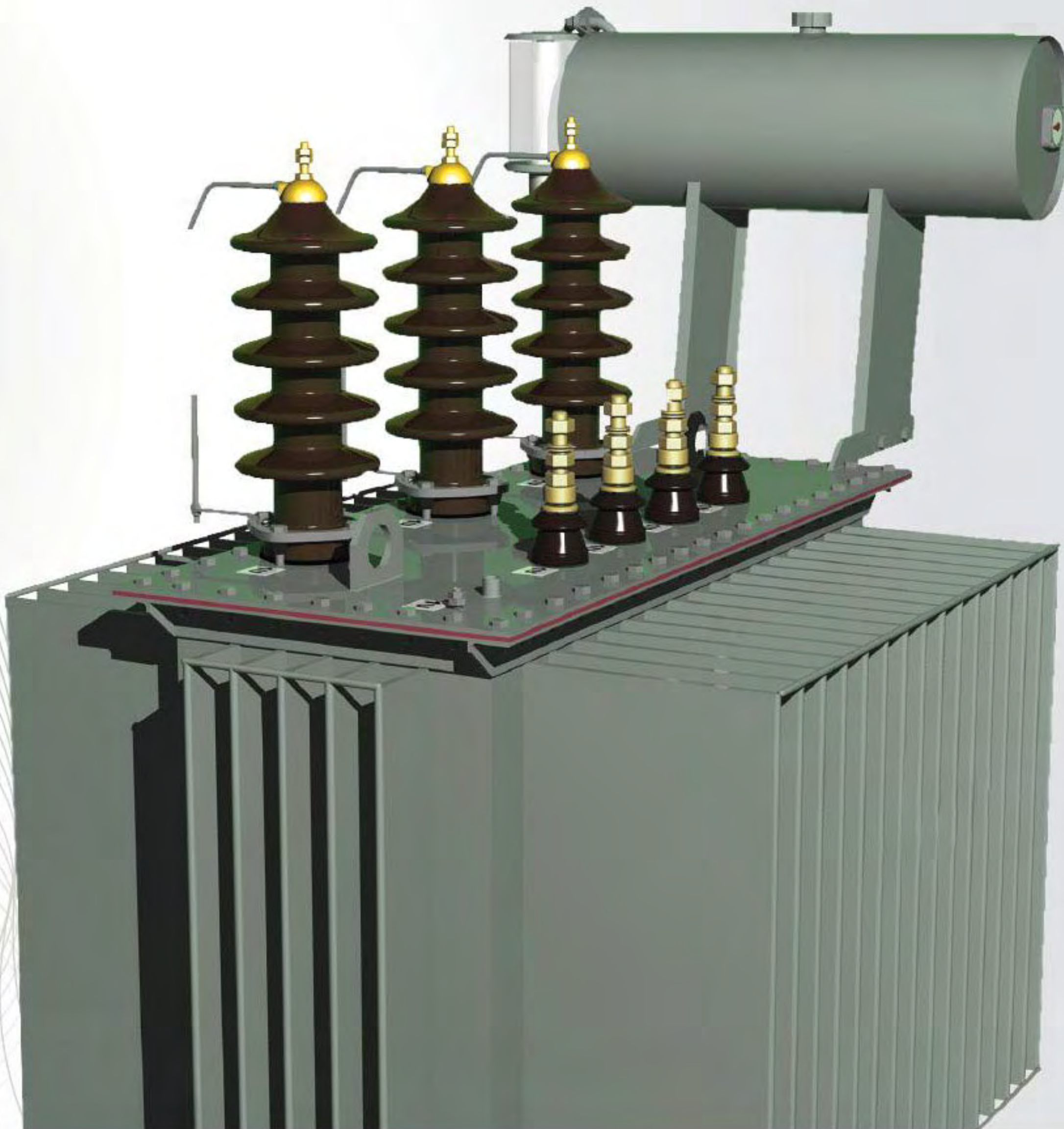


Oil Immersed Distribution Transformer

PRODUCT CATALOG





Distribution Transformers

ROM Energy Production facility can produce distribution transformers within range of 25 kVA to 25000 kVA.

Quality of our production plant and system has been certificated by ISO9001, ISO 14001, OHSAS 18001. Product quality has been certificated by TSE and BUYAL.

We generally use following standards for our products which also can be select by our customers:

- IEC 60076
- TSE 267
- ANSI C57 (relevant sections)
- ASTM D3487



Core, Magnetic Circuit

“We use special and genius algorithms during the design”

Silicon sheets which used for production, purchased according to our design. We select our suppliers carefully from core loss guaranteed suppliers category which we able to do technical cooperation.

Our designs are realized according to customer demand and standards with 0.23, 0.27, 0.30 mm tickness (M3, M4, M5) and grain oriented in magnetic field silicon sheets.

We generally use core form for magnetic circuit. But we use shell type core form also, for special requests



Windings



The low voltage windings are usually made by flat section electrolytic copper. CTC copper are used for transformers rated power up to 1000 kVA. Winding insulation are creating by craft or nomex. Cross section of the wires are calculating by special design softwares to reach higher level of cooling and lowest level of onload losses.

High voltage windings are generally made by enameled covered circular cross-section copper wire. Winding insulation are realized by craft and other special papers. Winding insulation is one of the most important point for the transformer life. Therefore we prefer best paper manufacturer of the world. Layer insulations made according to DIN 6740. Each coil are testing on after wiring process.

Tests and Quality Control

In ROM Energy production line, we test each transformer according to IEC60076. Type and special tests are also available by customer request. Tests results are saved real time to our database, also to our ERP system during tests without the intervention of the staff.

Problems are real time evaluated by our software so we can reach the source of the problem faster than manual controls.

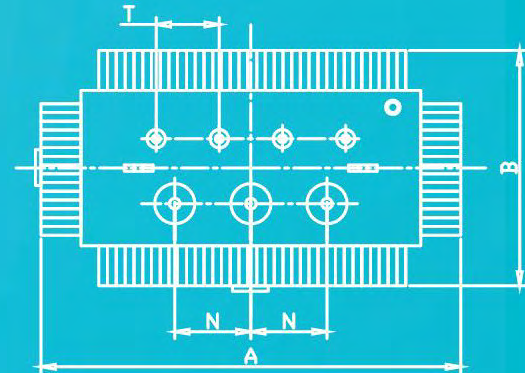
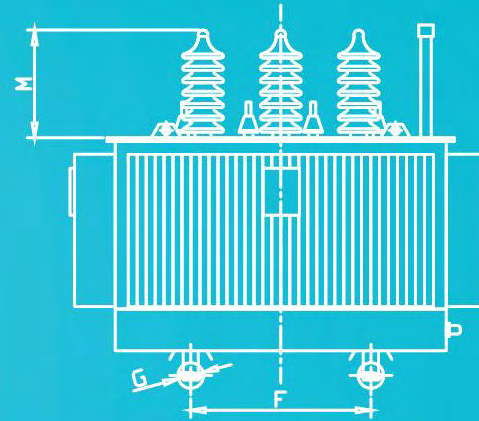
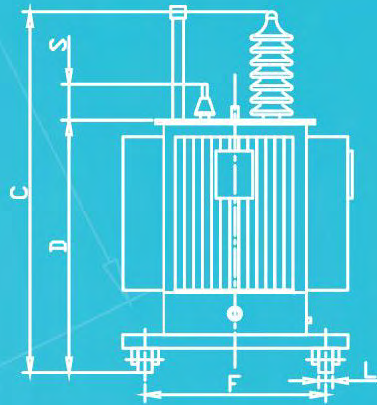
Our clients can get these test results by requesting from our team.



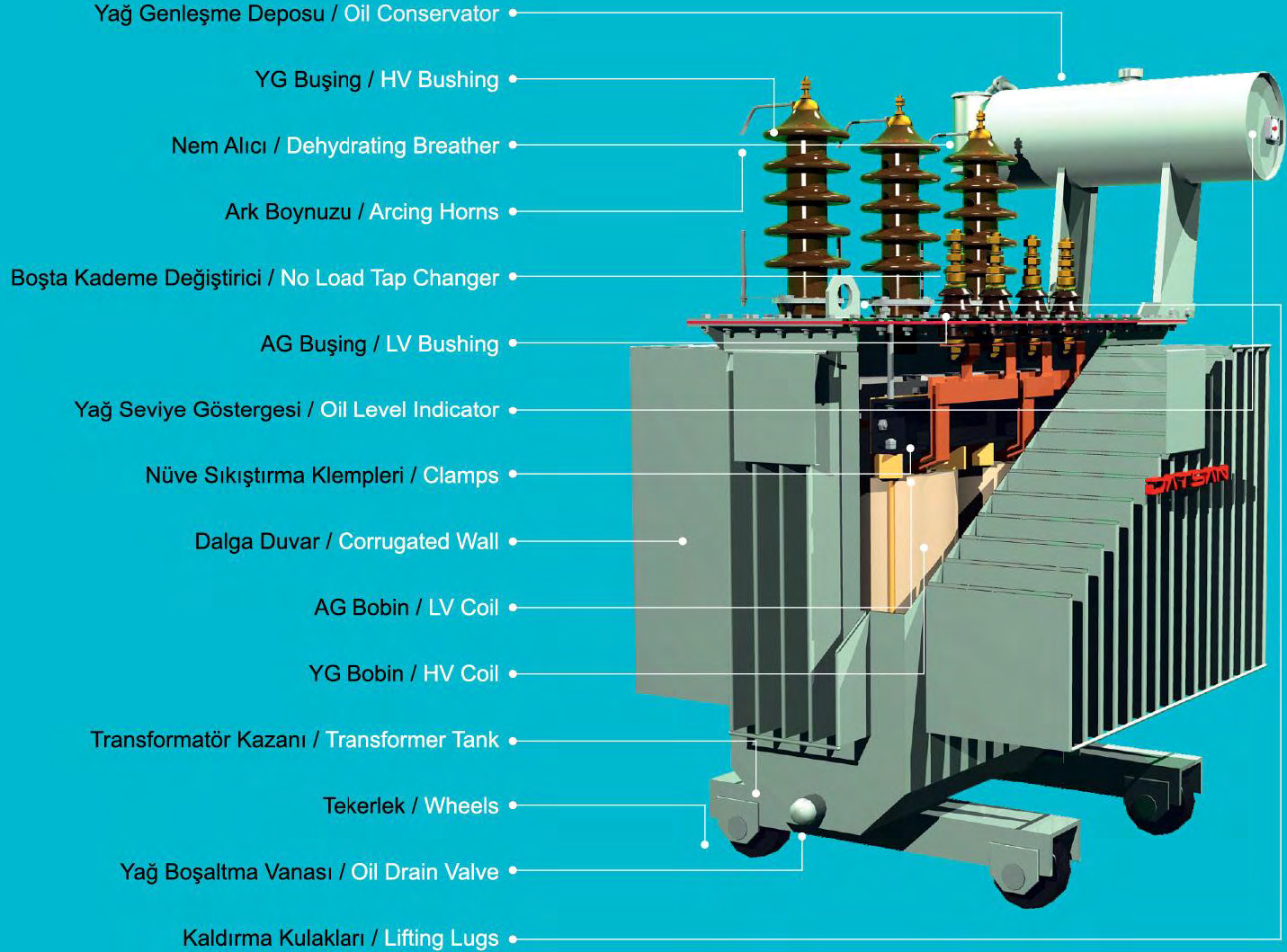
ROUTINE TESTS (According to IEC 60076)	TYPE TESTS
<ul style="list-style-type: none">• Measuring of the winding resistance,• Measuring of the insulation resistance,• Measuring of the turn ratio,• Measuring of the short circuit impedance,• Measuring of the noload and onload losses,• Induced voltage test,• Applied voltage test,	<div data-bbox="901 853 1263 927">SPECIAL TESTS</div> <ul style="list-style-type: none">• Temperature rise test,• Impulse voltage test,• Short circuit withstand test. <ul style="list-style-type: none">• Measuring of the noise level,• Measuring of the zero sequence impedance.



(Hermetically Sealed Type Transformers Dimensions)



We
for manufacture
you



■ Buchholz Rölesi

Transformatör kapağı ile genişleme deposu arasına montajlanır. Transformatör içindeki anızlarda çeşitli gazlar açığa çıkar ve bu gazlar röledeki haznede birikerek şamandıraları harekete geçirir. Şamandıra hareketi ise ikaz ve/veya kesme mekanizmalarının çalışmasını sağlar. Röle içerisinde iki adet 5A 250 VAC kontak mevcuttur.

■ Alkollü Termometre

Alkollü termometre hermetik ve yağ genişleme depolu transformatörler için kullanılabilir. Yapısında herhangi bir kontak barındırmaz. Kapak üzerine kaynaklanan termometre cebine montajlanır.

■ Nem Alıcı (Silika Jel)

Sadece yağ genişleme depolu transformatörlerde kullanılır. Yağ hacminin azalması esnasında kazana giren havada bulunan nemin yağa karışmasını önler. Boyutları transformatör anma gücüne göre değişiklik gösterir.

■ Hermetik Koruma Rölesi

Genellikle hermetik tip transformatörlerde kullanılır. Röle gaz tahliyesini, kazan iç basıncını ve yağ sıcaklığını gösterir. Ölçülen her bir parametre için ikiye kontak bulunmaktadır.

■ Basınç Emniyet Valfi

Sadece hermetik trafolarda kullanılır. Kazan iç basıncı, valfin ayarlandığı basınca ulaştığında açılarak dışarıya yağ tahliyesi yapar. Bu tahliye kazan iç basıncını düşürerek, muhtemel kazan yrtılmalarına engel olur.

■ Kontaklı Termometre

Bu cihaz üzerinde 2 adet ayar kadranı ve 2 adet okuma kadranı olmak üzere toplam 4 adet kadran bulunmaktadır. Bu kadranlar;

- Anlık yağ sıcaklığını,
- Ulaşılan en yüksek sıcaklığı,
- İkaz sıcaklığını,
- Açma sıcaklığını

gösterir. İkaz ve açma için 2 adet 5A 250 VAC kontaklı bulunmaktadır.

■ Manyetik Yağ Seviye Göstergesi

Yağ genişleme deposuna montajlanarak, yağ seviyesinin gözlemlenmesi için kullanılır. Opsiyonel olarak kontaklı modelleri de kullanılabilir.

■ Buchholz Relay

Its assembling between transformer cover and conservator tank. In case of any faults, various gases are released. By the accumulating of these gases, buoys are in motion. Motion of buoys actuated alarm and/or cut off switch. Relay has two 5A. 250 VAC switches.

■ Alcohol Thermometer

Alcohol thermometer can be used for hermetically sealed type or transformer with conservator tank. It is without contact. It is mounted in the thermometer pocket which welded on the transformer cover.

■ The Breather (Silica Gel)

The breather is used only for transformer with conservator tank. In case of oil volume decreasing, the breather keeps the moisture of the air which enter to tank. The size of breather determined by the rated power of the transformer.

■ Hermetic Protecting Relay

This relay is usually used for hermetically sealed transformers. It is monitored the discharge of gases, the pressure in the tank and the oil temperature. It has two contacts for each measured parameter.

■ Pressure Relief Valve

It is used only for hermetically sealed transformers. It opens briefly in the event of tank pressure equal to set pressure of the valve. This events protect the tank from possible tank damages.

■ Thermometer with Contacts

This equipment has totally 4 dial plate. 2 plates for reading, 2 plates for setting. These plates monitoring ;

- Oil temperature,
- Max. measured temperature,
- Alarm temperature,
- Cut-off temperature.

It has 2 pieces of 5A 250 VAC contacts for alarm and cut-off.

■ Magnetic Oil Level Indicator

The magnetic oil indicator is used in order to display the level of the oil in conservator tank. If required, the level indicator with optional contacts can be used.

