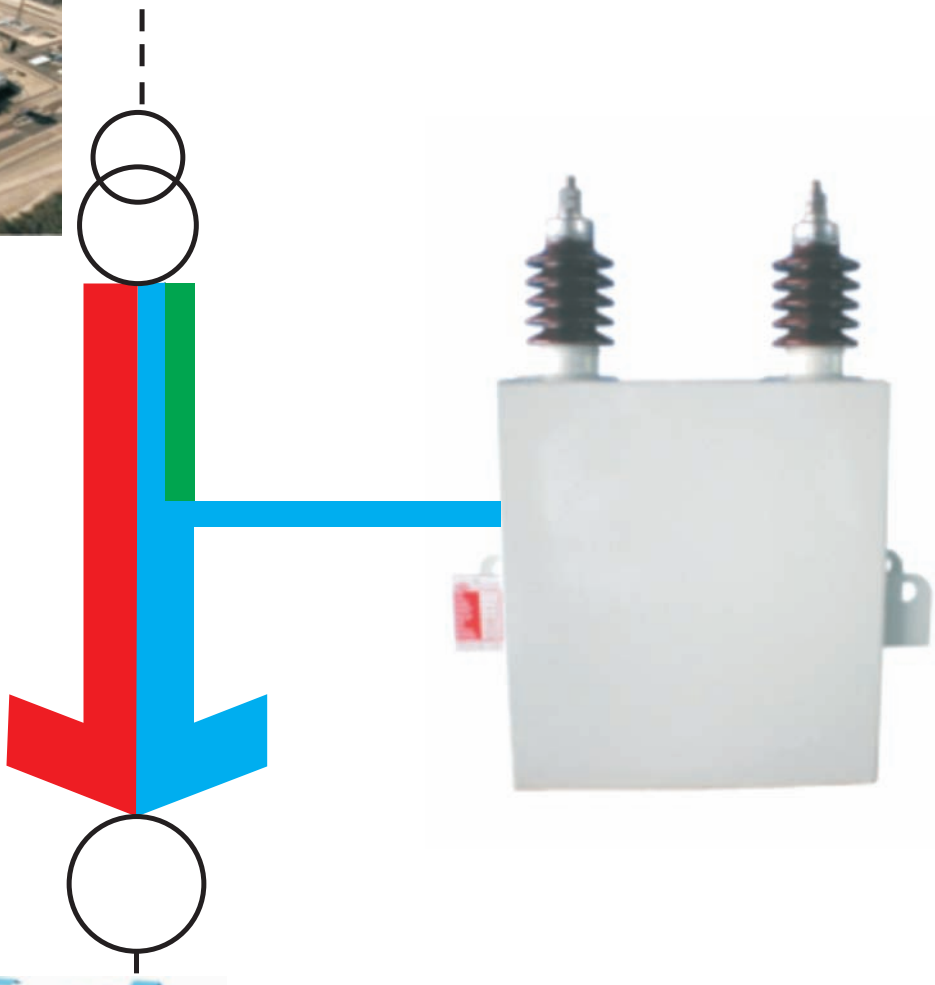
Medium Voltage Capacitor

Power Factor Correction



Save your money and Energy

General

Our Capacitor unit is designed for heavy duty operation in Fixed, enclosed and pole mount banks in all condition.

The Capacitor units is a single phase and three phase power capacitor of all film design, with very low dielectric losses and a long life. Each capacitor has several elements that consist of a dielectric of polypropylene film and Aluminium foil, which are connected in series and parallel group into an internal star or delta configuration.

Quality Assurance

ENERGE Capacitor plants are certified according to ISO 9001 - 2008

Safety

Medium voltage capacitors are manufactured in two different versions either for use with external fuses or already fitted with internal fuses.

Long Life

Transient surges in networks and partial discharge levels cause accelerated ageing of capacitor elements. The exceptionally long service life of capacitors is due to the intrinsic properties of the dielectric fluid, Viz.,

- Very high chemical stability
- High power of absorption of gases generated during partial discharges
- Very high dielectric strength

Composition

The capacitor is made of

- Polypropylene films,
- Folded Aluminium foils,
- Non-PCB dielectric fluid,

Capacitor tanks are made in stainless steel material with fixing brackets for mounting.

The capacitors are painted with two component EPOXY treatment for long withstanding capacity for environments.

Advantages

- **Improving power factor**
- **Reducing installation losses**
- **Decreasing voltage drop**

Technical data

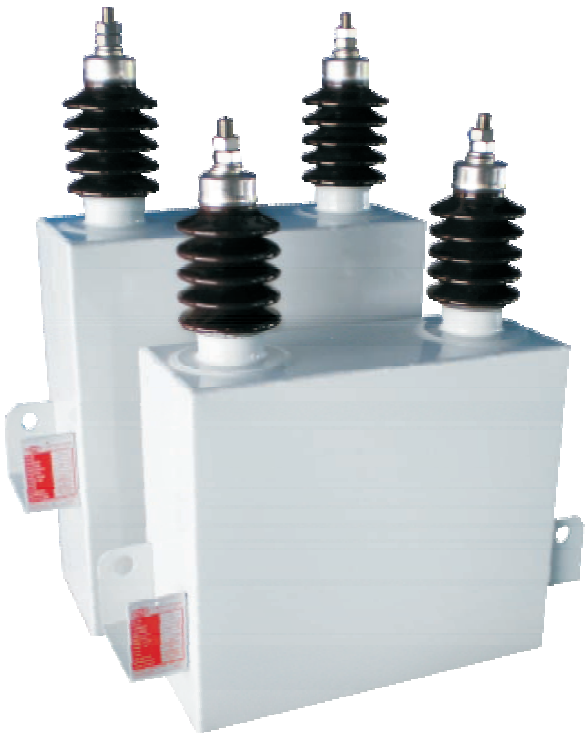
Type	**Impregnated all-film dielectric**
Rated Voltage	**Upto 12 kV**
Rated frequency	**50 Hz or 60 Hz**
Rated Power	**Upto 500 KVAr**
Average losses	**<0.15 W / Kvar**
Dielectric liquid	**Non-PCB**
All-film dielectric	**Polypropylene**
Temperature category	**-50° C to +55° C (D)**
Standards	**IEC 60871-1 ANSI / IEEE, CSA**
Standard Colour	**Light grey**
Standard bushings	**75 kV BIL 95 kV BIL**

Features

ENERGE Medium voltage Capacitors are described "100% All Film Capacitors". That capacitors have low loss material. Due to the that fact, ENERGE CAPACITORS are long lasting. Capacitors are designed and 100% tested to meet the international standards.

Each capacitor element has the possibility of having a separate internal fuse. In addition, each capacitor unit is provided with an internal discharge resistor.

All Medium voltage power capacitor units are light-weight and have low losses. They comply with most national and international standards.



Application

M.V. power factor correction is directly related to the technical management of transmission and distribution networks.
The benefits are:

- **Power quality**

  Increasing voltage levels in busbar sets in substations and at the end of lines.

- **Improving the Operating cost of an installation**

  Decreasing reactive power and therefore reducing apparent power with two relevant technical aspects:

  - Reducing losses
  - Increasing the performance of transformers and installations

- **Reducing the financial cost of energy**

Technical data

Type	**Impregnated all-film dielectric**
Rated Voltage	**1000...13800V (with internal fuses) Above 13800V (without internal fuses)**
Rated frequency	**50 Hz or 60 Hz**
Rated Power	**Upto 1000 Kvar**
Average losses	**<0.15 W / Kvar**
Dielectric liquid	**Non-PCB**
All-film dielectric	**Polypropylene**
Temperature category	**-50° C to +55° C (D)**
Standards	**BS IEC 60871-1 ANSI / IEEE, CSA**
Standard Colour	**Light grey**
Standard bushings	**75 kV BIL 95 kV BIL 125 kV BIL 150 kV BIL 200 kV BIL**