

Early Warning System: Preventive Maintenance Efforts on Distribution Transformers Through Online Monitoring of Temperature and Power Quality

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ABSTRACT

Research on temperature and power quality monitoring systems in distribution transformers was developed using Arduino and nodeMCU as sensors receiving media and processing measurement data. In this study, the monitoring system developed is more detailed regarding the condition of the distribution transformer section which includes: temperature and power quality measurements. Measurement of power quality in terms of the amount of current and voltage in the transformer. The research method used is ADDIE. Temperature measurement sensors are used to measure the detailed condition of transformer components and current and voltage sensors are used to analyze power quality conditions. The final research result is a set of distribution transformer monitoring tools in the form of hardware that can be monitored online.

Kata Kunci: Monitoring System, Distribution Transformer, Power Quality