

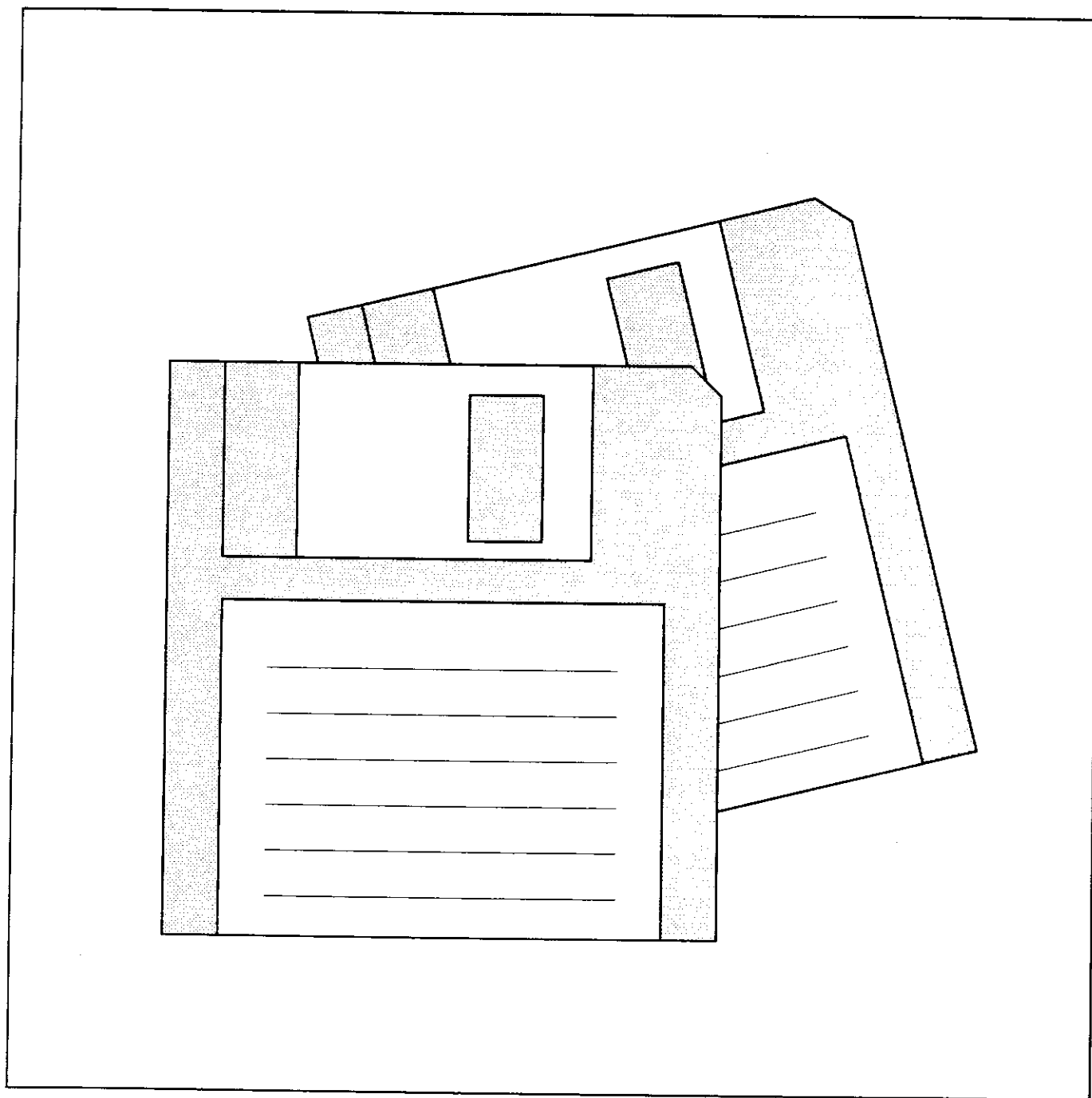
ABB Procontic T200
Programmable Controller

**Multi-System
Programming Software**
907 PC 33

7.4

Programming

Multi-System Programming Software



**ABB Schalt-
und Steuerungstechnik**

ABB

General

The 907 PC 33 programming and test software is available as

- Programming and test software 907 PC 331 for ABB Procontic CS31 (central units 07 KR 91, 07 KT 92) and ABB Procontic T200 (communication processor 07 KP 62),
Order No. GJP5204600R0102
- Programming and test software 907 PC 332 for ABB Procontic T200
Order No. GJP5204400R0102

The software packages 907 PC 331 and 907 PC 332 are delivered inclusive system specific documentation.

Functions which are identical for the two software packages are described in the documentation folder "General Part". This documentation folder can be ordered separately, Order No. GJP5204000R0102.

The software runs on an 07 PH 32 IBM-AT-compatible personal computer. An extensively automatic installation program loads the 907 PC 33 software package into this unit or into another IBM-AT-compatible personal computer.

The 907 PC 33 programming and test software allows the user a simple and economical programming of PLC programs in:

- Function block diagrams (FBD)
- Ladder diagrams (LD)
- Extended instruction list (Ext. IL)

The program can be entered in symbols as well as absolutely. The PLC program is extended by symbolic codes, long texts and comments. Help and error messages, which can be recalled at any time, as well as a syntax test facilitates the program entry. The compilation as a FBD or as a LD is carried out in a common editor. Thus, the elements can be mixed from FBD and LD and can be combined with each other. The library contains several connection elements and function

blocks, which makes it easy to program complex functions (e.g. PID controller).

Features

The scope of the listed features depends on the capabilities of the individual control systems.

General enhancements

- All functions can be controlled by the mouse.
- Easy traceable arrangement of project data and program configuration at a glance.
- Possibility to scroll in all directions in the editors.
- Automatic recognition of program changes.

Menu guidance

- Modern, easy-to-follow menus in the pop-up menu technique
- Representation in color (not for 07 PH 32)
- Fast selection of the menu points with the mouse or keyboard
- Recalling external programs on the DOS level directly from the menu (DOS shell)

Path data

- Entry of a file name with the corresponding DOS path
- Displaying the configuration overview by means of the file directory
- Transfer of file names and path, selection by cursor.

Password protection

- Access justification in several privilege levels

Saving data

- Save function available in all editors.
- Save of total projects on disk

Modularization

- Handling large projects
- Dividing the projects into logical structures
- Division into program and variable modules
- Module change-over is possible directly from FBD/LD- or extended IL editor.
- Modules can be called from all levels (total project- / program module – function selection).
- Easy input of module names and the corresponding file names.

FBD/LD Editor

- Single editor for the programming with graphic symbols as a function block diagram and as a ladder diagram
- Combination of ladder diagram networks with elements of the function block diagram

Extended IL

- Representation with symbols and text in various forms
- Selection of connection elements via a selection menu with the mouse
- Integration of standard IL functionality in the extended IL.
- No translation in extended IL necessary, if the extended IL does not contain any CE's.
- The translated IL can be displayed, the segment plan structure will be kept. Also possible in ONLINE mode.

Segment plans

- Division of the programs into segment plans results in an easy to survey program structure
- Simple management by segment plan names and segment plan numbers

Functional scope

An extensive number of commands is available in the editors to create programs:

- Syntax test and plausibility check in case of input of variables
- Block commands
 - to edit program parts and variables
 - deleting
 - moving
 - copying
 - saving
 - loading
 - printing
 - deleting unused variables
- Search commands
 - search the set number
 - search the word number
 - search the variable
 - search the symbol
 - search the command
 - search the line number
 - repetition
 - search for the segment plan
 - search for the CE
 - search for the free connection

- Searching and replacing

- Insertion

- Deletion

Library

- User layout usable with mouse.
- Programming of new connection elements (CE) also in FBD/LD possible.
- Hierarchical structuring of the CE library possible (similar to DOS-file directories)
- Help texts and short comments also for CEs.
- Checking possibilities for CE connections to recognize program errors earlier.
- For each producer CE, a detailed description of the function can be called as an auxiliary text directly from the FBD.

Variable editor

- Complete list of all entered variables
- Ordering according to absolute or symbolic variables
- User selectable, single or multiple definition of symbols for each variable.
- Acceptance and handing over of variable lists from and to any data processing systems
- Making variable lists available for certain CAD/CAE systems

Text Editor

- Entry of any ASCII files, max. 255 characters per line

Comments

- Verbal description of networks or program segments

ONLINE functions

Numerous ONLINE functions support the user when booting up, like, e.g.:

- Status display in
 - Function block diagram
 - Ladder diagram
 - Instruction list
 - Variable list
- Program
 - Transmission
 - Start
 - Abortion
 - Stop
 - Continuation
 - Status
- Single cycle on/off
- Single step on/off
- Breakpoint
 - setting it
 - displaying it
 - tracing it on the complete program
 - deleting it
- Triggering
 - by time
 - variable
- Overwriting
- Typing
- Forcing
- Altering
 - Time and counter set values
 - Variables
 - Program sections
- Online program altering

Selected variables can also be summarized in ONLINE lists and their status displayed on the screen.

- "Hotkeys" for faster function calls.
- Direct switching to the ONLINE function from the editors: FBD/LD, extended IL, variables list, ONLINE list.

- Direct PLC communication within the editors, e.g. "program send" directly from editor.
- Translation of program changes and sending them with only one key stroke.
- Direct "Overwriting" and "Forcing" within the editors.
- ONLINE-list with direct transfer of variables from the PLC program to "Forcing", "Overwriting".
- Easy setting of " Breakpoints" with cursor also in FBD.
- Online display of variables in different data formats (decimal, octal, hexadecimal, binary).

Program documentation

The automatic program documentation includes the output of the following lists by the printer:

- Function block diagram
- Instruction list
- CE library
- Logic plan
- Ladder diagram
- Variable list
- Cross reference list
- Comment list
- ONLINE list
- Text page
- Data area
- Modularization list
- Entire variable list
- Entire cross reference list
- System configuration

The output is adapted to any printer.

Printing format editor

A special printing format editor allows the respective list to be extended by an individual header and footer. Certain data can be output automatically as well using the headers or footers, like, e.g., the name of the project file, date and time.

