

DEVELOPMENT OF A 3KVA DC TO AC POWER INVERTER USING DC TO DC CONVERTER

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ABSTRACT

In this paper, a construction of 3kVA inverter based on Boost converter and Half-bridge inverter topology is presented. The boost converter steps the low voltage supply to a higher voltage supply, this is achieved with the use of appropriate electrical and electronics devices. The stepped up DC voltage is converted into an AC voltage which can be used by electrical appliances and it is also similar to the voltage that comes out of an electrical outlet. The essence of stepping up the voltage before converting is to reduce the size of the inverter using a high frequency transformer.

KEYWORDS: Inverter, Converter, PWM, Modulation frequency