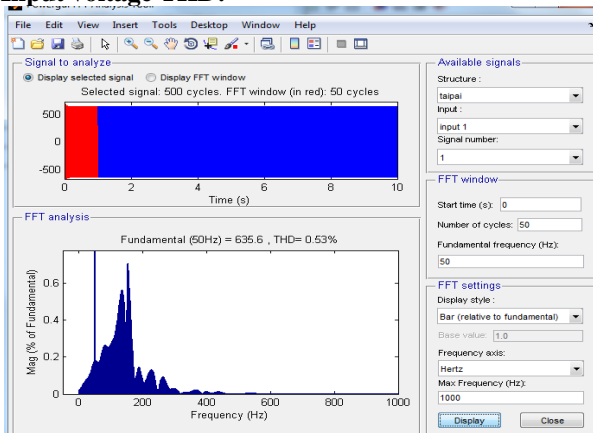
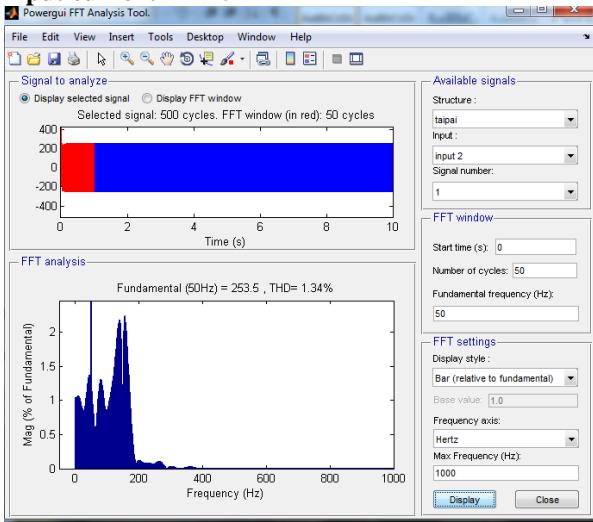


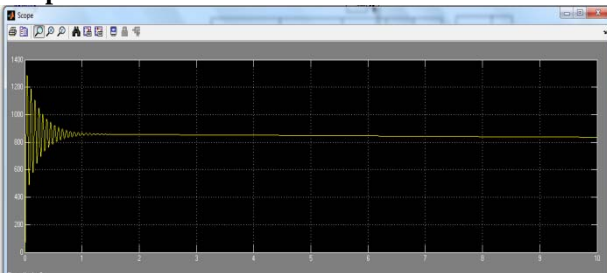
Input voltage THD:



Input current THD:



Output:



6. Conclusion

In this paper, a new three-phase two-switch ZVS PFC DCM boost rectifier has been introduced. The proposed rectifier achieves less than 5% input-current THD over the entire input Range and above 25% load and features complete ZVS of the switches. In addition, the proposed rectifier has automatic voltage balancing across the two split output capacitors, which simplify the implementation of downstream power processing with low-rated-voltage, low-cost, and high-performance converters connected across the split capacitors. The performance evaluation was performed on a three-phase prototype operating in the line voltage range of VL-L,RMS. The measured input-current THD at, RMS were 1.4% and 2.8%, respectively. The measured full-load efficiency was in the 97.6–98.2% range.

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