SESAME MOTOR CORP.

Precision Gear Motor Operation Manual

Thank you for selecting SESAME products.
Please read this manual before operation.

ISO 9001
ISO 14001

Safety Standards: The safety standard marks are indicated on the nameplates of approved products.

1. ATTENTION

1.1 Installation Preparation

- Please read this operation manual before using this motors. Any problems caused by inappropriate operation contrary with the manual, or damage caused by natural disasters, or restructure the Motor without our permission, Sesame will not hold any responsibility nor will the Motor be cover by warranty.
- Warranty start within one year after purchase the Motor. Within warranty period, if Motor damage is not cause by operation error nor by natural disaster, then please send back the Motor, we should replace the damage spare part at free of charge.
- Before Installation ensure correct Voltage can be apply to Motor.
- Do not bend the lead wires.
- Installation should be proceeding by trained technicians only.
- Please ground the motor according to the manual or a fire or electrical shock might be arose.
- Do not attempt to disassemble or modify the motor.

1.2 Installation conditions

The conditions below must be fulfilled to avoid any damage caused on the motor :

- The motor was designed to be installed on the other Facilities/Application.
- Do not expose the motor to flammable or corrosive gas.
- Indoor application only. Room temperature should be maintained between -10 ~ 50℃ (-10~40℃ for motor with capacitor.)
- The air humidity should not exceed 85%.
- The altitude of where the motor was installed should not exceed 1000m above the sea level.
- Do not expose the motor to the sunshine directly. Dust and spray of oil/water is also forbidden.
- Avoid any continuous vibration or impact on the motor.
- Ensure the motor was installed in a well ventilated location.

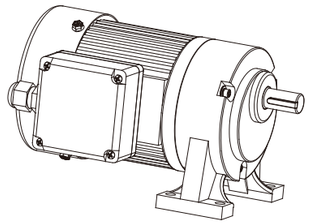
1.3 Preparation of start up

- Please check the power supply before starting the motor.
- High temperature might cause the coil and bearing failed earlier.
- Do not connect the motor with inverter.
- Confirm the specification of capacitor before installation.
- Motor might burn out if wrong wiring or overloaded.

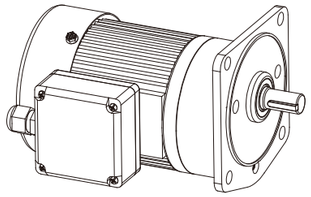
2. LOADING INSTALLATION METHOD

The output shaft surface was precisely grinded, it needed to milling a hole for input the keyway since the keyway is the transmission media, between motor and application.

<Foot-Mount type>



<V-Casing type>



Attention

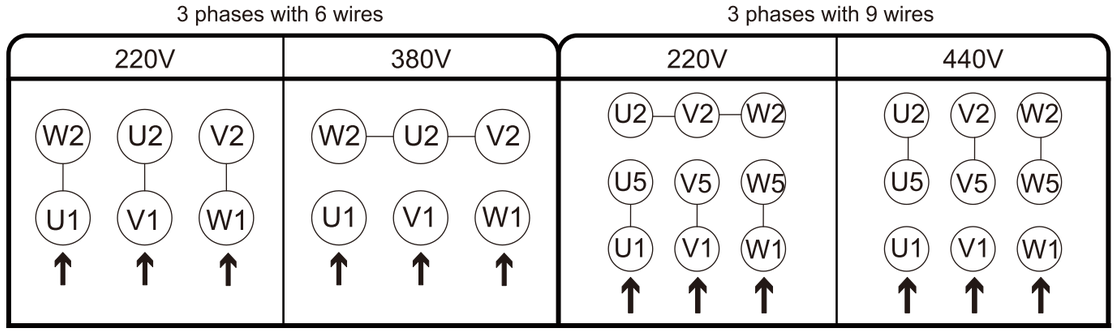
- Do not knock the motor by any tool during installation.
- The motor with gear shaft can only been mounted with adequate gear box. Please confirm the specification of gearbox before installation.
- Apply our product with other, please ensure it match other's requirement, specification, or limitation.
- Customer need to recheck our product is suitable for their current system or machinery usage.
- If customer is neglecting for rechecking, then Sesame is not responsible for any cause there might occur.
- The product must always be switched off before any work is performed on it (assembly, dismantling, maintenance, installation). The product must be disconnected from the electrical system and secured against being switched on again. All rotating parts must have come to a stop.
- Incorrectly performed electrical work can result in fatal injury! This work may only be carried out by a qualified electrician.
- The housing parts can heat up to well above 40°C. There is a danger of burns. After switching off, let the product cool down to ambient temperature.

3. WIRING DIAGRAMS

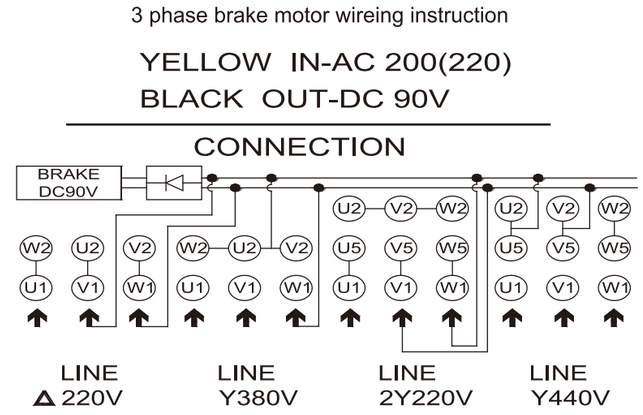
Visual direction for Motor running direction is from motor's the output shaft. Forward direction is clockwise, counterclockwise direction for reversal.

3.1 Three phases motor

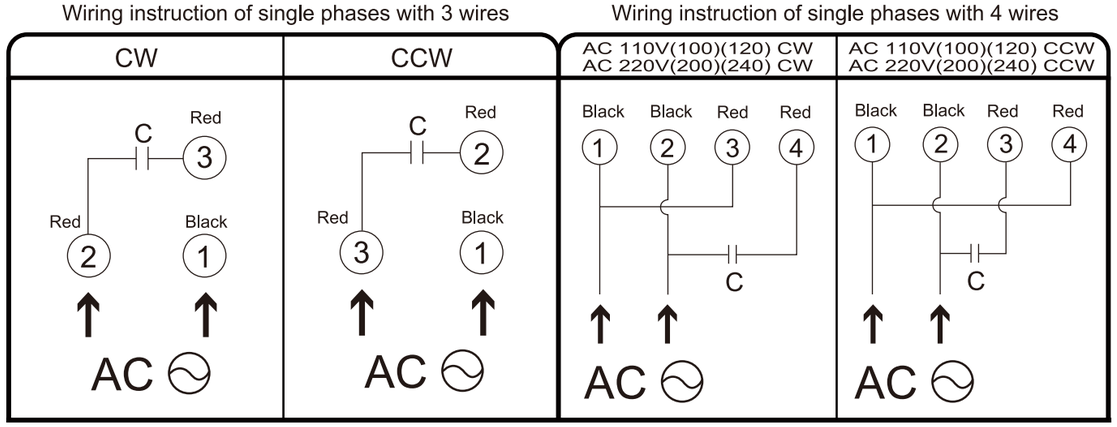
- Please wire the power supply according to the incoming voltage as shown below. Whenever the rotating direction needs to be reversed, switch any two wires of the incoming power cable.
- Please check if the wiring is correct after installation, ensure there is no missing phase, or phase voltage unbalance.



3.2 Three phases motor with brake

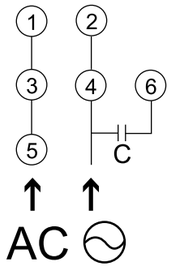
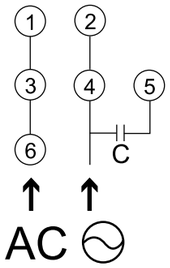
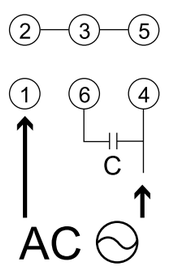
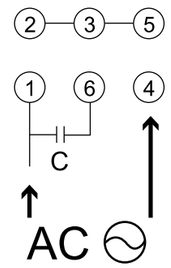


3.3 Single phase motor



3.3 Single phase motor (cont.)

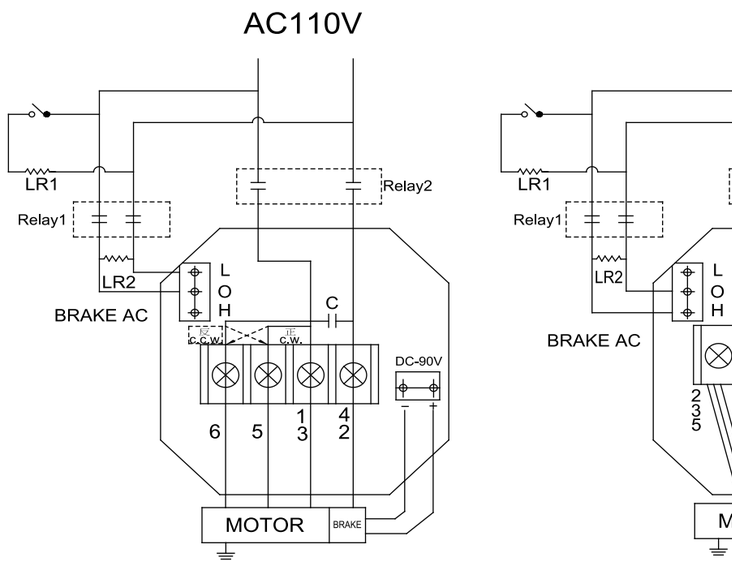
Wiring instruction of 1 phases with 6 wires

AC 110V(100)(120) CW	AC110V(100)(120)CCW	AC 220V(200)(240) CW	AC 220V(200)(240) CCW
①②③④ Black ⑤⑥ Red	①②③④ Black ⑤⑥ Red	①②③④ Black ⑤⑥ Red	①②③④ Black ⑤⑥ Red
			

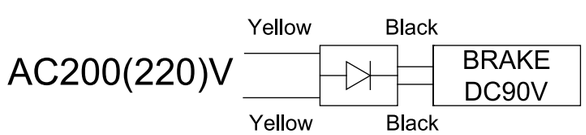
3.4 Single phase motor with brake

Single Phase Brake Motor Wiring Instruction

● Brake control panel without relay, wiring diagram



● Brake control panel with relay, wiring diagram



4. Installation of the capacitor (for single pahsse motor only).

- ◆ Ensure the capacitor matches the specification of the motor before installation.
- ◆ Install the capacitor with M5 screws (not included).
- ◆ Capacitor should be installed inside the electrical box or IP54 rated box to avoid electric shock.

⚠ Attention

- ◆ Install capacitor at least 10 cm away from motor to prevent heat damage to capacitor.

5. Electro Magnetic Brake Operate Precations.

- ◆ The Lining clearance will bigger than 0.3~0.35mm after a period of usage, please contact us to replace the lining.
- ◆ Isolating wiring is required when frequent braking condition.
- ◆ Brake frequency limit 10 times per minite.

6. Thermally Protected Motor Precaution

- ◆ Single phase thermally protected motor will restart automatically when motor temperature falls below a certain level. Always turn off the power before conducting checks or performing work on the motor.
- ◆ Thermal switch of three phases motor is installed with two red wires. Please connect two red wires to control system. Thermally protected motor will restart automatically when motor temperature falls below a certain level. Always turn off the power before conducting checks or performing work on the motor.

7. Trouble shooting guides

Please check the motor according to procedures below, if abnormal situation were found such as:

◆ The motor does not work or the speed cannot be raised:
- Check if the power supply fits the motor specification?
- Confirm if the power supply is correctly connected?
- Confirm if the motor is overloaded?
- Confirm if the wires are well connected with the terminal block?
- Confirm if the capacitor is well installed?

◆ The motor is over heated
- Check if the power supply fits the motor specification?
- Check if the temperature of the environment is under 40°C?
- Confirm if the capacitor specification is correct?

◆ Noise
- Check if the motor was blocked?
- Check if an open-phase occurs?
- Check if brake well functioning?
- Check if the fan loosens?

◆ If the problem could not be solved via the procedures above, please DO NOT take apart of the motor, contact SESAME for technical support right away.

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