

LIST OF ABBREVIATION

PM- Permanent Magnet
PMSM- Permanent Magnet Synchronous Motor
BLDC - Brushless DC
VLSI -Very Large-Scale Integration
HES - Hall Effect Sensors
2- Φ O - Two Phase Operation
DTC- Direct Torque Control
FOC - Field Oriented Control
SPWM - Sinusoidal Pulse Width Modulation
SVM - Space Vector Modulation
PWM - Pulse Width Modulation Technique
VSI - Voltage Source Inverter
FSTPI - Four-Switch Three-Phase Inverter
DPC - Direct Phase Current
PI - Proportional and Integral
PID - Proportional Integral and Derivative
FLC - Fuzzy Logic Controller
GA - Genetic Algorithm
ANN - Artificial Neural Network
MRAS - Model Reference Adaptive System
SMC - Sliding Mode Control
DWT - Discrete Wavelet Transform
PSO - Particle Swarm Optimization
BF- Bacterial Foraging
2-3 Φ O - Two & Three Phase Operation
3- Φ O - Three Phase Operation
SSC- Six-Step Control
HCCT- Hysteresis Current Control Technique
SSDTC- Six-Step Direct Torque Control Technique
MSSDTC - Modified Six-Step Direct Torque Control
TSDTC- Twelve-Step Direct Torque Control Technique

MTSDTC- Modified Twelve-Step Direct Torque Control Technique

MSPWM- Modified Sinusoidal Pulse Width Modulation Technique

ADC- Analog to Digital Converter

DAC- Digital to Analog Converter

CMV- Common-Mode Voltage

MTPA-Maximum Torque Per Ampere

MI- Modulation Index