



FRAKO Capacitors

The core of the solution



Not only are FRAKO power capacitors ideal for power factor correction systems, but they can also provide safety and reliability in other applications. With their robust construction and patented technology, they offer maximum current carrying capacity and voltage carrying capacity. Their compact design keeps their size down without the risk of their overheating. This makes them ideal components in every installation where reliability is the utmost priority.

Ideal components for

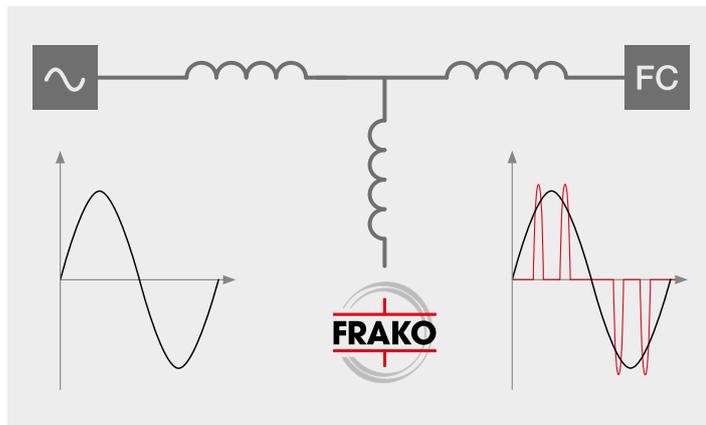
- Harmonic filters
- UPS systems

FRAKO power capacitors can be installed in a wide variety of electrical systems.

In addition to their key role in power factor correction systems, power capacitors are also used in filters (combinations of capacitance and inductance). A distinction is made between supply-side filters and load-side filters.

Supply-side filters

The primary objective of installing supply-side filters is to reduce or even eliminate the supply-side waveform distortion caused by the load. These devices are referred to as tuned passive filters, their classical application being with frequency converters, which draw currents with non-sinusoidal waveforms from the power supply and thus pollute the network with harmonics. The passive filter consists of a combination of chokes and capacitor(s) optimally tuned to the specific harmonics generated for the purpose of suppressing them.

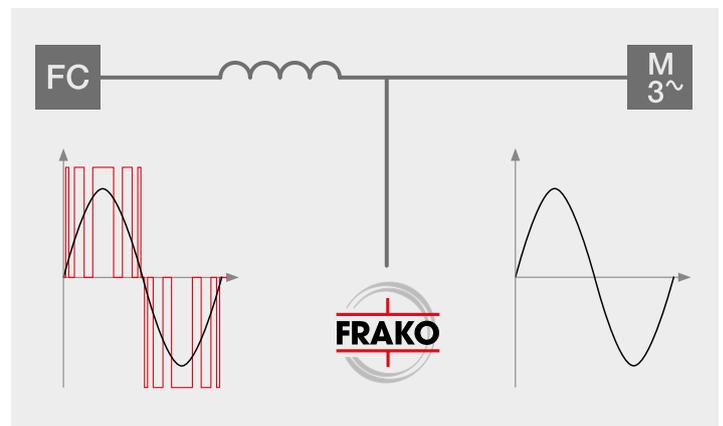


Fields of application for passive filters:

Frequency converters, UPS systems (usually internal)

Load-side filters

As a rule, load-side filters are so-called sine filters; they are installed between the frequency converter and the load (a motor). A special circuit with inductance and capacitance constitutes a low pass and ensures that the pulsating rectangular voltage waveform generated by the frequency converter is changed into a voltage that is as sinusoidal as possible. This sinusoidal voltage safeguards the motor, while the filter reduces the levels of harmonics in the current and prevents transient voltage peaks that could damage the motor or its insulation.



Fields of application for sine filters:

Frequency converters, UPS systems (usually internal)

Requirements for power capacitors

The power capacitors installed in filters are exposed to heavy currents as well as to voltages that sometimes display a high edge steepness dV/dt and strong pulsations. The capacitor construction is therefore essential for the correct functioning of the filter.

The robust yet compact design of FRAKO power capacitors, based on patented technologies and offering high current carrying capacity and voltage carrying capacity, makes them ideal components for systems where reliability is of paramount importance.

You have a specific application or would like to learn more about the benefits of FRAKO capacitors? Then please contact us and make use of our project expertise.

