عنوان فارسی مقاله:
روش کار در PMSM با تغذیه شبکه AC و سیمپلیکس انتفاخ در تویپولوژی اینورتر دوگانه برای حداکثر سازی ضرب توان

عنوان انگلیسی مقاله:
Operation Method for AC Grid powered PMSM with Open-End Winding in Dual-Inverter Topology for Power Factor Maximization

توجه!
این فایل تنها قسمتی از ترجمه میباشد. برای تهیه مقاله ترجمه شده کامل با فرمت ورد (قابل ویرایش) همراه با نسخه انگلیسی مقاله، اینجا کلیک کنید.
6 Conclusion

As the prototype testing showed, the proposed operation method of the PMSM in dual-inverter topology at a single phase AC grid achieved performances, which are comparable to drive system solutions with an active PFC stage. The benefit of this solution is the displacement of additional PFC inductors. These inductors are responsible for a large percentage of costs and installation spaces in conventional topologies with active PFC circuits.

Instead an additional three-phase bridge is necessary, which slightly reduces the overall efficiency of the drive system [8]. Also an adaption of the winding is required, to reach the rated machine power. Due to the reduction of the number of turns compared to the normal design criteria and the resultant decreasing of the machine inductance, the phase current ripple increases.