

Automatic Power Factor Control (APFC)

The main aim of this project is to enhance the power quality by constantly monitoring the load power factor, when the load power factor drops below a definite value it results in the rise of line current resulting in more line loss and greater voltage drop. So a method is to be developed to improve power factor automatically. Inductive loads are main reasons for low power factor in power systems. Therefore we need to develop a method to improve power factor automatically. Automatic power factor controller project provides solution to this problem. Low power factor creates unnecessary loading on transmission lines. By inserting the capacitances of required magnitude power factor can be improved therefore improving the efficiency of the system. . In this project, power factor correction unit is developed with microcontroller section, relays, capacitive load and inductive load.

