



# High Performance AC Drives: Modelling Analysis and Control (Power Systems)

By Mukhtar Ahmad

Download now

Read Online 

## High Performance AC Drives: Modelling Analysis and Control (Power Systems) By Mukhtar Ahmad

Variable speed is one of the important requirements in most of the electric drives. Earlier dc motors were the only drives that were used in industries requiring generation over a wide range of speed with step less variation, or requiring fine accuracy of speed control. Such drives are known as high performance drives. AC - tors because of being highly coupled non-linear devices can not provide fast dynamic response with normal controls. However, recently, because of ready availability of power electronic devices, and digital signal processors ac motors are beginning to be used for high performance drives. Field oriented control or vector control has made a fundamental change with regard to dynamic performance of ac machines. Vector control makes it possible to control induction or synchronous motor in a manner similar to control scheme used for the separately - cited dc motor. Recent advances in artificial intelligence techniques have also contributed in the improvement in performance of electric drives. This book presents a comprehensive view of high performance ac drives. It may be considered as both a text book for graduate students and as an up-to-date monograph. It may also be used by R & D professionals involved in the improvement of performance of drives in the industries. The book will also be beneficial to the researchers pursuing work on sensorless and direct torque control of electric drives as up-to date references in these topics are provided.

 [Download High Performance AC Drives: Modelling Analysis and ...pdf](#)

 [Read Online High Performance AC Drives: Modelling Analysis a ...pdf](#)

# High Performance AC Drives: Modelling Analysis and Control (Power Systems)

By Mukhtar Ahmad

## High Performance AC Drives: Modelling Analysis and Control (Power Systems) By Mukhtar Ahmad

Variable speed is one of the important requirements in most of the electric drives. Earlier dc motors were the only drives that were used in industries requiring generation over a wide range of speed with step less variation, or requiring fine accuracy of speed control. Such drives are known as high performance drives. AC -tors because of being highly coupled non-linear devices can not provide fast dynamic response with normal controls. However, recently, because of ready availability of power electronic devices, and digital signal processors ac motors are beginning to be used for high performance drives. Field oriented control or vector control has made a fundamental change with regard to dynamic performance of ac machines. Vector control makes it possible to control induction or synchronous motor in a manner similar to control scheme used for the separately - cited dc motor. Recent advances in artificial intelligence techniques have also contributed in the improvement in performance of electric drives. This book presents a comprehensive view of high performance ac drives. It may be considered as both a text book for graduate students and as an up-to-date monograph. It may also be used by R & D professionals involved in the improvement of performance of drives in the industries. The book will also be beneficial to the researchers pursuing work on sensorless and direct torque control of electric drives as up-to date references in these topics are provided.

## High Performance AC Drives: Modelling Analysis and Control (Power Systems) By Mukhtar Ahmad Bibliography

- Sales Rank: #6302278 in Books
- Published on: 2010-06-22
- Original language: English
- Number of items: 1
- Dimensions: 9.41" h x .62" w x 6.56" l, .89 pounds
- Binding: Hardcover
- 290 pages

 [Download High Performance AC Drives: Modelling Analysis and ...pdf](#)

 [Read Online High Performance AC Drives: Modelling Analysis a ...pdf](#)

## **Download and Read Free Online High Performance AC Drives: Modelling Analysis and Control (Power Systems) By Mukhtar Ahmad**

---

### **Editorial Review**

#### **Review**

#### **Aus den Rezensionen:**

“Bei vielen elektrischen Antrieben in der Industrie wird eine schrittlos veränderbare Drehzahl vorausgesetzt ... Dieses Buch wirft einen umfassenden Blick auf die verschiedenen Motorenarten, ihre Ansteuerung und Modellierung. ... Aufgaben mit Lösungen machen die anspruchsvollen mathematischen Herleitungen des Buchs für Studierende verständlich ... Ein fundierter Überblick über Hochleistungs Wechselspannungs Antriebe.“ (in: Bulletin SEV/VSEIelectrosuisse, 12/November/2010, Issue 11, S. 77)

#### **From the Back Cover**

This book presents a comprehensive view of high performance ac drives. It may be considered as both a text book for graduate students and as an up-to-date monograph. It may also be used by R & D professionals involved in the improvement of performance of drives in the industries. The book will also be beneficial to the researchers pursuing work on multiphase drives as well as sensorless and direct torque control of electric drives since up-to date references in these topics are provided. It will also provide few examples of modeling, analysis and control of electric drives using MATLAB/SIMULINK.

### **Users Review**

#### **From reader reviews:**

##### **Vicki Shah:**

Book is usually written, printed, or created for everything. You can realize everything you want by a book. Book has a different type. As it is known to us that book is important point to bring us around the world. Beside that you can your reading expertise was fluently. A reserve High Performance AC Drives: Modelling Analysis and Control (Power Systems) will make you to end up being smarter. You can feel far more confidence if you can know about anything. But some of you think which open or reading a book make you bored. It's not make you fun. Why they may be thought like that? Have you seeking best book or appropriate book with you?

##### **Frank Johnson:**

Book is to be different for each grade. Book for children until eventually adult are different content. We all know that that book is very important for all of us. The book High Performance AC Drives: Modelling Analysis and Control (Power Systems) had been making you to know about other understanding and of course you can take more information. It is rather advantages for you. The publication High Performance AC Drives: Modelling Analysis and Control (Power Systems) is not only giving you much more new information but also to be your friend when you sense bored. You can spend your own personal spend time to read your guide. Try to make relationship with the book High Performance AC Drives: Modelling Analysis and Control (Power Systems). You never feel lose out for everything in case you read some books.

**Deborah Young:**

Many people spending their period by playing outside having friends, fun activity along with family or just watching TV all day every day. You can have new activity to invest your whole day by looking at a book. Ugh, you think reading a book will surely hard because you have to accept the book everywhere? It fine you can have the e-book, having everywhere you want in your Smart phone. Like High Performance AC Drives: Modelling Analysis and Control (Power Systems) which is finding the e-book version. So , why not try out this book? Let's see.

**Garry Brown:**

Do you like reading a book? Confuse to looking for your selected book? Or your book had been rare? Why so many question for the book? But virtually any people feel that they enjoy to get reading. Some people likes reading through, not only science book but also novel and High Performance AC Drives: Modelling Analysis and Control (Power Systems) or maybe others sources were given understanding for you. After you know how the great a book, you feel desire to read more and more. Science e-book was created for teacher or maybe students especially. Those ebooks are helping them to include their knowledge. In various other case, beside science publication, any other book likes High Performance AC Drives: Modelling Analysis and Control (Power Systems) to make your spare time far more colorful. Many types of book like this one.

**Download and Read Online High Performance AC Drives:  
Modelling Analysis and Control (Power Systems) By Mukhtar  
Ahmad #PHCG967YFRT**

# **Read High Performance AC Drives: Modelling Analysis and Control (Power Systems) By Mukhtar Ahmad for online ebook**

High Performance AC Drives: Modelling Analysis and Control (Power Systems) By Mukhtar Ahmad Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read High Performance AC Drives: Modelling Analysis and Control (Power Systems) By Mukhtar Ahmad books to read online.

## **Online High Performance AC Drives: Modelling Analysis and Control (Power Systems) By Mukhtar Ahmad ebook PDF download**

**High Performance AC Drives: Modelling Analysis and Control (Power Systems) By Mukhtar Ahmad Doc**

**High Performance AC Drives: Modelling Analysis and Control (Power Systems) By Mukhtar Ahmad MobiPocket**

**High Performance AC Drives: Modelling Analysis and Control (Power Systems) By Mukhtar Ahmad EPub**