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Nota di contenuto	Frontmatter -- Preface -- Acknowledgments -- Contents -- List of Tables -- List of Figures -- Nomenclature and Abbreviations -- 1. Pulse width modulation techniques -- 2. Space vector pulse width modulation technique -- 3. Multilevel inverter topologies -- 4. Space vector pulse width modulation algorithm for the three-level inverter -- 5. Space vector pulse width modulation for multilevel inverters using fractal approach -- 6. Qualitative space vector pulse width modulation algorithm for multilevel inverters -- 7. Space vector pulse width modulation for multilevel inverters using the decomposition method -- 8. An analytical space vector pulse width modulation method for multilevel inverters -- References -- Appendices -- Subject Index
Sommario/riassunto	This book offers a general approach to pulse width modulation techniques and multilevel inverter topologies. The multilevel inverters can be approximately compared to a sinusoidal waveform because of their increased number of direct current voltage levels, which provides an opportunity to eliminate harmonic contents and therefore allows the utilization of smaller and more reliable components. On the other side, multilevel inverters require more components than traditional inverters

and that increases the overall cost of the system. The various algorithms for multilevel neutral point clamped inverter fed induction motor are proposed and implemented, and the results are analyzed. The performance of these algorithms is evaluated in terms of inverter output voltage, current waveforms and total harmonic distortion. Various basic pulse width modulation techniques, features and implementation of space vector pulse width modulation for a two-level inverter, and various multilevel inverter topologies are discussed in detail. This book is extremely useful for undergraduate students, postgraduate students, industry people, scientists of research laboratories and especially for the research scholars who are working in the area of multilevel inverters. Dr. Satish Kumar Peddapelli is Assistant Professor at the Osmania University in Hyderabad, India. His areas of interest are Power Electronics, Drives, Power Converters, Multi Level Inverters and Special Machines.

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