

1998, □ 6

Contents

Electrodynamics of electrical power devices

BARABANOVA N.V., EMETS Ju.P. Problem solution about field forming in conductor with a

boundary cylindrical switch
on _____ 3

RUDAKOV V.V. Dielectric failure mechanism in power capasitor units _____
_____ 10

SHACHTACHTINSKY T.I. Influence of electrodes field inhomogeneity on electric syrenth of a

solid dielectric dependingon its macrostructure _____
_____ 16

Conversion of electric energy parameters

MOSTOVJAK I.V., ZOSCHENKO A.V., MARTYNENKO M.A., SAMKOV A.V., DAN'KO A.V.

Parametrical synthesis of reactive elements for a three-phase system state balancing

with a non-stationary single-phase
load_____ 18

NAMESTNIK S.G. Physical model of a sequential RLC-circuit with a capacitance (inductance)

circuit
commutator_____ 20

AKIMOV L.V., DOLBNJA V.T., KOLOTILO V.I. About disturbance servo system in subordinate

control systems (SCS) of velocity with EMF controller and a complete order state
observer_____ 23

PAVLOV V.B., SKIDANOV V.M., YURCHENKO O.N. Method of two-zone control by converters

in transport electric drives with speed positive feedback_____ 34

Electromechanical energy conversion

MARCHENKO B.G., MYSLOVICH M.V. Power-generating units diagnostics theory on rotatable

nodes deviation and its practical application for Diesel-electric generators (part II) _____
_____ 39

VOLKOV A.V. Stationary mode analysis an asynchronous motor at autonomous inverter supply

with a pulse-width output voltage
control _____ 42

KRYGER I. Reactive power problems of an induction motor power saving operation conditions _____
48

FEDORENKO G.M., VYGOVSKY V.I., VYGOVSKY A.V. Coolant circulation influence on a
thermal

state of a turbogenerator stator winding of 1000 mW power _____
_____ 50

KAPUSTTN G.V., FINKEL'SHTEIN V.B. Space harmonics in an air gap of an asynchronous motor

at eccentricity
presence_____ 56

PISKUNOV O.G., RAZAK A., SURGIKT.V. Instability of electromagnetic inyerrupter with

photobattery-operated_____ 58

Electrical power systems and installations

STOGNIY B.S., SOPEL M.F., PILIPENKO Yu.V. Sampling frequency value at a digital

measurement and electromechanical and electromagnetic transient processes monitoring

in electric power
systems_____ 60

GONCHAR V.V., ZALIZETSKY A.M., KARPINSKY N.P., TREMBACH R.V. Electric characteristics

analysis of metalhalogen lamps in abnormal modes of
operation_____ 64

YAKIMENKO Yu.I., BUTKO V.I., ZAVOROTNIY V.F., PASICHNIC L.O. Low-potential power

sources and methods of their utilisation _____
_____ 70

GNEDOI N.V., VOZNESENSKY V.V., SIMENKO L.P., SNYCHEVA I.I. Electric energy costs

prediction at a local source introduction at a mining factory _____
_____ 75

ROZKIN S.M. Power equipment and software of parameters monitoring system of working

medium flows of unitized container compressor
stations_____ 78

INDEX of papers in a 1998 _____
_____ 81

ABSTRACTS

