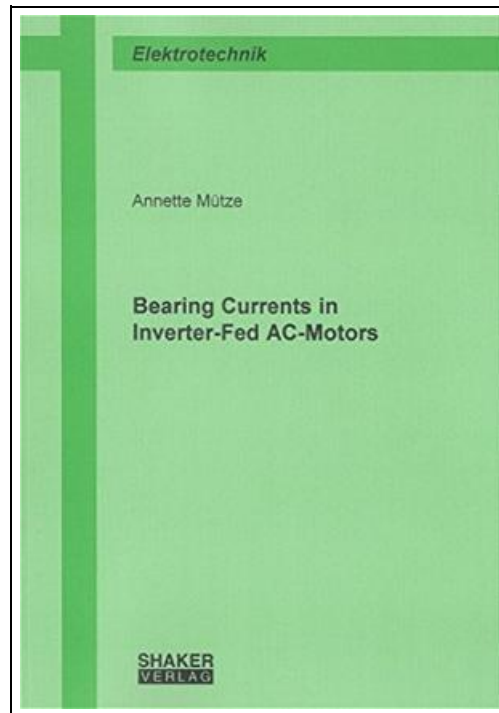


Bearing Currents in Inverter-Fed AC-Motors



Filesize: 9.39 MB

Reviews

It is a single of my favorite ebook. It can be packed with knowledge and wisdom I am just happy to tell you that this is basically the finest ebook i have got study in my very own lifestyle and may be he greatest pdf for actually.

(Dr. Jaquan Goodwin Jr.)

BEARING CURRENTS IN INVERTER-FED AC-MOTORS



To download **Bearing Currents in Inverter-Fed AC-Motors** eBook, please access the web link under and save the file or have accessibility to additional information which might be have conjunction with BEARING CURRENTS IN INVERTER-FED AC-MOTORS ebook.

Shaker Verlag Feb 2004, 2004. Taschenbuch. Condition: Neu. Neuware - Modern fast switching IGBT-inverters (Insulated Gate Bipolar Transistors) allow high dynamic operation of variable speed drives while leading at the same time to energy savings. However, due to the steep voltage surges, bearings may suffer from inverter-induced bearing currents. These bearing currents may destroy bearings - depending on the system - within short time of operation. So far, research has focused on the physical explanation of the different bearing current phenomena. Here, a thorough analysis of the qualitative and quantitative influence of different parameters under exactly the same conditions on motors from less than 1 kW up to 500 kW rated power was carried out within the frame of a research project. The system parameters studied are motor size, motor speed and bearing temperature, design of motor and inverter (components from different manufacturers), motor cable type and motor cable length, filter operation and operation with use of insulated bearings and with use of hybrid bearings. The results obtained show that the significance of the different bearing current phenomena vary with different motor sizes and grounding configurations. As a consequence, mitigation techniques applied to reduce or eliminate the bearing currents have to be chosen for different drive systems selectively. In addition, a series of tests for bearing damage assessment was carried out to obtain a better understanding of the mechanisms of damage of the bearing. Despite manifold investigations, the phenomena of the generation of corrugation cannot be explained with today's understanding. However, the deterioration of the bearing grease was found to correlate with the stress on the bearings. A parameter 'W' that is proportional to an energy was introduced to quantify the stress. Furthermore, models that are based on the design parameters are proposed to give physical explanations...



[Read Bearing Currents in Inverter-Fed AC-Motors Online](#)



[Download PDF Bearing Currents in Inverter-Fed AC-Motors](#)

Other PDFs



[PDF] **Learn at Home:Learn to Read at Home with Bug Club: Pink Pack Featuring Trucktown (Pack of 6 Reading Books with 4 Fiction and 2 Non-fiction)**

Follow the hyperlink listed below to read "Learn at Home:Learn to Read at Home with Bug Club: Pink Pack Featuring Trucktown (Pack of 6 Reading Books with 4 Fiction and 2 Non-fiction)" PDF document.

[Download eBook »](#)



[PDF] **Daddyteller: How to Be a Hero to Your Kids and Teach Them What s Really by Telling Them One Simple Story at a Time**

Follow the hyperlink listed below to read "Daddyteller: How to Be a Hero to Your Kids and Teach Them What s Really by Telling Them One Simple Story at a Time" PDF document.

[Download eBook »](#)



[PDF] **Index to the Classified Subject Catalogue of the Buffalo Library; The Whole System Being Adopted from the Classification and Subject Index of Mr. Melvil Dewey, with Some Modifications .**

Follow the hyperlink listed below to read "Index to the Classified Subject Catalogue of the Buffalo Library; The Whole System Being Adopted from the Classification and Subject Index of Mr. Melvil Dewey, with Some Modifications ." PDF document.

[Download eBook »](#)



[PDF] **Growing Up: From Baby to Adult High Beginning Book with Online Access**

Follow the hyperlink listed below to read "Growing Up: From Baby to Adult High Beginning Book with Online Access" PDF document.

[Download eBook »](#)



[PDF] **Born Fearless: From Kids' Home to SAS to Pirate Hunter - My Life as a Shadow Warrior**

Follow the hyperlink listed below to read "Born Fearless: From Kids' Home to SAS to Pirate Hunter - My Life as a Shadow Warrior" PDF document.

[Download eBook »](#)



[PDF] **Shadows Bright as Glass: The Remarkable Story of One Man's Journey from Brain Trauma to Artistic Triumph**

Follow the hyperlink listed below to read "Shadows Bright as Glass: The Remarkable Story of One Man's Journey from Brain Trauma to Artistic Triumph" PDF document.

[Download eBook »](#)