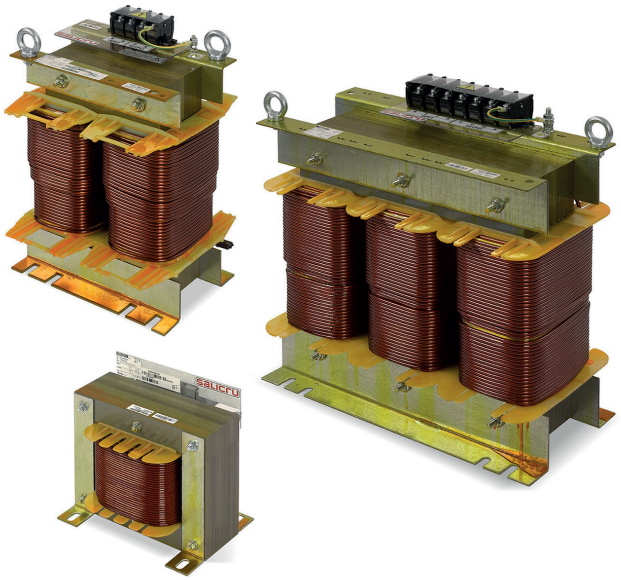
IT

Electrical transformers and autotransformers



IT: Simple concepts, effective solutions

Salicru has been designing and manufacturing low voltage electrical transformers and autotransformers for more than 50 years, for use as **IT series** standalone solutions, or integrated within its wide range of power electronics solutions (uninterruptible power supplies, voltage stabilisers, rectifiers, etc.). At the same time, we have continuously improved our own production methods and processes in order to meet the needs of our customers and also for special requirements.

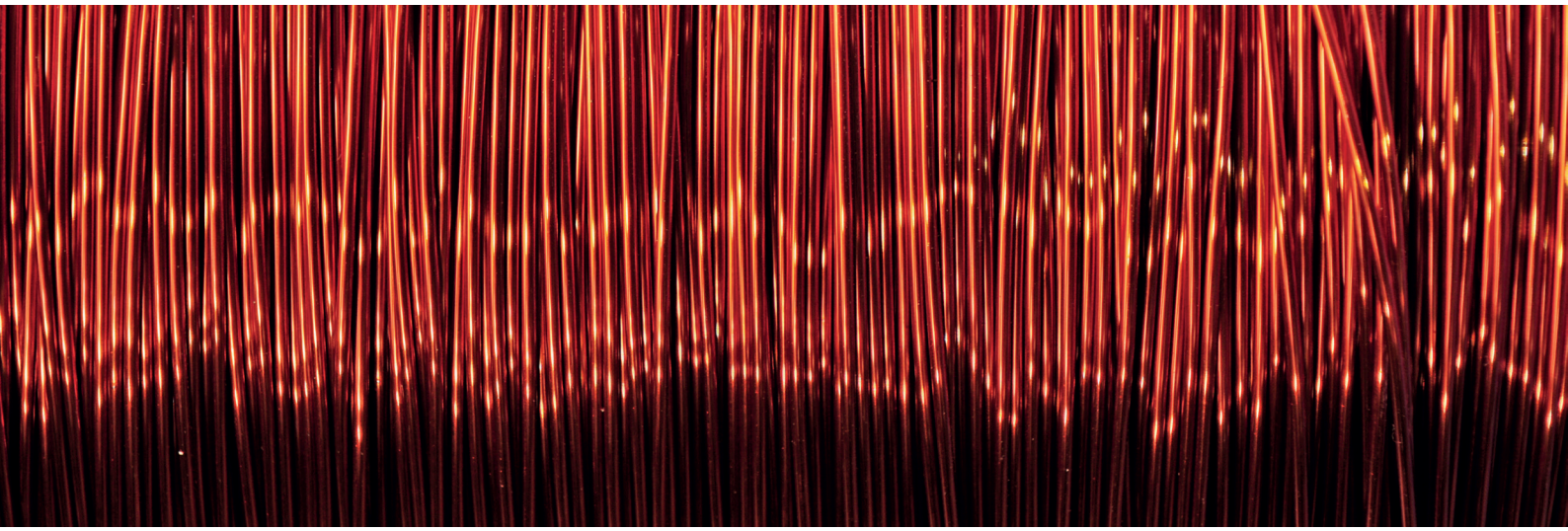
Single-phase and three-phase transformers are used as electrical isolation for reducing mains disturbances or adjusting the level of voltage coming from the grid. Autotransformers, on the other hand, with their serially-connected coils that do not provide galvanic isolation, have the function of converting one voltage to another, and, as such, are a more economical solution than transformers.

The transformers and autotransformers from Salicru's **IT series** are of the dry variety, made from low-loss magnetic plate and windings impregnated with class-H resin, and connected by means of clamp terminals or screws for pressure terminals. They can be manufactured with other voltages, regulation sockets, additional electrostatic screens, heat shields, etc., on request.

Applications: Adaptation and/or filtering of the supply voltage

Transformers are used in different types of industry, construction, energy technology and marine applications, such as electric motors, compressors, converters, cooling systems, UPSs and IT/TN networks. On the request of the customer, transformers can be manufactured for different voltages and frequencies, and feature, for example, an electrostatic screen between the primary and secondary windings, different finishes, wheels or other attachments.

And autotransformers are used for adapting the voltage of the mains supply to the voltage required to power all kinds of load and machinery.



Range

MODEL	TYPE	POWER (kVA / kW)	VOLTAGE	PRESENTATION
IT-T	Transformer	1 ÷ 100	Single-phase / Single-phase	Panel mounting
IT-T	Transformer	1 ÷ 100	Single-phase / Single-phase	Box
IT-T	Transformer	1 ÷ 300	Three-phase / Three-phase	Panel mounting
IT-T	Transformer	1 ÷ 300	Three-phase / Three-phase	Box
IT-ATR	Autotransformer	1 ÷ 300	Three-phase / Three-phase	Panel mounting
IT-ATR	Autotransformer	1 ÷ 300	Three-phase / Three-phase	Box

For other powers and versions, please enquire.

Technical specifications

MODEL		IT	
ELECTRICAL	Input/Output	Single-phase	Three-phase
	Power range	1 ÷ 100 kVA	1 ÷ 300 kVA
	Power factor	1	
	Connection group	Ii0	Dyn11[(1)]
INPUT	Rated voltage	100 ÷ 750 V	3 × 190 ÷ 750 V
	Rated frequency	50 / 60 Hz	
	Magnetising current	< 6 In	
OUTPUT	Rated voltage	100 ÷ 750 V	3 × 190 ÷ 750 V
	Voltage drop (100% load)	< 4%	<5%
	Frequency	50 / 60 Hz	
	Performance	> 95%	
	Short-circuit voltage	< 2.6%	<3.1%
MANUFACTURE	Insulators	Insulation class F (155ºC)	
	Windings	Insulation class H (180ºC)	
	Windings material	Aluminium	
	Impregnation	Synthetic polymerised resin – oven at 130ºC	
	Ventilation	ANAN	
GENERAL	Operating temperature	-25ºC ÷ +40ºC (climate class C2)	
	Storage temperature	-25ºC ÷ +75ºC	
	Relative humidity	Up to 95% non-condensing	
	Maxium operating altitude	2,400 masl	
	Version	Panel mounting or metal box	
	Colour (box version)	RAL 7035	
	Eye bolts for elevation	Yes, on units weighing more than 15 kg	
	Degree of protection	IP00 panel mounted version - IP23 boxed version	
	Heat loss (100% load)	<4.5%	<5%
	Vacuum heat loss	< 1.5%	
	Isolation voltage	3000 V input/output for 1 minute	
	Terminal type	Screw terminals	
OPTIONAL	K factor	K-4 / K-13 / K-20	
	Windings material	Copper	
	Wheels	For devices in box version	
	Isolation	Class 2 (Double isolation)	
STANDARDS	Safety	EN 61558-2-4 / EN 60076-11	
	Quality and environmental management	ISO 9001 & ISO 14001	

(1) Others available on request

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