KT Journal of Mechanical Engineering

ISSN: 3048-9563
(Online)

Key Tech Services Publication, India

http://www.ktjme.com
Vol.: 1, No. 1, 2024, Pages: 1-8

DESIGN AND IMPLEMENTATION OF HALF BRIDGE INVERTERS TOPOLOGIES TO COOKER INDUCTION HEATING

Parimal S. Bhambare[1], Abdulbary Abubaker Zein AlZubaidi[2]

[1,2] Department of Mechanical & Industrial Engineering, Caledonian College of Engineering, Oman

Abstract

Induction cooker is the process of inductive electrical heating using induction material, this technology called electromagnetic induction. This induction cooker is one of the applications of electromagnetic induction. The induction cooks on top using households, this application become in demand in the market and increasingly accepted as useful, energy saving and the efficiency is good for preparing food. It has useful benefits for induction cookers include better efficiency, safety and speed of heating, drawbacks include the fact non-ferrous cookware such as copper, aluminum and glass cannot on an induction cook on top. This project objective and aim is to design and build an induction cooker using half bridge inverter topology and control the power output

Received:30.04.2024; Accepted: 08.06.2024

Keywords: Induction cooker, Electrical heating, Inverter

*Corresponding author name and email: Parimal S. Bhambare, Parimalbhambare@nu.edu.om

How to cite this article: Parimal S. Bhambare, Abdulbary Abubaker Zein AlZubaidi, Design, and implementation of half bridge inverters topologies to cooker induction heating, 1, 2024, 1-8

Published Online: 2024

using microcontroller to varying the operating frequency.