

Bearings for Electrical Machinery



# **Application Examples**

- Electric Motors
- Generators
- Ventilation
- Electric Traction Motors

### The Problem

Bearings used in electrical machinery have a number of special requirements to fulfil. Extremely smooth running, long durations of use and high operational reliability are essential requirements. Where the bearings feature seals or shields, the type of grease lubricant used is an important consideration.

## The Solution

BTC bearings for electrical machinery feature especially smooth running characteristics. The bearings must also possess additional quality features that will ensure that the essential requirements are 100% fulfilled.

For sealed and covered bearings, greases which not only have silencing properties but also a very wide operating temperature range, are best suited.

### **Bearing Types**

Deep groove ball bearings and cylindrical roller bearings are most commonly used in this type of application. Smaller deep groove ball bearings typically incorporate seals or shields in order to safeguard high operational reliability.

In larger engines, cylindrical roller bearings are often used for floating bearings. Sometimes also angular ball bearings are used for locating bearings.





#### **Product Characteristics**

Bearings for electrical machinery applications must meet strict requirements for smooth running and operational reliability.

To ensure these properties, BTC bearings for electrical machinery must undergo additional tests for running noise.

### **Special Designs**

#### **Special Greasing**

Bearings with seals or shields can be supplied with a number of different greases, including special greases with silencing properties, special high temperature capability greases, etc.

#### **Seals**

For specific applications, BTC supplies seals with different seal lip geometries from various materials, e.g. FPM for applications operating at high temperature.

#### **Electrically Insulated Bearings**

BTC produces electrically insulated bearings in various designs which reliably prevent bearing damage from electricity.

On request, we are happy to supply further information on the subject. Our Technical Service Department is available to discuss your application further.

#### **Advantages**

- Extremely smooth running
- High quality special grease with silencing properties
- Wide variety of greases
- Electrically insulated bearings







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