ABSTRACT

Excessive use of energy is a problem facing the world today. The decreasing energy sources and natural resources have made various parties think of ways to save electricity consumption. The air conditioning system is the most dominant part of a closed room, but its use is often inefficient because it regulates the temperature so low. In the government regulation issued by the Minister of Energy and Mineral Resources No. 13/2012 concerning the saving of electricity use, it is necessary to use electricity efficiently and rationally without reducing safety, comfort and productivity.

One way that can be done to save electrical energy is by stabilizing the temperature automatically, by designing a device that is able to regulate the temperature of the AC unit automatically hopes to save electrical energy. So a device that can work automatically in the form of a remote control is designed that does not interfere with the system on the AC unit but works like a conventional AC remote control.

After the design is complete, testing is carried out in this final project based on the use of kWh before and after the tool is installed to obtain the difference. The test results of this final project can make savings by simply adjusting the temperature on the AC unit of 4.9 kWh or 24.69% for 3 days from the results of data comparisons.

Keywords: temperature, energy saving, intelligent control system, air conditioner