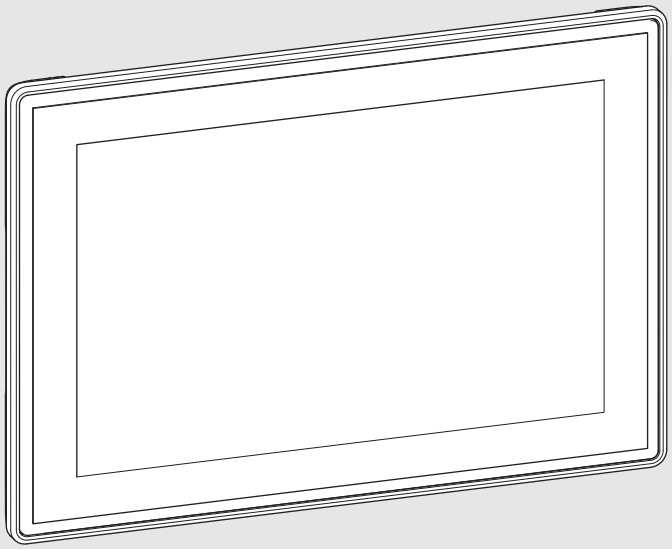
BOSCH

User manual

Central controller with touch display

Air Center Control

ACC MT



CE

6720892123 (2024/08) MT

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1 General safety instructions

⚠ Intended use

- ▶ Only use the product to control Air Flux/MDCI VRF and/or CL5000L/M air conditioning systems (VRF = Variable Refrigerant Flow).

All other use is considered unsuitable. Any damage resulting from unsuitable operations is excluded from liability.

⚠ Notices for the target group

These operating instructions are intended for this operation manual of the Air Flux/MDCI VRF and/or CL5000L/M air conditioning system.

All instructions must be observed. Failure to comply with instructions may result in material damage and personal injury, including danger to life.

- ▶ Read and retain the operation manuals of all system components (outdoor unit, indoor unit, ERV ventilation units, control units, etc.) prior to operation.
- ▶ Observe the safety instructions and warnings.

⚠ Safety instructions for care and cleaning

The projected capacitive touchscreen (PCT) contains a layer of tempered glass. This could be damaged if the touchscreen is used incorrectly.

- ▶ Only operate the touchscreen with a finger or a capacitive stylus.
- ▶ Protect against sharp edges and scratching.
- ▶ To clean, wipe with a soft cloth.
- ▶ Do not use organic solvents, acids or alkaline solutions.
- ▶ Wipe off water or fat residue without delay.

2 Data protection notices for the operator

The operator of the ACC MT central controller (or user role administrator and expert acting on behalf of the operator) is responsible for safeguarding user data.

From the operator's standpoint, data protection comprises the following:

- Not using usernames for the user accounts that are related to the individual person.
- Use strong passwords for the user accounts that are not easy to guess.
- If requested to do so by the user, the operator is under obligation to delete the corresponding user account and therefore all user data.
- Name indoor units, floor plans, schedules and calendar settings in such a way that it is difficult for outsiders to identify persons or families based on these names.

3 Product Description

The Air Flux product series is an air-conditioning system solution for commercial buildings, e.g. offices, hotels or apartment complexes.

The variable refrigerant flow central controller with ACC MT (Air Center Control) touch screen – referred to as "central controller" in this document – plays a key role in the operation of the air-conditioning system. The central controller is primarily designed to be used and operated by professional users in the area of HVAC technology who are authorised to make more in-depth system settings.

The central controller controls up to 32 outdoor and 64 indoor units (or other units of the type ERV, AF-HB or AHU-KIT) via an XYE communication cable. An optional expansion card AC-EXP controls up to 128 outdoor units and 256 indoor units (or other units of the type ERV, AF-HB or AHU-KIT) via an 4 XYE communication cable.

The central controller can be operated via 3 different user levels or user roles:

- User
- Expert
- Administrator

Users with the role of “User” can control indoor units either individually or as a group via the central controller. These users can only perform the most important settings.

Users with the role of “Expert”, e. g. Facility Manager, can access functions in the central controller such as grouping of indoor units, user management, assignment of user roles and a lock manager for time programs and diagnostics.

Users with the “Administrator” user role have unrestricted rights and can manage the rights of other users.

The central controller can be connected to a commercially-available PC via a local network (LAN).

Additionally, a connection to building management systems of third-party providers can be established via Modbus/TCP using the additional Ethernet interface provided by the expansion card AC-EXP. Connections, to fire-alarm call points or emergency flasher systems for example, can be established by using other interfaces. Connections to other systems, such as fire-alarm systems, can be established by using the digital inputs and outputs.

To protect against unauthorised access to the central controller from the Internet:

- ▶ Use suitable firewall (→ Figure 1, page 5).

System overview

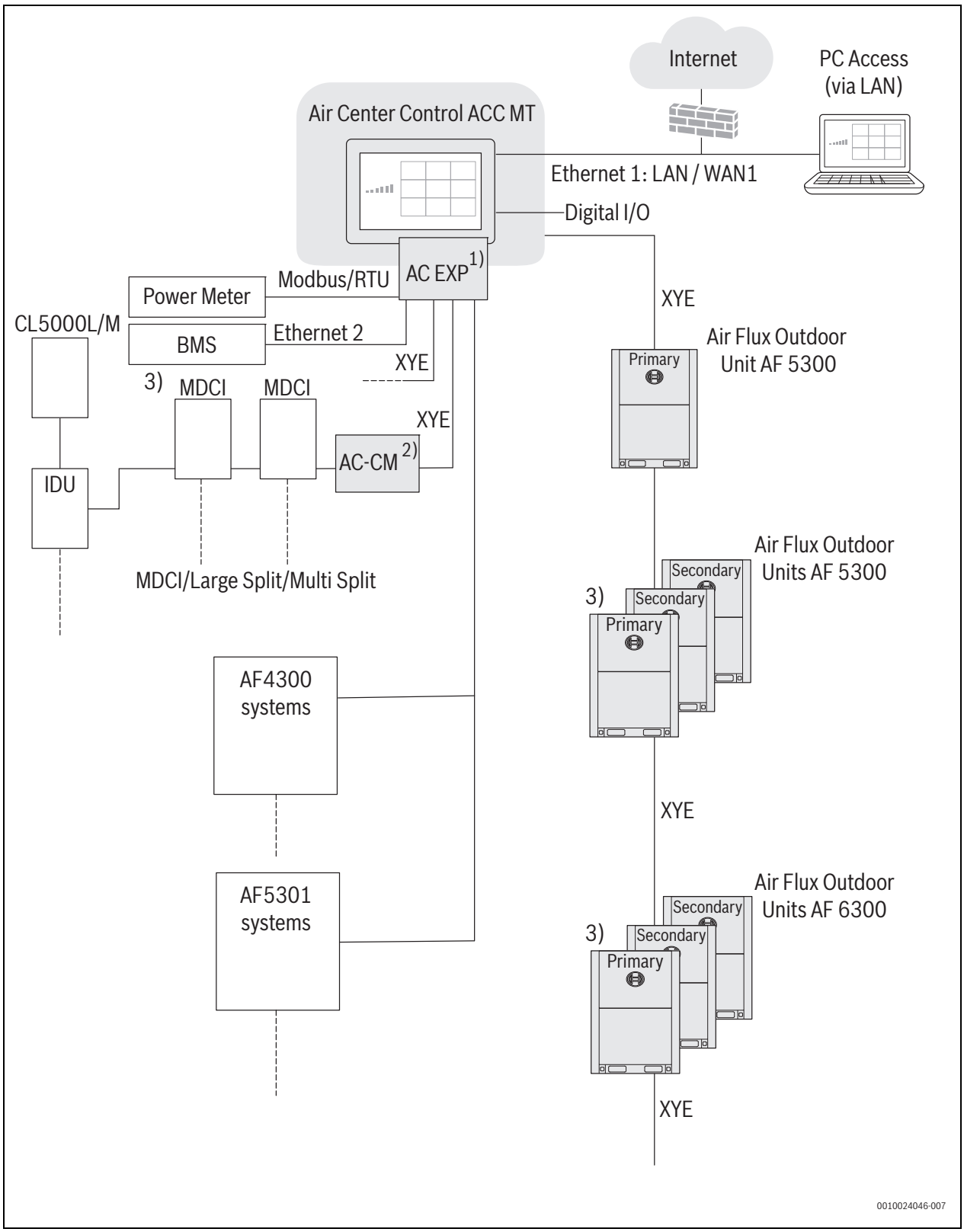


Fig. 1 VRF system overview (schematic overview;the system configuration shown is only an example, not all options are shown; the actual wiring/ piping is not shown in this figure)

1) AC-EXP (available as an accessory).

2) Adaptor AC-CM for connection of outdoor units of the type MDCI, and direct connection of selected Climate 5000L and Climate 5000M indoor units (some functions of these systems are restricted).

3) Auto addressing is the default setting in the outdoor units. However, this only leads to a successful system scan if only one refrigerant system with address “0” is connected.

If more than one refrigerant system is connected to an XYE cable, the addressing must be carried out manually in combination with unique IDU addresses.

On one XYE, either systems using an AC-CM (MDCI, CL5000L/M), or AF5300 / AF6300, or AF4300 / AF5301 can be connected. If more than one of such combinations exist, additional XYE ports via AC-EXP are required.

4 Regarding these instructions

Further applicable documents

Document
IM/OM of connected system devices
AC EXP (expansion card for ACC MT)
IM ACC MT
IM AC-CM (converter for outdoor units of the type MDCI)
AD AC-PS (power supply ACC MT)

AD Installation device
IM Installation Instructions
OM Operation manual
QSG Quick-Start-Guide

Important information

The info symbol indicates important information where there is no risk to people or property.

Additional symbols

Symbol	Meaning
▶	a step in an action sequence
→	a reference to a related part in the document
•	a list entry
–	a list entry (second level)

Table 1

Abbreviations and concept application

Abbreviation/concept	Definition
ACC MT	**A**ir **C**enter **C**ontrol with Touch Display
AF 5300/AF 5301/AF 6300, etc	Outdoor units
AHU KIT	DX-AHU connection kit
ARC	**A**ir **R**oom **C**ontrol (VRF wired/remote controller)
BMS	**B**uilding **M**anagement **S**ystem
Dashboard	Main screen on the central controller from where the user can make the most important settings.
Unit	Designation of the IDUs (indoor units) and ERV, AHU KIT and AF-HB ventilation units which are installed in the VRF system and have been detected by the central controller ACC MT. The central controller controls these units. The outdoor units are named specifically as outdoor units.
ERV	**E**nergy **R**ecovery **V**entilation Units
HB	**H**ydro **B**ox (hot water production module)
HP	**H**eat **P**ump (designation on icons representing ODUs of the type AF 5300)
HR	**H**eat **R**ecovery (designation on icons representing ODUs of the type AF 6300)
IDU	**I**n**d**oor **U**nit
IRC	**I**nfra **r**ed **c**ontroler (VRF infra-red remote control)
LAN	**L**ocal **A**rea **N**etwork
MDCI	Compact version of a VRF system with light functional restrictions
ODU	**O**ut**d**oor **U**nit
Port	Connection for an XYE cable. The central controller itself has an XYE port, the AC EXP expansion card offers 3 additional ports.
VRF	**V**ariable **R**efrigerant **F**low
WAN	**W**ide **A**rea **N**etwork
XYE	Communication BUS ACC – ODU

5 Commissioning

5.1 Configuration wizard

The configuration wizard starts automatically the first time the central controller is operated after establishing the connection with the power supply.

▶ Follow the instructions of the configuration wizard step-by-step.

The following configurations can be made:

- Select language, country, time zone, date and time
- Restore saved settings
- Perform software updates
- Create new admin user
- Start system scan

The first user account to be set up is a user account with administrator rights. Once the administrator account has been set up, the administrator can create new user accounts and assign user roles.

National data protection regulations must be observed when creating the user accounts (→ “Observe and comply with data protection notices for the operator” in the operating instructions).

The configuration wizard also starts once all settings have been reset. Previously saved user-specific settings can be restored during the **Select country** configuration step.
→ 18.6.1 "Resetting all settings"
→ 18.6.3 "Backing up and restoring settings"

6 Initial setup procedure

The following table shows a possible initial setup for the user with the user role Administrator. It may be advisable to take further steps, depending on the application.

	Reference
• Perform system scan to detect all units installed in the VRF system.	→ 16.2.4 "Scan VRF system (System scan)"
• Create user.	→ 18.1 "User management"

	Reference
• Create floor plan (if available and required).	→ 12 "Floor plans/Floor plan editor"
• Create groups.	→ 11 "Group editor"
• Define time programs and assign units.	→ 13 "Schedules"
• Define validity of time programs created in the calendar.	→ 14 "Calendar"

7 Controls

7.1 Dashboard

After successfully logging in, the **Dashboard** page appears.

→ 7.5 "Log user in and out"
→ 7.3 "Initial Menu" (access to further functions)

Overview Dashboard

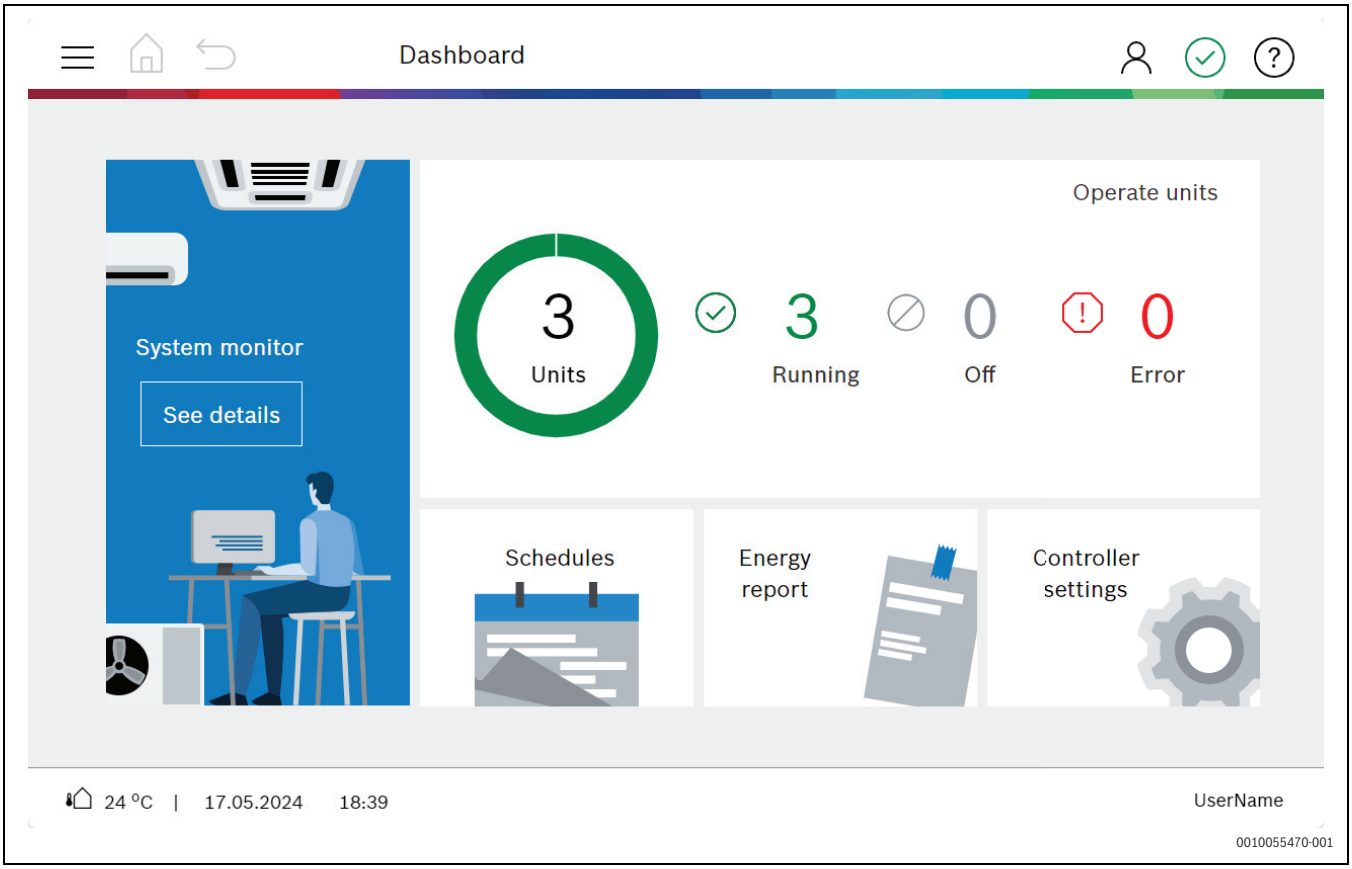
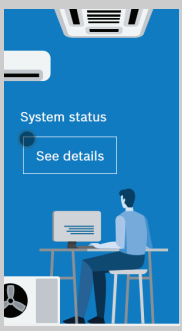
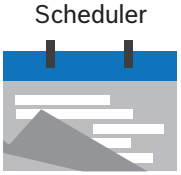
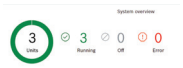


Fig. 2 Example of display (changes are possible)

	Designation	Description/references
	Header	• Navigation element, at the top edge of the screen on every page → 7.2 "Header"
	System monitor	• Opens the System monitor view.

	Designation	Description/references
	Energy report	• Opens the Energy report view.
	Operate units	• Edit indoor units, groups, adjust one or several units. • Access tile, list and floor plan view display variants. • Set functions such as Mode, Fan or Temp for selected indoor units. → 8 "Operating units" → 8.2 "Display variants" → 11 "Group editor" → 9 "Settings sidebar"
	Schedules	• Create and edit time programs. • Assign indoor units to the schedules. • Set time periods and operating functions for the indoor units. → 13 "Schedules"
	Controller settings	• Configure central controller. → 18.1 "User management" → 18.2 "Network settings" → 18.3 "Screen settings" → 18.4 "Language, date and time" → 18.5 "E-mail manager" → 18.6 "Device and updates"
	System status	• Shows all units that are switched on, and also those that are switched off, and also units that are affected by faults. • Access indoor units in all display variants. → 20 "Troubleshooting" → 8 "Operating units" → 8.2 "Display variants" → 16.2 "System structure"

7.2 Header

The header is located on each side at the top edge of the screen. It makes navigation through the user interface easier.

Header overview

	Description	Description/references
	Main menu	• Access functions. → 7.3 "Initial Menu"
	Dashboard	• Call up the **Dashboard** page. → 7.1 "Dashboard"
	Back	• Go back to the previous page.
	Middle of the header	• Shows the title of the page.
	Logout	• Log user out.

	Description	Description/references
		• Call up fault and event history. • Yellow symbol: pending warning. • Red symbol: pending faults. • Symbol green checkmark: there are neither pending warnings nor faults. → 16.1 "Fault and event history" → 20 "Troubleshooting"
	Help	• Guides to the User manual. → 19 "Help"

7.3 Initial Menu

The main menu is an element of the header. Functions can be accessed via the main menu.

To call up the main menu:

▶ Select header > ☰.
The main menu expands.

→ 7.2 "Header"

Overview Main menu

	Description	References
		• Show subfunctions.
	Operate units	→ 8 "Operating units"
	Schedules	→ 13 "Schedules"
	Calendar	→ 14 "Calendar"
	Energy management	→ 15 "Energy management"
	Diagnosis	→ 16 "Diagnosis"
	System configuration	→ 17 "System configuration"
	Controller settings	→ 18 "Controller settings"
	Help	→ 19 "Help"

7.4 Footer

The footer is displayed on every page at the bottom edge of the screen. The outside temperature, date, time and the user name of currently logged-in use are displayed in the footer.

→ 18.4 "Language, date and time"

7.5 Log user in and out

Logging in user

If a user is not logged in, the **Login** dialogue box appears.

To log in a user:

▶ Enter user name in the field **User name**.
▶ Enter password in the field **Password**.
▶ Select language via the **Language** dropdown list.
▶ Select **Login**.
The **Dashboard** page appears.

→ 7.1 "Dashboard"

Log user out

To log a user out:

▶ Header >  > **Logoff**
User is logged out. The **Login** dialogue box appears.

→ 7.2 "Header"

8 Operating units

All units can be operated, grouped and adjusted individually via the page **Operate units**.

To call up the page **Operate units**:

▶ **Dashboard** > **Operate units**

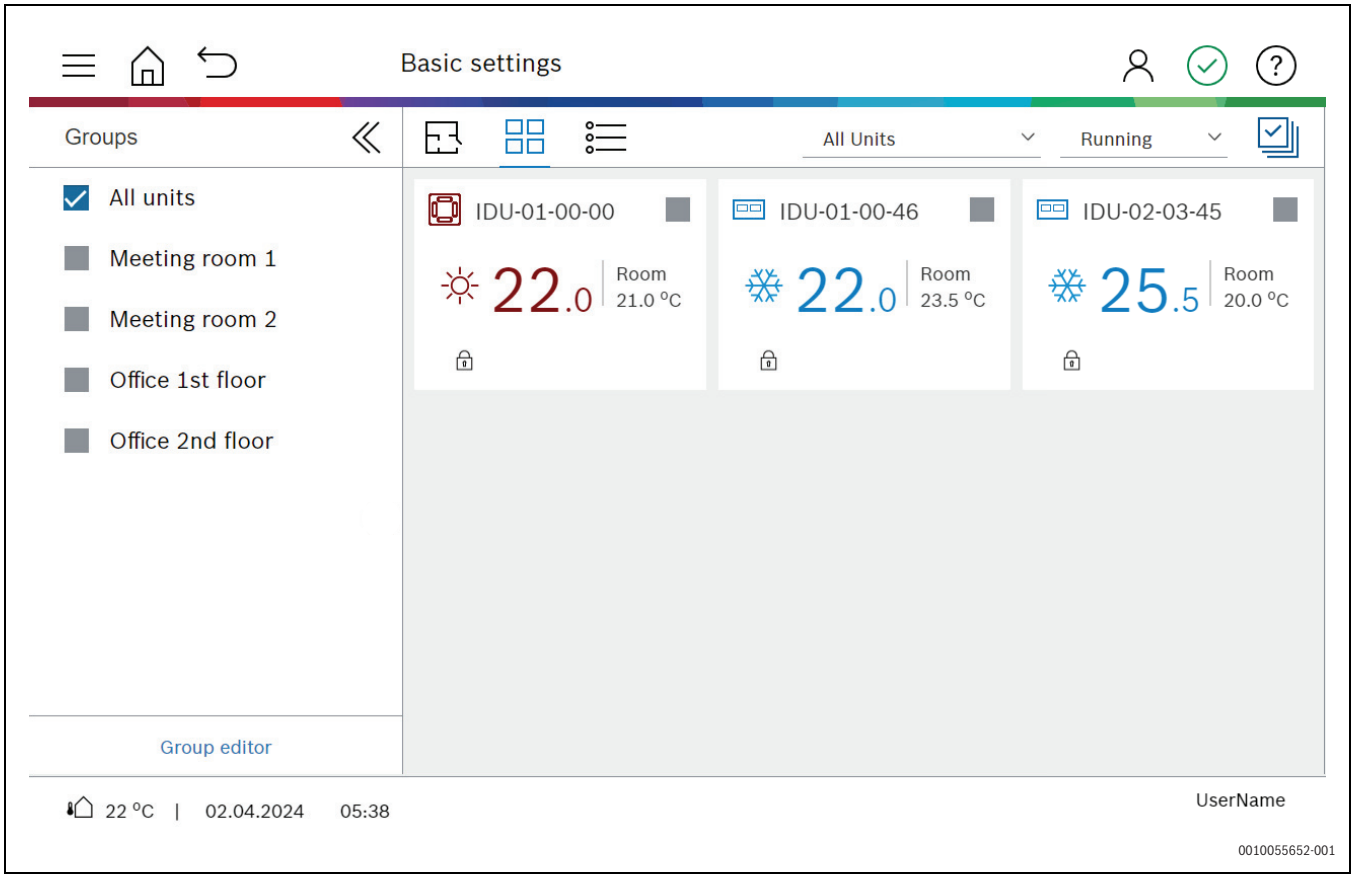
-or-

▶ Header > > **Operate units**

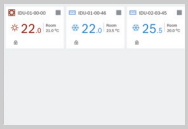
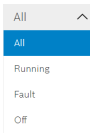
The **Operate units** page appears in the tile view.

→ 7.1 "Dashboard"
→ 7.2 "Header"

8.1 Overview Operate units



	Description	Description/references
	Header	• Navigation element, at the top edge of the screen on every page → 7.2 "Header"
29°C | 20.03.2019 1:05 pm	Footer	• Display of outdoor temperature, date, time and the user name of currently logged-in user → 7.4 "Footer"
Group editor	Group editor	• Combining units into groups. → 11 "Group editor"
	Area Groups	• Display and selection of created groups • Display and selection of all units • The Settings sidebar appears once units have been selected → 8.4 "Selecting and deselecting units for editing" → 9 "Settings sidebar"
	Display variants	• View of Operate units page with 3 possible variants: – Tile view – List view – Plan view → 8.2 "Display variants"

	Description	Description/references
	Units view area	• Displays the units selected in the Groups area. • Selection of units → 8.4 "Selecting and deselecting units for editing"
	Dropdown list selection	• Selection of units with specific attributes (e.g. switched off) → 8.4 "Selecting and deselecting units for editing"
All Units	Dropdown list selection of units: • AF5300/MDCI/Split • AF6300 • AHU HP • AHU HR • ERV • AF4300/AF5301 • All Units	• Selection of units → 8.4 "Selecting and deselecting units for editing"
	Select all or Select none	• Select all units. • Once all units have been selected, all units can be deselected via the Select nonebutton which then appears. → 8.4 "Selecting and deselecting units for editing"

Recommendation for overview
With larger systems, the most efficient way to use the display variants is to create groups. As a recommendation, no more than 25 indoor units should be assigned to a group in order to be able to adjust them and establish an overview more quickly.

→ 11 "Group editor"

8.2 Display variants

The **Operate units** page can be displayed in 3 different views:
- Tile view
- List view
- Floor plan view

The symbol for the selected view is displayed in blue.

The Group editor can be accessed via the tile and list view.

The **Floor plan editor** can be accessed via the Floor plan view.

If many indoor units are to be displayed simultaneously, there may be short delays when calling up or switching between views. The screen turns slightly darker and the message **Your request is currently being processed** appears.

The selection and setting options of the units are only described for the tile view in this documentation, but also apply for the List view and Floor plan view.

→ 11 "Group editor"
→ 12 "Floor plans/Floor plan editor"

8.2.1 Tile view

To switch from another view to the Tile view:

▶ Select .
The Tile view of the **Operate units** page appears. is displayed in blue.

8.2.2 List view

To switch from another view to the List view:

▶ Select .
The List view of the **Operate units** page appears. is displayed in blue.

8.2.3 Floor Plan view

To switch from another view to the Floor plan view:

▶ Select .

The Floor plan view on the **Operate units** page appears. is shown in blue.

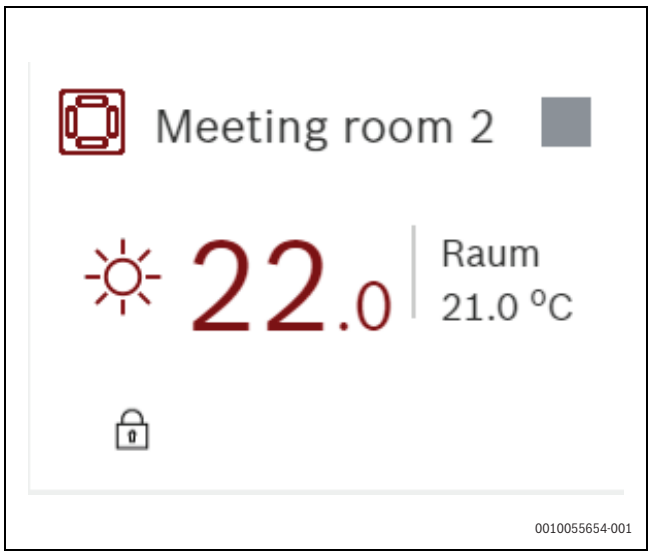
→ 12 "Floor plans/Floor plan editor"

8.3 Units illustration

On the **Operate units** page, in the units view area, the units (e.g. all units of a group) are represented that can be selected via the Groups area.

→ 8.1 "Overview Operate units"

Units illustration overview



	Description	Description/references
	Symbol unit	• Unit type in the colour of the operating mode currently selected → "Overview of symbols for unit types" → 9.1.4 "Set operating mode"
Meeting room 2	Name of the unit	→ 11.10 "Changing the name of a unit"
22.0	Operating mode and setpoint temperature	→ 9.1.4 "Set operating mode" → 9.1.5 "Adjusting the set temperature"
Room 20 °C	Room temperature	Display of current room temperature
		• Display in the lower area of the tile that certain settings are blocked. → 10 "Lock Manager"
		• Display in the lower part of the tile that the time program to which the unit is assigned to is active. → 13 "Schedules"
Off	Display **Off** (or other states)	• The following states can be displayed in the lower area of the tile: – Unit is switched off. – Unit can be reached , but has a fault. – Unit cannot be reached. – The operating mode selected is currently not available. → 16.2 "System structure" → 20 "Troubleshooting"

Overview of symbols for unit types

Symbol	Name of unit type
	4-way, 2-way or 1-way cassette
n	ARC group with n units (only IDUs) Several indoor units can be connected to one room controller. A so-called ARC group is thus being installed. The number of grouped units appears in the symbol for the ARC group. Settings made at the ARC or the central controller are applied to all indoor units in this group.

Symbol	Name of unit type
	Ceiling and floor unit
	Built-in ducted indoor unit
	Floor standing unit
	Wall mounted unit
	ERV ventilation unit

Symbol	Name of unit type
	DX-AHU connection kit AHU KIT
	Outdoor units (ODUs) of the type AF 5300 and similar without heat recovery
	Outdoor unit (ODU) of the type AF 6300
	Hot water production module AF-HB

The unit types are displayed in the colour of the assigned operating mode.

ARC groups behave like a virtual indoor unit: the same settings are displayed for all indoor units in this group. If a fault develops in one of the indoor units, the ARC group indicates a general fault display. The fault description for the individual indoor units of the ARC group can be called up from the **Fault and event history** page.

→ 16.1 "Fault and event history"

8.4 Selecting and deselecting units for editing

The units can be operated with all 3 display variants via the **Operate units** page.

To operate units individually (e.g. Set temperature, Mode, ...), units must be selected beforehand. The units are selected in the Units view area or in the Floor plans with units area.

The unit type (indoor unit, ERV, AHU KIT) can initially be selected:

▶ Select dropdown list unit selection.

The following options can be selected:

- AF5300/MDCI/Split
- AF6300
- AHU HP
- AHU HR
- ERV
- AF4300/AF5301

→ 8.1 "Overview Operate units"
→ 12.1 "Overview Floor plan view"
→ 8.2 "Display variants"
→ 9 "Settings sidebar"

8.4.1 Select an individual unit

To select an individual unit for editing:

▶ ☐ Select the unit to be edited.
☑ appears. Unit is selected. The **Settings** sidebar appears.

→ 8.3 "Units illustration"
→ 9 "Settings sidebar"

8.4.2 Selecting several units

To select several units for editing:

▶ ☐ Select the units to be edited.
☑ appears. Units are selected. The Settings sidebar appears.

-or-

▶ Select dropdown list selection.

The following options can be selected:

- **All**: all units detected by the system are displayed.
- **Running**: all units that are in operation are displayed.
- **Fault**: all units in which a fault is present are displayed.
- **Off**: all units that are switched off are displayed.

To select all (prefiltered) displayed units:

▶ Select Select all.
☑ appears. Units are selected. The Settings sidebar appears.

If many indoor units are to be displayed simultaneously, there may be short delays when displaying the units. The screen turns slightly darker and the message **Your request is currently being processed** appears. To prevent this:

▶ Units can be pooled into groups on the **Group editor** page.

→ 8.1 "Overview Operate units"
→ 12.1 "Overview Floor plan view"
→ 9 "Settings sidebar"
→ 11 "Group editor"

8.4.3 Select one or several groups

Groups can be selected for editing in the Tile view and List view on the **Operate units**page.

To select a group for editing:

▶ Make sure that all units have been deselected.
▶ ☐ Select the group to be edited in the area **Groups**.
☑ appears. Units belonging to the group appear in the area View of units where they can be selected.

→ 11 "Group editor"
→ 8.4.4 "Deselecting units or groups"
→ 8.4.2 "Selecting several units"
→ 8.2 "Display variants"
→ 8.1 "Overview Operate units"

8.4.4 Deselecting units or groups

To deselect selected units or groups:

▶ Select ☑.
☐ appears. Unit or group is deselected.

To deselect all selected units:

▶ Select **Select none**.
☐ appears. Units are deselected.

→ 8.1 "Overview Operate units"
→ 8.3 "Units illustration"
→ 11 "Group editor"

9 Settings sidebar

9.1 Settings

On the **Operate units**page (in all 3 display variants), units can be adjusted via the **Settings** sidebar.

To call up the sidebar:

- ▶ Select at least one unit to be adjusted.
  The **Settings** sidebar appears on the left hand edge of the screen on the **Operate units** page.

If a large number of indoor units are selected at the same time, brief delays may occur when adjusting the units. The screen darkens slightly and the message **Your request is currently being processed** appears. To prevent this:

- ▶ Arrange the units into groups on the **Group editor** page.

If units are assigned to a schedule, the settings defined for the schedule apply for the units. Settings that are made for the units via the page **Operate units** are no longer valid. If a schedule is active, the settings can be changed via the central controller, ARC or IRC. These settings remain active until the next time the schedule is changed. If a period ends, the units are switched off. If a period starts, the settings defined there are applied.

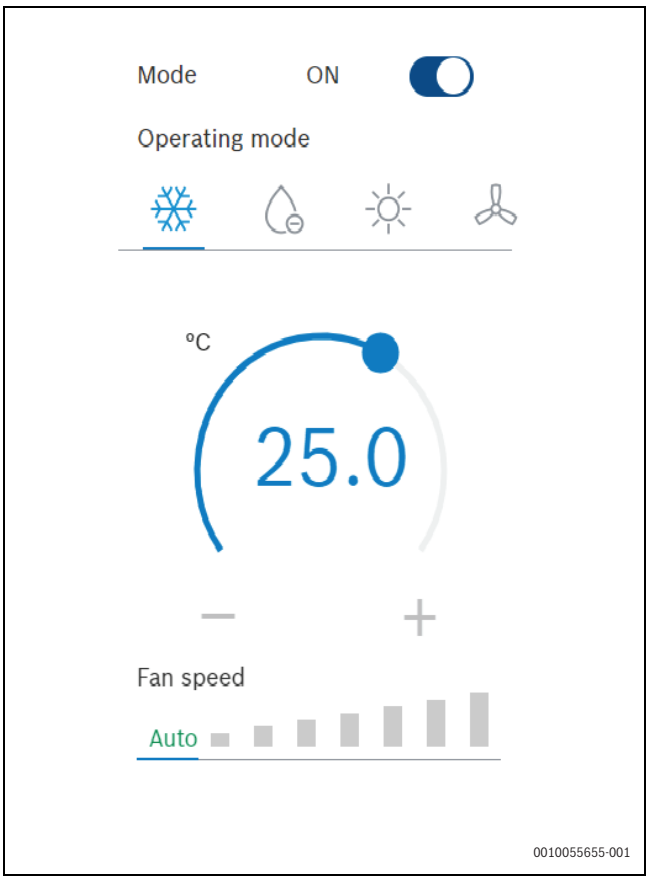
→ 8.4 "Selecting and deselecting units for editing"
→ 8 "Operating units"
→ 13 "Schedules"
→ "Locking the wired remote control"
→ "Locking the infra-red remote control"
→ 8.2 "Display variants"
→ 11 "Group editor"

9.1.1 Overview sidebar Settings

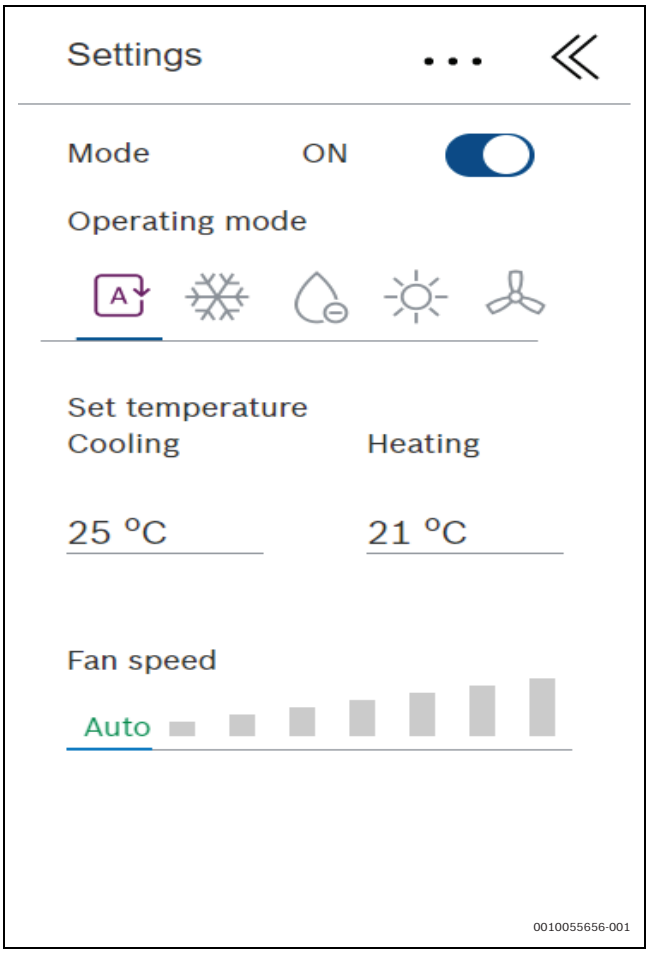
In case of the AHU Kit type, only the 3 speeds can be selected.
If it is CL5000L/M type, 7 fan speeds are displayed, however, only 3 fan speeds can be selected. For example, when selecting 6, it will jump after a few seconds to 7 (as it is a “high” fan speed):

- ▶ 1/2 = low speed (displayed as “1”)
- ▶ 3/4 = mid speed (displayed as “3”)
- ▶ 5/6/7 = high speed (displayed as “7”)

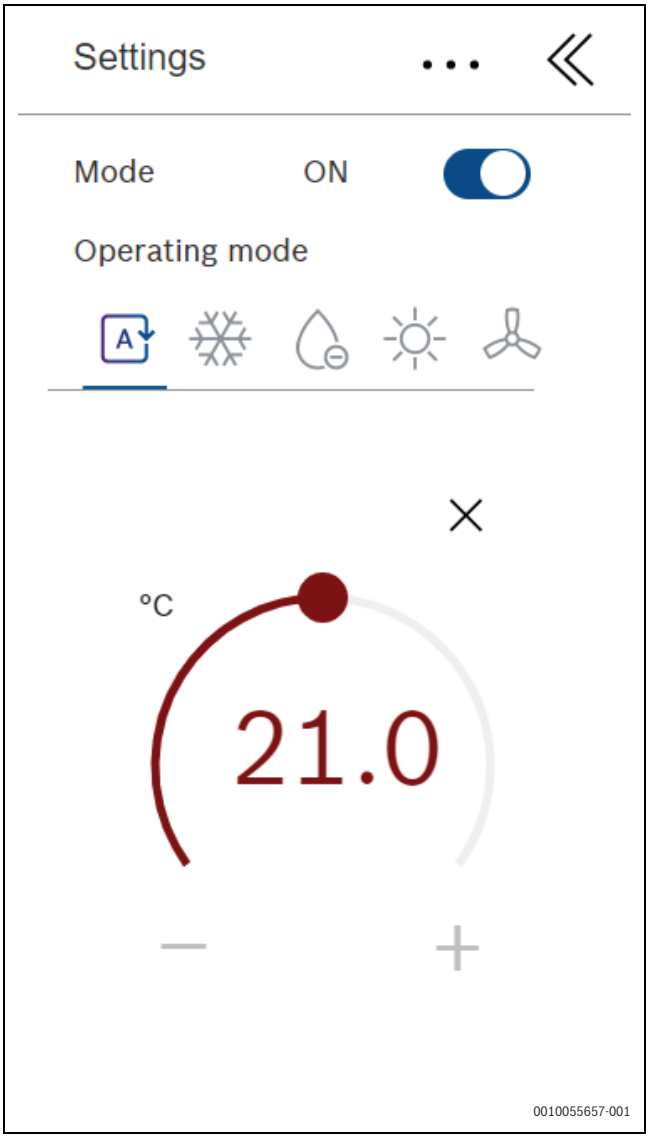
View for systems with HP outdoor unit



View for systems with HR outdoor unit

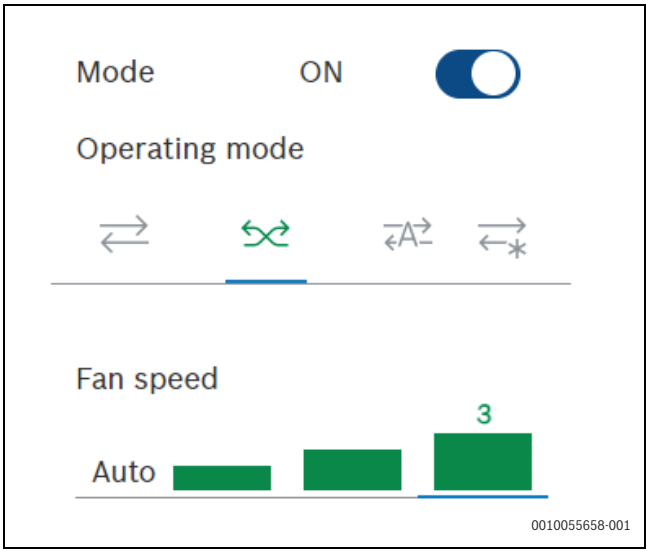


Changing the view after selecting the Cooling or Heating set temperature in systems with outdoor unit AF 6300



→ 9.1.5 "Adjusting the set temperature"

View following selection of an ERV ventilation unit



Making settings → 9.2 "Settings ERV"

If several units with different setting options are selected, only the common control elements (e. g. ON/OFF) are displayed.

Description	Description/reference
Mode	• Switch selected units on and off. → 9.1.3 "Operation – switching the units on and off"
Operating mode	• Set operating mode for selected units. → 9.1.4 "Set operating mode"
Set temperature	• Adjust set temperature for selected units via rotary control (cannot be adjusted in Fan Mode). • With the Auto Mode operating mode, Cooling and Heating can be adjusted for the selected units. The corresponding rotary control appears following selection. → 9.1.5 "Adjusting the set temperature"
Fan speed	• Set fan speed for selected units. → 9.1.6 "Set fan speed"
• • •	• Call up Lock manager (e.g. Lock manager). → 10 "Lock Manager"
«	• Hide sidebar. → 9.1.2 "Displaying/hiding the sidebar"

9.1.2 Displaying/hiding the sidebar

To hide the sidebar:

▶ Select «.
Sidebar is hidden.

To display the sidebar:

▶ Select ».
Sidebar is displayed.

9.1.3 Operation – switching the units on and off

Pre-selected units can be switched on and off via the **Mode** area in the sidebar.

To switch off selected units that have been switched on:

▶ Select .
appears. The display in the sidebar changes from **Mode** ON to OFF. The selected units are displayed greyed out and **Off** is displayed in the View of units area on the **Operate units** page. Units are not in operation.

Settings can also be made for units that are not switched on, which then take effect once the units have been switched back on.

To switch on selected units that have been switched off:

▶ Select .
appears. The display in the sidebar changes from **Mode** OFF to ON. The selected units are displayed in the View of units area on the **Operate units** page. The units are in operation.

→ 8 "Operating units"
→ 8.4 "Selecting and deselecting units for editing"

9.1.4 Set operating mode

The operating mode for the previously selected units can be set via the **Operating mode** area in the sidebar.

The following operating modes are available:

Symbol	Operation Mode
	Auto Mode (only in systems with outdoor unit AF 6300)
	Cooling mode
	Dehumidification mode
	Heat mode
	Fan (Only) Mode

To set the operating mode for selected units:

▶ Select symbol of the required operating mode (greyed out).
The operating mode appears in colour and is displayed with the selected units in the Units view area on the **Operate units** page.

→ 8 "Operating units"
→ 8.4 "Selecting and deselecting units for editing"
→ 8.3 "Units illustration"

9.1.5 Adjusting the set temperature

The setting temperature for pre-selected units can be set via the Set temperature area in the sidebar.

The Set temperature area appears if one of the following operating modes is set:

- Auto Mode (only for systems with AF 6300)
- Cooling mode
- Dehumidification mode
- Heating mode

Special feature with Auto Mode operating mode: Setting temperature can be adjusted Cooling and Heating separately. The corresponding rotary control appears after a button is selected. This means that a temperature band can be set. Cooling takes place above the upper set value (for cooling), heating takes place below the lower set value (for heating).

It is not possible to set a higher set value for Heating than for Cooling. An identical set value also cannot be set as a difference of 1 °C between the set values is always set automatically.

To adjust the set temperature for selected units:

▶ Drag the rotary control in the + direction or tap the semicircle directly at any point until the required set temperature (value in the centre) is displayed.

-or-

▶ Drag the rotary control in the — direction or tap the semicircle directly at any point until the required set temperature (value in the centre) is displayed.
The new set temperature is displayed for the selected units in the Units view area on the page **Operate units**.

Alternatively, the set temperature can also be adjusted as follows:

▶ Select + or — until the required set temperature is obtained.

To return to the Cooling and Heating selectionin the **Auto Mode operating** mode:

▶ Select ×.
Rotary control is closed. The Cooling and Heating selection appears.

→ 9.1.4 "Set operating mode"
→ 8 "Operating units"
→ 8.4 "Selecting and deselecting units for editing"

9.1.6 Set fan speed

The fan speed for the previously selected units can be set via the **Fan speed** area in the sidebar.

There are 7 fan speeds: 1 has the lowest fan output rate, 7 has the highest. There are 3 fan speeds in units of the type ERV and AHU KIT. The fan speed **Auto** is also available. The fan speed is automatically adjusted in **Auto** Mode as soon as there is a difference between the set temperature and room temperature.

To set the fan speed for selected units:

▶ Select bars of the required fan speed.
All bars up to the selected fan speed are displayed in green.

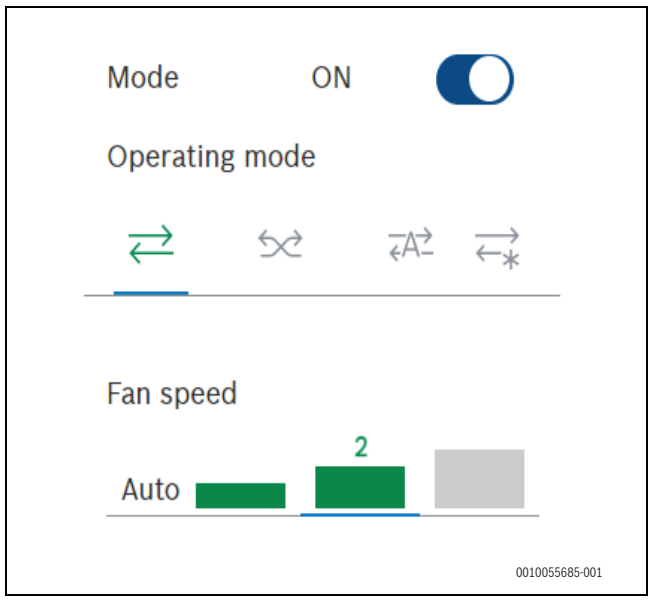
-or-

▶ Select **Auto**.
The fan speed of the selected units is displayed in the Units view area on the **Operate units** page as a number or as **Auto**.

→ 9.1.4 "Set operating mode"
→ 8 "Operating units"
→ 8.4 "Selecting and deselecting units for editing"
→ 9.2 "Settings ERV"

9.2 Settings ERV

The sidebar for setting selected units of the type ERV can be called up via the menu item **Settings ERV**.



Description	Description/reference
Mode	• Switch selected units on and off. → "Operation – switching units off and on"
Operating mode	• Set operating mode for selected units. → 9.2.1 "Set operating mode"
Fan speed	• Set fan speed for selected units. → 9.2.2 "Set fan speed"

9.2.1 Set operating mode

The operating mode for the previously selected units can be set via the **Operating mode** area in the sidebar.

The following operating modes are available:

Symbol	Operating mode
	By-pass Supply and extract air mode without energy recovery. This is used for small temperature differences between the outside and inside.
	Energy recovery To increase energy efficiency, the energy in the exhaust air is recovered by using it to heat/cool the supply air. This is used for large temperature differences between the outside and inside.
	Auto Mode Depending on the temperature difference between the outside and inside, the ERV ventilation unit automatically switches between Bypass operating mode and Energy recovery operating mode[1)] The fan speed is controlled automatically based on the CO_2 value measured in the extract air.
	Free cooling The fan speeds 1-3 (not **Auto**) can be set. Depending on the temperature difference between the outside and inside, the ERV ventilation unit automatically switches between Bypass operating mode and Energy recovery operating mode[2)].

1) Difference inside and outside temperature ≥ 5 °C = Energy recovery operating mode; Difference indoor and outdoor temperature < 5 °C = Bypass operating mode

2) Room temperature < outside temperature = Energy recovery operating mode; room temperature ≥ outside temperature = Bypass operating mode

To set the operating mode for selected units:

▶ Select symbol of the required operating mode (greyed out).
The operating mode appears in colour and is displayed with the selected units in the Units view area on the **Operate units** page.

→ 8 "Operating units"
→ 8.4 "Selecting and deselecting units for editing"
→ 8.3 "Units illustration"

Operation – switching units off and on

Previously selected ERV units can be switched off and on via the **Mode** area in the sidebar.

To switch off selected units that are switched on:

▶ Select .
appears. The display in the sidebar changes from **Mode** ON to OFF. The selected units are greyed out and displayed as **Off** in the Units view area on the **Operate units** page. Units are not in operation.

Settings can also be made for units that are switched off and are applied when the units are switched back on.

To switch on selected ERV units that are switched off:

▶ Select .
appears. The display in the sidebar changes from **Mode** OFF to ON. The selected units appear in the Units view area on the **Operate units** page. The units are in operation.

→ 8 "Operating units"
→ 8.4 "Selecting and deselecting units for editing"

9.2.2 Set fan speed

The fan speed for the previously selected units can be set via the **Fan speed** area in the sidebar.

The fan speed can only be selected and adjusted if one of the following operating modes is set:

- Bypass operating mode
- Energy recovery operating mode
- Free cooling operating mode

There are 3 fan speeds: 1 has the lowest fan output rate, 3 has the highest. The fan speed **Auto** is also available. The fan speed is automatically adjusted in **Auto** Mode as soon as there is a difference between the set temperature and room temperature.

To set the fan speed for selected units:

▶ Select bars of the required fan speed.
All bars up to the selected fan speed are displayed in green.

-or-

▶ Select **Auto**.
The fan speed of the selected units is displayed in the Units view area on the **Operate units** page as a number or as **Auto**.

→ 9.2.1 "Set operating mode"
→ 8 "Operating units"
→ 8.4 "Selecting and deselecting units for editing"

9.3 Exiting the settings sidebar Settings

To return to the **Groups** area (after editing the units):

▶ Deselect all units.
The **Groups** area (groups/floor plans) appears.

→ 8 "Operating units"
→ 12 "Floor plans/Floor plan editor"
→ 8.4 "Selecting and deselecting units for editing"

10 Lock Manager

Lock manager can be made for selected units via the **Settings** sidebar.

To call up the Lock manager:

▶ Select • • •.

→ 8.4 "Selecting and deselecting units for editing"

10.1 Settings of selected units

Settings of selected units can be locked for changes via menu item Lock manager.

Range	Description/references
Min. cool. temp	• Set the lower temperature limit for operating mode cooling mode; only these or higher temperatures can be set with this. → "Setting cooling limit"
Max. heat. temp	• Set the upper temperature limit for operating mode heating mode; only these or low temperatures can be set with this. → "Setting heating limit"
Lock operating mode	• Lock heating mode only and cooling mode only operation mode for setting changes, or off mode to cancel this lock. → "Disabling operating mode" Example: if the operating mode is locked in “heating mode only ” operating mode, all other operating modes cannot be set.
Lock IRC	• Lock the VRF infra-red remote control ARC C IR. Changes to the settings are no longer possible via VRF infra-red remote control. → "Locking the infra-red remote control"
Lock ARC	• Lock the VRF cable remote control ARC. Changes to the settings are no longer possible via VRF cable remote control ARC. → "Locking the wired remote control"
Lock fan settings	• Lock set fan speed for setting changes. → "Locking the fan settings"

Setting cooling limit

A temperature limit can be set for pre-selected units in the **Min. cool. temp** area of the Lock Manager.

The specified lower temperature limit cannot be undercut when modifying the settings for the units.

To set the lower temperature limit in Cooling mode for selected units:

▶ Select temperature value in the area **Min. cool. temp**.
Control dial appears.
▶ Drag the control dial in the + direction, or touch the semicircle directly at any given point, until the required lower temperature limit (temperature value displayed in the centre) is reached.

-or-

▶ Drag the control dial in the — direction, or touch the semicircle directly at any given point, until the required lower temperature limit (temperature value displayed in the centre) is reached.

Alternatively, the lower temperature limit can also be adjusted as follows:

▶ Select + or — until the required lower temperature limit is reached.

To apply the new temperature value:

▶ Select ×.
Control dial closes. The lower temperature limit is set. 🔒 appears in the area View of units on the **Operate units** page next to the selected units.

→ 8.4 "Selecting and deselecting units for editing"

Setting heating limit

An upper temperature limit can be set for pre-selected units in the **Max. heat. temp** area of the Lock Manager.

The specified upper temperature limit cannot be exceeded when modifying the settings for the units.

To set the upper temperature limit for selected units in Heating mode:

▶ Select temperature value in the area **Max. heat. temp**.
Control dial appears.
▶ Drag the control dial in the + direction, or touch the semicircle directly at any given point until the required set upper temperature limit (temperature value displayed in the centre) is reached.

-or-

▶ Drag the control dial in the — direction, or touch the semicircle directly at any given point until the required set upper temperature limit (temperature value displayed in the centre) is reached.

Alternatively, the upper temperature limit can also be adjusted as follows:

▶ Select + or — until the desired upper temperature limit is reached.

To apply the new temperature value:

▶ Select ×.
Control dial closes. The upper temperature limit is set. 🔒 appears in the area View of units on the **Operate units** page next to the selected units.

→ 8.4 "Selecting and deselecting units for editing"

Disabling operating mode

The following operating modes can be disabled for pre-selected units in the **Lock operating mode** area of the Lock manager:

- **Heating mode only**: the unit is blocked in Heating mode. Another operating mode cannot be set.
- **Cooling mode only**: the unit is blocked in Cooling mode only. Another operating mode cannot be set.

To lock one of the operating modes for selected units:

▶ Select ⌄.
Dropdown list is expanded.
▶ Select operating mode to lock to.
The selected operating mode is highlighted in blue and applied.
🔒 appears in the area View of units on the **Operate units** page next to the selected units.

To unlock an operating mode:

▶ Select ⌄.
Dropdown list is expanded.
▶ Select **Off**.
The locked operating mode is unlocked. 🔒 disappears in the area View of units on the **Operate units**page next to the selected units.

ℹ

→ 8.4 "Selecting and deselecting units for editing"

Locking the infra-red remote control

The infra-red remote control ARC C IR can be used to adjust units independently of the central controller.

The infra-red remote control can be disabled for pre-selected units in the **Lock IRC** area of the Lock Manager.

To disable use of the infra-red remote control for selected units:

▶ Select ⚪.
🔵 appears. Infra-red remote control is locked.
🔒 appears in the area View of units on the **Operate units** page next to the selected units.

To cancel the remote control interlock:

▶ Select 🔵.
⚪ appears. Settings can be made via the infra-red remote control.

ℹ

→ 8.4 "Selecting and deselecting units for editing"
→ 8.3 "Units illustration"

Locking the wired remote control

The wired remote control ARC can be used to adjust units independently of the central controller.

The ARC can be disabled for pre-selected units in the **Lock ARC** area of the Lock Manager.

To disable the ARC for selected units:

▶ Select ⚪.
🔵 appears. ARC is locked.
🔒 appears in the area View of units on the **Operate units** page next to the selected units.

To unlock the ARC:

▶ Select 🔵.
⚪ appears. Settings can be made via the ARC.

ℹ

→ 8.4 "Selecting and deselecting units for editing"
→ 8.3 "Units illustration"

Locking the fan settings

The set fan speed can be locked for pre-selected units in the **Lock fan settings** area of the Lock Manager.

To lock the fan speed for selected units:

▶ Select ⚪.
🔵 appears. The fan speed set for the unit(s) has been locked.
🔒 appears in the area View of units on the **Operate units** page next to the selected units.

To cancel the interlock of the set fan speed:

▶ Select 🔵.
⚪ appears. The fan speed can be adjusted for the selected units.

ℹ

→ 8.4 "Selecting and deselecting units for editing"
→ 8.3 "Units illustration"

10.2 Closing the Lock manager

To close the Lock manager:

▶ Select ✕.
The Lock manager have been closed.

11 Group editor

Units can be arranged in groups via the **Group editor** page.

Examples:

- In an office building, all offices belong to one group. Meeting rooms are assigned to another group.
- All units on the North side or South side are assigned to the respective groups.

ℹ

The **Group editor** page can only be called up via the **Operate units** page if all units have been deselected.
→ 8.4.4 "Deselecting units or groups"

To call up the page **Group editor**:

▶ **Dashboard** > **Operate units** > Tile or List view on the page **Operate units** > **Group editor**

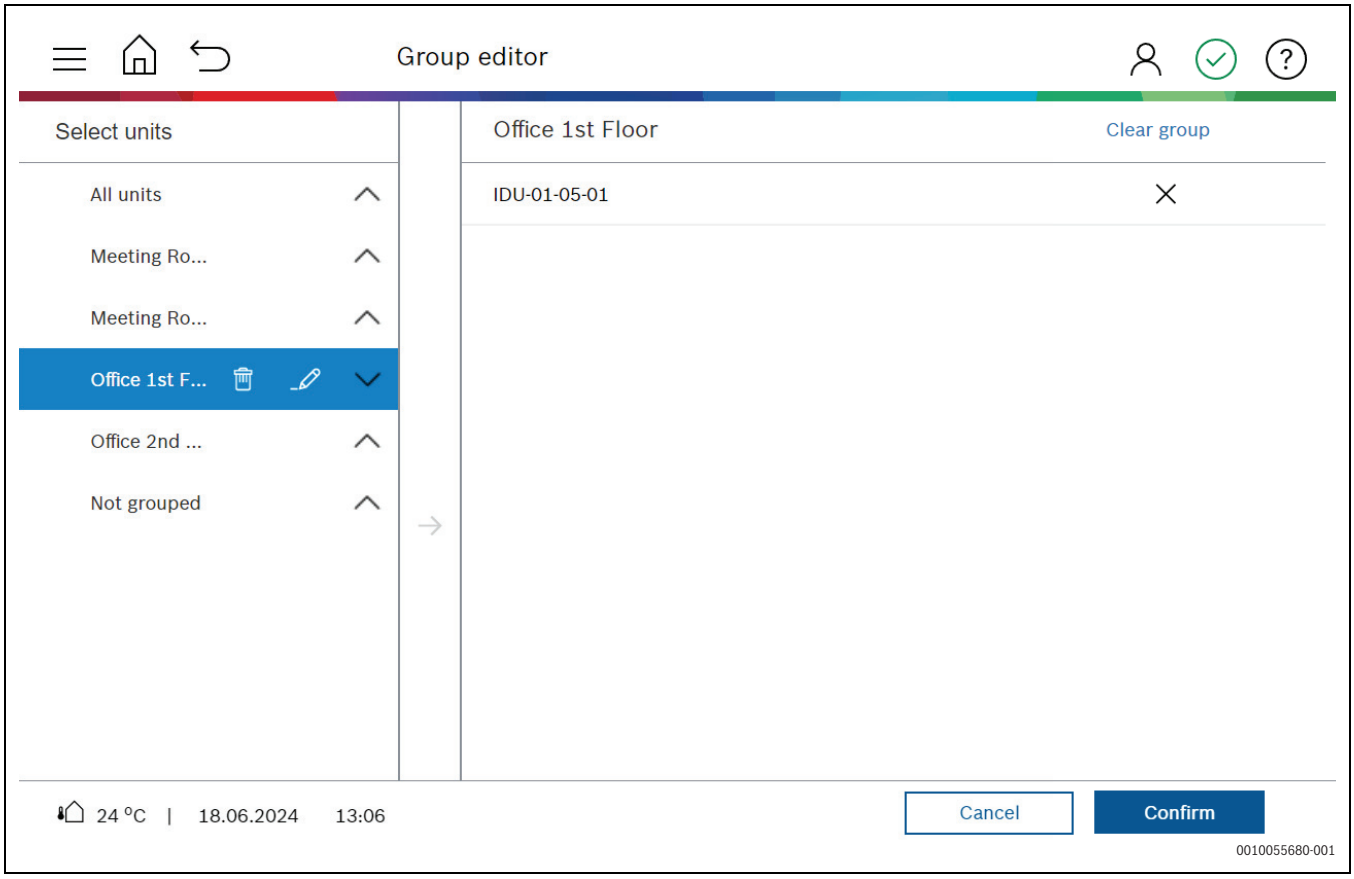
-or-

▶ Header > ☰ > **System configuration** > **Group editor**
The **Group editor** page appears.

ℹ

→ 7.2 "Header"
→ 8.1 "Overview Operate units"
→ 8.2 "Display variants"

11.1 Overview Group editor



	Description	Description/References
	Header	• Navigation element, on every page at the top edge of the screen → 7.2 "Header" → 11.11 "Closing the group editor"
	Footer	• Display of outside temperature, date and time → 7.4 "Footer"
	Select units area	• View and selection of groups and units • Change names of units. → 11.2 "Overview of units and groups"
		• Create new group. → 11.3 "Create group"
		• Display/hide units. → 11.2 "Overview of units and groups"
		• Assign selected units to a group. → 11.4 "Assigning units to a group"
		• Change groups and unit names. → 11.9 "Changing group names" → 11.10 "Changing the name of a unit"
		→ 11.8 "Deleting a group"

	Description	Description/References
	Right frame	• View of a selected group. • Assign units to a group. • **Confirm** and **Cancel** → 11.4 "Assigning units to a group"
✕		• Delete individual unit. → 11.6 "Deleting a unit from a group"
Clear group	Clear group	• Delete all units of a selected group. → 11.7 "Deleting all units in a group"

11.2 Overview of units and groups

The **Group editor** page in the **Select units** area contains an overview of the units, arranged into 3 categories:

- **Not grouped**: all units that are not assigned to any group.
- **All units**: all units that have been detected by the system and created.
- If groups have been created, the units assigned to these groups are displayed under these groups.

To display units:

▶ Select ⌄.
Units are displayed.

→ 16.2.4 "Scan VRF system (System scan)"

11.3 Create group

To create a new group:

▶ ＋ Select in the **Select units** area.
The **New group** dialogue box appears.
▶ Enter group name in the **Group name** field.
▶ Select **Confirm**.
The new group appears in the View area.

To cancel the operation:

▶ Select **Cancel**.

→ 11.4 "Assigning units to a group"
→ 11.1 "Overview Group editor"

11.4 Assigning units to a group

To assign units to a group:

▶ Expand the categories **All units** and/or **Not grouped**.
▶ Select ☐ of the units to be assigned to the group.
☑ appears. Units are selected.
→ appears.
▶ Select →.

-or-

▶ Drag and drop individual unit into the View area.
Units are assigned to the group and appear in the View area.
Confirm and **Cancel** appear.
▶ Select **Confirm**.
The group containing the assigned units is available in the system.
Group appears in the **Select units** area.

To cancel the operation:

▶ Select **Cancel**.

To assign additional units to an existing group:

▶ Select the group to which the units are to be added in the **Select units** area.
Units can be assigned as described above.

One unit can also be assigned to several groups.

As a recommendation, no more than 25 indoor units should be assigned to a group in order to be able to adjust them and establish an overview more quickly.

→ 11.2 "Overview of units and groups"
→ 11.5 "Selecting group"

11.5 Selecting group

To select a group (e.g. in order to assign or delete units):

▶ Select group in the **Select units** area.
The group is highlighted in blue and the group and units that have already been added are displayed in the View area.

11.6 Deleting a unit from a group

To delete a unit from a group:

▶ Select group from which units are to be deleted; the units of the group are displayed in the View area.
▶ Select ✕ to the right of the unit.
▶ Select **Confirm**.
The unit is deleted from the group and appears under **Not grouped** unless it is assigned to another group.

To cancel the operation:

▶ Select **Cancel**.

Individual units can also be deleted from an expanded group in the **Select units** area.

→ 11.5 "Selecting group"
→ 11.1 "Overview Group editor"

11.7 Deleting all units in a group

To delete all units in a group at the same time:

▶ Select group from which all units are to be deleted; the units of the group are displayed in the View area.
▶ Select **Clear group**.

▶ Select **Confirm**.
All units are deleted from the group and appear under **Not grouped** unless they are assigned to another group.

To cancel the operation:

▶ Select **Cancel**.

→ 11.5 "Selecting group"
→ 11.1 "Overview Group editor"

11.8 Deleting a group

Once a group has been deleted, users assigned to this group via the **User management** page can no longer access the units assigned to it.

To delete a group:

▶ Select to the right of the group in the **Select units** area.
The warning message **Delete group** appears.
▶ Select **OK**.
Group has been deleted.
Units that were assigned to the group appear under **Not grouped** unless they have been assigned to other groups.

To cancel the operation:

▶ Select **Cancel**.

→ 11.1 "Overview Group editor"
→ 11.2 "Overview of units and groups"
→ 18.1.2 "Add user"

11.9 Changing group names

To change a group name:

▶ Select to the right of the group in the **Select units** area.
The **Edit group name** dialogue box appears.
▶ Enter new group name in the field.
▶ Select **Confirm**.
Group name has changed. The group appears with the new group name in the View area.

To cancel the operation:

▶ Select **Cancel**.

→ 11.1 "Overview Group editor"
→ 11.2 "Overview of units and groups"

11.10 Changing the name of a unit

To change the name of a unit:

▶ Expand the category/group to which the units to be edited belong to display the units in the **Select units** area.
▶ Select to the right of the unit in the **Select units** area.
The **Rename unit** dialogue box appears.
▶ Enter new name of the unit in the field.
▶ Select **Confirm**.
The name of the unit has changed.

To cancel the operation:

▶ Select **Cancel**.

→ 11.1 "Overview Group editor"
→ 11.2 "Overview of units and groups"

11.11 Closing the group editor

To close the page **Group editor**:

▶ Select header > .
Dashboard appears.

→ 7.2 "Header"

12 Floor plans/Floor plan editor

Units can be edited and adjusted individually via the **Operate units** page in the Floor plan view.

▶ **Dashboard** > Floor plans

-or-

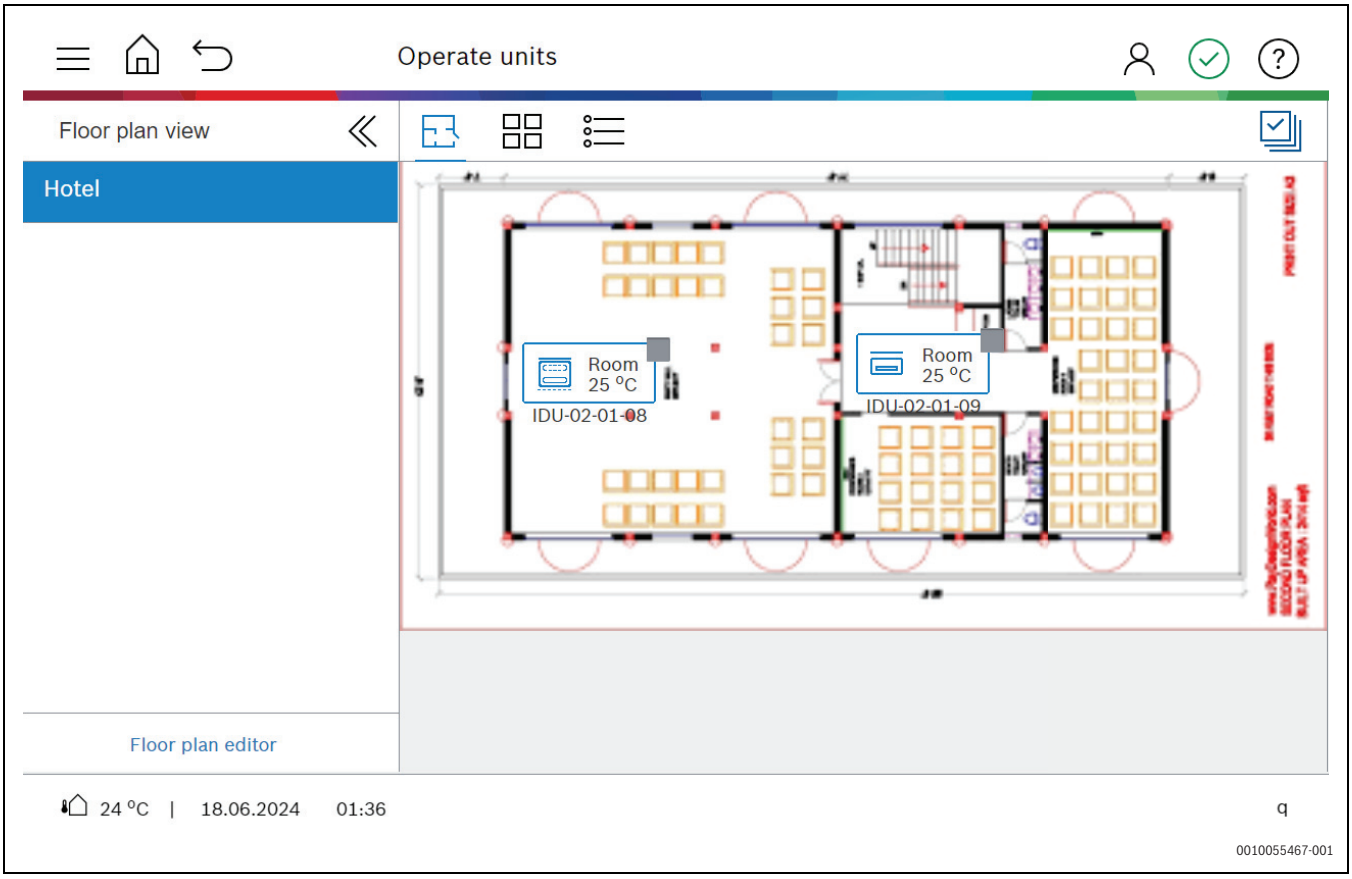
▶ Header > > **Operate units** > Display variant

The **Operate units**page in the Floor plan view appears.

The **Floor plan editor** page can be accessed via the Floor plan view page.

→ 8 "Operating units"
→ 9 "Settings sidebar"
→ 8.2 "Display variants"
→ 7.2 "Header"

12.1 Overview Floor plan view



	Description	Description/references
	Header	• Navigation element, at the top edge of the screen on every page → 7.2 "Header" → 12.14 "Closing the Floor plan editor"
29°C | 20.03.2019 1:05 pm	Footer	• Display of outdoor temperature, date and time → 7.4 "Footer"
Floor plan editor	Floor plan editor	• Add floor plans. • Assign units to floor plans. → 12.2 "Floor plan editor"
Floor plan view Basement Hostel Floor plan editor	Floor plan view area	• Display and selection of created floor plans • The Settings sidebar appears once units have been selected. → 9 "Settings sidebar" → 8 "Operating units"
	Display variants	• View of Operate units page with 3 possible variants: – Tile view – List view – Plan view → 8.2 "Display variants"

	Description	Description/references
	Floor plans with units area	• Displays the floor plans selected in the Floor plan view area. • Select units. → 8.4 "Selecting and deselecting units for editing"
	Select all or Select none	• Select all units. • Once all units have been selected, all units can be deselected via the Select none button which then appears. → 8.4 "Selecting and deselecting units for editing"

12.2 Floor plan editor

Floor plans can be uploaded, edited and units assigned to the floor plans on the **Floor plan editor** page.

The **Floor plan editor** page can only be called up if all units have been deselected.
→ 8.4 "Selecting and deselecting units for editing"

To call up the page **Floor plan editor**:

▶ **Dashboard** > **Floor plans** > **Floor plan editor**

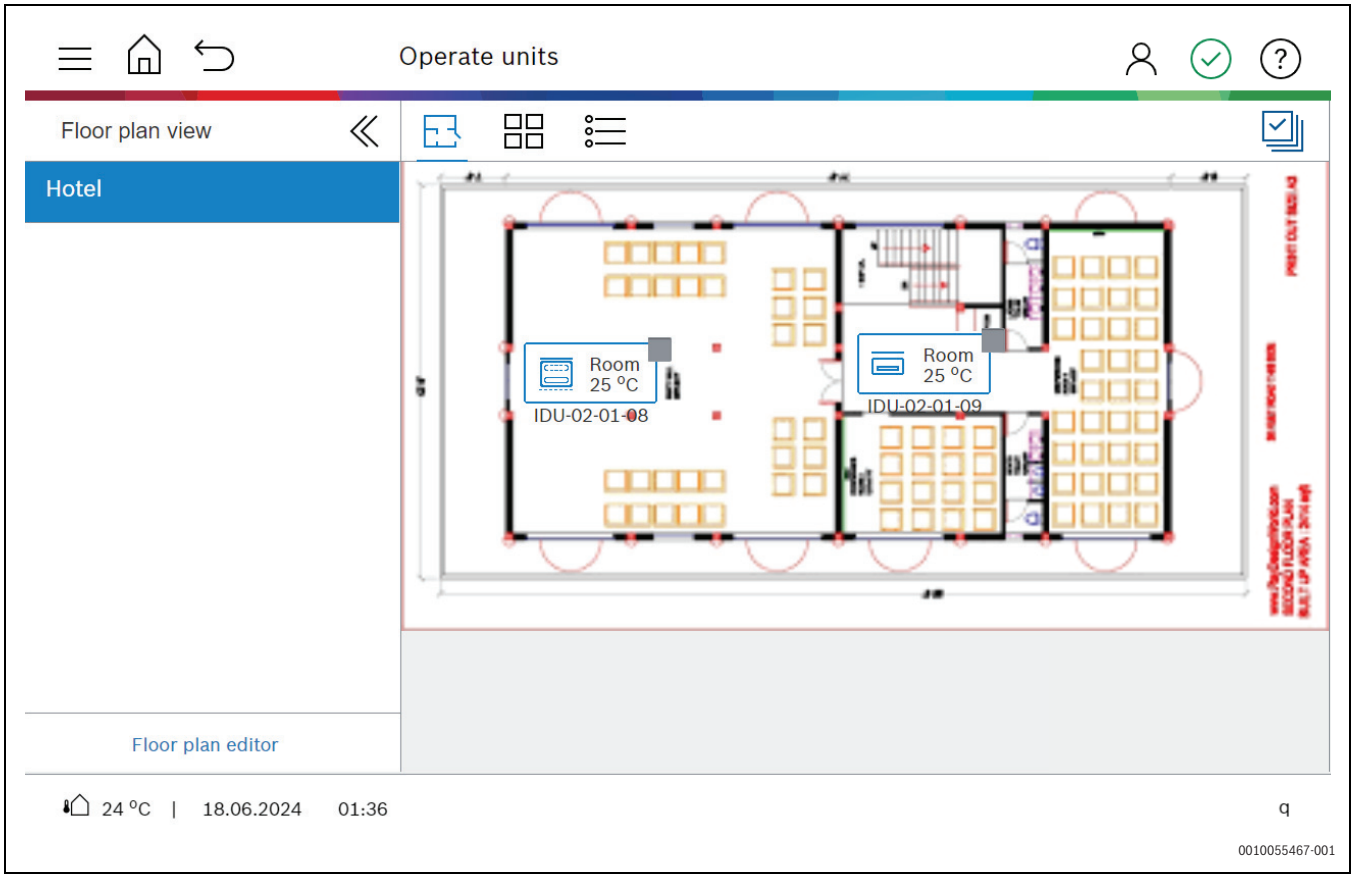
-or-

▶ Header > > **System configuration** > **Floor plan editor**

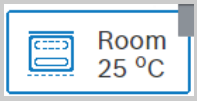
The **Floor plan editor** page appears.

→ 12.1 "Overview Floor plan view"
→ 7.2 "Header"

12.3 Overview Floor plan editor



	Description	Description/References
	Header	• Navigation element, on every page at the top edge of the screen → 7.2 "Header" → 12.14 "Closing the Floor plan editor"
	Footer	• Display of outside temperature, date and time → 7.4 "Footer"

	Description	Description/References
	Select units area	• View of groups and selection of units • Change names of units. → 12.4 "Overview of units and groups" → 12.13 "Changing the name of a unit"
		• Display/hide units. → 12.4 "Overview of units and groups"
	Floor plan selection dropdown list	• Select floor plan. → 12.8 "Selecting the floor plan"
		• Create new floor plan. → 12.5 "Upload new floor plan" → 12.6 "Adding new floor plan"
		• Edit floor plan and unit name. → 12.11 "Changing the floor plan name" → 12.13 "Changing the name of a unit"
		→ 12.12 "Deleting a floor plan"
	View area	• View of a selected floor plan. • Confirm and Cancel → 12.8 "Selecting the floor plan"
	Unit on the floor plan image	→ 12.9 "Deleting a unit from a floor plan"

12.4 Overview of units and groups

The **Floor plan editor** page in the **Select units** area contains an overview of the units, arranged into 2 categories:

- **All units**: all units that have been detected by the system and created.
- If groups have been created, the units assigned to these groups will be displayed under these groups.

To show the units in the 2 categories:

▶ Select ⌄.
Units are displayed.

→ 16.2.4 "Scan VRF system (System scan)"
→ 11 "Group editor"

12.5 Upload new floor plan

Requirements for floor plan files:

- Format: PNG, JPEG, JPG or GIF
- Size: no more than 25 megabytes
- Resolution: no more than 20 megapixels

To upload a new floor plan from USB:

▶ Select +.
The **New floor plan** dialogue box appears. The directory structure of the USB stick is displayed under **Select file**.
▶ Select floor plan.
▶ Enter name of floor plan in the **Enter name** field.
▶ Select **Confirm**.
Floor plan is displayed in the **Select file** dropdown list and can be added.

To cancel the operation:
▶ Select **Cancel**.

12.6 Adding new floor plan

To add a new floor plan that has already been uploaded to the **Floor plan view**:
▶ Select +.
The **New floor plan** dialogue box appears.
▶ Select floor plan via **Select file** dropdown list.
▶ Enter floor plan name in the field **Enter new floor plan name**.
▶ Select **Confirm**.
New floor plan appears in the View area.

To cancel the operation:
▶ Select **Cancel**.

For the new floor plan to be available in the system, at least one unit must be assigned to the floor plan.

→ 12.5 "Upload new floor plan"
→ 12.3 "Overview Floor plan editor"
→ 12.7 "Assigning units to a floor plan"

12.7 Assigning units to a floor plan

To assign units to a floor plan:
▶ Expand groups and/or **All units**.
▶ Drag-and-drop the individual unit into the floor plan in the View area.
The unit is assigned to the floor plan and appears on the floor plan.
▶ Select **Confirm**.
The floor plan with the assigned units is available in the system. The floor plan can be selected via the Floor plan selection dropdown list on the **Floor plan editor** page.

To cancel the operation:
▶ Select **Cancel**.

To assign additional units to an existing floor plan:
▶ Select floor plan to which additional units are to be assigned via the Floor plan selection dropdown list.
Units can be assigned as described above.

→ 12.8 "Selecting the floor plan"
→ 12.4 "Overview of units and groups"

12.8 Selecting the floor plan

To select a floor plan:
▶ Select Floor plan selection dropdown list.
▶ Select floor plan.
Selected floor plan appears in the View area.

→ 12.3 "Overview Floor plan editor"

12.9 Deleting a unit from a floor plan

To delete a unit from a floor plan:
▶ Select the floor plan from which the units are to be deleted so that the floor plan and assigned units appear in the View area.
▶ ✕ Select the unit on the floor plan image.
The unit has been deleted from the floor plan.

→ 12.8 "Selecting the floor plan"
→ 12.3 "Overview Floor plan editor"

12.10 Deleting all units from the floor plan

To delete all units from a floor plan at the same time:
▶ Select the floor plan containing all units you wish to delete.
▶ Select **Clear floor plan**.
All units have been deleted from the floor plan.

To be able to save a floor plan, at least one unit must be assigned to the floor plan.

▶ Assign at least one unit to the floor plan.
▶ Select **Confirm**.
The floor plan is displayed with the newly assigned units.

To cancel the operation:
▶ Select **Cancel**.

→ 12.8 "Selecting the floor plan"
→ 12.3 "Overview Floor plan editor"
→ 12.7 "Assigning units to a floor plan"

12.11 Changing the floor plan name

To change a floor plan name:
▶ Select the floor plan to be edited.
▶ Select ✎.
The **Edit floor plan** dialogue box appears.
▶ Enter new floor plan name in the **Enter new floor plan name** field.
▶ Select **Confirm**.
The floor plan name is changed and the new name appears in the Floor plan selection dropdown list.
▶ In the **Floor plan editor**, select **Confirm**.
The operation is complete.

To cancel the operation:
▶ Select **Cancel**.

→ 12.8 "Selecting the floor plan"
→ 12.3 "Overview Floor plan editor"

12.12 Deleting a floor plan

To delete a floor plan:
▶ Select the floor plan to be deleted.
▶ Select 🗑.
The warning message **Warning** appears.
▶ Select **Delete**.
The floor plan is deleted.

To cancel the operation:
▶ Select **Cancel**.

→ 12.8 "Selecting the floor plan"
→ 12.3 "Overview Floor plan editor"

12.13 Changing the name of a unit

To change the name of a unit:

- ▶ Expand the category/group to which the units to be edited belong to display the units in the **Select units** area.
- ▶ Select to the right of the unit in the **Select units** area.
  The **Rename unit** dialogue box appears.
- ▶ Enter new name of the unit in the field.
- ▶ Select **Confirm**.
  The name of the unit has changed.

To cancel the operation:

- ▶ Select **Cancel**.

→ 12.3 "Overview Floor plan editor"
→ 12.4 "Overview of units and groups"

12.14 Closing the Floor plan editor

To close the page **Floor plan editor**:

- ▶ Select header > .
  Dashboard appears.

→ 7.2 "Header"

13 Schedules

Time programs and corresponding time zones with defined settings (e.g. operating mode, set temperature) can be created on the **Schedules** page. Units can be assigned to these time programs.

To call up the **Schedules** page:

- ▶ **Dashboard** > **Schedules**

-or-

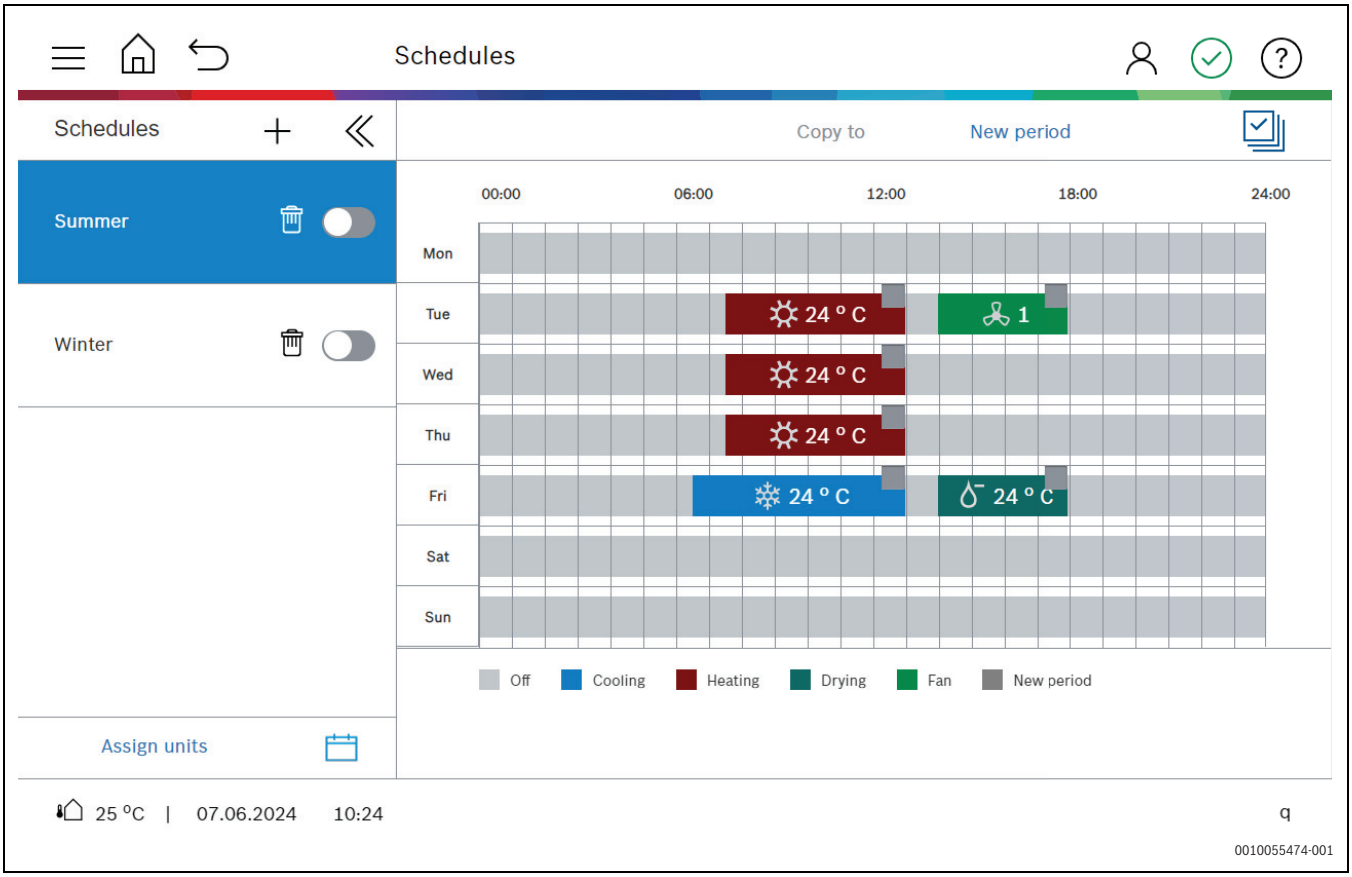
- ▶ Header > > **Schedules**

-or-

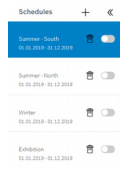
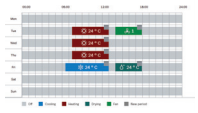
- ▶ Page **Calendar** >
  The **Schedules** page appears.

→ 7.1 "Dashboard"
→ 7.2 "Header"
→ 14 "Calendar"

13.1 Overview Schedules



	Description	Description/references
	Header	• Navigation element, at the top edge of the screen on every page → 7.2 "Header" → 13.14 "Exiting the Schedules"
29°C | 20.03.2019 1:05 pm	Footer	• Display of outdoor temperature, date and time → 7.4 "Footer"

	Description	Description/references
	Schedules area	• Display and selection of created time schedule • The Settings appears once time zones have been selected → 13.3 "Selecting a schedule" → 13.12 "Activating time programs" → 13.4 "Deleting a schedule" → 13.10 "Settings sidebar"
		• Create time schedule. → 13.2 "Creating a time program"
		• Hide sidebar. → 13.10.2 "Displaying/hiding the sidebar"
		• Activate/deactivate time schedule. → 13.12 "Activating time programs"
	View area	• View and edit a selected time schedule. • Select a period for processing. • **Confirm** and **Cancel** → 13.9 "Select and deselect periods to be edited"
		• Sidebar: delete time schedule. • View area: deleting a time period. → 13.4 "Deleting a schedule" → 13.6 "Deleting one or several periods from a schedule"
Assign units	Assign units	• Assign units to a time schedule. → 13.11 "Assigning units"
		• Call up the Calendar page. → 14.5 "Calling up the Schedules page"
New period	New period	• Assign new period to a time schedule. → 13.5 "Create time period"
Copy to	Copy to	• Transfer period and settings to other days. → 13.8 "Copying a period to different days"
	Select all or Select none	• Select all periods for processing. • Once all periods have been selected, all periods can be deselected via the Select none button which then appears. → 13.9.2 "Selecting all periods"

13.2 Creating a time program

Personal data and settings are stored locally on the central controller and can be viewed by other users if required.

To create a time program:

- ▶ + Select in the Schedules area.
  The Schedules dialogue box appears.
- ▶ Enter the name of the time program in the **Schedule name** field.
- ▶ In the dropdown list, select the unit type **Select type of schedules**.
- ▶ Select **Confirm**.
  The time program appears in the Schedules area.

To cancel the operation:

- ▶ Select **Cancel**.

→ 13.1 "Overview Schedules"

13.3 Selecting a schedule

To select a schedule (e.g. to create periods):

- ▶ Select schedule in the sidebar in the **Schedules** area.
  The selected schedule is highlighted blue in the **Schedules** area. The schedule appears in the View area and can be edited.

→ 13.1 "Overview Schedules"

13.4 Deleting a schedule

To delete a schedule:

- ▶ Select 🗑 to the right of the schedule in the sidebar in the area **Schedules**.
  The **Delete selected schedule?** dialogue box appears.
- ▶ Select **Confirm**.
  The schedule is deleted.

To cancel the operation:

- ▶ Select **Cancel**.

→ 13.1 "Overview Schedules"

13.5 Create time period

Up to 3 time periods can be defined for each day.

To create a time period for a time program:
- ▶ Select the time program for which a period is to be created; the time program appears in the View area.
- ▶ Select New period.
  Selection window **Select day(s)** appears.
- ▶ ☐ Select next to the desired day.
  ☑ appears. Day for which the new time period applies is selected.

To close the selection window and accept the time period:
- ▶ ✕ select the selection window.
  Selection window is closed. Time period is created and selected. The Settings sidebar appears.

So that the new time period is available in the system, the time period must be set via the Settings sidebar.

To cancel the operation:
- ▶ Select **Cancel**.

→ 13.3 "Selecting a schedule"
→ 13.10 "Settings sidebar"
→ 13.1 "Overview Schedules"

13.6 Deleting one or several periods from a schedule

To delete one or several periods from a schedule:
- ▶ Select the schedule you wish to delete the period from.
- ▶ Select the period to be deleted in the View area.
- ▶ Select 🗑 in the View area.
- ▶ Select **Confirm**.
  The period is deleted from the schedule.

To cancel the operation:
- ▶ Select **Cancel**.

→ 13.9 "Select and deselect periods to be edited"
→ 13.3 "Selecting a schedule"
→ 13.1 "Overview Schedules"

13.7 Deleting all periods from a schedule

To delete all periods from a schedule at the same time:
- ▶ Select the schedule from which you wish to delete all periods.
- ▶ Select **Select all**.
  All periods of the schedule are selected.
- ▶ Select 🗑.
- ▶ Select **Confirm**.
  All periods are deleted from the schedule.

To cancel the operation:
- ▶ Select **Cancel**.

→ 13.3 "Selecting a schedule"
→ 13.9 "Select and deselect periods to be edited"
→ 13.1 "Overview Schedules"

13.8 Copying a period to different days

Once a period has been set via the **Settings** sidebar, it can be copied from one day to other days.

To copy one period (or a maximum of 3 periods):
- ▶ Select the period you wish to copy.
- ▶ Select **Copy to**.
  The **Select day(s)** list box is displayed.
- ▶ Select ☐ next to the day(s) you want to copy the selection to.
  ☑ appears. The day(s) is (are) selected.

To close the list box and apply the selected days:
- ▶ Select the ✕ symbol of the list box.
  The list box closes. The period is copied and appears in the View area.

→ 13.10 "Settings sidebar"
→ 13.9 "Select and deselect periods to be edited"
→ 13.1 "Overview Schedules"

13.9 Select and deselect periods to be edited

Periods can be operated in the same manner as units via the **Schedules** page.

To operate periods individually (e.g. set **Operating mode**, **Set temperature**), periods must have been selected beforehand in the View area.

→ 13.1 "Overview Schedules"
→ 13.10 "Settings sidebar"
→ 13.3 "Selecting a schedule"

13.9.1 Selecting one or several periods

To select one or several periods for editing:
- ▶ Select ☐ for the periods you wish to edit.
  ☑ appears. The periods are selected. The **Settings** sidebar appears.

→ 13.3 "Selecting a schedule"
→ 13.10 "Settings sidebar"

13.9.2 Selecting all periods

To select all periods of a schedule you wish to edit:
- ▶ Select **Select all**.
  ☑ appears. All periods are selected. The **Settings** sidebar appears.

→ 13.3 "Selecting a schedule"
→ 13.10 "Settings sidebar"

13.9.3 Deselecting periods

To deselect selected periods:
- ▶ Select ☑ to uncheck it.
  ☐ appears. The period is deselected.

To deselect all selected periods:

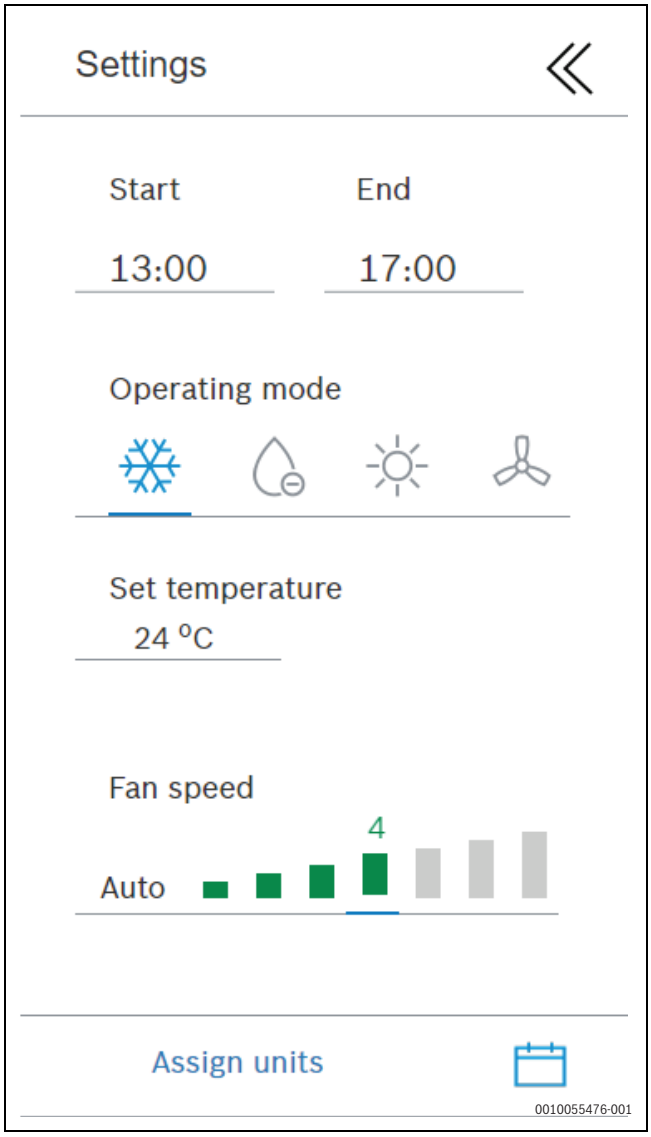
▶ Select **Select none**.
appears. Periods are deselected.

→ 13.3 "Selecting a schedule"

13.10 Settings sidebar

Time periods can be edited via the Settings sidebar.

13.10.1 Overview of sidebar settings, time periods



Auto Mode is only available in systems with outdoor unit AF 6300

To call up the sidebar:

▶ Select at least one time period to be edited.
The Settings sidebar appears on the left screen margin of the **Schedules** page.

All settings can also be made for selected units before applying the settings with **Confirm**.

→ 13.9 "Select and deselect periods to be edited"

Description	Description/Reference
Start and End	• Define start and end time for selected periods. → 13.10.3 "Setting the start and end time for a period"
Operating mode	• Set operating mode for selected periods. → 13.10.4 "Setting the operating mode (time periods)"
Set temperature	• Adjust the set temperature for selected periods via the control dial (not in Fan (Only) Mode). → 13.10.5 "Adjusting the set temperature (time periods)"
Fan speed	• Set fan speed for selected periods. → 13.10.6 "Setting the fan speed (time periods)"
«	• Hide sidebar. → 13.10.2 "Displaying/hiding the sidebar"

Settings of ERV ventilation units:
→ 13.10 "Settings sidebar"→ 9.2 "Settings ERV"

13.10.2 Displaying/hiding the sidebar

To hide the sidebar:

▶ Select «.
Sidebar is hidden.

To display the sidebar:

▶ Select ».
Sidebar is displayed.

13.10.3 Setting the start and end time for a period

The start and end time can be set for selected periods via the **Settings** sidebar. The periods and corresponding settings apply for the assigned units in this time window.

To adjust the start time for a period:

▶ Make sure that only **one** period per day is selected.
▶ Select time under **Start**.
The list boxes appear.
▶ Set the hours and minutes of the start time via the corresponding list box.
▶ Select **Confirm**.
The start time for the selected period is set.

To adjust the end time for a period:

▶ Make sure that only one period per day is selected.

- ▶ Select time under **End**.
  The list boxes appear.
- ▶ Set the hours and minutes of the end time via the corresponding list box.
- ▶ Select **Confirm**.
  The end time for the selected period is set.
  The unit is positioned accordingly in the View area on the **Schedules** page.

To cancel the time setting operation:

- ▶ Select **Cancel**.

To apply the settings:

- ▶ Select **Confirm** in the View area.

To cancel the operation:

- ▶ Select **Cancel** in the View area.

→ 13.9 "Select and deselect periods to be edited"
→ 13.1 "Overview Schedules"

13.10.4 Setting the operating mode (time periods)

The operating mode for the previously selected (multiple) time periods can be set via the **Operating mode** area in the Settings sidebar.

The following operating modes are available:

Symbol	Operation Mode
	Auto Mode (only in systems with outdoor unit AF 6300)
	Cooling mode
	Dehumidification mode
	Heat mode
	Fan (Only) Mode

To set the operating mode for selected time periods:

- ▶ Select symbol of the required operating mode (greyed out).
  The operating mode is displayed in colour with the selected time periods in the View area on the **Schedules** page.

To apply the settings:

- ▶ Select **Confirm**.

To cancel the operation:

- ▶ Select **Cancel**.

→ 13.9 "Select and deselect periods to be edited"
→ 13.1 "Overview Schedules"

13.10.5 Adjusting the set temperature (time periods)

The set temperature for previously selected time periods can be set via the **Set temperature** area in the Settings sidebar.

The **Set temperature** area can only be set for one of the following operating modes:

- Auto Mode (only for systems with AF 6300)
- Cooling mode
- Dehumidification mode
- Heat mode

To adjust the set temperature for selected time periods:

- ▶ Select indicated temperature.
  The rotary control for adjusting the temperature appears.
- ▶ Drag the rotary control in the + direction or tap the semicircle directly at any point until the required set temperature (value in the centre) is displayed.

-or-

- ▶ Drag the rotary control in the — direction or tap the semicircle directly at any point until the required set temperature (value in the centre) is displayed.

Alternatively, the set temperature can also be adjusted as follows:

- ▶ Select + or — until the required set temperature is obtained.

To apply the new temperature value:

- ▶ Select ×.
  Rotary control is closed. The new set temperature is displayed for the selected time periods in the View area on the **Schedules** page.

To apply the settings:

- ▶ Select **Confirm** in the View area.

To cancel the operation:

- ▶ Select **Cancel** in the View area.

→ 13.10.4 "Setting the operating mode (time periods)"
→ 13.9 "Select and deselect periods to be edited"
→ 13.1 "Overview Schedules"

13.10.6 Setting the fan speed (time periods)

The fan speed for the previously selected time periods can be set via the **Fan speed** area in the sidebar.

There are 7 fan speeds: 1 has the lowest fan output rate, 7 has the highest. There are 3 fan speeds in units of the type ERV and AHU KIT. The fan speed **Auto** is also available. The fan speed is automatically adjusted in **Auto** Mode as soon as there is a difference between the set temperature and room temperature.

To set the fan speed for selected time periods:

- ▶ Select bars of the required fan speed.
  All bars up to the selected fan speed are displayed in green.

-or-

- ▶ Select **Auto**.

To apply the settings:

- ▶ Select **Confirm** in the View area.

To cancel the operation:

- ▶ Select **Cancel** in the View area.

→ 13.10.4 "Setting the operating mode (time periods)"
→ 13.9 "Select and deselect periods to be edited"
→ 13.1 "Overview Schedules"
→ 9.2 "Settings ERV"

13.11 Assigning units

Units can be assigned to time programs via the **Assign units** page. The settings in the time programs (e.g. operating mode at specific times) are then valid for the assigned units.

If units are assigned to a time program, the settings defined for the time program apply for the units. Settings that have been made for the unit on the **Operate units**page no longer apply. If a time program is active, the settings can be changed via the central controller, ARC or IRC. These settings remain active until the next time the time program is changed. If a time period ends, the units are switched off. If a time period begins, the settings defined there are carried out.

To call up the **Assign units** page:

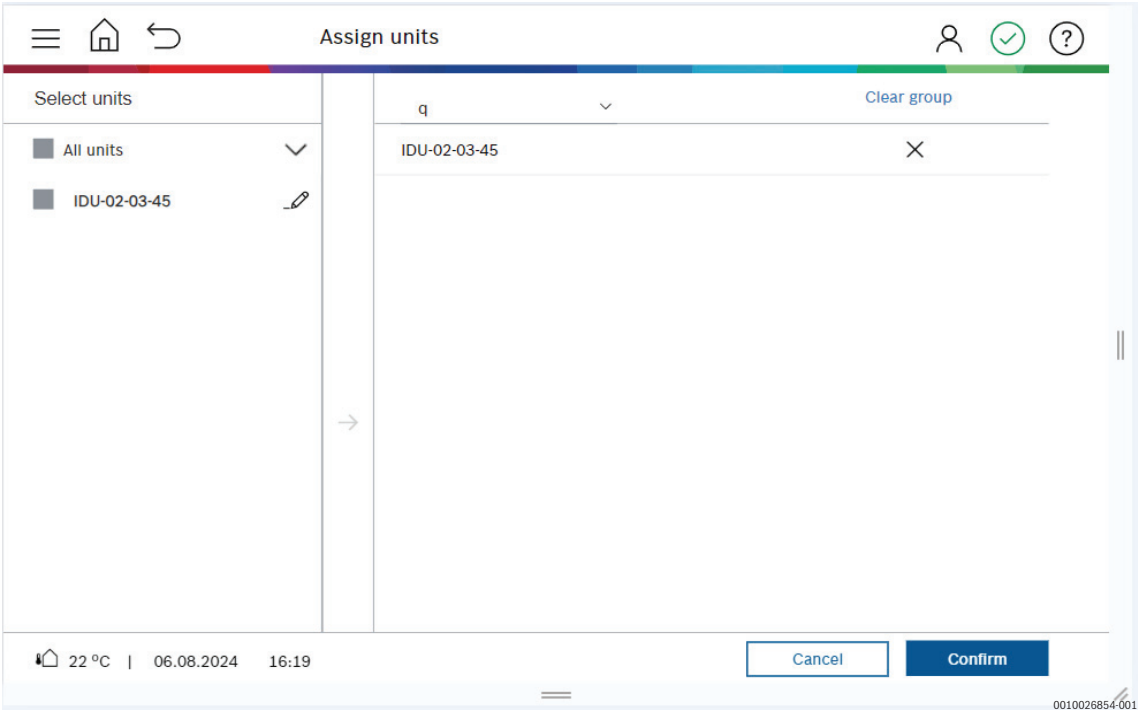
▶ **Dashboard** > **Schedules** > **Assign units**

-or-

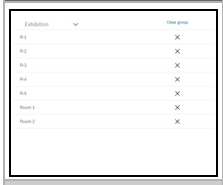
▶ Header > > **Schedules** > **Assign units**

→ 8 "Operating units"
→ 7.2 "Header"
→ 7.1 "Dashboard"

13.11.1 Overview Assign units



	Description	Description/References
	Header	• Navigation element, on every page at the top edge of the screen → 7.2 "Header" → 13.11.8 "Closing Assigning units"
	Footer	• Display of outside temperature, date and time → 7.4 "Footer"
	Select units area	• Overview of units and groups → 13.11.2 "Overview of units and groups" → 13.11.4 "Assigning units to a schedule" → 13.11.7 "Changing the name of a unit"
	Time program selection dropdown list	• Select a schedule. → 13.11.3 "Selecting a schedule"
		• Display/hide units. → 13.11.2 "Overview of units and groups"
		• Assign units to a schedule. → 13.11.4 "Assigning units to a schedule"

	Description	Description/References
	View area	• View of the selected schedule and the assigned units. • Confirm and Cancel → 13.11.4 "Assigning units to a schedule" → 13.11.5 "Deleting a unit from a time program"
Clear group	Clear group	• Delete all units from a schedule. → 13.11.6 "Delete all units from the schedule"

13.11.2 Overview of units and groups

The **Assign units** page in the **Select units** area contains an overview of the units, arranged into 2 categories:

- **All units**: all units that have been detected by the system and created.
- If groups have been created, the units assigned to these groups will be displayed under these groups.

To show the units in the 2 categories:

▶ Select ⌄.
Units are displayed.

→ 13.11.1 "Overview Assign units"
→ 11 "Group editor"

13.11.3 Selecting a schedule

To select a schedule:

▶ Select Time program selection dropdown list.
▶ Select schedule.
The selected schedule appears in the View area.

→ 13.11.1 "Overview Assign units"

13.11.4 Assigning units to a schedule

To assign units to a schedule:

▶ Select schedule to which you wish to assign the units.
▶ Expand groups and/or **All units**.
▶ Select ☐ of the units you wish to assign to the schedule.
☑ appears. Units are selected.
→ appears.
▶ Select →.

-or-

▶ Drag-and-drop each unit individually into the schedule in the View area.
▶ Select **Confirm**.
Units are assigned to the the schedule.

To cancel the operation:

▶ Select **Cancel**.

→ 13.11.2 "Overview of units and groups"
→ 13.11.3 "Selecting a schedule"

13.11.5 Deleting a unit from a time program

To delete a unit from a time program:

▶ Select time program from which you wish to delete a unit.
▶ Select ✕ of the unit in the View area.
▶ Confirm choice.
The unit is deleted from the time program.

→ 13.11.3 "Selecting a schedule"
→ 13.11.1 "Overview Assign units"

13.11.6 Delete all units from the schedule

To delete all units from a schedule at the same time:

▶ Select the schedule containing all units you wish to delete.
▶ Select **Clear group**.
All units are deleted from the schedule.
▶ Select **Confirm**.
There are no units assigned to the schedule.

To cancel the operation:

▶ Select **Cancel**.

→ 13.11.3 "Selecting a schedule"
→ 13.11.1 "Overview Assign units"

13.11.7 Changing the name of a unit

To change the name of a unit:

▶ Expand the category/group to which the units to be edited belong to display the units in the **Select units** area.
▶ Select ✎ to the right of the unit in the **Select units** area.
The **Rename unit** dialogue box appears.
▶ Enter new name of the unit in the field.
▶ Select **Confirm**.
The name of the unit has changed.

To cancel the operation:

▶ Select **Cancel**.

13.11.8 Closing Assigning units

To close the **Assign units** page and return to the **Schedules** page:

▶ Select header > ↩.
Schedules appears.

→ 7.2 "Header"

13.12 Activating time programs

Several time programs can be activated only if the assigned units are not shared by those time programs.

To activate a time program:

▶ Select ○ to the right of the time program in the Schedules area of the sidebar.
● appears.
Time program is activated.

The following can be set via the **Calendar** page: time periods where the time program is active If no time periods are defined on the **Calendar** page, the time program is continuously active.

→ 13.1 "Overview Schedules"
→ 14 "Calendar"
→ 14.8 "Defining periods for time programs"

13.13 Calling up the Calendar page

To call up the **Schedules** page via the **Calendar** page:

▶ Select in the bottom part of the Schedules sidebar.
The **Calendar** page appears.

→ 13.1 "Overview Schedules"
→ 14 "Calendar"

13.14 Exiting the Schedules

To end editing of the schedule on the **Schedules** page:

▶ Select header > .
Dashboard appears.

The activated schedules remain active after ending editing of the schedule.

→ 7.2 "Header"
→ 7.1 "Dashboard"
→ 13.12 "Activating time programs"

14 Calendar

Periods during which the created time programs are to be active are defined on the **Calendar** page.

To call up the **Calendar** page:

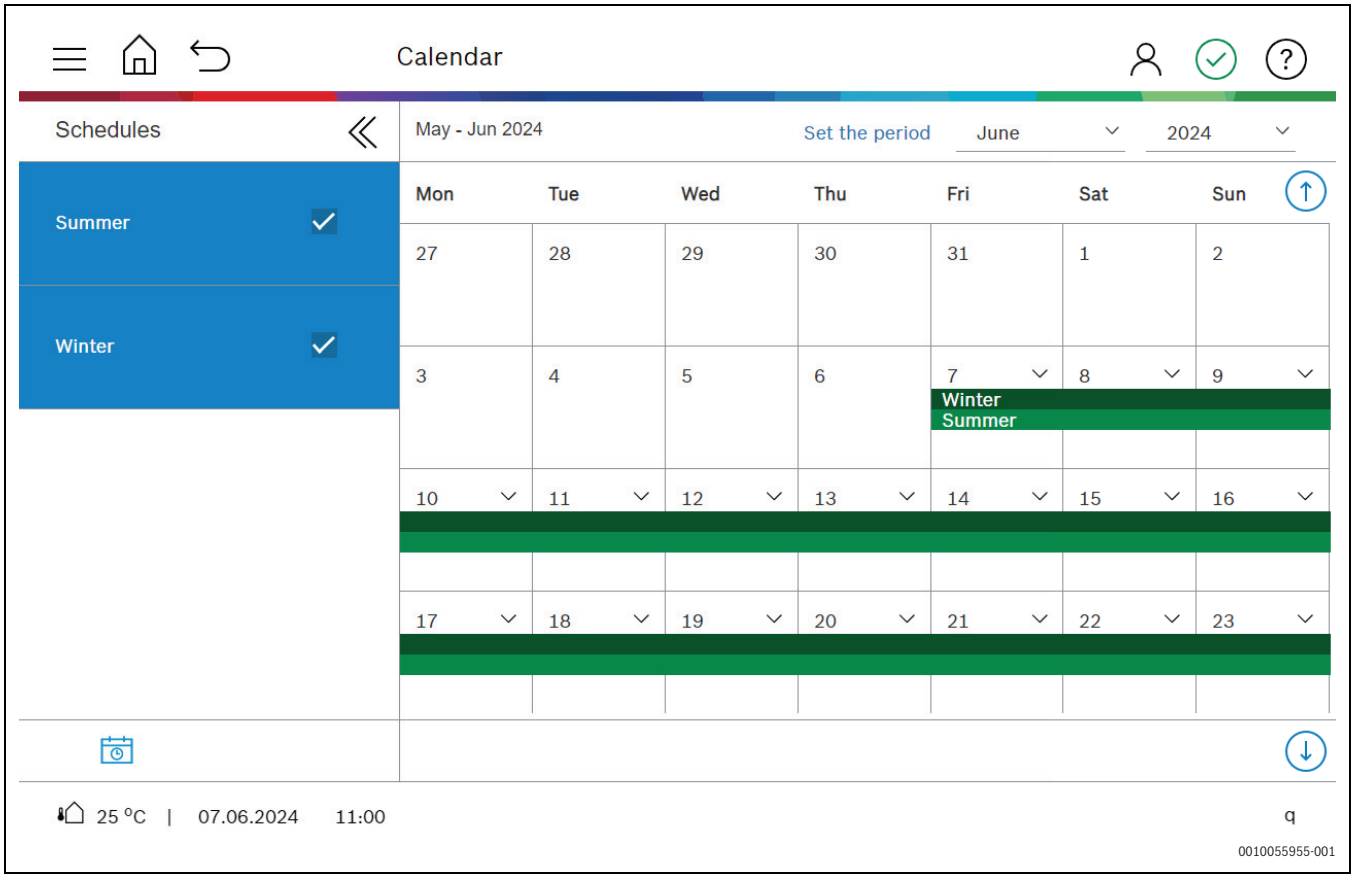
▶ Header > > **Calendar**

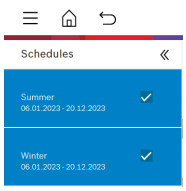
-or-

▶ Page **Schedules** >
The **Calendar** page appears.

→ 7.1 "Dashboard"
→ 7.2 "Header"
→ 13 "Schedules"

14.1 Overview Calendar



	Designation	Description/references
	Header	• Navigation element, at the top edge of the screen on every page → 7.2 "Header" → 14.9 "Ending the Calendar"
	Footer	• Display of outdoor temperature, date and time → 7.4 "Footer"
	Schedules sidebar	• Selection of created time programs • Access to Assign units and Schedules. → 14.3 "Select or deselect schedules" → 14.5 "Calling up the Schedules page"
		• Hide sidebar. → 13.10.2 "Displaying/hiding the sidebar"
		• Call up the Schedules page. → 14.5 "Calling up the Schedules page"
	View area	• View of selected time programs in the calendar view. • Select month and year display. • Access definition of time periods. → 14.3 "Select or deselect schedules" → 14.7 "Select a day or a period" → 14.6 "Changing the calendar view" → 14.8 "Defining periods for time programs"
	Month and year dropdown list	• Select month and year display. → 14.6 "Changing the calendar view"
	Set the period	• Define periods when time programs are active. → 14.8 "Defining periods for time programs"

14.2 Displaying/hiding the sidebar

To hide the sidebar:

▶ Select ⟨⟨.
Sidebar is hidden.

To display the sidebar:

▶ Select ⟩⟩.
Sidebar is displayed.

14.3 Select or deselect schedules

All time programs created on the **Schedules** page are displayed in the Schedules sidebar of the **Calendar** page.

14.3.1 Selecting one or several schedules

To select one or more schedules for viewing or editing:

▶ Select ☐ next to the schedules.
☑ appears. The schedules are selected and appear in different colours in the View area of the calendar.

Up to 4 schedules can be displayed simultaneously in the Area view of the calendar.

→ 14.1 "Overview Calendar"
→ 14.4 "Displaying more than 4 schedules"

14.3.2 Deselecting schedules

To deselect selected schedules:

▶ Select ☑ to uncheck it.
☐ appears. The schedule has been deselected and is no longer displayed in the View area of the calendar.

→ 14.1 "Overview Calendar"
→ 14.3.1 "Selecting one or several schedules"

14.4 Displaying more than 4 schedules

To display more than 4 selected schedules:

▶ Select more than 4 schedules in the **Schedules** sidebar.
▶ ⌄ appears in the View area next to the days of the calendar view.
▶ Select the ⌄ symbol of the day for which you wish to display all selected schedules.
The **Active schedules** window appears and displays the active schedules for the relevant day.

To close the **Active schedules** window:

▶ Select **Confirm**.

→ 14.1 "Overview Calendar"
→ 14.3.1 "Selecting one or several schedules"

14.5 Calling up the Schedules page

To call up the **Schedules** page from the **Calendar** page (e.g. to create additional time programs):

▶ Select in the bottom part of the Schedules sidebar.
The **Schedules** page appears.

→ 14.1 "Overview Calendar"
→ 13 "Schedules"

14.6 Changing the calendar view

To display a different month or year in the View area of the calendar view:

▶ Select the month via the Month dropdown list.
▶ Select the year via the Year dropdown list.
The selected month or year appears in the calendar view.

-or-

▶ Select ↑ or ↓.
The calendar view shifts up a week or down a week.

→ 14.1 "Overview Calendar"

14.7 Select a day or a period

To select a single day:

▶ Select day in the calendar view in the View area.
The tile of the day selected appears blue.

To select a period:

▶ Select the first and last day of the desired period in the calendar overview in the View area.
The tile of the period selected appears blue.

Periods can be changed again via Set the period.

→ 14.1 "Overview Calendar"
→ 14.8 "Defining periods for time programs"

14.8 Defining periods for time programs

The periods during which time programs that have been created are active can be defined.

If periods are not defined, the activated time program is continuously active (default setting).

A period can only be defined for one selected time program, and not for several time programs at once.

To define a period for a time program:

▶ Select an existing time program in the Schedules sidebar.
▶ Select a day or a period in the calendar overview.
▶ Select Set the period.
The **Define period for** window (name of the time program) is displayed. The day or period previously selected is set.

To change the day or period:

▶ Adjust the date in the Set the period area by dragging up or down.
The day or period for the time program has been modified.

To define whether the period occurs only once or repeats every year:

▶ Select **Unique** from the dropdown list.
Repeat (once or annually) of the period is defined.

-or-

▶ Select **Yearly** from the dropdown list.
Repeat (once or annually) of the period is defined.

-or-

To always run the time programs:

▶ Select **Always** from the dropdown list.

To apply the settings:

▶ Select **Confirm**.
The defined period is displayed in the colour of the time program in the calendar overview in the View area.

To cancel the operation:

▶ Select **Cancel**.

→ 14.1 "Overview Calendar"
→ 13 "Schedules"

14.9 Ending the Calendar

To exit the **Calendar** page:

▶ Select header > ⌂.
Dashboard appears.

→ 7.2 "Header"
→ 7.1 "Dashboard"

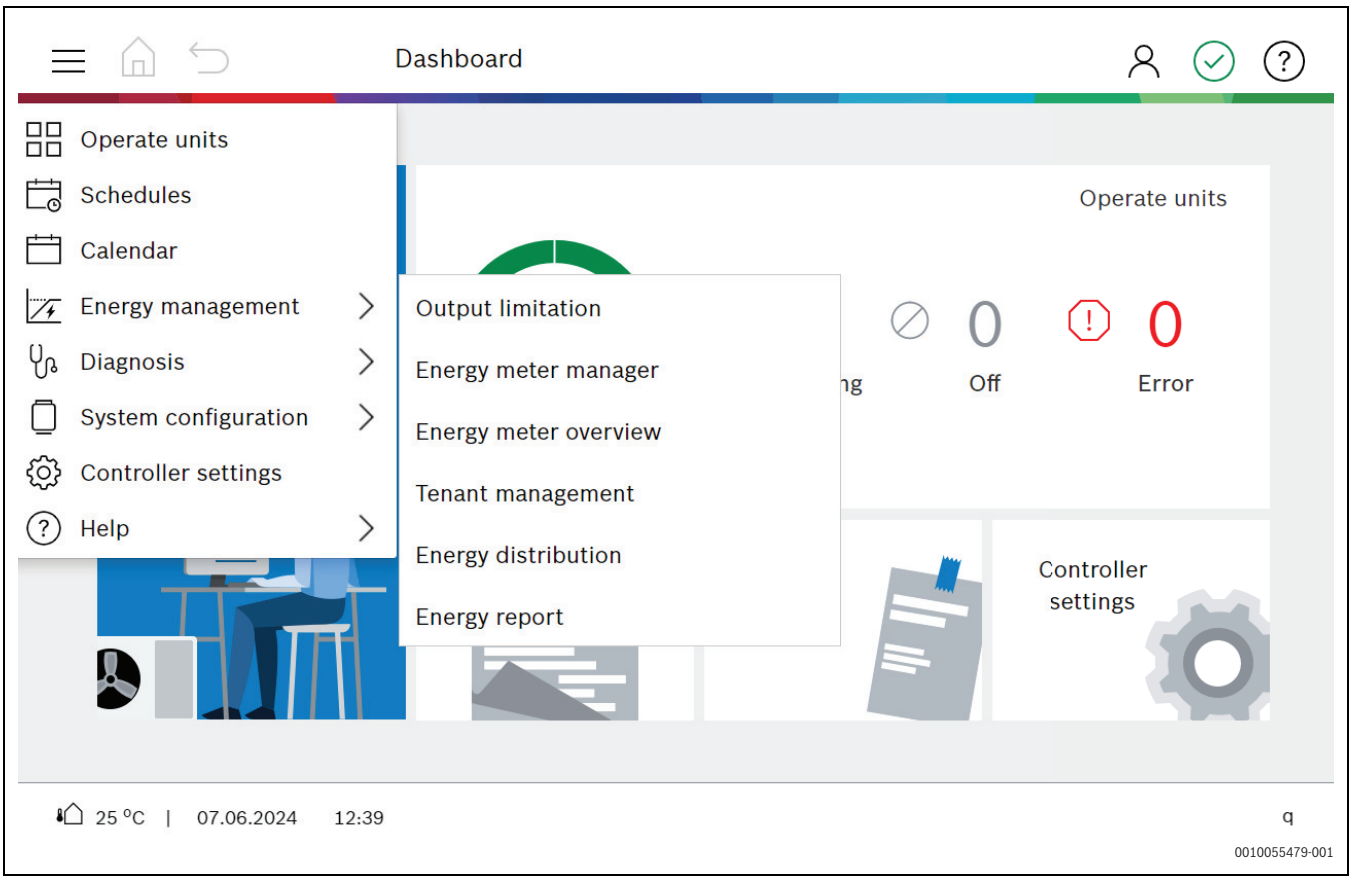
15 Energy management

To call up the **Energy management** page:

▶ Header > ☰ > **Energy management**
The **Energy management** page appears.

→ 7.2 "Header"

Overview Energy management



The following setting options are available:

Designation	Description/references
Output limitation	• Set output restriction for the refrigerant systems and the assigned units. → 15.1 "Output limitation"
Energy meter manager	• Create, integrate and configure energy meters. → 15.2 "Energy meter editor"
Energy meter overview	• Retrieve information about the energy meters. → 15.3 "Energy meter monitor"
Tenant Management	• Assign indoor units to tenants. → 15.4 "Tenant management"
Energy distribution	• Turn energy distribution on and off for each refrigerant system. → 15.5 "Energy distribution"
Energy report	• Generate energy report and save to USB stick. → 15.6 "Energy report"

15.1 Output limitation

The **Output limitation** page can be used to set an output restriction for the refrigerant systems and the assigned units.

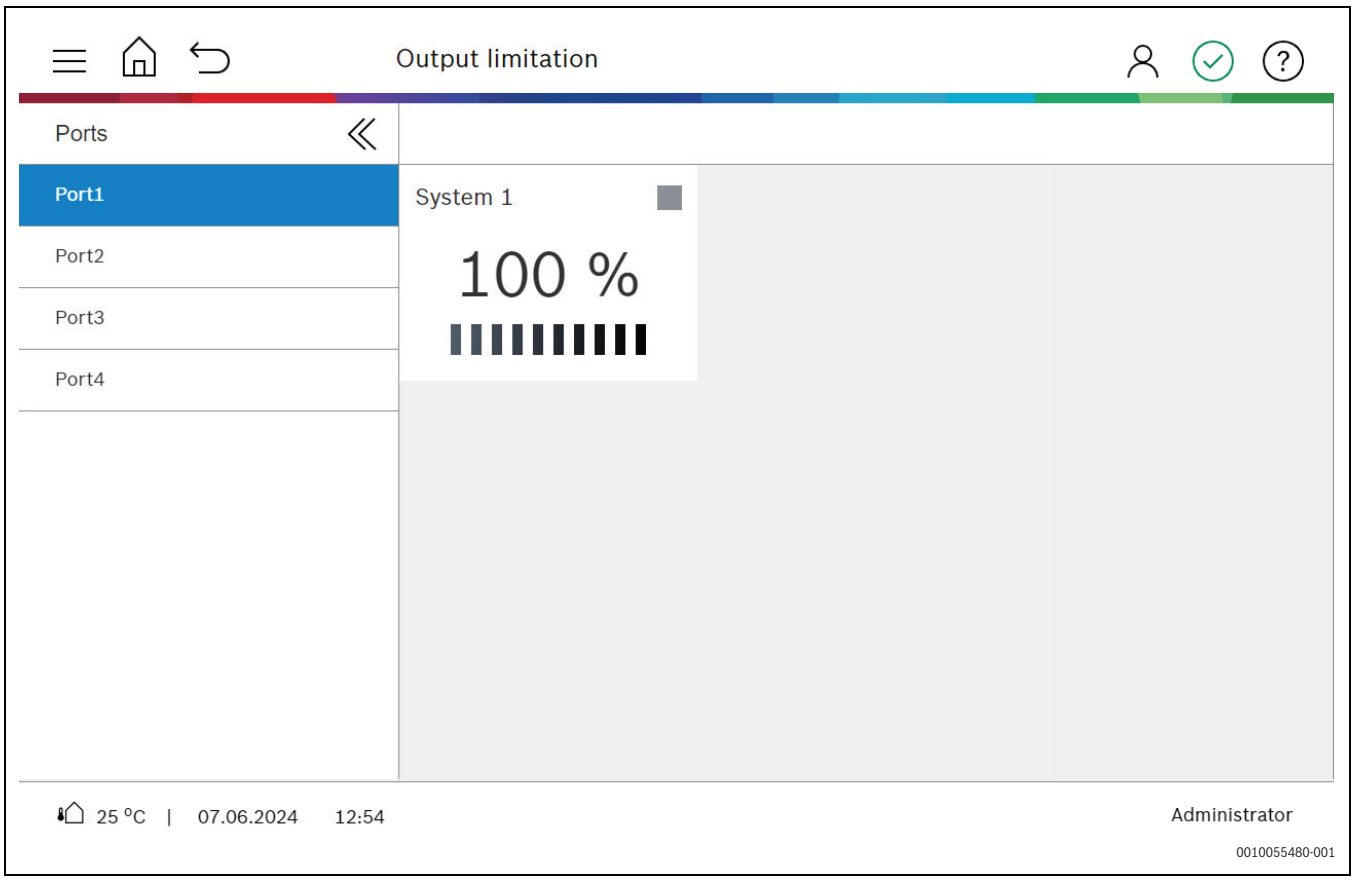
By adjusting the compressor frequency on the outdoor unit, the maximum electrical power input of the VRF system can be gradually reduced (from 100 % to 40 % of the maximum output).

To call up the **Output limitation** page:

▶ Header > ☰ > **Energy management** > **Output limitation**
The **Output limitation** page appears.

→ 7.2 "Header"

15.1.1 Overview Output limitation



	Description	Description/References
	Header	• Navigation element, on every page at the top edge of the screen → 7.2 "Header" → 15.1.6 "Exiting the Output limitation"
	Footer	• Display of outside temperature, date and time → 7.4 "Footer"
	Sidebar	• Ports sidebar • Once at least one refrigerant system has been selected, the Output limitation sidebar appears. → 15.1.3 "Selecting port" → 15.1.5 "Setting an output restriction"
		• Hide sidebar. → 13.10.2 "Displaying/hiding the sidebar"
	View area	• View and selection of refrigerant systems → 15.1.4 "Selecting and deselecting refrigerant systems"
Select all	Select all or Select none	• Select all refrigerant systems. • Once all refrigerant systems have been selected, the **Select none** button appears via which all refrigerant systems can be deselected. → 15.1.4 "Selecting and deselecting refrigerant systems"

15.1.2 Displaying/hiding the sidebar

To hide the sidebar:

▶ Select ⟨⟨.
Sidebar is hidden.

To display the sidebar:

▶ Select ⟩⟩.
Sidebar is displayed.

15.1.3 Selecting port

A port is a connection for an XYE cable. The central controller itself has an XYE port, the AC EXP expansion card offers 3 additional ports.

To select a port:

▶ Select port in the **Ports** sidebar.
The port appears highlighted in blue. The refrigerant systems assigned to the port are displayed in the View area.

→ 15.1.1 "Overview Output limitation"
→ 16.2 "System structure"
→ 15.1.5 "Setting an output restriction"

15.1.4 Selecting and deselecting refrigerant systems

Refrigerant systems must have been selected in the View area before an output restriction can be set for refrigerant systems.

→ 15.1.1 "Overview Output limitation"

Selecting one or several refrigerant systems

To select one or several refrigerant systems for editing:

▶ Select the corresponding ☐ for the refrigerant systems you wish to edit in the View area.
☑ appears. Refrigerant systems are selected. The **Output limitation** sidebar appears.

→ 15.1.1 "Overview Output limitation"
→ 15.1.5 "Setting an output restriction"

Selecting all refrigerant systems

To select all refrigerant systems for editing:

▶ Select **Select all**.
☑ appears. All refrigerant systems are selected. The **Output limitation** sidebar appears.

→ 15.1.1 "Overview Output limitation"
→ 15.1.5 "Setting an output restriction"

Deselecting refrigerant systems

To deselect selected refrigerant systems:

▶ Select ☑ to uncheck it.
☐ appears. The refrigerant system is deselected.

To deselect all selected refrigerant systems:

▶ Select **Select none**.
☐ appears. Refrigerant systems are deselected.

15.1.5 Setting an output restriction

To call up the **Output limitation** sidebar:

▶ Select at least one refrigerant system whose output you wish to adjust.
The **Output limitation** sidebar appears on the left hand edge of the screen on the **Output limitation** page.

An output restriction can be set for every refrigerant system in the following 7 stages:

- 100 % – full load
- Max. 90 %
- Max. 80 %
- Max. 70 %
- Max. 60 %
- Max. 50 %
- Max. 40 %

To set and apply the output restriction for selected refrigerant systems:

▶ Drag the control dial in the + direction, or touch the semicircle directly at any given point until the required stage (value displayed in the centre) is reached.

-or-

▶ Drag the control dial in the − direction, or touch the semicircle directly at any given point until the required stage (value displayed in the centre) is reached.

Alternatively, the output restriction can also be adjusted as follows:

▶ Select + or − until the required stage is reached.
The output restriction stage is displayed for the selected refrigerant systems in the View area on the **Output limitation** page.

→ 15.1.1 "Overview Output limitation"
→ 15.1.4 "Selecting and deselecting refrigerant systems"

15.1.6 Exiting the Output limitation

To close the settings for the output restriction on the **Output limitation** page:

▶ Select header > ⌂.
Dashboard appears.

→ 7.2 "Header"
→ 7.1 "Dashboard"

15.2 Energy meter editor

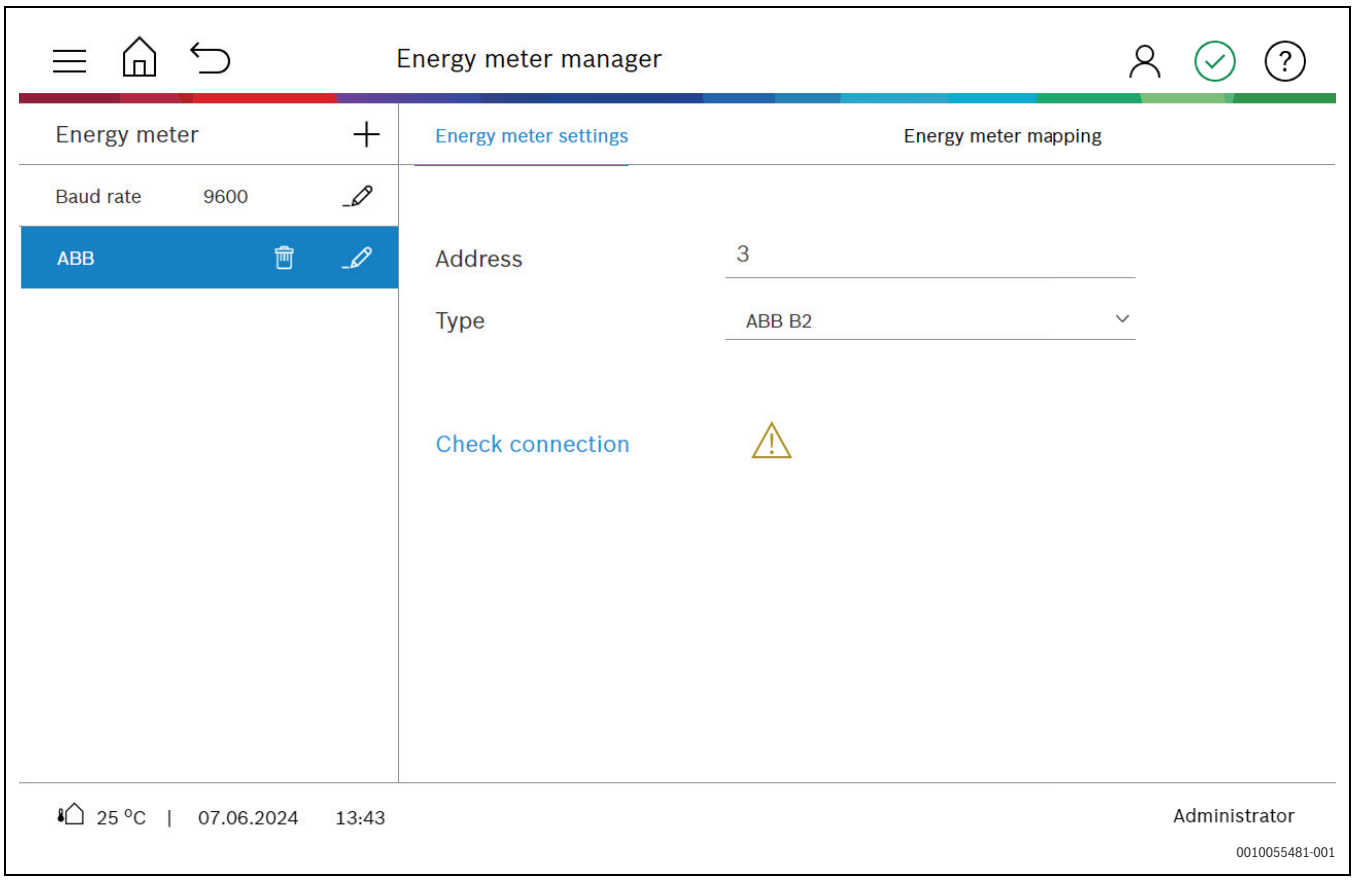
Energy meters can be added, adjusted, units assigned and replaced/ removed via the **Energy meter manager** page.

To call up the **Energy meter manager** page:

▶ Header > ☰ > **Energy management** > **Energy meter manager**
Energy meter manager appears.

→ 7.2 "Header"

15.2.1 Overview, energy meter editor



	Designation	Description/references
	Header	• Navigation element, at the top edge of the screen on every page → 7.2 "Header" → 15.2.6 "Close the Energy meter manager"
	Footer	• Display of outdoor temperature, date and time → 7.4 "Footer"
	Area Energy meter	• Create an energy meter. • Display of all energy meters created • Change the baud rate. → 15.2.2 "Create an energy meter" → 15.2.3 "Setting the energy meter"
		• Create an energy meter. → 15.2.2 "Create an energy meter"
		• Delete the energy meter.
		• Rename the energy meter. • Change the baud rate. → 15.2.2 "Create an energy meter" → 15.2.3 "Setting the energy meter"
	View area	• Access to the Energy meter settings area and Energy meter mapping area → 15.2.3 "Setting the energy meter" → 15.2.4 "Assign the energy meter units"
Energy meter settings	Area Energy meter settings	→ 15.2.3 "Setting the energy meter"
Energy meter mapping	Area Energy meter mapping	→ 15.2.4 "Assign the energy meter units"

	Designation	Description/references
	Dropdown list Type	• Select the energy meter type. → 15.2.3 "Setting the energy meter"
	Display Check connection	• Check the connection. → 15.2.3 "Setting the energy meter"
	Field Address	• Enter Modbus address. → 15.2.3 "Setting the energy meter"
	Change the baud rate	• Change the baud rate. → 15.2.3 "Setting the energy meter"

15.2.2 Create an energy meter

The central remote control of Bosch supports the following Modbus/RTU energy meter:

- ABB B2
- Entes MPR-2
- Schneider Electric iEM3000
- Siemens PAC 1600
- Siemens PAC 2200

To create an energy meter:

▶ Select ┼ in area Energy meter.

▶ Select an energy meter from the drop-down list in the area Energy meter settings. All energy meters in the system are displayed in the drop-down list.

▶ Name the energy meter.
The energy meter created appears in the area Energy Meter.

→ 15.2.1 "Overview, energy meter editor"

15.2.3 Setting the energy meter

The view area can be used to set a previously created energy meter via the Energy meter settings area.

15.2.4 Assign the energy meter units

Units can be assigned to an energy meter via the area Energy meter mapping in the view area.

To set an energy meter:

▶ In the area Energy meter , select an energy meter that has been created.

▶ In the area view, select the area Energy meter settings.

▶ Enter the Modbus address in the Address field.

▶ Select the energy meter type from the drop-down list Type.
The display Check connection shows whether there is a connection to the respective energy meter and whether the data can be read.

→ 15.2.1 "Overview, energy meter editor"

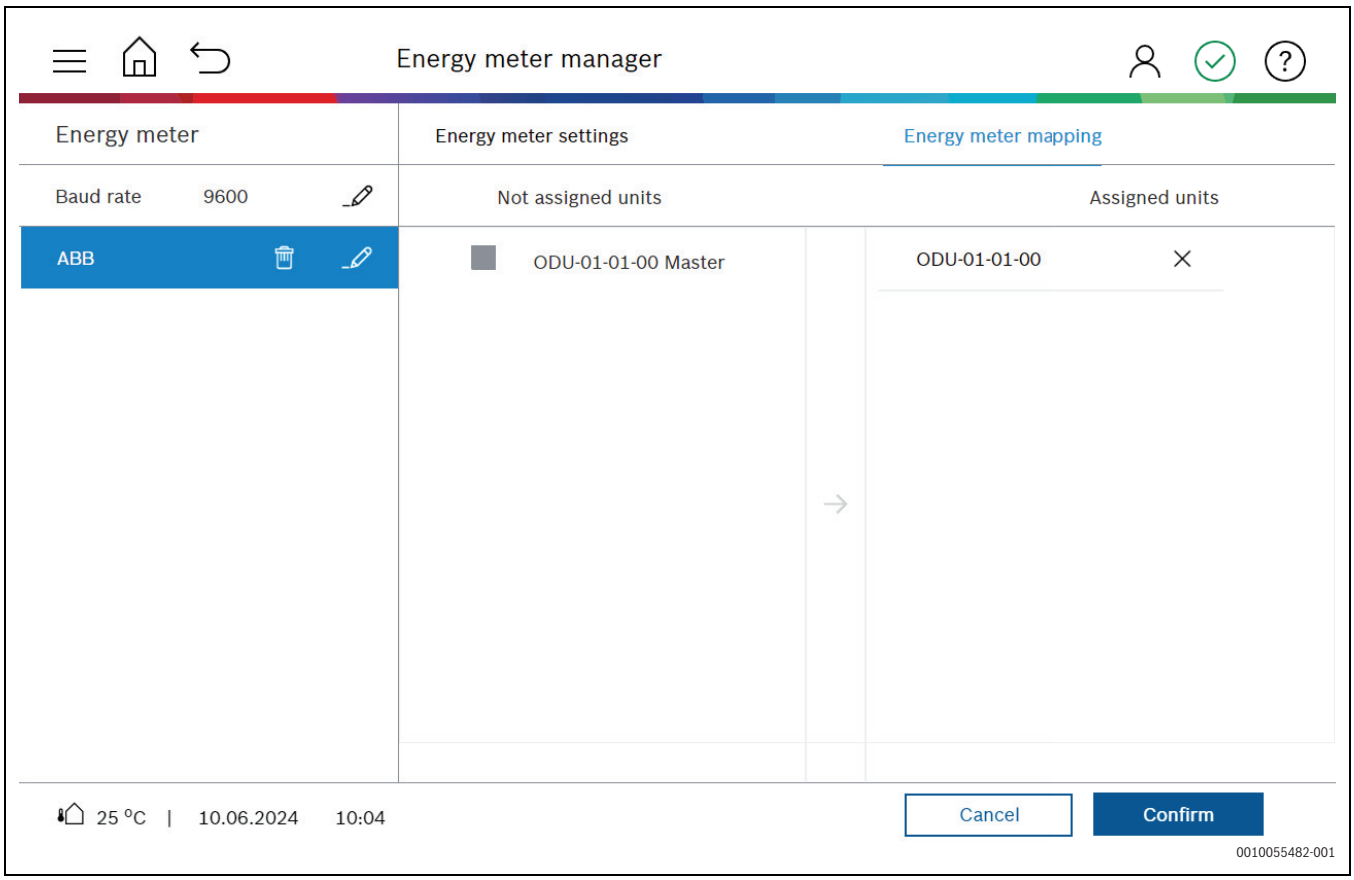
If necessary, the baud rate of the system can be changed.

To change the baud rate:

▶ Select ✎ in the energy meter area next to baud rate.

▶ Change the baud rate.

Important: if the baud rate has been changed, check the connection of the respective energy meters again.



To allocate an energy meter to units:

- ▶ In the area Energy meter , select an energy meter that has been created.
- ▶ In the area selection, select the area Energy meter mapping.
  The view **Not assigned units** and **Assigned units** appear.
- ▶ In the list **Not assigned units**, select the units that have to be allocated to the energy meter and pull to the area **Assigned units** by means of drag & drop.
  The units are allocated to the energy meter.

A maximum of 3 units can be allocated to an energy meter if they are within a cascade.

One unit can only be allocated to one energy meter at a time. It is not possible to allocated a unit to several energy meters.

→ 15.2.1 "Overview, energy meter editor"
→ 15.2.2 "Create an energy meter"

15.2.5 Replacing/removing the energy meters

To replace or remove an energy meter in a refrigerant system:

- ▶ Switch off the energy distribution for the refrigerant system concerned.
- ▶ Remove the energy meter and replace it with a new energy meter (meter reading at 0).
- ▶ Set new energy meter if it is not of the same type as the old energy meter or has a different Modbus address.
- ▶ Switch on the energy distribution for the respective refrigerant system again.

→ 15.2.1 "Overview, energy meter editor"
→ 15.5 "Energy distribution"
→ 15.2.3 "Setting the energy meter"

15.2.6 Close the Energy meter manager

To close the **Energy meter manager** page:

- ▶ Select header > ⌂.
  Dashboard appears.

→ 7.2 "Header"
→ 7.1 "Dashboard"

15.3 Energy meter monitor

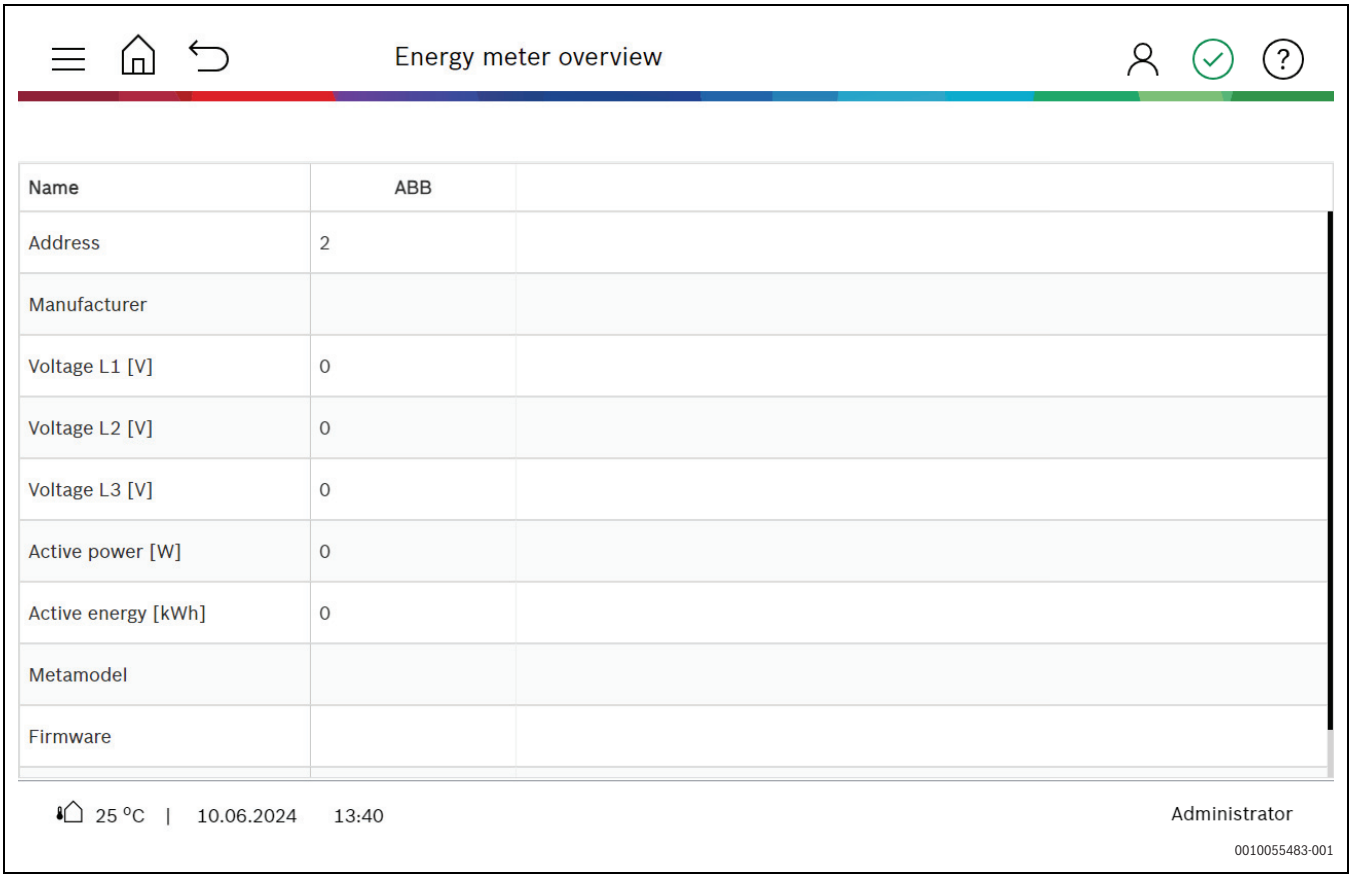
Information on the energy meters connected can be called up via the **Energy meter overview** page.

To call up the **Energy meter overview** page:

- ▶ Header > ☰ > **Energy management** > **Energy meter overview**
  Energy meter overview appears.

→ 7.2 "Header"

15.3.1 Overview, energy meter monitor



The **Energy meter overview** page displays detailed information about the energy meters connected. The values are displayed in real time and serve for the analysis of the respective energy meter.

15.4 Tenant management

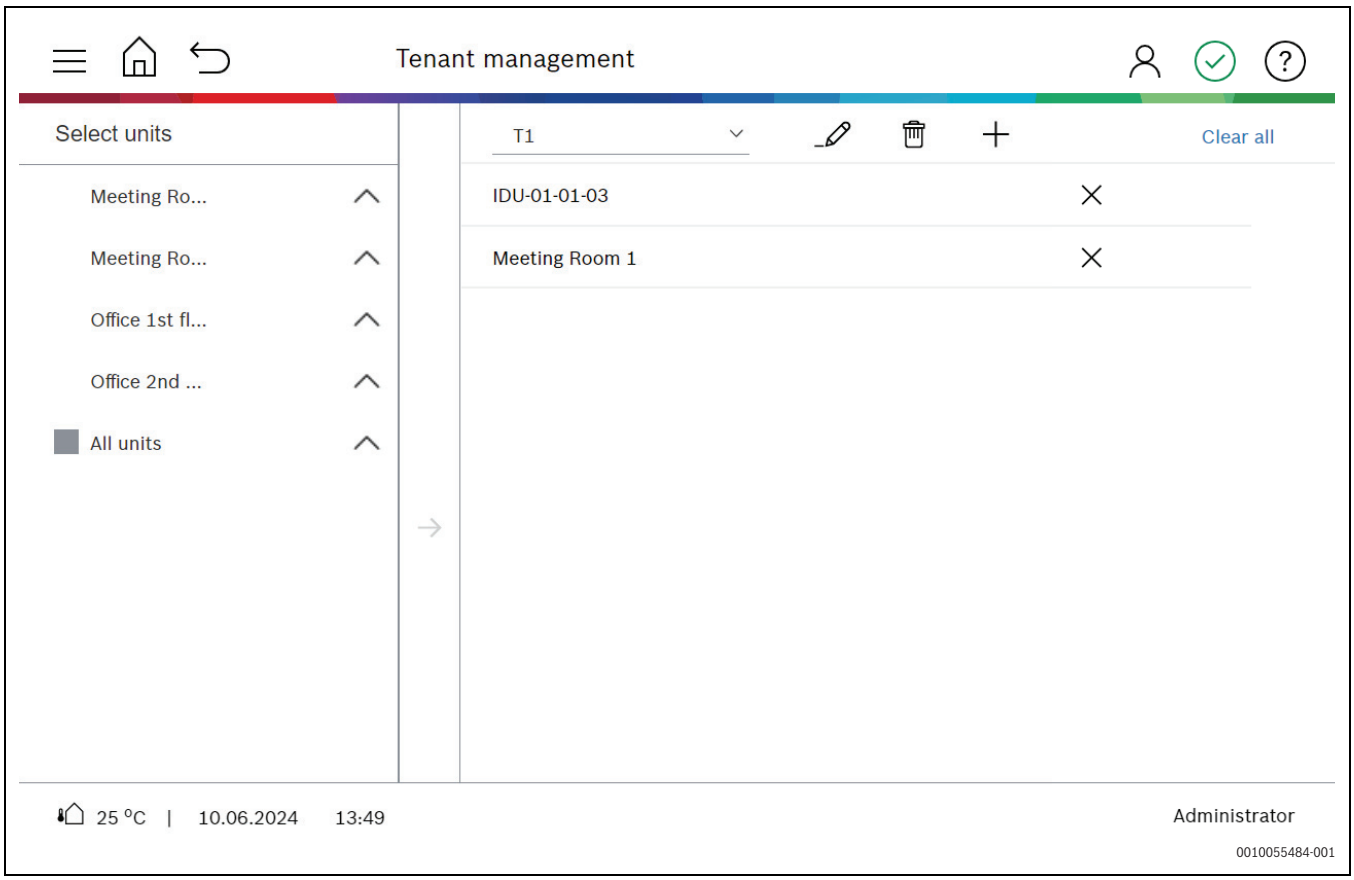
Tenants can be created and indoor units allocated on the **Tenant Management** page.

To call up the **Tenant Management** page:

▶ Header > ☰ > **Energy management** > **Tenant Management**
Tenant Management appears.

→ 7.2 "Header"

15.4.1 Overview, tenant management



The following settings can be made for on the **Tenant Management** page:

- Set the tenant.
- Allocate a tenant from a list or group of indoor units.
- Subsequently rename a tenant.
- Delete a tenant from the list.
- Subsequently add or delete indoor units.

One indoor unit can only be allocated to one tenant at a time.

15.5 Energy distribution

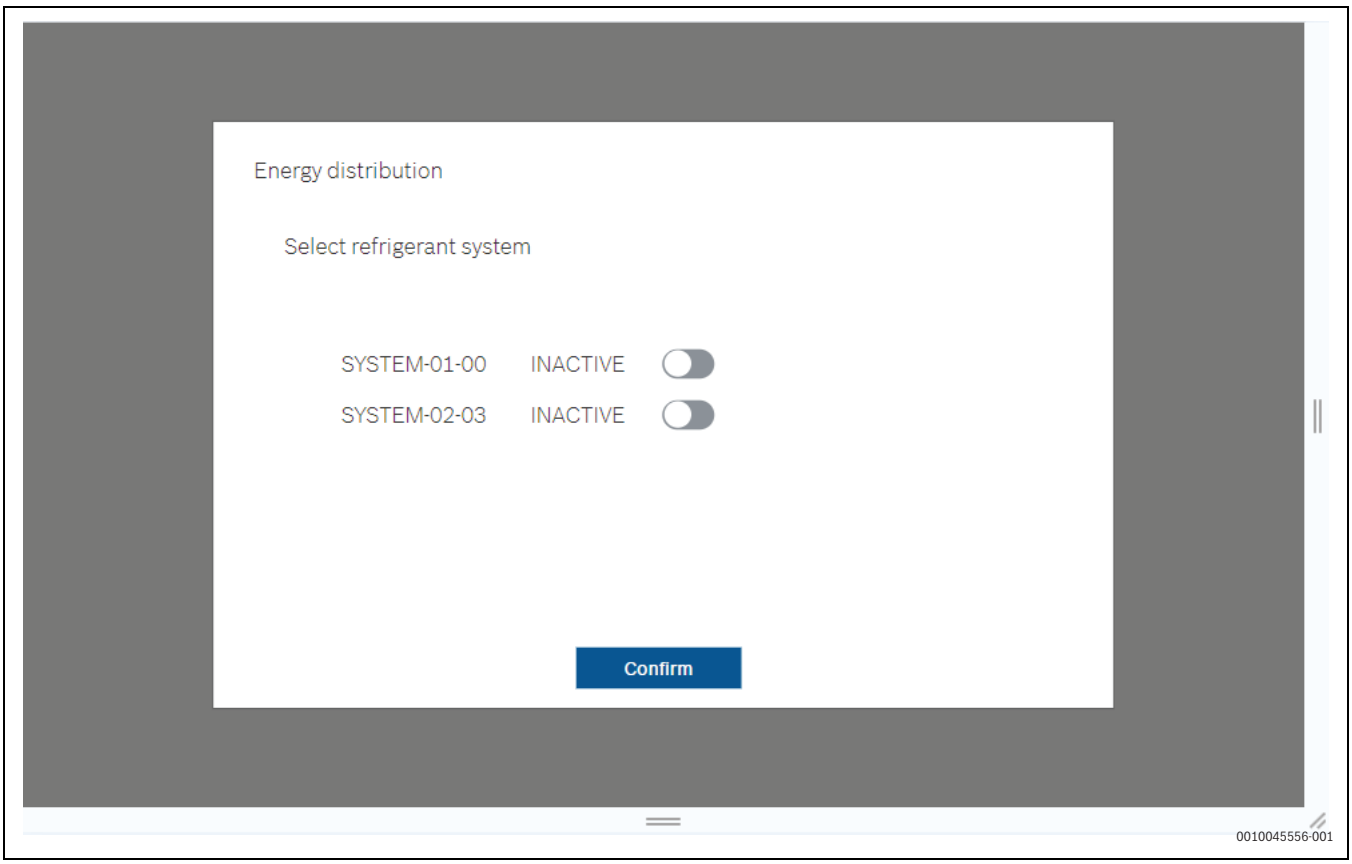
The energy distribution can be switched on and off for each refrigerant system via the **Energy distribution** page.

To call up the **Energy distribution** page:

▶ Header > ☰ > **Energy management** > **Energy distribution**
Energy distribution appears.

→ 7.2 "Header"

15.5.1 Switch the energy distribution on / off



The software for the energy distribution can be switch on or off individually using the dialogue for each refrigerant system.

The software calculates the energy consumption of the outdoor units and displays a distribution of the energy consumption of the indoor units.

The calculation for the energy distribution can be switch on or off individually using the dialogue for each refrigerant system.

After changing the time zone, it is necessary to restart the ACC MT central controller, otherwise errors will occur in the calculation of the power consumption.

If energy distribution is active in a refrigerant system, then changing or editing the allocated energy meter via the energy meter editor is not permitted.

It is essential that the NTP is configured.

A MicroSDX/SDXC card with at least 4 GB memory is required for operation of the energy meter.
Recommended: 8 GB High Reliability

Note:

If the energy distribution for a refrigerant system cannot be activated, ensure the following points:

- An energy meter is allocated to each outdoor unit.
- A connection has been established to all assigned energy meters.
- There are no faults in the system.

→ 15.2.3 "Setting the energy meter"
→ 20 "Troubleshooting"

15.6 Energy report

A report on the energy consumption of the outdoor units, converted to the connected indoor units, can be generated for a selected period of time and saved on a USB stick connected to the unit via the unit via the **Energy report** page.

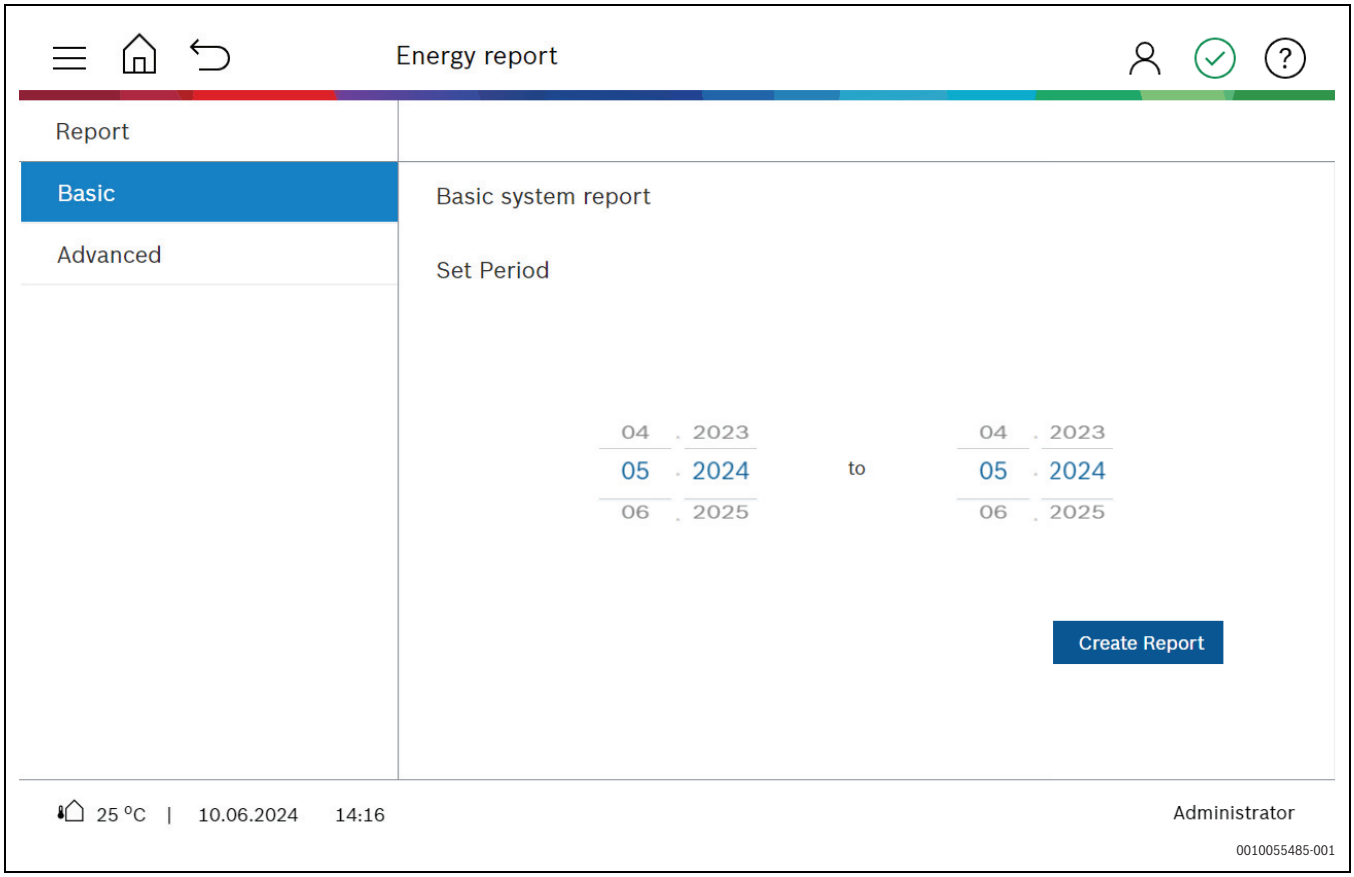
To call up the Energy report page:

▶ Header > ☰ > **Energy management** > Energy report
Energy report appears.

→ 7.2 "Header"

15.6.1 Energy report

Basic system report

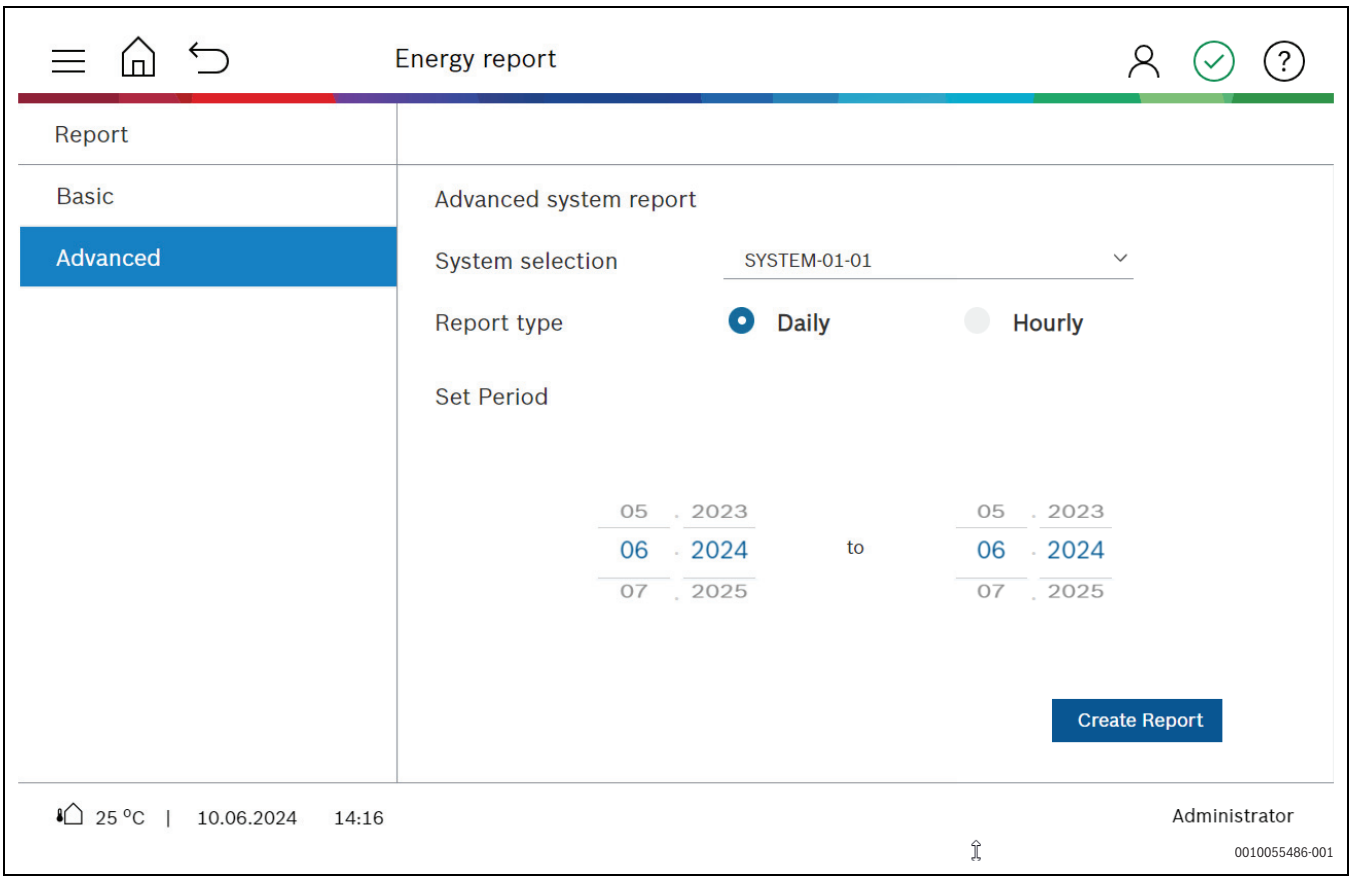


The selection of the report refers to all refrigerant systems connected (only applicable for Basic system report).

To create a Basic system report:

- In the area **Report**, select **Basic**.
  The selection Basic system report appears.
- **Set Period**.
  The period that can be selected for a report is maximum 24 months.
- Select **Create Report**.

Advanced system report



To create an advanced system report:

- ▶ In the area **Report**, select **Advanced**.
  The selection Advanced system report appears.
- ▶ Via the **System selection** dropdown list, select the refrigerant system for which the report should be created.
- ▶ Select **Report typeDaily** or **Hourly**.
- ▶ **Set Period**.
  Daily report: maximum selectable period 2 years.
  Hourly report: maximum selectable period 1 year.
- ▶ Select **Create Report**.

Important: monthly data are automatically deleted after 10 years. Daily and hourly data are automatically deleted after 2 years.

16 Diagnosis

16.1 Fault and event history

To call up the **Fault and event history** page:

- ▶ Header > ☰ > **Diagnosis** > **Fault and event history**

-or-

- ▶ If faults are present, the symbol ⓘ is displayed in the header.
  ⓘ select.

-or-

- ▶ If Warnings are present, the symbol ⚠ is displayed in the header.
  ⚠ select.
  The **Fault and event history** page appears.

→ 7.2 "Header"

Faults, warnings and events of the VRF system or the central controller are displayed on the **Fault and event history** page in a list view with several columns. Faults, warnings and events are each listed for the central controller, the outdoor unit and the indoor unit in separate higher-level tabs.

In the list, currently pending as well as historic faults, warnings and events are displayed:

- The current status of the entries is displayed in the first column. As standard, the entries currently pending are displayed first (click on column header to display solved first), sorted according to their time of occurrence (new events at the top in the list).
- The device affected is displayed in the second column.
- The fault or the event are described in the third column together with the respective fault code, if applicable.
- In the last column, the time of the last update of the list entry is displayed. In the case of currently pending entries, this is the time of occurrence; in the case of resolved list entries, this is the time at which the fault or event was resolved.

To empty the fault and event history:

- ▶ Select **Clear all**.
  Fault and event history has been emptied.

→ 20 "Troubleshooting"

16.2 System structure

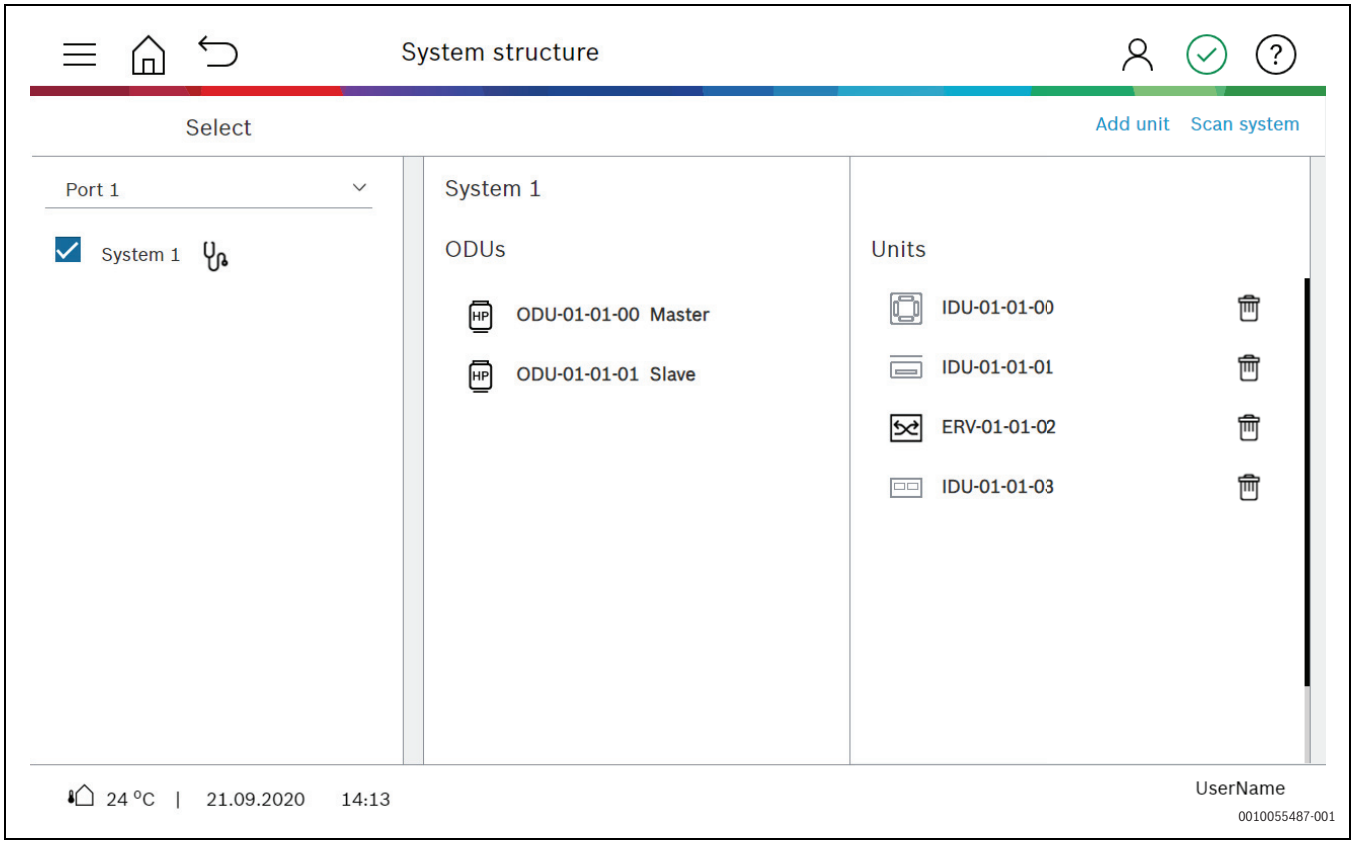
To call up the page **System structure**:

- ▶ Header > ☰ > **Diagnosis** > **System structure**
  The **System structure** page appears.

→ 7.2 "Header"

16.2.1 Overview of system structure

The overview displays the **System structure** page once the VRF system has been scanned (e.g. after exiting the configuration wizard starting a new system scan).



	Description	Description/references
	Header	• Navigation element, at the top edge of the screen on every page → 7.2 "Header" → 16.2.7 "Exiting the System structure"
29°C | 20.03.2019 1:05 pm	Footer	• Display of outdoor temperature, date and time → 7.4 "Footer"
	Select area sidebar	• Selection of ports • Display and selection of the refrigerant systems • Call up measurements and parameters (system monitor) of the refrigerant systems. → 16.2.2 "Selecting port" → 16.2.3 "Selecting refrigerant system"
Add unit	Add unit	• Manually add unit (IDU) to a refrigerant system. → 16.2.6 "Add unit"
Scan VRF system	Scan VRF system	• Scan VRF system again. → 16.2.4 "Scan VRF system (System scan)"
	View area	• View of selected refrigerant and the assigned units • Call up measurements and parameters (system monitor) of the units. → 16.2.3 "Selecting refrigerant system" → 16.3 "System monitor" → "Overview of symbols for unit types"

	Description	Description/references
		• Access System monitor page. → 16.3 "System monitor"
		• Delete unit (IDU) manually from a refrigerant system. → 16.2.5 "Deleting unit"

16.2.2 Selecting port

Up to 4 ports and the refrigerant systems assigned to these ports can be displayed in the Select area on the **System structure** page.

A port is a connection for an XYE cable. The central controller itself has an XYE port, the AC EXP expansion card offers 3 additional ports.

To select a port:

- ▶ Select dropdown list in the Select area.
- ▶ Select port.
  The port name is displayed. The refrigerant systems assigned to the port are displayed in the Select area where they can be selected.

→ 16.2.1 "Overview of system structure"
→ 16.2.3 "Selecting refrigerant system"

16.2.3 Selecting refrigerant system

8 refrigerant systems can be assigned to one port. After selecting the port, the refrigerant system assigned is displayed in the Select area.

Several refrigerant systems can be selected at the same time.

To select a refrigerant system:

- ▶ ☐ select the refrigerant system whose unit should be displayed. ☑ appears. The units (IDU and ODU) of the refrigerant system selected appear in the View area of the **System structure** page.

A refrigerant system is either assigned to an ODU or a cascade from an ODU (master) with up to 2 lower level ODUs (slave). Up to 64 units (IDUs, ERV, AHU KITS) can be assigned to each port. These can be distributed to different refrigerant systems.

→ 16.2.1 "Overview of system structure"
→ 16.2.2 "Selecting port"
→ 16.2.5 "Deleting unit"
→ 16.3 "System monitor"

16.2.4 Scan VRF system (System scan)

It may be necessary to scan the VRF system again, after assigning new addresses or making changes to the system structure, for example.

The system scan can also be started via the main menu:

- ▶ Header > ☰ > ⚙ **System configuration** > **Set up system**

If a system scan is carried out again, **all** addresses already entered, settings made for the units and groups, time programs, etc. that have been created are **deleted**. When making small changes to the system structure, we recommend adding or deleting units manually.

To scan the VRF system again:

- ▶ Select Scan VRF system.
  The **Scan VRF system** dialogue box appears.
- ▶ Select **Syst. scan**.
  The system scan starts automatically. A progress bar appears for the duration of the scan. Once the system scan is complete, all detected units are available for operation via the central controller. The **System structure** page appears. All devices detected by the system scan are displayed on this page.

To cancel the operation:

- ▶ Select **Cancel**.

→ "Abbreviations and concept application"
→ 16.2.1 "Overview of system structure"
→ 16.2.6 "Add unit"
→ 16.2.5 "Deleting unit"
→ 16.2.3 "Selecting refrigerant system"
→ 7.3 "Initial Menu"

16.2.5 Deleting unit

To delete a unit (IDU) manually from the refrigerant system, instead of via the system scan:

- ▶ Select the refrigerant system from which you wish to delete a unit.
- ▶ Select 🗑 to the right of the unit in the View area on the System structure page.
  The **Delete unit** dialogue box appears.
- ▶ Select **Confirm**.
  The unit is deleted from the refrigerant system.

To cancel the operation:

- ▶ Select **Cancel**.

→ 16.2.1 "Overview of system structure"
→ 16.2.3 "Selecting refrigerant system"

16.2.6 Add unit

To manually add a refrigerant system to a unit (IDU) instead if via the system scan:

- ▶ select **Add unit** on page **System structure**.
  The **Add unit** dialogue box appears.
- ▶ Select port via the**Select port** dropdown list.
- ▶ Select refrigerant system via the **Select refrigerant system** dropdown list.
- ▶ Select the **Address** of the unit via the dropdown list.
- ▶ Select **Confirm**.
  The refrigeration system has been added to the unit.

To cancel the operation:

- ▶ Select **Cancel**.

→ 16.2.1 "Overview of system structure"

16.2.7 Exiting the System structure

To close the page **System structure**:

- ▶ Select header > ⌂.
  Dashboard appears.

→ 7.2 "Header"
→ 7.1 "Dashboard"

16.3 System monitor

Via the System monitor page, the measured values as well as the refrigerant systems, outdoor units and all units (IDU, MDCI[1)], ERV, AHU KIT, AF-HB) can be viewed.

1) Function depends on which version of the central controller is used.

To call up the System monitor page:

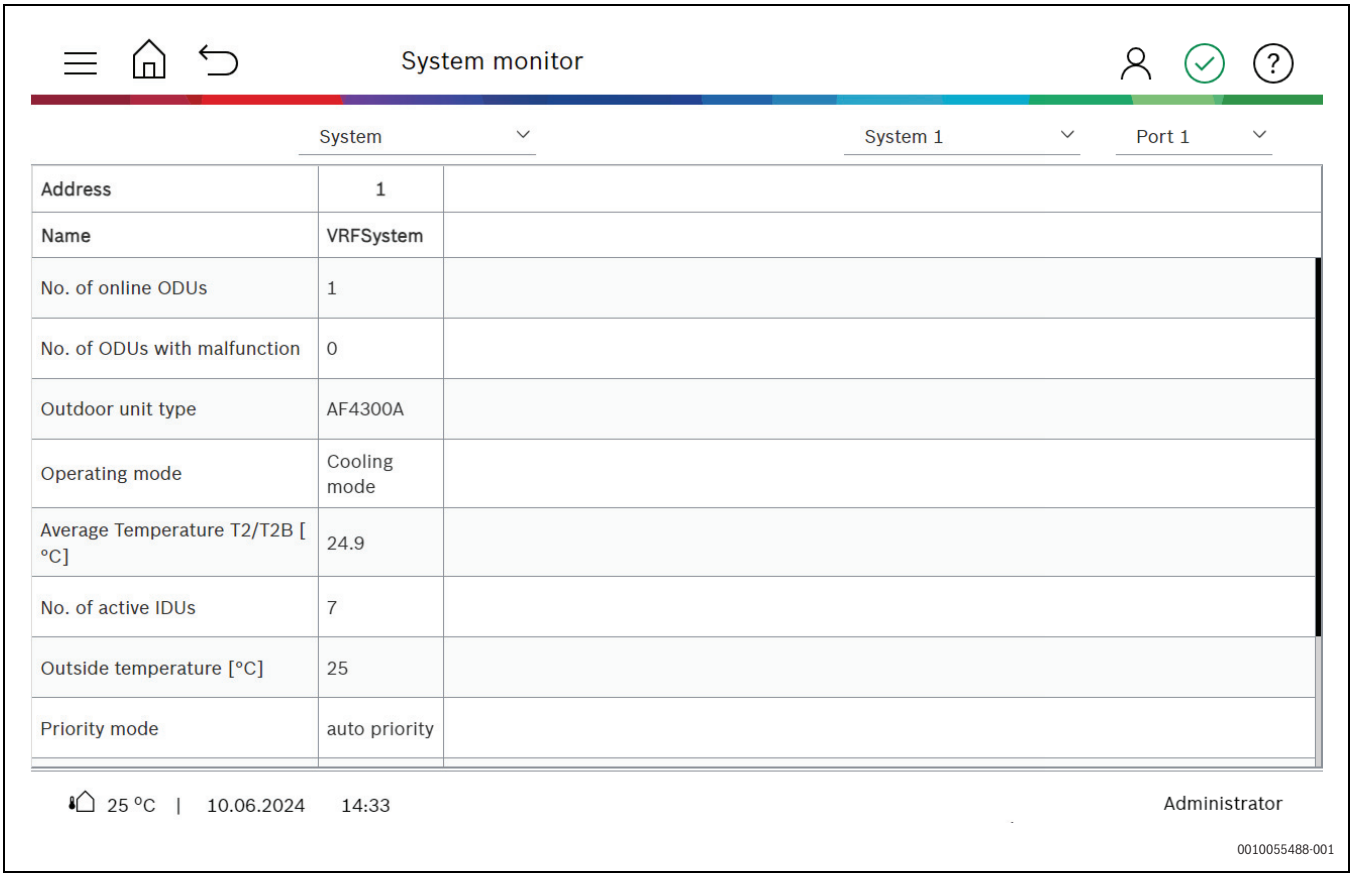
▶ Header > ☰ > **Diagnosis** > System monitor
The System monitor page appears.

To call up via the System monitor page the **System structure** page:

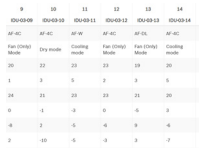
▶ Selecting refrigerant system.
▶ Select to the right of the refrigerant system in the Select area.
The System monitor page appears.

→ 7.2 "Header"
→ 16.2.1 "Overview of system structure"
→ 16.2.3 "Selecting refrigerant system"

16.3.1 Overview of system monitor



	Description	Description/references
☰ ⌂ ⮌...	Header	• Navigation element, at the top edge of the screen on every page → 7.2 "Header" → 16.3.6 "Exiting the System monitor"
29°C | 20.03.2019 1:05 pm	Footer	• Display of outdoor temperature, date and time → 7.4 "Footer"
	Selection area	• Select port via dropdown list. • Select refrigerant system via the dropdown list. • Select refrigerant system or units whose measurements and parameters are to be displayed via the dropdown list. → 16.2.2 "Selecting port" → 16.2.3 "Selecting refrigerant system" → 16.3.4 "Selecting display"

	Description	Description/references
	View area, left	• Display of measurements/parameter names. → 16.3.5 "Overview of measurements and parameters"
	View area, centre	• Display of measurements and parameters of the selected refrigerant systems or units. → 16.3.5 "Overview of measurements and parameters"

16.3.2 Selecting port

To display the parameters of a refrigerant system or corresponding units on the **System monitor** page, a port must initially be selected.

A port is a connection for an XYE cable. The central controller itself has an XYE port, the AC EXP expansion card offers 3 additional ports.

To select a port:

▶ Select port via **Port** dropdown list in the Selection area.
The port is selected and the assigned refrigerant systems can be selected.

→ 16.3.1 "Overview of system monitor"
→ 16.3.3 "Selecting refrigerant system"

16.3.3 Selecting refrigerant system

Once the port has been selected, the refrigerant systems assigned to the port can be selected.

To select a refrigerant system:

▶ Select the refrigerant system to be displayed from the **Select refrigerant system** dropdown list in the Selection area.
Refrigerant system is selected. The parameters of the selected refrigerant system and corresponding units are displayed in the View area.

→ 16.3.1 "Overview of system monitor"
→ 16.3.2 "Selecting port"

16.3.4 Selecting display

After selecting the port and the refrigerant system, the refrigerant system or the assigned units can be selected in order to view their parameters.

To select the parameters of the refrigerant system:

▶ Select **System** in the Selection area via the dropdown list.
The parameters of the refrigerant system are displayed in the View area. The selection is displayed in blue.

To select the parameters of the assigned outdoor units (ODU):

▶ Select **Outdoor unit** in the Selection area.
The parameters of the outdoor units are displayed in the View area. The selection is displayed in blue.

To select the parameters of the assigned indoor units (IDU):

▶ Select **IDU** in the Selection area.
The parameters of the indoor units are displayed in the View area. The selection is displayed in blue.

To select the parameters of the assigned ventilation units (ERV):

▶ Select **ERV** in the Selection area.
The parameters of the ERV ventilation units are displayed in the View area. The selection is displayed in blue.

To select parameters of the assigned DX-AHU connection sets AHU KIT:

▶ Select **AHU** in the Selection area.
The parameters of the DX-AHU connection kit AHU KIT are displayed in the View area. The selection is displayed in blue.

→ 16.3.1 "Overview of system monitor"
→ 16.3.5 "Overview of measurements and parameters"

16.3.5 Overview of measurements and parameters

Once the selection has been made, the measurement/parameter names appear in the View left area and the corresponding measurements and parameters appear in the View centre area.

→ 16.3.1 "Overview of system monitor"

16.3.6 Exiting the System monitor

To close the page **System monitor**:

▶ Select header > ⌂.
Dashboard appears.

→ 7.2 "Header"
→ 7.1 "Dashboard"

16.4 Digital input

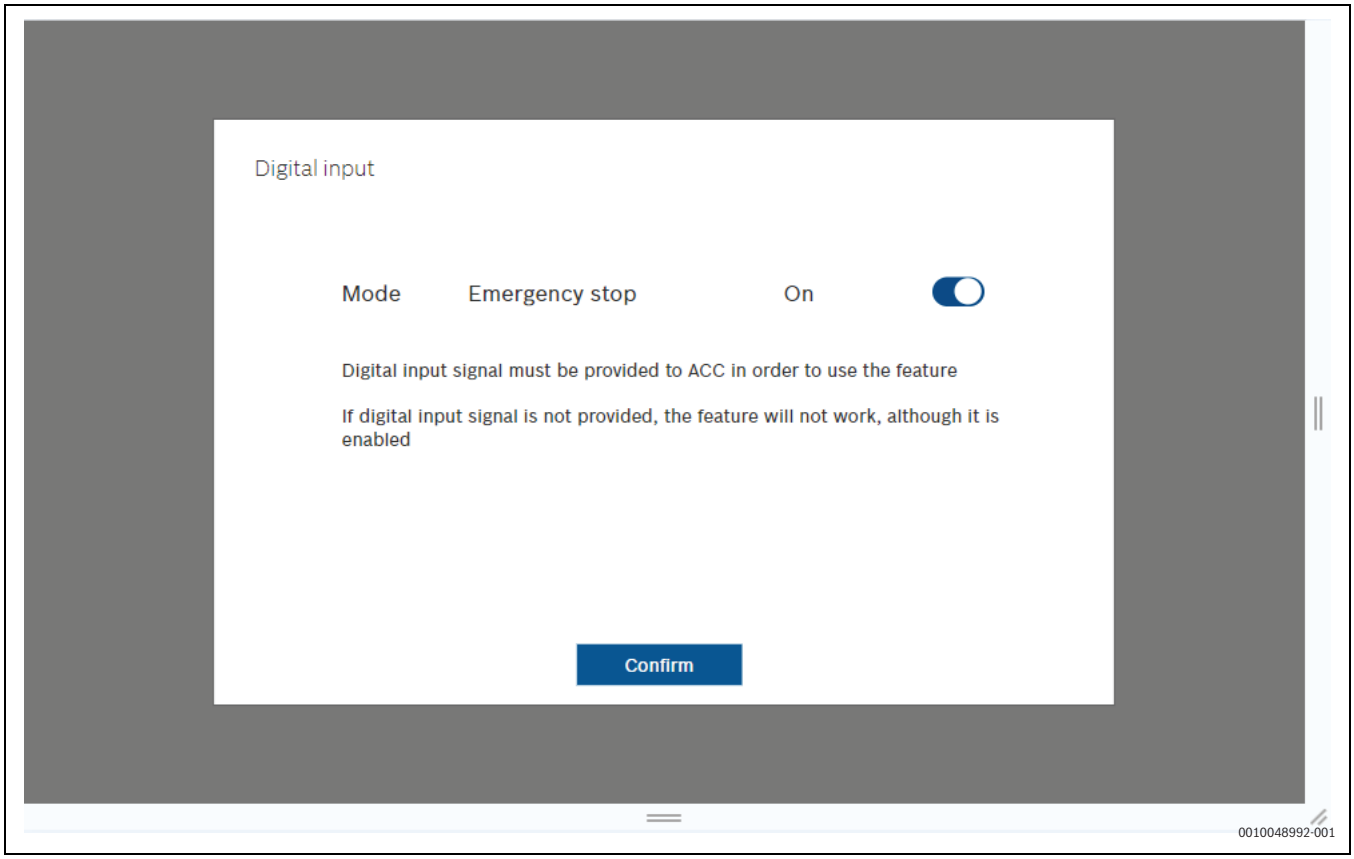
If the refrigerant system receives an emergency off signal (**Emergency stop**), e. g. from a connected smoke alarm, then all appliances connected are automatically switched off in the ACC MT central controller and the controllers are blocked.

The function **Emergency stop** can be switched on and off via the **Digital input** page.

To call up the **Digital input** page:

▶ Header > ☰ > **Diagnosis** > **Digital input**
The **Digital input** page appears.

→ 7.2 "Header"



To activate the **Emergency stop** function:

- ▶ Select . appears.
  The display changes from Off to On.
  The **Emergency stop** function is active.

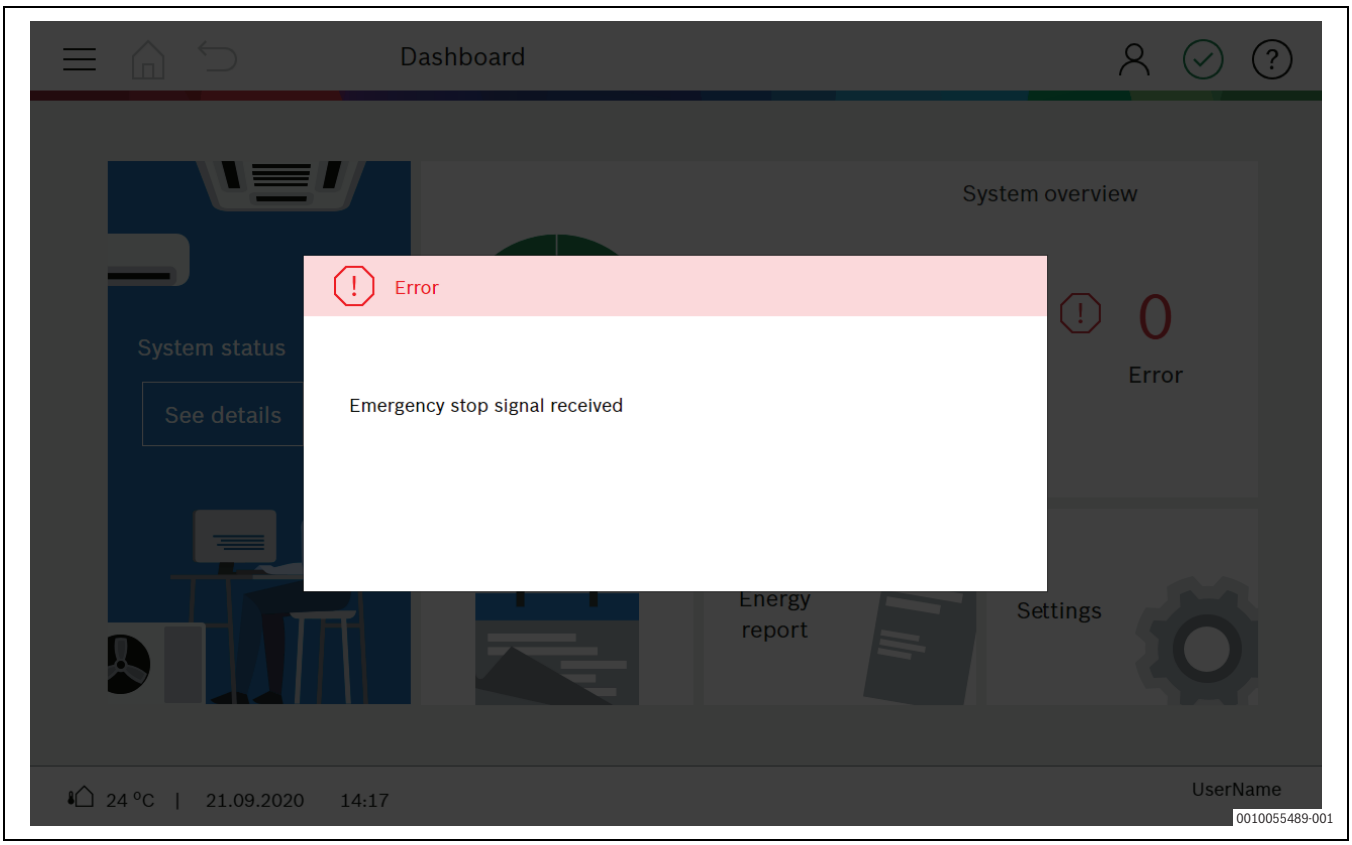
Notice: if the **Emergency stop** function is not activated, the refrigerant system can continue to be operated even in the event of a pending emergency off signal.

Notice: the digital input signal must be provided to the ACC MT central controller in order to use the emergency off function. If no digital input signal is provided, the emergency off function does not function even though it is activated.

Emergency stop

If the **Emergency stop** function is activated, in the event of a pending emergency, the operation of the ACC MT central controller is blocked by the **Emergency stop signal received** message window.

As long as the emergency off signal is present, it is not possible to operate the refrigerant system.



17 System configuration

17.1 Floor plan editor

→ 12 "Floor plans/Floor plan editor"

17.2 Group editor

→ 11 "Group editor"

17.3 Set up system

→ 16.2 "System structure"
→ 16.2.4 "Scan VRF system (System scan)"

18 Controller settings

To call up the page **Controller settings**:

▶ **Dashboard** > **Controller settings**

-or-

▶ Header > ☰ > **Controller settings**

The **Controller settings** page appears.

→ 7.2 "Header"
→ 7.1 "Dashboard"

Overview Controller settings

The following setting options are available:

Designation	Description/references
User management	• View, create and delete users. • Change password and make further settings. → 18.1 "User management"
Network settings	• Configure LAN port. • Make Network Settings. • Activate PC interface. → 18.2 "Network settings"
Screen settings	• Make screen settings. → 18.3 "Screen settings"
Language, date and time	• Change settings for time zone, date, time and language. → 18.4 "Language, date and time"

Designation	Description/references
E-mail manager	• Set up e-mail warnings in the event of faults. → 18.5 "E-mail manager"
Device & Updates	• Restore factory settings on central controller. → 18.6.1 "Resetting all settings" • Restart central controller. → 18.6.2 "Restarting" • Save user-specific settings on the USB stick and restore. → 18.6.3 "Backing up and restoring settings" • Install the software update from USB stick → 18.6.4 "Software update from USB stick"

18.1 User management

Users can be viewed, created, edited or deleted by an administrator via the **User management** page.

To call up the page **User management**:

▶ **Dashboard** > ⚙ **Controller settings**> **User management**

-or-

▶ Header > ☰ > ⚙ **Controller settings** > **User management**
The **User management** page appears.

→ 7.2 "Header"
→ 7.1 "Dashboard"

Overview User management

Description	Description/References
☰ ⌂ ⮌...	• Header: navigation element, on every page at the top edge of the screen → 7.2 "Header" → 18.1.5 "Closing user management"
User overview	• Display all created users
Add user	• Add new user. → 18.1.2 "Add user"
✎	• Change username, user role and user password. → 18.1.4 "Changing user data"
🗑	• Delete user. → 18.1.3 "Deleting users"

18.1.1 User roles

The **Operator**, **Expert** as well as **Administrator** user roles have different rights.

The following rights are assigned to the corresponding user roles:

Description/Link	User	Expert	Administrator
→ 9.1 "Settings"	✓	✓	✓
→ 10 "Lock Manager"	–	✓[1)]	✓
→ 11 "Group editor"	–	✓[1)]	✓
→ 12.2 "Floor plan editor"	–	✓[1)]	✓
→ 13 "Schedules"	–[2)]	✓[1)]	✓
→ 14 "Calendar"	–[2)]	✓[1)]	✓
→ 15 "Energy management"	–	–	✓
→ 16.1 "Fault and event history"	–[2)]	–[2)]	✓
→ 16.2 "System structure"	–	–[2)]	✓
→ 16.2.4 "Scan VRF system (System scan)"	–	–	✓
→ 16.3 "System monitor"	–	✓[1)]	✓
→ 16.4 "Digital input"	–	✓[1)]	✓
→ 18.1 "User management"	–[3)]	–[3)]	✓
→ 18.2 "Network settings"	–	✓[1)]	✓
→ 18.4 "Language, date and time"	–	✓[1)]	✓
→ 18.6 "Device and updates"	–	✓[1)]	✓
→ 18.6.3 "Backing up and restoring settings"	–	✓[1)]	✓

Description/Link	User	Expert	Administrator
→ 18.5 "E-mail manager"	–	✓1)	✓
→ 18.6.1 "Resetting all settings"	–	–	✓

1) Only if all unit access is given
2) Only view of accessible Units available (no changes possible)
3) User can view and change only the settings of current user

Table 2 Rights of all user roles

18.1.2 Add user

Only an administrator can add new users.

Personal data and settings are stored locally on the central controller and can be viewed by other users if required.

To add a new user:

▶ Select **Add user**.
The form for adding a new user appears.

User name

The username must be no more than 30 characters in length. An individual username must always be created that does not allow conclusions to be drawn about the identity of the person.

To create a username:

▶ Enter username in the **User name** field.

User role

To assign a role to the user:

▶ Select **User role** from the dropdown list.

Password

To create a password:

▶ Select ○ next to **Password required**.
● appears. The password entry fields appear.
▶ Enter password in the **Password** field.
▶ Confirm password in the **Confirm password** field.

The password function can also be deactivated. This function is only available to users with the role of User.

To deactivate the password function:

▶ Select ● next to **Password required**.
○ appears. Password function is deactivated.

Automatic logoff

If the **Automatic logoff** function is activated, a logged-in user is automatically logged out once a certain period of inactivity has elapsed. This function is only available to users with the roles User and Expert.

To activate the **Automatic logoff** function:

▶ Select ○ next to **Automatic logoff**.
● appears. Function is activated.

Access to all units

If the **Access to all units** is activated for a user, all units can be accessed.

An administrator automatically has access to all units. Depending on the application, it must be considered whether or not users with the User and Expert user roles should be granted access to all units.

To activate the **Access to all units** function:

▶ Select ○ next to **Access to all units**.
● appears. Function is activated. If groups have already been created, these can no longer be selected.

To assign groups to the user, the **Access to all units** function must be deactivated (○).

By being assigned to a group, a user gains access to the units assigned to the group. Groups can be created on the **Group editor** page.

Once groups have been created, they appear under **Access to** and can be assigned to the user.

To assign groups to the user:

▶ Select ☐ of the group to which the user is to have access.
☑ appears. Group is assigned to the user.

If a group is deleted via the **Group editor** page, the users assigned to this group can no longer access the units assigned to this group.

To apply all settings and permanently create a user:

▶ Select **Confirm**.
The user has been created and appears under **User overview**.

To cancel the operation:

▶ Select **Cancel**.

→ 2 "Data protection notices for the operator"
→ 18.1.1 "User roles"
→ 18.1.4 "Changing user data"
→ 11 "Group editor"

18.1.3 Deleting users

Users in any user role can be deleted under **User overview**.

To delete a user:

▶ Select 🗑.
Warning message appears.
▶ Select **Confirm**.
The user is deleted and no longer appears under **User overview**.

To cancel the operation:

▶ Select **Cancel**.

18.1.4 Changing user data

An administrator can change the user name, user role and password of users in any user role under **User overview**. Every other user can on the other hand change his own password.

If the password input is deactivated, the fields for changing the password are not displayed.

To change the user data:

▶ Select ✎.
The fields in which the data can be changed appear.
▶ Enter new user name in the **User name** field.
▶ Change user role via **User role** dropdown list.
▶ Enter new password in the **Password** field.

- ▶ Enter new password again in the **Confirm password** field as confirmation.
- ▶ Select and deselect groups under **Access to** to change assignment.
- ▶ Select **Confirm**.
  The user data is changed.

To cancel the operation:

- ▶ Select **Cancel**.

→ 18.1.2 "Add user"
→ 18.1.1 "User roles"

18.1.5 Closing user management

To close the page **User management**:

- ▶ Select header > ⌂.
  Dashboard appears.

→ 7.2 "Header"
→ 7.1 "Dashboard"

18.2 Network settings

Network settings can be made via the **Network settings** page.

To call up the page **Network settings**:

- ▶ **Dashboard** > ⚙ **Controller settings**> **Network settings**

-or-

- ▶ Header > ☰ > ⚙ **Controller settings** > **Network settings**
  The **Network settings** page appears.

To make network settings:

- ▶ Select network (LAN1/LAN2).
- ▶ Select ⬭ next to **DHCP**.
  DHCP[1)] is activated. Dynamic Host Configuration Protocol (DHCP) enables the network configuration to be assigned to clients by a server. When DHCP is activated, the IP address and additional network configurations are automatically assigned to the central controller.
- ▶ **IP address**, **Subnet mask**, **Default gateway**, **DNS server** can only be entered manually if DHCP is not activated. If DHCP is activated these fields are greyed out.

1) The DHCP feature is only available for LAN1.

Activate PC interface

The Google Chrome web browser version 83 or higher or the Mozilla Firefox version 68 or higher is required to access the user interface.
The current IP-address of the ACC MT is displayed in the input fields if the DHCP function is activated.
The ACC MT uses a self-generated certificate to establish an HTTPS connection. As the external computer does not recognise this certificate, the computer displays a warning the first time the user interface of the ACC MT is accessed. To access the control panel of the ACC MT, the certificate must be accepted manually in the browser.

If **PC interface** is activated, the control panel of the ACC MT can be accessed by entering the IP address of the ACC MT in the browser window of an external computer.

The prerequisite for this is that the external computer is in the same local network.

- ▶ Activate PC interface at the **PC interface** switch.
- ▶ Select **Confirm** to complete the setup.

-or-

- ▶ Select **Cancel** to cancel the setup.

Modbus/TCP

The Modbus/TCP interface enables the ACC MT central controller to read and write data via this protocol.

Separate IP addresses can be assigned for each XYE port.

Modbus/TCP must be activated to start the read/write process.

To activate Modbus/TCP, proceed as follows:

- ▶ Select ⬭.
  🔵 appears.
  Modbus/TCP Is activated.

18.3 Screen settings

Display settings can be made via the **Screen settings** page.

To call up the **Screen settings** page:

- ▶ **Dashboard** > ⚙ **Controller settings**> **Screen settings**

-or-

- ▶ Header > ☰ > ⚙ **Controller settings** > **Screen settings**
  The **Screen settings** page appears.

→ 7.2 "Header"
→ 7.1 "Dashboard"

Overview Screen settings

Description	Description/references
Ambient light sensor	• Adapting the brightness of the display according to the ambient light.
Brightness	• Adjusting the brightness of the display. → 18.3.1 "Adjusting the brightness of the display"
Switch off after	• Adjusting the display switch-off time. → 18.3.2 "Setting the switch-off time of the display"

18.3.1 Adjusting the brightness of the display

To adjust the brightness of the display:

- ▶ Drag the slider next to **Brightness** to the right or left until the required brightness is reached.
  The brightness of the display has been adjusted.

Recommendation:
to automatically adjust the brightness of the display based on the ambient brightness:

- ▶ Switch on the “ALS” (Ambient Light Sensor) function.

18.3.2 Setting the switch-off time of the display

The switch-off time is the period of inactivity until the display is switched off.

To adjust the display switch-off time:

- Next to **Switch off after**, select value (**Never**, **30min** or **60min**) via dropdown list.
  The switch-off time appears in the field and is applied.

18.4 Language, date and time

The time zone, date, time and language can be modified via the **Language, date and time** page.

To call up the page **Language, date and time**:

- **Dashboard** > **Controller settings**> **Language, date and time**

-or-

- Header > > **Controller settings** > **Language, date and time**
  The **Language, date and time** page appears.

18.4.1 Language

To make settings in the Language area:

- **Select language** from dropdown list.
  Settings are applied.

18.4.2 Time zone, date and time

To make the settings in the **Time zone, date and time** area:

- Select next to **Internet time** to apply time and date automatically from the Internet.
- Select **Time zone** via dropdown list.
- Adjust **Time** by swiping up or down if **Internet time** is not selected.
- Adjust **Date** by swiping up or down if **Internet time** is not selected.
  The settings are applied.

18.5 E-mail manager

If e-mail warnings are to be sent to a maximum of four recipients or recipient lists in the event of faults, this can be specified on the **E-mail manager** page.

Personal data and settings are stored locally on the ACC MT and under some circumstances can be viewed by other users of the ACC MT.

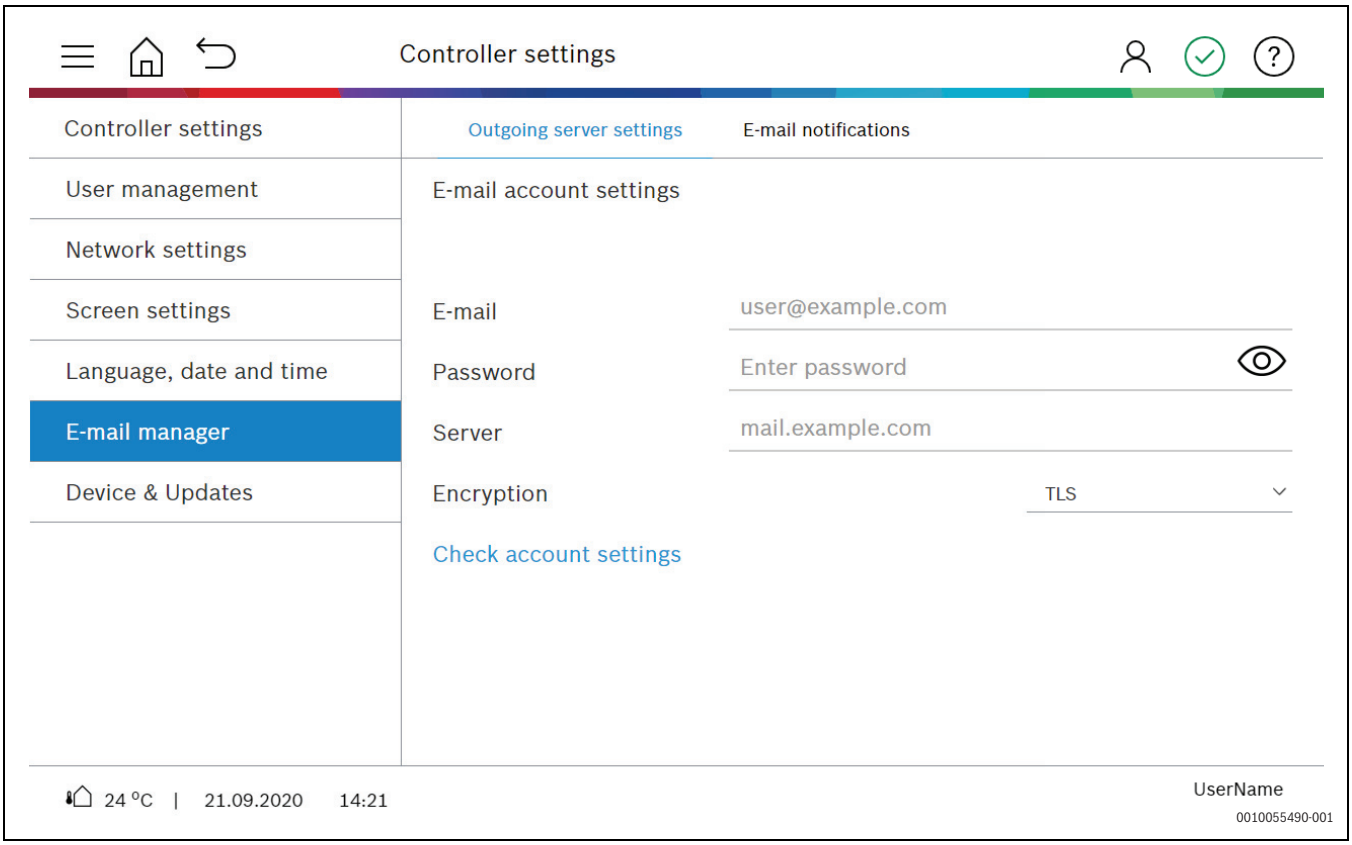
To call up the **E-mail manager** page:

- Header > > **Controller settings** > **E-mail manager**
  The **E-mail manager** page appears.

→ "Header overview"

18.5.1 Configuring the Outgoing server settings

The **Outgoing server settings** page contains an input screen form for setting up the e-mail account from which the e-mails are to be sent.



To set up the e-mail account:

- Enter e-mail address in the **E-mail** field.
- Enter password of the e-mail account in the **Password** field.
- Enter server address in the **Server** field.
- Select encryption from the **Encryption** dropdown list.

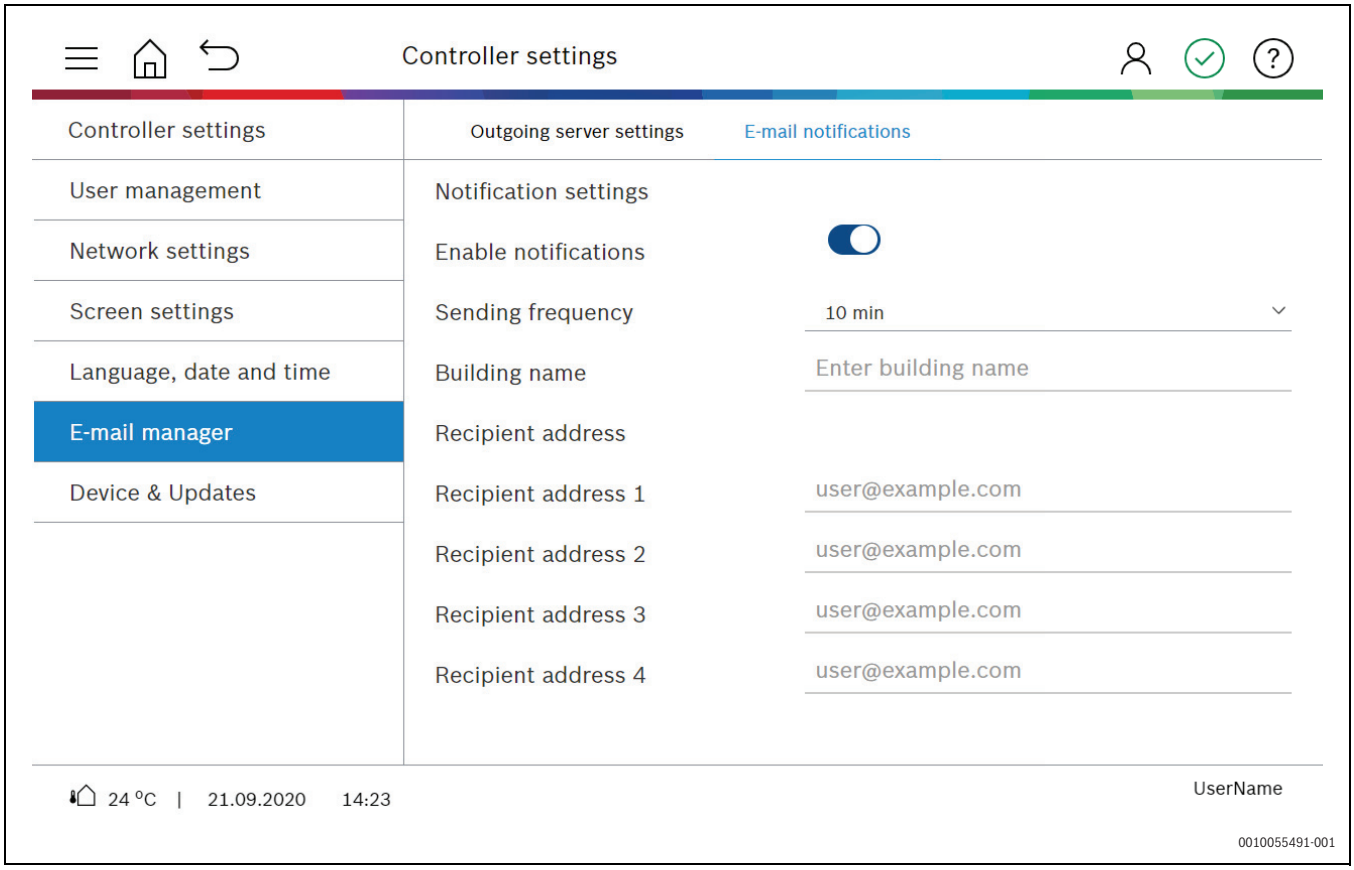
To test the settings:

- Select **Check account settings**.
  A window displays the result of the connection test.

→ 18.5.2 "Configuring the E-mail notifications"

18.5.2 Configuring the E-mail notifications

Once the outgoing server has been set up, the option for sending E-Mail warnings in the event of a fault can be activated on the **E-mail notifications** page.



To set up e-mail warnings:

- ▶ Activate forwarding of e-mail warnings at the **Enable notifications** switch.
- ▶ Adjust the frequency of the updates in the **Sending frequency** dropdown list.
- ▶ Enter the name of the building where the central controller is located in the **Building name** field.
  The name appears in the subject line of the e-mail warnings.
- ▶ Four e-mail recipients at the most are entered in the **Recipient addresses** area.

→ 18.5.1 "Configuring the Outgoing server settings"

18.6 Device and updates

The **Device & Updates** page can be used to reset and save settings, perform a restart and install software updates from the USB stick.

To call up the **Device & Updates** page:

- ▶ **Dashboard** > ⚙ **Controller settings** > **Device & Updates**

-or-

- ▶ Header > ☰ > ⚙ **Controller settings** > **Device & Updates**
  4 functions on the **Device & Updates** page are displayed for selection.

→ 7.2 "Header"
→ 7.1 "Dashboard"
→ 18.1.1 "User roles"

Overview Device & Updates

The following 4 functions can be accessed via the **Device & Updates** page.

Designation	Description/references
Reset all settings	→ 18.6.1 "Resetting all settings"
Restart	→ 18.6.2 "Restarting"
Save settings	→ 18.6.3 "Backing up and restoring settings"
SW update from USB stick	→ 18.6.4 "Software update from USB stick"

18.6.1 Resetting all settings

You can restore the factory settings for all user-specific settings and delete the settings for time programs, groups or floor plans on the **Reset all settings** page. The configuration wizard appears on the first start after the reset. It is possible to restore saved settings.

To call up the **Reset all settings** page:

- ▶ **Dashboard** > ⚙ **Controller settings** > **Device & Updates** > **Reset all settings**

-or-

▶ Header > ☰ > ⚙ **Controller settings** > **Device & Updates** > **Reset all settings**
The **Warning** dialogue box appears.

To reset all settings to the default settings:
▶ Select **Confirm**.
All settings are reset.

To cancel the operation:
▶ Select **Cancel**.

ⓘ
→ 7.2 "Header"
→ 7.1 "Dashboard"
→ 5.1 "Configuration wizard"
→ 18.6.3 "Backing up and restoring settings"
→ 16.2.4 "Scan VRF system (System scan)"

18.6.2 Restarting

ⓘ
The central controller is restarted via the **Restart** page. In doing so, there is no data loss and all user-specific settings are retained.

To call up the **Restart** page:
▶ **Dashboard** > ⚙ **Controller settings**> **Device & Updates** > **Restart**
-or-
▶ Header > ☰ > ⚙ **Controller settings** > **Device & Updates** > **Restart**
The **Warning** dialogue box appears.

To restart the central controller:
▶ Select **Confirm**.
The central controller is restarted. The **Login** dialogue box appears.

To cancel the operation:
▶ Select **Cancel**.

ⓘ
→ 7.2 "Header"
→ 7.1 "Dashboard"
→ 7.5 "Log user in and out"

18.6.3 Backing up and restoring settings

All user-specific settings can be saved to a USB stick via the **Save settings** page. The backup can be used to restore the user-specific settings after resetting all settings.

To call up the **Save settings** page:
▶ **Dashboard** > ⚙ **Controller settings** > **Device & Updates** >**Save settings**
-or-
▶ Header > ☰ > ⚙ **Controller settings** > **Device & Updates** > **Save settings**
The **Save settings** page appears.

ⓘ
→ 7.2 "Header"
→ 7.1 "Dashboard"
→ 18.6.1 "Resetting all settings"
→ "Restore settings"

Backing up settings

To back up the user-specific settings to USB stick:
▶ Select **Save settings**.
The **Save settings** dialogue box appears and the backup process starts. A further dialogue box appears once the backup is finished.
▶ Plug USB stick into the central controller.
▶ Select **Ok**.
The user-specific settings are backed up on the USB stick.

Restore settings

Backup settings can be restored via the configuration wizard after all settings have been reset, or on a brand new central controller.

To restore the user-specific backup settings:
▶ Insert USB stick containing the backup settings into the central controller.
▶ Select **Restore settings** below the country selection in the configuration wizard.
The dialogue box containing the directory structure of the USB stick appears.
▶ Select file.
▶ Select **Confirm**.
▶ Enter the access data of any administrator account that was saved on the central controller at the time the backup was created.
The restoration process starts. Once the settings have been successfully restored, the **Login** dialogue box is displayed.

ⓘ
→ 5.1 "Configuration wizard"
→ 18.6.1 "Resetting all settings"
→ 7.5 "Log user in and out"

18.6.4 Software update from USB stick

All user-specific settings can be saved to a USB stick via the **SW update from USB stick** page. The backup can be used to restore the user-specific settings after resetting all settings.

To call up the **SW update from USB stick** page:
▶ **Dashboard** > ⚙ **Controller settings** > **Device & Updates** > **SW update from USB stick**
-or-
▶ Header > ☰ > ⚙ **Controller settings** > **Device & Updates** > **SW update from USB stick**
The **SW update from USB stick** page appears.

ⓘ
Software updates are provided by the service technician as well as via the Internet.

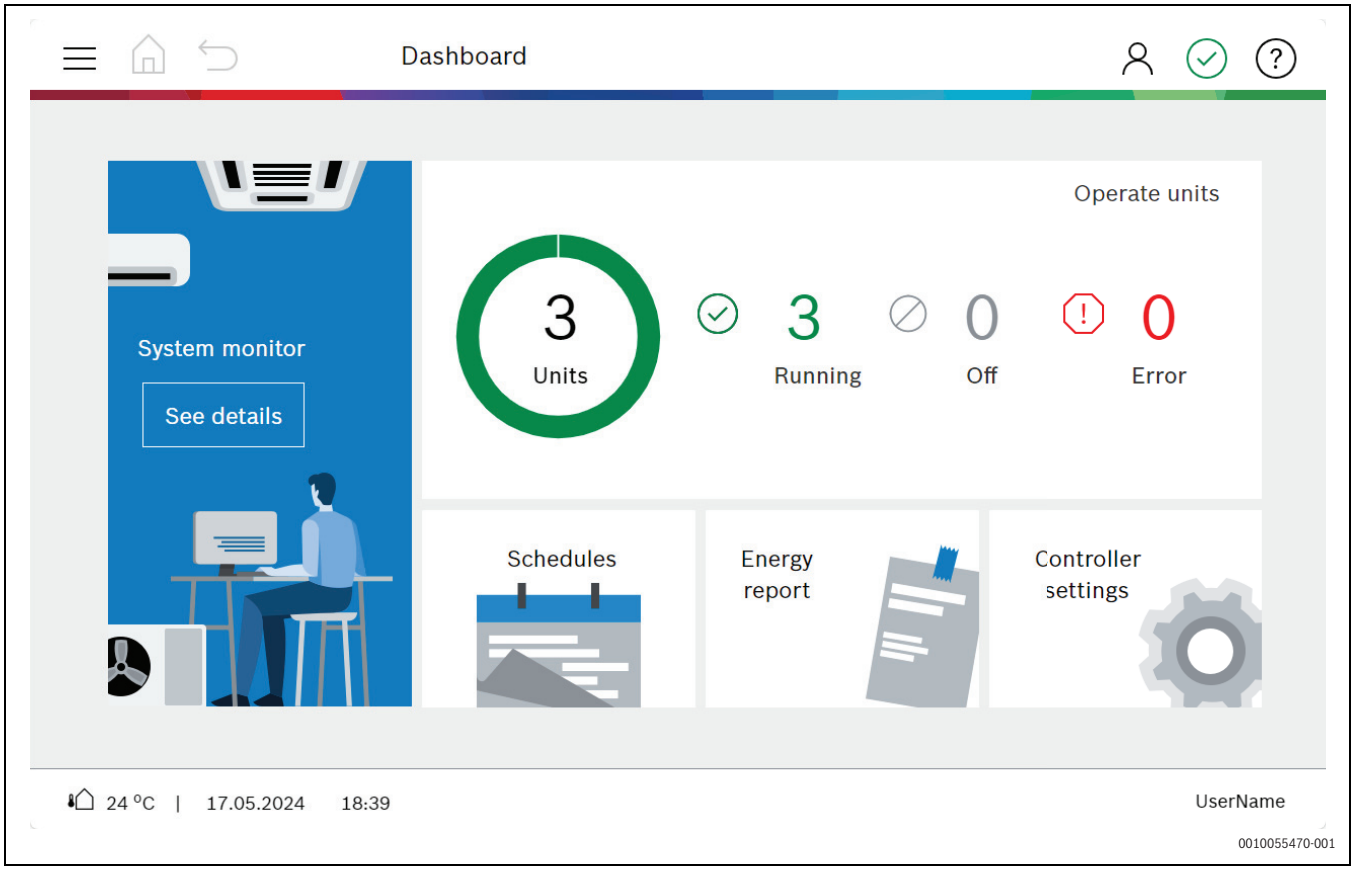
To install the software update from USB stick:
▶ Insert USB stick with the update into the central controller.
▶ Select **SW update from USB stick**.
The **Software update** dialogue box appears. The folder structure of the USB stick appears in the area **Select file**.
▶ Select the update file.
▶ Select **Confirm**.
The software update Starts. Wait screen appears for the duration of the update. The message **SW update successful** appears.
▶ Select **OK**.
The **Login** dialogue box appears.

To cancel the operation:
▶ Select **Cancel**.

→ 7.5 "Log user in and out"

19 Help

Further explanations about the product and help can be obtained on the User manual. To access the User manual, select the following options:



	Description	Description
☰	Main Menu	• Access the following via the **Help** menu item: – ACC information – Open source information – Terms and conditions – Help
?	Help	• Guides to the User manual.

Table 3 Main menu and help

→ 7.2 "Header"

The ACC MT central controller requires an Internet connection in order to forward fault messages and for NTP (in case no local NTP server is available). Otherwise an Internet connection is not required for operation of the ACC MT central controller.

ACC information

You can call up information on the software versions of the hardware and software components used on the central controller via the **ACC information** page.

20 Troubleshooting

20.1 Warnings and Errors

→ 16.2.4 "Scan VRF system (System scan)"
→ 18.6.2 "Restarting"
→ 18.6 "Device and updates"
→ 18.4 "Language, date and time"
→ 16.2 "System structure"

Fault code	Error description	Test procedure/Cause	Action
yX1	Communication fault	Fault in the communication between central controller and outdoor unit connected to XYE Port y **Note:** y can be a value between 1 ... 4, that specifies the port number.	▶ Check the XYE wiring between the central controller and outdoor unit. ▶ Repeat the system scan (**Note:** all user-specific settings are deleted in the process).
X2	Serious fault	Fault in the hardware / software of the central controller	▶ Restart central controller. ▶ Contact service and replace the central controller if necessary.
X21	Expansion card fault AC EXP	Fault of the connection to the expansion card AC EXP	▶ Restart central controller. ▶ Disconnect the central controller from the power supply, unplug and reinsert the expansion card. ▶ Replace the expansion card.
X22	PoE, insufficient performance	Power over Ethernet does not supply enough current.	▶ Check PoE provision or equipment. ▶ Contact the system administrator.
X23	USB interface fault	USB interface does not function correctly, e. g. over current	▶ Use another USB device. ▶ Restart central controller. ▶ Contact service and replace the central controller if necessary.
X3	E-mail manager fault	Fault in the network or with the internet connection, or a new configuration is required in the e-mail client.	▶ Check setting of the e-mail client. ▶ Check internet connection. ▶ Check network cable (LAN1). ▶ Restart central controller. ▶ Contact Service.
X4	Software update via USB failed	Software update via USB failed for unknown reason	▶ Repeat the USB software update. ▶ Remove the USB media and reinsert. ▶ Use another USB device. ▶ Restart central controller. ▶ Contact Service.
X41	Software update via USB failed, rollback	Software update via USB interface failed	
X42	Software update via USB failed, corrupt file	Software update via USB has failed due to file corruption.	
X43	Software update via USB failed, USB communication	Software update via USB has failed due to communication problems with the USB device.	
X6	Date and time fault	Central controller without power supply for a longer period	▶ Check the date and time setting, and correct.
X61	Internet time synchronisation fault	NTP server not available. NTP server blocked by a firewall.	▶ Internet connection, check network cable (LAN1). ▶ Check the network configuration. Contact the system administrator. ▶ Deactivate the internet time synchronisation and set the time manually.
X8	Fault energy meter or fault indoor unit/ outdoor unit.	There is a fault of the central controller in relation to the energy meter, indoor/ outdoor unit.	▶ Ensure that there are no other central controller faults related to energy meters, indoor/outdoor units.
X9	Energy distribution memory is full.	Flash memory full.	▶ Generate energy report and then clear memory.

20.2 Energy Distribution

- ▶ Make sure the SD card is plugged in and the Extension Kit is available.
  - – Use a high-quality microSD card of at least 4 GB capacity (e.g., Kingston Industrial 8GB, SanDisk Extreme Pro, etc.).
  - – Insert the microSD card behind the AC-EXP and reboot the ACC MT.
- ▶ Make sure that the ACC MT is connected to the Internet (or Intranet with local NTP server), and the NTP is enabled and successfully synchronized.
- ▶ Make sure that all IDUs and ODUs are visible in the System monitor. In case of AF6300, the S-Box parameters also needs to be visible.
- ▶ Make sure that the energy meters were successfully connected. In case of a connection failure:
  - – Check the correct Baud rate for Modbus/RTU.
  - – Check the correct address on the Energy meter.
  - – Check the cabling.
- ▶ Make sure that the ACC MT receives values from the Energy meter (e.g., Voltage L1, L2 & L3 should be ~230 V) in the Energy meter overview.
  The Active power shows the current energy consumption of the ODU and should be higher than 0.

- ▶ Check the Energy meter mapping. Make sure that all ODUs are assigned to an Energy meter. It is not possible to share an Energy meter between 2 VRF-Systems. In case of a cascade:
  - Either all ODUs can be assigned to 1 Energy meter.
  - Or each ODU can have its own Energy meter.
- ▶ Make sure that there are no open errors with the VRF-system and the Energy meter.
  A permanently occurring of the following errors can indicate a cabling issue:
  - X7: Energy meter malfunction[1)].
  - X1: Communication fault XYE[1)].
- ▶ In case of a restart, wait at least 3 minutes before activating the Energy distribution.

21 Environmental protection and disposal

Environmental protection is a fundamental corporate strategy of the Bosch Group.
The quality of our products, their economy and environmental safety are all of equal importance to us and all environmental protection legislation and regulations are strictly observed.
We use the best possible technology and materials for protecting the environment taking account of economic considerations.

Packaging

Where packaging is concerned, we participate in country-specific recycling processes that ensure optimum recycling.
All of our packaging materials are environmentally compatible and can be recycled.

Used appliances

Used appliances contain valuable materials that can be recycled.
The various assemblies can be easily dismantled. Synthetic materials are marked accordingly. Assemblies can therefore be sorted by composition and passed on for recycling or disposal.

Old electrical and electronic appliances

This symbol means that the product must not be disposed of with other waste, and instead must be taken to the waste collection points for treatment, collection, recycling and disposal.

The symbol is valid in countries where waste electrical and electronic equipment regulations apply, e.g. "(UK) Waste Electrical and Electronic Equipment Regulations 2013 (as amended)". These regulations define the framework for the return and recycling of old electronic appliances that apply in each country.

As electronic devices may contain hazardous substances, it needs to be recycled responsibly in order to minimize any potential harm to the environment and human health. Furthermore, recycling of electronic scrap helps preserve natural resources.

For additional information on the environmentally compatible disposal of old electrical and electronic appliances, please contact the relevant local authorities, your household waste disposal service or the retailer where you purchased the product.

You can find more information here:
www.bosch-homecomfortgroup.com/en/company/legal-topics/weee/

1) For more information on the error, see the 20.1 "Warnings and Errors" section.

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