

2004 ,□ □ 4

CONTENTS

Theoretical electrical engineering and electrophysics

NEFEDOV P.V. Simulation of a charge transfer processes in an ambipolar diffusion approach _____ 3

Conversion of electric energy parameters

MAKARENKO M.P. Special features of mathematical provision of system simulation of electromagnetic

processes in semiconductor electric energy converters with conventional equations _____ 8

DENISOV Yu A., VELIGORSKY A.A. Total quadratic estimates of systems accuracy of power electronics

with different types of width-pulse modulation_____ 13

NAMESTNIK S.G. Analysis of network current of a three-phase valve-capacitor source of reactive

power (VCSRП)_____ 18

GOLUBEV V.V. Pulse regulators of alternating voltage_____ 21

VOLKOV A.V. Computation of velocity and magnetic-flux linkage controllers for an asynchronous

electric drive with relay frequency-current control_____ 26

Electromechanical energy conversion

VAS'KOVSKY Yu.N. Estimation of dynamic stability limits of TVF-120-2 type turbo-generators at

their modernization _____

_____ 34

SARATOV V.A. Asynchronous characteristics of 100 MW turbo-generators of thermo-electric

plant power
units _____

38

VOITEKH A.A., ONOPRICH V.P., ONOPRICH L.V. Asynchronous motors of a general industrial
series

at frequent control of rotation

speed _____ 41

IDZJAK P. Mechanical deformations of a stator under a magnetic field influence of the main
poles of

a modern electric motor of constant

current _____ 45

KENSYTSKY O.G. Information increase of a standard system of thermal monitoring of a

turbo-generator _____

_____ 52

Electric power systems and installations

GINAILO A.V., MARTYNJUK M.V., BESPECHNY I.V. Problems and implementation circuits of

an automated system of supervisory control (ASSC) of power supply
companies _____ 55

YUSIFBEIUNA. Power method of effective estimation of a power system stability _____
_____ 63

Information measuring systems in power engineering

MONASTYRSKY Z.Ya., SAVOLJUK A.M. Special features of construction of self-compensated
level

gauges of electroconducting and non-electroconducting media with micjocontrollers
application _____ 67

GAL'TCHENKO V.Ya., VOROBEV M.A. Improvement of a solenoid magnetic system of a
coercitimeter

by the methods of structural
optimization_____ 71

Information

News from the Highest Certifying Commission of Ukraine_____ 76

In commemoration of the 80th anniversary of V.T.
DOLBNJA_____ 79