# DEPARTMENT OF ELECTRICAL ENGINEE RING UNIVERSITI TEKNOLOGI MARA CAWANGAN PUALAU PINANG

FINAL REPORT OF DIPLOMA PROJECT

### VARIABLE/REGULATOR OF OUTPUT POWER SUPPLY

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#### Abstract

The circuit present here is regulator or variable output power supply. This is part of power supply from AC to DC.

For this part, components in this circuit work as to give the output from transformer which is to step down the AC supply and send to filter for change into DC which used for input in the variable output power supply.

This regulation is ideal for having a simple variable bench power supply. Actually quite important because one of the first projects a hobbyist should undertake is the construction of a bench supply. While a dedicated supply is quite handy e.g. 5V or 12V, it's much handier to have a variable supply on hand, especially for testing.

That is why the variable is produce in this project. This is for easy to costumer for used their device in variable input supply.

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#### **CHAPTER 1**

#### **INTRODUCTION**

#### 1.1 Background

Nowadays there are so many types of electronic components. These electronic components are use widely in our life.

These various types of electronic components need its own input voltage and because there are vary, the input voltage also varies according its type.

To ensure the components meet their input voltage value and without to changes the voltage source, this variable output power supply was designed.

This variable output power supply can supply voltage to almost electronic components. The voltage can be adjusted from  $\pm 0$  V to 35 V. This variable output power supply will be very useful as the voltage can be adjusted according to the electronic components.

#### VARIABLE OUTPUT POWER SUPPLY

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