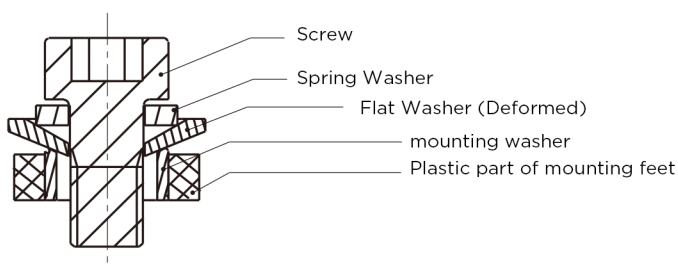
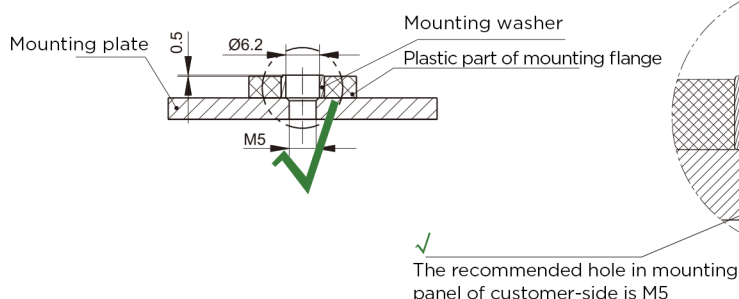
Unrecommended method:

(The hole of mounting plate at customer-side is too large)



Recommended method:

(The hole in mounting plate at customer-side is M5)



When use M5 screw, the thickness and strength of the washer needs to be guaranteed or it may deform and burst the cover

## Disclaimer

1. The specification is for reference only. ZJBENY has made every effort to make sure the accuracy of information. Specifications subject to change without notice.

2. We could not evaluate all the performance and all the parameters for every possible application. Thus the user should be in a right position to choose the suitable product for their own application. If there is any query, please contact ZJBENY for the technical service. However, it is the user's responsibility to determine which product should be used only.