Introduction

The following pages contain information to help you familiarize yourself with the manual.

Description of contents

The contents of the manual can be broken down subject-wise into a number of blocks:

- Description
  (System overview, technical description)
- Installation and operation
  (Installation guidelines, system start-up and program test, fault diagnostics, addressing)
- Programming instructions
  (Introduction to STEP 5, STEP 5 operations)
- Special capabilities
  (Analog value processing, integral blocks, communications)
- Technical specifications overview

You will find additional information in tabular form in the appendices.

Please use the forms at the back of the manual for any suggestions or corrections you may have and return the forms to us. This will help us to make the necessary improvements in the next edition.

Training courses

Siemens offer comprehensive training facilities for users of SIMATIC S5.

Details can be obtained from your nearest Siemens office or representative.

Reference literature

The manual contains a comprehensive description of the S5-115U. Subjects that are not specially related to the S5-115U have only been treated in brief, however. More detailed information is available in the following literature:

- **Programmable controls**
  Volume 1: Logic and sequence controls; from the control problem to the control program

  Günter Wellenreuther, Dieter Zastrow
  Brunswick 1987

  Contents:
  - Theory of operation of a programmable control system
  - Theory of logic control technology using the STEP 5 programming language for SIMATIC S5 programmable controllers.

  Order No.: ISBN 3-528-04464-0

- **Automating with the S5-115U**
  SIMATIC S5 Programmable Controllers

  Hans Berger
  Siemens AG, Berlin and Munich 1989

  Contents:
  - STEP 5 programming language
  - Program scanning
  - Integral software blocks
  - I/O interfaces

  Order No.: ISBN 3-89578-022-7

Information on the programmable controller hardware is to be found in the following catalogues:

- ST 52.3   "S5-115U Programmable Controller"
- ST 57   "Standard Function Blocks and Driver Software for Programmable Controllers of the U Range"
- ST 59   "Programmers"
- ET 1.1   "ES 902 C Modular 19 in. Packaging System"
- MP 11   "Thermocouples; compensating boxes"

The relevant manuals are available for other components and modules (e.g. CPs and SINEC L1). Reference is made to these sources of information at various points in the manual.

The S5-115U programmable controller is designed to VDE 0160. The corresponding IEC and VDE (Association of German Electrical Engineers) standards are referred to in the text.

Conventions

In order to improve readability of the manual, a menu-styled breakdown was used, i.e.:

- The individual chapters can be quickly located by means of a thumb register.
- There is an overview containing the headings of the individual chapters at the beginning of the manual.
- Each chapter is preceeded by a breakdown to its subject matter.
  The individual chapters are subdivided into sections. Boldface type is used for further subdivisions.
- Figures and tables are numbered separately in each chapter. The page following the chapter breakdown contains a list of the figures and tables appearing in that particular chapter.