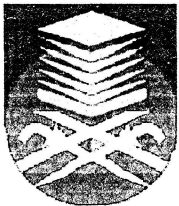


**DESIGNING AND DEVELOPING SINGLE PHASE TRANSFORMER
DIFFERENTIAL PROTECTION RELAY MODEL**

This report is present in partial fulfillment for the award of the
Bachelor of Electrical Engineering (Honours)
of
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ABSTRACT

This thesis describes a case study the operation and function of differential protection when faults occur at certain zone in transformer. The function of protection relay was to properly operate circuit breakers so as to disconnect only the faulty apparatus from the system as fast as possible. Thus, the interruption and damage can minimize when fault occur. The differential protective relay is the most widely use in protection system. *(There* is impossible to study deeply about protection in real power system. Therefore an idea to design a model of differential protective relay that is, the application was the same as real one is implemented. This project could be extended for further evaluation *for future worker* then student *with using the result of this project* could use as basic reference. Based on the theory and calculation, the whole circuit of differential protection relay was designed. The laboratory model of differential protection relay was developed and tested and experimental result was presented.

Keywords

Current transformers (CTs), peripheral interface controller (PIC 16F84A), circuit breaker (CB) and relay.

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