THYRISTORISED APFC PANELS

- **State- of -the art electronic switching device designed to replacement of electro-mechanically switched equipment in power factor correction systems.**
- Thyristor switched capacitor banks with high speed switching capability are designed to support the supply voltage of distribution systems and to correct the power factor of connected loads.
- Thyristor switched capacitor are capable of switching power factor correction machines with highly variable load, such as lifts, crane drives, crushers, welding machines, rolling mills etc.,
- Where power factor correction requires frequent and fast switching of capacitor banks.

Smooth and transient free

Connection and disconnection of the capacitor to and from the network occurs at zero current crossing threshold. This smooth connection avoids the transient effect like waveform distortions, generation of switching spikes etc., typically created by electro-mechanically switched Power Factor Correction (PFC) systems, the total correction time is only 3 to 4 cycles which is much faster than the electro-mechanically switched PFC systems.

Major Benefits

- Increase installed capacity of your transformer, D.G. Sets, Cables, Switch Gears etc.
- Save electricity charges by :
  a. Reducing energy consumption.
  b. Reducing contract demand cost.
  c. Avoids penalty due to power factor and maintains power factor close to unity on real time basis.
- Improves quality of power, by avoiding surges, sag or low voltage with heavy machinery like compressors, air conditioning plant, cranes etc. (Saves the cost of star – delta starters or soft starters).Eliminates harmonics (optional features).Absorb switching transient coming from the source or upstream.
- Due to fast correction of P.F. large H.P. motors can be started on generators already near full capacity.

Maintenance Free : The system is maintenance free because it does not use contactor for switching the capacitors.

Capacitor Life : Capacitor life is enhanced to minimum three times of normal life due to smooth connection and disconnection.

Resonance Free : The detuned reactors prevent resonance by shifting the capacitor /network resonance frequency.