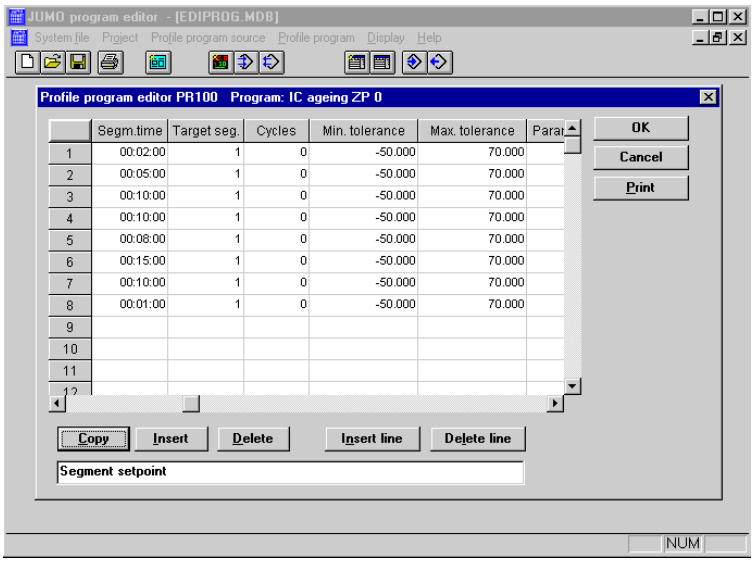


EdiProg

Universal Profile Program Editor

B 70.0754 Operating Instructions

5.99/00374963

Contents

Contents

1.1 Preface

The Universal profile program editor “EdiProg” is software which is intended for the quick and convenient creation of profiles.
Profiles from different JUMO profile instruments can be managed easily, in the form of a hierarchical structure.
These Operating Instructions describe the EdiProg software version 103.02.07 / database version 3.0.

PC knowledge

The processes and concepts described in the operating instructions require substantial experience in using the Microsoft-Windows[1] operating system.

Literature

When entering profiles, the corresponding operating instructions of the profile instruments must be available, since this description only deals with the functions of EdiProg.

1.2 Delivery package

Check every delivery to make sure it is complete and undamaged.
If something is missing or damaged, please contact your nearest subsidiary or the main factory.

Address

M. K. JUCHHEIM GmbH & Co
Moltkestraße 13 - 31
D-36039 Fulda, Germany
Phone in Germany (0661) 60 03-727
from abroad (++49) 661 6003-0
Fax in Germany (0661) 60 03-508
from abroad (++49) 661 6003-607

Delivery

- 3 diskettes
- Operating Instructions
- Software licensing agreement
- Registration card

1. Microsoft and Windows are registered trademarks of Microsoft Corporation

1 Introduction

1.3 Typographical conventions

Warning signs

The signs for **Danger** and **Warning** are used in these Operating Instructions under the following conditions:

Danger
This sign is used when there may be **danger to personnel** if the instructions are disregarded or not followed accurately!

Warning
This sign is used if there may be **damage to equipment or data** if the instructions are disregarded or not followed accurately!

Note signs

Note
This sign is used when your **special attention** is drawn to a remark.

Reference
This sign refers to further information in other manuals, chapters or sections.

abc[1]

Footnote
Footnotes are notes which refer to certain points in the text. Footnotes consist of two parts:

Marking in the text and the footnote text.
The markings in the text are arranged as continuous raised (superscript) numbers.
The footnote text (in smaller typeface) is placed at the bottom of the page and starts with a number and a full stop.

*

Action
This sign indicates that an action to be peformed is described. The individual steps are marked by this asterisk, e.g.:

* Switch off supply

* Pull screw-clamp connectors off the module

Program ➔ New

Command chain

Italic script together with the arrow indicates the “logical” program sequence, i.e. how the function is started from the menu bar.

2.1 Hardware requirements

The following hardware requirements must be met when operating the “Ediprog“ program.

Minimum configuration

- IBM-PC or compatible PC from 486 processor
- 4MB main memory
- 3.5" disk drive
- mouse
- one free serial port (communication with instrument)
- 6.5MB available on hard disk
- VGA graphics

Recommended configuration

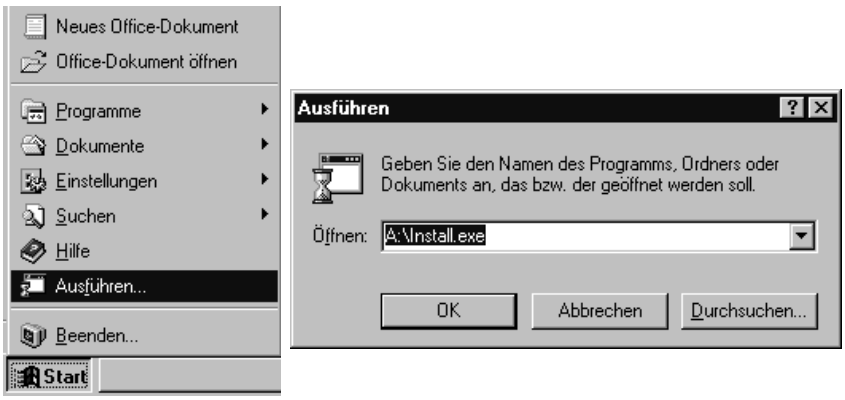
- IBM-PC or compatible Pentium[1] PC
- 8MB main memory
- mouse
- one free serial port (communication with instrument)
- 20MB free disk space
- Super VGA graphics (from 800x600 pixels)

2.2 Software requirements

- Windows 3.1 / 3.11 or Windows 95

2.3 Starting the installation program

* Start Microsoft Windows 95
* Insert diskette 1/3 of the Universal profile program editor
* Call up installation using the *Start* ➔*Run* function
  “a:\install” or “b:\install”, depending on drive letter



* Enter “a:\install” or “b:\install”, depending on drive letter
* Click on *OK*

The installation program will lead you through the rest of the installation with screen messages.

1. Pentium is a registered trademark of Intel Corporation

2 Installation

3 Project planning example

3 Project planning example

3.1 Basic information

The program editor can be used for the convenient creation of profile programs for JUMO profile controllers.

The programs are structured hierarchically in a system file and managed in the form of a database (tree structure). This ensures that the programs are easily saved and recovered.

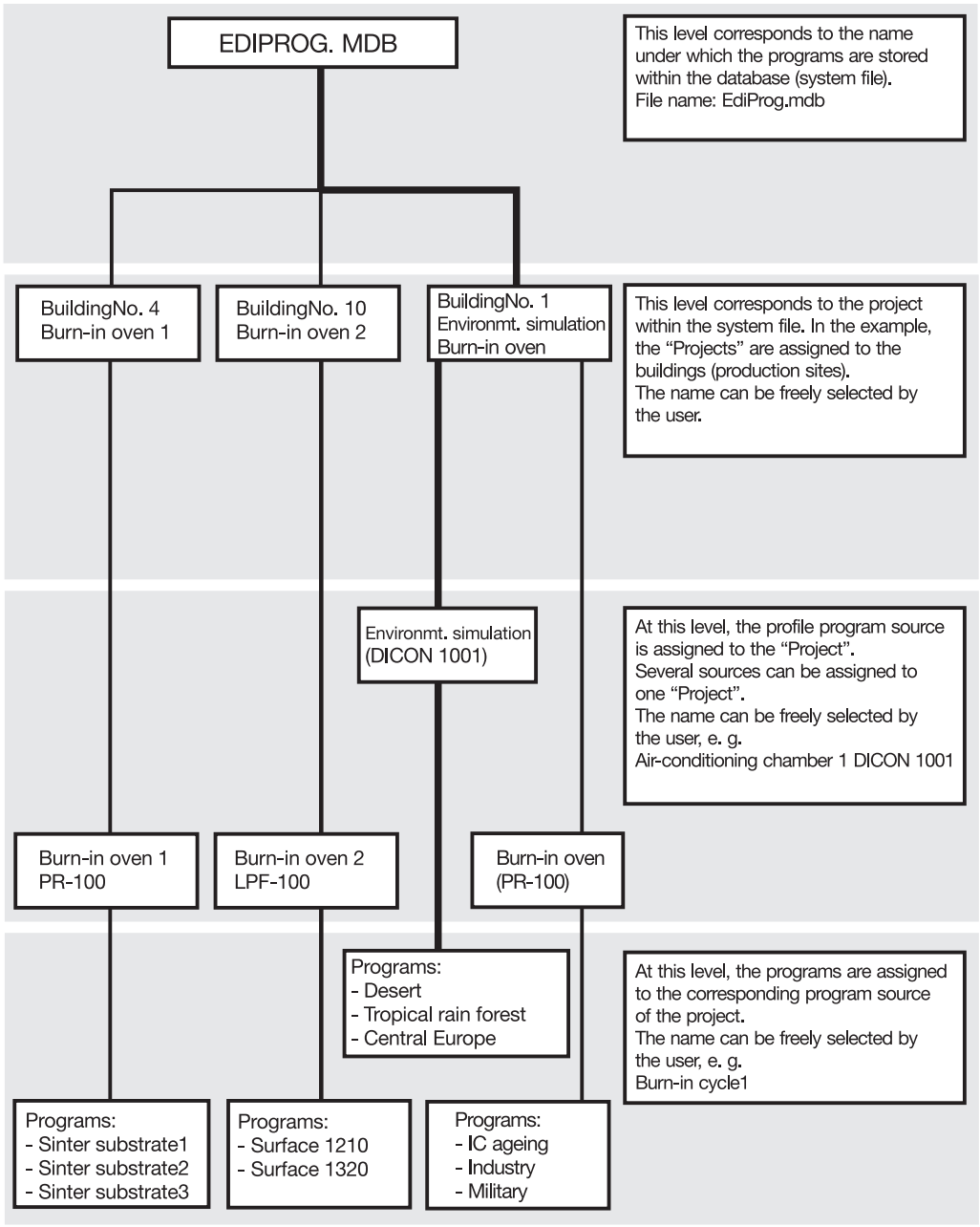
The example below shows the structure of the program management.
The DICON 1001 is used on different production sites for the operation and control of air-conditioning cabinets and burn-in furnaces. When used in production, different profile programs are required, which can be created and managed using the program editor. The path indicated in the picture is described below.

System file (1)

Project (2)

Profile program source (3)

Profile program (4)



The following template (basic display) will appear after the profile program starts. When the program is first started, it creates a system file called EDIPROG.MDB

This chapter describes the direct path to program creation.

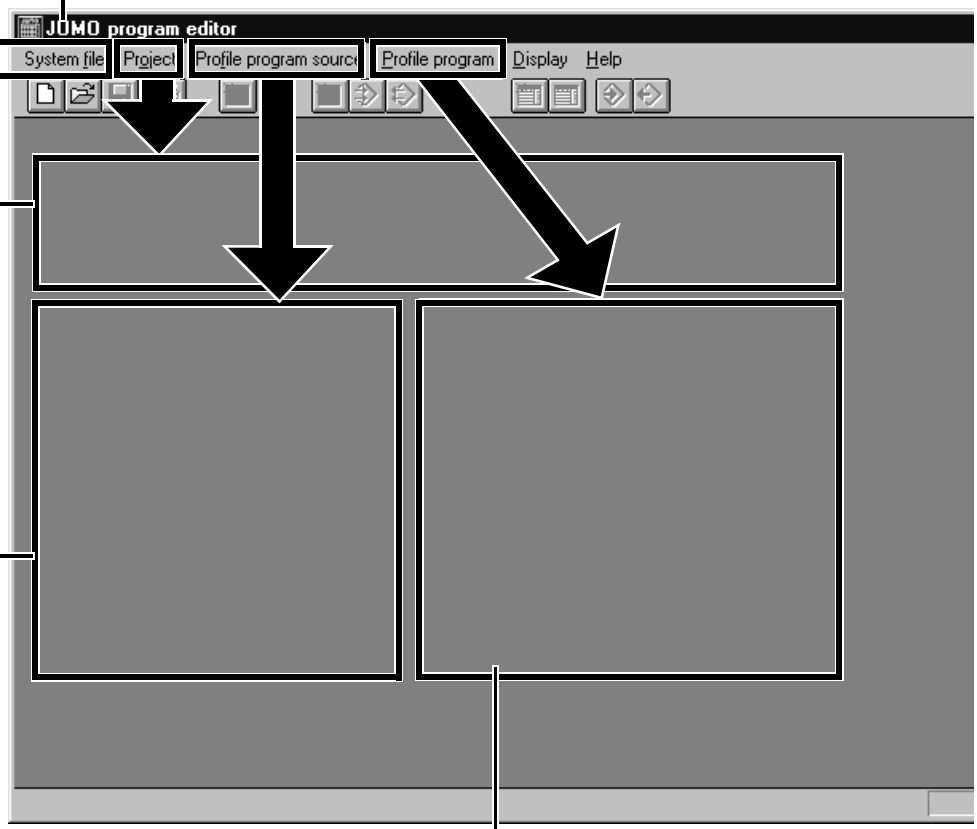
Close applications for setup programs when COM1 or COM2 are used for Ediprog.

(1) System file:
-New
-Open
-Save as
-Close
-Standard settings

(2) Project:
-New
-Edit
-Save as
-Delete

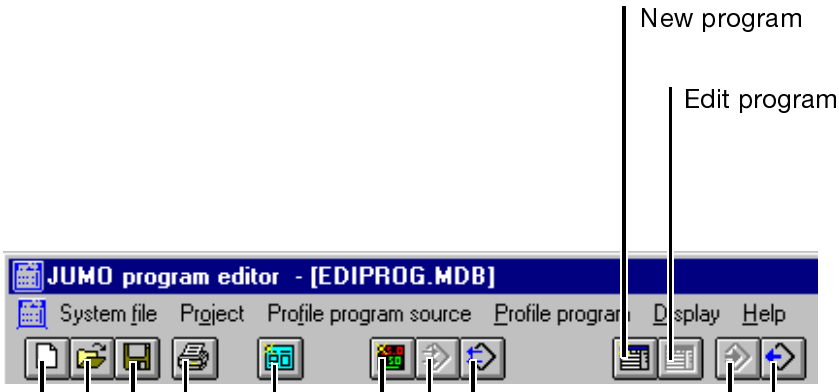
(3) Program source:
-New
-Edit
-Save as
-Delete

(4) Profile program:
-New
-Edit
-Save as
-Rename
-Delete



3.2 Explanation of the toolbar

The individual menu items can be called up quickly and directly using the buttons on the toolbar.
In the description below, these symbols are shown on the left side:



New program

Edit program

Read program from device

Transmit program to device

Load all programs from device
⇨ Section 4.3.6 “Transfer”

Transfer all programs to device
⇨ Section 4.3.6 “Transfer”

New program source
⇨ Section 3.5 “Profile program source”

New project
⇨ Section 3.4 “Project”

Print project
⇨ Section 3.4 “Project”

Save database as

Open database
⇨ Section 3.3 “System file”

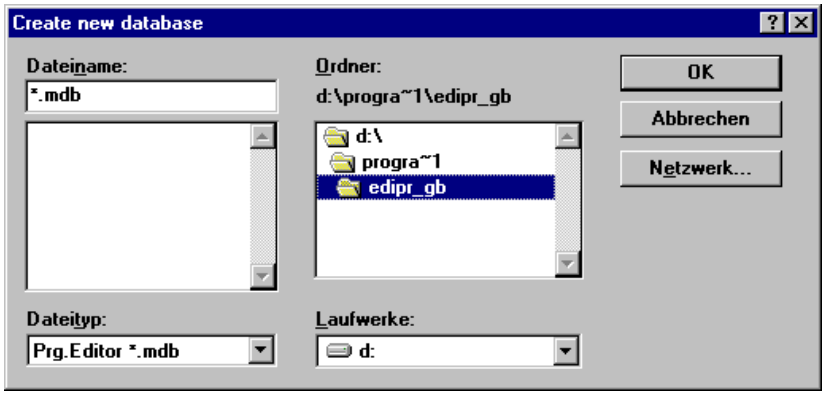
Database new
⇨ Section 3.3 “System file”

Functions which are shown greyed out cannot be executed.

3.3 System file

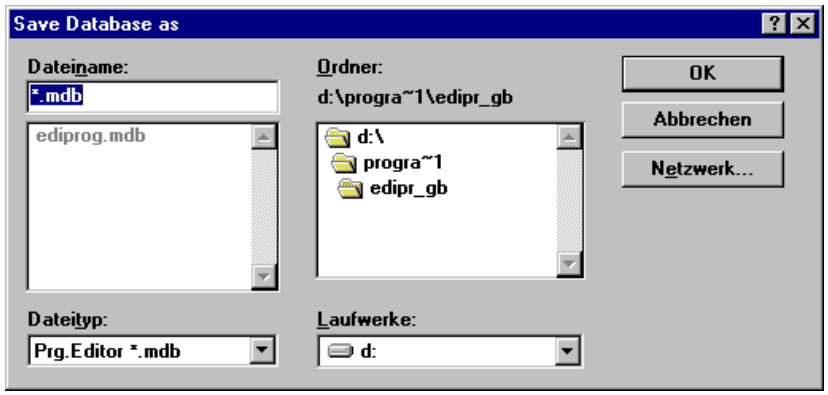
Create

Next, a new database name which corresponds to the application is assigned. The program automatically suggests the name “ediprog.mdb”.



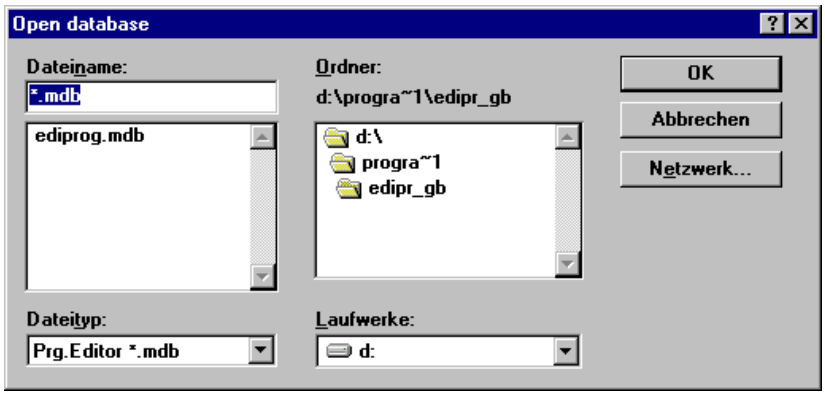
The menu item *System file* ➔*Save as* can also be used to assign a different name.

Save as



Open

If a database already exists, it is also possible to open a database at this point.



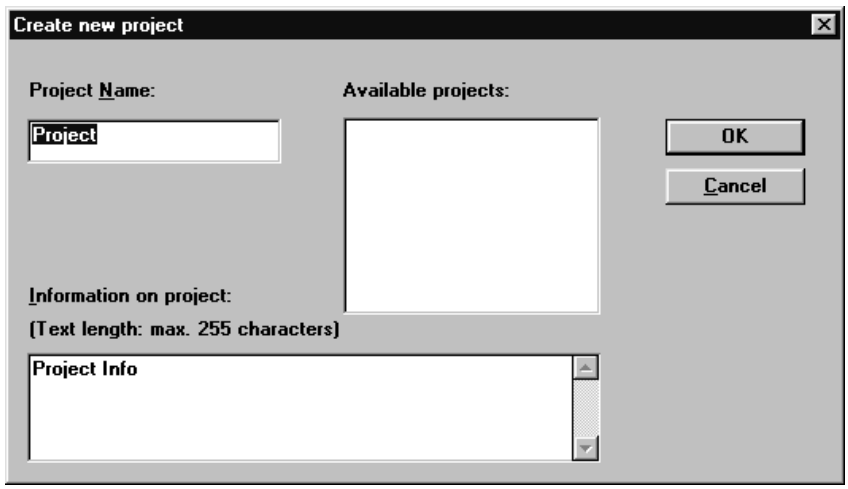
3 Project planning example

3.4 Project

Create new project

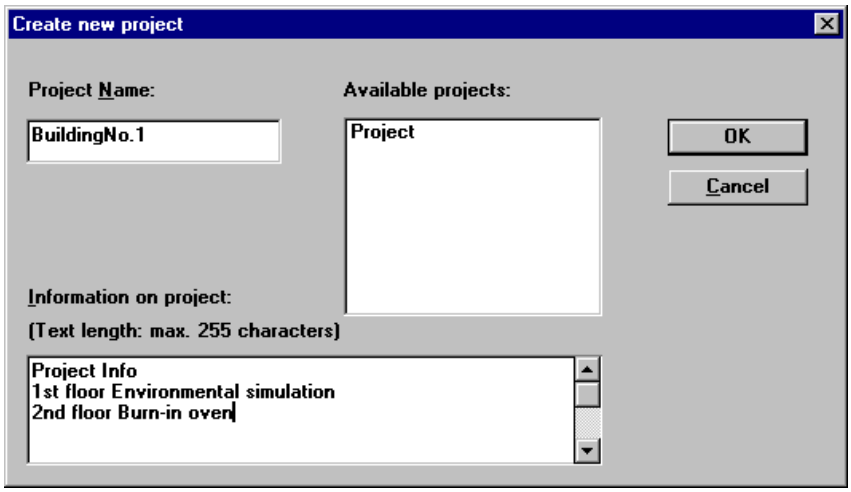
The entire system file is divided into different projects. The example below shows the division into different buildings (click on the ProjectName field).

Project (2)



* Enter project name

An info text of max. 255 characters can be entered for each project.
If the program is to be processed later, it can be easily recovered. Information could be given here on which chambers can be found in the building, for example.

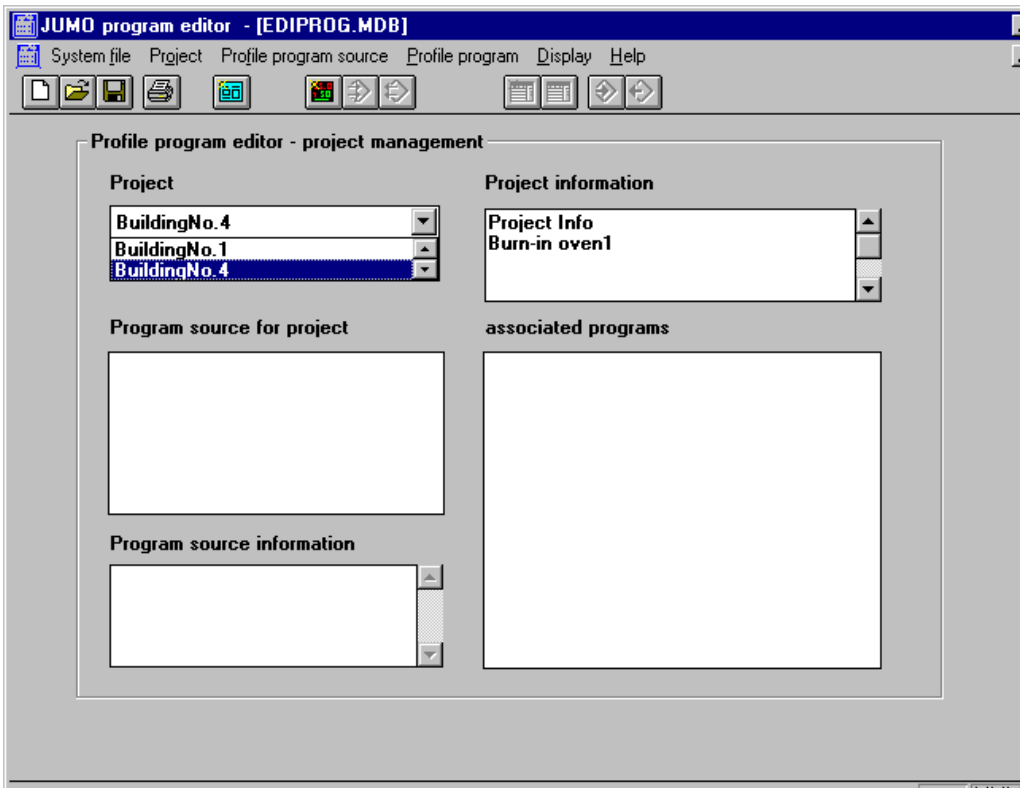


* Confirm with *OK*
* Enter next project

When all projects have been set up, then the corresponding program source (in the example: DICON 1001) can be assigned. To this end, the appropriate project name has to be selected in the “Profile program editor - project management” template.

Example

* Select project “Building No.1” by clicking on the selector field.



3 Project planning example

3.5 Profile program source

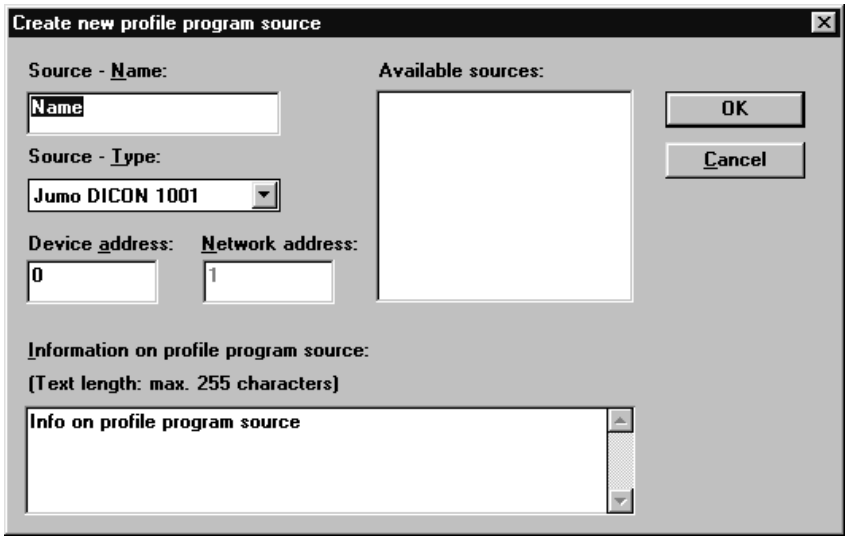
The term “profile program source” indicates a JUMO profile instrument which is selected in the subsequent template.

Create new profile program source

✱ Select *Profile program source* ➔*New*

A dialog appears in which the program source used is defined.

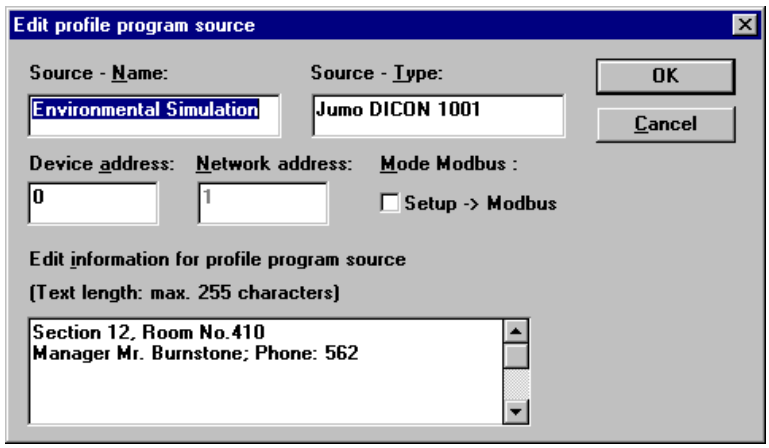
Profile program source (3)



An info text with max. 255 characters can be entered for each program source. If the program is to be processed later on, then it can be easily recovered. Information about the process can be given here, for example.

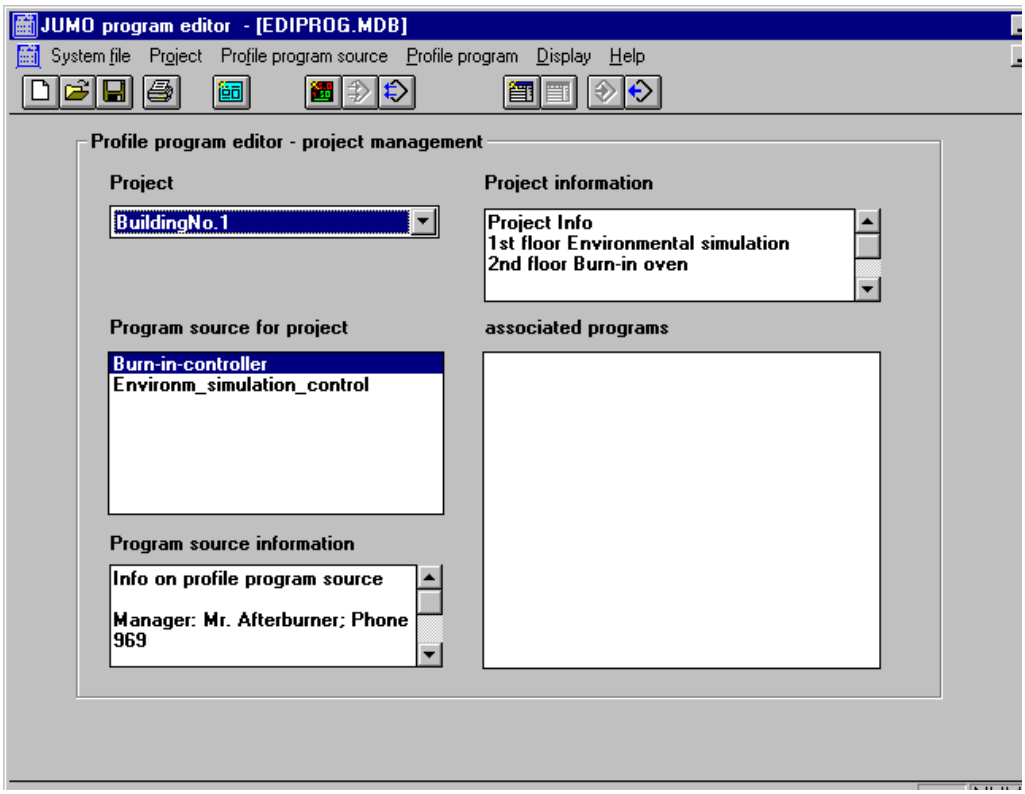
✱ Confirm with *OK*

Example



After all program sources have been entered in this project, then the profile program can be created. To do this, the required “profile program source” (simulation of environment) has to be selected within the program editor project management.

* Select profile program source “Simulation of environment” by clicking on the selector field.



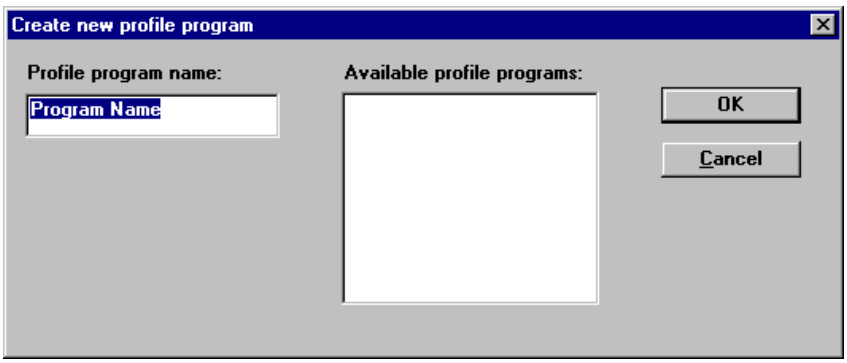
At this point, the input structure, which is identical for all program sources, ends.
The text below deals with the creation of profiles for the different JUMO instruments.

3.6 JUMO DICON 1001

* Click on *Profile program* ➔*New* in the toolbar

New profile program

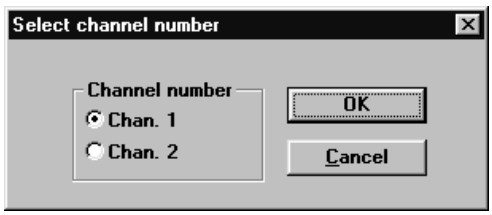
Profile program (4)



* Enter program name (desert, tropical rain forest etc.)

3.6.1 Select channel number

Two profiles can be selected under the program name (channel 1 / channel 2).

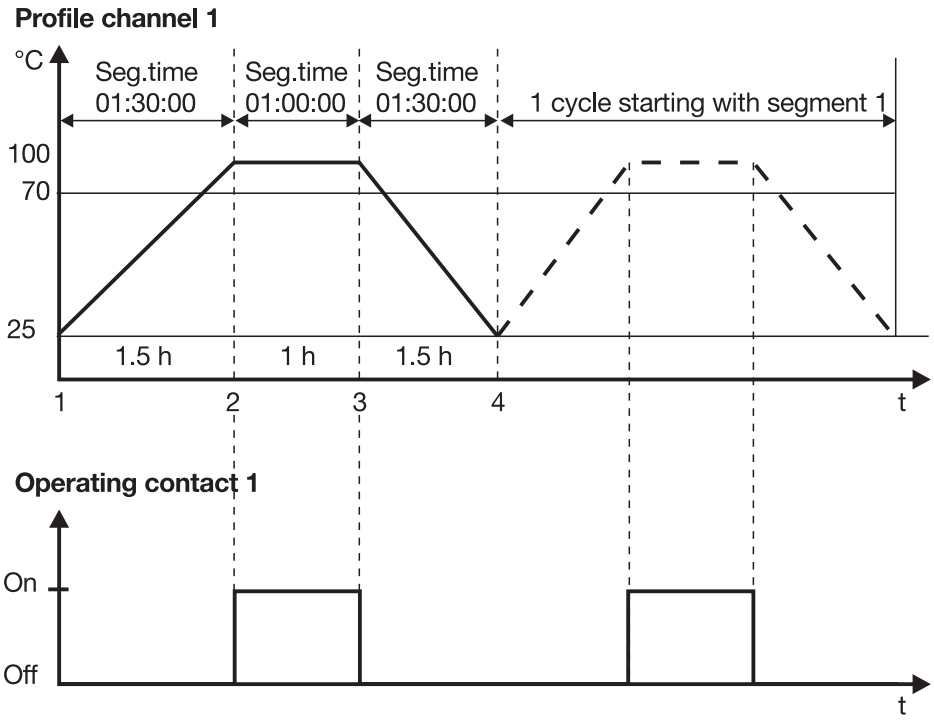


With the program editor, counting of the segments starts at segment 1 (corresponds to segment 0 in the device).

The following profile shows the entry in the program dialog:

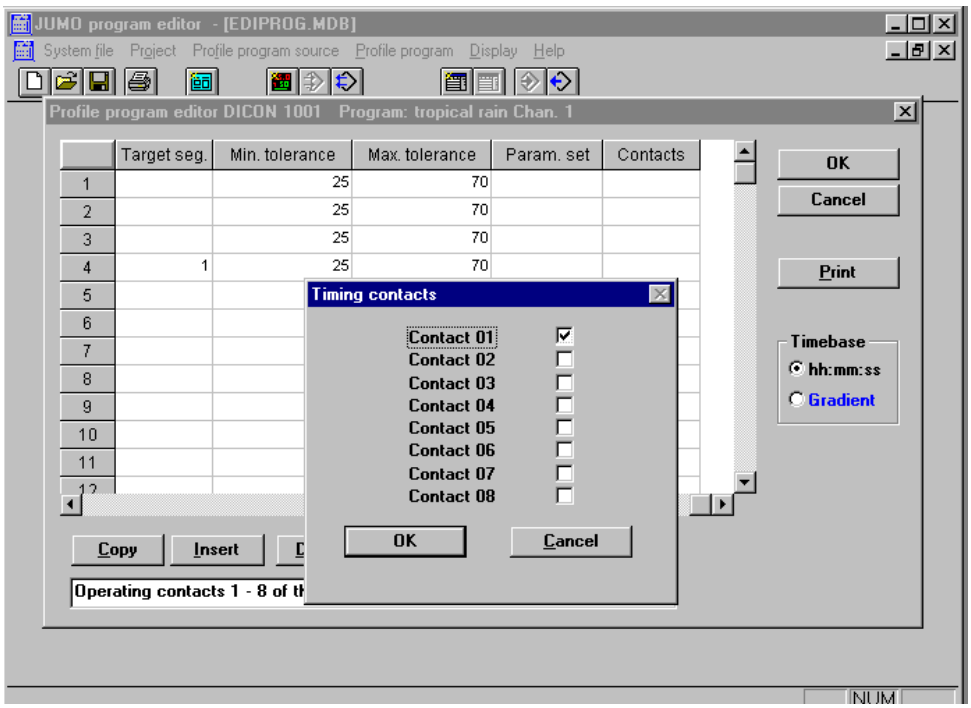
3.6.2 Profiles

Example

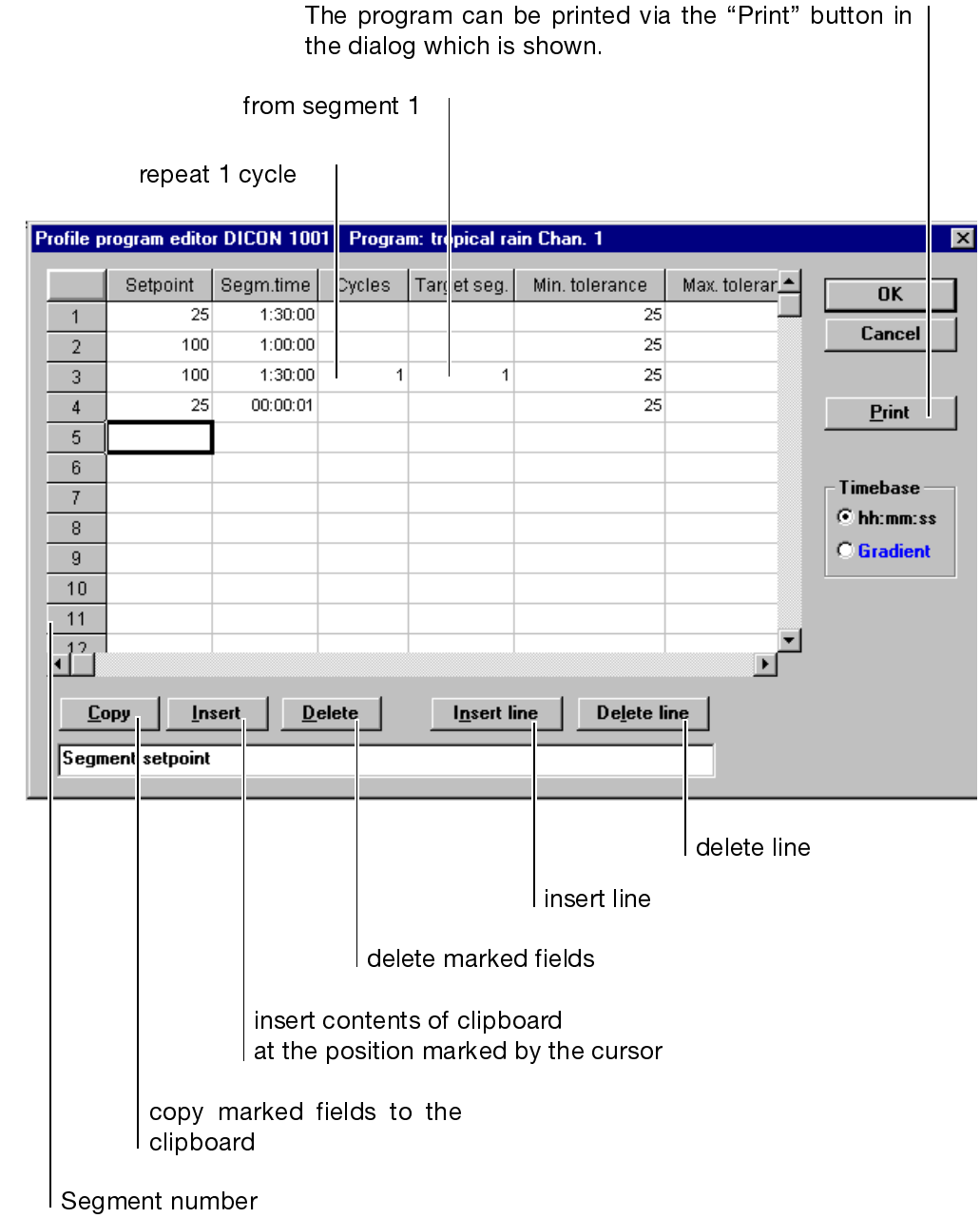


Set operating contact

✱ In the *Timing contacts* window, mark *Contact 01* with a cross
(A hexadecimal number is shown in the column)



The profile is entered in tabular form. Each line corresponds to the individual segments to be programmed. The segment number appears in numerical order on the left side of the screen.

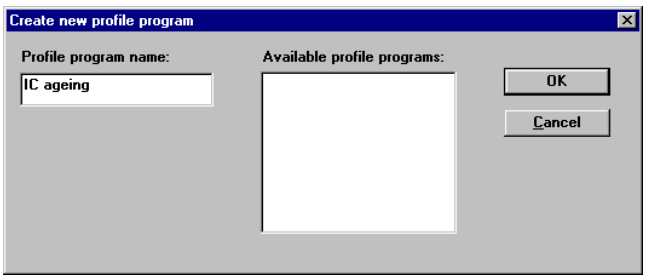


✱ Store the profile with *OK*

3.7 JUMO PR-100

The program entry for the PR-100 is very similar to the entry on the unit. Within one program, 4 profile curves (setpoint curves) and 8 timing diagrams are entered along a time axis.
Up to 50 different programs can be accommodated in a unit.

* Click on program source “Burn-in furnace”
* *Profile program* ➔ *New*



* Confirm with *OK*

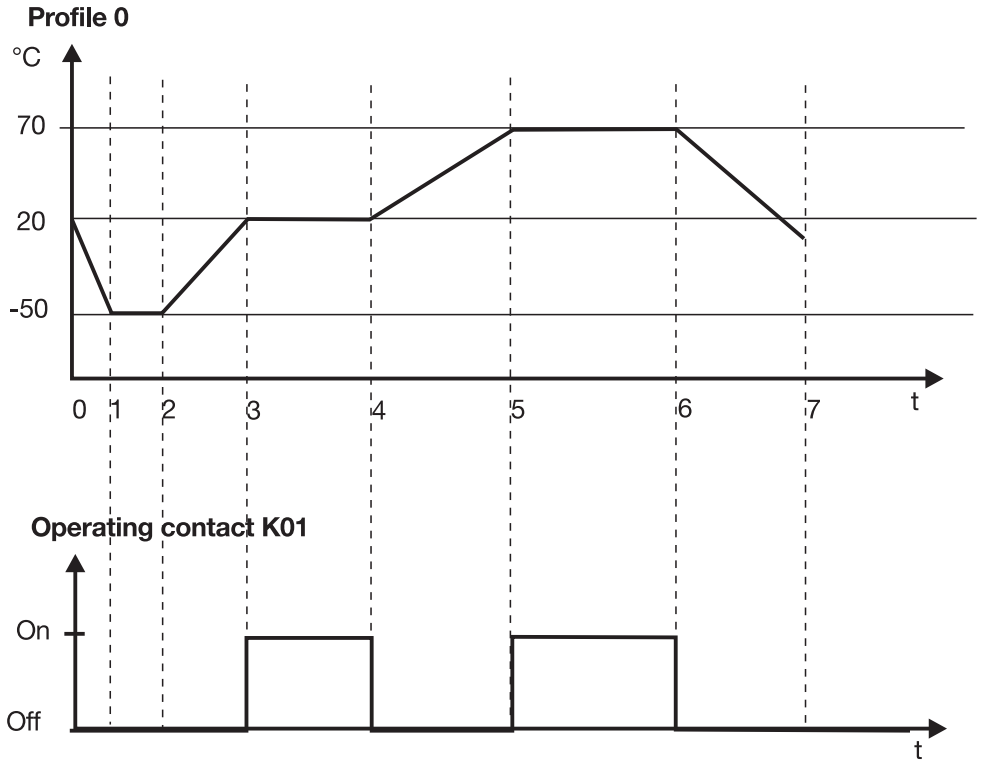
3.7.1 Select channel

3.7.2 Profiles

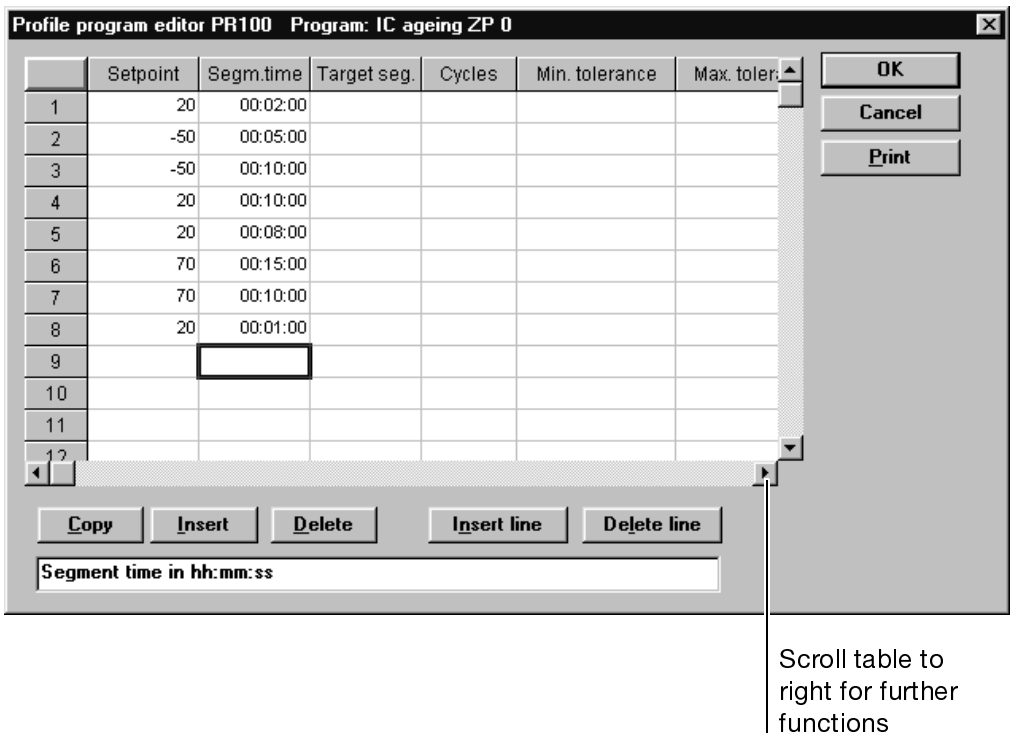
⇨ Operating Instructions B 75.3201.2 System hardware for PR-100 Process Control System

3 Project planning example

Example

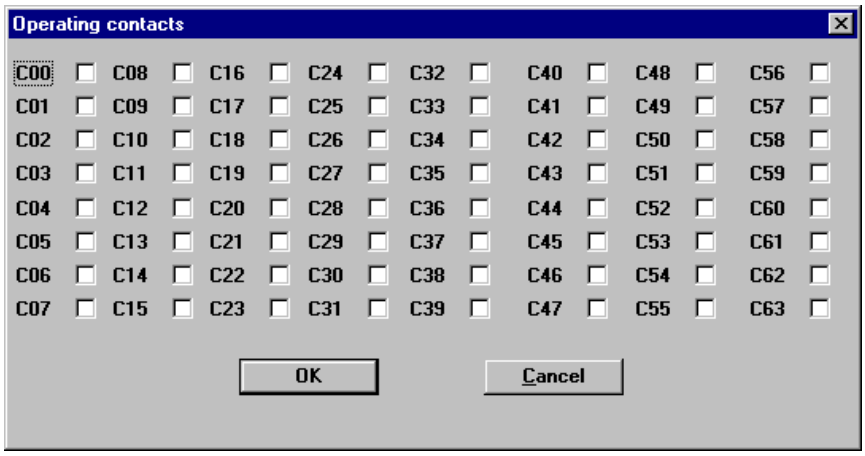


Entry

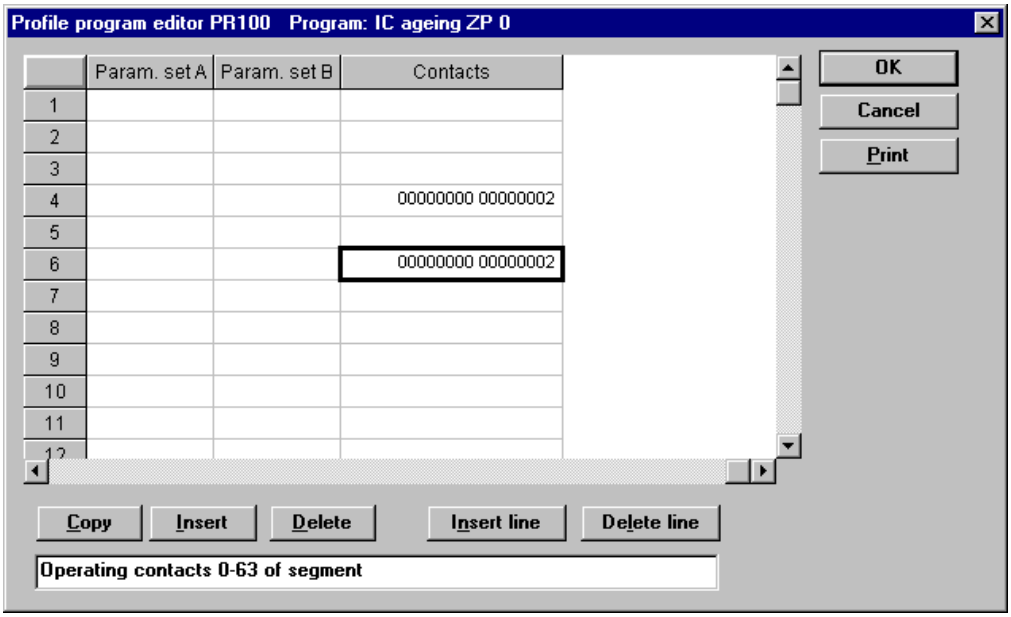


Operating functions

✱ Click on *Contacts* in table



3.7.3 Time switch



✱ Save entry with *OK*

3 Project planning example

3.8 Programs for the meat processing industry

As far as programming is concerned, differences arise between the equipment manufacturers and the users with regard to the functions used. EdiProg is suitable for both parties.

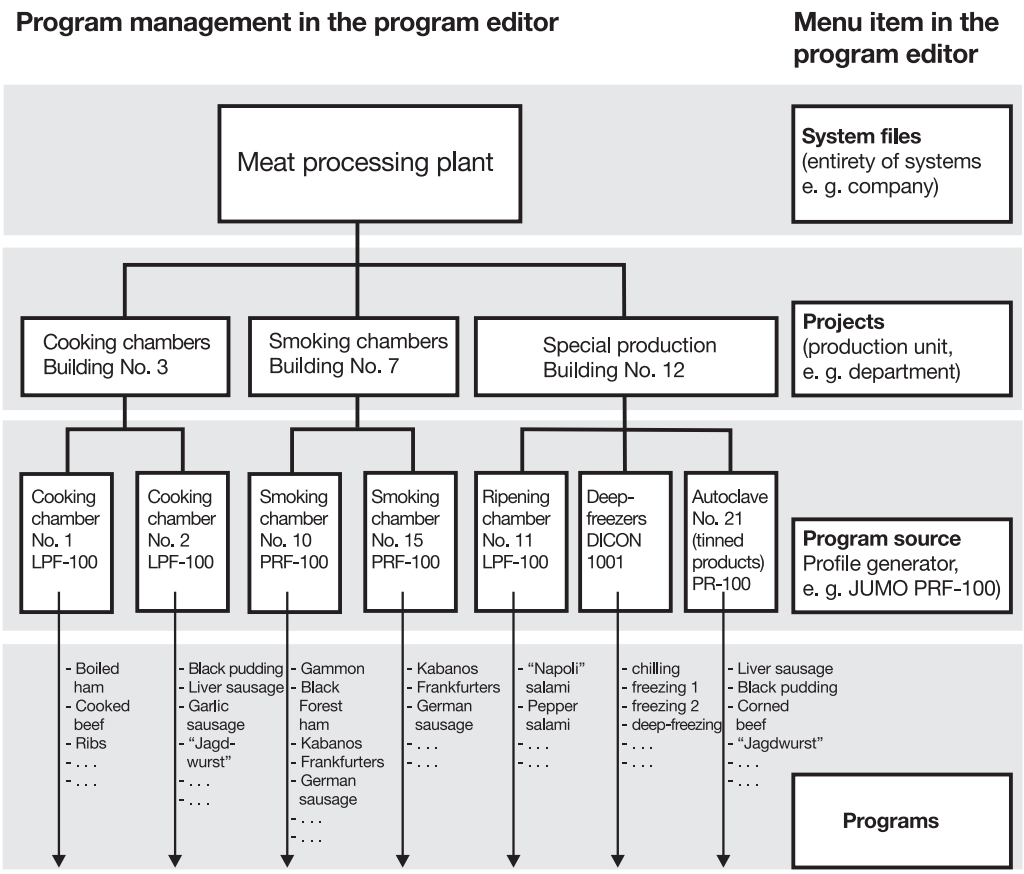
Equipment manufacturers

Generally, the equipment manufacturer enters the process steps (fixed segments) and delivers the operable installation with the standard programs.

Users

The user, on the other hand, uses the set segments, which are protected by a password, and alters existing programs or creates new ones with the aid of the process steps (fixed segments) supplied with it.

The program management is structured in the way described on the previous pages. The picture below shows an example from the meat processing industry.

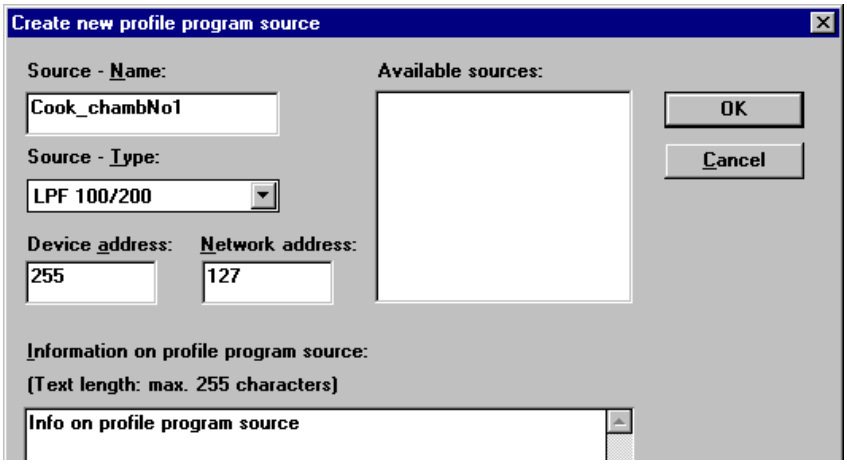


3.8.1 JUMO LPF-100/200

Before entering the program, the process steps have to be defined, or already existing ones loaded from the instrument.

* Create program source LPF-100/200 or
  click on it if LPF-100/200 has already been entered in the standard display "Profile program source of project".

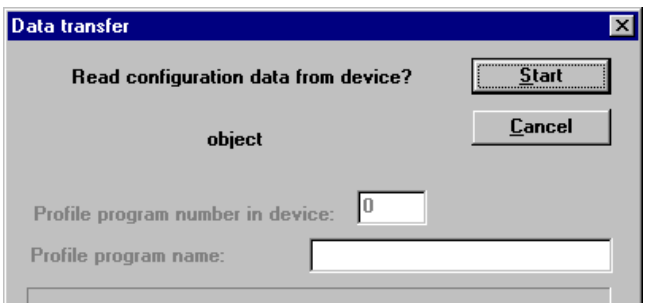
Create new profile program source



* Save with *OK*

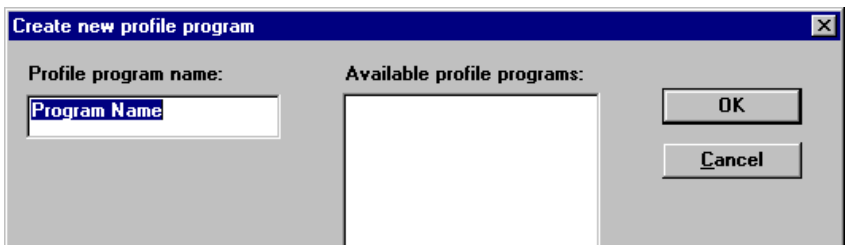
Read in configuration data

* Execute *Profile program source* ➔*Load configuration data*
  The "data transfer" window opens and the configuration data are read, so that EdiProg can recognise the process steps which are already available.



* Click on "Start"
* Execute *Profile program* ➔*New* (program name is marked)

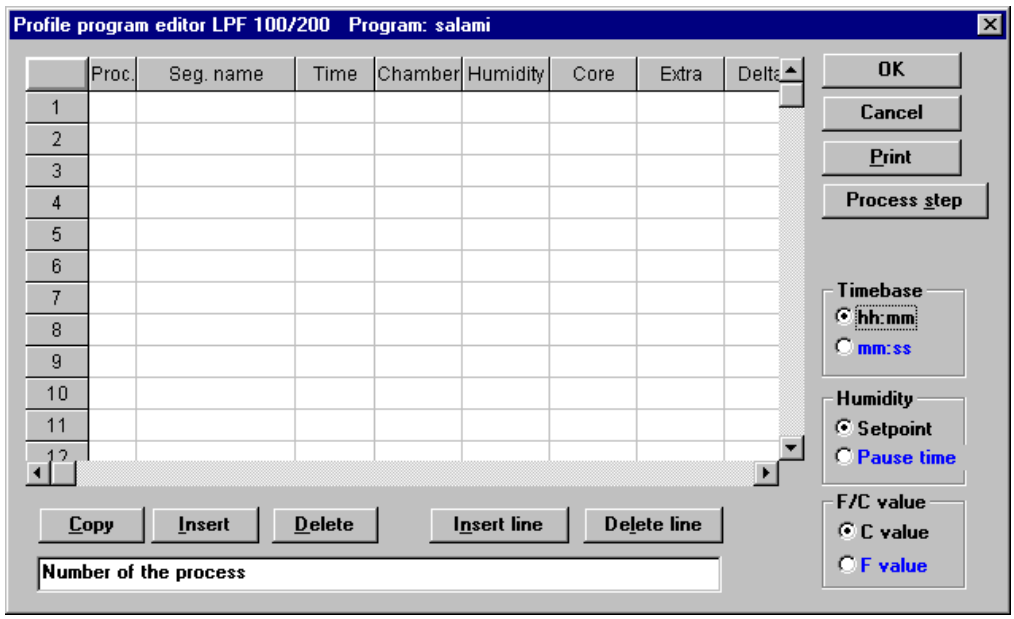
New program



* Enter program name (salami, test etc.)
* Save with *OK*

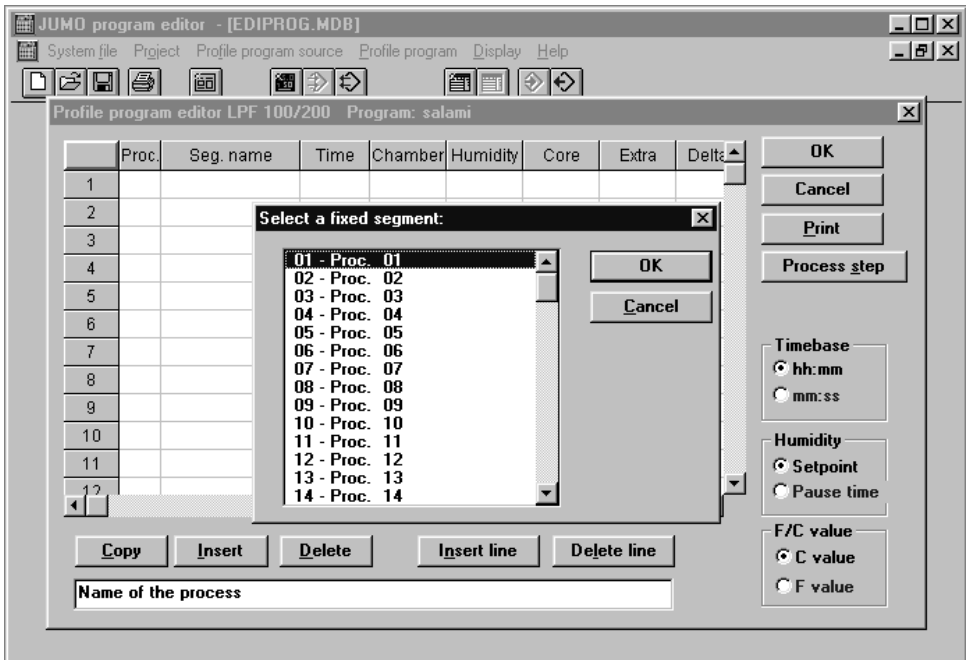
3 Project planning example

The profile is entered in tabular form. Each line corresponds to the individual segments to be programmed. The segment number appears in numerical order on the left side of the screen.



Select process steps

* Click on “Process steps”
* Confirm with *OK*
  The process step is entered in the table



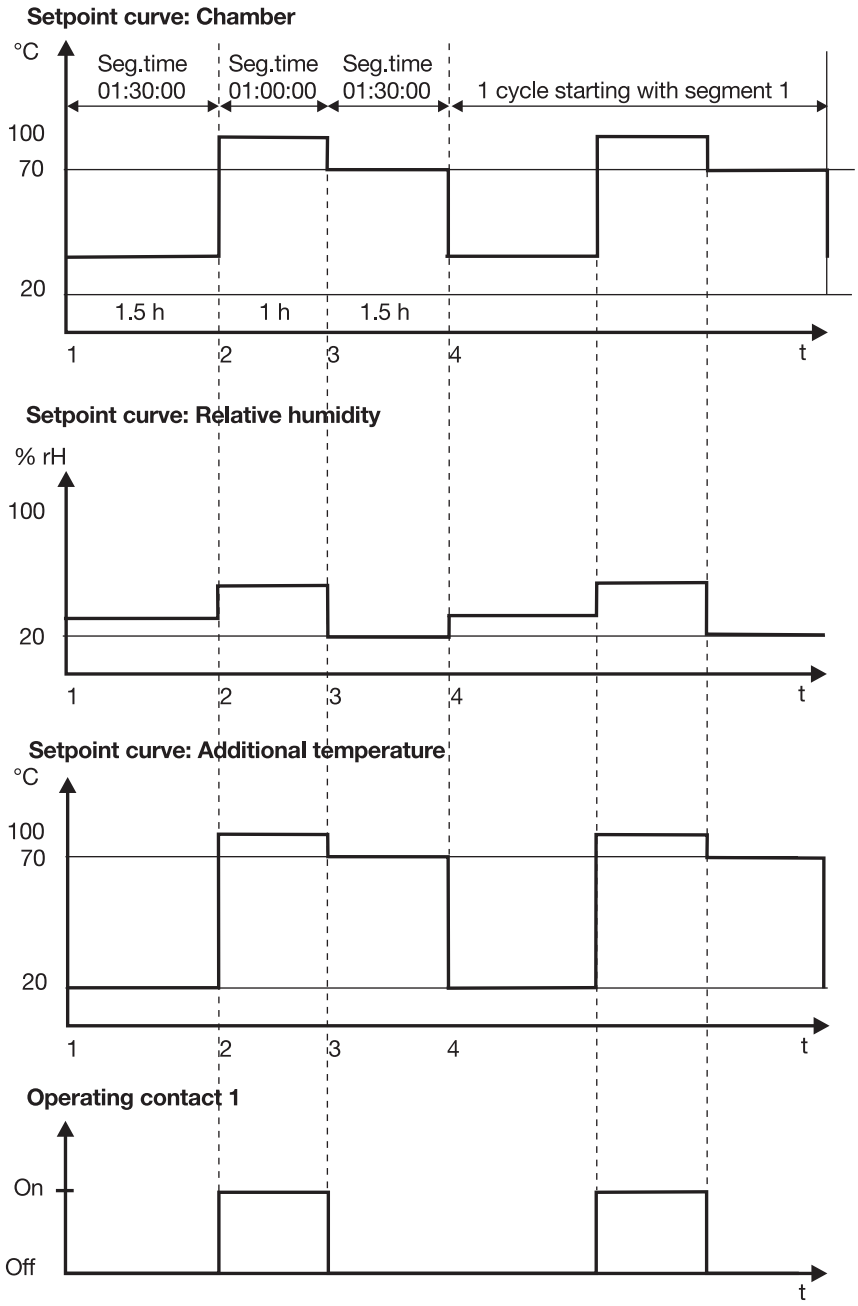
The operating outputs defined in the process steps are protected by a password against alteration.

Set operating functions

* In the “Operating functions” window, set function 01 by clicking with the mouse (password is required)

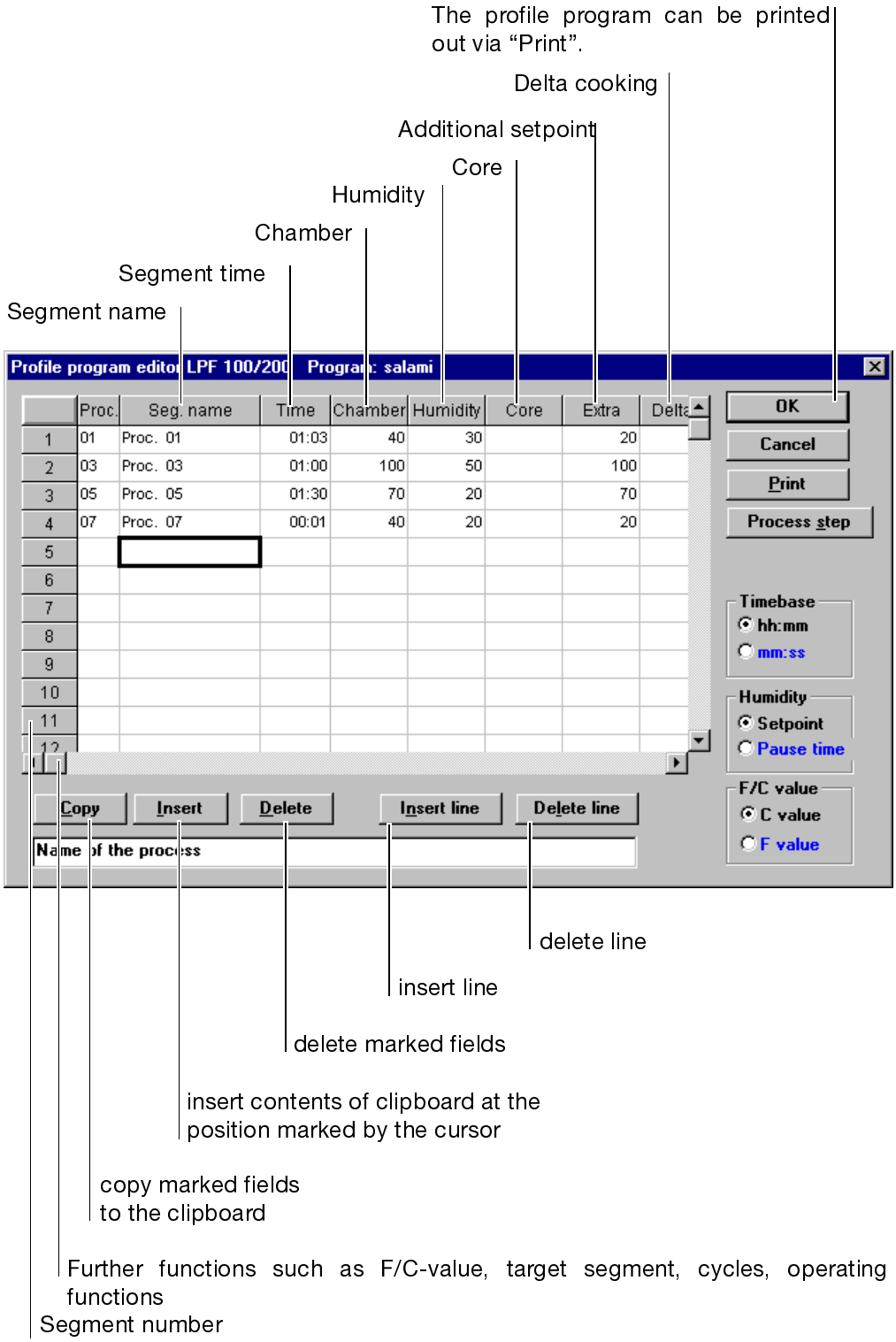
The profile below shows the entry in the program dialog.

Example



Repeat cycles

If specific program segments are to be repeated, the target segment “Target seg.” and the number of repeats are entered under “Cycles”.



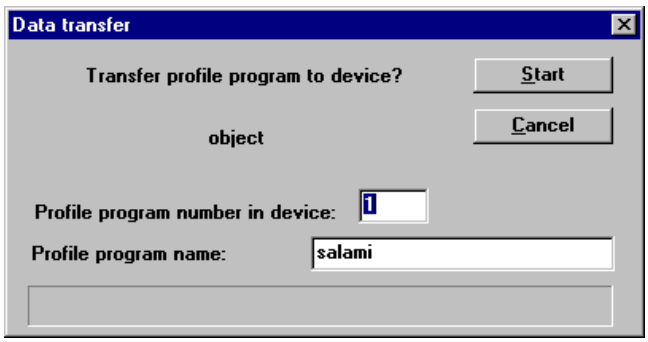
Timebase, humidity, F/C-value

If changes are made to these settings, then the setpoints are shown in a different colour.

✱ Save the profile with *OK*

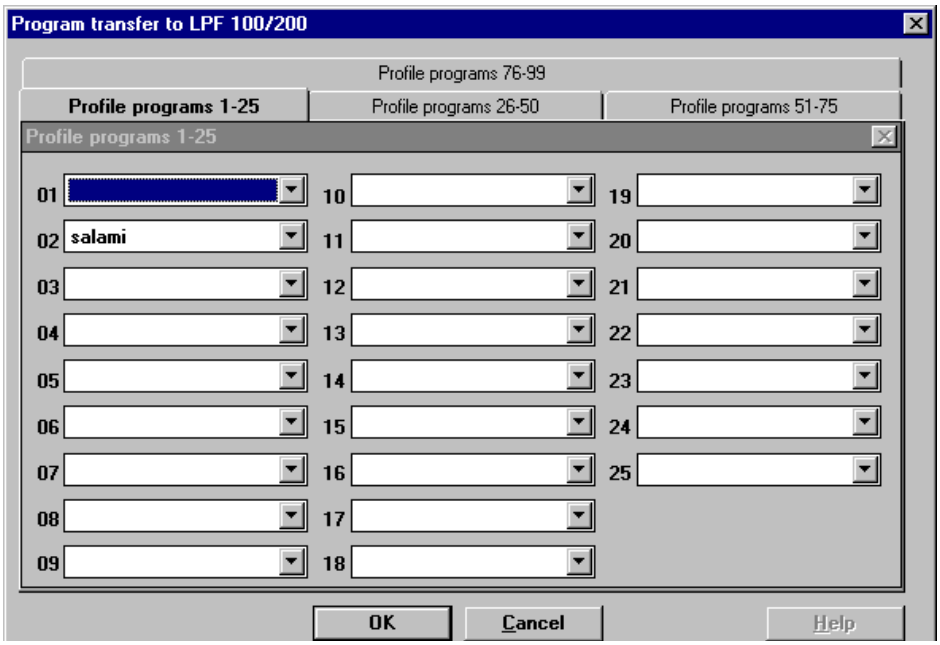
Transfer one EdiProg program

* Execute *Profile Program* ➔ *Transfer* ➔ *to device*



Transfer several EdiProg programs

* Click on “Profile program source” in the basic display
* Execute *Profile program source* ➔ *Transfer* ➔ *to device*



* Select programs required
* Start transfer with *OK*
  (the bar indicates the percentage of the program that has already been transferred)

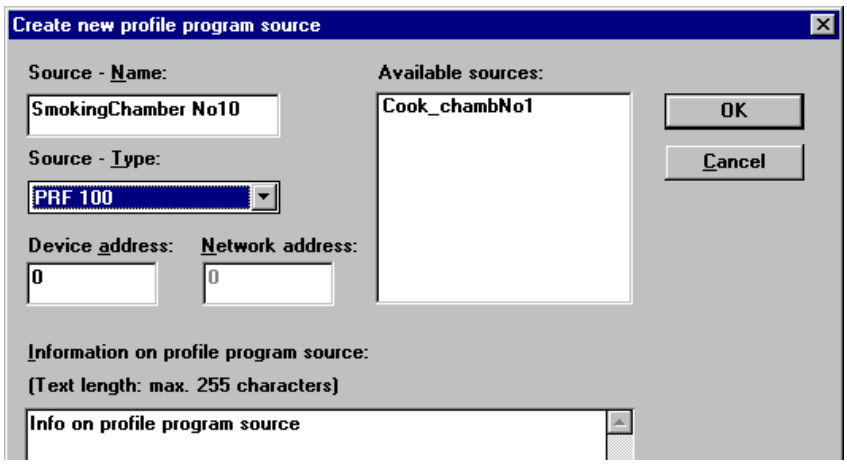
3.8.2 JUMO PRF-100

When working with EdiProg, “fixed segments” can be entered in the PRF-100. These fixed segments have special names, such as drying, baking, spraying etc.
This makes it very much easier for the operator to enter the program, since he can work with the designations that are usual in his industry.
Afterwards, the user can enter his programs and give them program names, such as salami, gammon, and so on.
The program names and the designations for “fixed segments” are also shown in the graphical display of the PRF-100.

The operating outputs in the process steps can only be changed by using a password, so that only certain people can alter important system functions provided by the equipment manufacturer.

* Create program source LPF-100/200 or
  click on it if LPF-100/200 has already been entered in the standard display “Profile program source of project”.

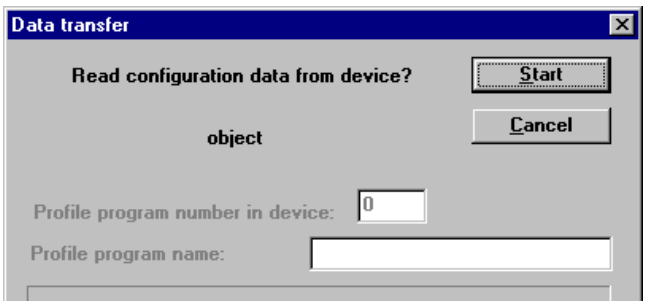
Create new profile program source



* Save with *OK*

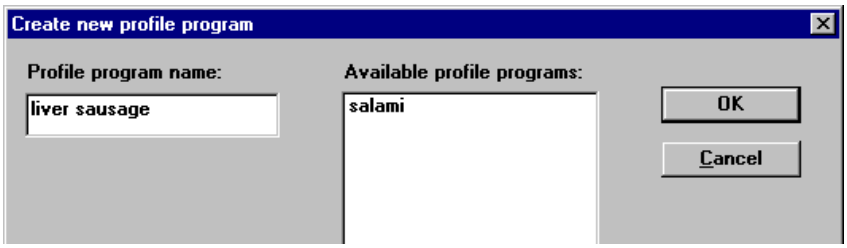
Read in configuration data

* Execute *Profile program source* ➔*Load configuration data*
  The “data transfer” window opens and the configuration data are read so that EdiProg can, for example, recognise “fixed segments” which already exist.



* Click on “Start”
* Execute *Profile program* ➔*New* (program name is marked)

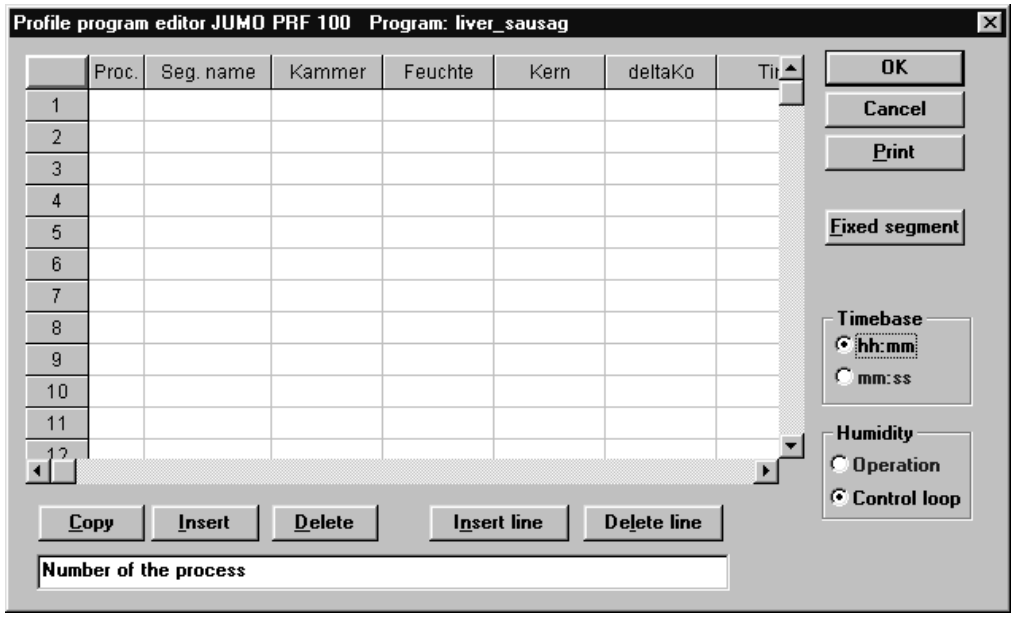
New profile program



✱ Enter program name (liver sausage, salami etc.)

✱ Save with *OK*

The profile is entered in tabular form. Each line corresponds to the individual segments to be programmed. The segment number appears in numerical order on the left side of the screen.



Select fixed segments

✱ Click on “Fixed segments”

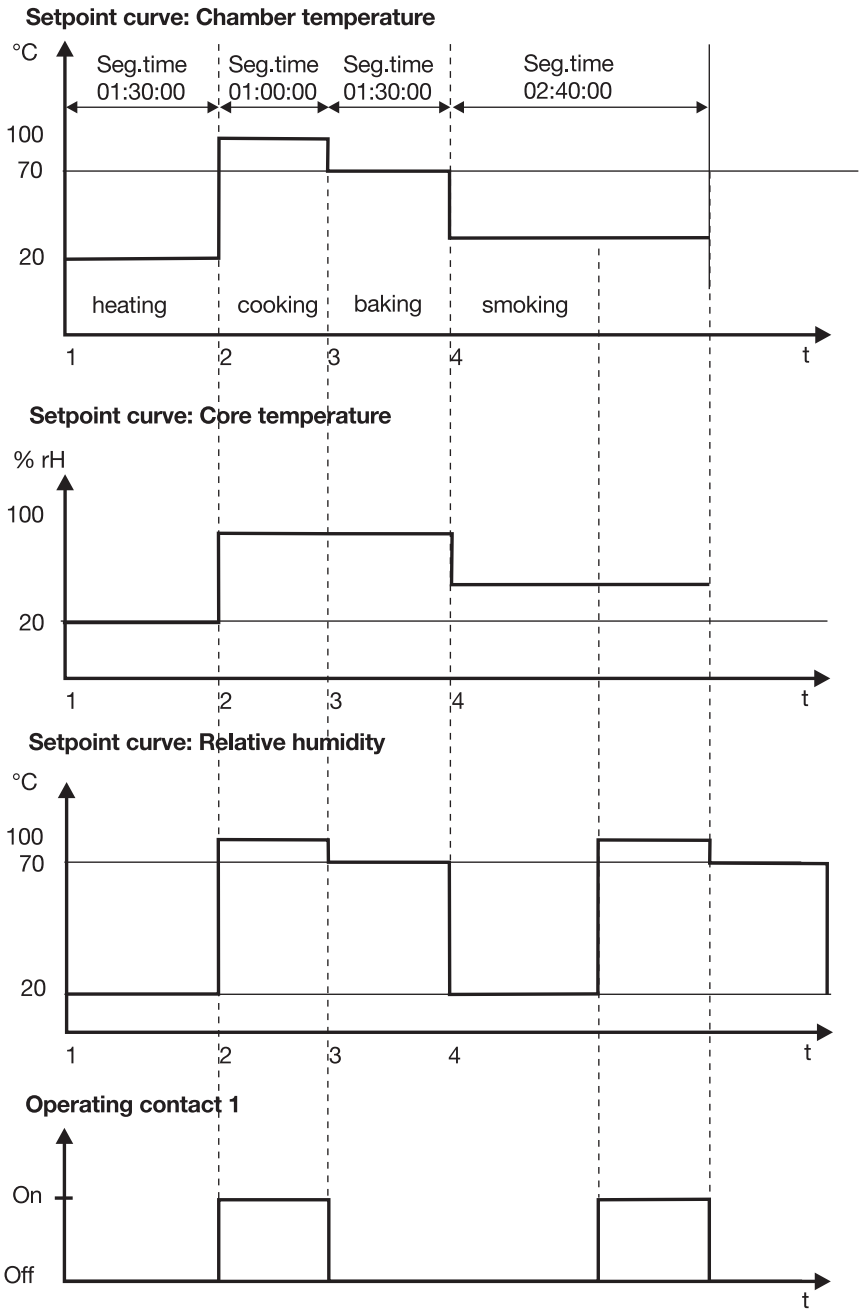
✱ Confirm with *OK*
The fixed segment is entered in the table.

The operating outputs defined in the “Fixed segments” are protected against alterations by a password.

⇨ Operating Instructions B 75.3101.2 System hardware for PRF-100 Process Control System

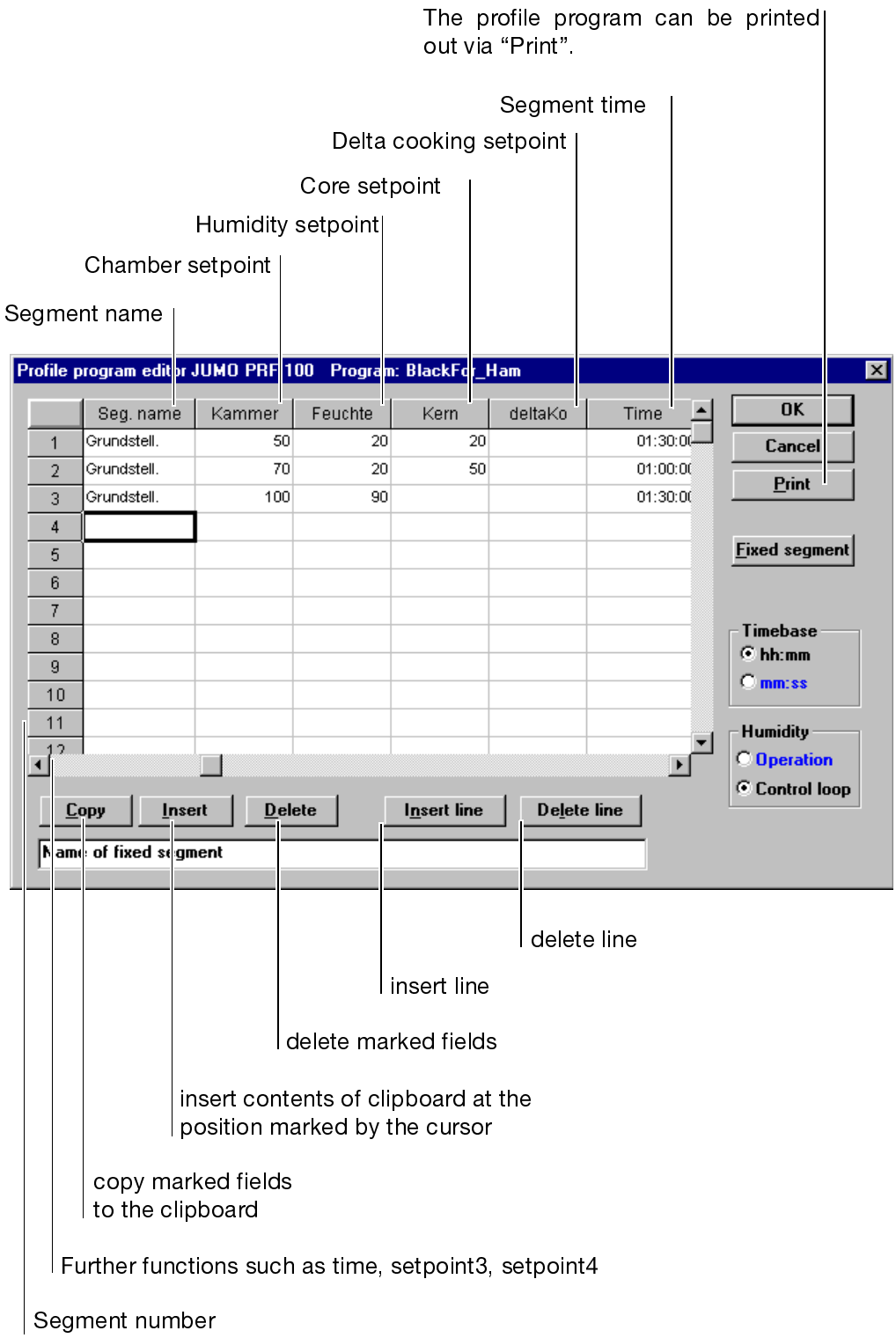
The profile below shows the entry in the program dialog:

Example



Repeat cycles

If specific program segments are to be repeated, the target segment “Target seg.” and the number of repeats are entered under “Cycles”.



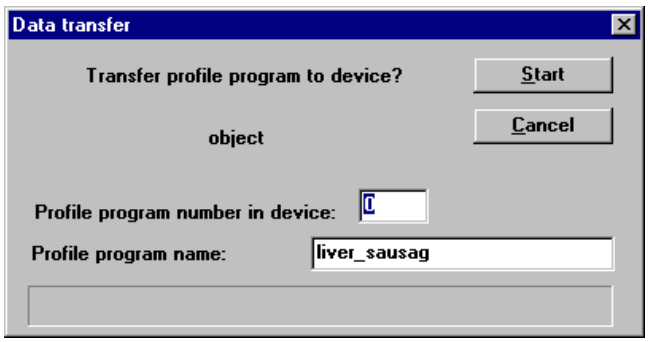
Timebase, humidity

If changes are made to these settings, the setpoints are shown in a different colour.

✱ Save the profile with *OK*

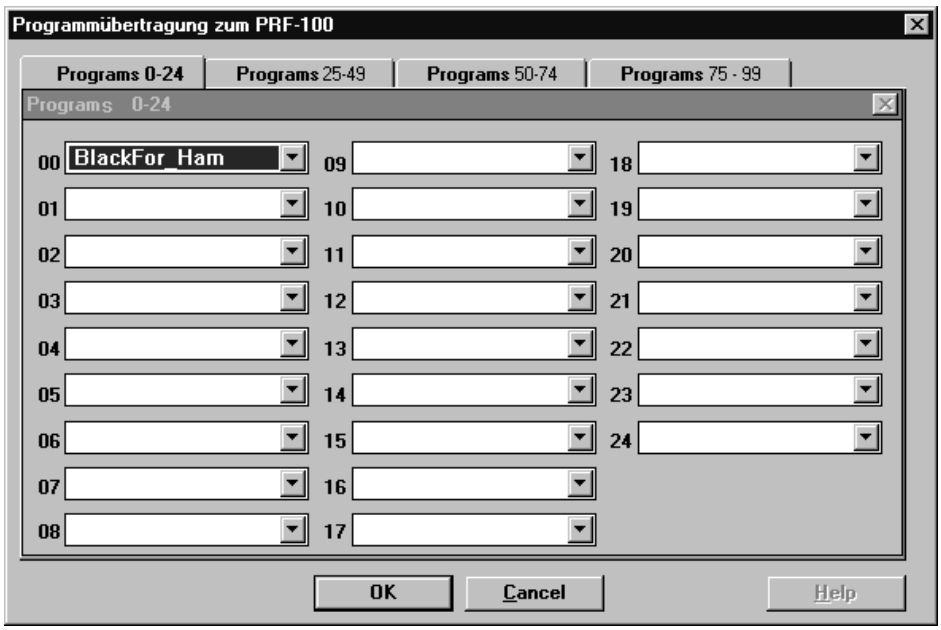
Transfer one EdiProg program

* Execute *Profile program* ➔ *Transfer* ➔ *to device*



Transfer several EdiProg programs

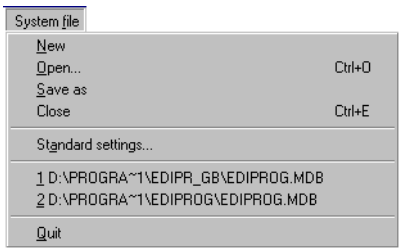
* Click on “Profile program source” in the basic display
* Execute *Profile program source* ➔ *Transfer* ➔ *to device*



* Select programs required
* Start transfer with *OK*
  (the bar indicates the percentage of the program that has already been transferred)

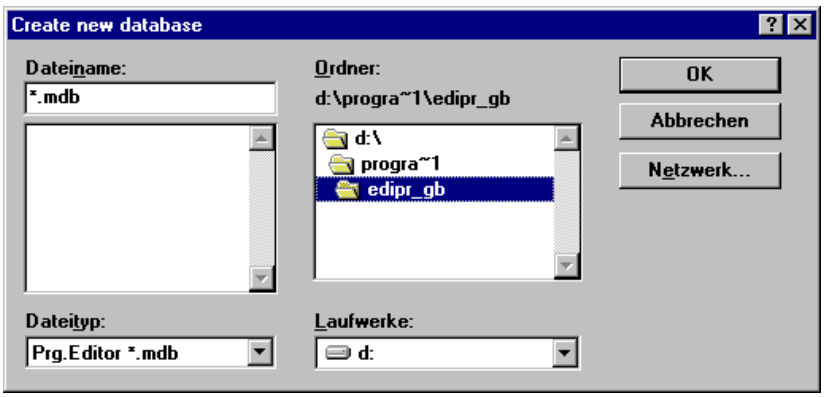
4.1 System file

Overview



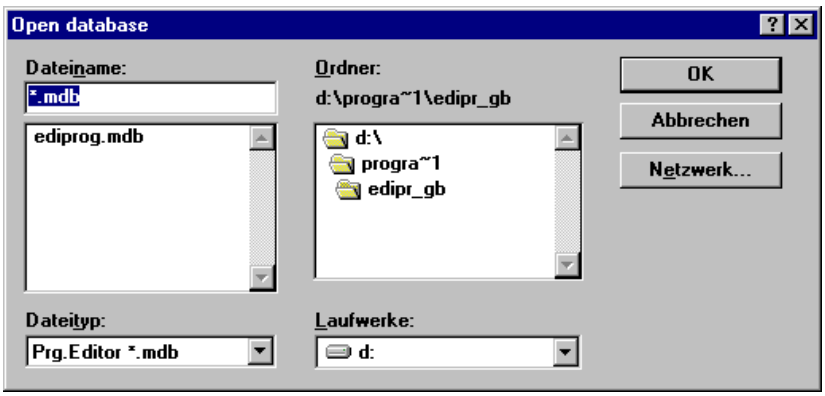
4.1.1 New

A database name which is appropriate for the application is assigned here. The program automatically suggests “ediprog.mdb”.



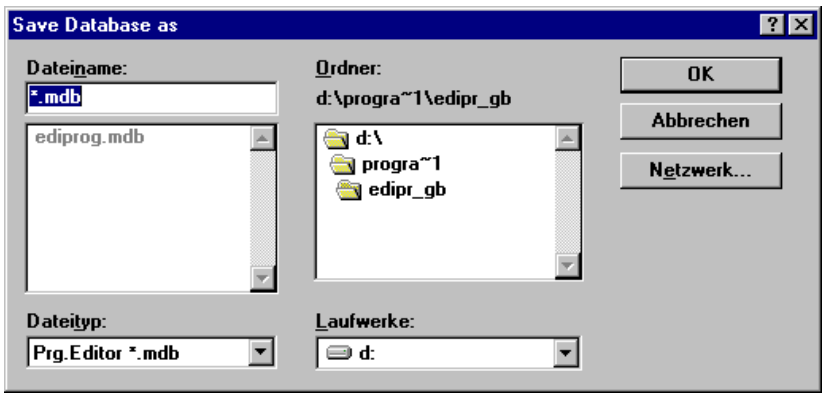
4.1.2 Open

If a database already exists, it can be opened by activating the button.



4.1.3 Save as

The menu item *System file* ➔*Save as* can be used to assign a different name.



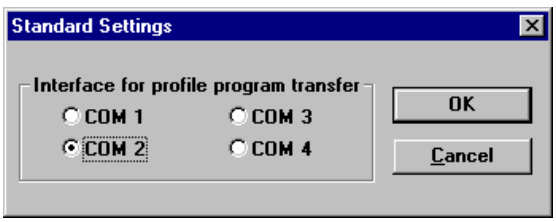
4.1.4 Close

This command saves and closes the system file. A different system file can be opened.

4.1.5 Standard settings

Interface

The COM interface is selected here, from which EdiProg transfers the programs to or from the device.



4.1.6 Quit

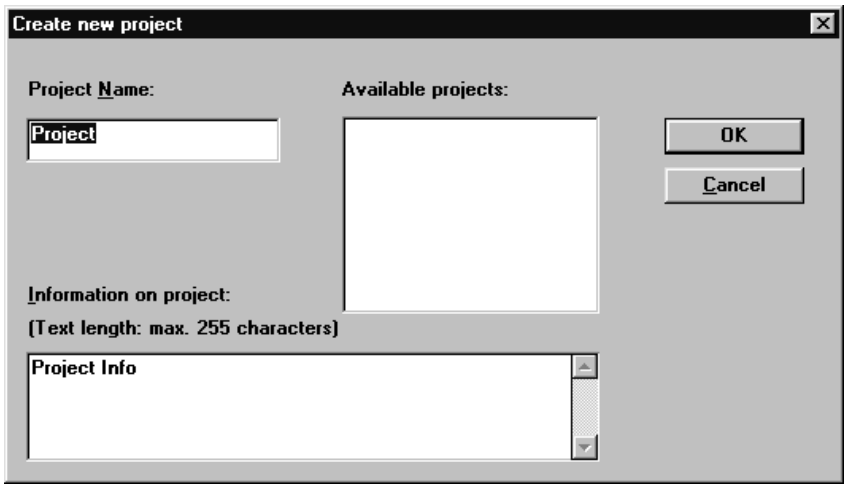
Closes EdiProg and returns to the operating system.

4.2 Project

Overview

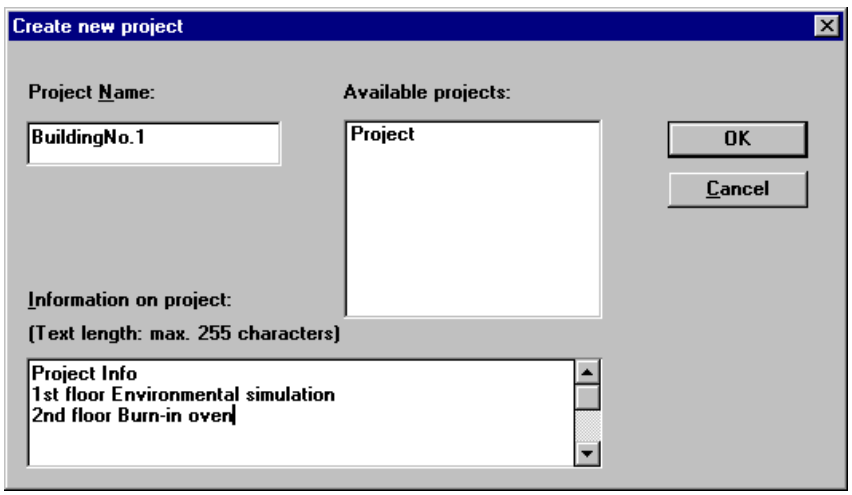
4.2.1 New

The entire system file is divided into different projects. In the example below, a division into different buildings is made (click on the selector field).



* Enter project name

An info text with up to 255 characters can be entered for each project.
If the program is to be processed later on, it can be easily recovered. For example, information could be given here on which chambers can be found in the building.

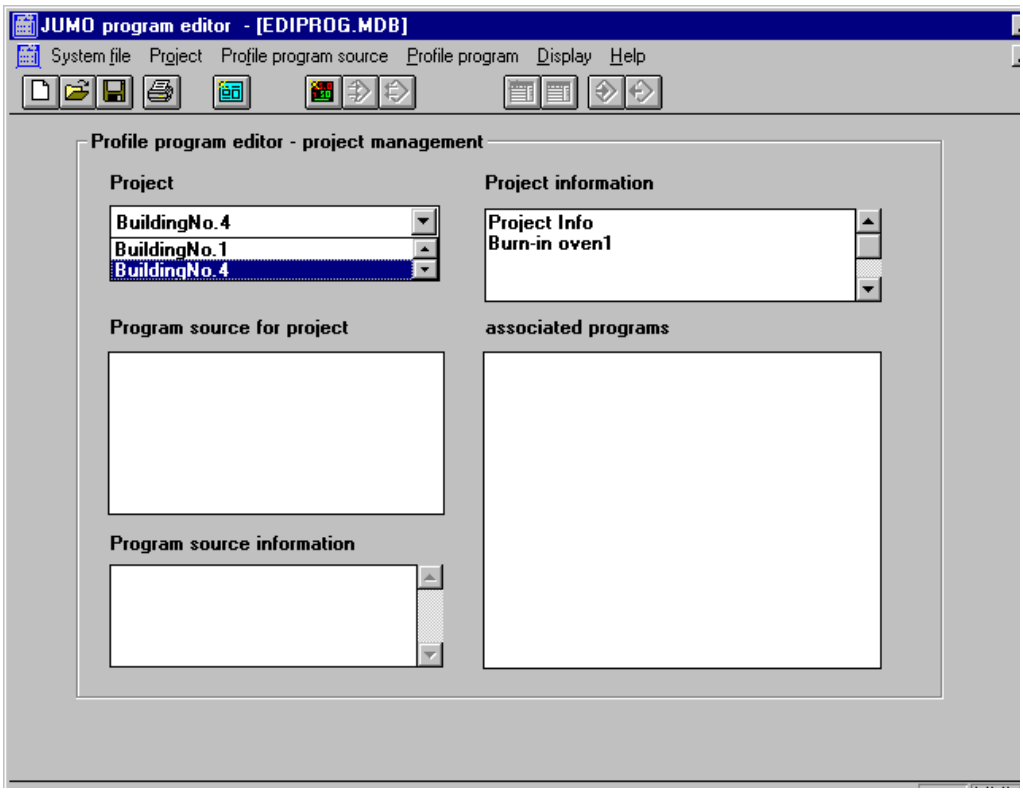


* Confirm with *OK*
* Enter next project

After all projects have been created, the corresponding program sources (in this example: DICON 1001) can be assigned. For this purpose, the appropriate project name is selected in the “Profile program editor - project management” template.

Example

* Select project “Building No.1” with a click on the selector field.



4.2.2 Edit

If a system file is open, this function can be used to alter the project name or the project info if changes occur within a building, as in the example.

4.2.3 Save as

The project can be stored under a different project name. This is appropriate when several buildings are arranged in a similar way, as in the example.

The data are simply stored under a different name and the differences with respect to the original building re-entered.

4.2.4 Delete

The selected project, including all program sources, is deleted without query.

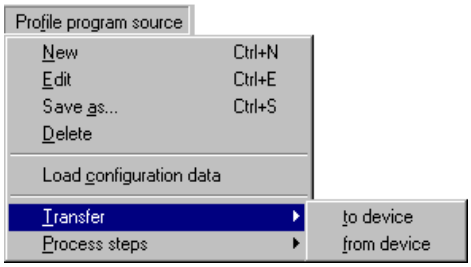
4.2.5 Print

A text editor opens and indicates all sources, the source info text, as well as all programs belonging to stored project. It is subsequently possible to make a print-out.

4.3 Profile program source

The term “Profile program source” indicates a JUMO profile instrument to be selected in the next screen template.

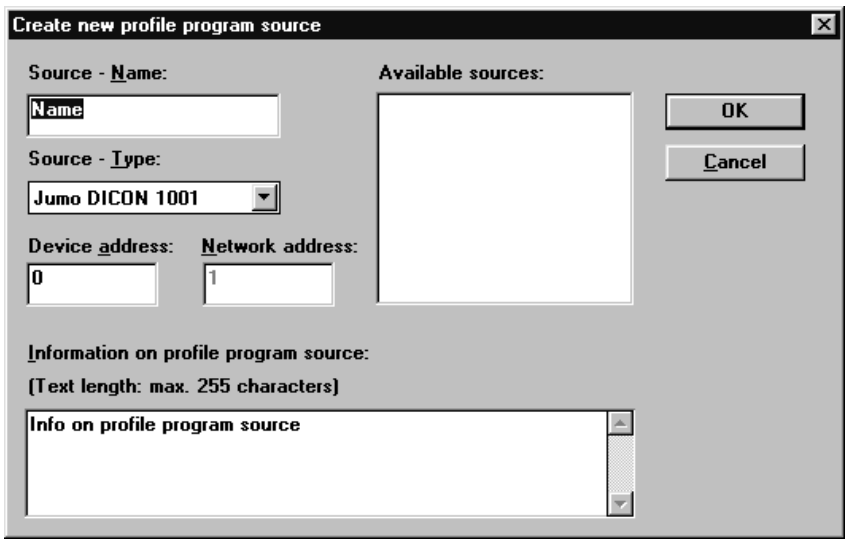
Overview



4.3.1 New

✱ Select *Profile program source* ➔*New*

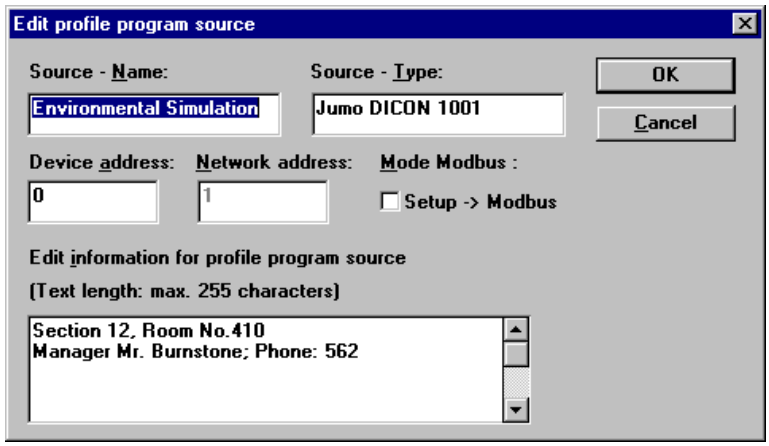
A dialog appears which determines the program source used.



An info text with up to 255 characters can be entered for each program source. If the program is to be processed later on, it can be easily recovered. Information on the process can be given here, for example.

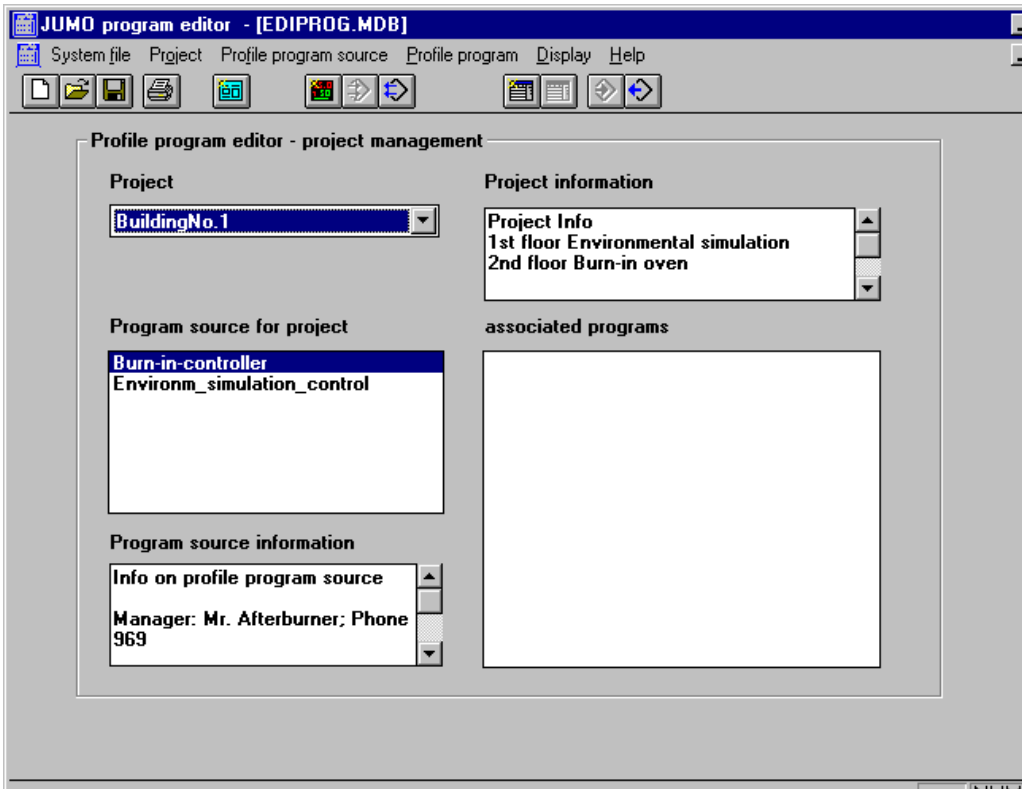
✱ Confirm with *OK*

Example



After all program sources have been entered in this project, program creation can commence. To this end, the required program source (simulation of environment) is selected within the program editor project management.

* Program source “Simulation of environment” can be selected by clicking on the selector field:



4.3.2 Edit

When the system file is open, this function can be used to alter the program sources, or the program source information, if, as in the example, changes occur within a process.

4.3.3 Save as

The program source can be saved under a different name. This is appropriate when the system is being expanded and several program sources are using the same programs.

4.3.4 Delete

The selected program source is deleted without query, together with all programs.

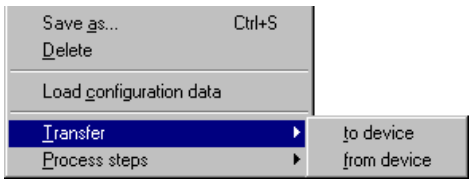
4.3.5 Load configuration data

It may have been necessary to adjust certain controller settings in the instrument, such as controller parameters, and alter them with respect to the factory setting. Before starting to write programs, EdiProg first has to recognise all parameters from the unit in order to subsequently transfer them to the unit, together with the programs. This is the case with profiles, which must not exceed the range limits for the transducer.

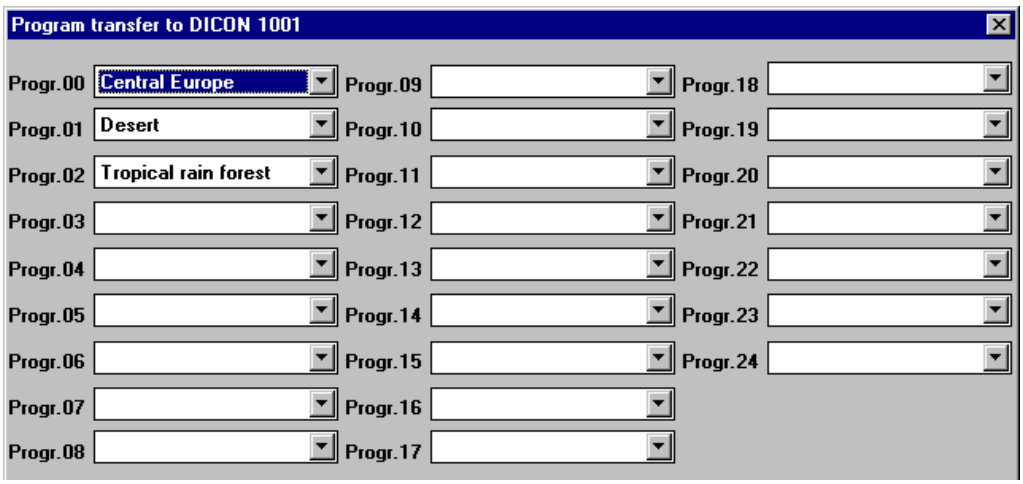
4.3.6 Transfer

Management

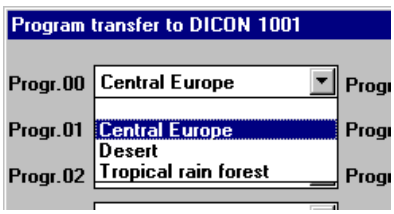
Using EdiProg, more programs can be managed than can be stored in program sources.



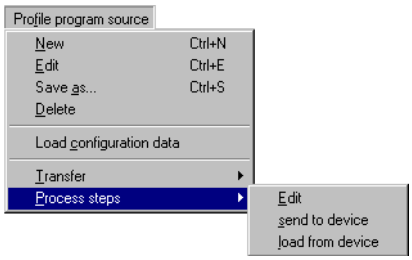
Program assignment



A click on the pull-down menu opens the list of all programs which have been entered for the program source. In this way, programs are assigned to their numbers in the unit.



4.3.7 Process steps

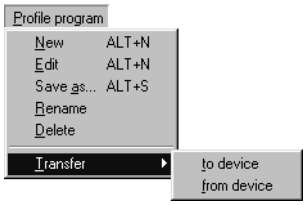


These functions can only be executed on program sources with process steps.

4 Profile Program Editor EdiProg

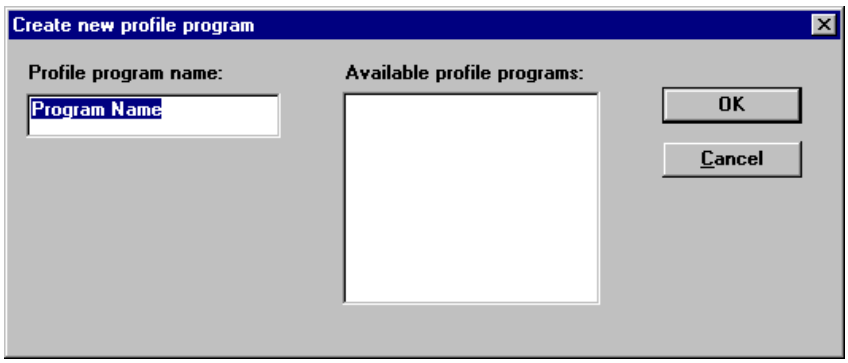
4.4 Profile program

Overview



* Click on *Profile program* ➔*New* in the toolbar

4.4.1 New



* Enter profile program name (central Europe, tropical rain forest)

4.4.2 Edit

The program selected in the basic display is opened and can be altered freely.

4.4.3 Save as

An existing program can be saved under a different name. This may be helpful when only a new setpoint profile has to be programmed, but operating functions or process steps are to remain unchanged.

4.4.4 Rename

This function assigns a different name to the program.

4.4.5 Delete

The program is deleted without query and does not appear in the list in the basic display.

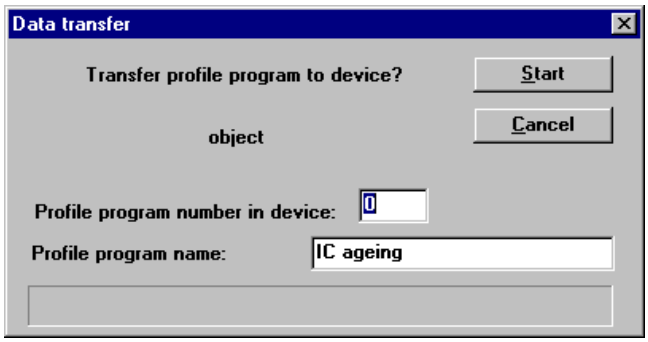
4.4.6 Transfer

Here, only the program that has just been selected in the project management can be sent to the instrument, or read out of the instrument, via the main menu item *Profile program* ➔ *Transfer.* As soon as this menu item is called up, the program no. of the unit that is required for the transfer has to be specified in a subsequent dialog, since the names assigned in the program editor are not transferred to the unit.

The programs selected by the user can be transferred via the main menu item *Profile* source ➔ *Transfer.*

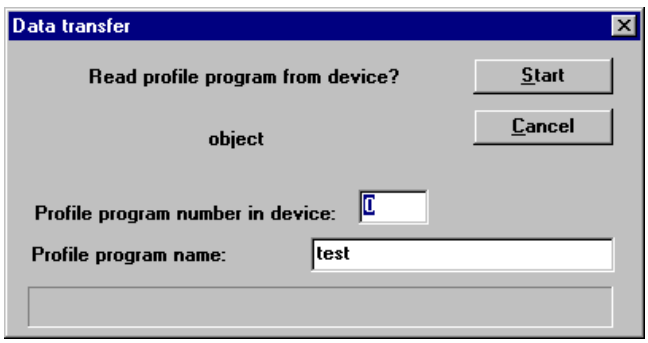
Send to JUMO instrument

Profile program ➔ *Transfer* ➔ *to device*



Read from JUMO instrument

Profile program ➔ *Transfer* ➔ *from device*



✱ Save the profile with *OK*

4 Profile Program Editor EdiProg

5 What to do if...

What's wrong?	Remedy	Info
No data connection	* Check *Standard settings→Interface* * Check connection cables and interface to establish whether the connectors have been fitted correctly.	⇨ Section 4.1.5 "Standard settings" ⇨ Section 4.3.1 "New" ⇨ Section 4.3.2 "Edit"
Password blocks the path to the programming of "fixed segments" (PRF-100) or "process steps" (LPF-100)	* Enter the factory-set passwords * Find out from the system manufacturer whether the password has been changed.	⇨ Standard passwords PRF-100 and PR-100: **2007** LPF-100/200: **9510** Process steps: **2345**

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