LIST OF SYMBOLS/ABBREVIATIONS USED

S1  Switching instant (on the applied voltage wave).
PF  Power-factor.
FF  Flip-flop (Set-Reset).
ICS Instant-controlled switching.
ICC Integral-cycle control.
ZCI Zero-crossing instant.
PZI Positive zero-crossing instant.
PFC Pulse-forming circuit.
PSC Phase-shifting circuit.
PSD Phase-sequence detector.
DBC Driver and buffer circuit.
MCC Master-controller circuit.
ZVS Zero-voltage switching.
RFI Radio-frequency interference.
PWM Pulse width modulation.

θ  Angle of the applied voltage wave at the SI.
Z  Circuit impedance.
φ  Power-factor angle of impedance, Z, of the circuit.
Im  Study-state maximum current of the circuit.
Io  Current flowing in the circuit at the SI.
Ip  The peak current of circuit during the transient period before steady-state condition.
Ze  Damping-ratio (zeta) of circuit.
Xc  Capacitive reactance.
Xl  Inductive reactance.
Qo  Initial charge stored on capacitor before applying the input voltage.
Y  Ratio of the initial voltage before switching, Qo/C, to the maximum voltage on the capacitor, Im.Xc, at steady-state.

n  Ratio of the initial current, Io, at the SI to the maximum current at steady-state (Io/Im).
Va  Phase voltage (L-N) of phase A.
Vab Line voltage of between phase A and B (L-L).
iA  Phase current in phase A (winding).
Xm1 Magnetizing reactance of primary winding.
Xm1a Magnetizing reactance of primary winding of phase A.
Xm1ab Mutual reactance of primary windings between A & B.