

## International Journal on Recent Researches In Science, Engineering & Technology

(Division of Electrical and Electronics Engineering)

A Journal Established in early 2000 as National journal and upgraded to International journal in 2013 and is in existence for the last 10 years. It is run by Retired Professors from NIT, Trichy. It is an absolutely free (No processing charges, No publishing charges etc) Journal Indexed in JIR, DIIF and SJIF.

Research Paper

Available online at: www.jrrset.com

Chief Editor: Dr. M.Narayana Rao, Ph.D., Rtd. Professor, NIT, Trichy.

ISSN (Print) : 2347-6729 ISSN (Online) : 2348-3105

Volume 3, Issue 4, April 2015.

JIR IF: 2.54 DIIF IF: 1.46 SJIF IF: 1.329

## Rotational Based Parameters Control of Switch Mode Inverter Fed Ac Drives

V. Monisha Rose PG Scholar <u>Monisharose.v@gmail.com</u> DMI College of Engineering Chennai M. Suresh ME
Assistant Professor / EEE
sureshmahalingam079@gmail.com
DMI College of Engineering
Chennai

**Abstract:** In this paper, by use of SWITCH MODE INVERTER (SMI) to control the torque and flux. The optimal switching state of SMI is used to control the torque and flux and it results in fast control of torque. The motor speed can be controlled in this method. The controlling processes are based on the control of Switch Mode Inverter with FOC instead of a matrix converter. Field-orientation control (FOC) or vector control of induction machine with decoupled torque and flux dynamics leadings are used for independent control of torque and flux. The result of this paper shows that it can reduce the total harmonic distortion.