

ANNOTATION

In this thesis, the calculation of a DC motor with a power of 11 kW, a rated voltage of 220 V and a rated speed of 3000 rpm is carried out.

According to the results of the calculation of the magnetic circuit, the values of induction and MDS were determined. sections of the magnetic circuit and built up the idle speed and transient response, also built up the performance characteristics of this engine. After calculating the switching parameters, we determined the switching parameters.

According to the result of the thermal calculation, it was established that the excess temperature of the armature winding, the field winding and the collector were below the maximum permissible values.

The calculations are made taking into account the recommendations set out in the textbook published under the editorship of Kopylov I. P. "Design of electric machines" and Gurin Ya.S. "Design of series of electric machines".