POWER FACTOR CORRECTION CAPACITORS

PF correction capacitors are used to correct the low lagging power factor caused by inductive loads such as motors to reduce the utility suppliers tariff charges.

Problem arises when PF correction banks remain connected when the inductive load is switched off. This presents a leading power factor load to the alternator causing the terminal voltage of the alternator to rise.

Capacitor banks controlled by automatic power factor regulators are not a problem since the regulator will only switch in the required number of capacitors to correct the lagging power factor.

A capacitor bank will reduce the current from the generator but does not reduce its size since the kW load does not change.