

**Modsoft AKF → Micro**  
**Type: MICROAKF**  
**Version 2.0 – 2.1**  
**Installation**

**User Instruction**  
DOK-704104.33-1197

Translation of the German Description DOK-703409

Belongs to software kit E-No. 424 704 703



## Documents in the software package

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Documentation	Area of application
Installation User Instruction DOK-704104	Explains the usage and installation of the dis- kettes included.
MICROAKF for Beginners User Instruction DOK-704105	Serves to introduce new customers to MICROAKF. The user learns how to use the software in small steps.
Short Form Guide User Instruction DOK-704106	Tables for validity ranges and system mar- kers, SFB-Formal operands for quick use on- site.
SFB Block Library DOK-704572	Description of the Standard Function Blocks.
Configuration User Instruction DOK-704107	Contains the new features of the current ver- sion and explains the functions of the indivi- dual software menus for the configurer.
Masterindex User Instruction DOK-704108	Index of all documentation.



## Notes

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### Application Note



**Caution** The relevant regulations must be observed for control applications involving safety requirements. For reasons of safety and to ensure compliance with documented system data, repairs to components should be performed only by the manufacturer.

### Training

Schneider Automation offers suitable training that provides further information concerning the system (see addresses).

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### Addresses

The addresses of our Regional Sales Offices, Training Centers, Service and Engineering Sales Offices in Europe are given at the end of this publication.

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## Terminology

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**Note** This symbol emphasizes very important facts.



**Caution** This symbol refers to frequently appearing error sources.



**Warning** This symbol points to sources of danger that may cause financial and health damages or may have other aggravating consequences.



**Expert** This symbol is used when a more detailed information is given, which is intended exclusively for experts (special training required). Skipping this information does not interfere with understanding the publication and does not restrict standard application of the product.



**Path** This symbol identifies the use of paths in software menus.

Figures are given in the spelling corresponding to international practice and approved by SI (Système International d' Unités).

I.e. a space between the thousands and the usage of a decimal point (e.g.: 12 345.67).

## Abbreviations

ABS	absolute addressing
Adr.	Address (signal address)
AKF	Instruction List, Ladder Diagram, Function Block Diagram
IL	Instruction List
AWP	User program
DB 0 ... 9	Data block(= SYM/COM block)
D-Word	Double word
I/O	Input / Output signals (e.g. of a module)
FB	Function block
FBD	Function Block Diagram
G-Word	Floating point word
HW	Hardware (e.g. PLC)
IB	Initialization block
LD	Ladder diagram
OB	Organisation block
PB	Program block
PADT	Programming and debugging tool (= Programming panel)
React.	Reaction during descriptions of steps (on screen)
SFB	Standard function block
PLC	Programmable controller system (= programmable controller)
SSP	Signal memory
SW	Software
SYM	Symbolic addressing
SYM/COM	Symbols and comments
SA	Node
<Return>	actuate the Return key
<Esc>	actuate the Esc key
<Ctrl>+<Alt>+<Del>	actuate the keys Ctrl, Alt and Del simultaneously (begin with Ctrl and end with Del)



## Objectives

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The installation instructions are for the installation of the software MICROAKF on the PADT.

## Arrangement of This Guide

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**Chapter 1** General

**Chapter 2** This chapter gives you information about the selection of the programming panel, additional memory upgrades, and the installation of the software and the drivers on the programming panel.

## Validity Note

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This instruction manual is valid for the software MICROAKF, version 2.0 – 2.1



# Handling 3 1/2" Diskettes

No cleaning of diskettes.

Store diskettes in protective containers and boxes.

Temperature 10 to 60°C  
Humidity 8 to 80%

Insert diskettes correctly.

No water on diskettes.

No heavy objects on diskettes.

No erasing on diskettes.

Diskettes tolerate no heat (sunshine).

Label diskettes at the right spot.

Don't move the metal slide.

No diskettes near magnetic fields.

No forcing diskettes into disk drive.

Always keep in mind



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# Chapter 1

## Introduction

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## 1.1 Overview

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This publication tells you how to install the Modicon software kits. The software is suitable for IBM-compatible personal computers using the MS-DOS operating system, in particular the IBM-compatible programming panel distributed by Schneider Automation.

Software installation of Modicon software is menu-driven. In this way existing user programs are safeguarded. It is recommended that the programming panel be prepared for Modicon software, even if the operating system has already been installed.



**Note** Henceforth, the programming panels shall be referred to as PADT (programming and debugging tool). Programmable controllers shall be referred to as PLC.

With your PADT and the software provided, you can program the Micro programmable controllers. With the aid of the programming panel the programs can be created, documented and archived.

The MS-DOS operating system makes it possible to use the programming panel as a personal computer as well.



# Chapter 2

## Installation

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This chapter describes the selection of programming panels, the installation of the software on the programming panel, and how to call up the software.



**Note** Specific performance data for the software packages are given in the Modicon automation catalogues.

## 2.1 Device selection/Requirements

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### 2.1.1 Important Remarks



**Note** The P810, P820C and P840C guarantee optimal operation.



**Caution** For MS-DOS version 3.3 or higher: The MS-DOS command APPEND may not be used with this software; the APPEND command may not lead to AKF directories.



**Caution** MS-DOS versions other than 3.x or 5.0 (only P310), reliable implementation of the AEG software is not possible, due to inadequate compatibility.



**Caution** When using the MS-DOS Version 6.0 the Micro AKF function "Special", "Archiving a Station" and "Special", "Restoring a Station" cannot be carried out.



**Caution** Do not start any memory-resident or interrupt-controlled IBM-PC programs parallel to the AEG software (available memory is insufficient).



**Caution** The OS/2 parameter "direct access to HW-Timer" must not be set to "yes" as a time-out will occur after only 3 to 4 seconds.

## 2.1.2 Requirements P810/P820C/P840C

In order to program an Micro with the present software you will need

- a programming panel (PADT) P810/P820C/P840C with
  - CONFIG.SYS File: Entry for "Buffers" = 20, "Files" = 20
  - available user memory (MS-DOS) before calling MICROAKF: at least 570 kByte
  - minimum hard disk memory 2 MB required
  - no memory resident programs started on PADT
  - MS-DOS versions 3.x, 5.0 or 6.0
  
- PADT interfaces:
  - COM1 for operating the programmable controller on the PADT (for program compilation, initial start-up)
  - COM2 optional, for connecting a mouse or printer (for design, documentation, monitoring)
  - LPT1 optional, for connecting a printer (for design, documentation, monitoring)

### 2.1.3 Requirements IBM-compatible PC

In order to program an Micro with the present software on an IBM-compatible PC you will need

- an IBM-compatible programming panel (PADT) with
  - Diskette drive 3 1/2 "
  - CONFIG.SYS file: Entry for "Buffers" = 20, "Files" = 20
  - 1 MByte RAM, of which the available user memory (MS-DOS) before calling MICROAKF is to be: at least 570 kByte
  - minimum hard disk memory 2 MB required
  - US-keyboard driver
  - no resident programs started on the PADT
  - MS-DOS version 3.x 5.0 or 6.0
  
- PADT interfaces:
  - COM1 for programmable controller operation on the PADT (for programme compilation, initial start-up)
  - COM2 optional, for connecting a mouse or printer (for design, documentation, monitoring)
  - LPT1 optional, for connecting a printer(for design, documentation, monitoring)

### 2.1.4 Requirements OS/2

For installation of the software Modsoft AKF choose the OS/2 standard installation.



**Note** To load the Flash memory it is recommended to leave the DOS Box.

## 2.2 Creating a Backup

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A backup can be made of every original diskette included in the software kit. The required number of blank diskettes (corresponding to the number of original diskettes) should be kept available.

Proceed on the operating system level as follows:

- Step 1** Type "Diskcopy a: a:".
- Step 2** Follow the instructions on the screen.
- Step 3** Answer the question "Make further copies (Y/N)" with "Y" until all the original diskettes have been copied.



**Note** Label the backup copies to match the original diskette(s). To prevent data loss, store the originals in a safe place.

## 2.3 Software installation

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Software installation is carried out using the prepared backup copies.



**Note** Nothing needs to be erased to overwrite an old software version with a more recent one. The old files are automatically overwritten with the command "A:INSTAL".



**Note** Please make backup copies of the original diskettes (see chapter 2.2) and use these copies here.

### 2.3.1 MICROAKF software installation

**Step 1** Ensure that your programming panel meets the requirements of Chapter 2.1.

**Step 2** If the CONFIG.SYS or AUTOEXEC.BAT files have been modified, the PADT can be reset by means of <Ctrl>+<Alt>+<Del> ("restart")

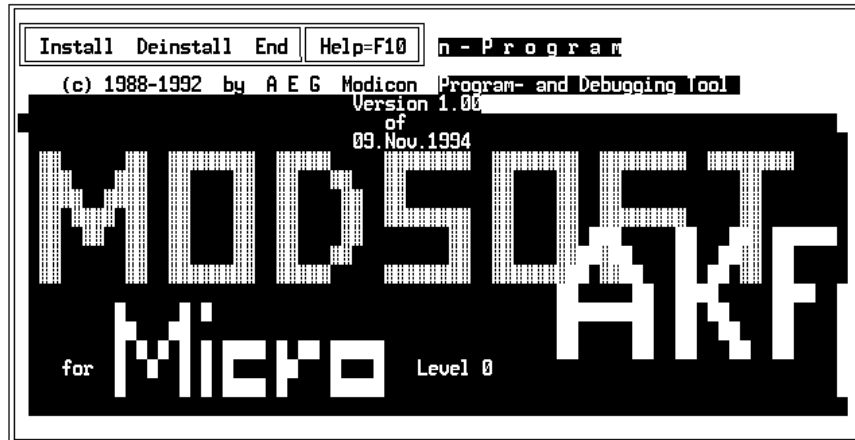
**Response** The prompt for the drive in use will appear (e.g. C:\)

**Step 3** Insert the MF0 #1 diskette into the drive

**Step 4** Enter A:INSTAL and press <Return> (A: is here used to designate your diskette drive)

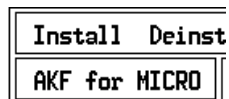
**Step 5** Enter the drive into which the program diskette has been inserted (preset value A:) and confirm by pressing <Return>.

**Reakt.** The installation program will show the screen



**Step 6** Open the installation menu by pressing <Return>

**Response** The MICROAKF window will open.



**Step 7** Start the software installation by pressing <Return>

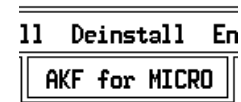
**Step 8** Follow the directions displayed on the screen.

**Step 9** Using, move the selection bar <-> to End and press <Return>.

Now you can call up the programming software (see chapter 2.4).

### 2.3.2 Deinstallation

After pressing <Return>, the following window appears:



The deinstallation functions erase the software files on your programming panel. Your systems and stations are not affected.

### 2.3.3 End

This menu item is used to leave the installation program after completing installation. Installation may be broken off at certain specified places by pressing <Esc>. In that case, the user diskette drive prompt will immediately be returned (e.g. C:\).

## 2.4 Calling the software Modsoft AKF → Micro

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Start the software on the MS-DOS-level (see Table 1, page 10).

**Table 1 Calling the software**

Entry	Recommended monitor
micro<Return>	-
micro /COL<Return>	Colour monitor
micro /BW<Return>	Liquid crystal display and Plasma monitor
micro /GR<Return>	Monochrome monitor
micro /NOSPS<Return>	projecting without PLC (applies to mouse operation at COM1 interface)
micro /MODEM<Return>	enable use of modem PLC



## AKF User Club

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The AKF User Club was created to offer you optimal possibilities for saving time and expenses in your planning efforts.

### Services

As a member of the User Club you will automatically receive information about:

Improved features

Software housekeeping

Extra documentation

Applications

Training, seminars, workshops

Up-to-the-minute application examples (general-purpose and special, technologically oriented ones)

By joining the AKF User Club, you will have the opportunity to share in experience and software with other users.

You will be sent a ready file in DIN A4 format with registers for sorting the information that you receive.

### Membership

The members of the AKF User Club are primarily **employees, who are registered with us by name**, of customers or Groupe Schneider branches.

Apply for membership with the Software License Agreement.



**Note** Please do not forget to send in the Software License Agreement, giving your full name and address (or that of your company).

## **Club Services and Processing of Applications**

### **Address for AKF User Club:**

Groupe Schneider  
Business Unit Automation  
International Subdivision  
Automation Technology MODICON  
AKF USER CLUB, H. Herforth  
Steinheimer Str. 117

D - 63500 Seligenstadt

### **Address for Application Exchange:**

Groupe Schneider  
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Automation Technology MODICON  
V12, H. Kämmerer  
Steinheimer Str. 117

D - 63500 Seligenstadt

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