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Reducing Electricity Bills for Industries and Commercial Establishment

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Abstract—The power factor correction of electrical loads has remained a major problem for industries. In early days the power factor correction was manually using capacitive load banks. In the proposed paper the automated power factor corrector (APFC) using capacitive load banks is discussed which is helpful in power factor correction. The proposed automated project uses a microcontroller to measure the value of power factor from the load. The project is designed in such a way that it will give approximately unity power factor. Both software and hardware are required to adjust the APFC. It helps us to improve the efficiency of the system.

Keywords — microcontroller, power capacitors, integrated circuit, inductive load, and reactive power