

EVC20 Series

1 .Application and product features

EVC20 type 24KV series AC vacuum contactor is suitable for AC 50Hz, rated working voltage up to 24KV, rated working current up to 630 A In the electrical system, it is used for making and breaking the main circuit directly or remotely. Applicable to AC-1, AC-2, AC-3 Use category need to open Off-control electrical control occasions. It has the characteristics of reliable use, long life, less maintenance and safety. Replacing conventional electrical appliances has obvious economic benefits beneficial.

2. Normal working conditions

Ambient temperature: the maximum ambient air temperature does not exceed + 40°C, and the average value in 24 hours does not exceed + 35°C, the ambient air temperature is the highest The low temperature is not lower than -15°C.
Altitude: The altitude of the installation site should not exceed 1000 meters.

▶ Relative humidity: the relative humidity of the atmosphere does not exceed 50% when the ambient air temperature is + 40°C, and a higher relative humidity is allowed at a lower temperature. For humidity, the daily average is not more than 95%. When the average temperature of the wettest month is + 20°C, the monthly average maximum relative humidity is 90%. The change occurs in condensation on the surface of the product.

▶ Working environment: no rain and snow attack, open fire, explosion hazard, chemical corrosion and strong vibration.

Installation conditions: the perpendicularity between the installation surface and the vertical surface does not exceed 5°
Pollution level: III

3. Type and specification of the product

| EVC 20 - 630- 3 | | | | | | |
|-----------------|--|---------------------------|--|--|--|--|
| | | | | | | |
| | | | | | | |
| | | Number of polos | | | | |
| | | Number of poles | | | | |
| | | Rated working current (A) | | | | |
| | | ——— Design sequence No. | | | | |
| | | | | | | |

4. Installation, use and maintenance

► The contactor should be installed in the normal working position, the installation surface should be flat, and the inclination angle to the vertical surface should be no more than 5°.

► After installation, the moving terminal of the contactor should be downward.

► Make the electrical connection correctly, pay attention to the control power supply voltage and the contactor control voltage.

► The regular maintenance of the contactor should be determined according to the environment of the place of use, operating frequency, operating years and other external factors. For those places with good operating environment and infrequent operation, it is recommended to carry out regular maintenance after one year of operation, and then it

can run for 1~1.5 Regular maintenance is carried out once a year, and it is recommended that all maintenance of the equipment be recorded. For those with poor operating environment and special operation times For frequent places, it is recommended to carry out a visual inspection and dust removal every six months.

Warning: The vacuum interrupter is the functional executive element of the contactor and cannot be impacted by external force, otherwise the entire contactor will be scrapped!

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5. EVC20 Series vacuum contactor Tech-Parameter

| Name | | | Unit | Value |
|---------------------------------------|--------------------------------------|---------------------|-------------|-------------------------------|
| Main circuit | Rated working voltage (Ue) | | kV | 24 |
| | Rated working current (le) | | A | 400, 630 |
| | Rated frequency (fr) | | Hz | 50 |
| | Rated making capacity | | A | 10le |
| | Rated breaking capacity | | A | 6le |
| | Rated short time withstand current | | A | 10le |
| | Rated peak withstand current | | A | 25le |
| | Rated short circuit duration | | S | 2 |
| | Lightening impulse withstand voltage | | kV | 125 |
| | Power frequency | Between phases, | kV | 65 |
| | withstand | phase to earth | | |
| | voltage | Vacuum breaks | kV | 65 |
| Control circuit | Rated voltage (Us) | | V | AC or DC. 220 |
| | Rated power (Ps) | Electric holding | VA | ≤2500/200 (absorbing/holding) |
| | | Mechanical holding | | ≤2600/1000 (closing/opening) |
| Δ. | willion / oirouit | Form | | 4NO+4NC |
| Auxiliary circuit | | Rated value | | AC 380V/5A, DC 380V/1A |
| Contr | ol circuit, auxiliary cir | cuit to earth power | kV | 2 |
| | frequency withstar | nd voltage | | |
| Rated operating frequency | | Long-term | time/h | 300 |
| | | Short-term | time/h | 600 |
| Mechanical endurance | | | 10000 times | 10 (AC-3) |
| Electrical endurance | | | 10000 times | 10 |
| Mechani cal characte ristics | Mechanical holding | Closing time | ms | ≤100 |
| | | Opening time | | ≤60 |
| | Electric holding | Closing time | ms | ≤200 |
| | | Opening time | | ≤160 |
| | 3-phase synchronism | | ms | ≤3 |
| | Net weigh | nt | kg | 98 |

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6. Outline and Installation Size:unit(millimetre (mm.)



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"KM+KM": Closing coil, KM1: Starting winding, KM2: Holding winding; SA1-1, SA2-2: Auxiliary switch; U: Rectifier bridge; RV: Varistor; C: Protection capacitor; XT: Wiring terminal

EVC20-630-3 Electrical Holding Vacuum Contactor Schematic

EVC20-630-3 Electrical Holding Vacuum Contactor Wiring Terminal Diagram





RV1-9: Varistor; C1, C2, C3: Arc suppression capacitor; SA1-1, SA2-1, SA1-2: Auxiliary switch; U1, U2, U3: Rectifier bridge; KM合: Closing coil group; KM分: Opening coil

EVC20-630-3 Electrical Schematic Diagram of Mechanically Holding Vacuum Contacto EVC20-630-3 Mechanical Holding Vacuum Contactor Wiring Terminal Diagram