

1. Record Nr.	UNINA9910970914503321
Autore	Kirtley James L
Titolo	Electric power principles : sources, conversion, distribution, and use / / James L. Kirtley
Pubbl/distr/stampa	Chichester, West Sussex, : Wiley, 2010
ISBN	9786612656644 9781119957447 1119957443 9781282656642 1282656643 9781119994404 1119994403 9780470667170 0470667176
Edizione	[1st ed.]
Descrizione fisica	1 online resource (405 p.)
Disciplina	621.3
Soggetti	Electric power production Electrification
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	ELECTRIC POWER PRINCIPLES; Contents; Preface; 1 Electric Power Systems; 2 AC Voltage, Current and Power; 3 Transmission Lines; 4 Polyphase Systems; 5 Electrical and Magnetic Circuits; 6 Transformers; 7 Polyphase Lines and Single-Phase Equivalents; 8 Electromagnetic Forces and Loss Mechanisms; 9 Synchronous Machines; 10 System Analysis and Protection; 11 Load Flow; 12 Power Electronics and Converters in Power Systems; 13 Induction Machines; 14 DC (Commutator) Machines; 15 Permanent Magnets in Electric Machines; Index
Sommario/riassunto	This innovative approach to the fundamentals of electric power provides the most rigorous, comprehensive and modern treatment available. To impart a thorough grounding in electric power systems, it begins with an informative discussion on per-unit normalizations,

symmetrical components and iterative load flow calculations. Covering important topics within the power system, such as protection and DC transmission, this book looks at both traditional power plants and those used for extracting sustainable energy from wind and sunlight. With classroom-tested material, this book also
