TRANSFORMER OVERHEAT CONTROL SYSTEM AND INTIMATION

ABSTRACT

This paper proposes a system that can be used to obtain control over the cooling system of a transformer in a way to maintain optimum level of operating temperatures of a transformer. Transformers when subjected to high temperatures lead to lesser efficiency and in worse cases cut off in supply. This may be due to ineffective cooling systems. The system proposed in this paper has a microcontroller that is used to manage the cooling of transformer winding. The microcontroller present in the Arduino UNO board (AT mega 328P) controls the fan in the output terminal corresponding to the temperature set. Temperature sensor LM35 is used to sense the temperature of the winding and is input to the Arduino UNO analog input pin for processing. The 16x2 character LCD is display the current temperature values as signaled by the temperature sensor.

BLOCK DIAGRAM