

HOW TO INCREASE YOUR POWER FACTOR AND YOUR BENEFITS?

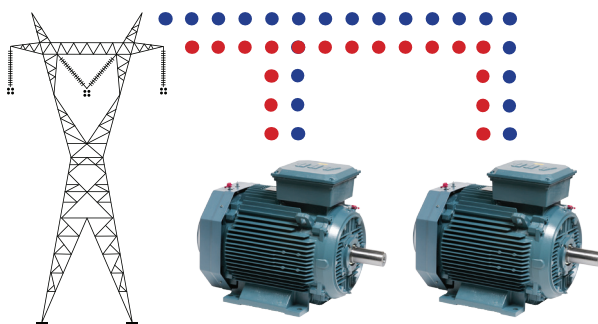
WHAT IS THE POWER FACTOR ?

Electrical distributions are essentially composed of three types of loads: resistive, inductive and capacitive. Inductive loads have the particularity of operating with a magnetic field which requires a certain electrical power without producing any work. These loads are typically motors, transformers, ballasts of fluorescent tubes, etc...

WHY CORRECT THE POWER FACTOR ?

The most frequent answer to that question is very simple: MONEY! Having a poor power factor means that the current required by the distribution system is greater than the current required performing the actual work. Therefore, all the power distributors penalize customers with a bad power factor. Compensating reactive energy means providing this energy instead of the distribution network by installing a capacitor bank.

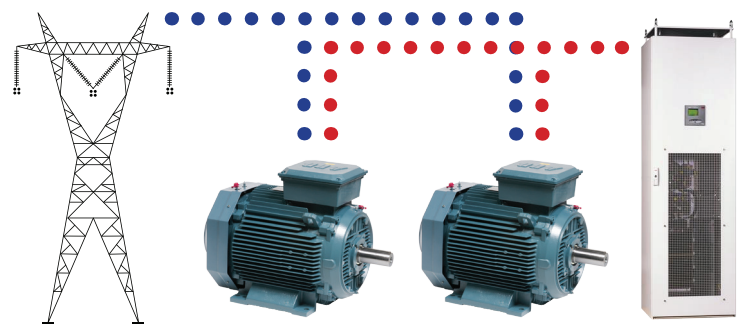
Electrical network without capacitor



Power
Supplier

Motor
Load

Electrical network with capacitor



Power
Supplier

Motor
Load

Capacitor
Bank

- • • • Actual Power (kW)
- • • • Reactive Power (kVAr)
- • • • Apparent Power (kVA)

THE BENEFITS ARE MULTIPLE

- ✦ Savings on the electricity bill. Average return on investment in 18 months
- ✦ Savings on the size of the electrical equipment since the power demand decreases
- ✦ Increase the active power available at the secondary transformers
- ✦ Stabilization of voltage
- ✦ Extension of the life of your distribution equipment
- ✦ Increased capacity of your electrical system, etc.

WHO CAN BENEFIT FROM THIS?

Several industrial, commercial and institutional applications can benefit from an increase in the power factor. These include: manufacturers, hospitals, shopping centers, office buildings and institutions, pulp and paper mills, sawmills, textile factories, printing plants, plastic factories, etc.

SOLUTIONS

Proax Technologies and ABB offer quality products for power factor improvement. ABB's power capacitors will reduce the total current consumed by your distribution network while increasing the capacity of your network with a higher power factor.

A typical installation repays itself in less than 18 months and in several cases in less than a year!



PROAX TECHNOLOGIES CAN PERFORM A FREE STUDY IN ORDER TO SUGGEST A SOLUTION TAILORED TO YOUR NEEDS



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