

## **Transformer Protection using Micro Controller**

### **Team Members:**

1. 19R21A0235 – T. Manish
2. 19R21A0221 – M. Vamshi
3. 19R21A0237 – U. Vikas
4. 19R21A0233 – T. Venkatesh
5. 19R21A0227 – R. Rajkumar
6. 19R21A0231 – S. Yeshwanth

### **Abstract**

In this project, present a “Arduino based protection and monitoring of transformer” main attention is to reduced or overcome the fault occurred in the transformer. To prevent the transformer from the fault due to the over-currents, temperature rise in transformer oil and over voltage, we used relay and sensor. This protective methodology is implemented by using Arduino controller. It is cost powerful device and high speed of operation with greater accuracy. Load current and transformer temperature are continuously monitored or sense by the controller. If supply voltage and load current crosses the threshold value which are previously set values in programmed and protection scheme operates and trips the load. For the testing purpose, one special type of transformer used that is Autotransformer. By using this, we can change the supply voltage of the primary of transformer to produce over voltage and under voltage fault. Also to occur over-current fault, we raise the load by using drilling machine. At the end, successfully, we have done this project after clarifying the advanced technique and find out all problems before any failure. The Transformer Protection using Micro Controller is shown in Figure 1.

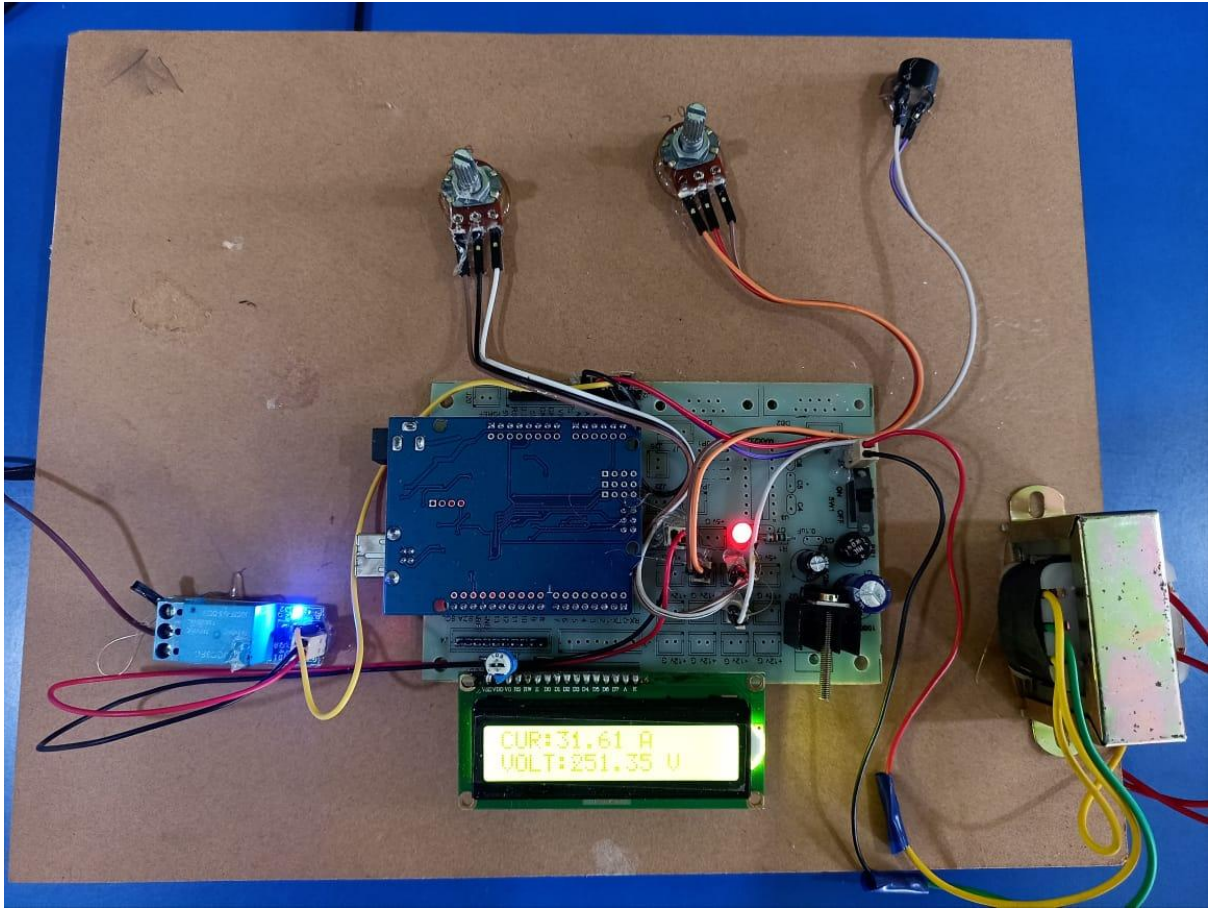


Figure 1. Transformer Protection using Micro Controller