



**WE TRANSFORM
ENERGY INTO
SUSTAINABLE GROWTH**



TECHNICAL SHEET TRANSFORMERS FOR RENEWABLE APPLICATIONS



TECHNICAL SHEET: TRANSFORMERS FOR RENEWABLE APPLICATIONS


Application:

The main application of transformers in large-scale renewable systems is to step up the inverter output voltages for the interconnection of renewable energy to the utility grid. Also, because of the gap between the input and output windings, transformers provide galvanic isolation between the solar facility and the utility grid, improving safety and protecting equipment by preventing ground-fault loops.

Scope of the offer:

Manufactured in compliance with applicable IEC and ANSI standards and/or individual customer specification.

Ratings (kVA):
Up to 10.000kVA (up to 6000A LV current)

UL Certified Rating (kVA): 
Up to 5.500kVA (aluminum windings)
Up to 10.000kVA (copper windings)

Basic Insulation Level:
Up to BIL 200kV.

MAGNETRON manufactures transformers with specific requirements determined by customers within the ranges indicated herein, based in the expertise of its engineering team and the production capacity of its manufacturing plant.

Typical construction:

Renewable transformers may be built in the following ways:

- Pad Mounted: with an enclosure that protects LV & HV connections to ensure safe operations and reduce the risk of accidents.
- Conservator Tank: It comes equipped with conservator, which uses the air space to compensate the volume changes of the oil density due to temperature rise.

Technical Features:

- Designed to be operated in the presence of current harmonics produced by the inverters with high levels of dV/dt and high temperature conditions according to customer requirements.
- Suitable to be fed by one or multiple inverters.
- Impedance between windings (HV-LV & LV-LV) can be guaranteed upon request.
- Adequate for outdoor operation.
- Customizable engineering designs for direct coupling with inverter to reduce installation costs.

Accessories and protection devices:

MAGNETRON offers a variety of high voltage and low voltage protection systems, as well as control and measurement devices to monitor the basic parameters of the transformers, such as pressure, temperature, oil level, internal gas generation and moisture control devices, in accordance with the customer's requirements.

On-site Support:

Magnetron offers a variety of field services, including SAT testing, maintenance and comissioning assistance (even during cold start conditions) to help contractors installation.

After-Sale Support:

Magnetron has a hybrid after-sales support model, with the availability of our own field service team that attends directly customer's requirements and a network of qualified service providers around the world, that allow us to expand our service capacity and improve response times.





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**GENERATING
WEALTH WITH
*SOCIAL CONSCIENCE***

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