DELABIE | KWC Professional

Managing water in a mobile and efficient way

Experience perfection

Managing water efficiently, successfully, and wirelessly

The technical equipment used in large building complexes such as swimming pools, sports facilities, offices, airports and industrial plants can now be automated and centrally controlled as a smart building. The main focus is on energy optimisation of building operations to reduce operating costs and increase building safety.

KWC Professional provides sanitary solutions for sustainable operation of these buildings. The AQUA 3000 open water management system establishes a balance between ecology and economy, between hygiene and consumption, and between planning and operation.

A well-designed, complete water management system facilitates economical operation of all connected components and can be connected to higher-level networks, e.g. via KNX-IP via a standardised RJ45 interface. The membership as a certified manufacturer in the KNX Association exists since 2016.

AQUA 3000 open allows operators of large drinking water installation systems to enhance their efficiency in terms of water and energy consumption. The goal is to guarantee the best-possible level of drinking water hygiene at every withdrawal point in the building. Limited resources such as energy and water are conserved, thereby reducing the emission of CO2.

Smart and easy drinking water hygiene with AQUA 3000 open

Access to clean and high-quality water has a significant influence on the quality of life and the standardised and mandatory directives on the quality of drinking water in EU member states (EU Drinking Water Directive 98/83/EC) help to ensure this. Each EU country has the freedom to implement the required quality standards with various factors such as physico-chemical, sensory and microbiological parameters generally being examined.

In poorly designed and operated drinking water systems, the "clean" water can be polluted and can contaminate the entire building. The main causes of this are stagnation and critical temperatures. Germs and bacteria (e.g. legionella) in drinking water installations are propagated at temperatures between 25 °C and 45 °C. They are transmitted in a contactless manner by breathing in very fine droplets of water that are formed when showering. The AQUA 3000 open water management system can prevent stagnating water and these critical temperatures.

The AQUA 3000 open water management system can be individually programmed and expanded as required. Shower fittings, basin taps, flushing valves and additional system components such as temperature sensors from KWC Professional can be connected retrospectively. For all connected fittings, the AQUA 3000 open system enables water hygiene flushing operations, thermal disinfection, operational mode switching, deactivation of cleaning, and system fault messages, such as leakage detection and statistical functions.
Water volume, hygiene functions and their temperature limit values can be individually monitored and set for each room and even for each individual fitting.

Malfunctions are detected immediately and reported by the system. The Ethernet CAN coupler (ECC2) with integrated WEB server helps with mobile controlling and monitoring of the entire water installation inside the building. All fittings connected to an ECC2 can be divided (up to eight groups) to separate rooms within a building, or to effectively and safely perform specialist functions. All of the data and relevant parameters for the groups can be exported in a csv format together with the date and time. The easy-to-read, illuminated display simplifies reading and navigation in the menu.

Smart fitting technology

AQUA 3000 open – Interconnecting intelligent basin taps, shower fittings and flush valves

Building level

Fitting level

Electronic module from the accessory range

F5 basin taps

F5 flush valves

Integrated electronic module

A3000 open flush valves

AQUA 3000 open compatible

- Option for combination with a suitable electronic module for integration into the AQUA 3000 open water management system of F5E fittings *)

AQUA 3000 open

- Network-compatible fitting
- The electronic module is included in the product *)

F5 shower fittings

A3000 open taps for facilities at risk of vandalism

AQUA 3000 open can be integrated into any sanitary facility in the building network and connected to existing building management systems using various data protocols. The ECC2 function controller constitutes the transfer point to the building network, it communicates with the respective fitting via the electronic module.

The intelligent electronic module is at the heart of the system. The suitable electronic module from the accessory range is available for all A3000 open-compatible F5 basin taps and shower fittings. The electronic module is included with the network-compatible flush valves for WCs.

The factory programmed, "plug and play" functionality of the electronic modules allow the fittings to be easily installed. Together with the electronic module, each fitting has application-specific programming for all of the important water supply functions which is independent of the higher-level control unit. Furthermore, a unique serial number provides the basis for additional control functions.

Parameter options

Our intelligent fittings have the following function programmes:

1. Easy parameter settings
2. Demand-optimised water supply functions
3. Programme mode switching
4. Peak-load optimisation & Simultaneous-operation suppression
5. Paid supply of water with AQUAPAY
6. Safety switch-offs
7. Deactivation of cleaning
8. Statistical functions and temperature logs
9. Automatic water hygiene flushing operations
10. Thermal disinfection programmes

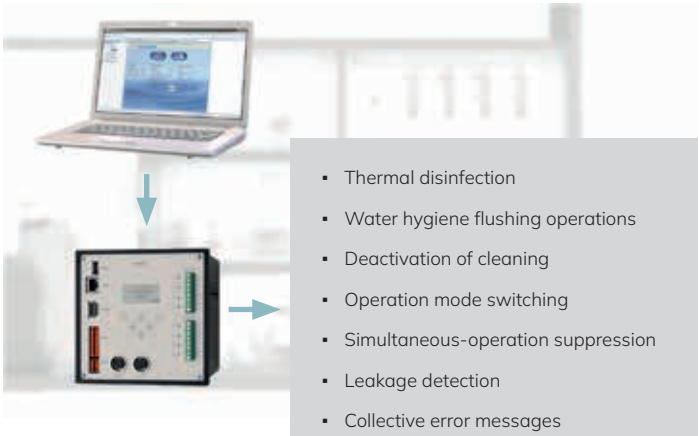
*) AQUA 3000 open system accessories must be ordered separately and tailored to a particular premises

Tailored product functions for optimum results

The intelligent product technology and the open system structure of AQUA 3000 open enable customised water supply functions and adaptation or expansion to specific building conditions at any time.
The following parameters demonstrate the various options for user-defined and useful control of sanitary fittings to reduce building system expenditure.

1. Easy parameter settings

- Building-specific programme parameters can be configured using a WEB browser.



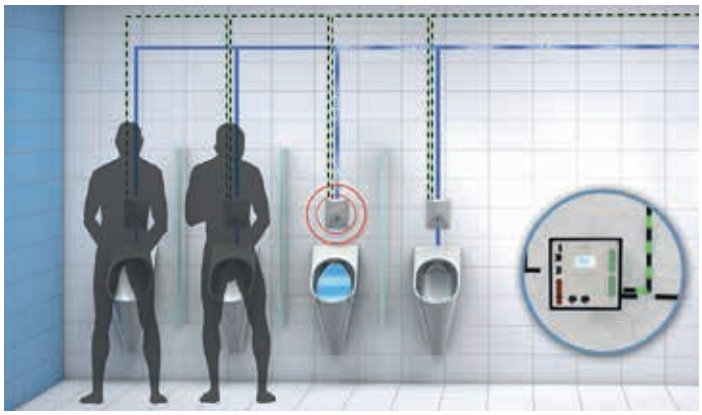
- Thermal disinfection
- Water hygiene flushing operations
- Deactivation of cleaning
- Operation mode switching
- Simultaneous-operation suppression
- Leakage detection
- Collective error messages
- Sequential controls
- External valves

2. Demand-optimised water-supply functions

- The electronic module automatically controls application-related basic functions such as start/stop of the water flow and flow duration.
- Different programme modifications such as individual hygiene flushing functions and peak load programmes can be individually customised during installation.

3. Programme mode switching

- All fittings are provided with 2 alternative control programmes (water supply functions) that are stored in the electronic module. To select different modes, e.g. day/night, school/association, paid/unpaid supply of water, school term time/holidays, stadium/intermission, room occupied/vacant etc., the respective programmes can be switched via an ECC2 function controller or the WEB browser.
- The optional AQUAPAY module for a paid supply of water ensures additional efficiency because users become more conscious of how they handle water resources.

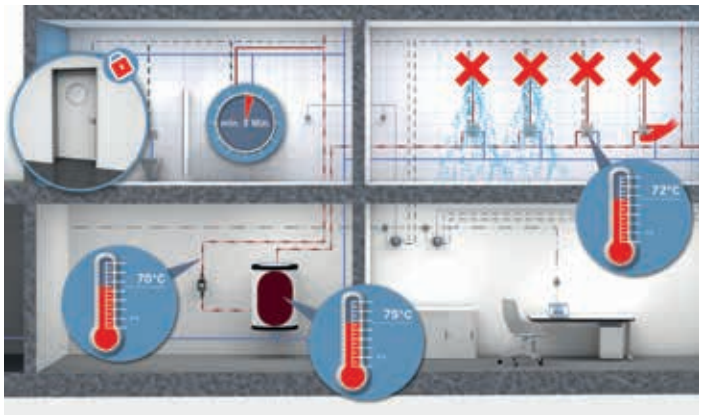


4. Peak-load optimisation

- The peak load optimisation processes are stored in the electronic modules and can be enabled in the function programme.
- The programme for a user-dependent reduction of the flow duration controls the supply of water depending on the frequency of usage of the fitting.
- The simultaneous-operation suppression feature flushes the fittings in succession.

5. Paid supply of water with AQUAPAY

- It is possible to use AQUAPAY coin-operated controllers to pay for a supply of water. This can be implemented via two options.
- One option is to integrate a coin-operated controller in the entire fitting network in order to control up to 31 fittings with an ECC. Alternatively, an AQUAPAY coin-operated controller can be combined with an individual shower unit.



6. Safety switch-offs

- In the event that a fitting is operated while thermal disinfection is being performed, the TD programme immediately interrupts the process. The safety switch-off feature also triggers when a fitting is activated continuously, e.g. due to improper use, and stops the flow of water.

7. Deactivation of cleaning

- This function ensures that sanitary facilities can be cleaned. It prevents fittings from being inadvertently activated.

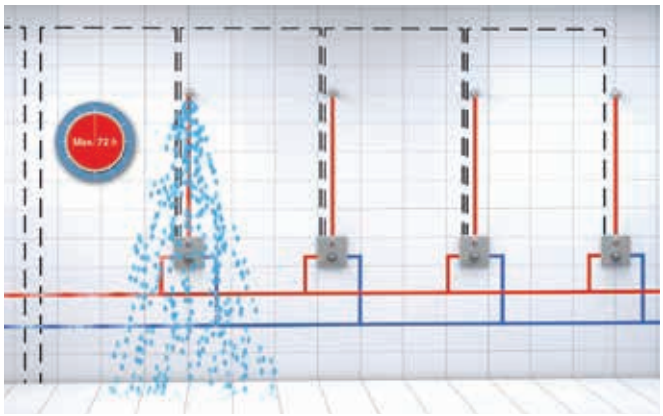
8. Statistical functions and temperature logs

- Temperature values and other important system data, such as completed water hygiene flushing operations and thermal disinfections, are stored. This data can be exported to a USB stick or downloaded via the WEB browser.

Ensuring drinking water hygiene – even with fluctuating usage times

Made simple with water hygiene flushing operations or thermal disinfection

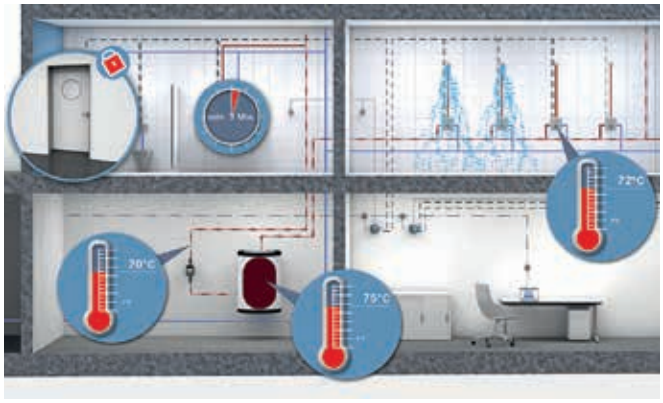
Both of the following functions are designed to be both a prevention and a treatment. They remove any build up of biofilm in the system which in turn prevents the water-pipes becoming contaminated with germs and bacteria (mainly legionella). The duration and intervals of the necessary thermal disinfection processes can be configured as specifically as the separate water hygiene flushing operations for preventing water stagnation. All of the statistical data is stored in the ECC2 and can be output via USB.
The success of the hygiene measures must be inspected through regular sampling.



9. Automatic water hygiene flushing operations

The electronic module has up to three hygiene flushing program control functions which are specific to the building:

- An automatic water hygiene flushing operation is performed for a fitting within a fixed interval.
- Dynamic water hygiene flushing operations are performed when a fitting has not been used for a certain period of time (factory programmed to 24 hours after last use).
- Temperature-controlled water hygiene flushing operations are performed in conjunction with optional temperature sensors via a cold and/or hot temperature control system on the cold and/or hot water control system.

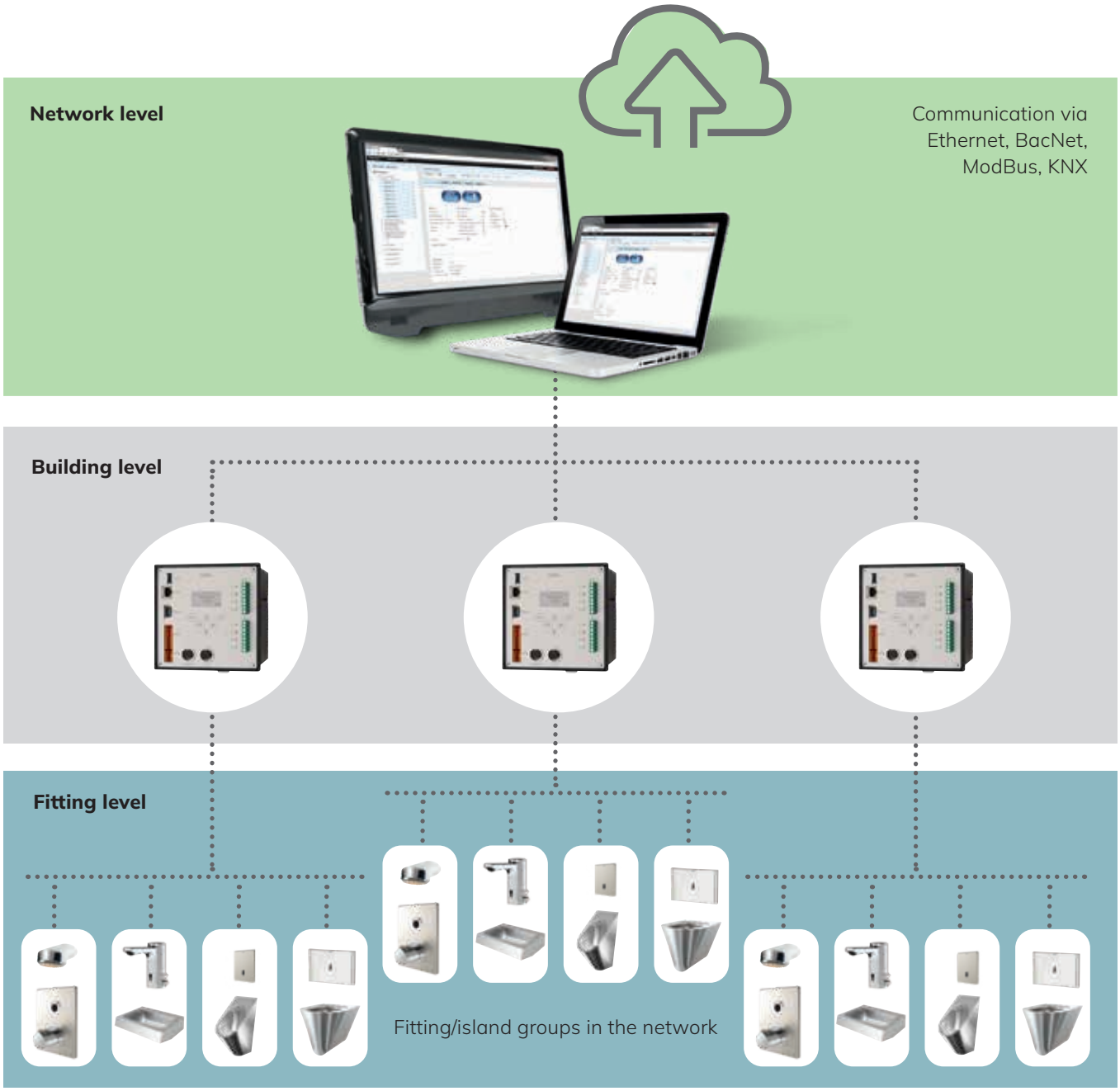


10. Thermal disinfection programmes

- The most important parameters (treatment time, water-flow duration, temperature control) of the thermal disinfection (TD) process are stored in the electronic module of each individual fitting. The temperature logs are stored in here as well.
- The thermal treatment process can be started via a digital input on the ECC2 function controller or a WEB browser. Operators can choose between a dynamic temperature-dependent programme or a time-controlled disinfection programme.
- Furthermore, the optional supply of water via the last fitting in the circuit ensures a speedy flow of hot water through the circulation pipe, and the TD process can be performed in a time efficient manner.

The structure of AQUA 3000 open

Network, building and fitting level



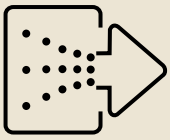
The AQUA 3000 open water management system is subdivided into a fitting building and network level. At the fitting level, an ECC2 function controller has a CAN island network with up to 32 fittings assigned to it. The ECC2 function controller at the building level serves as the transfer point to the network level.

For larger buildings, several ECC2-function controllers can be installed. The RJ45 ports of the individual ECCs can be used to connect all of the fittings installed in a building to a single PC or to the computer-aided facility management system (CAFM), from which they can then be jointly managed and/or controlled.

The ECC2 function controller

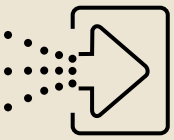
Connecting the fitting and building levels: The functions of the ECC2 at a glance

With the ECC2 (ECC = Ethernet-CAN-Coupler) function controller and the integrated WEB server, additional functions ranging up to CAFM and an additional IoT connection are available at a network level.
The integrated display facilitates operation.



Factory-programmed digital outputs

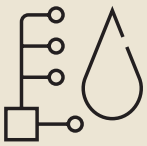
- Thermal disinfection active
- Thermal disinfection cancelled
- Safety shut-off of thermal disinfection
- Collective error messages



Factory-programmed digital inputs

- Start thermal disinfection
- Cancel thermal disinfection
- Operation mode switching
- Acknowledgement of outputs, e.g. for collective fault messages

When fittings are connected to the ECC2 function controller via the system cable, this function controller provides a power supply (24 V DC/60 W) and data communication within the CAN island network. The multifunctional unit also offers the option for sequential controls.



Data communication

The ECC2 function controller has a standardised data communication port for a PC or a computer-aided facility management system (CAFM). The data protocols provided are Ethernet, BacNet, KNX, and ModBus.

System connection for fittings

Two system cables can be connected to the ECC2 function controller for providing power and data communication, with a total length of up to 200 metres and a total of up to 32 fittings.

Real-time data storage

At adjustable intervals, the ECC2 function controller's internal data memory stores temperature values, actuator counts and run-times, operating hours, hygiene flushes, thermal disinfections and deactivations of cleaning together with the respective, specific date and time.
The data can be exported to a USB stick in csv format or downloaded with the WEB browser; it can then be saved and viewed as a speadsheet (e.g. in Excel).

Managing water over the internet

ECC software at a glance

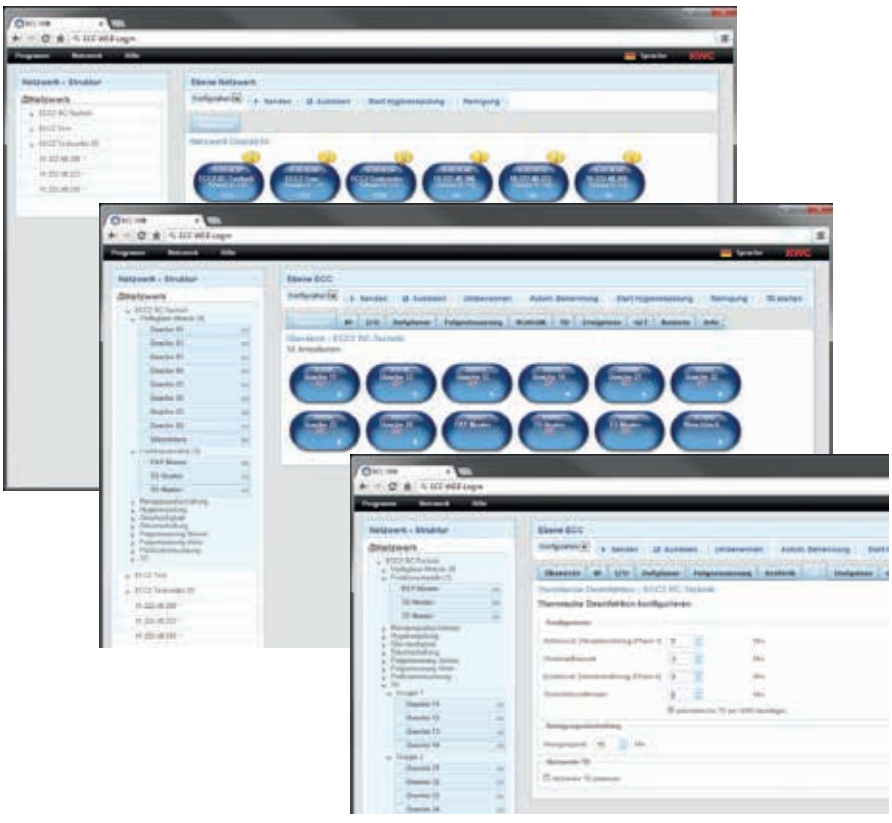
With the help of the WEB server integrated in the ECC2, all sanitary engineering processes can be viewed, monitored, and logged in a very user-friendly manner via a WEB browser. Furthermore, it is easy to set the parameters of system components.

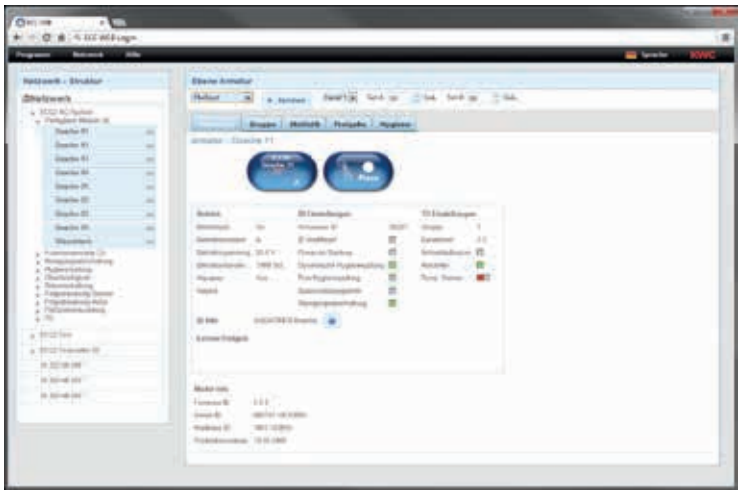
All of the fittings that work in conjunction with a specific ECC2 function controller are clearly depicted as island networks. As well as the ability to set media-flow durations (water, soap, air, etc.) and communication parameters, it is possible to perform and record water hygiene flushes and thermal disinfections. With the help of the virtual fitting islands, which can be grouped, moved and rearranged, the entire real sanitary system can be displayed on a standard WEB browser.

For applications in security-relevant areas, e.g. in correctional facilities, where time-controlled functions, possible usage restrictions and monitoring are required, the WEB server ensures you can control and program sequences for each individual fitting or group.

Overviews of network and fittings

The "Network" level shows all of the connected ECC2 function controllers. Here, the user can select an ECC island network and display it as a fittings overview. The "ECC" level shows the operating condition of every sanitary fitting, e.g. current temperature, operating mode and the state of connected sensors and actuators. From this screen the user can also select the "TD" tab to configure thermal disinfection processes.





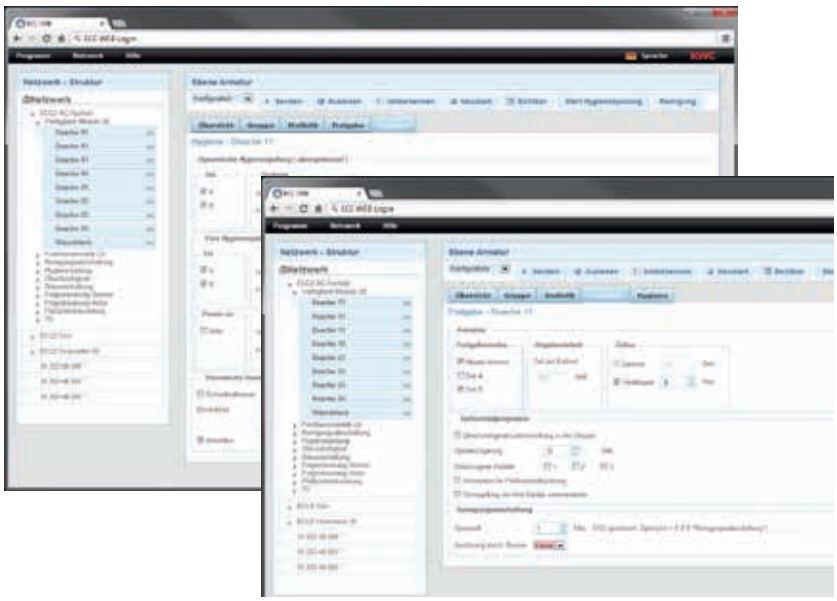
Overview of fittings with programme processes

An automatic overview is generated for each fitting. All of the important parameters that are necessary for operation can be viewed here at a glance.

The fittings function – e.g. shower with Piezo button – is displayed with a simple and understandable pictogram. Flow durations and sensor ranges can also be adjusted here.

Overviews of network and fittings

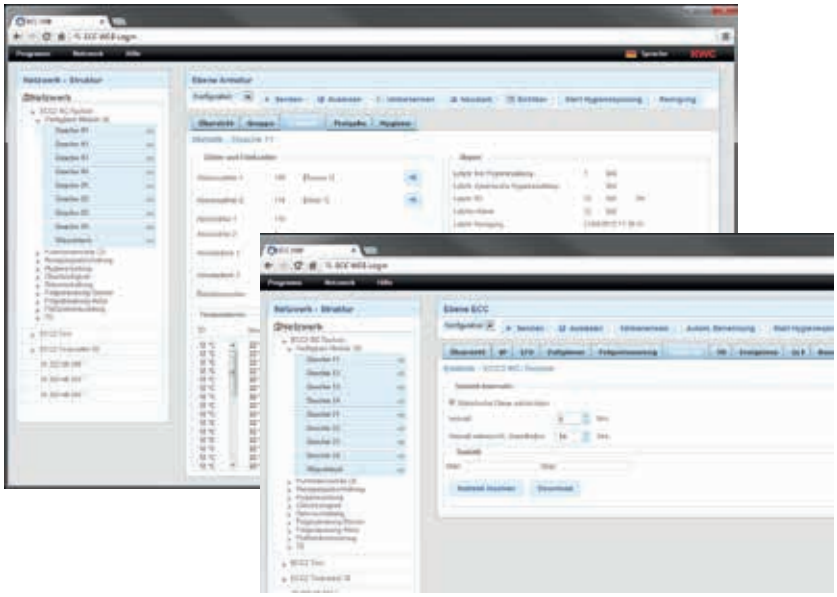
The "Release" and "Hygiene" tabs can be used to optimally adapt each fitting to the operating process. Hygiene flushes and thermal disinfection parameters such as treatment time and temperature can be configured for each individual fitting. Furthermore, the parameters for peak load programmes and deactivations of cleaning can also be entered here.



Statistical function for fittings

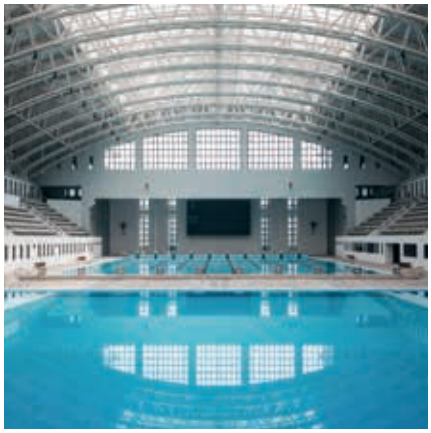
The "Fitting" level under the "Statistics" tab shows all counter values (number of times solenoid valve has triggered), operating hours, temperature courses, as well as the time that has elapsed since the last hygiene flushing operation of each individual fitting. It also displays status information relating to the last thermal disinfection process.

When the ECC's statistical recording function is activated, it continuously records the most important data, which can then be exported to a csv file for further analysis.



Applications for versatile public & semi-public rooms

AQUA 3000 open represents future-proof water management that can be easily expanded to accommodate the growing needs of a building. It is an open system that can be integrated into existing building management systems. The individual configuration options are as diverse as the conditions of the building itself and the water management system can learn from its users and adapt itself accordingly. Changes in building use are not a problem either, fittings can be easily added or removed, even years after the initial installation.



Recreation
indoor swimming pools,
fitness studios,
saunas & spas

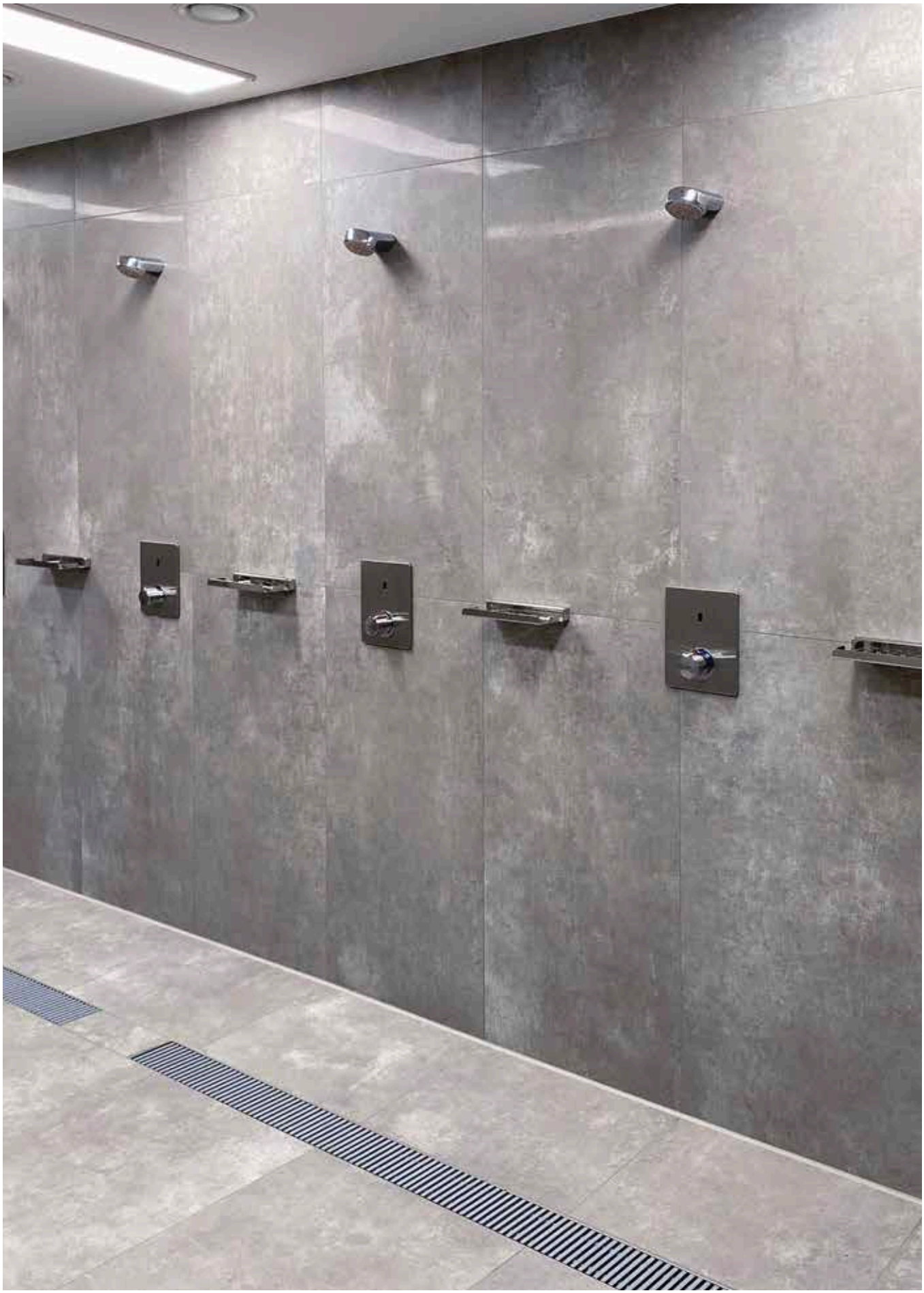
Education
schools, kindergartens,
educational &
training institutions

Travel
airports,
railway stations,
campsites, rest areas

Security
prisons, police stations,
military installations

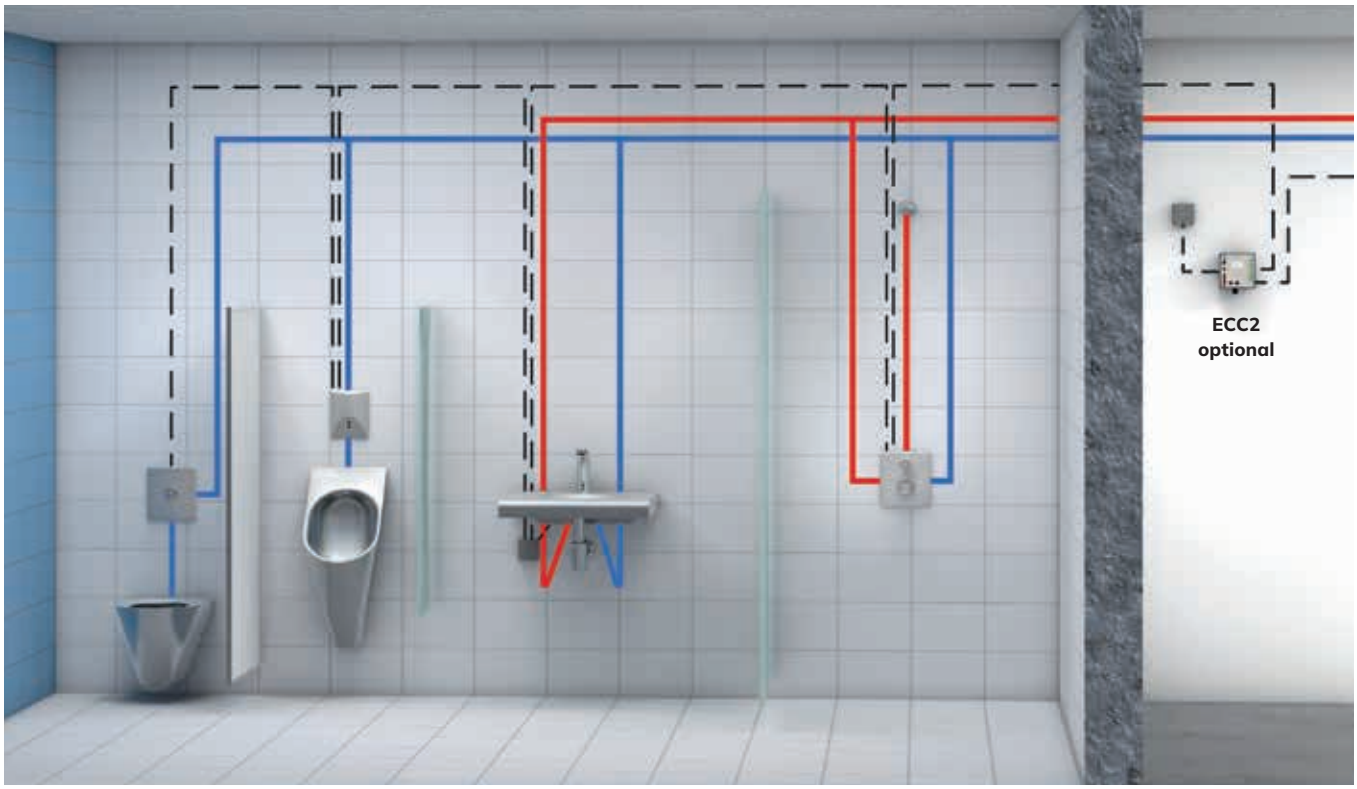
Health
hospitals,
nursing homes,
laboratories

Events
stadiums, cultural &
sports halls



Integrating the water management system

Connecting the ECC2 to the fitting



Legend for graphics page 18-21

EM-D	Electronic module for drinking water heater
EM-C	Electronic module for circulation line
(PWH)	Drinking water heater
	PWC (cold drinking water)
	PWC (hot drinking water)
	24 V DC system cable

The fittings are simply installed in series via a system cable providing a 24 V DC power supply. Factory commissioning is not necessary for standard water delivery functions, as the electronic modules which are integrated in the fittings are already factory-programmed and operate on a "plug and play" basis. Additional control functions, such as water hygiene flushing operations, are part of this basic programming. The system cable must be installed in an empty "pipe" leading all the way to the fittings.

Optional:
When integrating an ECC2 function controller into the overall system, the system cable has a dual function, power supply and data communication within the CAN island network. A terminating resistor on both sides ensures data communication between the ECC2 function controller and the individual fittings. Here, the ECC2 performs central management functions and supplies power to the fitting network. To adapt the control processes of the ECC2 and the electronic modules of the fittings to the specific conditions prevalent in a particular building, the customer service team can perform a commissioning service.

Thermal disinfection (TD) – an overview

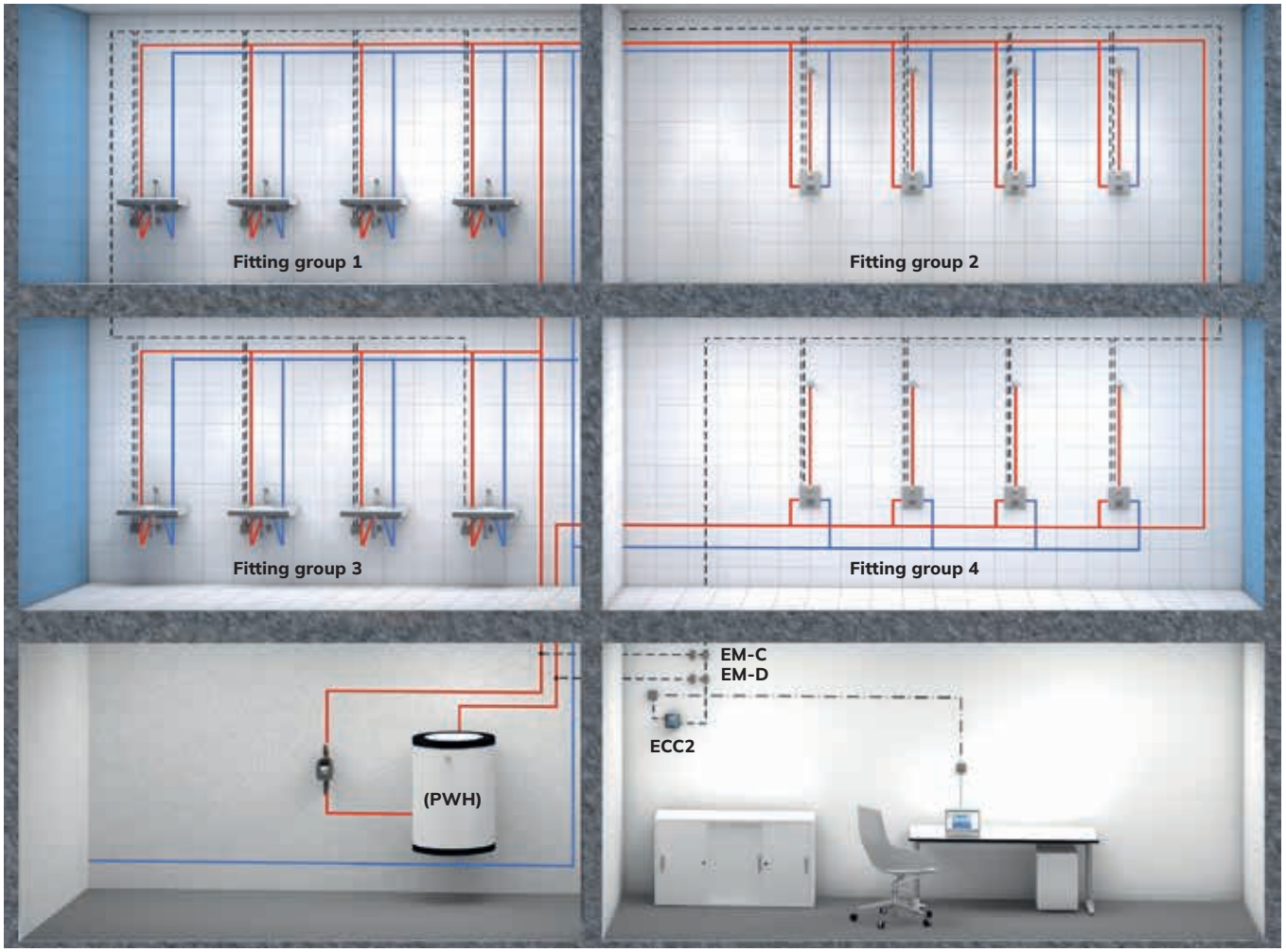
Fundamentals and models

The freely programmable digital inputs of the ECC2 or of the optional I/O add-on module and data protocols can be used to start and stop thermal disinfections (TD), group water hygiene flushes as well as deactivations of cleaning. Temperature sensors can also be integrated for each fitting to monitor the various processes.

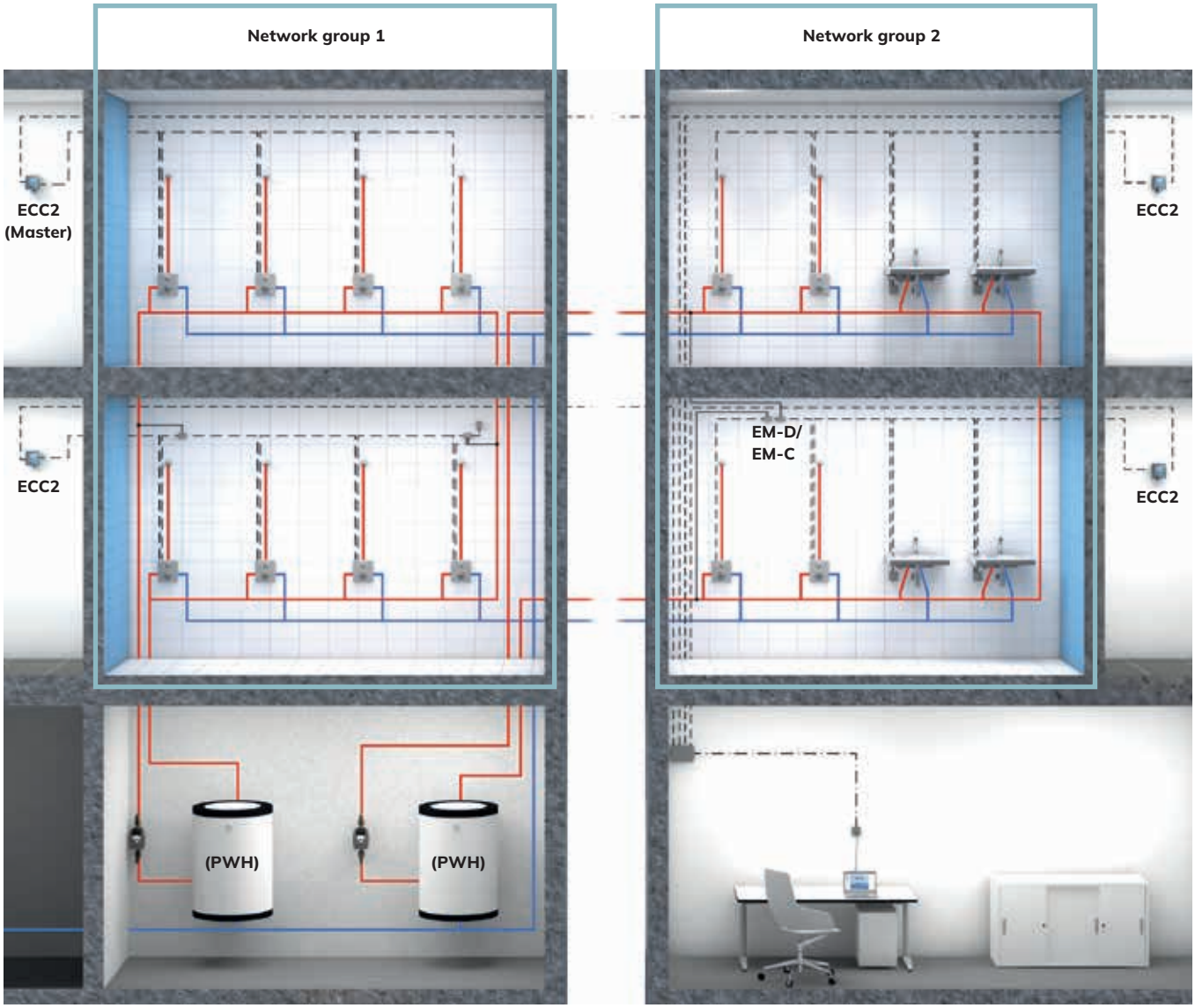
Performing TD on thermostatic valves requires the use of a bypass solenoid valve cartridge in the function block of the fitting. Within a CAN island network with an ECC2, the fittings that are to be subjected to TD can be arranged in up to 8 successively opening groups. For example, with smaller drinking water heaters, this could be 8 groups of 4 fittings each that are thermally disinfected in succession, thereby providing the system with the chance to re-heat. Parallel to the factory-programmed functions, commissioning by the customer service team is also required for thermal disinfection.

TD when controlling drinking water heaters

Forming fitting groups facilitates efficient performance of thermal disinfection, particularly for drinking-water heaters that have rather low storage capacities. In this system arrangement, the number of fittings is limited to 30. Added to the arrangement is a system electronic module to control the drinking water heater (EM-D) and a system electronic module for the circulation line (EM-C) for thermal disinfection. The latter ensures that heated drinking water is quickly supplied to the circulation line by selectively withdrawing water from the circulation feedback line.



Network-wide thermal disinfection



This plan version is suitable for buildings with different distances between the hydraulic line system and the A3000 open system cables. In this system configuration, the fittings are subdivided into a maximum of 8 groups. One of the ECC2 function controllers used in a building is defined as the "Master" via the data protocol and therefore serves to provide reliable communication with the defined areas.

The programme processes taking place during thermal disinfection (TD) are freely programmable; the fittings can be selected and the individual TD zones can be started.

With this system architecture, the TDs can be easily adapted to the specific conditions within a building and to changing parameters. These network-wide TDs for up to 8 network groups can be started in any selectable order via the digital inputs.

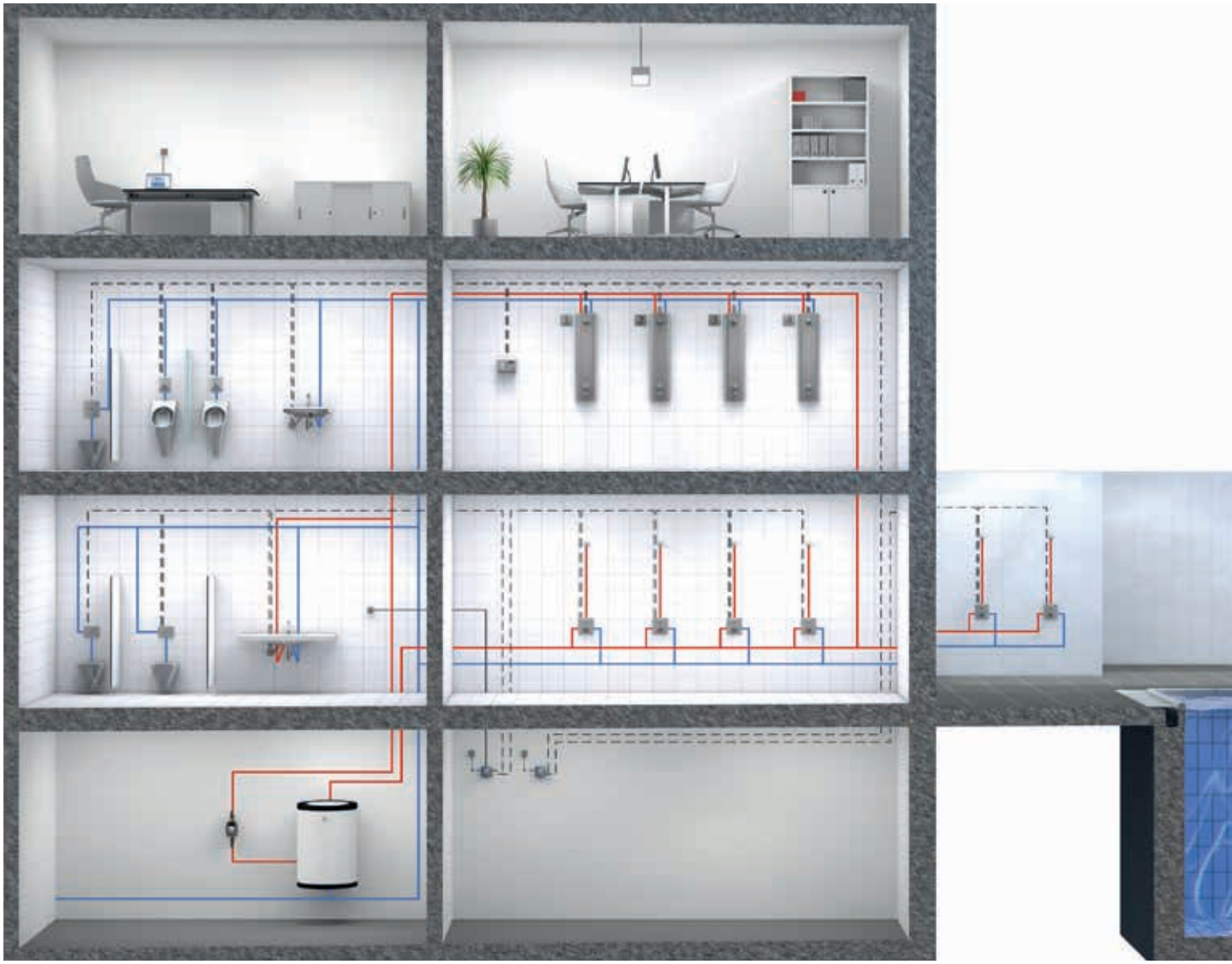
Transparency ensures optimum efficiency

Building integration with AQUA 3000 open

Fittings installed within a building can be made visible on a PC or brought online to the existing CAFM via the ECC2 function controller and the data protocol connections.

Forming logical function units, e.g. arranging fittings in groups based on building floors or user zones, simplifies the specific optimisation of water delivery functions within these units. These functions include water flow durations, water hygiene flushes, thermal disinfections, deactivations of cleaning, day and night switching operations, paid/unpaid supply of water as well as sequential controls in shower facilities.

With the help of monitoring and control functions, it is possible to analyse usage frequencies and control maintenance management on a demand basis. The network level also serves to monitor the system and facilitates rapid corrective measures in the event of any malfunctions.



Perfect combination for optimum sanitary facilities

Simple and flexible, from conception to implementation

KWC Professional

The basis for an optimum sanitary facility design is solid preliminary planning. This planning phase is oriented towards the specific conditions of the building and the user-dependent requirements for the sanitary facilities.

Qualified and proper building consulting to comply with technical standards and requirements is the most important component for driving a conceptual idea to its final planning stage. The specialists at KWC Professional accompany you in all phases of planning and implementation – particularly when dealing with more complex system solutions. In addition, we supervise commissioning and are also available as a contact person at any time during every day operation.

We are happy to pass our know-how on to you in our specific training sessions.

AQUA 3000 open

The AQUA 3000 open system is based on the principle of a clear and simple system architecture.

To accomplish this, only components that are actually necessary for the specific application requirements are used. An optimised water management system can be accomplished with just a few system components. All the main components of AQUA 3000 open are shown on the following pages.

AQUA 3000 open compatible

All fittings with this symbol can be integrated into the AQUA 3000 open water management system with the suitable electronic module from the accessory range. As standalone fittings, they also offer many hygiene and statistical functions.

AQUA 3000 open

All fittings with this symbol are already network-compatible, since the necessary electronic module is included with the product.

F5E
electronic pillar tap

F5EV1004

electronic module with ID 02010
ACEX1002

F5E-Mix
electronic pillar mixer

F5EM1004

electronic module with ID 02010
ACEX1002

F5E-Therm
electronic thermostat
wall-mounted mixer

F5ET1005

Version with pre-assembled disinfection unit
F5ET1020

necessary accessories:
mounting traverse
F5BTX002

electronic module with ID 02050
ACET1001

F5 Hybrid-kitchen tap

F5LME001

Version for storage
F5LME002

electronic module EM5 with ID 02160 – **ACEM1001**

F5E-Therm electronic
thermostatic in-wall mixer

F5ET1014

necessary accessories:
R5 system box
F5BX1001

electronic module EM5 with ID 02030 – **ACET1003**

F5E
electronic washbasin tap

F5EV1013

electronic module EM5 with ID 02090 – **ACEV1002**

AQUATIMER - A3000 open
electronic washbasin tap

AQUA123

F5E
electronic urinal flush

F5EF3010

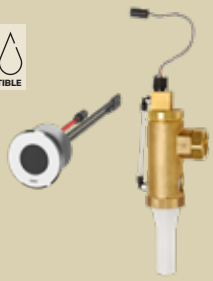
necessary accessories:
Basic installation kit
AQLN0006

electronic module EM5 with ID 09010 – **ACEF3001**

F5E
electronic urinal flush

F5EF3002

electronic module EM5 with ID 09010 – **ACEF3001**



F5E
electronic WC flush

F5EF4002

electronic module EM5 with ID 13020 – **ACEF4003**

AQUATIMER - A3000 open
electronic WC controller for
cistern

AT3O0051

necessary accessories:
Installation element with cistern – **AQFX0006**

EXOS. - A3000 open
electronic WC controller for
cistern

EXOS0027

necessary accessories:
Installation element with cistern – **AQFX0006**

F5E-Therm
electronic thermostat
wall-mounted mixer

F5ET2005

Version with pre-assembled disinfection unit
F5ET2009

necessary accessories:
mounting traverse
F5BTX002

electronic module EM5 with ID 07040 – **ACET2001**

F5E-Therm
electronic thermostat
wall-mounted mixer

F5ET2006

Version with pre-assembled disinfection unit
F5ET2010

necessary accessories:
mounting traverse
F5BTX002

electronic module EM5 with ID 07040 – **ACET2001**

F5E-Therm electronic
thermostatic in-wall mixer

F5ET2031

necessary accessories:
R5 system box
F5BX2001

electronic module EM5 with ID 07040 – **ACET2001**

F5E
electronic in-wall tap

F5EV2005

necessary accessories:
R5 system box
F5BV2002

electronic module EM5 with ID 07120 – **ACEV2004**

F5E-Therm stainless steel
shower panel with
thermostatic mixer

F5ET2020

necessary accessories:
shower head (optional)
SHAC0011 | **SHAS0011** | **SHMU0011**

electronic module EM5 with ID 07040 – **ACET2001**

F5E-Therm stainless steel
shower panel with hand
shower fitting and
thermostatic mixer

F5ET2021

electronic module EM5 with ID 07040 – **ACET2001**

F5E-Therm MIRANIT
shower panel with
thermostatic mixer

F5ET2024

necessary accessories:
shower head (optional)
SHAC0011 | **SHAS0011** | **SHMU0011**

electronic module EM5 with ID 07040 – **ACET2001**

F5E-Therm MIRANIT
shower panel with shower
gel shelf and
thermostatic mixer

F5ET2026

necessary accessories:
shower head (optional)
SHAC0011 | **SHAS0011** | **SHMU0011**

electronic module EM5 with ID 07040 – **ACET2001**

F5E-Therm - A3000 open electronic thermostatic in-wall mixer, incl. cold water flushing function

F5ET2040

necessary accessories:
R5 system box
F5BX2001

AQUATIMER - A3000 open electronic thermostatic in-wall mixer

AT3O0091

necessary accessories:
R5 system box
F5BX2001

AQUAPAY coin-operated controller for chargeable water delivery for controlling 2-31 shower fittings

AQUA802 for token coin
AQUA803 0,50 €

accessorie: token coins (50 pieces)
ZAQRP001

AQUAPAY coin-operated controller for chargeable water delivery for controlling 1 shower fitting

AQUA800 for token coin
AQUA801 0,50 €

EM1 electronic module with ID 07080 for F5 shower fitting and connection to hot and cold water
ACET2006

EM1 electronic module with ID 07110 for F5 shower fitting and connection to premixed hot- or cold water
ACEV2005

accessorie: token coins (50 pieces)
ZAQRP001

F5E-Therm MIRANIT shower panel with hand shower fitting and thermostatic mixer

F5ET2025

electronic module EM5 with ID 07040 – **ACET2001**

AQUAJET-Comfort shower head, infinitely angle-adjustable 13° - 23°

for wall connection **SHAC0013**

for surface pipe installation
SHAC0008

for F5 sower panels **SHAC0011**

AQUAJET-Slimline shower head

for wall connection **AQUA751**

for surface pipe installation
AQUA757

for F5 sower panels **SHAS0011**

MÜNCHEN shower head, infinitely angle-adjustable 9° - 21°

for wall connection **SHMU0012**

for F5 sower panels **SHMU0011**

F5E - A3000 open electronic washbasin tap for in-wall installation

F5EV1017

necessary accessories:
R3 system box – **F3BV1001**
wall outlet (optional)
ACXX1008 | **ACXX1009**
ACXX1010

for rear wall mounting via threaded rods – **F5EV1016**

F5E - A3000 open electronic shower fitting for in-wall installation

F5EV2007

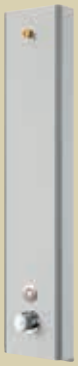
necessary accessories:
R3 system box – **F5BV2002**

for rear wall mounting via threaded rods – **F5EV2006**

F5E - A3000 open stainless steel shower panel

F5EV2008

necessary accessories:
shower head (optional)
SHAC0011 | **SHAS0011**
SHMU0011



F5E-Therm - A3000 open stainless steel shower panel

F5ET2041

necessary accessories:
shower head (optional)
SHAC0011 | **SHAS0011**
SHMU0011

F5E - A3000 open electronic WC flush valve for in-wall installation

F5EF4005

necessary accessories:
R3 system box
F3BF4001

F5E - A3000 open electronic WC control unit for concealed cisterns

F5EF4006

necessary accessories:
Installation frame with flush valve
AQFX0011

HEAVY-DUTY
WC wash basin combination for installation in the technical room

with WC pan angled 45° to the left
HDTX806L

HEAVY-DUTY
WC wash basin combination with integrated components

with centrally positioned WC pan
HDTX816M

ECC2 function controller

ZA3OP0011

Variant with GLT-data protocols
ZA3OP0022

Control cabinet with ECC2 function controller

ZA3OP0035

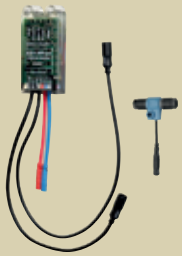
Variant with GLT-data protocols
ZA3OP0036

Operation box for ECC2 function controller

ZA3OP0034

Uninterruptible power supply

ZAQUA006



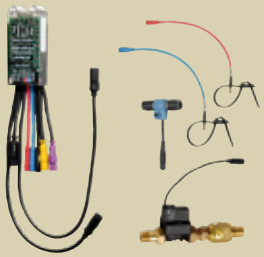
Electronic module for wash basin taps F5

for F5 wash taps
ACEX1002 | **ACEX1004** | **ACET1001**
ACET1002 | **ACET1003** | **ACET1004**
ACEV1002

for F5 shower taps
ACET2001

for F5 sink taps
ACEF3001 (Urinal)
ACEF4003 (WC)

für F5 Hybrid-kitchen taps
ACEM1001 | **ACEM1002**



Electronic module for wash basin taps F5

ZAQUA029

Electronic module for circulation line

ZAQUA030

Electronic module for circulation line

ZAQUA031

Circuit breaker

ZAQUA026

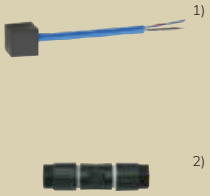
Power supply unit

ZAQUA007

System cable

ZAQUA077 100 m/ring
ZAQUA078 25 m/ring

Zero halogen version
ZAQUA011 100 m/ring
ZAQUA012 25 m/ring



Terminating resistor [1]

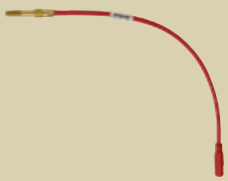
ZAQUA014

Coupling for system cable [2]

ZAQUA013

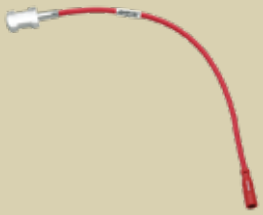
Coupling for system cable

ZAQUA075



Screw-in temperature sensor

ZAQUA017



Surface temperature sensor

ZAQUA020 for hot-water pipeline
ZAQUA021 for cold water pipe

Line flushing module for a water pipe

A3OP0003 for 1 water pipe
A3OP0004 for 2 water pipes

DELABIE | KWC Professional

AQUA 3000 open | EN | 03.2026