Contents

Nomenclature

MLI	Multi-Level Inverter
DCMLI	Diode-Clamped Multi-Level Inverter
FCMLI	Flying-Capacitor Multi-Level Inverter
NPC-MLI	Neutral Point Clamped Multi-Level Inverter
CHB-MLI	Cascaded H-Bridge Multi-Level Inverter
HMI	Hybrid Multi-level Inverter
PWM	Pulse Width Modulation
SPWM	Sinusoidal Pulse Width Modulation
THI-PWM	Third Harmonic Injected – Pulse Width Modulation
SHE-PWM	Selective Harmonic Elimination-Pulse Width Modulation
SVPWM	Space Vector Pulse Width Modulation
2-D SVM	Two-Dimensional Space Vector Modulation
3-D SVM	Three-Dimensional Space Vector Modulation
PS-PWM	Phase Shifted-Pulse Width Modulation
LS-PWM	Level Shifted-Pulse Width Modulation
CBPWM	Carrier Based Pulse Width Modulation
CBSVPWM	Carrier Based Space Vector Pulse Width Modulation
PD-CB-PWM	Phase Disposition-Carrier Based-Pulse Width Modulation
POD-CB-PWM	Phase Opposition Disposition-Carrier Based-Pulse Width Modulation
APOD-CB-PWM	Alternate Phase Opposite Disposition-Carrier Based-Pulse Width Modulation
CMLI	Cascaded Multi Level Inverter
CM	Common Mode
VSI	Voltage Source Inverter
VSC	Voltage Source Converter
SV	Small Vector
MV	Medium Vector
SSV	Switching State Vector
P	Prism
T	Tetrahedron
NZSV	Non-Zero State Vector

ZSV	Zero State Vector
THD	Total Harmonic Distortion
STATCOM	Static VAR Compensation
FACTS	Flexible AC Transmission System
SSSC	Static Synchronous Series Compensation
DVR	Dynamic Voltage Restorer
D-STATCOM	Distributed Static VAR Compensation
PQ	Power Quality
EMI	Electro-Magnetic Interference
EMC	Electro-Magnetic Compatibility
RFI	Radio Frequency Interference
NPC	Neutral Point Converter
SMC	Stacked Multi Cell
ANPC	Active Neutral Point Converter
MMI	Modular Multilevel Inverter
HB-NPC	H-Bridge-Neutral Point Converter
HMC	Hybrid Multilevel Converter
HEV	Hybrid Electric Vehicles
EV	Electric Vehicles
HVDC	High Voltage Direct Current
HV	High Voltage
AC	Alternating Current
BJT	Bipolar Junction Transistor
MOSFET	Metal Oxide Semiconductor Field Effect Transistor
IGBT	Insulated Gate Bipolar Transistor
GTO	Gate Turn-off Thyristor
IGCT	Insulated Gate Commutated Transistor
ETO	Emitter Turn-Off Transistor
MTO	MOS Turn-Off Transistor
MCT	MOS Controlled Transistor
SITH	Static Induction Thyristor
V	Voltage
V_{dc}	DC Voltage
V_{aN}, V_{bN}, V_{cN}	Pole Voltages
V_{an}, V_{bn}, V_{cn}	Phase Voltages
V_{ab}, V_{bc}, V_{ca}	Line Voltages