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基于双PWM技术的通信基站稳压电源的设计与实现

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Regulated AC Power Supply for Base Station Using Double PWM

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摘要

提出一种新的基于双PWM技术的新型通信基站稳压电源的拓扑结构，并对这种拓扑结构的主电路和工作原理进行了介绍，对其功率流进行了分析.与传统的交流稳压器相比，它具有高效节能、快速调节、三相自动平衡、无碳刷磨损及机械故障等优点，还可以克服由晶闸管构成的交流稳压器存在的环流故障.最后通过实验验证了该方案的可行性.

关键词：

双PWM 串联补偿 交流稳压电源 功率流

Service
把本文推荐给朋友
加入我的书架
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Abstract:

A novel regulated AC power supply unit for base stations using double PWM is presented in this paper. The main circuit and its principle of operation are introduced, and the power flow analyzed. Compared with conventional regulated AC power supply, the proposed method has high efficiency and faster response, and does not use a charcoal brush therefore is free of mechanical fault. It also avoids the cycle current fault existing in AC voltage regulators using SCR. Simulation and experiments show that the proposed scheme is feasible.

Keywords:

double PWM, series compensator, AC voltage stabilized source, power flow

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