1995, □ 2

contents

Electrodynamics of electrical power devices

Rozov V.Yu. Mathematical model of electrical equipment as exterior magnetic field source_____
_____
3

Afonin A.A., Grebenikov V.V., NovoseltsevA.V. Superconducting magnetohydrodynamic motors wkh

closed magnetic exiting system_____ 7

Electric energy parameters conversion

Bojko V.S., Bojko V.V., Senko V.I. The effect of resistance on commutation process in the

compensated rectifiers_____ 15

Golubev V.V. Quasi-state reaction of the second order sircuits on action of periodic piecewtse

sinusoidal voltage _____ 19

Shidlovskaja N.A. Calculation of the four-wire circuits with nonlinear resistive load by the method of

small
parameters_____
__ 24

Arhiereev I.P., Kipenskiy A.V., Kasilov O.V. Selected expalston of input current harmonics in the single-

phase semiconducting alternating voltage
converters_____ 29

Malafeev S.I., Lykov A.Yu., Sporyhin V.V. Investigation of the electric drive system with pulse

speed detector by means of simulation_____
_____ 33

Electromechanical energy conversion

Schastliviy G.G., Titko O.I., Chekurin V.F. The concept of simulation of destruction processes in the

conducting elements of electric
motors_____ 36

Vishnevskiy L.V. Analisys of discrete laws of voltage control in the induction generator_____ 41

Volchukov N.P. Influence of the converter type on the overload capability of rectifying motor_____ 46

Electrical energy systems and installations

Shidlovskiy A.K., Kuznetsov V.G., Tugay Yu.I., Dmitriev E.V., Molchanov V.N. Elimination of

ferroresonance mode of the distributing facilitis for electrical networks of 110-750 kV_____ 50

Gapchenko N.A., Kachanova N.A., Tverdyakov V.V., Karakoz V.M. Method of equivalents or exterior

power systems m the problems of short-term planning and dispatcher counsellor_____ 5

3

Minyilo O.S., Pokrovskiy K.B. Static mathematical model of the induction turbo-generator block_____ 56

Brzhezitskiy V.A., Ilyenko I.O., Ilyenko O.S., Mokhanov V.N. Mathematical simulation of overvol tage of

the non loaded transformer of 6-35 kV in the vacuum switching mode_____ 60

Korobchuk K.V. Analisys of the alternatives for maintence the continuity of service to the critical loads_____ 65

Naumov V.F. Method of diagnostics of the exiting systems in power generators_____ _____ 69

Electrical and magnetic measurements

Skrypnik Yu.O., Gutsalo O.G. Structural methods for accuracy increase of the facilitis for signal groupc time

dilay measurement_____
_____ 73

Komarenko E.Yu., Surdu M.N., Baranov G.L., Baranov V.L. Method and structure of measuriningss

circuits for determining the parameters of expotential process
_____ 76