عنوان مقاله:

Investigating several inverter topologies, amplifying the low voltage of photovoltaic modules to the higher level voltage of the network and converting it from DC to AC

محل انتشار:

چهارمین کنفرانس ملی توسعه پایدار در مهندسی برق و کامپیوتر (سال: 1402)

تعداد صفحات اصل مقاله: 9

نویسنده:

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خلاصه مقاله:

This paper focuses on the latest development of inverters for photovoltaic AC-Modules. The power range for these inverters is usually within ۹۰ Watt to ۵۰۰ Watt, which covers the most commercial photovoltaic-modules. Self-commutated inverters have replaced the grid-commutated ones. The same is true for the bulky low-frequency transformers versus the high-frequency transformers, which are used to adapt the voltage level. The AC-Module provides a modular design and a flexible behavior in various grid conditions. It hereby opens the market for photovoltaic-power for everyone at a low cost due to the plug and play concept, which also makes a further enlargement of the system possible.

کلمات کلیدی:

photovoltaic; single-phase grid-connected inverter; renewable energy.

لینک ثابت مقاله در پایگاه سیویلیکا: