

Ain Shams University Faculty of Engineering Electrical Power and Machines Dept.

FUNCTION BASED OPTIMIZED PROTECTION SCHEMES FOR DISTRIBUTION SUBSTATIONS

M.Sc. Thesis By

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Submitted in Partial Fulfillment of the Requirements for the degree Master of Science in Electrical Engineering

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A thesis submitted to the Faculty of Engineering –Ain Shams University in partial fulfillments of the requirements for the Master Degree in Electrical Power and Machines Engineering

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Professor Electric Power and Machine Department Faculty of Engineering- Ain Shams University Dedicated to my father, my beloved mother and brothers, my lovely wife.

Also, dedicated to everyone tried to help me, all my teachers, professors, my family and friends

STATEMENT

This thesis is submitted to Ain Shams University in

partial fulfillment of the requirements for the M.Sc.

Degree in Electrical Engineering (Power and Machines).

The work included in this thesis is carried out by the

author at the Electrical Power and Machines Department,

Ain Shams University. No part of this thesis has been

submitted for a degree or a qualification at any other

university or institute.

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