

**Modsoft AKF → Micro**  
**Typ: MICROAKF**  
**Version 2.0 – 2.1**  
**Masterindex**

**User Instruction**  
DOK-704108.33-1197

Translation of the German Description DOK-703413

Belongs to software kit E-No. 424 704 703



## Documents in the software package

---

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

---

### 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).

### Data, Illustrations, Alterations

Data and illustration are not binding. We reserve the right to alter our products in line with our policy of continuous product development. If you have any suggestions for improvements or amendments or have found errors in this publication, please notify us by using the form on the last page of this publication.

### 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.

**Copyright**

All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic or mechanical, including copying, processing or any information storage, without permission in writing by the Schneider Automation. You are not authorized to translate this document into any other language.

**Trademarks**

All terms used in this user manual to denote Schneider Automation products are trademarks of the Schneider Automation.

© 1997 Schneider Automation GmbH. All rights reserved.

## Terminology

---



**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**

---

This documentation contains the Master Index i.e. the primary index regarding documentation relating to this software package.

## **Validity Note**

---

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



# Index

---

## A

accept force status (on-line list): *Conf* 174  
Acceptance Clock: *Library* 37  
Actual Operand: *Library* 3  
Addressing: *Conf* 107  
Administration Information: *Library* 37  
AF: *Library* 12, 37, 55, 72, 75, 77, 79, 92, 105, 113  
AKF User Club: *Instal* 11  
    Club Services: *Instal* 12  
    Membership: *Instal* 11  
Analog Value Processing  
    ADU205: *Library* 9  
    PT100: *Library* 54  
AND block correction: *Conf* 57  
Archive from station: *Conf* 194  
Archive to station: *Conf* 195  
Arithmetic functions: *Conf* 90–107  
Auto-Repeat-Function: *Conf* 13

## B

Back-up copy: *Instal* 7  
BAF: *Library* 105  
Baud Rate: *Conf* 216  
Block  
    Number: *Conf* 63  
    Type: *Conf* 63  
Block Editor: *Conf* 26  
Block List: *Conf* 132  
    Load: *Conf* 132  
    Save: *Conf* 133  
Bootload (Basic Software in CPU):  
    *Conf* 149

Break: *Conf* 38  
    Dynamic Status Display: *Conf* 156  
Break (on-line list): *Conf* 176  
Break correction: *Conf* 33

## C

Call  
    Conditional Block: *Conf* 64  
    Unconditional Block: *Conf* 64  
call parameter  
    /BW: *Conf* 224  
    /COL: *Conf* 224  
    /GR: *Conf* 224  
Call PB/FB  
    conditional, LD/FBD: *Conf* 50  
    unconditional, LD/FBD: *Conf* 50  
Calling the software: *Instal* 10  
Channel Selection: *Library* 33  
Channel Selection KANAL: *Library* 96  
Channel-No.: *Library* 33  
Choose Block, Dyn. Status Display:  
    *Conf* 162  
Choose record, Dyn. Status Display:  
    *Conf* 163  
Comparator  
    IL: *Conf* 92  
    LD/FBD: *Conf* 104  
Compare  
    Equipment List: *Conf* 147  
    VBIS: *Library* 80  
    VBYS: *Library* 82  
    VWS: *Library* 84  
Compare Blocks with PLC: *Conf* 143  
Compare program with PLC: *Conf* 146

Comparison Mode: *Conf 144*  
Components for programming:  
    *Beginner 3*  
Compressed Font: *Conf 218*  
Conditional jump: *Conf 88*  
Configuration  
    ADU 204: *Short 44*  
    ADU 205: *Short 44*  
    FRQ 204: *Short 44*  
    TXT 201: *Short 45*  
    ZAE 201: *Short 45*  
    ZAE 204: *Short 45*  
connector in parallel path, LD: *Conf 53*  
Continuation of a parallel path, LD:  
    *Conf 53*  
Control enable (on-line list): *Conf 173*  
Conversion of PB in FB: *Conf 65*  
Conversion time: *Short 42*  
Copy Area: *Conf 112*  
Copy disks, Source-/Target-Drive:  
    *Conf 202*  
Copy Files, Parameter: *Conf 205*  
Copy Files, Source: *Conf 204*  
Copy Files, Target: *Conf 204*  
Copy network: *Conf 30*  
Correction mode: *Conf 56*  
Counter  
    IL: *Conf 76*  
    LD/FBD: *Conf 99*  
Counter range CTU, CTD, CUD: *Conf 76, 77*  
Counting  
    ZAE201: *Library 108*  
    Event counter: *Library 109*  
    Repeater counter: *Library 111*  
    ZAE204: *Library 94*  
CPU: *Conf 118*  
Cross Reference Mode: *Conf 188*  
Cross-connection of a parallel path:  
    *Conf 53*  
Cursor positioning: *Conf 42*

## D

Data Bits: *Conf 217*  
Data Block editor: *Conf 109*  
Data Block File: *Conf 41, 134, 185*  
Data Block, DB: *Beginner 16, 22; Short 3; Conf 108, 114*  
Date: *Conf 148*  
Decrement, DEC: *Conf 80*  
Deinstallation: *Instal 10*  
Device selection, SW-Installation:  
    *Instal 4*  
DIN 19239: *Beginner 10*  
Directory Structure on PADT: *Conf 207*  
Display NW-comments,Dyn. Status  
    Display: *Conf 159*  
Double Assignment on/off: *Conf 114*  
Down-Counter, LD/FBD: *Conf 100*  
Down-Counter, CTD: *Conf 76*  
DRU 096: *Conf 218*  
DRU 120: *Conf 219*  
DRU 1200: *Conf 220*  
DRU 292: *Conf 219*  
DRU 293: *Conf 219, 220, 221*  
DRU 295: *Conf 220*  
Dynamic Status Display  
    Break: *Conf 156*  
    Current Display: *Conf 154*  
    MW Mode: *Conf 158*  
    Output Mode: *Conf 167*

## E

Edge detection, LD/FBD: *Conf 105*  
Edge detection negative, EDN: *Conf 79*  
Edge detection negative, EDN,  
    LD/FBD: *Conf 105*  
Edge detection positive, EDP: *Conf 79*  
Edge detection positive, EDP,  
    LD/FBD: *Conf 105*  
Edge detection, both directions, ED:  
    *Conf 79*

Edge detection, both directions, ED,  
LD/FBD: *Conf* 105  
 Edit: *Beginner* 4; *Conf* 5, 18, 22–39  
   Block: *Conf* 5, 24, 26–39, 47–60,  
   71–107  
   Compile (Blocks): *Conf* 5, 133–134  
   Compile (Data Blocks): *Conf* 5  
   Equipment List: *Conf* 5, 115–123  
   Overview: *Conf* 5, 23–25  
   Replace Signals: *Conf* 5, 128  
   Symbols and Comments: *Conf* 5,  
   108–114  
   Title Block: *Conf* 5  
   Translate data blocks: *Conf*  
   134–135  
 edit FBD, connector: *Conf* 60  
 edit LD, connector: *Conf* 48  
 Edit on–line list: *Conf* 169, 175  
 Enter Symbol in the DB: *Conf* 36  
 equal  
   IL: *Conf* 92  
   LD/FBD: *Conf* 104  
 Equipment List  
   Abort: *Conf* 116  
   Module: *Conf* 117  
   Normalize: *Conf* 123  
   Parameterize ALU: *Conf* 121  
   Terminate: *Conf* 116  
 Erase Area: *Conf* 113  
 Erase correction: *Conf* 51, 62  
 Erase Field: *Conf* 112  
 Erase Line correction: *Conf* 32  
 Erase network: *Conf* 29  
 Erase on–line list: *Conf* 176  
 Error Handling: *Library* 37  
 Exchange Online: *Conf* 39  
 exclusive OR block: *Conf* 49, 59  
 Extended pulse, TEP, IL: *Conf* 78  
 Extension of the Printer Driver: *Conf*  
 222

## F

Factor: *Library* 36  
 Failure I/O bus: *Conf* 123  
 FBD editor: *Conf* 26, 54, 55, 56, 57,  
 58, 61, 98, 105  
 FBD element correction: *Conf* 51  
 FBD elements: *Conf* 95, 98  
   correction mode: *Conf* 35  
 FKT: *Library* 36  
 Flipflops, IL: *Conf* 75  
 Follow signal contents: *Conf* 167  
 Force & control (on–line list): *Conf*  
 174  
 Forcing completely off (on–line list):  
*Conf* 174  
 Formal Operand: *Library* 3  
 formfeed: *Conf* 222  
 Formulae memory demand: *Short* 42  
 Freely configurable RS232C port:  
*Conf* 215  
 Function Block Diagram, FBD:  
*Beginner* 7, 14, 16, 17, 18; *Short* 2,  
 3; *Conf* 26, 54, 64, 97, 99, 102, 104,  
 105  
 Function block, FB: *Beginner* 12, 16,  
 17, 18, 19, 20; *Conf* 26, 29, 50, 63,  
 66, 69, 95, 132  
   Actual operand: *Beginner* 19, 21;  
   *Conf* 69  
   Call FB1: *Conf* 68  
   Declaration Part: *Conf* 66, 69  
   Declaration part: *Beginner* 19, 20,  
   21; *Conf* 66  
   Formal operand: *Conf* 69  
   Instruction part: *Beginner* 19, 21;  
   *Conf* 66, 67  
 Function keys: *Conf* 9

## G

Graphic Characters: *Conf* 124  
greater than, LD/FBD: *Conf* 104  
greater than, IL: *Conf* 92  
greater than/equal, LD/FBD: *Conf* 104  
greater than/equal, IL: *Conf* 92  
GSR1: *Library* 113  
GSR2: *Library* 113

## H

Hardcopy. *See* Screensave  
Help Function: *Conf* 21  
Help text: *Conf* 21

## I

IL editor: *Conf* 26, 28, 29, 30, 31, 32, 37, 38, 39, 40, 41, 42  
    correction mode: *Conf* 34  
IL lines: *Short* 2  
IL lines comments: *Conf* 29  
IN: *Library* 12, 55  
Increment, INC: *Conf* 80  
INI: *Library* 87, 109  
Initialization: *Conf* 217  
Initialize Printer: *Conf* 218  
Input correction: *Conf* 58  
Input mode (IL, LD, FBD): *Conf* 70  
Input negated correction: *Conf* 58  
Input Symbol and Comment: *Conf* 109  
Insert line: *Conf* 32  
Insert network: *Conf* 29  
Installation, Software: *Instal* 8  
Instruction List, IL: *Beginner* 7, 11–12, 16, 17, 18; *Conf* 26, 64, 66, 71, 72, 73, 75, 76, 78, 79, 80, 81, 82, 83, 88, 89, 90, 91, 92, 93  
    operands: *Conf* 29  
    operations: *Conf* 29

## J

Jump conditional JT, IL: *Conf* 88

## K

Key macro: *Conf* 10, 13  
Key Table  
    Alt+digit: *Conf* 9, 12, 13  
    Alt+F2: *Conf* 11  
    Alt+F8: *Conf* 12  
    Alt+F9: *Conf* 13  
Backspace: *Conf* 10, 109, 116, 125, 171  
Backtab: *Conf* 34  
character: *Conf* 46, 57  
Ctrl + C: *Conf* 15, 194, 202  
Ctrl + Cursor right: *Conf* 57  
Ctrl + PgDn: *Conf* 31, 46, 57, 109  
Ctrl + PgUp: *Conf* 31, 46, 57  
Ctrl + R: *Conf* 10  
Ctrl + T: *Conf* 10  
Ctrl + Y: *Conf* 34  
Cursor Keys: *Conf* 9, 10, 14, 15, 20, 24, 29, 31, 34, 46, 57, 109, 116, 125, 171  
Del: *Conf* 10, 34, 46, 57, 109, 116, 125, 171  
End: *Conf* 10, 34, 55, 109, 116  
Esc: *Conf* 10, 15, 24, 27, 31, 44, 46, 55, 57, 109, 116, 155, 171  
F1: *Conf* 109  
F10: *Conf* 21, 27  
Graphic Characters: *Conf* 9, 125, 126  
Home: *Conf* 10, 34, 46, 109, 116  
Ins: *Conf* 10, 34, 46, 109, 125  
PgDn: *Conf* 24, 44, 46, 55, 57, 109, 125, 155, 171  
PgUp: *Conf* 24, 44, 46, 55, 57, 109, 125, 155, 171  
Return: *Conf* 10, 14, 15, 20, 24, 27, 28, 34, 43, 55, 57, 63, 70, 109, 116, 125  
shift Tab: *Conf* 31, 109, 116, 125, 171  
Tab: *Conf* 29, 31, 109, 116, 125, 171

Key table  
Cursor keys: *Conf 155, 162*  
Esc: *Conf 162*  
PgDn: *Conf 162*  
PgUp: *Conf 162*  
Key text buffer: *Conf 13*  
Keyboard: *Conf 9–16*  
Keyboard buffer. *See Learning, Lernen*

## L

Ladder Diagram, LD: *Beginner 7, 13, 16, 17, 18; Short 2, 3; Conf 26, 43, 64, 95*  
LD editor: *Conf 26, 43, 44, 45, 47, 48, 50, 51, 52, 53, 98*  
Learning: *Conf 12*  
Lineeditor: *Conf 10*  
Lines/Page: *Conf 221*  
Link Mode: *Conf 136, 210*  
Automatic adjustment: *Conf 136, 211*  
Complete Retranslation: *Conf 136, 210*  
Without comments: *Conf 136, 211*  
Without Retranslation: *Conf 136, 211*  
Load: *Conf 5, 18, 135–151*  
BLA4: *Library 16*  
BLA5: *Library 17*  
BLA6: *Library 18*  
Bootload: *Conf 5*  
Compare: *Conf 5, 143*  
DLA4: *Library 21, 22*  
DLA6: *Library 23*  
Exchange on–line: *Conf 138–140*  
Exchange online: *Conf 5*  
LA6: *Library 44*  
LBS: *Library 45*  
Load Modsoft: *Conf 5*  
Parameters for Slave: *Conf 5*  
Program Link: *Conf 5, 136*

Program to PLC: *Conf 5, 137*  
Read Equipment list: *Conf 5, 140*  
Read out PLC: *Conf 5, 141–142*  
Read RTU Parameters: *Conf 5*  
Set Date/Time: *Conf 5, 148–149*  
Load High Data, LHD: *Conf 84*  
Load Low Data, LLD: *Conf 84*  
Load Modsoft: *Conf 150*  
Load on–line list: *Conf 168*  
Loadable Basic Software: *Conf 149*  
local cross reference list: *Conf 184*  
Lower Limit Value: *Library 35*

## M

Mass flow, SB: *Library 57*  
Maximum Block Number: *Conf 209*  
Memory Type: *Conf 211*  
Menu lines, Editing: *Conf 22*  
MODE: *Library 34, 97*  
MODE-combinations: *Library 102*  
Modem–Connection: *Conf 225*  
Addition: *Conf 226*  
Dialling: *Conf 226*  
hang up: *Conf 226*  
Init–String: *Conf 226*  
Telephone number: *Conf 226*  
Modify network: *Conf 30*  
Modsoft AKF User Club, Services:  
*Instal 11*  
Module, ADU 204: *Short 44*  
Module–related (module/block)  
ADU204/PT100: *Library 54*  
POS 202, ZAE201/WEG: *Library 86*  
TXT201/TXT\_RCV: *Library 70*  
TXT201/TXT\_SEND: *Library 73*  
TXT201/TXT\_WRTE1: *Library 76*  
TXT201/TXT\_WRTE2: *Library 78*  
ZAE201/ZAE: *Library 108*  
ZAE204/ZAE204: *Library 94*

## Modules

ADU 204: *Conf* 119  
ADU 205: *Short* 44; *Conf* 106, 119  
ADU 206: *Conf* 119  
Analog I/O: *Conf* 119  
CPU: *Conf* 118  
DAO 216: *Conf* 119  
DAP 204: *Conf* 119  
DAP 208: *Conf* 119  
DAP 209: *Conf* 119  
DAP 212: *Conf* 119  
DAP 216: *Conf* 119  
DAP 220: *Conf* 119  
DAU 202: *Conf* 119  
DAU 208: *Conf* 119  
DEO 216: *Conf* 119  
DEP 208: *Conf* 119  
DEP 209: *Conf* 119  
DEP 216: *Conf* 119  
DEP 218: *Conf* 119  
DEP 220: *Conf* 119  
Digital I/O: *Conf* 119  
DNO 201: *Conf* 120  
DNP 205: *Conf* 120  
erase: *Conf* 121  
Intelligent modules: *Conf* 120  
KOS 201: *Conf* 120  
KOS 202: *Conf* 120  
Other modules (power supply ...):  
    *Conf* 120  
ZAE 201: *Conf* 120  
ZAE 204: *Conf* 120

## Monitoring

DSKAL: *Library* 24  
GRENZ: *Library* 39  
LIN: *Library* 48  
SKAL: *Library* 63  
Mouse: *Conf* 8, 43, 54  
Move Area: *Conf* 113  
MS-DOS: *Conf* 198  
    *See* Operating System  
MW Mode: *Conf* 158

## N

nesting depth: *Short* 2, 3; *Conf* 69  
Network  
    Dynamic Status Display: *Conf* 40  
    Presetting: *Conf* 41  
Network Comment, IL/LD/FBD: *Conf*  
    34  
Network Number: *Conf* 70  
Network Search: *Conf* 39  
Network Title, Correction: *Conf* 33  
Network Comment, IL/LD/FBD, Editor:  
    *Conf* 34  
Next Record, Dyn. Status Display:  
    *Conf* 162  
Normal-Font: *Conf* 217  
Normally  
    closed contact correction: *Conf* 48  
    closed contact in the parallel path:  
        *Conf* 53  
    open contact correction: *Conf* 47  
    open contact in the parallel path:  
        *Conf* 52  
not equal, LD/FBD: *Conf* 104  
not equal, IL: *Conf* 92  
Numeric Keypad: *Conf* 9

## O

OFF-delay, TOF, IL: *Conf* 78  
OFF-delay, TOF, LD/FBD: *Conf* 104  
OGW: *Library* 36  
On-line: *Conf* 152–177  
    Dynamic status display: *Conf*  
        153–167  
    On-line list: *Conf* 168–176  
    Start PLC: *Conf* 152  
    Stop PLC: *Conf* 153  
On-line list triggered, dyn. status  
display: *Conf* 167  
On-line List, Dyn. Status Display:  
    *Conf* 158  
on-line list, signal types: *Conf* 170



On-line, Dynamic Status Display,  
   Start: *Conf 154*  
 ON-delay storing, TS, LD/FBD: *Conf 103*  
 ON-delay, TON, IL: *Conf 78*  
 ON-delay, TON, LD/FBD: *Conf 103*  
 Online: *Beginner 4; Conf 6, 18*  
   Dynamic status display: *Conf 6*  
   Online List: *Conf 6*  
   PC Status: *Conf 6*  
   PLC Status: *Conf 177*  
   Start PLC: *Conf 6*  
   Stop PLC: *Conf 6*  
 Operand: *Library 3*  
 Operand Identifier: *Library 3*  
 Operand Value Ranges: *Short 16*  
 Operands: *Beginner 12; Short 14*  
 Operating System MS-DOS: *Conf 6, 205*  
 Operation: *Beginner 12; Library 3*  
 Operational Mode: *Library 34*  
 Operations for IL, LD, FBD: *Short 18–30*  
 OR block correction: *Conf 59*  
 Organization block OB: *Beginner 16*  
 Organization Block, OB: *Beginner 12, 13, 14, 17, 18, 20; Short 2; Conf 23, 26, 29, 50, 63, 95, 97, 132, 136*  
 Organization Block, OB1: *Conf 64*  
 OUT: *Library 12, 55*  
 Output correction: *Conf 49*  
 Output Monitoring : *Conf 107*  
 Output Unit: *Conf 145, 214*  
 Overview  
   Page backwards: *Conf 25*  
   Page forwards: *Conf 25*  
   Search: *Conf 25*  
   terminate: *Conf 25*

## **P**

P1: *Library 90, 113*  
 P2: *Library 90, 113*  
 P3: *Library 90*  
 PADT: *Conf 9, 13*

page backward, dyn. status display:  
   *Conf 156*  
 page forward, dyn. status display:  
   *Conf 156*  
 Page Mode: *Conf 184*  
 Parallel path: *Conf 52*  
 Parameter: *Library 3*  
   Parameter Types: *Library 5*  
   Value range: *Library 6*  
 Parameters during Formatting: *Conf 200*  
 Parameters for Slave: *Conf 150*  
 Parity: *Conf 216*  
 Path, Explanation: *Conf 18*  
 PLC Set up: *Conf 149*  
 PLC Station Name: *Conf 209*  
 PLC Switch-off behaviour. *See*  
   Switch-off behaviour  
 Position Sensing  
   POS 202, ZAE 201: *Library 86*  
   SFB32, WEG: *Library 86*  
 Positioning, WEG: *Library 86*  
 Presetting: *Conf 42*  
 Presetting in the correction mode:  
   *Conf 36*  
 Presetting, Dyn. Status Display: *Conf 160*  
 Previous record, Dyn. Status Display:  
   *Conf 163*  
 Print: *Beginner 4; Conf 6, 18, 179–191*  
   Complete Documentation: *Conf 6, 191–192*  
   Cross Reference List: *Conf 6, 187–188*  
   Equipment List: *Conf 6, 191*  
   Overview: *Conf 6, 180–182*  
   Program protocol: *Conf 6, 183–184*  
   Signal Assignment List: *Conf 6*  
   Signal Occupancy List: *Conf 189*  
   Symbols and Comments: *Conf 6, 185–186*  
 Print formfeed: *Conf 222*  
 Print Lines/Page: *Conf 221*

Print Start Page Number: *Conf* 182  
 Print Title Block: *Conf* 181  
 Print Title Block File: *Conf* 182  
 Printer Interface: *Conf* 216  
 Printer\_xyz: *Conf* 221  
 Program Block, PB: *Beginner* 12, 13, 14, 16, 17, 18, 20; *Conf* 26, 29, 50, 63, 64, 65, 69, 95, 97, 132  
 Program flowchart. *See* Introduction  
 Programming Example: *Beginner* 61  
 Pulldown Menus  
   Analog I/O modules: *Conf* 119  
   Archive Station: *Conf* 193  
   Compare: *Conf* 143  
   Compare Blocks: *Conf* 143  
   Compare equipment lists: *Conf* 147  
   Compare Program: *Conf* 146  
   Compile data blocks: *Conf* 134  
   Copy Disks: *Conf* 201  
   Copy Files: *Conf* 203  
   Digital I/O modules: *Conf* 119  
   Dyn. Status Display Network: *Conf* 40  
   Dynamic Status Display: *Conf* 153, 155  
   Edit Block: *Conf* 26  
   Edit Equipment List: *Conf* 116  
   Edit FBD: *Conf* 56  
   Edit IL: *Conf* 31  
   Edit network: *Conf* 43, 54  
   Edit on-line list: *Conf* 172  
   enter modules: *Conf* 117  
   Exchange On-line: *Conf* 138  
   Format Disks: *Conf* 198  
   Intelligent modules: *Conf* 120  
   LD editor: *Conf* 45  
   Link Mode: *Conf* 210  
   Load: *Conf* 135  
   Main menu: *Conf* 19  
   On-line: *Conf* 152  
   On-line list: *Conf* 168  
   other modules (power supply ...): *Conf* 120  
   Output Unit: *Conf* 145, 214  
   Parameterize ALU: *Conf* 121  
   PC Status: *Conf* 177  
   Print: *Conf* 179  
   Print Complete Documentation: *Conf* 191  
   Print Cross Reference List: *Conf* 187  
   Print Equipment List: *Conf* 191  
   Print Overview: *Conf* 180  
   Print Signal Occupancy List: *Conf* 189  
   Printer selection: *Conf* 215  
   Replace signals: *Conf* 128  
   Restore a Station: *Conf* 195  
   SeTup: *Conf* 207  
   Setup Print: *Conf* 214  
   Special: *Conf* 192  
   Station: *Conf* 208  
   Symbols and Comments: *Conf* 108  
   Title Block: *Conf* 124  
   Pulldown-Menu, CPU: *Conf* 118  
   Pulldown-Menus  
     Trigger conditions: *Conf* 164  
     triggered display: *Conf* 161  
     Triggered Display, choose block: *Conf* 162  
     Triggered Display, choose record: *Conf* 163  
     Triggered record: *Conf* 160  
   Pulse (Monoflop), TP, IL: *Conf* 78  
   Pulse extended, TEP, LD/FBD: *Conf* 102  
   Pulse, TP, LD/FBD: *Conf* 102

## R

Range of values: *Short* 14, 15  
 RDY: *Library* 72, 75  
 Read RTU Parameters: *Conf* 151  
 Reading out to Plant: *Conf* 142  
 recursion: *Beginner* 20  
 recursive call: *Short* 3; *Conf* 69  
 Reference Characters: *Conf* 9, 14, 15, 18, 20, 43, 54, 179

Replace Old and/or New Signal: *Conf* 130  
 Reproduction: *Beginner* 10  
 RESET: *Library* 92, 113  
 Restore from Station: *Conf* 196  
 Restore to Station: *Conf* 197  
 Rotate left, ROL: *Conf* 80  
 Rotate right, ROR: *Conf* 80  
 RS Flipflop  
   IL: *Conf* 75  
   LD/FBD: *Conf* 98  
 Rules Instruction List  
   Arithmetic operations: *Conf* 90  
   Bracket operation: *Conf* 72  
   Comparator: *Conf* 92  
   Connector: *Conf* 74  
   Conversion: *Conf* 93  
   Counter: *Conf* 76  
   Edge detection: *Conf* 79  
   Flipflop Operations: *Conf* 75  
   FREE instruction: *Conf* 89  
   Increment, Decrement: *Conf* 80  
   Initializing Pulse: *Conf* 71  
   Jumps: *Conf* 88  
   Loading, Arithmetic: *Conf* 90  
   Loading, Transfer: *Conf* 81, 82, 83  
   Logic operation sequence: *Conf* 73  
   Marker Bit: *Conf* 72  
   Network beginning/end: *Conf* 71  
   NOP-Instruction: *Conf* 89  
   Rotate: *Conf* 80  
   Shift: *Conf* 79  
   Standardizing operation: *Conf* 73  
   Timers: *Conf* 78  
   Two's complement: *Conf* 91  
  
**S**  
 Scan times (User Program): *Short* 42  
 Screensave: *Conf* 11  
 Scroll network  
   Backwards: *Conf* 37  
   Forwards: *Conf* 37  
 Search for network, Dyn. Status  
   Display: *Conf* 157  
   Search for Signal, Dyn. Status  
     Display: *Conf* 157  
   Search Function: *Conf* 111  
   Searching Operands: *Conf* 111  
   SET: *Library* 37, 105  
   SeTup: *Beginner* 4; *Conf* 6, 18, 207–226  
     Color: *Conf* 6, 224–225  
     PLant: *Conf* 6, 208  
     PLC station: *Conf* 6  
     Printer: *Conf* 6, 214–223  
     Station: *Conf* 208–213  
   Setup, Modem–Connection: *Conf* 6  
   Shift, SHW: *Library* 59  
   Shift left, SHL: *Conf* 79  
   Shift right, SHR: *Conf* 79  
   Signal List: *Conf* 186  
   Signal Memory Scanning: *Library* 38  
   Signal search: *Conf* 38  
   smaller than, LD/FBD: *Conf* 104  
   smaller than, IL: *Conf* 92  
   smaller than/equal, LD/FBD: *Conf* 104  
   smaller than/equal, IL: *Conf* 92  
   Software  
     Call: *Instal* 10  
     Installation: *Instal* 8  
   Special: *Beginner* 4; *Conf* 6, 18, 192–206  
     Archive Station: *Conf* 6, 193–195  
     Copy Disks: *Conf* 6, 201–202  
     Copy Files: *Conf* 6, 203–205  
     Directory: *Conf* 6, 192  
     End of Station Handling: *Conf* 6, 206–207  
     Erase a Station: *Conf* 6, 197  
     Erase Files: *Conf* 6, 202  
     Format Disks: *Conf* 6, 198–200  
     Operating System MS-DOS: *Conf* 6, 205  
     Restore a Station: *Conf* 6, 195–197  
     System Information: *Conf* 6, 206  
   Special keys: *Conf* 14

Spread Horizontal correction: *Conf* 46, 61  
 Spread Vertical: *Conf* 47  
 Spread Vertical correction: *Conf* 61  
 SR Flipflop  
     IL: *Conf* 75  
     LD/FBD: *Conf* 98  
 Standard Function Block, SFB:  
     *Beginner* 16, 21  
 Standard Function Blocks  
     Block Structure: *Library* 2  
     Condition entry: *Library* 4  
 Standard function blocks  
     ADU205, SFB 85: *Library* 9  
     ADU4\_20, SFB 411: *Library* 13  
     BLA4, SFB 413: *Library* 16  
     BLA5, SFB 414: *Library* 17  
     BLA6, SFB 415: *Library* 18  
     DAU4\_20, SFB 411: *Library* 19  
     DLA4, SFB 143: *Library* 21  
     DLA5, SFB 144: *Library* 22  
     DLA6, SFB 416: *Library* 23  
     DSKAL, SFB 433: *Library* 24  
     FRQ204, SFB 87: *Library* 31  
     GRENZ, SFB 436: *Library* 39  
     LA4, SFB 138: *Library* 42  
     LA5, SFB 139: *Library* 43  
     LA6, SFB 140: *Library* 44  
     LBS, SFB 128: *Library* 45  
     LINW, SFB 439: *Library* 48  
     PT100, SFB 86: *Library* 54  
     SB, SFB 122: *Library* 57  
     SHW, SFB 124: *Library* 59  
     SKAL, SFB 430: *Library* 63  
     TXT\_RCV, SFB 91: *Library* 70  
     TXT\_SEND, SFB 90: *Library* 73  
     TXT\_WRTE1, SFB 92: *Library* 76  
     TXT\_WRTE2, SFB 93: *Library* 78  
     VBIS, SFB 111: *Library* 80  
     VBYS, SFB 420: *Library* 82  
     VWS, SFB 110: *Library* 84  
     WEG, SFB 32: *Library* 86  
     ZAE, SFB 31: *Library* 108  
     ZAE204, SFB 33: *Library* 94  
 Start Archiving: *Conf* 194  
 Start Block Comparison: *Conf* 144  
 Start Copying Disks: *Conf* 201  
 Start Copying Files: *Conf* 203  
 Start display, Dyn. Status Display:  
     *Conf* 161  
 Start Dynamic Status Display: *Conf* 154  
 Start Entry: *Conf* 27, 124  
 Start Exchange: *Conf* 140  
 Start Formatting: *Conf* 198  
 Start Page Number: *Conf* 182  
 Start PLC, Dyn. Status Display: *Conf* 159  
 Start Print: *Conf* 180  
 Start Reading: *Conf* 141  
 Start Replace: *Conf* 129  
 Start Restoring: *Conf* 196  
 Start Translation (DB): *Conf* 134  
 Station Name (reading): *Conf* 142  
 Status display (on-line list): *Conf* 172  
 Stop PLC, Dyn. Status Display: *Conf* 159  
 Stop-Bits: *Conf* 217  
 Store on-line list: *Conf* 175  
 Storing ON-delay TS, IL: *Conf* 78  
 Structure of instruction line: *Beginner* 11  
 Structured Programming: *Beginner* 5  
 SW: *Library* 104  
 Swich-off behaviour PLC: *Conf* 123  
 SYM/COM-Block: *Beginner* 16  
 Symbols and Comments  
     Start: *Conf* 108  
     Terminate: *Conf* 110  
 System Markers: *Short* 6  
     (bit) from center: *Short* 7–12  
     (bit) of the nodes: *Short* 9–12  
     (byte) of the I/O-periphery: *Short* 11  
     (bytes) of the center: *Short* 10–12  
     (double word) of the center: *Short* 12  
     (word) of the center: *Short* 12  
     definition: *Short* 6  
     Short description: *Short* 5

## T

Terminate (on-line list): *Conf 176*  
Terminate (save): *Conf 37*  
Terminate in the correction mode:  
*Conf 33*  
Text memory Editor: *Conf 114*  
Text processing  
  TXT\_RCV: *Library 70*  
  TXT\_SEND: *Library 73*  
  TXT\_WRTE1: *Library 76*  
  TXT\_WRTE2: *Library 78*  
TIME: *Library 33*  
Time: *Conf 149*  
Time Base: *Library 33*  
Time base TP, TEP, TON, TS, TOF:  
*Conf 78*  
Time-critical processes: *Beginner 6*  
Timers  
  IL: *Conf 78*  
  LD/FBD: *Conf 102*  
Title Block: *Conf 181*  
  Height: *Conf 127*  
  Name: *Conf 126*  
  Width: *Conf 126*  
Title Block Editor: *Conf 124*  
Title Block File: *Conf 182*  
To Plant (read out): *Conf 142*  
Toggling: *Conf 15, 26, 70*  
Transfer High Data, THD: *Conf 86*  
Transfer Low Data, TLD: *Conf 86*  
Trigger conditions: *Conf 163*  
Triggered Display, Dyn. Status  
  Display: *Conf 161*

Triggered record, dyn. Status Display:  
  *Conf 160*  
Triggered Status Display, Examples:  
  *Conf 165*  
TXT-Blocks: *Library 70, 73, 76, 78*  
Typewriter keyboard: *Conf 9, 14*

## U

UGW: *Library 35*  
Up-/down-counter, CUD: *Conf 77*  
Up-/down-counter CUD, LD/FBD:  
  *Conf 101*  
up-counter, CTU: *Conf 76*  
up-counter, LD/FBD: *Conf 99*  
Update forcing (on-line list): *Conf 173*  
Upper Limit Value: *Library 36*  
User drive during formatting: *Conf*  
  199

## V

V\_R1: *Library 109*  
V\_R2: *Library 109*  
Validity Ranges of the Software  
  Modsoft AKF – Micro: *Short 2*  
Value range: *Library 6*  
VI: *Library 37, 92, 105, 113*

## W

WAF: *Library 12, 37, 55, 72, 75, 77,*  
  79, 92, 113  
Warm restart: *Instal 8*  
wildcards: *Conf 130*  
WORK: *Library 96*

