



## **MAGNETIC COMPONENTS**

ORTEA product range for low voltage transformers includes several types of products which meet many application needs. Single-phase, three-phase and three/single-phase transformers are tipycally used to:

- supply industrial plants;
- isolate the load from the mains;
- be included in UPS systems;
- be included in rectifying circuits;
- supply non-linear loads.

## **Isolation transformers**

Isolation transformers are very common in low voltage distribution. They are used when the galvanic separation between primary and secondary winding (i.e. between input and output line) is required.

All the isolation transformers are provided with electrostatic shield between the windings in order to guarantee higher and more efficient insulation.

The transformers destined to supply non-linear loads (K-factor transformers) are designed and built in order to withstand the presence of high current harmonics.

Quantity and importance of the harmonic currents at different frequencies, determine the K-factor value (K9, K13, K20 etc.)

The transformers can be housed inside IP21 metallic enclosures.

## Further details in the technical data tables

## Reactors



Thanks to a wide experience and a close co-operation with Customers, ORTEA has achieved a specific knowledge that allows for the construction of reactors suitable for all the different possibilities offered by the great variety of applications where these magnetic components are used.

Being the production extremely versatile and flexible, ORTEA can provide with a wide range of solutions. Both for outdoor and indoor installation, ORTEA produces single-phase and three-phase reactors either with magnetic or air core, medium voltage insertion reactors, medium voltage choking inductors, tuning reactors, smoothing

inductors, blocking reactors and current limiting reactors.

Any medium voltage reactor can be designed and built in compliance with the insulation classes

specified in the relevant Standards: 3.6kV, 7.2kV, 17.5kV, 24kV and 36kV. These components as well can have copper or aluminium windings and the magnetic core (when present) is made of low-losses magnetic steel sheets.

Blocking, filtering and tuning reactors, together with capacitor banks, are used in power factor correction systems and harmonic filters. This type of reactor is usually provided with magnetic core thus allowing for high linearity even in presence of current peaks much higher than the rated current.

All our reactors are designed and built in compliance with the relevant technical Standard (EN60076).





