

Instructions for storage of motors

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For prolonged storage of electric motors (e.g.spare motors), the following precautions must be observed:

The motor must not be subject to any external vibrations at standstill so as to avoid causing damage to the bearings.

Make sure that they are kept in a dry and dust free place, ambient temperature +10° C to +40° C, relative humidity < 50 %.

Unprotected machined surfaces (shaft-ends and flanges) should be treated against corrosion.

Rotor locking device

On motors with roller bearings, fix the rotor in place by means of the locking device, to protect the bearings against damage due to vibration.

Check before commissioning:

Bearings

Before commissioning a motor that has been stored for more than 4 years, check the bearings.

For motors without regreasing device, grease has to be renewed or bearings have to be changed after 2 years at the latest.

N.B. Even minor corrosion can considerably shorten the service life of the bearings. Bearings that need not be replaced should be packed with new grease.

Motors with regreasing device have to be regreased after 2 years at the latest with the double required quantity of grease. When motors are stored for over 4 years, change grease.

The rotor has to be rotated every month by approx. 30 degrees, in order to avoid compression spots on the bearings due to static load.

Insulation resistance

N.B. Before commissioning check the insulation resistance. With values $\geq 1k\Omega$ per Volt rated voltage, dry the winding

Check the insulation resistance of each phase against earth until the measured value is constant. The insulation resistance of new windings is above 10 M Ω .

If, at room temperature, the resistance is below 0.5 M Ω , the winding must be dried. In this case the winding temperature must not exceed 80°C. For drying connect the space heater or another heating device, or apply an AC voltage of 5 or 6 % (connect in delta) of the rated motor voltage to terminals U1 and V1. Repeat the measurement. The motor can be put into operation when the resistance is above 0.5 M Ω .

Anti-condensation heaters, if fitted, are recommended to be used to avoid water condensing in the motor.