

AQC45 Dual Power Automatic Transfer Switch

1. Application

AQC45 automatic transfer switch is suitable for the dual power supply system of AC50Hz , rated operational voltage 400V/230V, rated operational current up to 63A. Automatically transfer one or multi-load circuits from one power to the other power, to protect power supplied normally to load circuit.

The device mainly used for industry, shopping center, bank, high building and so on.

The device comply with IEC60947-6-1.

2. Environment conditions for operation

Temperature condition: $-5^{\circ}\text{C}\sim+40^{\circ}\text{C}$; the average value within 24h not exceed $+35^{\circ}\text{C}$.

Elevation: altitude of installation place shall not exceed 2000m.

Atmosphere condition: relative humidity at $+40^{\circ}\text{C}$ shall not exceed 50%. Higher humidity is permissible at lower temperature condition. When the higher monthly average relative humidity is 90% in the humiddest month , the lowest monthly average temperature of this month is $+25^{\circ}\text{C}$. And consider the influence of dew on product surface due to temperature changes.

Pollution grade: gradeIII

Apparatus grade: grade CB.

3. Structure

AQC45 automatic transfer switch is made up of MCB(DZ47)single motor mechanism, control circuit, all parts are installed on a backplate. Control power voltage of automatic transfer switch is AC230V, mechanical life is 5000 times.

4. Performance

AQC45 automatic transfer switch(only R type that is automatically entry and automatically reset) monitor phase voltage of double power supply(is named common power supply and standby power supply) at the same time. When common power supply is malfunction ,that is to say ,A phase of MCB is voltage failure or phase failure, automatic transfer switch automatically transfer standby power supply with non-time delay; when common power supply returns to normal , automatically transfer common power supply with non-time delay. Both power supply are malfunction are not allowed.

5. Main specifications and table for choosing of settled breakers

Type	Settled breakers	Number of poles	Type of instantaneous release	Rated current of breakers In (A)	Rated operational voltage of breakers Ue	Operational voltage of control circuit
AQC45	DZ47	3P 4P	Type C:for distribution Tripping current range: $5I_n\sim 10I_n$ Type D:for motor protection Tripping current range: $10I_n\sim 14I_n$	6,10,16,25, 32,40,50,63	AC400V/AC230	AC230

6. Matters need attention

1. Phase sequence of the input terminals of one MCB must be same as the other, N-pole of double power supply can not be connected wrongly.

2. Earthing protection should be reliable, assure service safe.

3. When checks load circuit normally or malfunction maintenance, must close automatic control function.



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