

SUMMARY

Diploma project is executed on 78 pages contains 37 figures, 1 table and 1 application.

The graphic part contains 3 sheets, in which the schematic diagram of the electric principle, structural and functional schemes of the system of the investigated laboratory stand; graphs of transients are depicted.

In this bachelor project the development of control algorithm of hybrid energy storage system of electric bus that supplied by rechargeable battery has been designed. Laboratory bench for testing and debugging the system on a small scale has been designed.

Its work has been tested by means of modeling, and experiments with laboratory bench containing individual energy source have been conducted.

In the Matlab (Simulink) software the model of system which includes DC-Dc booster and rechargeable battery with designed control algorithm has been created.

The load is a resistive element that simulates a three-phase inverter.

HYBRID ENERGY STORAGE SYSTEM, SUPERCAPACITOR MODULE,
RECHARGEABLE BATTERY, DC-DC BOOSTER, ELECTRIC TRANSPORT
VEHICLES, PULSE WIDTH MODULATION.

					6.050702.3214.031.BD			
	Letter	№ of doc.	Sign.	Data	Development of hybrid energy storage system control algorithm of electric bus	L.	Let.	Letters
Devel.	Y. Nikonenko							
Checked.	S. Peresada						7	78
N. Contr.						NTUU "KPI"		
Approved	S. Peresada					FEA ED-32		