

ABSTRACT

The aim of the diploma project is development of device for testing remote control of high-voltage equipment with additional functions that can be used in the field of energy.

Within the framework of this project the theoretical bases of contactless control of high-voltage equipment were investigated, device of remote measuring in the ultraviolet spectral range was designed, optical system of the device were modeled, components were selected, basic electric scheme and assembly drawings were developed.

The work is presented on 70 pages (without appendices), contains 3 tables, 42 figures, 4 graphic drawings and 22 literature sources.

Keywords: remote control of high-voltage equipment, electron-optical control, electron-optical converter, ultraviolet radiation, electron-optical flaw detector, corona discharge, optical system.