



Dear users,thank you for choosing our company's products,we will be happy to provide you with the most satisfactory products and the best quality service!

1.Product acceptance

After product arrives,please check the packaging first.Then open the package,take out the product and do the following acceptance:

- 1.1.Check if the contactor is compatible with the contents of the order,especially if the rated voltage,rated current and control voltage are consistent with the requirements.
- 1.2.Check the packing list information carefully.
- 1.3.Acceptance contactor.
 - 1.3.1.Appearance inspection.
 - 1.3.2.Using rated control voltage to do the switch close/open operation,check the action.
 - 1.3.3.Do 1min power frequency withstand voltage test when the switch open.
 - 1.3.4.Use the instrument to check the mechanical properties.
 - 1.3.5.Using the instrument to check the main circuit contact resistance.
 - 1.3.6.Another necessary checks.

2.Installation

- 2.1.The machine can only be installed horizontally,the installation can not have obvious tilt, the inclined angle can not exceed 15 °.
- 2.2.Four mounting holes must be in same plane to avoid contactor force deformation, then affect the normal work.
- 2.3.Connect the main circuit of the conductive row or the cable,the contactor can not have significant tension,the wiring must be compressed tightly.
- 2.4.Do the electrical connection correctly,the access control voltage must be consistent with the contactor control voltage,check after the wiring.
- 2.5.The contactor can provide the auxiliary contacts for you:three normally open and two normally close,or could be customized according to your requirements,to be specified when order,see the secondary circuit schematic when wiring.

3.Product descriptions

EVC8C series AC high voltage vacuum contactor is suitable for AC 50~60Hz,main circuit rated voltage 12kV,rated current from 160A to 1000A power network system for remote making and breaking and frequent starting and controlling AC motors,

transformers, capacitor banks and other occasions .

4.The use of the environment conditions

4.1.Ambient temperature:-25 °C ~ +40 °C.

4.2.Installation site altitude does not exceed 2000m.

4.3.The relative humidity of the air,the wettest month average monthly maximum relative humidity of 90%,monthly average minimum temperature of 25°C,and taking into account the cream of temperature changes on the surface of the product.

4.4.Environment:anhydrous invasion,non-corrosive and flammable gas and excessive vibration occasions.

5.Use requirements

5.1.Select the contactor technical parameters correctly,including the auxiliary switch contacts can not be overloaded use.

5.2.Contactor around and above to leave enough insulation space to ensure safety of use.

5.3.When the control power is turned on,but no reaction,cut off the control power immediately to check the reasons to avoid burning the solenoid coil.

5.4.The electromagnetic system have strong magnetic attraction when it's working,we should keep the things with ferromagnetic material away form the machine.

5.5.The main circuit connection principle is:the upper end (static end) is the incoming terminal,the lower end (moving end) is the outgoing end.

6.Product Specification

Rated voltage:12kV, rated current:160A,250A ,400A ,630A,800A and1000A.

7.Product structure

This series of contactor is composed of insulating frame,driving crank arm, electromagnetic system,auxiliary switch,vacuum switch tube and other components.The structure of high voltage circuit and low voltage control upper and lower split structure,with layout beautiful,safe and reliable,easy to install and maintain.

8.Working principle

8.1.The electromagnetic holding type:

Three-phase vacuum tube through the insulator and conductive rod lever,the contact connected to the cantilever springs,cantilevers and armature are fixed on the shaft.

During closing, solenoid armature coil snap-keep, inward movement, the upward motion of the cantilever, vacuum tube through the contact spring contact is closed and provides a contact pressure to ensure reliable close. When switch open, the electromagnetic coil power lose suction opening, moving the armature in the sub-gate under the action of the spring, the outward movement of cantilever downward movement, downward movement by pulling the lever, pull the insulator, moving conducting rod, contact separation requirements distance to achieve a reliable sub-gate.

Due to electromagnetic systems require larger power in armature snap and snap in place maintain power greatly reduced, in order to save electricity, synchronized by the auxiliary switch snap, maintain conversion. Auxiliary switch also provides user external control you need. With DC excitation of electromagnetic system, auto-control circuits with rectifiers, so users can be controlled directly from the AC power.

As the vacuum switch main contacts close/open is conducted in vacuum, which has a good breaking characteristics, long life, safe and reliable.

8.2 Vacuum switch tube(vacuum interrupter)

Vacuum interrupter is the heart of the contactor, the upper and lower cover plate, glass or ceramic housing, bellows, moving, fixed conductive rod composed of closed cavities, and pumped into the high vacuum, and movable and fixed conductive rod electric terminal welding a pair of wear-resistant closure material composition contacts, wellformed of the breaking contacts, bellows plays against atmosphere, so that contact can the function of the movement up and down.

Due to the vacuum chamber, the tube can not subject to external shock, the bellows can not be twisted by rotation, otherwise they will leak damage.

9. Maintenance

9.1. We recommend the user establish a regular maintenance system to ensure that the vacuum contactor is in good condition. Periodically clean the insulation frame, the vacuum switch tube and circuit system to ensure work insulation and normal operation. 9.2. Check if the fasteners are loose and the structure components are abnormal.

9.3. Auxiliary switch should be normal operation and good contact.

9.4. Check if the open distance and the overtravel meets the requirements.

9.5. Check if the electrical wiring is loose, and make sure it is firmly connected.

9.6. Vacuum switch tube vacuum degree test, in general use the power frequency withstand voltage method to check, the withstand voltage value should not be less than 1/2 of the rated value.

10. Transport, Storage

10.1. The vacuum switch tube shell of the vacuum contactor is made up of the glass or the ceramics, it belongs to the fragile component, must be treated with care. Loading and unloading do not throw, collision, transport process may not be upside down, rolling, violent vibration, transportation can not have snow intrusion.

10.2. Products should be stored in the absence of water invasion, non-corrosive and flammable gas, air circulation, drying, the temperature at -30°C ~ +40 °C in the warehouse.

10.3. Do not place the product for a long time, stored with the good plastic bag.

10.4. The product which is stored more than six months should be checked before use.

11. Ordering instructions

When ordering the product, the buyer must confirm the following information:

- (1). Product name, model and the specification.
- (2). Rated voltage, rated current and control voltage
- (3). Product quantity.
- (4). Spare parts or another special requirements.

12. Technical parameter

12.1. Main technical characteristics

Technical parameter	Value		
Main circuit rated voltage (kV)	12	12	12
Main circuit rated current (A)	160/250	400	630
Main circuit making capacity (A/100times)	2500	4000	6300
Main circuit break-make ability (A/25times)	2000	3200	5000
Ultimate breaking capacity(A/3times)	4000	4500	6300
Mechanical life(Times)	100 0000	100 0000	100 0000
Electricity life AC3(Times)	25 0000	25 0000	25 0000
Electricity life AC4(Times)	100000	100000	100000
Lightning impulse withstand voltage(kV)	75	75	75
Power-frequency withstand voltage of the main circuit(fracture)(kV)	42	42	42
Phase-phase/phase-ground power frequency withstand voltage(kV)	42	42	42

Power-frequency withstand voltage of the control circuit (kV)	2.5	2.5	2.5
Rated operating frequency (Times/h)	300	300	300
Terminal pressure(N)	>100	>150	>150
Clearance between open contacts (mm)	6±0.5	6±0.5	6±0.5
Overtravel(mm)	1.5±0.5	1.5±0.5	1.5±0.5
Main circuit contact resistance(μΩ)	≤200	≤200	≤200

Technical parameter	Value	
Main circuit rated voltage (kV)	12	12
Main circuit rated current (A)	800	1000
Main circuit making capacity (A/100times)	8000	10000
Main circuit break-make ability (A/25times)	6300	8000
Ultimate breaking capacity(A/3times)	6300	8000
Mechanical life(Times)	100 0000	100 0000
Electricity life AC3(Times)	25 0000	25 0000
Electricity life AC4(Times)	100000	100000
Lightning impulse withstand voltage(kV)	75	75
Power-frequency withstand voltage for the main circuit (fracture)(kV)	42	42
Phase-phase/phase-ground power frequency withstand voltage(kV)	42	42
Power-frequency withstand voltage for the control circuit (kV)	2.5	2.5
Rated operating frequency (Times/h)	300	300
Terminal pressure(N)	>150	>150
Clearance between open contacts (mm)	6±0.5	6±0.5
Overtravel(mm)	1.5±0.5	1.5±0.5
Main circuit contact resistance(μΩ)	≤200	≤200

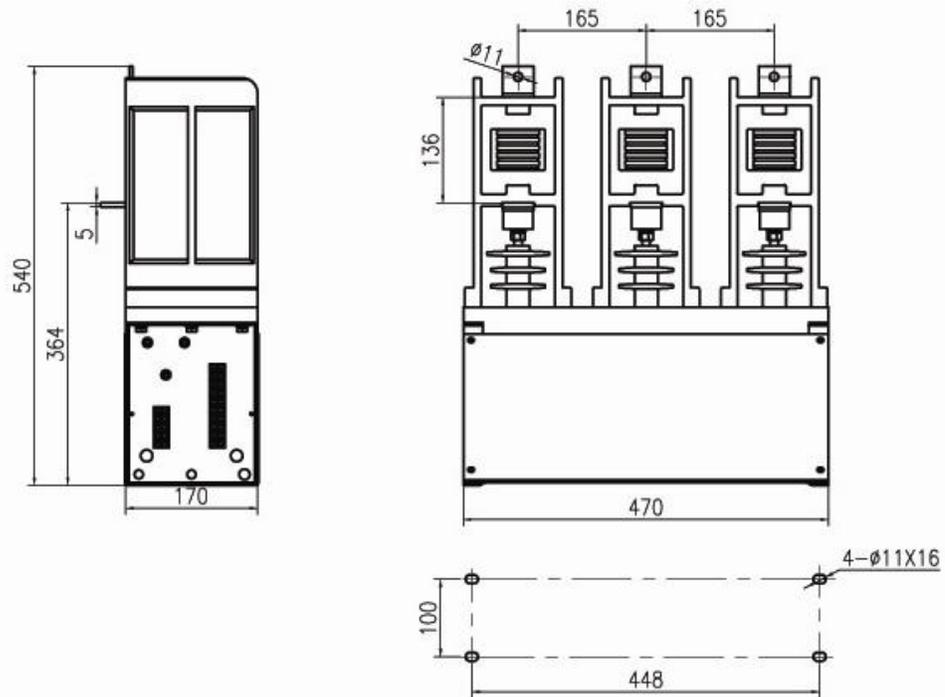
12.2.Number of poles:3

12.3.Control voltage:AC/DC 110V/220V/380V,or could be customized which is based on the client's requirements.

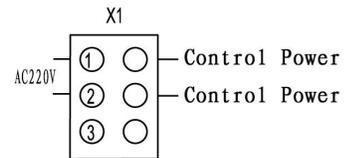
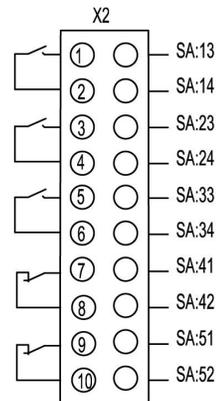
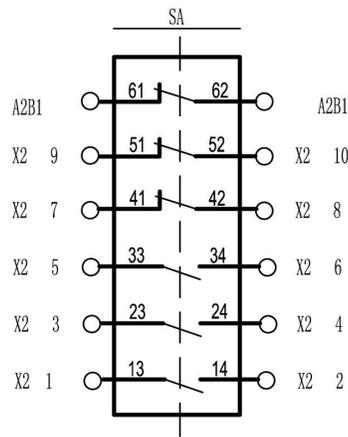
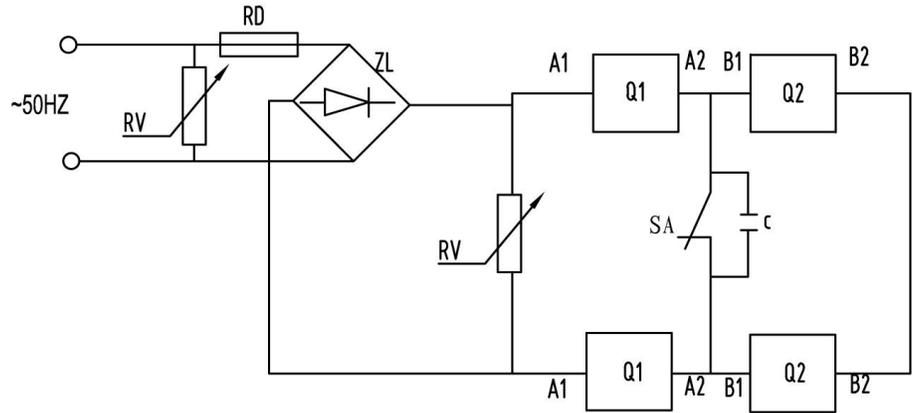
12.4.Auxiliary switch contact circuit conventional heating current is 5A.

12.5.Rated working system:intermittent long-term work system,repeated short-term work system(rated power on rate of 40%).

13.Product Dimensional Drawing(unit:mm)



14.EVC8C Series Secondary Circuit Diagram



ZL: Bridge Rectifier Q1: Starting Coil Q2: Keeping Coil X1: Connection Terminal
 C: Absorption Capacitance RD: Fuse RV: Varistor SA: Auxiliary Switch