

## **The effect of room temperature on the generator's wind**

### **Abstract**

Thermal modeling is a method used to formulate a temperature profile for a generator. The most common types of thermal model used by researchers are transient and steady-state model. There is insufficient of information regarding prolong usage of a generator in a confined space. The purpose of this paper is to formulate an empirical temperature model for the winding coils for the duration of 24 hours and to investigate whether a peak temperature exists. From the results, it can be concluded that there is a peak temperature detected for the winding coils in a non-controlled room temperature that occurs after 9 hours of experiment. The effect of room temperature on the winding coils temperature for no load condition is only 6.6%.

**Keywords;** Temperature Profile, Thermal Experiment, Thermal Modeling