ABSTRACT

Defibrillator is an electronics device which conducts electrical shock signals (pulses) to the heart muscle to maintain myocardial depolarization which is undergoing cardiac fibrillation (ventricular fibrillation atau atrial fibrillation). This defibrillator is made to be used as learning material so that anyone can have sufficient knowledge about the working principles and functions of the defibrillator. This defibrillator is equipped with two signal/wave selections namely monophasic and biphasic, the enrgy given ranges from 10-50 Joules with the use of tools 10, 20, 30, 40, 50 Joules. The energy will then be discharged or given to the patient by pressing the discharge/shock button on the paddle. The process for producing biphasic signals reuires two condensers and two mosfets. Energy disposal is controlled by the mosfet which then the mosfet will work alternately from the first condenser to the second condenser and reverse the direction of the paddle. Measuerments were made 5 times using Volt meter at the test points specified by the author, the results of measurements on biphasic signals prove that the voltage required to carry out defibrillation is lower than the voltage required by the monophasic signal.

Keyword : Defibrillator, Monophasic, Biphasic, Condenser.