

学术论文

双模冗余非马尔可夫模型可修系统分析

苏宏升, 张友鹏

兰州交通大学自动化与电气工程学院

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摘要 文章采用补充变量, 将双模冗余系统的非马尔可夫模型转化为马尔可夫过程模型, 针对该模型进行可靠性估计, 比较了不计维修时系统的寿命分布, 介绍了快修条件下系统的可靠性工作特点. 牵引变压器应用研究表明这种分析方法是十分有效的.

关键词 [双模冗余](#), [马氏过程](#), [寿命估计](#), [快修](#), [牵引变压器](#).

分类号

Non-Markov Repairable Model Analysis on Two Modular Redundant Systems

Su Hongsheng, Zhang Youpeng

School of Automatic and Electrical Engineering, Lanzhou Jiaotong University

Abstract Two-module redundant system's non-Markov model is converted to Markov process model by the use of supplementary variable technique in this paper, then according to the proposed model, reliability evaluation of the system life is implemented, and life distribution of the system under no maintenance is also compared, and also the work characteristics under quick maintenance are presented in detail. Application studies in the traction transformer indicate that the analysis approach is quite effective.

Key words [Two modular redundancy](#), [Markov process](#), [life estimation](#), [quick maintenance](#), [traction transformer](#).

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