

ABSTRACT

A method of obtaining by test a synchronous machine's characteristics using the LPA11-K twin microprocessor module and the PDP11-34 computing system is presented.

For each test, the appropriate signals (voltage and current) are sent via an interface to the A/D converter for subsequent processing. A program is written to display the results graphically and in tabular form.

The program is made "User Friendly" in that the user does not have to learn how to program or set up the equipment. In addition, the program is written in such a way that the user need no in-depth knowledge of the hardware aspect of the LPA.

The results of this exercise show a significant saving in time in the performance of these tests and the accuracy and convenience of using this method. Further work to be carried out are outlined and possible applications in industry are suggested.