



Application:

The main application of transformers in large-scale solar systems is to raise the output voltages of inverters for the interconnection of renewable energy to the utility grid. Also, due to the separation between the input and output windings, transformers provide galvanic isolation between the solar installation and the electrical grid, improving safety and protection of the equipment by preventing ground-fault loops.

Scope of the offer

Manufactured according to IEC and ANSI standards and/or customer specifications.

Ratings (kVA):

Up to 10.000 kVA.

UL Certificate Rating (kVA):

Up to 5500 kVA. (With possibility of extension)



Basic Insulation Level:

Up to 200kV BIL.

Leveraging the experience of our technical team and the production capacity of our manufacturing plant, Magnetron can manufacture transformers to specific requirements determined by our customer within the ranges indicated here in.

Typical Constructions:

Solar application Transformers can be built in the following constructive forms:

- **Pad Mounted:** With an enclosure that protects the LV and HV connections to ensure safe operation and reduce the risk of accidents.
- **Tank with Conservator:** It comes equipped with a conservator tank which uses the vacant space to compensate the volume changes of the oil due to temperature rise.

Technical features:

- Designed to be operated in the presence of harmonic currents produced by inverters in accordance with the customer technical requirements.
- Designed to be operated in the presence of harmonic currents produced by inverters, in accordance with the customer technical requirements.
 - Designed to be powered by one or multiple inverters.
 - The impedance between windings (HV-LV and LV-LV) can be guaranteed according to the customer's requirements.
 - Suitable for outdoor operation with direct exposure to sunlight.
- Designed to be operated in the presence of harmonic currents produced by inverters in accordance with the customer technical requirements.

Accessories and protection devices

MAGNETRON offers a variety of protection systems for low and high voltage, as well as alarm and control devices to monitor basic transformer functions such as pressure, temperature, oil level, humidity and internal gas generation, according to customer requirements.

STANDARD PAD-MOUNTED TRANSFORMER	
1	Low Voltage bushing.
2	High Voltage bushing well.
3	Ground shield bushing.
4	Neutral bushing HV.
5	Tap changer.
6	Load break switch.
7	Current sensing fuse.
8	Magnetic oil level gauge.
9	Pressure relief valve.
10	Filling valve.
11	Oil drain valve with sampler.
12	Thermometer.
13	Ground pad.
14	Tank grounding.
15	High Voltage bushing insert
16	Elbow bushing
17	Schrader valve.

