

| | |
|-------------------------|---|
| 1. Record Nr. | UNINA9910616212603321 |
| Autore | Rahmani-Andebili Mehdi |
| Titolo | DC Electric Machines, Electromechanical Energy Conversion Principles, and Magnetic Circuit Analysis : Practice Problems, Methods, and Solutions / / by Mehdi Rahmani-Andebili |
| Pubbl/distr/stampa | Cham : , : Springer International Publishing : , : Imprint : Springer, , 2022 |
| ISBN | 9783031088636 9783031088629 |
| Edizione | [1st ed. 2022.] |
| Descrizione fisica | 1 online resource (188 pages) |
| Collana | Energy Series |
| Disciplina | 381 621.31042 |
| Soggetti | Electric machinery Power electronics Electric power production Technical education Electrical Machines Power Electronics Electrical Power Engineering Engineering and Technology Education |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Nota di bibliografia | Includes bibliographical references. |
| Nota di contenuto | Problems: Magnetic Circuits Analysis -- Solutions of Problems: Magnetic Circuits Analysis -- Problems: Inductance of Windings and Induced Voltage in Windings -- Solutions of Problems: Inductance of Windings and Induced Voltage in Windings -- Problems: Energy Loss in Magnetic Circuits -- Solutions of Problems: Energy Loss in Magnetic Circuits -- Problems: Electromechanical Energy Conversion -- Solutions of Problems: Electromechanical Energy Conversion -- Problems: Separately Excited DC Electric Generator -- Solutions of Problems: Separately Excited DC Electric Generator -- Problems: Shunt DC Electric Generator -- Solutions of Problems: Shunt DC Electric Generator -- Problems: Series and Compound DC Electric Generators -- Solutions of Problems: Series and Compound DC Electric Generators -- Problems: |

Separately Excited and Shunt DC Electric Motors -- Solutions of Problems: Separately Excited and Shunt DC Electric Motors -- Problems: Series DC Electric Motor -- Solutions of Problems: Series DC Electric Motor -- Problems: Compound DC Electric Motor -- Solutions of Problems: Compound DC Electric Motor -- Problems: Power Loss and Efficiency of DC Electric Machines -- Solutions of Problems: Power Loss and Efficiency of DC Electric Machines.

Sommario/riassunto

This study guide is designed for students taking courses in DC electric machines, principles of electromechanical energy conversion, and magnetic circuit analysis. The textbook includes examples, questions, and exercises that will help electrical engineering students to review and sharpen their knowledge of the subject and enhance their performance in the classroom. Offering detailed solutions, multiple methods for solving problems, and clear explanations of concepts, this hands-on guide will improve student's problem-solving skills and basic and advanced understanding of the topics covered. Exercises cover a wide selection of basic and advanced questions and problems; Categorizes and orders the problems based on difficulty level, hence suitable for both knowledgeable and under-prepared students; Provides detailed and instructor-recommended solutions and methods, along with clear explanations.
