

# Reliability in Power Electronics and Electrical Machines: Industrial Applications and Performance Models

Part of the Advances in Computer and Electrical Engineering Book Series

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## Description:

In modern industries, electrical energy conversion systems consist of two main parts: electrical machines and power electronic converters. With global electricity use at an all-time high, uninterrupted operation of electrical power converters is essential.

**Reliability in Power Electronics and Electrical Machines: Industrial Applications and Performance Models** provides an in-depth analysis of reliability in electrical energy converters as well as strategies for designing dependable power electronic converters and electrical machines. Features a comprehensive discussion on the topics of reliability design and measurement, failure mechanisms, and specific issues pertaining to quality, efficiency, and durability.

## Readers:

This timely reference source offers practical examples and research-based results for use by engineers, researchers, and advanced-level students.

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## Topics Covered:

- Availability in Power Converters
- Condition Monitoring
- Converter Quality
- Fault Tolerant Power Converters
- Reliability Improvement
- Reliability Prediction
- Reliability Testing
- Thermal Modeling

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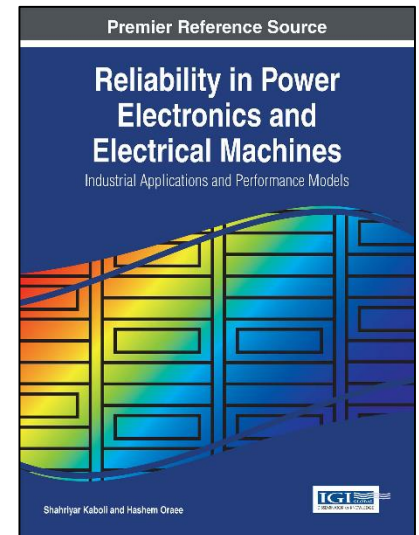


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