

# CHV-400/3.3 AC Vacuum Contactor

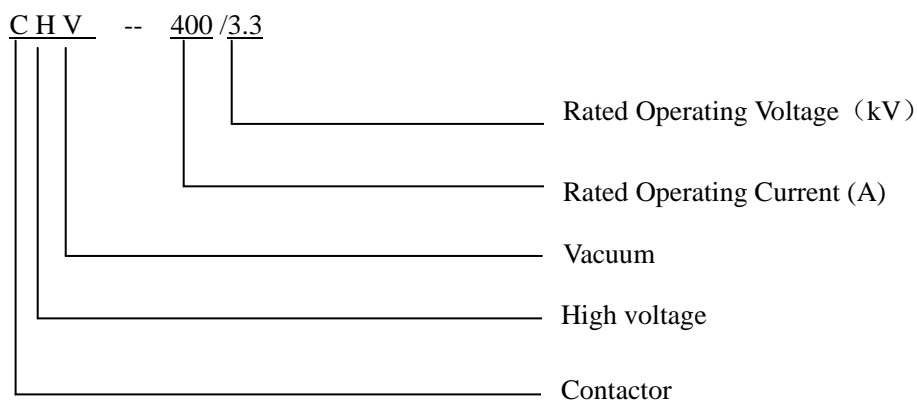
## I. Applications

CHV-400/3.3 contactors are suitable in electrical system with AC50HZ, rated operation voltage up to 3.3kV, rated operation current up to 400A to make or break the circuit, suitable for the control of AC motor's frequent start-off and stop, widely used in power systems, oil fields, chemical industry, mine, metallurgists and electrified railway etc.

## II. Service & Installation Condition

1. Ambient temperature:  $-25^{\circ}\text{C} \sim +45^{\circ}\text{C}$
2. Altitude: No more than 2000m
3. Relative Humidity: it will not exceed 50% when the highest ambient temperature is  $+40^{\circ}\text{C}$ , higher relative humidity is allowed when the temperature is lower. The monthly average max. relative humidity is not more than 90% in the most humid month average temperature  $20^{\circ}\text{C}$ , and also take the dews into consideration.
4. Operating Condition: Far away rain, snow and violent vibration, without the danger of fire and explosion.
5. Installation Condition: Gradient can not be no more than  $\pm 15^{\circ}$  between installation panel and the vertical.
6. Pollution grade: III
7. Installation category: III

## III. Type and Meaning



## IV. Structure and Operating Principle

This kind of Vacuum contactors are mainly composed of vacuum switch tube, insulated frame and actuator system. When power switched on, armature picks up and makes the insulated panel turn, then the movable contact touches the stable contact under the contact force and the spring, which make the main circuit contact. The drop-out spring makes the actuator release, then pulls the movable contact open when the power is turned off, and now the circuit is open.

## V. Technical parameter of product

Rated Operating Voltage: 3300V

Cycle Life: 1,000,000 times

Electric Life (AC4): 60,000 times

Controlled power voltage: 110V, or to make the products as customer's requirement

Other parameter is as following table:

Rated Operating Current (A)	Rated Pick-up Current (A)	Rated short Circuit Current (A)	Max. Short Circuit Current (A)	Contact Stroke (mm)	Over Travel (mm)	Reference Weight (kg)
400	4000	3200	4000	2±0.2	1±0.2	8

#### VI、 installation and Maintenance

1. Check and confirm if the parameter of model, spec and control voltage is correct before installation;
2. Installed surface should be horizontal and cleanly, assembly parts should be safety enough;
3. Please make sure that anything can not be fall into the contactor when do the assembly in case it will effect the function capability;
4. Note that the wire connection should not cause the stress of contactor;
5. Often clean the insulated frame, vacuum switch tube, circuit system to ensure the insulation capability.
6. Check the assembly parts and framework safety enough;
7. Check the erosion status of auxiliary contact, please modify or change a new one if needed;
8. Check the moving parts, please add some lubricate when needed;
9. Check the contact stroke and over travel is within the requirement;
10. Check the vacuum status of switch tube, usually use withstand voltage to do the test, the withstand voltage should not be less than 1/2 rated voltage.

#### VII Outline and Installed size

Outline drawing see the attachment.

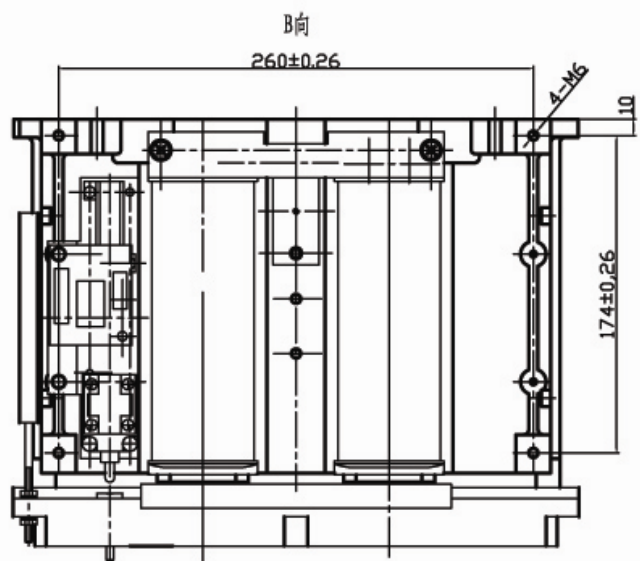
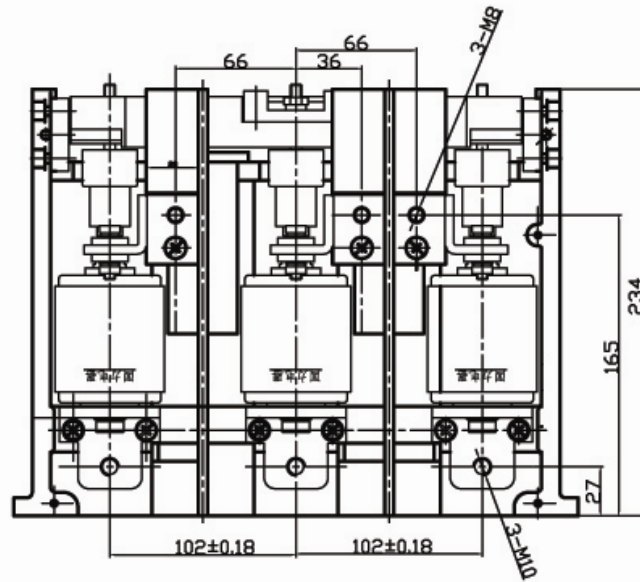
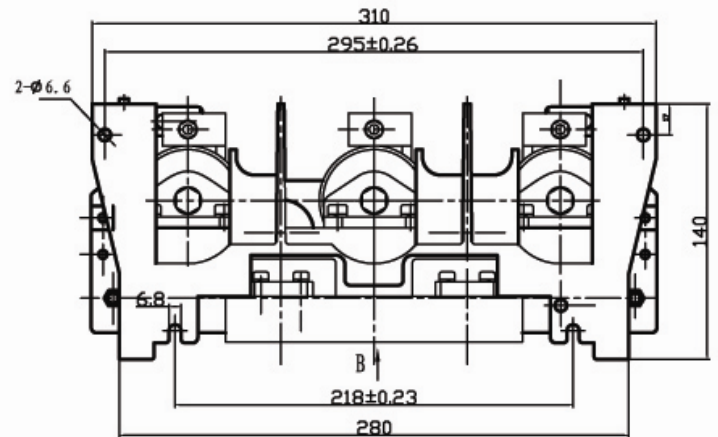
#### VIII Transport, Storage

1. When loading and unloading, do not throw, collide, do not convert, roll, acuity liberate and far away rain and snow.
2. All contactors must be stored in a dry environment without erosion and flammable gas, and the temperature should be -25℃~+45℃.
3. Contactors can not be stored for a long time, should be stored in a plastic bag.
4. If contactors are stocked over 6 month's, should be rechecked before using.

#### IX、 Information For Order

Please mark out the following item when order:

1. Full model and description of the contactor;
2. Rated voltage and current;
3. Rated Control Voltage;
4. Quantity
5. Spare parts or other special requirements.



Outline Drawing and Installation