Appendix D: Experimental Waveforms (Analog Controller)

D-1 Transformed Waveforms (Two Phase: 2φ)

Fig D-1.1: \(v_a\) and \(i_a\)

Fig D-1.2: \(v_p\) and \(i_p\)
Appendix D: Experimental Waveforms (Analog Controller)

D.2 Power components

Fig D-2.1 $p_{ac}$ AND $p$ (Active Power)

Fig D-2.2 $q_{ac}$ AND $q$ (REACTIVE POWER)
Appendix D: Experimental Waveforms (Analog Controller)

D-3 Compensating Reference Currents (2 φ)

Fig D-3.1 $i_{\alpha}$ and $i_{\beta}$ (α and β Phase)

D-4 Compensating Reference Currents (3 φ)

Fig D-4.1 $i_{ca}$ and $i_{cb}$ (Phase-A and Phase-B)

Fig D-4.2 $i_{ca}$ and $i_{cc}$ (Phase-A and Phase-c)
Appendix D: Experimental Waveforms (Analog Controller)

D-5 Source Voltage and Load Currents (3 φ)

Fig D-5.1: Phase A

Fig D-5.2: Phase B

Fig D-5.3: Phase C
Appendix D: Experimental Waveforms (Analog Controller)

D-6 Source Voltage and Compensating Currents (3 φ)

Fig D-6.1: PHASE-A

Fig D-6.2: PHASE B
Appendix D: Experimental Waveforms (Analog Controller)

D-7 Source Current and Source Voltage (3 φ)

Fig D-7.1: PHASE-A

Fig D-7.2: PHASE-B

Fig D-7.3: PHASE-C
Appendix D: Experimental Waveforms (Analog Controller)

D-8 $v_{ce}$ and Compensating Current

Fig D-8.1: UPPER IGBT PHASE- A

Fig D-8.2: $V_{ce}$ and COMPENSATING CURRENT
Appendix D: Experimental Waveforms (Analog Controller)

D-9 Gate Pulse and Compensating Current

Fig D-9.1: UPPER IGBT A-PHASE

Fig D-9.2 LOWER IGBT A-PHASE

Fig D-9.3: UPPER IGBT: Phase-A (Zoomed)