Installation and Operating Instructions

Systemsoftware - AQUA 3000 open for PC
Version 5.4

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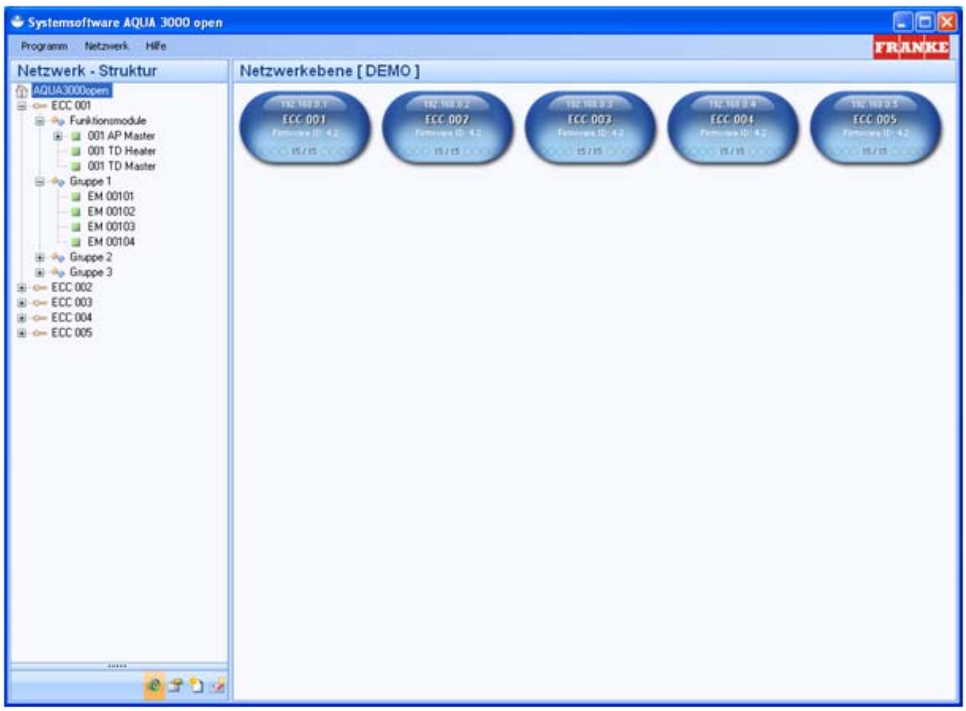
	ZAQUA009



⚠ **Caution!**
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1. Key

⚠ **Warning!**
Failure to observe can result in injury or even death.

⚠ **Caution!**
Failure to observe can result in material damage.

☞ **Important!**
Failure to observe can cause the product to malfunction.

☞ Useful information for optimally handling the product.

2. Warranty

Liability is accepted according to the General Terms and Conditions of Business and Supply.
Use original replacement parts only!

3. Application

AQUA 3000 open System Software for standard PC with Windows XP, Vista or Windows 7 operating system and DOT.NET Framework 2.0, for operating, visualising and monitoring AQUA 3000 open fittings and/or facilities.

4. System Requirements

Fittings:	A3000 open fittings with ECC function controller
PC:	1 GHz, 1 GB RAM, Screen resolution 1024x768 pixels Network access
Operating system:	Windows XP Service Pack 2, Windows Vista or Windows 7
Microsoft .NET Framework 2.0:	Download, e. g. from: http://msdn.microsoft.com/de-de/netframework/default.aspx
SAP Crystal Reports Runtime	This software is required for the report function Depending on the operating system: • CRRuntime_32bit_13_0_2.msi • CRRuntime_64bit_13_0_2.msi

Local administrator rights are required
- to establish the network,
- to set up the network,
- to install the software.

5. Installation

☞ **Important!**
Comprehensive network experience and computer knowledge is required to set up the network.

5.1 Insert the CD.

5.2 If DOT.NET Framework is not yet installed on the PC:
Install DOT.NET Framework.
Install DOT.NET Framework language package.

5.3 Select folder "Software\AQUA 3000 open - Setup\Systemsoftware AQUA 3000 open Vx.x.x".

5.4 Start the Setup.exe program.

5.5 Follow the instructions given by the installation program.

- The AQUA 3000 open system software is installed.
- The following symbol appears on the desktop: .

☞ When upgrading from an older version of the software to Version 5.4, please observe the notes in Chapter 50.

☞ When an ECC function controller is switched on or a module is restarted, it is necessary to wait for 5-min before configuring or using the ECC function controller and the module.

ECC function controller	Power supply for a max. of 32 A3000 open modules; controller for functions such as thermal disinfection, set A/B switching and protocol saving, with 10/100 MBits/s Ethernet interface.
Isle network	ECC function controller, that is connected with 1-32 A3000 open modules via system lines.
Network	The totality of all isle networks, which are interconnected via LAN/Ethernet and which can be controlled by the system software.
Project	A project serves to document the current status of a plant and can be used by customer service for diagnostic purposes. The following information is recorded in a project: – all "Netwide TD" groups (folders) and their configuration, which were created in the "Netwide TD" mode, – Notes on ECC function controllers and "Netwide TD" groups, – Settings for thermal disinfection of the folders, – Setting for module IDs.
Group	Whenever a module is connected to the ECC function controller it is also assigned to a group. Subdividing the fittings into groups will, for example, avoid all fittings connected to a particular ECC function controller from being disinfected at the same time. Instead, the groups are disinfected one after the other. Fittings in group 9 do not get disinfected.
Modules	A module may consist of: – Electronic module (EM) of a fitting, – Sensor module (SM) of a fitting, – Display module (LED) or – Electronic systems module (function module)
Fittings ID	File in which all configurations have been saved, for example settings for thermal disinfection or settings for hygiene flushing. This file can be sent to a module.
Folder "Application Data"	• Windows XP: "C:\Documents and Settings\All Users**Application Data**\Franke Aquarotter\Aqua3000open\" • Windows Vista: "C:**ProgramData**\Franke Aquarotter\Aqua3000open\" • Windows 7: "C:**ProgramData**\Franke Aquarotter\Aqua3000open\"

7. Introduction

The AQUA 3000 open provides tools and features for customising water supplies individually, intelligently and in keeping with current demand to suit the requirements of all kinds of buildings. It is thus possible to improve comfort, hygiene and safety for users of public and commercial sanitary facilities, while at the same time economic efficiency and greater environmental compatibility are achieved.

The A3000 open system software provides the following functions for fittings and/or systems:

- visualisation,
- monitoring and
- operation.

The system software has three structural levels.

1. Level	Network Overview of all isle networks that are connected together into a network.
2. Level	Fitting (isle networks) Overview of all modules that are connected together via an ECC-function controller.
3. Level	Modules Overview of all data that can be read from a module.

The system software has 2 modes.
Depending on the respective setting, the system software will either boot up in private or technician mode.

Private mode	In private mode, only an overview is shown at the Module Level. It is possible to read the IDs and statistics of the modules.
Technician mode	In technician mode, you can also – Commission a facility – Set up a facility – Thermally disinfect fittings – display statistical data on the Module Level

The software starts after installation in private mode

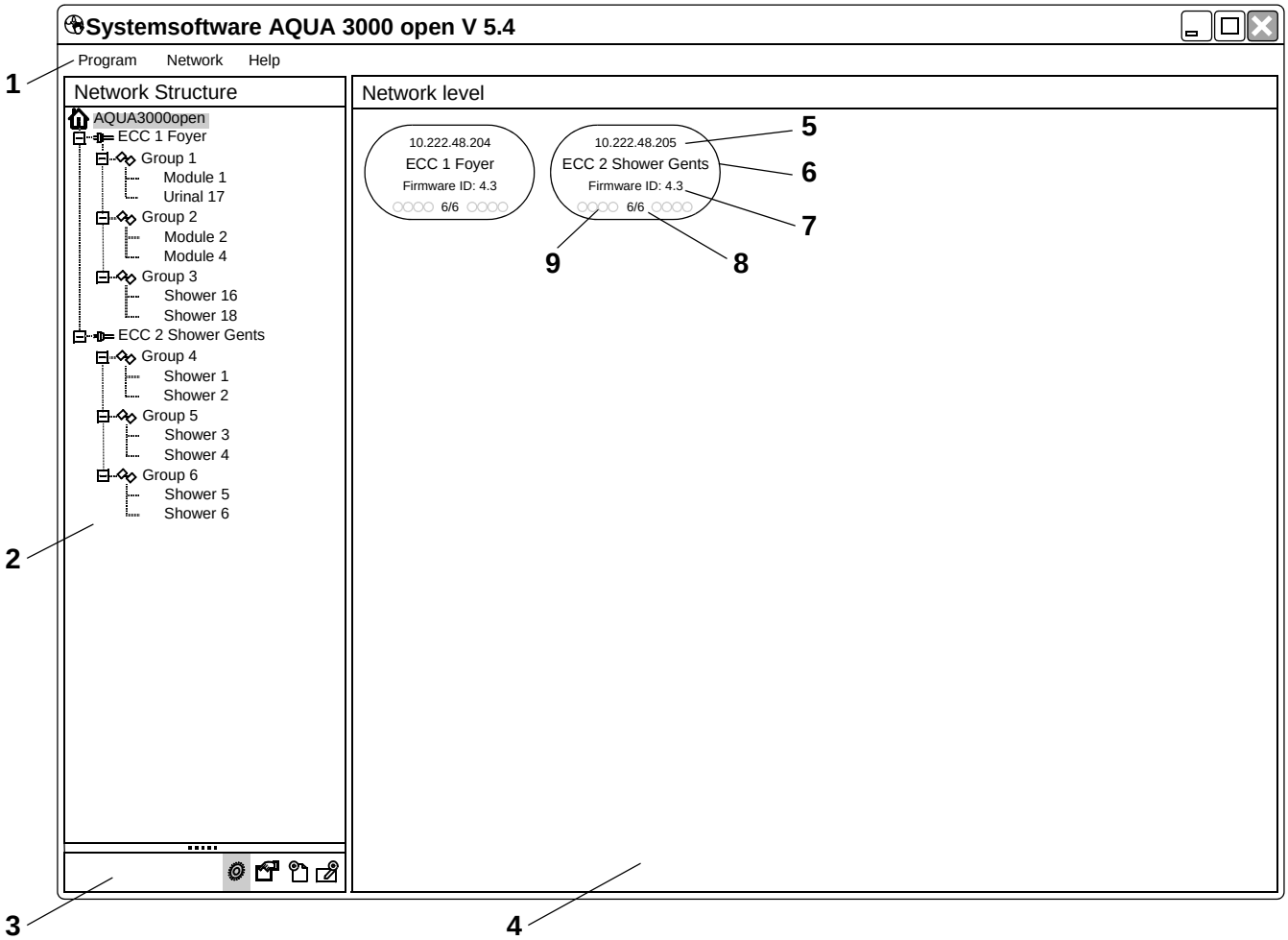
To access technician mode, send an email with "Technician mode approval" as the subject to ws-info.de@franke.com. You will then receive separate instructions (18-15.265).

With the help of an advanced version of the system software, customer service can make additional settings, for example modify fitting IDs.

8. Starting the Program

8.1 Click the symbol on the desktop.

- The AQUA 3000 open system software is started.
- The network overview is displayed.
  All ECC-function controllers found in the network are shown with their IP address, firmware ID and (if assigned) name. The underlying fitting level can be displayed by mouse-clicking.
- If the "Record Statistics" function was active when the program was last used, the program prompts the user to specify whether recording statistics is to be continued.
- If the "Auto Project" function was active when the program was last used, project file "A3000 OPEN.network" in the "Application Data" folder is automatically loaded.



1 Menu bar
2 Overview of network structure
3 Navigation Bar
4 Information window
5 IP address of the ECC function controller
6 Name of the ECC function controller
7 Firmware version of the ECC function controller
8 x of x fittings are online
9 ECC status display

Colour code in overview of network structure:

□	grey	…	The module is inactive.
■	green	…	The module is active.
■	red	…	The last transaction (read/send) failed. The status is reset when a successful transaction is completed.

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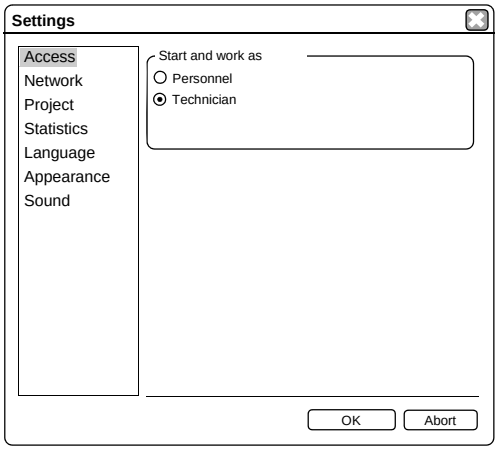


Access

9.1 In the menu bar, select "Program > Settings...".

- The Settings window opens.

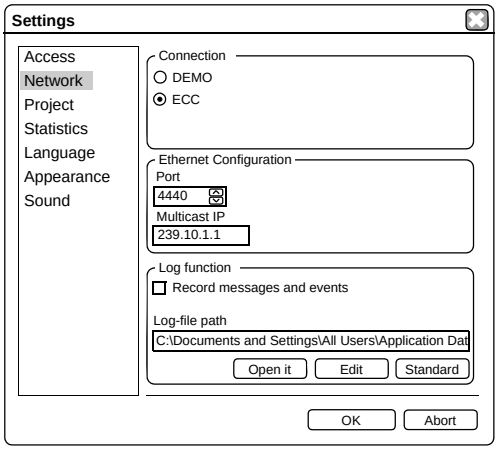
9.2 Select the mode with which the software should start.

☞ This setting is not available in private mode.

To access technician mode, send an email with "Technician mode approval" as the subject to ws-info.de@franke.com. You will then receive separate instructions.

9.3 Confirm the entry.

- The software switches to the selected mode.
- The next time the system is started, the software boots up in the selected mode.



Network

9.4 In the menu bar, select "Program > Settings...".

- The Settings window opens.

9.5 Select the Network tab.

9.6 Select the operating mode in the Connection field.

DEMO:

There are additional modules for demonstration available as well as the three function modules Aquapay-Master, TD-Heater and TD-Master. Some basic features of the modules are simulated. Sensor and actuator activities or thermal disinfections are not supported. Optionally a pre-configured network can be simulated using a demo database. The demo database and the IDs used by it are managed in the FAR program data folder under "Demo".

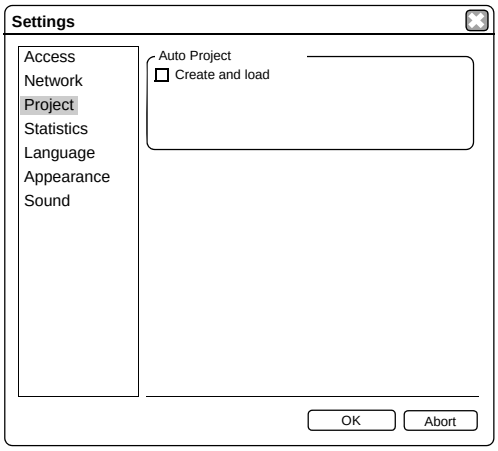
ECC:

operating mode of the water manager system for controlling the fittings.

9.7 Select the port and the Multicast IP address for the communication with the ECC function controller in the Ethernet Configuration field.
Port: The system software is assigned to the ECC via the port.
Multicast IP: The Multicast IP can be used to receive data simultaneously from several bus participants.

9.8 If a checkmark is in the Log Function field, a log file is created for the current day that logs the messages, incidents and states. The log file is saved in the FAR program data folder under "Logs" as standard. The technician can change the place where it is to be saved.

9.9 Confirm the entry.



Project

9.10 In the menu bar, select "Program > Settings...".

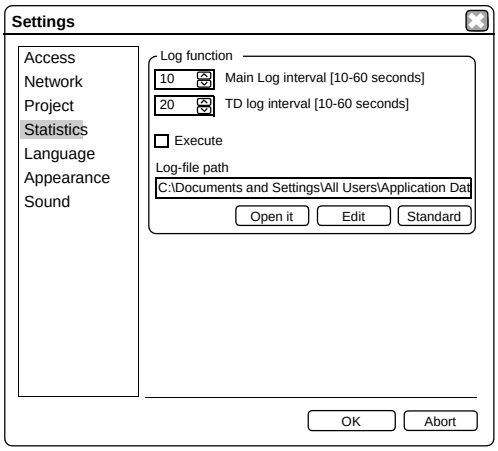
- The Settings window opens.

9.11 Select the Project tab.

9.12 Activate or deactivate the "Auto Project" function.
If a checkmark is in the "Create and Load" field, the "Auto Project" function is active.

- When the program is terminated, the current status of the network is automatically written into a project file in the "Application Data" folder. The project file exclusively uses the standard project file ("A3000 OPEN.network").
- When the program is started, the project file ("A3000 OPEN.network") in the "Application Data" folder is automatically loaded.

9.13 Confirm the entry.



Statistics

9.14 In the menu bar, select "Program > Settings...".

- The Settings window opens.

9.15 Select the Statistics tab.

9.16 Select the Main Log Interval.
The Main Log Interval is the time after which a data record is saved in the database by each fitting.

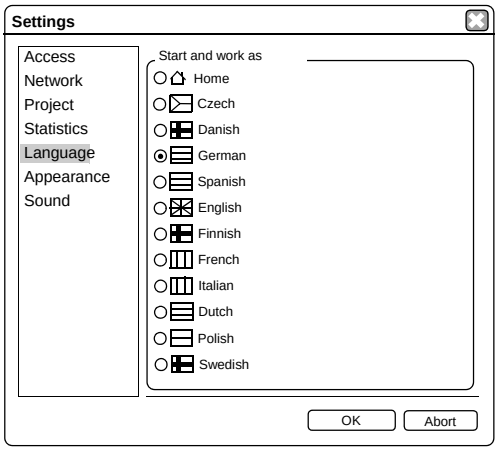
9.17 Select the TD Log Interval.
When thermal disinfection is active within the network (TD stage 5), the interval can be shortened to a range between 10 seconds and 60 seconds. The settings are saved upon conclusion of the program.

9.18 Activate or deactivate the "Log Statistics" function.
If a checkmark is in the "Execute" field, the "Log Statistics" function is active. The log file is saved in the FAR program data folder under "Statistics" as standard. The technician can change the place where it is to be saved.

9.19 Confirm the entry.

- When Log Statistics Data is active, each module within the network saves the current data in the specified intervals.

☞ The shorter the interval is set, the more space must be provided within the database, e. g.: When 100 fittings are logged with an interval of 10 minutes for a period of 24 hours, the size of the database required is approx. 10 Mb.



Language

9.20 In the menu bar, select "Program > Settings...".

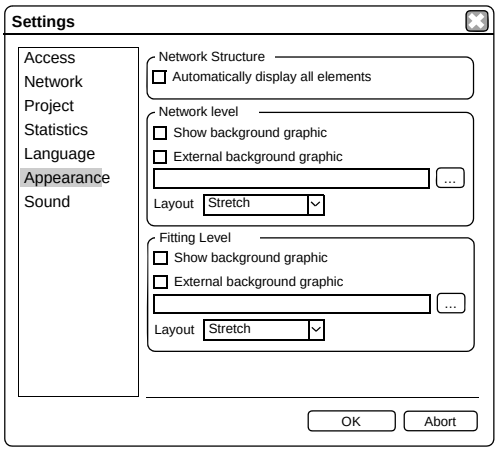
- The Settings window opens.

9.21 Select the Language tab.
The software is now available in 11 languages.

☞ Selecting "Home" switches to the corresponding language that the operating system on the respective computer uses.

9.22 Confirm the entry.

- When the system software is started the next time, it boots up with the selected language.



Appearance

9.23 In the menu bar, select "Program > Settings...".

- The Settings window opens.

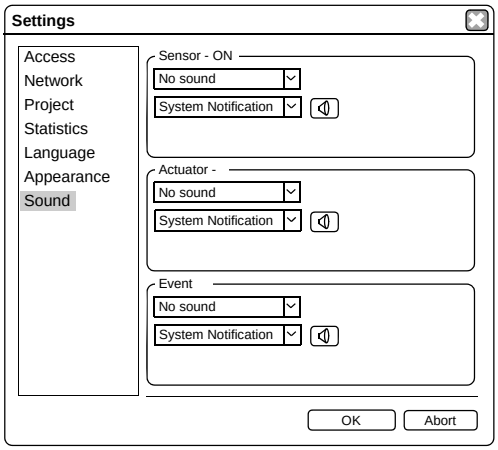
9.24 Select the Appearance tab.

9.25 Activate or deactivate the automatic display of all elements.
If a checkmark is in the "Automatically display all elements" field, the "Auto Expand" function is active.

- While the network is being read, the bar folders in the navigator are automatically flipped open.

9.26 Activate or deactivate the display of the background graphic.
If a checkmark is in the "Display Background Graphic" field, the standard graphic is displayed on the network level or fitting level.
If a checkmark is also in the "External Background Graphic" field, you can select your own graphic.

9.27 Confirm the entry.



Sound

9.28 In the menu bar, select "Program > Settings...

- The Settings window opens.

9.29 Select the Sound tab.

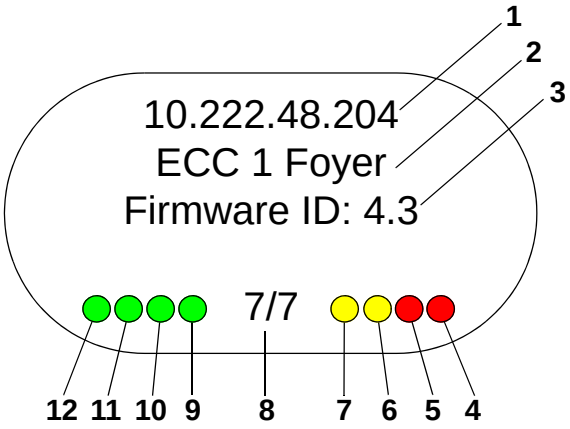
9.30 Select the sound for the desired action(s).

9.31 Confirm the entry.

10. User Information

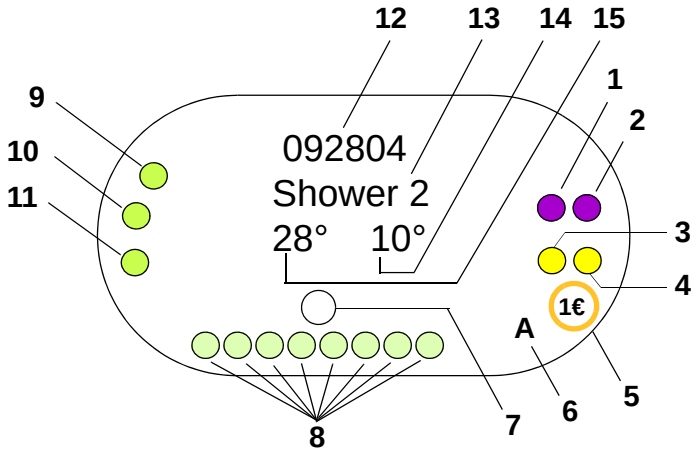
Symbol	Designation	Symbol	Designation
	Event, alarm (yellow)		Heating/cooling phase (orange) Condition blocked under sequential control
	Normal operation (blue)		Thermal disinfection (red)
	Inactive (grey)		Fitting operating with changed ID (green)
	Washing	IR	Opto-sensor
	Showering	Piezo	Piezo-button
	Soap dispenser	Radar	Radar sensor
	Ventilator	Capacitive	Capacitive sensor Touch tile
	Urinal	Sensor	Sensor, e. g. temperature sensor, ring sensor, etc.
WC	WC	Door	Door contact

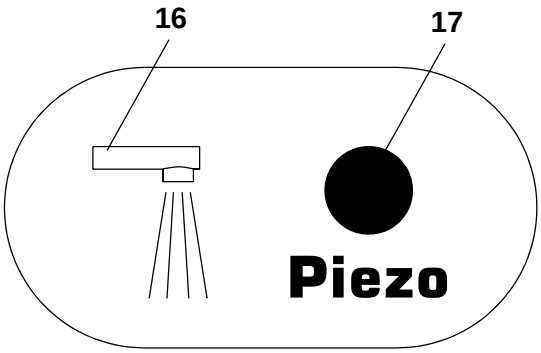
ECC display in the information window



1 IP Address
2 Name of the ECC function controller
3 Firmware version
4 Output 2: General faults
5 Output 1: TD OK/failed
6 UPS detected
7 SD card detected
8 Number of fittings (active/total)
9 Input 4: Set set B
10 Input 3: Start cleaning switch-off
11 Input 2: Start hygiene flush
12 Input 1: Start thermal disinfection

Fittings display in the information window





1 Actuator 1 resp. 1.1
2 Actuator 1.2
3 Actuator 2 resp. 2.1
4 Actuator 2.2
5 paid media delivery (Aquapay)
6 Status of operating condition (A, B)
7 Status flow duration reduction
(◔◑◕●)
8 Sensor-bus participant
9 Sensor 1
10 Sensor 2
11 Sensor 3
12 Series ID (hexadecimal format)
13 Name of fitting
14 Current temperature of cold water
(if the corresponding sensor is active in the program ID)
15 Current temperature of hot water
(if the corresponding sensor is active in the program ID)
16 Display for fittings type
17 Display trigger
○ Sensor
□ Display

11. General Information on Configuring the Network

The A3000 open ECC function controller incorporates the most important control functions for the new generation of A3000 open fittings.
Connections for Ethernet and SD card modules are provided for data transmission and communication. The highest level of neutrality and connection options is provided by means of an integrated 10/100 MBit/s Ethernet interface.

The ECC function controller can be accessed via a PC or laptop. Before the ECC-function controller can be accessed with the system software, the controller must be initialized (see Chapter 12.). The maximum number of PCs that can simultaneously access the ECC system controller with the system software is 5. It is possible to choose between multicast and direct connection.

When several ECC function controllers are interconnected within a network, it is necessary to change the respective IP addresses from the second ECC function controller onwards. All IP addresses of PCs and ECC function controllers interconnected within one and the same network must lie within the same IP address range (see standard IEE 802.3).

Many company networks are additionally equipped with routers, gateways or switches. Incorrectly set or enabled devices of this type can prevent proper communication. In these cases please contact the responsible network administrator.

If possible, AQUA 3000 open should be installed in its own network or subnet. In this case communication is not affected by any network load (e. g. due to excessive downloads).

12. Connecting the ECC Function Controller to a PC

☞ Every ECC function controller is factory set with the following IP address:

IP address:	192.168.0.1
Port:	4440

☞ **Important!**
When an ECC function controller is connected to a PC for the first time, the PC must be connected only to a single ECC function controller.

12.1 Set up the PC as follows:

- In the Control Panel/Network Connection deactivate DHCP (dynamic host configuration).
- In Control Panel/Network Connection set the factory specified IP address range. Recommendation:

IP address:	192.168.0.2
Subnet mask:	255.255.255.0

- If a firewall is active, enable port 4440 for UDP in the system software.

12.2 Use a standard Ethernet crossover cable to connect the ECC function controller to the PC.

- The system software detects the ECC function controller. This may take up to a minute.
- The ECC function controller communicates with the PC.

☞ If the computer was originally operating in a different home network, its IP address must be reset to its original configuration.

13. Incorporating the ECC Function Controller into a Network

13.1 Connect the ECC function controller with a PC (see Chapter 12.).

13.2 Use a standard patch cable to connect the ECC function controller to the network (switch/hub).

- The system software detects the ECC function controller. This process may take some time.
- The ECC function controller is displayed in the information window.

☞ The IP addresses of the PC and the ECC function controller must lie within the same IP address range.

If several function controllers are to be incorporated within one and the same network via Ethernet, the-IP address and, where necessary, the port must be reassigned.
Recommendation:

IP address range:	192.168.0.1 through 192.168.0.254
Port:	4440

If the network is being supervised, the responsible system administrator or network operator will assign the IP-addresses, the IP address range and, where applicable, a different port.
It is not possible to set a subnet mask and a gateway on the ECC function controller.

13.3 In the menu bar, select "Program > Settings... > Network".

13.4 Change the port.

13.5 Change the IP address.

13.6 Confirm the entry.

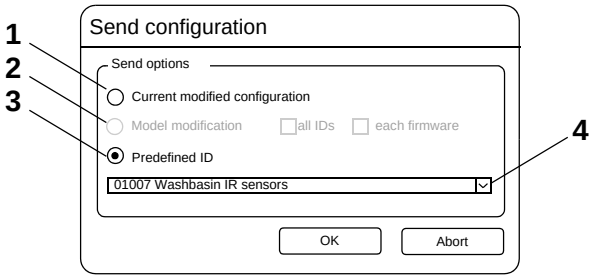
Read data of all modules

14.1 Select "Program > Read Data from all modules" in the menu bar.

- The configuration and statistics of all modules is read.

Sending IDs to several modules...

14.2 In the menu bar, select "Program > Send ID to several modules..."



14.3 Select the Send option.

1. When the configurations of several modules are changed, these changes are sent to all selected modules.
2. The model modifications are sent to all selected modules.
   If the option "to all IDs" is selected, the model modifications are sent to all selected modules independent of the ID.
   If the option "to all IDs" is not selected, the model modifications are only sent to modules with the same ID.
   If the option "each firmware" is selected, the model modifications are sent to all modules independent of the firmware.
   If the option "each firmware" is not selected, the model modifications are only sent to modules with the same firmware.
3. The selected, predefined ID is sent to all selected modules. All imported IDs are displayed in the list (4).

14.4 Confirm the entry.

14.5 Select the modules to which the ID is to be sent.

14.6 Confirm the entry.

14.7 Confirm the safety enquiry.

- The newly selected configuration is loaded into the selected modules.

or

Do not confirm the safety enquiry.

- The selected modules keep their old configuration.

Import ID...

14.8 In the menu bar, select "Program > Import ID...".

- The file selector opens up.

14.9 Select the location where the imported IDs are to be saved.

14.10 Select the IDs that are to be imported.

14.11 Confirm the entry.

- All marked IDs are imported.

Reading statistics of all modules

14.12 Select "Program > Read statistics from all modules" in the menu bar.

- The statistical data of all fittings accessible within the network are read in. The data are saved in a database located in the "Application Data" folder. The file name corresponds to the current date preceded by the characters “ecc” (e. g. ecc20100119.xml). The database gives the current status of the fittings. Each time the statistical data is read during the course of a single day, the data base file (e. g. ecc20100119.xml) gets overwritten.
- The statistics software opens up. The data read in are displayed graphically.

Show Graphic...

14.13 In the menu bar, select "Program > Show graphic..."

- The statistics software (see Chapter 33.) is now started.
- The contents of the "AQUA 3000 open databases" can be displayed graphically. The graphics can be printed.

Flash several modules...

14.14 Select "Program > Flash several modules..." in the menu bar.

- The file selector opens up.

14.15 Select the firmware file.

14.16 Confirm the entry.

14.17 Select the modules for which the firmware is to be altered.

- Function modules are not shown in the selection list. These modules must be flashed individually.
- If the hardware ID of the module is known, the module type is displayed in the selection list. Example: SM (Sensor module), EM (Electronic module) etc.

14.18 Confirm the entry.

14.19 Confirm the safety enquiry.

- The newly selected firmware is loaded into the selected modules.

or

Do not confirm the safety enquiry.

- The selected modules keep their old firmware.

Settings...

14.20 In the menu bar, select "Program > Settings...".

- The Settings window opens.
- Settings that can affect the software can be made centrally here(see Chapter 9.).

End

14.21 In the menu bar, select "Program > Quit".

- The system software is terminated.
- When the "Log Statistics" function is active, the statistical records are saved to a database. The current status of the statistics recording process (active/not active) is written into the configuration file.
- When the "Auto Project" function is active, the current status of the network is written into a project file in the "Application Data" folder. The project file is the standard project file "A3000 OPEN.network".

Netwide Thermal Disinfection (TD) mode

15.1 In the menu bar, select "Network > Netwide TD".

- The fittings of all ECC function controllers within the network are placed on a common global Fitting Level.
- Independent of their respective function controllers, the fittings can be assigned to customized netwide folders.
- The Drag&Drop function can be used to copy the fittings into any netwide folder.
- The "Netwide TD" menu item is replaced by the "Show ECCs" menu item

Show ECC Function Controllers mode

15.2 In the menu bar, select "Network > Show ECCs".

- The system switches away from the global Fitting Level.
- All fittings are shown assigned to their respective ECC function controllers.
- The Drag&Drop function can be used to take fittings within an ECC function controller and move them between folders.
- The "Show ECCs" menu item is replaced by the "Netwide TD" menu item

Creating new netwide TDs

☞ All newly created "Netwide TD" folders and all settings for these folders are lost when the system software is terminated. When changes and settings are made in the "Netwide TD" mode, these must be saved as a Project.

15.3 In the menu bar, select "Network > Netwide TD".

- The "Netwide TD" mode is activated.

15.4 In the menu bar, select "Network > Add new netwide TD...".

15.5 Enter the name of the new "Netwide TD" folder.

15.6 Confirm the entry.

- A new "Netwide TD" folder is defined.

15.7 Mark a module in the network structure overview.

15.8 Use the Drag&Drop function to move the fitting into any netwide folder.

- The marked fitting is copied into the selected "Netwide TD" folder.

or wait

15.9 Select the "Copy" menu in the information window.

15.10 Select the "Netwide TD" folder into which the selected fitting is to be copied.

- The marked fitting is copied into the selected "Netwide TD" folder.

Load Project...

see Chapter 40.

Saving a project…

see Chapter 40.

Saving a protocol...

see Chapter 41.

Network sort by Name

15.11 In the menu bar, select "Network > Network sort by Name".

- The ECC function controllers are sorted by name both in the Explorer as well as on the Network Level.
- The fittings are sorted by name on the Fittings Level.

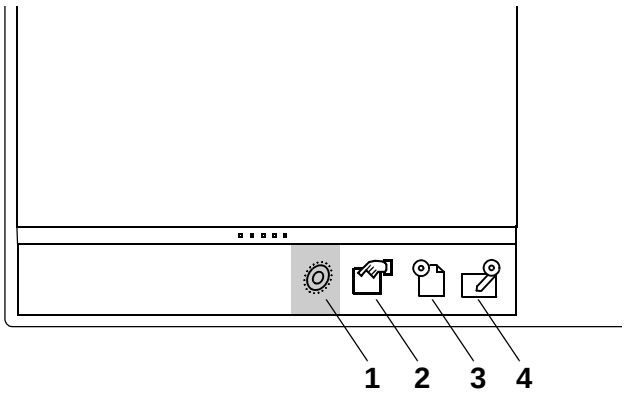
Updating the Network

15.12 In the menu bar, select "Network > Network Update".

- The entire network is read back in again.
- Inactive ECC function controllers and modules are removed from the display.

16. Navigation Bar

16.1 Start the system software.



1 Network structure
The network structure is displayed.

2 Control Center
The Control Center provides the following functions:
  – Scheduler (see Chapter 37.)
  – Logic Control (see Chapter 38.)
  – Media Control(see Chapter 39.)

3 Database
When the "Log Statistics" function is active, the database is displayed. The table can be rearranged according to each individual column by clicking the respective heading within the header (see Chapter 30.).

4 Report
All object-specific data as well as the most important configuration data of a project is saved in a report. A report can, for example, be created by the service technician or the customer to commission or record the current status of the project (see Chapter 42.).

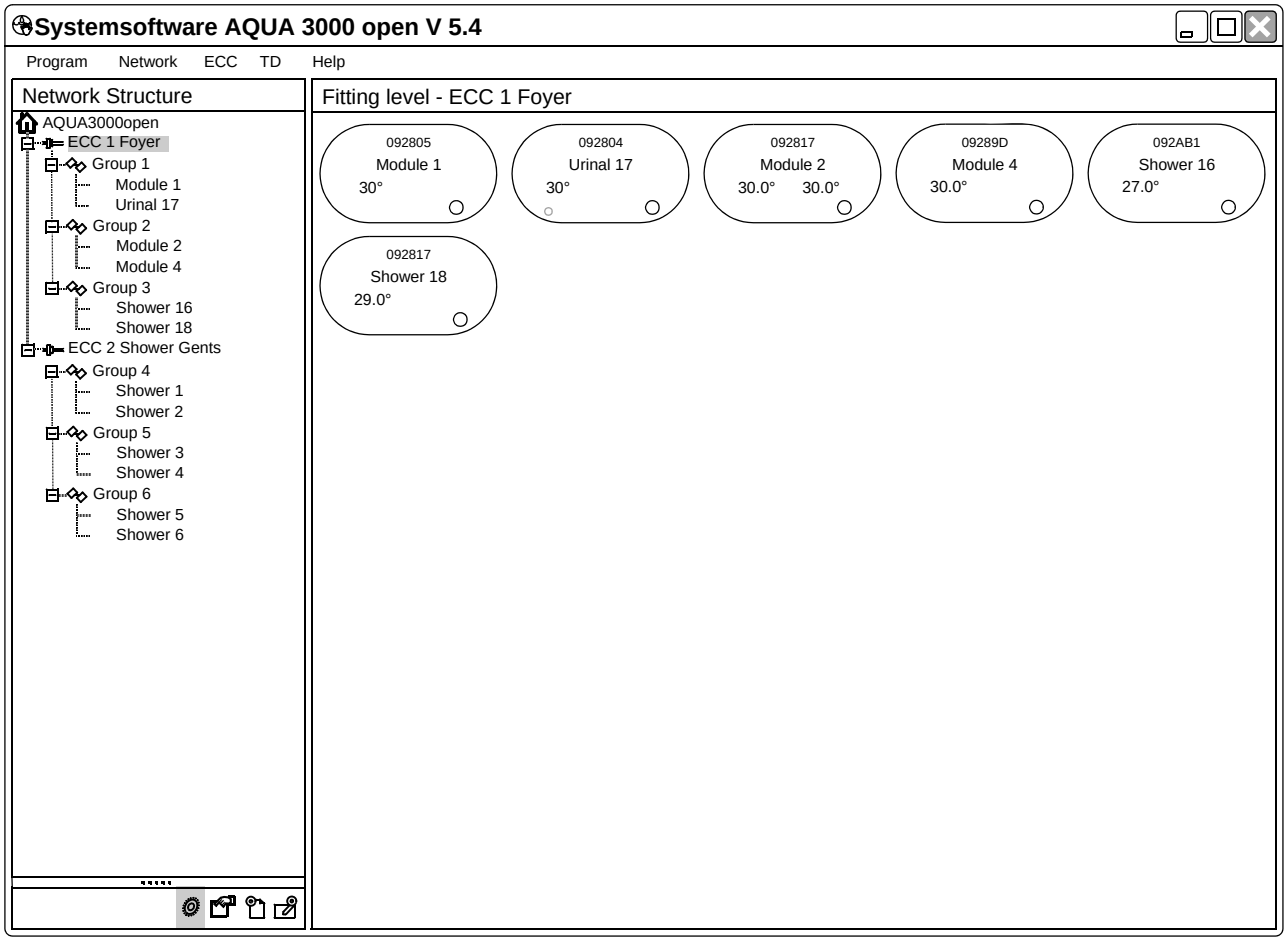
☞ If the "Crystal Reports Runtime" software is not installed, the "Report" function is not available.

17. Fitting Level

17.1 Start the system software.

17.2 Mark the ECC function controller in the network structure overview.

- The Fitting Level is displayed.
  All modules connected to the ECC-function controller are displayed together with their address (if assigned), name and their operating status. The underlying Module Level can be displayed by mouse-clicking.
- When the bus sensors of a module are in a "not active" status, they appear transparent.



Aquapay
When a module is configured for paid media delivery, the fittings display shows the status.

Fitting is ready for paid media delivery

Fitting is occupied or blocked

18. Configuring the ECC Function Controller

18.1 Mark the ECC function controller in the network structure overview.

Rename
The ECC function controller can be assigned an individual name (max. 32 characters), which can then be seen in the information window of the ECC display as well as in the network structure. The name is stored in the-ECC function controller and is preserved there after the system software is ended.

18.2 Select "ECC > Rename" in the menu bar.

18.3 Enter the new name for the ECC function controller.

18.4 Confirm the entry.

- The name of the ECC function controller is then displayed in the network structure overview.

Notes
Information can be entered and stored.

☞ All notes made are lost when the system software is stopped. In order to save notes, these must be stored as a project.

18.5 Select "ECC > Notes..." in the menu bar.

- When notes for the ECC function controller are entered, these are displayed in a window.

18.6 Notes for the ECC function controller
  - edit,
  - add,
  - enter new notes or
  - delete.

18.7 Confirm the entry.

- To maintain any changes when the system software is ended, the notes must be stored in the respective project.

Starting sensor addressing
Sensor activation can be used to assign a common naming scheme with ascending numbers to the modules of the ECC function controller.

18.8 Select "ECC > Start Sensor Addressing" in the menu bar.

18.9 Enter the name template
for number: *, e. g. Foyer Module*
for start number: #xxx#, e. g. Foyer Module #91#

- The Search Mode is now started. A progress bar is displayed while Search Mode is in progress (Modules on ECC ... are being updated).
- As soon as a module of the ECC function controller has been identified (trigger sensor), it is assigned a name that complies with the naming scheme.
  for number: e. g. Foyer Module 001, Foyer Module 002 … Foyer-Module 032
  for start number: e. g. Foyer Module 091, Foyer Module 092 … Foyer-Module 122
- The Search Mode ends as soon as all modules have been identified.
- If the Search Mode is ended manually, the modules that have not as yet been identified up to that point are not renamed.

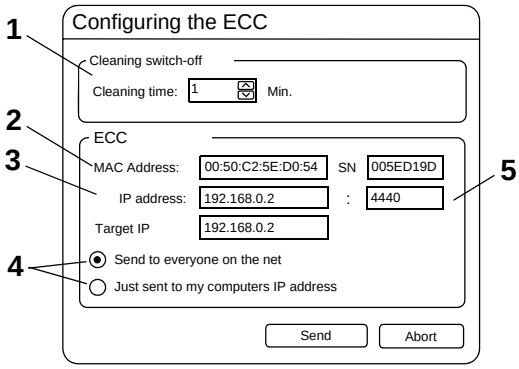
18.10 Confirm the enquiry.

- The renaming process is executed.

or wait
Do not confirm the enquiry.

- The renaming process is not executed.

Configuration
The parameters of the ECC function controller are displayed.



The MAC address (2) is a globally unique hardware address of the ECC function controller.

The IP address (3) serves to ensure unambiguous addressing of the ECC function controller within a network. The IP address of the ECC function controller must be within the same device section of the network mask (Subnet mask) as that used by the computer and must not be already assigned to some other device.

The AQUA 3000 open system software is assigned to the ECC function controller via port (5).

Send options (4)
Send to everyone on the network: The data sent by the ECC function controller can be received by all computers in the same network segment.
Just send to my computers IP address: The data sent by the ECC function controller can be received only by the computer that sent the ECC configuration.
Cleaning switch-off (1)
A fitting can be deactivated to allow cleaning and maintenance work. The Cleaning Mode time is the time during which the sensors of the fitting do not respond after the fitting has been deactivated. The Cleaning Mode time is stored in the ECC-function controller and is preserved there after the system software is ended.

Change the parameters of the ECC function controller

18.11 Select "ECC > Configuration" in the menu bar.

18.12 Change the IP address.

18.13 Select the Send option.

18.14 Confirm the entry.

- The ECC function controller has a new IP address.

18.15 Restart the software.

Set/change the parameters of the ECC function controller

18.16 Select "ECC > Configuration" in the menu bar.

18.17 Select the Cleaning Mode time.

18.18 Confirm the entry.

- When the Cleaning Mode time is triggered on the ECC function controller, all fittings that have an individual cleaning duration are deactivated for the specified time (see Chapter 46.).

Updating an ECC
The ECC displays in the information window are cleared and read back in again.

18.19 Select "ECC > ECC Update" in the menu bar.

- The ECC function controller in the network structure overview is read back in again.
- Inactive modules are removed from the Fitting Level of this ECC function controller.

Resetting incidents of modules

18.20 Select "ECC or Network TD > Reset incidents of modules" in the menu bar.

- The following happens to all modules of the selected ECC function controller or folder "Network TD":
  - all data in the "Incidents" window are deleted.
  - the Incident symbol in the ECC display and the Fittings display are deleted.

Resetting statistics of modules

18.21 Select "ECC or Network TD > Reset statistics of modules" in the menu bar.

- The following values are reset for all modules of the selected ECC function controller or folder "Network TD":
  - Action Counter 1,
  - Action Counter 2,
  - Actuator Runtime 1,
  - Actuator Runtime 2.
- The operating hours do not get reset.
- The statistical data is reset in the module, but it is not automatically reloaded.

19. The Process of Thermal Disinfection

The ECC function controller or the software starts, controls and checks the process of thermal disinfection. Thermal disinfection takes place in 7 phases. Instead of the Serial ID, the ECC display and/or the fitting display shows the phase in which the fitting is currently in. Additionally, depending on the respective disinfection phase, the colour of the ECC display and/or fitting display changes.

Phase	Program run	ECC display and/or fitting display
1	Start signal via external input contact or Ethernet network	blue
2	Heat up hot water tank in conjunction with system electronic module drinking-water heater	orange
3	Enable hot water in conjunction with system electronic module for circulation line	orange
4	Thermal treatment of circulation line	red
5	Thermal treatment of fitting	red
6	Cooling down phase	orange
7	System reset to normal operation	blue

20. Thermal Disinfection

⚠ **Warning!**
Protective measures for persons (scald-protection) must be provided during thermal disinfection, e. g. closing off sanitary rooms.
Failure to observe can cause bodily harm due to scalding.

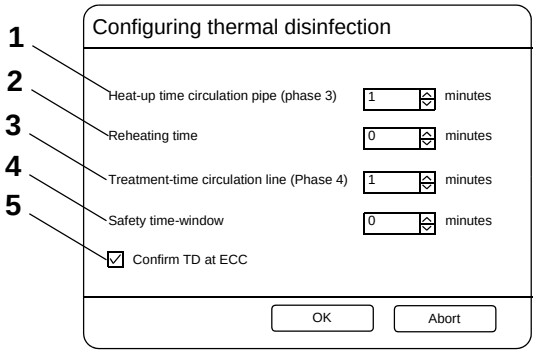
Configuring thermal disinfection

20.1 In the network structure overview or in the "Netwide TD" mode, mark an the ECC function controller "Netwide TD" folder.

20.2 In the menu bar, select "TD > Configure Thermal Disinfection".

20.3 Change the configuration for thermal disinfection.

20.4 Confirm the entry.



1 Preheating Time Circulation Pipe (Phase 3)
If there is no module for circulation heating in the system, the circulation line is heated up for a fixed set time.

2 Reheating time
A so-called reheating time can be selected between the groups; this serves to give the system time for renewed heating.

3 Treatment Time Circulation Pipe (Phase 4)
If there is no module for treatment intervals in the system, the circulation line is disinfected for a fixed set time.

4 Safety time window
After a thermal disinfection process, the hot water circulates in the circulation line until the fitting-sensors become activated again. The safety time window is the time that the fitting-sensors remain deactivated after the thermal disinfection process has completed.

5 Confirm TD at ECC
When this function has been selected, each thermal disinfection must be confirmed on each ECC function controller before a new thermal disinfection process can be started.
For further details please consult the Installation and Operating Instructions for the ECC function controller.

Starting thermal disinfection (local)

20.5 Mark the ECC function controller in the network structure overview.

20.6 In the menu bar, select "TD > Start thermal disinfection (local)".

20.7 Confirm the safety enquiry.

- Local thermal disinfection is started.
  The fittings of the selected ECC function controllers are thermally disinfected.
- The thermal disinfection process is monitored by the ECC function controller.

or

Do not confirm the safety enquiry.

- Local thermal disinfection is not started.

Starting thermal disinfection (netwide)

20.8 Load a Project where required (see Chapter 40.).

20.9 Activate the "Netwide TD" mode.

20.10 In the menu bar, select "Network > Netwide TD".

20.11 Mark a "Netwide TD" folder in the network structure overview.

20.12 In the menu bar, select "TD > Start thermal disinfection (netwide)".

20.13 Confirm the safety enquiry.

- Netwide thermal disinfection is started.
  All fittings of the selected "Netwide TD" folder are disinfected independent of their function controllers.
- The thermal disinfection process is monitored by the system software.

or

Do not confirm the safety enquiry.

- Netwide thermal disinfection is not started.

Set TD Sequence

20.14 Load a Project where required (see Chapter 40.).

20.15 Activate the "Netwide TD" mode.

20.16 Select "TD > Set LTD sequence..." in the menu bar.

20.17 Mark here when a "Netwide TD" folder is to participate in a global netwide thermal disinfection.

20.18 Use the "Up" and "Down" keys to determine the order in which the "Netwide TD" folders are to be processed.

20.19 Confirm the entry.

- When a global thermal disinfection process is started, the fittings of the selected "Netwide TD" folder are disinfected in the specified order.

Starting thermal disinfection (global)

20.20 Load a Project where required (see Chapter 40.).

20.21 Activate the "Netwide TD" mode.

20.22 In the menu bar, select "Network > Netwide TD".

20.23 Mark the uppermost level in the network structure overview.

20.24 In the menu bar, select "TD > Start thermal disinfection (global)".

20.25 Confirm the safety enquiry.

- Global thermal disinfection is started.
  All fittings of the "Netwide TD" folders selected in "Set LTD Sequence..." are disinfected in the specified sequence.
- The thermal disinfection process is monitored by the system software.

or

Do not confirm the safety enquiry.

- Global thermal disinfection is not started.

☞ If a fitting has been, for example, assigned to 2 different "Netwide TD" folders, and both these folders participate in the global thermal disinfection, then the corresponding fitting will be disinfected twice.

Stopping thermal disinfection

20.26 Mark the ECC function controller or folder in the network structure overview.

20.27 In the menu bar, select "TD > Stop Thermal Disinfection".

- Thermal disinfection is stopped.

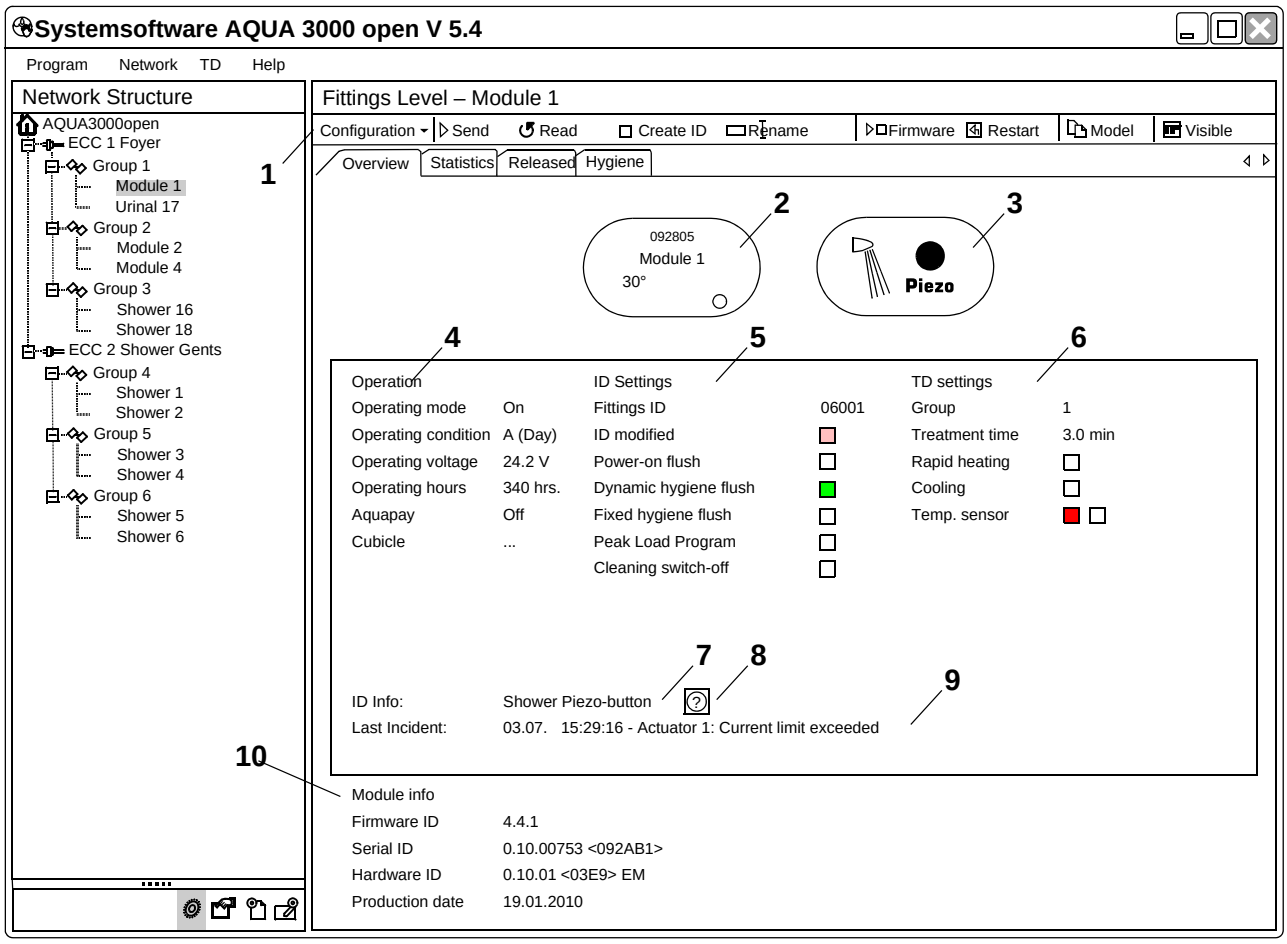
21. Module Level Display

An automatic overview is generated for each fitting; this overview displays all parameters that are necessary for operation. Besides displaying the parameters for the respective fitting, the display shows the status of the fitting functions such as hygiene flushing, thermal disinfection, peak load program and shut-down for cleaning.

21.1 Start the system software.

21.2 Mark the module in the network structure overview.

- The Module Level is displayed.



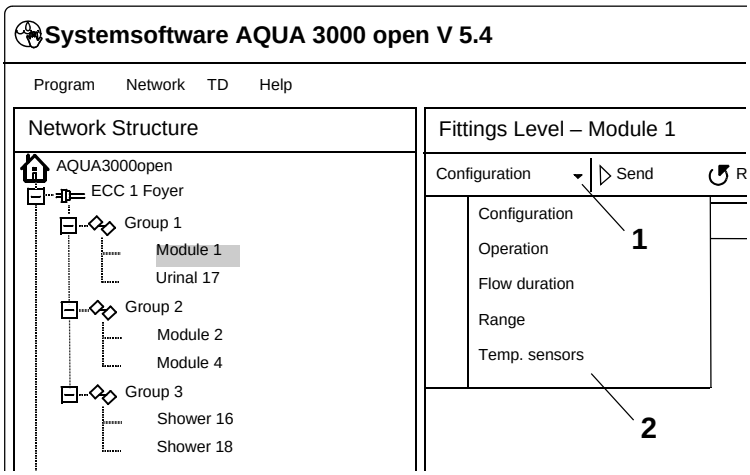
1 Toolbar (see Chapter 22.)
2 Fitting display with display for Serial ID, fitting name, current temperatures and operating condition
3 Fitting display with display for Fitting type and trigger
blue ... Fitting is working with original ID
green ... Fitting is working with changed ID
4 Display for operating data
5 Display for ID settings
6 Display for settings for thermal disinfection
7 Display for the brief description saved in the ID
8 The "?" button opens a window in which all information and settings of the ID are displayed (function description)
9 Display for the last, not yet confirmed events and alarm messages
10 Display for the IDs and the production date of the module

Colour code in the information window and on tabs:

□	grey	…	this option is not configured
□	bright red	…	the standard settings were changed
■	green	…	this option is configured
■	red	…	the temperature sensor for hot water is active
■	blue	…	the temperature sensor for cold water is active

Aquapay
The display for operating data (4) shows the status of paid media deliveries
- On: The module is configured for paid media delivery and is active.
- Off: The module is not configured for paid media delivery.
- Cubicle: The cubicle number is displayed when the module is working with "Master Mode" enabled.

22. Toolbar



The system software has 5 toolbars to configure the modules and fittings.

22.1 Click on the arrow (1).
- The display of the toolbars (2) flips open.

22.2 Click the desired tool bar.

Configuration	see Chapter 24.
Operation	see Chapter 25.
Flow duration	see Chapter 26.
Range	see Chapter 27.
Temp. sensors	see Chapter 28.

23. Context Menu

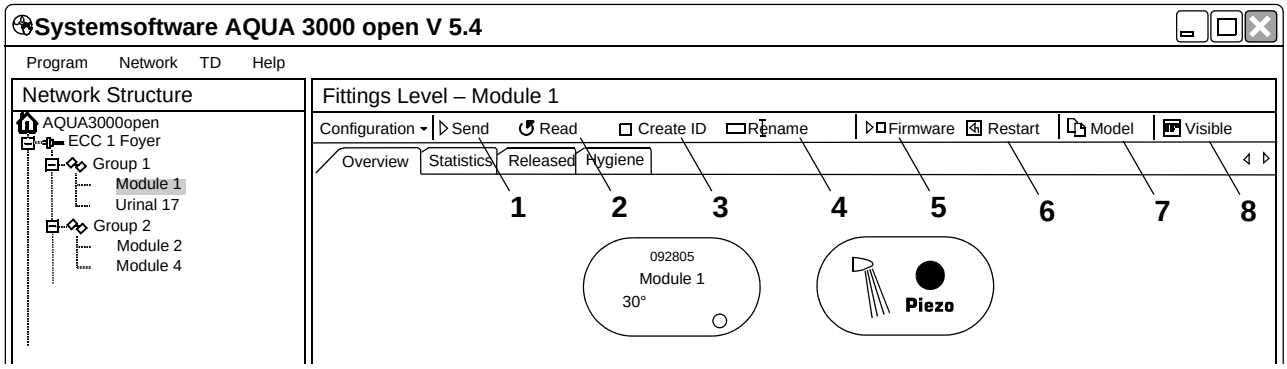
23.1 Mark an ECC function controller, group or module in the network structure of the network.

23.2 Right-click the mouse
- The context menu appears.
- The functions offered affect all lower-level modules.
- All functions offered are restricted to reading for the function modules.

24. Configuring a Module

24.1 Mark the module in the network structure overview.

- The Module Level is displayed.

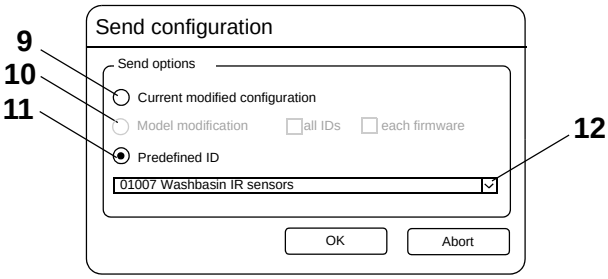


Send (1)

☞ Changes made to a module configuration are only applied when they are actually sent to this module.

24.2 In the menu select "Send".

24.3 Select the Send option.



9 The currently modified configuration is sent to the selected module.

10 The model modifications is sent to the selected module.
If the option "to all IDs" is selected, the model modifications are only sent to modules with the same ID.
If the option "to all IDs" is not selected, the model modifications are sent to all selected modules independent of the ID.
If the option "each firmware" is selected, the model modifications are sent to all modules independent of the firmware.
If the option "each firmware" is not selected, the model modifications are only sent to modules with the same firmware.

11 The selected, predefined ID is sent to all selected module. All imported IDs are displayed in the list (12).

Read (2)

24.4 In the menu select "Read".

- The current configuration of the module is read and displayed.

Create ID (3)

24.5 In the menu select "Create ID".

24.6 Enter the ID name.

☞ An ID name in the range from 65001 through 65534 can be selected. The system suggests the first free ID above 65000.

24.7 Confirm the entry.

- The current configuration is saved as an ID.

Rename (4)
The module can be assigned an individual name; this name is stored in the module.

24.8 Select "Rename" in the toolbar or press F2.

24.9 Enter the new name (max. 32 characters).

24.10 Confirm the entry.

Firmware (5)

☞ Important!
Make sure that the firmware is compliant with the module.

24.11 In the toolbar, select "Firmware".

- The file selector opens up.

24.12 Select the firmware file (*.P19).

24.13 Confirm the entry.

24.14 Confirm the safety enquiry.

- The newly selected firmware is uploaded into the selected module.

or
Do not confirm the safety enquiry.

- The selected module keeps its old firmware.

Restart (6)

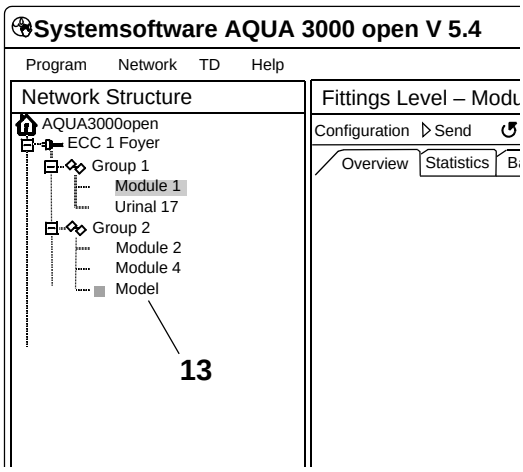
☞ Some changes made to a module configuration are only applied when they are actually sent to this module and the module is restarted.

24.15 In the toolbar, select "Restart".

- The module is initialised.
- The configuration and the statistics are read again.

Model (7)
The current configuration of any fitting can be defined as the model. Changes to the configuration of this model can then be sent to a selection of fittings.

☞ **Important!**
The configuration of all participating fittings must be read as only these fittings can be selected as the configuration target.



24.16 Select a fitting that is optimally suited for changing the parameters.

24.17 In the toolbar, select "Model".

- The model (**13**) is added to the network structure.

24.18 Mark the model in the network structure.

24.19 Change the desired values of the configuration.

24.20 In the menu bar, select "Program > Send ID to several modules..."

24.21 Activate the "Model modifications" option.

- The modifications are sent to all fittings with the same ID.

24.22 If necessary, activate the option "to all IDs".

- The modifications are sent to all fittings independent of the ID.
- If the option is deactivated, the modification is only sent to modules with the same ID

24.23 If necessary, activate the option "each firmware".

- The modifications are sent to all fittings independent of the firmware.
- If the option is deactivated, the modification is only sent to modules with the same firmware.

24.24 Confirm the entry.

- The model modifications are sent.

☞ If a new ID is selected as the model, the old model is overwritten.

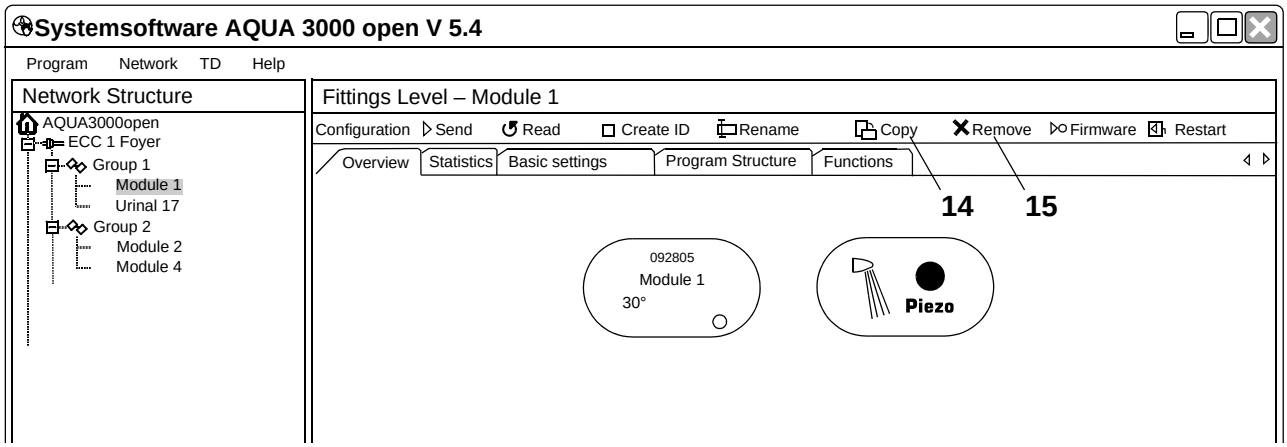
A model is deleted when

– the network is updated,
– the ECC function controller is updated or
– the "Remove model" function is selected in the context menu.

Visible/hidden (8)
This button indicates whether the module is visible or hidden on the Fittings Level.
By default all modules are visible on the Fittings Level.
When this function is deselected, the fitting is no longer shown at the Fittings Level. After restarting, by default the system software reactivates this function.
Parameter "Visible on fittings level" is saved in the module during "Send". In order to take this setting into account when the software is restarted, it must be possible to read the module configurations.
Alternatively the changes can be saved in a Project (see Chapter 40.) and the "Auto Project" function must be activated (see Chapter 15.).

24.25 In the toolbar, select "Visible".

- The fitting is not displayed on the Fittings Level.
- The button changes from visible to hidden.



Copy (14)

24.26 In the menu bar, select "Network > Netwide TD".

- The "Netwide TD" mode is activated.

24.27 Mark a module in the network structure overview.

24.28 In the toolbar, select "Copy".

24.29 Select the "Netwide TD" folder into which the selected fitting is to be copied.

- The marked fitting is copied into the selected "Netwide TD" folder.

Remove (15)

24.30 In the menu bar, select "Network > Netwide TD".

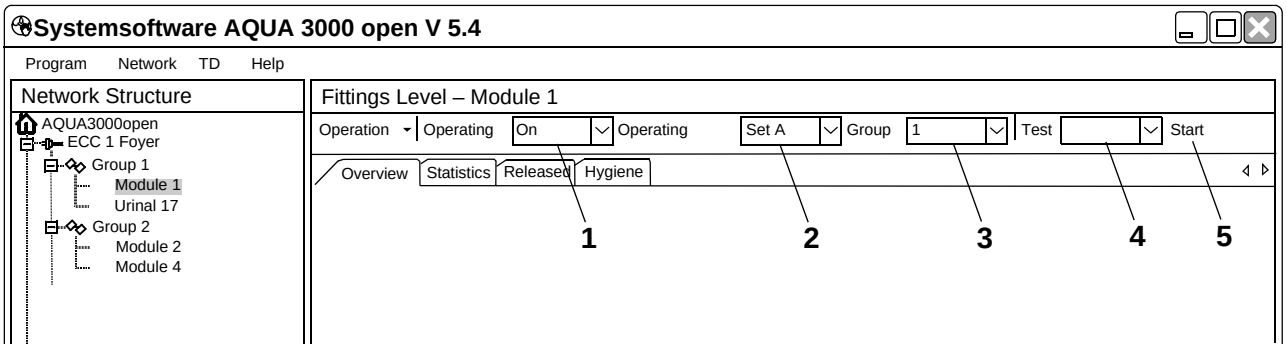
- The "Netwide TD" mode is activated.

24.31 Mark a module in a "Netwide TD" folder.

24.32 In the toolbar, select "Remove".

- The marked fitting is deleted from the selected "Netwide TD" folder.

25. Setting operating parameters



25.1 Select the Operation toolbar (see Chapter 22.) .

☞ Modifications to the operating mode and operating status are adopted 4 minutes after power ON.

Operating mode (1)

On:	Normal operation
Off:	All programs inactive
Standby:	Only service programs active (for example hygiene flushing)
Cleaning:	The function program is inactive during cleaning when switched on via ECC digital input IN3, a sensor signal or the Control Centre scheduler.

Operating condition (2)

2 operating conditions Set A/Set B can be defined, for example Day/Night or Normal Operation/ Holidays. An own fittings configuration can be configured for operating conditions A and B respectively. The current operating condition of the module can be specified. The operating condition can also be switched over on the ECC function controller by contact at digital input IN4.

Group (3)

Whenever a module is connected to the ECC function controller it is also assigned to a group. Subdividing the fittings into groups will, for example, avoid all fittings connected to a particular ECC function controller from being disinfected at the same time. Instead, the groups are disinfected one after the other.

1-8: All the fittings of a particular TD isle, which do not have any special functions for thermal disinfection and which are not to be exempted from the thermal disinfection, are entered in this group.

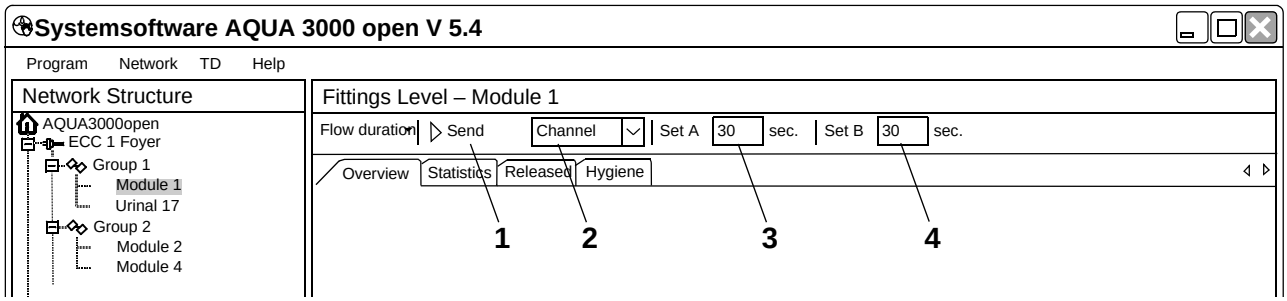
9: The fittings of this group do not take part in the thermal disinfection.

12-14: Functions modules

Test (4)
The channels can be tested to determine whether they are active. The actuator of the selected channel is controlled in a test. The assigned channels are specified in the function description (see Chapter 21.).

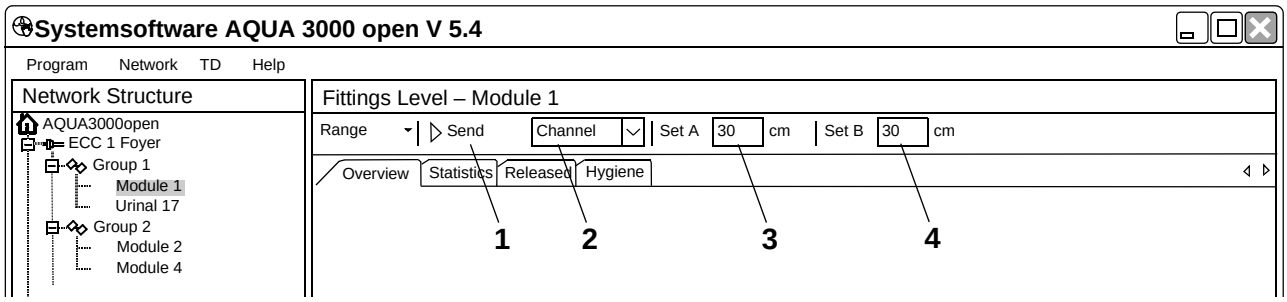
Start (5)
The test of the selected channel is driven.
The test stops automatically after 5 minutes.

26. Adjusting the Flow Duration



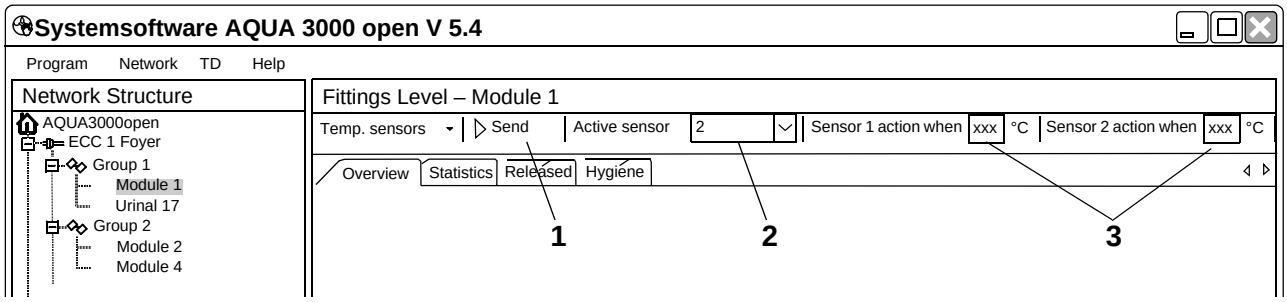
26.1 Select the Flow Duration toolbar (see Chapter 22.) .
26.2 Select the channel (2).
26.3 Enter the flow time for Set A (3).
26.4 Enter the flow time for Set B (4).
26.5 Send the modifications to the module (1).
26.6 Where necessary, restart the module so that the changes are applied by the module.

27. Setting the Range



27.1 Select the Range toolbar (see Chapter 22.) .
27.2 Select the channel (2).
27.3 Enter the range for Set A (3).
27.4 Enter the range for Set B (4).
27.5 Send the modifications to the module (1).
27.6 Where necessary, restart the module so that the changes are applied by the module.

28. Setting Temperature Sensors



If an action is stored in the fitting ID, the value that triggers this action can be changed. The sensor can be activated and deactivated. The stored actions are defined in the function description(see Chapter 21.).

28.1 Select the Temp. Senors toolbar (see Chapter 22.).

28.2 Select the sensor (2).

28.3 Enter the temperature (3) at which an action should take place.

28.4 Send the modifications to the module (1).

28.5 Where necessary, restart the module so that the changes are applied by the module.

29. Logging Statistics

Statistical data can be used to check and assess all modules. The temperature curves recorded during a thermal disinfection process can be used as a protocol.
When the menu bar "Network > Settings... > Statistics" shows a checkmark in the "Execute" field, this means that all data are being continuously saved. The data are saved in a database located in the "Application Data\Franke Aquarotter" folder. The file name corresponds to the current date preceded by the characters "net" (e. g. net20100119.xml). The database is automatically saved to the hard disk every hour and at the completion of the program. The system software automatically creates a new database file each day.
The data logging process is interrupted when the system software is stopped.
If the data logging process is interrupted, the database is continued when the logging process is restarted.
The statistics database can be displayed via the navigation bar and can be individually sorted according to every column.

29.1 In the menu bar, select "Program > Settings...

- The Settings window opens.

29.2 Select the Statistics tab.

- If a checkmark is in the "Execute" field, the "Log Statistics" function is active. The log file is saved in the FAR program data folder under "Statistics" as standard.

29.3 Change where the log file is saved if required.

29.4 Confirm the entry.

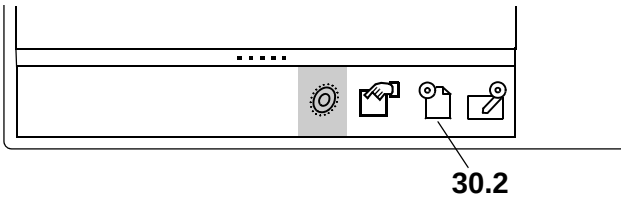
29.5 Confirm the enquiry.

- The statistical data of all modules is read.
- The database is started up with the current data.

or
Do not confirm the enquiry.

- The module data are updated continually one after the other.

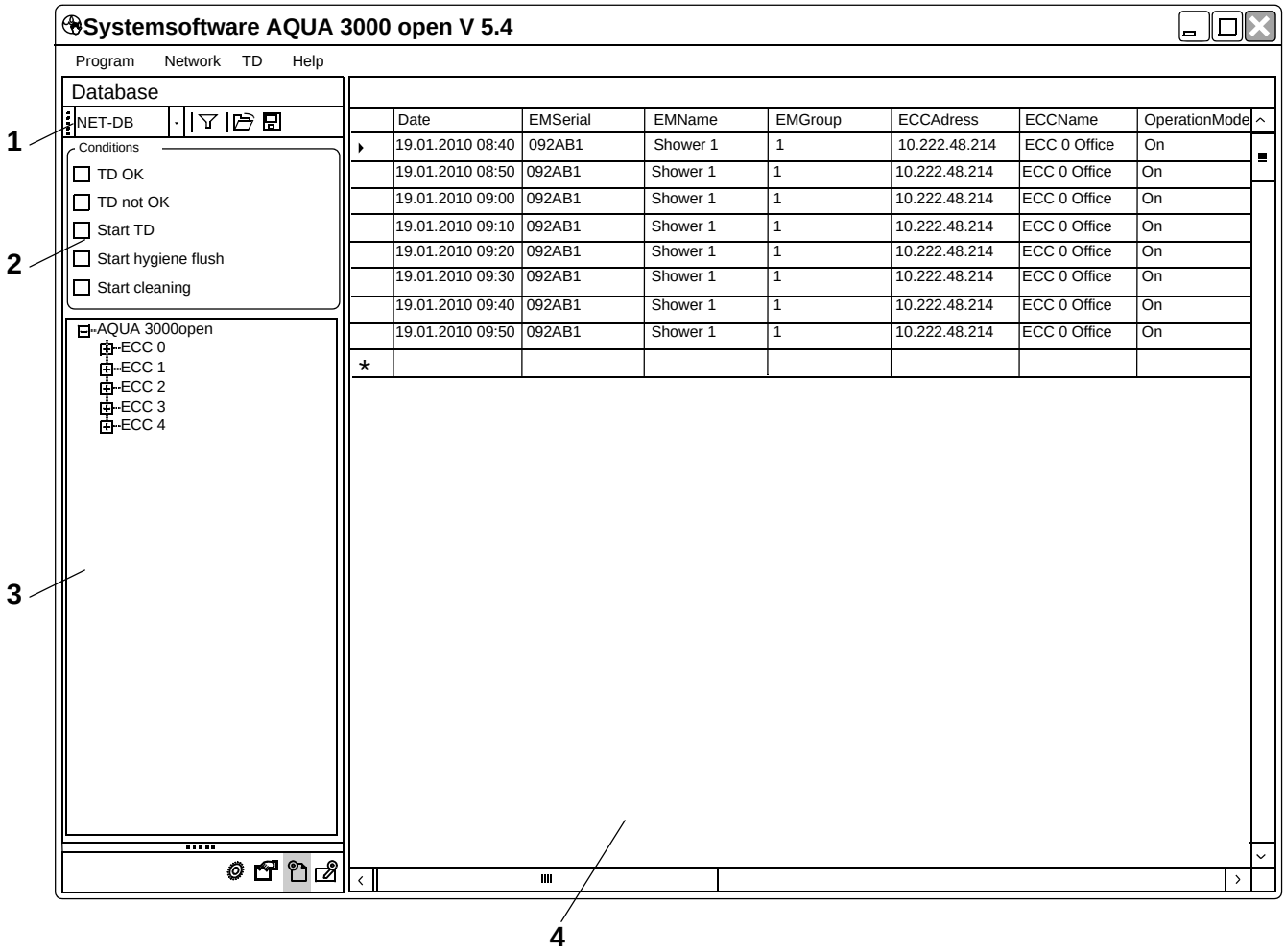
30. Database



30.1 Start the system software.

30.2 In the navigation bar select the symbol "Database".

- When the "Log Statistics" function is active, the current statistics-database is displayed.



Menu bar (1)

List Database	The list can be used to switch back and forth between the loaded databases.
• NET-DB	Database (net… .xml), which was created via menu "Network > Settings... > Statistics".
• ECC-DB	Database (ecc... .xml), which was created via menu "Program > Read statistics from all modules", or which was read out of an ECC function controller with an SD card module.
	Display for filtered database
	Load database; before a net-database can be loaded, the current statistics logging function must be interrupted.
	Save database; the filtered database can be saved in XML format or CSV format. The CSV file uses tabs as separators between the columns.

Conditions (2)
Conditions for filtering a statistics database.

TD OK	The data records of all modules that successfully participated in a thermal disinfection process are displayed.
TD not OK	The data records of all modules that did not successfully participate in a thermal disinfection process are displayed.
Start TD	The data records of all modules that were logged during a thermal disinfection process are displayed.
Start hygiene flush	The data records of all modules that were logged during the first hour following hygiene flushing are displayed.
Start cleaning	The data records of all modules that were logged during a cleaning process are displayed.

Network structure (3)
Shows a tree structure of all ECC function controllers and modules of a network.

Information window (4)

☞ All tables can be correspondingly sorted by clicking on the column head.

Database display

Date	Date
EMSerial	Serial number of module
EMName	Name of module
EMGroup	Group of module
ECCAdress	Address of the ECC function controller
ECCName	Name of the ECC function controller
OperationMode	Operation mode (see Chapter 25.)
Temperature 1	Temperature sensor 1
Temperature 2	Temperature sensor 2
ActorCounter 1	Counter Actuator 1
ActorCounter 2	Counter Actuator 2
SupplyVoltage	Operating voltage
TdPhase	Thermal disinfection phase
LastDynFlashHours	Number of hours since the last dynamic hygiene flush
LastFixeedFlashHour	Number of hours since the last fixed hygiene flush
LastTdHours	Number of hours since the last thermal disinfection
LastTdSuccess	Information, whether the last thermal disinfection was successful

☞ The database shown can be filtered through the specified conditions and the network structure.

30.3 Activate the condition(s).

30.4 Select the required area within the network structure.

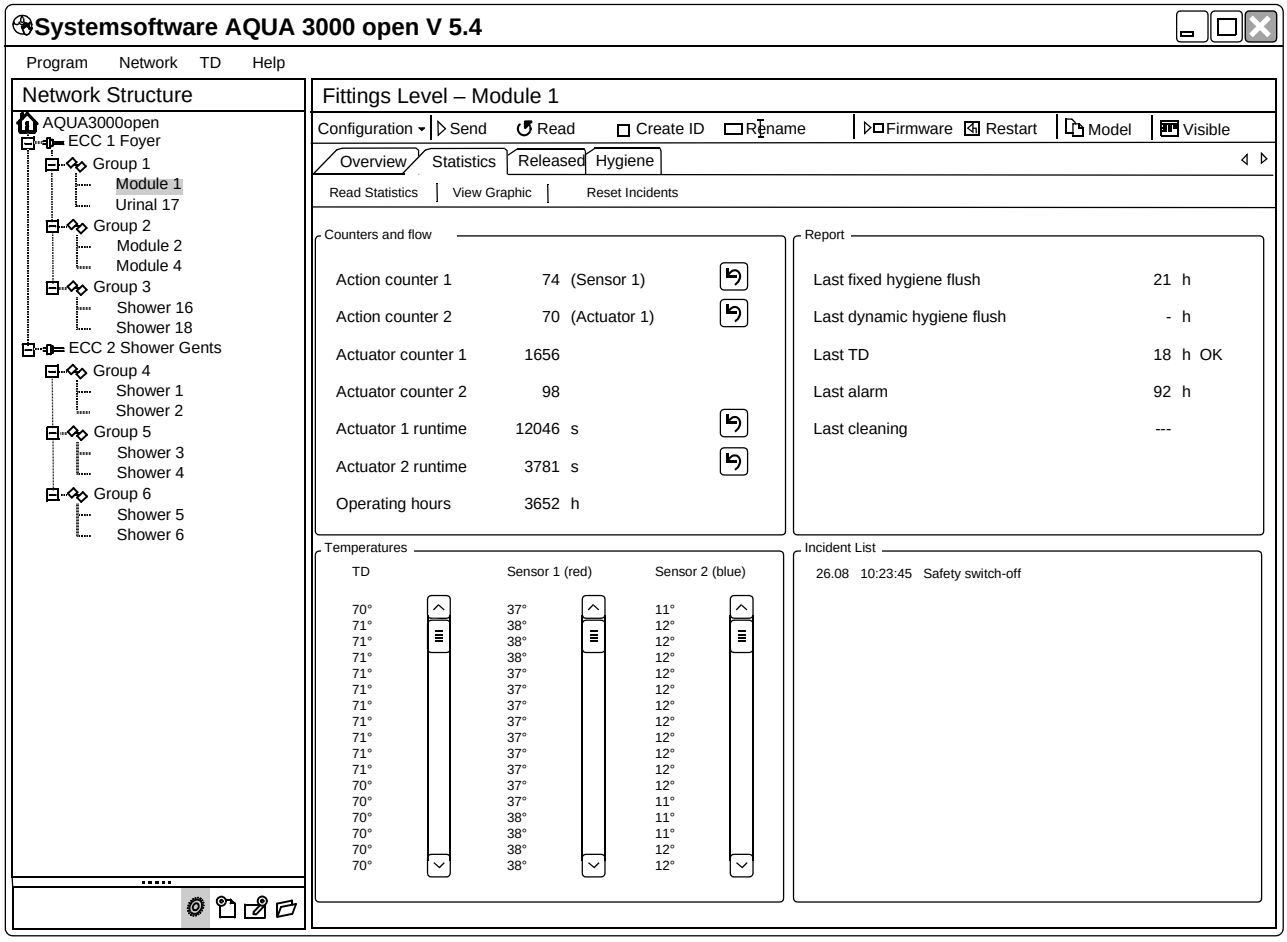
31. Showing Statistics

31.1 Start the system software.

31.2 Mark the module in the network structure overview.

31.3 Select the "Statistics" tab.

- The statistics data is displayed in the information window.



Display

Action counter 1, 2:
Counts the incidents corresponding to the action counter settings in the basic settings.
By default, Action Counter 1 counts the number of times Sensor 1 is triggered (Sensor 2 on motorway parking lot with WC facilities), and Action Counter 2 counts the number of times that Actuator 1 is triggered.
The basic setting can only be altered by customer service.

Actuator counter 1, 2:
Counts the number of times that the Actuator is triggered (not resettable).

Actuator duration 1, 2:
Counts the number of seconds that the Actuator has run (resettable).

Operating hours:
Counts the number of hours operated on the network (not resettable).

Last fixed hygiene flush:
Number of hours after the last fixed hygiene flush.

Last dynamic hygiene flush:
Number of hours after the last dynamic hygiene flush.

Last TD
Number of hours after the last thermal disinfection, and display showing whether the thermal disinfection was successful or failed.

Last alarm:
Number of hours after the last alarm.

Last cleaning
Date and time when the module was in "Cleaning" Mode the last time. The cleaning time is not saved in the module and is lost when the system software is stopped.

TD Temp.
Temperatures that were measured during the last thermal disinfection (120 values in 10 s steps).

Temp. 1 (red)
Temperatures that were measured by the hot water temperature sensor during normal operation. 96 values in 1 min steps, the most current value is at the bottom.

Temp. 2 (blue)
Temperatures that were measured by the cold water temperature sensor during normal operation. 96 values in 1 min steps, the most current value is at the bottom.

Incidents
Displays the messages and warnings occurring in the fitting (resettable).

Read Statistics

31.4 Click on the "Read Statistics" button.

- The information in the module's statistics memory is displayed.

View Graphic

31.5 Click on the "View Graphic" button.

- When there is a hot statistics database in the "Application Data" folder, the statistics software (see Chapter 33.) is started.
- The contents of the "AQUA 3000 open database" are displayed graphically. The graphic can be printed.
- When there is no hot statistics database in the "Application Data" folder, the statistics software (see Chapter 33.) is started. The data from the statistics page are displayed graphically.

Reset Incidents

31.6 Click on the "Reset Incidents" button.

- All data displayed in the "Incidents" window are deleted.
- The Incident symbol in the ECC display and the fitting display are deleted.

32. Starting the Statistics Software

The statistics software can be used to graphically display and evaluate the automatically logged long-term saved data.

There are 3 ways in which the statistics software can be started.

Method 1

32.1 Start the system software.

32.2 Mark a module in the network structure overview.

32.3 Select the "Statistics" tab.

- The statistics data is displayed in the information window.

32.4 Click on the "View Graphic" button.

- When statistics logging is active, the current data are saved in the statistics database.
- When there is a hot statistics database in the "Application Data" folder, the statistics software is started.
- The fitting data are loaded automatically.

Method 2

32.5 Start the system software.

32.6 In the menu bar, select "Program > Show graphic"

- The statistics software is now started.
- When the Log Statistics function is active, the current statistics database is displayed.
- When statistics logging is not active, no data are loaded automatically.

Method 3

32.7 In the Windows menu, activate program "Start > All Programs > Franke Aquarotter > Statisticsoftware AQUA 3000 open".

- The statistics software is now started.
- The data are not loaded automatically.

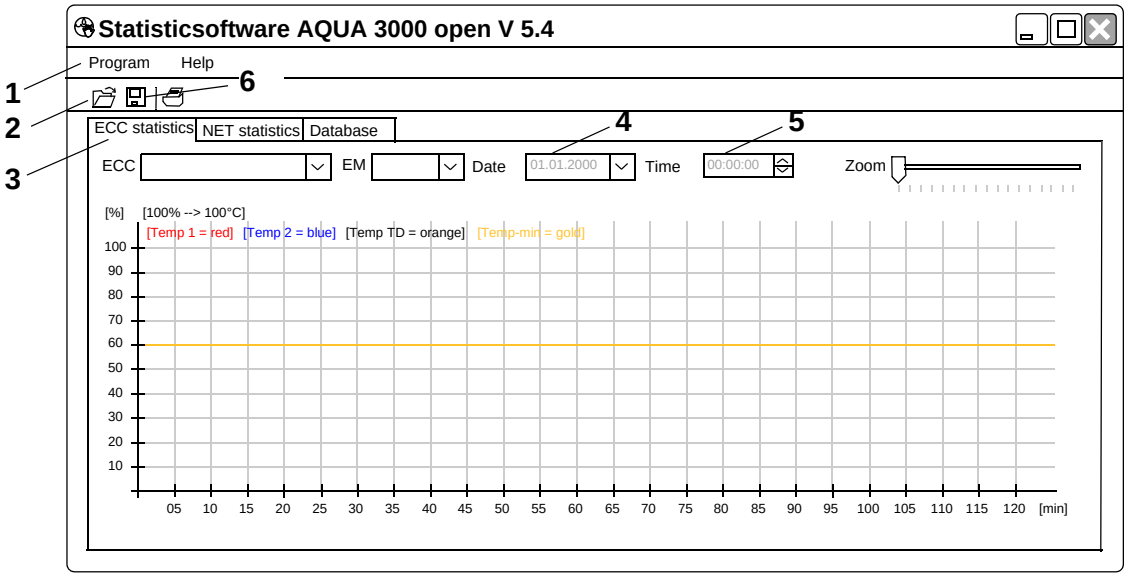
33. Loading/Saving Statistics Data

The statistics software can load and graphically represent the following databases:

- Databases (net… .xml), which were created via menu "Program > Settings... > Statistics".
- Databases (ecc… .xml), which were created via menu "Program > Read statistics from all modules".
- Dat files, which were read out of an ECC function controller using an SD card module.
- Databases (ecc… .xml) that were generated out of Dat files.

Loading Dat files or ECC files

33.1 Start the statistics software (see Chapter 32.).



33.2 In the menu bar, select "Program > Open" (1).
or wait
In the menu bar press the "Open" (2) button.

- The file selector opens up.

33.3 Select a Dat file or an ECC file (e. g. ecc20100119.xml).

33.4 Confirm the entry.

- The contents of the Dat file or ECC file are loaded for display.
- The "ECC statistics" (3) tab shows the following data graphically:
  - Course of temperature at temperature sensor 1 (red) prior to reading (96 min).
  - Course of temperature at temperature sensor 2 (blue) prior to reading (96 min).
  - 120 values in 10 second intervals for temperature sensor 1 during the last TD.

Saving ECC files

33.5 Load a Dat file or CSV file.

- A message is displayed indicating that the date on which the file was read is logged.

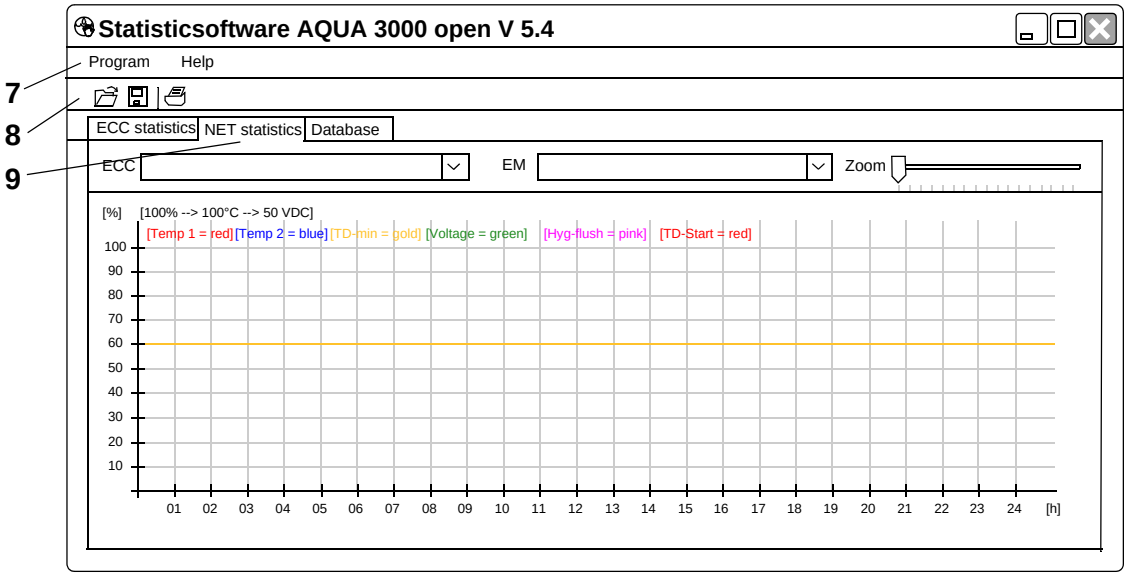
33.6 Enter the date (4) and the time (5) at which the data was read from the ECC function controller.

33.7 In the menu bar, select "Program > Save as..." (1).
or
Click on the "Save" (6) button.

- Data from various Dat files are stored in a common database. The name of the database corresponds to the current date and the time of reading preceded by the characters “ecc” (e.g. ecc20100119_0845.xml). The database is automatically stored in the folder that also contains the Dat files. The Dat files can now be deleted because all data (including the time of reading) are now located in the database.

Loading Network files

33.8 Start the statistics software (see Chapter 32.).



33.9 In the menu bar, select "Program > Open" (7).
or wait
In the menu bar press the "Open" (8) button.

- The file selector opens up.

33.10 Select a Network file (e. g. net20100119.xml).

33.11 Confirm the entry.

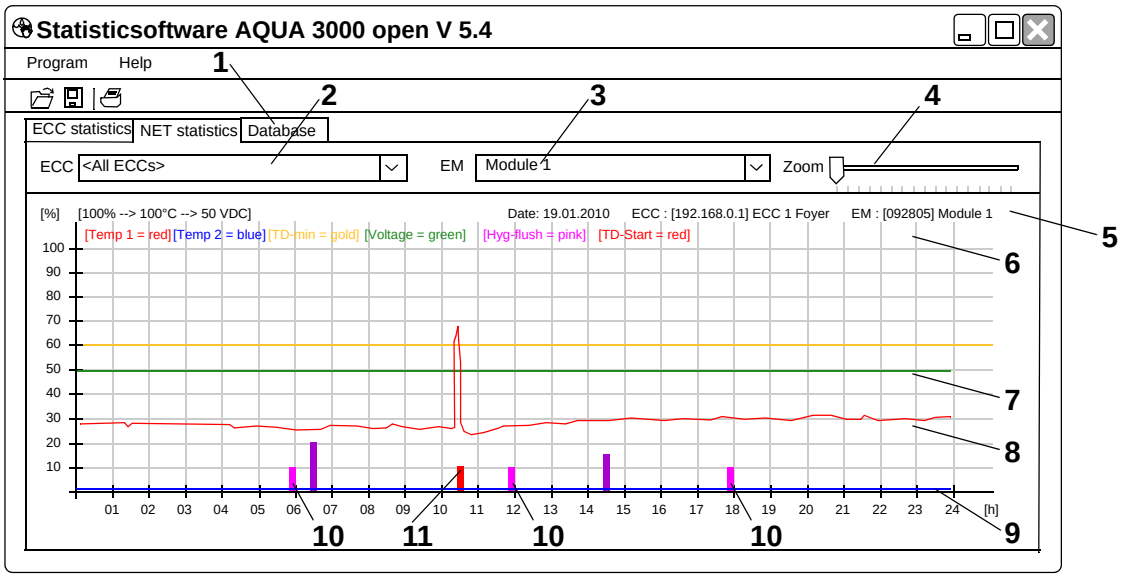
- The Network file is loaded for viewing.
- The "NET statistics" (9) tab shows the following data graphically:
  - Course of temperature at temperature sensor 1 (red, 24 h)
  - Course of temperature at temperature sensor 2 (blue, 24 h)
  - Course of operating voltage of the module (green, 24 h)
  - Start of hygiene flushing (pink, bar up to 10%)
  - Start of thermal disinfection (red, bar up to 10%)

☞ The data of a Network file cannot be changed in the statistics software. For this reason it is also not necessary to save a Network file.

34. Evaluating Statistics Data

34.1 Load a statistics file, e. g. a Network file (see Chapter 33.).

- The "NET statistics" tab shows the data graphically.



1 Database
The statistical data on which the graphical display is based is displayed. The table can be rearranged according to each individual column by clicking the respective heading within the header.

2 Selecting the ECC function controller
Select the ECC function controller whose module is to appear in the "EM" list for selection.
In the <All ECCs> mode, all modules of all ECC function controllers are displayed in the "EM" list. However, to be able to make a correct evaluation, it is necessary that each module in the entire network has a unique name.

3 Select module
Select the module whose statistical data are to be represented graphically.

4 Zoom
The displayed time interval can be zoomed.
Network: min. 1 h, max. 24 h
ECC : min. 5 min, max. 120 min

5 Reference data
The date of the recording, the module name and the name of the isle network are displayed, so that printouts made later can be properly assigned.

6 Legend
Explanation of colours used.

7 Course of the module's operating voltage

8 Course of temperature: Temperature sensor 1, hot water (red)

9 Course of temperature: Temperature sensor 2, cold water (blue)

10 Start of hygiene flushing (pink, bar up to 10%)

11 Start of thermal disinfection (red, bar up to 10%)

Printing a graphic
In order, for example, to make a record of the course of a thermal disinfection, the corresponding statistical data logged can be printed in the form of a graphic.

34.2 If necessary, select "Program > Page setup..." in the menu bar and set up the page.

34.3 In the menu bar, select "Program > Print...".

34.4 Select the printer.

34.5 Confirm the entry.

- The displayed graphic is printed.

35. Control Center - Overview

The Control Centre offers the following functions:

- Scheduler (see Chapter 37.)
- Logic Control (see Chapter 38.)
- Media Control(see Chapter 39.)

Requirements
In order to be able to use the Control Center, the following conditions must be fulfilled:

- The network connection between the PC and participating ECC function controllers must be active.
- The AQUA 3000 open system software must be started and active as an application.
- The corresponding function of the Control Centre must be set up and started.
- The Control Center (particularly the Logic Control) must be active on one PC in the network only.
- The module firmware must be at least version 4.3.5.
- The modules selected must not be function modules.

Selecting components
The components (ECC function controller, folder, group, module) can be collected from the component tree into the form using the Drag&Drop function.

Only appropriate components can be selected:

- ECC function controller (in "Display Network/ECCs")
  The ECC function controller is entered into the Module field, and an asterisk (*) is entered as the Group. This means that the action is performed for all modules of the ECC function controller.
  The ECC IP address is crucial for determining the ECC function controller.
- Folder (in "Network/Netwide TD" mode)
  The Folder is entered into the Module field, and an asterisk (*) is entered as the Group. This means that the action is performed for all modules of the Folder.
  The Folder name is crucial for determining the Folder.
- Group (Basic settings/Operation/Group)
  The ECC function controller resp. Folder is entered into the Module field, and the number of the Group. This means that the action is performed for all modules of the ECC function controller resp. Folder that are in the corresponding Group.
- Modules
  The ECC function controller resp. Folder is entered into the Module field and the module, however no Group. This means that the action is performed only for this module.
  The EM Serial ID is crucial for determining the module.

The Control Center jobs are administrated in a database and are displayed in a table on the corresponding pages of the Control Centre. The data records in the table are for orientation only and cannot be altered directly. When a data record in the table is marked, the values are shown in the form and can be altered there.
The table values are partly the index values of the selection list (the first entry e. g. "Non-recurring" or "None" has the index 0; the second entry has the index 1, etc.)

The database is automatically loaded when the program is started, and it is automatically saved when the program is stopped. Before the database is saved, all non-applied changes are rejected. Also, when the user exits from the Control Centre, all non-applied alterations are rejected.

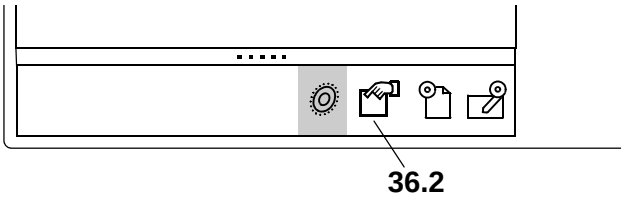
The status of the Control Center is displayed in the title bar in a coloured square.

Yellow	Scheduler active
Red	Logic Control active
Green	Media Control active
Turquoise	Statistics logging active

General information

- The Control Center must be deactivated to be able to configure the Network (e. g. "Flashing", "Send ID").
- The Control Center is purely a software controller; no parameters are saved in the ECC function controllers or in the modules.
- The functions of the Control Center must be restarted when
  - the Network is updated (Network/Network Update),
  - an ECC function controller was updated (ECC/ECC Update),
  - a module was restarted (Module Level/Configuration/Restart) or
  - a Project was loaded (Network/Load Project).
- Following initialisation (by "Restart", "Send ID") a module will generally be in the "On" mode of operation and in the "Set A" state of operation (firmware 4.3.5).
- From firmware 5.3, a module retains its operating mode and operating status after a restart.

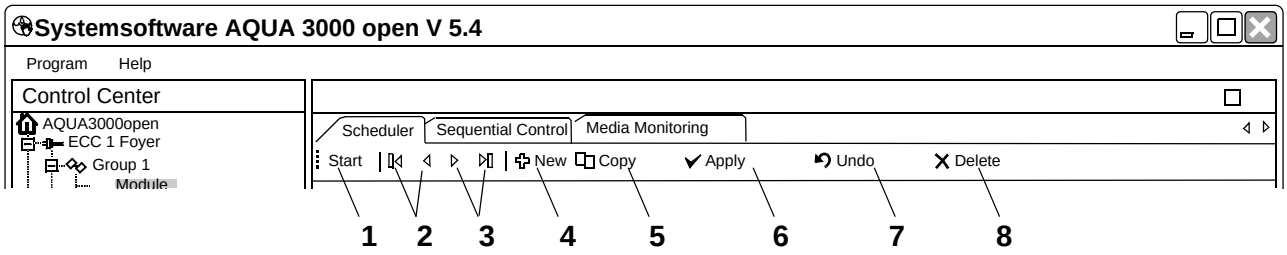
36. Starting the Control Center



36.1 Start the system software.

36.2 In the navigation bar select the symbol "Control Center".

- The Control Center is started.



1 Start
All settings resp. alterations to all data records of the corresponding function (scheduler, logic control or media monitoring) are applied. The function is now started. The entries can no longer be edited.

2 Navigation back
It is possible to navigate to the first or the previous data records.

3 Navigation forwards
It is possible to navigate to the next or the last data records.

4 New
A new, empty data record is created.

5 Copy
A new, empty data record is created and the parameters of the current data record are copied into it.

6 Apply
All settings resp. alterations to all data records of the corresponding function (scheduler, logic control or media monitoring) are applied.

7 Undo
All changes to all data records of the corresponding function (scheduler, logic control or media monitoring) since the last application (Start, Apply) resp. since the last undo (Undo, Exit from Control Centre) are rejected.

8 Delete
The current data record is deleted.

37. Scheduler

The scheduler facilitates

- changing the operating mode of a module or a group of modules at a certain time.
  Example:
  - Operation mode: On, Off, Stand by, Cleaning
  - Operating condition: Set A, Set B
- starting an action.
  Example:
  - hygiene flushing
  - TD Local
  - TD Netwide
  - TD Global
- checking whether an action was performed.
  Example:
  - Thermal disinfection check
  - Cleaning check

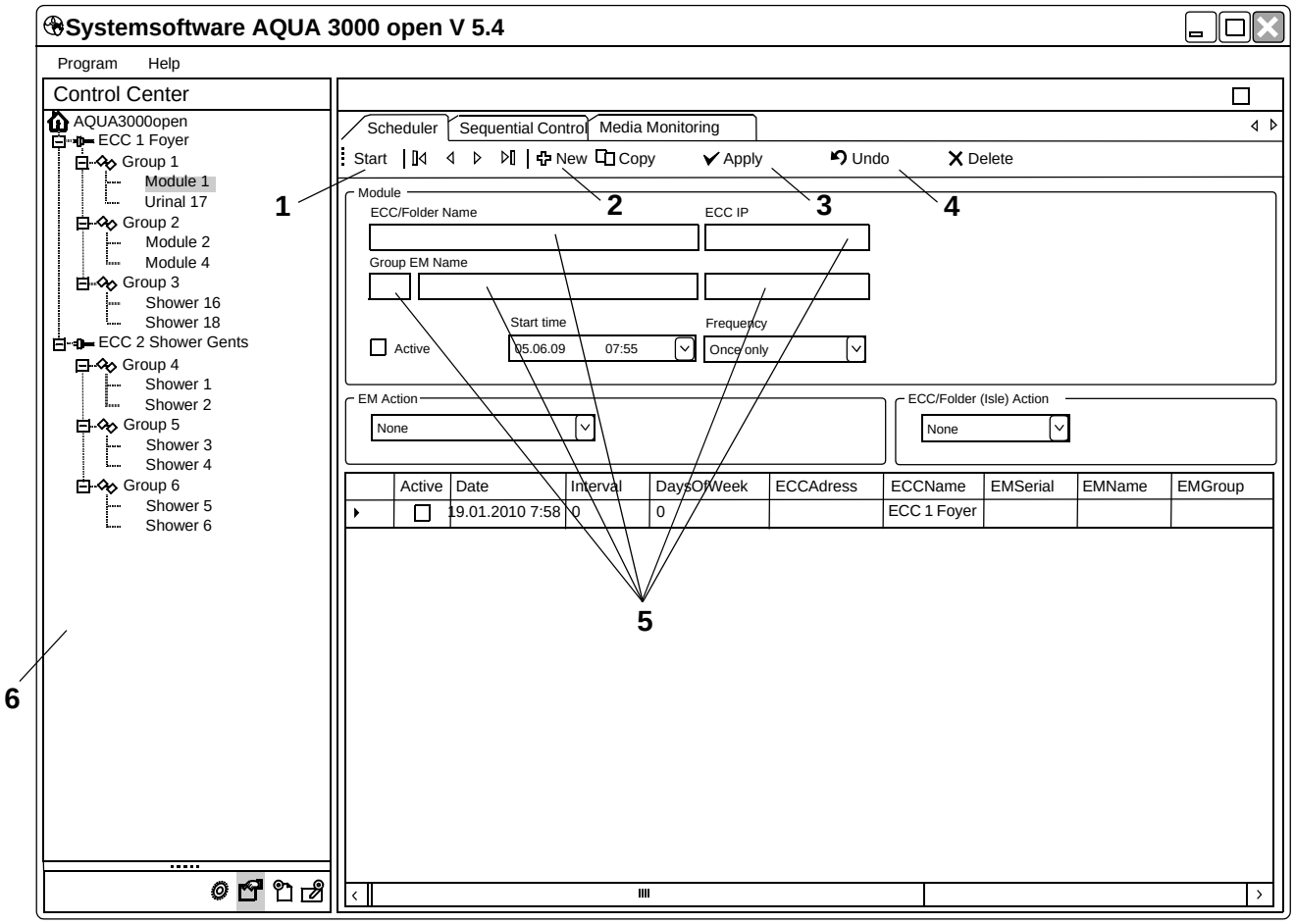
Orders

- An order can incorporate either an action for a module or an action for an ECC function controller resp. folder. It is not possible to execute an action for a module and an action for an ECC-function controller resp. folder within one and the same order.
- Several orders can be scheduled for the same time.
- When several orders have been scheduled for the same time, the sequence for processing these orders is not defined.
- When several orders have been scheduled in a staggered mode, the sequence for processing these orders is defined.
- The time basis is the current date and time of the PC upon which the software was started. Orders are executed with a delay of max. +15 seconds.

Executing orders

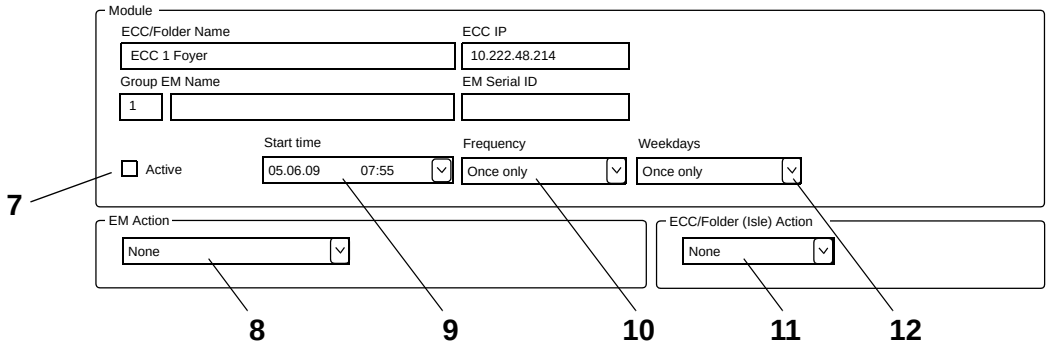
- An order is executed when
  - the status of the order is "Active",
  - the appointed time for executing the order has been reached, and
  - the due time has been exceeded by less than a minute.
- After the scheduler has been started, orders that have been due for more than a minute are not executed; instead they are postponed to the next possible time in the future.
- When an order is to be repeated, a new time is calculated; otherwise the order is set to "Inactive".

37.1 Start the Control Center (see Chapter 35.).



37.2 Create a new order. In the menu bar press button "New" (2).

37.3 Select an ECC function controller, a group or a module from the Network structure overview (6) and use the Drag&Drop function to pull it into one of the grey fields (5).



37.4 Enter the starting time (9) for the order.

37.5 Enter the frequency (10) for the order.

37.6 Where applicable, enter the weekdays (12) for repetitions.

37.7 Select an action for a module (8) or an action for an ECC function controller resp. folder (11).

37.8 Activate the order. For this purpose click checkbox (7).

37.9 Start the order. In the menu bar press button "Start" (1).
or
Apply the order. In the menu bar press button "Apply" (3).

☞ When the scheduler is running, it is not possible to create a new order, and existing orders cannot be changed. To do so the scheduler must first be stopped.

☞ Created orders are not saved if:

- the user exits from the Control Center (without Start or Apply).
- the system software is closed (without Start or Apply).
- the "Undo" (4) button in the menu bar is pressed.
- the PC crashes.

Active (7)

An order can be temporarily deactivated; in this state it is updated (frequency, weekdays), but it is not executed. When an order is being created the first time, its status must be set to active.

Frequency (10)

An order can be executed once only, every hour, daily or weekly.
If the "Once only" parameter was chosen, the job is performed and then deactivated.

Start time (9)

Date and time when the order is to be started.

Action for a module (8)

EM action > Operation mode (On, Off, Standby, Cleaning)

The selected operation mode is sent to the module in the form of a command. The module remains in this operation mode until it is changed by a different command. Only the "Cleaning" operation mode is automatically reset, when the cleaning switch-off of the module is not equal to zero. After the cleaning switch-off of the module has take place, the operation mode is reset.

EM action > Operating Status (Set A, Set B)

The selected operating status is sent to the module in the form of a command. The module remains in this operating status until it is changed by a different command.

EM Action > Hygiene Flushing

If the instruction for hygiene flushing is sent to a single module, the function is performed directly on schedule. If the command is sent to a group of modules (all modules of an ECC function controller, all modules of a Group), the modules' triggering delay is considered. However this does not apply for the "Netwide TD" mode.

Necessary settings per module:

– Fixed hygiene flush
  Flow duration: >0
  Actuator at least one actuator active (ID, technician)

Meaningful settings:

– Fixed hygiene flush
  Trigger delay: >0 (only active in the Group)

EM Action > Thermal Disinfection check

At the specified time, a check is run to determine whether a thermal disinfection was performed within the specified period prior to the scheduled time.
A check is made to determine whether the last thermal disinfection was successful and whether the hours that have passed since this last thermal disinfection are less than or equal to the selected period. If this is not the case, a warning message is generated. Only full hours of the selected period are considered. The requirement for obtaining a correct sum of hours since the last thermal disinfection is, that the module was uninterruptedly switched on during the time since then.

EM Action > Cleaning check

At the specified time, a check is run to determine whether a cleaning was performed within the specified period prior to the scheduled time.
A check is made to determine whether the time for the last cleaning switch-off (Cleaning operation mode was switched on) is in the selected period prior to the scheduled date. If this is not the case, a warning message is generated.
The cleaning time is set by the software; it is not saved in the module and it is lost when the system software is stopped.

Action for an ECC function controller resp. folder (11)

⚠ **Warning!**

The scheduler can be used to automatically start actions such as hygiene flushing and thermal disinfection according to a fixed schedule. Care must be taken to ensure that the thermal disinfection is performed in a safe and risk-free manner.
Additional measures must be applied to ensure that inadvertent starting of a thermal disinfection process at the wrong time is prevented.

Failure to observe can cause bodily harm due to scalding.

ECC/Folder Action > TD Local

It is only possible to select "TD Local" when the selected component is an ECC function controller. "Local Thermal Disinfection" always refers to all the modules of the selected ECC function controller, and it is only performed when the selected ECC function controller is actually visible at the appointed time. The "Show ECCs" mode must thus be active at the specified time.

ECC/Folder Action > TD Netwide

It is only possible to select "TD Netwide" when the selected component is a Folder. Netwide Thermal Disinfection always refers to all the modules of the selected "Netwide TD" Folder, and it is only performed when the selected "Netwide TD" Folder is actually visible at the appointed time. The "Netwide TD" mode must thus be active at the specified time.

ECC/Folder Action > TD Global

It is only possible to select "TD Global" when the selected component is a Folder. Global Thermal Disinfection always refers to the sequence of activated "Network TD" Folders defined for the appointed time, and it is only performed when the selected "Netwide TD" Folders are actually visible at the appointed time. The "Netwide TD" mode must thus be active at the specified time.

38. Logic Control

Logic Control provides a facility with which it is possible to intervene in the runoff of the function programs to control them. When a sensor or the actuator of a module are activated, this can have an effect on the module's own function program as well as that of another module. The source module and the target module can thus be one and the same module or two different modules.

In order to be able to use logic control, the respective fitting ID must be adapted by customer service.

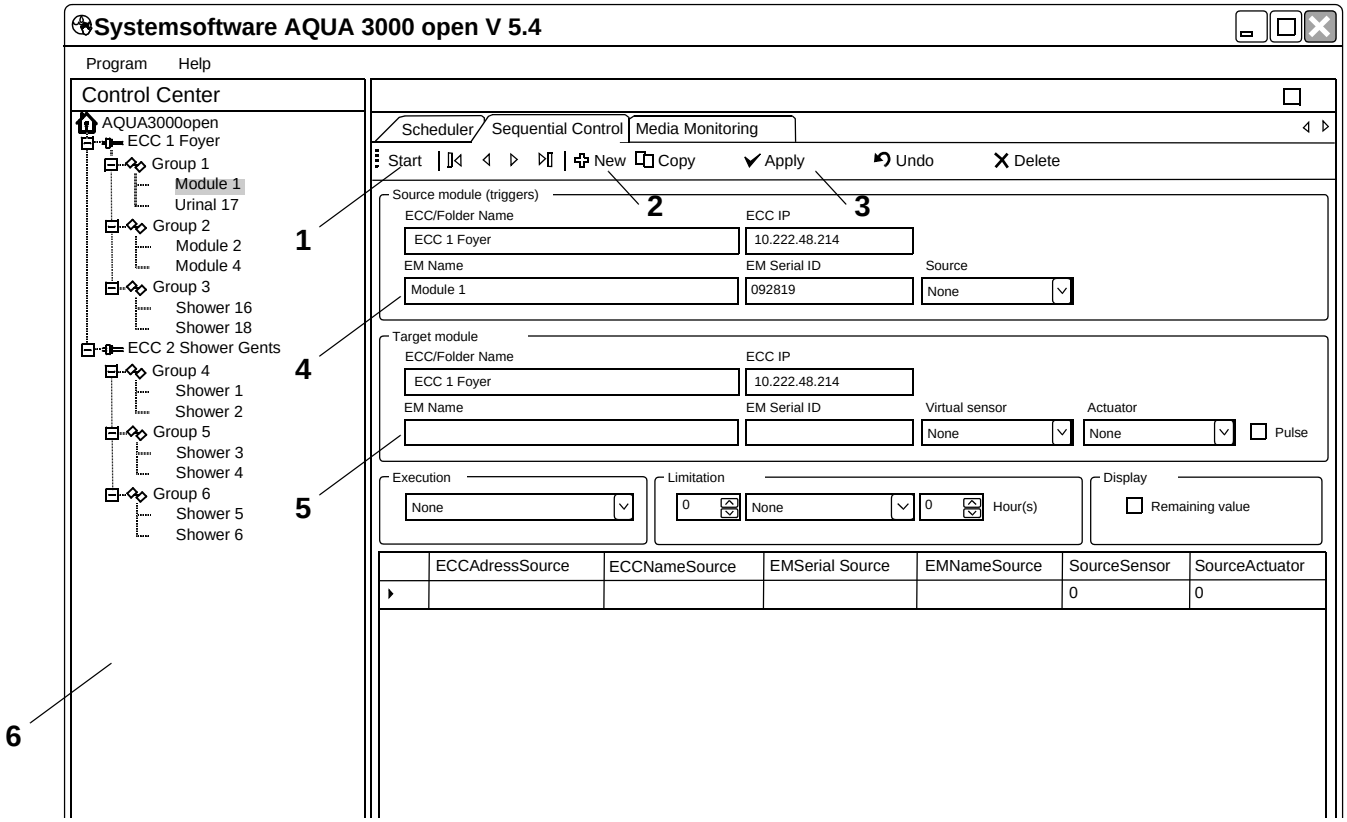
The following executions are possible:

- Manual: Enabled by operator.
- Automatic: Directly dependent on the configuration.
- Limited: Enable is determined by limitations.

☞ Each module may only be incorporated into one logic control, because per module only one appurtenant source module and one target module can be administered. Multiple incorporations can lead to unintentional actions.

38.1 Start the Control Center (see Chapter 35.).

38.2 Select the "Logic Control" tab.



38.3 Create a new order. In the menu bar press button "New" (2).

38.4 Select the source module: Select a module from the Network structure overview (6) and use the Drag&Drop function to pull it into one of the grey fields (4).

38.5 Select the target module: Select a module from the Network structure overview (6) and use the Drag&Drop function to pull it into one of the grey fields (5).

☞ The ID of the target module must permit sequential control.

38.6 Start the order. In the menu bar press button "Start" (1).
or wait
Apply the order. In the menu bar press button "Apply" (3).

Output module > Source
The selected source (sensor or actuator) is monitored, and its activation is transferred to the function program of the target module.

Target module > Virtual sensor
The selected virtual sensor is set when the source module is activated, and it thus affects the runoff of the target module's function program.
For this purpose the target module must be equipped with firmware version 4.3.5 or newer.

Target module > Actuator
In "Manual" execution, the status of the selected actuator affects the acceptance of an enable request.

- Active: An enable request is ignored.
- Inactive: An enable request is accepted and reported.
- No selection: An enable request is always accepted. The enable causes the status of the controlled actuator to be reversed (ON<->OFF).

In "Limited" execution, the selected actuator is monitored with respect to the selected restrictions.

Target module > Pulse
The "Pulse" status determines the way in which the virtual sensor is controlled.

- Pulse = Yes
  The virtual sensor behaves like a Piezo-sensor (short pulse when the source is activated, for example like when pressing a Piezo-button)
- Pulse = No
  The virtual sensor behaves like an optical IR sensor (active as long as the source is active, for example like a reflection with an IR sensor)

Normally the pulse setting must be selected according to the sensor of the source module.

Execution > Manual
When the source module is activated, this is signalled at the target module by the incident symbol. This "Flush request" can be enabled by the user on the overview page of the target module (also in user mode). The target module has a fixed flow duration.
The Actuator selected under Target Module/Actuator influences the acceptance of the enable request.

Execution > Automatic
When the source module activates, this has a direct affect on the function program of the target module. The target module reacts depending on the configuration and the ID.

Execution > Limited
When the source module is activated, a check is made to determine whether the restriction set for the actuator selected from Target Module/Actuator is being maintained. If this is the case, the target module is activated.
During activation, monitoring of the target module continues, and, if the restriction is no longer maintained, the target module is deactivated.
If the target module no longer maintains the restriction, the "used credit balance" is indicated by a yellow fitting display. This "credit" can be "recharged" fully on the overview page of the module at any time (also in user mode).
For systemic reasons, flow-duration recording may differ slightly from the module's real flow duration.

Limitations:

- x times per y hours
  The period (y hours) commences with the first activation. The fitting can be activated only x times within this period.
- x times per day
  The period commences at 00:00 hrs. and ends on 23:59 hrs. the same day. The fitting can be activated only x times within this period.
- x minutes per y hours
  The period (y hours) commences with the first activation. The fitting can be activated only x minutes within this period.
- x minutes per day
  The period commences at 00:00 hrs. and ends on 23:59 hrs. the same day.
- Blocked for x minutes
  The period commences when the target module is activated. Within this period the target module cannot be activated again.

Display > Remaining value
Instead of the current temperature, the fitting display can show the target module's remaining value (credit or block time), resulting from the restrictions for the selected actuator.

39. Media Control

Media Control is a facility with which Actuator 1 resp. Actuator 2 can be monitored with respect to their flow duration.
If a minimum value or a maximum value are exceeded during the specified period, the Media Control sends an incident message to the affected module.

The interval commences:

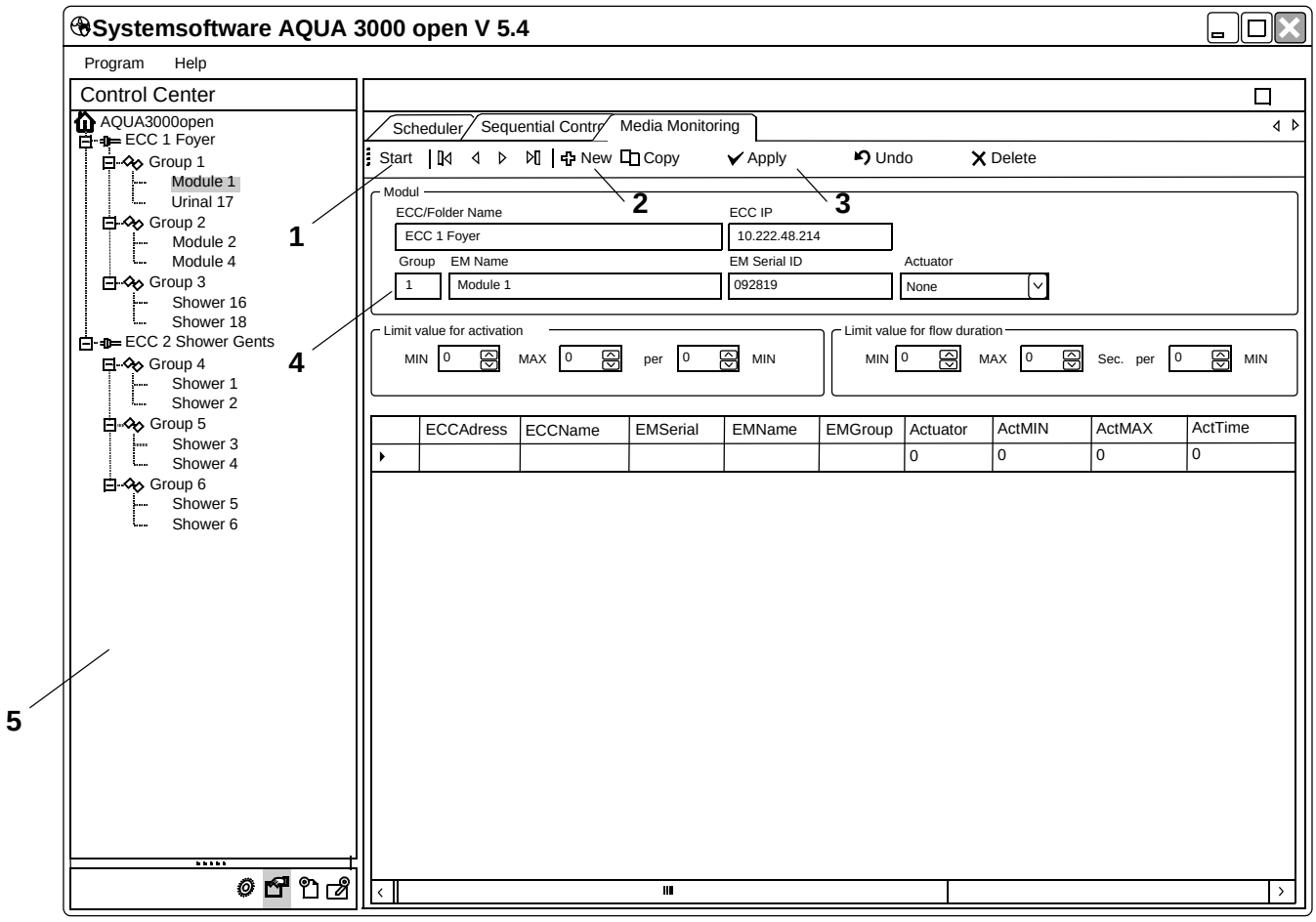
- when Media Control starts
- after conclusion of the previous interval
- after an incident message has been generated

☞ Only those orders are considered where an actuator has been selected and the period is not equal to zero.

☞ Each module may only be incorporated into one Media Control, because per module only one limit value for activation and flow duration can be administered. Multiple incorporations can lead to unintentional actions.

39.1 Start the Control Center (see Chapter 35.).

39.2 Select the "Media Control" tab.



39.3 Create a new order. In the menu bar press button "New" (2).

39.4 Select a module from the Network structure overview (5) and use the Drag&Drop function to pull it into one of the grey fields (4).

39.5 Start the order. In the menu bar press button "Start" (1).
or wait
Apply the order. In the menu bar press button "Apply" (3).

Module > Actuator
The selected actuator is monitored.

Limit values > MIN / MAX
During monitoring, the MIN and MAX values specified may also include a value of "0" (zero). For MIN monitoring it is thus necessary to enter a suitable MAX value (e. g. the maximum possible value) so that a warning message for MAX is avoided.

Limit Values > Period
The period commences with the start of Media Control and is then continuously repeated. If a limit value is reached within this period, a warning message is generated directly and the period is restarted.

40. Project

Load Project...

☞ When the system software is restarted, all information that was not saved in the ECC function controllers or in the modules must be reloaded from a project file.

40.1 Select "Network > Load Project..." in the menu bar.

- The file selector opens up.

40.2 Select a network file saved as a project (filename extension ".network").

40.3 Confirm the entry.

- The following information is loaded from the project file and displayed:
  - All "Netwide TD" groups (folders) and their configuration,
  - Notes on ECC function controllers and "Netwide TD" groups,
  - Settings for thermal disinfection of the folders,
  - Setting for module IDs.

Saving a project…

☞ When the system software is ended, all information that was not saved in the ECC function controllers or in the modules is lost.

40.4 Select "Network > Save Project..." in the menu bar.

40.5 Confirm the enquiry.

- The file selector opens up.

40.6 Select the name of the project and the place where it is to be saved.

40.7 Confirm the entry.

- A file with the filename extension ".network" is saved.
- The following information is saved in the project file:
  - All "Netwide TD" groups (folders) and their configuration,
  - Notes on ECC function controllers and "Netwide TD" groups,
  - Settings for thermal disinfection of the folders,
  - Setting for module IDs.

Loading a project offline
A project can be loaded without there being a connection to the network.
A project serves to document the current status of a plant and can be used by customer service for diagnostic purposes. All module data, for example the configuration of a module, are shown.

41. Protocol

The configuration data of the complete system is documented in a log at the time of saving.

Saving a protocol...

41.1 Select "Network > Save Protocol..." in the menu bar.

- The file selector opens up.

41.2 Select the name of the protocol file and the place where it is to be saved.

41.3 Confirm the entry.

- Details of the ECC function controller and the modules are saved as CSV files in the selected storage location.
  - Protokollname _Ecc.csv: Details of ECC function controllers and folders
  - Protokollname _Em.csv: Details of modules without data from the program structure
  - Protokollname _EmPs.csv: Details of modules from the program structure (flow durations, ranges)

The CSV files have column names in the first line and use tabs as separators between the columns. They can be opened directly in spreadsheet programs such as Microsoft Excel or OpenOfficeCalc.

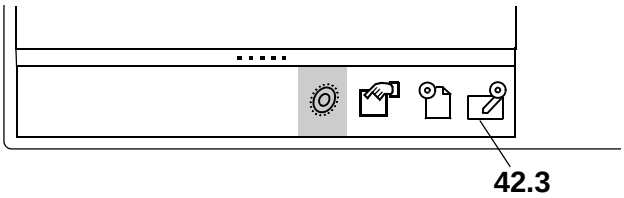
42. Report

☞ **Important!**
A report can only be created when the "SAP Crystal Reports Runtime" software is installed.

A report can, for example, be created by the service technician or the customer to commission or record the current status of the project. The report can be displayed via the navigation bar.
The System protocol is structured into 7 (logical) pages and contains a brief overview of the ECC function controllers and modules.

- Page 1: Cover sheet - Address, report type, project data
  (one page per network)
- Page 2: Project configuration/Setup
  (one page per network)
- Page 3: Configuration of the ECC function controller and fittings
  (one page per ECC function controller)
- Page 4: Configuration of the function modules
  (one page per ECC function controller)
- Page 5: Status of the ECC function controller and statistics of the fittings
  (one page per ECC function controller)
- Page 6: Overview of the fitting IDs used in the network
  (one page per network)
- Page 7: Information on customer service, signatures of the trained operators, of the customer and of the technician.
  (one page per network)

Before saving the report, the system asks for the name and the storage location of the protocol form.



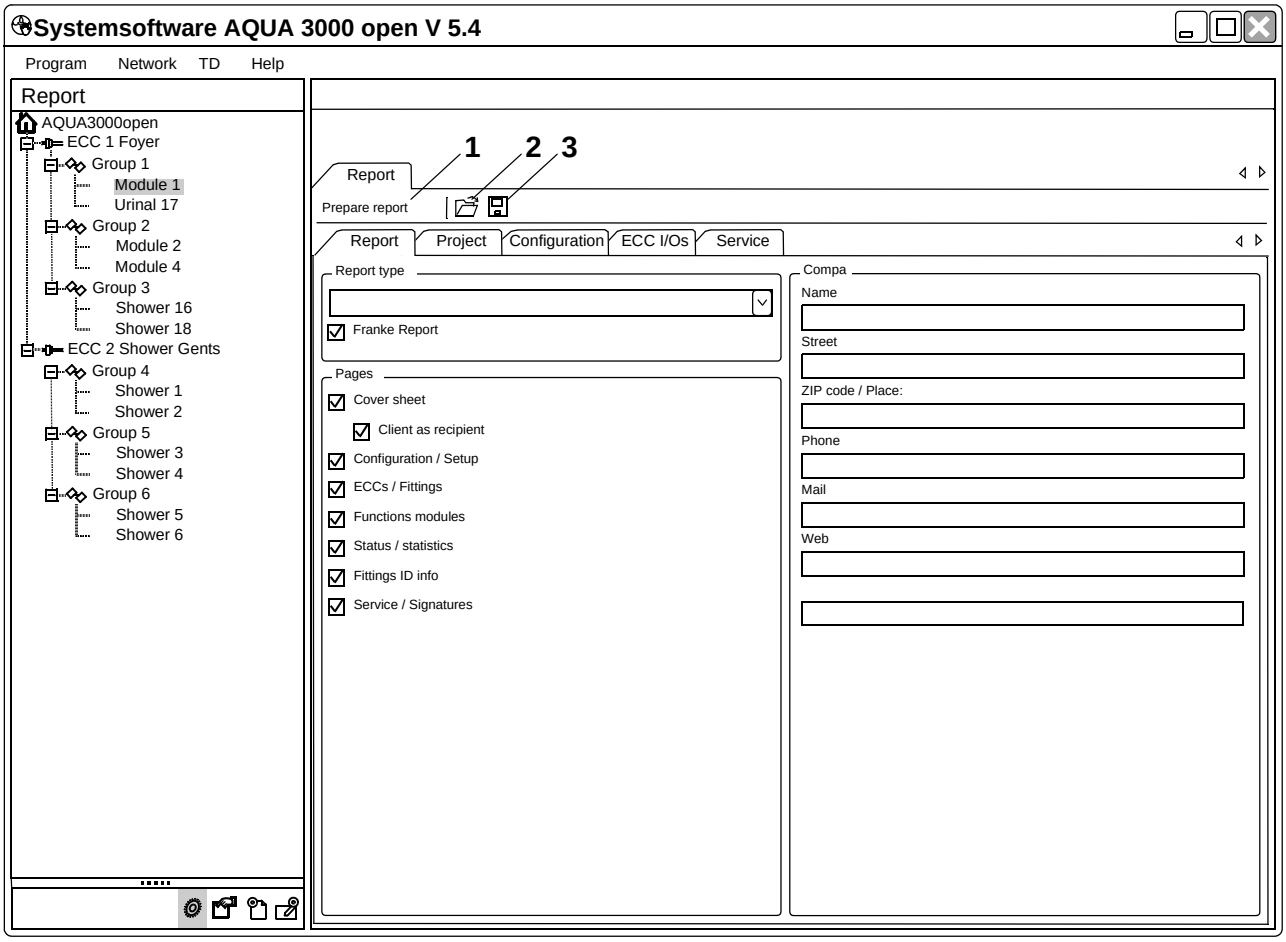
42.1 Start the system software.

42.2 Select "Program > Read Data from all modules" in the menu bar.

- The configuration and statistics of all modules is read.

42.3 In the navigation bar select the symbol "Report".

- The Report is now started.



Prepare report (1)
The report is generated and displayed in a separate window. The report can be printed or exported for separate processing in different file formats.

Load report settings (2)
Saved configurations can be loaded from a file.

Save report settings (3)
The configurations made for the report can be saved in a file with individual names.

43. DEMO Mode

The system software can be operated in DEMO mode for training or presentation purposes. Water management with 5 ECC function controllers is simulated in DEMO mode. The simulation refers to configurations and their modifications. Sensor and actuator activities are not simulated. The configurations of the modules can be changed in DEMO mode without hesitation. The modifications do not affect the active water management system. All modifications are rejected when the system software is closed.

43.1 In the menu bar, select "Program > Settings..."

- The Settings window opens.

43.2 Select the Network tab.

43.3 Select the DEMO operating mode in the Connection field.

43.4 Confirm the entry.

43.5 Restart the system software.

- The system software starts in DEMO mode.

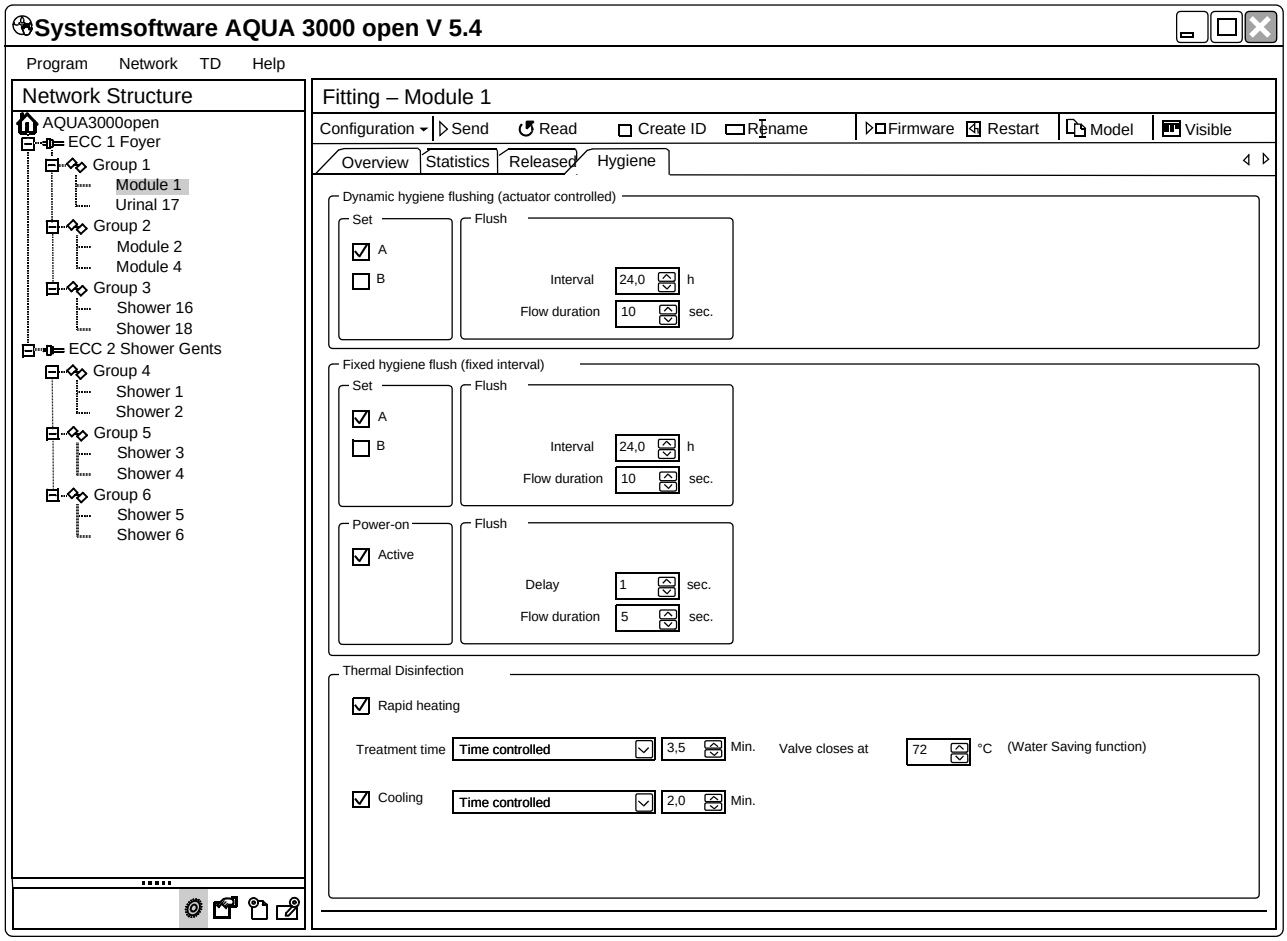
44. Hygiene Flushing

44.1 Start the system software.

44.2 Mark the module in the network structure overview.

44.3 Select the "Hygiene" tab.

- The settings are displayed in the information window.



44.4 Change the settings.

44.5 Send the altered configuration to the module.

44.6 Where necessary, restart the module so that the changes are applied by the module.

☞ **Important!**
The actuators are configured via the ID.

☞ If no actuators are activated for the hygiene flush, the "Not configured!" message appears in the configuration area.

Dynamic hygiene flushing (actuator controlled)
Hygiene flushing is performed at a fixed interval, after the last flushing.

☞ Necessary settings:

Set: activate desired set
Interval > 0 (with 0, flushes are continually repeated)
Flow duration > 0

Active in set A, B:
Specifies the operating condition at which a dynamic hygiene flush is to take place.

Interval:
Time after the last flushing that a hygiene flush is to take place.

Flow duration:
Time, how long the hygiene flush is to be performed.

Fixed hygiene flush (fixed interval)
Hygiene flushing is performed at a fixed interval, independent of previously performed flushings.

☞ Necessary settings:

Set: activate desired set
Interval > 0
Flow duration > 0

Active in set A, B:
Specifies the operating condition at which a fixed hygiene flush is to take place.

Interval:
Time after which a hygiene flush is to be performed.

Flow duration:
Time, how long the hygiene flush is to be performed.

Power-on flush:
When power-on flushing is active, the fitting is flushed for a certain length of time when powered via the operating voltage (initialisation of the electronic module).

☞ **Important!**
The power-on flushing is configured by the ID.

☞ If no power-on flushing is activated, the "Not configured!" message appears in the configuration area.

☞ Necessary settings:

Function = active
Flow duration > 0

Flow duration:
Time, how long the power-on flush is to be performed.

Delay:
The power-on flush can be delayed for an adjustable time in order to prevent multiple simultaneous flushings.
When hygiene flushing is active, this delay is also effective for fixed hygiene flushing.

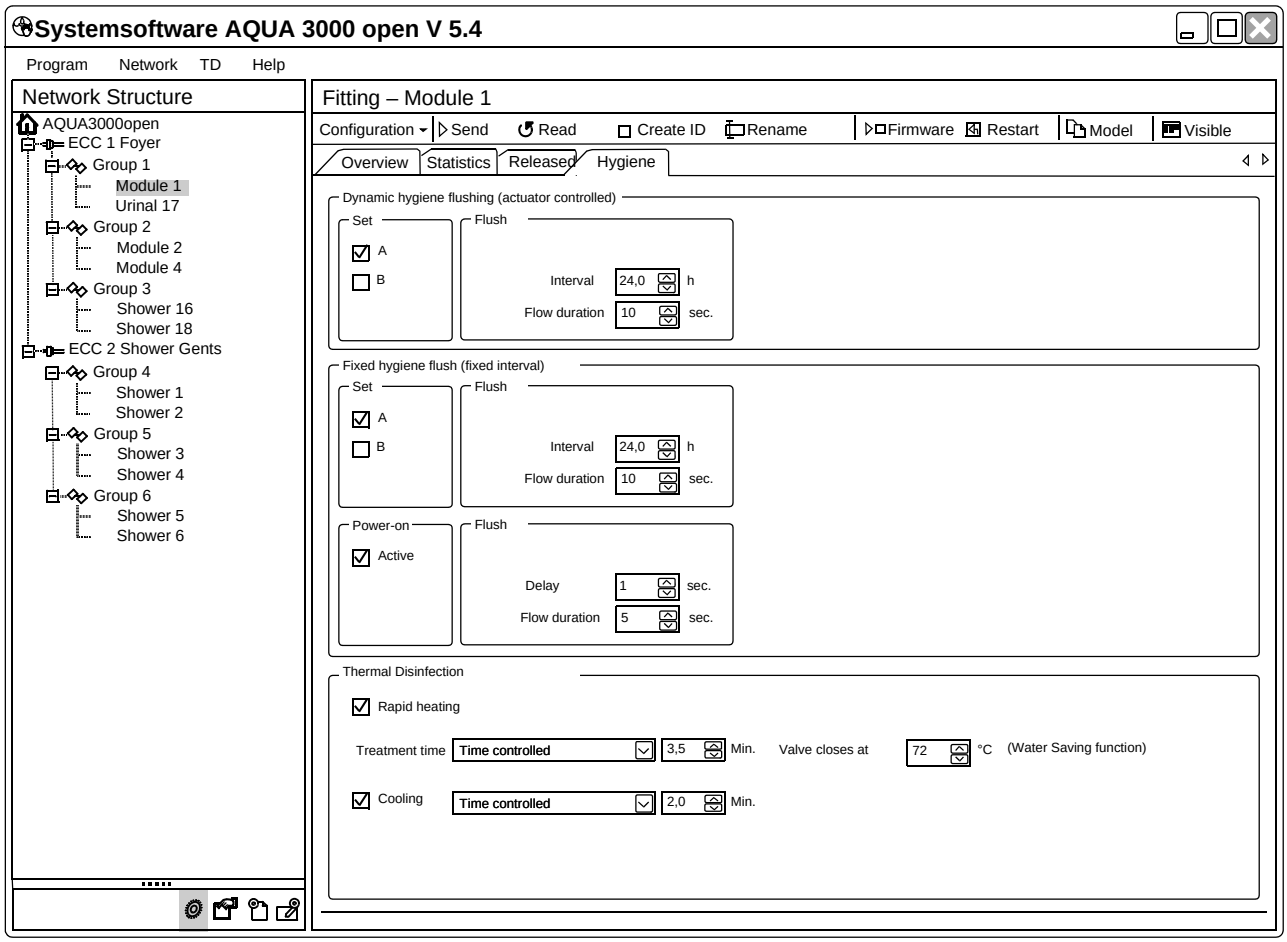
45. Thermal Disinfection

45.1 Start the system software.

45.2 Mark the module in the network structure overview.

45.3 Select the "Hygiene" tab.

- The settings are displayed in the information window.



45.4 Change the settings.

☞ Necessary settings:

Group = 1-8
Treatment time > 0 time controlled or temperature controlled

45.5 Send the altered configuration to the module.

45.6 Where necessary, restart the module so that the changes are applied by the module.

Group

Whenever a module is connected to the ECC function controller it is also assigned to a group. Subdividing the fittings into groups will, for example, avoid all fittings connected to a particular ECC function controller from being disinfected at the same time. Instead, the groups are disinfected one after the other.

1-8: All the fittings of a particular TD isle, which do not have any special functions for thermal disinfection and which are to be thermally disinfected, are entered in this group.

9: The fittings of this group do not take part in the thermal disinfection.

12-14: Functions modules

TD Flow

Rapid heating:

The fitting opens the solenoid valve. Hot water flows out of the circulation pipe. More hot water tops up the circulation pipe.

Influence time:

Time controlled	During thermal disinfection the solenoid valve opens up for the set duration.
Temperature controlled	During thermal disinfection the solenoid valve opens up in a temperature-controlled manner and in compliance with a specified temperature/time table.

Temperature	Time
>80°C	2 Min.
>75°C ≤ 80°C	3 Min.
>70°C ≤ 75°C	5 Min.
>65°C ≤ 70°C	10 Min.
>60°C ≤ 65°C	20 Min.

Cooling:

Time controlled	To cool down, the fitting opens up for the set time.
Temperature controlled	To cool down, the fitting opens up until the set temperature is reached.

Water saving function

The valve responsible for thermal disinfection closes automatically when

- the influence time has been set in the TD process, and
- the set temperature is reached.

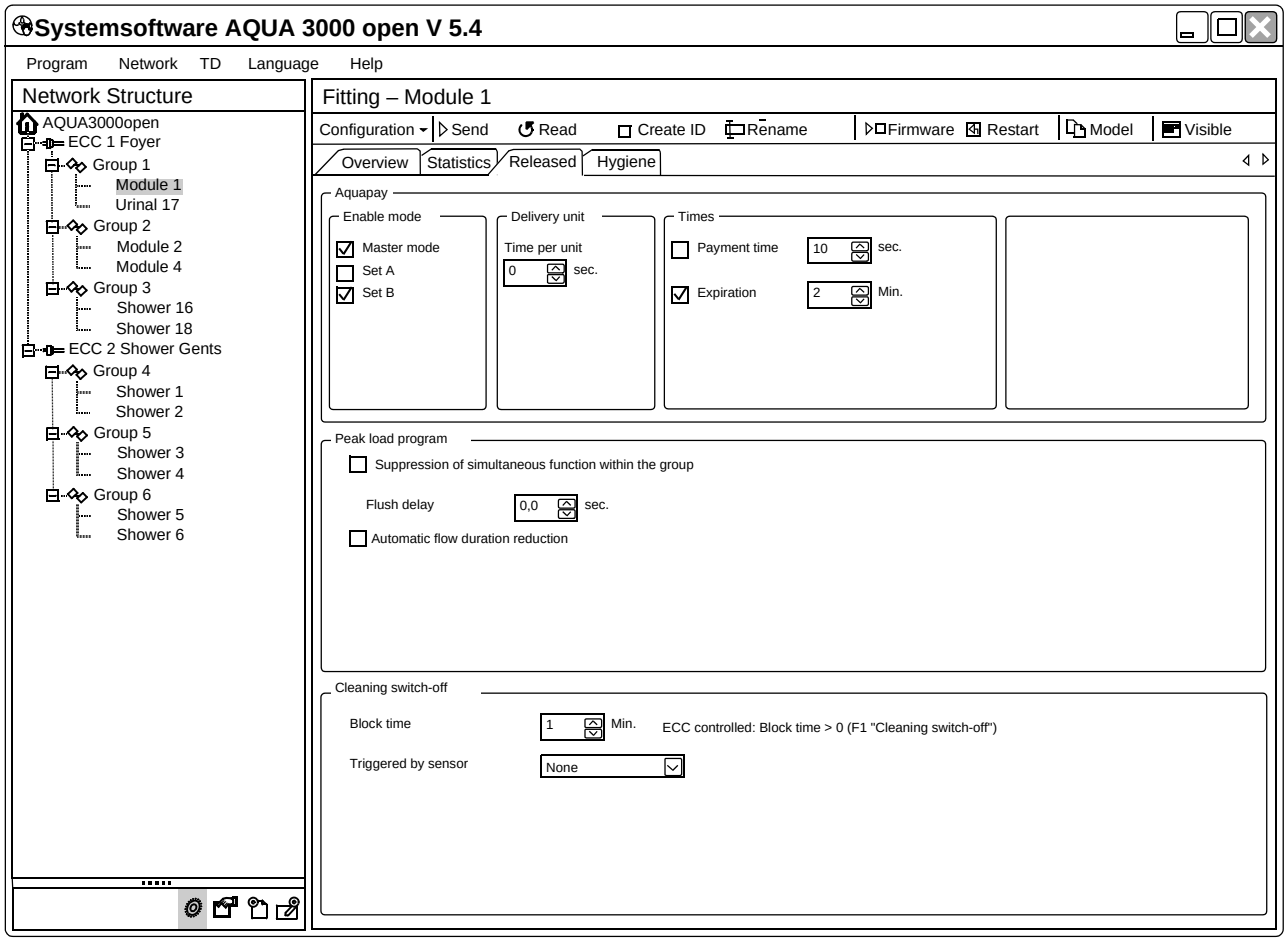
The valve that is responsible for thermal disinfection is configured by the ID.

46.1 Start the system software.

46.2 Mark the module in the network structure overview.

46.3 Select the "Release" tab.

- The settings are displayed in the information window.



46.4 Change the settings.

46.5 Send the altered configuration to the module.

46.6 Where necessary, restart the module so that the changes are applied by the module.

Aquapay

A module can be configured for paid media delivery.
This function will be available for the modules from firmware version 5.3.

Enable mode

Module control via an AP master (Master mode) or as an individual fitting.

Delivery unit

Duration of media delivery per paid unit, e. g. per 50 Cent coin.
This function is not active when the fitting is working in Master mode.
The delivery unit is set in the AP-Master module(see Chapter 47.).

Times

Time for payment and use of credit.
Payment time: Time during which the coins or chips must be inserted into the counter. This function is not active when the fitting is working in Master mode.
Expiration time: Time after the last usage that the credit expires.

Peak Load Program

☞ Necessary settings:

Suppression of simultaneous function within the group = active
and/or
Automatic reduction of flow duration = active

Suppression of simultaneous function within the group:
When there is simultaneous usage of fittings within a group, the fittings are opened consecutively in a delayed fashion.

Flush delay time:
Time that passes, before the next fitting is opened.

Automatic flow duration reduction:
When there is heavy fitting usage, the flow duration is automatically reduced.
The status of the flow-duration reduction is displayed: ◔◑◕●

Description	Values
Monitoring period (MP)	5 min
Reduction stage 1 ◔	4-7 activations /MP
	80% flow duration
Reduction stage 2 ◑	8-12 activations /MP
	50% flow duration
Reduction stage 3 ◕	13-17 activations /MP
	20% flow duration
Reduction stage 4 ●	18 activations /MP
	0% flow duration

Cleaning switch-off

Cleaning switch-off:
Time during which the fitting is deactivated, e. g. for cleaning it.
The Cleaning switch-off can be activated via a contact input on the ECC function controller, the software or via a sensor.

When Cleaning switch-off is triggered via an ECC function controller, the following must be observed:
A fitting will participate in the cleaning process if
- a cleaning period has been set (see Chapter 18.) for the ECC function controller and
- more than 0 minutes has been specified in the field for Cleaning switch-off.

A fitting will not participate in the cleaning process if
- a cleaning period has been set (see Chapter 18.) for the ECC function controller and
- 0 minutes has been specified in the field for Cleaning switch-off.

Triggered by sensor
Information about which sensor activates Cleaning switch-off.

47. Electronic Module – A3000 open for Paid Media Delivery (AP Master)

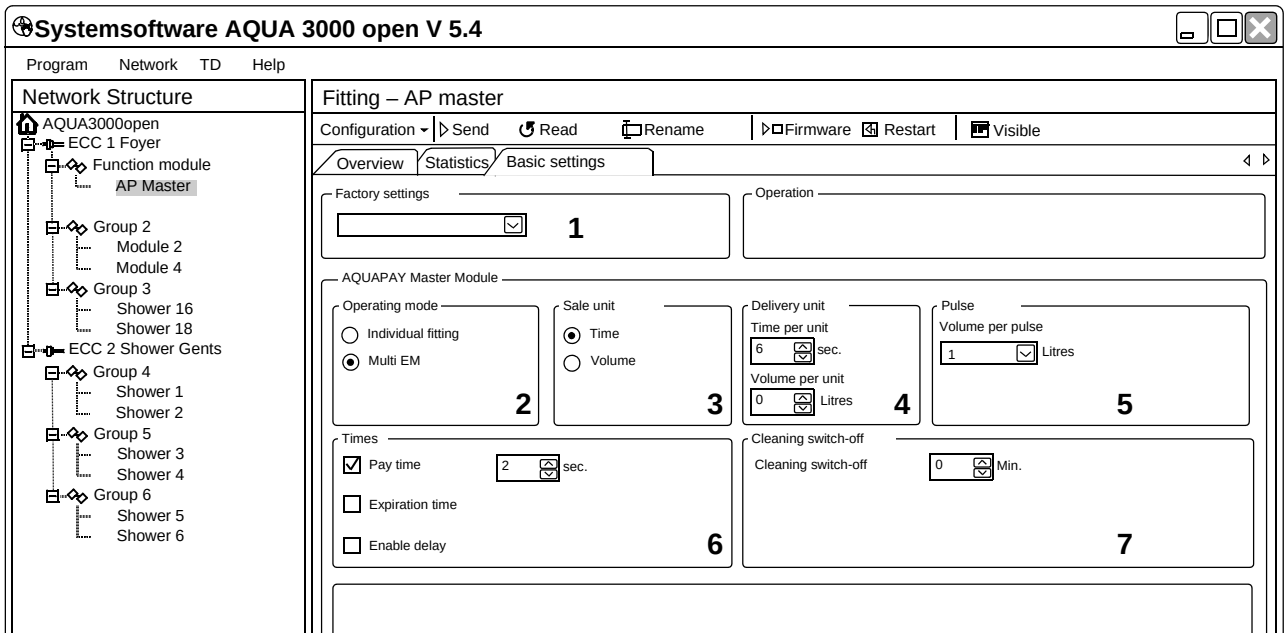
47.1 Start the system software.

47.2 In the network structure overview, mark the Electronic Module – A3000 open for paid media delivery.

- The data on the "Overview" and "Statistics" tabs are displayed analogue to the normal modules.

47.3 Select the "Basic settings" tab.

- The settings are displayed in the information window.



47.4 Change the settings.

47.5 Send the altered configuration to the module.

- After the configuration has been sent, the module is reset.

1 Factory settings
The default factory settings make it easier to configure the system with standard parameters. Factory settings are: Master (several EMs), Individual fitting time, Individual fitting volume

2 Operating mode
The AP-Master module can be operated as an individual module or can manage several fittings. Volume delivery is only possible when the AP-Master module is working in the Individual Fitting mode of operation.

3 Sale unit
Paid media delivery can be charged on the basis of time or volume.

4 Delivery unit
Duration or volume of media deliver per paid unit.

5 Pulse counter
The AP-Master module is adapted to the hardware used by the volume counter (e. g. contact water counter).

6 Times
Time for payment and use of credit. Expiry time and Enable delay can only be activated when the AP-Master module is working in the Individual Fitting mode of operation.

7 Cleaning switch-off
Time during which the fitting is deactivated, e. g. for cleaning it.

48. Electronic Module – A3000 open for Circulation Pipe

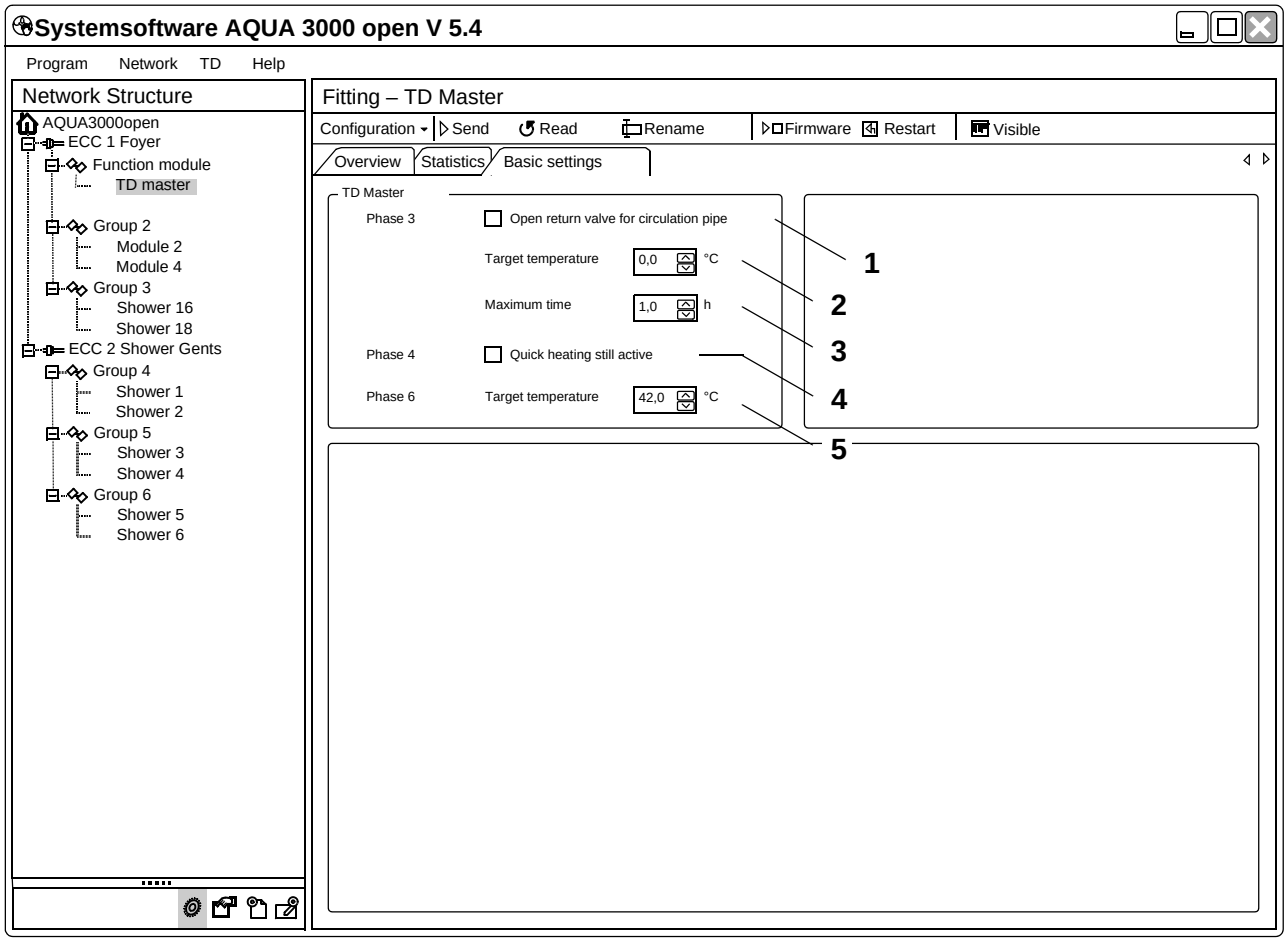
48.1 Start the system software.

48.2 Mark the Electronic Module A3000 open for Circulation Pipe in the network structure overview.

- The data on the "Overview" and "Statistics" tabs are displayed analogue to the normal modules.

48.3 Select the "Basic settings" tab.

- The settings are displayed in the information window.



48.4 Change the settings.

48.5 Send the altered configuration to the module.

- After the configuration has been sent, the module is reset.

1 When the checkbox is active, the return valve in the circulation line opens up during the heating phase (Phase 3) of the thermal disinfection process.
2 The return valve closes when the temperature specified here for the circulation line has been reached or exceeded.
3 When the target temperature (2) is not reached within the time specified here, the return valve is closed and thermal disinfection is aborted.
4 When the checkbox is active, the return valve in the circulation line remains open during the treatment phase (Phase 4) of the thermal disinfection process.
5 During the cooling phase, the return valve closes when the temperature specified here for the circulation line has been reached or exceeded.

49. Electronic module – A3000 open for Drinking Water Heater.

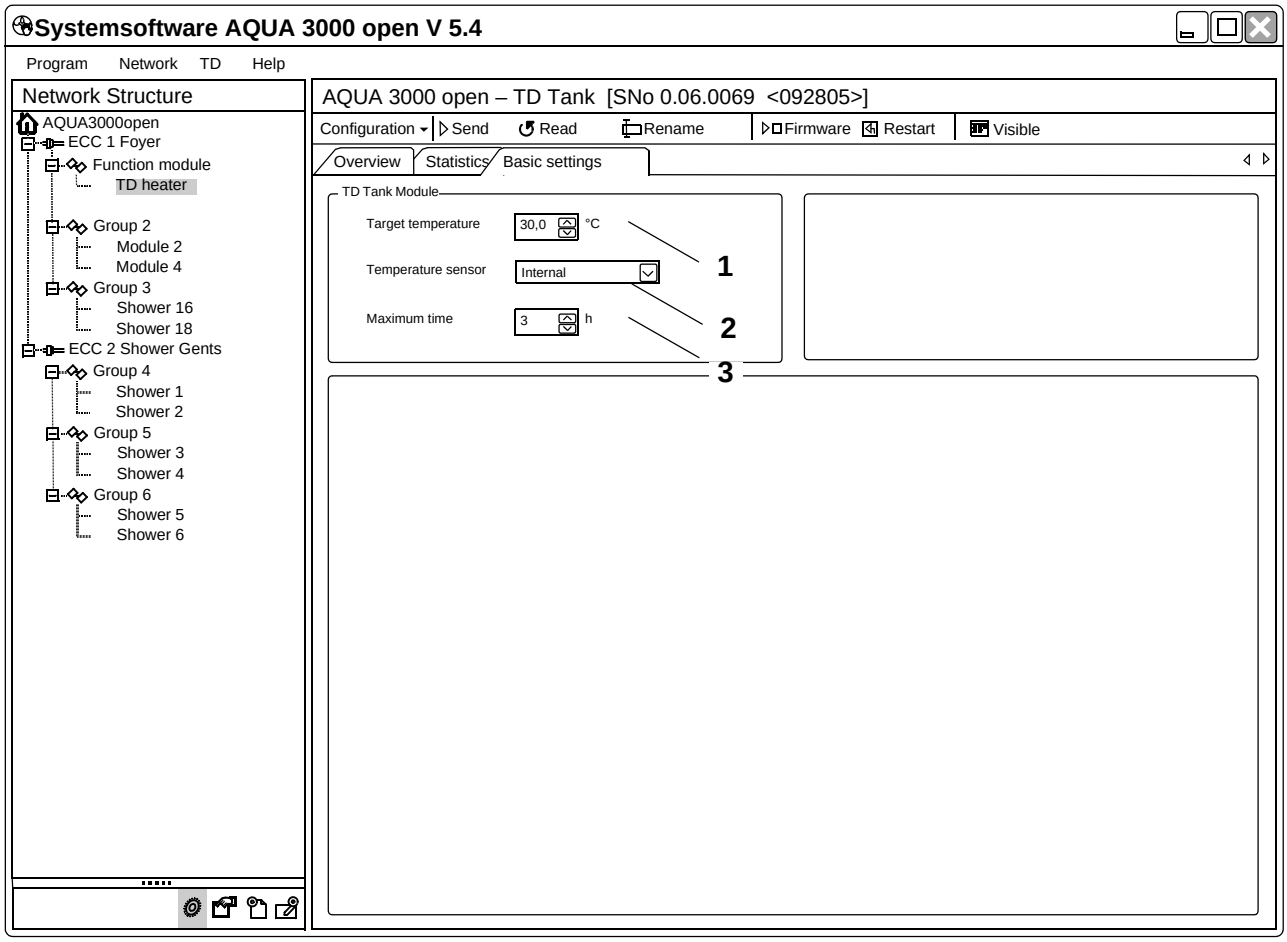
49.1 Start the system software.

49.2 Mark the Electronic Module A3000 open for drinking water heater in the network structure overview.

- The data on the "Overview" and "Statistics" tabs are displayed analogue to the normal modules.

49.3 Select the "Basic settings" tab.

- The settings are displayed in the information window.



49.4 Change the settings.

49.5 Send the altered configuration to the module.

- After the configuration has been sent, the module is reset.

1 Temperature to which the water in the drinking water heater is to be heated.
2 Option, whether the temperature in the drinking water heater is to be monitored by an internal or an external temperature sensor.
3 Maximum time that the heating phase is to last.
This function will be available from firmware version 5.4.

50. Upgrade from Version 5.2 to Version 5.3 and Higher

In order to take advantage of the technology for user account management introduced since Windows Vista, there is the need to change the way in which the program data is managed.

The program data includes the following files:

- A3000 OPEN.config (program settings for Systemsoftware)
- A3000 OPEN.network (project file for Auto-Project)
- Control.xml (database of the Control-Center)
- farnetio.xml (program settings for NetIO)

as well as the following folders with their contents:

- ID (folder for IDs)
- Statistic (folder for statistics databases)
- Protocol (folder for log tables)

Up until Version 5.2 the program data were saved in the application folder (C:\Program Files\Franke Aquarotter\Systemsoftware AQUA 3000 open\). From Version 5.3 onwards the program data are saved in the Application Data folder.

☞ The "Application Data" folder has different locations and names, depending on the respective Windows versions.

- Windows XP: "C:\Documents and Settings\All Users\Application Data\Franke Aquarotter\Aqua3000open\"
- Windows Vista: "C:\ProgramData\Franke Aquarotter\Aqua3000open\"
- Windows 7: "C:\ProgramData\Franke Aquarotter\Aqua3000open\"

☞ By default the "Application Data" folder is hidden.

When the currently applicable software is started, a check is made to determine whether program data have already been saved in the new Application data folder. If this is not the case, the program data (if existent) is copied from the Application folder into the Application Data folder.

The files in the "Statistics" subfolder are not taken over automatically; here the user must himself determine which databases are to be taken over into the new Application Data folder.
The "Protocol" subfolder is not taken over automatically, because from the current program version onwards the log files are saved completely in a folder that the user himself can freely choose.

If the current software is installed in a different folder from the one used by the previous version, the user must take over the program data manually. If the program data are not taken over, the software will work with the default parameters.

step … Step size, with which the value can be changed
def … Software preset for the values, which are stored in the ID.

Menu	Parameter	Adjustment range
Program > Settings... >Statistics	Main interval	1 - 1440 [step 1] [def 10] minutes
	TD interval	10 - 60 [step 1] [def 20] seconds
Program > Settings... > Network	Port	Range: 0 - 65535 Reserved: 0 - 1023 Standard : 4440
	Multicast IP	Range: 224.0.0.0 - 239.255.255.255 [def 239.10.1.1]
ECC > Rename		max. 32 alphanumerics
ECC > Start Sensor Addressing	Naming scheme for fittings	* for number [automatic 1 to 32]; e. g. Shower * Gents --> "Shower 001 Gents" … "Shower 032 Gents" #xxx# for start number [automatic xxx to xxx+31]; e. g. Shower #100# Gents --> "Shower 100 Gents" … "Shower 131 Gents"
ECC > Configuration	MAC address	Firm
	IP Address	Individually adjustable. Segment range: 0 - 255 Reserved: 0 and 255 Standard : 192.168.0.1
	Cleaning time	0 - 255 [step 1] [def 255] minutes
TD > Configure thermal disinfection	Heat-up time circulation pipe (phase 3)	1 - 240 [step 1] [def 1] minutes
	Reheating time	0 - 240 [step 1] [def 0] minutes
	Treatment-time circulation line (Phase 4)	1 - 240 [step 1] [def 1] minutes (Firmware 4.2)
	Safety time-window	0 - 360 [step 1] [def 0] minutes (Firmware 4.2)
Configuration > Generate ID		65001 - 65534
Configuration > Rename		max. 32 alphanumerics
Module Level> Hygiene > Dynamic Hygiene Flushing	Active for Set	A, B: NO / YES [def A,B]
	Interval	0 - 120 [step 0.5] [def 24] Hours
	Flow duration	0 - 255 [step 1] [def 10] seconds

Menu	Parameter	Adjustment range
Module Level> Hygiene > Fixed Hygiene Flushing	Active for Set	A, B: NO / YES [def A,B]
	Interval	0 - 120 [step 0.5] [def 0] Hours
	Flow duration	0 - 255 [step 1] [def 10] seconds
Module Level > Hygiene > Power-on flushing	Power-on flushing	NO / YES [def YES]
	Flow duration	0 - 255 [step 1] [def 5] seconds
	Trigger delay	0 - 255 [step 1] [def 0] seconds
Toolbar >Operation	Group	1 - 8, 9 No TD, 12-14 function modules
Module Level> Hygiene > Thermal Disinfection	Rapid heating	NO / YES [def NO]
	Treatment time > Time controlled	0.5 - 20.0 [step 0.5] [def 3.5] minutes
	Cooling	NO / YES [def YES]
	Cooling > Time controlled	0.5 - 20.0 [step 0.5] [def 2.0] minutes
	Cooling > Temperature controlled	30 - 45 [step 1] [def 45] °C
	Water saving function > Valve closes at	62 - 80 [step 1] [def 72] °C
Module Level > Release > Peak Load Program	Suppression of simultaneous function within the group	NO / YES [def NO]
	Flush delay	0.0 - 25.5 [step 0.5] [def 0.0] seconds
	Automatic reduction of flow duration in the isle network	NO / YES [def NO]
Module Level > Release > Cleaning Switch-off	Cleaning switch-off	0 - 255 [step 1] [def 1] minutes
	Triggered by sensor	List [def none]
Module Level > Release > Aquapay	Enable mode	Master, A, B [def NO]
	Delivery unit – time	0 - 511 [step 1] [def 180] seconds
	Delivery unit – volume	0 - 500 [step 1] [def 20] Litres
	Pay time	NO / YES [def NO] 0 - 30 [step 1] [def 10] seconds
	Expiration time	NO / YES [def NO] 0 - 30 [step 1] [def 5] minutes

52. Fault Correction

Fault	Cause	Remedy
ECC function controller and fittings are not being displayed	– The firewall is blocking the port.	➔ Set an exception: Enable port 4440 for UDP
	– Connecting cable is not CAT5 or higher	➔ Replace cable
	– Connecting cable for direct PC-ECC connection is not a crossover cable	➔ Replace cable
	– Network adapter is deactivated	➔ Activate it
	– Safety software (anti-virus program) is preventing communication	➔ Check, if necessary adjust and send
ECC function controller is being shown, but the fittings are not being shown on the fitting level	– System line is not properly connected to the ECC function controller	➔ Check it
	– No terminating resistors	➔ Check it
	– Electric T-junction is not properly connected or the screw connections have not been tightened	➔ Check it
	– Incorrect settings in the system software (Network configuration and/or ECC function controller configuration)	➔ Check and adjust as required
ECC function controller and fittings are being displayed, but they cannot be operated	– The IP-address of the ECC function controller and the PC are not within the same range.	➔ Adapt the IP-address(es) of the ECC and/or the PC
	– Firmware ID of the ECC function controller or module and the system software are not of the same communication type	➔ Check and have customer service make any necessary changes

If you are unable to correct a fault or if the fault is not described in the fault correction section, please inform our customer service department!

ALG
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