Newnes is an imprint of Elsevier 30 Corporate Drive, Suite 400, Burlington, MA 01803, USA Linacre House, Jordan Hill, Oxford OX2 8DP, UK

Copyright © 2005, SciTech Publishing Inc. 911 Paverstone Dr., Ste. B Raleigh, NC 27615 www.scitechpub.com

All rights reserved.

No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of the publisher.

Permissions may be sought directly from Elsevier's Science & Technology Rights Department in Oxford, UK: phone: (+44) 1865 843830, fax: (+44) 1865 853333, e-mail: permissions@elsevier.com.uk. You may also complete your request online via the Elsevier homepage (http://www.elsevier.com), by selecting "Customer Support" and then "Obtaining Permissions."

Tables 14.4 and 14.5 reprinted with permission from IEEE Std. 519-1992–Recommended Practices and Requirements for Harmonic Control in Electrical Power Systems, Copyright 1996<sup>®</sup>, by IEEE. The IEEE disclaims any responsibility or liability resulting from the placement and use in the described manner.



Recognizing the importance of preserving what has been written, Elsevier prints its books on acid-free paper whenever possible.

## Library of Congress Cataloging-in-Publication Data

Sueker, Keith H.

Power electronics design: a practitioner's guide / by Keith H. Sueker.—1st ed. p. cm.

Includes bibliographical references and index.

ISBN 0-7506-7927-1 (hardcover : alk. paper) 1. Power electronics—Design and construction. I. Title.

TK7881.15.S84 2005

621.31'7--dc22

2005013673

## **British Library Cataloguing-in-Publication Data**

A catalogue record for this book is available from the British Library.

ISBN: 0-7506-7946-8

For information on all Newnes publications visit our website at www.books.elsevier.com

05 06 07 08 09 10 10 9 8 7 6 5 4 3 2 1

Printed in the United States of America

## Working together to grow libraries in developing countries

www.elsevier.com | www.bookaid.org | www.sabre.org

**ELSEVIER** 

BOOK AID International

Sabre Foundation