

DOI: <https://doi.org/10.15407/techned2019.04.003>

## **DETERMINATION OF PROBABILISTIC PROPERTIES OF ELECTRICAL CHARACTERISTICS OF CIRCUITS OF ELECTRIC DISCHARGE INSTALLATIONS TAKING INTO ACCOUNT THEIR STOCHASTICALLY CHANGING PARAMETERS**

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| Journal   | Tekhnichna elektrodynamika                                          |
| Publisher | Institute of Electrodynamics National Academy of Science of Ukraine |
| ISSN      | 1607-7970 (print), 2218-1903 (online)                               |
| Issue     | No 4, 2019 (July/August)                                            |
| Pages     | 3 – 11                                                              |

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### **Abstract**

*An approach to determination of probabilistic properties (probability density function, the probability distribution function, expectation) of electrical characteristics of charge circuits of reservoir capacitors of electric installations whose active resistance can vary randomly is proposed. It is assumed that resistance is characterized by a continuous random variable whose probabilistic properties are known. As examples, the probabilistic properties of capacitor voltage and choke voltage in the circuits of the first and second order with a stochastically changing active resistance having a normal or uniform probability distribution were studied. References 14, figures 3.*

**Key words:** capacitor charge, active resistance, inductance, transient, stochastic change, probabilistic properties, continuous probability distribution.

Received: 30.01.2019

Accepted: 18.02.2019

Published: 05.06.2019

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