CE Motor Operation and Maintenance Instructions

Single-phase / Three-phase Asynchronous Motor

Related Type : MS/ YS/YL/YY/ YC/MY/ML/MC

1 working conditions

1.1 Ambient temperature is -10 ℃ ~ + 40 ℃

1.2 Altitude does not exceed 1000 meters

1.3 No corrosive or explosive gas

2 installation and use

2.1 Before using the motor, please check the power supply, voltage, frequency and etc., to see if it meets the motor's parameter on the nameplate. Measure the insulation resistance of the stator winding to ground and which of each phases. The resistance value shall not be less than 0.5 MΩ, otherwise the rotor winding shall be dried first.

2.2 The power supply voltage shall not exceed ± 5% of the rated voltage of the motor. The three-phase voltage should be balanced and symmetrical for each phase.

2.3 Before using, please check if the motor is deformed or damaged during transportation. Test rotation of the motor manually without the power supply, which is supposed to be flexible and smooth rotated.

2.4 The motor should be properly installed according to its structural installation type, and the motor casing must be reliably grounded.

2.5 The motor can't reach normal speed or have abnormal sound after a few seconds after the power is turned on. The power MUST be cut off immediately. The reason of the fault should be identified and the fault should be repaired before restart the motor.

2.6 The motor shall not be started frequently, shall be less than 3 time per hours. It is strictly FORBIDDEN TO OVERLOAD the motor. If the motor stops due to overload, CUT OFF the power supply immediately. Change the rotation direction of the motor, please follow the wiring diagram strictly.

2.7 Please select appropriate fit type for the connection of the motor drive shaft ext and the transmission connection parts such as pulleys, gears, couplings, etc. If the connection are over tight and over used smash and press the motor shaft will damage to the motor bearings, and further lead to make huge noise.

2.8 Must be concentric when connecting the motor shaft and the connection parts. Must maintain the Concentricity the belt-driven belts. Adjusting the belt pull force of the pulley drive should not be too tight, so as not to affect the normal starting of the motor, and cause the unilateral wear of the motor bearings to be too large, affecting the service life consequentially.

3 Selection of motor external cable Reference table

Rated current (A)	Standard cross-sec area (mm2) of wire	Rated current (A)	Standard cross-sec area (mm2) of wire
I≤6	0.75	25 < I ≤32	4
6 < I ≤6	1	32 <I≤40	6
10 <I ≤16	1.5	40 <I ≤6	10
16 <I ≤25	2.5		

Note: The external wire in this table should be copper core cable, and the length should not exceed 20 meters. If it does needs to extend the length cable, the cross-sectional area should be

increased. If the voltage in your area is much lower, please increase the cross-sectional area of cable.

4 Maintenance and repair

4.1 The motor should be inspected and cleaned regularly, and the casing must not be dusty.

4.2 Frequently check whether the fasteners on the motor are loosen or falling off.

4.3 For motors that are used continuously for a long time, the bearings should be cleaned and lubricated every six months, refueled to half full, and the bearings should be inspected and replaced if found to be faulty.

4.4 For a motor that has not been used for a long time, check whether the bearing grease has solidified or deteriorated, and whether the rotation is flexible before starting.

4.5 If the capacitor is found to be damaged and needs to be replaced, it must meet the various parameters (rated voltage, capacitance setting) of the original capacitor to avoid affecting the performance and life of the motor.

4.6 When disassembling the motor, care should be taken not to damage the stator winding and the centrifugal switch.

5Storage and transportation

5.1 The storage environment of electric motors should be kept dry and ventilated to avoid sharp changes in ambient temperature. It is strictly prohibited to stack them with corrosive items.

5.2 When the motor is stored and transported, it should not be inverted, and it should not be stacked too high. Pay attention to protect the shaft extension.

6 Warranty period

6.1 The user guarantees that the motor can operate normally within one year under the conditions of correct use and storage according to the requirements of the maintenance manual. If the motor is damaged or cannot be damaged due to poor manufacturing quality within this specified time, During normal work, our company will repair, return, and exchange for customers.

6.2 We will not guarantee any motors disassembled and repaired without authorization.

6.3 The user's failure to operate correctly in accordance with the instructions, causing the motor to be burned is the responsibility of the user, and is not within the scope of our three guarantees. Our company is not responsible for the direct and indirect losses caused.

6.4 The company does not guarantee without the seal of the dealer and the date of purchase.

6.5 In addition to the above, please contact to your supplier.

General troubleshooting of electric motors

l No.	Failure phenomenon	Troubleshooting
1	Motor does not start	1. The power fuse is blown: replace the fuse. 2. Unsoldering or damage of centrifugal switch or capacitor: weld it firmly or replace it. 3. overload: the large capacity motor should be replaced. 4. Loose terminal: tighten it.
2	start with no load or with the help , but the start is slow or the steering is unstable.	1. The contact of the centrifugal switch cannot be closed or the contact of the contact is poor, and the index is unsoldered: repair the switch or weld it firmly. 2. The capacitor leads are open circuit or poor contact: Resolder. 3. The capacitor is damaged: replace the capacitor with the same

		specification.
3	Motor speed is lower than normal speed.	1. The centrifugal switch cannot be apart: repair the centrifugal switch. 2. Check if the wiring matches diagram in the Terminal box. 3. Bearing damage: Change the bearing.
4	After starting, the motor heats up quickly and even burns out.	1. Shake winding insulation resistance to ground. Under normal conditions, the temperature is greater than 0.5M Ω and the resistance is less than 0.5M Ω . Drying is required. The resistance is close to zero, and the winding is grounded and cannot be used. 2. After start-up, the centrifugal switch cannot be turned on and the sound is abnormal. Retry the machine after repairing the centrifugal switch. 3. The main and auxiliary windings are connected incorrectly and short-circuited. 4. The rotor cannot be used if it is dismantled.
5	The motor is too noisy when running.	1. Whether the motor is fixed and installed firmly meets the requirements. 2. Check whether the centrifugal switch is damaged. 3. Check whether the bearing is damaged. 4. Check whether there is any foreign body in the stator case. Take out the foreign body and reassemble it. 5. If the above reasons are excluded, the windings have problems and cannot be used.
6	Steering not meet user requirements.	Open the terminal box and switch the two ends of the secondary winding according to the wiring diagram.