

Abstract

This report presents fundamental principles to design and development a power electronic based AC regulator. A power electronic based AC regulator ac to ac converter, in generic form accepts electric power from one system and convert it for other system. AC regulators are based on pairs of antiparallel connected switches. The speed control of induction motor can be achieved by varying terminal voltage. The speed control of induction motor in certain type of drives where torque is directly proportional to square of speed can be achieved by phase control of applied voltage. Several different arrangements of thyristors and motor windings are possible.