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MELSEC MEDOC – Start-up guide

Important!
Read this before you install MELSEC MEDOC:

Copy protection: MELSEC MEDOC is not copy protected. In the licence contract it is described how to copy MELSEC MEDOC.

Licence contract: Enclosed you will find a contract, which is to be filled in and returned to Beijer Electronics.

Uninstallation: Remove all MELSEC MEDOC files from the hard disk by entering (if update version)

C:\>CD MEDOC - change directory to MELSEC MEDOC
ERASE MEDOC.* - remove MELSEC MEDOC files
ERASE *.TYP - remove type files

Installation: Insert the system disk to drive A and type:

A:INSTALL A: C:\MEDOC (DOS version)
A:SETUP [J] (32-bit version)

MELSEC MEDOC installs in directory C:\MEDOC.

Start MELSEC MEDOC 32-bit
Start MELSEC MEDOC from the Start-menu,
Start - Programs - MELSEC MEDOC.

Start MELSEC MEDOC DOS
Start by changing to the directory that MELSEC MEDOC is located in.
Example:

C:\CD MEDOC [-J]

Change to the directory MEDOC
Start MEDOC by entering:

MEDOC [-J]
Start options

The different start options affect the on-screen presentation and activate extended memory management.

Suitable start option for MELSEC MEDOC on PCs running Windows is **MEDOC E3**.

Examples of other start options (MEDOC):

- **MEDOC H2**  High resolution mode
- **MEDOC H3**  High resolution mode + compressed ladder diagram
- **MEDOC E3**  Activates extended memory management. Saves the PLC-program on the hard drive.
- **MEDOC ?**   Lists all the start options on-screen.
Create a new project

- Start
- New_Proj
- Select PLC type
- Name the project

Open a project

- Start
- Open
- Select the project

Programming

- Edit
- Name
- Instr
- Ladder

- F2 – to the working area
- F5 – insert
- Enter – change
- F6 – delete

- F5 – exit insert
- F2 – leave the working area
- Save

- F7 – start ladder programming
- Enter – changing the I/O
- F6 – delete the rung

- F5 – exit ladder programming
Transfer to the PLC

Transfer

PLC

Medoc > PLC
-answer the questions

Transfer from the PLC

Transfer

PLC

PLC > Medoc
-answer the questions

Find the I/O, name or step

Edit

Instr

Ladder

F2 – to the working area

0 – find step zero

Enter I/O or name

Enter, Enter… – find, find next

Esc – cancel search when right position has been found

Edit, monitor, etc.
Monitor mode (status display)

<table>
<thead>
<tr>
<th>Edit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instr Ladder</td>
</tr>
<tr>
<td>F2 – to the working area</td>
</tr>
<tr>
<td>F8 – status display</td>
</tr>
<tr>
<td>F8 – exit status display</td>
</tr>
</tbody>
</table>

Find the I/O, name or step

Monitor mode (status display) in the name list

<table>
<thead>
<tr>
<th>Edit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instr Ladder</td>
</tr>
<tr>
<td>Name</td>
</tr>
<tr>
<td>Enter the device number</td>
</tr>
<tr>
<td>F8 – status display</td>
</tr>
<tr>
<td>F8 – exit status display</td>
</tr>
</tbody>
</table>
**Set/Reset**

- **Edit**
- **Instr**
- **Ladder**

**F2** – to the working area

**F8** – status display

**F7** – Set/Reset

Enter the device number

- **1** – set to one (digital I/O)
- **0** – set to zero (digital I/O)
- **0-9** – change register content

Note!
The PLC-program is superordinate to the forced setting when the PLC is in RUN mode.

The question regarding confirmation can be removed under Options/Security.
ONLINE-programming (modifying the program in RUN mode)

ONLINE-changes should only be used for minor adjustments such as changing the timer/counter preset or supplementing individual instructions. The program in MEDOC and the PLC must be identical prior to change. The PLC-program may only include one END.

Note!
Entry monitor in the instruction list or ladder diagram

Note!
Saved settings can be retrieved in the Name Window’s Entry monitor or in the Device monitor (F9 in the working area).
Entry monitor in the Name Window

- **Edit**
- **Instr**
- **Ladder**

**Name**

Enter I/O – e.g. X0

**F7** – Select arbitrary I/O
**F9** – I/O above the cursor is copied to the Entry monitor

**Alt+S** – save settings
**Alt+R** – load saved settings

Ten different settings can be saved

**F8** – status display

**F8** – exit status display
Copy to floppy disc

Files

Copy – select the project to be copied

State the name of the copy

Enter destination – e.g. A:\

Enter – carry out copying

Copy from floppy disc to the hard drive

Files

Dir_Set – Note the current setting (shall be reset later)

A:\ – from the disk drive A

Copy – select the project to be copied

State the name of the copy

Enter destination – E.g. the directory you have noted. Directory selection (Dir_Set) can also take place using the function key F8. Exit by indicating a project in the directory.

Enter – carry out copying

Dir_Set – Change to the directory where you have saved the copy. Directory selection (Dir_Set) can also take place using the function key F8. Exit by indicating a project in the directory.
## Function keys

<table>
<thead>
<tr>
<th>Key</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>F1</strong>: Help</td>
<td>Show the help text for the current position.</td>
</tr>
<tr>
<td><strong>F2</strong>: Working area ON/OFF</td>
<td>Jump between the menu area and the working area.</td>
</tr>
<tr>
<td><strong>F3</strong>: Marking</td>
<td>Start/stop, used for example when moving an area.</td>
</tr>
<tr>
<td><strong>F4</strong>: Block name</td>
<td>The block can be selected with “Move”, “Copy” and “Delete”.</td>
</tr>
<tr>
<td><strong>F5</strong>: Name</td>
<td>Display of names on/off.</td>
</tr>
<tr>
<td><strong>F6</strong>: Insert row</td>
<td>Insert row.</td>
</tr>
<tr>
<td><strong>F7</strong>: Delete</td>
<td>Delete line or ladder rung.</td>
</tr>
<tr>
<td><strong>F8</strong>: Ladder editing</td>
<td>Start/stop programming of ladder rung.</td>
</tr>
<tr>
<td><strong>F9</strong>: Status display</td>
<td>Monitoring on/off.</td>
</tr>
<tr>
<td><strong>F10</strong>: Set/Reset</td>
<td>Show further instructions when entering instructions.</td>
</tr>
<tr>
<td><strong>Enter</strong>: Change of existing code or I/O</td>
<td>Copy previous row in the name field, special key in other functions.</td>
</tr>
<tr>
<td><strong>ESC</strong>: Abort</td>
<td>Activation of the selected function.</td>
</tr>
</tbody>
</table>

*Movement in the menu area + [Enter] for selection*

- **F2**: Working area ON/OFF
- **F4**: Names ON/OFF
- **F5**: Insert (Instr/Name)
- **F6**: Delete
- **F7**: Ladder editing
- **F8**: Status display + **F7**: Set/Reset
- **Enter**: Change of existing code or I/O

**F1**
Help: Show the help text for the current position.

**F2**
Jump between the menu area and the working area.

**F3**
Marking: Start/stop, used for example when moving an area.

**F4**
  a) Block name: The block can be selected with “Move”, “Copy” and “Delete”
  b) Name: Display of names on/off.

**F5**
Insert row.

**F6**
Delete line or ladder rung.

**F7**
Start/stop programming of ladder rung.

**F8**
Monitoring on/off.

**F9**
Show further instructions when entering instructions.

**F10**
Copy previous row in the name field, special key in other functions.

**Enter**
Activation of the selected function.

**Esc**
Abort.
Alt-key functions

Alt+H  Cursor in the working area – High resolution mode on/off

Alt+O  Edit-Instr/Ladder. Cursor in the working area.
  – ONLINE programming mode.

Alt+C  Edit-Instr/Ladder. Cursor in the working area.
  – Line comment reading (programming mode)

Alt+T  Edit-Ladder. Cursor in the working area.
  – Logic check of program from beginning to end and
  stop with:
  1. No error: at the start of the last converted section.
  2. With error: at the start of the converted section of
  the program where the error was discovered.

Shortcut keys (hot keys)

Used to quickly move through the menus.

0  Open an existing project (Start Open)
1  Edit the instruction list (Edit Instr)
2  Edit the ladder diagram (Edit Ladder)
3  Edit the name list (Edit Name)
4  Edit parameters (Edit Param)
5  Transfer between MEDOC and the PLC system (Transfer PLC)
6  Transfer between MEDOC and other programming unit
  (Transfer GPP)
7  Printout (Print)
8  File management (Files)
9  Exit MEDOC (Quit Yes)
Troubleshooting

Reading of Error code when ERROR is lit on the PLC system

1. Start MELSEC MEDOC
2. Open the project
3. Select Edit
4. Select Instr or Ladder
5. Select Name and state the channel number for the error code register
   - FX-series Error codes: D8060-D8067
   - Program step: D8069 (if the error is linked to a specific instruction)
   - A-series Error codes D9008 (AnA/AnN also have D9091)
   - Program step D9010 (if the error is linked to a specific instruction)
6. Press F8 for status display of the register. Read the error code and program step.
7. Exit status display by pressing F8.
8. Correct the error.
MEDOC’s connection to the MELSEC PLC system

Converter SC09
The FX0S/FX0/FX0N/FX1S/FX1N/FX2N series

Converter SC09
The FX series

Converter SC09
The A series