

DESIGNING AND TESTING ELECTRICAL PROTECTION SYSTEM AT HOME SCALE BASED ON ARDUINO ATMEGA 328 WITH VOLTAGE SENSOR

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ABSTRAK

This final project aims to make hardware (hardware), software (software) and to determine the performance of the Arduino ATmega 328 Microcontroller-Based Electrical Power Protection System with Current Sensor. The design method for the Electrical Power Protection System at Household Scale Loads Based on the Arduino ATmega 328 Microcontroller with a Current Sensor uses a design method consisting of designing tools, making tools, and testing tools. In this final project, the Electrical Power Protection System for Household Scale Loads Based on the Arduino ATmega 328 Microcontroller with a Current Sensor is made as a protection device based on the Arduino ATmega 328 microcontroller. Amperes) flowing in the load, so you can also get the real power value (Watt) which will be displayed on the 16x2 LCD. The protection system in this tool can also be set the current limit value of protection using a push button, where if the specified current limit value is exceeded, the relay will be active to cut off the load current and the buzzer sounds as an alarm.

Keywords: *Protection device, Current Sensor, Voltage Sensor, Atmega 328, Power.*