

Low Voltage



Presentation

Isolation Transformers and Autotransformers, step-up and step-down voltage, in the rated power up to 1.5MVA, in the voltage classes up to 1.2kV, oriented to the distribution systems, lighting networks, panels, engines, machines, furnaces and other industrial applications.

Construction

Three-phase, two-phase and single-phase with insulation in polyester varnish or molded in epoxy resin, with copper or aluminum winding, magnetic core manufactured in silicon steel sheets, connections through connectors, screws or bus-bars, metal cabinet in carbon steel with electrostatic powder paint finishing, individually tested.

Standard Transformer Characteristics

HV / LV Voltage Class		0,6 ou 1,2 kV	(other features on request)
HV / LV Withstand Applied Voltage		4 ou 10 kV	
Vector Group	Isolation	Dyn1	
	Autotransformer	Yn0	
Frequency		60Hz	
Class of Material and Temperature Rise		F-155°C / 105°C	
Factor K		K = 1	
Standards		ABNT NBR 10295 / 5356-1/5	

Included Accessories

Earthing Terminal
Lifting Eyebolts and Couplers Base
Characteristic Plate

Optional Accessories

Metalic Enclosure from IP 21 up to IP 65
4 PT-100 Sensors or PTC
Analogic or Digital Controller with outputs alarm and power down
Orientable Wheels
Forced Ventilation System
Shielding Screen





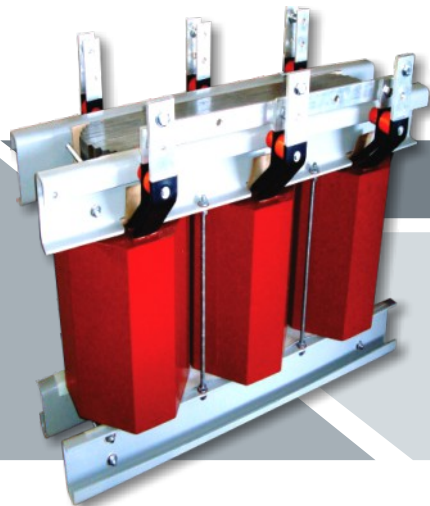
Special Transformers

We have a Transformers line to meet various sectors, in which the manufacturing procedures require distinctive specifications, having high electrical current levels, which can be used in electric arc furnaces, ladle furnaces, rectifiers/converters to feed large engines with thyristorised drives, which means large power with low voltage levels.

K Factor Transformers (Non-Linear Charge)

The number of non-linear loads grows up continuously. The non-sinusoidal currents cause excessive heating, mainly in the transformer's windings, due to the loss increase by eddy currents, high noise level, as well as significant reduction of the equipment's life-cycle. For these applications, Transformadores União provides K-rated transformers, which present some useful peculiarities for the application:

- Coils with multiple Transposed Wires or in Foils windings, meeting the requirements from standard IEEE C57.110;
- K Factor - 4, 8, 13 and 20 (other under inquiry);
- In-rush current, rated according to the customer's need;
- Electrostatic shielding between windings;
- Neutral sized conductor to operate with 200% of the nominal phase current. (Switched-mode power supplies).



Transformers in Aggressive Environment

These Transformers are used where there is presence of industrial dust, in places close to the sea, offshore applications or other places with high metallic parts oxidation probability, being necessary the use of protection degree from IP 54 to IP 65, immersed in compound mass or encapsulated in epoxy resin, appropriate for installation in explosive atmospheres.

Applications

• Metalworkinga	• Medical	• Shipbuilding
• Data Centers	• Offshore	• Mining