Hybrid Insulation Transformer

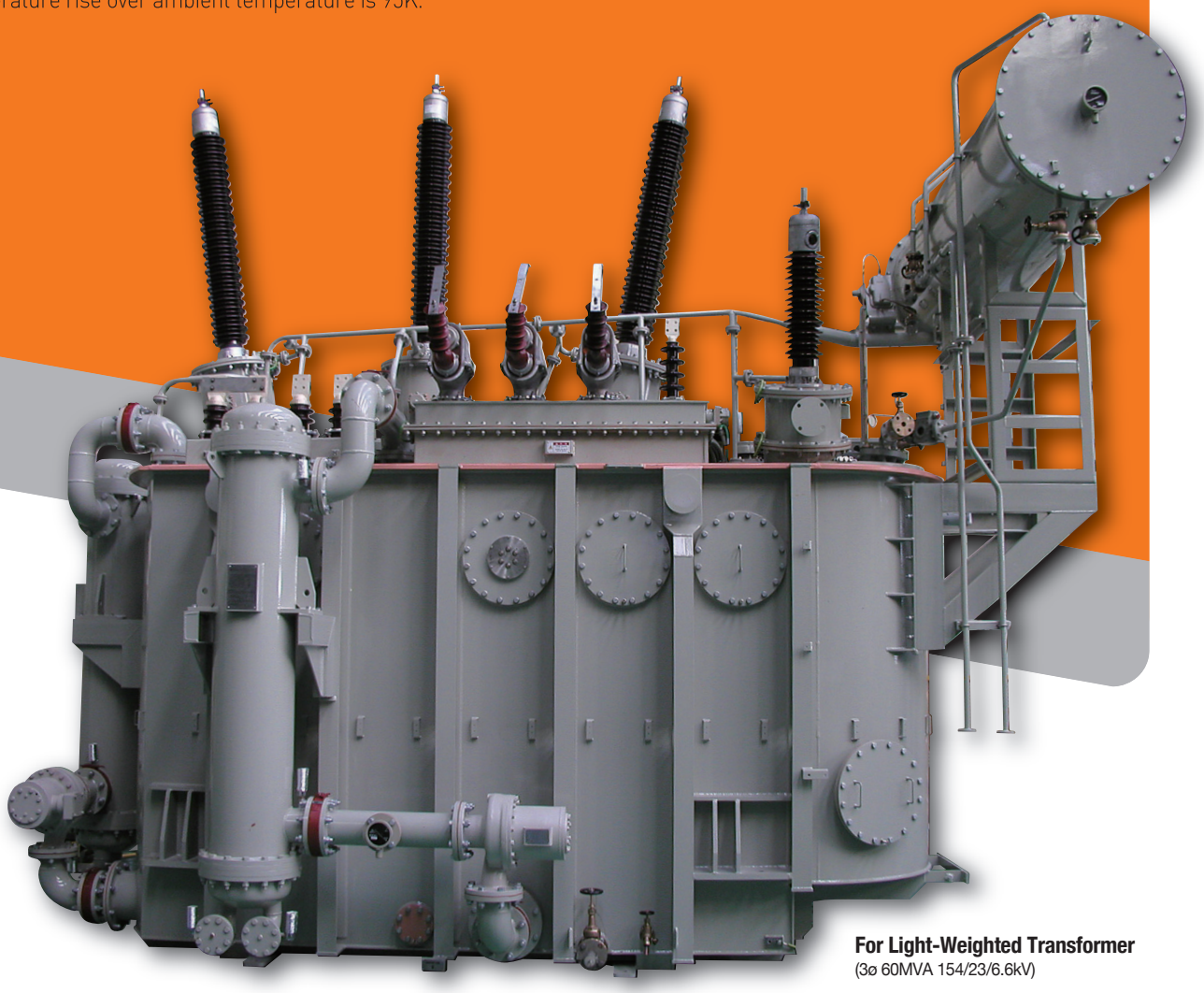
Hybrid Insulation System

The hybrid insulation system uses conventional liquid and high-temperature materials throughout the transformer in the windings, but not necessarily every winding. A layer tertiary winding, for example, may be composed of conventional materials since it may operate at a lower temperature than the other windings. Typically the conductor insulation and the radial and axial spacers separating the coil windings are high-temperature materials. Conventional cellulose insulation is used in all other areas, such as cylinders and angle rings that operate at conventional temperatures. Under the condition of hybrid insulation system, the top oil temperature rise over ambient temperature is 60(65)K, and the average winding temperature rise over ambient temperature is 95K.

Benefits

Key Facts

- Reduction of transportation weight overland transportation and reduction of transportation cost
- Compact size reduction of installation area and cost
- Increase of life cycle by adopting hybrid insulation system



For Light-Weighted Transformer
(3ø 60MVA 154/23/6.6kV)

HYUNDAI
HEAVY INDUSTRIES CO.,LTD.

ISO 9001/ISO 14001/OHSAS18001(N/A) REGISTERED FIRM
DNV Certification B.V. THE NETHERLANDS

Standards

Hyundai rotating machines have been supplied and tested in accordance with worldwide classification societies such as IEC, NE rtical MotMA, EN, API, BSI, AS, IS, KS, JIS, and IEEE, JEC for industrial application and Lloyd, ABS, DNV and KR for marine use as well.

Application

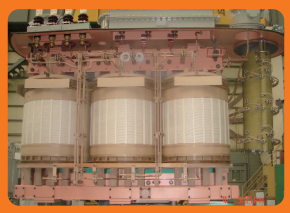
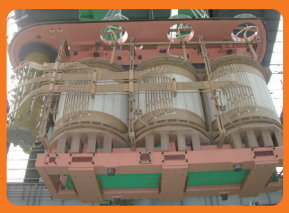
The developed product, hybrid insulation transformer adopts the hybrid insulation system which consists of A class insulation material and H class insulation material. This kind of transformer has long life cycle compared with the general transformer due to an excellent thermal resistance and a superior mechanical characteristics.

The most used applications are as follows;

- Light-weighted transformer
- Re-building project
- Mobile transformer
- Traction transformer

Feature

This transformer can reduce the weight and the size, and increase the rated power, moreover, this transformer can be operated under the overload condition in case of emergency.
The clients can save the transportation cost, the installation cost and the maintenance cost, etc., due to these merits of this transformer.


Quality Assurance

We are dedicated to supplying the best quality products and services for our clients. We have developed our own quality assurance program to comply with ISO 9001 as required by International Organization for Standardization(ISO) in order to assure that HHI products are designed, manufactured, inspected, tested and delivered in the most efficient manner.

Production Range

- Capacity : Up to 100MVA
- System voltage : Up to 154kV

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