

电力系统

一种基于有源滤波器的同相牵引供电方案

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摘要:

摘要: 电气化铁路牵引供电系统由于采用单相供电方式, 造成电力系统三相负载不平衡, 存在大量无功和谐波。电分相环节的存在不利于机车向高速重载的方向发展。本文分析一种基于有源滤波器和Yn,d11变压器结合的新型同相牵引供电系统方案。该方案基本消除三相负载不平衡, 同时取消了电分相环节。根据该方法建立了simulink仿真, 仿真结果结果表明了该方法的有效性。

关键词:

A Cophase Traction Power Supply System Based on Active Power Filter

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Abstract:

Abstract: Electric railway traction power supply system due to a single-phase power supply, resulting in the unbalance of three-phase load for power system, there are a large number of reactive power and harmonic. The neutral sections insulator is not conducive to the existence of links to high-speed heavy locomotive direction. In this paper, a new traction power supply system based on active filters and Yn, d11 transformer is put forward. The method basically eliminates three-phase load imbalance, and removes the part of the neutral sections insulator. According to the method establish a simulink simulation, simulation results show the effectiveness of the method.

Keywords:

收稿日期 2010-01-15 修回日期 2010-05-14 网络版发布日期 2010-10-17

DOI:

基金项目:

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