not official Version

HomeMatic

homematic IP

WebUI Manual

FOR FANS. BY FANS.

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English Version 0.4

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Table of Content

Notes on this manual

This manual provides extensive information on the commissioning and control of the central CCU2 or CCU3 via the user interface WebUI. The described functions and parameters are equally valid for the central CCU2 and CCU3. Differences are indicated by symbols.

In addition to this manual, read the operating instructions of the Central CCU2 or CCU3 and the instructions of the individual Homematic and Homematic IP devices.

Further information on the operation of the Control Panel, the WebUI and the smart-home-system, frequently asked questions and answers as well as the current versions of the operating instructions, firmware updates and other technical information are always available at www.eQ-3.de, www.homematic.com and on www.homematic-ip.com.

Information about the symbols used:

Attention! A danger is pointed out here.

Note. This section contains additional important information!

This section contains only information about the central CCU2.

This section contains only information about the central CCU3.

Part I-Prerequisites and first steps

1   Introduction

1.1   What is Smart Home?

A smart home enables the automation of daily tasks and duties in house or apartment: a suitable system is used to link different technical devices and functions within a household in order to centrally and To be able to control and automate recurring tasks as comfortably as possible.

An intelligent home control system makes your home a smart home – an intelligent home in the truest sense of the word. It increases the safety in the living environment, helps to save precious energy and enhances personal living comfort. An intelligent control of your heating system can reduce heating costs by up to 30 percent without sacrificing comfort, which means a significant cost savings immediately. With a comfortable lighting control you create a cosy atmosphere at the touch of a button. Alarm systems, automated roller shutter control, networked door and window contacts, smoke detectors and motion sensors protect your home.

The key to greater comfort and security is flexible and intuitive access through a user interface that meets the highest security standards. This means that you always have a view of your home via smartphone, tablet or PC and can access the system at any time and from almost anywhere, control devices or retrieve information about devices and states.

In summary, a smart home system convinces by more comfort and safety in your own home, an increase in living and quality of life and last but not least a approve energy saving that can be achieved by intelligent lighting and heating control.

1.2   The smart home systems Homematic and Homematic IP

The smart home Central Control Unit CCU2 and CCU3 communicates via the Homematic IP and Homematic protocols. Homematic IP as well as Homematic components can be controlled comfortably and individually via the WebUI user interface or in connection with partner solutions.

Homematic and Homematic IP are the successful EQ-3 smart home systems that automate numerous applications in everyday life according to personal needs. The mash-te range of Homematic and Homematic IP includes, for example, products from the areas of indoor climate, safety, light, shading and access, and is suitable for new construction and refurbishment as well as for retrofitting thanks to radio and wire-bound products. All Instru and functions from the various areas can be flexibly combined to create more safety, comfort and time saving in everyday life.

Homematic and Homematic IP devices for the control of the room climate offer a demand-oriented control of the radiators in the entire house at Space level and thus enable an energy cost saving of up to 30%. Homematic IP also offers an efficient and individual control of the floor heating system.

With the security components, no movement remains undetected and windows or door status changes are recognized as soon as they are opened. A comfort boost is offered by the switching and

Dimming actuators for lighting control as well as products for the automation of roller shutters. All devices for brand switches can be easily integrated into the existing switch design using adapters.
The product portfolio of the numerous radiobased components is complemented by wired devices that enable wired automation and control over the bus throughout the house.

The wireless components communicate at 868 MHz via the robust and reliable radio protocol of EQ-3. Interference from WLAN, Bluetooth or other wireless standards in the 2.4 GHz band is excluded.

The radio protocols of both systems are encrypted and meet the highest standards in terms of data protection and security, which have been confirmed by independent institutes.

The systems can be flexibly extended by additional components at any time. Gradually you can build your system and add to your personal ideas. Thanks to the large portfolio of components, the manifold application possibilities in connection with the central CCU2 or CCU3 can be expanded and individually controlled by the user interface WebUI.

1.3   The user interface "WebUI"

The central CCU2 or CCU3 is the central element for local control of the Homematic and Homematic IP systems. The CCU assumes the function of a web
Server that runs the "WebUI" user interface, among other things.

The WebUI is the Web-based user interface for comprehensive local configuration, control and control of your Homematic or Homematic IP system. The user interface is easily accessed via a standard web browser (see "2 System Requirements" on page 9).

The user interface WebUI allows you to use all Homematic and Homematic IP devices software based and comfortable
•   Control and configure,
•   Connect directly to other devices or
•   be used in central programs.

In addition, the WebUI will inform you at any time about the current condition of your Homematic or Homematic IP system.

All Homematic and Homematic IP radio components are supported. Within half of the Homematic and Homematic IP product ranges, direct links are also possible, which has the advantage that they remain active even without the use of the central control unit. In addition, the central CCU3 also allows the control and configuration of Homematic IP wired devices via the WebUI.

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1 in the Homematic IP system can be used as an alternative to the central CCU2/CCU3 of the Homematic IP access point in connection with the free smartphone app as a central control.

2 System Requirements

2.1 Central Unit - CCU2

Current version of one of the Following Web browser:	Mozilla Firefox ® Microsoft ® Internet Explorer Google Chrome Safari
Data:	Released 2014 Ethernet (TCP/IP and DHCP) USB 1.1 or higher by enclosed software 80 devices can be connected
Resolution:	1024 x 768 (user Web pages) 1280 x 1024 (Administrator Web pages)

2.2 Central Unit - CCU3

Current version of one of the Following Web browser:	Mozilla Firefox ® Microsoft ® Internet Explorer Google Chrome Safari
Data:	Released 2018 Ethernet (TCP/IP and DHCP) Raspberry Pi 3B (inside) mediola AIO CREATOR NEO Licence 1 year Cloudmatic Licence 400 devices can be connected

The first CCU1 and Homematic System was anounced in the ELV catalogue in 2006 and details given in the ELV Journal 05/2007. Before Homematic the product line was called FS20.

3   First start of the WebUI user interface

3.1   Open WebUI

Before you open the WebUI, first connect your *CCU* to the router and the power supply according to the enclosed operating instructions.

The WebUI *(*user interface offers a large number of configuration and control options for your Homematic and Homematic IP devices . To enable local configuration of your devices and to control devices and connect them with each other or for using Central Control Unit programs , you must start and set-up the WebUI.

You can access the user interface is accessed via a Web browser (see "5 Prerequisites" on page 6). To access the WebUI in your Web browser, you need the IP address or the DNS name of your CCU. You can also use your router or the "NetFinder" add-on software to find out the IP address.

3.1.1   DNS Name

As most routers support DHCP, the assignment within the network is carried out automatically. During start-up, the CCU3 tries to receive an IP address. When requesting the DHCP, the desired DNS name is transferred to the DHCP at the same time. The following DNS names are used for the central:

The CCU2 uses the DNS name "homematic-CCU2". If the DHCP Server supports the specification of a DNS name (e.g. Fritz! box), the WebUI of the Control Panel can About the URL **http://homematic-ccu2** Be addressed directly in the Web browser.

The CCU3 uses the DNS name "CCU3-WebUI". Does the DHCP server support specifying a DNS name (for example, Fritz! box), the WebUI of the control panel can be Url   **http://ccu3-webui** Be addressed directly in the Web browser.

For a secure connection, you can also call the WebUI of your head office via HTTPS://HOMEMATIC-CCU2 or HTTPS://CCU3. Security hints may occur depending on the Web browser you are using. Allow access to the WebUI and confirm the call to the Bedienoberfäche via the secured connection.

If the DHCP server does not support the indication of a fix DNS name, you will usually find the IP address of your CCU via the web interface of the router or via the additional software "Netfinder" (see "3.1.3 IP address of your headquarters via" Netfinder " on Page 11).

3.1.2   Access your central IP address via router

You can find the IP address of your CCU3 in the device list of your router. Therefore, you will need the MAC address of your CCU.

It can be found on the device sticker. Depending on the router manufacturer, you will find the CCU in the following area of the router back-end:

Netgear: Connected devices
TP-Link: Network/Connected Devices
FritzBox: Home Network

- Note the IP address of your Central Control Unit..
- Enter the IP address into your web browser. The WebUI home page is opening.

Depending on the configuration, the IP address of the CCU can also be determined via the network area of the Windows computer.

3.1.3   Calling the IP address of your CCU via Netfinder

If you do not have a network with DHCP server, you can set the IP address of the central CCU2 via the USB port. The control Panel can only be used via USB without a network. For more information on setting up via USB connection, refer to the "Troubleshooting" section of the CCU2 manual.

Check if your PC has Java software. If necessary, download the software to www.java.com.

You can use the Netfinder add-on software to display the IP address of your CCU. To download the software, proceed as follows:

- Open the Web site www.eq-3.de.
- Download the zip file of the Netfinder in the download area and unzip the files to the desired location on your PC.
- Open the Netfinder program on your PC. The IP address of your control panel is displayed in the window.

Figure 1:   Netfinder

- •　　Write down the IP address of your CCU.
- •　　Enter the IP address in your Web browser. The start page of the WebUI opens.

3.2　　Update WebUI software/Firmware

When starting the CCU for the first time, please update the software of your device via the WebUI. Please proceed as described and follow the instructions in the WebUI user interface.

ℹ️ If the central software has been damaged, you can restore it via the recovery system. This may occur, for example, if the power supply has been interrupted during a software update. Further informations can be found in the section "25 Rescue System" on page 324.

Open the homepage of your WebUI. Therefore, please enter the IP address into your web browser.
• Click on the button "Update".
• First click on the "Download" button to save the software files to your PC.
• Accept the license agreement and click on "Install" afterwards.
• Save the file on your PC.
• Select the downloaded software via "Select file".
• Click on "Upload" to load the software to your Central Control Unit. This process may take a few minutes.
• As soon as the software file is uploaded to your CCU, accept the license agreement again and click "Install".
• Confirm the update via the button "Start update". The software update is now in progress.

Once the software update has been carried out, you will need to register on the Central Control Unit again. The full range of functions will then be available for your Central Control Unit.
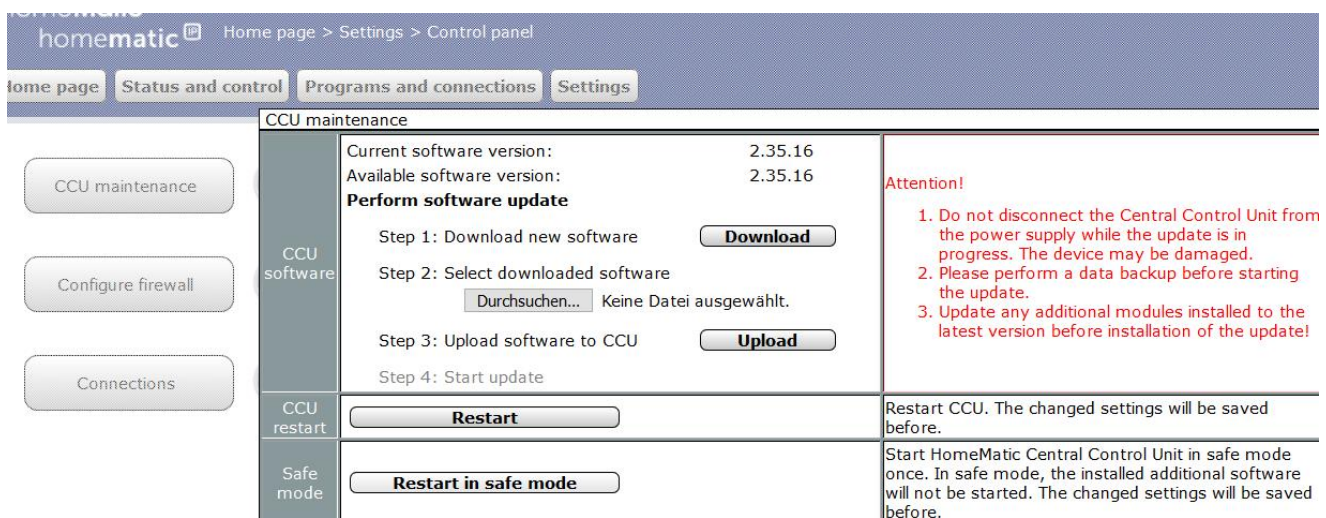
Figure 2:　　　　Home WebUI Update

3.3 Set Date and Time

Once your control Panel has been connected to the network, the date and time are automatically detected and set.

Figure 3: Home – Set time

If you do not have an Internet connection, the date and time must be set manually. To do this, do the following:

- In the user interface, click Settings, Control Panel.
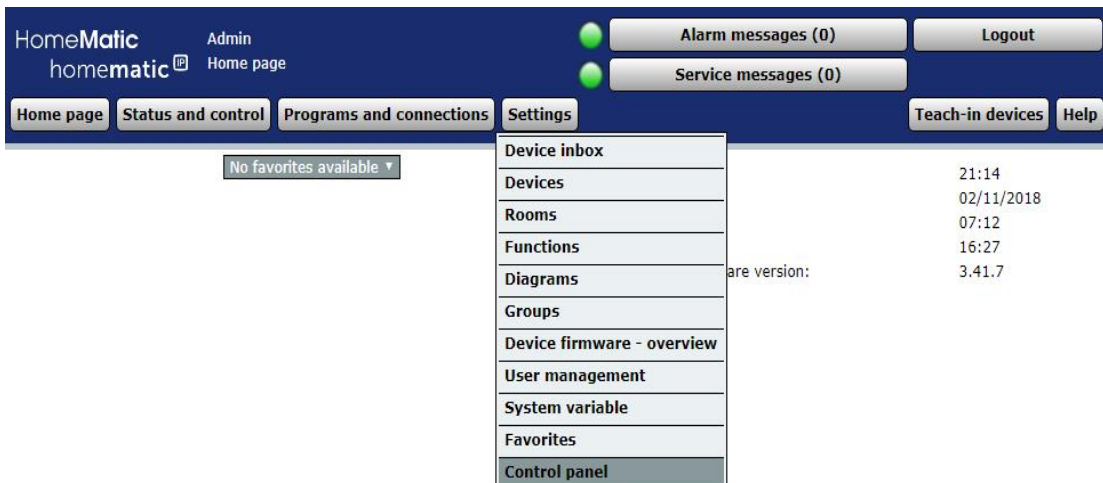
Figure 4: Setting the time 1

- Then click on "Time and position setting".

Figure 5: Setting the time 2

- In the next window, set the date and time and click "Apply Time".

  Alternatively, you can take the time from the PC. Click on "Take time from PC".

CCU time and position settings

Time	Time (hh: mm: ss) 21 : 16 : 52
	Date (dd.mm.yyyy) 02 , 11 , 2018 Apply time
	Get time from computer
NTP server	NTP server addresses: 0.de.pool.ntp.org 1.de.pool.ntp. Apply time server
position	Country estonia ▼
	City Tallinn ▼
	Longitude 24.45 East ▼
	Latitude 59.25 North ▼
	Time zone EET / EEST (UTC + 2 / + 3) ▼ Apply settings

Back

Figure 6:   **Setting the time 3**

•   then click Back.

3.4 User Administration

In the user administration, all settings for your own user account are summarized.

The operation and configuration of your system via the WebUI user interface is based on the assigned user role. The authorization levels for the individual operating and configuration options are divided into the following:

Admin:
• Full access to all operating and configuration parameters:

User:
Limited access to functions
• Home
• Status and operation of devices
    ◦ Devices
    ◦ Rooms
    ◦ Functions
    ◦ Charts
    ◦ Favorites
    ◦ Programs
    ◦ System variable
    ◦ System
• Settings
    ◦ User
    ◦ Charts
    ◦ Favorites
• Help
• Alarms
• Service Notifications
• Unsubscribe

Guest:
• Access to favorites created by the admin or user

• Click Settings, user Management to make the user accounts a bearer.

User name	Password	Button for login	permission	E-mail	Phone number	Log in automatically	Action
Admin	*****	✔	Administrator			active	Edit
User1	not set	✔	User				Edit / Delete

Figure 7: **System configuration-Control Panel-user management**

The first created user account ("admin") has a special status: This user account cannot be deleted. In addition, the "Permission level" and "endpoint selection" parameters are not adjustable.

For security reasons, there is no (!) Possibility to reset the password of the first user logged in if the password has been forgotten! Please notie your password and keep it in a safe place.

Edit user Account
• Click Edit in the Action column to open the user account Configuration pop-up window. *-> "3.4.1 Configuration-user account" on page 16*

Delete user account
• Click Delete in the Action column to completely delete the associated user account.

Configure Automatic Logon
• Click "Automatic Logon" to open the pop-up window for configuring automatic logon, i.e. login without entering a user name and password for a device.

3.4.1 Configuration-User Account

The entire configuration of a user account is carried out within this pop-up window. The window is divided into the areas of
1. Configuration of the actual user account
2. "Home-System Information" with the definition of the System variables displayed on the home page.

Figure 8: Pop-up user account-configuration

Configure user Account
- Select the points listed below and enter the relevant information there. Then press the button "Apply settings".

User Name entry
- Enter a freely definable entry for the user name.

User names must be unique, i.e. they cannot be assigned to more than one similar name.

Entry "Password"/"Password Retry"
- Enter a freely definable password. For security, repeat the entry under "Password-retry".

⚠ For security reasons, there is no (!) Possibility to reset the password of the first user logged in if the password has been forgotten! Please note your password and keep it in a safe place.

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Language

The "Language" drop-down button allows you to choose between "Auto", German, English and Turkish as the language for the user interface of your CCU. To choose from, do the following:

- "Auto": This option addresses the language of the user interface
  Automatically according to the browser or system language of your computer. For example, if you have selected "German" as the system language for your computer, you can also use the user interface of the CCU in German language. For all other system languages, the user interface is shown in English.

- "German": With this option, the user interface is available in German
  language regardless of the system language.

- "English": This option provides the user interface in English regardless of the system language.

- "Turkish": with this option, the user interface is available in Turkish language regardless of the system language.

> Changes to the language settings will not take effect until you have unsubscribed and renewed the message.

CheckBox "User name in Login"
- Select this option from the checkbox. ◦
    - If the box is checked, a button appears with the user name on the Registration page (see. *"4 User Login" on page 21).*
    - ◦ If the box is unchecked, there is no button on the login page. The registration to the CCU is then only via the direct input of the User name Possible (*"4 User Login" on page 21).*

Permission level entry
- Choose between the different permission levels:
    - ◦ Administrator
      The user account is given full configuration and operating rights.

    - ◦ User
      The user account is given full control rights, but only limited configuration rights.

    - ◦ Guest
      The user account will only be assigned access to the corresponding favorite pages.

CheckBox "Enable simplified link configuration mode"
- Select this option from the checkbox. ◦
    - If the box is checked, only the user-friendly easy-mode profiles are available when setting the connection per file of the direct links (see. *"18.1.4 Profile Setting" on page 70*).
    - If the box is unchecked, when setting the connection per file of the direct links in addition to the user-friendly easy-mode profiles, the

"Expert" Profile is available (see*"18.1.4 Profile Setting" on page 70*).

Phone Number Entry
- If you want, enter a phone number for this user.

Mail entry
- Enter an email address for this user.

Define System Information-add system variable
- Select Add System variable to add additional system variables to the home page. As system information, any system variable that is represented by "variable name" and "value" on the Start page can be selected. The selected system variables are listed in list form.

The system variable is represented by "variable name" and "value" on the home page. See *"1 4 System variable Selection "on page 36.*

Define system Information-remove system variable from start Page •
- In the variable list, locate the desired system variable that you want to delete from the start page.
- Click Delete to delete the system variable from the list.

3.5 Configuration-Automatic Logon

Within this pop-up window the configuration of the automatic logon is done. If automatic logon to a terminal is assigned to a user account, that user is automatically logged in, i.e. without entering a user name and password. The login page is thus skipped when accessed with the corresponding terminal and immediately the corresponding start page is invoked.

To protect the system against external access, you should disable automatic logon to the system.

Access to other user accounts is done by logging off and corresponding Neuan message with user name and password input.

⚠ Attention! Selecting an user for the AUT
Automatic registration allows the system logon for the corresponding final adviser without further verification of legitimacy. The system is therefore not sufficiently protected against external access.
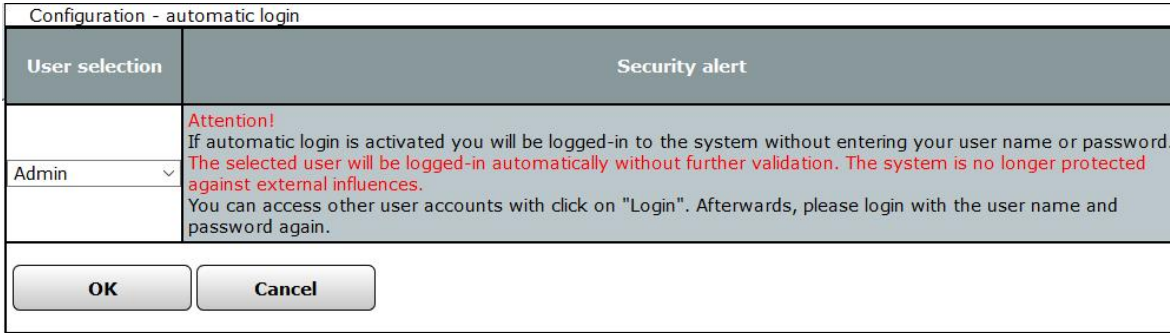
Figure 9:   **Pop-up automatic sign-up-configuration**

Unsubscribe automatically

-     In the User Management window, click Auto Sign in at the bottom of the screen.

-     Click Auto Sign In.
-     In the select list in the User selection column, select
  Not selected. A registration is only via the registration page
  (*"4 User Login (login)) "on page 21* possible.
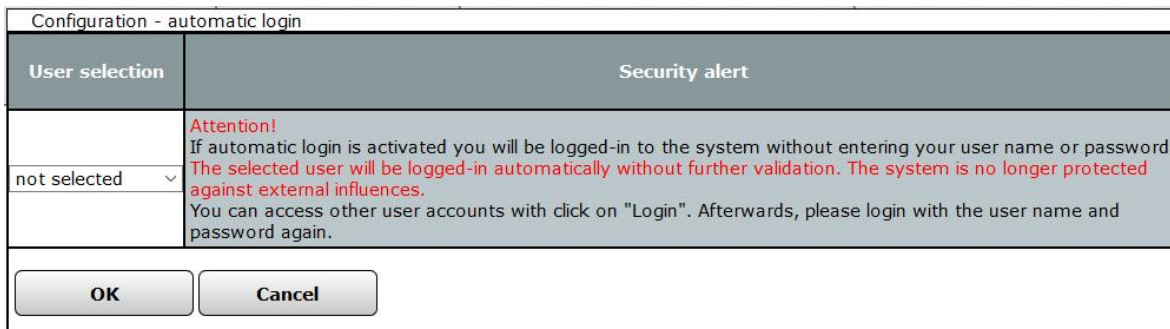
Figure 10:   **Disable screenshot Automatic login**

4 User Login

To gain access to the WebUI user interface, you need to log on to the CCU. The registration to the CCU is done via this window.
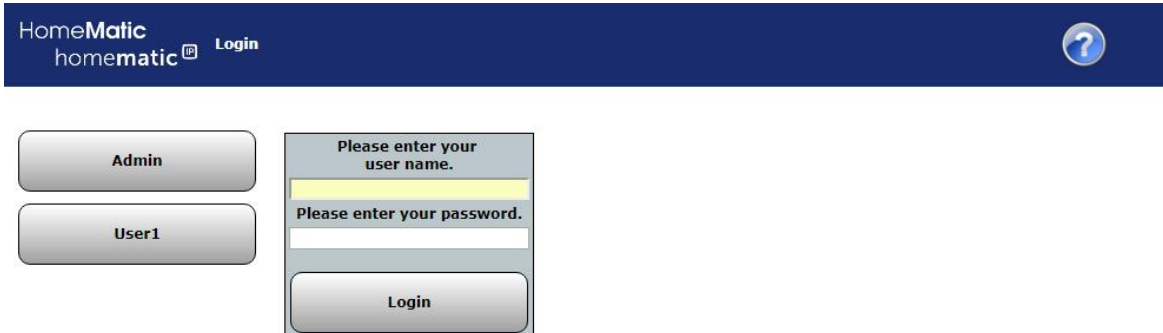
Figure 11: Screenshot User Login

User logon (General)
• Click on the left button with the user name. This will automatically enter the corresponding input field. Alternatively, you can enter the user name directly in the input field "type your user name!".

ⓘ If your user name does not appear in the list, you can do so in the configuration Your user account *"19.1 User Administration" on page 48 o*r *"19.9 User administration "on page 131*.

• Enter your password here. Please note that this is case sensitive.

ⓘ If you have not assigned a password, you are not allowed to make any entries here.

• Click the Sign In button to complete the sign-up process. Then the associated user home page is called.

First time registration to the Homematic or Homematic IP system
An administrator user account has already been created for the first logon.

• To log on to the system for the first time, click the user name of the administrator user account, and then select Sign In.
• You do not need to enter a password because this user account does not have a password by default.

ⓘ To protect this user account from unauthorized access, please assign your Personal password as in *"3.4 User Management" on page 15 d*escribed.

ⓘ If automatic logon is Configured for the device (e.g. PC) you are using (*see."3.4 User Management" on page 15*), the user logon *is performed* automatically, i.e. without entering the user name and without entering the password, with the specified user account.

5 User Logoff (Logout)

In order to close the user interface and to prevent other users of the PC used to handle the system, it is necessary to terminate the session by logging off from the control Panel.

In addition, *with* the logout will *the* changes to the system *session you just have open put* in the non-*briefly* memory . This happens-otherwise automatically only in very large time intervals or during a system backup. If a power outage occurs after system changes without this storage, the previously made changes are no longer present in the Control Panel.

We therefore recommend that you always leave the session by l*ogout* and not just close the browser.

Log off from the system
- To exit the current session, select the "Logout" button located on the right side of each header. The Sign in window confirms the successful logoff process. Afterwards, no access to the CCU is possible without a registration.

New Sign In
- Click on "New Login" to open the login dialog again.

Figure 12: User logoff

Part II-Basics of WebUI user interface

6 WebUI Home Page

After logging on to the system, the start page is called. The Favorites section on the left provides quick access to important channels. The system information and the displayed service and alarm messages give a quick overview of the current state of the system.
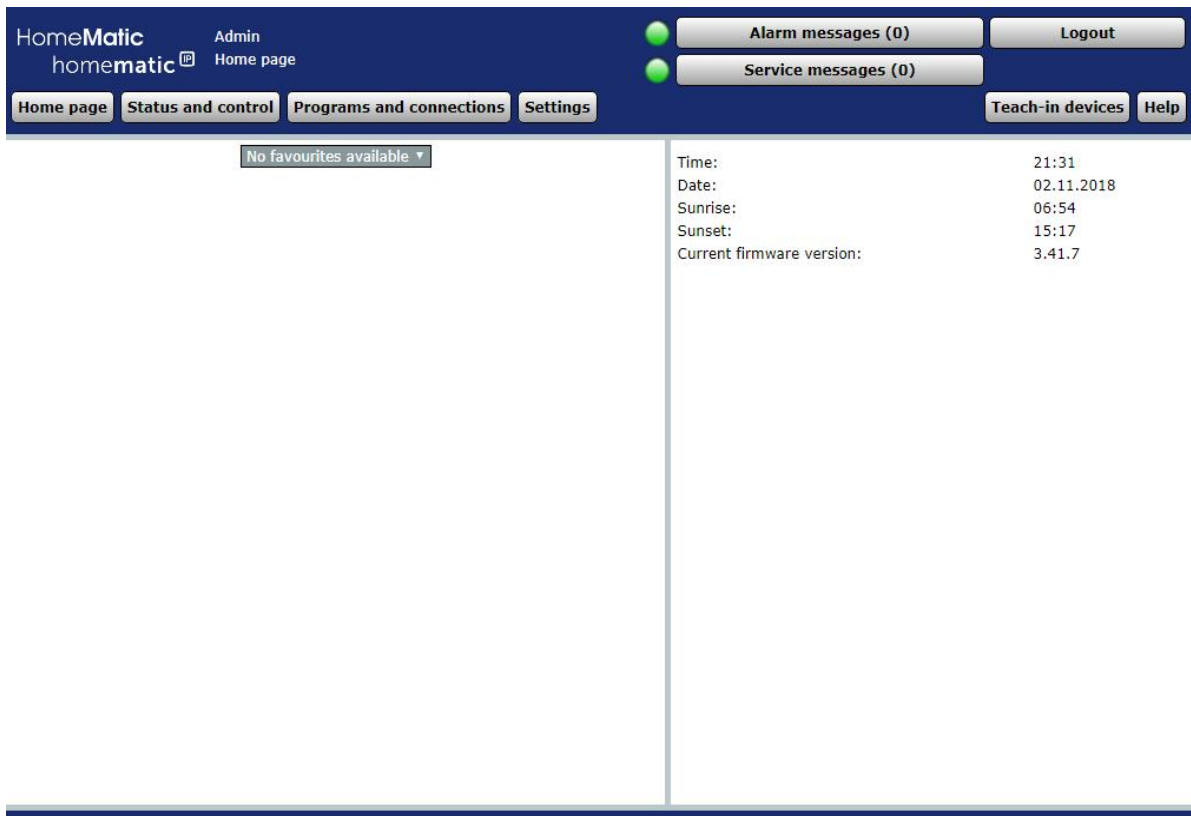
Figure 13:   **User Home Page**

The right pane on the home page is for information about the current system state. The following data are shown:

1. Time
   Displays the current system time. The time is set in *"19.12.3 Time- and position setting "on page 153*

2. Date
   Display of the current system date. The date is set in*"19.12.3 Time- and position setting "on page 153.*

3. Sunrise
   Displays the sunrise time for the current day. For the correct calculation,
   The information in *"19.12.3 Time and position setting" on page 153 r*equired.

4. Sunset
   Displays the sunset time for the current day. For the correct calculation
   Are the information in *"19.12.3 Time and position setting" on page 153 r*equired.

5. Safety instructions for the system (if necessary)
   This information indicates potential vulnerabilities caused by a non-full configuration.

   A.) "Login: no password set!"
   The note appears if the password is not set for at least one user account with the
   administrator privilege level.

   B.) "Security: System security key not set!"
   The note appears if the system security key has not yet been modified, that is, still contains
   the factory key:

6. Current Firmewareversion
   Display of the current Firmeware version.

7. System variable with current value (optional). The selection of the Systemva shown here
   Combinations is done in the user administration (s*ee"19.1 User Administration" on page 48).*

7 Basic structure of the user interface

Basically, the individual surface pages can be divided into two categories:
• Standard (Full screen) window
• Pop-up window

7.1 Window Structure-standard window

The typical window structure of a WebUI standard window includes the header, the *menu*, the work area and the footer:
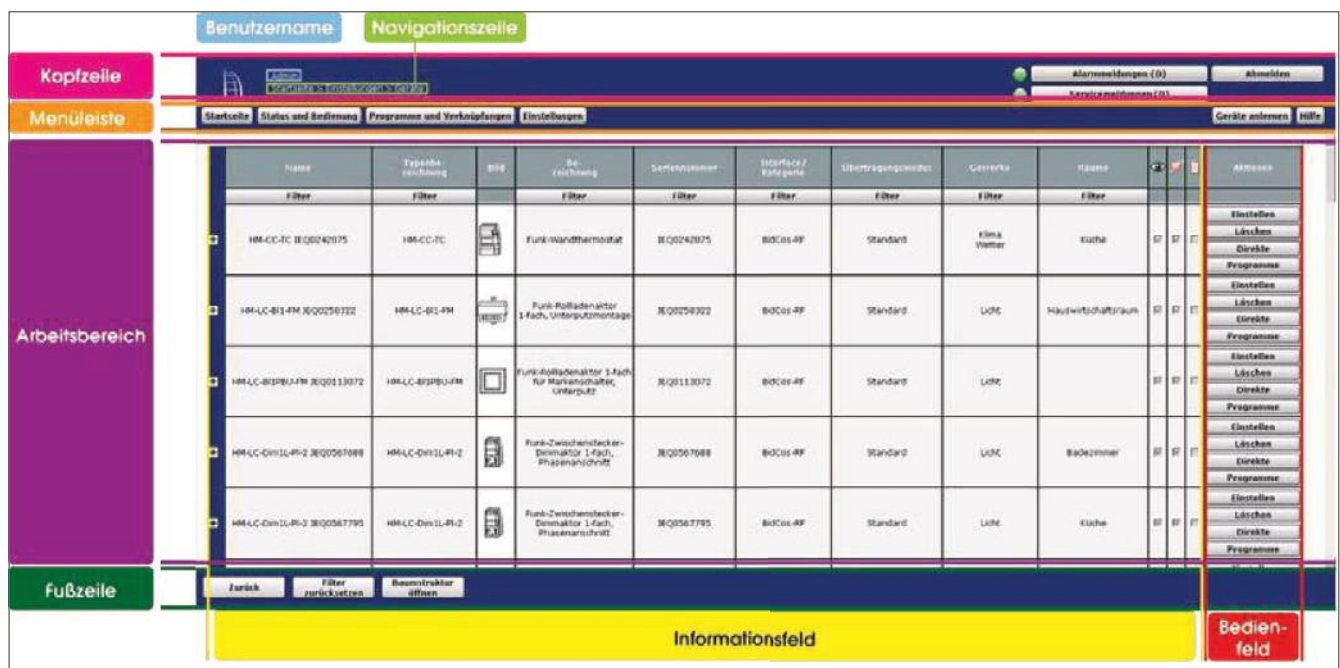
Figure 14: Standard Window-Example

Header
The header shows the user name and below it a navigation line. The navigation line shows the current position in the WebUI and allows the user to navigate quickly back through the control layers.

Also in the header are the buttons to call up the alarm messages and Service message as well as the button "logout", with which you can log off as a user from the Control Panel.

Menu
The structure of the menu bar is always the same, with the availability of the buttons being dependent on the user rights.

The menu bar for users with the permission level " **User** "contains the buttons
• Home
• Status and Operation
• Settings
• Help
• Alarms

- Service Notifications
- Unsubscribe

The menu bar for users with the permission level "**Administrator**" contains the buttons
- Home
- Status and Operation
- Programs and Shortcuts
- Settings
- Learning devices
- Help
- Alarms
- Service Notifications
- Unsubscribe

Workspace

The actual operation of the WebUI takes place in the work area. You can click anywhere on the device list in a row and get the configuration display for the information fields. The (unfolded) device line shows the Geräteeinstellun and the channel settings for the expanded channel lines.

Footer

The footer closes each window. Here you can find various buttons for editing.

7.2 Window Structure-pop-up window

When a pop-up window is opened, the default window from which the pop-up window is opened remains inactive in the background. Operations are then only possible in the pop-up window. The typical window structure of a pop-up window contains the header, the work area and the footer:
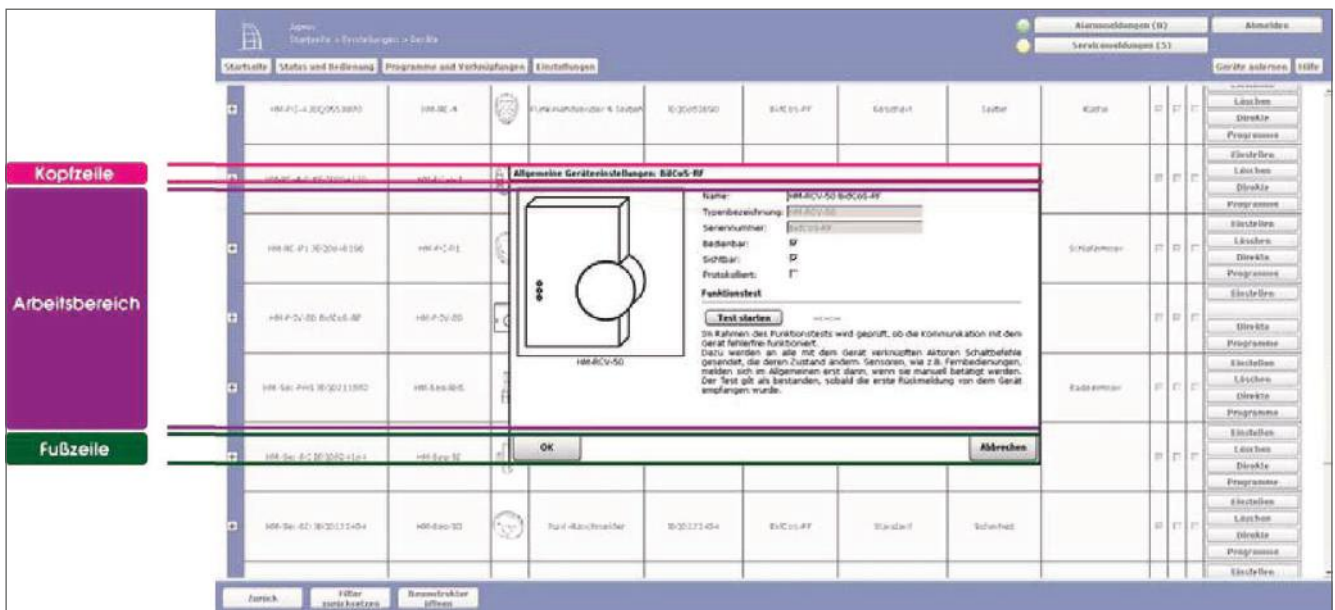
Figure 15: Pop-up Window-Example

Header
The header shows the window name.

Workspace
The actual operation of the WebUI takes place in the work area. Basically, here are areas where operation or input is possible, with a white background represented-represents, while areas that serve only as an information field or in which non-editable information are displayed with a gray background.

Footer
The footer closes each window. Here you can find various buttons for editing.

7.3   Filtering and Sorting

You can sort and/or filter in almost all lists and tables shown in the work area.

Sorting and filtering can be performed independently of each other.

Sorting
The sorting is done by clicking on the corresponding column heading in the table. Clicking again changes the sort order from descending to Aufstei-gender and vice versa.

The coloring of the cell with the column heading indicates the sort criterion.
standard is sorted according to the first column.

Filtering
Filtering is only possible in lists and tables that have a corresponding filter row below the column heading. Depending on the content of the columns, the filter function is executed as a free-text filter or as a pull-down menu with check boxes to hook the filter criteria.

The coloring of the filter cell below the column heading indicates the activated fil-terfunktion.

The filtering can be disabled by clicking on the button "reset Filter" in the footer or by deselecting the checkbox in the Filter pull-down menu.

8 Alarm messages

All alarm messages from the entire system are displayed in the Alarm Messages window in list form. The alarm messages are bound to an alarm name (alarm variable = system variable of the type "alarm") and the triggering channel. The alarm message of each list line can therefore be assigned to a corresponding event according to these entries.

The system automatically generates an alarm message when an alarm variable accepts the status "true = triggered". Setting the alarm variable to "true", i.e. triggering an alarm message, is done by an administrator-created program, which is automatically executed when a channel changes state.

For example, triggering a door window contact (with corresponding program Merstellung) generates a line with the name of the corresponding alarm variables, the name of the door window contact and the information about the status of the door window contact "open". Alarm messages do not create a new entry in the list, that is, no new line if an entry with the same alarm variables and the same triggering data point already exists. Only the last trigger time is updated with the time of the event.

All alarm messages must be confirmed manually. Confirmed alarm messages automatically disappear from the list.

To create new alarm variables, a new system variable of the variable type is first Alarm variable (see.*"19.10 System Variable" on page 131*). Then is the alarm variable with the help of a program with the corresponding sensors (eg. The door window contact) and to program the triggering (see. *"18.2 Program creation and direkt link "on page 75*).
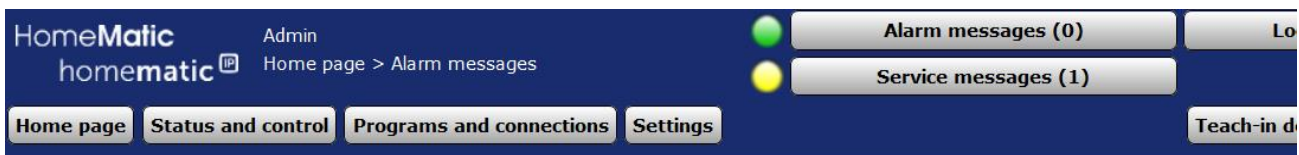
Figure 16: **Alarms**

The following columns are shown in the order specified:

1. First release date/time
   Time and the date of the first occurrence of the alarm message

2. Last Trigger Date/time
   Time and date of the last occurrence of the alarm message-is the alarm message in-mer still current, i.e. if the variable still has the value "true = triggered", the entry has the current system time. If the reason for the alarm message is no longer present (alarm variable takes the value "false = Not triggered"), for example because a door window contact has again reported the status "closed", time and date are entered from the time when the variable is has not been set.

3. Number of firings
   Number of triggers (updates) for this alarm message and trigger this-the channel within the period between 1. Tripping and last tripping.

4. Alarmname
   Name of the alarm variables.

5. Status
   Current state, i.e. the value of the alarm variable.

6. Description
   Description of the alarm variables that can be optionally entered during configuration.

7. Alarm Message
   Alarm Message-Here is the name of the channel which led to trigger the alarm (e.g. door-window contact living room) and the associated State of this channel (e.g. open).

8. Room
   Space allocation of the channel that led to the tripping.

9. Action
   Button to confirm the alarm message. All alarm messages must be reset manually.

Confirm Alarm Message
• Click on the button "confirm" in the corresponding line of the alarm message.

This deletes the corresponding line in the alarm messages. All alarm messages must be deleted manually.

Confirm all alarm messages together
- Click "Confirm All" to confirm all the alert messages that have occurred in the list together.

9   Service Messages

All service messages from the entire system are displayed in this window in list form. The service messages are either channel-related, i.e. the messages are valid for the channel entered under "Name", or device-related (e.g. "battery empty" or "configuration data are available for transmission"). Depending on the content or type of the message, it must be confirmed manually or automatically reset by system. Confirmed or automatically reset service messages disappear automatically from the list.

Figure 17:   **Service Messages**

The following columns are shown in the order specified:

1. First message Date/time
   Time and the date of the first occurrence of the service notification.

2. Last Message Date/time
   Time and date of the last occurrence of the service notification-if the Zugehö channel has already reported to the system that the reason for the service notification is no longer present, the entry has the timestamp of the last occurrence of the error message. If the corresponding channel is still disturbed, the entry has the current system time.

3. Name
   Channel name

4. Image
   Stylized representation of the device to which the channel belongs. For devices with multiple Ka-Nälen, the channel is colored in the image.

5. Serial Number
   Serial number of the device to which the channel belongs. For multi-channel devices, the serial number is still added by the channel number.

6.Functions
   Association of the Channel.

7. Room
   Space allocation of the channel.

8. Last Modification
   Date and time of the last communication between the Central station and the corresponding channel. If the state of the channel changes at the present time, this is indicated by the active symbol.

9. Service notification
   Description of the service notification-the messages can be both cross-system information and channel-specific service messages.

10. Action
    Button to confirm the service notification. Service messages that are independently reset by the SY-stem do not have an entry here.

Edit service Notification
- The service notification column shows whether there is a service notification for a device. (e.g. "Battery low").
- Correct the specified error (e.g. by renewing the battery). Specifying the name, serial number, and room and function assignment makes it easier for you to identify the device.
- You can then confirm the service notification.

Confirm Service Notification
- After you have processed the service notification, click on the button "confirm" in the corresponding line.

Confirm all service messages together
- Click "Confirm All" to confirm all entries in the list together.

Service notifications, which are independently managed and confirmed by the system, remain in the list. As soon as the cause of the service notification is fixed, the system deletes these service messages independently.

10   Error messages

At regular intervals, the WebUI checks the connection to the different interfaces. If the WebUI determines that the connection to a component is interrupted, it will issue an error message.

The following illustration shows an example of an error message for a radio components TE. The error messages in the event of an interruption to wired components, system component parts or an interruption to the logic layer is overwritten with a correspondingly different Titellei-Ste, except however identical.

BidCos-RF

Eine Komponente der HomeMatic Zentrale reagiert nicht mehr.

Hierfür kann es eine Reihe von Ursachen geben:

- es besteht keine Netzwerk-Verbindung
- die Stromversorung der HomeMatic Zentrale wurde unterbrochen
- mindestens eine Komponente der HomeMatic Zentrale ist abgestürzt

Überprüfen Sie die Netzwerk-Verbindung und die Stromversorgung der HomeMatic Zentrale. Starten Sie ggf. die HomeMatic Zentrale neu.

Schließen

Figure 18:   Error message

In this case, please restart the control panel so that the connections to the interfaces can be re-established.

11   Help

The WebUI Help section provides basic information about your head office, such as serial number and version, as well as links to help pages or license terms.
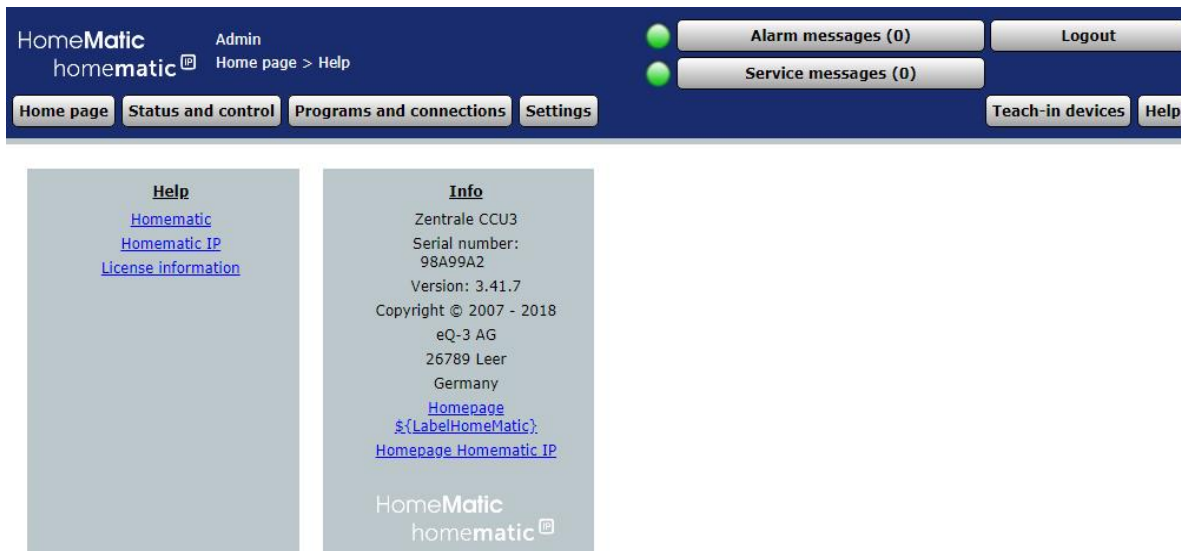
Figure 19:   Help

- Click the Help button in the upper right-hand corner of the screen to access the Help section.
- Click on "Homematic" or "Homematic IP" under "Help" to go to the help page of the respective website.
- Click on "License Information" to access legal basics information.

12 Channel selection

The selection of a channel (e.g. for program creation, configuration of favorite pages, etc.) is done via the pop-up window "channel selection". All information is ind
device configuration in *"19.2 Devices" on page 110,* defined.

	Name	Picture	Description	Serial number	Function	Rooms
	Filter		Filter	Filter	Filter	Filter
☐	Heating Control 1 floor INT0000001:1 Connection partner radiator thermostat transmitter		HM-CC-VG-1 Heating Control 1 floor INT0000001	INT0000001:1	Heating	Kid room 1 floor
☐	Heating Control 1 floor INT0000001:2		HM-CC-VG-1 Heating Control 1 floor INT0000001	INT0000001:2	Lock	
☐	Heating control 2 floor INT0000002:1 Connection partner radiator thermostat transmitter		HM-CC-VG-1 Heating control 2 floor INT0000002	INT0000002:1		
☐	Heating control 2 floor INT0000002:2		HM-CC-VG-1 Heating control 2 floor INT0000002	INT0000002:2	Lock	
☐	HM-CC-RT-DN OEQ2083225:4 Connection partner radiator thermostat		HM-CC-RT-DN HM-CC-RT-DN OEQ2083225	OEQ2083225:4	Heating	Kid room 1 floor

Cancel **OK** **Show virtual channels** **Reset filter**

Figure 20: **Channel selection**

Depending on the number of existing devices and channels, loading the list may take some time.

Select Channel
• Select the desired channel in the channel list and choose it by clicking on it.

The pop-up window then closes automatically and the selected selection is taken over.

View virtual devices
By default, devices or channels that the central system manages internally and are not physically present are not listed. Click "Show virtual Channels" to get a complete list including the virtual devices/channels.

Cancel Selection
• Click Cancel in the footer to close the pop-up window without a selection.

13 Program Selection

The selection of a program (e.g. for the configuration of favorite pages) is done via the pop-up window "program selection". Entries can only be entered in the Action column. All other information will be used during program creation *"18.2.1 Program Creation" on Page 76.*

Figure 21: Program Selection

ℹ️ Depending on the number of existing programs, loading the list may take some time.

Select Program

• Choose the desired program in the program list and select it by clicking on the button "selection" in the corresponding line.

The pop-up window then closes automatically and the selected selection is taken over.

Cancel Selection

• Click Cancel in the footer to close the pop-up window without a selection.

14   System Variable Selection

The selection of a system variable (e.g. for the program creation, the configuration of the home page or of favorite pages, etc.) is done via the pop-up window "System variables Selection". Entries can only be entered in the Action column. All other information is see configuration *"19.10 System Variable" on page 131*.

Figure 22:   **System Variable Selection**

(i)   Please note that no backslash "" can be entered in the Description field!

(i)   Depending on the number of existing system variables, loading the list may take some time.

Select System Variable
•   Find the desired system variable in the variable list and select it by clicking on the button "selection" in the corresponding line.

The pop-up window then closes automatically and the selected selection is taken over.

Cancel Selection
•   Click Cancel in the footer to close the pop-up window without a selection.

Part III-operation and configuration

15   Administrator Home Page

After logging on to the system, the start page is called. The Favorites section on the left provides quick access to important channels. The system information and the displayed service and alarm messages give a quick overview of the current state of the system.
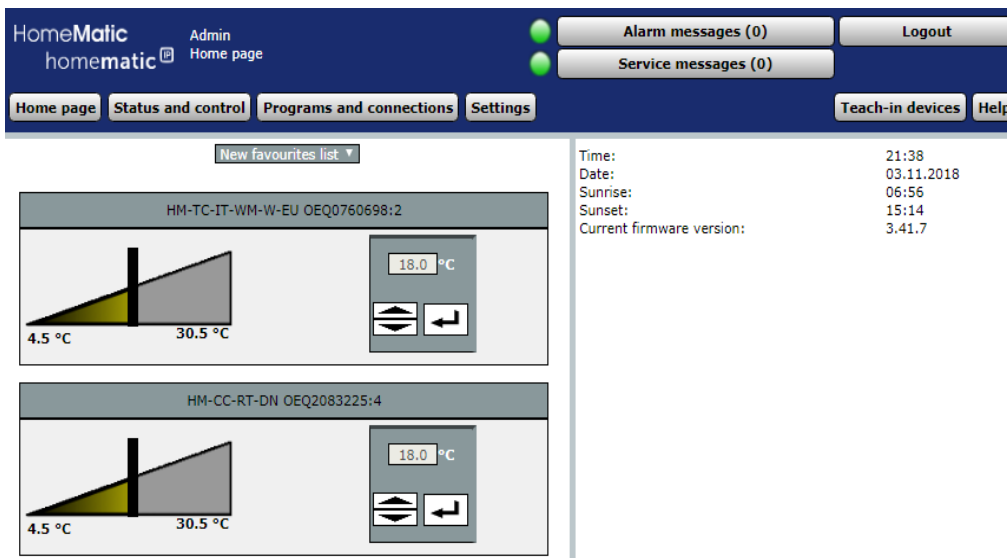
Figure 23:   **Administrator Home Page**

15.1   Favorites Area

The Favorites area in the left part of the workspace contains a user-dependent, configurable list of favorites with the control and controls (control fields) associated with the channels.

Selecting the Favorites page displayed on the home page
*   In the header of the Favorites section, select the desired list of favorites from the selection list.
        Only the favorite pages that you have access to as a registered user appear in the selection list. If you do not have any favorite pages available,

        Create them over *"19.11 Favorites" on page 137*.

Serving Favorites
*   operate these channels directly via the displayed control field according to their function (see. "28 Overview Control and Control elements (control fields)" on page 330).

 At the same time, the control field displays the current state of the channel.

Status Query of Favorites
Here is the represented control field for visualizing the current channel state (see."15 Overview of all control and control elements (Control fields)". Operation is not possible.

15.2   System information

This section is for information about the current system state. The following data are shown:

1. Time
   Displays the current system time. The time is set in "19.12.3 Time and position setting" on page 153.

2. Date
   Display of the current system date. The date is set in "19.12.3 Time and position setting" on page 153.

3. Sunrise
   Displays the sunrise time for the current day. For the correct calculation, the information in "19.12.3 Time and position setting" on page 153 is required.

4. Sunset
   Displays the sunset time for the current day. For the correct calculation, the information in "19.12.3 Time and position setting" on page 153 is required.

5. Current Firmewareversion
   Displays the current firmware version.

6. Sign Up
   "Login: no password set!"
   The note appears if the password is not set for at least one user account with the administrator privilege level.
   Enter a password in the user account configuration (see. "19.9 User Management" on page 131 or "3.4.1 Configuration – User account" on page 16).

16 Status and Operation

The display of the system status and the operation of the system, i.e. the control of delayed channels, the starting of programs etc., are carried out via control and control elements See.*"28 Overview of Control and Controls (control fields)" on page 330).*

You can access the individual channels by assigning them to room and/or functions or via the assignment to the higher-level device (e.g. for the operation of remote and other mobile devices useful). Program sequences have the separate order criteria programs.

Creating favorite pages allows you to create your own groupings of different channels and programs. For the favorite pages, the associated name maps access to the channel or program.

> In general, only the channels and programs that are provided by the Administrator gate with the attribute "operable" can be operated. If you do not find a channel or a program in the corresponding lists, check the channel or program attributes (see. *"19.2 Devices" on page 110 and "18.2 Program creation and Direct Link "on page 75.*
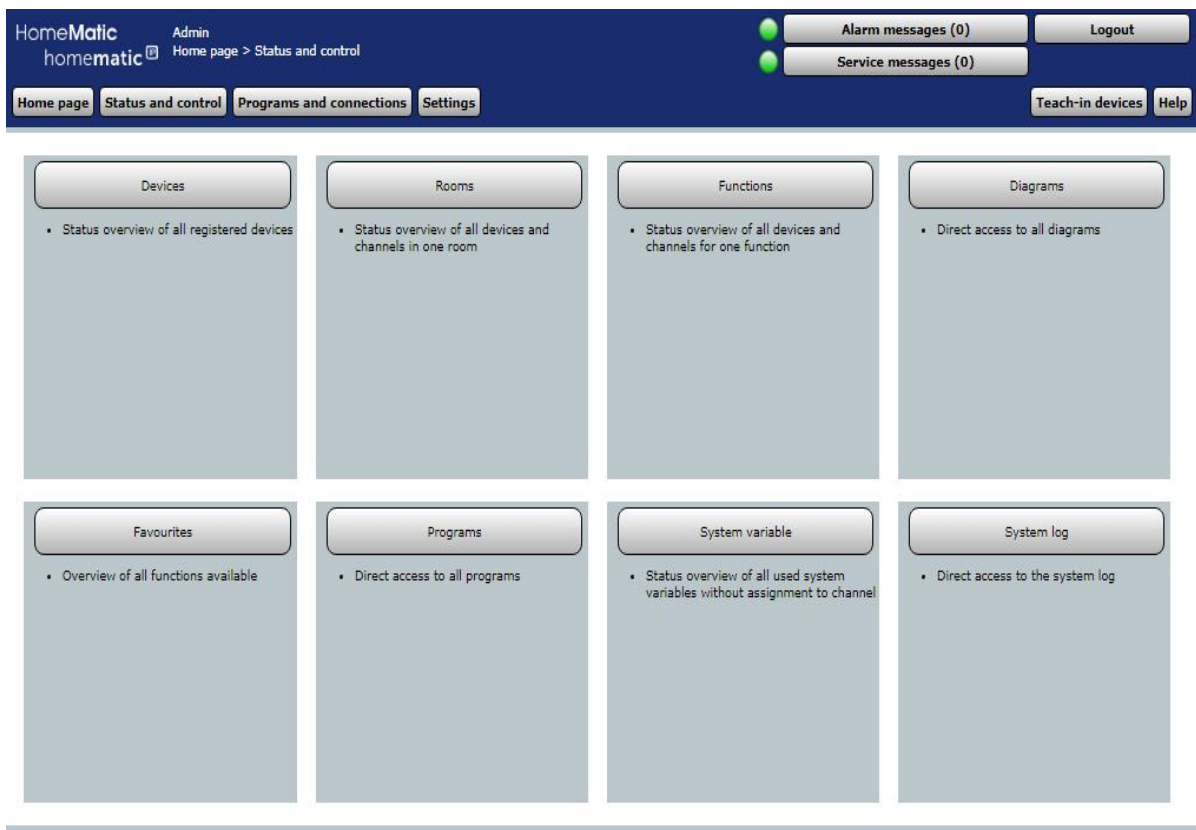

Figure 24: Status and Operation

Status overview and operation of devices
- Click on "Devices" to obtain a status overview of all the connected devices and their channels and to operate the devices via the WebUI.*"16.1 Status and Operation – Devices "on page 40*

Status overview and operation of channels in rooms
- Click "Rooms" to obtain a status overview of all devices and channels in a room and to operate the devices via the WebUI. *"16.2 Status and Operation – Rooms "on page 42*

Status overview and operation of channels in *function*s
- Click on "functions" to obtain a status overview of all devices and channels in a factory and to operate the devices via the WebUI. *"16.3 Status and Operation – Functions "on page 43*

Status and operation of diagrams
- Click on charts to get an overview of all charts *"16.4 Status and Operation Diagrams "on page 43*

Status overview and operation of channels in favorites
- Click Favorites to go to the Favorites home page with links to the favorite pages you've set up. *"16.5 Status and Operation-favorites" on page 46*

Status overview and execution of programs
- Click on "Programs" to get an overview of all the programs. *"16.6 Status and Operation – programs "on page 47*

Status Overview of System variables
- Click System variables to obtain a status overview of all system variables used without channel mapping. *"16.7 Status and Operation – System variables "on page 48*

Quick reference-System log
- Click System Log to see an overview of the events logged in the system. *"16.8 status and operation-System log" on page 48*

16.1　Status and operation - Devices

This window gives you a status overview of all devices registered in the system. You can use this window to addition all channels associated with a device. In the left part of the work area, the device list is located with all the devices in the system. The device name and a picture of the respective devices are displayed. If you select a device with a mouse click, the field with the name of the device appears blue.

In the right part of the work area is the list of channels available on the selected device. The following columns exist in the specified order:

Operation and Configuration

Figure 25:   Status and operation-devices

1. Name
    This column shows the channel name.

2. Space
    This column shows the space allocation of the channel.

3. Functions
    This column shows the work assignment of the channel.

4. Last update
    This column informs you of the date and time of the last events on this channel.
    If service notifications are available for the channel, this is
    Identified.
    If the state of the channel changes at the present time, this is done by
    The *Active symbol i*dentified.

5. Control
    This column contains the control and control associated with the channel. You operate
    the desired channel directly via the displayed control field according to the
    its function (see.*"28 Overview of control and Control elements (control fields)" on
    Page 330*). In addition, the control field shows the current status of the channel.

Select Device
•   Click the device name in the device list on the left to select the device you want to
       use.

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ℹ️   If you have created a group, it will be displayed as a device. The operation of a group automatically affects all devices in the group.

Operate the channel on the device
- In the channel list on the right, locate the channel you want. Operation is performed using the control field represented in the column "Control".

16.2   Status and operation - Rooms

This window gives you a status overview of all devices assigned to a room. In addition, you can use this window to control all the Ka-channels assigned to a selected room.

In the left part of the work area is the room list with all the rooms in the system. The name of the window is displayed. If you select a room with a mouse click, the field with the name of the room appears blue.

In the right part of the work area is the list of channels available in the selected room. The following columns exist in the specified order:

Figure 26:   Status and operation-Rooms

Select Room
- Click the room name in the rooms list on the left to select the space you want.

Operate the channel in the room
- In the channel list on the right, select the channel you want. Operation is performed using the control field represented in the column "Control".

16.3 Status and operation - *Functions*

This window gives you a status overview of all devices assigned to a unit. In addition, you can use this window to operate all channels associated with a work. In the left part of the work area is the list of functions with all the functions in the system. The factory name is displayed. The currently selected work is marked in colour.

In the right part of the work area is the list of channels available in the selected plant.

Figure 27:   Status and operation-*functions*

Select a craft
- Click on the factory name in the list of functions on the left to select the desired plant.

Operate the channel in the factory
- In the channel list on the right, select the channel you want. Operation is performed using the control field represented in the column "Control".

16.4 Status and Operation - Diagrams

For example, in conjunction with the Homematic Radio switch Actuator 1-way with power measurement, intermediate plug or with the Homematic IP switching-measuring socket measurement data such as voltage, current, active power, frequency and energy consumption of the connected consumers Create graphs of this measurement data.

For measurement data acquisition and diagram display, you must use a microSD card (at least 1 GB) for the CCU2 to store the information.

For the measurement data acquisition and diagram display, you must use a USB stick (at least 1 GB) for the storage of the CCU3.

To enable measurement data acquisition and diagram display, proceed as follows:

- First, disconnect the power cable and then the network cable from your control panel.
- Insert a microSD card into the microSD card slot of the CCU2 or A USB stick into the USB port of the CCU3.
- Reconnect the power supply and reconnect the network cable.

- Restart the Control Panel. In the WebUI, click Settings, Control Panel, central maintenance, restart.
- Finally, you need to initialize the microSD card or the USB stick. To do this, in the WebUI, click Settings, Control Panel, general settings, initialize.

Under "status and Operation", "charts" you can view graphs and track the history.
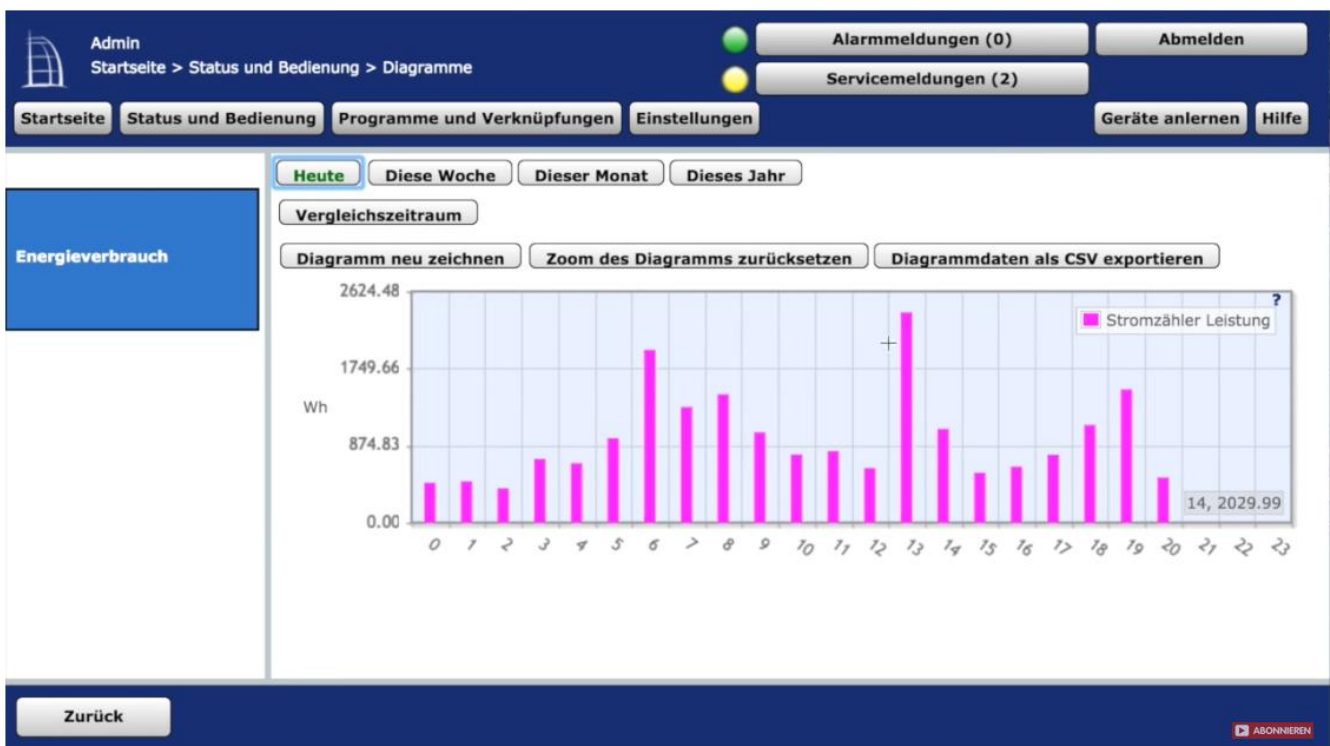

Figure 28:   **Status and Operation diagrams**

Depending on the diagram type (temperature measurement, power measurement or user specific, see.*"19.6 Diagrams" on page 124*), you can select the following time-space options:

temperature measurement and power measurement

Button "Today"
Displays the measured value data of the current day (0 to 24 o'clock)

Button "This Week"
Displays the measured value data for this week (Monday to Sunday)

Button "This month"
Displays the measured value data of this month (first to last day of the month)

Button "This year"
Displays the measured value data of this year (January to December)

"Export chart data as CSV" button
Here you can export the chart data to an Excel file

Reset Chart Zoom button
Lets you reset the zoom of the chart

User specific

Select Last 24 h button
Displays the measured value data from the last 24 hours

Select Last week button
Displays the last week's measured value data

Select Last month button
Displays the last month's measured value data

Select Last year button
Displays the last year's measured value data

Start time Entry: Date and time
Here you can enter an individual start time for the measurement data acquisition

End time Entry: Date and time
Here you can enter an individual end time for the measurement data acquisition

Large Time View Selection
Average values, minimum values, maximum values

Button "Redraw Diagram"
Redraws the chart

"Export chart data as CSV" button
Here you can export the chart data to an Excel file

Chart legend: Device name, channel, and value type

ℹ️ The charts can be clicked in the legend to show or hide them.

ℹ️ To enlarge a specific area of a chart, click the left mouse button on the chart.

16.5   Status and Operation - Favorites

Using favorite pages, users can create their own groupings of different channels and programs.
The Favorites area in the left part of the home page of your WebUI contains a benutzerabhän-GigE, configurable Favorites list with the control and loading Dienelementen (control fields) associated with the channels.

On the Favorites home page, the associated name maps access to the channel or program. To create favorite pages, i.e. to group channels, program
and system variables to a favorite page, see *"16.10 Favorites" on page 49*
or *"19.11 Favorites" on page 137.*

If more than one favorite page is defined, buttons with links appear on the Favorites home page on all available favorite pages. Access to the desired favourite page is done by a dark grey-screened button, which bears the respective favourite name, the corresponding description is displayed on the right. The operation of the favourites can be made by clicking on the button directly on the corresponding favourite page.
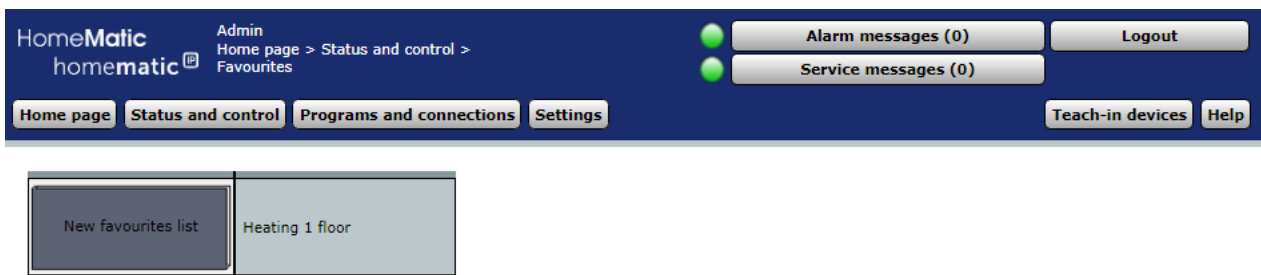

Figure 29:   **Favorites-Favorites-Home**

Select Favorite Pages
•   In the Favorites home page, click the button that has the name of the favorite page you want to use to open the appropriate Favorites page.

ℹ️ Only the favorite pages that you have access to as a registered user appear in the selection list. If you do not have any favorite pages available,
Create them over *"19.11 Favorites" on page 137.*

Use Favorites

The control and control element has a white background for all the (favourite) channels.

You can use these operating channels directly from the displayed control field according to Control their function (see."*28 Overview of control and Control elements (control fields)" on Page 330*).

In addition, the control field shows the current status of the channel.

Status Query of Favorites

For all non-operable (favourite) channels, the control and Control Panel has a gray background.
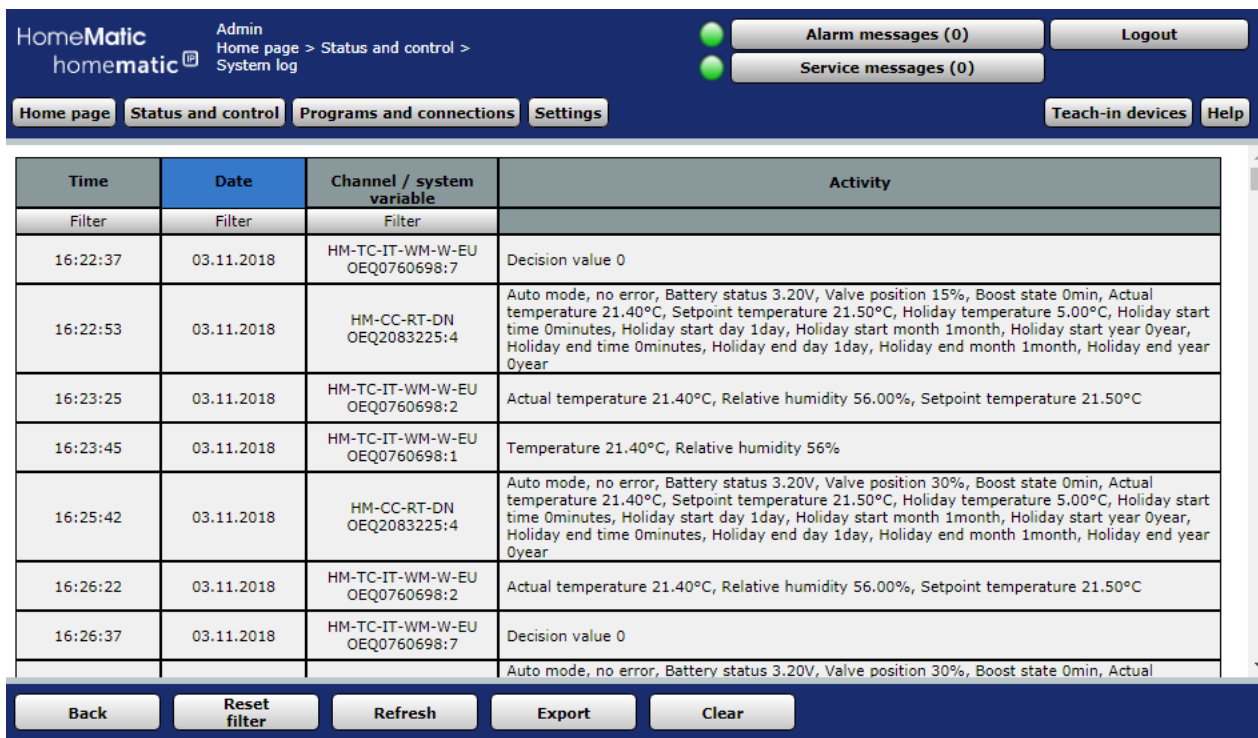
Here the represented control field serves to visualise the current channel state (see "*28 Overview of Control and Controls (control fields)" on page 330).*

> ℹ️ Only the favorite pages that you have access to as a registered user appear in the selection list. If you do not have any favorite pages available,
> Create them over *"16.10 Favorites" on page 49 or "19.11 Favorites" on Page 137* or contact your administrator.

16.6   Status and operation - Programs

This window shows you an overview of all programs available in the system. You can use this window to run all the displayed programs.

The work area shows you a list of the available programs. The following columns exist in the specified order:

Figure 30:   **Status and operation-Programs**

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Operating the program
- Select the program you want to use from the program list. The operation is done with the control field represented in the column "Action".

ℹ️ Attention, when starting a program manually, the first then part of the program is always executed. The programmed conditions are not checked or Ignored.

16.7 Status and operation - System variables

This window shows you a status overview of all used system variables without channel assignment.

16.8 Status and operation - System protocol

This window represents all logged events on a channel or system variable. This results in a list of all activities on channels and system variables, where the attribute "logged" is set. Listed are the entries by event time and date sorted with time, channel/system variable and activity. The list shows the history of all actions logged up to the time that the window was invoked. By clicking on the "Update" button, the last stand will be displayed as well.

The memory reserved for the system log contains 3,000 entries. The storage is done in a ring memory, so that the oldest entries are overwritten when the memory is exhausted. For the purpose of data backup, the system log can be used as a text file (. csv) on your computer at any time by clicking the "Export" button.
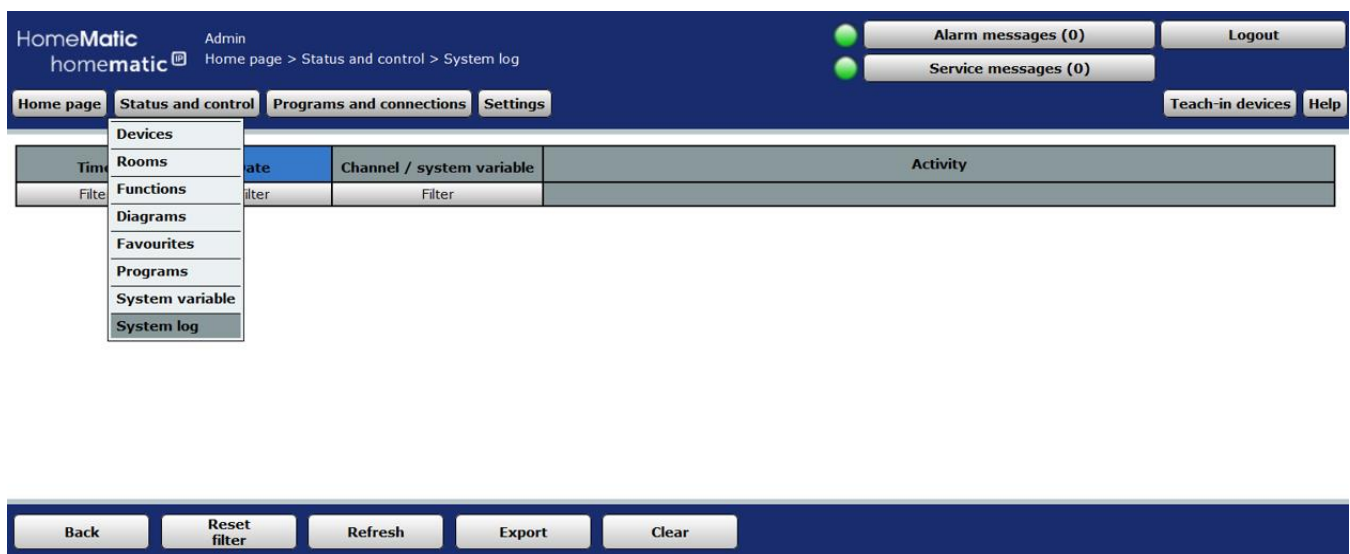

Figure 31: Quick reference-System log

16.9 Diagrams

ℹ️ See section "19.6 Diagrams" on page 124 for details on how to set the charts when using devices with measurement functions.

16.10 Favorites

The Favorites Manager lists all of the favorite pages that you have access to as a user. Entries can only be entered in the Action column. All other information is
*"16.11 Favorites page creation" on page 50 d*efined.

Name	Description	Number of columns	Column alignment	Name field position	User	Action
Filter		Filter	Filter	Filter	Filter	
Admin favourites list1	Heating 1 floor	Auto	Left	Left	Admin	Edit / Delete

Figure 32: System Configuration-Favorites

Create New Favorites Page
- Click "New..." To open the window for creating and editing a new favorite page.
  ->"16.11 Favorites page creation" on page 50

Edit Favorites Page
- Click "Edit..." In the "Action" column to open the window for editing the corresponding favorite pages."16.11 Favorites page creation" on page 50

Delete Favorites Page
- Click Delete to delete the Favorites page completely.

16.11   Favorite page creation

The configuration of the favorite pages is done in this window.
The window is divided into the areas of

1.   Description of the Favorites page
2.   Definition of channels and system variables for the Favorites page

If this window is accessed via "edit", the data of the corresponding Favo rites are entered in the corresponding fields. If the window is called via "new...", all fields are empty or preoccupied with default values.

Figure 33:   System Configuration Favorites-Favorites Creation

Enter your favorite description and arrange the Favorites (Control fields) set.

•   Select the items listed below in the Favorites description and enter the appropriate information.

Entry "Name"
Enter a freely definable entry for the favourite name.
Favorite names must be unique, i.e. they cannot be given multiple names.

Description entry
Enter a freely definable entry for an optional, more detailed description.

Column Number Entry
Specify how many columns the Favorites (Control fields) represented on the Favorites page.

Choose from the selection list with the entries:

- ◦ Auto: The system automatically optimizes the number of columns based on the resolution possible on the display device.
- ◦ 1: Representation always occurs in a column.
- ◦ 2: Display is always in two columns.
- ◦ 3: Representation always takes place in three columns.
- ◦ 4: Display is always in four columns.

Column Alignment Entry

Specify how the Favorites (Control fields) are aligned on the Favorites page. Choose from the selection list with the entries:

- ◦ Left: Control fields are positioned on the left side of the Favorites page. Centered:
- ◦ Control fields are positioned side-centered on the Favorites page.

Positioning Preview Entry

This column contains the schematic representation of the arrangement of the control fields on the Favorites page. The field is not editable.

Name field position entry

Specify where the channel, program, or system variable name is positioned.
Choose from the selection list with the entries:

- ◦ Above: Name field is positioned above the control field.
- ◦ Left: Name field is positioned to the left of the control field.

User entry

This column contains the user name of the user who is allowed to access the Favorites page. The field is not editable and displays the user name that is currently logged on.

Action entry

This column contains the buttons to delete the Favorites page.

Delete Favorites Page

- • To delete the Favorites page completely, click Delete in the Action column of the favorites description.

Save Favorites Page Under new name

- • In the Favorites description, change the name of the Favorites page.
- • Optionally, change the description of the Favorites page in the Favorites description.
- • Click "Save Selection as New Favorites page" To create a new Favorites page with the settings you have made. The old Favorites page remains unchanged.

Add Favorites (Control fields) to the Favorites page
The Favorites (Control fields) are selected according to their functionality. Click on the buttons above the Favorites list to add a corresponding control field to the end of the list:

- Click Add Channel to add the control field to another device channel. In the channel list, select the channel you want to use.
  "12 Channel selection "on page 34
- Click Add System variable to add the control field to another system variable. In the System variables list, select the system variable you want to use.
  "14 system Variable Selection" on page 36
- Click "Add Program" to add the control field of another program. Select the program you want to use from the program list.
  "13 Program Selection "on page 35.
- Click "Add Separator" to insert a placeholder for a blank entry in the Favorites window (see also "move favorite position").

Remove Favorites (Control fields) from the Favorites page
- In the channel, program, and System variables list, locate the entry you want to delete. Click Delete in the Action column to delete the entry from the list.

Setting the function of the favourite (control field)
As a functional property of the favourite, it can be defined whether the favourite entry is to be used or only acts as a status display. The setting is done by the entry in the function column.

- Select "Operation" if you want to be able to use the favorites in the Favorites page.
- Select "Status" If you want to use the favourite as a status display only and no operation is possible.

The setting option is generally only available for devices and programs that are provided by the Administrator with the attribute "operable". If the entry is only marked with the "visible" attribute, the entry in the "function" column is set to "status".

Move the position of the favourite (control field)
The positioning of the favorites is done by using the arrows in the position column and by inserting separator lines. In the positioning preview, you can gain an overview of the appearance of the Favorites page.
- Click ∧ in the Position column to move the associated favorite to a higher position.
- Click ∨ in the Position column to move the associated favorite to a lower position.
- To define free spaces on the Favorites page, click Add Separator Bar.

Accept all entries and save the Favorites page
• Click "OK" in the footer to save the entries and close the window.

Discard all entries and do not save the Favorites page
• Click Cancel in the footer to discard the entries and close the window.

17   Teaching-in devices to the CCU

The learning of new devices to the control Panel is done via the button "Teach-in devices" in the upper right corner of the browser window.

Figure 34:   **Teaching in devices**

The interfaces available in the system are listed line by row. By default, this affects the following three device categories:
•   Homematic: Learning Homematic Wireless Components
•   Homematic Wired: Learning wired Homematic wire Components
•   Homematic IP: Learning from Homematic IP components.
       *Homematic IP Wired from Q1 2019 only for CCU3

Figure 35: Pop-up-learning devices

ⓘ If there are several variants for learning in the line for a device category, choose one of the two variants, depending on the situation or device. Note that the variants "learn Homematic device with serial number" and "Home-matic wired device automatically" are not available for all devices.

Please note the additional information in the user interface, in the operating instructions below and the description for learning the devices in the device user manual.

17.1   Homematic Device direct teach in

To learn a new Homematic device to the control panel, run the points listed below.

ⓘ For the direct learning described here it is necessary to put the device to be learnt manually in the teach-in mode. If you want to teach a device that you do not have direct access to, for example because it is installed in an intermediate ceiling, it is may be easier to adjust the device according to the instructions *and teach in the the Homematic device thru the serial number.*

• Click on the button "Teach HM Device" to the control panel for 60 seconds into teach-in mode. The Infofield shows the currently remaining learning time.

- Within this learning period, also place the Homematic device to be learnt into teach-in mode. For instructions on activating the teach-in mode on the Homematic device, refer to the operating instructions for the device.

ⓘ Wait until the 1-minute learning period is finished to see the device in the Inbox.

- If the device to be teach-in is connected to one of the central unknown system Security key is protected, the pop-up window will automatically open With the security query. Please follow the instructions under "Teaching-in Device – *Confirm Security Query* " and then continue the teach in process.
- As soon as the timer for the teach-in has finished, the new angel harvests appear Devices in the Inbox. The "Inbox (X New Devices")" button shows how many new devices have been successfully teached-in.

ⓘ After the actual teach-in (with teach-in flashing on the components) the central if can read configuration data from the new component. Depending on the complexity of the device and the number of direct links that may be created previously, this may take more than 1 minute in exceptional cases. As a rule, however, the data is already transmitted within a few seconds or up to 30 seconds. However, if you selt to the inbox too soon, so before all the data has been transferred, you may get incomplete display of the configuration settings.

- If necessary, teach-in more devices by repeating the steps described for each device.

- Configure the new teach-in equipment according to the instructions under "Configure new teach-in devices".

ⓘ New teach-in equipment and the associated channels are only available in the Homematic system for operating and configuration tasks after they have been configured in the inbox.

17.2   Homematic device teach in with serial number

To learn a new Homematic device by using the serial number printed on the device, run the points listed below.

ⓘ Learning a Homematic wireless device using the serial number does not require a manual call of the teach-in mode on the Homematic device. Thus, this learning variant is especially suitable for mounted devices. If necessary, make a note of the serial number printed on the device before installation.

ⓘ It is not possible to learn a Homematic wireless component using the serial number for devices that are !!! powered by battery !!! (e.g. remote controls) or which are security-relevant (e.g. Keymatic, WinMatic).

- Enter the serial number of the device to be teached-in in the "Serial Number" field.

- Click on the "Teaching-in Device" button to complete the teach-in process. If the
- device to be teached-in is protected with one of the CCU unknown system security keys, the pop-up window will automatically open with The security prompt. Please follow the instructions under " Teaching-in Device – *Confirm Security Query* " and then continue the teach in process.

- After a few seconds (approx. 5 to 10 seconds after successful teach-in)

The new teached-in device appears in the Inbox. The button " *Inbox (x New Devices) ″* Shows how many new devices have been successfully teached in.

- If necessary, learn more devices by repeating the steps described for each device.

- Configure the new teach-in device according to the instructions under "Configure New teach-in device".

ℹ️ New teached-in device and the associated channels are only available in the Homematic system for operating and configuration tasks after they have been configured in the inbox.

17.3   Teach-in - confirm security query

If the device to be teached-in is protected with one of the central unknown system security keys, the pop-up window with the security prompt will automatically open during the teching-in process.
If the CCU system security key of the device to be teach-in is known, then no safety query is made, in the teaching-in process, the system skips the Sicherheitsab question automatically.

To edit the security query, do the following:

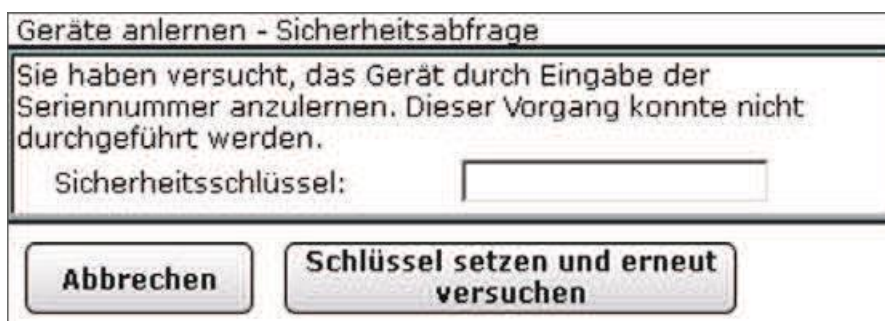**Figure 36:**   **Pop-up – Device Teaching-in – Safety query**

- Enter the system security key.
- Click Set key and try again to continue the teaching-in process.

- Click Cancel to stop the teaching-in process and close the security prompt without entering the system security key.

Do not start a teaching-in process and close the window.
- Click Back in the footer of the Learn Devices window to close the window.

17.4 Homematic Wired teach in with search

To learn a new Homematic wired device to the CCU, follow the points listed below.

- Click the "HM Wired Device Search" button to start the search for Homematic wired devices.
- After a few seconds (about 5 to 10 seconds after successful registration) all the devices identified by the control panel as a new Homematic wired device appear Devices in the Inbox. The button "*Inbox (x)*" shows how many new Devices have been successfully teached-in.
- Configure the new teach-in device according to the instructions under "Configure New teach-in device".

ℹ️ New teach-in and the associated channels are only available in the Homematic system for operating and configuration tasks after they have been configured in the inbox.

17.5 Homematic Wired automatic teach in

To learn a new Homematic wired device to the control panel, run the points listed below.

- Start the learning process on the device you are teaching-in. For instructions on activating the teach-in mode on the Homematic device, refer to the operating instructions for the device.
- After a few seconds (approx. 5 to 10 seconds after successful tech-in) The new teach-in device appears in the Inbox. The "Inbox (x)" button shows how many new devices have been successfully teached-in.
- If necessary,teach-in more devices by repeating the steps described for each device.

- Configure the new fishing equipment according to the instructions under "Configure New teached-in device".

ℹ️ New teached-in device and the associated channels are only available in the Homematic system for operating and configuration tasks after they have been configured in the inbox.

17.6 Homematic IP device teach-in with internet access

To learn a new Homematic IP device to the control panel, perform the points listed below.

- Click the "HmIP Device" button to move the control panel to teach-in mode for 60 seconds. The infofield shows the currently remaining teach-in time.

- Within this period, also place the Homematic IP device to be teached in into the teach-in state. The instruction to activate the teach-in mode on the Homematic

IP device, please refer to the operating instructions for the device.

- After a few seconds, the new teached-in device will appear in the Inbox.
- If necessary, learn more devices by repeating the steps described for each device.

- Configure the new teach-in device according to the instructions under
    "Configure new teach-in device".

    New teach -in device and the asso ciated channels are only available in the Homematic system for oper ating and configur ation tasks after they have been configured in the inbox.

17.7   Homematic IP device teach-in without internet access

To learn a new Homematic IP device to the control panel, run the points listed below.

This teach-in variant can be selected if your control panel does not have active Internet access, for example if you have connected your control panel via USB to your computer.

- To learn, enter the key (device key) and the SGTIN (individual Device number) of the Homematic IP device that you want to teach to the CCU in the corresponding fields. It does not matter whether you enter the hyphens of the key and the SGTIN, or not.

    The key and the SGTIN can be found on the enclosed sticker of the device. The SGTIN can also be found in the battery compartment on battery-operated devices. Please keep the sticker in a safe place.

- Click the "HmIP Device" button to move the control panel to teach-in mode for 60 seconds. The infofield shows the currently remaining teaching-in time.

- After a few seconds, the new teach-in device will appear in the Inbox.
- If necessary, teach-in more devices by repeating the steps described for each device.

- Configure the new teach-in device according to the instructions under "Configure New teach-in device".

    New teach-in and the associated channels are only available in the Homematic system for operating and configuration tasks after they have been configured in the inbox.

17.8   Configure new teached in devices

- Click "Inbox (x New Devices)" in the footer to access the Device Configuration window (Inbox).->*"19.1 Device Inbox" on page 105*

18   Direct Connections vs Programs

The simple functional linking of different Homematic or Homematic IP devices and the programming of automated processes is done via this window.
In order to link devices together, i.e. for example, to switch a radio switch actuator with the help of a remote control or to switch a light time-controlled, it is necessary to establish a so-called linkage of these two devices. Basically there are three possibilities:

Direct device links between two devices when operating devices without Control Panel:
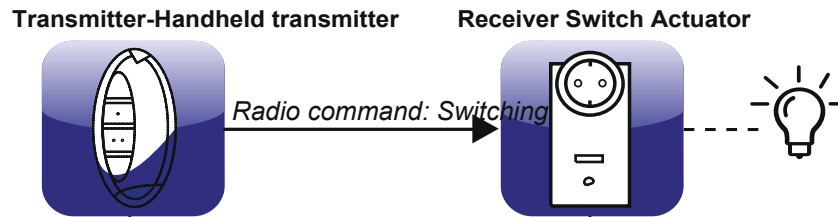
Transmitter-Handheld transmitter   **Receiver Switch Actuator**

Radio command: Switching

Figure 37:   **Communication with a direct device link without Central**

The link exists only directly between the sender and the receiver. This makes a CCU
Basic functionality – A more advanced configuration of the devices and the activated
lty is not possible. The switchboard is not involved in creating the link. For more information on creating direct links without the control Panel, please refer to the operating instructions for each device.

> As soon as a device has been trained at the head office (see also "17 Device Teaching-in" on page 53), direct device links between two devices can only be created via the Control Panel. Creating a shortcut without a switchboard is no longer possible.

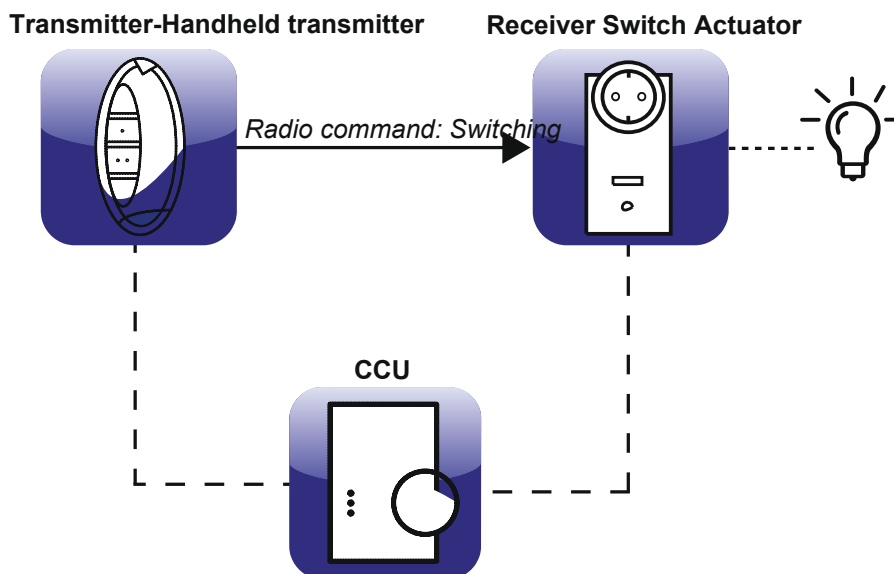**Direct device shortcuts via the central**

Transmitter-Handheld transmitter   **Receiver Switch Actuator**

Radio command: Switching

CCU

Figure 38:   **Communication with a direct device link with Central**

The direct device link is directly between the sender and the receiver, where the creation and configuration of the link is done via the control Panel. In addition to the readily available basic functionality, further configurations are possible. Because communication, such as sending a switching command, is done directly between the sender and the receiver, the control Panel is not required to execute the command.

In this type of link, the switchboard serves only to create and configure the link, it also listens to data communication and logs the actions as needed. The control Panel can therefore be turned off and/or removed from the system even after creating and configuring a Direk link. All functionalities created via direct links remain unchanged. Automated if-then relationships and time controls cannot be created via direct linking. These functions can only be realized via programs with the central unit.
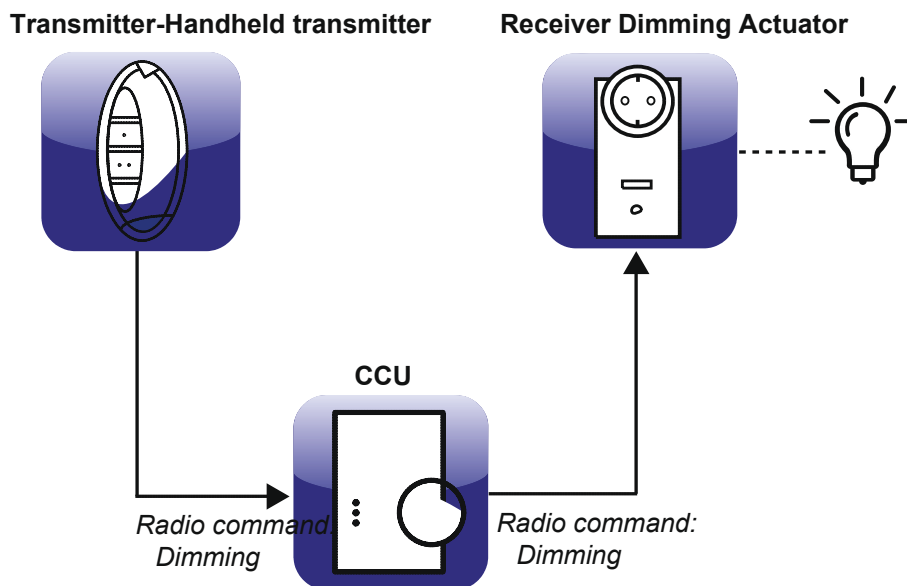
Programs and Central links

Transmitter-Handheld transmitter   **Receiver Dimming Actuator**

CCU

Radio command: *Radio command:*
Dimming   *Dimming*

Figure 39:   **Communication during program execution**

A program or a central link exists only in the control Panel. The Homematic or Homematic IP devices involved in a sol-Chen link/program do not communicate directly with each other, but only indirectly (according to the programmed function) via the Control Panel. The control Panel must therefore always be in operation for the programs and central links to function.

In order to establish a link between two devices in the system and/or to program a house automation, it is possible to choose between the variants 2 and 3 described above. Depending on the desired functionality, either a direct device connection or a program makes sense.

A device can be integrated in various direct links as well as in different programs. For example, a switch actuator that switches external lighting can switch on the outdoor light by pressing a button directly with a remote control and automatically switch off the light at 22:00 clock via a program in the Control Panel.

Figure 40:   Shortcuts and programs

Create a direct device link

• Click Direct device shortcuts to go to the overview of all direct device links and follow the instructions to create a new link.
   -> "18.1 Direct device Links" on page 62

Edit Direct Device Link

• Click Direct device shortcuts to go to the overview of all direct device links and follow the operating instructions for editing a link.
   -> "18.1 Direct device Links" on page 62

Delete Direct device link

• Click Direct device shortcuts to go to the overview of all direct device links and follow the instructions to delete a link.
   -> "18.1 Direct device Links" on page 62

Create a program or central link

• Click on "Program Creation & central links" to go to the overview of all programs and follow the operating instructions to create a new program.
   -> "18.2 program creation and direct link" on page 75

Edit program or Central link

• Click on "Program Creation & central links" to go to the overview of all programs and follow the operating instructions for editing a program.
  -> "18.2 program creation and direct link" on page 75

Delete program or Central link

• Click on "Program Creation & central links" to go to the overview of all programs and follow the operating instructions to delete a program.
  -> "18.2 program creation and direct link" on page 75

18.1   Direct Connection

This window gives an overview of all the direct Geräteverknüp that exist in the system. The creation of new direct device links and the configuration or deletion of existing direct device links is done in this window.

Entries can only be entered in the Action column. All other data and other information tions are defined*"18.1.4 Profile Setting" on page 70*.
The following columns exist in the specified order:

If the list is sorted according to the table column "sender", the stylized image of the device appears in the field of the name.

If the list is sorted by the table column "sender", the button "Add Recipient" appears in the field of the serial number.

If the list is sorted according to the table column "receiver", the stylized image of the device appears in the field of the name.

If the list is sorted by the table column "Recipient", the button "Add Sender" appears in the field of the serial number.

Figure 41:   **Shortcuts and programs-Direct links**

Create a new Direct link

• Click New link in the footer to open the first Link Partner Selection window for a new direct link.
  -> "18.1.1. 1 Link Partner" on page 64

Edit Direct Link

• Find the direct link you want to edit in the list. Click Edit in the Action column to open the edit the corresponding Direct Link window (profile setting)
  -> "18.1.4 profile Setting" on page 70

Delete Direct link

• In the list, locate the direct link that you want to delete. Click Delete in the Action column to delete the link completely and access the status message for the data transfer.
  -> "18.1.5 Linking and Program status" on page 73

Link another receiver to an already used sender

You can proceed as if you were creating a new link (see "18.1.1 1. linked Table partner" on page 64) or alternatively choose the following path:

• Click the Sender column heading to view the list of created direct

To sort links according to the channel names of the channels.

- In the list, locate the sender with which you want to create another link.

- Click "Add Recipient" in the "sender-serial number" column,
  To create a new link and the window to select the 2. Link partner. The corresponding channel is already selected as the first link partner.
  -> *"18.1.2   2. Link Partner" on page 67*

Link another sender to an already used receiver
Follow the steps below to link another receiver to the sender:

- Click the Recipients column heading to sort the list of direct links created according to the recipient's channel names.
- In the list, locate the recipient with whom you want to create another link.

- Click "Add Sender" in the "receiver-serial number" column,
  To create a new link and the window to select the 2. Link partner. The corresponding recipient is already selected as the first link partner.
  -> *"18.1.2   2. Link Partner" on page 67*

18.1.1   1. Linking partner

The selection of the first link partner (channel) in the creation of a direct connection to the Council is done in this window. You can access this window via the
Instructions for creating a new link in
-> *"18.1 Direct device Shortcuts" on page 62*

Entries can only be entered in the Action column. All other information is configured in *"19.2 Devices" on page 110.*

🛈 Direct links can only be created within a product group, i.e. between Homematic or Homematic IP devices. !!! A mixture of Homematic and Homematic IP devices is not possible with a direct link !!! Only HmIP with HmIP protocol or Hm with Hm protocol.

HomeMatic homematic IP

Figure 42:   Create new link-selection 1. Link Partner

The following columns exist in the specified order:

First Name
   This column contains the channel name.

2. Type designation
   These columns contain the short name of the device to which the channel belongs. The type description can also be found on the device. For devices with multiple channels, the short name is still added by the channel number.

3. Image
   This column contains a stylized representation of the device to which the channel belongs. For multi-channel devices, the channel is color-coded in the image. An enlarged and more detailed image is automatically displayed as a mouseover-feature-on.

4. Name
   This column contains the name of the device to which the channel belongs.

5. Serial Number
   This column contains the serial number of the device to which the channel belongs. For multi-channel devices, the serial number is still added by the channel number.

6. Category
   This column contains the category classification according to the channel. With the breakdown-lung in
   A. Receiver
   B. Transmitter

7. Transfer Mode

This column contains information about whether the secured transfer is enabled or the default transmission.

8. Function

This column contains the work assignment of the channel.

9. Room

This column contains the space allocation of the channel.

10. Action

This column contains the button to select the channel shown in the line or Channel pair.

> Depending on the number of existing devices and channels, loading the list may take some time.

Commonly used button pairs (e.g. remote controls) are also represented as a pair of buttons. A collection of individual buttons is not possible.

Select Channel as Link partner

- Choose the desired channel in the channel list and select it by clicking on the button "selection" in the corresponding line. The window then closes automatically and the selected selection is transferred to the selection window for selecting the second link partner.
  -> "18.1.2 2. Link Partner" on page 67

- > button pairs of a remote control etc., which are usually used together in a functional combination, are also shown in the list as a contiguous pair of buttons and can also be selected only as a pair. If only one button of a pair of buttons is to be used in the link (for example, for a "one-button-dimmer control"), the corresponding button pair must be selected first and then the link with the unneeded button
  Delete. See the corresponding operating instructions in
  -> "18.1 Direct Device Shortcuts "on page 62

Show Virtual devices

By default, devices or channels that the central system manages internally and are not physically present are not listed. Click Show virtual devices to get a complete list including the virtual devices.

Cancel Selection

- Click Cancel in the footer to close the window without a selection and return to the overview of the direct device shortcuts.
  -> "18.1 Direct device Links" on page 62
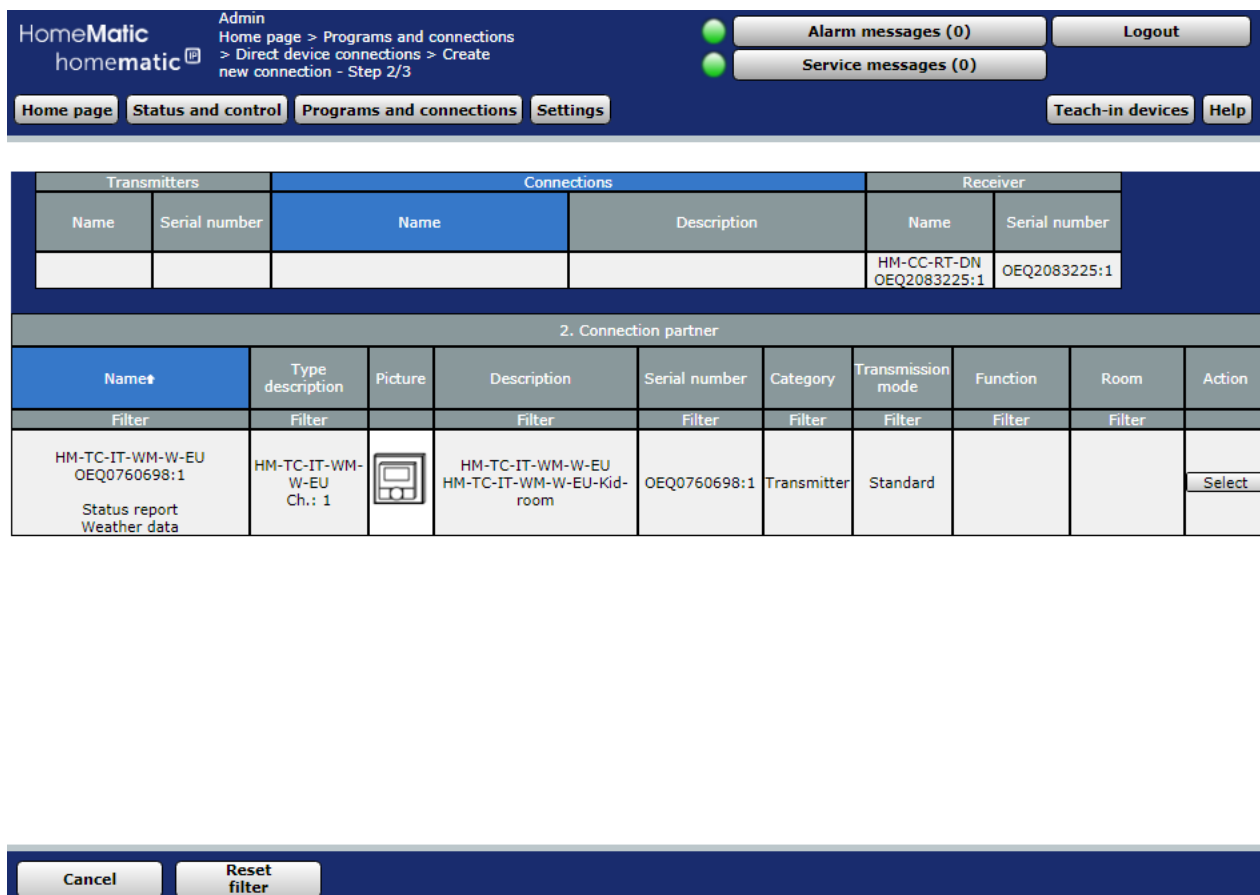
18.1.2 2. Linking partner

The selection of the second link partner (channel) in the creation of a direct connection to the Council is done in this window. You can access this window automatically after the Selection of the first link partner in *"18.1.1 1. Link Partner" on page 64* or via the operating instructions to another transmitter/receiver with an already in use Receiver/sender to be linked to the *"18.1 Direct device Links" on page 62*.

ℹ️ Direct links can only be created within a product group, i.e. between Homematic or Homematic IP devices. A mixture of Homematic and Homematic IP devices is not possible with a direct link. Only HmIP with HmIP protocol or Hm with Hm protocol.

The window is divided into the areas of
- ◦ Description of the link to the list of the first link partner already selected or the link partners already selected
- ◦ List of channels for selecting the second link partner

Entries can only be entered in the Action column. All other information is configured in *"19.2 Devices" on page 110*.

Figure 43: Create new link-selection 2. Link Partner

ℹ️ Only channels that can be linked to the already selected first connection partner are listed, so that, for example, after the selection of a remote control button pair as the first link partner for the second link part Remote controls and other button/switch more to choose from.

(i) Commonly used pairs of buttons (e.g. remote controls) which are also represented as a pair of buttons. It is not possible to list individual buttons.

(i) Depending on the number of existing devices and channels, loading the list may take some time.

Select Channel as Link partner
- Find the channel you want in the channel list and select it by clicking on the "Select" button in the corresponding line. The window then closes automatically and the selected selection is transferred to the window for entering the link description.
  -> "18.1.3 Link description" on page 68

(i) Button pairs of a remote control etc., which are usually used together in a functional combination, are also shown in the list as a contiguous pair of buttons and can be selected only as a pair. If only one button of a button pair is to be used in the link (for example, for a "one-button Dimmer control"), the corresponding button pair must be selected first and then ßend the link with the unneeded button to delete. See the development
Operating instructions in the

-> "18.1 Direct device Links" on page 62.

Show Virtual devices
By default, devices or channels that the central system manages internally and are not physically present are not listed.
- Click Show virtual devices to get a complete list including the virtual devices.

Cancel Selection
- Click Cancel in the footer to close the window without a selection and return to the overview of the direct device shortcuts. This also discards the selection of the first mate partner.
  -> "18.1 Direct Device Shortcuts "on page 62

18.1.3 Link Description

The input for the description of the created direct device link is done in this window. The newly created direct link is shown in line form. You can reach
This window automatically after selecting the second link partner in the
-> "18.1.2 2.Link Partner "on page 67.

Entries are only in the columns "link-
Name and link-description possible. The name of the link is automatically Generated from the control Panel by the names of the linked channels. The name can also be edited manually.

The column "description" contains an optional further description of the direct device connection. This is automatically from the control panel the names of the linked channels or of the profiles used. The description can also be edited manually.

Figure 44:   Create new link-Link description

ℹ️ When connecting contiguous channel pairs (for example, remotes), the individual new direct links associated with each channel pair channels are displayed in line.

Change the name of the direct link
- Click in the name field associated with the link and edit the freely definable entry for the name of the direct device link. The name must be unique and unambiguous, i.e. it cannot be given multiple identical names.

Change the description of the direct link

- Click in the Description field associated with the link and edit the freely definable entry for the description of the direct device link.

Create a direct link to basic functionality (default profile)
- Click Create link in the footer to create the specified shortcut (s). The link is created with basic functionality,
  This means that the default profile defined for the respective link partner is used.

Via the pop-up window with the status message for data transfer to the devices
-> *"18.1.5 Link and Program status" on page 73*, you can automatically access the
View window of the direct device shortcuts.
-> *"18.1 Diret Device Shortcuts on page 62*

For all devices, the basic function of the device is also defined as the basic functionality (standard profile). For example, when linking a remote control button pair with a radio switch actuator, the standard profiles of the devices are defined so that the switch actuator is switched on with one button and switched off with the other.

If you want to set different functions from the basic function, please follow the The operating instructions *Create link and join function (link profile) Edit* or the operating instructions *Edit Direct Link* in the overview of the Direct links (*"18.1 Direct device Links" on page 62*).

Creating a direct link and working with the link profile

- Click Create and edit link in the footer to create the specified shortcut (s). The link is initially created with basic functionality, which means that the default profile defined for the respective link partner is used.

Via the pop-up window with the status message for data transfer to the devices -> *"18.1.5 Link and Program status" on page 73*, you automatically enter the Setting the link function (profile setting) -> *"18.1.4 Profile setting" on page 70*

> Besides the basic function of the device (basic functionality, Stan-Dardprofil), other important linking functions, so-called easy-mode profiles, are preconfigured for all devices.

Do not create a link
- Click Cancel in the footer to close the window without creating a shortcut and returning to the overview of the direct device shortcuts. This discards the selection of the linking partners.
-> *"18.1 Direct device Shortcuts "on page 62*

18.1.4 Profile Setting

The configuration of a direct device link is done in this window. The window is divided into the areas of:

- ◦ Description of the link to the devices involved (sender and receiver)

- ◦ Display of the profiles (linking functions) for the devices working as transmitters and receivers.

You can reach this window automatically after creating a new link (with profile setting) in -> *"18.1.3 Link description" on page 68* or via manual to edit a direct link in -> *"18.1 direct device connection" on page 62*

Inputs are only available in the action, name, description, and channel parameters columns, as in the profile setting – Sender and Profile setting – recipients fields.

Figure 45: Direct Links-profile setting

Profile setting at the transmitter

> ℹ In the case of transmitters, profile settings are not normally possible.
> In the "Expert mode" the displayed parameters of the transmitter page should not be changed.

> ℹ Certain settings and functions can be used only for the entire transmitter and not separately for individual links (e.g. minimum duration for long button presses). The setting of such parameters that affect the entire channel is carried out according to the operating instructions *Edit Channel Parameters*.

Profile setting at the receiver

• In the "Profile setting – Recipient" field, select the desired channel profile (easy-mode profile) from the selection list, i.e. the desired functionality. For each selected easy-mode you get a short explanatory text about the function of the selected easy-mode profile and the influence of the optionally available parameters. The parameters of the individual easy-mode profiles are already pre-filled with sensible standard values. Then, if necessary, adjust the listed parameters to suit your needs.

> ℹ Since the number and type of easy-mode profiles and the nature of the corresponding parameter depend on the respective channel type, only a basic description of the setting takes place at this point.

Some devices/channels have only one easy-mode profile, so no selection is possible. In order to access the expert profile and thus to the entire paramters available of the device,

you must first unlock the configuration of your your user account
-> *"3.4.1 Configuration-user account" on page 16)*

ⓘ Certain settings and functions can only be edited for the entire receiver and not separately for individual links (for example, minimum time for long button Press). The setting of such a parameter, which is relevant to the entire channel, is carried out according to the operating instructions *Edit Channel Parameters*.

Transfer the profile setting to the devices without closing the window •

Click the button "Transfer profile settings to components" in the footer to transfer all currently selected easy-mode profiles and the displayed parameters to the devices and to call up the pop-up window for the status message of the data transfer.
-> *"18.1.5 Link and Program status" on page 73*

Transfer the profile setting to the devices and close the window •

Click "OK" in the footer to transfer all the currently selected easy-mode profiles and the displayed parameters to the devices.

Via the pop-up window with the status message for data transfer to the devices
-> *22.1.5 Link and program status.* You will automatically be taken to the screen of the direct device shortcuts.
-> *"18.1 Direct device Links" on page 62*

Test Profile setting

• Click Test Recipient profile to view the profile setting at the receiver to trigger the SET function on the receiver.

ⓘ Changes in the profile settings are not effective until the new profile Settings according to the operating instructions *Profile setting to the devices.* have also been transferred to the device. Profile settings on the transmitter cannot be checked.

Cancel Profile Setting

• Click Cancel in the footer to discard the profile settings and return to the overview of the direct device shortcuts.
-> *"18.1 Direct Device Shortcuts "on page 62*

ⓘ You can only discard changes that do not have profile settings Transfer devices without closing the window to the corresponding devices were transferred.

Save profile setting as new easy-mode profile

Set the desired functionality of an Easy-Mode profile according to the operating instructions Profile setting at the transmitter or Profile setting at the receiver. Then click on the button "Save settings as new profile template" and follow the instructions to save the current parameter settings as a new standalone Easy-Mode profile for the corresponding channel type (eg wireless switch actuator).

Delete Direct device link
• Click Delete in the link Action column to completely delete the link and call up the pop-up window for the status message of the data transfer.
-> "18.1.5 Link and Program status" on page 73

Edit channel parameters of the transmitter
• Click "Set..." In the "Sender – Channel parameters" column to open the Channel Parameter setting window for the sender channel.
-> "19.2.1 Set channel parameters "on page 113

Edit Receiver Channel Parameters
• Click "Set..." In the column "receiver – Channel parameters" to open the window for setting the channel parameters for the receiver channel.
-> "19.2.1 Set channel parameters "on page 113

18.1.5 Link and program status

This pop-up window provides information about the status of the data transfer from the Control Panel to the device addressed. The window is a system message and appears automatically, i .e. it cannot be called manually. For example, the window appears after the creation, editing or deletion of a direct device link (see. 22. Direct device connection), after changing device and channel parameters (see. "19.2.2 Set device paramters" on page 114 or
"19.2.1 Set Channel parameters" on page 113.

Operation is only possible in the footer. Depending on the content of the hint column, There are different buttons in the footer.

Connection and program status			
Name	**Type description**	**Picture**	**Please note**
HM-TC-IT-WM-W-EU OEQ0760698:7	HM-TC-IT-WM-W-EU		The data transmission to the device has been completed successfully.
HM-LC-Sw1-Ba-PCB-Boiler	HM-LC-Sw1-Ba-PCB		

OK

Figure 46: **Link and program status**

Data transfer was successful-Confirm status info
• Click OK in the footer to confirm the status info and close the pop-up window.

Figure 47: Link and program status-with note

Data transfer was unsuccessful-check transfer status again

*   Follow the instructions in the instructional text and, for example, bring the device into teach-in mode (see the operating instructions for the device). Click "Recheck" in the footer to retry the data transfer and re-enter the status window.

Data transfer was not successful-ignore note

*   Click Ignore in the footer to close the pop-up window without triggering a new data transfer.

Since the configuration of the device in question has not been completed, the corresponding service message remains intact. In addition, due to the uncomplete configuration, it can result in incorrectly functioning links and program relationships.

18.2   Program creation

The creation of new programs (program sequences) and the configuration or deletion of existing programs is done in this window. You can access this window via the corresponding Operating instructions in the *"18 Direct connection vs Programs" on page 59.*

Entries can only be entered in the Action column. All other data and other information are defined in *"18.2.1 Program creation" on page 76.*

Figure 48:   **Shortcuts and programs-Programs**

Create a new program
*   Click New to open the Program Creation window.
    -> "18.2.1 Program creation "on page 76

Edit Program
*   Find the program you want to edit in the list click "Edit" in the "Action" column to open the window for editing the corresponding program.
    -> "18.2.1 Program creation" on page 76

Delete Program
*   Find the program you want to delete in the list. To delete the program completely from the system, click "Delete" in the line that belongs to the program.

Configure Program
Action entry
Set the attributes of the program by selecting the appropriate checkbox. 。
        CheckBox "Active"
        Select this option from the checkbox.

If the box is checked, the program is activated, i.e. an evaluation/check of the condition is carried out.
If the box is unchecked, the program is locked, i.e. there is no check of the condition. In no case will the program be executed automatically.

ⓘ Regardless of this configuration, the program can be operated or triggered manually via the WebUI (if this option is enabled via the "operable" checkbox).

○ CheckBox "Visible"
Select this option from the checkbox.
If the box is checked, the program is in the Windows under*"16 Status and Operation "on page 39 a*vailable. The current status of the program can be look at it.

If the box is unchecked, the program is in the Windows under *"16 Status and Operation "on page 39* Not available. Therefore, the program cannot be operated or triggered thru the WebUI, the status can not be seen.
○ CheckBox "Operable"
Select this option from the checkbox.

If the box is checked, the program is in the Windows under *"16 Status and Operation "on page 39* Available. The program can be operated or triggered.

If the box is unchecked, the program is in the Windows under n*"16 Status and Operation "on page 39 n*ot available. Therefore, the program cannot be operated or triggered thru the CCU WebUI.

ⓘ All other information about the program (configuration of condition, activity, etc.) As shown in the operating instructions *Edit Program* described.

Show intrinsic programs
• Click Show Native programs to list programs that have the system internal attribute set as part of the program creation process.

Hide intrinsic programs
• Click Hide Native Programs to hide programs that have the system internal attribute set as part of the program creation process.

18.2.1 Program Creation

The configuration or programming of a Programmablau-FES controlled by the central control is done in this window. You can access this window via the appropriate operating Instructions for editing or recreating a program in
"18.2 Program Creation and Direct Connection" on page 75.
This window will be the data of the corresponding program is entered in the relevant fields. If the window is called via "new...", all fields are empty or preoccupied with default values.

The window is divided into the areas of:
○ Description of the program

◦ Field for defining program conditions
◦ Field to define the program activity in the event that the entire program condition takes the logical state true.
◦ Field to define the program activity in case the entire program condition takes the logical state incorrectly.
◦ Depending on the programming, additional fields can be followed for nested program conditions and program activities.

Inputs are only available in the action, name, and description columns, as well as in the program creation fields.

Figure 49: **Programs-Program Creation**

18.2.1.1 Basic program Creation

A simple program consists of one or more conditions defined in the field "condition: If..." and one or more activities set in the fields "activity: Then..." and "activity: otherwise...".

Programs can be started by various events (triggers). Once a program has been started by an event, the conditions of the program are checked from above and the then activities of the first fulfilled condition block are executed. If a block is fulfilled, the following conditions may no longer be checked and therefore their then activities will not be executed.

The following events are triggers for a program:
• Button presses (on remote controls)
• Changes to the logical state of a condition line (trigger on change)
• Update of a sensor value or actuator status ("Trigger on Update")
• The occurrence of defined times or the time range change from defined time periods ("trigger to time points").

In addition, all active programs are executed (triggered) when the central station is started or restarted.

The trigger events are completely detached from the logical query conditions of the programs and are not themselves part of the condition. This means that, for example, the condition "if: Switch actuator on, trigger on change" triggers the program both when switching on and off, but the condition is met during the entire time the actuator is switched on. So if the program was triggered again after switching on the actuator by another event, this condition would be fulfilled (because the actuator is on). In other words, the Change event is not part of the logical query, but serves only as an out-of-solver to start the testing and processing of the entire program.

In principle, the procedure is as follows:
1.   Once the program is triggered by an event and the program is marked "active", the control Panel checks whether the condition field ("Condition: If...") is met, i.e. Whether the conditions listed are met in conjunction with their logical linkage (and/or OR). If the conditions are met, the condition field assumes the true state, otherwise the field has the logical status incorrect.

If no conditions are specified in the Condition field, the program will initially have the value false. The condition is then set to true only by manual operation (see 19.5 status and Operation – programs) (for the moment of operation).

2.   If the condition field takes the state true, the activity field is automatically immediately activated."activity: Then...", i.e. all the actions it contains, and the actions (or defined other conditions) specified in the other activity fields are ignored.

3.   If the condition field ("Condition: If...") takes the state incorrectly, the Further expiration of the selection in the field "activity: otherwise..." Depends on:
   ◦   If "Otherwise" is selected in the selection list, then the Activity field "activity: otherwise...", i.e. all the actions it contains, is executed immediately and the actions specified in the other activity fields are ignored.
   ◦   If the entry "otherwise if" is selected in the selection list, this field is automatically added to another condition field called "Condition: otherwise If...", which automatically recovers related activity fields (related "activity: then..." and associated " Activity: otherwise... " field). The conditions defined in this field "otherwise, if..." are then checked, in principle as described in the first. Depending on the result of the test (true or FALSE), the program then branches to the corresponding activity fields (which belong to this field) (as described in 2 or 3).

The sequence of the program follows the mathematically logical form:
•   If the "conditions: If..." field is true, then perform all activities in the "activities: Then..." Field.
•   If the "conditions: If..." field is false, then
   ◦   All activities in the field "activities: otherwise..." (Entry "otherwise..." Selected in the selection list). or.
   ◦   Check all conditions in the field "activities: otherwise if..." (Entry "otherwise..." Selected in the selection list):
        If the "conditions: otherwise if..." field is true, then perform all activities in the "activities: Then..." Field.
        If the "conditions: otherwise if..." field is false, then

A. Execute all activities in the field "activities: otherwise..." (Entry "otherwise..." Selected in the selection list), or

B. Check all conditions in the field "activities: otherwise if..." (Entry "otherwise if..." is selected in the selection list)

In addition to simple programs that only have a clear "If -> Then -> Otherwise you can create nested program sequences with different cases according to the "if-then-else if" principle, as they are also common in different programming languages.

Change the name of the program

*   Click in the column "name" and edit the freely definable entry for the name of the program. The name must be unique, i.e. it cannot be given multiple identical names. This also applies to devices, channels and variables.

Enter or change the description of the program •

Click in the column "description" and edit the freely definable entry for the description of the program.

Define system relevance of the program

*   Configure system relevancy by using the appropriate "intrinsic" checkbox in the "Action" column.

Select this option from the checkbox.

◦   If the box is checked, the system attribute is set internally for this program. By default, the program does not appear in the program lists. This is useful for programs that work in the background, such as programs that routinely describe system variables (for example, definition of the daily amount of rain).

> **ℹ** In some program lists, you can manually display internal programs by using a corresponding button in the list display.

◦   If the box is unchecked, the system internal attribute is not set for this program. This will show the program in all program lists.

> **ℹ** Self-created programs should never get the intrinsic attribute because then if necessary. Not all functions are available for correct execution of the program.

Program with a simple If ->Then -> Otherwise, create a shortcut — create not nested program

Run the points listed below to create an unnested program, that is, to create a program that

◦   One or more if conditions,
◦   One or more then activities and
◦   Optional one or more other activities.

*   Set the conditions "condition: If..." To run the program.
    To do this, follow the instructions in   *"18.2.1.2 condition Field" condition: If... "*

or condition field "condition: otherwise if... "Edit" on page 82.

- Set the activity: then... activities that are executed automatically when the conditions are met, that is, true. To do this, follow the instructions in *"18.2.1.3 activity Field" action: Then... "Edit" on page 83.*
- Optional: If you want to perform actions that are performed automatically when the conditions are not met, that is, are incorrect. Set these activities as follows:

- Select "Otherwise" in the "activity: otherwise..." field in the selection list. Set the
- desired activities. To do this, follow the instructions in *"18.2.1.3 activity Field" action: Then... "Edit" on page 83.*
- Enter a program description and change the name of the program if necessary.
- Close the program creation according to the operating instructions *Input Apply and Close window.*

Create program without conditions

Run the points listed below to create an unnested program, that is, to create a program that consits:

- ◦ One or more then activities and
- ◦ Optional one or more other activities

ⓘ The program, i.e. the condition check, returns the default value Wrong. The condition is only used by manual operation (see *19.5* Status and Operation – Programs) set to True (for the moment of operation). So-with all then-activities are executed only on operation and all otherwise-activities are active in the remaining time.

- Set the activities "activity: then..." Which, when operated manually, Be executed. To do this, follow the instructions in *"18.2.1.3 activity Field "Activity: Then..." Edit "on page 83.*
- If you want to perform actions that occur during the non-operation time, set these activities. Follow the instructions In *"18.2.1.3 activity Field" action: Then... "Edit" on page 83.*

  ⓘ The definition of activities in the otherwise branch is usually not useful, because these activities are executed quasi-constantly, i.e. active.

- Enter a program description and change the name of the program if necessary.
- Close the program creation according to the operating instructions *Input Apply and Close window.*

Create executable program only from the user interface

- Follow the operating instructions *Create program without conditions* To create a Program that can be started from the user interface.

Program with a If -> Then -> Otherwise-if create linked-Program

Execute the items listed below to create a nested program. Create a program that consists of:

- ◦ One or more if conditions,
- ◦ One or more then activities and
- ◦ One or more otherwise-if conditions with related then activities optional one or
- ◦ more other activities

- Set the conditions "condition: If..." To run the program.
  To do this, follow the instructions in *"18.2.1.2 condition Field" condition: If... "*
  or condition field "condition:otherwise if... "Edit" on page.

- Set the activity: then... activities that are executed automatically when the conditions
  are met, that is, true. To do this, follow the instructions in
  "18.2.1.3 activity Field" action: Then... "Edit" on page 83.

- Set another condition check to run automatically
  If the condition preceded in "condition: If..." (or in case of multiple nesting: all preceding
  conditions, i.e. those in "condition: If..." And those in "condition: otherwise If...") are not
  met, i.e. are false and define the activities related thereto. To do this, do the following:

- In the "activity: otherwise..." field in the selection list, select "otherwise if...". From the
  Activity field, the Additional condition field "condition: otherwise If..." is automatically
  created, and the New Activity field "action: Then...", which belongs only to this condition
  field, is automatically generated.

  Set the otherwise-if conditions. Follow the instructions
  In *"18.2.1.2 condition Field" condition: If... "or Condition Field*
  Condition otherwise if... "Edit" on page 82.

- These conditions are only checked if the predetermined
  Condition checks in the condition: If... field (and any subsequent condition checks in
  "condition: otherwise If..." The result has been delivered incorrectly.

- Set activity: Then... that will be executed automatically
  If the above-defined otherwise-if conditions are met, i.e. true. Follow
  The instructions in *"Edit 18.2.1.3 Activity field: Then..." on Page 83.*

- Optional: If you want to perform actions that are executed automatically,
  If all the preceding condition checks (the conditions in "condition: If..." and the
  "condition: otherwise If...") are not met, that is, are false. Set these activities as
  follows:

- Select "Otherwise" in the "activity: otherwise..." field in the selection list.
  • Set the desired Activities. To do this, follow the instructions in "18.2.1.3 activity
   field" activity: Then... "Edit" on page 83

- Enter a program description and change the name of the program if
  necessary.

- Close the program creation according to the operating instructions
  input and Close window.

Accept input and close window
•   Click OK in the footer to accept the entries and close the window.

Discard input and close window
•   Click Cancel in the footer to close the window without taking the changes and
       entries.

**18.2.1.2   Condition field "condition: If..." or Condition field "condition: otherwise
                If..." Edit**
Set the conditions "condition: If..." To run the program. To do this, do the following:

•   Click the Add icon in the condition: If... field to display a selection list and create the
       structure for defining conditions.

•   Set the first condition using the selection list according to the
       Operating instructions in ″18.2.1.5 *define contions*″ on page 85.
•   Continue to define the conditions according to the following sub-points:
•   If you do not want to create additional conditions, the definition of the conditions is
       complete. Proceed according to the operating instructions of your running in "18.2.1.1
       Basic Program Creation" on page 77.

•   If you want to create additional conditions, select the desired logical link (and OR/and
       OR) between the two conditions using the selection list directly below the first
       condition:

       In the select list, choose "and" to combine the first condition and the second
       condition with a logical and with each other. This means that both conditions (both
       the first and the second condition) must be fulfilled (true) so that this link is also
       true.
•   When you select the AND operator in the first link level, the
       2. Link level automatically set the OR operator. Within the join levels, the logical
       operators are always the same.

       In the selection list, select or to link the first condition and the second condition to a
       logical or to one another. In other words, only one of the conditions must be true,
       so that this link is both true.

•   The AND operator is automatically set at the second link level by selecting the
       OR operator at the first link level. Within the join levels, the logical operators are
       always the same.

•   Click the Add icon in the condition box below the first condition to apply the logical
       operator selected above for the link levels and to show the selection list.

•   Set the second condition by using the selection list according to the
       Operating instructions in *″18.2.1.5 Define Conditions″ on page 85.*
•   Continue to define the conditions according to the following sub-points and

Repeat this step until you have defined all the required conditions:

- ◦ If you do not want to add any more conditions, go to
according to the operating instructions
"18.2.1.1 Fundamentals for Program creation "on page 77.
- ◦ If you want to add another condition in the first link level:
- ◦ Click the "Add" icon below your last condition in the 1. Link level.

- ◦ Use the selection list to set the new condition according to the
Operating instructions in *18.2.1.5 Define conditions on page 85*.
- ◦ If you want to add another condition at the second link level:

- ◦ Click the *Add icon a*t the second link level.
- ◦ Use the selection list to set the new condition according to the
Operating instructions in*18.2.1.5 Define conditions on page 85.*

Delete individual conditions
- • In the Condition field, locate the condition that you want to delete. Click
the *"*Delete *"*icon at the end of the line to make the above condition
(condition line) completely removed from the program.

Note that programs must not contain empty otherwise-if blocks or empty or
uncomplete condition lines.

18.2.1.3 Edit Activity field: Then...

Set the activity: then... activities that are executed when the conditions are met, that is, true. To do this, do the following:
- • Click the Add icon in the activity: then... activity field to display a selection list.

- • Set the desired action using the selection list according to the operating
instructions in "define 18.2.1.6 activities" on page 87.
- • Continue the definition of the activities according to the following sub-points and
repeat this step until you have defined all the actions you want in this then branch:

- ◦ If you do not want to add any more actions in the then branch, proceed to
"18.2.1.1 Basic program Creation" on page 77 according to the operating
instructions that you have executed.
- ◦ If you want to add another action in the then branch:
Click the "Add" Symbo*l be*low the last action.
Use the selection list to set the desired action according to the
Operating instructions in *"18.2.1.6 Define Activities" on page 87.*
- • CheckBox "Delete all running delays for these participating activities before
running". Select this option from the checkbox.
- ◦ If the box is checked, all activities still pending for execution are deleted for all the
channels and system variables specified in the "activity: Then..." Field.

For example, a command that has not yet been executed to (delay) off a Schaltaktors is deleted.

ℹ️ Activate this checkbox to reproduce, for example, the function of retriggering a stair light machine.

- ◦ If the box is unchecked, all activities still pending execution for the channels and system variables specified in the field "activity: Then..." will be retained. Due to the activities still in the background, there may be unwanted activities when the ℹ️ program triggered multiple times or when multiple channels or system variables are used.

Delete individual activities
- In the Activity field, locate the action that you want to delete. Click the "Delete" icon at the end of the line to completely delete the action (action Line) from the program.

ℹ️ The order of different actions in a then block can be influenced by the "delayed" function of the statement lines (see "18.2.1.6 Define Activities" on page 87).

18.2.1.4 Edit Activity field: otherwise...

Optionally, set the activities "activity: otherwise..." that are executed when the conditions are not met, that is, are incorrect. To do this, do the following:
- To display a selection list, click the Add icon in the activity: otherwise... activity field.

- Use the selection list to set the desired action according to the Operating instructions in *"Define 18.2.1.6 Activities" on page 87.*
- Continue the definition of the activities according to the following sub-points and repeat this step until you have defined all the actions you want in this otherwise branch:
  - ◦ If you do not want to add any other actions in the otherwise branch, go to the According to the operating instructions f*or "18.2.1.1 Fundamentals program creation "on page 77*.
  - ◦ If you want to add another action in the otherwise branch:
    Click the Add icon below the last action.
    Use the selection list to set the desired action according to the Operating instructions in *"18.2.1.6 Define Activities" on page 87.*
  - ◦ CheckBox "Delete all running delays for these participating activities before running". Select this option from the checkbox.
    If the box is checked, all activities still pending for execution are deleted for all the channels and system variables specified in the field "activity: otherwise...". For example, a command that has not yet been 0executed to (delay) off a Schaltaktors is deleted.
    ℹ️ Activate this checkbox to reproduce, for example, the function of retriggering a stair light machine.

    If the box is unchecked, all activities still pending execution remain

Channels and system variables specified in the field "activity: Then...".

> **ⓘ** Due to the activities still in the background, there may be unwanted activities in case of multi-fold triggering of the program or multiple use of channels or system variables.

Delete individual activities
- In the Activity field, locate the action that you want to delete. Click the "Delete" icon at the end of the line to completely delete the action (action Line) from the program.

18.2.1.5   Define Conditions

Set channel state as condition
To select a channel and its channel state as a condition, run the points listed below. The type and scope of the list of Ka-nalstatus available for a condition check depends on the type of channel:

- In the "condition: If..." or "condition-otherwise if..." Field, select "Channel state" in the selection list.
- Then click on the "Channel selection" button to select the desired channel from the channel list. -> *"12 Channel selection" on page 34.*

> **ⓘ** Only channels that can be used for a condition check that have a read-only state or trigger an action appear in the channel list.

The channel list also shows system variables associated with a channel (See Channel Assignment in *Edit System Variable*).

- From the following selection list, select the channel status that you want to apply as a condition. i.e. This allows you to select the state of the channel that is checked by the control Panel for its logical state.
  Depending on the type of channel state selected, proceed as follows: ◦

    For a channel state that is uniquely defined by the selection list (for example, "Short Press" on a remote control), the definition of the channel state is terminated with the selection in the selection list.

  ◦ If the desired channel state cannot be completely defined via the selection list and a narrowing of the range of values is necessary (e.g. to define a temperature value), a more comprehensive
    Description in the form: "In the value range of *<value range limit>*". Click on the button *<value range limit> t*o display the
    the definition of a range of values. -> *"18.2.2 setting of the Value range "on page 92.*

    > **ⓘ** The type and scope of the list of possible channel States depends on the selected channel, i.e. the channel category.

- Select the desired trigger from the following selection list:
  ◦ Select the "Trigger on change" entry to initiate the automatic condition check of all conditions when the logical state of the condition line being considered has changed (for example, if the temperature exceeded an upper limit.

◦ Select the "Trigger on Update" entry to initiate the automatic condition check whenever the channel status is transmitted (for example, at any temperature transmission, regardless of a change in value).

◦ Select the "Check only" entry to connect to other
Condition lines or manual operation (see *"16.6 Status and operation – Programmes "on page 47*) An automatic condition check in the form of a Active status Query.

Change channel selection to Condition field
• In the Condition box, locate the channel that you want to change. Click the channel name shown to select a different channel from the channel list.
  -> "12 channel Selection" on page 34

  ⓘ Then, check or change the channel's associated
  Condition check According to the operating instructions in *Channel State as set condition.*

Set System state as condition
Run the points listed below to select a system state, that is, a System variable and its value or status as a condition. The type and scope of the list of values available for a conditional check depends on the type of System variable:

• In the "condition: If..." or "condition-otherwise if..." Field, select "System State" in the select list.
• Click on the following button "system variable Selection" to select the desired system variable from the system variables list.
  -> 14 System variable Selection "on page 36

  ⓘ In the System variables list, only system variables that do not appear in a channel Assigned (see Channel Assignment in *Edit System Variable).*

• Select the desired state from the following selection list
  Value to be considered a condition.
  Depending on the nature of the selected system variable status, proceed as follows:

  ◦ For a value that is uniquely defined by the select list (for example, "present" for the system variable presence), the definition of the value is terminated with the selection in the select list.

  ◦ If the desired value cannot be defined completely using the selection list and the range of values is necessary (for example, to define a range of values), a further description appears automatically in the
  Form: "In the value range of *<Wertebereichgrenzen>*". Click on the button
  Running   *<Wertebereichsgrenzen>*To display the window for defining a
  To open the value range.   *-> "18.2.2 setting of the value range" on page 92*

  ⓘ The type and scope of this status collection depends on the selected system variable, which is the type of the system variable.

• Select the desired trigger from the following selection list:
  ◦ Select the "Trigger on Change" entry to activate the automatic

*c*ondition check when changing the system state.

- ◦ Select the "Trigger on Update" entry to initiate the automatic condition check whenever the system status is transmitted.
- ◦ Select the "Check only" entry to connect to other
  Condition lines or manual operation (see *"16.6 Status and operation – Programmes "on page 47)* An automatic condition check in the form of a *a*ctive status Query.

Change system variable selection to condition field

- In the Condition box, locate the system variable that you want to change. Click on the system variable name shown to select a different system variable from the system variables list. *-> "14 system Variable Selection" on page 36*

  Then review or change the system variables associated with the Condition check according to the operating instructions in *System State set as condition.*

  If a variable definition is changed (for example, a value list expands) after it is already in use in programs, the affected program rows must be recreated or changed at least once to use the new condition check value.

Set time constraints/time programs as condition

To select a time dependency, that is, a time program as a condition, run the points listed below:

- Select "Time" in the "condition: If..." or "condition-otherwise if..." field in the selection list.
- Click the "Time Module" button below to program the timing constraints and open the Time Module programming window.
  -> 22.2.3 setting Timemodule "18.2.3 setting Timemodule" on page 94
- Select the desired trigger from the following selection list:
  - ◦ Select the "Trigger to Times" entry to initiate the automatic condition check at exactly the specified time (defined by "start" at a time or by "start" and "end" for a period).

  - ◦ Select the "Check only" entry to connect to other
    To trigger the comparison of the system time with the defined time range.

Changing the time program

- In the Condition box, locate the time program that you want to change. Click on the displayed short form of the time program to open the window for setting the time program. *-> "14 system Variable Selection" on page 36*

18.2.1.6   Define Activities

Set channel state as activity/action

An activity is the change of a channel or system state as well as the execution of a

script. Activities are not necessarily executed in the order in which they are listed.

To program a channel activity as an action of a program, execute the points listed below. In other words, the channel is assigned a specific channel state as an action. The type and scope of the programmable actions to a channel are dependent on the channel:

- In the "activity: Then..." or "activity: otherwise..." Field, select the "channel state" entry in the selection list.
- Click the "Channel Selection" button next to select the desired channel from the channel list. -> *12 Channel Selection*

  Only channels that have a changeable state or can trigger an action appear in the channel list.

- The channel list also shows system variables associated with a channel (See Channel Assignment in *Edit System Variable).*
- Set the time delay of the action to be performed on this channel. Select the time delay with the selection list:
  ◦ Select immediate to perform this activity in an undelayed manner.
  ◦ Select delayed to run the activity time-delayed. Set
    With the input fields that appear *< Input field-time >*
    < select list-Unit > the time delay: in the input field, enter the
    Value and then select the unit (seconds, minutes, hours) with the selection list. The time delay refers to the triggering event rather than a distance to a aligned with action row.

- From the next selection list, select the channel state you want the channel to accept.
  Depending on the type of channel selected, proceed as follows:
  ◦ For a channel status that is clearly defined by the selection list (for example,

    "Switching state: On" for a switch actuator), the definition of the channel status is terminated with the selection in the selection list.

  ◦ If a value entry is necessary to fully define the desired channel state (for example, to specify a Dimmwertes), the
    Automatically enter the field "on *< Input field Value >*". The definition of a value is as follows:
    If the desired value is a pure numerical value:
    Enter the desired value that the channel should accept directly into the
    Input Field "on *< Input Field-value >* .

    If the desired value is a numerical value that is to be extracted automatically from the value of another channel or system variable:
    Click the *Value input icon* directly after the input field " o*n*
    < Input Field-value > "To open the Advanced Value Entry window and
    the definition of the value. -> *"18.2.5 Value Input" on page 101*

    If the desired value is a text:
    Type the text you want the channel to accept or display,
    Directly into the input field "on *< Edit field-Text >*.

If the desired value is a text that is to be extracted automatically from the value or state of another channel or system variable:
Click on the "text input" icon just after the input field
"< Edit field-Text >" to open the Advanced Text Entry window and
To make the definition of the text there. *-> "18.2.5 Value Entry" on page 101*

ℹ️ If the selected channel offers a more complex channel action, you can click
On the small white sheet in the action line, the complex channel action is defined in a popup window.

Change channel selection to Activity field

- In the Activity box, locate the channel that you want to change. Click the channel name shown to select a different channel from the channel list.
  -> "12 channel Selection" on page 34

  ℹ️ Then also check or change the corresponding definitions for the desired action, i.e. the desired channel status according to the
  Operating instructions in *Set channel state as activity/action.*

Set system state as activity/action

Execute the points listed below to program the setting (define) of a system state as an action of a program. In other words, the system variable is assigned a specific state or value as an action. The nature and scope of the programmable actions for a system variable depend on the type of system variable:

- In the "activity: Then..." or "activity: otherwise..." Field, select the "System State" entry in the selection list.
- Click on the following button "system variable Selection" to select the desired system variable from the system variables list.
  -> "14 System variable Selection" on page 36

  ℹ️ In the System variables list, only system variables that do not appear in a channel Assigned (see Channel Assignment in *Edit System Variable).*

- Set the time delay of the action that is performed on this system variable should be determined. Select the time delay with the selection list:
  ◦ Select immediate to perform this activity in an undelayed manner.
  ◦ Select delayed to run the activity time-delayed. Set
    with the input fields that appears *< Input field-time >*

    < select list-Unit > the time delay: in the input field.
    Then use the selection list to select the unit (seconds, minutes, hours).

- Select the desired state from the following selection list
  The system variable should accept.
  Depending on the type of system variable selected, proceed as follows:

  ◦ For a state that is uniquely defined by the select list (for example, "present" for
    system variable "presence"), the definition of the system variable status is terminated with the selection in the select list.

  ◦ If a value entry is necessary to fully define the desired state (for example, to set a numerical value), the
    Input Field "on   *< Input field value >*" the definition of a value is as follows:
    If the desired value is a pure numerical value:
    Enter the desired value that the channel should accept directly into the
    Input Field "on   *< Input field-value >* .

If the desired value is a numerical value that is to be extracted automatically
from the value of a channel or other system variable:
Click on the "value input" icon just after the input field "
< Input Field-value > "to open the Advanced Value Entry window and
the definition of the value.   -> *"18.2.5 Value Entry" on page 101*

ℹ If a variable definition is changed (for example, a value list is expanded),
After it is already in use in programs, the affected program lines must be
recreated or changed at least once to use the new condition check value.

Change system variable selection to condition field or activity field

In the Condition field or activity field, locate the system variable that you want to change. Click
on the system variable name shown to select a different system variable from the system
variables list. -> *"14 system Variable Selection" on Page 36*

ℹ You can also review or change the corresponding definitions for the value query or
action.

Execute script Program as activity/action

Execute the following points to trigger the execution of a script-program-Mes as an action of a
program. In other words, as an action, the script program,
According to the operating instructions in *22.2.4 Script Programming* created and executed:

• In the "activity: Then..." or "activity: otherwise..." Field, select "Script" in the selection list.

• Click the Next button "Create script" to open the pop-up window for programming
the script program.
-> *"18.2.4 Script Programming "on page 100*

• Set the time delay to run the script. Select the time delay with the selection list:

  ◦ Select Immediate to start the run undelayed. ◦
Select delayed to start the execution time delay. Set
With the input fields that appears *< Input field-time >*
< select list-Unit > the time delay: in the input field,
and then use the selection list to select the unit (seconds, minutes,
hours).

ℹ A deferred script action cannot be canceled. To achieve such a ality, the use of a
deferred system variable and a second program that triggers the variable change is
recommended.

Example: Switching on the actuator for a certain amount of time

An actuator should be switched on for a certain period of time. To do this, it is necessary to
use a power-on delay. Otherwise, the program may not function properly.

Figure 50:   **Programs-Program Creation**

The setting of the duty cycle is always carried out only with a switching command. Therefore, it is important that the duty cycle is set before running the switching command, because the actions in the then or otherwise path of a central program are not processed Zwin in the specified order. Even if you set the start-up time in the line of a pro-gram and only switch the actuator on the following line, it could happen that the actions are processed in the reverse order.

If an actuator is switched without a specified or "post-set" duty cycle, it remains in this state until the next switching command.
To solve the problem, the switching of the actuator can be delayed. Here, a relatively short delay (e.g. 1 second) is sufficient in the all-mean.

18.2.2 setting of the value range

The setting or default of a range of values is done in this pop-up window.
The condition of the range of values is then fulfilled, that is to say true, if the value to be evaluated mathematically satisfies the conditions specified in the field "value range".

Figure 51: Pop-up-setting the value range

Setting the value range
Select the points listed below and enter the relevant information there.

Then complete the configuration according to the instructions under "*Accept Input and close window.*

Use the buttons to select the entry:

• "from   < *Input Field 1* > <unit> to smaller < *Input Field 2* > <unit> "

This setting allows you to specify a range of values that can be specified by the entered limit values.

ⓘ The value in the From Input field (input field 1) belongs to the range of values, the value "to smaller" (input field 2) no longer belongs to the range of values. The value in input field 2 must be greater than that in input field 1.

For example, the input "from 10 °c to less than 20 °c" defines a range of values from 10 °c to 19.9 °c, i.e. the value 20 °c no longer belongs to the valid range of values. The limits of the upper limit value are required in order to prevent undefined states from being string together by overlapping.

• "Greater than *<Input Field>* <unit> "
  This setting allows you to specify a range of values that can only be
  limit entered. The value in the input field does not belong to the valid range of values.

For example, the input "greater than 10 °c" defines a range of values from 10.1 °c to "infinity", i.e. the value 10 °c no longer belongs to the valid range of values.

- "Less than *<Input Field>* <unit> "
  This setting allows you to specify a range of values that can only be
  limit entered. The value in the input field does not belong to the valid range of values.

  For example, the input "less than 10 °c" defines a range of values from "Minus infinity" to 9.99 °c, i.e. the value 10 °c no longer belongs to the valid range of values.

- "Greater than or equal to *<Input Field>* <unit> "
  This setting allows you to specify a range of values that can only be
  limit entered. The value in the input field belongs to the valid range of values.

  For example, the input "greater than or equal to 10 °c" defines a range of values from 10.0 °c to "infinity".

- "Less than or equal to *<Input Field>* <unit> "
  This setting allows you to specify a range of values that can only be
  Limit entered. The value in the input field belongs to the valid range of values.

🛈 For example, the input "less than or equal to 10 °c" defines a range of values from "Minus infinity" to 10.0 °c.
The displayed unit is automatically inserted by the system. It is, for example, dependent on the type of channel (temperature sensor, humidity sensor, etc.) for which this setting is made.
A range of values that includes only one value, that is, quasi "equals", cannot be defined. It is also necessary to define a range of values for such an application.

Accept input and close window
- Click OK in the footer to accept the entries and close the window.

Discard input and close window
- Click Cancel in the footer to close the window without taking the changes and entries.

18.2.3 setting Timemodule

The setting or preset of time settings, i.e. the programming of Zeitberei, time points and their repetition and validity is done in this pop-up window.
You can reach this window using the corresponding operating instructions in *"18.2.1 Program creation "on page 76* .

Figure 52:   **Pop-up-time module setting**

The window is divided into the areas of
1. Time with the determination of the time ranges or time points.
   The actual determination of the daily time range in which an activity is to be executed, or the determination of a fixed day point at which an action is to be started, is done in this field.

2. Recurrence pattern with the definition of repetition
   This field is used to determine the time period for the time of day, i.e. when the action defined per (day) time range is to be repeated.

3. Validity period with the determination of the temporal validity
   This field is used to determine at what times the time of day is set, and when the repeats defined in recurrence patterns are performed.

The condition of the time module is then considered to be fulfilled, that is, true, if all three sub-conditions are met under "time", "Recurrence pattern" and "lifetime". The conditions of the time module are true if

1. The current system time is within the time range defined in the Time field, or the system time is exactly the same as the specified time.
     And
2. The system date corresponds to the date or day specifications specified in the Recurrence pattern field
        And
3. The system date is within the time window defined in the Validity period field.

Programming the time module-Creating a timer program
Select the points listed below and enter the appropriate information
Information. Close the settings according to the operating instructions
overtake input and close window from

Time entry
This field is used to determine the day-time range in which an activity is to be executed, or to set a fixed day point at which an action is to be started.

Select the entry with the radio button:
• "Time Range"
    To define a time range, click on the radio button "Time range". Then set the "Time range" with the following radio buttons:
    ◦ "Start < Select field-Start >   End < Select field-End >
        Duration < Select field-duration"
        With this selection, you specify a time range that is limited by the time you
        enter "start" and "End", or by entering "start" and "duration".

        Enter the beginning of the desired time range in the Start selection box or selec t a preset from the selection list.
          Enter the end of the desired time range in the End selection box or select a preset from the selection list or
        Enter the duration of the time range in the Duration selection box, or select a preset from the selection list.

        🛈   The time in "Start" belongs to the defined time range, whereas the value in selection field "End" (*Selection Field 2*) no longer belongs to the time range. For example, the entry "Start" 20:00, "End" 20:30 defines a time range from 20:00 pm to 20:29:59 pm. The time range is invalid when the system time is skipped at 20:30 a.m. The limitation of the upper point of time is necessary to prevent undefined states when string togethering time windows by overlapping.
    ◦ "All day"
        You use this selection to define a time range that can be set over the entire

Day, i.e. from 00:00:00 a.m. to 23:59:59 p.m. The time part condition is therefore always fulfilled.

◦ Astro Daytime
With this selection, you define a time range that lasts from sunrise to sunset, i.e. the broad daylight tag. The time range is automatically recalculated from the control Panel every day.

The Astro time only coincides with the actual sunrise and sunset times when the time and position settings (cf.
"19.12.3 Time and position setting" on page 153) for the location are correct. Furthermore, landscape conditions such as Mountains, high forests etc. significantly reduce the real days.

◦ Astro Night
With this selection, you set a time range that lasts from sunset to sunrise, i.e. the night marks. The time range is automatically recalculated from the control Panel every day.

The Astro time only coincides with the actual sunrise and sunset times when the time and position settings (cf.
"19.12.3 Time and position setting" on page 153) for the location are correct. Furthermore, landscape conditions such as Mountains, high forests etc. significantly reduce the real days.

◦ "Point in Time"
To specify a point in time, click the "Time" radio button. With this selection, you specify a single day (trigger point) at which an action is to be started. The time is defined by the "beginning". Enter the desired time in the Start box or select a preset from the selection list.

• "Recurrence Pattern" Entry
The determination of the time period for the time of day set in the term, i.e. when the action defined per (day) time range or time is to be repeated, is done in this field.

Select the entry with the radio button: ◦

"Unique"
To specify an action to be performed only once on a specific date, click the radio button "once". The unique date is defined by the entry "AM".

Enter the desired execution date in the "AM" selection box or select a day using the selection list (Calendar function).

◦ "Time Interval"
To define an action that should repeat itself regularly within (!) the defined time range (or from the defined time), click the radio button "time interval". The time interval is defined by the entry "all
< Input field-time >   ".
Enter the desired time interval in the input field "all *< Edit Field-Time >*and select the unit using the selection list (seconds, minutes or hours).

○ "Daily"
To define an action to be repeated in daily, i.e. weekly, intervals, click on the radio button "daily". Then set the daily interval with the following radio buttons:

A. "Every day"
With this selection, a daily repetition takes place.

B. "All   < *Input Field Tags* Days"
This selection is used to repeat the rhythm of the input field
Defined number of days.
Enter the desired number of numbers in the number box.

🛈   You must set the start of the rhythm in the "Validity period" field.

C. "On weekends (Sat. until Sun.)"
With this selection, the action takes place only on weekends, i.e. on the days of Saturday and Sunday.

D. "Every day except on weekends (Mo. to Fr.)"
With this selection, the action takes place only on weekdays, i.e. on Monday, Tuesday, Wednesday, Thursday and Friday.

○ "Weekly"
To set an action to repeat at weekly intervals, click the Weekly radio button. Then use the following radio buttons to set the weekly interval:

""Every week at"
A. With this selection, the action takes place every week on the days marked by the checkbox in front of the day names. Select the days you want:

If the box is checked, the day is selected and the action takes place on that day.

If the box is unchecked, the day is ignored and the action does not take place on that day.

B. "All   < *Week number input field* >Weeks at "
This selection is used to repeat the rhythm of the input field
Defined week number on the days marked with the checkbox before the
day names. Select the days you want:
If the box is checked, the day is selected and the action takes place on that day.

If the box is unchecked, the day is ignored and the action does not take place on that day.

○ "Monthly"
To set an action to repeat at monthly intervals, click the Monthly radio button.
Then use the following radio buttons to set the monthly interval:

A. "AM < *Edit Field Month* . Day of each   < *Edit Field Month* > Month"
With this selection, you specify a repeat interval that is determined by the
Entry of a month (month) and month (input field month) is defined. Thus,
repetitions in the form "on the 12th day of every second month" can be set.

Enter the desired day of the month in the Month Date Entry field. Enter the
month interval in the month input field.

B. "AM < *Wochentagsnummer selection List* Every
< *Edit Field Month* > . Month"
With this selection, you define a repeat interval that is defined by the entries of a
specific weekday (selection list Wochentagsnummer and selection list weekday)
and the month rhythm (input field months). Thus, repetitions in the form "on the
fourth Monday of every 2. Month.

Select the desired day of the week using the Wochentagsnummer
and weekday selection list.
Enter the month interval in the month input field.

- ◦   "Annually"
  To define an action to be repeated at annual intervals, click the "Annual" radio
  button. Then use the following radio buttons to set the monthly interval:

  A. "Every < *Edit field-tag* >   . < *select list-month* >
  With this selection, you specify a repeat interval that is determined by the
  Entries of a year (the day and month input fields are defined. Thus, repetitions
  can be set in the form "every July 6th".
  Enter the desired day in the tag field.   Enter the month you want
  in the Month entry field.

  B. "AM < *Wochentagsnummer selection List*   in
  < *Edit Field Month* >"
  With this selection, you specify a repeat interval that is determined by the
  entries of a specific weekday (selection list Wochentagsnummer
  and selection list weekday) and the month (Month input field) is defined. Thus,
  repetitions in the form "on the fourth Monday in September" can be set.

  Select the desired day of the week using the Wochentagsnummer
  and weekday selection list.
  Enter the month in the Month entry field.

- •   "Validity Period" Entry
  The determination of the times at which the time of day is set, and whether and when the
  repeats defined in the "recurrence pattern" are executed, is
  In this field. This validity period is defined by the ʊtart time and the ending point.

- •

  - ◦   Enter the start time, which is the start of the validity period. The date
    is defined by the entry "Start: < *select field-Start* > ". Enter the

The start date you want in the Start selection box or select a day using the selection list (Calendar function). By default, the current system date is entered here.

∘ Enter the end date, i.e. End of the validity period. Set the end of the validity period with the following radio buttons:

A. "No end Date"
With this selection, you do not set an end date, the validity period is not limited in time.

B. "Ends after < *Input field-number* >   Dates"
With this selection, you specify the end time that is specified by the entered Number (input field number) of the performed repetitions is defined. Enter the number of repetitions allowed in the Number entry field.

C. "Ends on < *select field-End Date* >   "
With this selection, you specify the end time that is specified by the entered Date (selection field end date) is defined. Enter the desired end date in the End Date selection box or select a day using the selection list (Calendar function).

Accept input and close window
• Click "OK" in the footer to accept the entries and close the window.

Discard input and close window
• Click "Cancel" in the footer to close the window without taking the changes a nd entries.

18.2.4 Script Programming

A script program is entered in this pop-up window. You can reach this window via the corresponding operating instructions in *"18.2.1 Program creation" on page 76*.

Figure 53: Pop-up-script programming

Create program

Information on how to create and test script programs for the system as soon as they are available.

Test program

Information on how to create and test script programs for the system as soon as they are available.

Accept input and close window
• Click "OK" in the footer to accept the entries and close the window.

Discard input and close window
- Click Cancel in the footer to close the window without taking the changes and entries.

18.2.5 Value Input

The extended input of a numerical value is done in this pop-up window. You can reach This window using the corresponding operating instructions in *22.2.1 Program Creation* .

Figure 54: Pop-up-value input

Enter Numerical value
Select the points listed below and enter the appropriate information
Information. Close the settings according to the operating instructions
Take over input and close window
- Select value from the selection list.
- In the next selection box, enter the value or select a value from the list if it exists.

> ℹ️ Whether and in what form a selection list is offered for value input depends on which channel the value input was called from, i.e. Which channel the value input is working on.

Automatically transfer the numerical value from the value or state of a channel select the points listed below and carry the corresponding information
Information. Close the settings according to the operating instructions
Take over input and close windows
- Select "Channel state" from the selection list.
- Click the "Channel Selection" button to get access to the module for selecting a channel and select the desired channel.
             -> *"12 channel Selection" on page 34*
- In the select list that you want, select the desired channel value, which you would like to apply automatically as the values.
   > ℹ️ Whether and in what form a selection list is offered to select a channel value depends on the selected channel type.

Automatic numerical value from the value or state of a system variable take over

Select the points listed below and enter the appropriate information
Information. Close the settings according to the operating instructions
Take over input and close winow

- Select System State from the selection list.
- Click the "System Variable Selection" button to access the module to select a system variable and select the desired system variable, whose value you want to automatically transfer as value.

Accept input and close window
- Click OK in the footer to accept the entries and close the window.
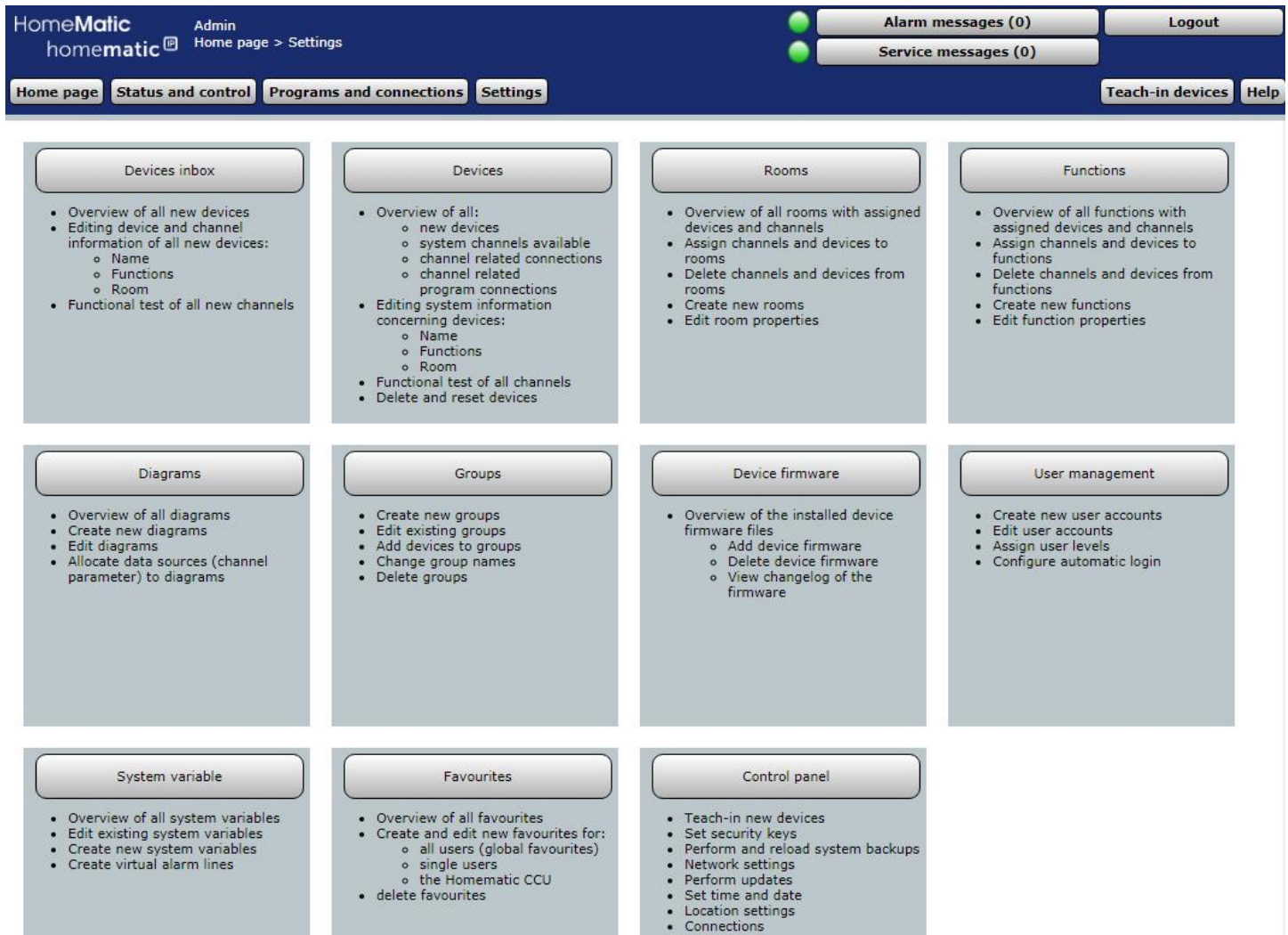
Discard input and close window
- Click Cancel in the footer to close the window without taking the changes and entries.

19   System configuration as Administrator - Settings

The configuration of all system settings is done via the button "settings".

ℹ️ Users with the user permission level are only provided with limited configuration options for their own user account.

New *teach-in* equipment and channels Configure-inbox Edit •

Click on "Device Inbox (x)" To get an overview of all new fishing devices and their channels and configure the devices and channels.

Reconfiguring device and channel parameters

•   Click on "Devices" to get an overview of all the fishing equipment and channels (including system channels) and to configure the devices and channels. Configure.

Assigning Devices to Rooms

•   Click Rooms to get an overview of all the rooms and their associated channels.

Creating spaces and editing room parameters

•   Click on "Rooms" to get an overview of all rooms and rooms

To create and edit.

Assigning Equipment to *functions*
• Click on "functions" to get an overview of all the functions and the associa
ted channels.

Creating *function*s and editing the work parameters
• Click on "functions" to get an overview of all functions and to create and edit functions.

Creating and editing System variables
• Click System variable to get an overview of all system variables present in the system and to create and edit the system variable.

Creating and editing alarm lines
• Click on "System variable" to get an overview of all system variables in the system including all alarm lines created and to create and edit alarm lines.

Create or edit favorite pages and Favorites lists •
Click on "Favorites" to get an overview of all your favorite pages and to create and edit favorite pages.

Configure user Account
• Click User account to get an overview of all user accounts and create and edit user accounts.

Configuring and Updata Central
• Click "Control Panel" to access the modules to configure the console.

Edit time and date settings
• Click Control Panel to gain access to the time, date, and location module.

Edit Security Settings
• To gain access to the system Security Configuration module, click Control Panel.

Create and replay backup
• Click Control Panel to gain access to the module for managing backups.

Performing a Reset
• Click "Control Panel" to access the module to run the

19.1   Device inbox

The initial configuration of a device and the associated channels (after successful connection to the control centre) takes place in the menu item "Device Inbox". All newly learned devices appear first here and must also be configured here.

ⓘ Devices and the associated channels that are still in the Inbox are not available in the system for further operating and configuration tasks.

Figure 56:   **System configuration-Device Inbox**

• The list of newly registered devices and channels is set up in a tree structure. Click on the "+" or "-" icons to open or close the tree structure.

• Click on the "+" icon in front of a device to select the channels or channel pairs To get displayed.

The table entries for the devices, channel pairs, and channels are divided into systemal and user information. System data is automatically generated by the central gene-bareboat and cannot be edited either. Only the user information can be configured in the list. The following columns exist in the specified order:

ⓘ The "Done" button on the device line is only available if all channels belonging to the device are configured and they are confirmed in each channel line by clicking on the checkbox.

Configure device
Select the points listed below on the device line and enter the corresponding information.

• Then configure all the channels of the corresponding device according to the Instructions under   *Configure Channel* .

• Then complete the configuration according to the instructions under   *Devices or Complete Channel Configuration* Off.

Transfer Mode entry
• Click in the field to gain access to the module for setting the transfer mode.   -> "Set 19.2.3 Transfer Mode" on page 116
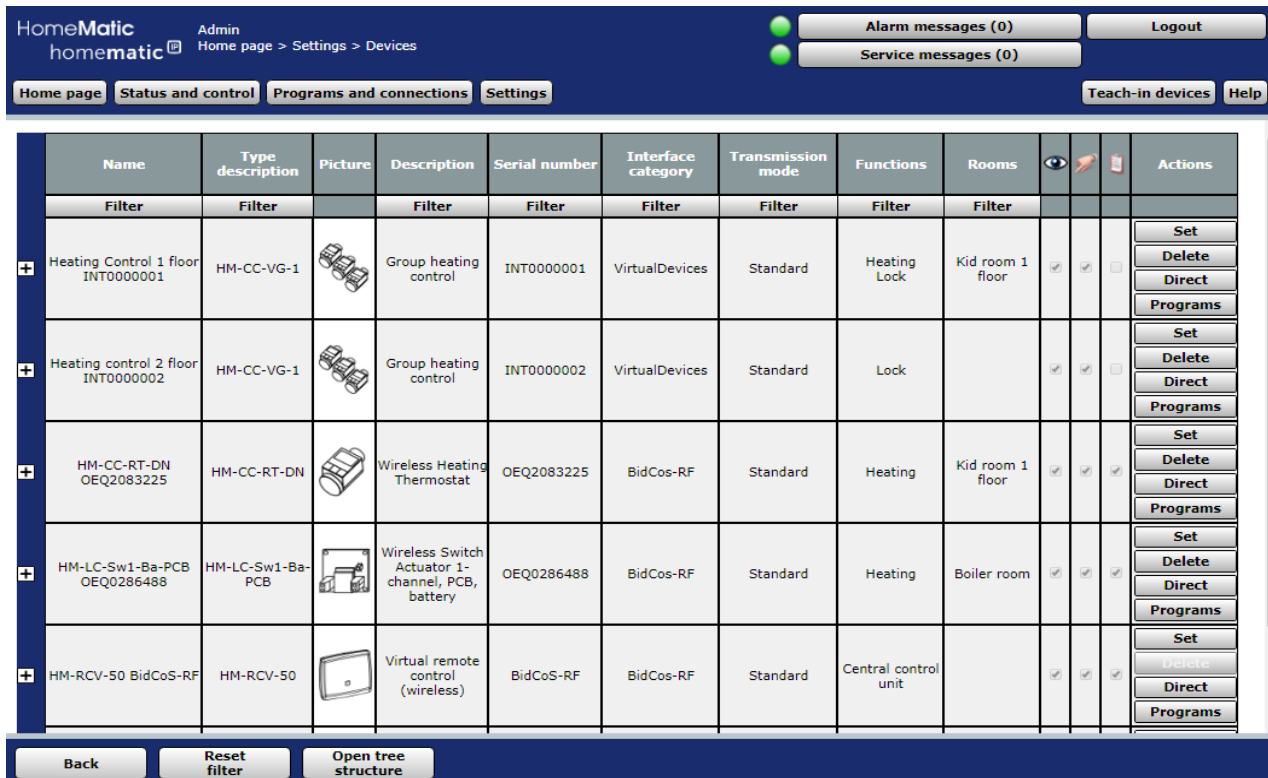
ℹ️ Switching the transfer mode is not available for all devices. For example, some devices or channels are set to secure transmission (e.g. keymatic), while other devices are fixed to standard transmission. Be aware that for remote controls, both channels of a pair of buttons must be gured separately.

Entry "Name"

Here you can enter a freely definable entry for the device name. Device names and channel names must be unique, i.e. they cannot be assigned several same names. Device, channel, program and variable names should always be unique throughout the system.

"*Functions*" entry

Here you can define to which plant a device is to be assigned. The system assigns a standard work station to each of the advisers.

- Click in the field in the respective channel and select the appropriate unit by means of the checkbox after the respective entry of the list. Multiple selection is possible.

- Click on "New..." In the list to create a new work.

Room entry

Here you can specify to which room a device is to be assigned. The Standar Deintrag is empty.

- Click in the field in the respective channel and select the appropriate room by means of the checkbox after the respective entry of the list. Multiple selection is possible.

- Click on "New..." In the list to create a new room.

Function Test Entry

- Click on "Test" to perform a function test if necessary (see " *Functional (short test) of a device*")

Action entry

- Set the attributes of the device by selecting the appropriate checkbox.

  ○ CheckBox "Visible"
    Select this option from the checkbox.
    If the box is checked, the device is in the Windows under"*16.8 Status and operation – System Log "on page 48* Available. The current status of the device can be Look at it.
    If the box is unchecked, the device is in the Windows under"*16.8 Status and Operation – System Log "on page 48* Not available. The device can Therefore not be operated via the WebUI, the status cannot be seen.

  ○ CheckBox "Operable"
    Select this option from the checkbox.
    If the box is checked, the device is in the Windows under"*16 Status and Operation" on page 39* Available. The device can be operated.

If the box is unchecked, the device is in the Windows under"*16 Status and Operation "on page 39*   Not available. This means that the device cannot be WebUI.

◦ CheckBox "Logged"
Select this option from the checkbox.
If the box is checked, the device is for the system log function (*"16.8 Status and operation – System log "on page 48*   ) released. All actions that The device is being recorded.
If the box is unchecked, the device is for the system log function (*"16.8 Status and Operation – System log "on page 48)*   Locked. There is no Record for this device.

Configure Channel

The configuration of the channels is done in the same way as the configuration of the device. Enter all entries in the channel line and enter the corresponding information in the A. For the description of the individual entries see "   *Configure device*   ". All entries only to the corresponding channel. •

Complete the configuration according to the instructions in   *Devices or Complete Channel Configuration*For the channel.

Configure channel Pair

It is not possible to configure a pair of channels together. Configure the two channels separately. For a better overview, you should select the channel names of two channels b elonging to a channel pair in such a way that they differ only in an attached numbering or by a function addition (e.g. "living room light on" and "living room light Off").

Complete device or channel configuration

Here you can complete the channel configuration using the "Done" checkbox. •
Select the checkbox if you have made all entries in the channel line or Control.

Complete device configuration using the "Done" button •

Click the "Done" button when you have made all entries on the device line or Control.

🛈 The "Done" button is only available if all channels associated with the device are configured and this is confirmed in each channel line by clicking on the checkbox.

Perform function test (test) of a channel

• Locate the channel in the list where you want to perform a function check (test).

• Click the "Test" button to trigger the function test. which function is triggered on a channel is specific to the channel:
A. For actuators (switches, dimmers, etc.), the channel state is twice at each actuation

Selt (toggle function), the OK field is highlighted in yellow and the time stamp is deleted. After executing the action, the actuator automatically returns to the Control Panel. The time stamp associated with the confirmation is entered and the OK field is stored in green.

B. For sensors/remote controls, the OK field is highlighted in yellow and the time stamp is deleted. The switchboard is now waiting for a message from the channel. For automatically transmitting sensors (e.g. weather sensors) This happens automatically in the corresponding Transmittera-ster. For manually actuated sensors, the corresponding channel must be "actuated" (for example, pressing the corresponding remote control button). The time stamp associated with the notification is entered and the OK field is stored in green.

Perform function test (test) of a device
- The functional test for devices is carried out in the same way as the functional test of a channel. Click the "Test" button on the device line to trigger the function test for all channels belonging to the device in parallel. For more information please refer to The point " *Perform function test (test) of a channel* ".

Setting channel-specific parameters
- Locate the channel in the list where you want to set the channel parameters. • Click "Set..." In the line belonging to the channel to gain access to the module for setting channel parameters.   -> *"Set 19.2.1 Channel parameters" on page 113*

Setting device-specific parameters
- Locate the device in the list where you want to set the device parameters. • Click "Set..." In the line belonging to the device to gain access to the module for setting device parameters.   -> *"19.2.2 Device parameters Setting "on page 114*

Switching the secure transfer mode on and off
- Locate the channel in the list where you want to change the transfer mode, that is, you want to switch from standard transmission to secured transmission or vice versa.
- In the line that belongs to this channel, click in the Transfer Mode field to gain access to the module for setting the transfer mode.   È *"Set 19.2.3 Transfer Mode" on page 116*

> 🛈   Switching the transfer mode is not available for all devices. For example, some devices or channels are set to secure transmission (e.g. keymatic), while other devices are fixed to standard transmission. Be aware that for remote controls, both channels of a pair of buttons must be gured separately.

Switching the default transfer mode on and off
- Locate the channel in the list where you want to change the transfer mode, that is, you want to switch from standard transmission to secured transmission or vice versa.
- In the line that belongs to this channel, click in the Transfer Mode field,

To gain access to the module for setting the transfer mode.

-> "Set 19.2.3 Transfer Mode" on page 116

Switching the transfer mode is not available for all devices. For example, some devices or channels are set to secure transmission (e.g. keymatic), while other devices are fixed to standard transmission. Note that for remote controls, both channels of a pair of buttons must be configured separately.

19.2   Devices

The configuration of a device and the associated channels is done in this window. All devices and channels listed in this window are available in the system for operating and configuration tasks.

ⓘ New fishing equipment is initially only in the Inbox and must be configured there as well.

Figure 57:

The list of devices and channels available in the system is built up in a tree structure. Click on the "+" or "-" icons to open or close the tree structure. Click on the "+" icon in front of a device to get the channels or channel pairs displayed.

The table entries for the devices, channel pairs, and channels are divided into systemal and user information. System data is automatically generated by the central gene-bareboat and cannot be edited either. Only the user information can be configured in the list. The following columns exist in the specified order:

1. Name
2. Type designation
3. Image
4. Name
5. Serial Number
6. Interface/Category
7. Transfer Mode
8. Functions
9. Rooms
10. Visible/operable/logged
11. Actions

110

All of the above entries are listed under *"19.1 Device Inbox" on page 105*
described.

Configure device
Please follow the instructions as described in the same operating instructions   *"19.1*
Device Inbox "on page 105   are described.

Configure Channel
Please follow the instructions as described in the same operating instructions   *"19.1*
Device Inbox "on page 105   are described.

Configure channel Pair
Please follow the instructions as described in the same operating instructions   *"19.1*
Device Inbox "on page 105   are described.

Delete Device
•   Locate the device you want to delete in the list. •
      Click "Delete..." In the line that belongs to the device to gain access to the module to
      delete the device and follow the instructions on the screen. È
          "Delete 19.2.4 Device" on page 117

ℹ️   Delete a device only if there are no more links to this device (see the "Links" column). If
      the device is still used in direct links and/or programs, please remove it first by calling up
      the list of links belonging to the device and editing them accordingly. If you delete a
      device that is still used in links, unwanted program relationships may occur.

Perform function test (test) of a channel
Please follow the instructions as described in the same operating instructions   *"19.1*
Device Inbox "on page 105   are described.

Perform function test (test) of a device
Please follow the instructions as described in the same operating instructions   *"19.1*
Device Inbox "on page 105   are described.

Setting channel-specific parameters
Please follow the instructions as described in the same operating instructions   *"19.1*
Device Inbox "on page 105   are described.

Setting device-specific parameters
Please follow the instructions as described in the same operating instructions   *"19.1*
Device Inbox "on page 105   are described.

Switching the secure transfer mode on and off
Please follow the instructions as described in the same operating instructions   *"19.1*
Device Inbox "on page 105   are described.

Switching the default transfer mode on and off
Please follow the instructions as described in the same operating instructions *"19.1 Device Inbox "on page 105* are described.

Call up the list of direct links associated with the device or channel •

In the list, locate the device or channel to which you want to see the list of direct links.

•	Click the "Direct" button in the line belonging to the device to get access to the list of related direct links *-> "18.1 Direct Device Shortcuts "on page 62*

Call up the list of programs belonging to the device or channel •

In the list, locate the device or channel to which you want to view the list of programs.

•	Click the "Programs" button in the line that belongs to the device to access the list of associated programs *-> "18.2 Program creation and Central Link "on page 75*

Set 19.2.1 Channel parameters

The configuration of the specific parameters of a channel is carried out in this pop-up
St. You can reach this window using the corresponding operating instructions in *"19.1 Devices Inbox "on page 105* and *"19.2 Devices" on page 110*

The window is divided into the areas of
1. Description of the device
2. List the channel (or channel pairs: the Channels) with the corresponding channel parameters

Input is only possible in the parameter column. All other information and other Formations will be *24.1 Device Inbox* an*d 24.2 Devices* Defined.

Figure 58: Pop-up-set channel parameters

The nature and scope of this parameter collection depends on the device type. The parameters are listed with the parameter name and the corresponding input field.

ℹ️ If the device has channel parameters that affect direct links and/or programs, you will also receive a line with a hint text. Please follow the instructions as otherwise unwanted program relationships may arise.

Edit Channel Parameters
• Select the points listed in the Parameters column and select the appropriate settings.

ℹ️ The channel parameters are preoccupied with standard values, so that usually no settings are required.

ℹ️ Since the number and type of channel parameters depend on the respective device types, it only follows a basic description of the parameter setting at this point.

Accept all entries and close the window •
>   Click "OK" in the footer to save the entries and close the window.

ℹ️ To store the changed channel parameters, communication between the device and the central station is necessary. Devices that are not always on standby must be placed in configuration mode or teach mode. Please refer to the operating instructions for the device or the Statusin-fo generated by the WebUI. -> *"18.1.5 Link and Program status " on page 73*

Discard all entries and close the window •
>   Click Cancel in the footer to discard the entries and close the window.

Set 19.2.2 device Parameters

The configuration of the specific parameters of a device is done in this pop-up fen-ster. You can also set channel parameters in this pop-up window.

You can reach this window using the corresponding operating instructions in *"19.1 Devices Inbox "on page 105*   And *"19.2 Devices" on page 110*.

The window is divided into the areas of

1. Description of the device

2. List of device parameters

3. List the channel (or channel pairs: the Channels) with the corresponding channel parameters

Figure 59:   **Pop-up-set device parameters**

Inputs are only in the Parameters column under device parameters and Channel parameters Possible. All other details and further information will be *"19.1 Devices Inbox "on page 105 a*nd *"19.2 Devices" on page 110* Defined.

Edit Device Parameters

- Select the points listed in the Parameters column in the Device Parameters area and select the appropriate settings.

ℹ️ The device parameters are preoccupied with standard values, so that usually no settings are required.

ℹ️ Since the number and type of device parameters depend on the respective device type, it only follows a basic description of the parameter setting at this point. For further information on the specific device parameters, please refer to the description of the corresponding device in the "Homematic script Part 4 data points" at https://www.eq-3.de/service/downloads.html. or here https://homematic-forum.de/forum/viewtopic.php?f=49&t=45485

Edit Channel Parameters

- Click Open parameter list in the channel parameters area to open the list of channels associated with the device.
- In the list, find the channel whose channel parameters you want to edit. •
  Select the point listed in the Parameter column and select the appropriate setting.

ℹ️ The channel parameters are preoccupied with standard values, so that usually no settings are required.

ℹ️ Since the number and type of channel parameters depend on the respective device types, it only follows a basic description of the parameter setting at this point. For further information on the specific channel parameters, please refer to the description of the corresponding device. This can be found in the document "Homematic script Part 4 data points" for download at www.eq-3.de

Update Device Firmware

- Click "Update" in the firmware column of the device description and select the appropriate settings.

ℹ️ The update feature is not available on all devices. If the "Update" button does not exist, the device does not support a centrally running firmware update. You can also manually add firmware files for your devices to the central

ℹ️ (See Chapter *"19.8 device Firmware" on page 130*).

Accept all entries and close the window •
  Click "OK" in the footer to save the entries and close the window.

ℹ️ To store the changed device or channel parameters, communication between the device and the central station is necessary. Devices that are not always in the ready-to-receive socket must be placed in the configuration mode or teach-in mode. Please refer to the operating instructions for the device or the status info generated by the WebUI.

Discard all entries and close the window •
> Click Cancel in the footer to discard the entries and close the window.

Setting the 19.2.3 transfer mode

The transmission mode setting for the selected channel is set in this pop-up
Window. You can reach this window using the corresponding operating instructions ln *19.1 ge-
Councils Inbox "on page 105   And "19.2 Devices" on page 110*

	Name	Type description	Picture	Description	Serial number	Interface category	Transmission mode	Functions	Rooms	👁	🖊	🗑	Actions
	Filter	Filter		Filter	Filter	Filter	Filter	Filter	Filter				
⊞	Heating Control 1 floor INT0000001	HM-CC-VG-1		Group heating control	INT0000001	VirtualDevices	Standard	Heating Lock	Kid room 1 floor	✓	✓	☐	Set / Delete / Direct / Programs

Figure 60:   **System Configuration-Devices**

ℹ Switching the transfer mode is not available for all devices. For example, some devices
or channels are set to secure transmission (e.g. keymatic), while other devices are fixed
to standard transmission. Be aware that for remote controls, both channels of a pair of
buttons must be gured separately.

•   To change the transfer mode, click the appropriate device in the Transfer Mode
column. The pop-up window for transferring the standard mode opens.

Figure 61:   **Pop-up-select transfer mode**

Turn on secure transfer mode and switch off standard transfer mode

• Select saved from the selection list in the transfer mode line.

With "secured", sender authenticates to the receiver by knowing the system security key. Due to the resulting increase in the Kommunikationsauf, the processing of the command is delayed slightly and the battery life is reduced.

Switch on the standard transfer mode and switch off the secure transfer mode

• Select standard from the selection list in the transfer mode row.

By default, the command sender is not authenticated. The low communication volume resulting from this results in fast command processing and maximum battery life.

Do not change transfer mode and close window •
Do not make any changes to the transfer mode line and click Cancel in the footer to close the window without changing the transfer mode.

Delete 19.2.4 Device

Devices are deleted in this pop-up window. You can reach this window
The corresponding operating instructions in *"19.2 Devices" on page 110*. Under delte option you can specify whether you only want to remove the device or also want to reset it to the factory state.

Figure 62: Device Overview-Delete device

• In the device browser, click Delete. The pop-up window for deleting devices opens. You can do the following:
  ◦ Device disconnection
    All direct links to which the device is involved remain intact. The device is removed from all program shortcuts when you are learning. The system security key is stored in the device.
  ◦ Reset Device to factory state
    The device is deleted from all direct links to which the device is involved, as well as from all affected programs. The

System security key is reset to factory state.

If the device is still used in direct links and/or programs, you will also receive a line with a hint text. Please follow the instructions and remove the device first from the links to the device, as otherwise unwanted program relationships may arise.
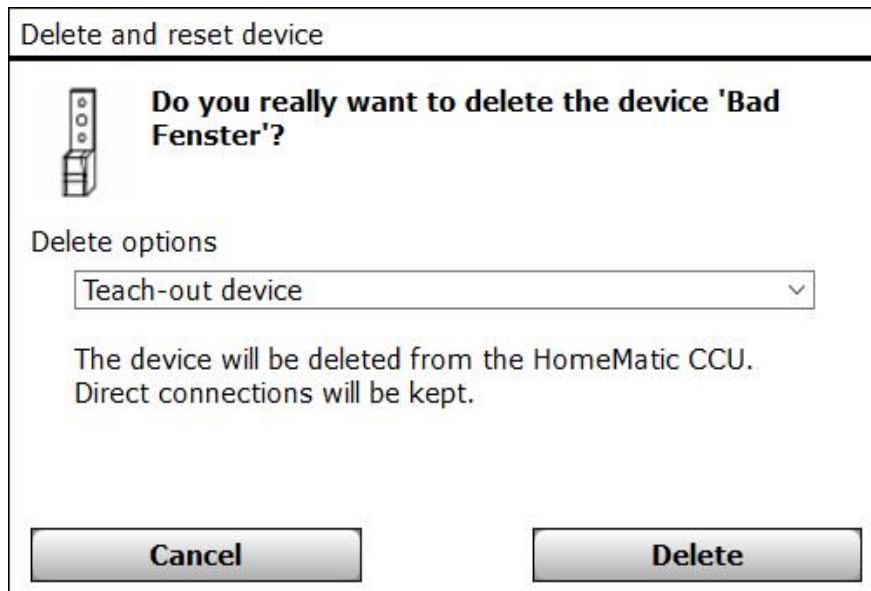
Figure 63: Pop-up-delete and reset device

Learn from the central unit
- Select "Unlearn Device" and then click "Delete" to relearn the device.

The device is deleted from the WebUI and removed from all program links. The system security key is stored in the device.

Since the system security key is stored in the device, it is absolutely necessary for Neute learning. Please make a note of the system security key that is valid at the time of the ab-learning together with the device!

Reset Device to factory state
- Select "Reset Device to Factory state" and then click "Delete" to completely remove the device from the system.

The device is deleted from all the direct links on which the device is involved, and removed from all affected programs. The system security key is reset to factory state. This means that the device can be re-taught to any system.

Do not remove or delete the device from the control Panel and close the window • Click Cancel to leave the device unchanged in the system and close the window.

19.3   Rooms

The configuration of a room with the channels available in it is done in this fen-ster.

Figure 64:   **System Configuration-Spaces**

The list of rooms and the channels available in them is built up in a tree structure. Click on the "+" or "-" icons to open or close the tree structure. Click on the "+" symbol in front of a room to see the channels associated with the room.

Action
In this column there is the button "add Channel" in the room line, with which space a channel can be added.
In this column there is the button "delete" in the channel line, with which the corresponding channel is removed from the room.

Links
The "direct" and "Programs" buttons are available in this column. This allows the Di-indirect to access the link list for direct links and the link list for programs. These lists contain only entries in which the associated channel is involved.

Add channel to a room
•   Locate the room to which you want to add a channel. •
        Click "Add Channel" in the row belonging to the room to gain access to the channel selection module and select the channels you want to add from the channel list by selecting the checkbox and confirm the

Selection with OK.

Delete a channel from a room
- Locate the space from which you want to delete a channel. •
  Open the view on the channels located in this room by clicking on the "+" symbol in front of the space name.
- To permanently remove the channel from the room, locate the channel you want to delete in the list and click Delete in the row that belongs to the channel.

Creating a new room
- Click Edit in the footer to gain access to the module for creating new spaces.

Change the name of the
• Click Edit in the footer to gain access to the module for editing the room parameters.

Edit 19.3.1 Room Parameters

The configuration of rooms is done in this pop-up window. You can reach this
The corresponding operating instructions in the *"19.3 rooms" on page 119* .

Edit room		
Name	**Description**	**Action**
Bathroom 1 floor		Delete
Bathroom 2 floor		Delete
Bed room big 2 floor		Delete
Bed room small 2 floor		Delete
Boiler room		Delete
Home office 1 floor		Delete
Kid room 1 floor		Delete
Living room		Delete
Terrace		Delete
Sauna		Delete
Stairway		Delete
Close	New	

Figure 65:   Pop-up-edit room parameters

Edit Room Parameters
- Select the points listed below and enter the relevant information there.

- Then complete the configuration according to the instructions under "All entries Apply and close window.

Entry "Name"
- Enter a freely definable entry for the room. The name must be unique, i.e. it should not be given multiple identical names.

Comment Entry
- Enter a freely definable entry for an optional, more advanced

Description.

Creating a new room
- Click New in the footer to create a new line in the list of the other.

Accept all entries and close the window •
Click Close in the footer to save the entries and close the window.

Do not change room parameters and close windows •
Do not make any changes to the columns and click Close in the footer to close the window without changing it.

19.4   *Functions*

The configuration of a work with the channels available in it is done in this window.

Figure 66:   System Configuration-Functions

The list of the Functions and the available channels is built up in a tree structure. Click on the "+" or "-" icons to open or close the tree structure. Click on the "+" symbol in front of a craft to see the channels associated with the work.

Action
In this column there is the button "add Channel" in the space line, with the functions a channel can be added.
In this column there is the button "delete" in the channel line, with which the corresponding

Channel is removed from the factory.

Links

The "direct" and "Programs" buttons are available in this column. This allows the Di-indirect to access the link list for direct links and the link list for programs. These lists contain only entries in which the associated channel is involved.

Add channel to a craft

• Locate the work you want to add a channel to. •
Click "Add Channel" in the row belonging to the factory to gain access to the channel selection module and select the channels you want to add from the channel list by selecting the checkbox and confirm the selection with "OK".

Delete Channel from a factory

• Find the work you want to delete a channel from. •
Open the view on the channels in this section by clicking on the "+" symbol in front of the factory name.
• Locate the channel you want to delete in the list and click "Delete" in the row belonging to the channel to permanently remove the channel from the factory.

Create new plant

• Click Edit in the footer to gain access to the module for creating new functions.

Change the *Function*s name

• Click Edit in the footer to gain access to the module for editing the factory parameters.

19.5   Edit *Functions parameters*

The configuration of functions is done in this pop-up window. You can reach this The corresponding operating instructions in the

Name	Description	Action
Button		Delete
Central control unit		Delete
Climatic conditions		Delete
Energy management		Delete
Environment		Delete
Heating		Delete
Light		Delete
Lock		Delete
Security		Delete
Weather		Delete

Edit function
Close   New

Figure 67:   Pop-up-edit factory parameters

Edit Factory parameters

- Select the points listed below and enter the relevant information there.

- Then complete the configuration according to the instructions under " *All entries Apply and Close window*

Entry "Name"

Enter a freely definable entry for the work. The name must be unique and unambiguous. No more than one name can be given.

Comment Entry

Enter a freely definable entry for an optional, more detailed description.

Create new plant

- Click New in the footer to create a new line in the list of functions. • Then follow the instructions as described in the operating instructions *Edit Factory parameters* are described.

Accept all entries and close the window •

Click Close in the footer to save the entries and close the window.

Do not change room parameters and close windows •

Do not make any changes to the columns and click Close in the footer to close the window without changing it.

19.6   Diagrams

Via Homematic or Homematic IP devices with measurement function (E. g. Radio switch Actuator 1-way with power measurement, intermediate plug or Homematic IP switching-measuring socket) you are able to measure data such as voltage, current, active power, frequency and energy consumption of the The connected consumer and create diagrams of this measurement data. You are able to store the measurement data directly on the cental unit (maximum coverage period of 5 years) or Export the data (see "16.4 Status and Operation Diagrams" on page 43).

For measurement data acquisition and diagram display, you must use a microSD card (at least 1 GB) for the CCU2 to store the information.

For the measurement data acquisition and diagram display, you must use a USB stick (at least 1 GB) for the storage of the CCU3.

To enable measurement data acquisition and diagram display, proceed as follows:

- First, disconnect the power cable and then the network cable from your control panel.
- Insert a microSD card into the microSD card slot of the CCU2 or A USB stick into the USB port of the CCU3.
- Reconnect the power supply and reconnect the network cable.

- Restart the Control Panel. In the WebUI, click Settings, Control Panel, central maintenance, restart.
- Finally, you need to initialize the microSD card or the USB stick. To do this, in the WebUI, click Settings, Control Panel, general settings, initialize.

To make settings for how the charts are displayed, click Charts under set up. This is where you first see charts that have already been created. To create a new chart, do the following:

- Click New in the lower left corner of the screen to create a new chart.

You can save a maximum of 50 diagrams at the same time.

- First, select one of the following chart types:
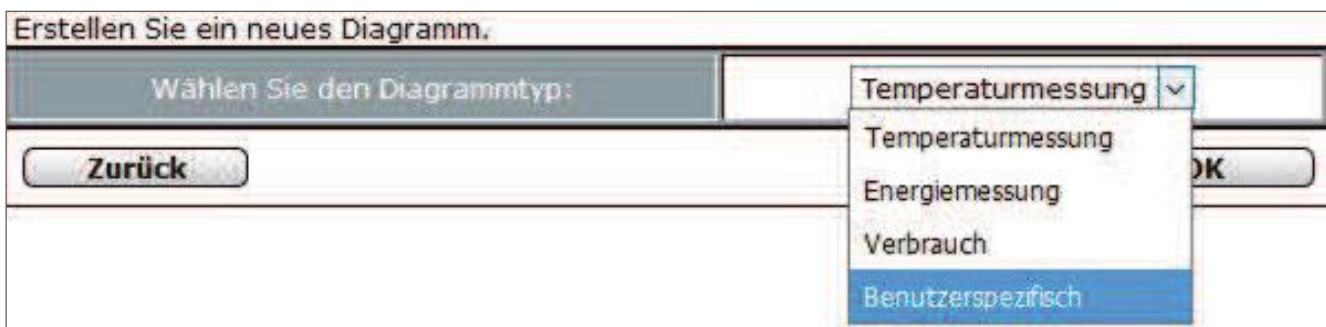
Figure 68:   **Select chart Type**

- ◦ temperature measurement (unit °C) è Bar
- ◦ Energy measurement (performance of the device (calculated by the unit itself), is summed up in the chart to the respective time span, unit wh) è Bar
- ◦ Consumption (energy meter (summed up power of the device), determined difference to the previous value yields the performance) è Curve Chart
- ◦ User-specific (unit freely selectable)   È Curve Chart

Depending on the chart type you selected earlier, you have the option of following the settings for your chart. You can then save your newly created chart.

The following shows and describes the settings for the user-specific chart type.

Figure 69: Create a new chart

Enter "Name"
Type a name for the chart.

Input "description"
You can also enter a description for the chart.

Template selection
Select one of the templates to determine the background color and line width.

Default Period Selection
Last 24 hours, last week, last month, last year

Default view for larger periods selection
Average values, minimum values, maximum values
ℹ The data is summarized over longer periods of time. For example, the Schnittswert per day is determined and displayed for the year view.

Input "unit displayed"
Type a unit of measure that appears in your chart.

Select "Minimum y-axis value"/select "Y-axis maximum value" automatic or fixed

All selected data sources
Here you can see all the data sources that have already been selected for the chart representation.

All other data sources
Here you can see all the data sources for the chart representation. Click the "Plus" button to view new data sources. You can use Add to add new data sources.

ℹ️ You can select a maximum of 15 data sources per chart.

19.7   Groups

With group management, you can comfortably configure and operate multiple devices in one room using the WebUI. When creating a new group, direct device links are established between the devices in the group. The group behaves in terms of configuration and control like a device – data is transferred to all devices of the entire group.

ℹ️ You can create a group for Homematic or Homematic IP devices. A Mischbe drive within the group is not possible.

ℹ️ Currently, groups can be created from the group type "Heating control".

The following Homematic IP devices can be added to the heating control group:
• Homematic IP Radiator Thermostat (HmIP-ETRV, HmIP-ETRV-2, HmIP-ETRV-2-UK)
• Homematic IP Radiator Thermostat – Compact (HmIP-ETRV-c)
• Homematic IP Radiator Thermostat – Compact (HmIP-ETRV-B)
• Homematic IP wall thermostat with humidity sensor (HmIP-WTH, HmIP-WTH-2)
• Homematic IP window and door contact (HmIP-SWDO)
• Homematic IP window and door contact – Concealed installation (HmIP-SWDO-I)
• Homematic IP window and door contact with magnet (HmIP-SWDM)
• Homematic IP Window Handle sensor (HmIP-SRH)
• Homematic IP temperature and humidity sensor – inside (HmIP-STH)
• Homematic IP temperature and humidity sensor with display – inside (HmIP-STHD)
• Homematic IP wall thermostat with switching output – for brand switches (HmIP-BWTH, HmIP-BWTH24)
• Homematic IP Multi IO box (HmIP-MIOB)
• Homematic IP Wall switch 2-fold (HmIP-WRC2)
• Homematic IP Wall Switch 6-fold (HmIP-WRC6)
• Homematic IP Keychain Remote control – 4 keys (HmIP-KRC4)
• Homematic IP Keychain Remote control – alarm (HmIP-KRCA)
• Homematic IP Remote Control – 8 keys (HmIP-RC8)
• Homematic IP switch Actuator for brand switch – with signal light (HmIP-BSL)

- Homematic IP switching-measuring actuator for brand switches (HmIP-BSM)
- Homematic IP switching-measuring-actuator (HmIP-FSM, HmIP-FSM16)
- Homematic IP Switching-measuring socket (HmIP-PSM, HmIP-PSM-UK, HmIP-PSM-CH, HmIP-PSM-PE, HmIP-PSM-IT)
- Homematic IP Switching socket (HmIP-PS)
- Homematic IP circuit board (HmIP-PCBs)
- Homematic IP Circuit Board – 2-fold (HmIP-PCBS2)
- Homematic IP circuit Board for battery operation (HmIP-PCBs-bat)
- Homematic IP Module Board open collector – 8-speed (HmIP-mod-OC8)
- Homematic IP Module Board transmitter – 8x (HmIP-mod-RC8)
- Homematic IP Wired Switch Actuator – 4-fold (HmIPW-DRS4)
- Homematic IP wired IO module concealed-6-fold (HmIPW-FIO6)

The following Homematic devices can be added to the heating control group: ◦ Homematic Radio Radiator Thermostat (HM-CC-RT-DN)

- ◦ Homematic Wireless Wall Thermostat (HM-TC-IT-wm-W-EU)
- ◦ Homematic Wireless Window Contact (HM-SEC-SC/HM-Sec-SC-2)
- ◦ Homematic Wireless Window contact, Optical (HM-SEC-SCO)
- ◦ Homematic Radio window-Rotary handle Contact (HM-Sec-RHS)
- ◦ Homematic Radio-Wall switch 2-fold, surface mounting (HM-PB-2-WM/HM-PB-2-WM55/HM-PB-2-WM55-2)
- ◦ Homematic Radio transmitter 2-speed for brand switch (HM-RC-2-PBU-FM)

Figure 70:   Set up Heating Group overview

Create and edit 19.7.1 Group

• To rebuild or change a group, click Settings, Groups, new in the WebUI.

• You can then add devices to the group and make more advanced configurations for the group:

Group name Input
Assign or change a name for the group.

Group Type selection
Select a group type (for example, "Heating control").

Group devices
Displays devices that belong to a group that has already been created.

Add Devices
View the devices that you can add to a group.

Already linked devices
Displays devices that are already linked to other devices. Devices cannot be added to a group until they are no longer linked to other devices.

⚠️ Changes to the physical devices affect all devices in a group. However, changes to the devices through the WebUI do not affect the group.

• To save a newly created group or changes to a group that has already been created, click OK.

ℹ️ When you learn new devices and allow them to be assigned to a group, you can add the devices directly to a group in your Inbox. To do this, click the "Add to Group" button in the Inbox with the appropriate device under "done". In the Inbox, you can also create a new group directly. To do this, click Create New group under done.

Figure 71: Inbox Group settings

19.7.2 and set up groups

Once you have created a group, you can operate, set, delete and edit it in the next window.

Figure 72:   **Group Overview**

Group actions:

Use
•   Click the "Operate" button to check the status of the devices in a group and to operate the devices

Set
•   Click the Set button to change the parameters of the devices in a group.

Delete
•   Click the Delete button to delete a group.

Edit
•   Click the Edit button to edit the settings of a group.

19.8 Device firmware

In the menu item "Settings" under "Device firmware" You can load firmware updates for your devices to the Central station and update the devices.

- Open the Web site www.eQ-3.de.
- In the Downloads section, select the appropriate firmware file for the device you want to update.
- Save the firmware file to your computer. •
  In the WebUI user interface, click "Device Firmware" under "Settings" and then "new".
- In this window, click Browse and select the desired firmware file.
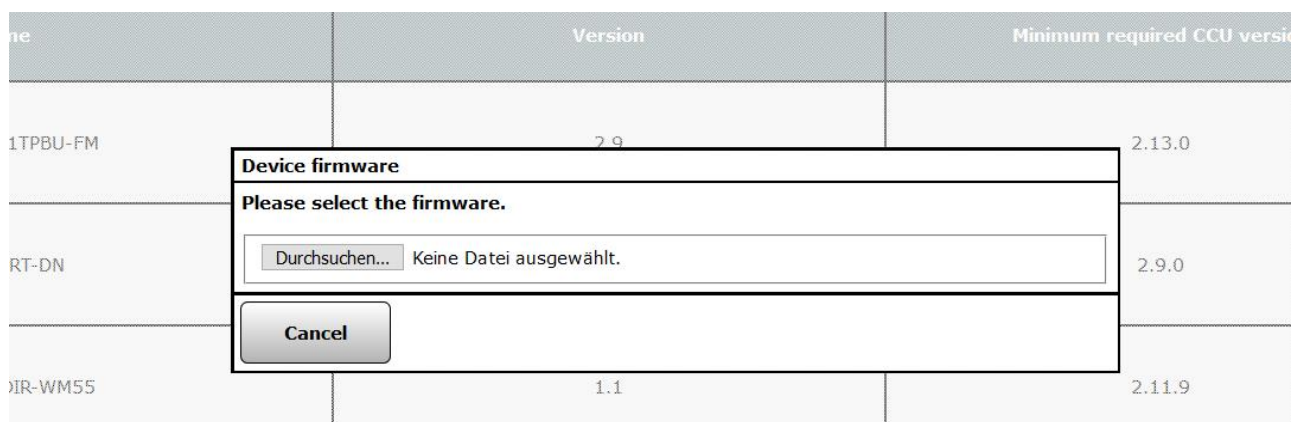
Figure 73: Select firmware file

- If you have the file selected, click Upload.

In the following window you will see the firmware files you have uploaded.

Figure 74: Overview of uploaded firmware files

- Under Settings, devices, click Set on the device you want to rerecord.

The available version is displayed under "firmware".

Figure 75:   **Available firmware update**

- Click the "Update" button to load the firmware onto the device. Wait for the
- update operation to finish successfully.
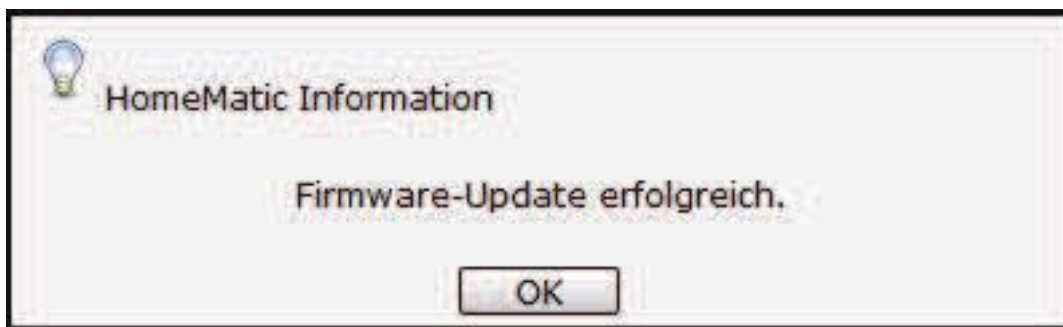
Figure 76:   **Firmware Update Successful**

- After the update, check the functionality of the device. should be displayed or
  A CRC error is signalled via the LED, check that you have selected the correct firmware
  file or that it has not been fully loaded on the device.

19.9   User Management

In user management, all settings are are included to all existing user accounts. Entries can only be entered in the Action column. For more information, see section "3.4 User Management" on page 15.

19.10   System variable

This window provides an overview of all system variables present in the system. The creation of new system variables and the configuration or deletion of existing SY-stem variables is done in this window. Entries can only be entered in the Action column. All system variables listed in this window are available in the system for programming tasks and status messages. All Alarm variables (SY-stem variable of type "alarm") are also listed in this window.

Entries can only be entered in the Action column. All other data and other information are *Edit System Variable* Defined.

Figure 77: **System Configuration-System variable**

Configure system Variable

Action entry

Set the attributes of the system variable by selecting the appropriate checkbox. ∘

> CheckBox "Visible"
> Select this option from the checkbox.
> If the box is checked, the system variable in the Windows under *"16 Status and Operation "on page 39* Available. The current status of the system variable can be seen.
> If the box is unchecked, the system variable in the Windows under *"16 Status and operation "on page 39* Not available. The status (current value) of the System variable can therefore not be viewed via the WebUI.

∘ CheckBox "Logged"
> Select this option from the checkbox.
> If the box is checked, the system variable for the system log function is (see *19.7 Quick reference-System log*) released. All changes in the System variables are thus recorded.
> If the box is unchecked, the system variable for the system log function is (see *"16.8 status and operation-System log" on page 48* Locked. It No data recording for this system variable occurs.

🛈 All other information about the system variable (configuration of name, description, VA-Riablentyp, etc.) is processed as described in "Edit system variable Configuration".

Delete system variable

• In the list, locate the system variable that you want to delete. •
To delete the system variable completely from the system, click Delete in the
row belonging to the system variable.

ℹ Delete a system variable only if no program links exist with this system variable (see the
"Links" column). If the system variable is still used in programs, remove it first, where you
can access the list of associated links and edit them accordingly. If you delete a system
variable that is still used in links, unwanted program relationships can occur.

Create a new system variable

• Click "New" at the bottom of the screen to open the pop-up window for creating and
editing a new system variable. -> *Edit System Variable*

Edit System Variables Configuration

• Find the system variable you want to edit in the list. •
Click Edit in the Action column to open the window for editing the appropriate system
variables. -> *Edit System Variable*

Calling up a list of programs belonging to the system variables •

In the list, locate the system variable to which you want to view the list of programs.

• Click the "Programs" button in the row belonging to the system variable,
To get access to the list of related programs -> *"18.2*
program creation and central linking "on page 75

Edit System Variable

The configuration of a system variable is done in this pop-up window. If you call this fen-ster via
"edit", the data of the corresponding system variables are entered in the corresponding fields.

If the window is called "New", all fields are empty or preset with default values.

Figure 78: Pop-up-edit system variable

Edit System Variable

• Select the points listed below and enter the relevant information there.

• Then complete the configuration according to the instructions under " *All entries Apply and save the system variable* From.

Entry "Name"
• Enter a freely definable entry for the system variable name or Alarm name. The name must be unique, i.e. it cannot be given multiple identical names.

> For easier differentiation from other objects, it is useful to name variable names with a SV_.

Description entry
• Enter a freely definable entry for an optional, more detailed description.

Variable Type entry
• Specify the type of the system variable. The variable type determines which values the variable can accept and whether it is an alarm-relevant variable.

• Select from the selection list with the entries: ◦
   Logic
   A system variable of this type can only accept two fixed states (values). Thus, the system variable becomes a so-called Boolean variable with the states "true" and "false".
   ◦ List
   A system variable of this type can take a fixed number of different states (values). The values must be named under values.
   ◦ Number
   A system variable of this type represents a numeric value that can be both a sythesis number value and a floating-point value.
   ◦ Alarm
   A system variable of this type can only accept two fixed states (values) and has alarm relevance. Thus, the system variable becomes a so-called Boolean variable with the states "true" and "false", wherein the system automatically generates an alarm message as soon as the system variable accepts the state "true".

If you change the variable type or the entries under values after the variable is already in use in programs, you must recreate the program lines in order for the changed definition to take effect in the programs.

Values entry
The values column contains the name of the allowed values, or the allowed value range of the variable.

> For variables of type logic value, List of values and alarm, the windows under *"16.8 status and operation-System log" on page 48* The registered Tebezeichnungen to the system variables. Also during program creation (see *"18.2 program creation and Central Link" on page 75*) are the Descriptive value labels to choose from.

- Specify the descriptive value labels or the range of values. The content of this column depends on the selected "Variable type".
  - ◦ Logic and alarm Variable type:
    Enter descriptive value labels for the two possible states (values) "true" and "false" (for example, true = "Present" and false = "absent" or True = "thrown" and false = not triggered).
  - ◦ Value List Variable type:
    Descriptive value labels for each state. The number of possible states is given by the number of value names entered. The value drawings for the different states are separated by semicolons (for example, "internal sharp; Externally sharp; Blurred ").
  - ◦ Number Variable Type
    Enter a limit value (range) by entering a allowed minimum and maximum values.

Unit of Measure entry
- Optionally, enter a freely definable unit of measurement. The input is usually only useful in conjunction with the variable type "number".

Channel Mapping entry
The Channel mapping column contains the name of the optional zugeordne-th channel system variable. This setting is used to define whether the variable describes a pure SY-stem State or is assigned as an additional value to a channel (device), such as an external sensor.

> ℹ️ If a channel mapping is defined, this system variable does not appear as usual as "system State" but as "channel state" to the associated channel.

- Specify where the system variable represents a system state or is to be associated with a channel.
- Select the entry with the radio button: ◦
    Without
    System variable describes a virtual system state. The system variable is under *"16.8 status and operation-System log" on page 48* And *"18.2 program creation and central linking "on page 75* As System State Created.
  - ◦ With
    System variable describes a value that is directly related to A channel (device). The system variable is under *"16.8 Status and Operation – System Log "on page 48* And *"18.2 Program creation and Central Link "on page 75* As another value to the selected channel (device).

To complete the configuration, select the channel to which this system variable mapped-net is to be.
- Click Channel selection to assign the channel.

Create alarm variable

Configure the system variable according to the instructions in *Edit System Variable*

- Select the variable type "alarm".

Assigning a system variable to a channel (device)

Configure the system variable according to the instructions in *Edit System Variable*

- Select the radio button "with" in the channel map and then choose the desired channel via "channel selection".

Accept all entries and save the system variable •

Click "OK" in the footer to save the entries and close the window.

Discard all entries and do not save the system variable •

Click Cancel in the footer to discard the entries and close the window.

Warning: Delete system variable

This pop-up window appears only if you are trying to lo a system variable that is still in use at least one program.

Delete system variable

- Click Yes to delete the system variable.

After the system variables have been deleted, unwanted program relationships can occur because the system variable was not previously removed from the affected programs.

Confirmation prompt	
Do you really want to delete the system variable?	
No	Yes
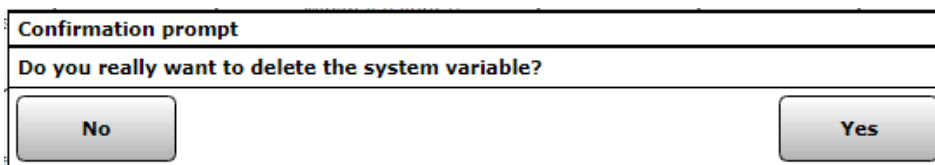
Figure 79:   Pop-up-security query: Delete system variable

Do not delete system variables/edit affected programs

- Click Close in the footer to close the window without deleting the system variable.

Please follow the instructions as described in the operating instructions *List of the system Call up programs belonging to the variables* In *"19.10 System Variable" on page 131* Be are written.

19.11 Favorites

All favorite pages are listed in the administrator's Favorites manager. Input are only available in the Action column. All other information is *"19.11.1 favourites-Page creation "on page 138* Defined.

Name	Description	Number of columns	Column alignment	Name field position	User	Action
Filter		Filter	Filter	Filter	Filter	
Admin favourites list1	Heating 1 floor	Auto	Left	Left	Admin	Edit / Delete

Figure 80: System Configuration-Favorites

Create New Favorites Page
- Click New... to open the Create and edit a new Favorites page window.
  -> *"19.11.1 favorite page creation" on page 138*

Edit Favorites Page
- Click "Edit..." In the "Action" column to open the window for editing the corresponding favorite pages. ->*"19.11.1 favorite page creation" on Page 138*

Delete Favorites Page
- Click Delete to delete the Favorites page completely.

19.11.1 Favorite page creation

The configuration of the favorite pages is done in this window.
The window is divided into the areas of:
1. Description of the Favorites page
2. Definition of channels and system variables for the Favorites page

- To access this window, click New in the Favorites list at the bottom of the screen.

If this window is accessed via "edit", the data of the corresponding Favo rites are entered in the corresponding fields.
If the window is called "New", all fields are empty or preset with default values.
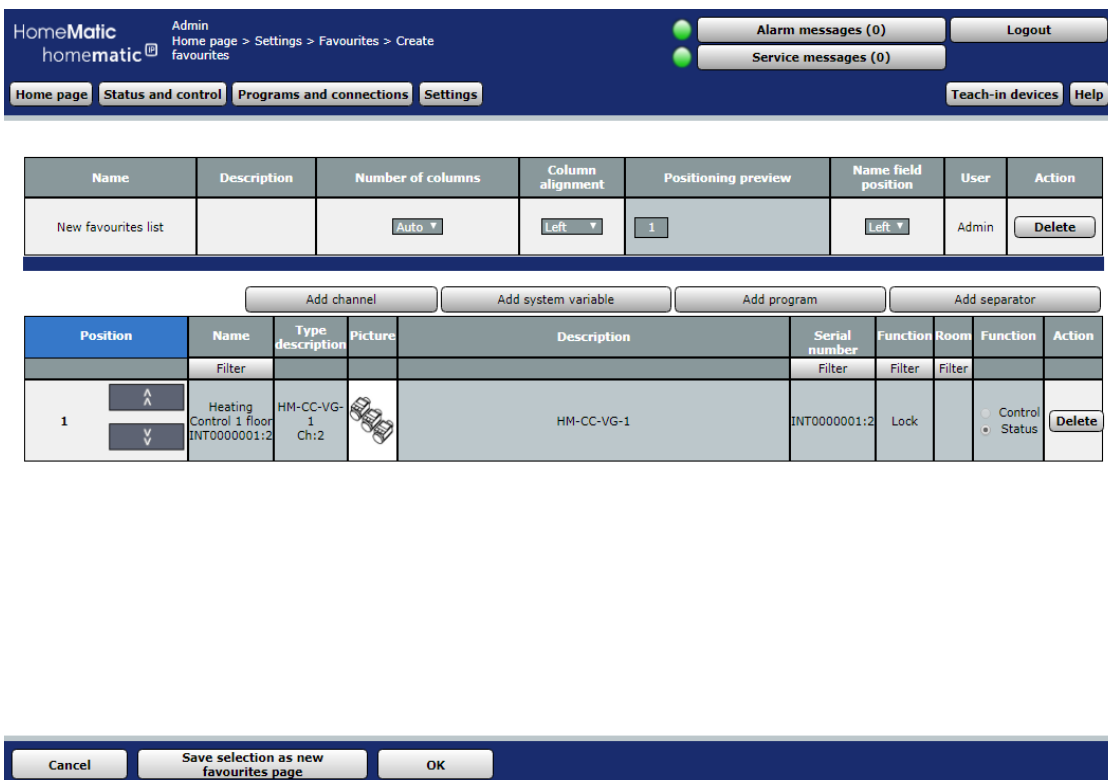
Figure 81: System Configuration-Favorites-Favorites page creation

Enter your favorite description and arrange the Favorites (Control fields).

- Select the items listed below in the Favorites description and enter the appropriate information.

Entry "Name"
- Enter the freely definable favorite name. Favorite names must be unique, that is, they cannot be given multiple names.

Description entry
- Enter a freely definable entry for an optional, more detailed description.

Column Number Entry

- Specify how many columns the Favorites (Control fields) are displayed on the Favorites page. Select from the selection list with the entries: ◦

  Auto.
  The number of columns is automatically optimized by the system based on the resolution possible on the display device

  1 representation is always in one column.

  2 display is always in two columns.
  3 display always takes place in three columns.
  4 is always displayed in four columns.

Column Alignment Entry

- Specify how you want the Favorites (Control fields) to be aligned on the Favorites page. Choose from the selection list with the entries:
  - ◦ Links
    Control fields are positioned left-aligned on the Favorites page. ◦
    Centered
    Control fields are positioned page-centered on the Favorites page.

Positioning Preview Entry

This column contains the schematic representation of the arrangement of the control fields on the Favorites page. The field is not editable.

Name field position entry

- Specify where the channel, program, or system variable name is positioned. Choose from the selection list with the entries:
  - ◦ Above
    Name field is positioned above the control field.
  - ◦ Links
    Name field is positioned to the left of the control field.

User entry

- Specify which users you want to make this favorites page available for. •
  Click in the field and select the appropriate user using the checkbox after the respective entry in the list.

Multiple selection is possible. The list contains the user names of all user accounts. An user with the user permission level only has the option to modify a Favorites page on its own if it is the only registered user for the Favorites page.

Action entry

This column contains the button to delete the Favorites page.

Delete Favorites Page

- To delete the Favorites page completely, click Delete in the Action column of the favorites description.

Save Favorites Page Under new name
- In the Favorites description, change the name of the Favorites page. •
  Optionally, change the description of the Favorites page in the
  Favorites description.
- Click "Save Selection as New Favorites page" To create a new Favorites page with the
  settings you have made. The old Favorites page remains unchanged.

Add Favorites (Control fields) to the Favorites page
The Favorites (Control fields) are selected according to their functionality. •
  Click on the buttons above the Favorites list to add a corresponding control field to the
  end of the list:
- Click Add Channel to add the control field to another device channel. In the
  -> "12 channel list, select the channel you want to use.
  Channel selection "on page 34
- Click Add System variable to add the control field to another system variable. In the
  System variables list, select the system variable you want to use.
  -> *"14 system Variable Selection" on page 36*
- Click "Add Program" to add the control field of another program. Select the program
  -> "13 you want to use from the program list.
  Program Selection "on page 35
- Click Add Separator to insert a placeholder for an empty entry in the Favorites
  window. (See also "move favorite position")

Remove Favorites (Control fields) from the Favorites page •
  In the channel, program, and System variables list, locate the entry you want to delete.

- Click Delete in the Action column to delete the entry from the list.

Setting the function of the favourite (control field)
As a functional property of the favourite, it can be defined whether the favourite entry is to be
used or only acts as a status display. The setting is done by the entry in the function column.

- Select "Operation" if you want to be able to use the favorites in the Favorites
  page.
- Select "Status" If you want to use the favourite as a status display only and no
  operation is possible.

The setting option is generally only available for devices and programs that are provided
by the Administrator with the attribute "operable". If the entry is only marked with the
"visible" attribute, the entry in the "function" column is set to "status".

Move the position of the favourite (control field)
The positioning of the favorites is done by the arrows in the column "position" and by the
insertion of separators. In the positioning preview you can gain an overview of the
presentation of the Favorites page.

- Click ∧ in the Position column to move the associated favorite to a higher position.

- Click ∨ in the Position column to move the associated favorite to a lower position.

- Click Add Separator to define free spaces on the Favorites page.

Accept all entries and save the Favorites page •
Click "OK" in the footer to save the entries and close the window.

Discard all entries and do not save the Favorites page
• Click Cancel in the footer to discard the entries and close the window.

19.12   System **Control panel**

The configuration of all system-settings is done via the control Panel.
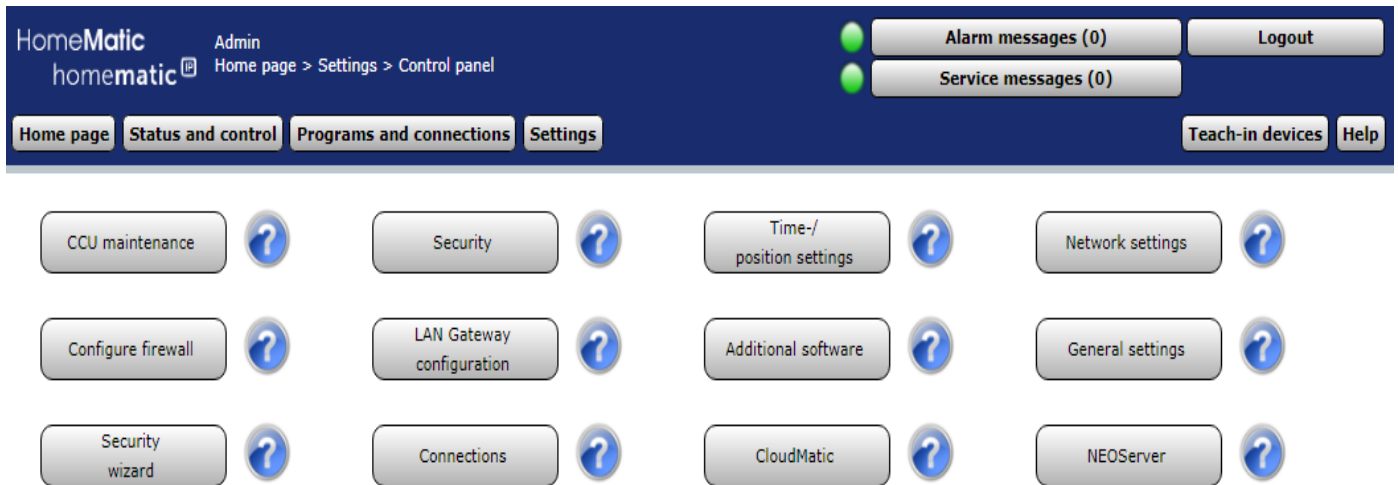
Figure 82:   **System Configuration-Control Panel**

Central Maintenance
*   Click Central Maintenance to perform a software update to restart the control Panel or to make settings for error logging.

Security
*   Click Security to set a system security key to create or replay a system backup to perform a system reset or to set a session timeout.

Time/Position setting
*   Click on "Time/Position setting" to set the time, to specify an NTP time server or to make a position indication.

Network
*   Click Network settings to make IP settings or to create a certificate.

Configure Firewall
*   Click Configure Firewall to grant access rights to IP addresses and remote APIs.

LAN Gateway Configuration
*   Click LAN Gateway to configure the internal antenna or wireless LAN gateways.

Additional software
*   Click Add-on software to install additional software.

https://homematic-forum.de/forum/viewforum.php?f=36

General Settings

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*   For example, to configure memory management, click General Settings

or energy cost management.

Couplings
• Click on "Couplings", for example to connect to Osram Lightify.

CUx-Daemon (optionally available)
CUx-Daemon is a third-party software and provides a universal interface between the central and appropriately compatible components of other systems such as FS20, EnOcean and many more. With the help of this add-on it is possible to integrate components of other systems into the system.

• Click on "Cux-daemon" to go to the add-on.

Redmatic
RedMatic combines several software components into one CCU Addon, software package that can be easily installed on a Homematic CCU3 or RaspberryMatic as additional software via the WebUI.
The basis is Node-RED with the CCU nodes for Node-RED. This makes it possible to implement rules, automations, scripts and connections of external services and systems for a Homematic system in a simple, visual way - and this largely without any programming knowledge. The wiki has more information about Node-RED and some usage examples (called Flows).
In addition, RedMatic WebApp and Node-RED Dashboard are included; with this user interfaces for mobile devices and the browser can be created easily (example screenshots).

Also direct Homekit, Blockly, node.js ... and much more.

CloudMatic
• Click "CloudMatic" to set up a remote grip on your smart home installation. For more information about the installation, please refer to the website www.cloudmatic.de. This is a third-party software.

NEOServer

• Click "NEOServer" For more information about the programs and services of Mediola (such as the AIO creator Neo) and to activate the server program installed on the central CCU3. It is a third-party software.

By activating the NEOServers, you can integrate plug-ins for devices from other manufacturers and service providers such as Bose, Sonos, Digitus and others into your smart home system. Additional costs may arise here.
With the AIO creator Neo You can create an individual control app Jackie your CCU3 and the components of it.
For more information on setting up and using the CCU3, please refer to the information card provided and the website www.mediola.com.

19.12.1 Central Maintenance

The configuration and execution of maintenance functions for the system is done in this pop-up window. You can reach this window using the corresponding operating instructions in *"19.12 Control Panel" on page 142* .

Figure 83: **Pop-up-central maintenance**

The available maintenance functions are:

1. Update the firmware of the control Panel. For example, you can use a firmware update to play a new user interface.

2. Restart the Control Panel (while maintaining all settings).

3. Reboot in Safe mode

4. Configuration and downloading of error logs.

It is important to note the hints in the user interface.

19.12.1.1 Software updates

Check if there is a software update for the CCU

By calling up the pop-up window, your Web browser automatically checks the currently available firmware. The version currently installed on the central station is displayed in the line "CCU2 software" or "CCU3 software" as "Current software version". The latest version available on the Homematic homepage is displayed under "Available software version".

Perform an update according to the instructions under " *Perform software update"*
If the available version has a higher version number than the one currently installed.

ℹ️ The latest available version is displayed correctly only if your Web browser, i.e. Your user PC that has access to the Internet.

Perform software update
• Please perform a backup before the update.

ℹ️ Run the steps listed in the "CCU2 software" or "CCU3 software" line sequentially to load a new firmware on the control Panel.

• Click "Download" to save the new firmware to your user PC.

To download the firmware, you must have your Web browser, i.e. Your user PC, have access to the Internet.

• To continue the installation, agree to the Lizenzbedinungen and then click Install.

• In the following operating system or Web browser window, click Save File to save the file.
• Click Browse to open the Select Firmware window. In the File Upload window, locate
• the downloaded firmware file that you saved earlier.

• Click "Open" to enter the file name and the directory path in the window of the User interface.
• Click "Upload" to load the new firmware to the control Panel. The pop-up window will then open to confirm the firmware update (Security prompt).

• Click "Start Update" to load the new firmware to the control Panel. Follow the
ℹ️ instructions on the screen.

• After the CCU has automatically restarted, click "Log in Again" to log on to the system or to access the home page.
• Open the pop-up window *"19.12.1 Central Maintenance" on page 144* Again and Check according to the instructions under " *Check whether a firmware update for the Central*   "Whether the update was successful.

ℹ️ Do not disconnect the control panel from the power supply during the update. Because The device can be damaged.

After a firmware update, a backup should be made again to provide a backup suitable for the current firmware.

The firmware update takes about 5 minutes. If the control Panel does not respond for a long time, please restart the Control panel.
If you no longer have access to your control panel via your web browser, disconnect the device from the power supply for a short time. Wait for the control Panel to complete the boot process and try to access the control Panel again.

19.12.1.2   Restarting the Control Panel

To restart the control panel, run the points listed below in the "CCU2 restart" or "CCU3 new-Start" line. All settings and configurations are maintained.

> ⓘ If you want to reset the control Panel to the factory state and delete all settings and configurations, you must set a reset in accordance with the corresponding Operating instructions in the *"19.12.2 Security" on page 148*   Perform.

- Click Restart on the "CCU2 reboot" or "CCU3 restart" line to start the
  To restart the CCU. The pop-up window will then open to confirm the restart
  (Security prompt).
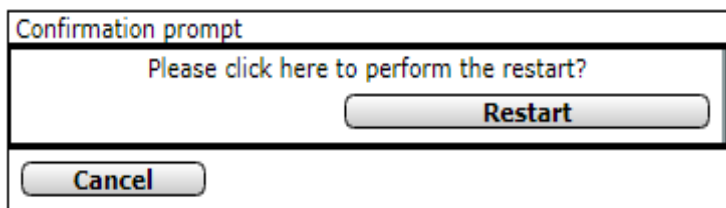
Figure 84:   **Pop-up-restart-security prompt**

- Click "Run reboot" to restart the system and log on to the system, or to restart the system and go to the home page

  > ⓘ Because the control Panel is unreachable during the restart, it is possible that your Web browser has an error message with the "Connection failed" content. Please wait until the central station has finished the boot process and try to access the control Panel again.

Restart in Safe mode

You can start your control panel in Safe mode if undefined to-stands occur during operation. In Safe mode, the installed add-on software does not start. Changed settings are saved in advance.

Configure the recording of an error log

Select the points listed below in the "error log" line and enter the appropriate information there.
Then close the configuration by clicking on " *Apply Settings* "

Entry "BidCoS RF"
- Select the desired logging function from the selection list for the communication protocol BidCoS-RF.

Entry "BidCoS Wired"
- Select the desired logging function from the selection list to the communication protocol BidCoS-Wired.

Entry "Logic Layer"
- Select the desired logging function for the logic layer from the selection list.

Syslog Server Address entry
- A. Leave this field blank to save the error log only on the control Panel.

- B. Optionally enter the address of your syslog server to view the error log In addition to the specified Syslog server.

If you have any problems or questions about configuring your syslog server, please contact your network administrator.

Download error Log
- Click "Download LogFile" in the "error log" line to load the recorded error log onto your user PC.
- Follow the instructions on the screen.

Discard all entries and close Windows •
Click Back in the footer to close the window.

19.12.2 Security

The security settings for the system are configured in this pop-up
Window. You can reach this window using the corresponding operating instructions in *"19.12 Control Panel "on page 142*

Figure 85:   **Pop-up security**

The security features relevant to the safe operation of the system are:
1. System security key: Password that is used in secure transfer mode to signature the data transfer and protects various security-relevant configurations at the CCU from unauthorized access.

2. Backup management: Creating and replaying system backups
3. System Reset: Reset Control Panel to factory state.

4. Timeout: Period in which the session remains active in the Web
browser. 5. SSH: Edit the settings of the central SSH access.

ⓘ Please note the notes and warnings in the right columns of the corresponding lines.
Failure to observe these warnings may cause the entire system to stop functioning.

19.12.2.1 Set system security key for the first time

To set the system security key for the first time, follow the points listed below.

- Enter your personal system security key in the system security key row in the
  security key and security key-retry fields.

ⓘ The system security key must consist of at least 5 characters. Please do not apply
special characters such as "&" for the system security key,
"!" or "/".

⚠ Make a note of your system security key and keep it in a safe place.
Safe place. For security reasons, **No** Possibility of system
To reset or bypass the security key. Setting the system
security key affects **All** Devices installed in the system.

- Click "Apply Key" to set the system security key in the system.

Change system security key
- Change the system security key according to the instructions in *system
  Set security key for the first time* .

19.12.2.2 Create System Backup

Run the following points sequentially to create a backup of your SY-stem and save the
backup file on your user PC.
- Click "Create Backup" in the backup management row.

ⓘ Creating the backup may take a few minutes depending on the upgrade level of the
configured system.

- In the following operating system window, click Save to open the window for
  entering the file name and location.
- In the Save File as window, select the location of the backup file and specify a new file
  name if necessary. Make a note, preferably in the file name, of the firmware version of
  the control Panel with which this backup was created.
- Click "Save" to store the backup file on your user's PC. In the following operating
- system window, click Close to confirm that the backup file has been successfully
  saved.

For security, the backup file is signed using the system security key. This allows the backup file to be replayed only with a valid system security key (i.e. valid for this backup).

Replay backup File
Run the points listed below one at a time to reload a backup of your SY-stem to the control Panel.

ⓘ When a backup is recorded, all the settings made after the system backup and all programs are deleted.

• Click Browse to open the Select Backup File window.

• In the Select File window, locate the appropriate backup file. Click Open to accept the
• file name and directory path in the User Interface window.

• Click "Replay Backup" to open the pop-up window for replaying the system backup.
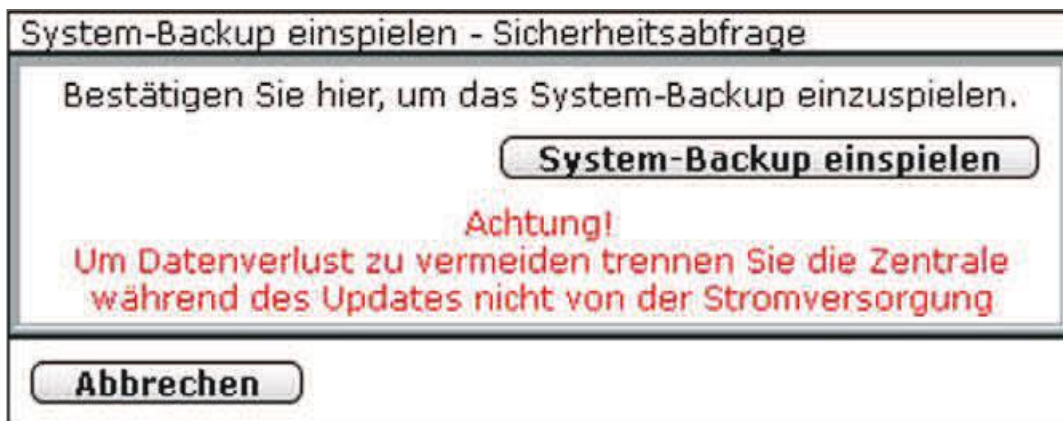
Figure 86:   **Pop-up-replay system backup**

• Enter the system security key in the Security prompt window. You only need to enter the system security key if it was previously set. If the system security key is in the factory state, you do not need to enter the key to replay the backup.

• Click "Replay system Backup" to load the system backup to the Control Panel. The pop-up window will then open to restart the system.

ⓘ The backup can take a few minutes, depending on the upgrade level of the configured system.
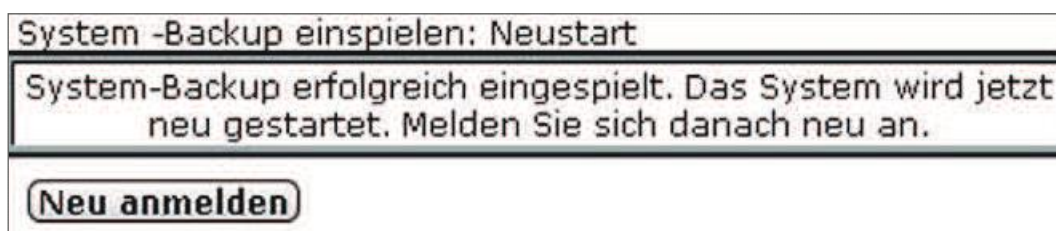
Figure 87:   **Pop-up-replay system backup-reboot system**

• Click "Log in again" to restart the system and log on to the system

Or to restart the system and go to the home page

ℹ️ Because the control Panel is unreachable during the restart, it is possible that your Web browser has an error message with the "Connection failed" content. Please wait until the central station has finished the boot process and try to access the control Panel again.

19.12.2.3 Performing a system reset

Run the following points one after the other to perform a system reset and restore the factory settings to the Control Panel.

ℹ️ All configurations, settings and programming are deleted. The security key is reset.

• Click "System Reset" in the line reset to start the reset operation. The pop-up window will then open to enter the system security key (Security prompt).
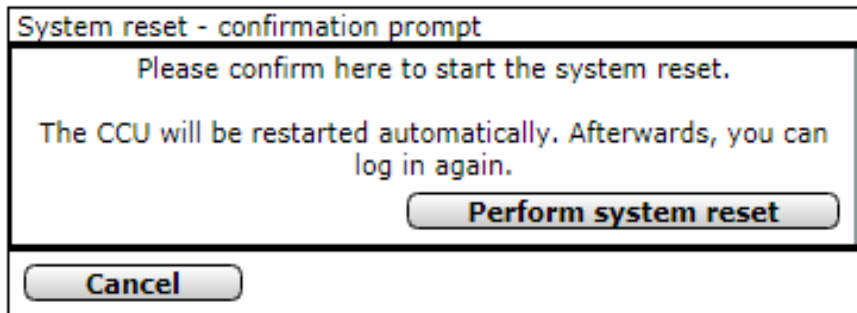
Figure 88: Pop-up-reset-security query

• Enter the system security key in the Security prompt window. You only need to enter the system security key if it was previously set. If the system security key is in the factory state, you do not need to enter the key to replay the backup.

• Click "Perform a Reset" to perform the reset of the control Panel. The pop-up window will then open to restart the system.
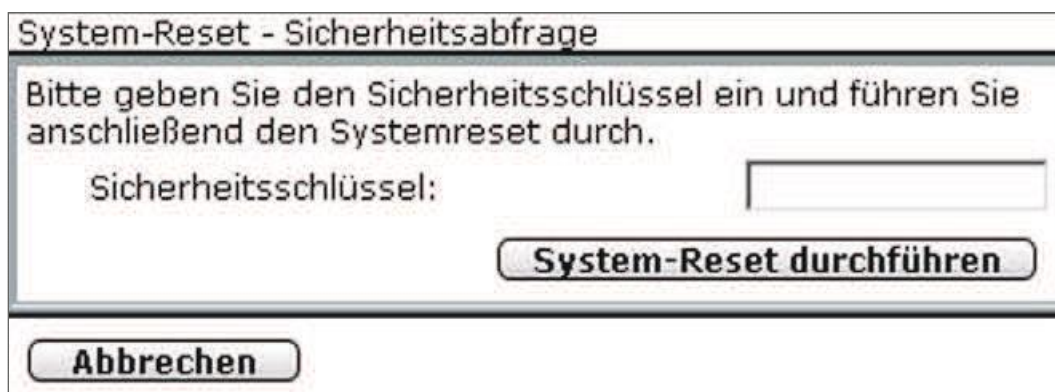
Figure 89: Pop-up-system reset-reboot

- Click "Register again" to restart the control Panel and log on to the system.

Since the CCU is not reachable during the restart, it is possible that your Web browser has an error message with the content "Connection failed"
Spends. Please wait until the central station has finished the boot process and try to access the control Panel again.

19.12.2.4 Configure Timeout time

- Type the timeout time in seconds in the box. Click "Apply
- Timeout".

SSH-Secure Shell
You can activate the SSH function of your head office via the checkbox "SSH active" and assign a password for access. "SSH" is a server service on the Zen Trale, which is used to establish an encrypted network connection and to access the Linux operating system of the CCU via separate programs (e.g. "putty" for Windows).

Close the window.
- Click Back in the footer to close the window.

19.12.3 Time and position setting

The setting of the time and date and the setting of the geographic location takes place in the-SEM pop-up windows. You can reach this window using the corresponding operating instructions   In *"19.12 Control Panel" on page 142*

```
CCU time and position settings
┌─────────┬──────────────────────────────────────────────────────────────┐
│         │ Time (hh:mm:ss)     22  : 51  : 37                             │
│  Time   │ Date (dd.mm.yyyy) 03 . 11  . 2018    (    Apply time    )      │
│         │                              (  Get time from computer  )      │
├─────────┼──────────────────────────────────────────────────────────────┤
│NTP server│ NTP server addresses: ee.pool.ntp.org  ( Apply time server ) │
├─────────┼──────────────────────────────────────────────────────────────┤
│         │ Country              Estonia      ▼                           │
│         │ City                 Tallinn ▼                                │
│Position │ Longitude    24.45             East ▼                         │
│         │ Latitude     59.25             North ▼                        │
│         │ Time zone EET/EEST (UTC+2/+3)      ▼  (   Apply settings   )   │
├─────────┴──────────────────────────────────────────────────────────────┤
│ (  Back  )                                                              │
└──────────────────────────────────────────────────────────────────────── ┘
```

Figure 90:   Pop-up – time and position setting

Setting the time and date manually
Select the points listed below in the "Time" line and enter the appropriate information there.

Then close the configuration by clicking on "   *Take time "*   Off.

Time entry
•   Enter the time in the specified format.

Date Entry
•   Enter the date in the specified format.

Take the time and date from the PC system clock •
      Click "Take time from PC" to take the current PC time to the Control Panel.

Automatically obtain time and date via the Internet •
      In the "NTP server" line, enter the hostname of a time server to automatically obtain and synchronize the time and date over the Internet. Click "Apply time Server" to accept the setting.

      🛈   At the factory, NTP time server addresses are already entered here.

Setting the geographical position of the place of residence by selecting a country or city select the points listed below in the "position" line and enter the relevant information there.
Then close the configuration by clicking on "   *Apply Settings "*   Off.

Country Selection Entry
• Select your country from the selection list.

City Selection Entry
• Select your city or city from the selection list.
After the selection of the country and city, the entries for longitude, latitude and time zone are updated automatically.

Only if the geographical position is correctly adjusted will the Astrouhr (sunrise and sunset times) be calculated correctly.

Setting the geographic position by entering longitude and latitude Select the points listed below in the line entry row and enter the appropriate information there.

Then close the configuration by clicking on " *Apply Settings "* Off.

Longitude entry
• Enter the longitude of your place of residence in the specified format.

Latitude entry
• Enter the latitude of your place of residence in the specified format.
You can find information about the latitude and longitude of your place of residence in a navigation system or read it on relevant internet pages.
Only if the geographical position is correctly adjusted will the Astrouhr (sunrise and sunset times) be calculated correctly.

Setting the time zone
From the selection list in the line entry row, select the establishments-concerned time zone for your location.
Then close the configuration by clicking on " *Apply Settings "* Off.
After the selection of the country and city, the entries for longitude, latitude and time zone are updated automatically.

Close window
• Click Back in the footer to close the window.

19.12.4 Network Settings

The network settings of the control Panel are configured in this pop-up window.
You can reach this window using the corresponding operating instructions in *19.12 System Control "on page 142*

⚠️ Changes to the network settings can cause you to get no more access to the Control Panel. If you have any problems or questions about configuring your network settings, please contact your network administrator.

Figure 91:   Pop-up-network settings

19.12.4.1   IP Settings

Select the points listed below and enter the relevant information there.

Then complete the configuration according to the instructions under "   *All inputs Take and close windows*   From.

ℹ️ Match the entries in this window with the configuration of your network.

Hostname entry
- Enter a host name.
- Click the "Use the following IP address" check box to connect the control Panel to an existing network using a fixed IP address. Configure the following parameters according to your LAN:
  - IP Address
  - Subnet mask
  - Gateway

Use the following DNS server addresses entry
- Configure the parameters as needed according to your LAN.

19.12.4.2   Create certificate

Here is the creation of a certificate, which is necessary to be able to build a secure HTTPS connection between the Web server (in this case the CCU) and your web browser on the user PC.
- Select the points listed below and enter the relevant information there.

Hostname entry
- Enter the host name of the dynamic domain for your headquarters that you have set up for a dynamic Domain Name System (DYNDNS) provider and that you want to access directly to your CCU (for example, "hm-zentrale.dyndns.org"). .

> When you open the window, the currently used domain name or IP address is automatically entered here.

Email Address entry
Enter your email address.

Country entry
- Enter your country's abbreviation (DE for Germany, at for Austria, etc.).

- Click Create certificate to create the certificate on the Homematic server (www.homematic.com).

> To create the certificate, you must have your Web browser, i.e. Your user PC, have access to the Internet.

- In the following operating system or Web browser window, click Save file to save the certificate to your user PC.

Download the certificate to the CCU
To load a previously created certification support his to the control panel, run the points listed below sequentially.

- Click Browse to open the Select Certificate window. In the File Upload window, locate
- the appropriate certificate that you saved earlier.

- Click "Open" to display the file name and directory path in the windows of the
  User interface.
- Click Upload to load the certificate to the CCU. The pop-up window will then open
  to restart the system.
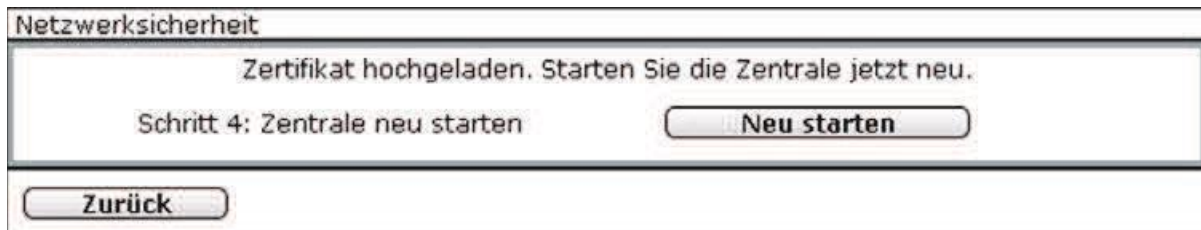
Figure 92:   Pop-up-network security-restarting the system

- Click Restart to restart the control Panel. Then the pop-up window will open to log on to
  the system again. Click "Register again" to log in to the system or to access the home
  page

Since the CCU is not reachable during the restart, it is possible that your Web browser
will issue an error message with the content "Connection failed". Please wait until the
central station has finished the boot process and try to access the control Panel again.

When you first access the CCU through a secured HTTPS connection, you must
manually accept the certificate created and loaded above. This is necessary because
the certificate created is a so-called self-signed certificate and has not been issued by a
recognized certification authority. For more information on accessing

via a secured HTTPS connection see   *Secured Ethernet Connection*   .

For more information about HTTPS connections, SSL encryption, and associated certificates,
please contact your network administrator.

Secured Ethernet Connection
In order to establish a secure HTTPS connection between the CCU and the Web browser
on your user PC, a corresponding certificate must be loaded at the CCU. First, complete
the appropriate operating instructions for creating and uploading a certificate.

For more information about HTTPS connections, SSL encryption, and associated certificates,
please contact your network administrator.

To access the CCU through a secure (SSL-encrypted) HTTPS connection, follow the
points listed below sequentially:
- Connect the control Panel to your LAN using a network connection cable. Start your
- Web browser.
- In the address bar of the Web browser, enter the location associated with the

Hostname of the dynamic domain in the form http://172.25.50.156 A. The user login screen will then open

ℹ️ For the first time (after uploading the certificate) over a secured HTTPS connection to the Control Panel, you must accept the created and loaded certificate MA-or manually. This is necessary because the certificate created is a so-called self-signed certificate and has not been issued by a recognized certification authority.

Accept all entries and close the window •
Click "OK" in the footer to save the entries and close the window.

Discard all entries and close Windows •
Click Cancel in the footer to close the window without changing it.

Configure 19.12.5 Firewall

The firewall is configured in this pop-up window. Here the access to the two interfaces of the control Panel is set.
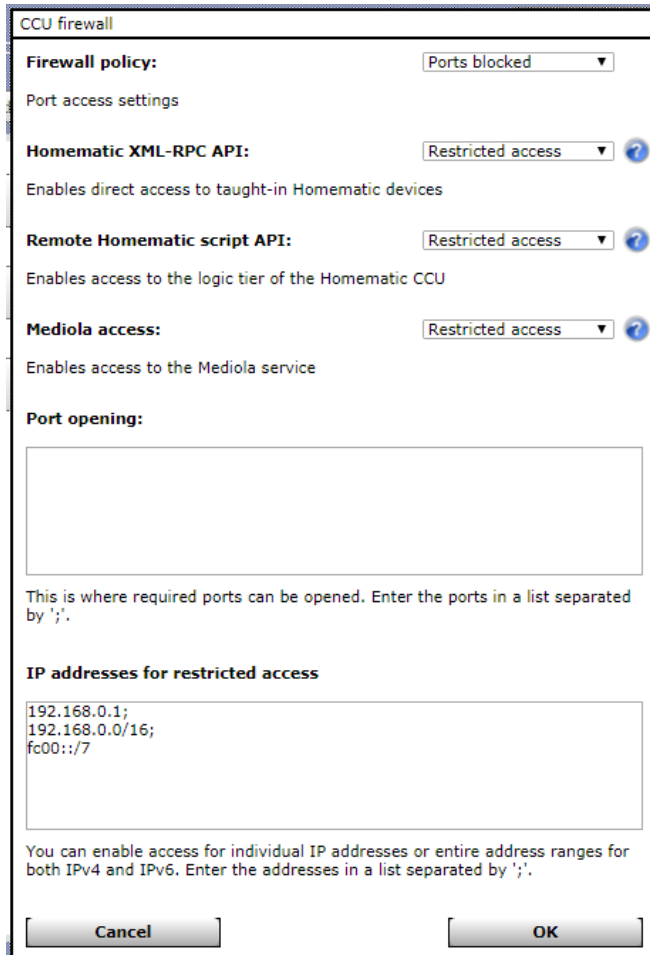
Figure 93:   Pop-up window firewall configuration

Homematic XML-RPC API
The Homematic XML-RPC API is an interface that can only be accessed directly on individual devices, but cannot be used to control functions, spaces, programs,...

For example, a single switch or dimmer can be controlled, but not the program "presence" or the room "bathroom".

Full
Access to the control Panel is only protected over the network. Anyone who can access the network at the same time has the Homematic XML-RPC API interface.

Restricted
The Homematic XML-RPC API interface is only for some selected IP addresses or Address ranges that are listed in the "Restricted Access IP Addresses" section.

No access
Access from the network to the Homematic XML-RPC API interface is blocked.

Remote Homematic Script API
The remote Homematic Script API interface can be used to control spaces, functions, and programs.

Full
Access to the control Panel is only protected over the network. Anyone who can access the network at the same time has the remote Homematic script API interface.

Restricted
The remote Homematic Script API interface is only available for some selected IP addresses or ranges of address listed in the restricted to grip IP addresses area.

No access
Access from the network to the remote Homematic script API interface is blocked.

19.12.6 LAN Gateway Configuration

The configuration of the available wireless LAN gateways is done in this window.

Figure 94: LAN Gateway Configuration

If you want to use a wireless LAN gateway as an antenna, click the "Add to" button.

Another pop-up window opens:

Figure 95: Edit Gateway Pop-up window

Name
- Type a name for the device (optional).

Serial number
- Enter the serial number of the device.

Security key
- Enter the device's security key.

IP address (optional)
An IP address is usually not to be specified. However, it is possible to manually assign an IP address with the software provided to the gateway.
- In this case, the IP address must be entered here.

19.12.7 Additional Software

The installation, administration and uninstallation of additional software is done in this pop Up window. You can reach this window using the corresponding operating instructions in *19.12 Control Panel on page 142.*

ℹ️ It is important to note the hints in the user interface.

⚠️ Any additional software installed by the user may lead to undesirable results, including data loss and system instability.

Check for Addons here:
https://homematic-forum.de/forum/viewtopic.php?f=49&t=46890

Figure 96: Pop-up – additional software (no additional software installed yet)

Install additional software

Run the points listed below sequentially to load an additional software to the Control Panel.

- Click "Browse" to open the add-on software Selection window.

- In the File Upload window, locate the appropriate add-on software. Click Open to accept
- the file name and directory path in the User Interface window.

- Click Install to install the add-on software on the Control Panel and follow the instructions on the screen. The control panel will automatically reboot after installation.
- After the central station has automatically restarted, click "Log in again to log on to the system or to access the home page any new add-on software is listed in this pop-up window Zeilenwei-se after installation. The form and the contents of the information line are the additional software.

The operating and configuration possibilities of the additional software can be consulted in the operating instructions of the additional software or please contact the support of the additional software manufacturer.

Uninstall Add-on software
- In the list, locate the additional software that you want to delete. •
  Click "Uninstall" on the corresponding line to uninstall the additional software.
  Follow the instructions on the screen.

19.12.8 General Settings

In the menu item "General Settings" You can select a microSD card or a USB Initialize the stick for measurement data acquisition and diagram display (see"*16.4 Status and Operation Diagrams "on page 43)* and the corresponding prices of your Energieanbie Ters and the currency for the performance measurement.

General settings		
External USB memory	Status: microSD card is available but has not yet been initialized.	Storage of data only includes the diagrams.
Price per kWh	**Currency** [EUR ▼] **Current** Price/kWh [0.00] **Gas** Price/kWh [0.00] Heating value kWh/m^3 [0.00] Condition number [0.00] (Save)	Here you can set the price per kWh of your electricity provider.
Info LED	Service messages: ☑ Alarm messages: ☑	Switching the Info LED flashing on or off in case of service and alarm messages

(Back)

Figure 97: **Pop-up-general settings**

You can select one of the following currencies: ◦
Euro
◦ Turkish lira
◦ British pound
◦ Swiss francs
◦ Polish zloty

Energy consumption and energy costs are provided under "status and Operation" ⟶ Ge For devices with power measurement.

19.12.9 couplings - Philips HUE and OSRAM Lightify

In the menu item "couplings" You can, for example, create a coupling between your central-Le and Osram Lightify or Philips Hue.

Making couplings
*   Under Control Panel, click Couplings to open the pop-up window for editing.
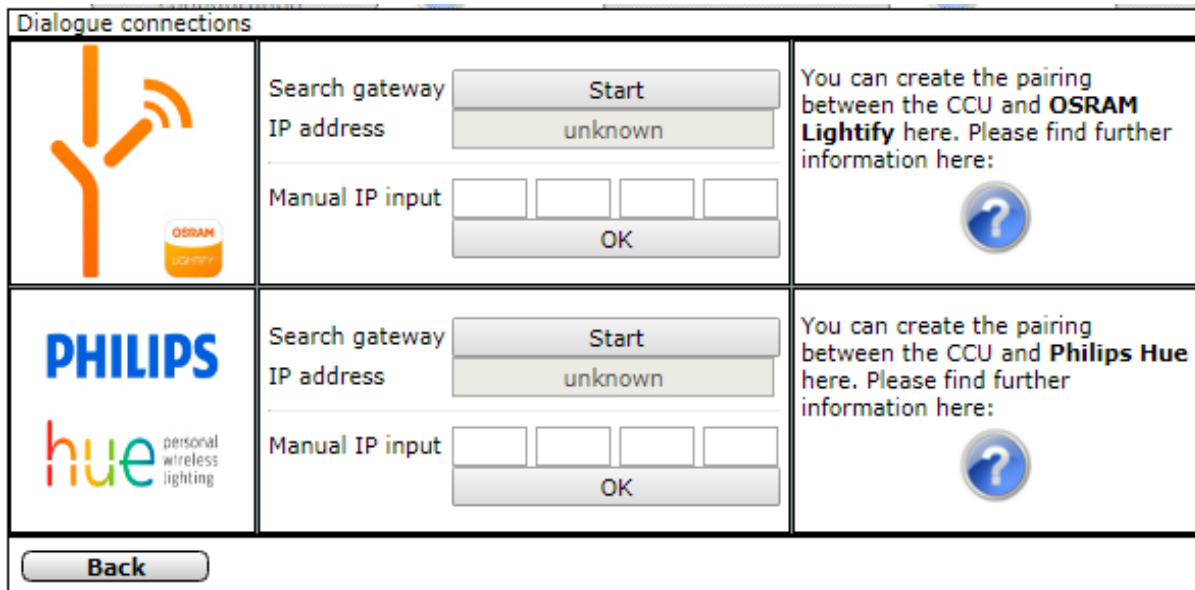
Figure 98:   Pop-up window couplings

*   Enter the IP address of the gateway and click OK.

CUx Daemon
CUx-Daemon is a universal interface between the central and corresponding compatible onscreen components of other systems such as FS20, EnOcean and many others. With the help of this add-on it is possible to unprecedented components of other systems into the system.

*   Click on "Cux-daemon" to go to the add-on.

CloudMatic
*   Click "CloudMatic" to set up a remote grip on your home automation installation. For more information about the installation, please refer to the website www.cloudmatic.de. This is a third-party software.

19.12.10   NEOServer

☐   This application is pre-installed and available only in conjunction with the CCU3.

See "NEOServer" For more information about Mediola's programs and services (such as the AIO creator Neo) and how to activate the server program installed on the central CCU3. It is a third-party software.

By activating the NEOServers, you can involvement plug-ins for devices from other manufacturers and service providers such as Bose, Sonos, Digitus, and others in your smart home system. Additional costs may arise here.

To activate the server, do the following: •

 Under Control Panel, click NEOServer. Here you can view the status of the server.

Figure 99:   **NEOServer offline**

• Click Enable to connect to the Mediola server. Wait until the server is enabled and
• "Status: Online" appears.

Figure 100: NEOServer Online

HomeMatic
homematic IP

ℹ The NEOServer is always started automatically at the start of the CCU3.

ℹ The NEO Automation Manager plug-in allows you to shortcut and automate systems between your Homematic or Homematic IP and GE councils of other integrated brands/manufacturers.

See https://www.mediola.com/hersteller-liste for a list of all brands and manufacturers currently supported by the AIO creator Neo via Neo plugins.

For more information on the installation of the AIO creator Neo, please refer to the CCU3 enclosed information card.

Redmatic

RedMatic combines several software components into one CCU Addon, software package that can be easily installed on a Homematic CCU3 or RaspberryMatic as additional software via the WebUI.
The basis is Node-RED with the CCU nodes for Node-RED. This makes it possible to implement rules, automations, scripts and connections of external services and systems for a Homematic system in a simple, visual way - and this largely without any programming knowledge. The wiki has more information about Node-RED and some usage examples (called Flows).
In addition, RedMatic WebApp and Node-RED Dashboard are included; with this user interfaces for mobile devices and the browser can be created easily (example screenshots).

Also direct Homekit, Blockly, node.js ... and much more.

RedMatic is only suitable for the CCU3 and RaspberryMatic. It cannot be used on the CCU2 or lower.
For the use of the CCU Nodes a modern browser is necessary, the Internet Explorer is not supported.

Under Releases the file redmatic- <version> .tar.gz is available for download. After installing the Addon via the Homematic WebUI (Control Panel -> Addon Software) and the necessary reboot of the CCU, Node-RED can be reached at http://<ccu-addresse>/addons/red.
Patience is required during installation, it can take up to 10 minutes. Some sample flows and a simple dashboard are already preconfigured, the dashboard is accessible at http://<ccu-addresse>/addons/red/ui.

20 Homematic Device Configuration

20.1 Wireless Radiator Thermostat (HM-CC-RT-DN)

With the electronic radio radiator thermostat from Homematic You can regulate the room temperature time-controlled and adjust heating phases to your individual needs.

After you have trained the radio radiator thermostat to the Control Panel, you can make the settings of the device using the WebUI interface. Click
To "Settings"-"Devices" and select the radiator thermostat (s. *"19.2 Devices "on page 110*).

Figure 101: Radio Radiator Thermostat Overview

In this window you can make settings for the radio radiator thermostat and adjust the parameters of the radiator thermostat.

20.1.1 Device Parameters

The device parameters of the radio radiator thermostat can be configured individually.
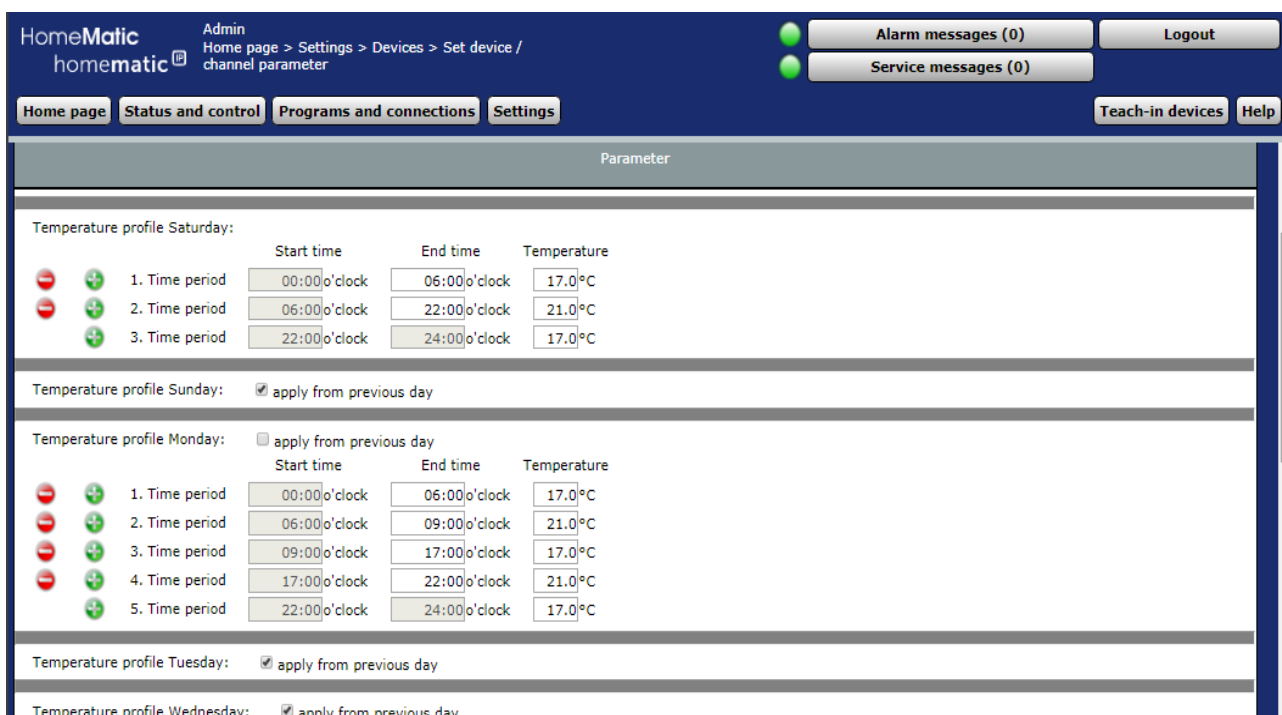
Figure 102: Temperature Profiles

Programme
You can set individual temperature profiles of the radio Heizkörperthermo-STAT for each weekday. A temperature profile can be divided into several time periods (max. 6 heating phases and 13 switching times). The start and end times and the temperature must be specified for each time period. You have the possibility to create the temperature-file for the day separately or by the checkbox "as before" to take over the profile of the previous days.

- Temperature Profile Saturday
  CheckBox: "How the day before"
  Input: Period: Start time-end times-temperature
- Temperature Profile Sunday
  CheckBox: "How the day before"
  Input: Period: Start time-end times-temperature
- Temperature Profile Monday
  CheckBox: "How the day before"
  Input: Period: Start time-end times-temperature
- Temperature Profile Tuesday
  CheckBox: "How the day before"
  Input: Period: Start time-end times-temperature
- Temperature Profile Wednesday
  CheckBox: "How the day before"
  Input: Period: Start time-end times-temperature
- Temperature Profile Thursday
  CheckBox: "How the day before"
  Input: Period: Start time-end times-temperature
- Temperature Profile Friday
  CheckBox: "How the day before"
  Input: Period: Start time-end times-temperature

Local Control lock
CheckBox: The operation on the device can be blocked to prevent the unwanted modification of settings, e.g. by accidental touching. The local control lock locks the operation on the device. The control lock can be removed from the unit.

Global control Lock
CheckBox: The operation on the device can be blocked to prevent the unwanted modification of settings, e.g. by accidental touching. The global control lock locks the operation on the device and can only be activated via the WebUI (not on the device).

Mode control lock
CheckBox: When the control lock mode is activated, the device can only be operated in the currently set mode. It is not possible to switch between the operating modes (auto, Manu, holiday or boost). The mode control lock can only be disabled via the WebUI (not on the device).

Comfort temperature
At the factory, a comfort temperature of 21 °c is set. You can adjust the comfort temperatures individually.
Input Temperature range: 15.00 – 30.00 °c

Eco temperature
At the factory an eco temperature of 17 °c is set. You can set the eco temperature in-dividual.

Input Temperature range: 5.00 – 25.00 °c

Minimum temperature
At the factory, a minimum temperature of 4.5 °c is set. To determine the lower limit of the adjustable temperature, a minimum temperature of 5.00 – 14.5 °c can be set.

Selection temperature range: Off and 5.00 – 14.5 °c

Maximum temperature
At the factory, a maximum temperature of 30.5 °c is set. To limit the height of the adjustable temperature, a maximum temperature of 15.0 – 30.0 °c can be set.

Selection temperature range: On and 15.0 – 30.0 °c

Window-to-temperature
When airing in the room, the radiator thermostat automatically regulates the temperature to save heating costs. At the factory, a window-to-temperature of 12 °c and an eco-time of 15 minutes are set. You can adjust the window-to-temperature individually.

Input Temperature range: 5.00 – 30.00 °c

mode for temperature Fall detection
Here you can make mode settings for the temperature drop detection: •
    Inactive: Temperature Fall Detection Inactive
•   Auto mode: Temperature Fall detection only active in auto
•   Auto + Manu Mode: Temperature fall detection only active in auto and Manu mode
•   Auto + party mode: Temperature drop detection active only in auto and Party mode
•   Active: Temperature Fall detection for all modes Active (default)

Selection mode: Inactive, Auto mode, auto + Manu mode, auto + Party mode or active

Window-to-temperature duration
Here you can set the duration of the temperature fall detection. This function is not possible in conjunction with a Homematic window contact.
Input time: 0-60 Minutes

Descaling Trip
A descaling drive of the Heizkör Perthermostat is carried out once a week to protect against the calcification of the valve. The valve is opened once completely and then

Closed again. This prevents the valve pin from setting itself by lime ablagerun gene. No operation is possible during this short period of time. The factory is set for the weekly descaling trip Saturday, 11:00 pm. You can adjust the time-point for the descaling trip individually.

Select time Weekday: Monday-Sunday

Time
The factory is set for the weekly descaling trip Saturday, 11:00 pm. You could adjust the time for the descaling trip individually.
Time of Selection: 0 – 11 pm and full or half hour

Temperature offset
As the temperature of the radiator is measured, it may be colder or warmer at another point in the room. To align this, a temperature offset of ± 3.5 °c can be set. If, for example, 18 °c are measured instead of 20 °c, an offset of-2.0 °c is to be adjusted. At the factory, an offset temperature of 0.0 °c is set. You can adjust the offset temperature individually.

Selection temperature range:-3.5 – 3.5 °c

Boost duration
With the boost function, cool rooms can be heated up at the push of a button and within a very short time. When the boost function is triggered, the heating valve is immediately opened for 5 Minu to 80% (factory setting). You can adjust the boost duration individually. Selection Time: 0 – 30 minutes

Valve Opening degree
With the boost function, cool rooms can be heated at the push of a button and within a very short time. When the boost function is triggered, the heating valve is immediately opened for 5 mi-Slots to 80% (factory setting). You can adjust the valve opening level individually during the boost duration.
Input aperture: 0 – 100%

Boost after window closure trigger
CheckBox: You can activate this function if you want the boost function to be automatically disconnected after an open window is detected and the window is closed again.

ℹ️ In Expert mode (see) can Other settings on the wireless radiator thermostat, such as setting the Display lighting duration or the automatic change from summer to winter time.

Channel parameters
This is where the channels of the device are displayed. You cannot set channel parameters for the radio radiator thermostat.

You can hide the parameter list by clicking the "Close parameter list" button.

20.2 Wireless Switch Actuator, Power Metering Plug Adapter (HM-ES-PMSw1-PL)

With the Homematic Radio switch Actuator 1x with power measurement in the adapter housing you can connect connected loads (e.g. Turn off your dryer) and measure the energy consumption of these devices (up to 3680 Watts (16 a)).

The radio switch actuator with power measurement combines two functional areas in one advised:

Switching of connected loads (switching channel)
- Measurement of voltage, current, active power, frequency and energy
- consumption (measuring channel)

To configure the wireless switch actuator with power measurement, click "Settings" in the

WebUI user interface ⟶ "Devices" and select the radio switch actuator with Performance measurement .

Figure 103: Setting Radio switch actuator with power measurement

In this window you can make settings for the radio switch actuator with power measurement and adjust the parameters of the device.

20.2.1 Device Parameters

The device parameters of the radio Schaltaktors with power measurement can be individually confi gured. You can make the following configurations:

CheckBox "Lock reset by Device Key":
Set the check mark if you want to disable the Reset function ("Factory settings restoring-len") on the device. The reset can only be done via the control Panel.

20.2.2 Channel Parameters

20.2.2.1 Channel 1: Switching channel

Figure 104: Radio switch actuator with power measurement-Channel 1

Input "Status messages delay": 0.50 – 15.50 S (default: 2.00)
The value indicates the time interval at which the device sends STA-Tusmeldungen to the control center after a state change.
To prevent collisions when sending status messages, you can define a time window that will be added to the delay Time: 0.00 – 7.00 S (default: 1.00)

"Max Send attempts" entry: 0 – 10 (default: 5)
Sets the number of maximum send attempts.

Programming the internal device key:
You can choose between the expert, switch on, switch off, switch on/off (default), and stair light modes:

- Expert: In Expert mode, you can make additional device configurations. •
  Switch on, switch off, switch on/off: With a pressure on the device button, the switch is switched on or off for the specified time (duration in the state "on" or "off"). If a delay time (switch-on or switch-off delay) is set, a circuit only takes place after the end of this time.

- Staircase Light: With a pressure on the device button, the switch is switched on for the specified time (duration in the state "on").

Switch-on delay selection:
None, 5 S-1 h, enter value

Selection "On time (duration in state" on ")": 1 S-24 h,
Infinity, enter value

Switch off delay selection:
None, 5 S-1 h, enter value

Select "Dwell time in State" off ": 1 S-24 h, Infinity, enter value
Button "Simulate key Press": Click on this button to simulate a key press on the advised and to look at the effects.

20.2.2.2   Channel 2: Measuring channel (current/Spannungs-/Leistungs-and frequency meter

		Strom-/Spannungs-/Leistungs- und Frequenzmesser
		Mittelwertbildung über 1 s (1 - 16)
		Ein Wert wird gesendet, wenn sich seit der letzten Sendung
HM-ES-PMSw1-Pl KEQ0421366:2	Ch.: 2	die Leistung um Werteingabe ▾ 100.00 W (0.01 - 3680.00)
		oder der Strom um Werteingabe ▾ 100 mA (1 - 16000)
		oder die Spannung um Werteingabe ▾ 10.00 V (0.10 - 230.00)
		oder die Frequenz um Werteingabe ▾ 1.00 Hz (0.01 - 2.55)
		geändert hat.
		Mindestpause nach 8 s (0 - 16)
		der letzten Sendung

Figure 105: Radio switch actuator with power measurement-Channel 2

Input "mean value over":
1 – 16 S (default: 1)
Average values of the measurement data are generated in the device, which are sent to the control center for further processing.

Input "A value is sent if the power has changed since the last broadcast: 0.01 – 3680.00 W
Or the current at: 1 – 16000 W
or the voltage at: 0.10 – 230.00 V or the
frequency changed by: 0.01 – 2.55 Hz.

Enter "Pause after last broadcast": 0 – 16 S (default: 8)

20.2.2.3 Channel 3 to 6 (power, current, voltage and frequency sensor)

HM-ES-PMSw1-Pl KEQ0421366:3	Ch.: 3	**Leistungs-Sensor** Schaltbefehl bei Überschreiten der Leistung ▾ Bei Überschreitung des oberen Grenzwerts Entscheidungswert (200) senden, wenn vorher der untere Grenzwert unterschritten wurde. Oberer Grenzwert 200.00 W (0.00 - 3680.00) Unterer Grenzwert 100.00 W (0.00 - 3680.00)
HM-ES-PMSw1-Pl KEQ0421366:4	Ch.: 4	**Strom-Sensor** Schaltbefehl bei Überschreiten der Stromstärke ▾ Bei Überschreitung des oberen Grenzwerts Entscheidungswert (200) senden, wenn vorher der untere Grenzwert unterschritten wurde. Oberer Grenzwert 2000 mA (0 - 16000) Unterer Grenzwert 1000 mA (0 - 16000)
HM-ES-PMSw1-Pl KEQ0421366:5	Ch.: 5	**Spannungs-Sensor** Schaltbefehl bei Überschreiten der Spannung ▾ Bei Überschreitung des oberen Grenzwerts Entscheidungswert (20) senden, wenn vorher der untere Grenzwert unterschritten wurde. Oberer Grenzwert 240.00 V (115.00 - 255.00) Unterer Grenzwert 220.00 V (115.00 - 255.00)
HM-ES-PMSw1-Pl KEQ0421366:6	Ch.: 6	**Frequenz-Sensor** Nicht aktiv ▾ Der Sensorkanal ist nicht aktiv.

Figure 106: Radio switch actuator with power measurement-channel 3-6

The sensor channel is not active. In Expert mode, you can perform additional configurations on the sensor channel of the wireless Schaltaktors with power measurement.

20.3   Wireless Wall Thermostat (HM-TC-IT-wm-W-EU)

With the Homematic wireless wall thermostat, you can regulate the room temperature in conjunction with one or more Homematic Radio radiator thermostats (HM-CC-RT-dn) and adjust heating phases to your individual needs. The wall thermostat measures the temperature and humidity and then cyclically forwards the IS and should-tempera to the radiator thermostat, so that the room temperature can be controlled.

After you have trained the wireless wall thermostat to the control Panel, you can make the settings of the device using the WebUI interface. To do so, click
Under "Settings" on "Devices" and select the wall thermostat (s.).

Figure 107: Wireless Wall Thermostat Overview

In this window, you can change the settings for the wireless wall thermostat and adjust the parameters of the device individually.

20.3.1 Device Parameters

The device parameters of the wireless wall thermostat can be configured individually.

Programme
You can choose between 3 weeks of programs.
Selection: Active Wochenrpogramm: 1, 2, 3 selection:
Edit Weekly program: 1, 2, 3

For each weekday, you can set individual temperature profiles for the radio Wandthermo-Stat. A temperature profile can be divided into several time periods (max. 6 heating phases and 13 switching times). The start and end times and the temperature must be specified for each time period. You have the option of creating the tempera-turprofile for the day separately or by using the checkbox "as the day before" to take over the profile of the previous days.

- Temperature Profile Saturday
  CheckBox: "How the day before"
  Input: Period: Start time-end times-temperature
- Temperature Profile Sunday
  CheckBox: "How the day before"

Input: Period: Start time-end times-temperature

- Temperature Profile Monday
  CheckBox: "How the day before"
  Input: Period: Start time-end times-temperature
- Temperature Profile Tuesday
  CheckBox: "How the day before"
  Input: Period: Start time-end times-temperature
- Temperature Profile Wednesday
  CheckBox: "How the day before"
  Input: Period: Start time-end times-temperature
- Temperature Profile Thursday
  CheckBox: "How the day before"
  Input: Period: Start time-end times-temperature
- Temperature Profile Friday
  CheckBox: "How the day before"
  Input: Period: Start time-end times-temperature

Figure 108: Temperature Profiles

Keylock

CheckBox: The operation on the device can be blocked to prevent the unwanted modification of settings, e.g. by accidental touching. The keypad lock locks the operation on the device. The control lock can be removed from the unit.

Global control Lock

CheckBox: The operation on the device can be blocked to prevent the unwanted modification of settings, e.g. by accidental touching. The global control lock locks the operation on the device and can only be activated via the WebUI (not on the device).

Mode control lock
CheckBox: When the control lock mode is activated, the device can only be operated in the currently set mode. It is not possible to switch between the operating modes (auto, Manu, holiday or boost). The mode control lock can only be disabled via the WebUI (not on the device).

Comfort temperature
At the factory, a comfort temperature of 21 °c is set. You can adjust the comfort temperatures individually.
Input Temperature range: 15.00 – 30.00 °c

Eco temperature
At the factory an eco temperature of 17 °c is set. You can set the eco temperature in-dividual.

Input Temperature range: 5.00 – 25.00 °c

Minimum temperature
At the factory, a minimum temperature of 4.5 °c is set. To determine the lower limit of the adjustable temperature, a minimum temperature of 5.00 – 14.5 °c can be set.

Selection temperature range: Off and 5.00 – 14.5 °c

Maximum temperature
At the factory, a maximum temperature of 30.5 °c is set. To limit the height of the adjustable temperature, a maximum temperature of 15.0 – 30.0 °c can be set.

Selection temperature range: On and 15.0 – 30.0 °c

Temperature offset
As the temperature of the radiator is measured, it may be colder or warmer at another point in the room. To align this, a temperature offset of ± 3.5 °c can be set. If, for example, 18 °c are measured instead of 20 °c, an offset of-2.0 °c is to be adjusted. At the factory, an offset temperature of 0.0 °c is set. You can adjust the offset temperature individually.

Selection temperature range:-3.5 – 3.5 °c

Hysteresis for two-point control
The wall thermostat can be used in conjunction with a switch actuator as a two-point controller. The regulation is based on the target and the present temperature as well as the hysteresis fixed here.

Type of two-point regulation
If the wall thermostat is used as a two-point controller, this determines whether the control should be "heating" or "cooling".
In the heating mode, the switch actuator is switched on when the target temperature is not set, and in cooling mode it is switched on when it is exceeded.
Selection: Heating or cooling

Boost duration
With the boost function, cool rooms can be heated up at the push of a button and within a very short time. When the boost function is triggered, the heating valve is immediately opened for 5 Minu to 80% (factory setting). You can adjust the boost duration individually. Selection Time: 0 – 30 minutes

Boost after window closure trigger
CheckBox: You can activate this function if you want the boost function to be triggered automatically after an open window is detected and the window is closed again.

Display on display
Here you can choose which temperature display should be active in the display of the radio Wandthermo-stats.
Selection: Current temperature or target temperature

> **ℹ** In Expert mode (see *"3.4 User Management" on page 15*), you can Settings on the wireless wall thermostat such as the display of the weekday or the Automatic change from summer to winter time.

20.3.2 Channel Parameters

This is where the channels of the device are displayed. For the wireless wall thermostat, you can set kei-NE channel parameters.
You can hide the parameter list by clicking the "Close parameter list" button.

20.4 Wireless LAN Gateway (HM-LGW-O-tw-w-EU)

The Homematic Wireless LAN Gateway serves as an extension of the radio range of your head office in a Homematic system.
If you are using Homematic devices outside the direct range of your head office,
For example, in the basement, on the upper floor of your house or in the Garden House, the Wireless LAN Gateway supports the transmission of radio commands to these devices.

20.4.1 integration into the system

In order to establish communication between the wireless LAN Gateway and its headquarters and to be able to use the Wireless LAN gateway as a range extension of the central station, you must include it in the system.

To do this, do the following: •
        In your WebUI, click Control Panel under Settings.

Figure 109: Settings-Control Panel

•   Then click on "LAN Gateway" in the next window.

Figure 110: Control Panel-LAN Gateway

• To integrate your wireless LAN gateway into the system, press the "Add" button next.

Figure 111: LAN Gateway General settings

• Select the RF: Homematic RF-LAN Gateway type.
• Remove the serial number and access code of your wireless LAN gateway from your notes or the sticker on the back of the case.
• Enter them in the appropriate fields. •
  Then press OK.

Figure 112: Adding a LAN Gateway

Your wireless LAN gateway is displayed in the user interface. •
To activate it, click on "Apply" and restart your control panel.

- To do this, click Settings, Control Panel, central maintenance, Reboot and log in again.

Figure 113: Pop-up – Centralized maintenance

Then you must connect all the devices (if this is not already done automatically) to be reached via the Wireless LAN gateway with the wireless LAN gateway via the WebUI.

- To do this, in Device view (settings, Control Panel, LAN Gateway), click Set under Actions on the device.
- In this view, select the Wireless LAN Gateway and confirm with "OK".

Figure 114: Interface Mapping

Now you can reach the selected devices of your Homematic system via the Wireless LAN gateway.

20.5 Wireless Door/Window Sensor Optical (HM-SEC-SCO)

The Homematic wireless Door/Window Sensor, visually detects open or closed window or doors through an infrared sensor (reflex coupler) and transmits the condition via radio to other Homematic devices or to the Control Panel.

The device offers different applications and can be used, for example, with the Homematic Radio Radiator thermostat (also in group management) for regulating the room temperature temperature with the window open.

After you have trained the radio door/window sensor to the control Panel, you can use the WebUI user interface to make the device's settings. To do so, click "Settings"-"Devices" and select the radio door/window sensor (see

Figure 115: Wireless door/window sensor, optical overview

In this window, you can change the settings for the wireless door//window sensor and adjust the parameters of the device individually.

20.5.1 Device Parameters

The device parameters of the radio door/window sensor can be configured individually.

Figure 116: Wireless door/window sensor, optical device parameters

CheckBox "Cyclic status message"
If the checkbox is activated, the device sends status messages to the control center at a cyclic distance. The basic grid for cyclic status messages is a randomly varying time range of one hour. However, with the following 2 parameters the grid can be enlarged. Both parameters are applied one after the other.

CheckBox "Sabotage Message"
If the checkbox is activated, the tamper contact integrated in the device reports the remove of the cover cap.

CheckBox "Lock reset by Device Key"
If the checkbox is activated, the factory settings of the device cannot be restored via the Geräteta-Ste. The reset can only be done via the control Panel.

Enter "Max send attempts":
1 – 10 (default: 6)
Sets the number of maximum send attempts.

20.5.2 Channel Parameters

The channel parameters of the radio door/window sensorS can be configured individually.

Figure 117: Wireless door/window sensor, optical channel parameters

Selection "message in position open"
Specifies which state message is sent to the Control Panel when the window or door is open.

Selection: No message, too, open

"Message in position closed" selection
Specifies which state message is sent to the Control Panel when the window or closed door is closed.
Selection: No message, too, open

Entry "Alarm delay": 0.00-7620.00 S
The value indicates the time interval at which the device sends STA-Tusmeldungen to the control center after a state change.

Input "Max send attempts": 1 – 10 (default: 6)
Sets the number of maximum send attempts.

20.6 Remote Control 8 Buttons (HM-RC-8)

With the Homematic radio remote control you can control the fishing Homematic devices comfortably with eight keys.

The remote control can be taught directly to other Homematic devices or the control Panel, for example, to switch on or off lighting or to move the roller shutter up or down. You can set the functions of the 8 buttons individually. Several Homematic devices can be taught at a button. This allows multiple functions to be performed simultaneously using a single button print.

After you have learned the radio remote control to the Control Panel, you can use the WebUI user interface to set the device's settings. To do this, click "Settings"-"Devices" and select the Radio remote control (S. *"19.2 Devices" on Page 110*).

Figure 118: Radio remote Control 8 keys-Overview

In this window you can change the settings for the radio remote control and adjust the parameters of the device individually.

20.6.1 Device Parameters

The device parameters of the radio remote control can be configured individually.

Figure 119: Radio Remote Control 8 buttons-device and channel parameters

CheckBox "Lock reset by Device Key"
If the checkbox is activated, the factory settings of the device cannot be restored via the device button. The reset can only be done via the control Panel.

20.6.2 Channel Parameters

You can set the following parameters for each channel or for each button of the remote control:

Minimum duration for long *button* press:
0.30-1.80 S (default: 0.40)
Here you can enter the minimum duration for a long key press.

Double-click Time (*Button* Lock):
0.00-1.50 S (Default: 0.00)
Here you can enter the double-click time to activate the button lock.
If a non-zero value is entered here, the assigned button function is executed only with a double-click in the Set time window.

20.7 Wireless Combination Signalling device MP3 (HM-ou-CFM-TW)

The Homematic Combination Signalling device MP3 enables the acoustic and optical signalling of different states via loudspeakers and/or beacons. For example, the device can be used as a doorbell.

After you have trained the wireless combi signal transmitter to the control Panel, you can make the settings of the device using the WebUI interface. To do so, click "Settings"-"Devices" and select the Radio Combi-Signal encoder (s.).

Figure 120: Wireless Combi Signal Encoder MP3-Overview

In this window you can change the settings for the Wireless Combi signal encoder and adjust the parameters of the device individually.

20.7.1 Device Parameters

The device parameters of the radio combined signal Encoder MP3 can be configured individually.

Figure 121: Radio Combi signal Encoder device Parameters

CheckBox "Lock reset by Device Key"
If the checkbox is activated, the factory settings of the device cannot be restored via the Geräteta-Ste. The reset can only be done via the control Panel.

20.7.2 Channel Parameters

This is where the channels of the device are displayed. You cannot set channel parameters for the Radio Combo Signal encoder MP3.

Figure 122: Radio Combi Signal Encoder channel parameters

You can hide the parameter list by clicking the "Close parameter list" button.

20.7.3 configuration options via links

In direct learning without a central station, only a basic functionality is available for the Wireless combi signal generator; For example, the optical signal in red is played six times and the audio file with the number 001 plays once completely. If no SD card was inserted during the learning, the internal gong is played completely. Wide-RE possibilities (e.g. status display by permanently flashing signal light) can be set via a control panel. Using direct links (see "18.1 Direct Geräteve" on page 62) and central programs (see "18.2 Program creation and Central Link" on page 75), you have the option of connecting both the SI Gnalleuchte channel and the audio channel Individually.

20.7.3.1   Channel 1-Signal light channel

Figure 123: Direct link Channel 1-Signal light channel

Switch-on delay
Here you can define the time delay at which the device led is to be switched on.

Signal type

Here you can define in which color and how long the signal people should light up.

ⓘ Individual flashing sequences can be created using central programs.

Number of repetitions

Here you can set the number of times the device led flashes one after the other (1-255 times).

ⓘ If the number of repetitions is set to 255, the signal will be delivered permanently until a possible interruption.

20.7.3.2   Channel 2-Audio channel

Figure 124: Direct link Channel 2-Audio channel

Switch-on delay

Here you can specify the time delay at which the audio channel is to be switched on.

Signal type

Sound No. (0-255)

Here you can specify which audio files are to be played. 0 =

ⓘ   Internal gong (can be used without SD card)
255 = random track between 1 and 254 on the SD card

Number of repetitions

Here you can specify how often the audio files are played (1-255 times).

ⓘ If the number of repetitions is set to 255, the signal will be delivered permanently until a possible interruption.

Volume

Here you can specify the volume at which the audio files are to be played.

20.8   Wirless Dimming Actuator 1-channel, DIN rail(HM-LC-Dim1T-DR)

With the Homematic Dimming Actuator 1-channel DIN rail, you can switch on
or off and dim the connected consumers. The device enables a COM-continuous control of
connected consumers via transmitter or the central station. At the same time, the radio
dimming actuator has a push that can be connected to the 230-V push-button.

After you have learned the radio dimming actuator to the control Panel, you can use the
WebUI user interface to make the device's settings. To do this, click
"Settings"-"Devices" and select the radio dimming actuator (see   *"19.2 Devices" on the
Te 110*).

Figure 125: *Wireless* Dimming Actuator Overview

In this window, you can change the settings for the radio dimming actuator and adjust the PA
parameters of the device individually.

20.8.1 Device Parameters

In the upper part you will find basic settings first. First, you can define here whether a long
button press of the device button is to be interpreted as operation after completion of the
configuration. This can prevent incorrect operation by accidentally triggering the to-learn
mode. The reset can also be blocked by the device button.

20.8.2 Channel Parameters

In the lower part you can define the behaviour of the actuator in case of overcurrent
(overload) detection zone, at overtemperature in the device and the output of status
messages. Below you can set the function of the device button of the radio Dimmaktors.
Several predefined profiles are available, the parameters of which are individually adjustable
bar.

The profile settings for the device button are also valid for an installation button (S1)
connected to the device externally as part of the normal operation. The single-GE
difference is that no learning or reset can be initiated via the external switch to S1.

ℹ️ Your individual profiles can be set up via the expert mode of the WebUI and via virtual channels. For instructions, see:

http://www.elv.de/elektronikwissen/virtuelle-Homematic-aktorkanaele-und-ihre-verknuepfungslogik.html

Device and Channel parameters

Figure 126: Radio dimming Actuator Overview device and Channel parameters

Profiles

The respective function is explained in the corresponding parameter window:

Programmierung der internen Gerätetaste - WIT7590011:1

Aufwachlicht

Mit einem kurzen Tastendruck wird das Licht langsam auf den festgelegten Helligkeitswert hochgedimmt. Ein langer Tastendruck dimmt das Licht abwechselnd hoch- und herunter.

1. "Dimmer on/brighter" profile

With a short press of the button, the light is switched on to the specified brightness value. A long press of the button dims the light up.

Dimmer - ein/heller

Mit einem kurzen Tastendruck wird das Licht auf den festgelegt

Rampenzeit beim Einschalten | 0.5s
Verweildauer im Zustand "ein" | unendlich
Pegel im Zustand "ein" | 100%

Zusätzliche Einstellung für den langen Tastendruck.

Pegelbegrenzung beim Hochdimmen | 100%

Ramp time on power-up
The time at which the dimmer must achieve the preset brightness value after switching on.

Dwell time in the "on" state
The dimmer stays on for the selected time.

Level in state "on"
The brightness value to be set after switching on.

When the button is pressed for a long time (dimming), the level limit for high dimming is the brightness value, which can be set maximum during high dimming.

2. Profile "dimmer off/darker"

The light is switched off with a short press of the button. A long press of the button dims the light down.

Dimmer - aus/dunkler

Mit einem kurzen Tastendruck wird das Licht ausgeschaltet. Ein langer Tastendruck dimmt das Licht herunter.

Ausschaltvözögerung | keine
Blinken in der Ausschaltvözögerung | aus
Rampenzeit beim Ausschalten | 0.5s

Zusätzliche Einstellung für den langen Tastendruck.

Pegelbegrenzung beim Herunterdimmen | 0%

Off delay
The power is switched off only after the selected time.

Flashing in the off delay
The connected light flashes while the switch-off delay is running.

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Ramp time when turning off

The time at which the dimmer must achieve the preset brightness value after switching off.

When the button is pressed for a long time (dimming), the level limit for dimming the brightness value, which may be set minimally when dimming down.

3. Profile "dimmer on/off & lighter/darker"

With a short press of a button, the light changes between the specified brightness value and "off".

A long press of a button dims the light alternately up and down.

Dimmer - ein/aus & heller/dunkler ∨

Mit einem kurzen Tastendruck wechselt das Licht zwischen dem festgelegten Helligkeitswert und "aus". Ein langer Tastendruck dimmt das Licht abwechselnd hoch- und herunter.

Rampenzeit beim Einschalten	0.5s ∨
Verweildauer im Zustand "ein"	unendlich ∨
Pegel im Zustand "ein"	100% ∨
Ausschaltverzögerung	keine ∨
Blinken in der Ausschaltverzögerung	ein ∨
Rampenzeit beim Ausschalten	0.5s ∨

Zusätzliche Einstellung für den langen Tastendruck.

Pegelbegrenzung beim Hochdimmen	100% ∨

ⓘ The parameters available here correspond to those of the "Dimmer on/Heller" and "Dimmer off/Dark" profiles

4. Tread Staircase Light

Here, a short or long press of a button will switch on with the set brightness value for the time selected here. In the switch-off delay, the brightness value (level) for the warning is slightly lowered and then slowly dimmed down to "off".

The parameters available here correspond to those of the dimmer on/brighter and dim-mer off/darker profiles.

Treppenhauslicht ∨

Das Licht wird durch kurzen oder langen Tastendruck für die festgelegte Zeit eingeschaltet. In der Ausschaltverzögerung wird der Pegel zur Vorwarnung leicht abgesenkt, um anschließend langsam bis auf "aus" herunter zu dimmen.

Rampenzeit beim Einschalten	0.5s ∨
Verweildauer im Zustand "ein"	2min ∨
Pegel im Zustand "ein"	90% ∨
Ausschaltverzögerung	20s ∨
Blinken in der Ausschaltverzögerung	aus ∨
Rampenzeit beim Ausschalten	20s ∨

5. Profile Sleep Light

Here, a short press of the button will switch on with the Set brightness value (level) and a slow down dimming (ramp time) According to the specified dwell duration.

A long press of the button dims the light up and down.

The parameters available here correspond to those of the dimmer on/brighter and dim-mer off/darker profiles.

6. Profile Flashing Light

The light switches between the two Helligkeitswer (levels) in the specified time interval.

The parameters available here correspond to those of the
"dimmer on/Brighter" and "dimmer off/darker" profiles.

7. Profile Wake-up light

Here, a short press of a button will take a slow high-dimming (ramp time) to the fixed brightness value (level). Then the light remains for the specified dwell time.
A long press of the button dims the light up and down.
The parameters available here correspond to those of the dimmer on/brighter and dim-mer off/darker profiles.

8. Profile "dimmer on/off/lighter/darker"

This is done by simply switching on or off at the short press of a button and the dim-Men in the specified direction with a long press of a button.

Function simulation

If you have transferred a setting via the OK button at the very bottom left to the actuator and the feedback is done, you can use "simulated button pressure" to test the function from the WebUI and then control it in the operating view by clicking it remotely.
If you have failed to transfer the profile, an error message appears:

Part IV - Integration of Homematic IP devices

As of firmware version 2.17. XX (or higher) of the central CCU2 or with the central CCU3, Homematic IP devices can be integrated into existing systems and WebUI configured and controlled via the user interface. This makes it possible to operate Homematic and Ho-mematic IP devices in parallel. Within this parallel operation, a link between Homematic and Homematic IP Instru is also possible via central programs. Direct links between the two device families are not possible due to the system.

As with Homematic components, the integration of the Homematic IP components takes place via the "Learn Device" window. This is possible either with or without active Internet access (cf. "17 Device Learning" on page 53).

For information on how to configure each Homematic IP device using the WebUI be user interface, see the following sections.
For detailed information on the operation of the Homematic IP system, please refer to the Homematic IP user's Guide (found in the download section at www.eQ-3.de).

Http://http://www.eq-3.de/Downloads/eq3/download%20bereich/handbuecher/Homematic_IP-Anwenderhandbuch.pdf

> ⓘ Note: The device parameters are set in Homematic IP devices via device-specific channel parameters.

21   Homematic IP Device Configuration

21.1   Homematic IP Radiator Thermostat (HmIP-ETRV)

With the Homematic IP radiator thermostat You can regulate the room temperature time-controlled and adjust heating phases to your individual needs. Up to three adjustable heating profiles (weekly programs) are available.

After you have trained the Homematic IP radiator thermostat to the Control Panel, you will be WebUI to make the settings of the device via the user interface. Click on "Settings" – "Devices" and select the radiator thermostat (s. "19.2 Devices" on page 110).

Figure 127: Homematic IP Radiator Thermostat – Overview

In this window you can make settings for the HmIP Radiator thermostat and adjust the parameters of the radiator thermostat.

21.1.1 Channel Parameters

This is where the channels of the device are displayed. The individual setting of the device is done via channels 0 and 1 of the Channel parameter list.

21.1.1.1   Channel 0

Figure 128: Homematic IP Radiator Thermostat Settings Device parameters

CheckBox "Cyclic status message"
If the checkbox is activated, the device sends status messages to the control center at a cyclic distance. The basic grid for cyclic status messages is a randomly varying time range of about 2 to 3 minutes. However, with the following 2 parameters the grid can be enlarged. Both parameters are applied one after the other.

Number of status messages to skip
The registered value reduces the number of messages to the central station with increasing values. The default value "1" means that the device will report to the control center every 4 to 6 minutes, with the value "2" every 6 to 9 minutes, etc.

Number of unchangeable status messages to skip
This filter refers to the messages that have passed the previous "number of Auszulas-Send status Messages" filter.
If nothing changes compared to the last status message sent, you can enter the number of messages that are also suppressed in this case.

CheckBox "Lock reset by Device button"
If the checkbox is activated, the factory settings of the device can no longer be restored using the device button (System button) on the device. The reset can only be done via the control Panel.

CheckBox "Global Control Lock"
If the checkbox is activated, the operation on the device is locked to prevent the unwanted modification of settings, e.g. by accidental touching.
The global control lock can only be disabled via the WebUI (not on the device).

Routing Active checkbox
If the checkbox is activated, the device tries to transmit radio commands or status information

Send a router if the wireless partner is not directly reachable.

ℹ️ As a wireless router, for example, Homematic IP switching sockets (HmIP-PS) or switch-measuring sockets (HmIP-PSM) can be used. This function is available from July 2017.

CheckBox "Automatic switch from summer to winter time"
If the checkbox is activated, the summer-to winter time is automatically switched off. The checkbox is selected by default.

21.1.1.2   Channel 1

Figure 129: Homematic IP Radiator Thermostat – Temperature profiles

Weekly Programs
With Homematic IP radiator thermostats You have the possibility to set up to three Wochenpro-grams (heating profiles) for a wide variety of needs. You can select the weekly program using the dropdown button "edit Wochenpro-gram".

For each of these weekly programs, you can set individual temperature turprofile of the radiator thermostat for each weekday. A temperature profile can be divided into several time periods (max. 6 heating phases and 13 switching times). The start and end times and the temperature must be specified for each time period. You have the option of creating the temperature profiles for the day separately or by using the check-box "as before" to take over the profile of the previous days.

- Temperature Profile Saturday
  CheckBox: "How the day before"
  Input: Period: Start Time – End times – temperature
- Temperature Profile Sunday
  CheckBox: "How the day before"

Input: Period: Start Time – End times – temperature

- Temperature Profile Monday
  CheckBox: "How the day before"
  Input: Period: Start Time – End times – temperature
- Temperature Profile Tuesday
  CheckBox: "How the day before"
  Input: Period: Start Time – End times – temperature
- Temperature Profile Wednesday
  CheckBox: "How the day before"
  Input: Period: Start Time – End times – temperature
- Temperature Profile Thursday
  CheckBox: "How the day before"
  Input: Period: Start Time – End times – temperature
- Temperature Profile Friday
  CheckBox: "How the day before"
  Input: Period: Start Time – End times – temperature

Immediate response to button press without prior lighting
The manual operation of the unit is only possible after a single pressing of a button. By selecting this checkbox, the first operation of a button immediately affects the operation of the device.

Minimum temperature
At the factory, a minimum (target) temperature of 4.5 °c (off) is set. In order to determine the lower limit of the adjustable temperature, a minimum temperature of 5.00 – 14.5 °c can be set. If a minimum temperature of 4.5 °c is set, the valve is permanently closed.

Maximum temperature
At the factory, a maximum temperature of 30.5 °c (on) is set. To limit the height of the adjustable temperature, a maximum temperature of 15.0 – 30.0 °c can be set. If a maximum temperature of 30.5 °c is set, the valve is permanently and completely open.

Selection temperature range: On and 15.0 – 30.0 °c

Temperature offset
As the temperature of the radiator is measured, it may be colder or warmer at another point in the room. To align this, a temperature offset of ± 3.5 °c can be set. If, for example, 18 °c are measured instead of 20 °c, an offset of-2.0 °c is to be adjusted. At the factory, an offset temperature of 0.0 °c is set. You can adjust the offset temperature individually.

Selection temperature range:-3.5 – 3.5 °c

Window-to-temperature
When airing in the room, the radiator thermostat automatically regulates the temperature to save heating costs. The factory has a window-to-temperature of 12 °c and a

Eco-duration of 15 minutes set. You can adjust the window-to-temperature individually.

Input Temperature range: 5.00 – 30.00 °c

Boost duration
With the boost function, cool rooms can be heated up in a short time by pressing the Stellrads. When the boost function is triggered, the heating valve is immediately opened for 5 minutes to 80% (factory setting). You can adjust the boost duration in duel.

Selection Time: 0 – 30 minutes
Descaling Trip
A descaling drive of the Heizkör Perthermostats is carried out once a week to protect against the calcification of the valve. The valve is once completely opened and then ßend closed again. This prevents the valve pin from setting itself through lime deposits. No operation is possible during this short period of time. The factory is set for the weekly descaling trip to Saturday, 11:00 pm. You can adjust the time for the descaling trip individually.

Select time Weekday: Sunday-Saturday
Time of Selection: 00:00 – 23:00 pm at the full hour

21.1.2 information on the connection of devices via the central

For a complete connection between the wall thermostat and the radiator thermostat, it is necessary to connect the devices to each other via 3 channels:

- Wall Thermostat Channel 1 with radiator thermostat Channel 6
- Wall Thermostat Channel 2 with radiator thermostat Channel 5
- Wall Thermostat Channel 3 with radiator thermostat Channel 3

When linking the radiator thermostat to the radiator thermostat, it is necessary to connect the heating element via 2 channels:

- Radiator Thermostat Channel 1 with radiator thermostat Channel 2
- Radiator Thermostat Channel 2 with radiator thermostat Channel 1

21.2   Homematic IP Wall Thermostat (HmIP-WTH-2)

The Homematic IP wall thermostat with humidity sensor enables the time-controlled adjustment of the room temperature in conjunction with one or more Homematic IP heating body thermostats. The wall thermostat measures the temperature and humidity in the room and cyclically propagates the measured temperature to the radiator thermostats so that the room temperature can be precisely controlled.

ℹ️ The control of Homematic radio radiator thermostats via the HmIP Wandther-Mostat is also possible, but only via central programs, but not via direct links.

After learning the wall thermostat to the control Panel, you can adjust the settings of the device using the WebUI interface. To do this, click "Devices" under "Settings" and select the wall thermostat (see "19.2 Devices" on page 110).

Figure 130: Homematic IP Wall Thermostat – Overview

In this window you can change the settings for the HmIP wall thermostat and adjust the parameters of the device individually.

21.2.1 Channel Parameters

This is where the channels of the device are displayed. The individual setting of the device is done via channels 0 and 1 of the Channel parameter list.

21.2.1.1   Channel 0

CheckBox "Cyclic status message"
If the checkbox is activated, the device sends status messages to the control center at a cyclic distance. The basic grid for cyclic status messages is a randomly varying time range of about 2 to 3 minutes. However, with the following 2 parameters the grid can be enlarged. Both parameters are applied one after the other.

Number of status messages to skip
The registered value reduces the number of messages to the central station with increasing values. The default value "1" means that the device will report to the control center every 4 to 6 minutes, with the value "2" every 6 to 9 minutes, etc.

Number of unchangeable status messages to skip
This filter refers to the messages that have passed the previous "number of Auszulas-Send status Messages" filter.
If nothing changes compared to the last status message sent, you can enter the number of messages that are also suppressed in this case.

CheckBox "Automatic switch from summer to winter time"
If the checkbox is activated, the summer-to winter time is automatically switched off. The checkbox is selected by default.

CheckBox "Global Control Lock"
If the checkbox is activated, the operation on the device is locked to prevent the unwanted modification of settings, e.g. by accidental touching.
The global control lock can only be disabled via the WebUI (not on the device).

CheckBox "Lock reset by Device button"
If the checkbox is activated, the factory settings of the device can no longer be restored using the device button (System button) on the device. The reset can only be done via the control Panel.

21.2.1.2 Channel 1

Figure 131: Homematic IP Wall Thermostat – Temperature profiles

Weekly Programs
With HmIP wall thermostats you have the possibility to set up up to three weeks of programs (heating profiles) for a wide variety of needs. You can select the weekly program using the "weekly program to be edited" dropdown button. For each of these weekly programs, you can use individual temperatures for each weekday

Turprofile of the Wall thermostat. A temperature profile can be divided into several time sections (max. 6 heating phases and 13 switching times). For the respective time period, the start and end times and the temperature must be specified. You have the option of creating the temperature profiles for the day separately or by using the checkbox "as before" to take over the profile of the previous days.

- Temperature Profile Saturday
  CheckBox: "How the day before"
  Input: Period: Start Time – End times – temperature
- Temperature Profile Sunday
  CheckBox: "How the day before"
  Input: Period: Start Time – End times – temperature
- Temperature Profile Monday
  CheckBox: "How the day before"
  Input: Period: Start Time – End times – temperature
- Temperature Profile Tuesday
  CheckBox: "How the day before"
  Input: Period: Start Time – End times – temperature
- Temperature Profile Wednesday
  CheckBox: "How the day before"
  Input: Period: Start Time – End times – temperature
- Temperature Profile Thursday
  CheckBox: "How the day before"
  Input: Period: Start Time – End times – temperature
- Temperature Profile Friday
  CheckBox: "How the day before"
  Input: Period: Start Time – End times – temperature

Display on display
Here you can choose which temperature display should be active in the display of the wall thermostat.
Selection: Current temperature or target temperature

Display
Here you can select which information is to be displayed in the display of the wall thermostat.
Selection: temperature or temperature and humidity

Minimum temperature
At the factory, a minimum (target) temperature of 4.5 °c (off) is set. In order to determine the lower limit of the adjustable temperature, a minimum temperature of 5.00 – 14.5 °c can be set.
Selection temperature range: Off and 5.00 – 14.5 °c
Maximum temperature
At the factory, a maximum temperature of 30.5 °c (on) is set. To limit the height of the adjustable temperature, a maximum temperature of 15.0 – 30.0 °c can be set.

Selection temperature range: On and 15.0 – 30.0 °c

Temperature offset

As the temperature on the wall thermostat is measured, it can be used elsewhere
Be colder or warmer in the room. To align this, a temperature offset of ± 3.5 °c can be set. For example, if you measure 18 °c instead of 20 °c, you should set an offset of-2.0 °c. At the factory, an offset temperature of 0.0 °c is set. You can adjust the offset temperature individually.

Window-to-temperature

The wall thermostat automatically shuts down the temperature when airing in the room in order to save heating costs. At the factory, a window-to-temperature of 12 °c and an eco-time of 15 minutes are set. You can adjust the window-to-temperature individually.

Input Temperature range: 5.00 – 30.00 °c

Boost duration

With the boost function, cool rooms can be heated up in a short time by pressing the Stellrads. When the boost function is triggered, the heating valve is immediately opened for 5 minutes to 80% (factory setting). You can adjust the boost duration in duel.

Selection Time: 0 – 30 minutes

Notes on connecting devices via the central

For a complete link between the HmIP wall thermostat and the HmIP radiator thermostat, it is necessary to connect the devices to each other via 3 channels:

•   Wall Thermostat Channel 1 with radiator thermostat Channel 6
•   Wall Thermostat Channel 2 with radiator thermostat Channel 5
•   Wall Thermostat Channel 3 with radiator thermostat Channel 3

Note on the link between HmIP wall thermostat and HmIP switch actuator: •
     Wall Thermostat Channel 5 (linking partner Cord Impulse for two-point control) with switch actuator (HmIP-PSM) channel 6

Default, the receiver profile of the Schaltaktors is on "switch toggle".

Figure 132: Screenshot linking wall thermostat and switch actuator (default)

For a correct function of the two-point control, the receiver profile "switch on/off" must be selected.

Figure 133: Screenshot link wall thermostat and switch actuator (profile setting)

21.3 Homematic IP temperature and humidity sensor – inside (HmIP-sth)/Homematic IP temperature and humidity-sensor with display – inside (HmIP-STHD)

The two Homematic IP temperature and humidity sensors for indoor use allow the time-controlled adjustment of the room temperature in conjunction with one or more Homematic IP radiator thermostats or Floor Heating Actuator via the control Panel.

The Homematic IP temperature and humidity sensors measure the temperature and humidity in the room and pass the measured temperature cyclically to Heizkörperther-mostate or Floor Heating Actuator, so that the room temperature can be precisely controlled. The Homematic IP temperature and humidity sensor with display – inside (HmIP-STHD) also shows you the temperature and humidity on a brilliant LC display.

> ℹ The control of Homematic radio radiator thermostats via Homematic IP tem-Temperature and humidity sensors is also possible, but only via central-lenprogramme, but not via direct links.

After learning a Homematic IP temperature and humidity sensor to the control Panel, you can use the WebUI user interface to take the device's settings. To do this, click on "Devices" under "Settings" and select the temperature and humidity sensor (see "24.2 Devices" on page 135).

Figure 134: Homematic IP temperature and humidity sensor-overview

In this window you can change the settings for the Homematic IP temperature and air humidity sensor and adjust the parameters of the device individually.

21.3.1 Channel Parameters

This is where the channels of the device are displayed. The individual setting of the device is done via channels 0 to 5 of the channel parameter list.

21.3.1.1 Channel 0

CheckBox "Cyclic status message"
If the checkbox is activated, the device sends status messages to the control center at a cyclic distance. The basic grid for cyclic status messages is a randomly varying time range of about 2 to 3 minutes. However, with the following 2 parameters the grid can be enlarged. Both parameters are applied one after the other.

Number of status messages to skip
The registered value reduces the number of messages to the central station with increasing values. The default value "1" means that the device will report to the control center every 4 to 6 minutes, with the value "2" every 6 to 9 minutes, etc.

Number of unchangeable status messages to skip
This filter refers to the messages that have passed the previous "number of Auszulas-Send status Messages" filter.
If nothing changes compared to the last status message sent, you can enter the number of messages that are also suppressed in this case.

CheckBox "Lock reset by Device button"
If the checkbox is activated, the factory settings of the device can no longer be restored using the device button (System button) on the device. The reset can only be done via the control Panel.

CheckBox "Automatic switch from summer to winter time"
If the checkbox is activated, the summer-to winter time is automatically switched off. The checkbox is selected by default.

If necessary, you can use the "Configure DST" button to adjust the start of daylight saving time, the end of daylight saving time or the deviation from coordinated Time (UTC) of the time zone.

21.3.1.2   Channel 1

Figure 135: Homematic IP temperature and humidity sensor – temperature profiles

Weekly Programs

With Homematic IP temperature and humidity sensors you have the possibility to set up up to six weeks of programs (heating profiles) for a wide variety of needs. You can select the weekly program using the dropdown button "edit Weekly program".

For each of these weekly programs, you can set individual temperature and humidity sensor turprofile for each weekday. A temperature profile can be divided into several time periods (max. 6 heating phases and 13 switching times). For the respective time period, the start and end times and the temperature must be specified. You have the option of creating the temperature profiles for the day separately or by using the checkbox "as before" to take over the profile of the previous days.

• Temperature Profile Saturday
Input: Period: Start Time – End times – temperature

• Temperature Profile Sunday
CheckBox: "How the day before"
Input: Period: Start Time – End times – temperature

• Temperature Profile Monday
CheckBox: "How the day before"
Input: Period: Start Time – End times – temperature

• Temperature Profile Tuesday
CheckBox: "How the day before"
Input: Period: Start Time – End times – temperature •
Temperature Profile Wednesday
CheckBox: "How the day before"
Input: Period: Start time-end times-temperature

• Temperature Profile Thursday
CheckBox: "How the day before"
Input: Period: Start Time – End times – temperature

• Temperature Profile Friday
CheckBox: "How the day before"
Input: Period: Start Time – End times – temperature

Display in the display (only HmIP-STHD)
Here you can choose which temperature display should be active in the display of the temperature and air humidity sensor.
Selection: Current temperature or target temperature

Display Mode (HmIP-STHD only)
Here you can choose which information is to be displayed in the display of the temperature and Luftfeuch tigkeitssensors.
Selection: temperature or temperature and humidity

Energy saving temperature (cooling mode)
Here you determine the energy saving temperature for floor heating systems with cooling function. The pre-set value of 23 °c means that the cooling function will not be activated until the measured room temperature exceeds 23 °c.
Selection Temperature range: 15.00 – 30.00 °c

Energy saving temperature (heating mode)
Select the energy saving/Eco-Temperatur in the heating mode. The registered value is the lowering temperature when the Ecobetrieb is activated.
Selection Temperature range: 5.00 – 25.00 °c

Minimum temperature
At the factory, a minimum temperature of 5 °c is set. To set the lower limit of the adjustable temperature, a minimum
(target) Temperature of 5.0 – 14.5 °c. Selection
temperature range: Off and 5.00 – 14.5 °c

Maximum temperature
At the factory, a maximum temperature of 30.5 °c (on) is set. To limit the height of the adjustable temperature, you can set a maximum
(target) Temperature of 15.0 – 30.0 °c. Selection
temperature range: On and 15.0 – 30.0 °c

Ignore min./max. temperature in Manu mode
When the checkbox is activated, the temperature can also be set beyond the minimum temperature and maximum temperature limits specified by the Manu mode.

Temperature offset
As the temperature is measured at the temperature and humidity sensor, it may be colder or warmer at another point in the room. To align this, a TEM-temperature offset of ± 3.5 °c can be adjusted. For example, if you measure 18 °c instead of 20 °c, you should set an offset of-2.0 °c. At the factory, an offset temperature of 0.0 °c is set. You can adjust the offset temperature individually.

Window-to-temperature
The temperature and humidity sensor, when airing in the room, regulates the temperature au-tomatis to save heating costs. At the factory, a window-to-temperature of 12 °c and an eco-time of 15 minutes are set. You can adjust the window-to-tem temperature individually.

Input Temperature range: 5.00 – 30.00 °c

Boost duration
With the boost function, cool rooms can be heated up in a short time by pressing the Stellrads. When the boost function is triggered, the heating valve is immediately opened for 5 minutes to 80% (factory setting). You can adjust the boost duration in duel.

Selection Time: 0 – 30 minutes

21.3.1.3   Channel 5

Type of two-point regulation
The temperature and humidity sensor can be used in conjunction with a switch actuator as a two-point controller. Use this dropdown button to determine whether the control should be "heating" or "cooling". In heating operation, the switch actuator is switched when the target temperature is below the target temperature, and in the cooling mode when the Setdown is exceeded.   Selection: Heating or Cooling

Hysteresis
When using the temperature and humidity sensor as a two-point controller, the re-operation is carried out depending on the target and the temperature. You use the hysteresis to determine how much the value of the present is allowed to fluctuate before the control starts.

Notes on connecting devices via the central
For a complete link between the temperature and humidity sensor and the radiator thermostat, it is necessary to connect the devices to each other via 3 channels: •
Temperature and humidity sensor Channel 1 with radiator thermostat Channel 6
•   Temperature and humidity Sensor Channel 2 with radiator thermostat Channel 5
•   Temperature and humidity Sensor channel 3 with radiator thermostat Channel 3

21.4   Homematic IP window and door sensor – optical (HMIP-SWDO)

The Homematic IP window and door sensor – visually detects open or closed windows or doors through an integrated infrared light barrier (reflex coupler) and transmits the state via radio to other Homematic IP as well as to Homematic devices or to the central Central.

The device offers different applications and can be used, for example, with Homematic IP and Homematic radiator thermostats to regulate the room temperature while the window is open.

After learning the Homematic IP window and door contact to the control Panel, you can make the settings of the device using the WebUI user interface. To do this, click "Settings" – "Devices" and select the Homematic IP window/door sensor (see "24.2 Devices" on page 135).

Figure 136: Homematic IP window and door *Sensor* – Optical – overview

In this window you can make settings for the HmIP window/door contact and adjust the parameters of the window/door contact individually.

21.4.1 Channel Parameters

This is where the channels of the device are displayed. The individual setting of the device is done via channels 0 and 1 of the Channel parameter list.

21.4.1.1   Channel 0

Figure 137: Homematic IP window and door sensor – Optical – device/*channel* parameter

set CheckBox "Cyclic status message"
If the checkbox is activated, the device sends status messages to the control center at a cyclic distance. The basic grid for cyclic status messages is a randomly varying time range of about 2 to 3 minutes. With the following 2 parameters, the grid can be

be increased. Both parameters are applied one after the other.

Number of status messages to skip

The registered value reduces the number of messages to the central station with increasing values. The default value of "20" means that the device will report to the control unit approximately once per hour (every 42 to 63 minutes).

CheckBox "Lock reset by Device button"

If the checkbox is activated, the factory settings of the device can no longer be restored using the device button (System button) on the device. The reset can only be done via the control Panel.

21.4.1.2   Channel 1

Figure 138: Homematic IP window and door contact – Optical – Channel parameter 1 setting

Event delay drop-down button

Specifies within which period of the HmIP window/door Contact the message is forwarded to the CCU at Standsänderung (Open, closed).
Selection: Inactive, 100ms, 3 seconds, 1 minute, 1 hour, enter value

"Message in position open" drop-down button

Specifies which state message is sent to the Control Panel when the window or door is open.

Selection: No message, closed, open

"Message in position closed" drop-down button

Specifies which state message is sent to the Control Panel when the window or door is open.

Selection: No message, closed, open

21.5 Homematic IP Wall mount remote switch 2-buttons (HmIP-WRC2)

The Homematic IP Wall switch – 2-fold is used to control actuators that have been trained on the wall push-buttons. One or more components can be taught to a button in order to address them together. This allows several actions to be performed with a single button press.

After you have learned the Homematic IP Wall switch 2 times to the control Panel, you can make the settings of the device via the WebUI user interface. To do this, click on "Settings" – "Devices" and select the wall switch 2-fold (see "19.2 ge-councils" on page 110).

Figure 139: Homematic IP Wall switch 2-speed-Overview

In this window you can make settings for the HmIP wall switch and adjust the parameters of the button.

21.5.1 Channel Parameters

This is where the channels of the device are displayed. The individual setting of the device is done via channels 0 to 2 of the Channel parameter list.

21.5.1.1 Channel 0

Figure 140: Homematic IP Wall switch 2-speed device-/Kanalparameter set

CheckBox "Cyclic status message"
If the checkbox is activated, the device sends status messages to the control center at a cyclic distance. The basic grid for cyclic status messages is a randomly varying time range of about 2 to 3 minutes. However, with the following 2 parameters the grid can be enlarged. Both parameters are applied one after the other.

Number of status messages to skip
The registered value reduces the number of messages to the central station with increasing values. The default value "1" means that the device is approximately every 4 to 6

Minutes at the control Panel, the value "2" every 6 to 9 minutes, etc.

Number of unchangeable status messages to skip
This filter refers to the messages that have passed the previous "number of Auszulas-Send status Messages" filter.
If nothing changes compared to the last status message sent, you can enter the number of messages that are also suppressed in this case.

CheckBox "Lock reset by Device button"
If the checkbox is activated, the factory settings of the device can no longer be restored using the device button (System button) on the device. The reset can only be done via the control Panel.

21.5.1.2   Channel 1 and 2

HMIP-WRC2 000193C98CA5E7:1 Tasterkanal	Ch.: 1	Doppelklick-Zeit (Tastensperre)	0.0	s (0.0-25.5)
		Mindestdauer für langen Tastendruck	0.4	s (0.0-25.5)
		Einheit für den Timeout	Minuten	
		Wert für den Timeout	2	(0-63)
HMIP-WRC2 000193C98CA5E7:2 Tasterkanal	Ch.: 2	Doppelklick-Zeit (Tastensperre)	0.0	s (0.0-25.5)
		Mindestdauer für langen Tastendruck	0.4	s (0.0-25.5)
		Einheit für den Timeout	Minuten	
		Wert für den Timeout	2	(0-63)

Figure 141: Homematic IP Wall switch 2-channel parameters 1 and 2 set

You can set the following parameters for each channel or for each button of the wall

switch: **Double-click Time (button Lock): 0.0 – 25.5 s (default: 0.0)**
Here you can enter the double-click time to activate the button lock.

Minimum duration for long button press: 0.0 – 25.5 s (default: 0.4) Here you can enter the minimum duration for a long button press.

Dropdown button timeout for long button press (given: 2 minutes)
Here you can determine the time after which the radio signal is interrupted after a long press of the button.
Selection: 100ms, seconds, minutes, hours, enter value

The Homematic IP wall switch 2-fold can not be operated via the control Panel.

21.6   Homematic IP Switch Actuator, Plug Adapter (HmIP-PS)

The Homematic IP switching socket makes it possible to switch on and off of the plugged-in consumers, for example electric heaters. If you use the switching socket in conjunction with a Homematic or Homematic IP wall thermostat, the temperature in rooms with electric radiators can also be precisely regulated. The switching on and off of devices is also possible via the system button of the switch socket itself.

After you have trained the Homematic IP switching socket to the control Panel, you can make the settings of the device using the WebUI interface. To do this, click "Settings" – "Devices" and select the switching socket (see "19.2 Devices" on page 110).

Figure 142: Homematic IP Switching socket-Overview

In this window you can make settings for the HmIP switching socket and set the parameters of the device.

21.6.1 Channel Parameters

This is where the channels of the device are displayed. The individual setting of the device is done via channels 0 to 2 of the Channel parameter list.

Figure 143: Homematic Switching socket set device/Kanalparameter

21.6.1.1   Channel 0

CheckBox "Cyclic status message"
If the checkbox is activated, the device sends status messages to the control center at a cyclic distance. The basic grid for cyclic status messages is a randomly varying time range of about 2 to 3 minutes. However, with the following 2 parameters the grid can be enlarged. Both parameters are applied one after the other.

Number of status messages to skip
The registered value reduces the number of messages to the central station with increasing values. The default value "1" means that the device will report to the control center every 4 to 6 minutes, with the value "2" every 6 to 9 minutes, etc.

Number of unchangeable status messages to skip
This filter refers to the messages that have passed the previous "number of Auszulas-Send status Messages" filter.
If nothing changes compared to the last status message sent, you can enter the number of messages that are also suppressed in this case.

CheckBox "Lock reset by Device button"
If the checkbox is activated, the factory settings of the device can no longer be restored using the device button (System button) on the device. The reset can only be done via the control Panel.

21.6.1.2   Channel 1

Minimum duration for long button press: 0.0 – 25.5 s (default: 0.4)
Here you can enter the minimum duration for a long button press.

21.6.1.3   Device Parameters Channel 2

Event delay drop-down button
Specifies the period during which the HmIP switching socket will pass the message to the Control Panel when the state changes (on, off).
Selection: Inactive, 100ms, 3 seconds, 1 minute, 1 hour, enter value

Random share drop-down button
Specifies the time until the switching socket sends a STATUSMEL to the transmitter after receiving a radio signal.
Selection: Selection: Inactive, 100ms, 3 seconds, 1 minute, 1 hour, enter value

21.7   Homematic IP Switch Actuator, Power Metering Plug Adapter (HmIP-PSM)

The Homematic IP switch-measuring socket allows switching on and off of connected consumers, for example electric heaters. If you use the switch socket in conjunction with a Homematic or Homematic IP wall thermostat, the temperature in rooms with electric radiators can also be precisely regulated. Switching devices on and off is also possible via the system button of the switching socket itself. In addition, the switching measuring socket measures the energy consumption of the connected device as well as other data such as voltage, current, power and power frequency, the values of which are represented by the WebUI.

After you have trained the HmIP switching socket to the control Panel, you can make the settings of the device using the WebUI interface. To do this, click "Settings" – "Devices" and select the switch-measuring socket (see "19.2 Devices" on page 110).

Figure 144: Homematic IP Switching-measuring socket-overview

In this window you can make settings for the Homematic IP switch-measuring socket and set the parameters of the device.

21.7.1 Channel Parameters

This is where the channels of the device are displayed. The individual setting of the device is done via channels 0 to 2 and channel 6 of the Channel parameter list.

Figure 145: Homematic IP Switching-measuring socket set device/Kanalparameter

21.7.1.1   Channel 0

CheckBox "Cyclic status message"
If the checkbox is activated, the device sends status messages to the control center at a cyclic distance. The basic grid for cyclic status messages is a randomly varying time range of about 2 to 3 minutes. However, with the following 2 parameters the grid can be enlarged. Both parameters are applied one after the other.

Number of status messages to skip
The registered value reduces the number of messages to the central station with increasing values. The default value "1" means that the device will report to the control center every 4 to 6 minutes, with the value "2" every 6 to 9 minutes, etc.

Number of unchangeable status messages to skip
This filter refers to the messages that have passed the previous "number of Auszulas-Send status Messages" filter.
If nothing changes compared to the last status message sent, you can enter the number of messages that are also suppressed in this case.

CheckBox "Lock reset by Device button"
If the checkbox is activated, the factory settings of the device can no longer be restored using the device button (System button) on the device. The reset can only be done via the control Panel.

Routing Active checkbox
If the checkbox is activated, the device tries to send radio commands or status information via a wireless router if the wireless partner is not directly reachable.

ℹ️ As a wireless router, for example, Homematic IP switching sockets (HmIP-PS) or switch-measuring sockets (HmIP-PSM) can be used. This function is available from July 2017.

21.7.1.2 Channel 1

Minimum duration for long button press: 0.0 – 25.5 s (default: 0.4)
Here you can enter the minimum duration for a long button press.

21.7.1.3 Channel 2

Event delay drop-down button
Specifies the period during which the HmIP switch-measuring socket will pass the message to the Control Panel at Standsänderung (on, off).
Selection: Inactive, 100ms, 3 seconds, 1 minute, 1 hour, enter value

Random share drop-down button
Specifies the time until the switch-measuring socket sends an STA-Tusmeldung to the transmitter after receiving a radio signal.
Selection: Inactive, 100ms, 3 seconds, 1 minute, 1 hour, enter value

21.7.1.4 Channel 6: Consumption and Power measurement
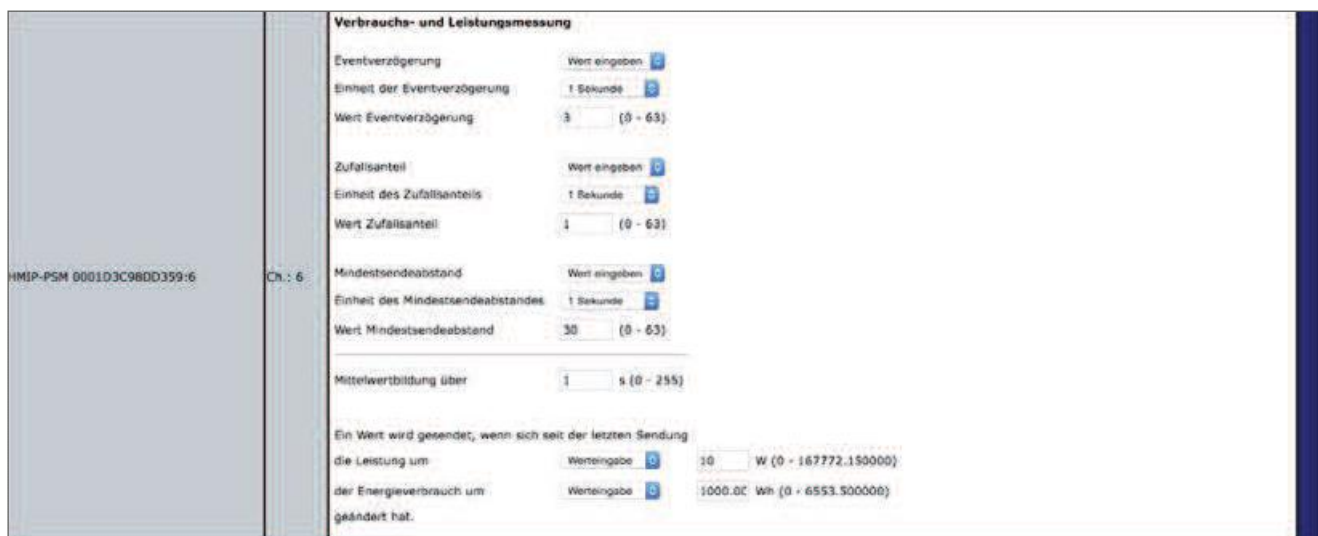
Figure 146: Homematic IP Switching-measuring socket-setting the measuring channel parameters

Event delay drop-down button
Specifies the period during which the HmIP switching measuring socket will be connected to the

Headquarters.

Selection: Inactive, 100ms, 3 seconds, 1 minute, 1 hour, enter value

Random share drop-down button
Specifies the time until the switch-measuring socket sends an STA-Tusmeldung to the transmitter after receiving a radio signal.
Selection: Inactive, 100ms, 3 seconds, 1 minute, 1 hour, enter value

Input "Mindestsendeabstand"
Specifies the period of time between the last shipment and the following. This setting affects only the measured value channel, but not the sensor channel.

Selection: Inactive, 100ms, 3 seconds, 1 minute, 1 hour, enter value

Input "average value over": 1 – 255 s (default: 1)
Defines the time period during which average values of the measurement data are formed in the device, which are sent to the control center for further processing.

Input "A value is sent when the last broadcast has been... "
Defines a threshold at which a measured value transmission is to be carried out in addition to the cyclic transmission of measured values.

The performance (Value input: 0 – 167772.15 W)

Or

Energy consumption   (Value input: 0 – 6553.5 WH)

Has changed.

ℹ️ Avoid entering small values here, as it can cause the duty cycle limit to be reached quickly due to frequent radio transmissions.

21.8 Homematic IP Floor Heating Actuator (HmIP-faI-XX)

Homematic IP Floor Heating Actuator are available in four versions, each for 6 (HmIP-FAL230-C6 and HmIP-FAL24-C6) or 10 (HmIP-FAL230-C10 and HmIP-FAL24-C10) heating zones. The units have a power supply of 24 or 230 volts.

By integrating one of the Floor Heating Actuator into your Homematic system, you can comfortably configure and control your floor or other water-based surface heating in conjunction with one or more Homematic IP wall thermostats via the WebUI. In addition, several Floor Heating Actuator can be used in the house and integrated into the Homematic system.

The Floor Heating Actuator can also be used to control a circulating pump. This must be connected directly to the heating Zone 1 (HZ1) of the Floor Heating Actuators.

In conjunction with the Homematic IP multi IO box, other functions and devices can be integrated as well. This includes e.g. humidity limiters, temperature limiters, exter-NE switching clocks as well as switching from heating to cooling operation for floor heating systems with cooling function.

Figure 147: HmIP Floor Heating Actuator Overview

The Homematic IP Floor Heating Actuator is already preconfigured so that you do not have to change the configuration in the re-gel after learning the channels. For specific cases and requirements, however, extensive configuration-rationing possibilities are available via the WebUI. Detailed information with detailed application examples can be found in the section " 22 Floor heating control with Homematic IP instru-Ten:

Application Examples "on page 264.

After learning the Floor Heating Actuators to the Control Panel, you can settings the device via the WebUI user interface. To do this, click on "Devices" under "Settings" and select the Floor Heating Actuator (see "24.2 Devices" on page 135).

21.8.1 linking of the Floor Heating Actuators with one or more wall thermostats via the central

After learning the Floor Heating Actuators and one or more Homematic IP wall thermostats, the individual channels of the Floor Heating Actuators must be linked to the wall thermostats of the room which is above the relevant heating circuit or The heating circuits concerned are supplied. This is done via direct links to the Central

Le. To do this, do the following:

- Click Programs and shortcuts and choose direct links from the drop-down menu.

- Click New link in the footer to open the first Link Partner Selection window for a new direct link.
- Select the channel of the Floor Heating Actuators you want to link to the wall thermostat by clicking the "Select" button on the corresponding line.

- Click on "Select" to select the wall thermostat that you want to
  Link to the corresponding channel of the actuator, and click Create in the window that follows.
- Confirm the link and program status by clicking on the button "OK". The link is now established.
- Connect each channel of the Floor Heating Actuators, which controls the individual heating circuits, with the respective wall thermostats of the corresponding room.

Figure 148: Link Homematic ip wall thermostat and Floor Heating Actuator

21.8.2 Connection Test

You can check the wireless connection between your Homematic IP wall thermostats and a Homematic IP Floor Heating Actuator as well as the correct channel mapping.

During this check the wall thermostat sends a switching command to the floor heizungsaktor. The heating circuit or the associated heating circuits assigned to the wall thermostat are controlled and switched on or off for one minute depending on the operating condition. The corresponding green channel LEDs of the Floor Heating Actuators are lit or switch off, depending on the previous condition.

- Press the setting dial of the wall thermostat f   en the configuration menu.
- Select the radio symbol "" by turning the S   he selection by briefly pressing the Stellrads.

21.8.3 Channel Parameters

This is where the channels of the device are displayed. The individual setting of the device is done via channel 0 of the Channel parameter list.

21.8.3.1 Channel 0

The settings you make here affect the entire device. You make the settings for the remaining channels of the Floor Heating Actuators using the profile settings of the corresponding channel.
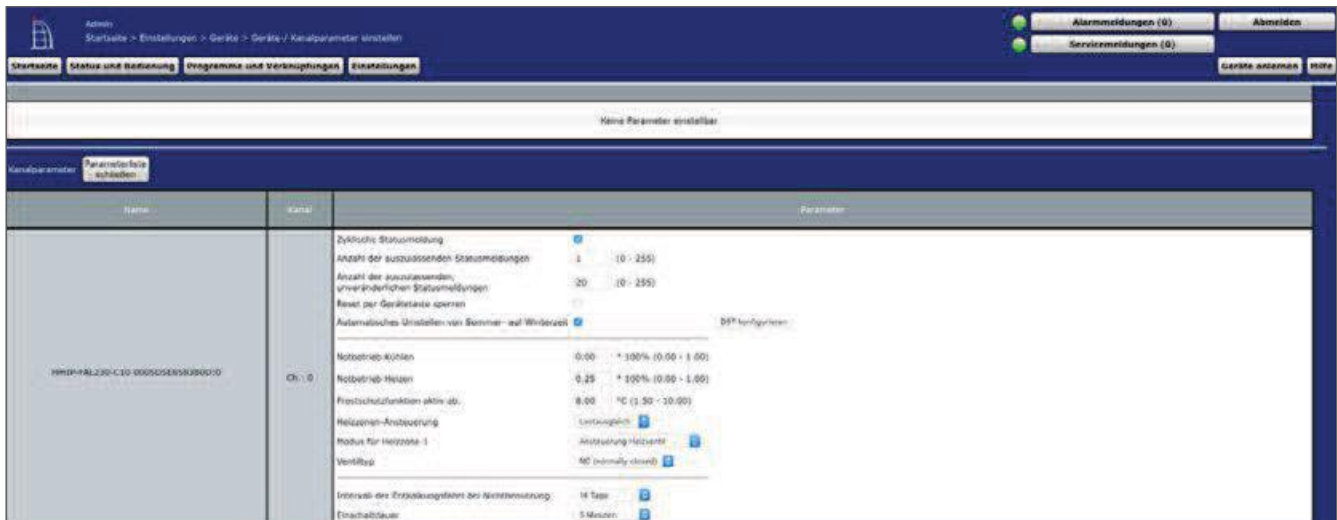
Figure 149: Homematic IP Floor Heating Actuator Device parameters

CheckBox "Cyclic status message"
If the checkbox is activated, the device sends status messages to the control center at a cyclic distance. The basic grid for cyclic status messages is a randomly varying time range of about 2 to 3 minutes. However, with the following 2 parameters the grid can be enlarged. Both parameters are applied one after the other.

Number of status messages to skip
The registered value reduces the number of messages to the central station with increasing values. The default value of "20" means that the device will report to the control unit approximately once per hour (every 42 to 63 minutes).

Number of unchangeable status messages to skip
This filter refers to the messages that have passed the previous "number of Auszulas-Send status Messages" filter.
If nothing changes compared to the last status message sent, you can enter the number of messages that are also suppressed in this case.

CheckBox "Lock reset by Device button"
If the checkbox is activated, the factory settings of the device can no longer be restored using the device button (System button) on the device. The reset can only be done via the control Panel.

CheckBox "Automatic switch from summer to winter time"
If the checkbox is activated, the readjustment from summer to winter time is automatic. If necessary, you can use the "Configure DST" button to adjust the start of daylight saving time, the end of daylight saving time or the deviation from coordinated Time (UTC) of the time zone.

Emergency Operation Cooling
In case of longer disturbances of the radio communication between the wall thermostat and the Fußbodenhei Zungsaktor, the cooling mode is deactivated or retracted to a value to be defined.

Emergency heating
In case of longer disturbances of the radio communication between the wall thermostat and the floor heizungsaktor, the valves are automatically controlled. By default, the valve is opened for 225 seconds (25% of 15 minutes). When you restore the wireless communication, the system switches back to normal operation.

Frost Protection Function Active
Preset 8.00. With this value, the Floor Heating Actuator is adjusted to a temperature of 8 ° C as a set point to avoid freezing the system. If necessary, you can adjust the values between 1.5 °c and 10 °c.

Heating zones control drop-down button
When selecting "Load Balancing" (default), the heating zones are staggered controlled-ert. When you select Load collection, the heating zones are controlled. These functions are only possible if they are supported by your floor heating control.

Dropdown button "mode for heating zone 1"
"Control heating valve" (default) is the correct setting if a heating valve is connected to heating Zone 1 (HZ1) of the Floor Heating Actuators. Select "Triggering circulating pump" if a circulating pump is connected to heating Zone 1 (HZ1) of the Floor Heating Actuators. The circulating pump is switched off whenever a valve is not opened at any heating zone of this Floor Heating Actuator.

Drop-down button "Valvetype" (based on actuator)
Select "NC (normally closed)" If the circuit-board actuators of the type "powerless closed" are mounted on your heating circuit (default). If you have mounted a "powerless open" type in your Heating circuit distributor, select "No (normally open). Refer to the data sheet of the actuator used.

Dropdown button "Interval of descaling trip when not in use"
Here you set the interval for activating the descaling drive of the heating valves.

Duty cycle drop-down button
In time periods without temperature control, e.g. in summer, the actuators are controlled on a regular basis to prevent the valves from being fixed. Here you determine the duration of the descaling trip.

21.8.4 profile settings

You can make the parameters for the individual heating zones of the Floor Heating Actuator s after the direct linking of the Floor Heating Actuators with one or more Wandther mostaten , if necessary, using the profile setting.
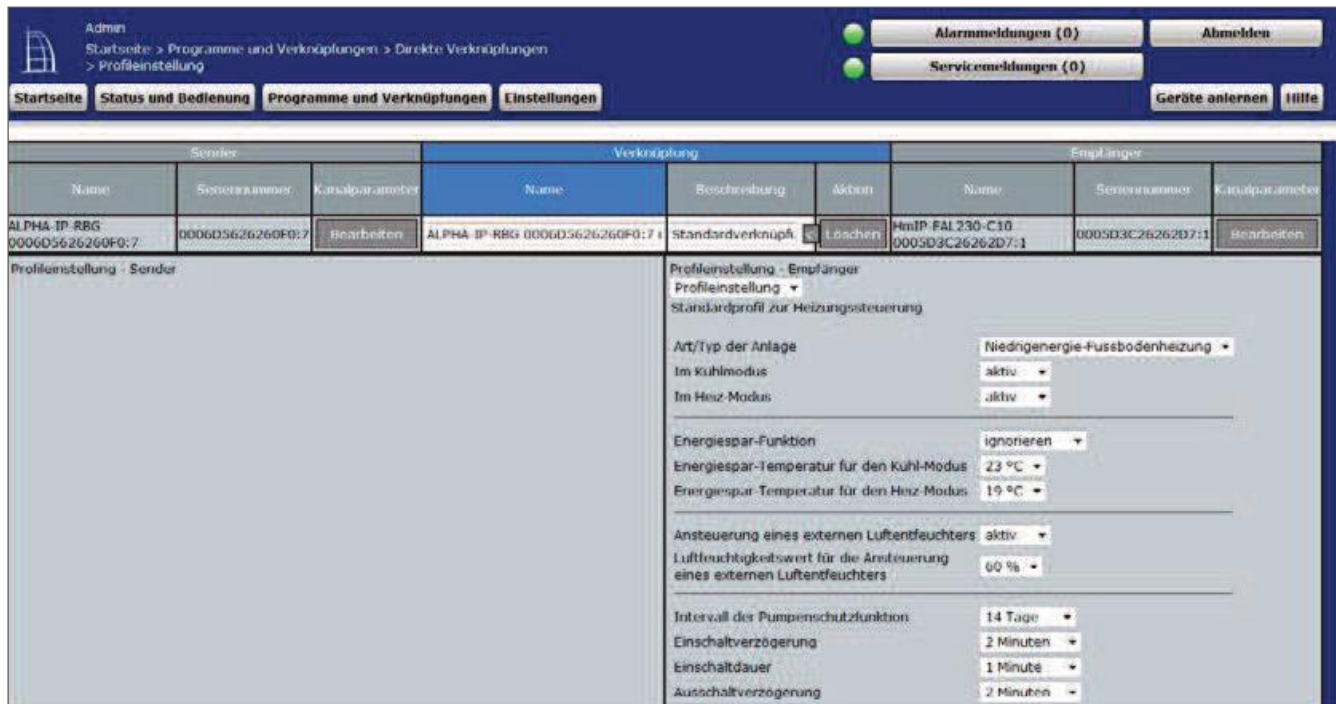
Figure 150: Homematic IP Floor Heating Actuator profile settings

• Click Programs and shortcuts and choose direct links from the drop-down menu.

• Select the channel of the floor heating system whose parameters you want to adjust, and click the Edit button in the Action column. The Profile setting window opens.

Type/type of attachment dropdown button
This setting determines the control behavior of the heating valve that is connected to the selected channel.

• **Standard floor Heating**
This option is preset and should be selected if you have installed a standard floor heating system.

• **Low Energy Floor Heating**
Select this option if you are running a floor heating system with a very low flow temperature.
ℹ️ The other options are reserved for special cases, for example, when the Floor Heating Actuator valves are connected to control additional heating systems, such as an underfloor convector or radiator.

• **Radiator**
If the selected channel controls a heating zone to which a motor is connected to supply a radiator, select this option.

- **Passive Convector**
  If a heating zone is controlled over the selected channel to which an actuator is connected for the supply of an underfloor convector, select this option.

- **Active convector (with fan)**
  If a heating zone is controlled over the selected channel to which a motor is connected to supply a fan coil, select this option.

Cooling in refrigeration
Here you can disable or activate cooling in the cooling mode for the "heating zone" of the channel in question.

Heating in heat
Here you can activate heating in the heating mode for the Heizzne of the channel in question.

Energy Saving function
- **Accept**
  If an external timer is connected to the Homematic IP multi IO box, the heating zone of the selected channel is switched to night mode when the input is activated by the timer.

- **Ignore (default)**
  Here the request of the Multi IO box for switching to night operation is ignored.
  The temperature reduction is controlled by this setting above the wall thermostats of the room in question.

Energy saving temperature for cooling mode
Here you can set the energy saving temperature in the cooling mode.

Energy saving temperature for heating mode
Here you can set the energy saving temperature in the heating mode.

Control of an external air dehumidifier
- **Active (default)**
  If an external air dehumidifier is connected to the Homematic IP multi IO box,
  If a defined threshold value is exceeded (humidity value for
  The control of an external air dehumidifier) The dehumidifier is activated in order to avoid condensation problems. In the case of underfloor heating with active cooling, the corresponding heating or cooling circuit is additionally closed.

- **Inactive**
  This setting deactivates the control of an external air dehumidifier.

Humidity value for the control of an external air dehumidifier
The humidity value can be set here, when the external air dehumidifier is activated when it is exceeded.

Interval of pump protection function

The parameter adjustment is only available for a circulating pump connected directly to the heating Zone 1 (HZ1) of the Fußbodenhei-zungsaktors.

To avoid damage to the pump during a longer standstill, the circulating pump zy-Klisch is switched on. Here you define the length/duration of the pump protection function (selection: Not active, 1 day, 7 days, 14 days, 28 days).

Switch-on delay

Here you can adjust the start-up delay of the pump, i.e. the time that passes from the time of a request for a switching output until the pump is switched on. This allows you to compensates the delay time through the adjustment motor until the valve is opened.

Duty cycle

In time periods without temperature control, e.g. in summer, the actuators are controlled on a regular basis to prevent the valves from being fixed. Here you define the duration of the control.

Off delay

Here you can adjust the delay of the pump, i.e. the time that passes from the time point of a request of a switching output to the switching off of the pump. You can compensate for the delay time through the actuator until the valve is closed.

21.9 Homematic IP Multi IO box (HmIP-MIOB)

The Homematic IP multi IO box is a separate central control unit for switching circulating pump and/or boiler in conjunction with one or more Homematic IP Floor Heating Actuator.

In addition, the Multi IO box has a change-over input and thus offers the possibility to switch between heating and cooling operation when a corresponding SI-signal is received. Connection possibilities for a temperature limiter, an external timer for automatic switching to night operation and a humidity limiter for the avoid of condensation formation are among the other functions. An analogue output for example, it can be connected to a KWL system (controlled housing ventilation).

Figure 151: Homematic IP multi IO box settings

After learning the multi IO box to the Control Panel, you can make the settings of the device using the WebUI user interface. To do this, click on "Devices" under "Settings" and select the Homematic IP multi IO box (see "24.2 Devices" on page 135).

21.9.1 Channel Parameters

This is where the channels of the device are displayed. The individual setting of the device is done via channels 0 to 11 of the channel parameter list.
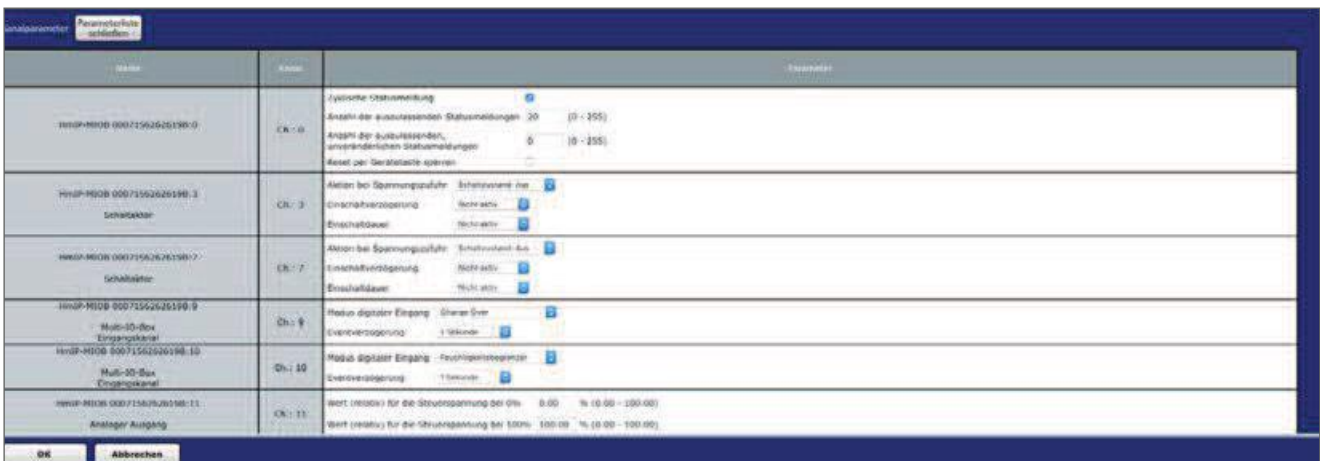
Figure 152: Homematic IP multi IO Box channel parameters

21.9.1.1 Channel 0

CheckBox "Cyclic status message"
If the checkbox is activated, the device sends status messages in a cyclic distance

to the headquarters. The basic grid for cyclic status messages is a randomly varying time range of about 2 to 3 minutes. However, with the following 2 parameters the grid can be enlarged. Both parameters are applied one after the other.

Number of status messages to skip
The registered value reduces the number of messages to the central station with increasing values. The default value of "20" means that the device will report to the control unit approximately once per hour (every 42 to 63 minutes).

Number of unchangeable status messages to skip
This filter refers to the messages that have passed the previous "number of Auszulas-Send status Messages" filter.
If nothing changes compared to the last status message sent, you can enter the number of messages that are also suppressed in this case.

CheckBox "Lock reset by Device button"
If the checkbox is activated, the factory settings of the device can no longer be restored using the device button (System button) on the device. The reset can only be done via the control Panel.

21.9.1.2   Channel 3 and 7

Action on power drop down button
Here you can define the switching state, which the cord impulse of the multi IO box, for example, after a power outage with renewed power supply.
Selection: Switching state: OFF, switch-on delay, switching state: On

Power-up delay drop-down button
Here you can define the switch-on delay of the cord impulse.
Selection: Inactive, 100ms, 1 second, 3 seconds, 30 seconds, 1 minute, 2 minutes, 1 hour, enter value

Duty cycle drop-down button
You use this menu item to define the duty cycle of the cord impulse.
Selection: Inactive, 1 second, 2 seconds, 5 seconds, 10 seconds, 30 seconds, 1 Mi-groove, 2 minutes, 1 hour, [...], 24 hours, permanent, enter value

21.9.1.3   Control of circulating pump and/or boiler

The settings of the parameters of Channel 3 and Channel 7 of the Multi IO box determine the switching behaviour of home connected devices such as circulating pump and/or boiler. The information on whether heating or cooling is required is supplied by the Fußbodenhei-Zungsaktoren. For this purpose, the heat demand channel of the Floor Heating Actuators (Channel 7 for Devices with 6 heating circuits or channel 11 for devices with 10 heating circuits) must be linked with Ka-nal 3 and/or Channel 7 of the Multi IO box. A special function ensures that the

That the actuators of the MIOB are switched on as soon as one of the link partners of the respective channel reports "heat demand" and only then turns off if none of the existent-gen partners reports more "heat demand".

Please refer to the operating instructions of the device for the corresponding connection assignment.

21.9.1.4   Channel 9

Depending on the connected device, you define the function of the digital channel.

Digital input Mode drop-down button
Change over (default): Switching the entire system between the heating and Kühlbe Drive when an external controller enters a corresponding change-over signal.

Temperature limiter: When connecting an external temperature limiter, the Pum-PE is switched off and the Homematic IP Floor Heating Actuator drives all actuators when the temperature limiter has detected a too high flow temperature.

Lowering operation (eco-mode): When connecting an external timer, the corresponding heating zones are automatically switched to night operation (lowering temperature) when the input is activated.

Humidity limiter: When connecting an external humidity limiter, the
The cooling operation of the underfloor heating system is disabled when a humidity keitswert to be defined is exceeded. This is used to avoid condensation on the floor surface.

Pushbutton: Configuration of the digital input as push. If this option is selected, the corresponding digital input, such as a Homematic IP wall switch, is held.

Event delay drop-down button
Here you can set the delay at which the received signal is processed. Selection: 1 Second, 3 seconds, 30 seconds, 1 minute, 2 minutes, 1 hour, enter value

21.9.1.5   Channel 10

Depending on the connected device, you define the function of the digital channel.

Digital input Mode drop-down button
Humidity Limiter (default): When connecting an external Feuchtigkeitsbe limiter, the cooling operation of the floor heating system is disabled when a humidity value to be defined is exceeded. This is used to avoid condensation water on the floor surface.

Change over: Switching the entire system between heating and cooling mode when a corresponding change-over signal is input from an external controller.

Temperature limiter: When connecting an external temperature limiter, the Pum-PE is switched off and the Homematic IP Floor Heating Actuator drives all actuators when the temperature limiter has detected too high flow temperatures.

Lowering operation (eco-mode): When connecting an external timer, the corresponding heating zones are automatically switched to night operation (lowering temperature) when the input is activated.

Pushbutton: Configuration of the digital input as push. If this option is selected, the corresponding digital input, such as a Homematic IP wall button, behaves.

Event delay drop-down button
Here you can set the delay at which the received signal is processed. Selection: 1 Second, 3 seconds, 30 seconds, 1 minute, 2 minutes, 1 hour, value set-Ben

21.9.1.6   Channel 11

Depending on the connected device, you define the parameters of the digital off-course of the Homematic IP multi IO box. The analogue output of the Multi IO box can emit a voltage of 0 to 10 v.

This channel can be used, for example, for controlling a controlled living room ventilation (KWL).

Value input "value (relative) for the control voltage at 0%"
You use this value input to define the minimum output voltage according to your needs.

Value input "value (relative) for the control voltage at 100%"
You use this value input to define the maximum output voltage according to your needs.

21.10 Homematic IP Window Handle sensor (HmIP-SRH)

The Homematic IP window Grip sensor detects the position of the window handle, whether a fen-ster is open, closed or tilted, and sends this information to the Control Panel.

The window handle sensor is ideal for use in conjunction with alarm systems, for example in combination with an alarm siren. Another area of application is the Raumkli-Masteuerung. In combination with Homematic (also in group management) and Homema-TIC IP radiator thermostats, the room temperature is automatically lowered as soon as a window is opened or tilted. In addition, the device can be used in conjunction with Rollladenakto-Ren.

After learning the window handle sensor to the control Panel, you can make the settings of the device using the WebUI user interface. To do this, click "Devices" under "Settings" and select the window handle sensor (see "24.2 Devices" on page 135).

Figure 153: Homematic IP Window handle sensor settings

In this window you can make settings for the Homematic IP window handle sensor.

21.10.1 Channel Parameters

This is where the channels of the device are displayed. The individual setting of the device is done via channels 0 and 1 of the Channel parameter list.

Figure 154: Homematic IP Window handle sensor channel parameters

21.10.1.1 Channel 0

The settings you make here affect the entire device.

CheckBox "Cyclic status message"
If the checkbox is activated, the device sends status messages to the control center at a cyclic distance. The basic grid for cyclic status messages is a randomly varying time range of about 2 to 3 minutes. However, with the following 2 parameters the grid can be enlarged. Both parameters are applied one after the other.

Number of status messages to skip
The registered value reduces the number of messages to the central station with increasing values. The default value of "20" means that the device will report to the control unit approximately once per hour (every 42 to 63 minutes).

Number of unchangeable status messages to skip
This filter refers to the messages that have passed the previous "number of Auszulas-Send status Messages" filter.
If nothing changes compared to the last status message sent, you can enter the number of messages that are also suppressed in this case.

CheckBox "Lock reset by Device button"
If the checkbox is activated, the factory settings of the device can no longer be restored using the device button (System button) on the device. The reset can only be done via the control Panel.

21.10.1.2   Channel 1

Here you determine with which delay which signal the window handle sensor sends to the control Panel.

Event delay
Here you determine the delay with which the window handle sensor sends the current Statusmel to the Control Panel (selection: Not active, 100ms, 1 second, 3 seconds, 30 se customers, 1 minute, 2 minutes, 1 hour, enter value).

The following settings apply depending on the type of installation of your window handle. These settings determine whether and in which position of the window handle the message is sent to the control Panel.

Message in position below
Selection: No message, open, to, tilted

Message in position transverse
Selection: No message, open, to, tilted

Message in position up
Selection: No message, open, to, tilted

21.11   Homematic IP Motion Detector with Brightness sensor – inside (HmIP-SMI)

The Homematic IP motion detector with Brightness sensor is specially designed for indoor use. The device reliably detects movements within the sensing range and also the ambient brightness thanks to an integrated Brightness sensor.

You can use the powerful motion detector, for example, for lighting control or in safe/heitsanwendungen. With the motion detection, light can be switched on or alarm triggered in conjunction with other Homematic/Homematic IP devices. Short-term fluctuations in brightness are filtered out. This can prevent an accidental response of the motion detector. Tripping brightness and response sensitivity are adjustable via the control panel.

After learning the motion detector to the control Panel, you can make the settings of the device using the WebUI user interface. Click on "Devices" under "Settings" and select the motion detector (see "24.2 Devices" on page 135).

Figure 155: Homematic IP Motion Detector settings

In this window you can make settings for the Homematic IP motion detector.

21.11.1 Channel Parameters

This is where the channels of the device are displayed. The individual setting of the device is done via channels 0 and 1 of the Channel parameter list.

Figure 156: Homematic IP Motion Detector channel parameters

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21.11.1.1 Channel 0

CheckBox "Cyclic status message"
If the checkbox is activated, the device sends status messages to the control center at a cyclic distance. The basic grid for cyclic status messages is a randomly varying time range of about 2 to 3 minutes. However, with the following 2 parameters the grid can be enlarged. Both parameters are applied one after the other.

Number of status messages to skip
The registered value reduces the number of messages to the central station with increasing values. The default value "1" means that the device will report to the control center every 4 to 6 minutes, with the value "2" every 6 to 9 minutes, etc.

Number of unchangeable status messages to skip
This filter refers to the messages that have passed the previous "number of Auszulas-Send status Messages" filter.
If nothing changes compared to the last status message sent, you can enter the number of messages that are also suppressed in this case.

CheckBox "Lock reset by Device button"
If the checkbox is activated, the factory settings of the device can no longer be restored using the device button (System button) on the device. The reset can only be done via the control Panel.

21.11.1.2 Channel 1

Sensitivity
Under this menu item you adjust the sensitivity of the motion detector. Depending on the Hö the selected value, the lower the sensitivity.

Mindestsendeabstand
Here you determine the time within which no further movements are to be transmitted to the Central Control unit after the detected movement.

Send a checkbox within the Mindestsendeabstands detected motion
If this checkbox is activated, further movements, which were detected within the defined Min-destsendeabstandes, are transmitted to the Central Control unit after the Mindestsendeabstand Defi-Ned transmission lock has expired.

Time after the detected motion is reset
Here you define the time after which the motion detector switches back to the status "no movement".

Brightness Filter
The brightness sensor in the motion detector measures a brightness value every 6 minutes. The drop-down button determines how many of these values are stored and the time period for which the measurement takes place.

Normal/Eco Mode

If you select Eco mode, you can enter the lower threshold for sending status messages to Lux.

⚠ No switching commands are sent for motion detection above the threshold value. Therefore, the ECO mode is not suitable for security applications. Alternatively, you can use the appropriate button to take over the current hel-brightness. The value of the current brightness is displayed in the button in round Klam. Depending on the brightness filter settings, the current brightness is the lowest measured value of the last X measurements.

21.12 Homematic IP Motion Detector with Brightness sensor – outside (HmIP-SMO)

The Homematic IP motion detector with Brightness sensor is specially designed for outdoor use, but can also be used in indoor environments. The device detects movements within the sensing range and also the ambient brightness thanks to an integrated Brightness sensor.

You can use the powerful motion detector, for example, for lighting control or in safe/heitsanwendungen. With the motion detection, light can be switched on or alarm triggered in conjunction with other Homematic/Homematic IP devices. After learning the motion detector to the control Panel, you can make the settings of the device using the WebUI user interface. Click on "Devices" under "Settings" and select the motion detector (see "24.2 Devices" on page 135).

Figure 157: Homematic IP Motion Detector external settings

In this window you can make settings for the Homematic IP motion detector with Brightness sensor – outside.

21.12.1 Channel Parameters

This is where the channels of the device are displayed. The individual setting of the device is done via channels 0 and 1 of the Channel parameter list.

Figure 158: Homematic IP Motion Detector external channel parameters

21.12.1.1   Channel 0

CheckBox "Cyclic status message"
If the checkbox is activated, the component logs on to the control center at regular intervals.

CheckBox "Cyclic status message"
If the checkbox is activated, the device sends status messages to the control center at a cyclic distance. The basic grid for cyclic status messages is a randomly varying time range of about 2 to 3 minutes. However, with the following 2 parameters the grid can be enlarged. Both parameters are applied one after the other.

Number of status messages to skip
The registered value reduces the number of messages to the central station with increasing values. The default value "1" means that the device will report to the control center every 4 to 6 minutes, with the value "2" every 6 to 9 minutes, etc.

Number of unchangeable status messages to skip
This filter refers to the messages that have passed the previous "number of Auszulas-Send status Messages" filter.
If nothing changes compared to the last status message sent, you can enter the number of messages that are also suppressed in this case.

CheckBox "Lock reset by Device button"
If the checkbox is activated, the factory settings of the device can no longer be restored using the device button (System button) on the device. The reset can only be done via the control Panel.

21.12.1.2   Channel 1

Sensitivity
Under this menu item you adjust the sensitivity of the motion detector. Depending on the Hö the selected value, the lower the sensitivity.

Mindestsendeabstand
Here you determine the time within which no further movements are to be transmitted to the Central Control unit after the detected movement.

Send a checkbox within the Mindestsendeabstands detected motion
If this checkbox is activated, further movements, which were detected within the defined Min-destsendeabstandes, are transmitted to the Central Control unit after the Mindestsendeabstand Defi-Ned transmission lock has expired.

Time after the detected motion is reset
Here you define the time after which the motion detector switches back to the status "no movement".

Brightness Filter
The brightness sensor in the motion detector measures a brightness value every 6 minutes. The drop-down button determines how many of these values are stored and the time period for which the measurement takes place.

Normal/Eco Mode

If you select Eco mode, you can enter the lower threshold for sending status messages to Lux.

⚠ No switching commands are sent for motion detection above the threshold value. Therefore, the ECO mode is not suitable for security applications.

Alternatively, you can use the corresponding button to apply the current brightness. The value of the current brightness is shown in the button in parentheses. Depending on the brightness filter settings, the current brightness is the lowest measured value of the last X measurements.

21.13   Homematic IP Alarm Siren (HmIP-ASIR)

The Homematic IP alarm siren is designed for indoor use and in the event of an alarm, triggered e.g. by a motion detector, ensures reliable acoustic and optical signalling. The alarm is deactivated by means of fishing equipment or the control Panel. When activated, the integrated loudspeaker emits a beep with a sound pressure level of more than 90 db. You can choose between a number of different signal tones. Two powerful red LED signal lights provide an additional optical signaling and thus ensure an early war-time in the event of an alarm.

After learning the alarm siren to the Control Panel, you can adjust the settings of the device using the WebUI interface. To do this, click on "Devices" under "Settings" and select the alarm siren (see "24.2 Devices" on page 135).

Figure 159: Homematic IP Alarm siren Settings

In this window you can make settings of the Homematic IP alarm siren.

21.13.1 Channel Parameters

This is where the channels of the device are displayed. The individual setting of the device is done via channels 0 and 1 of the Channel parameter list.

Figure 160: Homematic IP alarm Siren channel parameters

21.13.1.1   Device parameter Channel 0

CheckBox "Cyclic status message"
If the checkbox is activated, the device sends status messages to the control center at a cyclic distance. The basic grid for cyclic status messages is a randomly varying time range of about 2 to 3 minutes. With the following 2 parameters, the grid can be

be increased. Both parameters are applied one after the other.

Number of status messages to skip
The registered value reduces the number of messages to the central station with increasing values. The default value "0" means that the device will report to the control center every 2 to 3 minutes, with the value "1" every 4 to 6 minutes, and so on.

Number of unchangeable status messages to skip
This filter refers to the messages that have passed the previous "number of Auszulas-Send status Messages" filter.
If nothing changes compared to the last status message sent, you can enter the number of messages that are also suppressed in this case.

CheckBox "Lock reset by Device button"
If the checkbox is activated, the factory settings of the device can no longer be restored using the device button (System button) on the device. The reset can only be done via the control Panel.

21.13.1.2   Device Parameters Channel 1

Double-click Time (button Lock): 0.0-25.5 s (given: 0.0)
Here you can enter the double-click time to activate the button lock.

**Minimum duration for long buttonstrokes: 0.0-25.5 s (default: 0.4) Here
you can enter the minimum duration for a long button press.**

Dropdown button timeout for long button press (given: 2 minutes)
Here you can determine the time after which the radio signal is interrupted after a long press of the button (selection: Not active, 100ms, 1 second, 3 seconds, 30 seconds-the, 1 minute, 2 minutes, 1 hour, enter value).

21.14 Homematic IP Smoke detector with Q-label (HmIP-SWSD)

The Homematic IP Smoke alarm detector monitors a room for smoke development. The device works based on the photo-electronic stray light principle. As a result, dangerous flue fumes and thus incipient fires are detected early and a timely warning can be made.

The alarm is displayed by triggering an integrated siren and a flashing red warning led. A white LED is used for emergency lighting and provides additional orientation in the event of a power failure.

Up to 40 wireless smoke detectors of the same type can be connected, so that in the event of an alarm all other smoke detectors are activated as well.

After learning the smoke detector to the control Panel, you can make the settings of the device using the WebUI user interface. To do this, click on "Devices" under "Settings" and select the smoke alarm (see "24.2 Devices" on page 135).

Figure 161: Homematic IP Smoke Detector settings

In this window you can make settings for the Homematic IP smoke alarm sensor with Q-label.

All smoke detectors that are harvested at the central angle are automatically linked and thus form a "group". As soon as a smoke detector is triggered, all devices in the group will make an alarm.

21.14.1 Channel Parameters

This is where the channels of the device are displayed. The individual setting of the device is done via channels 0 and 1 of the Channel parameter list.

Figure 162: Homematic IP Smoke Detector settings

21.14.1.1 Device parameter Channel 0

CheckBox "Cyclic status message"
If the checkbox is activated, the device sends status messages to the control center at a cyclic distance. The basic grid for cyclic status messages is a randomly varying time range of about 2 to 3 minutes. However, with the following 2 parameters the grid can be enlarged. Both parameters are applied one after the other.

Number of status messages to skip
The registered value reduces the number of messages to the central station with increasing values. The default value of "20" means that the device will report to the control unit approximately once per hour (every 42 to 63 minutes).

Number of unchangeable status messages to skip
This filter refers to the messages that have passed the previous "number of Auszulas-Send status Messages" filter.
If nothing changes compared to the last status message sent, you can enter the number of messages that are also suppressed in this case.

CheckBox "Lock reset by Device button"
If the checkbox is activated, the factory settings of the device can no longer be restored using the device button (System button) on the device. The reset can only be done via the control Panel.

21.14.1.2 Device Parameters Channel 1

checkbox forwarding of received data telegrams
If this checkbox is activated, the siren and led emergency lighting of other trained smoke detectors will also be activated in the event of smoke detection.

21.15 Homematic IP Switch Actuator and Meter - Flush Mount (HmIP-FSM)

The compact Homematic IPSwitch Actuator and Meter - Flush Mount is suitable for installation in a concealed or Aufputzdose. It enables the switching on and off of connected consumers and measures their energy consumption.

The actuator enables convenient control of connected loads via radio remote control or via the central unit.

After learning the switching measuring actuator to the Control Panel, you can make the settings of the device using the WebUI user interface. To do this, click on "Devices" under "Settings" and select the switching measuring actuator (see "24.2 Devices" on page 135).

Figure 163: Homematic IP *Switch Actuator and Meter - Flush Mount* Settings

In this window you can make settings for the Homematic IP Switch Actuator and Meter - Flush Mount .

21.15.1 Channel Parameters

This is where the channels of the device are displayed. The individual setting of the device is done via channels 0 to 6 of the channel parameter list.

Figure 164: Homematic IP Switching measuring actuator Concealed channel parameters (channel 0)

21.15.1.1 Channel 0

CheckBox "Cyclic status message"
If the checkbox is activated, the device sends status messages to the control center at a cyclic distance. The basic grid for cyclic status messages is a randomly varying time range of about 2 to 3 minutes. However, with the following 2 parameters the grid can be enlarged. Both parameters are applied one after the other.

Number of status messages to skip
The registered value reduces the number of messages to the central station with increasing values. The default value of "20" means that the device will report to the control unit approximately once per hour (every 42 to 63 minutes).

Number of unchangeable status messages to skip
This filter refers to the messages that have passed the previous "number of Auszulas-Send status Messages" filter.
If nothing changes compared to the last status message sent, you can enter the number of messages that are also suppressed in this case.

CheckBox "Lock reset by Device button"
If the checkbox is activated, the factory settings of the device can no longer be restored using the device button (System button) on the device. The reset can only be done via the control Panel.

CheckBox "Automatic switch from summer to winter time"
If the checkbox is activated, the readjustment from summer to winter time is automatic. If necessary, you can use the "Configure DST" button to adjust the start of daylight saving time, the end of daylight saving time or the deviation from coordinated Time (UTC) of the time zone.

21.15.1.2   Channel 2
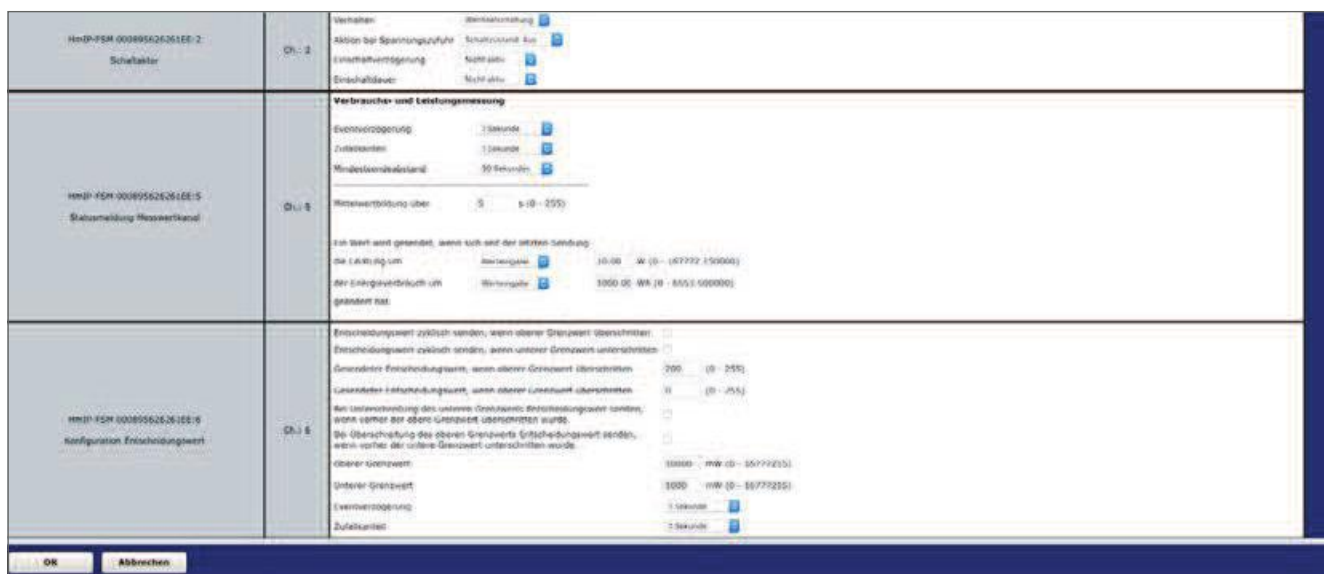
Figure 165: Homematic IP Switching measuring actuator Concealed settings (channel 2-6)

Behaviors drop-down button
The current measurement is active when you select "Alternating switch" (default). Other operating functions are "Output 1 active" and "Output 2 active".

Action on power drop down button
Here you can define the switching state that the virtual channel of the switching measuring AK Gate will take after a power outage with a new voltage supply.
Selection: Switching state: OFF, switch-on delay, switching state: On

Power-up delay drop-down button
Here you can define the power-on delay of the device channel.

Selection: Inactive, 100ms, 1 second, 3 seconds, 30 seconds, 1 minute, 2 minutes, 1 hour, enter value

Duty cycle drop-down button
You use this menu item to define the duty cycle.
Selection: Inactive, 1 second, 2 seconds, 5 seconds, 10 seconds, 30 seconds, 1 Mi-groove, 2 minutes, 1 hour, [...], 24 hours, permanent, enter value

21.15.1.3   Channel 5: Consumption and Power measurement

Event delay drop-down button
Specifies the period during which the switching measuring actuator will pass the measured values to the Control Panel.
Selection: Inactive, 100ms, 1 second, 3 seconds, 30 seconds, 1 minute, 2 minutes, 1 hour, enter value

Random share drop-down button
Here you determine the random part for sending the measured value.
Selection: Inactive, 100ms, 3 seconds, 1 minute, 1 hour, enter value

Input "Mindestsendeabstand"
Specifies the period of time between the last shipment and the following. This setting affects only the measured value channel, but not the sensor channel.

Selection: Inactive, 100ms, 3 seconds, 1 minute, 1 hour, enter value

Input "average value over": 1 – 255 s (default: 1)
Defines the time period during which average values of the measurement data are formed in the device, which are sent to the control center for further processing.

Input "A value is sent when the last broadcast has been... "
Defines a threshold at which a measured value transmission is to be carried out in addition to the cyclic transmission of measured values.

The performance (value input: 0 – 167772.15 W)
Or
The energy consumption has changed (value input: 0 – 6553.5 wh).

ℹ Avoid entering small values here because the frequent radio transmissions can cause the duty cycle limit to be reached quickly.

21.15.1.4   Channel 6: Configuration decision Value

Here you set the parameters if you want the actuator to send a switching command when it is under and/or exceeding a value measured by the device.

CheckBox "Send decision value cyclically if upper limit exceeded" If the checkbox is activated, the actuator sends the decision value at regular intervals when a defined upper limit value is exceeded.

CheckBox "Send decision value cyclically if lower limit is below" If the checkbox is activated, the actuator sends the decision value at regular intervals when a defined lower limit value is exceeded.

Input "sent decision value when upper limit exceeded" This value is sent by the actuator when the upper limit value is exceeded.

Input "sent decision value if lower limit is below" This value is sent by the actuator when the lower limit value is exceeded.

CheckBox "If the lower limit is below the limit, send the decision value if the upper threshold has been exceeded before."
If the checkbox is activated, the device will only send the decision value when the lower limit value is exceeded, if the upper limit has been passed before.

CheckBox "If the upper limit is exceeded, send the decision value if the lower limit has been exceeded before."
If the checkbox is activated, the device only sends the decision value when the upper limit value is exceeded, if the lower limit has been exceeded before.

Upper Limit/Lower limit entry
Enter the upper or lower limit value in Milliwatts.

Event delay drop-down button
Specifies the delay with which the switching measuring actor sends the decision value.
Selection: Inactive, 100ms, 3 seconds, 1 minute, 1 hour, enter value

Random share drop-down button
Here you determine the random part for sending the decision value.
Selection: Inactive, 100ms, 1 second, 3 seconds, 30 seconds, 1 minute, 2 minutes, 1 hour, enter value

21.16 Homematic IP Switch Actuator and Meter (16 A) - Flush Mount (HmIP-FSM16)

Homematic IP Switch Actuator and Meter (16 A) - Flush Mount is suitable for installation in a concealed or Aufputzdose. It allows connected devices to be switched on and off and measures their energy consumption. The switching measuring actuator has a particularly high switching capacity for large loads up to 16 a.

The actuator enables convenient control of connected loads via radio remote control or via the central unit.

After learning the switching measuring actuator to the Control Panel, you can make the settings of the device using the WebUI user interface. To do this, click on "Devices" under "Settings" and select the switching measuring actuator (see "24.2 Devices" on page 135).

Figure 166: Homematic IP Switch Actuator and Meter (16 A) - Flush Mount settings

In this window you can make settings for the Homematic IP Switch Actuator and Meter (16 A) - Flush Mount (16 a).

21.16.1 Channel Parameters

This is where the channels of the device are displayed. The individual setting of the device is done via channels 0 to 6 of the channel parameter list.

21.16.1.1   Device parameter Channel 0

Figure 167: Homematic IP Switch Actuator and Meter (16 A) - Flush Mount channel parameters (channel 0)

CheckBox "Cyclic status message"
If the checkbox is activated, the device sends status messages to the control center at a cyclic distance. The basic grid for cyclic status messages is a randomly varying time range of about 2 to 3 minutes. However, with the following 2 parameters the grid can be enlarged. Both parameters are applied one after the other.

Number of status messages to skip
The registered value reduces the number of messages to the central station with increasing values. The default value of "20" means that the device will report to the control unit approximately once per hour (every 42 to 63 minutes).

Number of unchangeable status messages to skip

This filter refers to the messages that have passed the previous "number of Auszulas-Send status Messages" filter.

If nothing changes compared to the last status message sent, you can enter the number of messages that are also suppressed in this case.

CheckBox "Lock reset by Device button"

If the checkbox is activated, the factory settings of the device can no longer be restored using the device button (System button) on the device. The reset can only be done via the control Panel.

CheckBox "Automatic switch from summer to winter time"

If the checkbox is activated, the readjustment from summer to winter time is automatic. If necessary, you can use the "Configure DST" button to adjust the start of daylight saving time, the end of daylight saving time or the deviation from coordinated Time (UTC) of the time zone.

21.16.1.2 Device Parameters Channel 2
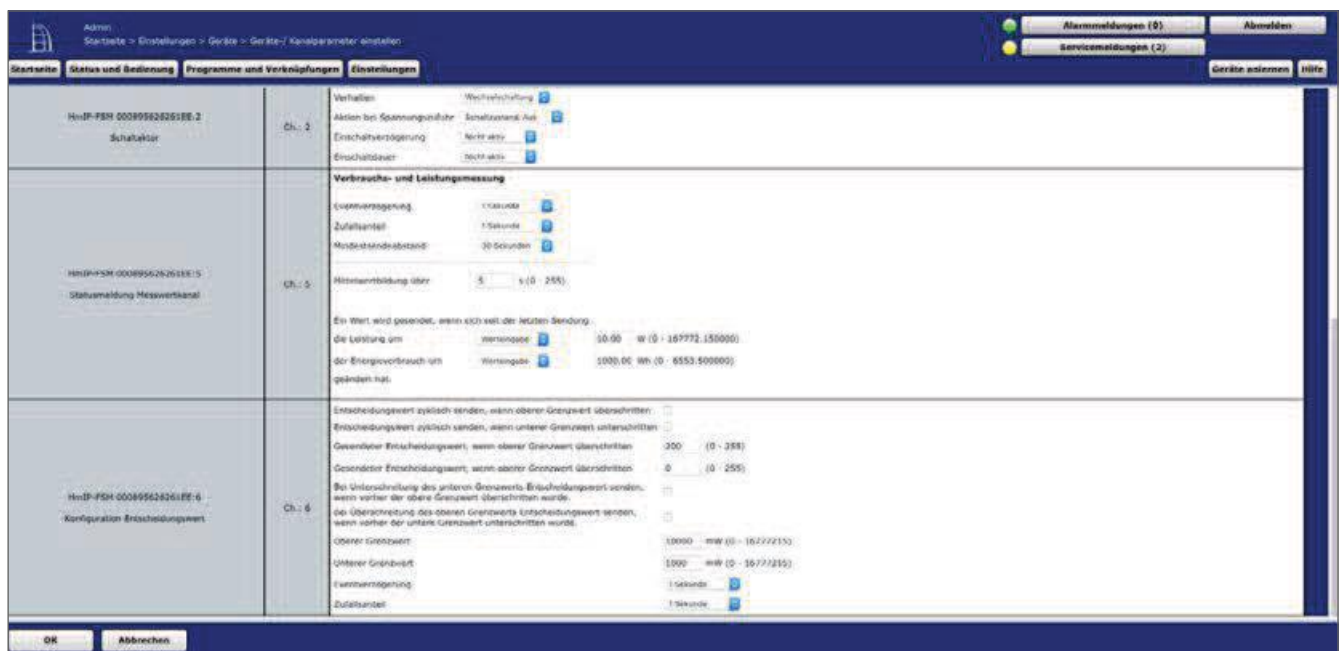
Figure 168: Homematic IP Switching-measuring actuator (16 a) – Concealed channel parameters (channel 2-6)

Behaviors drop-down button

The current measurement is active when you select "Alternating switch" (default). Other operating functions are "Output 1 active" and "Output 2 active".

Action on power drop down button

Here you can define the switching state that the virtual channel of the switching measuring AK Gate will take after a power outage with a new voltage supply.

Selection: Switching state: OFF, switch-on delay, switching state: On

Power-up delay drop-down button
Here you can define the power-on delay of the device channel.
Selection: Inactive, 100ms, 1 second, 3 seconds, 30 seconds, 1 minute, 2 minutes, 1 hour, enter value

Duty cycle drop-down button
You use this menu item to define the duty cycle.
Selection: Inactive, 1 second, 2 seconds, 5 seconds, 10 seconds, 30 seconds, 1 Mi-groove, 2 minutes, 1 hour, [...], 24 hours, permanent, enter value

21.16.1.3 Device Parameters Channel 5: Consumption and Power measurement

Event delay drop-down button
Specifies the period during which the switching measuring actuator will pass the measured values to the Control Panel.
Selection: Inactive, 100ms, 1 second, 3 seconds, 30 seconds, 1 minute, 2 minutes, 1 hour, enter value

Random share drop-down button
Here you determine the random part for sending the measured value.
Selection: Inactive, 100ms, 3 seconds, 1 minute, 1 hour, enter value

Input "Mindestsendeabstand"
Specifies the period of time between the last shipment and the following. This setting affects only the measured value channel, but not the sensor channel.

Selection: Inactive, 100ms, 3 seconds, 1 minute, 1 hour, enter value

Input "average value over": 1 – 255 s (default: 5)
Defines the time period during which average values of the measurement data are formed in the device, which are sent to the control center for further processing.

Input "A value is sent when the last broadcast has been... "
Defines a threshold at which a measured value transmission is to be carried out in addition to the cyclic transmission of measured values.

The performance (value input: 0 – 167772.15 W)
Or
The energy consumption has changed (value input: 0 – 6553.5 wh).

Avoid entering small values here because the frequent radio transmissions can cause the duty cycle limit to be reached quickly.

21.16.1.4 Device Parameters Channel 6: Configuration decision Value

Here you set the parameters if you want the actuator to send a switching command when it is under and/or exceeding a value measured by the device.

CheckBox "Send decision value cyclically if upper limit exceeded" If the checkbox is activated, the actuator sends the decision value at regular intervals when a defined upper limit value is exceeded.

CheckBox "Send decision value cyclically if lower limit is below" If the checkbox is activated, the actuator sends the decision value at regular intervals when a defined lower limit value is exceeded.

Input "sent decision value when upper limit exceeded" This value is sent by the actuator when the upper limit value is exceeded.

Input "sent decision value if lower limit is below" This value is sent by the actuator when the lower limit value is exceeded.

CheckBox "If the lower limit is below the limit, send the decision value if the upper threshold has been exceeded before."
If the checkbox is activated, the device will only send the decision value when the lower limit value is exceeded, if the upper limit has been passed before.

CheckBox "If the upper limit is exceeded, send the decision value if the lower limit has been exceeded before."
If the checkbox is activated, the device only sends the decision value when the upper limit value is exceeded, if the lower limit has been exceeded before.

Upper Limit/Lower limit entry
Enter the upper or lower limit value in Milliwatts.

Event delay drop-down button
Specifies the delay with which the switching measuring actor sends the decision value.
Selection: Inactive, 100ms, 3 seconds, 1 minute, 1 hour, enter value

Random share drop-down button
Here you determine the random part for sending the decision value.
Selection: Inactive, 100ms, 1 second, 3 seconds, 30 seconds, 1 minute, 2 minutes, 1 hour, enter value

21.17   Homematic IP Switch Actuator and Meter for Brand Switches (HmIP-BSM) The

compact Homematic IP Switch Actuator and Meter for Brand Switches is designed for installation in a concealed box for switches. It enables the closed of consumers to be switched on and off and measures their energy consumption.

Thanks to the measuring function, the actuator detects switched-on consumers and can therefore also be used in existing cross and switch switches.

The switching measuring actuator enables convenient control of connected consumers via the switch, via fishing remote controls as well as via the central.

After learning the switching measuring actor to the CCU2 or CCU3, you can make the settings of the device using the WebUI user interface. To do this, click on "Devices" under "Settings" and select the switching measuring actuator (see "24.2 Devices" on page 135).

Figure 169: Homematic IP Switch **Actuator and Meter for Brand Switches settings**

In this window you can make settings for the Homematic IP Switch Actuator and Meter for Brand Switches.

21.17.1 Channel Parameters

This is where the channels of the device are displayed. The individual setting of the device is done via channels 0 to 8 of the channel parameter list.
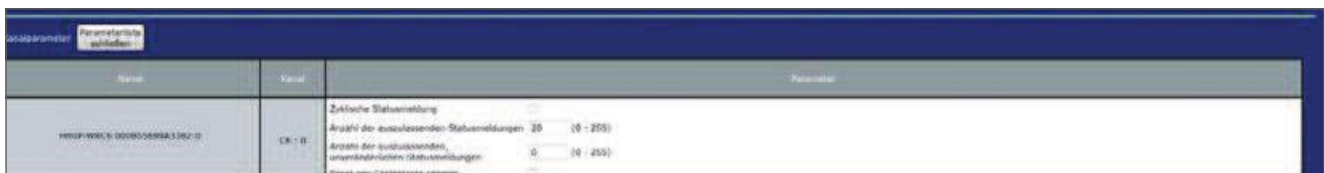
21.17.1.1   Channel 0

Figure 170: Homematic IP Switch Actuator and Meter for Brand Switches channel parameters (channel 0)

CheckBox "Cyclic status message"
If the checkbox is activated, the device sends status messages to the control center at a cyclic distance. The basic grid for cyclic status messages is a randomly varying time range of about 2 to 3 minutes. However, with the following 2 parameters the grid can be enlarged. Both parameters are applied one after the other.

Number of status messages to skip
The registered value reduces the number of messages to the central station with increasing values. The default value "1" means that the device will report to the control center every 4 to 6 minutes, with the value "2" every 6 to 9 minutes, etc.

Number of unchangeable status messages to skip
This filter refers to the messages that have passed the previous "number of Auszulas-Send status Messages" filter.
If nothing changes compared to the last status message sent, you can enter the number of messages that are also suppressed in this case.

CheckBox "Lock reset by Device button"
If the checkbox is activated, the factory settings of the device can no longer be restored using the device button (System button) on the device. The reset can only be done via the control Panel.

CheckBox "Automatic switch from summer to winter time"
If the checkbox is activated, the readjustment from summer to winter time is automatic. If necessary, you can use the "Configure DST" button to adjust the start of daylight saving time, the end of daylight saving time or the deviation from coordinated Time (UTC) of the time zone.

21.17.1.2   Channel 1 and 2

Figure 171: Homematic IP switching measuring actuator for brand switch channel parameters (channel 1-2)

You can set the following parameters for each Tasterkanal of the switching measuring actuator:

Double-click Time (button Lock): 0.0-25.5 s (given: 0.0)
Here you can enter the double-click time for the button lock. If you press the button only once, the function assigned to this button will only be executed if "0.00" is displayed here. If you have defined a higher value, the function is not executed until you press the button a second time within the defined time.

**Minimum duration for long button press: 0.0 – 25.5 s (default: 0.4) Here
you can enter the minimum duration for a long button press.**

Long button time-out dropdown button (given: 2 minutes)
Here you can determine the time after which the radio signal is interrupted after a long press of the button.
Selection: Inactive, 100ms, 1 second, 3 seconds, 30 seconds, 1 minute, 2 minutes, 1 hour, enter value

21.17.1.3   Channel 3

Figure 172: Homematic IP switching measuring actuator for brand switch channel parameters (Channel 3)

Event delay drop-down button
Specifies the period during which the switching measuring actor will pass the message to the Control Panel at Zustandsände (on, off).
Selection: Inactive, 100ms, 3 seconds, 1 minute, 1 hour, enter value

Random share drop-down button
Specifies the time until the switching measuring actor sends a status message to the transmitter after receiving a radio signal.
Selection: Inactive, 100ms, 3 seconds, 30 seconds, 1 minute, 2 minutes, 1 hour, enter value

CheckBox "Enable device led"
If the checkbox is activated, the device led also signals transmitted status messages.

21.17.1.4   Channel 4 – 6

Here you set the parameters for the virtual channels 4, 5 and 6.

Figure 173: Homematic IP switching measuring actuator for brand switch channel parameters (channel 4-6)

Behaviors drop-down button
When selecting "Alternating switching" (default), the actuator detects which channel is active. Other options are "Output 1 active" and "Output 2 active".

Action on power drop down button
Here you can define the switching state that the virtual channel of the switching measuring AK Gate will take after a power outage with a new voltage supply.
Selection: Switching state: OFF, switch-on delay, switching state: On

Power-up delay drop-down button
Here you can define the power-on delay of the device channel.
Selection: Inactive, 100ms, 1 second, 3 seconds, 30 seconds, 1 minute, 2 minutes, 1 hour, enter value

Duty cycle drop-down button
You use this menu item to define the duty cycle.
Selection: Inactive, 1 second, 2 seconds, 5 seconds, 10 seconds, 30 seconds, 1 Mi-groove, 2 minutes, 1 hour, [...], 24 hours, permanent, enter value

21.17.1.5 Channel 7: Consumption and Power measurement

Figure 174: Homematic IP switching measuring actuator for brand switch channel parameters (Channel 7)

Event delay drop-down button
Specifies the period during which the switching measuring actuator will pass the measured values to the Control Panel. Selection: Inactive, 100ms, 1 second, 3 seconds, 30 seconds, 1 minute, 2 minutes, 1 hour, enter value

Random share drop-down button
Here you determine the random part for sending the measured value.
Selection: Inactive, 100ms, 3 seconds, 1 minute, 1 hour, enter value

Input "Mindestsendeabstand"
Specifies the period of time between the last shipment and the following. This setting affects only the measured value channel, but not the sensor channel.

Selection: Inactive, 100ms, 3 seconds, 1 minute, 1 hour, enter value

Input "average value over": 1 – 255 s (default: 1)
Defines the time period during which average values of the measurement data are formed in the device, which are sent to the control center for further processing.
Input "A value is sent when the last broadcast has been... "
Defines a threshold at which a measured value transmission is to be carried out in addition to the cyclic transmission of measured values.

The performance (value input: 0 – 167772.15 W)
Or
The energy consumption has changed (value input: 0 – 6553.5 wh).

ℹ️ Avoid entering small values here because the frequent radio transmissions can cause the duty cycle limit to be reached quickly.

21.17.1.6   Channel 8: Configuration decision Value

Here you set the parameters if you want the actuator to send a switching command when it is under and/or exceeding a value measured by the device.

Figure 175: Homematic IP switching measuring actuator for brand switch channel parameters (Channel 7)

CheckBox "Send decision value cyclically if upper limit exceeded" If the checkbox is activated, the actuator sends the decision value at regular intervals when a defined upper limit value is exceeded.

CheckBox "Send decision value cyclically if lower limit is below" If the checkbox is activated, the actuator sends the decision value at regular intervals when a defined lower limit value is exceeded.

Input "sent decision value when upper limit exceeded" This value is sent by the actuator when the upper limit value is exceeded.

Input "sent decision value if lower limit is below" This value is sent by the actuator when the lower limit value is exceeded.

CheckBox "If the lower limit is below the limit, send the decision value if the upper threshold has been exceeded before."
If the checkbox is activated, the device will only send the decision value when the lower limit value is exceeded, if the upper limit has been passed before.

CheckBox "If the upper limit is exceeded, send the decision value if the lower limit has been exceeded before."
If the checkbox is activated, the device only sends the decision value when the upper limit value is exceeded, if the lower limit has been exceeded before.

Upper Limit/Lower limit entry
Enter the upper or lower limit value in Milliwatts.

Event delay drop-down button
Specifies the delay with which the switching measuring actor sends the decision value.
Selection: Inactive, 100ms, 3 seconds, 1 minute, 1 hour, enter value

Random share drop-down button
Here you determine the random part for sending the decision value.
Selection: Inactive, 100ms, 1 second, 3 seconds, 30 seconds, 1 minute, 2 minutes, 1 hour, enter value

21.18   Homematic IP dimming actuator for brand switches (HmIP-BDT)

The compact Homematic IP dimming actuator for brand switch is designed for installation in a sub-putzdose for switches. It allows the dimming of connected Glühlam-pen, HV-Halogen lamps, NV-Halogen lamps with electronic transformer, dimmable energy-saving lamps and many dimmable LED lamps.

The dimming actuator enables convenient control of connected consumers via the Tasterwippe of the switch, via fishing remote controls as well as via the control Panel. After learning the Dimmaktors to the Control Panel, you can make the settings of the device using the WebUI user interface. To do this, click on "Devices" under "Settings" and select the dimming actuator (see "24.2 Devices" on page 135).

Figure 176: Homematic IP dimming actuator for brand switch settings

In this window you can make settings for the Homematic IP dimming actuator for brand switches.

21.18.1 Channel Parameters

This is where the channels of the device are displayed. The individual setting of the device is done via channels 0 to 4 of the channel parameter list.

21.18.1.1   Device parameter Channel 0
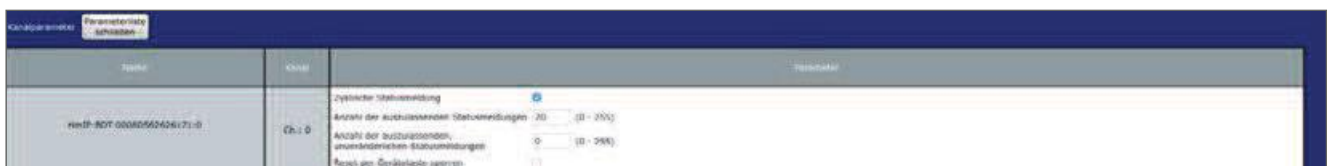
Figure 177: Homematic IP dimming actuator for brand switch channel parameters (channel 0)

CheckBox "Cyclic status message"
If the checkbox is activated, the device sends status messages to the control center at a cyclic distance. The basic grid for cyclic status messages is a randomly varying time range of about 2 to 3 minutes. However, with the following 2 parameters the grid can be enlarged. Both parameters are applied one after the other.

Number of status messages to skip
The registered value reduces the number of messages to the central station with increasing values. The default value of "20" means that the device will report to the control unit approximately once per hour (every 42 to 63 minutes).

Number of unchangeable status messages to skip

This filter refers to the messages that have passed the previous "number of Auszulas-Send status Messages" filter.

If nothing changes compared to the last status message sent, you can enter the number of messages that are also suppressed in this case.

CheckBox "Lock reset by Device button"
If the checkbox is activated, the factory settings of the device can no longer be restored using the device button (System button) on the device. The reset can only be done via the control Panel.

21.18.1.2   Device Parameters Channel 1 and 2

You can set the following parameters for each Tasterkanal of the Dimmaktors.

Figure 178: Homematic IP dimming actuator for brand switch channel parameters (channel 1-2)

Double-click Time (button Lock): 0.0 – 25.5 s (default: 0.0)
Here you can enter the double-click time for the button lock. If you press the button only once, the function assigned to this button will only be executed if "0.00" is displayed here. If you have defined a higher value, the function is not executed until you press the button a second time within the defined time.

Minimum duration for long button press: 0.0 – 25.5 s (default: 0.4) Here you can enter the minimum duration for a long button press.

Dropdown button timeout for long button press (given: 2 minutes)
Here you can determine the time after which the radio signal is interrupted after a long press of the button.
Selection: Inactive, 100ms, 1 second, 3 seconds, 30 seconds, 1 minute, 2 minutes, 1 hour, enter value

21.18.1.3   Device Parameters Channel 4

Figure 179: Homematic IP dimming actuator for brand switch channel parameters (Channel 4)

Action on power drop down button
Here you can define the switching state that the dimming actuator will take after a power outage with a new voltage supply.
Selection: Switching state: OFF, switch-on delay, switching state: On,

Power-up delay drop-down button
Here you can define the power-on delay of the device.
Selection: Inactive, 100ms, 1 second, 3 seconds, 30 seconds, 1 minute, 2 minutes, 1 hour, enter value

Duty cycle drop-down button
You use this menu item to define the duty cycle of the Dimmaktors.
Selection: Inactive, 1 second, 2 seconds, 5 seconds, 10 seconds, 30 seconds, 1 Mi-groove, 2 minutes, 1 hour, [...], 24 hours, permanent, enter value

21.19   Homematic IP Wall Remote - 6-Buttons (HmIP-WRC6)

With this compact, universally usable wall switch, Homematic IP devices can be easily controled via three button pairs placed on top of each other. The wall switch has a replaceable label field and allows for an individual button label and thus a clear, unambiguous assignment of functions. The label can also be changed at any time for later changes.

After learning the wall switch to the control Panel, you can make the settings of the Räts via the WebUI user interface. To do this, click on "Devices" under "Settings" and select the wall switch (see "24.2 Devices" on page 135).

Figure 180: Homematic IP Wall Switch-6-*buttons*-settings

In this window you can make settings for the Homematic IP wall Switch -6- buttons.

21.19.1 Channel Parameters

This is where the channels of the device are displayed. The individual setting of the device is done via channels 0 to 4 of the channel parameter list.

Figure 181: Homematic IP Wall Switch-6-channel parameters (channel 0)

Device parameter Channel 0
The settings you make here affect the entire device. The settings for the buttons of the wall switch are set using the Tasterkanäle 1 – 6.

CheckBox "Cyclic status message"
If the checkbox is activated, the device sends status messages to the control center at a cyclic distance. The basic grid for cyclic status messages is a randomly varying time range of about 2 to 3 minutes. However, with the following 2 parameters the grid can be enlarged. Both parameters are applied one after the other.

Number of status messages to skip
The registered value reduces the number of messages to the central station with increasing values. The default value of "20" means that the device will report to the control unit approximately once per hour (every 42 to 63 minutes).

Number of unchangeable status messages to skip
This filter refers to the messages that have passed the previous "number of Auszulas-Send status Messages" filter.
If nothing changes compared to the last status message sent, you can enter the number of messages that are also suppressed in this case.

CheckBox "Lock reset by Device button"
If the checkbox is activated, the factory settings of the device can no longer be restored using the device button (System button) on the device. The reset can only be done via the control Panel.

21.19.1.1 Device Parameters Channel 1 – 4

You can set the following parameters for each channel or for each button of the wall switch.

Figure 182: Homematic IP Wall Switch-6-channel parameters (channel 1-4)

Double-click Time (button Lock): 0.0 – 25.5 s (default: 0.0)
Here you can enter the double-click time for the button lock. If you press the button only once, the function assigned to this button will only be executed if "0.00" is displayed here. If you have defined a higher value, the function is not executed until you press the button a second time within the defined time.

**Minimum duration for long button press: 0.0 – 25.5 s (default: 0.4) Here
you can enter the minimum duration for a long button press.**

Long button time-out dropdown button (given: 2 minutes)
Here you can determine the time after which the radio signal is interrupted after a long press of the button.
Selection: Inactive, 100ms, 1 second, 3 seconds, 30 seconds, 1 minute, 2 minutes, 1 hour, enter value

21.20   Homematic IP Keychain Remote control – 4 buttons (HmIP-KRC4)

With this compact, universally applicable radio remote control, you can comfortably control the fishing Homematic and Homematic IP devices. A button can also be used to learn several components. For example, you can switch on the shutters administrator-terfahren and at the same time turn on the lighting or switch to a predefined DIMM value.

After learning the keychain remote control to the Control Panel, you can set the device's settings using the WebUI user interface. To do this, click on devices under "Settings" and select the keychain remote (see "24.2 Devices" on page 135).

Figure 183: Homematic IP Keychain Remote control settings

In this window you can make settings for the Homematic IP keychain 4 button remote.

21.20.1 Channel Parameters

This is where the channels of the device are displayed. The individual setting of the device is done via channels 0 to 4 of the channel parameter list.

21.20.1.1   Channel 0

The settings you make here affect the entire device. You use the Tasterkanäle 1 – 4 to select the settings for the Keychain remote buttons.

Figure 184: Homematic IP Keychain Remote control channel settings (channel 0)

CheckBox "Cyclic status message"
If the checkbox is activated, the device sends status messages to the control center at a cyclic distance. The basic grid for cyclic status messages is a randomly varying time range of about 2 to 3 minutes. However, with the following 2 parameters the grid can be enlarged. Both parameters are applied one after the other.

Number of status messages to skip

The registered value reduces the number of messages to the central station with increasing values. The default value of "20" means that the device will report to the control unit approximately once per hour (every 42 to 63 minutes).

Number of unchangeable status messages to skip

This filter refers to the messages that have passed the previous "number of Auszulas-Send status Messages" filter.

If nothing changes compared to the last status message sent, you can enter the number of messages that are also suppressed in this case.

CheckBox "Lock reset by Device button"

If the checkbox is activated, the factory settings of the device can no longer be restored using the device button (System button) on the device. The reset can only be done via the control Panel.

21.20.1.2   Channel 1 – 4

You can set the following PA parameters for each channel or button of the Keychain remote control.

HmIP-KRC4 0002D5698FF50D:1 Tasterkanal	Ch.: 1	Doppelklick-Zeit (Tastensperre)	0.0
		Mindestdauer für langen Tastendruck	0.4
		Timeout für langen Tastendruck	2 Minuten
HmIP-KRC4 0002D5698FF50D:2 Tasterkanal	Ch.: 2	Doppelklick-Zeit (Tastensperre)	0.0
		Mindestdauer für langen Tastendruck	0.4
		Timeout für langen Tastendruck	2 Minuten
HmIP-KRC4 0002D5698FF50D:3 Tasterkanal	Ch.: 3	Doppelklick-Zeit (Tastensperre)	0.0
		Mindestdauer für langen Tastendruck	0.4
		Timeout für langen Tastendruck	2 Minuten
HmIP-KRC4 0002D5698FF50D:4 Tasterkanal	Ch.: 4	Doppelklick-Zeit (Tastensperre)	0.0
		Mindestdauer für langen Tastendruck	0.4
		Timeout für langen Tastendruck	2 Minuten

Figure 185: Homematic IP Keychain Remote control channel settings (channel 1-4)

Double-click Time (button Lock): 0.0 – 25.5 s (default: 0.0)

Here you can enter the double-click time for the button lock. If you press the button only once, the function assigned to this button will only be executed if "0.00" is displayed here. If you have defined a higher value, the function is not executed until you press the button a second time within the defined time.

Minimum duration for long button press: 0.0 – 25.5 s (default: 0.4) Here you can enter the minimum duration for a long button press.

Dropdown button timeout for long button press (given: 2 minutes)

Here you can determine the time after which the radio signal is interrupted after a long press of the button.

Selection: Inactive, 100ms, 1 second, 3 seconds, 30 seconds, 1 minute, 2 minutes, 1 hour, enter value

22 Floor heating control with Homematic IP devices: Examples

Thanks to the extensive portfolio of different Homematic IP components for controlling your floor heating you have the possibility to increase individual settings and to adapt the system to the structural conditions in your home. Below you will find an overview of the application examples, which explain both the installation and the possibilities of use.

ℹ️ In order to be able to use the Homematic IP wall thermostat HmIP-WTH, you need at least the firmware version 1.6. For more information about how to perform firmware updates, see the "26 Firmware update for radio-based Devices" section on page 326.

22.1 Application Example 1: Control of the floor heating system

After learning the Floor Heating Actuators and one or more Homematic IP wall thermostats, the individual channels of the Floor Heating Actuators must be linked to the wall thermostats of the room which is above the relevant heating circuit or The heating circuits concerned are supplied.

The coupling of the heating circuits 1 – 6 and 1 – 10 is done via the Homematic IP wall thermostat. For the control of the floor heating the use of several Floor Heating Actuator is possible.
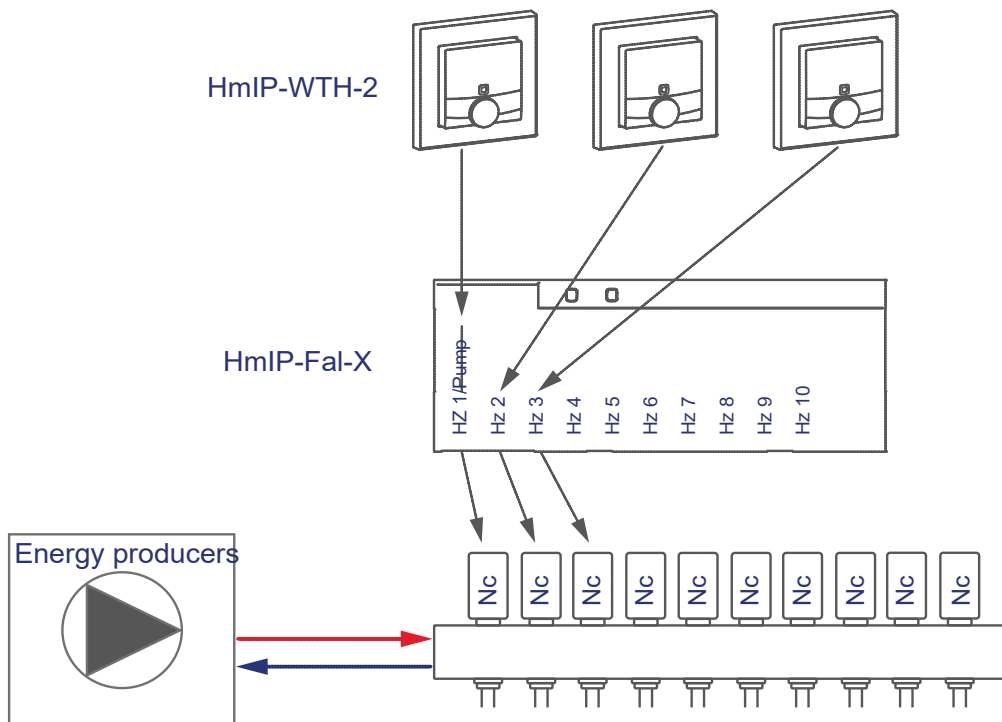
You can configure the devices to control the floor heating using the screenshots below:

- Learn the Floor Heating Actuator and the wall thermostats to the control Panel.

- Create a direct link between the wall thermostat and the Floor Heating Actuator:

  Room 1: Wall thermostat (1) Channel 7 with Floor Heating Actuator (HZ 1) Channel 1 Room 2: Wall thermostat (2) Channel 7 with Floor Heating Actuator (Hz 2) Channel 2
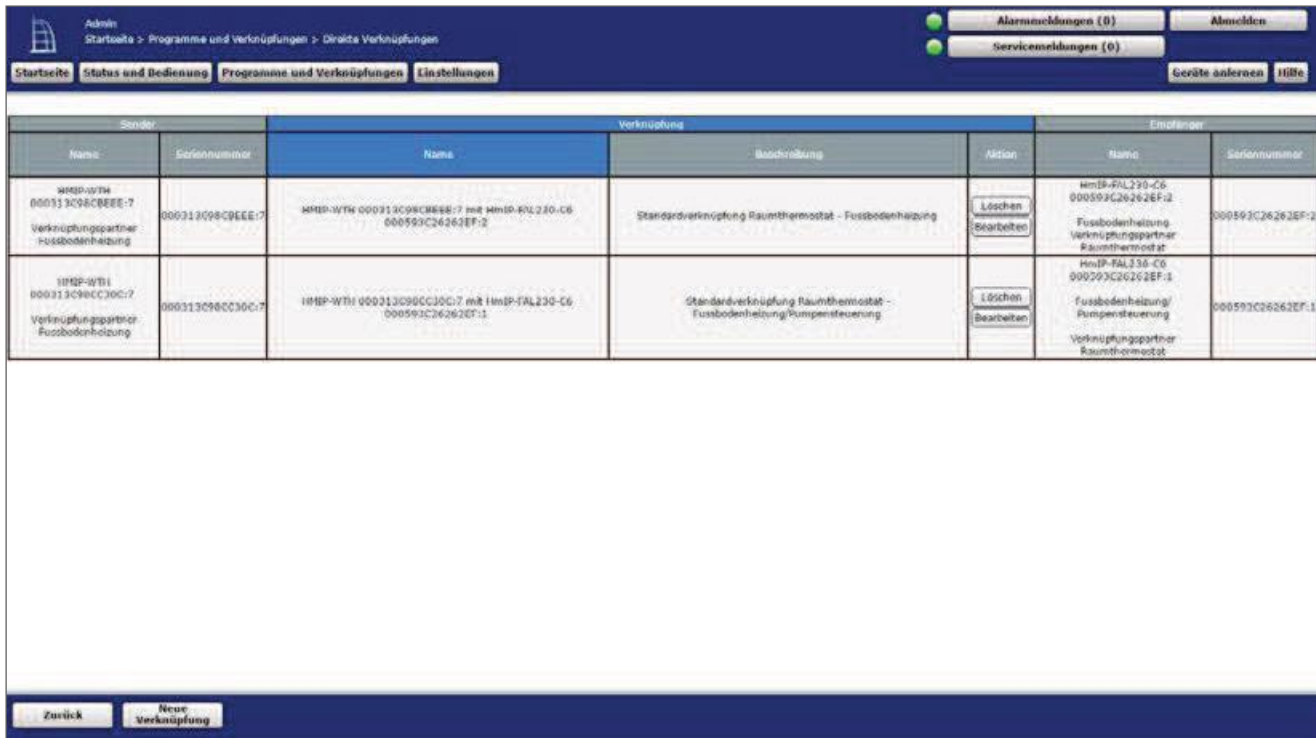
Figure 186: Link between wall thermostat and Floor Heating Actuator

- The wall thermostat must be taught to the channel of the Floor Heating Actuators associated with the heating circuit.
- A wall thermostat can be trained on one or more channels of the Floor Heating Actuators, depending on how many heating circuits are controlled by a wall thermostat.
- The next window shows the overview of the link parameters. Here you can Changes to the profile of the heating control are made.
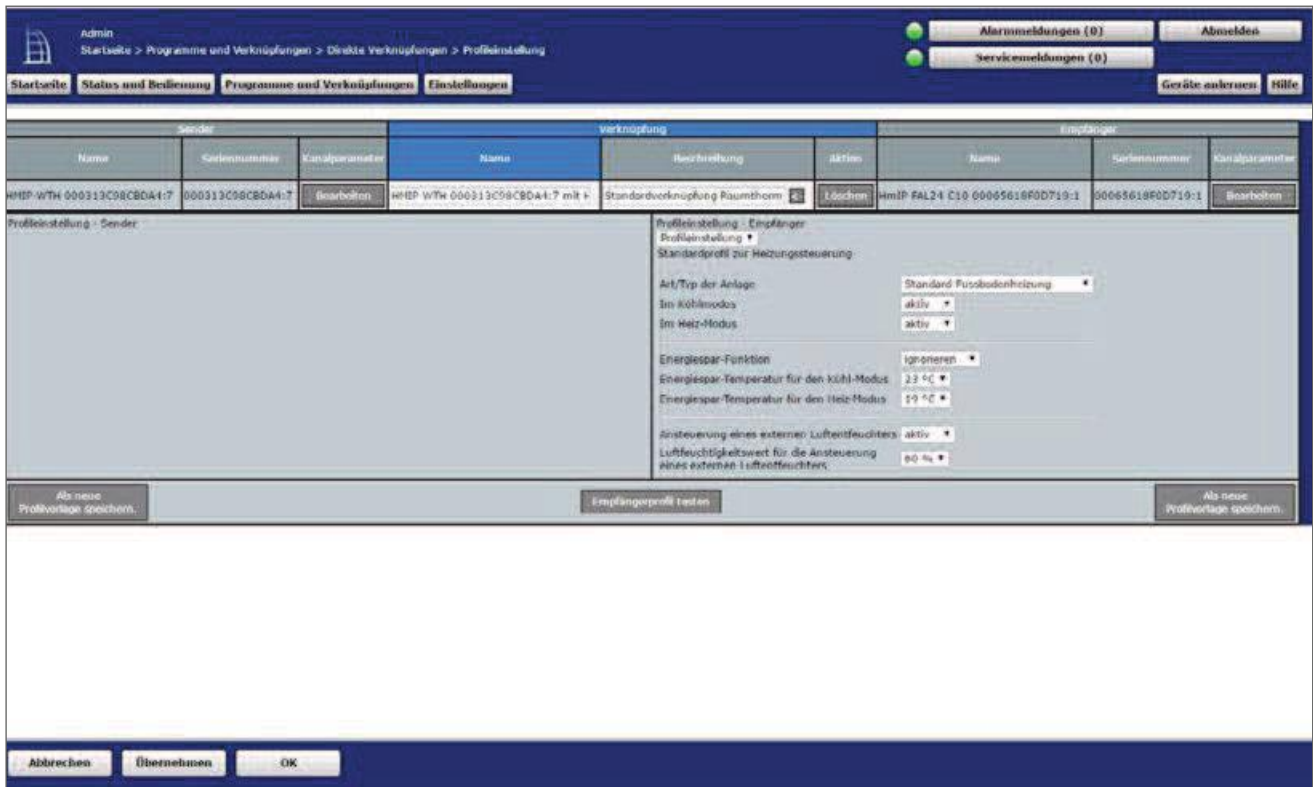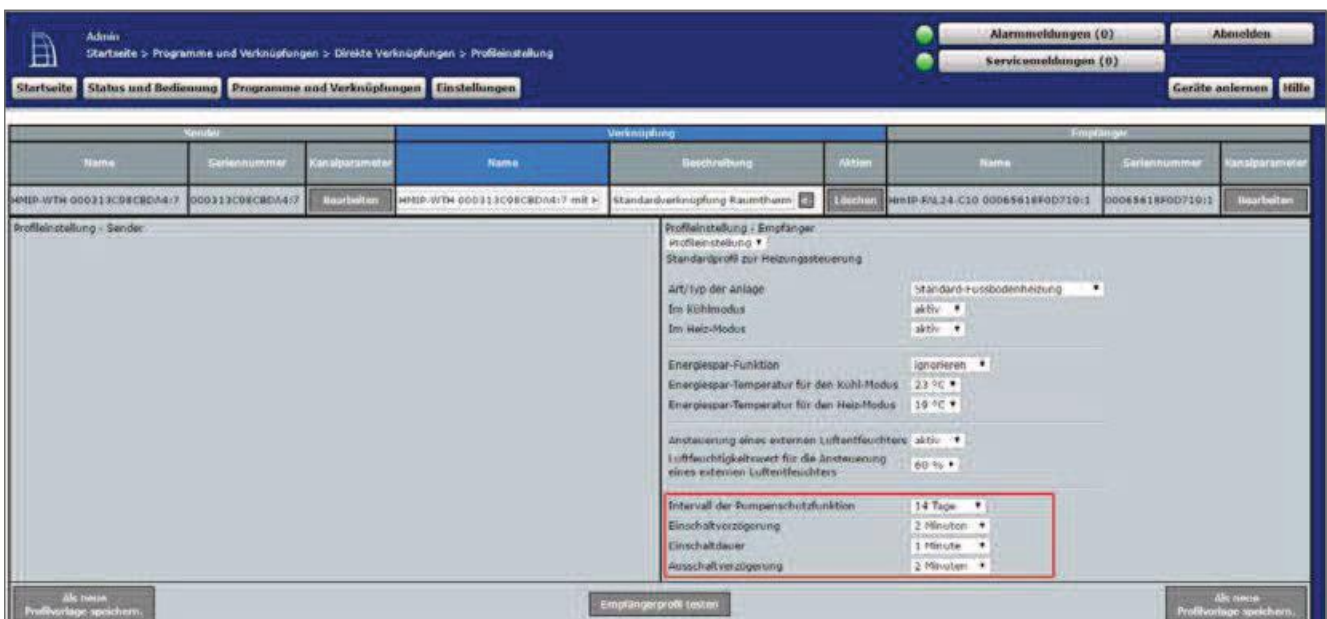
Figure 187: Link parameters between Wall thermostat and Floor Heating Actuator

- The general parameters of the Floor Heating Actuators are made under "settings", "Devices", "Floor Heating Actuator" in Channel 0.
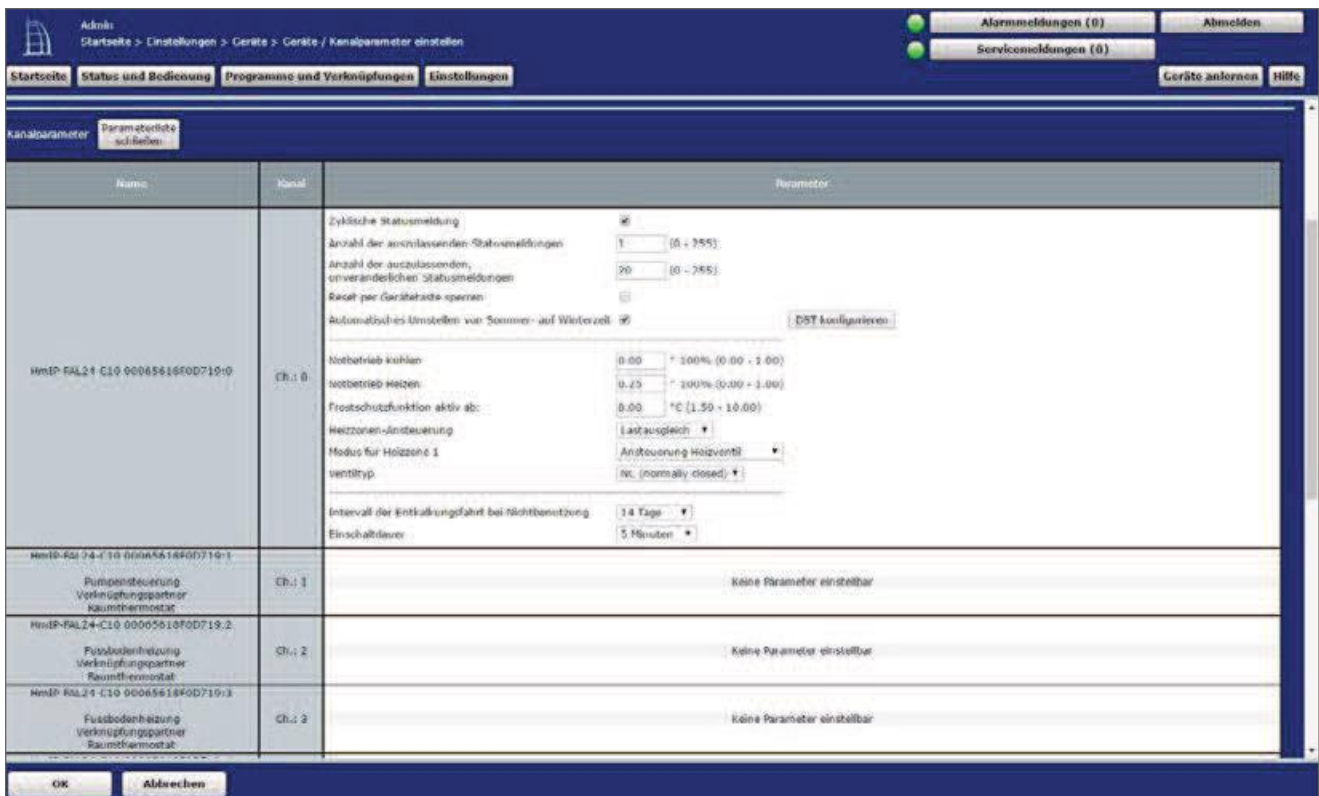
Figure 188: Configuration Channel parameter Floor Heating Actuator

- The default configuration of the Floor Heating Actuators can still be used for this use case.

- The general parameters of the wall thermostat are set under "Settings", "Devices", "Wall thermostat" in channel 0.
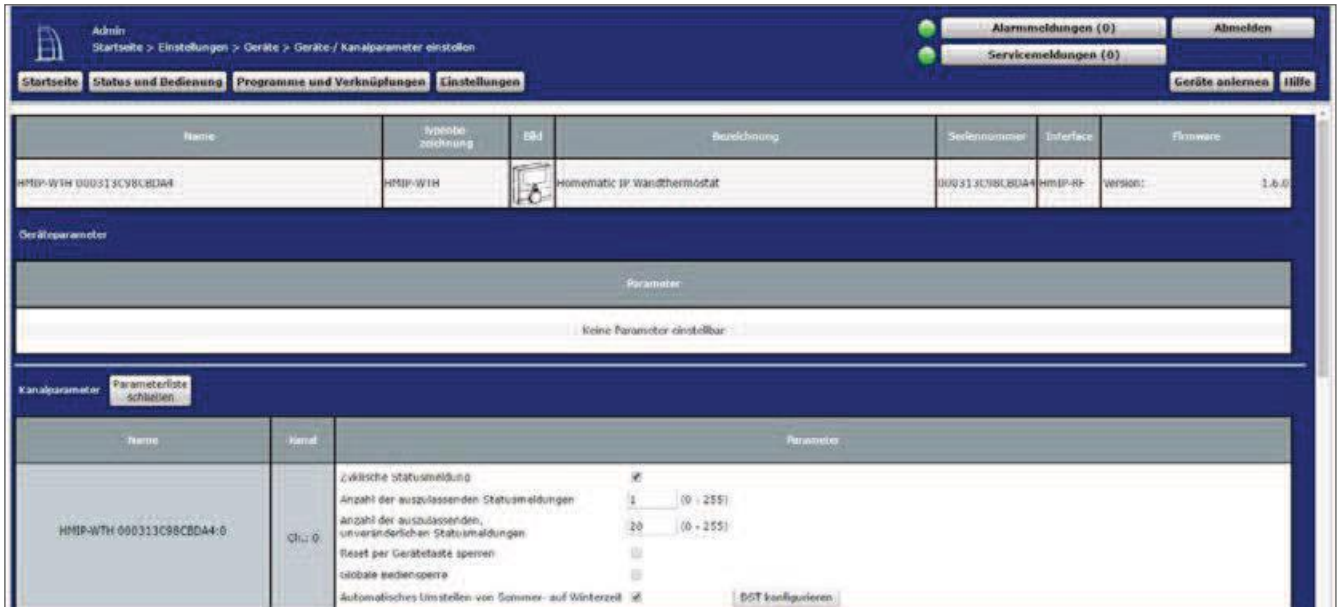
Figure 189: Configuration Channel parameter Wall thermostat channel 0

- parameters, such as temperature profiles, can be adjusted in Channel 1.
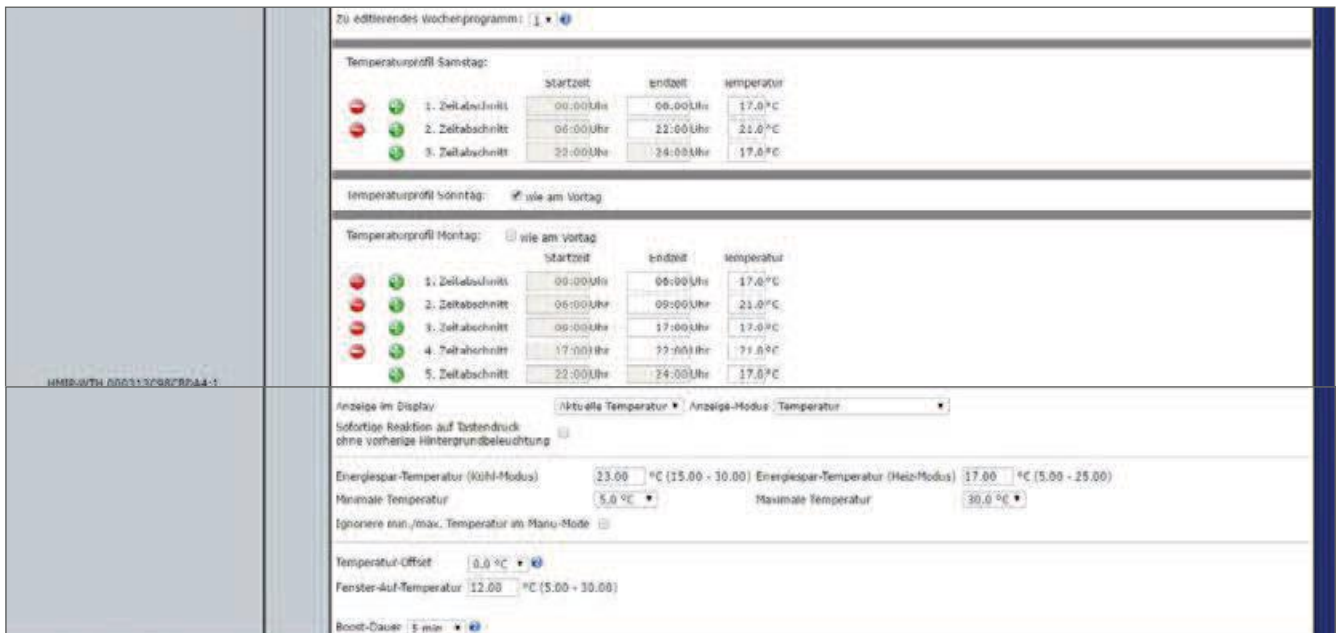
Figure 190: Configuration channel parameter Wall thermostat Channel 1

- The standard configuration of the wall thermostat can be further used for this use case.

22.2 Application Example 2: Control of floor heating and Pump

When using a Floor Heating Actuators, you have the possibility to also control an on-closed circulating pump. In this case, the heating circuit 1 only controls the UM Wälzpumpe.

The coupling of the heating circuits 2 – 6 or 2 – 10 is done via the Homematic IP wall thermostat. For the control of the floor heating the use of several Floor Heating Actuator is possible.

ℹ️ It is sufficient if you link any wall thermostat with the channel for the pump control on the Floor Heating Actuator to realize a heat demand control of all rooms.
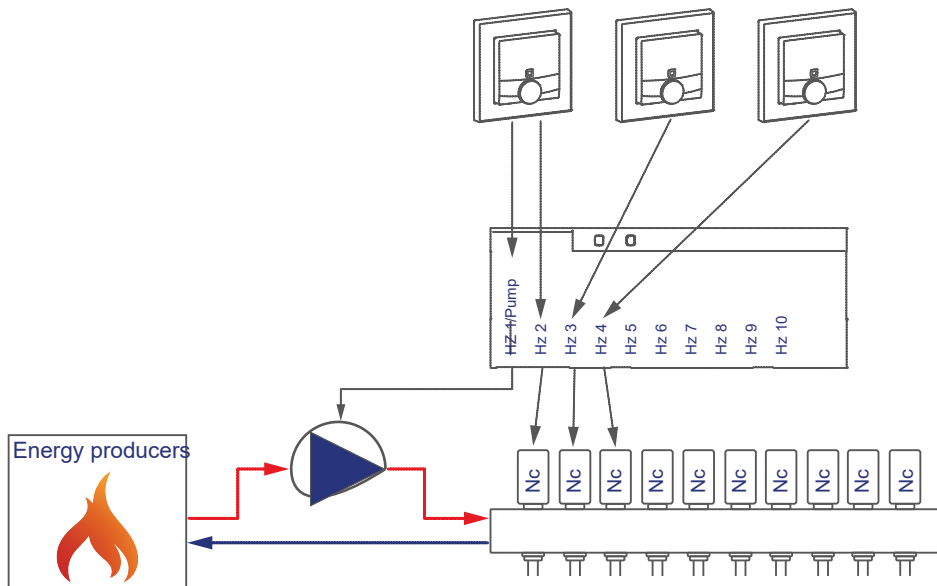
You can configure the devices to control floor heating and a circulating pump as follows:

- Learn the Floor Heating Actuator and the wall thermostats to the control Panel. Create
- a direct link between the wall thermostat and the Floor Heating Actuator:

Room 1: Wall thermostat (1) Channel 7 with Floor Heating Actuator Channel 1 Pump Room 2: Wall thermostat (1) Channel 7 with Floor Heating Actuator Channel 2 valve 1 Room 3: Wall thermostat (2) Channel 7 with Floor Heating Actuator Channel 3 valve 2

Figure 191: Link between wall thermostat and Floor Heating Actuator

- The assignment from the wall thermostat to the heating circuits takes place in this application starting from Channel 2.
- To be able to adjust the parameter settings of the pump (channel 1), It is also necessary to create a link of a wall thermostat to channel 1 of the Floor Heating Actuators (in this example from the Wall thermostat 1 in addition to channel 1 of the Floor Heating Actuators).
- In the parameter settings of the Floor Heating Actuators, the mode for heating Zone 1 must be changed to "control circulating pump" under "Settings", "Devices", "Floor Heating Actuator" in Channel 0.

Figure 192: Configuration Floor Heating Actuator

- The standard configuration of the wall thermostat can be further used for this use case.

- In this application example, the parameters for the control of the pump are also listed. If necessary, parameters such as a switching on and off delay of the pump can be used to compensate for the valve opening or Closing times are set.

- The links between the wall thermostat and the Floor Heating Actuator Channel 2 are constructed analogous to the use Case 1.
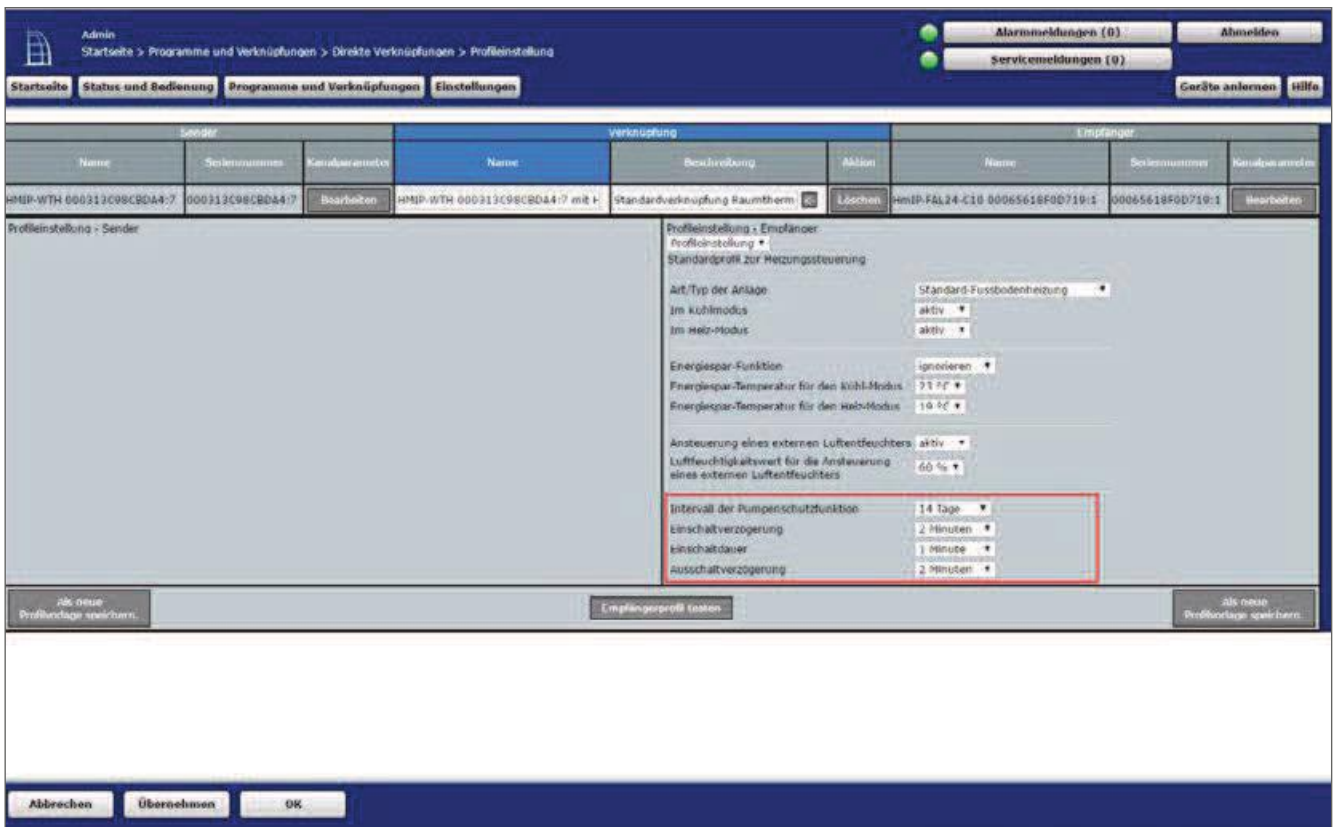
Figure 193: Link parameters between Wall thermostat Channel 1 (pump) and Floor Heating Actuator

22.3   Application Example 3: Control of the floor heating, the Boilers and Air dehumidifiers

When using a Floor Heating Actuators and a multi IO box, for example, you have the option of controlling a connected boiler and a dehumidifier.

The control of the boiler via the output OUT1 of the Multi IO box is possible. An air dehumidifier is controlled via the output OUT2 of the Multi IO box. The current humidity is measured by the Homematic IP wall thermostat.

The inputs of the multi IO box remain not connected.

The coupling of the heating circuits 1 – 6 and 1 – 10 is done via the Homematic IP wall thermostat. For the control of the floor heating the use of several Floor Heating Actuator is possible.
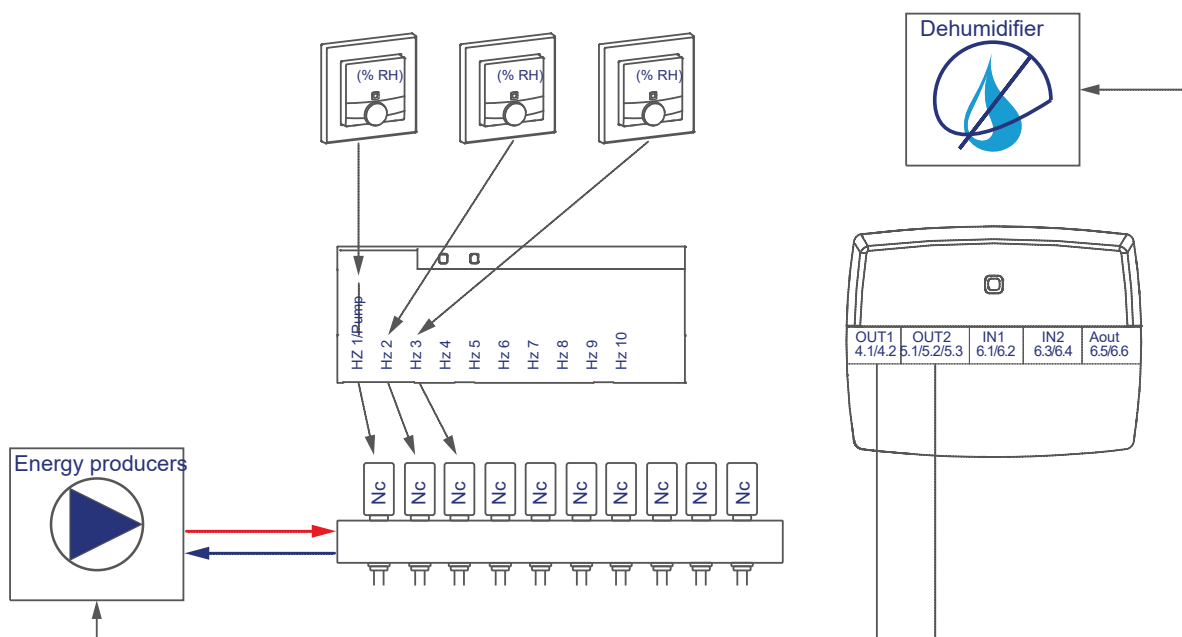
You can configure the devices to control floor heating, boilers and air dehumidifiers as follows:

• Learn the Floor Heating Actuator, wall thermostats and the multi IO box to the control Panel.

• Create a direct link between the wall thermostat and the
Floor Heating Actuator as well as between the multi IO box and the
Floor Heating Actuator:

Room 1:   Wall Thermostat (1) Channel 7 with Floor Heating Actuator (HZ 1)

Room 2:   Channel 1 wall thermostat (2) Channel 7 with Floor Heating Actuator (Hz 2) Heating Actuator

General: Floor Heating Actuator Channel 11* with MIOB OUT1 VirtB
             (Channel 3) Floor Heating Actuator** channel 13 with MIOB OUT2
             VirtB (Channel 7)

*(or Channel 7 when using the Floor Heating Actuators-6-fold)

* * (or Channel 9 when using the Floor Heating Actuators-6-fold)

Figure 194: Link between multi io box and Floor Heating Actuator

ℹ️ Note on using multiple Floor Heating Actuator with a multi IO box:
With the Multi IO box only the virtual B-channels are recommended for the realisation of the heat treatment-darfsfunktion. The output is switched on when one of the link partners reports heat demand. The output is not switched off until none of the linking partners reports more heat requirements.

This behavior of the VirtB channel cannot be disabled. If this function is undesirable, the Virta and VirtC channels can be used in the same way as for existing switching actuators.

• The standard configuration of the wall thermostat can be further used for this use case.

In the standard configuration, the dehumidifier is triggered as soon as any Wandther-Mostat reports an excess of the humidity threshold.
For example, if only one Wandtermostat is to be responsible for triggering the dehumidifier, all other parameters for controlling an external Luftent damper must be set to "inactive".

In addition, in the link parameters, the humidity tripping thresholds for each Ka-nal of the wall thermostats Floor Heating Actuator to the fishing rod can be set up as required.

• Using the link parameters between Floor Heating Actuator and multi IO box, settings for the heat demand channel can be made . Use the default settings for this application example.
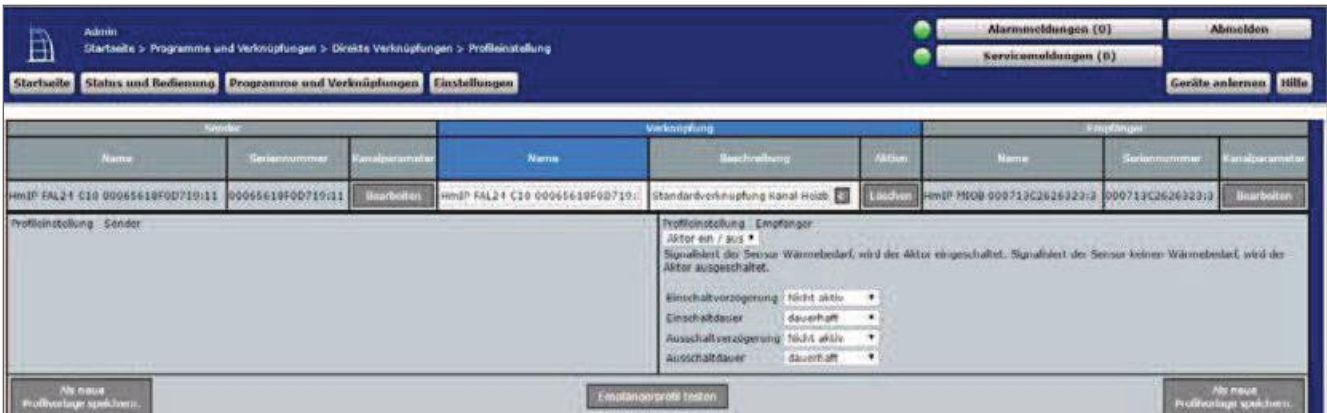
Figure 195: Heat demand channel between Floor Heating Actuator and multi IO Box

• Using the link parameters between the Floor Heating Actuator and the Multi IO box, settings for the air humidity channel can be made. Use the default settings for this application example.
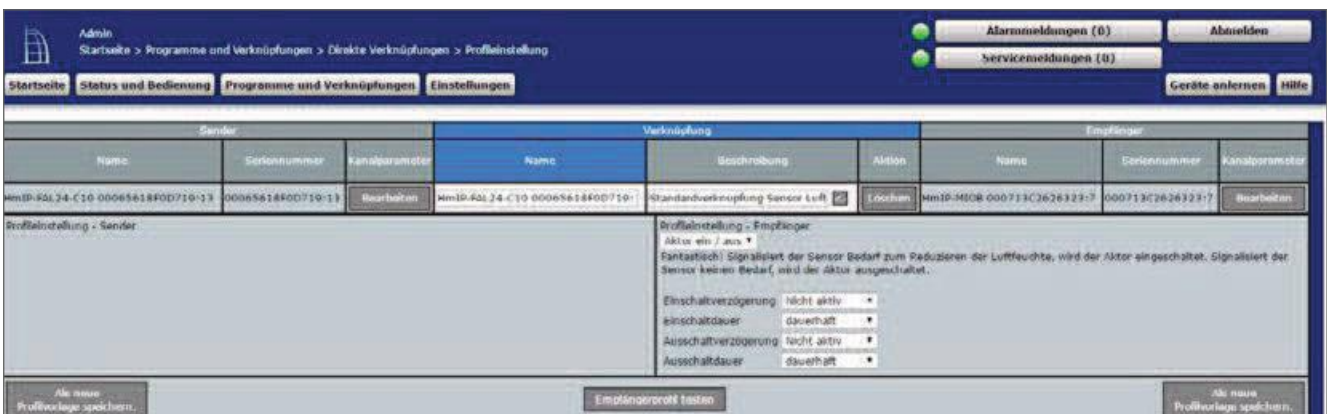
Figure 196: Air humidity channel between Floor Heating Actuator and multi IO Box

- The general parameters of the multi IO Box can be adjusted under "settings", "Devices", "Multi IO Box" in Channel 0. The standard configuration of the Multi IO Box can be used for this use case further.

Figure 197: Configuration Multi IO Box (Channel 0)

- The cord impulse of the multi IO box have the following channels:

Switch Actuator 1 (Channel 4.1/4.2)	Switch Actuator 2 * (Channel 5.1/5.2/5.3)
Channel 1: OUT1 Real Channel 2: OUT1 Virta Channel 3: OUT1 VirtB Kanal 4: OUT1 VirtC	Channel 5: OUT1 Real Channel 6: OUT1 Virta Channel 7: OUT1 VirtB Kanal 8: OUT1 VirtC

* The parameters are set up analogously (channels 5 to 8).

Figure 198: Configuration Multi IO Box (channel 1-4)

- Channel 9 and 10 are the digital inputs of the multi IO box, Channel 11 is the analogue output of the Multi IO box.

Figure 199: Configuration Multi IO Box (channel 9-11)

- In this application example, the above parameters are not required. Therefore, the default configuration can still be used.

22.4 Application Example 4: Control of the floor heating, circulating Pump, boiler and air dehumidifier

In this application example, the pump control is carried out via the floor heating actuator. The heating zone 1 only controls the pump. The boiler is controlled via the output OUT1 of the Multi IO box. The boiler is switched on and off in this configuration depending on the heating requirements of the wall thermostats of the individual rooms. An air dehumidifier can be controlled via the output OUT2 the multi IO box. The current humidity is measured by the Homematic IP wall thermostat.

The inputs of the multi IO box are not used to control the boiler. The coupling of the heating circuits 2 – 6 and 2 – 10 is done via the Homematic IP wall thermostat. For the control of the floor heating the use of several Floor Heating Actuator is possible.
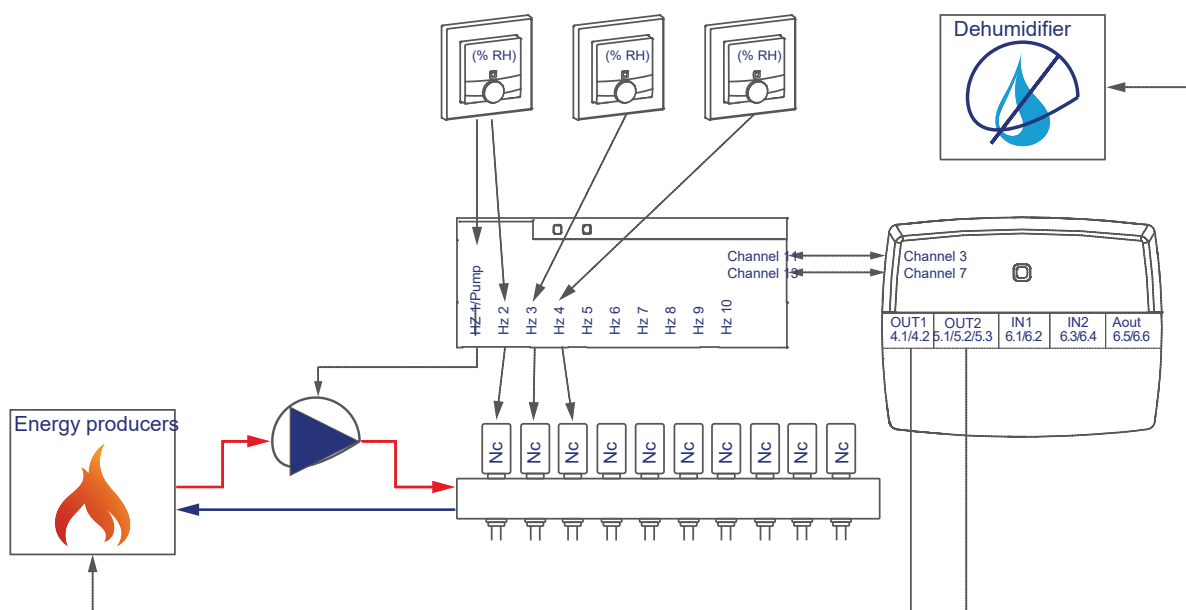
The configuration of the devices for controlling the floor heating, circulating pump of the heating boiler and air dehumidifier can be carried out as follows:

• Learn the Floor Heating Actuator, wall thermostats and the multi IO box to the control Panel.
• Create a direct link between the wall thermostat
And the Floor Heating Actuator as well as between the multi IO box and the Floor Heating Actuator. In order to be able to perform the parameter settings of the pump (channel 1), a wall thermostat must be connected to channel 1 of the Floor Heating Actuators:

- Room 1: Wall Thermostat (1) Channel 7 with Floor Heating Actuator Channel 1
  Room 1: pump Wall thermostat (1) Channel 7 with Floor Heating Actuator
  Room 2: Channel 2 valve 1 Wall Thermostat (2) Channel 7 with Floor Heating Actuator Channel 3
  General: valve 2 Floor Heating Actuator Channel 11 with MIOB OUT1 VirtB
  (Channel 3) Floor Heating Actuator* channel 13 with MIOB OUT2 VirtB
  (Channel 7)

*(or Channel 7 when using the Floor Heating Actuators-6-fold)

* * (or Channel 9 when using the Floor Heating Actuators-6-fold)

Figure 200: Link between wall thermostat, multi IO Box and Floor Heating Actuator

Note on using multiple Floor Heating Actuator with a multi IO box:
With the Multi IO box only the virtual B-channels are recommended for the realisation of the heat treatment-darfsfunktion. The output is switched on when one of the link partners reports heat demand. The output is not switched off until none of the linking partners reports more heat requirements.

This behavior of the VirtB channel cannot be disabled. If this function is undesirable, the Virta and VirtC channels can be used in the same way as for existing switching actuators.

- The standard configuration of the wall thermostat can be used for this use case from Channel 2 onwards.

- Changes to the profile of the heating control can be made here. It can also be determined here whether the moisture measurement of the wall thermostat is to be deactivated for controlling the dehumidifier. By default, all wall thermostats can activate the dehumidifier.

Figure 201: Link parameters between Wall thermostat and Floor Heating Actuator

- The default settings can be used for the link between the wall thermostat and channel 1 of the Floor Heating Actuators.

- Unlike in Figure 202, the parameters for controlling the pump are also listed. If necessary, a switch-on and off delay of the pump can be adjusted to compensate for the valve opening or closing times.

Figure 202: Link parameters between Wall thermostat Channel 1 (pump) and Floor Heating Actuator

- The link parameters between Floor Heating Actuator and multi IO box, settings for the heat demand channel can be set. For this application example, the default configuration of the Multi IO box can be used further.
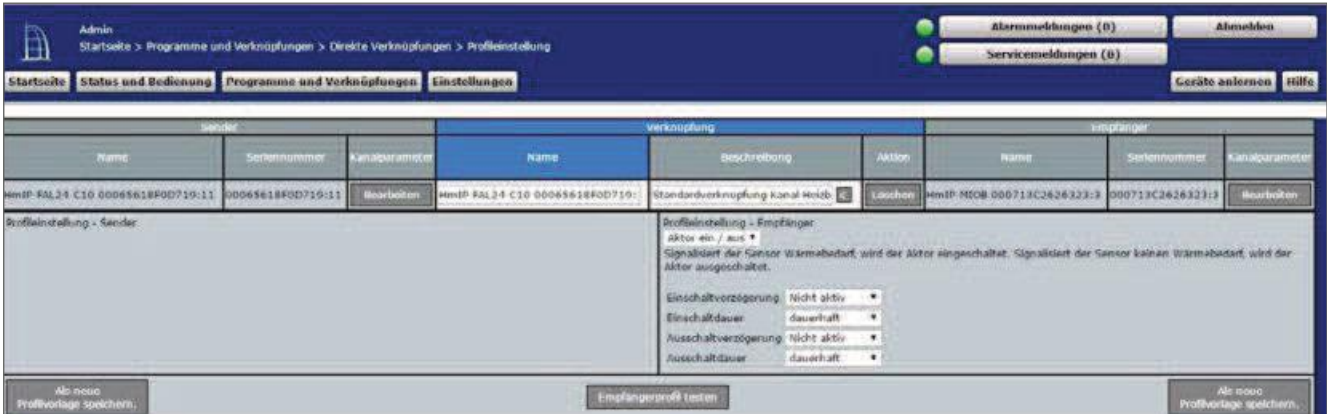
Figure 203: Heat demand channel between Floor Heating Actuator and multi IO Box

- In addition, settings for the air humidity channel can be made. For this application example, the default configuration of the Multi IO box can be used further.
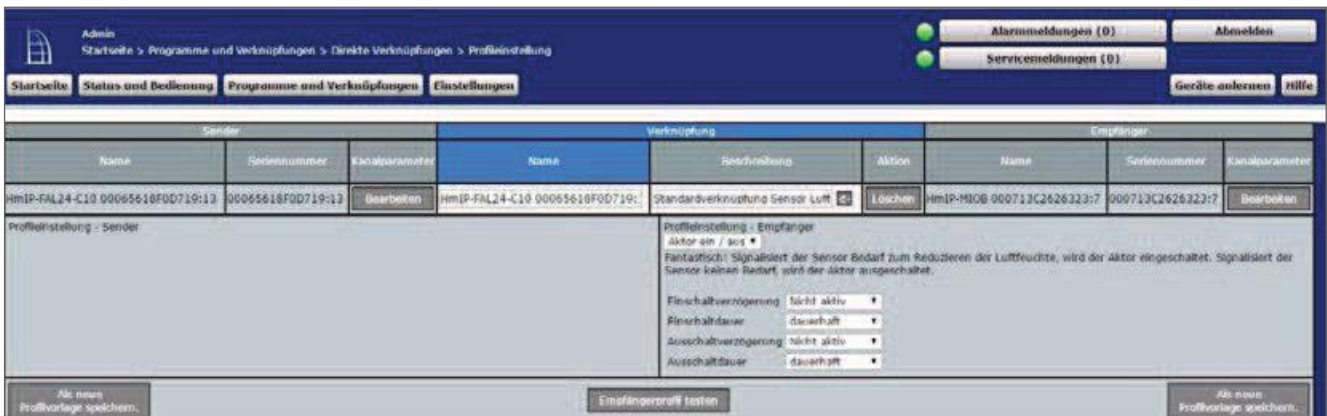
Figure 204: Air humidity channel between Floor Heating Actuator and multi IO Box

- In the parameter settings of the Floor Heating Actuators, the mode for heating Zone 1 must be changed to "control circulating pump" under Channel 0.
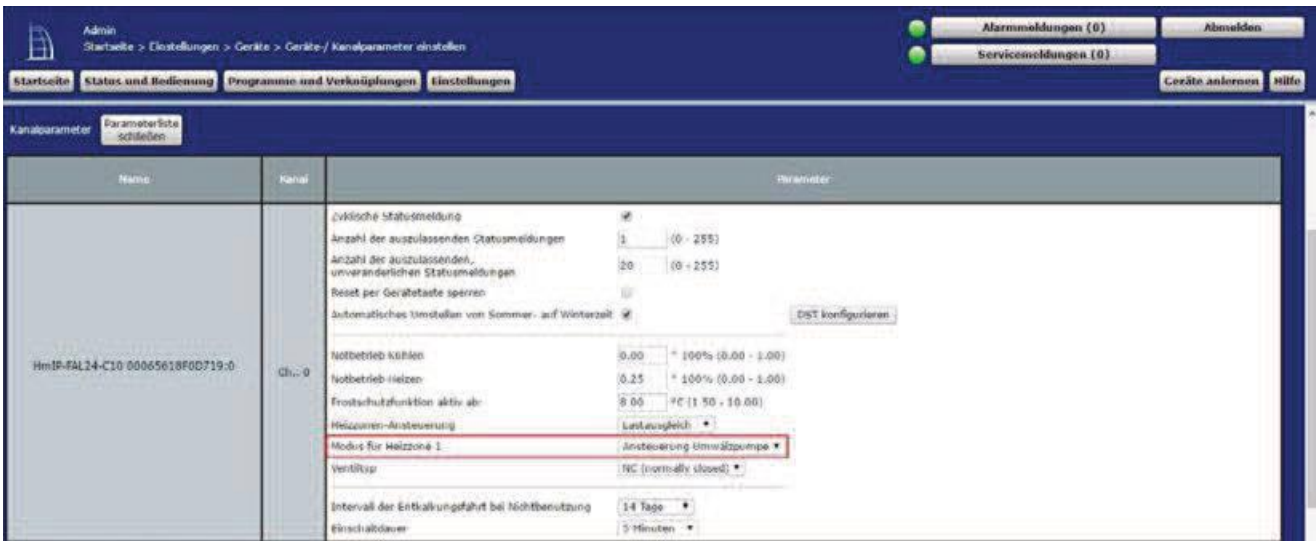
Figure 205: Configuration Channel parameter Floor Heating Actuator

- The standard configuration of the wall thermostat can be further used for this use case.

- The general parameters of the multi IO Box can be made under "settings", "Devices", "Multi IO Box". The standard configuration of the Multi IO box can be further used for this application example.

Figure 206: Configuration of channel parameters multi IO Box (Channel 0)

- The cord impulse of the multi IO box have the following channels:

Switch Actuator 1 (Channel 4.1/4.2)	Switch Actuator 2 * (Channel 5.1/5.2/5.3)
Channel 1: OUT1 Real Channel 2: OUT1 Virta Channel 3: OUT1 VirtB Kanal 4: OUT1 VirtC	Channel 5: OUT1 Real Channel 6: OUT1 Virta Channel 7: OUT1 VirtB Kanal 8: OUT1 VirtC

* The parameters are set up analogously (channels 5 to 8).

Figure 207: Configuration Multi IO Box (channel 1-4)

- Channel 9 and 10 are the digital inputs, channel 11 is the analogue output of the device.

Figure 208: Configuration Multi IO Box (channel 9-11)

- In this application example, the above parameters are not required. Therefore, the default configuration can still be used.

22.5   Application Example 5: Control of floor heating and Circulating pump with switching from heating to cooling mode

You have the possibility to use the Floor Heating Actuator also in cooling mode, so that, for example in summer, your floor heating can be used to cool the room temperature.

> **i** You can only activate refrigeration for rooms where a floor heating system with cooling function is installed, such as a heat pump with this function.

The pump control is carried out via the Floor Heating Actuator. The heating circuit 1 only controls the pump.

The boiler is controlled via the output OUT1 of the Multi IO box.

The switch between heating and cooling operation through the heat pump is controlled to the output OUT2 of the Multi IO box.

The switch between heating and cooling is only possible via a CCU2 or CCU3 Central program.

The coupling of the heating circuits 2 – 6 or 2 – 10 is done via the Homematic IP wall thermostat. For the control of the floor heating the use of several Floor Heating Actuator is possible.
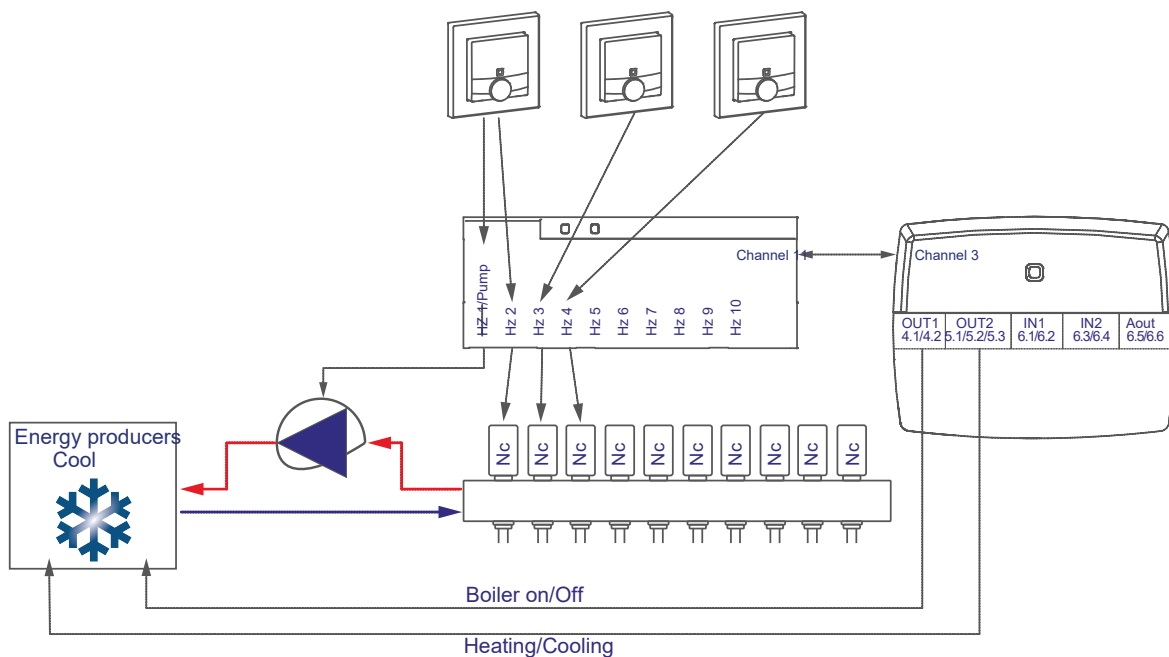
The configuration of the devices for controlling the floor heating and pump with switching possibility between heating and cooling operation can be carried out as follows:

- Learn the Floor Heating Actuator, wall thermostats and the multi IO box to the control Panel.
- Create a direct link between the wall thermostat
  And the Floor Heating Actuator as well as between the multi IO box and the Floor Heating Actuator. In order to be able to perform the parameter settings of the pump (channel 1), a wall thermostat must be connected to channel 1 of the Floor Heating Actuators:

  Room 1:   Wall Thermostat (1) Channel 7 with Floor Heating Actuator Channel 1
  Room 1:   pump Wall thermostat (1) Channel 7 with Floor Heating Actuator
  Room 2: Channel 2 valve 1Wall Thermostat (2) Channel 7 with Floor Heating Actuator Channel 3
  General: valve Floor Heating Actuator Chaňnel 11 with MIOB OUT1 VirtB

                 (Channel 3)
* (or Channel 7 when using the Floor Heating Actuators-6-fold)

Figure 209: Link between wall thermostat, multi IO Box and Floor Heating Actuator

ℹ️ Note on using multiple Floor Heating Actuator with a multi IO box:
With the Multi IO box only the virtual B-channels are recommended for the realisation of the heat treatment-darfsfunktion. The output is switched on when one of the link partners reports heat demand. The output is not switched off until none of the linking partners reports more heat requirements.

This behavior of the VirtB channel cannot be disabled. If this function is undesirable, the Virta and VirtC channels can be used in the same way as for existing switching actuators.

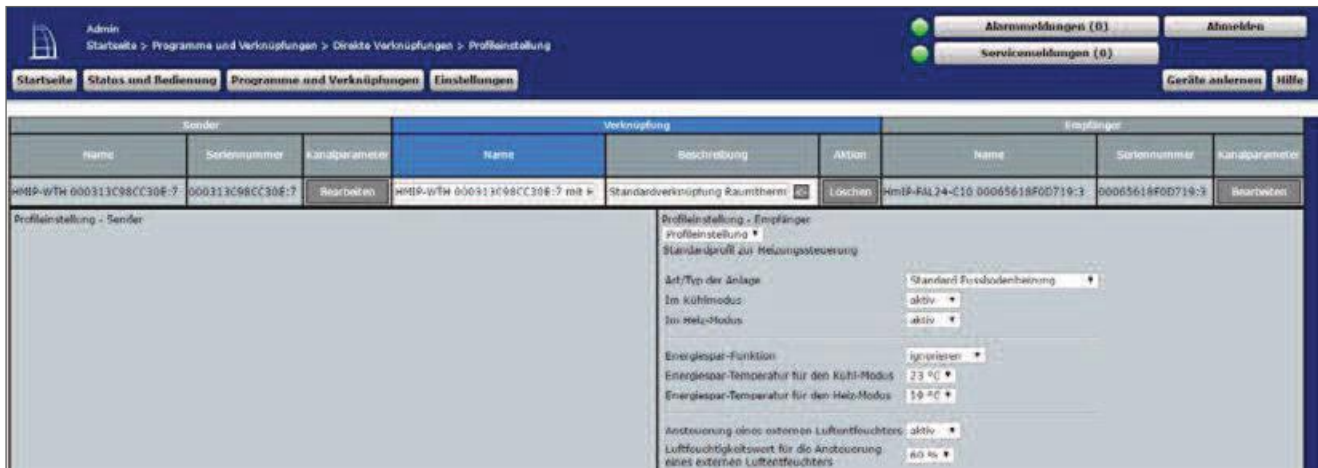- The standard configuration of the wall thermostat can be used for this use case from Channel 2 onwards. Changes to the profile of the heating control can be made here.

Figure 210: Link parameters between Wall thermostat and Floor Heating Actuator

- The default settings can be used for the link between the wall thermostat and channel 1 of the Floor Heating Actuators.
- Unlike in Figure 210, the parameters for controlling the pump are also listed. If necessary, a switch-on and off delay of the pump can be adjusted to compensate for the valve opening or closing times.
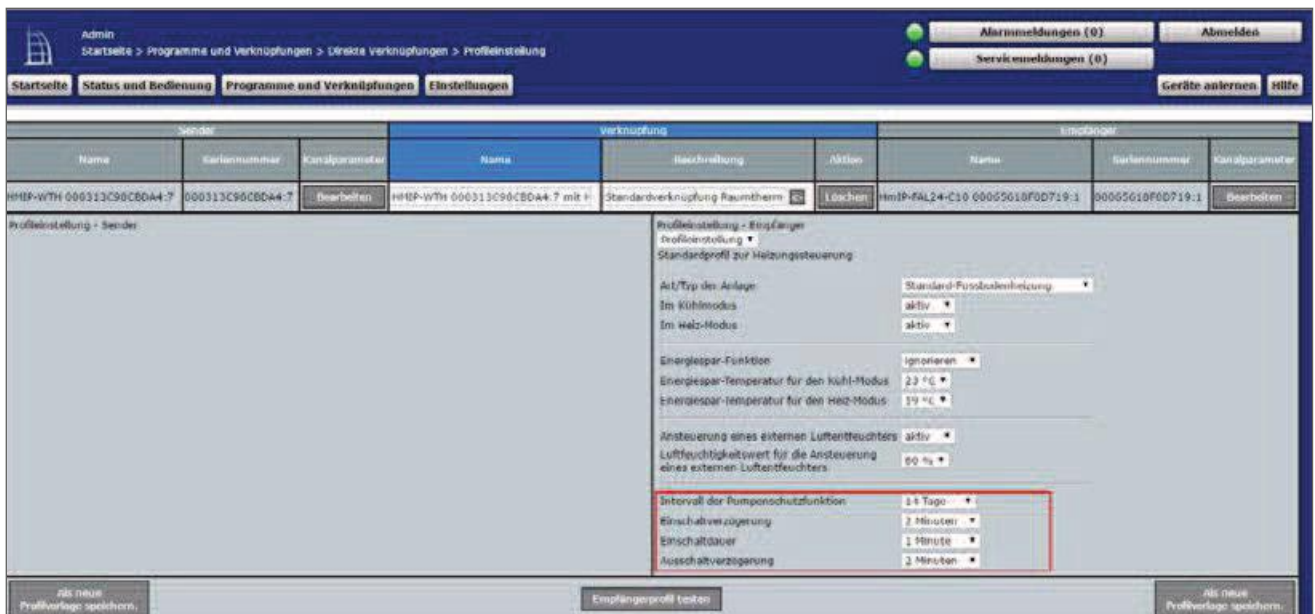
Figure 211: Link parameters between Wall thermostat Channel 1 (pump) and floor heizungsaktor

- Using the link parameters between Floor Heating Actuator and multi IO box, settings for the heat demand channel can be set for controlling the heat pump. For this application example, the default configuration of the Multi IO box can be used further.
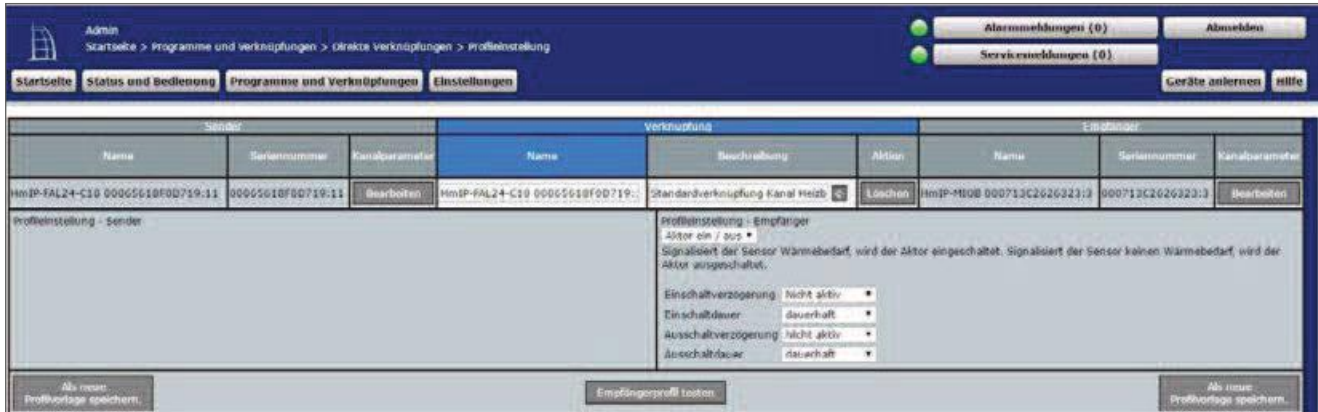
Figure 212: Heat demand channel between Floor Heating Actuator and multi IO Box

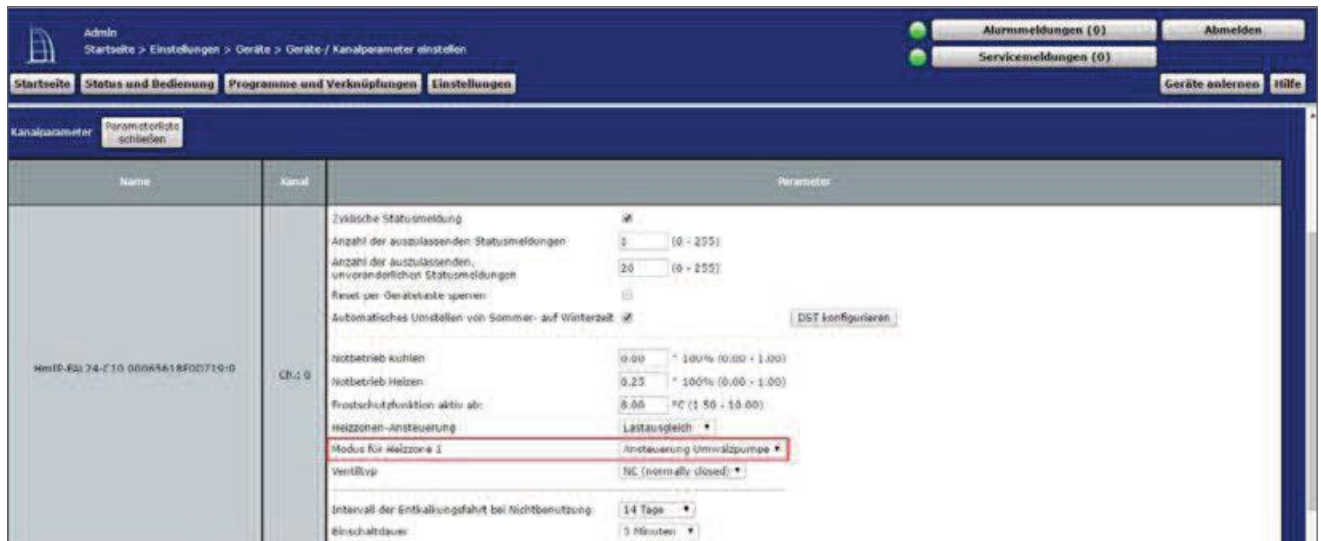- In the parameter settings of the Floor Heating Actuators, the mode for heating Zone 1 must be changed to "control circulating pump" under Channel 0.

Figure 213: Configuration Floor Heating Actuator

- The standard configuration of the wall thermostat can be further used for this use case.

- The general parameters of the multi IO Box can be adjusted under "settings", "Devices", "Multi IO Box" in Channel 0. The standard configuration of the Multi IO box can be further used for this application example.

Figure 214: Configuration Multi IO Box (Channel 0)

- The cord impulse of the multi IO box have the following channels:

Switch Actuator 1 (Channel 4.1/4.2)	Switch Actuator 2 * (Channel 5.1/5.2/5.3)
Channel 1: OUT1 Real Channel 2: OUT1 Virta Channel 3: OUT1 VirtB Kanal 4: OUT1 VirtC	Channel 5: OUT1 Real Channel 6: OUT1 Virta Channel 7: OUT1 VirtB Kanal 8: OUT1 VirtC

* The parameters are set up analogously (channels 5 to 8).

Figure 215: Configuration Multi IO Box (channel 1-4)

- Since the signal for the change-over (switching between heating and cooling) in this application example does not come from the multi IO box, the digital inputs in this case are set to the operating mode "button".

Figure 216: Configuration Multi IO Box (channel 9-11)

- Both the digital inputs and the analogue output are not used in this application example.

- For the realization of the application example, a simple central program is required, which activates the cooling mode of the relevant wall thermostats and Floor Heating Actuator and on the other, the "co-pilot" output of the Multi IO box, in order to Installation into the cooling mode.

Figure 217: Central program Cooling

- The switching to the cooling mode is exemplified here with a virtual button of the Control Panel.
- When actuated, all wall thermostats and Floor Heating Actuator are put into the cooling mode and the output OUT2 the multi IO box is controlled.

- In order to get back into the heating operation (for example by means of another virtual button of the CCU), another program must be created, which returns to the heating mode analogous to the above program or deactivates the output OUT2 the multi IO box.

22.6   Application Example 6: Control of floor heating and circulating pump with switch between heating and cooling via external switch

When using a Floor Heating Actuators with pump control and multi IO box, you have the possibility of switching between heating and cooling via a connected switch.

The pump control is carried out via the Floor Heating Actuator. The heating circuit 1 controls there-with only the pump.
The boiler is controlled via the output OUT1 of the Multi IO box.
The switch between heating and cooling operation through the heat pump is controlled via the output OUT2 of the Multi IO box.
The switch between heating and cooling can only be controlled via the input IN1.

The coupling of the heating circuits 2 – 6 or 2 – 10 is done via the Homematic IP wall thermostat. For the control of the floor heating the use of several Floor Heating Actuator is possible.
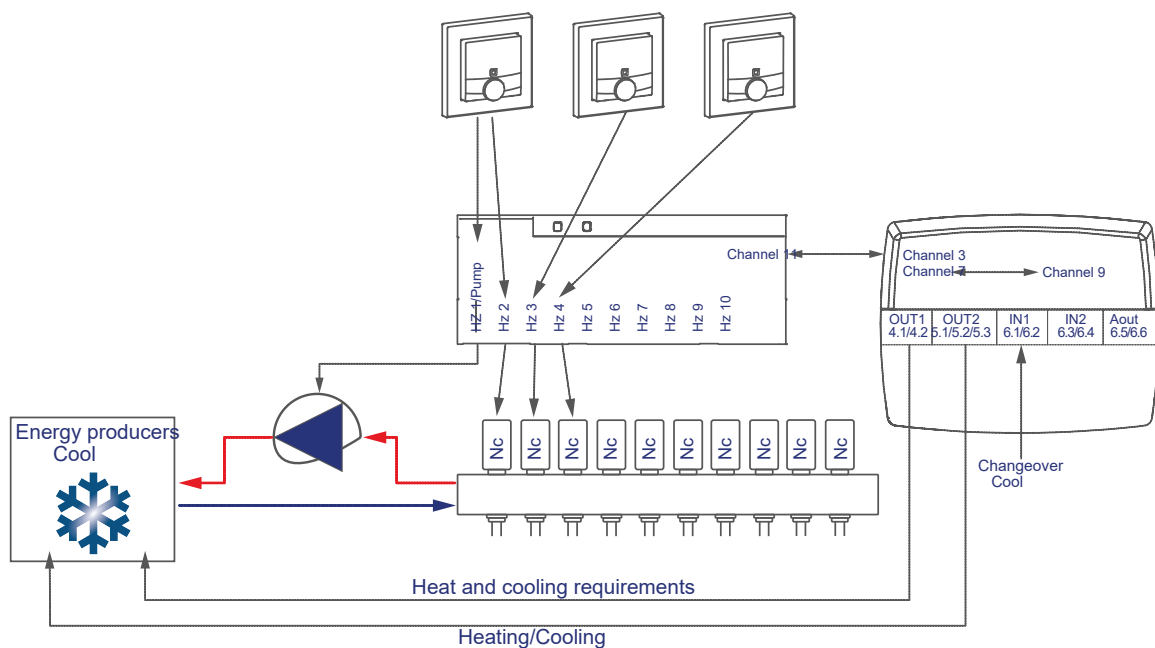
The configuration of the devices for controlling the floor heating and pump with switching between heating and cooling via external push buttons can be carried out as follows:

- Learn the Floor Heating Actuator, wall thermostats and the multi IO box to the control Panel.
- Create a direct link between the wall thermostat
  And the Floor Heating Actuator as well as between the multi IO box and the Floor Heating Actuator. In order to be able to perform the parameter settings of the pump (channel 1), a wall thermostat must be connected to channel 1 of the Floor Heating Actuators:

Room 1:   Wall Thermostat (1) Channel 7 with Floor Heating Actuator Channel 1
Room 1:   pump Wall thermostat (1) Channel 7 with Floor Heating Actuator
Room 2: Channel 2 valve 1 Wall Thermostat (2) Channel 7 with Floor Heating Actuator Channel 3
General: valve 2
                   Floor Heating Actuator Channel 11 * with MIOB OUT1 VirtB Channel 3

Multi IO Box IN1 (Channel 9) with multi IO box OUT2 VirtB (Channel 7)
* (or Channel 7 when using the Floor Heating Actuators-6-fold)

Figure 218: Link between Wandthermost, multi IO Box and Floor Heating Actuator

Note on using multiple Floor Heating Actuator with a multi IO box:
With the Multi IO box only the virtual B-channels are recommended for the realisation of the heat treatment-darfsfunktion. The output is switched on when one of the link partners reports heat demand. The output is not switched off until none of the linking partners reports more heat requirements.

This behavior of the VirtB channel cannot be disabled. If this function is undesirable, the Virta and VirtC channels can be used in the same way as for existing switching actuators.

- The standard configuration of the wall thermostat can be used for this use case from Channel 2 onwards.

Figure 219: Link parameters between Wall thermostat and Floor Heating Actuator

- Changes to the profile of the heating control can be made here. The default settings can be used for the link between the wall thermostat and channel 1 of the Floor Heating Actuators.
- Unlike in Figure 219, the parameters for controlling the pump are also listed. If necessary, a switch-on and off delay of the pump can be adjusted to compensate for the valve opening or closing times.
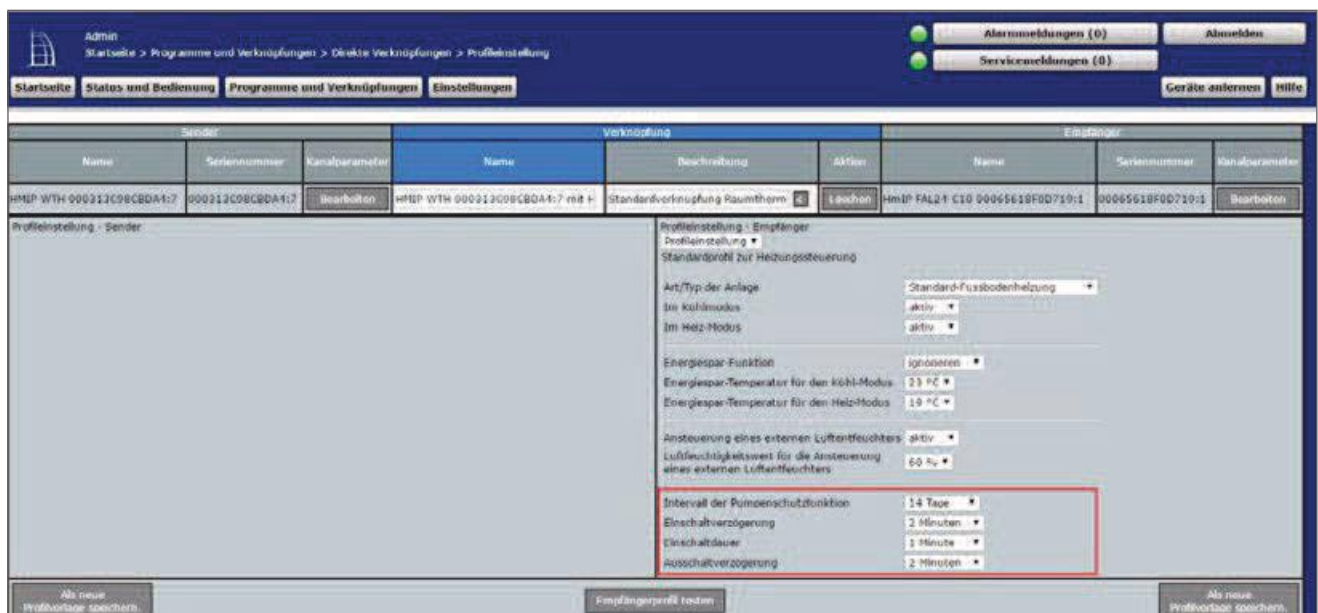
Figure 220: Link parameters between Wall thermostat Channel 1 (pump) and Floor Heating Actuator

• Using the link parameters between Floor Heating Actuator and multi IO box, settings for the heat demand channel can be set for controlling the heat pump. For this application example, the default configuration of the Multi IO box can be used further.
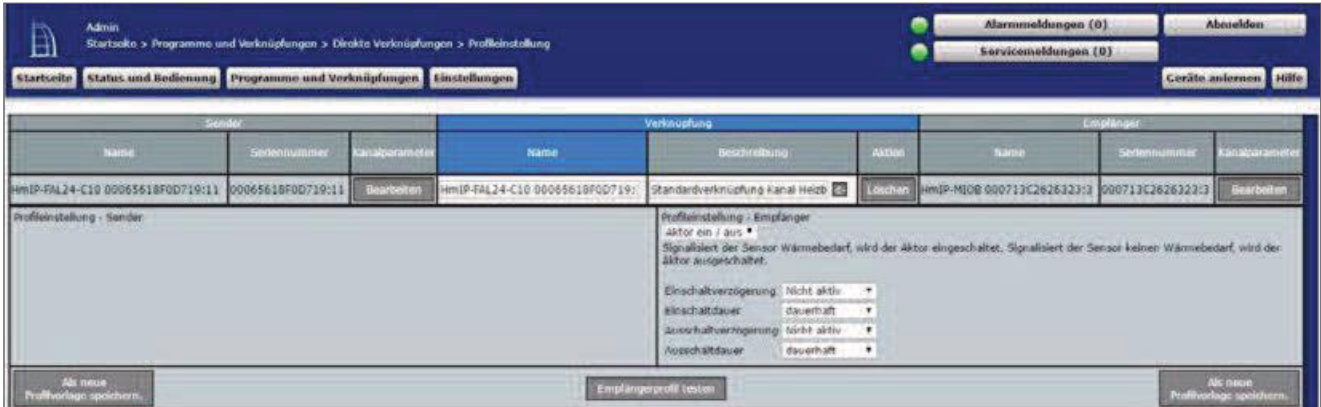
Figure 221: Heat demand channel between Floor Heating Actuator and multi IO Box

• In the parameter settings of the Floor Heating Actuators, the mode for heating Zone 1 must be changed to "control circulating pump" under Channel 0.

Figure 222: Configuration Channel parameter Floor Heating Actuator

• The standard configuration of the wall thermostat can be further used for this use case.

- The general parameters of the multi IO Box can be adjusted under "settings", "Devices", "Multi IO Box" in Channel 0. The standard configuration of the Multi IO box can be further used for this application example.
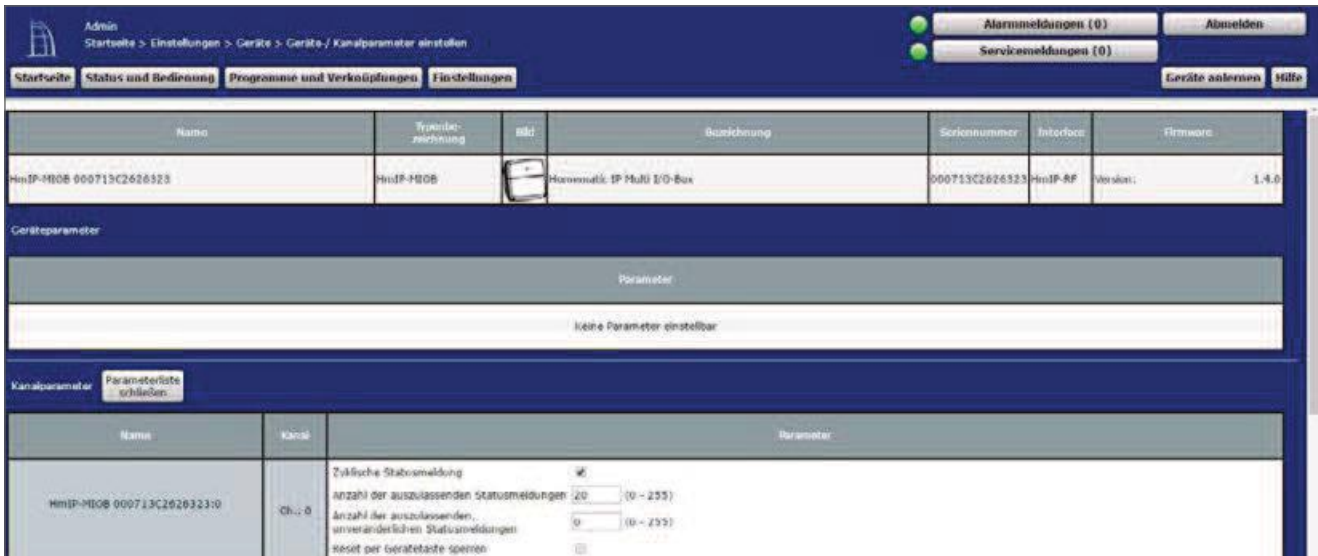
Figure 223: Configuration Multi IO Box (Channel 0)

- The cord impulse of the multi IO box have the following channels:

Switch Actuator 1 (Channel 4.1/4.2)	Switch Actuator 2 * (Channel 5.1/5.2/5.3)
Channel 1: OUT1 Real Channel 2: OUT1 Virta Channel 3: OUT1 VirtB Kanal 4: OUT1 VirtC	Channel 5: OUT1 Real Channel 6: OUT1 Virta Channel 7: OUT1 VirtB Kanal 8: OUT1 VirtC

* The parameters are set up analogously (channels 5 to 8).

Figure 224: Configuration Multi IO Box (channel 1-4)

- In this application example, the digital input IN1 of the Multi IO box is used to switch between heating and cooling mode. For this reason, the operating mode "change over" is to be selected under Channel 9. This operating mode does not require the creation of a central program for this application example.

Figure 225: Configuration Multi IO Box (channel 9-11)

- Both the second digital input and the analogue output are not used in this application example.

22.7 Application Example 7: Control of the floor heating and circulating pump with switching between heating and cooling operation as well as moisture limitation

When using a Floor Heating Actuators with a pump and multi IO box, you have
The ability to define a humidity limit. The cooling operation is
The floor heating system is disabled when a connected to the Multi IO box is
Active moisture sensor detects water. This is used to avoid condensation on the floor surface
or the pipes of the heating system. The pump control is carried out via the Floor Heating
Actuator. The heating circuit 1 only controls the pump.

The heat pump is controlled via the output OUT1 of the Multi IO box.
The control input of the heat pump, which switches between heating and cooling operation,
is connected to the output OUT2 of the Multi IO box.
Input IN1 the Multi IO box controls the heating and cooling operation via a connected switch,
an active humidity sensor with switching output is connected to the input IN2.

The coupling of the heating circuits 2 – 6 or 2 – 10 is done via the Homematic IP wall
thermostat. For the control of the floor heating the use of several Floor Heating Actuator is
possible.
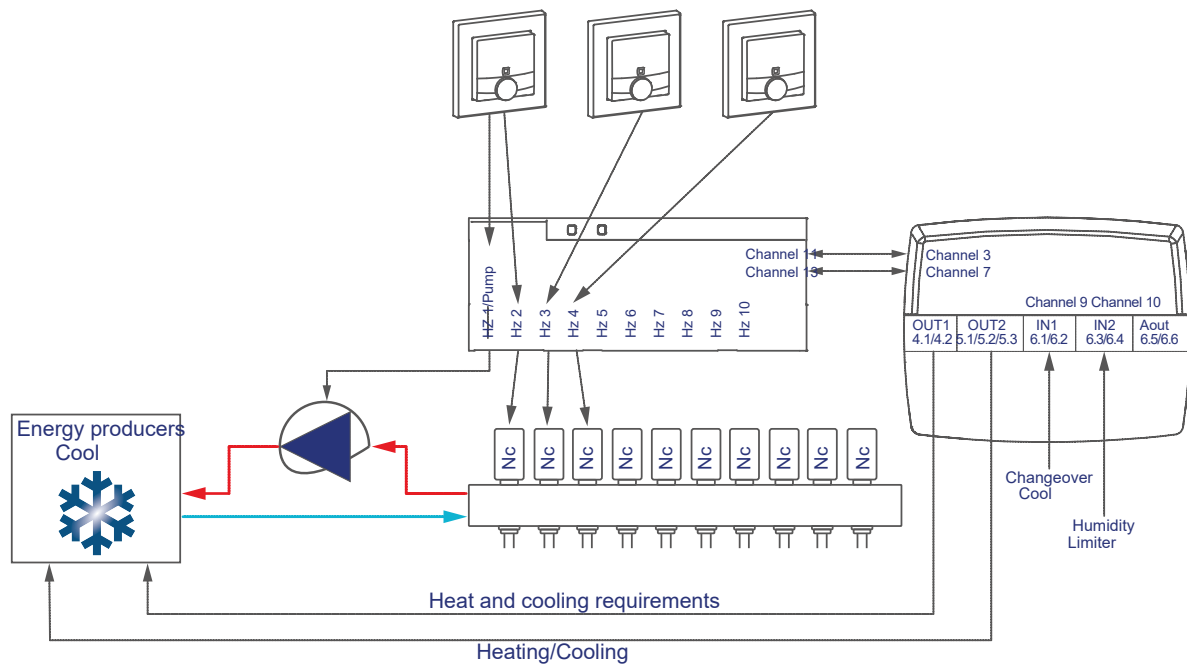
The configuration of the devices for controlling the floor heating and circulating pump with
switching between heating and cooling operation as well as moisture limitation can be carried
out as follows:

- For this application example, all settings can be made analogous to the application example 6.
- In addition, the following setting must be made:

- In this application example, the digital input IN1 of the Multi IO box is used to switch between heating and cooling mode. For this reason, the operating mode "change over" is to be selected under Channel 9. This mode of operation does not require you to create a central program in this scenario.

- The digital input IN2 of the Multi IO Box (Channel 10) set to "humidity limiter" is only evaluated in cooling mode. As soon as a moisture is detected in the cooling operation, for example by condensation, the actuators connected to the Floor Heating Actuator are closed to avoid further condensation on the pipes.

Figure 226: Parameter settings multi IO box

- The analogue output is not used in this application example.

22.8 Application Example 8: Control of floor heating and Circulating pump with temperature limit

When using a Floor Heating Actuators with a pump and multi IO box you have the possibility to define a temperature limit. The pump is switched off and the Floor Heating Actuator drives all actuators when the temperature limiter has detected a too high flow temperature.

The pump control is carried out via the Floor Heating Actuator. The heating circuit 1 controls there-with only the pump.
The boiler is controlled via the output OUT1 of the Multi IO box.
The input IN1 of the Multi IO box controls the temperature limit.
The coupling of the heating circuits 2 – 6 or 2 – 10 is done via the Homematic IP wall thermostat.
For the control of the floor heating the use of several Floor Heating Actuator is possible.
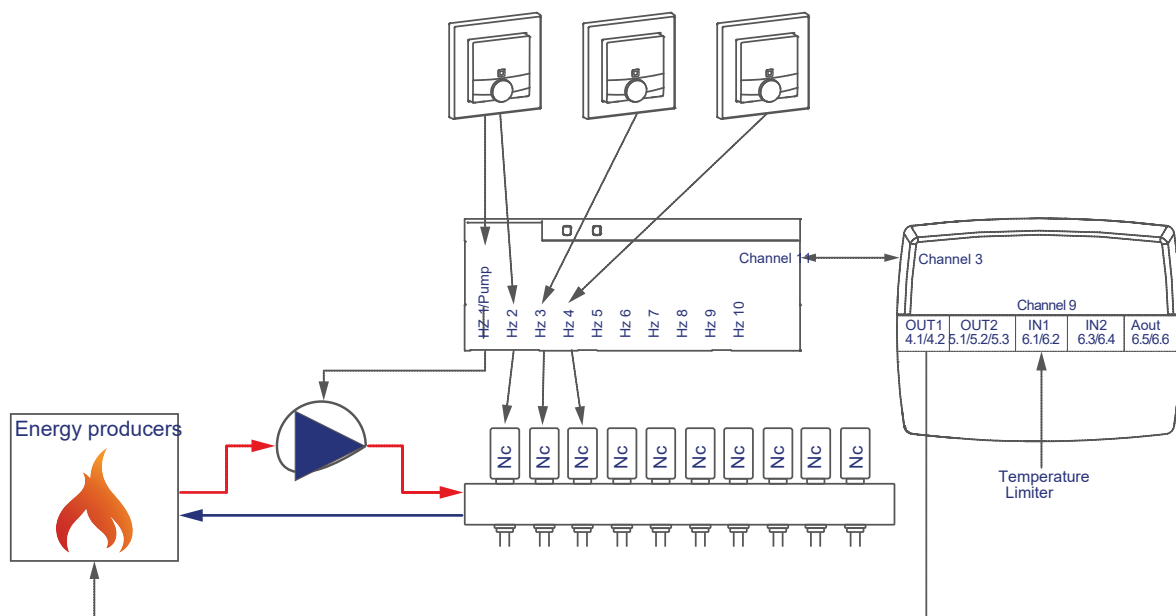
The configuration of the devices for controlling the floor heating and pump with tempera-Turbegrenzung can be carried out as follows:

• Learn the Floor Heating Actuator, wall thermostats and the multi IO box to the control Panel.

• Create a direct link between the wall thermostat
And the Floor Heating Actuator as well as between the multi IO box and the Floor Heating Actuator. In order to be able to perform the parameter settings of the pump (channel 1), a wall thermostat must be connected to channel 1 of the Floor Heating Actuators:

- Room 1: Wall Thermostat (1) Channel 7 with Floor Heating Actuator Channel 1
  Room 1: pump Wall thermostat (1) Channel 7 with Floor Heating Actuator
  Room 2: Wall The 2 valve (2) Channel 7 with Floor Heating Actuator Channel 3
  General: valve 2 Floor Heating Actuator Channel 11 * with MIOB OUT1 VirtB (Channel 3)

* (or Channel 7 when using the Floor Heating Actuators-6-fold)

Figure 227: Link between wall thermostat, multi IO Box and Floor Heating Actuator

ℹ️ Note on using multiple Floor Heating Actuator with a multi IO box:
With the Multi IO box only the virtual B-channels are recommended for the realisation of the heat treatment-darfsfunktion. The output is switched on when one of the link partners reports heat demand. The output is not switched off until none of the linking partners reports more heat requirements.

This behavior of the VirtB channel cannot be disabled. If this function is undesirable, the Virta and VirtC channels can be used in the same way as for existing switching actuators.

- The standard configuration of the wall thermostat can be used for this use case from Channel 2 onwards.

• Changes to the profile of the heating control can be made here. It can also be determined here whether the moisture measurement of the wall thermostat is to be deactivated for controlling the dehumidifier. By default, all wall thermostats can activate the dehumidifier.

Figure 228: Link parameters between Wall thermostat and Floor Heating Actuator

• The default settings can be used for the link between the wall thermostat and channel 1 of the Floor Heating Actuators.

• Unlike in Figure 228, the parameters for controlling the pump are also listed. If necessary, a switch-on and off delay of the pump can be adjusted to compensate for the valve opening or closing times.
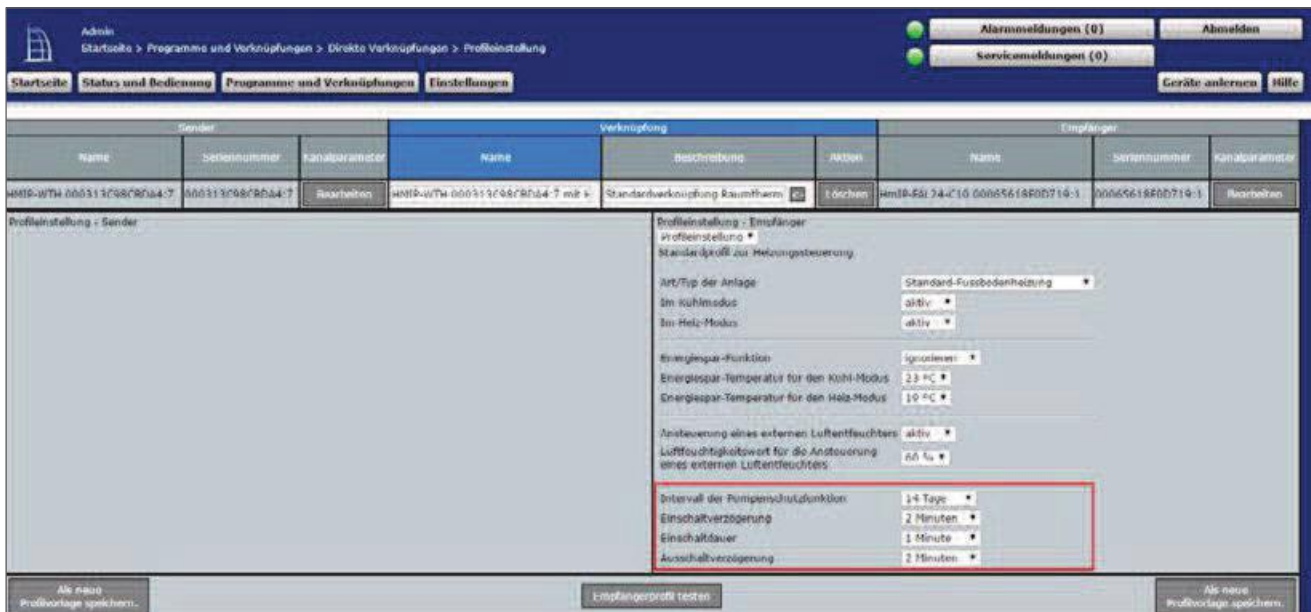
Figure 229: Link parameters between Wall thermostat Channel 1 (pump) and floor heizungsaktor

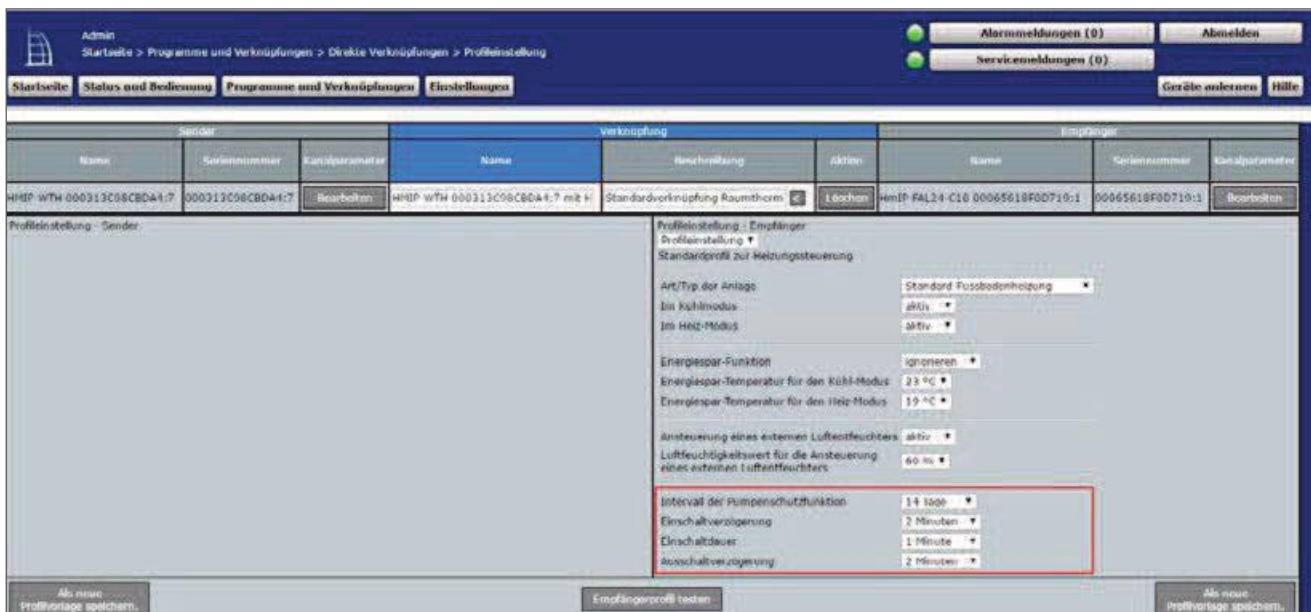- Using the link parameters between Floor Heating Actuator and multi IO box, settings for the heat demand channel can be set for controlling the heat pump. For this application example, the default configuration of the Multi IO box can be used further.
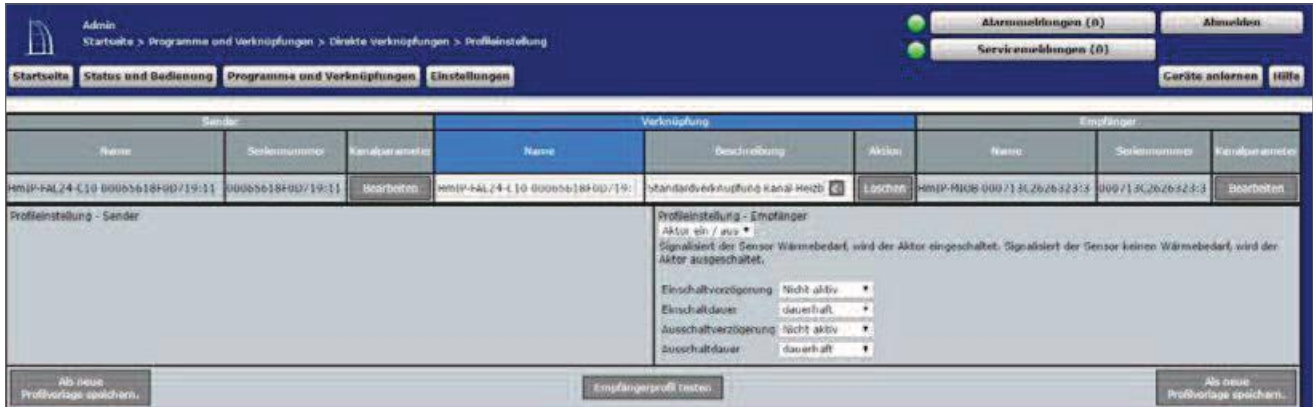
Figure 230: Heat demand channel between Floor Heating Actuator and multi IO Box

- In the parameter settings of the Floor Heating Actuators, the mode for heating Zone 1 must be changed to "control circulating pump" under Channel 0.
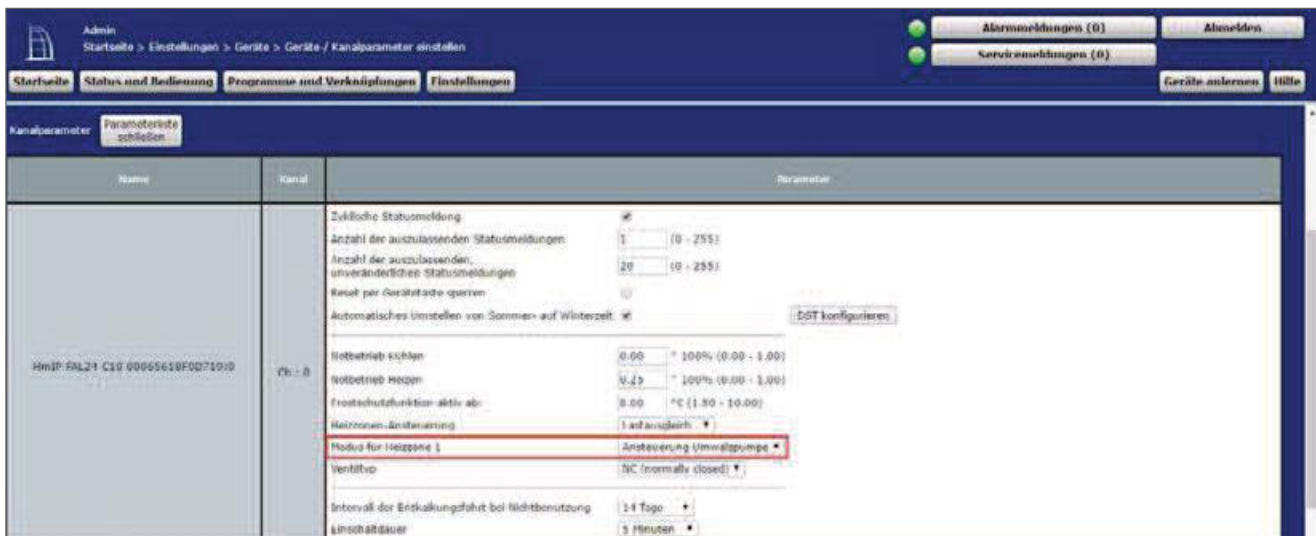
Figure 231: Configuration Floor Heating Actuator

- The standard configuration of the wall thermostat can be further used for this use case.

- Settings for the general parameters of the multi IO Box can be made under "settings", "Devices", "Multi IO Box" Channel 0. The standard configuration of the Multi IO box can be further used for this application example.

Figure 232: Configuration Multi IO Box (Channel 0)

- The cord impulse of the multi IO box have the following channels:

Switch Actuator 1 (Channel 4.1/4.2)	Switch Actuator 2 * (Channel 5.1/5.2/5.3)
Channel 1: OUT1 Real Channel 2: OUT1 Virta Channel 3: OUT1 VirtB Kanal 4: OUT1 VirtC	Channel 5: OUT1 Real Channel 6: OUT1 Virta Channel 7: OUT1 VirtB Kanal 8: OUT1 VirtC

* The parameters are set up analogously (channels 5 to 8).

Figure 233: Configuration Multi IO Box (channel 1-4)

- In this application example, the digital input IN1 of the multi IO box is controlled by a "temperature limiter". For this reason, the operating mode "temperature Limiter" must be selected under Channel 9. In this mode, all valves are closed and the heat requirement and thus the pump are deactivated when overheating is recognized.

Figure 234: Configuration Multi IO Box (channel 9-11)

- Both the second digital input and the analogue output are not used in this application example.

22.9 Application Example 9: Control of floor heating and Circulating pump with external timer for lowering operation

When using a Floor Heating Actuators with a pump and multi IO box you have the possibility to de-define an external timer for automatic switching into the lowering mode.

The pump control is carried out via the Floor Heating Actuator. The heating circuit 1 controls there-with only the pump.
The boiler is controlled via the output OUT1 of the Multi IO box.
The input IN1 of the Multi IO box controls the external timer.
The coupling of the heating circuits 2 – 6 or 2 – 10 is done via the Homematic IP wall thermostat. For the control of the floor heating the use of several Floor Heating Actuator is possible.
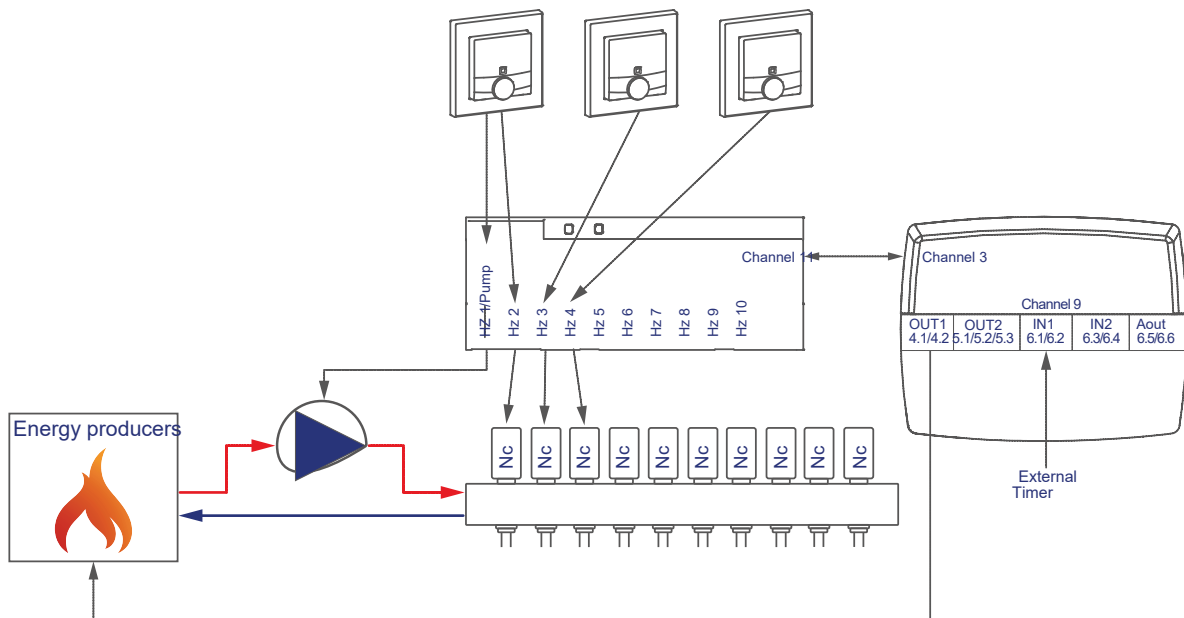
The configuration of the devices for controlling the floor heating and pump with external timer for the lowering operation can be carried out as follows:

• Learn the Floor Heating Actuator, wall thermostats and the multi IO box to the control Panel.
• Create a direct link between the wall thermostat
  And the Floor Heating Actuator as well as between the multi IO box and the Floor Heating Actuator. In order to be able to perform the parameter settings of the pump (channel 1), a wall thermostat must be connected to channel 1 of the Floor Heating Actuators:

- Room 1:   Wall Thermostat (1) Channel 7 with Floor Heating Actuator Channel 1
  Room 1:   pump Wall thermostat (1) Channel 7 with Floor Heating Actuator
  Room 2:   Wall Thermostat (2) Channel 7 with Floor Heating Actuator Channel 3
  General: valve 2 Floor Heating Actuator Channel 11 * with MIOB OUT1 VirtB (Channel 3)

* (or Channel 7 when using the Floor Heating Actuators-6-fold)

Figure 235: Link between wall thermostat, multi IO Box and Floor Heating Actuator

Note on using multiple Floor Heating Actuator with a multi IO box:
With the Multi IO box only the virtual B-channels are recommended for the realisation of the heat treatment-darfsfunktion. The output is switched on when one of the link partners reports heat demand. The output is not switched off until none of the linking partners reports more heat requirements.

This behavior of the VirtB channel cannot be disabled. If this function is undesirable, the Virta and VirtC channels can be used in the same way as for existing switching actuators.

- The standard configuration of the wall thermostat can be used for this use case from Channel 2 onwards.

- For the wall thermostats that are harvested in this application example starting from Channel 2 of the Floor Heating Actuators, it is necessary to adjust whether the energy-saving operation (ECLK) is accepted by the device in question. If this is desired for the heating zone in question, the Power Save option must be set to accept.
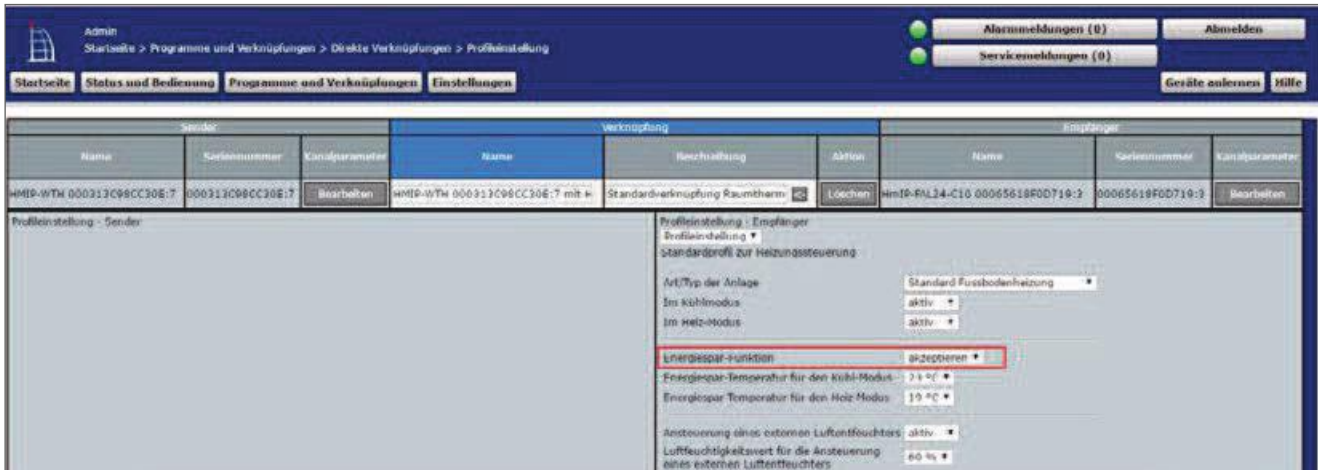
Figure 236: Link parameters between Wall thermostat and Floor Heating Actuator

- The default settings can be used for the link between the wall thermostat and channel 1 of the Floor Heating Actuators.
- Unlike in Figure 236, the parameters for controlling the pump are also listed. If necessary, a switch-on and off delay of the pump can be adjusted to compensate for the valve opening or closing times.

Figure 237: Link parameters between Wall thermostat Channel 1 (pump) and floor heizungsaktor

- Using the link parameters between Floor Heating Actuator and multi IO box, settings for the heat demand channel can be set for controlling the heat pump.
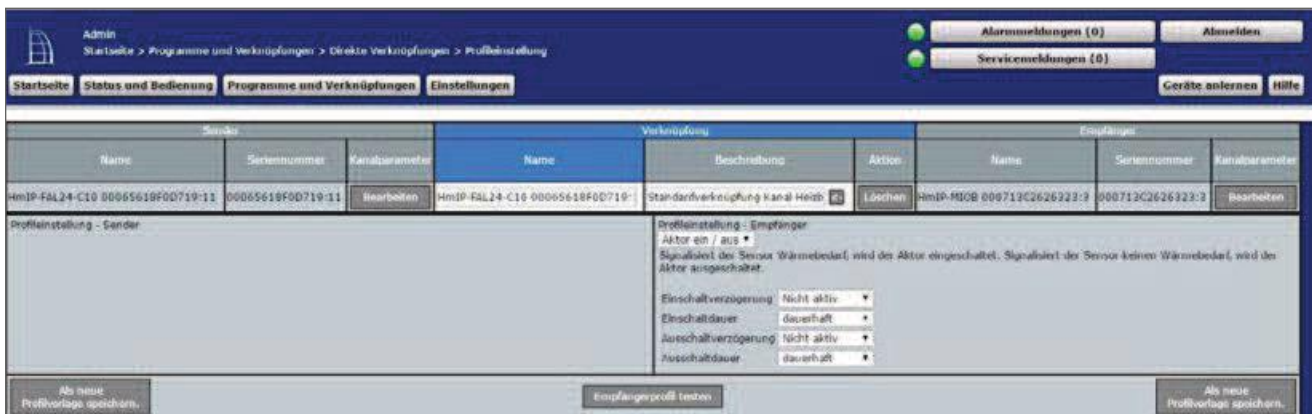
Figure 238: Link parameters between Floor Heating Actuator and multi IO Box (1)

- For this application example, the default configuration of the Multi IO box can be used further.

- In the parameter settings of the Floor Heating Actuators, the mode for heating Zone 1 must be changed to "control circulating pump" under Channel 0.

Figure 239: Configuration Channel parameter Floor Heating Actuator

- For this application example, for each wall thermostat (channel 1) The target temperature in the case of the specified by multi IO Box Channel 9 (ECLK) deflating operation, an energy-saving temperature for the cooling and heating mode can be set.
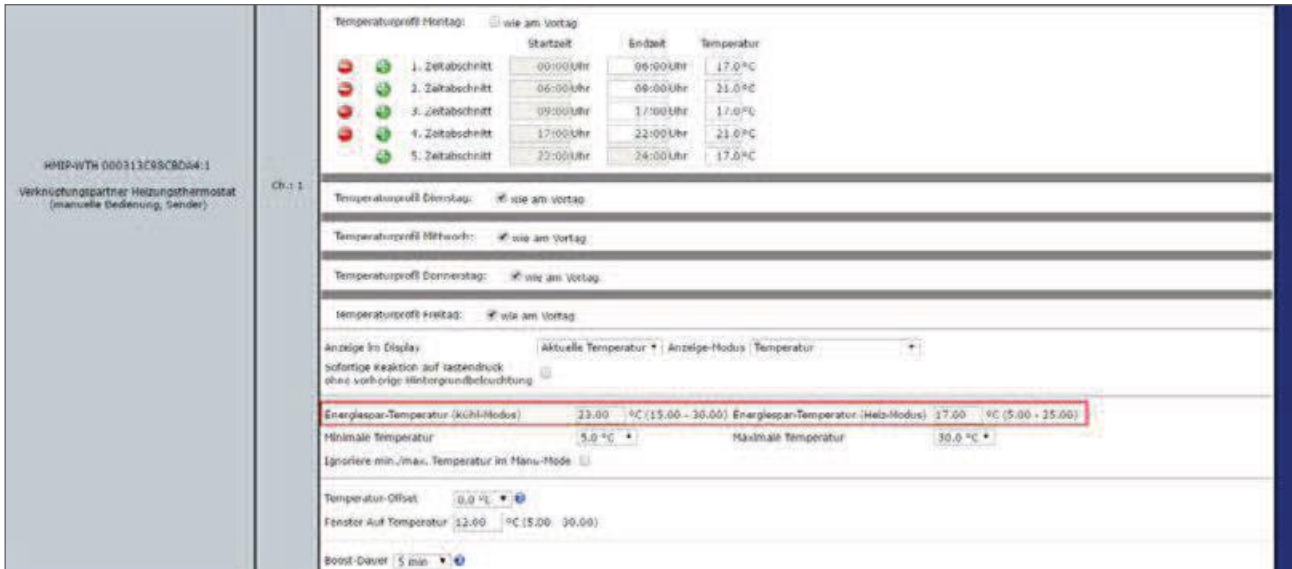
Figure 240: Configuration Channel parameter Floor Heating Actuator

- No changes have been made to the other settings compared to the default configuration.
- Settings for the general parameters of the multi IO Box can be made under "settings", "Devices", "Multi IO Box" Channel 0. The standard configuration of the Multi IO box can be further used for this application example.
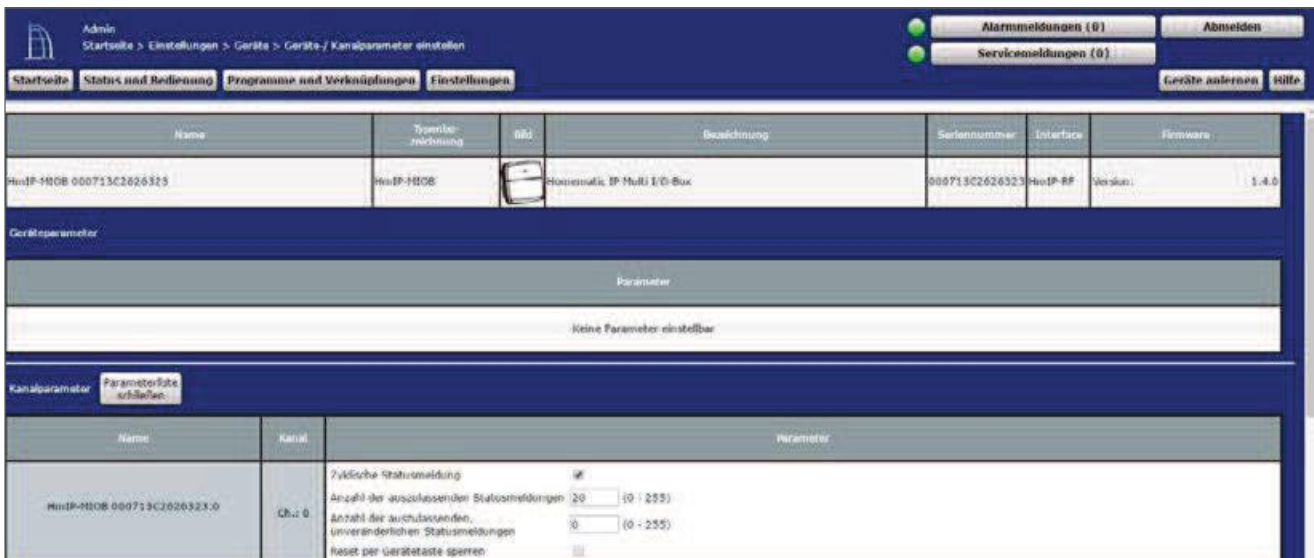
Figure 241: Configuration of channel parameters multi IO Box (Channel 0)

- The cord impulse of the multi IO box have the following channels:

Switch Actuator 1 (Channel 4.1/4.2)	Switch Actuator 2 * (Channel 5.1/5.2/5.3)
Channel 1: OUT1 Real Channel 2: OUT1 Virta Channel 3: OUT1 VirtB Kanal 4: OUT1 VirtC	Channel 5: OUT1 Real Channel 6: OUT1 Virta Channel 7: OUT1 VirtB Kanal 8: OUT1 VirtC

* The parameters are set up analogously (channels 5 to 8).

Figure 242: Configuration Multi IO Box (channel 1-4)

- In this application example, the digital input IN1 of the multi IO box is controlled by an external clock. For this reason, the operating mode "lowering mode (eco-mode)" is to be selected under Channel 9. In this mode, the lowering operation is activated when the input is actuated on all appropriately configured wall thermostats.

Figure 243: Configuration Multi IO Box (channel 9-11)

- Both the second digital input and the analogue output are not used in this application example.

22.10 Application Example 10: Control of floor heating and pump with energy saving mode for cooling operation

When using a Floor Heating Actuators with a pump and multi IO box, you can define a power saving mode for cooling operation. This way, for example, the temperature can be raised at night to save energy for the cooled-temperature. An external switching clock is used for this purpose.

The pump control is carried out via the Floor Heating Actuator. The heating circuit 1 controls there-with only the pump.
The boiler is controlled via channel OUT1 of the Multi IO box.
The app can be used to switch between cooling and heating operations. The input IN1 of the multi IO box is controlled by the external timer.
The coupling of the heating circuits 2 – 6 or 2 – 10 is done via the Homematic IP wall thermostat. For the control of the floor heating the use of several Floor Heating Actuator is possible.

The configuration of the devices for controlling the floor heating and pump with energy saving mode for cooling operation can be carried out as follows:

- Learn the Floor Heating Actuator, wall thermostats and the multi IO box to the control Panel.
- Create a direct link between the wall thermostat
  And the Floor Heating Actuator as well as between the multi IO box and the Floor Heating Actuator. In order to be able to perform the parameter settings of the pump (channel 1), a wall thermostat must be connected to channel 1 of the Floor Heating Actuators:

- Room 1: Wall thermostat (1) Channel 7 with Floor Heating Actuator Channel 1 Pump Room 1: Wall thermostat (1) Channel 7 with Floor Heating Actuator Channel 2 valve 1 Room 2: Wall thermostat (2) Channel 7 with Floor Heating Actuator Channel 3 valve 2 General: Floor Heating Actuator Channel 11 * with MIOB OUT1 VirtB (Channel 3)

* (or Channel 7 when using the Floor Heating Actuators-6-fold)

Figure 244: Link between wall thermostat, multi IO Box and Floor Heating Actuator

Note on using multiple Floor Heating Actuator with a multi IO box:
With the Multi IO box only the virtual B-channels are recommended for the realisation of the heat treatment-darfsfunktion. The output is switched on when one of the link partners reports heat demand. The output is not switched off until none of the linking partners reports more heat requirements.

This behavior of the VirtB channel cannot be disabled. If this function is undesirable, the Virta and VirtC channels can be used in the same way as for existing switching actuators.

- The standard configuration of the wall thermostat can be used for this use case from Channel 2 onwards.
- For the wall thermostats that are harvested in this application example starting from Channel 2 of the Floor Heating Actuators Angel, it is necessary to adjust whether the eco-operation (ECLK) is accepted by the device in question. If this is desired for the heating zone in question, the Power Save option must be set to accept.
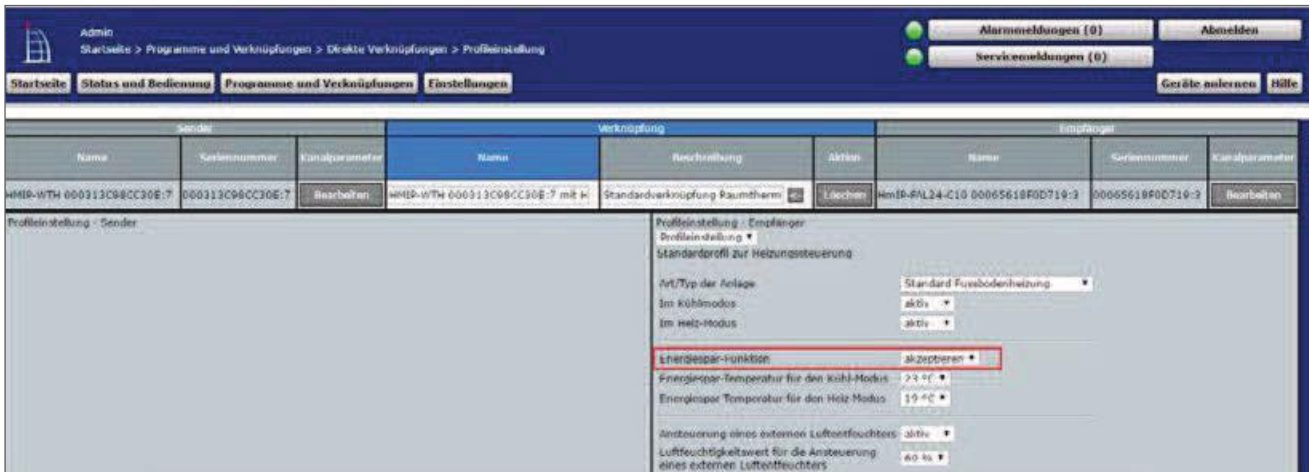
Figure 245: Link parameters between Wall thermostat and Floor Heating Actuator

- The default settings can be used for the link between the wall thermostat and channel 1 of the Floor Heating Actuators.
- Unlike in Figure 245, the parameters for controlling the pump are also listed. If necessary, a switch-on and off delay of the pump can be adjusted to compensate for the valve opening or closing times.
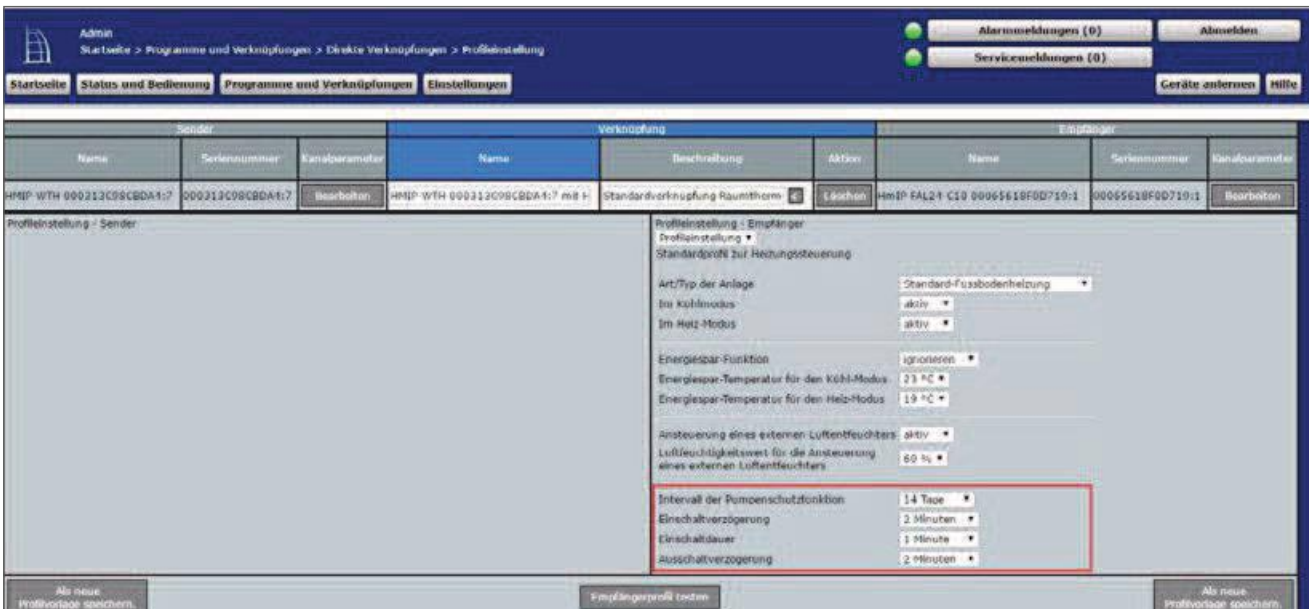
Figure 246: Link parameters between Wall thermostat Channel 1 (pump) and Floor Heating Actuator

- Using the link parameters between Floor Heating Actuator and multi IO box, settings for the heat demand channel can be set for controlling the heat pump. For this application example, the default configuration of the Multi IO box can be used further.
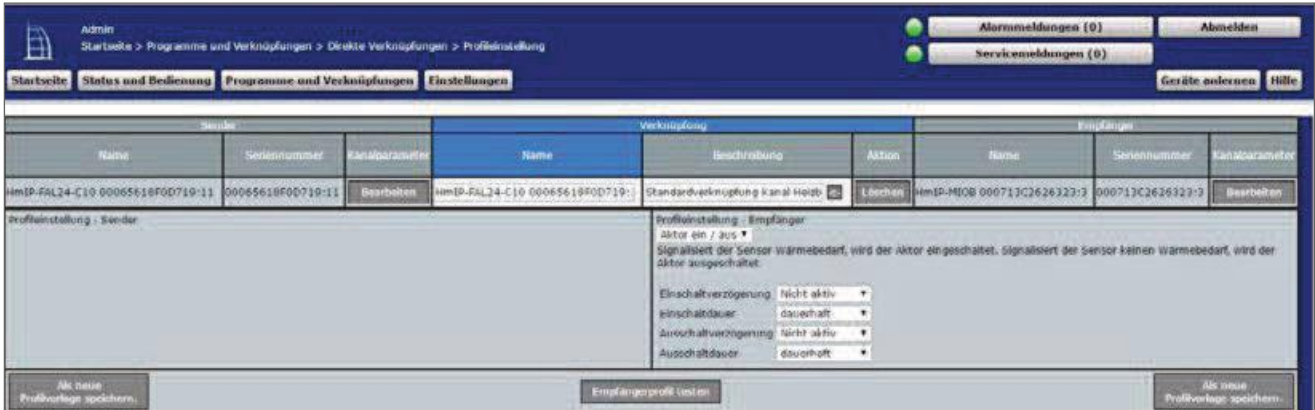
Figure 247: Heat demand channel between Floor Heating Actuator and multi IO Box

- In the parameter settings of the Floor Heating Actuators, the mode for heating Zone 1 must be changed to "control circulating pump" under Channel 0.
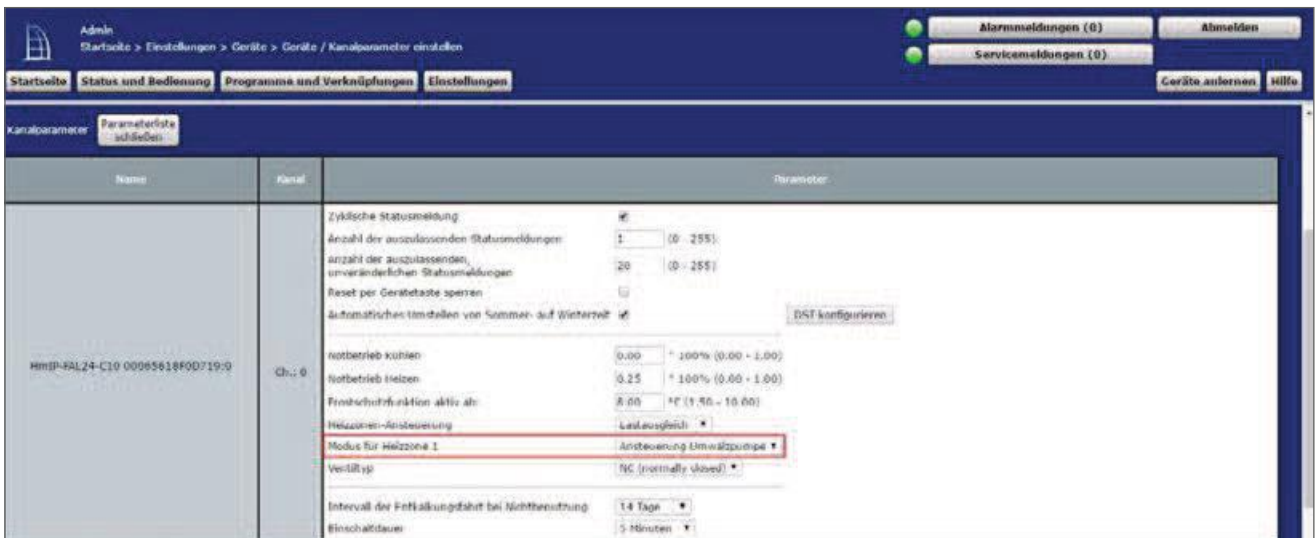
Figure 248: Configuration Floor Heating Actuator

- For this application example, for each wall thermostat (channel 1) The target temperature in the case of the specified by multi IO Box Channel 9 (ECLK) deflating operation, an energy-saving temperature for the cooling and heating mode can be set.
- No changes have been made to the other settings compared to the default configuration.
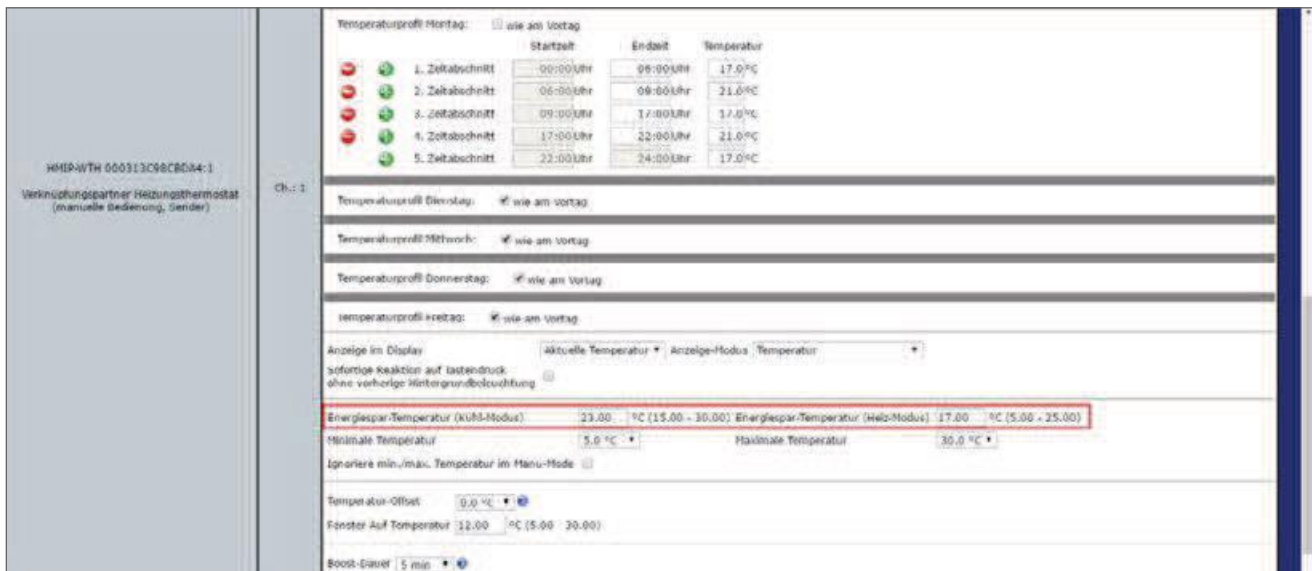
Figure 249: Configuration Floor Heating Actuator

- The standard configuration of the Multi IO box can be further used for this application example.
- Settings for the general parameters of the multi IO Box can be made under "settings", "Devices", "Multi IO Box" Channel 0.
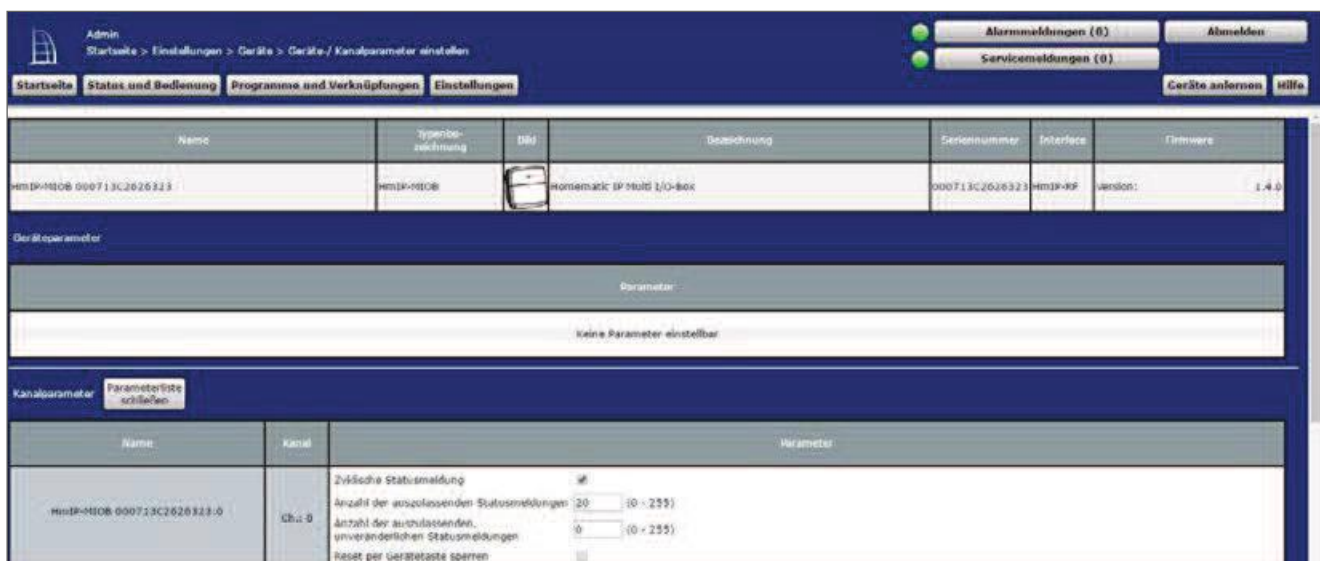
Figure 250: Configuration Multi IO Box (Channel 0)

- The cord impulse of the multi IO box have the following channels:

Switch Actuator 1 (Channel 4.1/4.2)	Switch Actuator 2 * (Channel 5.1/5.2/5.3)
Channel 1: OUT1 Real Channel 2: OUT1 Virta Channel 3: OUT1 VirtB Kanal 4: OUT1 VirtC	Channel 5: OUT1 Real Channel 6: OUT1 Virta Channel 7: OUT1 VirtB Kanal 8: OUT1 VirtC

* The parameters are set up analogously (channels 5 to 8).

Figure 251: Configuration Multi IO Box (channel 1-4)

- In this application example, the digital input IN1 of the multi IO box is controlled by an "external clock", an external timer. For this reason, the operating mode "lowering mode (eco-mode)" is to be selected under Channel 9. In this mode, the lowering operation is activated when the input is actuated on all appropriately configured wall thermostats.

Figure 252: Configuration Multi IO Box (channel 9-11)

- Both the second digital input and the analogue output are not used in this application example.

- For the implementation of the above-described application example, a simple central program is required, which activates the cooling mode of the relevant wall thermostats and Floor Heating Actuator and on the other the "co-pilot" output of the Multi IO Box To switch the installation to cooling mode.

- The switch to the cooling mode is provided as an example with a virtual button The headquarters.
- When actuated, all wall thermostats and Fußbodenheizungsakoren in the mode and the output OUT2 the multi IO box.

Figure 253: Central program for power saving in cooling mode

- In order to get back into the heating operation (for example by means of another virtual button of the CCU), another program must be created, which returns to the heating mode analogous to the above program or deactivates the output OUT2 the multi IO box.

Part V - More features and information

23   Exchange and change of CCU

If you can access the most up-to-date system backup of an "old" Central station, both the exchange of a central unit of the same model and the change, for example, from a central CCU2 to the central CCU3 is easily possible. In this case, device configuration, programming and a large part of the settings of your previous headquarters can be easily transferred to the new headquarters. If you have not created a SY-stem backup and your previous CCU is defective, you must reanler all devices and re-create programs and central links etc.

> **ⓘ** When switching from a CCU2 to a CCU3, previously used additional software is not transferred to the new CCU via the system backup. Additional software must be re-installed on the CCU3.

> **ⓘ** When you switch from a CCU2 to a CCU3, the network settings of the CCU2 are not applied. If necessary, you can manually adjust the network settings, such as the IP address.

> **ⓘ** Please make sure that the Control Panel (s) have the latest device software (firmware), or that after the first start of your control panel, a soft-ware update must be carried out (cf. operating instructions of the Control Panel).

The exchange or change of your head office takes place in four simple steps:
- You are creating a current system backup of the "old" headquarters.
- Decommission the old Control Panel (not both central stations must be active at the same time).
- The new headquarters will be in operation.
- Perform a software update at the new headquarters.
- Play back the system backup of your previous headquarters to the new headquarters.

23.1 Creating a system Backup

All the steps necessary for a comfortable change are taken in the pop-up window "CCU-security".

•   Under Settings, click Control Panel and Security.

Figure 254: Pop-up window – CCU2 or CCU3 security

Use this procedure to create a backup of your "old" headquarters system Hand save the backup file to your computer.

•   Click the "Create Backup" button in the "Backup Management" section and confirm the creation of the system backup by clicking "OK".

ℹ️   Creating the backup may take a few minutes depending on the upgrade level of the configured system.

- Then save the created backup file to your computer. Depending on the operating system, this is also automatic.

Performing the new central software update
After the first start of your head office, an update must be carried out first. Please proceed as described in the respective operating instructions of the CCU2 or CCU3-Ben.

The software update may take a few minutes. After you have successfully completed the up-date, you must log on to the CCU again. The full range of functions of your head office will then be available to you.

> ℹ️ It is strongly recommended that you lo the cache of your Web browser after the update. Instructions can be found in the tutorial "delete browser cache", which is available on the website www.eq-3.de for download or in the FAQ section.

23.2   Install the system backup to the new CCU

Follow the steps below to transmission a backup with the configuration, programming and settings of your system to the new headquarters.

- Click "Create Backup" in the backup management row.
> ℹ️ Creating the backup may take a few minutes depending on the upgrade level of the configured system.
- In the following operating system window, click Save to open the window for entering the file name and location.
- In the Save File as window, select the location of the backup file and specify a new file name if necessary.
- Click "Save" to store the backup file on your user's PC. •
  In the following operating system window, click Close to confirm that the backup file has been successfully saved.

> ℹ️ When you play back a backup file from the "old" headquarters to the new Central Station, a backup: Version control window opens with a warning message. Please confirm this by clicking on the button "OK".

Figure 255: Pop-up Window – Backup – version control

- If necessary, enter the security key in the "Replay system backup – Security Query" window.

ℹ️ You only need to enter the security key if it was previously set. If you have not set a security key, you do not need to enter the key to replay the backup.

- Click the "Replay system Backup" button to backup the system to the To transfer your new headquarters. The pop-up window will then open to restart the system.

ℹ️ The backup can take a few minutes, depending on the upgrade level of the configured system.
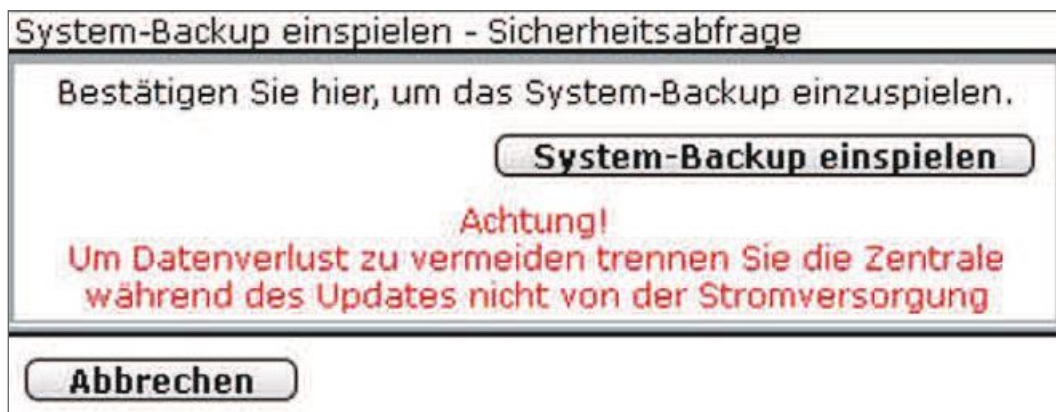

Figure 256: Pop-up Window – system backup – Restarting the system

- Click on the button "Log in again" to restart the system and log on to the system or to restart the system and go to the home page

ℹ️ The control Panel cannot be reached during the restart. Therefore, it is possible that your Web browser issues an error message with the "Connection failed" content. Please wait until the central station has finished the boot process and try to access the Neut to the Control Panel

Creating a backup for data on the MIRCOSD card card

The data stored on the MIRCOSD card card of the CCU2 (e.g. for the acquisition and diagram display) are not included in the system backup and must be transferred separately to the new head office.

To create a backup of the data, proceed as follows: •
    Under Settings, click Control Panel. •
    In the overview, click General Settings.

Figure 257: Pop-up-general settings

•   Under microSD card, click Back up data to create a backup of the data.

•   Save the file to your PC to be transferred to the new central CCU3.

To transfer the data to the CCU3, proceed as follows: •
    Insert a USB stick into the USB port of the CCU3 to transfer the directory structure of
    the CCU3 to the stick, which is necessary to transfer the data.
•   Remove the stick from the CCU3 and plug it into the USB port of your PC.

•   Open the directory of the stick on your PC.
•   Unpack and copy the previously saved backup of the microSD card into the
    measurement folder.
•   Remove the stick on your PC and plug it into the USB port of the CCU3.

The stick must remain in the CCU3 for the data to be stored and you can access the data via the WebUI.

When swapping a CCU3 against a new CCU3, the stick can be inserted into the new CCU3 after the backup file has been recorded and the existing data will be used further. Alternatively, you can save the data on the USB stick under "All-in-common settings" on the PC as well.

24 Device Exchange

Homematic and Homematic IP devices usually work extremely reliably over a long period of time. If one of your components is still defective, you have the option of making a device exchange within the system directly from the inbox of your CCU, if the device types are identical. The advantage of device swapping: With this fast, comfortable approach, you can maintain configurations, programs, and shortcuts in the same way as with central exchange.

ℹ️ Please make sure that your control Panel has the latest software (firmware) before the device is exchanged.

To replace a component, please do the following: •
>   Start by learning the new device at your head office (see   *25 devices).*
>   Specific information on how to learn individual components can be found in the user manual of the respective product.

• After a successful learning process, your new device appears in the Inbox of the WebUI. Click the "Swap" button in the "Action" column and the "Device Selection" window will open.

Figure 258: Device Selection

• Then select the device you want to replace in the Device Selector window by clicking on the "Select" button. If there are two identical device types in the system, a pop-up window will open, which looks something like this, depending on the device:

Figure 259: Pop-up window-Device swap-Confirmation

- Confirm the device Exchange by clicking on the button "yes" and close the swap process by clicking on "OK". From now on you can use your new device as usual.

> In the case of radio-based devices, it may be necessary to press the configuration button of the corresponding device to complete the swap process.

25   Rescue system

In rare cases, such as interrupting the power supply during a software update, it is possible that the software of your CCU is damaged and you can no longer reach it via the Web browser.

If the control Panel via the device led indicates that the normal operating system can no longer be started (cf. operating instructions of the respective control Panel), a rescue system ("recovery System") is available, which allows the function of the central Derherstellt. To do this, a software update must be carried out via the rescue system:

- First download the file with the current version of the CCU2 or CCU3 device software (HM-CCU2-or CCU3-firmware) in the download area of the website "www.eq-3.de".

- Disconnect the power supply to your control panel by pressing the power cable Drag.

  Press and hold the rescue button/system key for 5 seconds while the

- Plug in the power supply cable again. Release the rescue button/System key again to start the rescue system.

Open the user interface WebUI as usual by entering the IP address in your browser.

🛈 With the button "Create Backup" you can create a system backup of the central station if necessary and if it is still possible, depending on the state of the Control Panel.
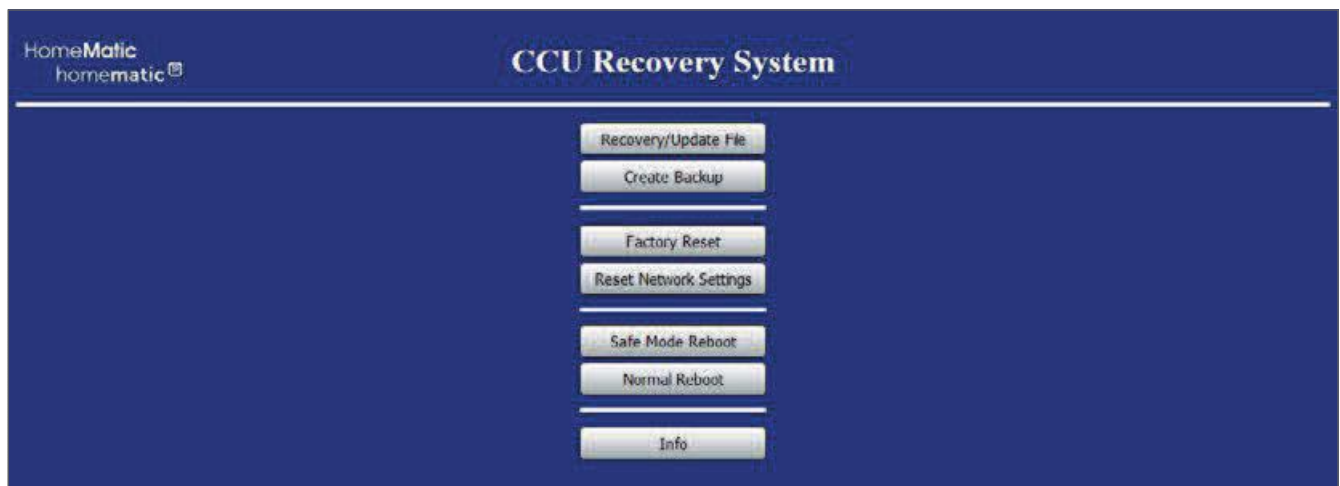

Figure 260: CCU2 Recovery Home Page

- First, click on the "Recovery/update File" button to select the installation file you previously downloaded, then press "Start recovery/update".

If you now log in again by entering the IP address of your head office in the Address field of your Web browser, the full functionality of your head office is available again.

With the button "factory reset" You can reset your control panel to the factory state. All configurations, settings and programming are deleted.

With the button "Reset network Settings" The network settings are reset to the factory state of the control Panel.

With the button "Safe Mode reboot" You can start the control Panel without additional software (addons). With the button "normal reboot" You can start the control Panel normally.

26 Firmware update for ~~wireles~~ devices

With the control Panel you have the possibility to update the device software (firmware) of radio-based devices.

As soon as a new firmware version is available for your radio-based device, this will be displayed on the home page of the WebUI user interface.
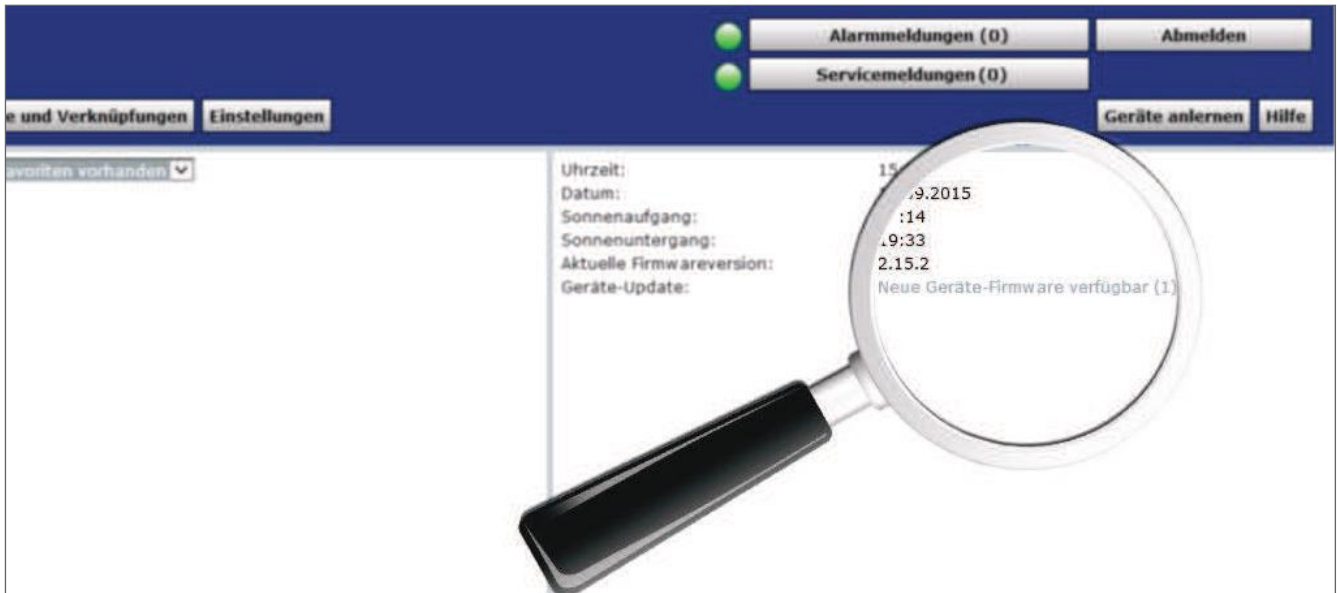

Figure 261: Start Page WebUI-firmware update available

- On the home page, under Device Update, click the "New device firmware available (x)" message.
- A pop-up window will appear to show you which device a new device firmware is available for.
- Click on the version number of the firmware version under "new". The device firmware is automatically downloaded.

Figure 262: Pop-up window device firmware update

- Click OK to close the window.
- To transfer the new firmware version to the device, click on "Settings"-"Device firmware".
- The next window shows the devices for which a firmware update can be made.

Figure 263: Uploading Device Firmware

- Click the New button at the bottom of the screen.
- A pop-up window appears. Click on the "Browse" button to select the firmware file you previously downloaded.
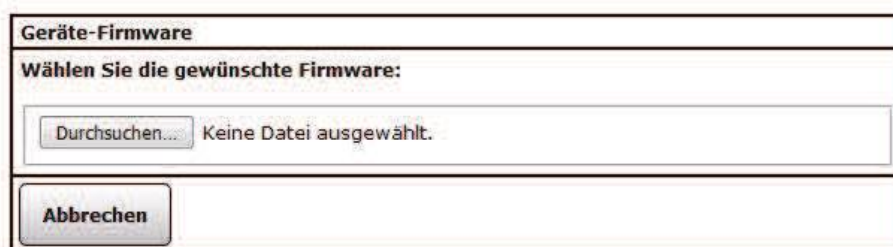

Figure 264: Pop-up window selection firmware file

- Click Upload and the device firmware will be updated.

Now your device is fully available with the latest device firmware.

If you are running a firmware update for several radio-based components, you may have exceeded the duty cycle limit. The duty cycle (re-lative frequency occupancy) describes a legally controlled limitation of the transmission time of devices in the frequency ranges 868-870 MHz and 169 MHz. Exceeding the duty cycle limit is indicated by blinking of your device and results in a temporary limitation of your device's functionality. After a short time (max. 1 hour), all functions of the device are completely available again.

27 Channel Overview

The selection of one or more channels is done via this pop-up window. For example, you can access this window by using the appropriate operating instructions to add channels
In *"19.3 rooms" on page 119* And *"19.4 functions" on page 121* . Inputs are only available in the Action column is possible. All other information is used in the device configuration in "19.2 Devices "on page 110 defined by the administrator.

ℹ️ Depending on the number of existing devices and channels, loading the list may take some time.

Figure 265: Pop-up – channel overview

Select Channel
- Choose the desired channel in the channel list and select it by clicking on the checkbox.
- If necessary, select other channels as described above.
- Click "OK" in the footer to transfer the data of all channels marked by checkbox to the calling window.

Show Virtual devices

By default, devices or channels that the central system manages internally and are not physically present are not listed. Click Show virtual devices to get a complete list including the virtual devices.

Perform function test (test) of a channel

- Locate the channel in the list where you want to perform a function check (test).

- Click the "Test" button to trigger the function test. which function is triggered on a channel is channel specific: ◦

    For actuators (switches, dimmers, etc.), the channel state is changed (toggle function), the OK field is stored in yellow and the time stamp is deleted. After executing the action, the actuator automatically returns to the Control Panel. The time stamp associated with the confirmation is entered and the OK field is stored in green.

    ◦ For sensors/remote controls, the OK field is highlighted in yellow and the time stamp is deleted. The switchboard is now waiting for a message from the channel. For automatically transmitting sensors (e.g. weather sensors) This happens automatically in the corresponding transmitter aster. For manually actuated sensors, the corresponding channel must be "actuated" (for example, pressing the corresponding remote control button). The time stamp associated with the notification is entered and the OK field is stored in green.

Calling up a list of direct links to the channel •

    In the list, locate the channel to which you want to see the list of direct links.

- Click the "Devices (x)" button in the line that belongs to the channel to access To get the list of related direct links   È *"18.1 Direct Device Shortcuts "on page 62*

Calling up a list of programs belonging to the channel •

    In the list, locate the channel to which you want to view the list of programs.

- Click the "Programs (x)" button in the line belonging to the channel to access To get the list of related programs   È *"18.2 Program creation and Central Link "on page 75*

Cancel Selection

- Click Cancel in the footer to close the pop-up window without a selection.

Part VI - Annex

28 Overview control and control elements (Control-Fields)

The description of the control and control elements can always be seen in conjunction with the Channel function (device function). Since this is a generalized procedure, you may need to transfer the functions and the operation to the real devices and channels.

The structure of the control and control elements (in short: control) for the individual channels reflects the operating possibilities of the corresponding channel. The following rules apply:

Usability
The usability of an element is marked by the format. A control can consist of operable and inoperable elements:
- Buttons are displayed in 3d format. • Adjustable controls (slider) are represented in 2d format with the Endwertangaben (e.g. 0% and 100%).
- Non-operable info fields (state display only) are shown in 2d format.

Progress bar
The currently valid status of an element to the channel is indicated by the color of the control element or the Info field and, if necessary, by additional textual values:
- For valid or active states, the button or the Infofield is colored blue. The currently valid or last valid values are also entered in the corresponding number fields.

- For non-valid or inactive states, the button or the Infofield is colored gray.

- If the state of the channel changes at the current time, the button or the Infofield is colored blue.

Elements of a channel, which can be operated in principle, are in the status *"16.8 status and operation – System log "on page 48* With a 3d field, i.e. with a A button, but in principle it is not possible to use it.

28.1 Window handle Contact-Sensor 3-stage

The general control has the following control and control elements:

Figure 266: Rotary handle Contact

Status Open
Function: Status message via the sensor contact in the open position.

Status Tilt Position
Function: Status message via sensor contact in tilt position

Status locked
Function: Status message via the sensor contact in locked position
Device Example: Window rotary handle Contact

ℹ️   No operation possible!

28.2   Window Actuator - Winmatic
The general control has the following control and control elements:

Figure 267: Window and door operator-multi-level switching fields

1. Control Panels *Set Value*
     Setting the value (Verfahrwertes, e.g. opening angle) by mouse

2. Input field   *Set Value*
     Setting the value (Verfahrwertes, for example, opening angle) by numerical input.

3. button   *Stop*
     Stops the process of the drive.

4. Button *On*

    Starts the procedure of the drive in the upward direction.

5. Button *To*

    Starts the procedure of the drive in the downward direction.

6. Button *Locked*

    Starts the procedure of the drive in the downward direction.

7. Status *State indeterminate*

    Status message about an indeterminate state of the actuator (e.g. the window and door drive).

Device Example: WinMatic

Setting the value and transferring it to the Stellaktor

• Use the mouse to click on the buttons in the graphic to start directly with the values set (0%, 50%, 100%).

• Click with the mouse in the Value field and enter the desired numerical value. Then click on the "Enter" icon.

• Click the arrows in the value box to increment or decrease the value.

Start Stellaktor

• Click "On" to let the actuator drive to the Stellaktor. The Stellaktor stops automatically at 100% (end point).

Start Stellaktor

• Click "to" to let the actuator drive to the Stellaktor. The Stellaktor stops automatically at 0% (end point).

Stop the Stellaktor procedure

• Click "Stop" to stop the actuator to the Stellaktor in the current position.

Create locked state

• Click "Locked" to start the locked-state with the actuator to the Stellaktor.

28.3 Remote Control display

The general control has the following control and control elements:
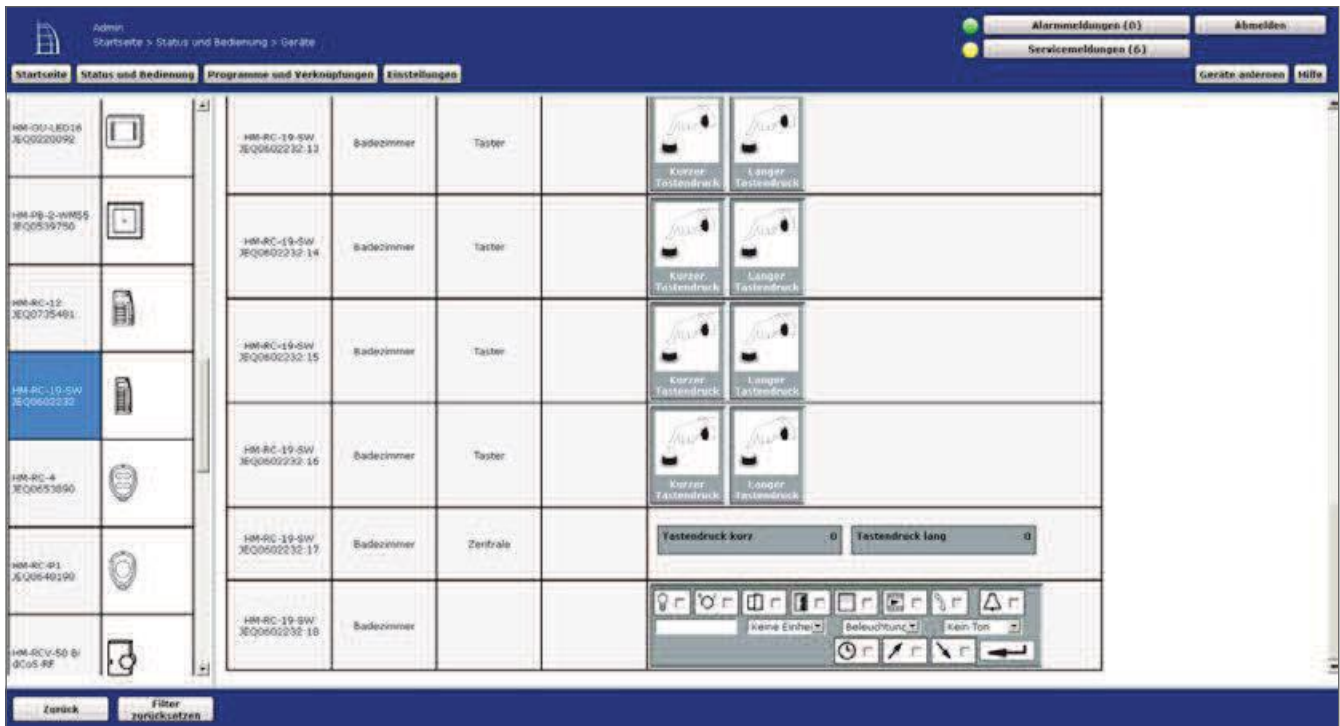

Figure 268: Remote Control display

1. Button *Setting or transmitting the display contents*
   Stops the process of the drive.

Device Example: Remote control display

Setting the value and transferring it to the Stellaktor
Select the points listed below and enter the relevant information there. Then click on the "Enter" icon.
• Select the desired symbol by using the checkbox next to the respective symbol.

• If the box is checked, the corresponding symbol is activated in the display.
• If the box is unchecked, the corresponding symbol is not displayed. •
   Type a text in the leftmost box. •
   Enable the display of a unit of measure to the text by using the Unit selection list.
• Select a desired light effect using the light selection list
• Select a desired sequence of sounds using the sound selection list.

28.4 Program

The general control has the following control and control elements:

Figure 269: Program

1. Status *Active*
   Status message whether the program is set to active.

2. Button *Start*
   Runs the program (the actions in "activity: Then..."). Example:
Programs

Run Program
• Click "Start" to immediately execute all actions listed in the "activity: Then..." Field. Any conditions defined as a condition when the program is created are ignored. The condition check is set to true for the moment of operation.

> The actions that are performed when the program is started can be Program Creation (see *"18.2.1 Program creation" on page 76*) See or contact your administrator.

28.5   Switch Actuator – 2-stage

The general control has the following control and control elements:
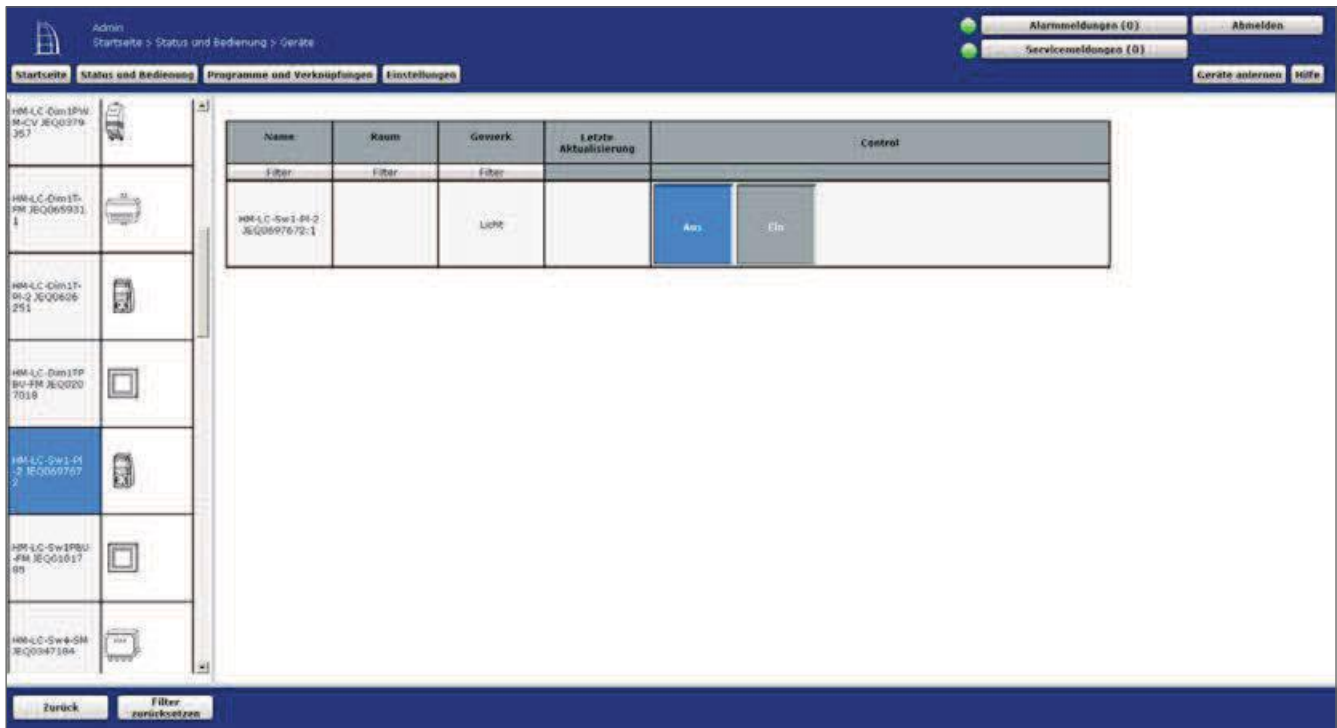

Figure 270: Control Switch Actuator – 2-stage

1. Button *From*
      Turn off the Schaltaktors.

2. Button *A*
      Switch on the actuator.

Device Example: Switch actuator

Turn on switch actuator
•   Click on to bring the switch actuator to the on position.

Switch actuator off
•   Click Off to bring the switch actuator to the off position.

28.6   Shutter Actuator

Multi-level switching fields
The general control has the following control and control elements:
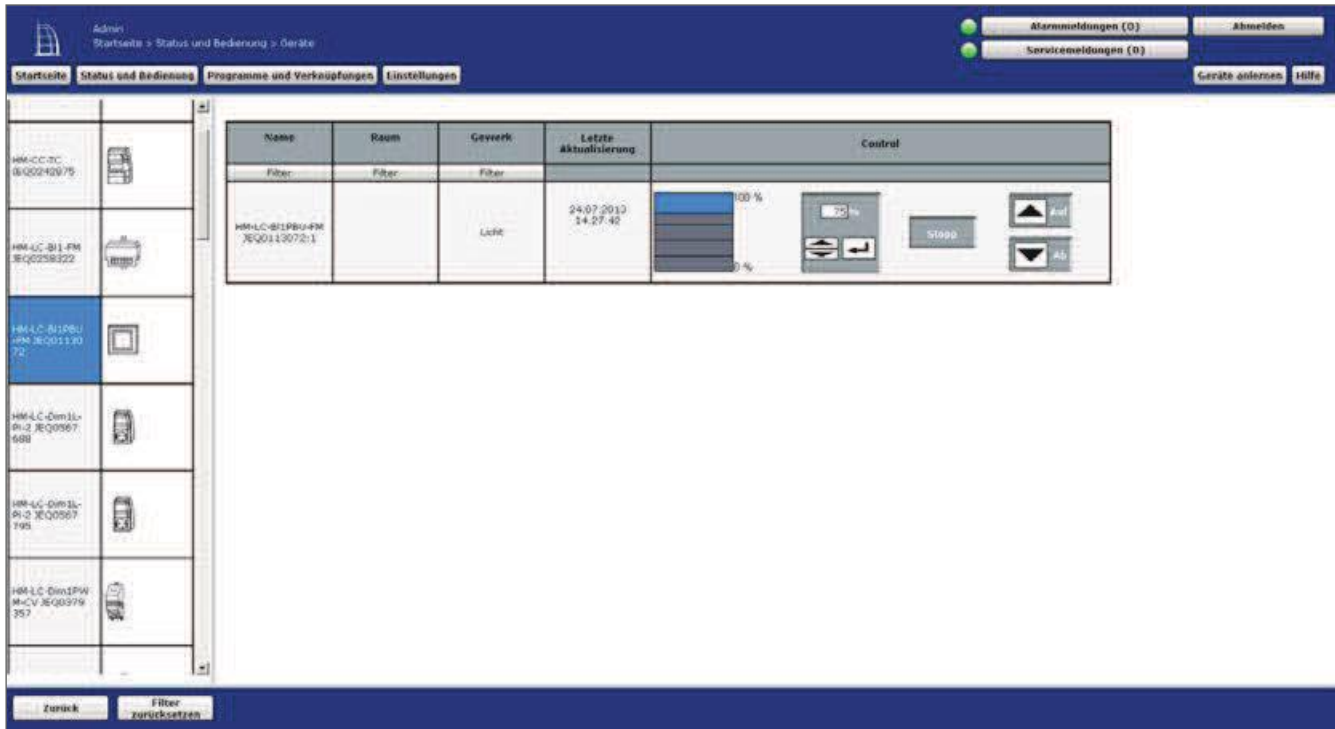

Figure 271: Stellaktor – Multi-level switching fields

1. Control Panels *Set Value*
   Set the value (drive, e.g. Behanghöhe) by mouse.

2. Input field   *Set Value*
   Setting the value (motion, e.g. Behanghöhe) by numerical input.

3. button   *Stop*
   Stops the process of the drive.

4. Button   *On*
   Starts the procedure of the drive in the upward direction.

5. Button   *Off*
   Starts the procedure of the drive in the downward direction.

Device Example: Rollladenaktor

Setting the value and transferring it to the Stellaktor
Use the mouse to click on the buttons in the graphic to start directly with the values set (0%, 25%, 50%, 75%, 100%).
•   Click with the mouse in the Value field and enter the desired numerical value

A. Then click on the "Enter" icon.

- Click the arrows in the value box to increment or decrease the value.

Start Stellaktor
- Click "On" to move the actuator up or down to the Stellaktor. The Stellaktor stops automatically at 100% (end point).

Start Stellaktor Downhill
- Click "AB" to move the actuator to the Stellaktor or to run it down. The Stellaktor stops automatically at 0% (end point).

Stop the Stellaktor procedure
- Click "Stop" to stop the actuator to the Stellaktor in the current position.

Multi-level slider with on/off
The general control has the following control and control elements:

Figure 272: Stellaktor – Multi-level slider with on/off

1. Slider   *Set Value*
     Set the value (e.g. Dimmerwert) by mouse.

2. Input field   *Set Value*
     Setting the value (E. G. Dimmerwert) by numerical input.

3. button   *A*

Switching on the Stellaktors to the old value (e.g. for a dimming actuator: switching to old brightness).

4. Button   *From*

Switch off the actuator.

Device Example: Dimming actuator

Setting the value and transferring it to the Stellaktor

- Use the mouse to click on the slider in the graphic and move it to the desired value while holding down the mouse button.
- Click with the mouse in the Value field and enter the desired numerical value. Then click on the "Enter" icon.
- Click the arrows in the value box to increment or decrease the value.

Stellaktor off

- Click Off to bring the Stellaktor to the off position (set 0 as value).

Stellaktor on old value

- Click on to return the Stellaktor to the last value before powering it off.

Multi-level slider

The general control has the following control and control elements:

Figure 273: *Shutter Actuator*-**multi-level slider**

1. Slider   *Set Value*

Setting the value (e.g. temperature of a wall thermostat) by mouse.

2. Input field   *Set Value*

Setting the value (e.g. temperature of a wall thermostat) by Zahlenwertein.

Device Example: Wall thermostat

Setting the value and transferring it to the *Shutter Actuator*
*   Use the mouse to click on the slider in the graphic and move it to the desired value while holding down the mouse button.
*   Click with the mouse in the Value field and enter the desired numerical value. Then click on the "Enter" icon.
*   Click the arrows in the value box to increment or decrease the value.

28.7 System variable

The general control has the following control elements:

Figure 274: System Variable

1. Status system variable and status
   Status over the current value of the system variable (for example, system variable "presence" with the status "present").

Example: System variable

No operation possible!

28.8 Door Lock Drive – 2-stage

The general control has the following control and control elements:
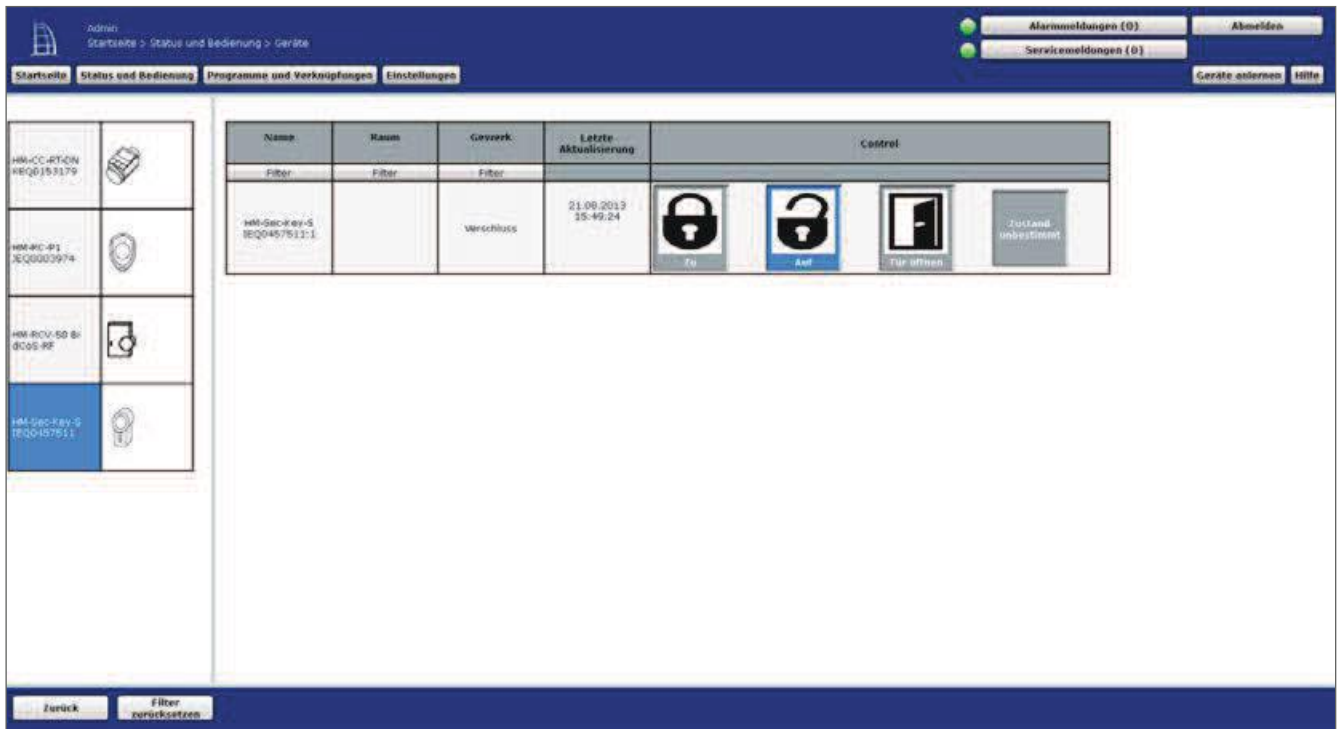
Figure 275: Door Lock Drive

1. Button *To*
   Function: Starts the completion or driving of the drive.

2. Button *On*
   Function: Starts the unlocking or driving up of the actuator in the upward direction

3. button *Open Door*
   Function: Starts the process of opening the door (for example, by dragging the trap).

4. Status *State indeterminate*
   Function: Status message about an indeterminate state of the Türantriebes.

Device Example: keymatic

Open the lock with the Stellaktor. •
   Click "On" to let the actuator drive to the Stellaktor. The Stellaktor stops automatically at 100% (end point).

Close the lock with the Stellaktor •
   Click "to" to let the actuator drive to the Stellaktor. The Stellaktor stops automatically at 0% (end point).

Open the door or pull the latch
• Click "Open Door" to open the door or to pull the trap.

28.9   Door and window contact-Sensor 2-stage

The general control has the following control and control elements:

1. Status   *Open*
   Function: Status message via the open sensor contact.

2. Status   *Locked*
   Function: Status message via the closed sensor contact.

Device Example: Door window Contact

Figure 276: Door and window Contact

🛈   No operation possible!

28.10   Push button remote control – 2-stage

The general control has the following control and control elements:
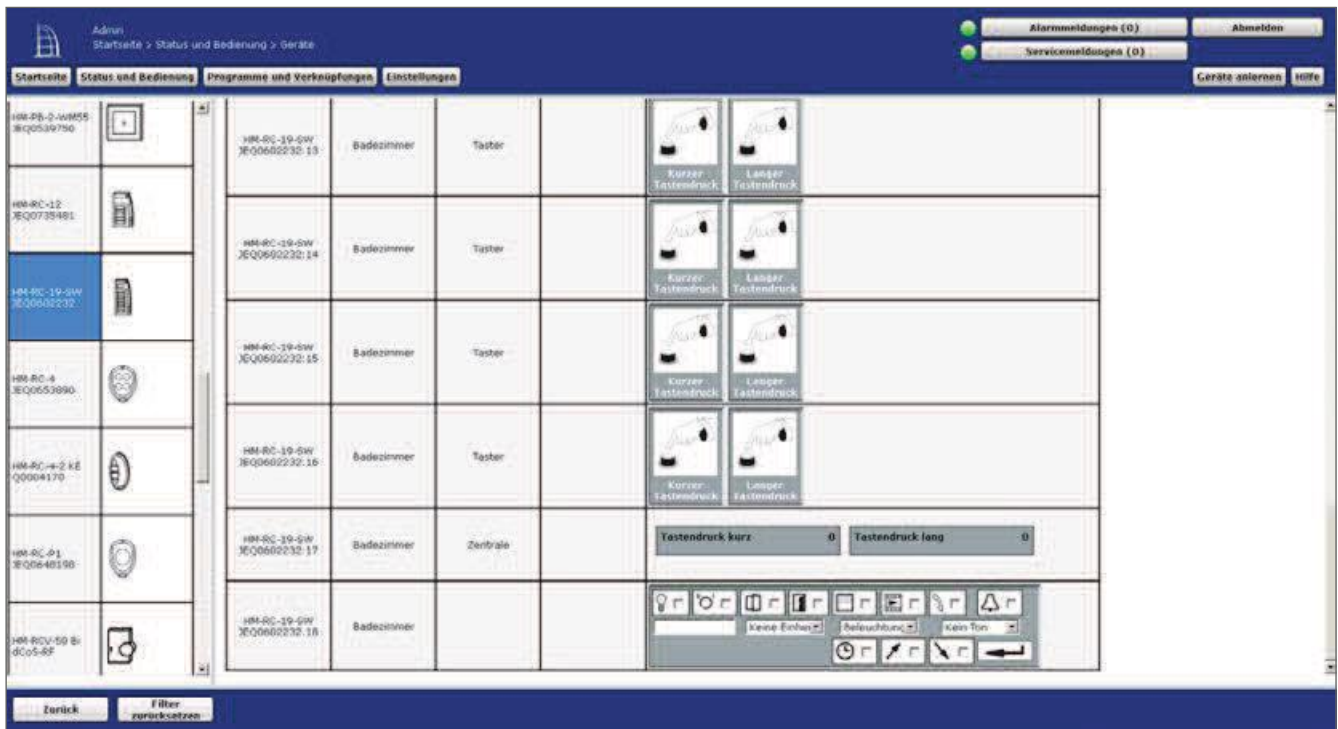
Figure 277: Push button and remote control

1. Button   *Short Press of a button*
    Triggers a short press of a button.

2. Button   *Long Button Press*
    Triggers a long button press.

Device Example: Remote control

Run Short Press
•   To perform a short press of a button, click "Short Press."

Run Long button Press
•   To perform a long press of a button, click "Long Button Press".

28.11   Value Display – Sensor values

The general control has the following control elements:

Figure 278: Value representation – Sensor values

1. Status parameter label and value
   Representation of the values belonging to the channel (measured value).

ℹ The type and extent of the parameters and measured values shown depend on the corresponding chanel.

ℹ No operation possible!

Triggering an event or operating the control element
•   Click "Press" to trigger the event or to press the control element.

28.12 Hazard detectors

The general control has the following control and control elements:

Figure 279: Hazard detector

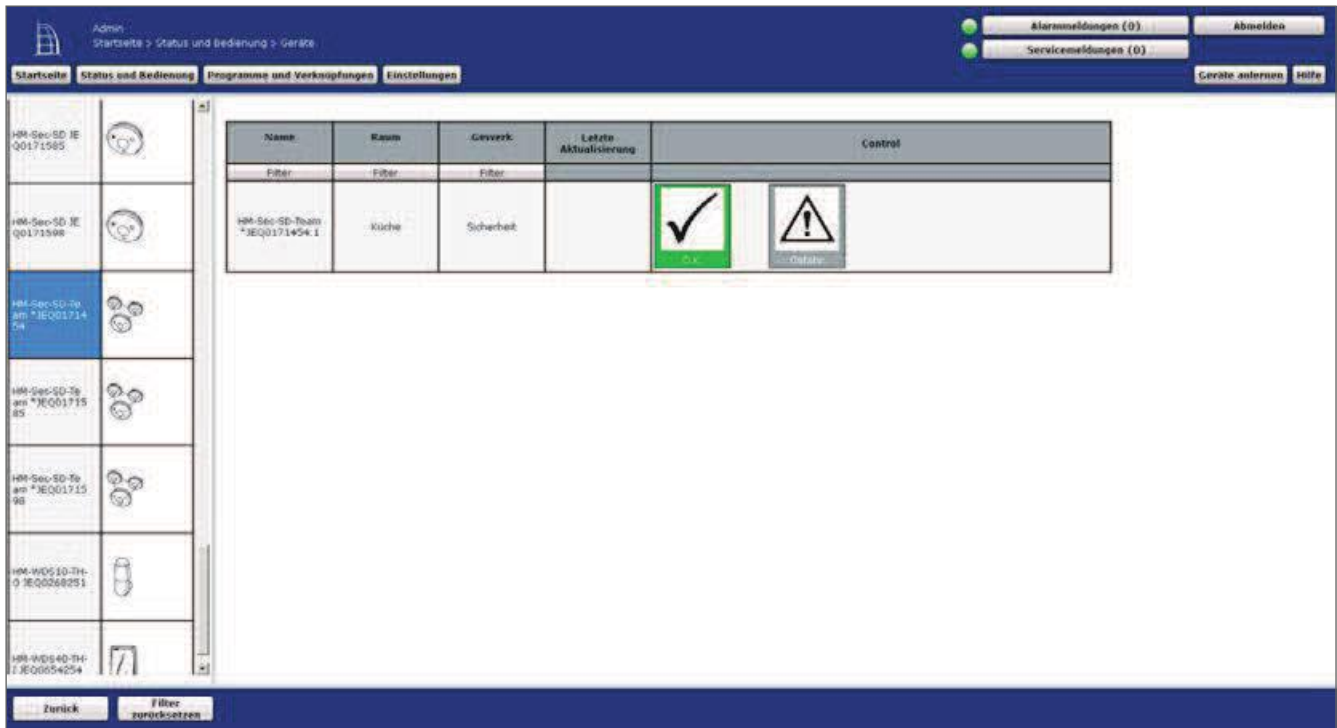1. Status *Ok.*
   Status message about the hazard detector in the unactivated state (no alarm, rest condition).

2. Status *Risk*
   Status message about the hazard detector in the activated state (alarm status).

Device Example: Smoke detector

ⓘ   No operation possible!

29   Symbols used

Warning symbol

The warning symbol shows in the control windows   *19 Status* and operation on the Service messages associated with the corresponding channel.

Note icon

The hint symbol indicates an additional important information.

Help text icon

The Help text icon indicates an existing mouseover help text.

Active Symbol-WebUI

The active symbol WebUI on the start page indicates that the WebUI is performing an Akti-on that has not yet been completed.

Active symbol Device

The active symbol device shows in the operating Windows "16 status and Operation" on page 39 and in the status overviews "16.8 status and Operation – System log" on page 48 that the corresponding channel at the current time performs an action that is still is not complete.

Enter icon

By clicking on the Enter symbol you accept a setting. For more detailed in-formations, please refer to the chapter on the corresponding window.

Add icon

Clicking on the Add icon adds another line or entry. For more information, please refer to the corresponding window section.

30 Glossary

Alarm variable/alarmname
An alarm variable is a system variable of the variable type "alarm". It describes a system state that can accept the "true" and "false" states, where the "true" state is usually equated with "alarm triggered" and automatically generates an alarm message in the system. With the help of an alarm variable different Alarmanla-gen-lines can be defined, so that the central station quasi the function of a freely configurable alarm system takes over.

Teach mode
The teach-in mode is a operating state of the central and the Homematic or Homematic IP devices in which the devices are made known to the SMRT home system or to each other. For more information about the teach-in mode of the devices, please refer to the corresponding operating instructions.

Homematic Funk
Homematic Funk is the standard for wireless communication via radio transmission between the individual Homematic devices and for communication between the Homematic devices and the central station.

Homematic Wired
Homematic Wired is the standard for wired communication via IEA485 interface (RS485 interface) between the individual Homematic wired devices under-each other and for communication between the Homematic wired devices and the Zen Trale.

Control field
A control field is the graphical element in the user interface, in which the functions of a channel are clearly displayed and in which all user-relevant information about the channel is displayed. For more information, see "28 Overview of Control and Controls (control fields)" on page 330.

Direct device Link
Direct device shortcuts connect two or more devices directly.
Other (see Also *"18 Shortcuts and programs" on page 59*). You communicate With each other without having to rely on a CCU. The control Panel is only used to create or edit the link and status capture.

The advantages are a high reliability due to the autonomous operation of the controller and the direct feedback of the receiver status to the transmitter.

Channel

A channel is a functional part of a device. For example, with the 19-button remote control, the entire remote control is the device, while each single button represents a channel.

Device

A device encompasses the entire physically tangible component. A device contains one or more channels. For example, in the 19-button remote control the entire remote control is the device, while each single button represents a channel.

Function **union**

A craft describes a functional area to which a summary term can be assigned. The " functions" attribute allows a structured, functional order e.g. of devices.

Examples of functions are light, weather, climate or safety.

Central Link/Program

Central links or programs connect two or more devices to each other via the central Schengeschaltete. The transmitter and receiver only communicate with the control Panel, there is no direct link between the individual devices. The control Panel takes over the entire controller.

Advantages are the extended programming possibilities e.g. with time control, logic-pro- and the possibility of external access to the control system (see Also   *22 Links*   and programs).

Room

A space is a spatial area that can be logically assigned to a room name. The space attribute allows for a structured, spatial order, for example, of devices. Examples of rooms can be:

- ∀ Living room
- ∀ Nursery
- ∀ (but also) Dining area or lounge in a combined living/dining room car
- ∀

System security key

The system is a house automation control based on the bidirectional Homematic or Homematic IP Radio protocol.

Many of the components support secure radio transmission of the data in order to protect your home automation control from external interventions. This is especially necessary for the one set in Sicherheitsrelvanten areas (for example, when using the Homematic keymatic). The backup is done using the AES symmetric cryptography (Advanced Encryption Standard). In the case of a secured radio connection, the receiver checks whether the sender is authorized to send a command to the receiver. The system security key is used to generate an individual AES security key and thus as a kind of password. In addition, with the system security key, various security-related operations and configurations in the user interface are protected against un-permitted access.

ℹ️ For a secure transfer of the data and thus for the use of the AES-cryptographic-toprocess, the assignment of a user-defined system security key is not required. All components that sup a secure data transfer have already been shipped with a pre-set AES security key, hereinafter also referred to as the default security key. It is recommended to use the default security key. If you have problems configuring your home automation control, you can reset the system with a low effort, since new components have also implemented the default secure Heitsschlüssel on delivery. However, if a user-defined security key is used and is no longer known, restoring the system without backing up your headquarters can become a problem. The user-defined AES security key is only stored in the backup, which allows communication with the already-harvested components.

⚠️ In order to protect security-relevant transmitters and receivers (e.g. the Homematic WinMatic) from unauthorized access, these components must enable the transfer mode "backed up" and, if they are against the default security key Decide to set the system security key. **Make a note of your System security and keep it in a safe place! For security reasons, there is no way to reset or bypass the system security Keyguard. Setting the system security key affects all components in the system.**

If you decide in retrospect for a custom system security key, you can implement it without any difficulty in the system. Renewable learning of the components is not necessary; Only the changed Confi guration must be transferred to the components.

If you want to remove the system security key again and replace it with the default security key, you need to reset the control Panel. Before doing so, you should always set all components to the factory state so that they are also provided with the default security key; This is only possible with individual system-safe-Heitsschlüssel via the control Panel. If you reset the control Panel in front of the components, you no longer have the option of putting the components into the factory state and making them usable again. Before the reset, check that the central service messages do not have configuration data for the components to be transferred.

If you exchange a central unit with an individual system security key against a central station with a default security key, you have two options for integrating the latter into the existing SY-stem. Either you first put all the components into the factory state with the old Control Panel or you transfer the backup of the old Control Panel and thus the user-defined AES security key to the new control Panel.

ℹ️ Please do not use special characters such as "&", "!", or "/" for the system security key.

System variable

A system variable is a space within the system that can be defined by the user with a name and functionality. Depending on the configuration, a system variable can be used to

1. To describe a system state in summary. For example, a system variable "presence" can be used to summarize the state of the system in the presence of people in the house.

2. Assign another value to one channel (device), i.e. another all possible
   To generate a channel (device). For example, with a Systemva-combinations "rain quantity last 24 hours", which is assigned to a weather sensor, another measurement can be generated, which is automatically calculated from the present Regenwer.

3. Create an alarm variable (alarm name) that automatically affects the
   Entries in the alarm messages (see Also   *Alarm variable/alarmname*). In
   For example, an alarm variable "alarm Zone 1" can be used to combine the status of several channels (devices) associated with the system variables, whereby the "tripping" of these alarm variables automatically indicates an alarm message in the system.

Webui

A WebUI is a Web application (also called an Internet program) that is based on a 2
Web server (in this case on the Control Panel). The user interface is displayed in a Web browser, which is also used for example when surfing the Internet (e.g. Microsoft ® Internet Explorer, Mozilla Firefox ®).

2nd   UI = User Interface

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HomeMatic

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