

1. Record Nr.	UNINA9910830232503321
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Titolo	Modeling and control of modern electrical energy systems / / Masoud Karimi-Ghartemani
Pubbl/distr/stampa	Piscataway, New Jersey ; ; Hoboken, New Jersey : , : IEEE Press : , : Wiley, , [2022] ©2022
ISBN	1-394-17262-1 1-119-88342-3
Descrizione fisica	1 online resource (387 pages)
Collana	IEEE Press series on power engineering
Disciplina	621.317
Soggetti	Electric power systems - Control Renewable resource integration Electric power system stability Energy storage
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Cover -- Title Page -- Copyright -- Contents -- Author Biography -- Preface -- Acknowledgments -- Acronyms -- Symbols -- Introduction -- Part I Power Electronic Conversion -- Chapter 1 Power Electronics -- 1.1 Power Electronics Based Conversion -- 1.1.1 Advantages of Power Electronics -- 1.2 Power Electronic Switches -- 1.3 Types of Power Electronic Converters -- 1.4 Applications of Power Electronics in Power Engineering -- 1.4.1 Power Quality Applications -- 1.4.2 Power System Applications -- 1.4.3 Rectifiers and Motor Drive Applications -- 1.4.4 Backup Supply and Distributed Generation Applications -- 1.5 Summary and Conclusion -- Exercises -- Problems -- Reference -- Chapter 2 Standard Power Electronic Converters -- 2.1 Standard Buck Converter -- 2.1.1 Analysis of Operation -- 2.1.2 Switching Model -- 2.1.3 Average (or Control) Model -- 2.1.3.1 Current Control Model -- 2.1.3.2 Output Voltage Control Model -- 2.1.3.3 Input Voltage Control Model -- 2.1.4 SteadyState Analysis -- 2.1.5 Sensitivity Analysis -- 2.1.5.1 Sensitivity to R -- 2.1.5.2 Sensitivity to vB -- 2.1.5.3 Sensitivity to vA -- 2.1.6 Virtual Resistance Feedback -- 2.1.7 Input Feedback

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Sommario/riassunto

In Modeling and Control of Modern Electrical Energy Systems, distinguished researcher Dr. Masoud Karimi-Ghartemani delivers a comprehensive discussion of distributed and renewable energy resource integration from a control system perspective. The book explores various practical aspects of these systems, including the power extraction control of renewable resources and size selection of short-term storage components. The interactions of distributed energy resources (DERs) with the rest of the electric power system are presented, as is a discussion of the ability of the DER to ride through grid voltage faults and frequency swings. Readers will also discover how to derive mathematical models of different types of energy systems and build simulation models for those systems.
