



CONVENTIONAL AND SELF-PROTECTED TRANSFORMERS



Conventional and self-protected type transformers are used in medium voltage power networks, in residential or industrial areas, generally outdoors installed on a pole or substation type for floor mounting and have special bushings on the high voltage side for connection to overhead lines. These equipments are characterized by having an active part immersed in special dielectric oil, which, in addition to being the insulating medium, serves as a cooling medium that allows the heat generated by the active part to be evacuated.

The Rymel brand transformer tank is made of high-quality steel sheet and is coated with a special paint, applied in electrostatic painting booths and cured under high temperatures in an oven, which allows a highly resistant surface. and durability, especially for outdoors and that protects the tank against corrosion and against saline and aggressive environments.

Rymel has a complete manufacturing line for conventional and self-protected type transformers; and it is a company with more than 40 years of experience in the market. These transformers are designed with high safety margins, using high quality materials and through certified manufacturing processes (ISO 9001, ISO 14001, ISO 45001 and BASC), which use high technology and high quality standards, to result in highly reliable products that provide solutions to the needs of our customers.



TECHNICAL CHARACTERISTICS		
	ONE PHASE	THREE PHASES
CAPACITY	From 5 kVA up to 500 kVA	From 15 kVA up to 5000 kVA
PHASES	1	3
TENSION	Up to 46 kV	
BIL	Up to 250 kV	
WINDING MATERIAL	Aluminum or copper	
COOLING CLASS	ONAN	ONAN-ONAF
FREQUENCY	60 0 50 Hz	
TAP CHANGER	± 2,2.5% or according to customer requirements.	
TEMPERATURE RAISE	Typically 65/65°C, or according to customer requirements.	
K FACTOR	K1, K2, K4, K6, K9, K13, K20 or according to customer requirements.	
TYPE OF EFFICIENCY	Clase A, B, C o D; DOE	
TYPE OF INSULATION	Mineral or Biodegradable.	
TANK	Manufactured with Cold Rolled and Hot Rolled sheet steel with a design that allows it to withstand internal pressure and mechanical stress, or stainless steel.	
PAINT SYSTEM	Special electrostatic paint of great resistance and durability, especially for outdoors and corrosive environments.	
GASKET	Highly durable and compatible with dielectric oil, to guarantee the life of the equipment.	
ACCESORIES	<ul style="list-style-type: none"> - High and low tension bushings - Overpressure valve - Oil level: Inside marking or sight glass - Recirculation, drainage and sampling valve - Neutral and tank grounding - Post lifting and fixing device - Nameplate made of high-strength anodized aluminum - Tap changer 	
ADDITIONAL ACCESORIES	<ul style="list-style-type: none"> - Low voltage or high voltage thermomagnetic switch. - Internal fuse on the high voltage side. - Fault Indicator Pilot Light. - Operating lever for opening and closing. - Surge arresters (optional). 	
STANDARD	NTC o International IEC 60076 and IEEE C57.12.00	

**ADDITIONAL ACCESORIES
FOR SELF-PROTECTED
TRANSFORMES**

Our self-protected transformers offer great security and reliability in the networks, since they have protection elements incorporated from the design, which protect the line and the equipment from external events, eliminating the need for protection devices and reducing installation costs.

Self-protected transformers differ from conventional ones, in that they have incorporated elements that isolate the failed transformer from the network and protect the equipment against: overvoltages, overloads, external short circuits and additionally they have a pilot light that is activated in case of operation of the transformer switch or a temporary overload.

