1. Record Nr. UNINA9910140170403321

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Titolo	Understanding FACTS : concepts and technology of flexible AC transmission systems / / Narain G. Hingorani, Laslo Gyugyi ; Mohamed E. El-Hawary, consulting editor
Pubbl/distr/stampa	New York : , : IEEE Press, , c2000 [Piscataqay, New Jersey] : , : IEEE Xplore, , [1999]
Descrizione fisica	1 PDF (xix, 432 pages) : illustrations
Altri autori (Persone)	GyugyiLaszlo
Disciplina	621.319/13
Soggetti	Flexible AC transmission systems
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Facts concept and general system considerations -- Power semiconductor devices -- Voltage-sourced converters -- elf-and line-commutated current-sourced converters -- Static shunt compensators: SVC and STATCOM -- Static series compensators: GCSC, TSSC, TCSC, and SSSC -- Static voltage and phase angle regulators: TCVR and TCPAR -- Combined compensators: unified power flow controller (UPFC) and interline power flow controller (IOFC) -- Special purpose facts controllers: NGH-SSR damping scheme and thyristor-controlled braking resistor -- Application examples.
Sommario/riassunto	"The Flexible AC Transmission System (FACTS) -- a new technology based on power electronics -- offers an opportunity to enhance controllability, stability, and power transfer capability of AC transmission systems. Pioneers in FACTS and leading world experts in power electronics applications Narain G. Hingorani and Laszlo Gyugyi have teamed together to bring you the definitive book on FACTS technology. Hingorani and Gyugyi present a practical approach to FACTS that will enable electrical engineers working in the power industry to understand the principles underlying this advanced system. UNDERSTANDING FACTS will also enhance expertise in equipment specifications and engineering design, offering an informed view of the future of power electronics in AC transmission systems. This comprehensive reference book provides an in-depth look at: * Power

semiconductor devices * Voltage-sourced and current-sourced converters * Specific FACTS controllers including SVC, STATCOM, TCSC, SSSC, UPFC, IPFC plus voltage regulators, phase shifters, and special controllers with a detailed comparison of their performance attributes * Major FACTS applications used in the United States. UNDERSTANDING FACTS is an authoritative resource that is essential reading for electrical engineers who want to stay on the cusp of the power electronics revolution." Sponsored by: IEEE Power Engineering Society.