



Figure 15(b): Harmonic spectrum of the source current (after compensation)

8. Conclusion

The proposed SAPF control scheme advantages are related to its simplicity, implementation and modeling. The use of a predictive control algorithm for the converter current loop proved to be an effective solution for improving current quality of the distribution system. The system tracking capability and transient response is improved. The predictive current controller is a stable and robust solution. The proposed algorithm mitigates the system harmonic currents and reactive power compensation simulated results have been shows the compensation effectiveness of the proposed active power filter

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