Eskom Power Series

Volume 4

Inductive Instrument Transformers and Protective Applications

Who should read this book?

This book is essential for the engineer responsible for placing and adjudicating orders and running power system protection and maintenance.

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What does this book cover?

In a power system, it is important that the correct application requirement of the instrument transformers is attained and that the design is within the limits specified by the user, and is cost effective. For this purpose, a short account of faults and protection relays, which are related to the instrument transformers, together with several protection applications are given and supported with practical examples.

Starting at a basic level, the arguments are expanded to provide sound knowledge for the beginner and a refresher to those who are more familiar with the topics.

Examples of instrument transformer designs, together with the means to establish their thermal stability, are included in the text. Extensive appendices describe particular arguments or formulae used in the text, to keep the text itself fluid.

The detailed mathematical modelling of both instrument transformers and protective systems is comprehensively illustrated with pertinent numerical examples to ensure that the application of the modelling is clearly understandable.

Inductive Instrument Transformers and Protective Applications (Volume 4 in the Eskom Power Series) is a remarkable book for its rigorous and comprehensive treatment of electromagnetic voltage and current transformers and will form a valuable addition to the personal library of every technical specialist interested in the measurement of high voltage and high current and in classical protective systems. It is essential for the engineer responsible for placing and adjudicating orders, and running power systems protection and maintenance.

Contents of the book

What other books are available?

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Volume 2: Fundamentals and Practice of Overhead Line Maintenance (pp 258), ISBN No. 0-620-30906-7

Volume 3: The Practical Guide to Outdoor High Voltage Insulators (pp 224), ISBN No. 0-620-31074-X

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What books are in development?

- The Engineer's Toolkit
- HVDC Power Transmission (Part 2)
- Power Station Chemistry Book
- High Voltage Overhead Power Lines: Construction Works
- Fly Ash Properties and Utilisation Book (Parts 1 to 6)
- Insulating Fluid for the Electrical Engineering Industry
- AC Substation Design Handbook
- Coal Classification and Utilisation Book

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Contact: Sanjeev Bisnath

Email: bisnats@eskom.co.za

Tel +27 11 629 5072

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