

Appendix B

Waveforms at each stage implementation of SVM

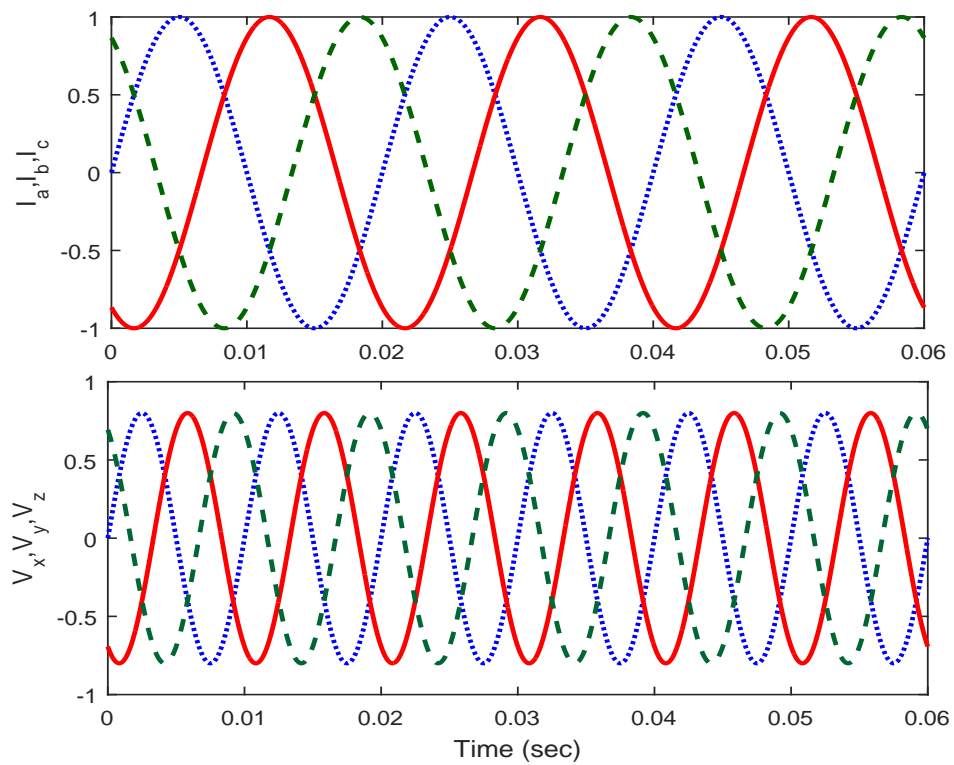


Figure B.1: Input currents(50Hz)(top) and desired output voltages(100Hz)(bottom)

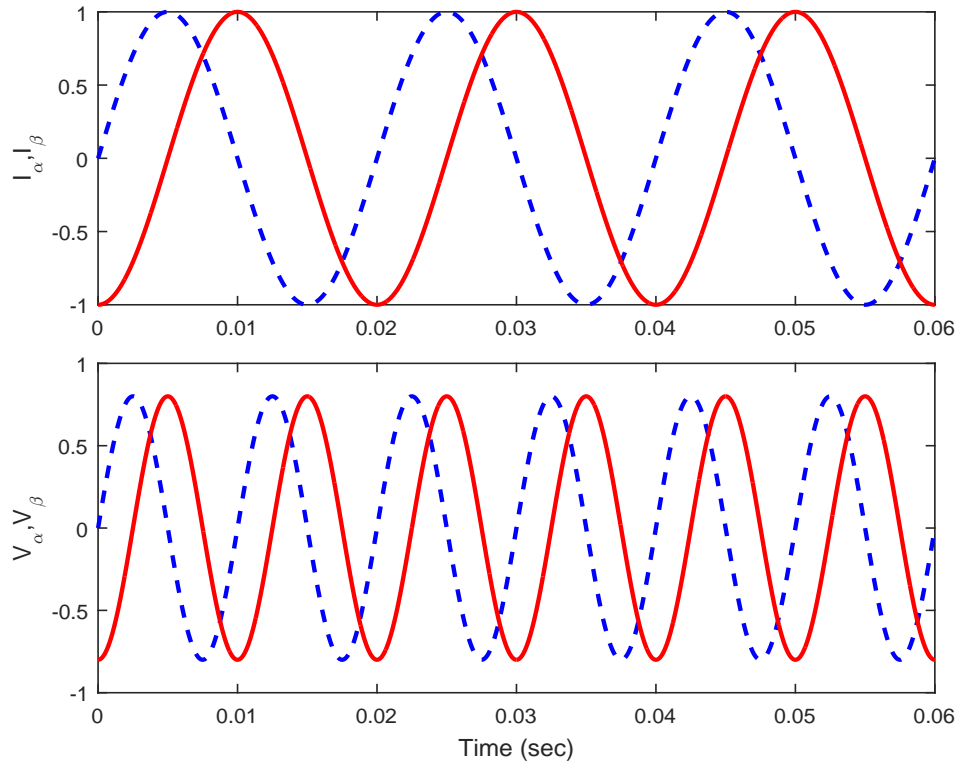


Figure B.2: I_α, I_β (top) and V_α, V_β (bottom)

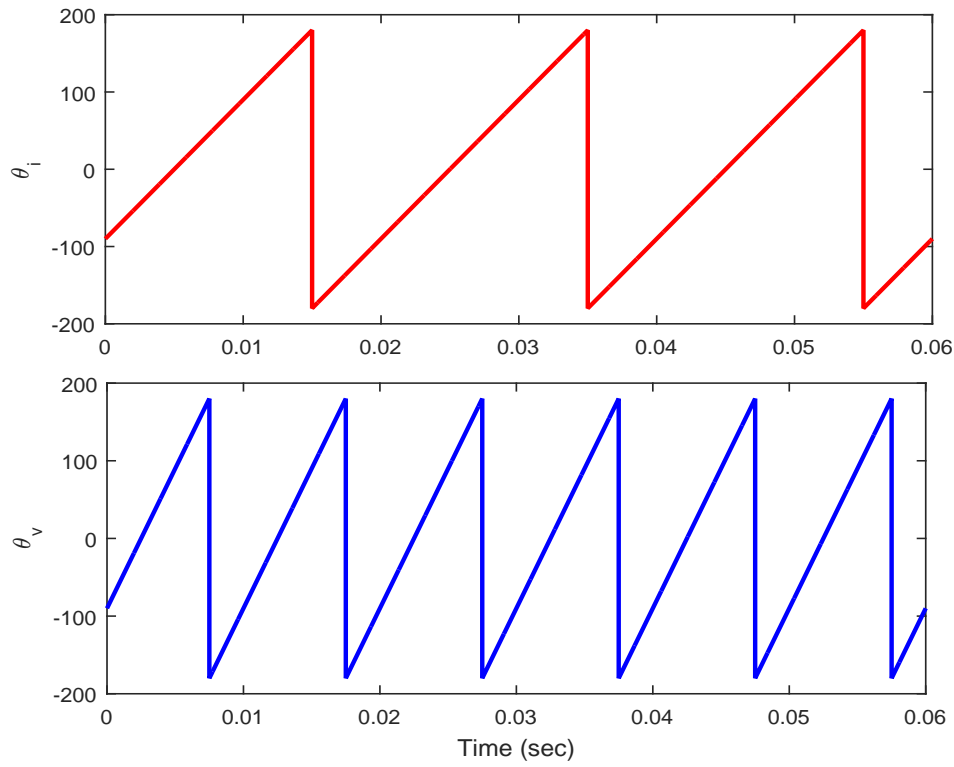


Figure B.3: Theta θ_i (top) and θ_v (bottom)

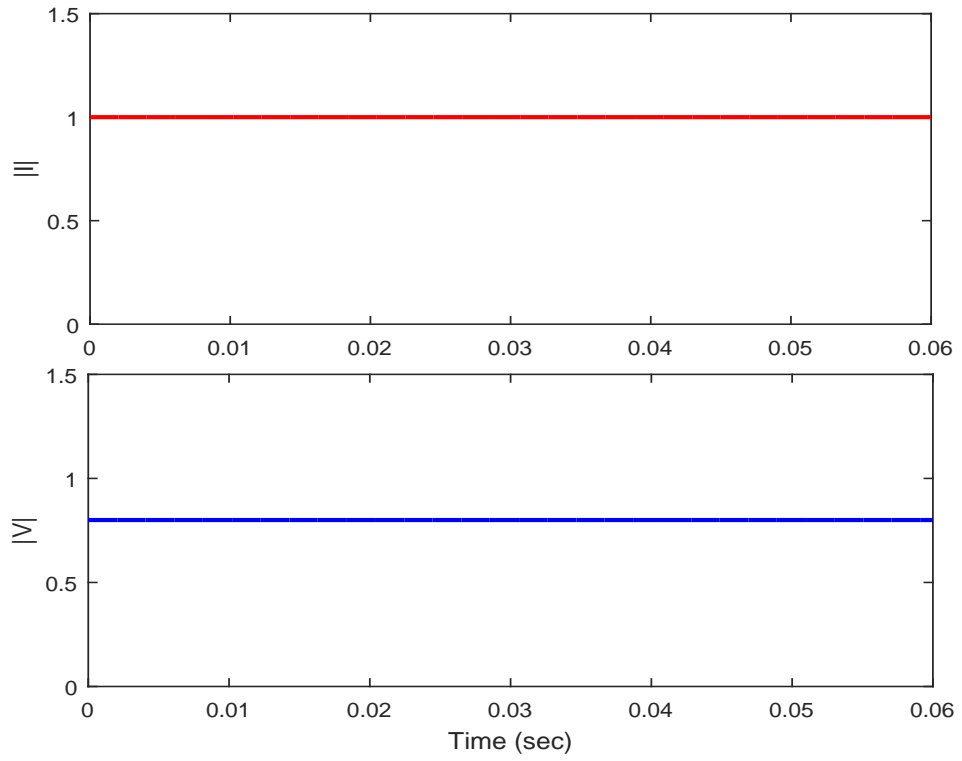


Figure B.4: Magnitudes $|I|$ (top) and $|V|$ (bottom)

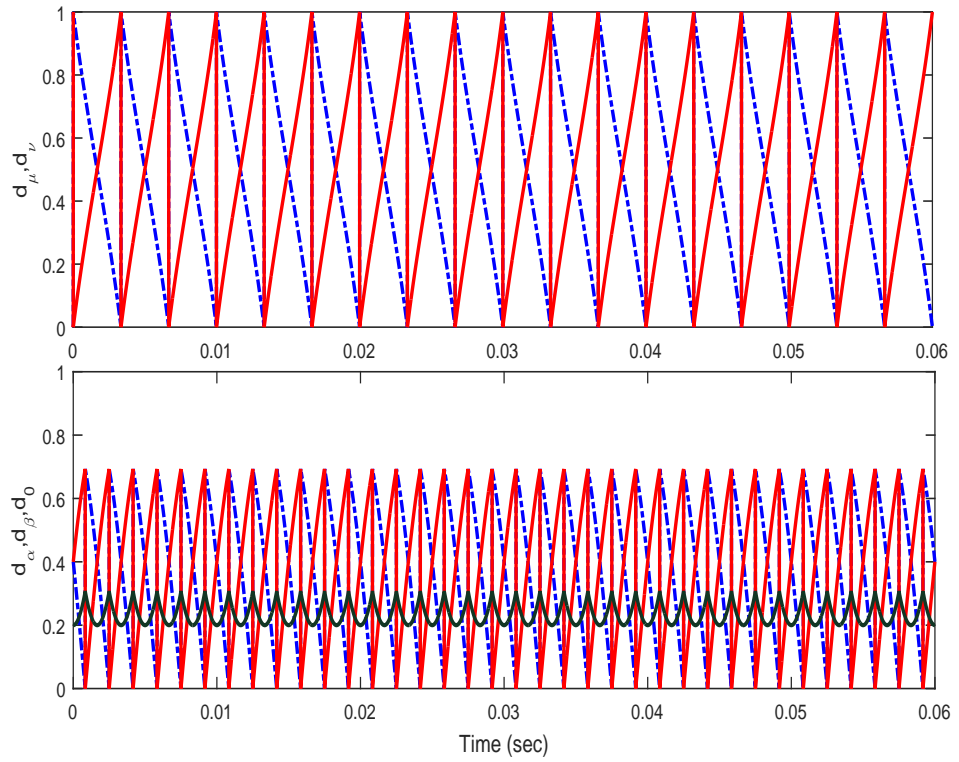


Figure B.5: Duty ratio's $[d_\mu(\text{red}), d_\nu(\text{blue})]$ (top) and $[d_\alpha(\text{red}), d_\beta(\text{blue}), d_0(\text{green})]$ (bottom)

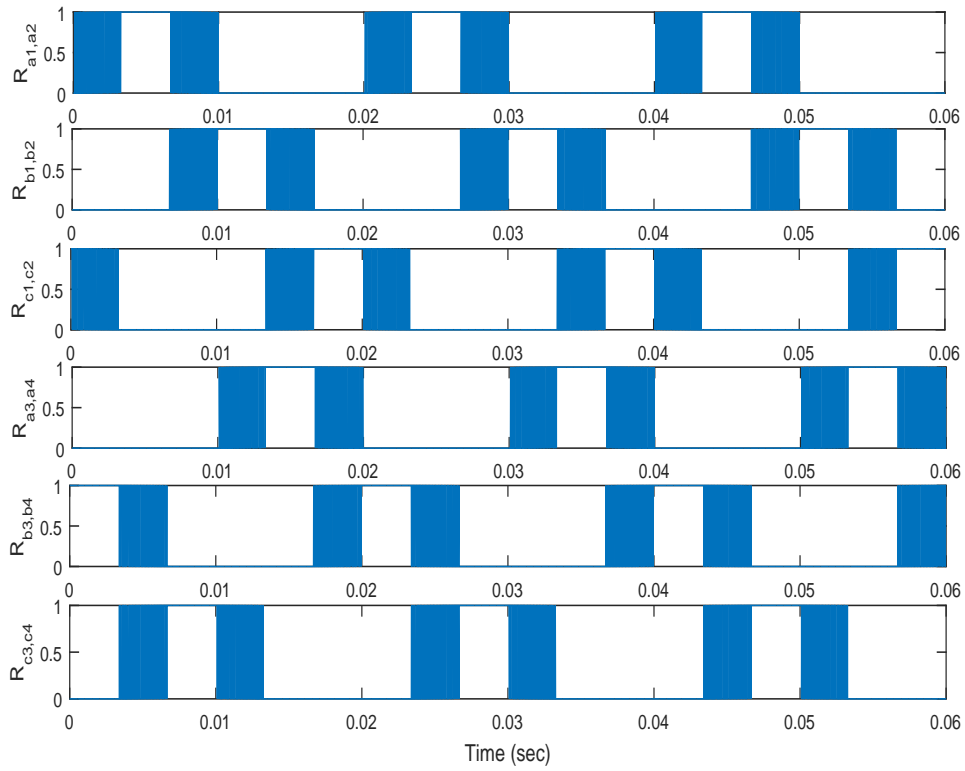


Figure B.6: Rectifier switching signals

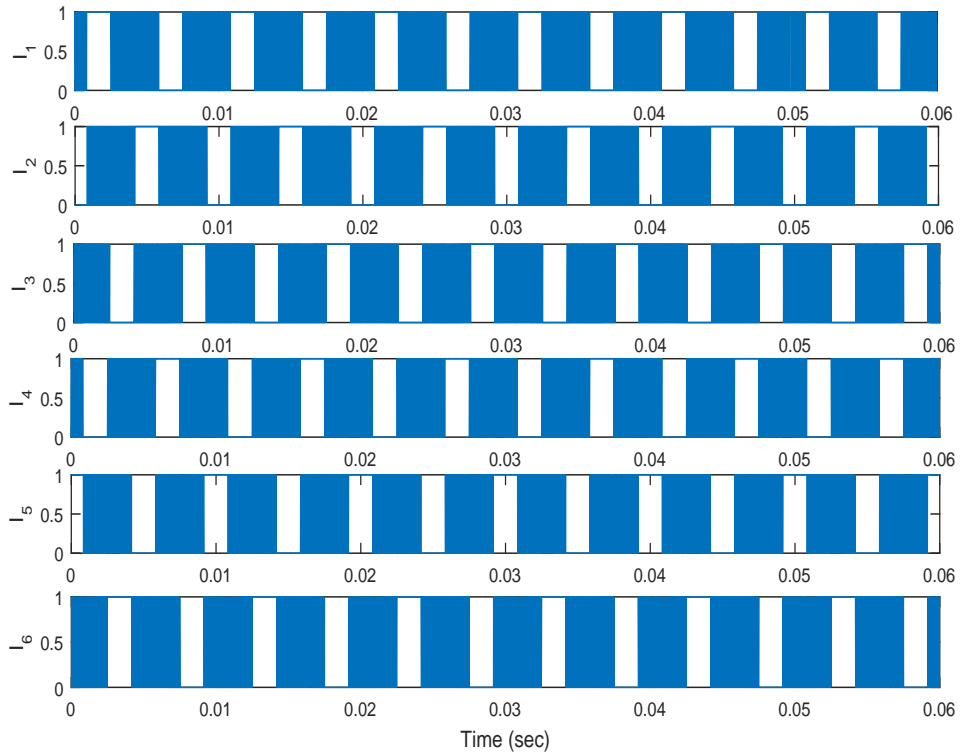


Figure B.7: Inverter switching signals