

# **Abstract**

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## **Power factor Improvement of a Boost Converter Supplying a DC Motor**

Abstract A study of boost-converter circuit utilized to drive a DC motor as a load while improving the supply power factor is demonstrated through this paper. A computer simulation of the proposed circuit has been assessed using simulink under matlab version (6) to show circuit behavior for different operation modes: speed and voltage control. Experimental investigation has been carried out to analyze the effect of circuit parameter variations on the motor response. Keywords: boost-converters, power factor correction