Abstract

This report presents, complete design and simulation model and analysis for Medium Frequency Inverter for application of induction heating. To demonstrate the proposed unified approach the fundamental inverter topology like single phase bridge inverter has been analyzed, after that the functional simulation model for single phase and three phase inverter is achieved and the actual implementation of single phase model is proposed with the help of matlab simulink with the developed functional model, design parameters such as voltage and current ratings of the power semiconductor switches and load current can be easily calculated.