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FINAL REPORT OF DIPLOMA PROJECT

FACULTY OF ELECTRICAL ENGINEERING



SIMULATION AND MODELLING
OF INPUT FOR AC TO DC
INVERTER

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ACKNOWLEDGMENT

We would like to express our gratitude to the Almighty for giving us opportunity to seek wisdom and knowledge of the universe and can be a good caliph to manage and explore the mysterious world.

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ABSTRACT

The advancement of technology has given many benefits to human being and universe as a whole. We can see obviously the changes in the engineering and medical field. The evolution of electrical engineering knowledge has give create many changes to the world. The creation of transistor in the middle of 20th century by three scientists has a very big impact to the revolution of computer, communication and digital.

In our project, we were responsible to make something that can supply voltage to the inverter. There are so many sources that have been selected to us, such as wind, water, car battery, solar panel, generator and etc. As a successful engineer, we need to create the circuit ourselves. This is due to a few reasons. First, we consider on the cost. Second, we think about the difficulties and their ability in some cases that may be happen soon. So, we have made up our mind to create the circuit that function almost the same as adaptor. Although it is quite simple and less cost, we also can achieve our main target.

We are responsible to supply 12VDC to the inverter. As a summary, our circuit will reduce the 230VAC from the main source and step down to 12VDC before supply to the inverter.

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CHAPTER 1

INTRODUCTION

1.1 Background of the Project

A project undertaken to boost the electrical engineering during free time. The project is to build a circuit that allows running the inverter. The circuit that will be design can convert 230VAC to the 12VDC. The inverter needs to invert 12VDC to 100VAC.

1.2 Scope of Work

This progress report present the work carried out in developing a source to inverter. The source designed is rectifier, which will convert 230VAC to 12VDC. The circuit had simulated by using Tina Software.

1.3 Project Report Organization

The structure of this project report was carefully planned to give a clear explanation of the first stage in designing the circuit in the software. The report will include simulated result and how the operation of the circuit.