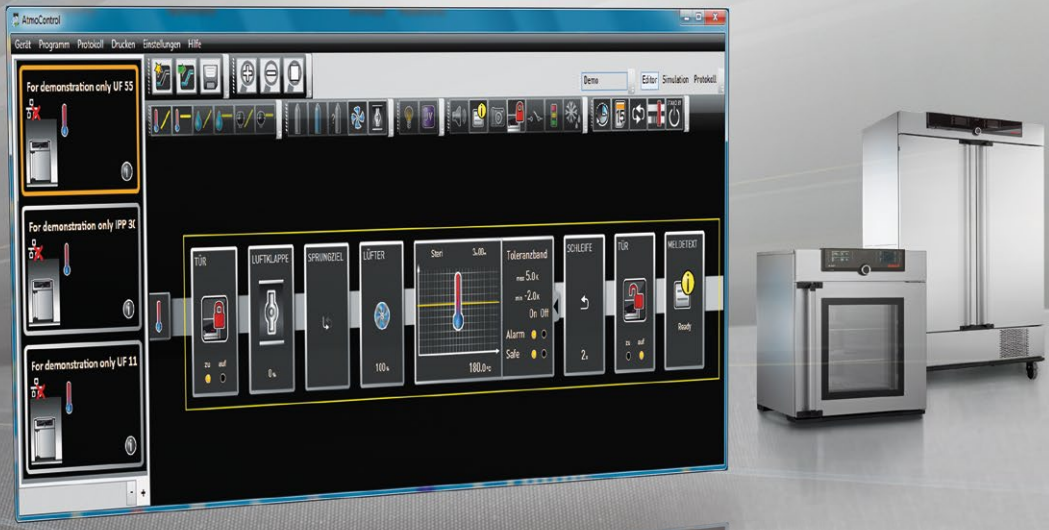
memmert
Experts in Thermostatics

AtmoCONTROL

SOFTWARE MANUAL



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About this manual

Purpose and target group

This user manual describes the installation and use of the MEMMERT programming software AtmoCONTROL. It is intended for use by trained personnel of the operator, who have the task of programming/operating MEMMERT appliances.

If you intend to work with the software, please read this manual carefully before starting. Familiarise yourself with the software and simulate various tests before transferring programmes to the appliance. Incorrect use could result in damage to the appliance and/or to the chamber load.

If there is something you do not understand, or certain information is missing, ask your superior or contact the manufacturer. Do not do anything without authorisation.

Other documents that have to be observed

Please also read the user manual for the respective appliance or appliances to be operated with AtmoCONTROL and familiarise yourself with it.

Storage and resale

This manual should always be kept in a place where those working with the software have access to it. It is the responsibility of the operator to ensure that persons who work with or will work with the software are informed as to the whereabouts of this user manual. We recommend that it is always stored in a protected location close to the computer on which the software is installed. Make sure that the manual is not damaged by heat or damp.

Update

The current version of AtmoCONTROL and this manual are available for download at www.memmert.com/de/service/downloads/software/.

Contents

1. Introduction

1.1 Description

AtmoCONTROL is a software for programming and logging MEMMERT appliances of the generation 2012 of appliances (from October 2012) with Ethernet and/or USB interface and corresponding equipment.

With AtmoCONTROL, you can

- graphically create, modify and save programmes on your computer with various parameters and transfer these to the appliance (description from page 13);
- read out, organise and document the internal log memory of appliances (description from page 28);
- configure user authorisations on USER ID USB sticks, with which the manual adjustment of individual or all parameters on the appliance can be prevented (description from page 30).

1.2 Supported MEMMERT appliances and parameters

Using AtmoCONTROL, programmes can be created and transferred, protocols read out and USER IDs configured for the following appliances of the generation 2012 of appliances (from October 2012):

Appliance	Programmable main parameter							
	Temperature	Humidity	Pressure	CO_2	O_2	Fan speed	Air flap	Light*
UN PLUS	✔	–	–	–	–	–	✔	✔
UF PLUS	✔	–	–	–	–	✔	✔	✔
IN PLUS	✔	–	–	–	–	–	✔	✔
IF PLUS	✔	–	–	–	–	✔	✔	✔
SN PLUS	✔	–	–	–	–	–	✔	✔
SF PLUS	✔	–	–	–	–	✔	✔	✔
HPP	✔	✔	–	–	–	–	–	✔
IPP PLUS	✔	–	–	–	–	–	–	✔
ICP	✔	–	–	–	–	✔	–	✔
ICH	✔	✔	–	✔*	–	✔	–	✔

* additional option

For all other MEMMERT appliances of the generation 2012 of appliances, protocols can only be read out using AtmoCONTROL via Ethernet (see page 28); parameters can only be set on the appliance itself.

2. Installation

2.1 System requirements

Category	Minimum system requirements
Processor	Pentium 1 GHz
Main memory	1 GB
Available free space on hard drive	4 GB
Graphics	VGA graphics and colour monitor
Interfaces	an available USB or Ethernet interface
Operating system	Windows 7, Windows 8

2.2 Installing AtmoCONTROL

You must have administrator rights to be able to install AtmoCONTROL.

Start the installation file AtmoControlSetup.exe from the USB storage medium provided. You are now guided through the installation process step by step.

3. Working with AtmoCONTROL

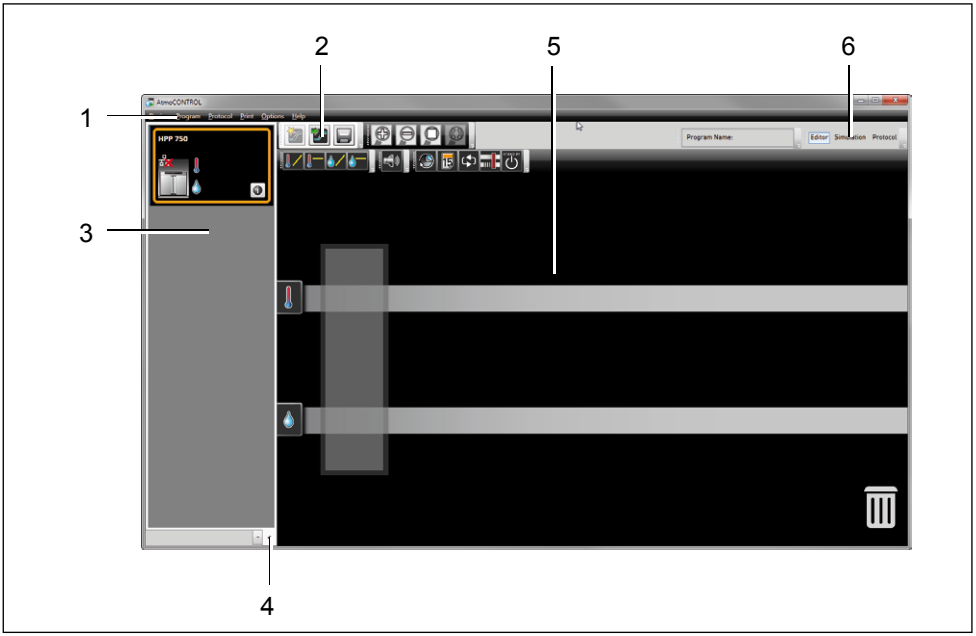
3.1 Starting AtmoCONTROL

AtmoCONTROL can be started in two ways:

- by double-clicking on the shortcut created on the desktop:
- in the Start menu (Start➞Programs➞AtmoCONTROL)

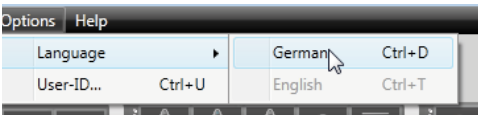
3.2 Programme interface

The main programme interface window of AtmoCONTROL is divided into the following areas:

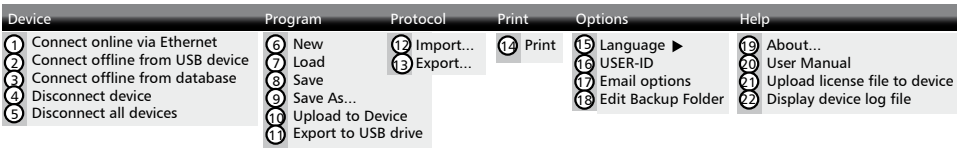


1 *Menu bar (see section 3.2.1)*
2 *Toolbar (quick access to most important functions, see section 3.2.2)*
3 *Status bar (provides an overview of available appliances, see page 10)*
4 *Show/hide status bar*
5 *Editor, simulation and protocol window (only for appliances listed on page 6, otherwise only protocol window)*
6 *Programming mode switch (for editor/simulation/protocol, only for appliances listed on page 6)*

You may change the language of the programme interface at any time. German or English can be set („Options"➞ „Language").



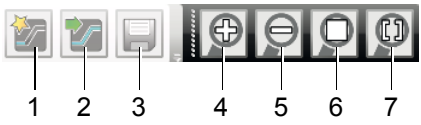
3.2.1 Menu bar



1 *Connect to device via Ethernet (see page 10)*
2 *Connect device using protocol data on USB storage medium (see page 11)*
3 *Connect device using database file (see page 11)*
4 *Disconnect selected device (see page 12)*
5 *Disconnect all devices*
6 *Create new programme (see page 13)*
7 *Load a saved programme (see page 23)*
8 *Save programme*
9 *Save programme under a new name*
10 *Transfer programme to device via Ethernet (see page 23)*
11 *Export programme to USB storage medium (see page 23)*
12 *Import protocol from USB storage medium (see page 29)*
13 *Export protocol data (see page 30)*
14 *Print (see page 30)*
15 *Change programme language (German/English)*
16 *Configure USER-ID (see page 30)*
17 *Automatic sending of emails (see page 31)*
18 *Edit backup folder (see page 32)*
19 *Programme information*
20 *Open this manual in PDF format*
21 *Install device licence (see page 10*
22 *Show the log file of the appliance (see page 12)*

3.2.2 Toolbar

The toolbar provides rapid access to the most important menu functions:



1 *Create a new programme*
2 *Load programme from the data medium*
3 *Save new programme*
4 *Enlarge view (zoom in)*
5 *Reduce view (zoom out)*
6 *Show full programme/ protocol*
7 *Choose the time range you would like to display*

3.2.3 Status bar

The status bar gives an overview of the appliances logged on to AtmoCONTROL. Appliances can be added and removed again.

If the appliance is connected to the computer via Ethernet and it has already been logged on once, it is automatically recognised and the current operating state (temperature, alarms) is displayed (Fig. 1).

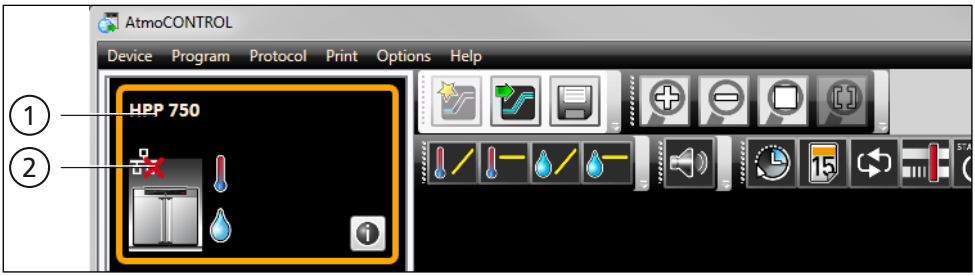
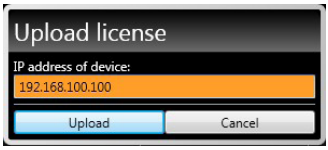


Fig. 1 An appliance of type HPP 750 (1) is registered offline (2) in AtmoCONTROL

3.3 Installing device licence via Ethernet (Single Display Devices)

1. Click on "Help"➞"Upload license file to device".
2. In the window now opening, select the licence file (*.lic) and click "OK".
3. Enter the IP address of the appliance you want to transfer the licence to.



A description of how to set the IP address is provided in the user manual of the corresponding appliance.

4. Click on "Upload" to start transferring the licence. The appliance can now be added (registered) in AtmoCONTROL as described in the following section.

3.4 Adding and disconnecting devices

3.4.1 Adding device connected via Ethernet

1. Click on „Device"➞„Connect online via Ethernet".
2. In the window opening now, enter the IP address of the device. Default setting is the standard IP address all devices have at delivery (192.168.100.100). The IP address entered here must correspond to that of the device.

A description of how to change the IP address of a device is provided in the user manual of the corresponding device.

If you click on „Connect" now, the device is added to the status bar and you can create programmes for it or read out protocols.

3.4.2 Connecting device using USB storage

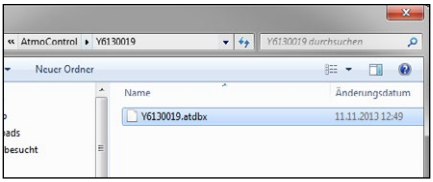
1. Export protocol data from an device to USB storage medium.

A description of how to read protocol data on a device is provided in the user manual of the corresponding device.

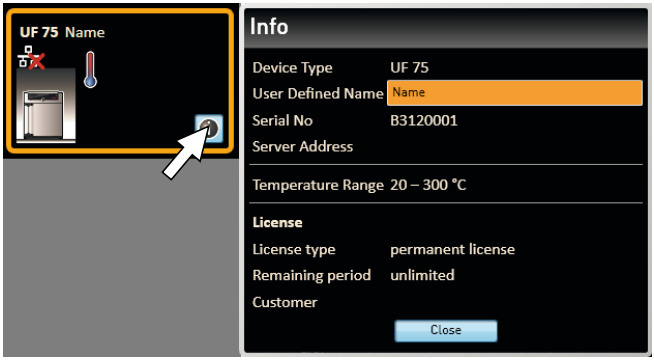
2. Connect the USB storage medium to your computer/laptop.
3. Click on „Device"➞„Connect offline from USB device". All devices for which protocol data are saved on the USB storage medium are connected.

3.4.3 Connecting a device using database file

1. Click on „Device"➞„Connect offline from database".
2. A window opens, in which you can open the device database file (*.atdb).



As soon as the appliance has been added, you can have detailed appliance information displayed at any time. To do this, click on the ⓘ icon in the appliances view ("Device"). A window opens, displaying detailed information. Here, you can also enter a name of your choice for your appliance later on, if you have not already done so when logging on, or change the appliance name.



3.4.4 Log file

If a device is added – no matter whether this is done using a USB stick or via Ethernet – the log file Log.txt is also transferred and saved in a subfolder of the directory

C:\ProgramData\Memmert\AtmoControl\

The log file is structured as shown in the example on the right:

A Date and time of events

B + Beginning of the event
– End of the event

C Alarm / event code

D Alarm / event description

A detailed list of all event codes is given from page 33.

A	B	C	D
06.06.2013 08:57:55	+	111	Controller Restart
06.06.2013 08:57:55	-	111	Controller Restart
06.06.2013 08:57:55	+	402	Humidity Min Alarm
06.06.2013 08:57:56	-	402	Humidity Min Alarm
06.06.2013 08:57:56	+	402	Humidity Min Alarm
06.06.2013 08:57:57	-	402	Humidity Min Alarm
06.06.2013 09:43:21	+	111	Controller Restart
06.06.2013 09:43:21	-	111	Controller Restart
06.06.2013 09:43:21	+	402	Humidity Min Alarm
06.06.2013 09:43:21	-	402	Humidity Min Alarm
06.06.2013 09:43:21	+	402	Humidity Min Alarm
06.06.2013 09:43:24	-	402	Humidity Min Alarm
06.06.2013 09:43:24	+	402	Humidity Min Alarm
06.06.2013 09:43:28	-	402	Humidity Min Alarm
06.06.2013 09:43:41	+	407	Temp Min Alarm
06.06.2013 09:44:01	-	407	Temp Min Alarm

3.4.5 Disconnecting devices

If you want to remove a device from the status bar, select it and then click on „Device"➞„Disconnect device". In order to disconnect all connected appliances, use „Disconnect all devices".

4. Programme

4.1 Editor window

4.1.1 Overview

In the Editor window, programmes can be created: sequences of various parameters (e.g. temperature, pressure and humidity), which the appliance then implements from a definable point in time.

To be able to create a programme in AtmoCONTROL, the appliance which is to perform the programme must be listed in the status bar and selected (clicked on). The appliance can, but does not have to, be connected to the computer via the network. If the appliance is not yet listed in the status bar, it must be added (see page 10).

4.1.2 Creating a programme

Select the appliance that will later perform the programme by clicking on it in the status bar (Fig. 2, No. 1). An icon bar with the available parameters (functions) for this appliance is shown (2, description from page 16). Additionally, one or two editor threads (3 and 4) are displayed, depending on the appliance. The programme sequence is determined on these.

Two editor threads are always shown for appliances with humidity or pressure control, and one editor thread for all others.

Bear in mind that the two editor threads are not synchronised. This means that a specific X position on one thread does not match the same position on the other thread in time. If you want to see the parameter values for a specific point in time, you must change to the simulation mode (see page 22).

If you want to create a time correlation to a specific point, use the "Sync" function (see page 20).

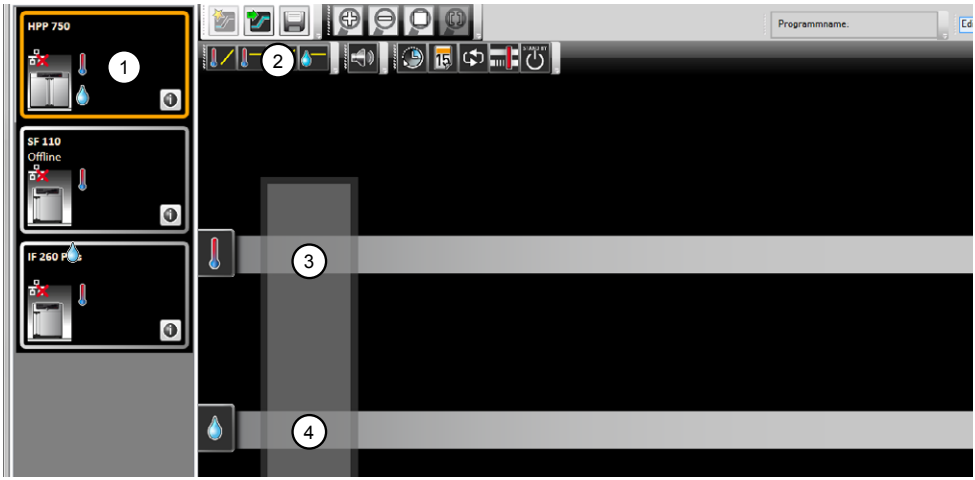


Fig. 2 Elements to create a programme
1 Appliance selected
2 Available parameters (functions)
3 Editor thread
4 Additional editor thread for appliances with humidity or pressure control

To create a programme, drag the individual parameter icons onto the editor thread one after another in the desired order, while holding down the left mouse button (Fig. 3 and Fig. 4). To assist the correct positioning, a red insertion mark is displayed at the insertion position. With the zoom icons in the toolbar list (see section 3.2.2 on page 9) or with the mouse wheel, you can zoom in or out of the display or have the entire programme displayed. Keep the mouse button pressed and drag to reposition icons to another point of the respective thread.

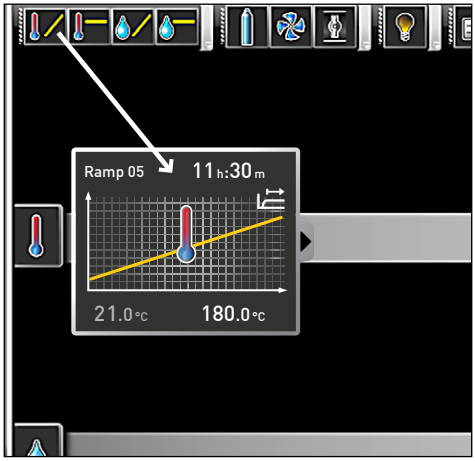


Fig. 3
Drag the parameter icon (in this case a temperature change) onto the editor thread while holding the mouse button down

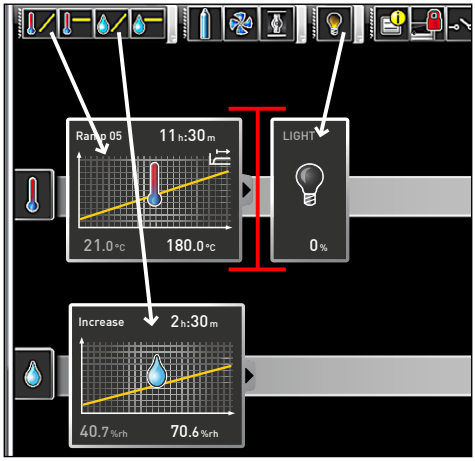


Fig. 4
Drag other parameters – light and a humidity change in this case – onto the editor thread. A red insertion mark helps you to find the correct position.

The temperature icons (change/hold temperature) may only be placed on the upper editor thread, humidity and pressure icons only on the lower one.

The meaning of the individual icons and the adjustment options are described from page 16. You can find some simple programme examples from page 24.

Removing a parameter icon from the editor thread

To remove a parameter icon (and therefore its function) from an editor thread – if you have inserted it by mistake, for example – select it and, with the mouse button depressed, move it to the recycle bin symbol on the lower right (Fig. 5).

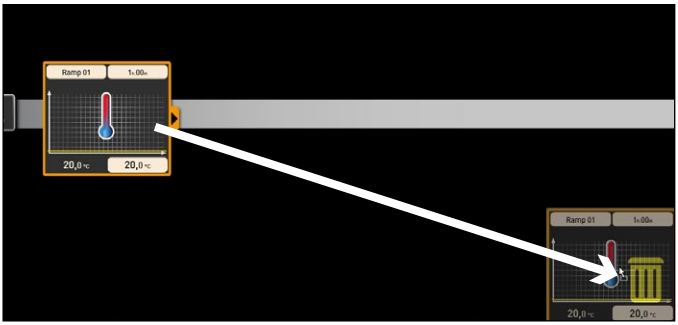
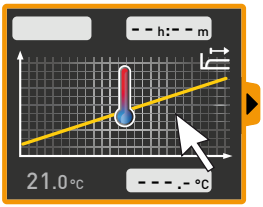


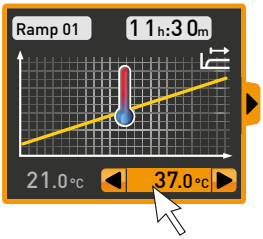
Fig. 5
To delete a parameter icon from an editor thread, drag the icon, with the mouse button depressed, to the recycle bin symbol.

4.1.3 Setting parameters

If a parameter icon is selected (clicked) on an editor thread, it is displayed with an orange frame. The adjustable values – in the example on the right, the ramp name, the duration of the ramp and the setpoint temperature – have a grey background.



To adjust values, click successively on the corresponding fields – in the example on the right, the setpoint temperature. The value is highlighted in colour and can be changed by keyboard entry or clicking on the arrow icons.



The adjustment range depends on the appliance for which the programme is created.

The main parameters have additional adjustment options, which can be displayed by clicking on the fold down icon (Fig. 6, No. 1). Here, the adjustable values – in the example below, the tolerance band and the setpoint dependency (SPWT) – also have a grey background (2) and can be adjusted after being clicked on (3).

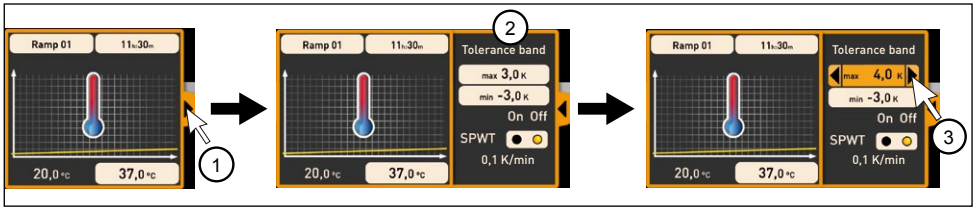


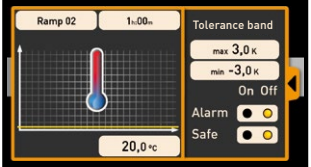
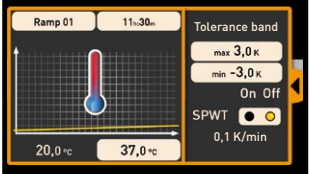
Fig. 6 Further adjustment options fold down after clicking on the arrow icon on the right edge of the window (1)

4.1.4 Available parameters

Below, all the parameter icons with their adjustment options are shown.

Which parameters are available to adjust the programme depends on the appliance for which a programme is to be created. Only those parameters are available that the appliance is able to implement. For appliances without humidity regulation, for example, no humidity icon is available. The respective adjustment options (temperature ranges etc.) are appliance-specific.

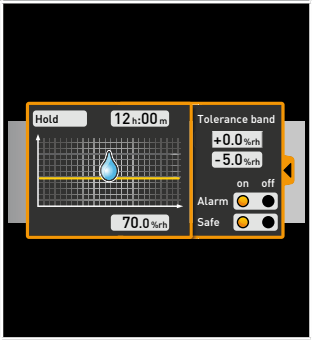
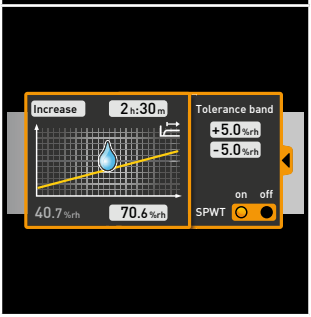
Broad parameter representation

Depiction in icon bar	Meaning	Depiction on editor thread	Function and adjustment options
	Hold temperature		*Function* Maintains a set temperature for a specific time. *Adjustment options* • Name of programme segment[1] • Duration (time or infinite ∞) • Temperature to be maintained • Tolerance value above/below • Alarm if limits are exceeded • Safe[2] (For programme example, see page 24)
	Change temperature		*Function* Increases or decreases temperature over a specific time to a set value. *Adjustment options* • Name of programme segment[1] • Duration • Target (setpoint) temperature • Tolerance value above/below • SPWT[3] (For programme example, see page 25)

[1] When run, this is displayed in the status bar of the appliance

[2] When Safe is "on", it is ensured that the value really is maintained within the tolerance band as long as specified, and only then is the programme continued (this is sensible for sterilisers, for example). If the actual values leaves the tolerance band, the clock timer starts again from the beginning.

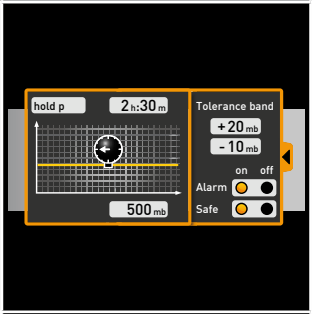
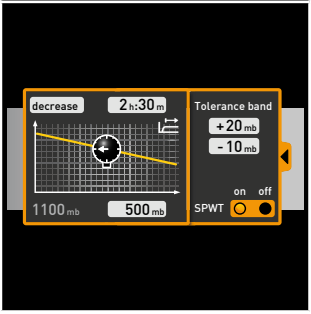
[3] SPWT: Setpoint wait. If this is "on", the programme sequence is not continued before the setpoint value is reached, even if the set time has already expired. If this is "off", the programme sequence is continued after the set time has expired, irrespective of whether the setpoint value was reached or not.

Depiction in icon bar	Meaning	Depiction on editor thread	Function and adjustment options
	Hold humidity		*Function* Maintains a specific humidity for a specific time. *Adjustment options* • Name of programme segment[1] • Duration (time or infinite ∞) • Humidity value to be maintained • Tolerance value above/below • Alarm if limits are exceeded • Safe[2]
	Change humidity		*Function* Increases or decreases humidity over a specific time to a specific value. *Adjustment options* • Name of programme segment[1] • Duration • Target (setpoint) humidity • Tolerance value above/below • SPWT[3]

[1] When run, this is displayed in the status bar of the appliance

[2] When Safe is "on", it is ensured that the value really is maintained within the tolerance band as long as specified, and only then is the programme continued (this is sensible for sterilisers, for example). If the actual values leaves the tolerance band, the clock timer starts again from the beginning.

[3] SPWT: Setpoint wait. If this is "on", the programme sequence is not continued before the setpoint value is reached, even if the set time has already expired. If this is "off", the programme sequence is continued after the set time has expired, irrespective of whether the setpoint value was reached or not.

Depiction in icon bar	Meaning	Depiction on editor thread	Function and adjustment options
	Hold pressure		*Function* Maintains a specific pressure for a specific time. *Adjustment options* • Name of programme segment[1] • Duration (time or infinite ∞) • Pressure to be maintained • Tolerance value above/below • Alarm if limits are exceeded • Safe[2]
	Change pressure		*Function* Increases or decreases pressure over a specific time to a specific value. *Adjustment options* • Name of programme segment[1] • Duration • Target (setpoint) pressure • Tolerance value above/below • SPWT[3]

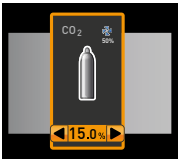
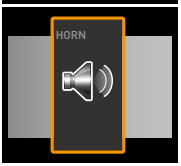
[1] When run, this is displayed in the status bar of the appliance

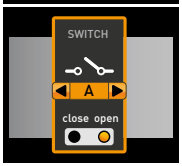
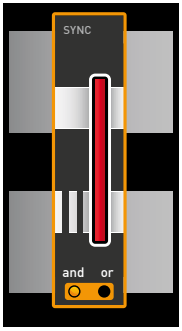
[2] When Safe is "on", it is ensured that the value really is maintained within the tolerance band as long as specified, and only then is the programme continued (this is sensible for sterilisers, for example). If the actual values leaves the tolerance band, the clock timer starts again from the beginning.

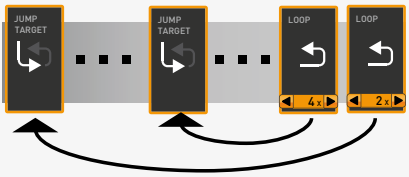
[3] SPWT: Setpoint wait. If this is "on", the programme sequence is not continued before the setpoint value is reached, even if the set time has already expired. If this is "off", the programme sequence is continued after the set time has expired, irrespective of whether the setpoint value was reached or not.

Narrow parameter representation

With the narrow parameter representation, no time progression can be set, in contrast to broad parameter representation. The setting made immediately becomes active at the respective position – and remains active until it is changed by the insertion of a new parameter icon of the same type.

Depiction in icon bar	Meaning	Depiction on editor thread	Adjustment options/ comments
	CO_2		0 to 20 percent For a setpoint ≠ 0.0, the fan is automatically set to 50 %.
	O_2		1 to 20 percent, off
	Fan speed		0 to 100 percent in steps of 10 % (For programme example, see page 26)
	Air flap position		0 % (closed, recirculating operation) to 100 % (opened completely, fresh air operation) in steps of 10% (For programme example, see page 26)
	Interior lighting		depends on appliance type • 0 or 100 % (off/on) • 0 to 100 % in steps of 1%
	UV light		on/off
	Horn		Adjustment options: none Appliance emits an acoustic signal at the position in the programme at which the icon was inserted, for example if a specific setpoint value is reached or the programme is finished.

Depiction in icon bar	Meaning	Depiction on editor thread	Adjustment options/ comments
	Door		Adjustment options: open/close Close/open door at the position in the programme at which the icon was inserted. (For programme example, see page 25)
	Switch		Switches a switching contact (A, B or C) on or off at the insertion position
	Defrost		Activates the defrosting function of the appliance at the insertion position
	Clock timer		Here, the day(s) and the time at which the programme is to be performed, can be adjusted. The programme is repeated each week at the specified times. (For programme example, see page 24)
	Calendar		Here, the date and time at which the programme is to be performed, can be adjusted. In contrast to the clock timer, the programme is run only once.
	Synchronising		• Setting "and": The programme is only continued when the preceding ramps are finished on both editor threads. • Setting "or": The programme is continued as soon as one of the preceding ramps is finished.

Depiction in icon bar	Meaning	Depiction on editor thread	Adjustment options/ comments
	Loop		The programme jumps back from the insertion position to a position that can be freely selected and repeats the sequence between n times (adjustable). When inserting a loop function, an icon for the jump target is automatically inserted at the programme start. Holding the mouse key down, move it to the beginning of the range that is to be repeated. Loops may be embedded inside one another:  (For programme example, see page 27)
	Standby		Switches all appliance functions off at the insertion position

4.2 Simulating the programme sequence (preview)

While creating the programme, you can display the prospective progression of all parameters as a diagram at any time. To do this, click on "Simulation" (Fig. 7).

Depending on the complexity of the programme, it may take a few seconds for the simulation to be calculated and displayed.

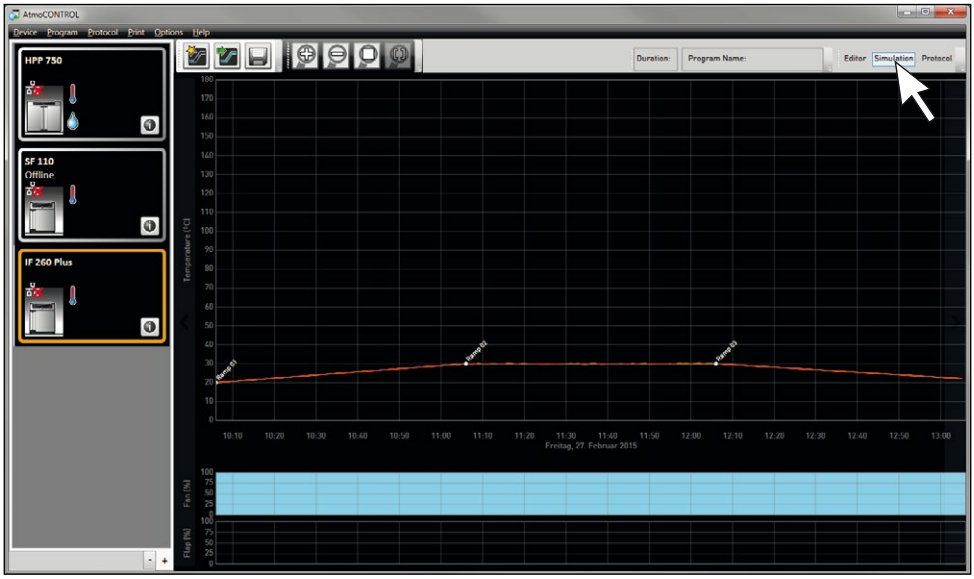


Fig. 7 Programme preview diagram (simulation)

In simulation mode, no changes can be made to the programme, as this mode is just for information purposes. Change to the editor window by clicking on the "Editor" button if you want to alter the programme.

4.3 Saving, loading, transferring and running the programme

4.3.1 Saving the programme

Click on “Program” ➞“Save as”. If the subfolder “Profiles” in the “Memmert” folder (...\Memmert\Profiles) is not shown as storage location, create a new folder named “Memmert” with a subfolder named “Profiles”. Enter a name for the programme and click on “Save”.

The name with which you save the programme is later displayed in the programme selection display on the appliance.

4.3.2 Loading a saved programme

Via „Program"➞„Load”, you can reopen and continue editing the saved programmes.

4.3.3 Transferring programme via Ethernet

To be able to transfer a programme via Ethernet, the appliance and computer must be connected via Ethernet, the correct IP address set (see page 10) and the appliance switched on.

Click „Program"➞„Upload to device”. The programme is uploaded to the appliance and can be started there.

4.3.4 Transferring a programme via USB storage medium

1. Click „Program"➞„Export to USB drive”. The programme is saved on the USB storage medium connected.
2. Connect the USB data medium to the appliance which is to run the program.

4.3.5 Selecting and starting a programme on the appliance

If the programme was transferred to the appliance via Ethernet or USB data medium, it can be selected and started there.

How programmes are selected and started on the appliance is described in the user manual for the appliance.

If the appliance is connected to the computer via the network, the respective current operating status can be monitored in the status bar of AtmoCONTROL (see page 10).

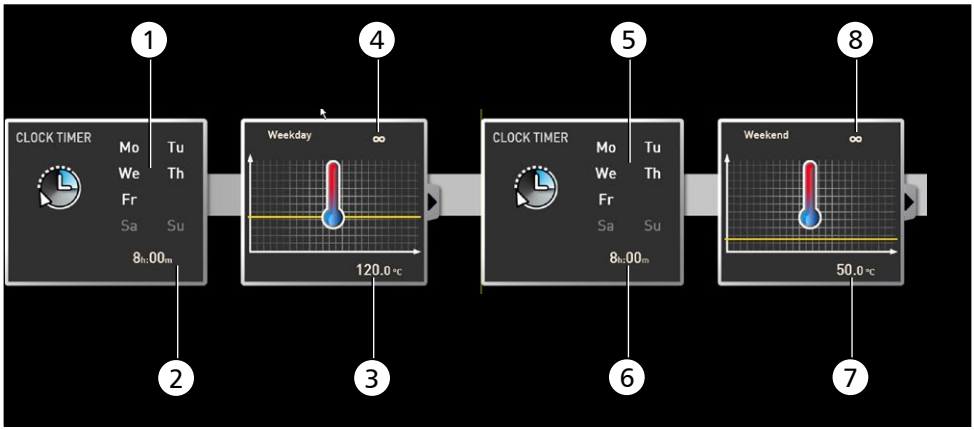
With appliances that have humidity control, make sure that the water supply tank of the appliance is filled before the programme start. Check the level of the tank at regular intervals, especially for programmes that run for long periods. The same applies for appliances with gas supply.

4.4 Programme examples

For reasons of space, it is not possible to present programme examples with all the available parameters for all MEMMERT appliances here. Instead, a number of simple example programmes will be presented to familiarise you with how a programme is structured.

Caution:
It is important that you run through a number of programme examples to get to know AtmoCONTROL before you actually transfer and run programmes on the appliance.

4.4.1 Programme example with clock timer



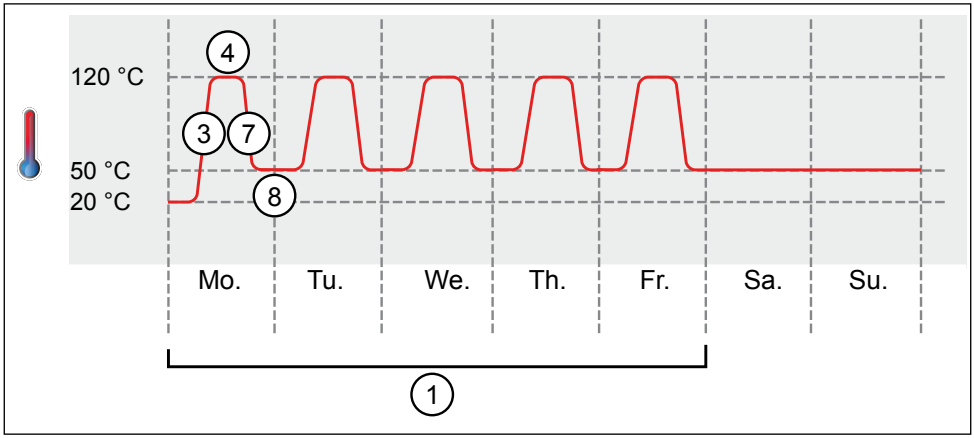
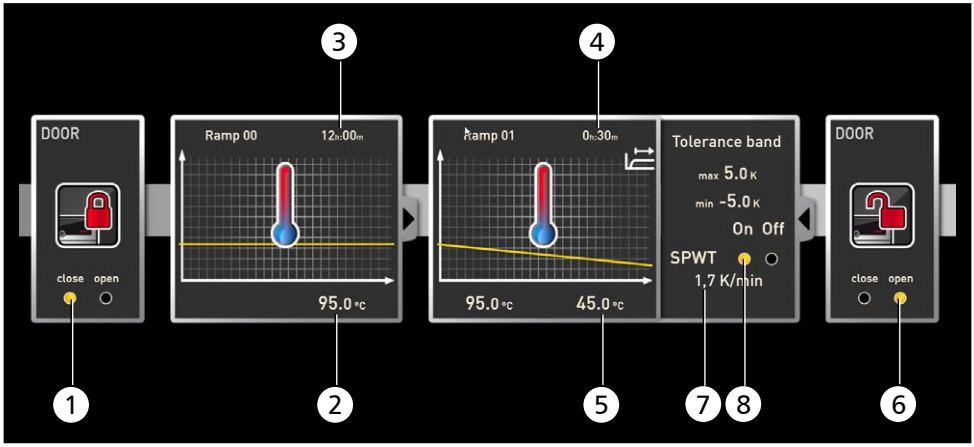


Fig. 8
The appliance heats up from Monday to Friday (1) at 8 am (2) to 120 °C (3) and continues to maintain this temperature (infinitely ∞) (4) until it is changed: also Monday to Friday (5) at 6 pm (6) to 50 °C (7) – again continued (infinitely ∞) (8) until it is changed again in the morning at 8 am (2).

4.4.2 Programme example with door locking



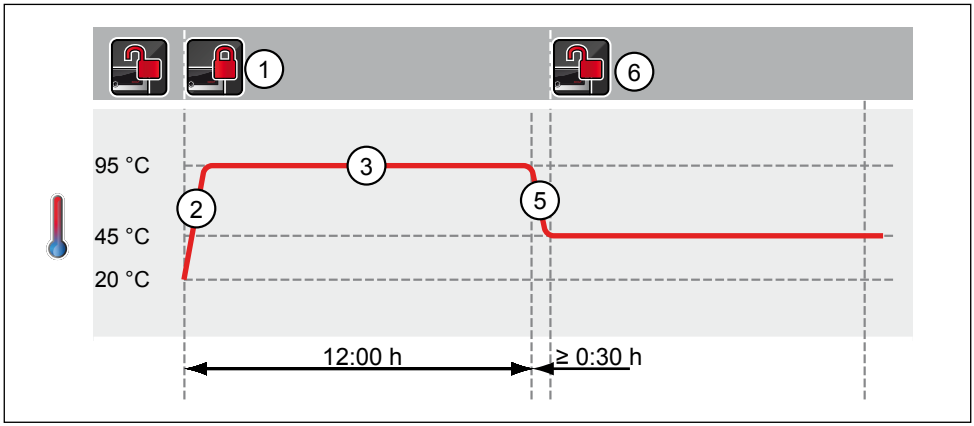
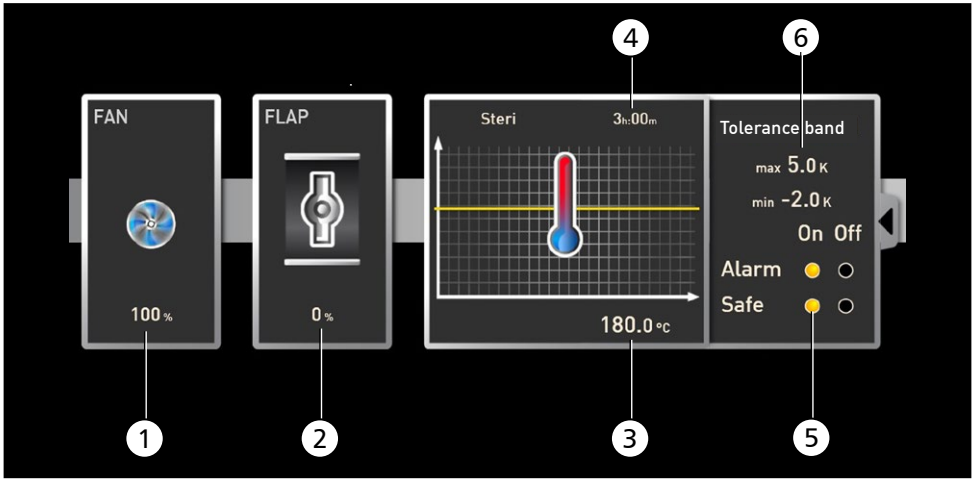


Fig. 9
The door is locked at the beginning of the programme (1). Then, the appliance heats up to 95.0 °C (2) and maintains this temperature for 12 hours (3). Subsequently, the temperature is lowered (5) for 30 minutes (4) to 45.0 °C and then, the door is opened (6). The setting "SPWT on" (8) ensures that the door is opened only when the temperature really has dropped to 45.0 °C, even if this takes longer than 30 minutes. Below the temperature change is shown in K/min (7).

4.4.3 Programme example sterilisation



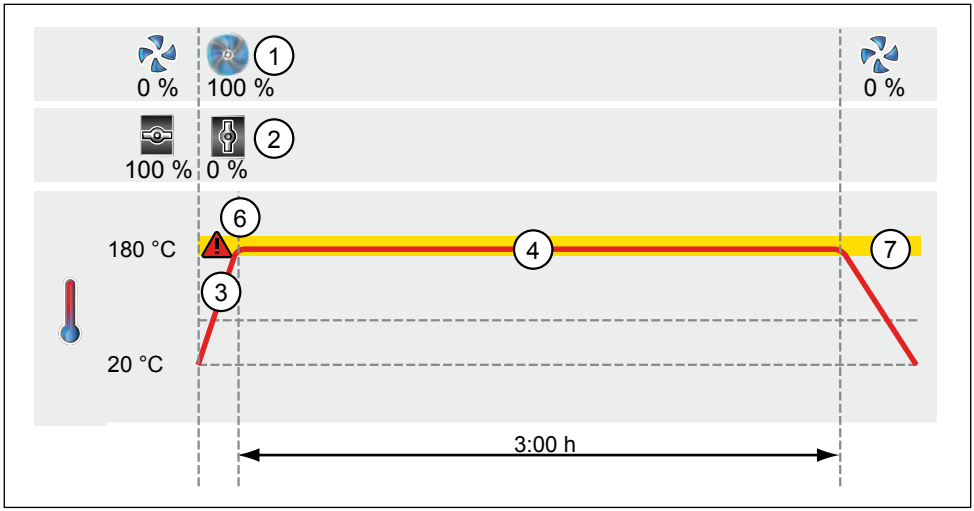
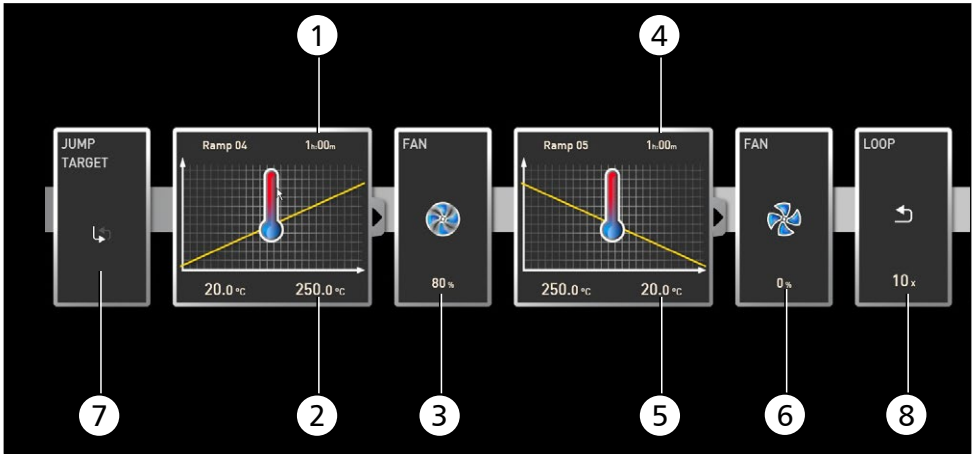


Fig. 10
At the beginning, the fan is switched on to 100 % (1) and the air flap is closed (0 %) (2). Then, the appliance heats up to 180.0 °C (3) and maintains this temperature for 3 hours (4). The setting „Safe“ (5) ensures that the sterilisation time does not start (6) before the set tolerance band (7) is reached and is restarted if it is exceeded.

4.4.4 Programme example loop



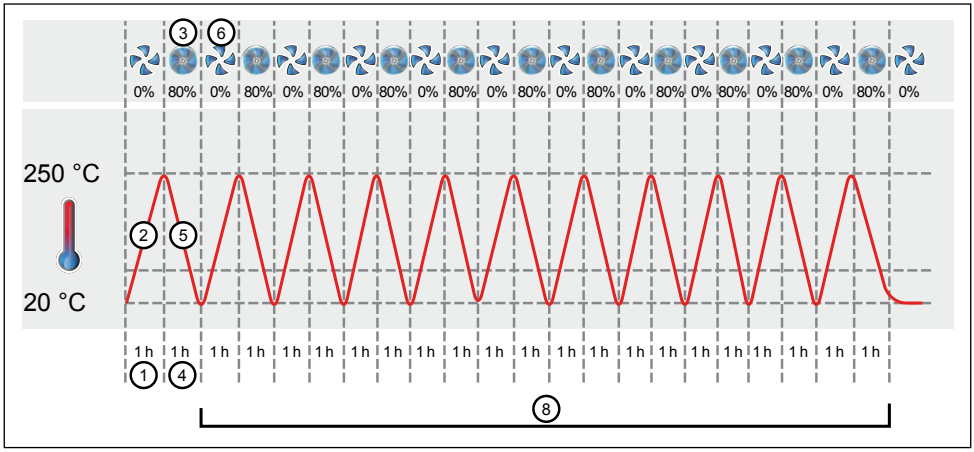


Fig. 11
First, the appliance heats up to 250.0 °C (2) for one hour (1). Then, the fan begins to run at 80 % power (3) and the temperature is lowered for one hour (4) to 20.0 °C (5). Subsequently, the fan is switched off (6). This sequence is repeated from the jump target (7) ten times (8).

5. Protocol

In the protocol window, you can now see a graphic representation of the chronological sequence of set and actual values of the appliance highlighted in the status bar (temperature, humidity, fan, etc.). The representation depends on the range of functions of the respective appliance.

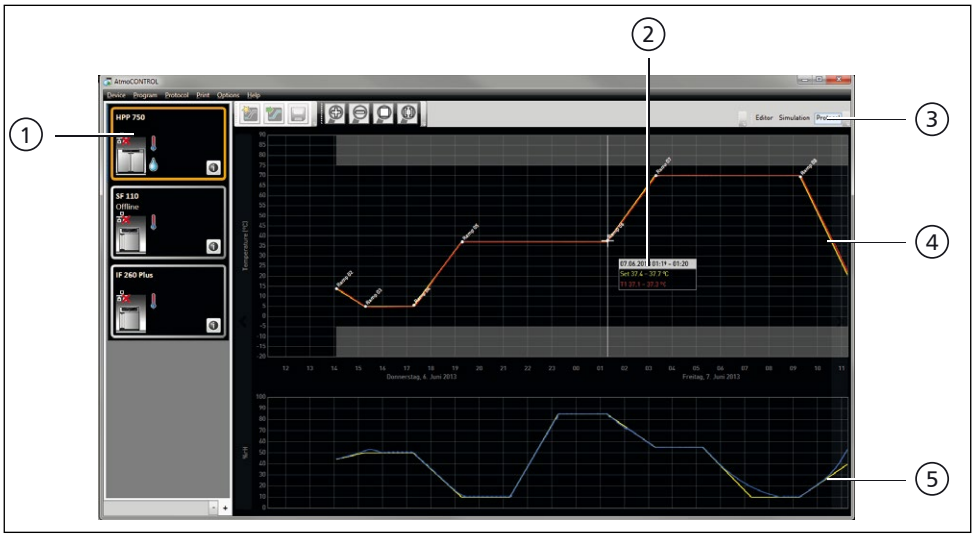


Fig. 12 Protocol display (example)

1 Appliance for which the protocol is being shown
2 Set value (yellow) and actual value (other colour) at the cursor position
3 Open protocol view
4 Chronological sequence of set (yellow) and actual (other colour) temperature values
5 Chronological sequence of other appliance functions (humidity, fan speed, air flap position, etc. depending on the appliance's functions)

5.1 Load protocol

5.1.1 Importing protocol from network

To be able to import a protocol via network, the appliance and computer must be connected to the network, the correct IP address set (see page 10) and the appliance switched on and logged in to AtmoCONTROL.

Click on the "Protocol" button (Fig. 12); the protocol data of the appliance are transferred and displayed and can be further processed – e.g. exported to a spreadsheet file format (see Section 5.3).

5.1.2 Importing protocol from USB data medium

At the appliance, protocols can be exported to an USB storage medium and imported in AtmoCONTROL:

How protocols on the appliance are exported to USB storage media is described in the user manual for the appliance.

1. Connect the USB storage medium with the exported protocols to your computer/laptop.
2. Click on „Protocol"➞„Import". The protocol data are transferred and displayed in AtmoCONTROL.

Protocol data are also loaded automatically if you connect an appliance using the protocol files on an USB storage medium (see page 11).

5.2 Working in the protocol view

You can zoom into an area of the protocol window by

- clicking the magnifying glass symbol (+) in the tool bar. To zoom out, click on the magnifying glass symbol (-) again.
- keep the mouse button pressed and drag to select the desired area (Fig. 13)
- scroll with the mouse wheel

If you want to see a time range of more than two days, click on the right icon of the tool bar at the top (Fig. 14). A window will open in which you can select the time range.

Fig. 13
Expanding the time range by drawing a rectangle

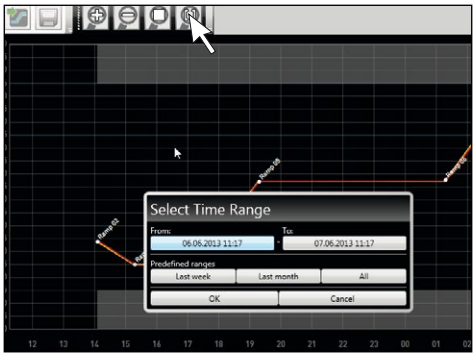


Fig. 14
Choose time range manually

5.3 Exporting protocol

With „Protocol"➞„Export", you can export a freely definable protocol logging period into a file of the types *.csv or *.xlsx (Excel), which can be processed in spreadsheet programmes (Fig. 15).

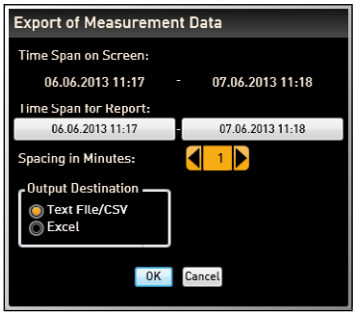


Fig. 15
Exporting protocols

6. Printing

With the „Print" function, you can print out programmes in the editor window, as well as simulations and protocols – depending on what is currently displayed.

7. Options

7.1 Language

You can set the language of the user interface (German or English) under "Options"➞"Language".

7.2 USER-ID

7.2.1 Description

With the appliances listed in the table on page 6, it is possible, with the help of an encrypted "USER-ID" file on a special USB stick (Fig. 16), to lock functions of the appliance or to restrict them in their operation. You can configure which parameters are to be prevented from being adjusted when the USER-ID USB stick is removed.

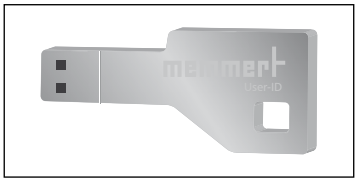


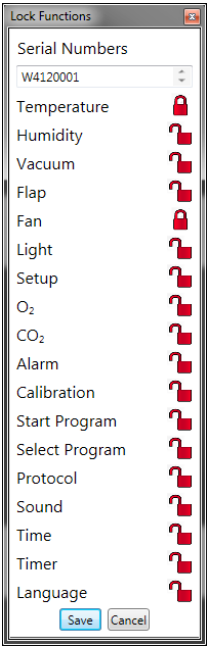
Fig. 16
USER-ID USB stick

AtmoCONTROL cannot generate a USER-ID file, but only change the authorisations of a purchased USER-ID file on a USER-ID data medium. If there is no valid USER-ID file on the USB data medium, configuration in AtmoCONTROL is also not possible.

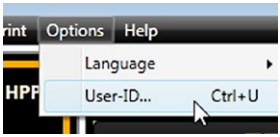
There can be only one USER-ID on a USER-ID USB stick. The settings in this file then apply for all appliances configured.

A USER-ID identifier on a USER-ID USB stick for one (or several) serial numbers can be purchased. This data medium contains a file with keys for one or more appliances. With the help of AtmoCONTROL, the function of the USER-ID key can be changed.

7.2.2 Use



1. Insert the USER-ID USB stick with the USER-ID file into the computer with AtmoCONTROL.
2. In the Options menu bar, click on ➞USER-ID.



3. A window appears with the functions of the logged on appliance that can be blocked (depending on the appliance type).
4. Click on the lock icon next to the functions that should be blocked or released, and confirm this with OK.
5. Eject and remove the USER-ID USB stick, insert it in the appliance and activate.

How USER-IDs are activated and deactivated on the appliance is described in the operating instructions for the appliance.

7.3 Sending emails

AtmoCONTROL can automatically send an email to a freely definable recipient if an alarm was triggered, e.g. if the temperature is exceeded. To make the corresponding settings, select „Options"➞„Email options" (Fig. 17). Your computer/laptop must have internet access and you need to have an e-mail provider or outgoing mail server. The login data (user name, password etc) are entered like in an email programme.

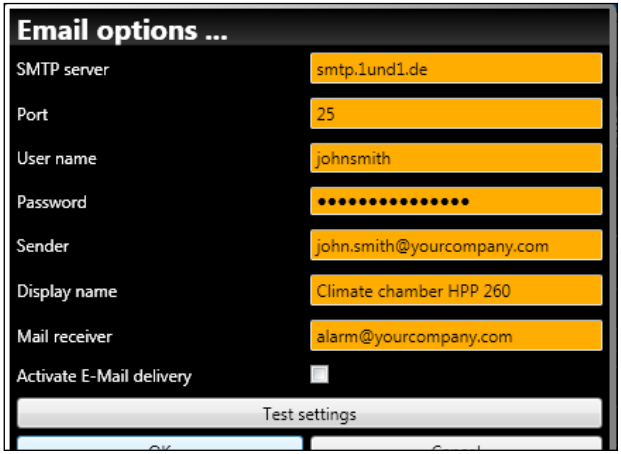


Fig. 17
Settings for the automatic sending of emails in case of alarm events

7.4 Backup folder

You can set up a backup folder in which AtmoCONTROL saves backup copies of programmes and user data. To do so, click on “Options”➞”Edit Backup Folder”.

You can either use the default folder or select a different one.

8. Event codes of the log file Log.txt

(see page 12)

Error codes for Generation 2012 appliances Status: October 09, 2012

In case of a hardware error of the oven, the controller displays the following error codes in a status / error window, as well as logs them in the “Log.txt” file in the “Config” directory on the SD card.

The position of the error number further specifies the position of the error.

Error code	Parameter	Description
101: OS Error		Operating system error
102: File System Error		File system error
103: USB Error		USB error
104: GUI Error		Graphical user interface error
105: IP Stack Error		Ethernet error
106: I2C Bus Error		12C bus error
107: RTC Error		Realtime clock error
108: RAM Disk Error		RAM disk error
109: WatchDog Reset		Watchdog error
110: Power Supply OK		Power Supply OK
111: Controller Restart		Restart after reset
201: Config Error		Configuration error
202: Calib User Error		Error in calibration file (user)
203: Calib System Error		Error in calibration file (calibration system)
204: PID Config Error		Error in PID parameters
205: User Config Error		Error in user settings
206: Battery Error		Battery low
207: SD Card Space		Warning at 95% disk space usage
208: SD Card Full		Error, SD card is full
209: SD Card Missing		SD card is missing
210: Failed To Copy Protocol		Error copying the protocol
211: Restauration Failed		Error restoring LastState
212: Max Count Of Profiles		Maximum number of profiles on SD card reached
301: Fan Error		Fan speed error
302: Heating Error		Heating error
303: Temp Limitor		Temperature limiter has triggered
304: Door open		Door is opened
305: Hzg Err Note: The position of the red digit indicates the defective stage of the appliance.	200000	Triac optocoupler heating 1 power module 1 defective
	020000	Triac optocoupler heating 2 power module 1 defective
	002000	Triac optocoupler heating 1 power module 2 defective
	000200	Triac optocoupler heating 2 power module 2 defective
	000020	Triac optocoupler heating 1 power module 3 defective
	000002	Triac optocoupler heating 2 power module 3 defective
	100000	Triac heating 1 power module 1 defective
	010000	Triac heating 2 power module 1 defective
	001000	Triac heating 1 power module 2 defective
	000100	Triac heating 2 power module 2 defective

	000010	Triac heating 1 power module 3 defective
	000001	Triac heating 2 power module 3 defective
306: Comm Err	1000	Power module 1 is not responding
	0100	Power module 2 is not responding
	0010	Power module 3 is not responding
	0001	Humidity power module is not responding
	2000	Power module #1 checksum error in communication
	0200	Power module #2 checksum error in communication
	0020	Power module #3 checksum error in communication
	0002	Humidity power module checksum error in communication
401: Humidity Sensor		Humidity sensor defective
402: Humidity Min Al		Humidity below minimum value
403: Humidity Max Al		Humidity maximum value exceeded
404: Water tank empty		Water tank empty
405: Temp Sensor Defunct		Temperature sensor defective
406: Sensor Alarm		Monitoring sensor defective
407: Temp Min Alarm		Temperature below minimum value
408: Temp Max Alarm		Temperature maximum value exceeded
409: Temp Auto Alarm		Temperature tolerance band violated
410: Lights Off		Automatic lights switch-off
501: Sensor CO2 Error		CO_2 sensor defective
502: CO2 Empty		CO_2 supply interrupted / gas cylinder empty
503: CO2 Auto Switch		Notification of gas cylinder change
504: CO2 Min Alarm		CO_2 below alarm limit
505: CO2 Max Alarm		CO_2 alarm limit exceeded
506: Sensor O2 Error		O_2 sensor defective
507: N2 Empty		N_2 supply interrupted / gas cylinder empty
508: O2 Min Alarm		O_2 below alarm limit
509: O2 Max Alarm		O_2 alarm limit exceeded
601: Vacuum Sensor Error		Pressure sensor defective
602: No Shelf		No shelf inserted
603: Vacuum Min Alarm		Pressure below alarm limit
604: Vacuum Max Alarm		Pressure alarm limit exceeded
700: Power Min Border		Voltage below minimum limit
701: Device Fail time		time of power failure
702: Device Start Time		time of restart
801: Program Start		Programme start
802: Program Cancelled		Programme cancellation
803: Program End		Programme end
804: Invalid Program		Programme cannot be loaded

Index

memmert

Experts in Thermostatics

AtmoCONTROL

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englisch

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