

IEC 61131-3: Programming Industrial Automation Systems

Karl-Heinz John · Michael Tiegelkamp

IEC 61131-3: Programming Industrial Automation Systems

Concepts and Programming Languages,
Requirements for Programming Systems,
Decision-Making Aids

Second Edition

 Springer

Karl-Heinz John
Irrlrinnig 13
91301 Forchheim
Germany
karlheinz.john@gmx

Michael Tiegelkamp
Kurpfalzstr. 34
90602 Pyrbaum
Germany
Michael.Tiegelkamp@gmx.de

This book contains one Trial DVD. **“SIMATIC STEP 7 Professional, Edition 2006 SR5, Trial License”** encompasses: SIMATIC STEP 7 V5.4 SP4, S7-GRAPH V5.3 SP6, S7-SCL V5.3 SP5, S7-PLCSIM V5.4 SP2 and can be used for trial purposes for 14 days.

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Preface of the 2nd revised edition

IEC 61131 (“IEC 1131” until 1998) has become widely established in recent years as the programming standard in automation industry. Today, a wide range of small to large PLC manufacturers offer programming systems that are based on this standard. Additional standards and recommendations (e.g. for Motion Control) complement IEC 61131 with functionality in response to growing market requirements.

One of the most important advancements is IEC 61499 (formerly IEC 1499). The basic concepts and ideas of this standard are described in a separate chapter (Chapter 9). Its significance in connection with distributed PLC systems is discussed in Section 7.8.

IEC 61131 is now available in a second edition. The numerous changes and supplements to this standard have been incorporated in the 2nd edition of this book.

A comprehensive index at the end of the book facilitates the search for specific topics.

The enclosed DVD and CD contain the complete demo versions of two programming systems (in the latest versions), enabling the reader to immediately implement and consolidate the knowledge gained from this book by practical application.

We would like to thank SIEMENS AG and infoteam Software AG for providing the enclosed software.

Our special thanks go again to Hans-Peter Otto, member of the IEC and DKE standardisation committees for his active support and mutual inspiration.

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Karl-Heinz John

Michael Tiegelkamp

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