

**ELECTRICAL AUTOMATION
SYSTEMS TOWARDS INTELLIGENT
AND ENERGY EFFICIENCY
APPLICATIONS**

Musse Mohamud Ahmed



IIUM PRESS

INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA

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APPLICATIONS

Musse Mohamud Ahmed

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IIUM Press

Published by:
IUM Press
International Islamic University Malaysia

First Edition, 2011
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Perpustakaan Negara Malaysia

Cataloguing-in-Publication Data

ISBN: 978-967-418-170-3

Member of Majlis Penerbitan Ilmiah Malaysia – MAPIM
(Malaysian Scholarly Publishing Council)

Printed by :
IUM PRINTING SDN.BHD.
No. 1, Jalan Industri Batu Caves 1/3
Taman Perindustrian Batu Caves
Batu Caves Centre Point
68100 Batu Caves
Selangor Darul Ehsan
Tel: +603-6188 1542 / 44 / 45 Fax: +603-6188 1543
EMAIL: iiumprinting@yahoo.com

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CHAPTER 2

ELECTRICAL DISTRIBUTION EQUIPMENT FAULTS

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This chapter explains the overview of distribution equipment, substation construction types, faults and breakdowns, fault level reductions, faults calculation and faults at distribution side.

2.1 Overview of Distribution Equipment Faults

The function of the substations are to configure a nodal point which the power or electricity can be changed or distributed from it to other substations or consumers, allowed the incoming and outgoing switch connected with other substations and allowed the fault point due to the substation affected in the system isolated with switching method and the electricity remain supplied via other back up supply.

There are four types of substations, which are: pole mounted, in-door substation, outdoor substation and compact substation. They are showed in Figures 2.1, 2.2, 2.3 and 2.4 respectively.

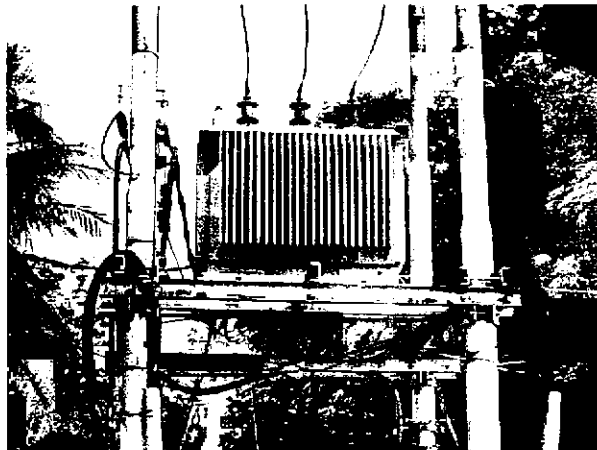


Figure 2.1: Pole Mounted Substation