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| Titolo                  | Multidisciplinary Design Optimization Methods for Electrical Machines and Drive Systems // by Gang Lei, Jianguo Zhu, Youguang Guo  |
| Pubbl/distr/stampa      | Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2016   |
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| Edizione                | [1st ed. 2016.]  |
| Descrizione fisica      | 1 online resource (251 p.)   |
| Collana                 | Power Systems, , 1860-4676   |
| Disciplina              | 621.31042  |
| Soggetti                | Electric power production<br>Machinery<br>Engineering mathematics<br>Engineering - Data processing<br>Industrial engineering<br>Production engineering<br>Electrical Power Engineering<br>Machinery and Machine Elements<br>Mathematical and Computational Engineering Applications<br>Industrial and Production Engineering   |
| 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 at the end of each chapters.   |
| Nota di contenuto       | Introduction -- Design fundamentals of electrical machines and drive systems -- Optimization methods -- Design optimization methods for electrical machines -- Design optimization methods for electrical drive systems -- Design optimization for high quality mass production -- Application-oriented design optimization methods for electrical machines -- Conclusion and future works.  |
| Sommario/riassunto      | This book presents various computationally efficient component- and system-level design optimization methods for advanced electrical machines and drive systems. Readers will discover novel design optimization concepts developed by the authors and other researchers in the last decade, including application-oriented, multi-disciplinary, multi-objective, multi-level, deterministic, and robust design optimization methods. A multi-disciplinary analysis includes various |

aspects of materials, electromagnetics, thermotics, mechanics, power electronics, applied mathematics, manufacturing technology, and quality control and management. This book will benefit both researchers and engineers in the field of motor and drive design and manufacturing, thus enabling the effective development of the high-quality production of innovative, high-performance drive systems for challenging applications, such as green energy systems and electric vehicles.

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