# SPECIFICATION

## MODEL
## K-AC300-Q220-90W

## 1. Applicable scope

The applicable model of this specification (220-240V, 50/6oHz) shaded pole motor used in the refrigerator.

## 2 Types and Specifications

2.1 Type: single-phase shaded-pole asynchronous motor

2.2 Specifications

2.2.1 Rated voltage: 220-240V;
2.2.2 Rated frequency: 50/60Hz;
2.2.3 Number of poles: 2 poles;
2.2.4 Actual load: Φ300 28 degree aluminum fan;
2.2.5 Working mode: S1 (continuous working system);
2.2.6 Insulation class: Class E (Class 120);
2.2.7 Coil protection method: 135 ℃ protector protection

## 3. Working environment

3.1 Working conditions
3.1.1 The altitude does not exceed: 1000m;
3.1.2 Ambient temperature: -30℃~50℃;
3.1.3 Relative humidity: ≤85%RH;

3.2 Installation position: The shaft extension is installed horizontally;
3.3 Working voltage: Under the rated frequency and load, the motor can work normally when the voltage fluctuation is within ±5% of the rated voltage.

## 4. Structure

4.1 Appearance: see the outline drawing
4.2 Shaft Out Mode: Single Out Shaft
4.3 Bearing Type: Rolling Bearing
4.4 Type of power connection: leaded loose wire
4.5 Steering: C.C.W (viewed from the shaft end, the shaft rotates counterclockwise) suction;
4.6 Axial clearance: / mm;
4.7 Shaft extension radial runout: ≤0.03mm (tested at rated voltage frequency and no load)

## 5. Material of important parts:

5.1 Bracket: closed aluminum end cap;
5.2 Bearing: 608 rolling bearing;
5.3 Material of winding enameled wire: enameled copper round wire;
5.4 Coil frame material: flame retardant nylon PA66;
5.5 Lead wire: VDE H03VV-F 3G0.5mm2 black
5.7 Shaft material: 40Cr
5.8 Stator material and surface treatment: silicon steel electrophoresis (black)

## 6. Performance parameters

6.1 No-load characteristics: (20±5℃):

| Voltage(V) | Frequency(Hz) | Current(A) | Power(W) | Speed(rpm) |
|---|---|---|---|---|
| 220 | 50 | 0.64 ±10% | 68±10% | |

6.2 Load characteristics: (The motor is tested after running for 5 minutes with rated load, and the room temperature is 20±5℃):

| Voltage(V) | Frequency(Hz) | Current(A) | Power(W) | Speed(rpm) |
|---|---|---|---|---|
| 220 | 50 | 0.67±10% | 90±10% | 1300±100 |

6.3 Starting performance:

Motor load starting voltage: ≤187V;

6.4 Noise:

When the motor runs with no load at rated voltage and rated frequency, the noise value on a spherical surface with a radius of 30cm from the motor does not exceed 45dB(A), and there is no abnormal noise.

6.5 Motor temperature rise

Motor is tested with rated load at 254V 50Hz, temperature rise ≤ 90 K (room temperature is 20±5℃)

6.6 Stall temperature

The motor is tested to a thermally stable state under 240V/50Hz locked rotor, and the coil temperature does not exceed 165° C

6.7 Insulation resistance

The cold insulation resistance between the winding and the casing and the stator core is ≥100MΩ (measured with a DC500V megohmmeter).

6.8 Electric strength

The voltage of 1800V/1mA/1s is applied between the stator iron core and the winding of the motor, and the motor has no breakdown and flashover phenomenon.

6.9 Leakage current

When the motor is energized at 1.06 times the rated voltage, the leakage current of the motor should not be greater than 0.25mA.

6.10 Creepage distance: ≥2.5mm

7. Life:

The motor with actual load is under normal temperature and normal pressure, with rated power supply, continuous operation, and its life is more than 3000 hours;

8. Environmental testing

8.1 Heat resistance

Put it in the environment of 115℃ for 24 hours, take it out for 5 minutes and test it. Apply 1800V/1mA/1s between the stator iron core and the windings of the motor. voltage, the motor has no breakdown flashover phenomenon, and the insulation resistance is greater than 10MΩ.

8.2 Damp heat test

Place for 48 hours in a room with a temperature of 40±2° C and a relative humidity of 91-95%, take it out for 5 minutes, and test the stator iron of the motor.

When a voltage of 1800V/1mA/1s is applied between the core and the winding, the motor has no breakdown and flashover, and the insulation resistance is greater than 10MΩ.

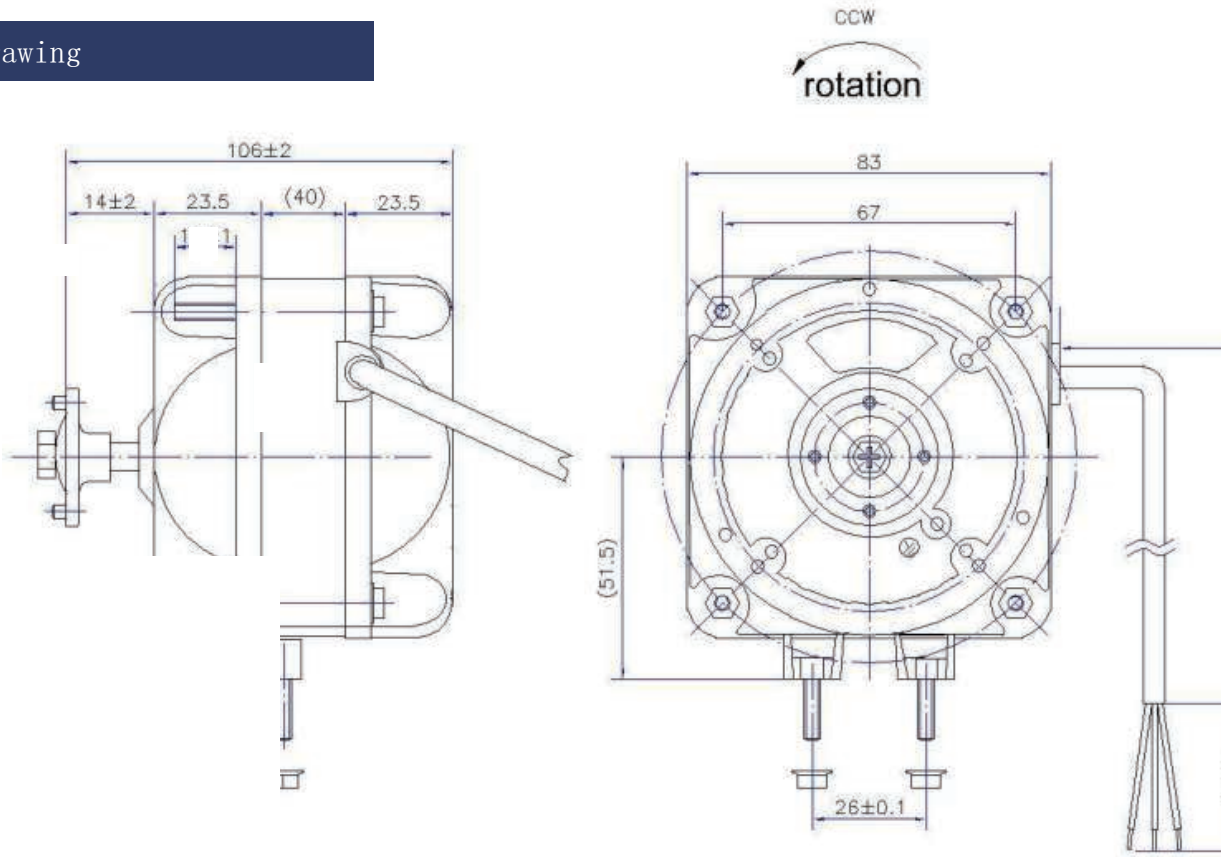
9. Appearance:

9.1 The marking is clear and firm;

9.2 The surface of the motor is clean, free of dirt, damage, deformation and rust.

10. Parts comply with ROHS requirements.

## 7. Outline drawing




WIRING DIAGRAM

