APFC PANEL

In electrical engineering, the power factor of an AC power system is defined as the ratio of the real power absorbed by the load to the apparent power flowing in the circuit. Real power is the average of the instantaneous product of voltage and current and represents the capacity of the electricity for performing work. Apparent power is the product of RMS current and voltage. Due to energy stored in the load and returned to the source, or due to a non-linear load that distorts the wave shape of the current drawn from the source, the apparent power may be greater than the real power, so more current flows in the circuit than would be required to transfer real power alone. A power factor magnitude of less than one indicates the voltage and current are not in phase, reducing the average product of the two. A negative power factor occurs when the device (which is normally the load) generates real power, which then flows back towards the source.

In an electric power system, a load with a low power factor draws more current than a load with a high power factor for the same amount of useful power transferred. The higher currents increase the energy lost in the distribution system and require larger wires and other equipment. Because of the costs of larger equipment and wasted energy, electrical utilities will usually charge a higher cost to industrial or commercial customers where there is a low power factor.

MARSZ have developed Automatic Power Factor Control or APFC Panels are mainly used for the improvement of Powe Factor. Power Factor is the ratio of active power to apparent power and it is a major component in measuring electrical consumption. APFC is an automatic power factor control panel which is used to improve the power factor, whenever required, by switching ON and OFF the required capacitor bank units automatically. Equipped with advanced technologies and features, our (APFC Panels) Automatic Power Factor Correction Panels / Power Factor Improvement Panels are fully automated in operation, having capacity to achieve industry-required power factor in diverse situations. These panels are quality-tested components that undergo a wide variety of electrical load.

They can be used in a many industries

- Hospitals / Hotels
- Building segment
- Steel Rolling mills
- Chemical industry
- Textile
- Cement plant
- Sugar plant
- Automobile industry

Product Specifications:

- Non-compartmentalized
- Modular design for easier assembly, Installation & maintenance
- Automatic power factor correction
- 4 – 14 correction stages
- Optimum reactive power compensation
- Indoor
- Floor mounted
- Cable entry from bottom

Key features of our APFC :

- Better reliability and lower losses
- Withstands high temperature
- Step protection MCCB
- Savings in electricity bills
- Perfect to improve power factor
- User-friendly microprocessor based APFC relay
- Self-optimizing control capability
- Dust-proof cabinet with power coating
- Perfect control with different system parameters measurement with indicating light
- Cost-effective reliable static devices