

VISVESVARAYA TECHNOLOGICAL UNIVERSITY
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(SPONSERED BY KSCST.BANGALORE)
A Project Report
On

“Single Phase High Frequency AC Converter for Induction Heating
Application”

Dissertation submitted in partial fulfillment of the requirements
for the award of degree of

Bachelor of Engineering
In
Electrical and Electronics Engineering
Project Associates

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ABSTRAT

The proposed topology reduces the total harmonic distortion (THD) of a high frequency AC/AC Converter well below the acceptable limit. This project deals with a novel single phase AC/DC/AC soft switching utility frequency AC to high frequency AC converter. In this project a single phase full bridge inverter with Vienna rectifier as front end is used instead of conventional diode bridge rectifier to provide continuous sinusoidal input current with nearly unity power factor at the source side with extremely low distortion.. This power converter is more suitable and acceptable for cost effective high frequency (HF) consumer induction heating applications.