

Figure 4.1: Output load voltage

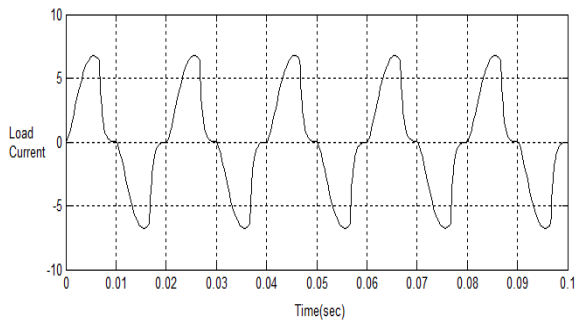


Figure 4.2: Output load Current

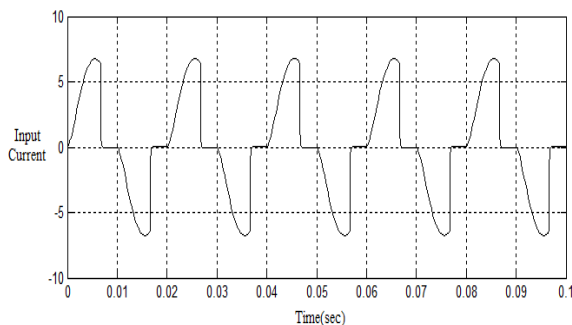


Figure 4.3: Supply Current

5. Conclusions

The paper presents the extinction angle control technique for single phase AC-AC voltage converters. The extinction angle control technique provides a considerable improvement in the input power factor. This improvement is mainly due to the improvement in the displacement factor.

The ac voltage controller with the extinction angle control technique has been applied to a RL load and various results are obtained. Thus, this technique is suitable for most Industrial application like lathes, fans, blowers, pumps and many other where speed control of single-phase induction motor is required. This method is very simple, convenient and cost effective.

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