Program 2018

International Rights Catalog

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It is my pleasure to present to you the International Rights Catalog 2018 of the VDE VERLAG, the leading publishing house for technical books and dictionaries. We have compiled relevant titles of both catalogs, Spring and Autumn into a years catalog for the international readers. It offers a wide range on specialist books with international appeal on the subjects: Standards and Safety, General Electrotechnology, Information and Communications Technology, Automation Engineering, Drive Technology, Electrical Engineering, Measurement and Test, Engineering History, Electrical Installation, Energy Systems Engineering, Energy Efficient Construction, Building Law Practice and Construction Management, Air Conditioning and Ventilation Engineering, Refrigeration Engineering, Geoinformation – GIS, Geodesy.

Highlights in this year are:

- Basic Course Refrigeration
- Planning Aids for Ventilation Technology
- Efficient Operation of Heat Pumps
- The Construction Manager for Electrical Engineering
- LED Lighting Technology
- Charging Infrastructure for Electro Mobility in the Private and Semi-Public Area

- Basics of the Digital Technology
- The Construction Manager School
- The On-Site Energy Consulting
- Handbook of Air Conditioning Technology
- Handbook Geo-Marketing

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I wish you an enjoyable browse through our catalog 2018!

Maria Pinto-Peuckmann
Literary Agent for VDE VERLAG
E-Mail: maria@pinto-peuckmann.de

Frankfurt Book Fair 2018
I cordially invite you to visit me in Hall 6.3/Rights & Scouts Centre/Table 28M. Please come across and have a look!

Content

Standards and Safety .................................................. 3
General Electrotechnology .......................................... 15
Information and Communications Technology ............ 17
Automation Engineering ............................................. 19
Drive Technology ........................................................ 21
Electrical Engineering ............................................... 22
Measurement and Test ............................................... 25
Engineering History ................................................... 26

Electrical Installation.................................................. 27
Energy Systems Engineering........................................ 32
Energy Efficient Construction..................................... 33
Building Law Practice and Construction Management. 34
Air Conditioning and Ventilation Engineering.......... 36
Refrigeration Engineering.......................................... 43
Geoinformation – GIS ............................................... 51
Geodesy ..................................................................... 55
Cichowski, Rolf Rüdiger  
VDE Publication Series – Volume 59

Parameters for the Electrician
Standards Overviews, Tables and Tips

- Quickly find the relevant DIN VDE standards with examples and explanations
- Adaptation to the latest standards
- Reference book with interpretations as well as tables and pictures from DIN-VDE standards
- Wide range of topics: From planning to preparation, installation and commissioning until maintenance of electrical systems

Target Audience  Apprentices, electricians, engineers and technicians
Fields of Expertise  Electrical installation, electrical planning and standardization

Dipl.-Ing. Dipl.-Wirtsch.-Ing. Rolf Rüdiger Cichowski, MBA, is an author and management consultant. He has held several executive positions during his active career and has been a member of technical commissions and committees.

The electrician can find the necessary, currently valid DIN-VDE standards and specifications quickly and easily with this reference book for specific applications in electrical installations. With numerous examples and explanations!

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ISBN 978-3-8007-4295-0

€ 32.00
ISBN 978-3-8007-4162-5
Recommendations on the subject

Schmolke, Herbert
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- Extensive information on protective measures, materials and equipment, requirements and rooms as well as for tests before and after commissioning
- Including definition of the most important terms

**Target Audience**  Electrical plants operators, installers and maintenance technicians and electrical facilities tester

**Fields of Expertise**  Electrical installation, electrical planning and standardization

Dipl.-Ing. Herbert Schmolke worked for 20 years as an electrical engineer at VdS Schadenverhütung GmbH (testing and certification institution for fire protection and security) responsible for the approval of experts in electrical engineering and thermography as well acting as an advisor.

The book contains clearly understandable and clearly presented the most important data and facts as well as requirements and specifications for the installation of electrical systems. The content structure and the extensive subject index allow fast and comprehensive information on the topic. The informative work is aimed at all practitioners involved in planning, construction, maintenance, testing and operation of electrical equipment.

4th reworked Edition, 2018
280 Pages
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**Recommendations on the subject**

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The guide through all 24 main parts of DIN VDE 0100
Answers to the questions:
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· Does the requirement apply to my specific application?

Target Audience
Apprentices, vocational schools, educational institutions, beginners, skilled workers, masters, master schools, planners, project engineers and technicians

Fields of Expertise
Electrical installation, electrical planning and standardization

Dipl.-Ing. Siegfried Rudnik and Dipl.-Ing. (FH) Reinhard Pelta have many years of practical experience in standardization and are active as recognized experts in numerous national and international committees and associations.

The DIN VDE 0100 consists of 24 main parts. Even experienced users of standards can sometimes not spontaneously say which normative requirements are to be found where. This is where the guidebook comes in: the book supports research and helps to find the specific normative requirement in DIN VDE 0100. A really useful book for beginners as well as the experienced installer and raiser of electrical systems!

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ISBN 978-3-8007-3896-0

€ 29.00
ISBN 978-3-8007-4497-8
Kreienberg, Michael
VDE Publication Series – Volume 1

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- Updated index of the most important electrical equipment, machines, installations and associated terms of the applicable VDE regulations
- Guideline about the groups 0 to 8 of the VDE body of regulations
- In consideration of the VDE guidelines and VDE Publication series “Standards Comprehensible”

Target Audience: Electricians, Electrical engineers and other persons involved in electrotechnology
Fields of Expertise: Electrical engineering and standardization

Dipl.-Ing. (FH) Michael Kreienberg (VDE) is responsible for the VDE Publication Series “Standards Comprehensible” in the editing of the VDE VERLAG and also represents the topics of general electrotechnology and electric power technology.

Using the index, electrical equipment, machines and systems can be quickly and easily assigned to the corresponding VDE regulations. Anyone interested will receive a clear insight into the extensive body of standards with this well-known standard work.

2018. 522 Pages
€ 26.00

ISBN 978-3-8007-4500-5
Already published

Recommendations on the subject

€ 29.00
ISBN 978-3-8007-4319-3

€ 32.00
ISBN 978-3-8007-4101-4

€ 36.00
ISBN 978-3-8007-3939-4
Recommendations on the subject

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Explanations to DIN VDE 0105-100:2015-10

- Explanation of the standard DIN VDE 0105-100:2015-10 “Operation of Electrical Installations”
- New: Text of the Standard now at the beginning of each section
- New: Requirements for DC / DC systems
- With various practical examples

Target Audience: Electrical Engineers, Electrical engineering master technicians, Electricians
Fields of Expertise: Electrical engineering and standardization

The explanations of this work have been written by the members of the committee responsible for drafting the standard K 224 of the DKE “Operation of Electrical Installations”.

Well understandable and clear is the DIN VDE 0105-100:2015-10 explained. The standard specifies what operators of electrical installations need to do in order to maintain electrical facilities and operating resources in safe condition and perform all operational activities riskless. With various examples from practice!

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Operator’s Responsibility and Safety in existing systems with 25 Court Judgments among other things to Building Law, Workplace Regulations, Operational Safety Ordinance, etc.

- Practical answers to the question of Inventory Protection or obligation to retrofitting?
- With 25 court judgments from case law
- In consideration of the workplace regulations, operational safety ordinance and DIN Standards

Target Audience
- Plant managers, managing directors, lawyers, experts, safety engineers, safety coordinators, technical manager and responsible electricians

Fields of Expertise
- Construction management, building practice, standardization

Prof. Dr. Thomas Wilrich is a specialist lawyer for administrative law and acting in the areas of labor law/occupational safety/industrial safety as well as product safety and product liability law/technology law.

This guide provides practical answers to the question of “grandfathering or retrofitting” and contains 33 court judgements from the case law practice. The author shows the reader the pitfalls, but also solutions. Although the work was written by a lawyer, it is addressed to the practitioner, especially planners and plant operators.

2018. 252 Pages
€ 32.00

ISBN 978-3-8007-4531-9
Already published

Recommended on the subject

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  ISBN 978-3-8007-4322-3

- € 32.00
  ISBN 978-3-8007-4162-5

- € 29.00
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Schmolke, Herbert
VDE Publication Series – Volume 45

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- Examples, figures and tables clearly explain the important requirements

**Target Audience**
Apprentices, installers and planners of electrical systems, engineers, masters, and technicians

**Fields of Expertise**
Electrical installation, electrical planning and standardization

Dipl.-Ing. Herbert Schmolke worked for 20 years as an electrical engineer at the VdS Schadenverhütung GmbH (testing and certification institution for fire protection and security) for the recognition and technical support of electrical engineering and thermography experts.

All relevant guidelines, standards and regulations on the topic of “Electrical installation in residential buildings” are explained in this book. It is not about a mere commentary, but rather about providing all of the necessary information quickly and clearly arranged. The well-known standard work has been completely revised and takes into account the changes of underlying standards, in particular the series DIN VDE 0100, VDE 0855 and DIN 18012, DIN 18014, DIN 18015-1 to -5. Concrete cases from the practice with the appropriate solutions are described in a clearly understandable way.

9th new reworked Edition, 2018
684 Pages
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ISBN 978-3-8007-4641-5
Already published
Hofheinz, Wolfgang  
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- Description of protection technology with insulation monitoring  
- Display of application areas in industry, on ships, in electric vehicles, rail vehicles and in mining  
- Description of the measuring methods of insulation monitoring devices and the DIN-VDE standards  

Target Audience: Operators, installers, planners and project engineers  
Fields of Expertise: Electrical installation, electrical planning and standardization

Dipl.-Ing. Wolfgang Hofheinz was until his retirement Managing Director of Bender in Grünberg/Hessen. He was in numerous national and international standards committees active.

Due to increasing use of ungrounded IT power systems the right choice of suitable monitoring devices is of great importance. The combination of the ungrounded IT power supply system with insulation monitoring enables a special protection technology. The advantages of this technology are the increased operation reliability, fire and accident safety. The book describes this system and its applications in the industry, on ships, in electric and rail vehicles and in mining. The practical reference book for all planners and Designers of electrical systems!

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Recommendations on the subject

**Rosa, Andreas**

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**Erection and Operation of Power Generating Sets in Accordance with DIN VDE 0100-551, DIN VDE 0100-560, DIN VDE 0100-710, DIN 6280, etc.**

- Practical planning assistance, taking into account the different standards, laws and regulations
- Answers to questions about the dimensioning of performance, control and energy distribution as well as compliance of protective measures or selectivity
- In consideration of legal building regulations and fire protection requirements
- Display of the use of power generating sets as a safety power source with practical examples and measurements

**Target Audience**

Operators, planners, engineers and electrical engineering master technicians and electricians

**Fields of Expertise**

Electrical engineering and standardization

Dipl.-Ing. (FH) Andreas Rosa is legally recognized as a responsible expert for the testing of safety installations and equipment. He works as a freelance expert with a focus on safety power supply systems. The variety of different standards, laws and regulations of standby electric supply generating sets are presented clearly in this book. The work provides answers to questions about the dimensioning of performance, control and energy distribution and compliance with the protective measures or selectivity. It also considered other issues, such as legal building regulations in the design of the area of installation and fire protection requirements. And finally, the use of power generating sets as a safety power source shown with practical examples and measurements.

3rd revised and extended Edition, 2018

234 Pages

€ 32.00

ISBN 978-3-8007-4547-0

Already published
Recommendations on the subject

Hofheinz, Wolfgang
VDE Publication Series – Volume 171

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- Accentuation of standards in software development
- With a view to future requirements

Target Audience: Development managers, programmers, quality managers, software developers
Fields of Expertise: Medical technology, standardization

Dr. Thorsten Prinz is Research Associate at the DGBMT German Society for Biomedical Engineering in the VDE.

The digitization of the health care system is progressing at all levels and it appears clearly in medical software. All participants at the manufacture of medical devices and in vitro diagnostics (IVD) are facing the challenge to develop high quality products in line with market requirements. This new textbook describes the relevant standards in the field of medical technology with their essential contents as well as all aspects of medical software-development. Practical application tips complete that successful work. Suitable for professionals and for beginners!

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Recommendations on the subject

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€ 27.00
ISBN 978-3-8007-3588-4

€ 19.50
ISBN 978-3-8007-2781-0
Rudnik, Siegfried  
VDE Publication Series – Volume 26  

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- Practical interpretation aids to DIN EN 60204-1 (VDE 0113-1)  
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- Development of the protection goals by means of risk assessment and the background information applicable to the individual case  
- With cross references to the other regulations (DIN, VDE, DGUV, EN, IEC and ISO)  

**Target Audience**  
Equipment manufacturers, planners, standard writers, project engineers, service personnel, safety specialists and electrical engineering master technicians  

**Fields of Expertise**  
Drive technology, electrical engineering, mechanical engineering and standardization  

Dipl.-Ing. Siegfried Rudnik has many years of practical experience in standardization and was active as a recognized expert in numerous national and international standards committees. Siegfried Rudnik is the author of numerous textbooks.  

The book contains practical interpretation aids to the DIN EN standard 60204-1 (VDE 0113-1). It shows how the standard is involved in the concept for machine safety and the corresponding European standards. The well-understandable explanations, comments and examples make it possible to work out the essential protection goals. A useful reference book for planners, manufacturers and suppliers of machines and machinery!  

7th reworked and extended Edition, 2018  
544 Pages  
€ 36.00  
Already published  

**Recommendations on the subject**  

- € 29.00  
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- € 26.00  
  ISBN 978-3-8007-4257-8  

- € 36.00  
  ISBN 978-3-8007-4180-9
Schneider, André

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- User-friendly guide for practice oriented certification
- Presentation of the certification process sequence
- Description of complex relationships and compatibility with other test and quality marks
- CD-ROM with checklists, editable forms and certification information

**Target Audience**  Development engineers, manufacturers, distributors and importers

**Fields of Expertise**  Automation technology, standardization

André Schneider has worked extensively for a long time on the process of CE-Marking and has developed a study on the certification of products under the CE-Marking.

The sequence of the certification process in the context of the CE-Marking of products for the European market is presented. Up-to-date and user-friendly, this guide supports the practice-oriented implementation of the certification. Also helpful is the comprehensive glossary, which explains concepts and terms concisely and clearly. In addition to a wealth of information on the certification process, the accompanying CD-ROM contains useful checklists and editable forms for risk assessment and declaration of conformity or incorporation.

5th new reworked Edition, 2018
XVI, 188 Pages. With CD-ROM
€ 36.00
ISBN 978-3-8007-4473-2
Already published

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**Recommendations on the subject**

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- **€ 36.00**
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- **€ 32.00**
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**Meuth, Hermann**

**Digital Technology**

**A Clear and Modern Introduction**

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- Exercises with solutions
- Subliminal, however a consistent provision of all mathematical prerequisites

**Target Audience**  Students

**Fields of Expertise**  Electrical engineering and information technology

**Prof. Hermann Meuth**, Ph. D. (University of Washington) was a professor at the Department of EIT of Darmstadt University from 1994 to 2013, where he still holds regular teaching assignments today. Previously, he held R & D functions at Forschungszentrum Jülich, Lawrence Berkeley National Laboratory, University of California at Berkeley, and the University of Washington, Seattle. He has been developing didactic training and e-learning materials for years.

The work impresses with a clear didactic concept by means of a uniform systematic and consistent color coding of all chapters. The overall presentation is based consistently on each other and is divided into three different levels of difficulty. Numerous exercises with solutions as well as the graphical and tabular material concentration are an essential support to the success of self-study.

2017, 253 Pages
€ 28.00
ISBN 978-3-8007-3637-9

Already published
€ 49.90
ISBN 978-3-8007-4205-9

€ 29.95
ISBN 978-3-8007-3257-9

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ISBN 978-3-8007-3483-2
Maier, Helmut

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- From signals, conversions and number systems over cryptography and data security up to bus systems and interfaces
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- Including an introduction to microprocessor technology and automation theory

**Target Audience**
Lecturers and students

**Fields of Expertise**
Electrical engineering and information technology

Professor Helmut Maier has profound skills of knowledge transfer because of his long teaching activity at the University of Augsburg in the field of electrical engineering to digital technology, microcomputer / -controller technology, control technology, automation, robotics, etc. He was also a frequent guest lecturer in the field of Industrial Automation at the Asian Institute of Technology (AIT) in Thailand.

The textbook deals with a core topic in the study of electrical engineering and information technology – digital technology. Signals, conversions and number systems, cryptography and data security bus systems and interfaces, as well as the basics of digital technology are clearly described. The book contains simulation of digital circuits and description with VHDL.

2018. 461 Pages
€ 34.00

ISBN 978-3-8007-4536-4

Already published

9 783800 745364

**Recommendations on the subject**

- **€ 34.50**
  ISBN 978-3-8007-2982-1

- **€ 32.80**
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- **€ 109.00**
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Mathematics of Digital Media
Precise – Comprehensible – Obvious

- Mathematics clear explained using the example of everyday applications of telecommunications technology and information theory: From the navigation system via the mobile phone to the Internet
- Clear structure, numerous illustrations and detailed calculations
- With short biographies and historical forays

Target Audience
High school graduates, mathematics teachers, those interested in mathematics and those interested in technology

Fields of Expertise
Information technology, communication technology and mathematics

Prof. Dr.-Ing. Martin Bossert studied electrical engineering at the Technical University Karlsruhe and the University of Arizona / USA and received his doctorate on a topic of channel coding at the TH Darmstadt. Since 1993 he is a professor at the University of Ulm and director of the Institute for Telecommunications and Applied Information Theory (TAIT). Prof. Bossert is active in numerous national and international committees.

Sebastian Bossert is as the son, the junior in the writing team. He studied mathematics specializing in stochastic at the Albert-Ludwigs-Universität Freiburg.

Much of what we use every day involves mathematics, which some people are afraid of. This should not be so, because there are many practical concepts that significant simplify and support the learning of mathematics. The educational book conveys technical and mathematical interests by means of everyday applications and practical examples in the field telecommunications technology and information theory, how exciting and useful mathematics can be.

2nd revised Edition, 2017
271 Pages
€ 29.00
ISBN 978-3-8007-4456-5
Already published
Siegmund, Gerd

SDN – Software-Defined Networking
New Requirements and Network Architectures for High-Performance Networks

- The first overview of the function of SDN (Software-Defined Networking) and technical relationships
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- SDN is in the WAN area the basis for the Internet, the classic fixed network and all mobile networks
- In private networks, the basis for high-performance, cross-site networking, as well as for optimized network architecture in the company
- Display of the basics, functions and functional sequences
- With examples of virtualization, cloud applications, data center networks, IaaS and SaaS

Target Audience: Operators of communication facilities, manufacturer of communication equipment, engineers, network administrators and students

Fields of Expertise: Data technology, information technology, communication technology, communications engineering and networking

Prof. Dr.-Ing. Gerd Siegmund is a professor at the Technical University of Nuremberg, Georg-Simon-Ohm and the private university AKAD as well as director of the Steinbeis Transfer Center “Technik der Netze” in Stuttgart.

In addition to the requirements and new architectures of modern IP-networks are in this new release the basics and functions of the SDN-based networks (Software-defined Networking) shown. The basics of IP traffic theory and the traffic characteristics of various communications as well as traffic engineering are also covered. Numerous examples of virtualization and cloud applications, networks in the data centers, IaaS and SaaS illustrate the interesting topic. A separate chapter is dedicated to the TeraStream network, a potential future IP transport platform of Telekom. This new textbook gives a compact overview of the functions of the SDN and makes the technical connections comprehensible.

2018. 472 Pages
€ 49.00

ISBN 978-3-8007-4511-1
Already published

9783800745111

Recommendations on the subject:

- € 64.90 (Volume 1)
  ISBN 978-3-8007-3594-5

- € 64.90 (Volume 2)
  ISBN 978-3-8007-3474-0

- € 108.00 (Set)
  ISBN 978-3-8007-3595-2
Hofer, Johannes

**SCL and OOP with the TIA Portal**

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- **New:** Content updated to version 14 of the TIA portal from Siemens
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**Target Audience**  Programmer

**Fields of Expertise**  Automation engineering

Johannes Hofer has been active in automation for many years. He has extensive experience as a commissioning and project engineer and has numerous seminars and training on C++ and SCL directed. After several years as an engineer in Germany as well as in other European countries, he is now a system engineer at a Spanish company.

The Siemens TIA Portal is an engineering framework with which all planning and production processes for task-oriented applications that can be designed from a single screen. The object-oriented approach has won a great influence at programmers for the new controller families S7-1500 / 1200!

This book shows how among the paradigms of the OOP function modules can be implemented. You learn how you can with the TIA portal realize in SCL the object-oriented programming in interaction with UML. Many practical examples, tests and explanations complete the successful work.

3rd reworked and extended Edition, 2018
391 Pages. With DVD
€ 49.00

ISBN 978-3-8007-4432-9
Already published

**Recommendations on the subject**

- **€ 82.00**  
  ISBN 978-3-8007-4330-8

- **€ 29.80**  
  ISBN 978-3-8007-4379-7

- **€ 59.00**  
  ISBN 978-3-8007-4336-0
Kanngießer, Ulrich

**Programming with Structured Text**

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- Decision-making aid for a better solution of control tasks

**Target Audience**  Apprentice and IL-Programmers  
**Fields of Expertise**  Automation engineering

Ulrich Kanngießer works as a freelance specialist author and seminar provider. He has been involved with the world of automation for more than 30 years. He has published numerous specialist articles on the topic and organized workshops with different control systems from different manufacturers.

The textbook is a practical aid for getting started with the programming language “Structured Text” (ST / SCL). It offers trainees and students support who apply the automation technology or have to come back to modern control technology when planning their tasks. Even programmers who previously used the IL (instruction list) find with this successful work an entry or change in the modern form of programming.

2nd revised and extended Edition, 2018  
XXXIV, 418 Pages. With CD-ROM  
€ 38.00  
ISBN 978-3-8007-4409-1  
*Already published*

**Recommendations on the subject**

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  € 29.80  
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- **Regelungstechnik**  
  € 49.90  
  ISBN 978-3-8007-4201-1

- **Crashkurs Regelungstechnik**  
  € 42.00  
  ISBN 978-3-8007-3642-3
**Recommendations on the subject**

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- *Elektromaschinen* - *Electrical Machines*
  - € 49.00

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  - € 28.00
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Cichowski, Rolf Rüdiger (ed.)
Plant Engineering for Electrical Distribution Networks

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- With pictures and practical tips
- Keywords on classical utilities (such as power cable systems, overhead lines, transformers, net-protection or net-stations), procedures and functions as well as new technologies, such as the connection of EEG plants

**Target Audience**  
Users, operators, engineers, students and technicians

**Fields of Expertise**  
Electrical distribution networks, electrical engineering and energy supply

Dipl.-Ing. Dipl.-Wirtsch.-Ing. Rolf Rüdiger Cichowski, MBA (born 1945) works as a freelance author. He has 40 years in his professional career worked in various sectors of the electrical and energy industry for various network operators and service companies, including about 20 years as managing director.

The encyclopedia of systems engineering offers all readers dealing with the technology of distribution networks quick help in the development of individual thematic question. Alphabetic sorting provides quick access. Additional references to further literature and the relevant DIN VDE standards make this lexicon to a useful and practical guide.

2nd Edition, 2017. 404 Pages
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**Recommendations on the subject**

- € 36.30  
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- € 37.40  
  ISBN 978-3-8007-3566-2

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Cichowski, Rolf Rüdiger (ed.)
Schossig, Walter/Schossig, Thomas

Plant Engineering for Electrical Distribution Networks

**Power-System Protection**

- Commented on by practitioners for the practice!
- For network protection technicians and operators of electrical distribution networks
- Description of the function, the line, transformer and plant protection devices, selective earth fault detection and voltage and detuning rate control
- With notes for their selection, commissioning and operational management
- In consideration of the latest technical developments and trends

**Target Audience**
Operators and power-system protection engineers

**Fields of Expertise**
Electrical engineering, electrical distribution networks and network protection technology

The power-system protection engineers and operators of electrical power distribution networks will find practical advice in this volume. In addition to the description of the function, the line, transformer and system protection devices, the selective earth fault detection, the voltage and the detuning rate control notes for the selection, commissioning and operational management are given.

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- Presentation of a new assessment procedure for the energetic assessment of heat pump and micro CHP systems
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Target Audience
Plant engineers, planning engineers, students and main power supply operators

Fields of Expertise
Electrical engineering, Micro CHP Technology and Mini CHP Technology

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- Documentation of all experiences with the operating of the system
- Including cost-effectiveness analysis and documentation of the survey of field test participants

Target Audience
Plant engineers, planning engineers, students and grid operators

Fields of Expertise
Electrical engineering, micro CHP-technology and mini CHP-technology

2018. IX, 283 Pages
€ 72.00

ISBN 978-3-8007-4630-9
Already published
Li, Hua

Research Report

**Hybrid Methods for the Efficient Calculation of the Inductances and the Capacities of Measuring Coils**

- Presentation for the efficient and accurate numerical calculation of the inductances and the capacities of arbitrarily shaped measuring coils
- Comparison of analytical and numerical methods and their applicability

**Target Audience**  Engineers and students

**Fields of Expertise**  Sensor technology and simulation technology

Hua Li graduated from Beijing University of Technology (BJUT) in July 2006 with a bachelor’s degree in Electrical Engineering and Automation Technology. In September 2006 he came to Germany and completed his master studies in the field of electrical engineering at the University of Siegen, which he successfully completed in 2010. From September 2010 until the end of August 2016, he completed his doctorate at the Institute of Theory of Electrical Engineering at the University of Stuttgart. Since November 2016 he works as a hardware developer at Voith Digital Solutions GmbH.

The present work deals with the efficient and exact numerical calculation of the inductances and the capacities of arbitrarily shaped measuring coils.

2018. XXIII, 113 Pages

€ 70.00
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Already published

Recommendations on the subject

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  ISBN 978-3-8007-4403-9

- **€ 25.00**  
  ISBN 978-3-8007-4203-5

- **€ 45.00**  
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Horstmann, Theo/Döring, Peter (eds.)

History of Electrical Engineering – Volume 27

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Contributions to the History of the Electric Automobile

- Comprehensive presentation of the history of electric mobility
- Overview of the development of traction batteries
- In consideration of technological, economic and political factors
- Electric mobility in National Socialist Germany between political exploitation and economic interests

Target Audience: Archivists, librarians, engineers, interested parties, journalists, editors and technical historians

Fields of Expertise: Propulsion technology, automotive engineering, electrochemistry, electrical engineering and history of technology

2018. Approx. 188 Pages
approx. € 34.00

ISBN 978-3-8007-4430-5
To be published in September 2018

Foundation Werner-von-Siemens-Ring (ed.)

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Excellent Research Contributions 2017

- From the Werner-von-Siemens-Ring Foundation in 2017, outstanding research contributions by young scientists
- Current research stands in various technical disciplines

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Fields of Expertise: Natural sciences and history of technology

2017. 96 Pages
€ 42.00

ISBN 978-3-8007-4507-4
Already published
Micksch, Konrad

**The Construction Manager for Electrical Engineering**

- Target-oriented and practice-oriented combination of knowledge for the fulfillment of the versatile tasks of a construction manager for electrical engineering
- Including checklists and tables for quick support in all stages of construction
- With proven sample letters, checklists and printed forms in digital form

**Target Audience**  Electrician, electrical designer, lighting designer and masters

**Fields of Expertise**  Construction management, electrical installation and electrical design

Dipl.-Ing. Konrad Micksch is a textbook author for construction and energy. He was the owner of the engineering company “bebecon” in Berlin and worked many years as project coordinator and project manager in the construction of power plant and transformer stations, in railway and bridge construction in Germany and foreign countries.

If an electrician takes on the responsibility of a construction manager for electrical engineering on a building site, he will be required not only to practice craftsmanship, but also a whole range of other skills and qualities. This book brings together accurately and practically all the knowledge that the reader needs to fulfill these tasks. Especially in heavily loaded phases of the preparation and execution of construction projects, this new edition provides clear checklists and tables, a fast and practical support that helps the construction manager to do more than fulfill his role. With proven sample letters, checklists and printed forms in digital form!

2018
268 Pages. With CD-ROM
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Already published

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**Recommendations on the subject**

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![Prüfungsfragen mit Antworten](image2)
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![Leitfaden der Installationstechnik](image3)
€ 33.00
ISBN 978-3-8007-3514-3
Slabke, Uwe

LED Lighting Technology
Basic Knowledge for Planning, Selection and Installation

- The manual for planning, selection and installation of LED lights
- With planning examples from the authors of many years of professional experience
- With useful instructions for installation and installation technology
- Practical assistance in the case of a time-consuming error analysis
- Information to the retrofitting with smart lighting and conversion kits
- With content on human centric lighting, CLO and smart lighting
- Including guide to the selection and quality of current LED systems

Target Audience: Electricians, electrical planners, lighting planners, students and sales staff
Fields of Expertise: Lighting technology, electrical installation, electrical planning

Dr.-Ing. Uwe Slabke has been director of the LED Institute in Bensheim since 2011. After studying electrical engineering and subsequently Doctorate in the field of lighting technology, he worked as a technical director and development manager in renowned industrial companies in the lighting industry. As part of his current activity, he deals among other things with the evaluation and testing of LED lighting systems and works as an expert in the LED field.

The LED light has become the industry standard of the lighting industry. This book presents the basics of the use of LED lights incl. Retrofit lamps for the practitioner. It clearly illustrates the function and the operating behavior of LED lamps and LED lights in the electrical installation. The author specifically describes the planning, selection and installation of the LED. He shows the limits of technology and provides assistance in the case of a time-consuming error analysis. Topics like HCL, CLO and smart lighting are also part of the work. The conclusion is a guide to selection and current quality of LED systems available on the market.

2018. 256 Pages
€ 36.00
ISBN 978-3-8007-4451-0
To be published in September 2018

Recommendations on the subject
Klinger, Jürgen

Charging Infrastructure for Electro Mobility in the Private and Semi-Public Area
Planning · Construction · Maintenance

► Assistance for consultation, selection of the right charging point or charging station and installation of the components
► Description of required safety devices when installing charging points
► With tips for maintenance of infrastructure and integration into renewable energies
► For those who install charging stations or set up charging points

Target Audience Electricians and electrical planners
Fields of Expertise Electrical installation, electro mobility and electrical planning

Jürgen Klinger has a master in electrical engineering and is responsible for planning and training at an electrical wholesaler. Previously he worked as a specialist teacher in the field of master craftsmen training and was active as a training engineer electric in a big size company.

The topic of electro mobility including the necessary infrastructure to load the vehicles is characterized through a high variety. This new book gives the expert assistance for the consultation, the selection of the right charging point or rather the charging station and the installation of these components. The Author answers questions about required safety features when installing the charging points. He specifies the charging times and indicates the specifics of available vehicles. Also he gives hints to maintenance of the infrastructure and deals with the integration into the renewable energies. Skilled craftsmen and operators find here all necessary information for the optimal proceeding.

2018. 149 Pages
€ 34.00
ISBN 978-3-8007-4417-6
Already published

Recommendations on the subject
Recommendations on the subject

- The guideline for information-technology wiring for buildings and for generic cabling systems
- Treatment of the topics earthing and shielding as well as installation quality
- Showing trends 25/40 Gbit- and Single-pair-Ethernet and Power over Ethernet (PoE) / Power over Data Lines (PoDL)
- With tips for proper reading and optimal use of standards

**Target Audience**    Users, craftsmen, engineers and students

**Fields of Expertise**    Wiring for buildings, information technology and communication technology

Yvan Engels, Konstantin Hüdepohl, Prof. Albrecht Oehler, Rainer Schmidt and Dirk Wilhelm are a project group from the GUK 715.3 for the preparation of the wiring standards and they are designated experts in the field of research, teaching, standardization, planning, and assessment of structured wiring and related topics.

The practical guide to information-technology wiring for buildings and generic cabling systems covers the topics of earthing, shielding and installation quality. Furthermore, the trends 25/40-Gbit and single-pair Ethernet as well as Power over Ethernet (PoE) / Power over Data Lines (PoDL) are presented. Numerous tips help with the optimal application of standards.

2019. Approx. 250 Pages
approx. € 36.00
ISBN 978-3-8007-4517-3
*To be published in November 2018*
Matheis, Wolfgang

**Electrical Installations in Buildings of a Special Type and Use**

*A Guideline for the Safety Power Supply*

- The guideline for the electrical installation of safety installations in buildings
- Systematic solutions for tasks and problems for the professional electrical installation in the room for the security system
- In consideration of the requirements of fire protection
- Best suitable for conceptual and systematic planning in compliance with current regulations and standards

**Target Audience**
Architects, apprentices, electrical installers, electrical engineers, planners and electrical engineering master technicians

**Fields of Expertise**
Electrical installation, electrical planning and safety technology

Dipl.-Ing. (FH) Wolfgang Matheis leads an engineering office for electro-technical building equipment and has 30 years of professional experience in the design of electrical systems in public and private buildings.

The book provides a systematic solution to the tasks and problems of electrical installation for safety installations in buildings using current regulations and standards. This guide deals with the professional applied electrical installation in the room for the security system in the building, taking into account the requirements of fire protection. Numerous solutions to frequently occurring problems make the daily work easier.

2019. Approx. 150 Pages

approx. € 24.80

ISBN 978-3-8007-4649-1

To be published in December 2018

**Recommendations on the subject**

- € 39.00
  ISBN 978-3-8007-4254-7

- € 32.00
  ISBN 978-3-8007-4131-1

- € 26.00
  ISBN 978-3-8007-3541-9
Seifert, Hans-Jürgen

**Efficient Operation of Heat Pumps**

Avoid Planning Errors – Analyze Problems – Optimize Work Statistics

- The most important principles for error-free planning and installation as well as trouble-free operation of heat pumps are succinctly presented
- From the choice of the right hydraulics over typical weaknesses in planning and execution to the problem treatment of existing plants
- With checklists for targeted-oriented investigation and optimization of existing plants

**Target Audience**  Plant operators, specialist planners, manufacturers, installers and service technicians

**Fields of Expertise**  Energy Systems Engineering

Dipl.-Ing. (FH) Hans-Jürgen Seifert is owner of an engineering company for heat pump systems and rational energy application. As a private and court expert he provide expertise on heat pump heating systems.

The author – himself a heat pump expert with years of professional experience – shows with this book, how to avoid mistakes in the planning and installation of heat pumps and recognize untapped potential. Whether choosing the right hydraulics, typical weaknesses in design and execution, expert programming of heat pump controllers or troubleshooting existing plants – it sums up the most important principles for error-free planning and installation as well as the trouble-free operation of heat pumps. In addition, a series of checklists provides the expert with a good tool for systematically examining and optimizing existing systems for an efficient way of working.

2018. Approx. 220 Pages

**approx. € 38.00**

ISBN 978-3-8007-4144-5

*To be published in October 2018*
Schwarzburger, Heiko

Energy in the Residential Building

Electricity · Heat · E-mobility

- Holistic view of the residential building and its energy supply
- New: possibilities of energy storage and self-consumption by means of storage batteries
- Examination of all energetic processes in the residential buildings on their necessity, potentials and saving possibilities
- Analysis of building and environment and their use for a largely self-sufficient energy supply
- Objective: Realization of a sustainable, efficient and cost-saving supply of electricity and heat in the new building and in the existing building

Target Audience  Architects, builders, civil engineers, building energy consultants, approval authorities and installers
Fields of Expertise  Civil engineering, technical building equipment

Dipl.-Ing. Heiko Schwarzburger, M. A. is an engineer for mechanical engineering and publicist. For 20 years, he has been writing about energy and technology as an editor and publisher. He has been editor-in-chief and head of various journals in the energy industry since 2006.

This book provides the reader with holistic view to the residential buildings and its supply of electricity, heat and water. All of the processes that play a role in the residential buildings are examined in their entirety for their potential and savings potential.

The focus is on the reduction of energy consumption and costs, the generation of energy and provision of energy from renewable sources and energy storage consideration in new construction and modernization. In addition, the supply of water is treated, as far as it touches energetic issues. The author refers to standards and regulations and gives practical advice for planning and installation, supplemented by plenty of visual material.

2nd revised and extended Edition, 2017
199 Pages
€ 39.00

ISBN 978-3-8007-4325-4
Already published

Recommendations on the subject

- € 36.00
  ISBN 978-3-8007-3932-5

- € 58.00
  ISBN 978-3-8007-3494-8

- € 49.00
  ISBN 978-3-8007-4144-1
Stammkötter, Andreas

The Construction Manager School

Legal basics with sample letters

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- Selection of editable sample letters on CD-ROM
- Practice-related mediation of the legal basis through numerous examples and sample letters
- Including documentation of the regulations of the VOB and the contract law of the Civil Code
- Also ideally suited as an entry into the construction law for lawyers

Target Audience: Architects, builders, civil engineers, masters of the construction industry and lawyers

Fields of Expertise: Construction and building law

Dr. Andreas Stammkötter (specialized lawyer for construction and architectural law) has been active as a lawyer predominantly in the area of the building, architect and public procurement right since 1993. He is the author of numerous building law publications and worked for many years as a lecturer at the technical school of civil engineering in Leipzig.

This work provides a practical and comprehensible understanding of the legal expertise required at the construction site. It is aimed primarily at the practitioner, from a one-man company up to a stock corporation. Andreas Stammkötter passes on his experience and his extensive knowledge as a lecturer in many construction site trainings. The advantage: the legal basics are complemented by numerous editable sample letters. How to do everything right on the construction site!

6th revised and extended Edition, 2018
240 Pages. With CD-ROM
€ 34.00

ISBN 978-3-8007-4468-8
Already published

Recommendations on the subject

- € 39.00
  ISBN 978-3-8007-4270-7

- € 29.00
  ISBN 978-3-8007-4352-0

- € 68.00
  ISBN 978-3-8007-3232-6
Söllner, Bernd

The On-Site Energy Consulting
Step-by-Step to the Expert’s Report

- Energy consultations are mandatory for almost all energy-efficient building renovations with KfW funding!
- Praxis book to the implementation of the requirements of the current BAFA-Guideline for on-site energy consultations
- New: With explanations on the handling of the “Individual Rehabilitation Roadmap” of the BMWi
- Step-by-step guide – from the preparation up to the billing
- Including a complete example of an expert’s report for a single-family house

Target Audience: Architects, consultants, energy consultants, property managers, planners and homebuilder

Fields of Expertise: Energy-efficient construction

Dipl.-Ing. (FH) Bernd Söllner has been the owner of an engineering company for energy and supply technology for more than 25 years. The company has in addition to planning for new construction and renovation also the focuses on energy consulting for all types of buildings. He was a lecturer at Esslingen University for more than 15 years. Since 1997, he has been working as an energy consultant trainer at the Esslingen Technical Academy.

If an energetic renovation of a building is on, then is the participation of an energy consultant always beneficial. The minimum requirements for on-site energy consulting are laid down in a guideline issued by the Federal Office of Economics and Export Control (BAFA). How this on-site energy consultation in practice can look exactly is described in the book compact and clear. A complete appraisal of a detached house completes the content.

4th revised and extended Edition, 2018
approx. 112 Pages
approx. € 26.00

To be published in December 2018

Recommendations on the subject:

€ 24.80 ISBN 978-3-8007-3609-6
€ 34.00 ISBN 978-3-8007-4057-4
€ 38.00 ISBN 978-3-8007-3977-6
Hörner, Berndt/Casties, Manfred (eds.)

**Handbook of Air Conditioning Technology**

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- Since more than 40 years on the market

**Target Audience**
- Plant engineers, plant operators, engineers, planners and students

**Fields of Expertise**
- Building technology, air conditioning technology, technical building equipment, supply engineering

The circle of authors consists, in addition to industry experts, mainly of university teachers who are researching and teaching in the field of building and energy technology.

**Ed. Prof. em. Dr.-Ing. Berndt Hörner** taught air-conditioning technology and headed the laboratory for air-conditioning technology for many years.

**Ed. Prof. Dr.-Ing. Manfred Casties** teaches building technology, building automation, fire protection and lighting technology.

With the new edition of the extensive second volume, the “Handbook of Air Conditioning Technology” completes to a comprehensive compendium that conveyed theory and practice of air conditioning technology currently and competently.

Volume 2 deals extensively with the planning, design and operation of ventilation and air conditioning systems. This work provides the necessary background knowledge to successfully master non-standard tasks.

7th revised and extended Edition, 2018

XX, 760 Pages

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ISBN 978-3-8007-4215-8

Already published

**Recommendations on the subject**

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- € 42.00
  - ISBN 978-3-8007-3349-1

- € 176.00
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Recommendations on the subject

Automatic Control Technology in Building and Supply Engineering

- Textbook on the basics of regulation and control technology and its application in all areas of the supply technology
- Issued by well-known professors at German universities
- Explanation of the contexts for the design, commissioning and operation of supply systems
- Focus: Minimizing energy consumption while increasing comfort and the best possible operation
- With numerous practical examples

Target Audience: Engineers, planners and students
Fields of Expertise: Air conditioning technology, ventilation technology, technical building equipment and supply engineering

Well-known professors at German universities belong to the Working Group of the professors for building automation and energy systems.

This textbook provides the basics of regulation control technology comprehensible and gives the practical applications a detailed space. It provides in-depth knowledge and explains plant system and control engineering relationships, which are essential for the design, commissioning and operation of utility-technical facilities. The goal is to optimally coordinate energy saving and comfort requirements in order to achieve the best possible operation with the least possible effort of energy consumption.

8th revised Edition, 2017
XIV, 493 Pages
€ 69.00
ISBN 978-3-8007-4279-0
Already published

Recommendations on the subject

- € 39.00
  ISBN 978-3-8007-3665-2
- € 48.00
  ISBN 978-3-8007-3215-9
- € 34.00
  ISBN 978-3-8007-3947-9
Project Planning of Clean Room and Cleanness Engineering

Guide to the Elimination of Impurities in Production and Health Care

- Application and cost-specific solutions for clean room projects
- Detailed description of all phases of clean room projects
- Including the presentation of safety and sustainability aspects

Target Audience: Engineers, planners and students in the area of air conditioning, process and chemical engineering, medical and pharmaceutical industry

Fields of Expertise: Air conditioning technology, ventilation technology

Dr. Horst Weißsieker is a certified public expert for clean room technology. Previously he worked in leadership positions in the clean room area.

From the planning, construction and commissioning to the operation of clean room systems, this book offers cost-specific solutions for clean room projects. A particular focus is on the requirements of clean room technology for quality and risk management as well as the safety and sustainability of clean rooms.

2nd revised and extended Edition, 2019
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approx. € 49.00

ISBN 978-3-8007-4292-9
To be published in November 2018

Recommendations on the subject

€ 29.90
ISBN 978-3-8007-3523-5
Sinder, Christoph/Gringel, Meinolf/Hardt, Hartmut/Langerbein, Hermann

**Risks of Legionella Bacteria in Evaporative Cooling Plants and Cooling Towers**

**Causes and Avoidance**

- Presentation of the hygienic risks, causes and technical background of legionella bacteria in evaporative cooling plants and cooling towers
- Explanation of measures for the economic reduction of the risk of legionella bacteria in re-cooling plants
- Interpretation aid for the application of the relevant technical regulations
- In particular the 42nd Federal Emission Control Ordinance and the VDI 2047

**Target Audience**  Operators, installers, manufacturers, maintenance staff, laboratory service providers, regulatory authorities, planners and water treatment companies

**Fields of Expertise**  Air conditioning technology and ventilation technology

Dr. Christoph Sinder is head of the business unit Plant & Production Security at DMT GmbH & Co. KG, a company of TÜV Nord Group. Dr.-Ing. Meinolf Gringel is head of the testing laboratory for refrigeration, air-conditioning and heating technology. He is also an expert and consultant engineer for refrigeration, air-conditioning and energy technology at DMT GmbH in Essen. Hartmut Hardt is an independent lawyer active in the field of law around the topic of technical security. Dipl.Ing. Hermann Langerbein is an expert with a focus on technical water, cooling and boiler water at DMT GmbH & Co. KG.

The hygienic risks associated with evaporative cooling systems and cooling towers, their causes and the hygienic and technical background necessary to understand the problem are described in an understandable way. The requirements stemming from the legal and technical regulations are presented and commented on in summary.

2018. Approx. 230 Pages
approx. € 39.00

ISBN 978-3-8007-4554-8
To be published in December 2018
Air Conditioning and Ventilation Engineering

Ebinger, Ingwer/Morgenstern, Jens

Air Conditioning for Rail Vehicles
Basics, Concepts, Perspectives

- First special and comprehensive work for refrigeration and air conditioning in rail vehicles
- On the current state-of-art representation of the methods for designing air conditioning systems for rail vehicles
- Including norms and rules
- Explanation of load and performance calculations as well as methods for calculating the annual energy demand
- Description of processes for the generation of heat and cooling, including their application and application prospects in rail vehicles
- The work is suitable as a textbook, as a daily work tool and as a reference book

Target Audience
Engineers and students

Fields of Expertise
Vehicle technology, air conditioning technology, refrigeration technology, mechanical engineering and rail technology

Prof. Dr.-Ing. Ingwer Ebinger teaches thermodynamics, vehicle air conditioning, fluid mechanics and turbo machinery at the University of Applied Sciences Hamburg. Previously, he was a lecturer and executive in the industry.

Prof. Dr.-Ing. Jens Morgenstern teaches Technical Thermodynamics at the University of Applied Sciences (HTW) Dresden. Previously, he worked in research and doctrine at the HTW and other universities. Both authors have written numerous articles or contributions to textbooks.

The work provides the methods for the design of air conditioning systems for rail vehicles and the use of the same state of the technology. Load and performance calculations as well as methods for calculating the annual energy demand are explained in detail. The description of methods for heat and refrigeration along with its application and application prospects in rail vehicles follows. The versatile book is ideally suited for students, practitioners and as a reference book.

2019. Approx. 280 Pages
approx. € 54.00

ISBN 978-3-8007-4025-3
To be published in July 2019
Planning Aids for Ventilation Technology

- Description of basic ventilation knowledge to select the most effective and economical ventilation system for a building object
- Explanation of physical and technical correlation of ventilation technology
- New Topics: Ventilation for industrial plants, air-only systems, design of air conditioning, hybrid-ventilation systems
- Update of European standards, rules and regulations
- New: Current technical solutions and their assessment under the aspects of comfort, energetic effort, sustainability, building automation and optimization of investment costs

Target Audience: Architects, civil engineers, planners and students
Fields of Expertise: Construction technology, technical building equipment and supply engineering

Prof. Achim Trogisch taught technical building equipment at the University of Applied Sciences Business (HTW) in Dresden. His practical experience over many years at the Institute of Air Conditioning and Refrigeration (ILK) and HL-Technik AG are incorporated into this work. Prof. Mario Reichel is Professor for technical building equipment / regenerative energy systems at the HTW and works as a planner and construction supervisor.

The manual provides architects, planners and engineers with the knowledge they need to select the most effective and economical ventilation system for a construction project. The volume gives an insight into the refrigeration technology, introduces modern solutions in the ventilation technology and deals with aspects that affect the cost-effectiveness of an air-conditioning system. Current European regulations have been incorporated and interpreted, new calculation examples developed.

6th revised and extended Edition, 2018
582 Pages
€ 58.00
ISBN 978-3-8007-4276-9
Already published

Recommendations on the subject

€ 28.00
ISBN 978-3-8007-3981-3
Tale-Yazdi, Georg
Refrigeration · Climate · Ventilation | COMPACT

Ventilation of Commercial Kitchens: Basics and Calculations

- Detailed information on the design, planning and operation of kitchen ventilation systems
- Overview of the standards, regulations, directives and building regulations to be observed
- With the latest fire protection requirements

Target Audience: Executing companies, public authorities, operators and planners of large kitchens, experts and chimney sweep

Fields of Expertise: Air conditioning technology and ventilation technology

Dipl.-Ing Georg Tale-Yazdi is the owner of an engineering office for ventilation and air conditioning technology. He is also author of various specialist contributions. Furthermore, he holds training courses and is active in various associations, expert committees and standards committees.

This new guide contains detailed information on the design, planning, building regulation law requirements, fire safety and operation of kitchen ventilation systems. The standards, regulations and directives are presented detailed and easy to understand as well as the building regulations laws to be followed. An overview of the different extractor hoods and kitchen ventilation covers completes the successful book.

2018. 143 Pages
€ 34.00
ISBN 978-3-8007-4209-7

Already published

Recommendations on the subject

€ 26.00
ISBN 978-3-8007-3934-9

€ 34.00
ISBN 978-3-8007-3979-0
Veith, Heinz/Schmidt, Dieter

**Basic Course Refrigeration**

- Learning assistance on the basic topics physics and thermodynamics
- Explanation of the main parts of a refrigeration system and their function effects
- Exercises and solutions
- Ideal for self-study
- Well suited for employees in the field of air-conditioning technology and for career changers from electrical engineering

**Target Audience**
Apprentices, electrical industry companies, heating industry, ventilation companies, refrigeration plant engineers, refrigeration mechatronics, masters, planners and technicians

**Fields of Expertise**
Refrigeration plant technology and refrigeration technology

Dipl.-Ing. Heinz Veith (†) worked for over 40 years in the refrigeration and air conditioning industry. In addition to his duties as a product manager and authorized officer, he also devoted himself to education and training in the field of refrigeration. The in-depth revision was taken over by Mr. Dieter Schmidt. He taught trainees of the refrigeration plant technology and is a member of the journeyman examination committee of the state guild of Lower Saxony/Saxony-Anhalt.

The book provides an easy and didactically proven entry into refrigeration technology. Due to the stepwise introduction into the subject, it is not only suitable for the (future) refrigeration plant builder. In particular, it is intended for those companies who want to turn to growing in the subject of air conditioning. The book is an excellent learning aid and is especially well suited for self-study, as each chapter concludes with a collection of tasks whose solutions are listed at the end of the book.

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Planck, Erhard/Schmidt, Dieter (eds.)

Refrigeration Plant Technology – Questions and Answers
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Target Audience Exam preparations for mechatronics and technicians in education and training
Fields of Expertise Electrical engineering, air conditioning and refrigeration

Erhard Planck taught trainees in the refrigeration equipment trade in the field of electrical engineering / control technology at the Education Center for Technology and Design of the City Oldenburg. Dieter Schmidt taught refrigeration apprentices at the Vocational Schools Springe. He is a member of the journeyman examination committee of the refrigeration plant construction guild Lower Saxony/Saxony-Anhalt.

The two-volume standard work “refrigeration plant technology – questions and answers” opens up the entire field of refrigeration technology. Volume 1 focuses on the basics of application (refrigeration and electrical engineering). The informative book contains numerous sample exercises and solutions as well as repetitive questions with selection answers for every topic of refrigeration technology. It is a useful aid for the theoretical preparation for the journeyman and master examination as well as for the general examination of the level of knowledge or for further deepening of individual topics.

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Planck, Erhard/Schmidt, Dieter (eds.)

**Refrigeration Plant Technology – Questions and Answers**

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- New: Additional circuit diagrams and exercises in the electrical part
- Presentation in question and answer form with sample exercises and solutions
- The optimal preparation for the theoretical subject exam Part 2

**Target Audience**
Exam preparations for mechatronics and technicians in education and training

**Fields of Expertise**
Electrical engineering, air conditioning, refrigeration, control engineering

Erhard Planck taught trainees in the refrigeration equipment trade in the field of electrical engineering / control technology at the Education Center for Technology and Design of the City Oldenburg. Dieter Schmidt taught refrigeration apprentices at the Vocational Schools Springe. He is a member of the journeyman examination committee of the refrigeration plant construction guild Lower Saxony/Saxony-Anhalt.

The “refrigeration plant technology - questions and answers” is an indispensable aid to the theoretical training preparation for the journeyman and master examination. It serves both the deepening of the learned material and the general review of their own knowledge.

Volume 2 “Expertise” roughly covers the material from the intermediate examination to the journeyman’s examination. Leaning on the basic curriculum here becomes the entire subject area of refrigeration plant technology in question and answer, with example tasks and solutions developed.

6th revised Edition, 2017
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ISBN 978-3-8007-4390-2
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Refrigeration Engineering

Breidenbach, Karl/Breidenbach Marcus/Hainbach, Christian/Taxer, Rolf
IKET GmbH (ed.)

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Volume 1: Basic Knowledge for Mechatronics for Refrigeration Technology

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Target Audience
Apprentices, specialist engineers, journeymen, refrigeration plant engineers, refrigeration mechatronics, students and technicians

Fields of Expertise
Refrigeration plant technology, refrigeration technology

Dipl.-Ing. Karl Breidenbach (†) was a master refrigeration engineer and worked for many years in the industry and in the craft. For almost 20 years he was director and lecturer at the Federal College of Refrigeration and Air Conditioning.

Marcus Breidenbach is an expert for refrigeration systems.

Dr.-Ing. Christian Hainbach is Technical Managing Director and Expert for Refrigeration Systems at IKET GmbH.

Rolf Taxer is a master refrigeration engineer and owner of a refrigeration and air conditioning specialist.

Professionals in the refrigeration plant construction industry need extensive specialist knowledge in their daily work. The “Breidenbach”, as the industry calls this standard work for the refrigeration engineers and for refrigeration master, very clearly introduces with numerous illustrations, examples and exercises in the field of refrigeration plant technology. Due to the methodically thought-out structure, the book is very well suited for independent learning. Extensive solutions to all exercises help to understand the context better and to deepen the learning content even further.

7th revised and extended Edition, 2018
XVIII, 564 Pages
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Refrigeration Engineering

Schittenhelm, Dietmar/Hoffmann, Michael

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- Part 2: Control technology in refrigeration plant construction

Target Audience: Apprentices, engineers, refrigeration masters, refrigeration mechatronics, planners, technicians
Fields of Expertise: Electrical engineering, refrigeration systems, refrigeration technology, control engineering

Dipl.-Ing. Dietmar Schittenhelm (†) was from 1986 to 2012 lecturer at the Federal College of Refrigeration and Air Conditioning Technology in Maintal and since 1991 the head of the college. Since the 6th edition, this work has been revised and expanded by Dipl.-Ing. Michael Hoffmann, Head at the Federal College of Refrigeration and Air Conditioning Technology in Niedersachsenwerfen.

This textbook has been introduced for many years and conveys the necessary knowledge about the use of electrical and control technology in refrigeration technology – from the general basics to concrete application. In order to be able to assess the use and function of electrical or electronic components, the first part of this book presents the basics of electrical engineering, with reference to the application in refrigeration plant construction. The second part of the plant deals with control technology in refrigeration plant construction.

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Otto, Volkart

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Target Audience  Building authorities, operators of air conditioning systems, operators of refrigeration systems, energy consultants and planning engineers

Fields of Expertise  Refrigeration technology and technical building equipment

Volkart Otto is a planning engineer for technical building equipment and air conditioning / refrigeration systems. He trains prospective refrigeration plant masters. Previously, Otto worked as a specialist planner in an engineering office and as a plant manager in the heating and ventilation industry.

The work explains current trends in cold water and brine technology, critically questions them and provides an informative outline of the history. The reader thus obtains a basic understanding of the relationships in refrigeration and heat pump systems with cold or heat carriers, in order to avoid misinterpretations in the planning and handling of the systems. Practical "toolboxes" help to successfully process different project situations, which are structured in sub-steps.

2018. Approx. 600 Pages
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Arpagaus, Cordin

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Dr. Cordin Arpargaus is a senior research Engineer at the Institute of Energy Systems, Interstate University of Applied Sciences for technical books, NTB, which deals with thermal energy systems, heat pumps, refrigeration and energy efficiency in industrial processes.

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Refrigeration Engineering

Meinolf Gringel/André Migaczewski
Bundesinnungsverband des Deutschen Kälteanlagenbauerhandwerks – BIV (ed.)

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A Guideline According to § 12 EnEV 2014

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Target Audience: Apprentices, operators, refrigeration plant engineers and refrigeration engineers
Fields of Expertise: Refrigeration engineering

The German guild association (BIV) is the governing body of the German national associations of refrigeration and air conditioning technology.

Dr.-Ing. Meinolf Gringel is head of the testing laboratory for refrigeration, air-conditioning and heating technology. He is a technical expert and consulting engineer for refrigeration, air conditioning and energy technology at DMT GmbH in Essen. André Migaczewski is project manager at DMT GmbH and is studying mechanical engineering at the Technical University Bochum.

Based on an easy-to-understand presentation of the Energy Saving Regulation (Energie-Einspar-Verordnung (EnEV)), the book clearly illustrates the Practical implementation of an energetic inspection on refrigeration systems. The numerous flowcharts and checklists guide the reader step-by-step through the test procedure. This guide is indispensable for technicians, engineers and operators of refrigeration systems.

2018. 78 Pages
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Michael Herter is Managing Director of infas 360 GmbH.
Karl-Heinz Mühlbauer is the founder and managing partner of panadress marketing intelligence GmbH.

Geo-marketing analyzes current as well as potential B2B and B2C markets according to spatial structures, in order to ensure sales of products across the entire range of marketing tools (price, product, sales and communication policy) to plan more effectively and to be able to control measurably. Geo-marketing is a discipline with high economic potential and increasing integrative relevance in times of heterogeneous mass data. This complete four-color handbook provides a comprehensive overview of all areas of geo-marketing. In addition to a comprehensive theoretical section, it is dedicated primarily to practical applications and also offers a glimpse into the future.

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Target Audience  Application service providers, data providers, geodesists, geoinformatics, geoscientists, internet service providers, cartographers, software developers, environmental scientists and web designers

Fields of Expertise  Geodesy/surveying, geoinformatics/GIS, geoscience, informatics, cartography and environmental sciences

Dr.-Ing. Christian Seip is at the German Federal Agency for Cartography and Geodesy busy and responsible for the GDI-DE Registry.
Dipl.-Ing. Marco L. Zehner M. Sc. (GIS) is responsible for the field of geospatial information in the data processing center Mecklenburg-West Pomerania.
Dr.-Ing. Peter Korduan is the owner of GDI-Service and offers consulting, development, training and services in the area of Web-GIS and spatial data infrastructures.

The book describes the basic concepts of web-based Geographic Information Systems (GIS), from standard smart-mapping solutions to interactive and dynamic map services. The possibilities and limits of the individual technologies are also conveyed. Using numerous examples and illustrations, this new publication offers a demonstrative introduction to the sometimes very complex systems of the fields of informatics, geoinformatics and geodesy. Directories and references will help to deepen the topic for your own quick entry.

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**Target Audience**  Practitioners, students and scientists

**Fields of Expertise**  Civil engineering and geodesy/surveying, geoinformatics/GIS, geosciences, planning and environmental sciences

Since 1994 the GI Geoinformatik GmbH provides a complete offer for spatial data processing. The offering ranges from trading ArcGIS software, programming, training and support to GIS data acquisition and analysis to mobile GNSS / GIS solutions and app developments. The GI geoinformatics relied on Esri software products from the start and works closely with Esri Germany GmbH as an Esri partner.

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Noack, Patrick Ole

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**Fields of Expertise**
Remote sensing, geodesy, geoinformatics/GIS, geosciences, agriculture, environmental sciences and measurement

Prof. Dr. agr. Patrick Ole Noack is Professor of Agricultural Systems Engineering at the Weihenstephan-Triesdorf University of Applied Sciences.

This book explains the basics of precision farming and illuminated in the context of practical application. In addition to an introduction to satellite positioning and Geographic Information Systems (GIS) the most important sensors and data transmission methods in the agriculture are presented. Furthermore, the structure and function of sensors and data processing systems are documented and various applications like the site-specific fertilization and automatic steering systems are explained and rated.

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**Fields of Expertise**
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**Prof. Dipl.-Ing. Manfred Bauer** was a lecturer in surveying and mapping at the FH Hamburg and has collaborated in numerous GPS campaigns in the inland and foreign country.

The book provides practitioners and students with the basic knowledge that they needed to understand GNSS technology. The revised and updated book allows users to review and assess the suitability of GNSS for their own projects and for solving problems. The newer GNSS – the Chinese BDS and the European Galileo – will be presented and for the first time the problem of GNSS vulnerability will be discussed.

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- **€ 29.80**
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Resnik, Boris/Bill, Ralf

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Fields of Expertise
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Prof. Dr.-Ing. Boris Resnik is Professor of engineering surveying and geoinformatics at the Beuth University of Applied Sciences Berlin. Prof. Dr.-Ing. Ralf Bill is University Professor of geodesy and geoinformatics at the University of Rostock and head of Steinbeis Transfer Center for geoinformatics in Rostock.

The aim of this book is to provide students and users outside of geodesy with a comprehensive introduction to the subject area of surveying and to provide a practical guideline. Here, the basics as well as current developments and trends are explained. Special emphasis was placed on a vivid, user-friendly presentation with many illustrations. Numerous examples and tasks enable the independent implementation of the material, which makes this work worthy of a textbook.

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