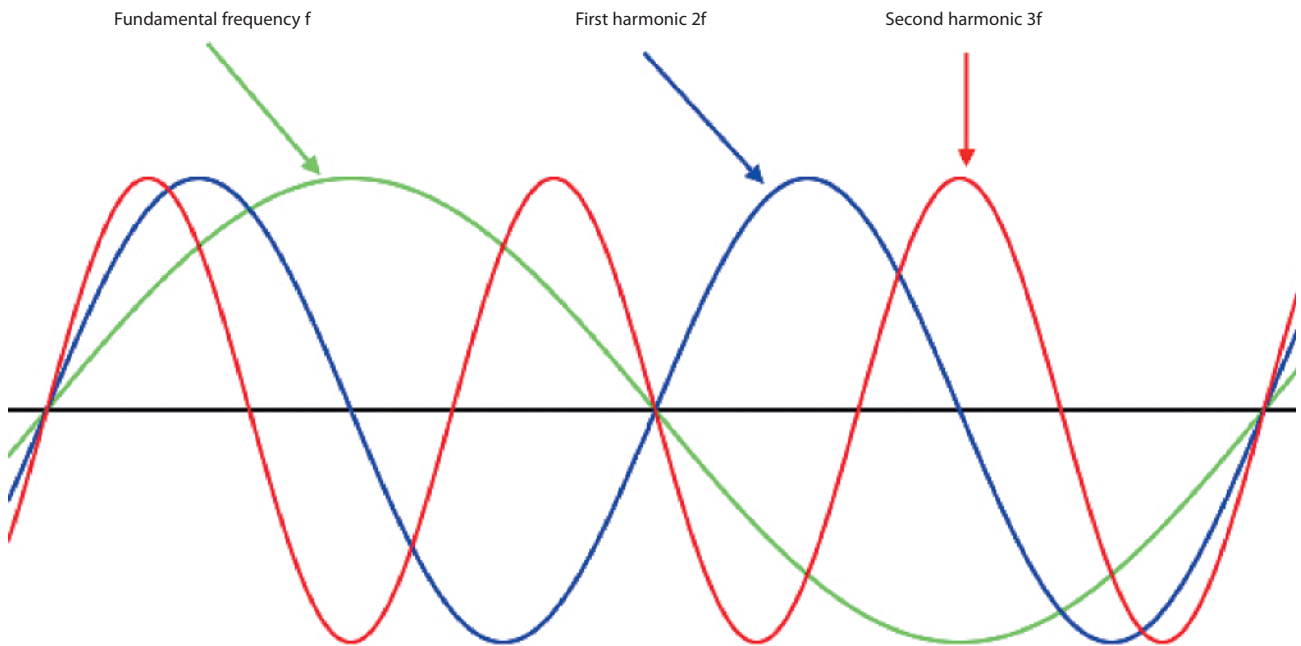


Resistors

Stationary

Harmonic Filter



Quality of power is becoming ever more important for both suppliers and end users, as the number of devices that may feed harmonics in power systems is increased, resulting in higher line losses, interferences and resonances.

Harmonic Filters - made up by capacitors, inductors and resistors - help clearing harmonics which inevitably tend to occur. The LC circuit filters all spurious frequencies and only lets fundamental frequency through, while the Harmonic Filter Resistors (Harmonic Filters Resistors, also referred to as Damping Resistors) dissipate harmonic currents into heat.

Typical fields of applications for Harmonic Filters Resistors are HVDC networks and electrical induction furnaces.

Our team of experienced engineers designs the best solution for the different characteristics required and the most diverse environment. Microelettrica can custom design Harmonic Filters Resistors from a few kW power up to tens of MW, as well as B.I.L. up to 600kV. Our Harmonic Filter Resistors employ non-magnetic low temperature-coefficient elements, to minimise Ohmic value drift and therefore preventing excessive power increase. They also show low parasitic inductance values, which is a key feature for the effective design of damping elements.



Microelettrica Scientifica

Resistors

Stationary: Harmonic Filter

Applications

Energy

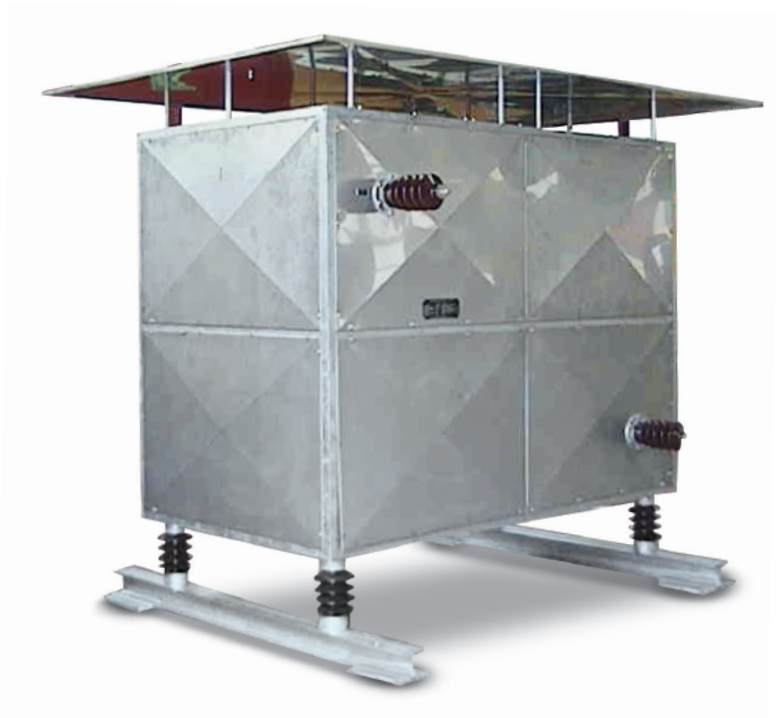
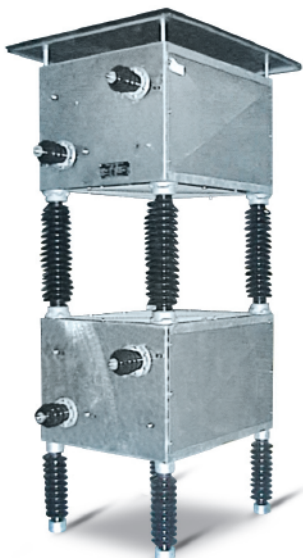
Industry

The essential pieces of information needed to design an Harmonic Filters Resistors are:

- Nominal Voltage
- Current or Power
- Ohmic Value (with tolerance in %)

Other relevant parameters are:

- B.I.L.
- Required Insulation Level; HV terminal to hearth, LV terminal to earth, between terminals
- Clearance and Creepage
- Enclosure finish; our standard is mild galvanised, but different stainless steel (such as AISI304 or AISI316) are also available. Painting in the desired RAL colour is also an option
- Environment; we design resistors for the harshest industrial or natural settings
- Maximum Inductance
- Bushing Layout; top or side mounted
- Mounting; three-phase stacked, side by side, others



KNORR-BREMSE



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