Abstract

Shunt hybrid power filter are extensively used for current harmonic elimination and to compensate reactive power for linear/nonlinear loads and to improve input power factor. Hybrid power filter is thus used as practical solution to solve the electric power quality (EOQ) issues. Hybrid filter consists of a shunt active power filter (SAPF) and passive filters. Shunt active power filter operates at a very low switching frequency, thus giving higher conversion efficiency. The combined operation of shunt active power filter and passive filter ensures total harmonic distortion (THD) of source current should be within the permissible limits set by various regulatory agencies i.e. THD=