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| | Autore | Pulle Duco W. J |
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| | Descrizione fisica | 1 online resource (430 p.) |
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| | Soggetti | Energy systems<br>Power electronics<br>Control engineering<br>Energy Systems<br>Power Electronics, Electrical Machines and Networks<br>Control and Systems Theory |
| | Lingua di pubblicazione | Inglese |
| | Formato | Materiale a stampa |
| | Livello bibliografico | Monografia |
| | Note generali | Description based upon print version of record. |
| | Nota di bibliografia | Includes bibliographical references and index. |
| | Nota di contenuto | Introduction -- Drive Principles and Development -- Module 1: Lab Sessions -- Module 2: Lab Sessions -- Module 3: Lab Sessions -- VisSim Based Case Studies -- PLECS Based PIL Case Studies. |
| | Sommario/riassunto | · Provides an overall understanding of all aspects of AC electrical drives, from the motor and converter to the implemented control algorithm, with minimum mathematics needed · Demonstrates how to implement and debug electrical drive systems using a set of dedicated hardware platforms, motor setup and software tools in VisSim™ and PLECS™ · No expert programming skills required, allowing the reader to concentrate on drive development · Enables the reader to undertake real-time control of a safe (low voltage) and low cost experimental drive This book puts the fundamental and advanced concepts behind electric drives into practice. Avoiding involved mathematics whenever practical, this book shows the reader how to implement a range of modern day electrical drive concepts, without requiring in depth programming skills. It allows the user to build and run a series of AC |

drive concepts, ranging from very basic drives to sophisticated sensorless drives. Hence the book is the only modern resource available that bridges the gap between simulation and the actual experimental environment. Engineers who need to implement an electrical drive, or transition from sensored to sensorless drives, as well as students who need to understand the practical aspects of working with electrical drives, will greatly benefit from this unique reference.