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Titolo	Digital Protective Schemes for Power Transformer // by Dharmesh Patel, Nilesh Chothani
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Descrizione fisica	1 online resource (XXX, 193 p. 98 illus., 55 illus. in color.)
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Soggetti	Power electronics Energy systems Power Electronics, Electrical Machines and Networks Energy Systems
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Nota di contenuto	Introduction of Power Transformer Protection -- Phasor Angle based Differential Protection of Power Transformer -- Adaptive Digital Differential Protection of Transformer -- Relevance Vector Machine based Transformer Protection -- Current Transformer Saturation Detection and Compensation -- Real-Time Monitoring & Adaptive Protection of Power Transformer to Enhance Smart Grid Reliability -- Three State Kalman Filter based Directional Protection of Power Transformer.
Sommario/riassunto	This book provides a comprehensive overview of protection schemes used for power transformers and describes the internal fault conditions and external abnormalities that may disrupt the operation of a power transformer. It also highlights the issues of current protective schemes, which pose several challenges in terms of the detection of internal faults and abnormalities, including computational burden, reduced accuracy, difficulty to implement, increased cost, computational complexity, impermeability to high resistance faults (HRF), and malfunction in conditions like cross-country fault. To address these problems, the book develops an effective novel transformer protection scheme that can eliminate all the said difficulties using an innovative algorithm. Given its scope, it is a useful resource for researchers and

practitioners working in the field of power system protection, allowing them to design novel protection schemes, and providing insights into the hardware validation of developed technique.

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