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3.3.3. Elementary example: control of a DC drive3.4. Energetic Macroscopic Representation; 3.4.1. Description by EMR; 3.4.2. Structure of control by inversion of an EMR; 3.4.3. Elementary example: control of an electrical vehicle; 3.5. Complementarity of the approaches and extensions; 3.5.1. Differences and complementarities; 3.5.2. Example: control of a paper band winder/unwinder; 3.5.3. Other applications and extensions; 3.6. Bibliography; Chapter 4: The Robustness: A New Approach for the Integration of Energetic Systems; 4.1. Introduction; 4.2. Control design of electrical systems
4.2.1. The control design is an issue of integration

Sommario/riassunto

This book proposes systemic design methodologies applied to electrical energy systems, in particular analysis and system management, modeling and sizing tools.It includes 8 chapters: after an introduction to the systemic approach (history, basics & fundamental issues, index terms) for designing energy systems, this book presents two different graphical formalisms especially dedicated to multidisciplinary devices modeling, synthesis and analysis: Bond Graph and COG/EMR. Other systemic analysis approaches for quality and stability of systems, as well as for safety and robustness analysis