**ELECTRIC MOTOR**

**USE & MAINTENANCE**

**INSTRUCTION**

**1.Use conditions:**

Electric motors should be used under following conditions:

Ambient air temperature: along with season a variation, but not beyond 40℃

Elevation: not beyond 1000m

Duty type: S1(Continuously)

Stator winding temperature raising limiting value

(resistance-law): not beyond 80K

**2. Preparation before fixing:**

1)The packing should be checked whether they get integrated and damp sign or not before the cartons of electric motors be opened.

2)It ought to pay attention to the antirust coat when eliminating the dust on the electric motors after the cartons of electric motors be opened.

3)The nameplate data of electric motors should be checked that whether they are conform the requirements.

4)Patiently inspect the electric motors whether thereis distorts or the damage in the transportation process. The fastener whether or not become less crowded or falloff, try to rotate the electric motors to see whether they are nimble or not.

5)Use 500v Mega meter survey insulation resistance, which the value should not be lower than 0.5MΩ. Otherwise carry on dry processing to the stator winding. The temperature to the dry processing should not beyond120°C.

**3. Electric motors fixing:**

1)The electric motors are permitted to use shaft coupling, the spur gear transmission and the pulley drive. But for the electric motors(2 pole)with higher than 4kwand the electric motors(4 pole) with 11kw are not suitably used pulley drive, such as small pulley drive.

2)Big triangle belt transmission scope and double shaft stretching electric motors ventilator end are only permitted to use shaft coupling. When using the shaft coupling, the electric motor axle and the necessary axle should superpose.

3)The vertical fixing electric motors, besides shaft stretching commensurate with normal pulley drive load, itis not allowed to bring any other axial load installments again.

4)The fixing of electric motors should guarantee their good fan cooling conditions.

**4. The application of electric motors:**

1)The electric motors should properly earth, and they are designed with earth installment. When necessity also may use the electric motors end foot or the flange plate set bolt earth

2)Generally, the electric motors have hot protective device, and according to the electric motors nameplate electric current to adjust protective device the entire definite value.

3)When the deviation between frequency or power source and the nameplate data beyond ± 1% or beyond±5% of voltage, the electric motors cannot guarantee the input of rated power continuously, the continuous working electric motors do not permit the overload

4)The electric motors are not allowed to have the offhand on and abnormal sound or vibration in the operation of no-load or load. The temperature of the bearings are not ought to beyond 95℃.

**5. Electric motors maintenance, repair:**

1)The use environment should always maintain dry, the surface of the electric motors should be kept clean, the wind entrance should not be blocked by dust and fibered..

2)When the hot protection of the electric motors continuously take action, it is ought to find out the breakdown which comes from an electric motor or a super load or the entire definite value of a protection installment is too low, after removing breakdown, it can be put into operation.

3)It should guarantee that the better lubrication in the application of electric motors. General electric motors should be supplemented or changed lubricating greases they have operated about 5000 hours(sealed bearings have no need to change lubricating grease in its use expiry day), when in the movement the over-heat of bearing or the deterioration of lubricating grease be discovered it has to replace the lubricating grease promptly. As in the process of replacing the lubricating grease, the old one should be eliminated and use the gasoline to cleanse the bearings and the fuel slot of bearing cover, then the ZL-3Lithium base lubricating grease should be filled in the cavity2/3 of inner and outer circle of bearing.

4)When bearing life end, the vibration and the noise will obviously increase in the operation of the electric motors. If the radial internal clearance of bearing reach the following value, the bearing must be replaced.

5)When detach motor, you can take rotor out from axial end or non-axial end. If there is no need to detach the fan, it would be much convenient to take rotor out from non-axial end. When the rotor is extracted from stator, testator winding or insulation should be avoided damaging.

6)When change stator winding, please remember to write down the original form, size, number of winding and wire gage. If the originally -designed winding is changed freely, it will severely affect one or several functions of motor, even make it unable to use.

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| The name of products: |
| Model specification: Purchase date:  |
| The store of purchase:  |
| Product serial number:  |
| User name: Purchase price:  |
| Detailed address;  |

**Qualified Certificate**

**Type of product:**

 **Power:**

**This product is qualified according to the standard examination, the export is permitted.**

 **Inspector:**

**The date of inspection :**