User reference guide

Daikin Cloud Plus

Table of contents

1 About this document

This guide explains how to use Daikin Cloud Plus and DC+ Fallback control. It provides details about the user interface and procedures to work efficiently.

Thank you for purchasing this product. Please:

- Keep the documentation for future reference.

Target audience

All users.

The original instructions are written in English. All other languages are translations of the original instructions.

INFORMATION

This appliance is intended to be used by expert or trained users in shops, in light industry, and on farms, or for commercial use by lay persons.

Daikin Cloud Plus has 4 types of user roles, which correspond to 4 different access levels. This document describes the interface from the highest level available. Depending on your user role, some functions may not be available to you, or screenshots may differ slightly.

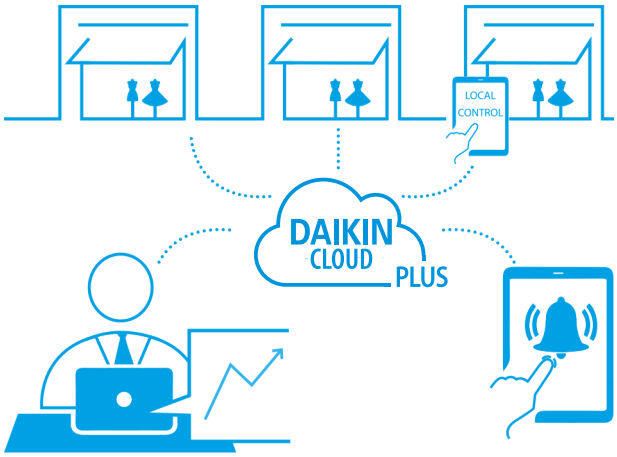
This document applies to version 1.3 of the software. Deviations from what you see in your version might occur.

2 Terms of use

Before you can start using Daikin Cloud Plus, you have to accept the terms of use. After first logging in, the Terms of use will be displayed on screen. You can return to the Terms of use again at any time by clicking the TERMS OF USE link near the bottom of the page.

3 About Daikin Cloud Plus

Daikin Cloud Plus is accessible via https://cloudplus.daikineurope.com/. The Daikin Cloud Plus user interface allows you to control your building's climate from any location. It can connect multiple building locations and is accessible via any web enabled device. Installers and technicians also have access to the Cloud so that they can remotely log in and immediately begin troubleshooting if there is ever a malfunction.



The user-friendly interface makes control even easier, and the automatic energy consumption tracking helps you reduce your costs in the long-run. There are 4 possible user roles, each with different access levels.

Depending on your role, you have more or less functions available (see "3.1 About user roles and access levels" [▸ 5] for more information.)

3.1 About user roles and access levels

There are 4 possible user roles, each with different access levels. Depending on your role, more or less functionality may be available. The following roles, according to their hierarchy, are:

- Daikin administrator
- Daikin affiliate
- Installer
- End user

The following table shows the features that are NOT available to all different user roles.

Functionality	Daikin administrator	Daikin affiliate	Installer	End user
Display and control outdoor units in the equipment list (see "4.5.1 Equipment list" [▸ 15])	●	●	●	–
Set critical sensor threshold values (see "To manage sensor thresholds" [▸ 29])	●	●	●	–

Functionality	Daikin administrator	Daikin affiliate	Installer	End user
Access demand control overview (see "4.7.1 Demand control" [▸ 119])	●	●	●	–
Settings forced level (see "4.7.1 Demand control" [▸ 119])	●	●	●	–
Create a new site (see "4.11.1 Site list" [▸ 168])	●	●	●	–
Select site affiliate during site creation (see "4.11.1 Site list" [▸ 168])	●	●	●	–
Delete a site (see "4.11.1 Site list" [▸ 168])	●	●	●	–
Access DC+ Edge control page (see "4.11.5 DC+ Edge control" [▸ 195])	●	●	●	–
View application version (see "4.4 Account Settings" [▸ 12])	●	●	-	–
Perform commissioning (see the installer reference guide)	●	●	●	–

Note that there are also some actions only owners of a site can perform as opposed to associated users, regardless of user role. See "Site association and ownership" [▸ 178].

3.2 About packages

There are 2 package options available for Daikin Cloud Plus: package A and package B. In addition to all functionality available in package A, package B offers access to remote diagnostics and data collection options. Refer to the table below to see which additional functionality is available in package B.

Functionality	Package A	Package B
Remote diagnostics - Site history (see "4.9.1 Site history" [▸ 149])	–	●
Remote diagnostics – Alarm history (see "4.9.2 Alarm history" [▸ 152])	–	●
Remote diagnostics – Enable alarm notification e-mails for a site (see "4.4.1 Application settings" [▸ 13] and "Site details" [▸ 174])	–	●
Remote diagnostics – Prediction logic (see "4.9.3 Prediction logic" [▸ 159])	–	●
Data collection settings – Hourly data (see "4.10.1 Data output" [▸ 160])	–	●
Data collection settings – Data output (see "4.10.1 Data output" [▸ 160])	–	●

When a site is first created, trial versions of package A and package B are activated for that site automatically. This allows you to experience the full functionality of Daikin Cloud Plus for a limited time. To activate packages after the trial period, a contract must be created. For more information about contract creation, contact your Daikin affiliate or representative.

3.3 About cookies

Daikin Cloud Plus uses cookies. When browsing to https://cloudplus.daikineurope.com/ for the first time, a pop-up window will ask you to accept these cookies. For the application to function optimally, some essential and functional cookies ("minimal cookies") must be accepted. For more information about cookies and how they are used to optimise your experience, click the link in the pop-up window. You can also always reach this page by clicking the COOKIES link near the bottom of the page.

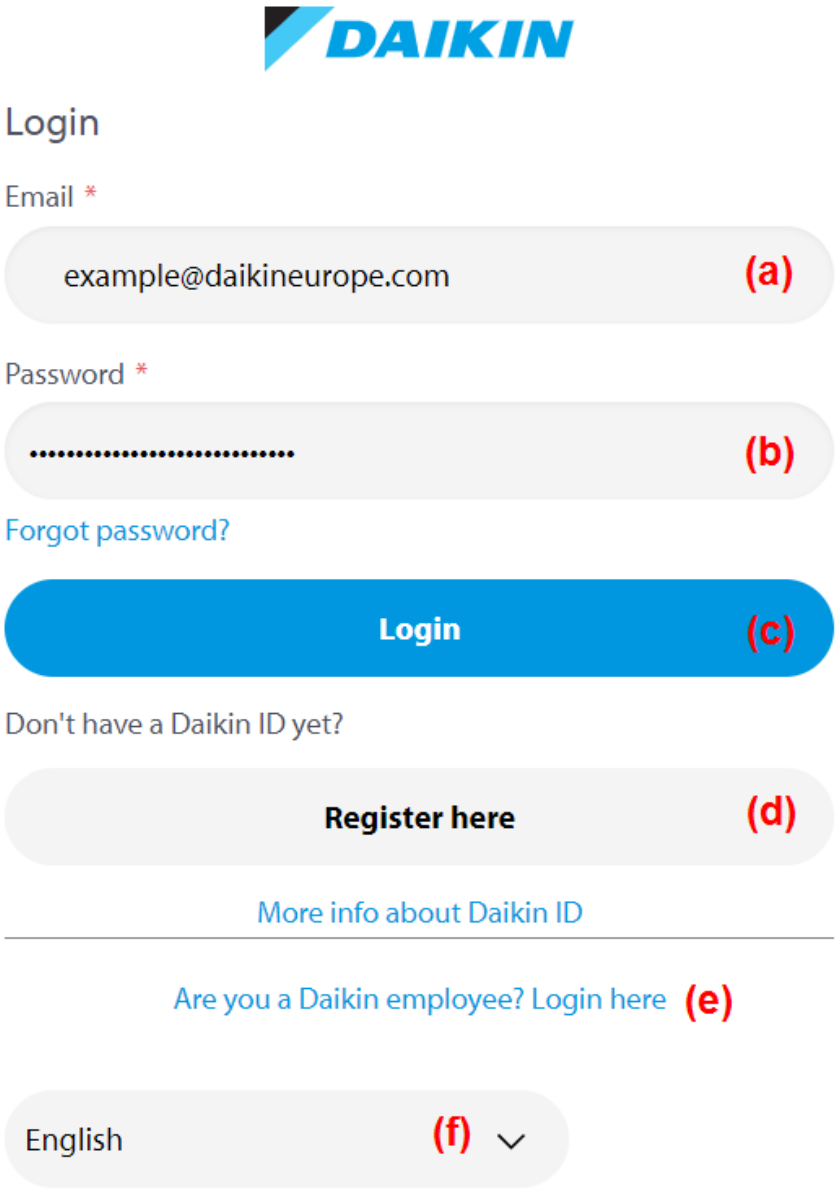
4 Operation

4.1 To log into Daikin Cloud Plus

INFORMATION

A Daikin ID is required in order to log into Daikin Cloud Plus. If you do NOT have a Daikin ID yet, click the link on the login page to register for an account with your local affiliate.

1. In your web browser, go to https://cloudplus.daikineurope.com/.
2. If this is your first time visiting, accept the cookies from the pop-up window. For more information about cookies, see "3.3 About cookies" [▸ 7].
3. Click Login.
4. Enter your Daikin ID credentials (a, b).



5 Log in with your Daikin ID. Alternatively, you can log in as a Daikin employee (e). If you do not have a Daikin ID yet, register for an account by clicking the button (d).

6 If required, change the language of the user interface using the drop-down list (f).

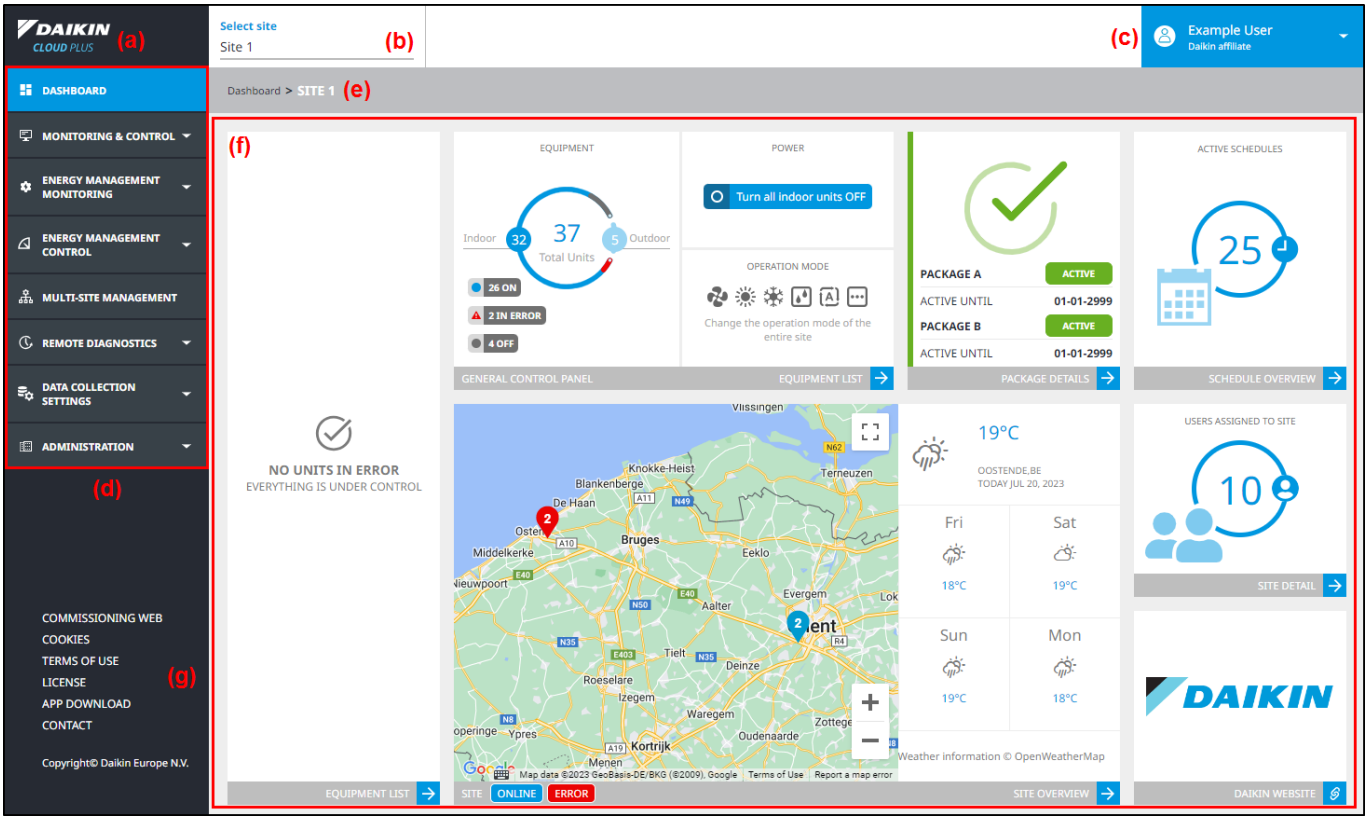
7 Click Login (c).

Result: You are now logged in.

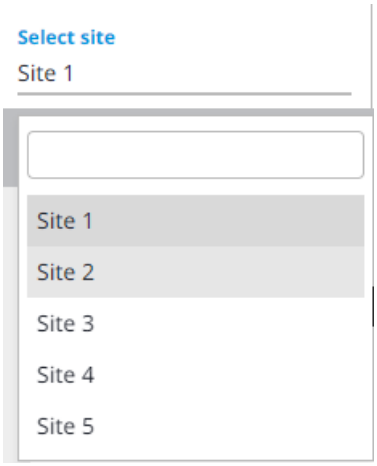
> **INFORMATION**
>
> After the first login, you will be presented with the terms of use for Daikin Cloud Plus. Please review the terms of use carefully before using the application.

4.2 User interface

The user interface of Daikin Cloud Plus consists of the following major parts:



- The Daikin Cloud Plus logo (a). Clicking the logo returns you to the Dashboard. For more information about the items on the Dashboard, see "4.3 Dashboard" [▸ 11].
- An upper toolbar with a site picker (b) showing you all the installations. If you have multiple sites to manage, a Daikin technician will set these up so they become available in the site picker. To consult installations from another site, simply select one from the site picker drop-down list. You can also enter a site name in the search field to search for sites more easily. For more information about sites, see "4.11.1 Site list" [▸ 168].

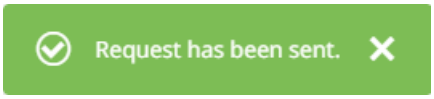


- Account Settings drop-down menu (c). For more information about Account Settings, see "4.4 Account Settings" [▸ 12].
- Sidebar (d), allowing you to navigate to the different functions of the application on different pages. In case the sidebar is hidden, the "hamburger" icon on the top left of the screen can be clicked to expand the sidebar.
- Breadcrumbs (e) that give you feedback on where you are in the structure of the user interface.
- A content section (f) displaying the actual requested data.
- Footer with various useful links (g) that can be accessed at all times.

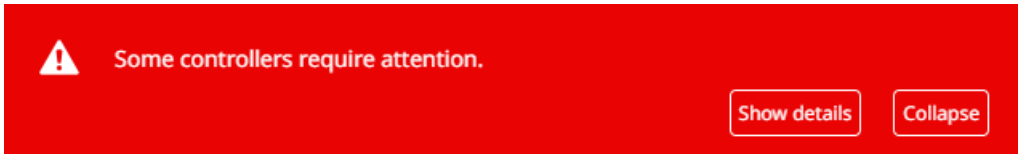
INFORMATION

The user interface is responsive, which means it looks good on all devices (desktops, tablets and smartphones). It will react to the available display size. This means for example that the navigation pane is hidden on smaller devices.

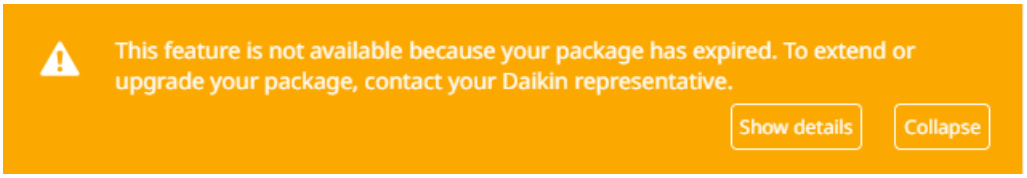
At times, notification pop-ups can appear on screen to convey various types of information; e.g. confirmation of setting changes, error messages. The pop-up windows can have various colours (grey, red or green), depending on the type of message that is communicated.



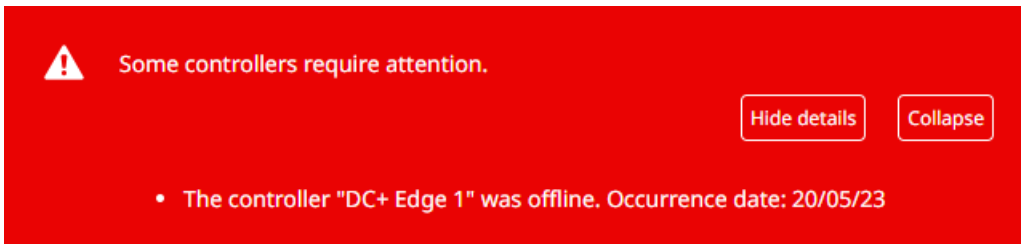
Additionally, a red alert bar can appear under the breadcrumbs on some pages. The alert bar provides additional information about issues with controllers and communication errors.



When there is a package related issue, the alert bar appears yellow.



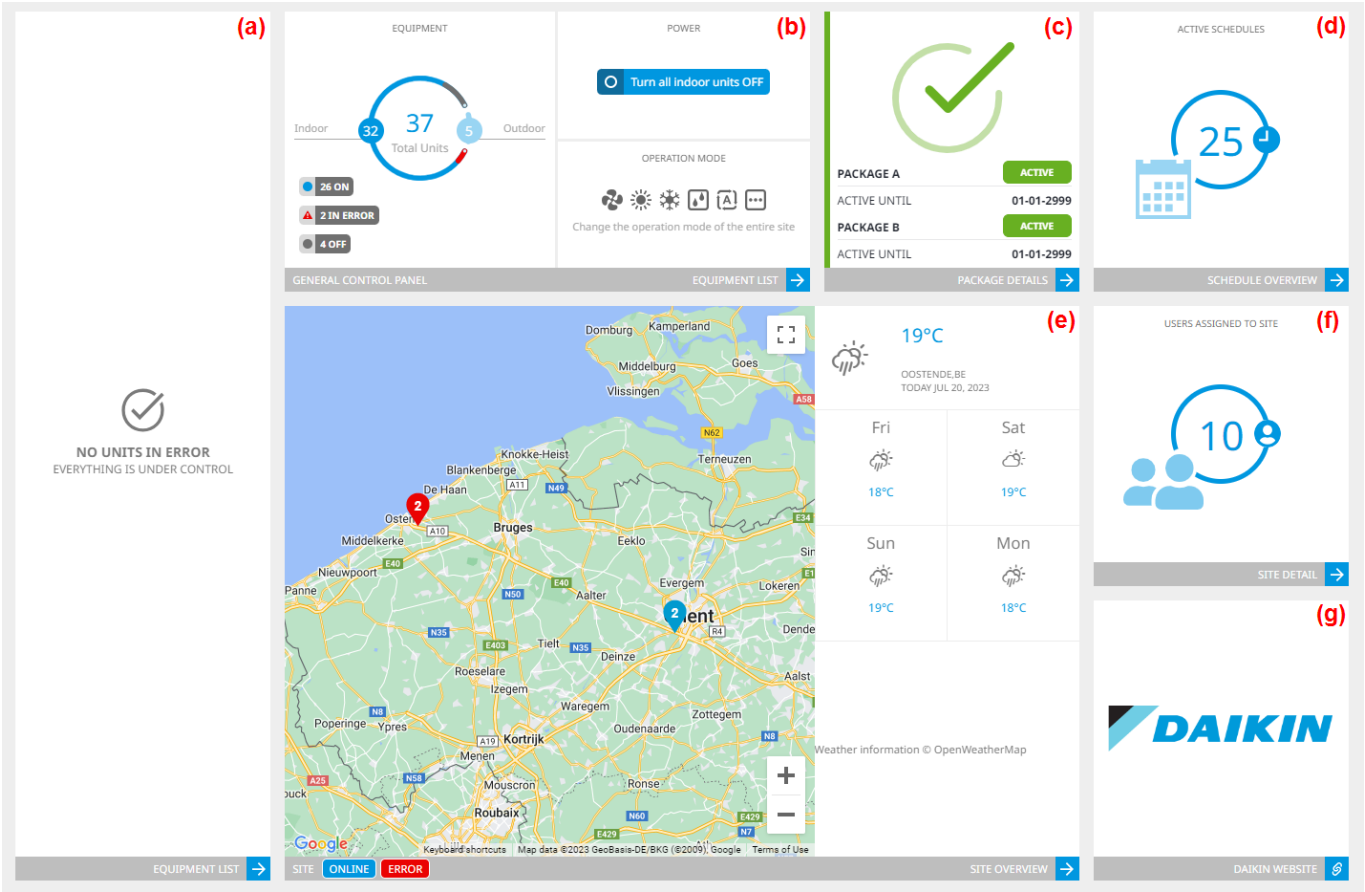
You can expand the alert bar by clicking Show details to reveal more information about the issue at hand.



You can choose to hide the details again, or minimise the alert bar so that it takes up less space on screen. You can always expand the alert bar again by clicking the downward facing arrow.

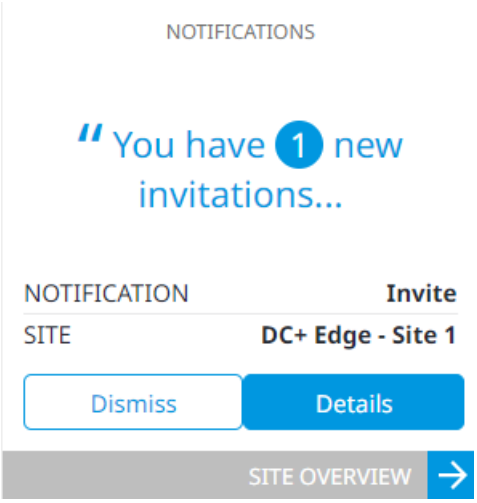
4.3 Dashboard

After logging in successfully, the Dashboard is the first page the user sees. The Dashboard consists out of several tiles, that each give you information about a specific topic. The following tiles are available:



- EQUIPMENT LIST (a): lists alerts for any management point that may have a problem (errors, malfunctions, controller offline, …)
- GENERAL CONTROL PANEL (b): gives an overview of all the indoor and outdoor units of the selected site and their status. This panel also allows you to manage all units of the selected site at once (turn on/off, change operation mode for the entire site).
- PACKAGE DETAILS (c): displays the currently active package status and expiration date.

- SCHEDULE OVERVIEW (d): displays active schedule information for the currently selected site.
- SITE OVERVIEW (e): situates all sites on a map and displays the weather forecast for the currently selected site location. The pin colours on the map provide information about the site status:
  - Red: error
  - Blue: no errors
- SITE DETAIL (f): displays the amount of users associated to the currently selected site.
- Daikin website (g): shows the Daikin logo and links to the Daikin website, but only if there are no open invitations. If there are pending site invitations, this tile displays notifications instead.



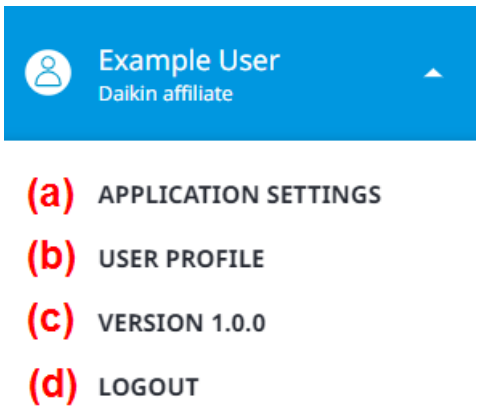
INFORMATION

Dismissing the notification on the dashboard will NOT decline the actual site invitation, it will only dismiss the notification itself.

At the bottom of every tile is an arrow that can be clicked in order to go to the relevant page directly. You can always return to this page from by clicking the Daikin Cloud Plus logo (a) at the top left of the screen, or by clicking Dashboard in the sidebar.

4.4 Account Settings

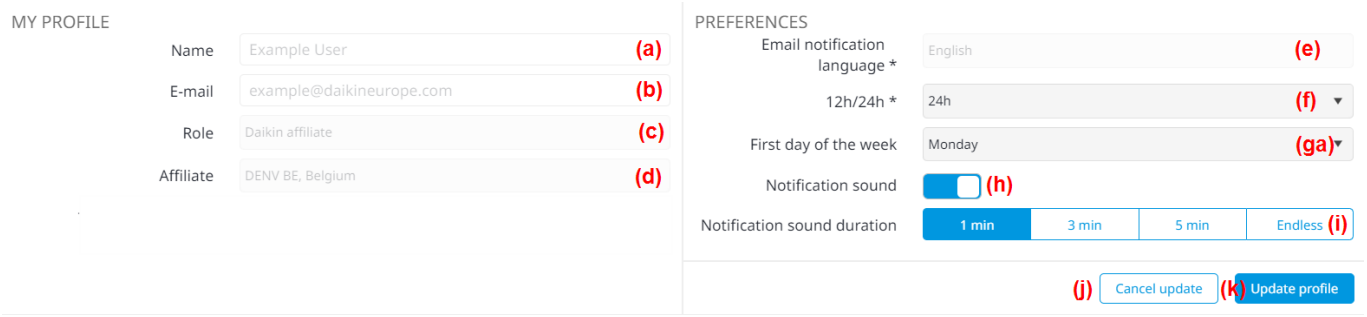
The Account Settings drop-down menu shows the user that is currently logged in, along with the user role at all times. When expanded, the account settings drop-down menu displays the following items:



- APPLICATION SETTINGS (a): this section is primarily used to modify your application preferences. For more information, see "4.4.1 Application settings" [▸ 13].
- USER PROFILE (b): allows you to view and modify your Daikin ID information. Clicking this option opens https://id.daikin.eu/ in a new browser tab where you can update your profile.
- VERSION (c): displays the current Daikin Cloud Plus version.
- LOGOUT (d): log out of the application.

4.4.1 Application settings

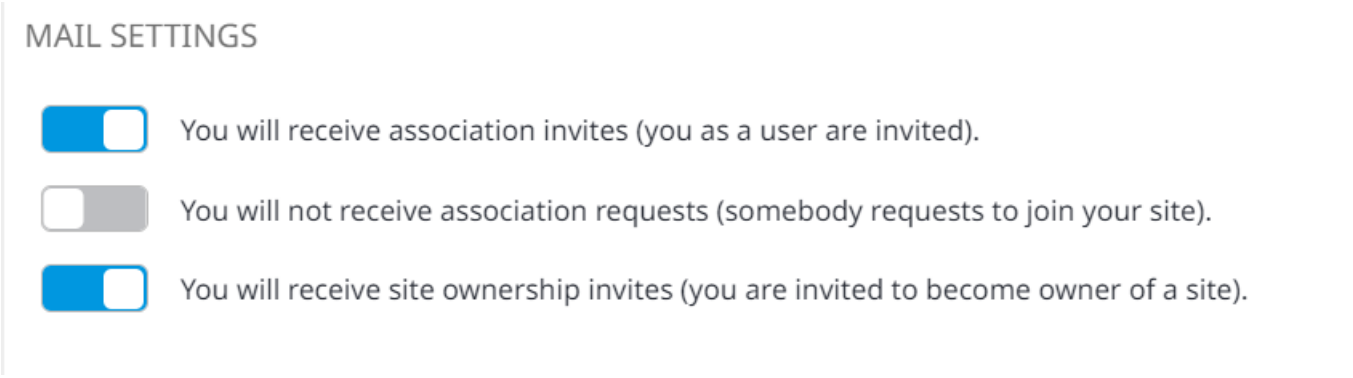
This page allows you to modify preferences such as date and time format, notification sounds and the duration of notification sounds when notification sounds are enabled. Note that you can view (but not edit) basic profile information here too, as well as add your telephone number. Like most profile information, the e-mail notification language is read-only, as this is determined by the preferences of your Daikin ID.



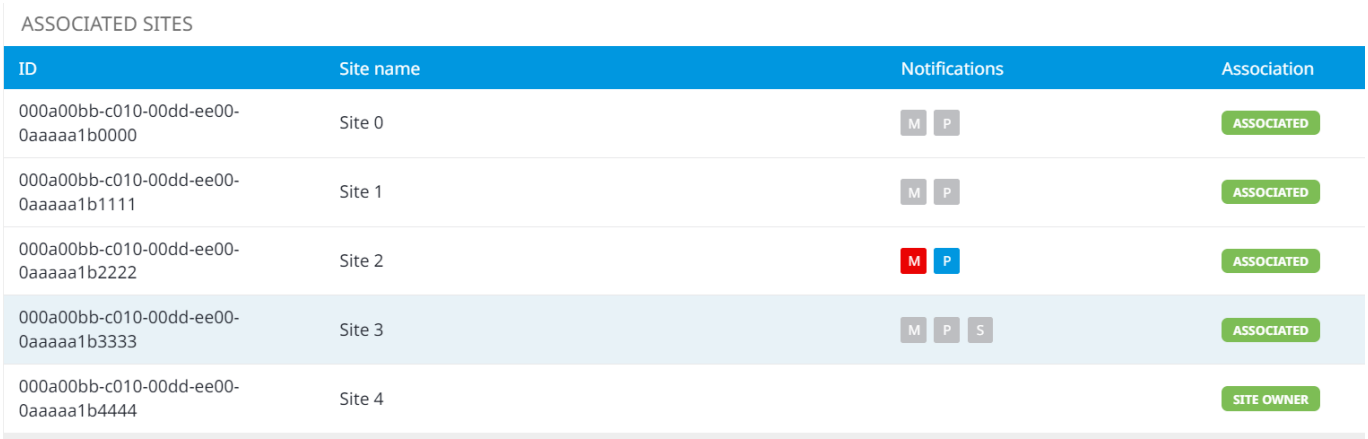
Item	Description
(a) Name	Read-only (determined by Daikin ID)
(b) E-mail	
(c) Role	
(d) Affiliate	
(e) E-mail notification language	Read-only (determined by Daikin ID)
(f) 12/24h	Choose between a 12 hour or 24 hour time format from the drop-down list.
(g) First day of the week	Select which day should be the first day of the week from the drop-down list (Monday or Sunday).

Item	Description
(h) Notification sound	Toggle switch to enable or disable notification sounds.
(i) Notification sound duration	Only visible when the notification sounds are enabled. This setting determines how long notifications sounds will last (1 minute, 3 minutes, 5 minutes, or endless).
(j) Cancel update button	Click to discard any changes made.
(k) Update profile button	Click to save any changes made.

You can also modify e-mail settings. To no longer receive e-mails for association requests and/or site invites, disable the toggle switch for the type of invite or request.



In addition, under Associated sites, you can see which sites you are the owner of or are associated to. Clicking the name of any site redirects you to the details page for that site.



For every site, you can disable or enable notifications individually by clicking the respective icons under Notifications.

Notification type	Active	Inactive
Malfunction	M	M
Prediction Logic alarm	P	P
Sensor Alert	S	S

INFORMATION

You can also enable or disable notifications for a specific site from the site details page. See "4.11.1 Site list" [▸ 168] for more information.

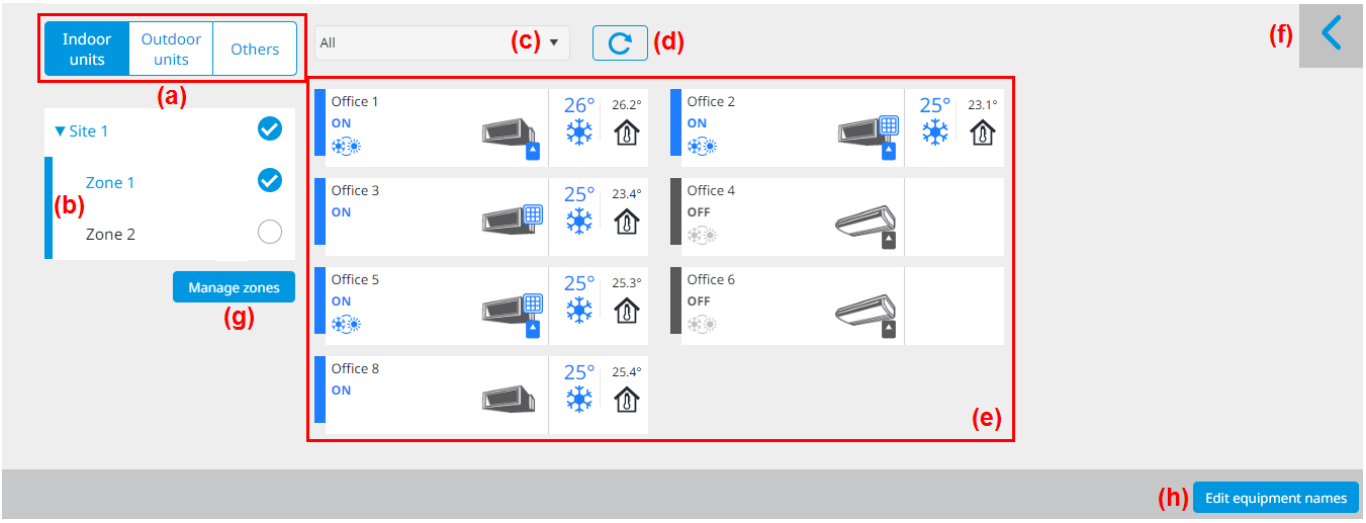
INFORMATION

To enable sensor notifications, you must first configure for which parameter you want to enable alarms. For every parameter, you can choose to send a notification when either the Warning or the Critical threshold is exceeded, or both. For more information about sensors and thresholds, see "4.5.2 Sensor list" [▸ 26].

4.5 Monitoring & operation

4.5.1 Equipment list

The Equipment list allows you to monitor and control all the units that belong to the currently selected site, all the units of 1 or more specific zones, or individual units.



The page contains the following elements:

- Equipment selector (a): switch views between indoor unit, outdoor unit, and other equipment.
- Zone list (b): allows you to only select units that belong to a specific zones. This is only relevant for indoor units.
- Status drop-down menu (c): allows you to filter units and/or equipment by the state that they are in. The possible options differ depending on which type of unit is selected (indoor or outdoor). After selecting an item, click the refresh button (d) in order to refresh the equipment list.
- Refresh button (d): refreshes the equipment list after selecting a filter option from the drop-down menu (c).
- Equipment tiles (e): all pieces of equipment belonging to the selected DC+ Edge and/or zone(s).
- General control panel (f): this panel allows you to apply actions to multiple units immediately. If the panel is collapsed, it can be expanded by clicking the arrow in the top right of the page.
- Manage zones button (g): redirects you to the "4.11.2 Zone list" [▸ 187].
- Edit equipment names button (h): when clicked, allows you to modify equipment names and change the icons displayed in the equipment list tiles.

INFORMATION

BACnet objects (BACnet Di/Dio, BACnet Ai/Ao, and BACne Mi/Mo) that are NOT in a group appear in the indoor units view. However, BACnet groups appear in the Others view.

INFORMATION

The zone selection state persists across browser sessions.

INFORMATION

The room temperatures displayed on unit tiles are temperatures measured by the sensor built into the unit. Because of this, the displayed temperatures may differ slightly from the actual temperature.

INFORMATION

When filtering units with the status drop-down menu (c), up to 128 units can be operated at once with the general control panel (see "To control multiple units at once" [▸ 21] for more information). If the number of units that appears in the equipment list after filtering still exceeds 128, select a zone first before filtering, so that maximum 128 units are selected.

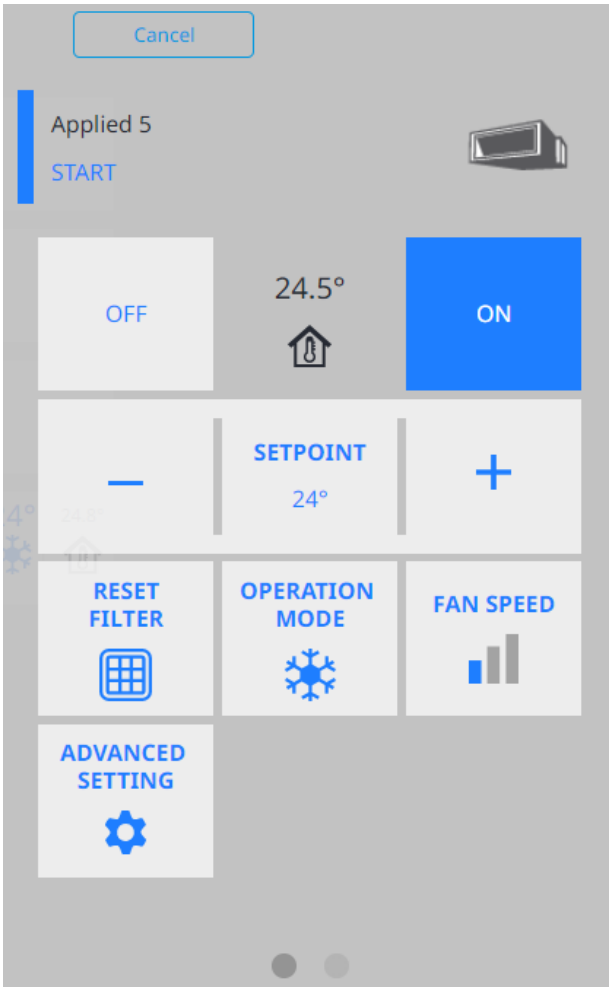
To control a single unit

INFORMATION

End users are NOT able to see the outdoor unit option in the equipment selector. End users can also NOT control outdoor units from the equipment list.

1. From the site selector, select the site that contains the unit you want to control.
2. In the sidebar, go to MONITORING & OPERATION > EQUIPMENT LIST.
3. Select the type of unit (indoor or outdoor) you want to control.
4. Click the tile of the unit you want to control.

   Result: A control panel for that unit appears on the right side of the page.



5 Make the desired changes to the unit settings.

Depending on the type of unit, more or fewer settings may be available. Consult the tables below for an overview of all possible settings for indoor and outdoor units.

Basic settings (indoor unit)	
ON/OFF	Turn the unit ON or OFF.
SETPOINT	Increase (+) or decrease (-) the temperature setpoint (16°C~32°C, steps of 0.5°C). Alternatively, click SETPOINT to immediately set a specific setpoint in the overlay and confirm.
RESET FILTER	After cleaning the unit filter, reset the filter sign. Click OK in the pop-up window to confirm.
OPERATION MODE	Change the operation mode. After selecting, choose an operation mode in the overlay. The available operation modes depend the type of unit, and can be any of the following: Heating, Cooling, Fan, Dry, Dependent mode.
FAN SPEED	Change the fan speed. After selecting, choose a fan speed (1~3) in the overlay.
AIRFLOW DIRECTION	Change the airflow direction. After selecting, choose an airflow direction (0~4, Swing, or Auto) in the overlay.

Basic settings (indoor unit)	
VENTILATION MODE	Change the ventilation mode. After selecting, choose a ventilation mode (Automatic, Bypass, ERVentilation) in the overlay.
VENTILATION VOLUME	Change the ventilation volume. After selecting, choose the ventilation volume (Low, Medium Low, Medium, Medium High, High or Auto) in the overlay. Enable or disable Fresh up and confirm.

NOTICE

See the service manual of the outdoor unit for more information about outdoor unit settings. Before changing any of the outdoor unit settings, make sure you know what the impact of changing a setting will be. Do NOT change any outdoor unit field settings without having consulted the service manual first.

Note that the option to display outdoor units in the equipment list is NOT visible for end users. The outdoor unit settings CANNOT be changed by end users, only by installers or higher.

Basic settings (outdoor unit)	
DEFROST SWITCH SETTING	Change the defrost changeover setting. After selecting, choose a defrost switch setting (L, M, S) in the overlay.
TARGET EVAPORATING TEMP SETTING	Change the target evaporating temperature. After selecting, choose a setting (0~7) in the overlay and confirm.
TARGET CONDENSING TEMP SETTING	Change the target condensing temperature. After selecting, choose a setting (0~7) in the overlay and confirm.
CAPACITY PRIORITY SETTING	Enable or disable the capacity priority setting. This will override night time low noise operation or low noise operation if capacity is required.
CONSTANT DEMAND CAPACITY CONTROL RATIO	Set the ratio for constant demand capacity control (40%~150%, steps of 10%) and confirm in the overlay.
NIGHT TIME LOW NOISE CONTROL	Enable or disable night time low noise operation, then set the level (1~3) in the overlay and confirm.
NIGHT TIME CONTROL START TIME SETTING	Change the night time low noise operation start time. Select the start time in the (Around 8 PM, Around 10 PM, Around 12 PM) in the overlay and confirm.
NIGHT TIME CONTROL END TIME SETTING	Change the night time low noise operation end time. Select the end time (Around 6 AM , Around 7 AM, or Around 8 AM).in the overlay and confirm.
LOW NOISE CONTROL LEVEL	Change the low noise operation level of the outdoor unit. After selecting, choose a low noise operation level (1~3) in the overlay and confirm.
HIGH/LOW DIFFERENCE LEVEL	Change the elevation difference level. After selecting, choose a setting (0~7) in the overlay and confirm.

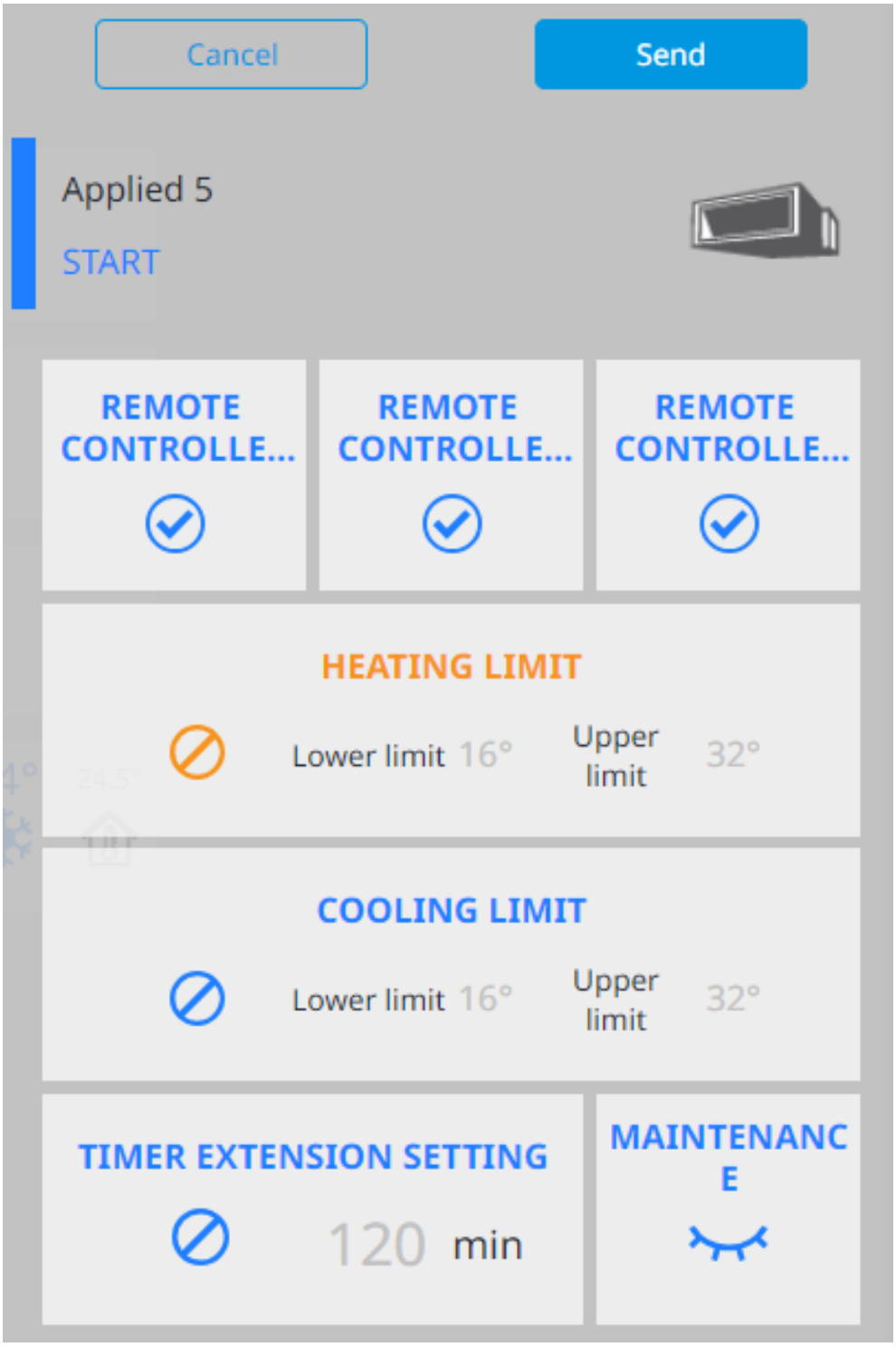
Basic settings (outdoor unit)	
PARENT OPERATION DISABLING SETTING	Emergency operation setting for the master (parent) unit in a multi-outdoor unit system. See the service manual of the outdoor unit for more information.
CHILD 1 OPERATION DISABLING SETTING	Emergency operation setting for the slave (child) unit in a multi-outdoor unit system. See the service manual of the outdoor unit for more information.
CHILD 2 OPERATION DISABLING SETTING	Emergency operation setting for the slave (child) unit in a multi-outdoor unit system. See the service manual of the outdoor unit for more information.
INDOOR UNIT LOWER LIMIT OPENING SETTING	Set the lower limit for the opening of the indoor unit expansion valve when the unit is turned on. After selecting, choose a setting in the overlay and confirm.
R32 REFRIGERANT LEAK ALARM SETTING	Disable the R32 refrigerant leak alarm for the outdoor unit if it is active.
MAINTENANCE	Set the unit in maintenance mode.

INFORMATION

The operation mode can only be changed to heating, cooling or automatic on units that are heating/cooling master. You can recognise a heating/cooling master unit by the combined heating and cooling icon on the equipment list tile.

6 Click Advanced setting.

Result: The advanced settings appear.

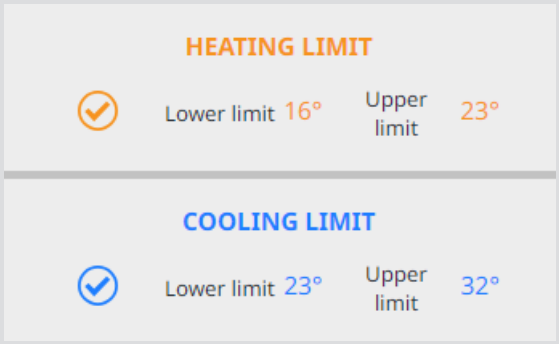


Advanced settings (indoor unit)	
Remote controller ON/OFF	Set whether you want to allow units to be turned ON/OFF via the remote controller. You can also only allow the unit to be turned OFF (Stop only).
Remote controller setpoint	Set whether you want to allow the setpoint to be changed via the remote controller.
Remote controller op. mode	Set whether you want to allow the operation mode to be changed via the remote controller.

Advanced settings (indoor unit)	
HEATING LIMIT	Enable or disable heating limits. Set the lower and upper heating limits (16°C~32°C, steps of 0.5°C) in the overlay and confirm. The upper limit must always exceed the lower limit.
COOLING LIMIT	Enable or disable cooling limits. Set the lower and upper cooling limits (16°C~32°C, steps of 0.5°C) in the overlay and confirm. The upper limit must always exceed the lower limit.
TIMER EXTENSION SETTING	Set a timer to turn the unit OFF after a certain amount of time has passed (30~180 minutes, steps of 30 minutes).
MAINTENANCE	Set the unit in maintenance mode.

INFORMATION

Daikin recommends for most installations to set the values for both the maximum cooling and heating limit to 23°C. Limiting the maximum cooling and heating temperatures avoids extreme settings and the resulting high energy consumption.



7 After changing any setting, click Send in the control panel to apply the settings.

Result: The actions are applied to the unit.

To control multiple units at once

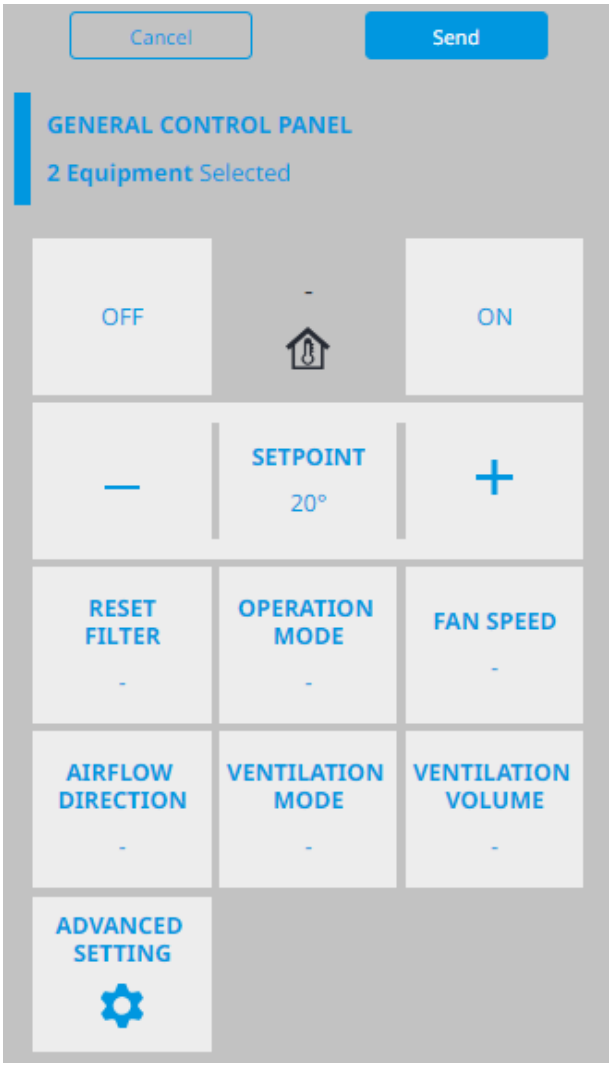
1 From the site selector, select the site that contains the unit you want to control.

2 In the sidebar, go to MONITORING & OPERATION > EQUIPMENT LIST.

3 Narrow down your selection of units by selecting a specific DC+ Edge and/or zone.

4 Click the arrow at the top right of the page.

Result: A general control panel for the selected units appears on the right side of the page. It indicates how many units are currently selected.



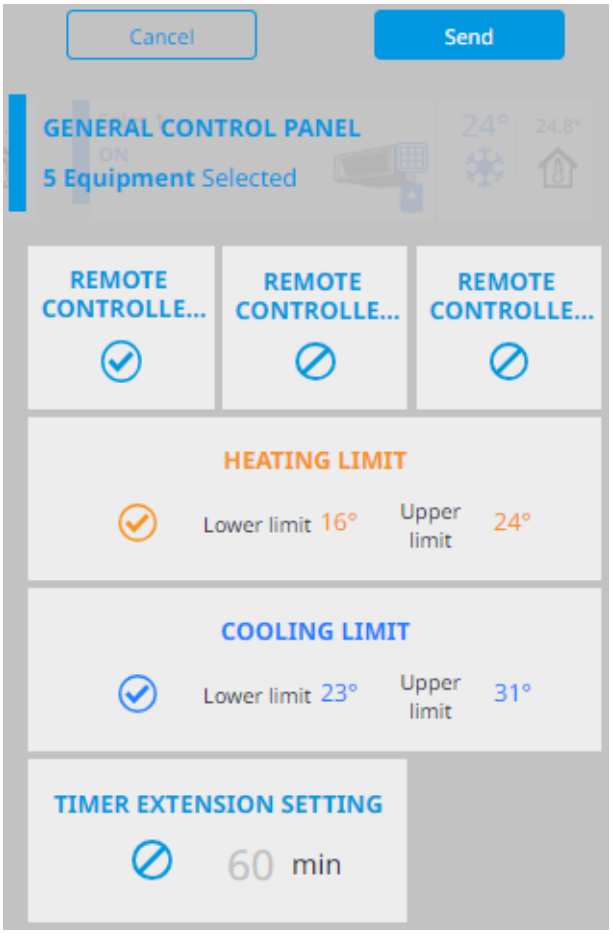
5 Make the desired changes to the unit settings. For information about the settings, see the tables above.

INFORMATION

When multiple units are selected, all settings become available in the control panel, regardless of whether they apply to the selected unit types. Once the settings are confirmed, the settings are automatically applied only to compatible units. Incompatible units will ignore the commands.

6 Click Advanced setting.

Result: The advanced settings appear. For information about the advanced settings, see the tables above.



7 After changing any setting, click Send in the general control panel to apply the settings.

Result: The actions are applied to all selected units.

To control other equipment

The connection of the DC+ Edge to a BACnet network allows for the integration of BACnet compatible devices (for example, air handling units) in Daikin Cloud Plus. If any BACnet groups have been created for the site, they appear when the Others option is selected in the equipment selector. Grouping BACnet objects into a single management point allows for easier control over the equipment in question. Note that the information displayed on the equipment list tile for every BACnet group is configurable in Daikin Cloud Plus Commissioning. For more information on how to commission BACnet, see the installer reference guide.

1 From the site selector, select the site that contains the equipment you want to control.

2 In the sidebar, go to MONITORING & OPERATION > EQUIPMENT LIST.

3 Select Other in the equipment selector.

4 Click the tile of the equipment you want to control.

Result: A control panel for the equipment appears on the right side of the page.

INFORMATION

The objects and accompanying controls that appear in the control panel for BACnet groups can vary depending on how the objects in the BACnet are configured Daikin Cloud Plus Commissioning. The illustrations below only serve as an example of a BACnet group. For more information about the configuration of BACnet objects and groups, see the installer reference guide.

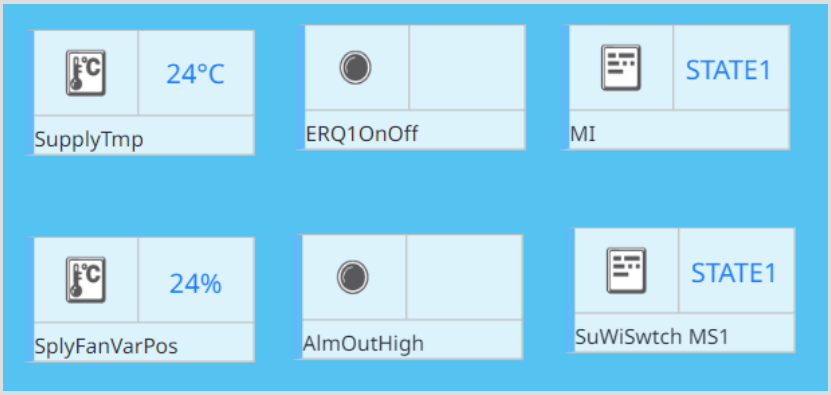
5 Under the Objects (a) tab, you can interact with all BACnet objects that belong to the BACnet group. Depending on the object, you can increase or decrease values (f), or toggle a certain object value on or off (h). In case of multistate value objects (g), you can click the state and set a new state value in the overlay. Note that depending on the configuration, some objects may be read only (d, e), and serve to provide information about the state of the system.

6 Click Send (c) to confirm any changes you have made.

Result: The actions are applied to the unit or equipment.

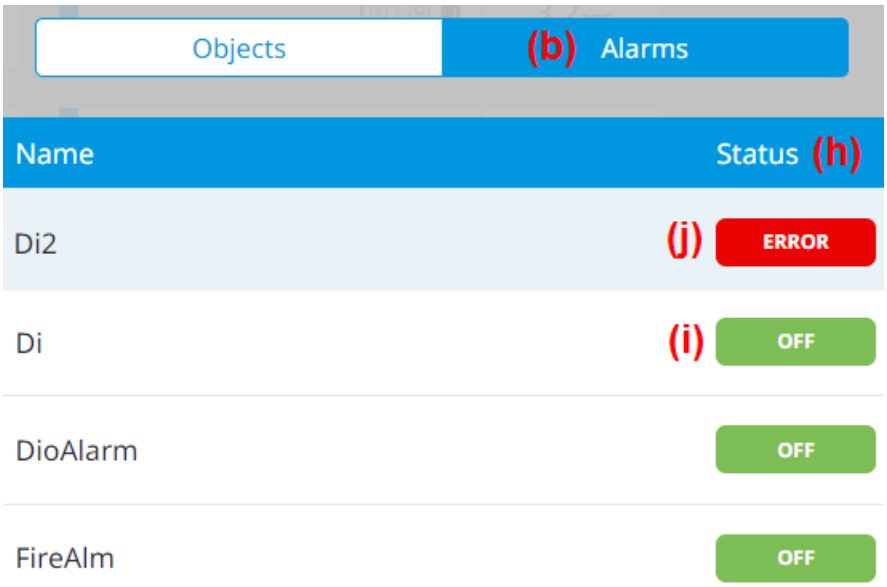
INFORMATION

As an alternative to controlling BACnet groups from the equipment list, you can create a customised layout screen that displays all the relevant controls using layout view:



For more information about the creation of layouts, see "4.11.6 Layout settings" [▶ 196].

7 Select the Alarms (b) tab to monitor the alarm status (h) of the objects in the BACnet group. Green (i) indicates that there is no error, while red (j) indicates that the object is in an error state.



INFORMATION

The alarms listed here are also visualised on the alarm history page. See "4.9.2 Alarm history" [▶ 152] for more information.

INFORMATION

When an object in a BACnet group is in an error state, the object in error state jumps to the top of the list in the Alarms tab.

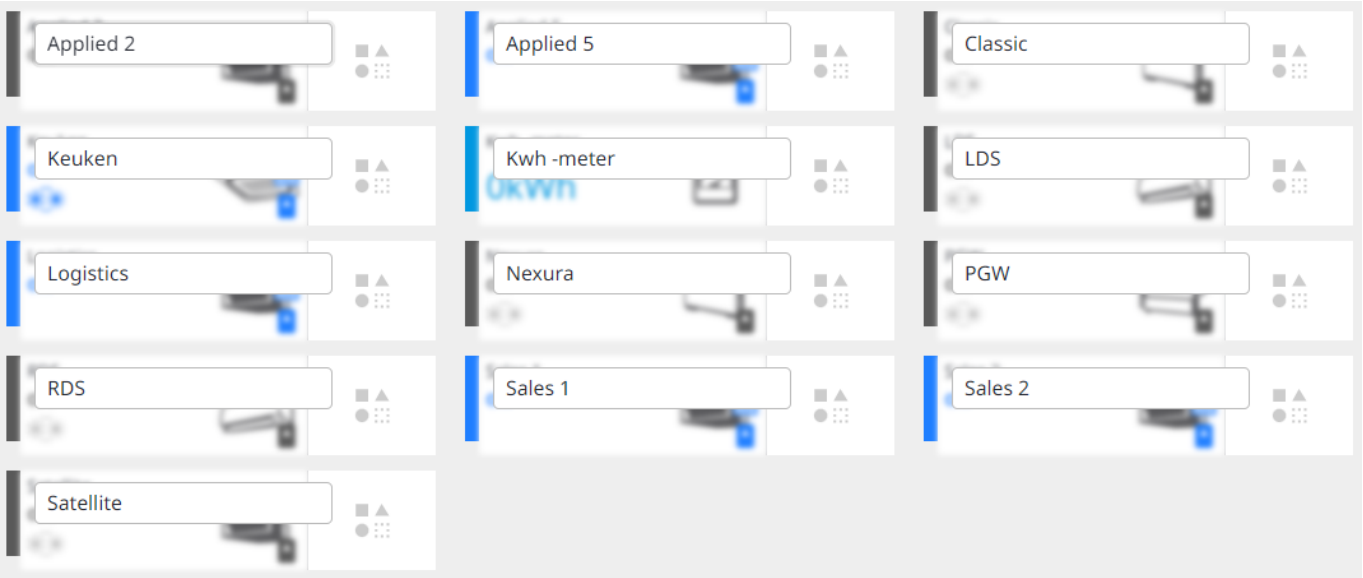
To change equipment names and icons

1 From the site selector, select the site that contains the equipment you want to modify.

2 In the sidebar, go to MONITORING & OPERATION > EQUIPMENT LIST.

3 Click the Edit equipment names on the bottom right of the page.

Result: The equipment tile names become editable.



4 Rename the equipment (maximum 20 characters).

5 Click next to the equipment name.

Result: A list with all available icons appears on the right side of the page.

6 Select the desired icon.

7 Click Save.

8 Once all equipment has been modified, click Save at the bottom right of the page.

Result: The equipment names and icons have changed.

INFORMATION

Keep the following in mind when naming equipment:

- Equipment names can have a maximum length of 20 characters.
- Duplicate names are not allowed.
- The order in which the equipment list tiles appear is directly related to the name of the equipment. In the Equipment list, Daikin Cloud Plus will order equipment names by their first character, prioritising specific character types over others in the following order: symbols – numbers – uppercase letters – lowercase letters. Consider this if equipment needs to be ordered in a certain way.

4.5.2 Sensor list

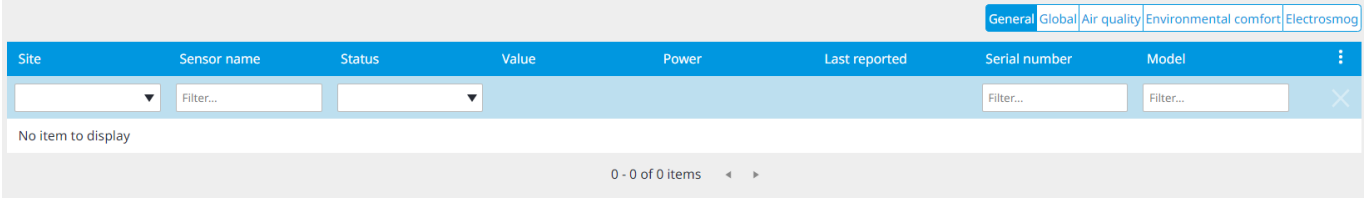
By making use of (optional) indoor environmental quality sensors, the Sensor list page allows you to monitor a variety of parameters relating to indoor air quality, environmental comfort and electromagnetic pollution. In order to visualise any data on this page, at least 1 Daikin AirSense sensor must be paired to the site.

For more information about pairing, see "To pair a sensor to a site" [▸ 33].

The parameters measured by the sensor are subdivided into 3 major categories:

Air quality	Environmental comfort	Electrosmog
▪ VOC (ppb) — Total indoor volatile organic compounds ▪ CO_2e (ppm) — Carbon dioxide equivalent ▪ CO_2 (ppm) — Carbon dioxide ▪ PM10 (µg/m^3) — Particulate matter: inhalable coarse particles (diameter of 10 µm or less) ▪ PM2.5 (µg/m^3) — Particulate matter: fine particles (diameter of 2.5 µm or less) ▪ IAQ — Indoor air quality	▪ Temperature (°C) ▪ Pressure (mbar) — Atmospheric pressure ▪ Lux (lx) — Brightness ▪ Sound (dB) — Noise ▪ Humidity (RH %) — Relative humidity	▪ Elect. HF (V/m) — High frequency electromagnetic field strength ▪ Elect. LF (nT) — Low frequency electromagnetic field strength ▪ WiFi Lev. (dBm) — WiFi signal strength ▪ WiFi N. (N) — Number of WiFi networks present

The parameter values of each category are combined into a category value which is representative of all parameters of that category. The 3 category values are then also combined into a Global value that gives an indication of the overall indoor air quality. Use the buttons on the top right side of the page to display more detailed values for a certain category of parameters.

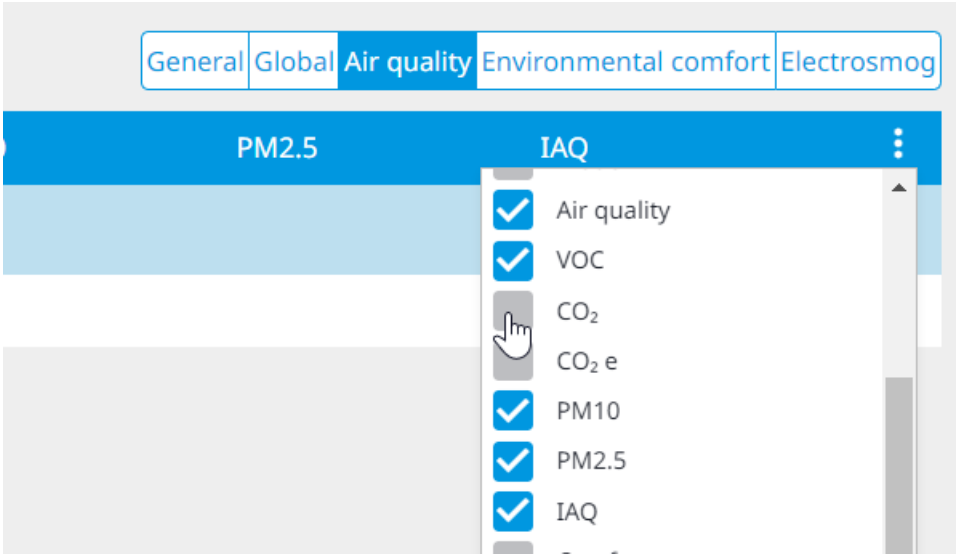


The following views are available:

View	Description
General	Shows general information about the sensor itself.
Global	Shows the Global value (Value) and the parameter values of the 3 major categories (Air quality, Environmental comfort and Electrosmog)

View	Description
Air quality	Shows the values of all parameters related to Air quality.
Environmental comfort	Shows the values of all parameters related to Environmental comfort.
Electrosmog	Shows the values of all parameters related to Electrosmog.

For every view, you can modify which information is displayed. Click the vertical ellipsis and select the checkboxes of the information you want to display in that view.



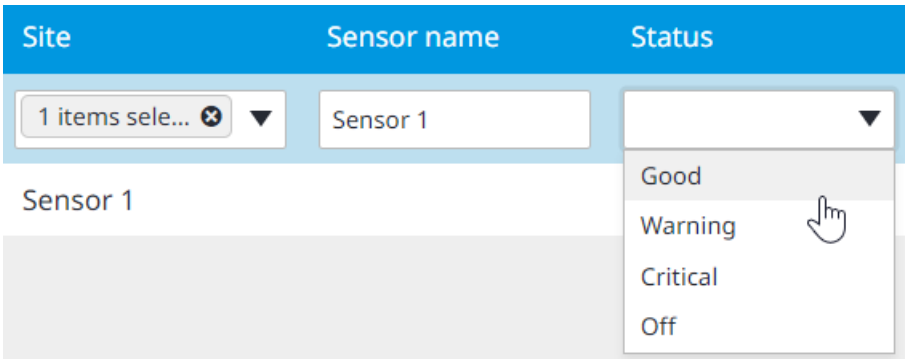
The sensor status displayed in the Sensor list changes to indicate when the Global value drops below the set thresholds. A sensor can be in 1 of 4 possible states:

Sensor status	Description
Good (green)	No thresholds have been violated.
Warning (orange)	The Global value has dropped below the Warning threshold.
Critical (red)	The Global value has dropped below the Critical threshold.
Off (gray)	The sensor is off. The Global value is not displayed.

INFORMATION

The sensor status can be linked to controlling actions. See "4.5.6 Interlocking" [▸ 62] for more information.

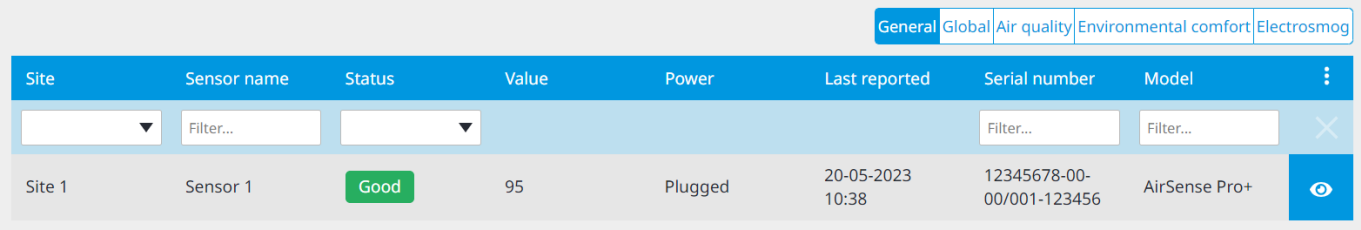
You can filter sensors in the list by Site, Sensor name and Status. To filter by Site or Status, select an item from the drop-down list. Note that you can select multiple items from the drop-down list simultaneously. To filter by Sensor name, simply type in the Sensor name field.



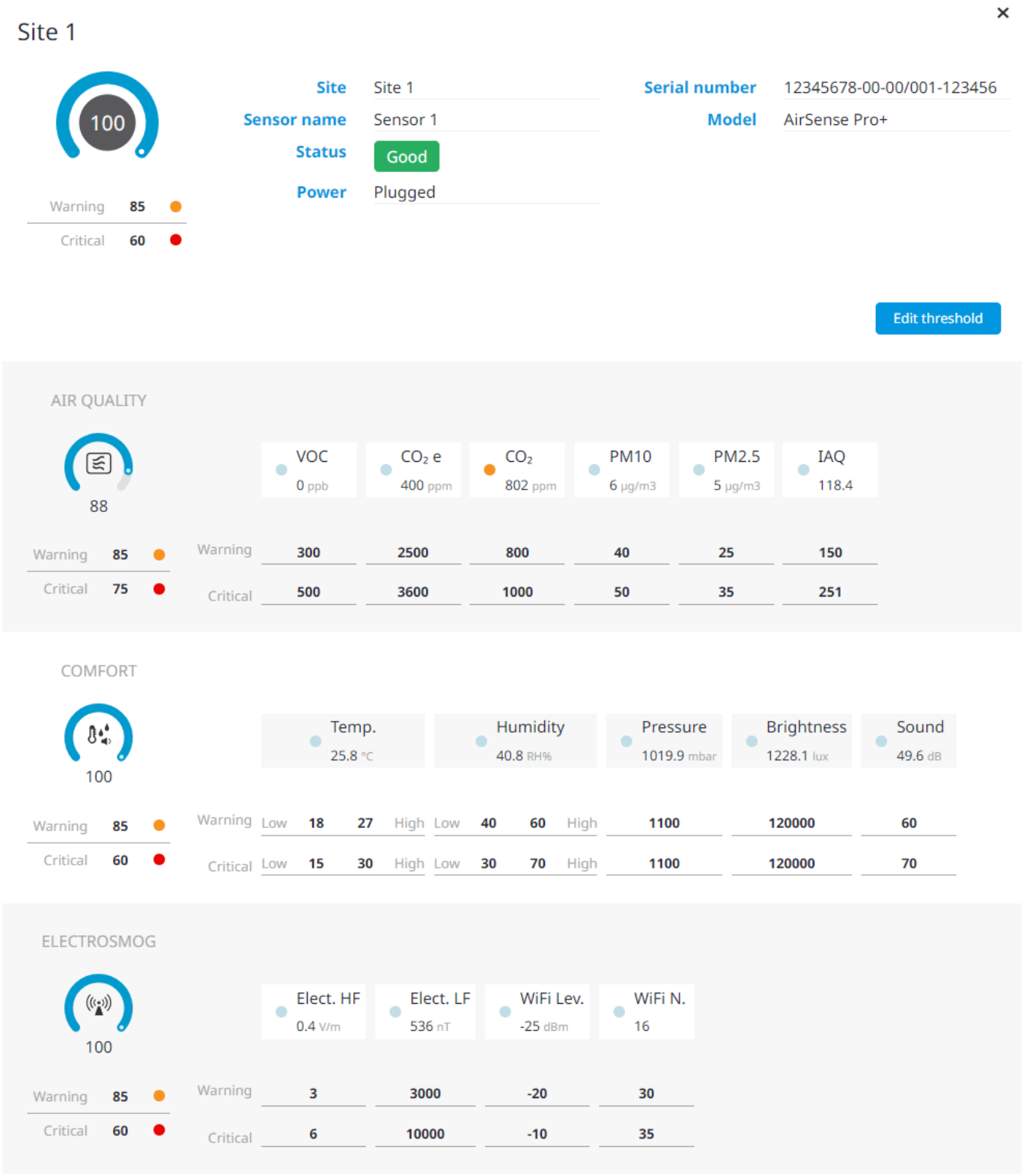
To manage sensor thresholds

For every sensor, you can define threshold values for individual parameters (e.g. CO_2), categories (e.g.Air quality), as well as the Global value. When thresholds are violated, the sensor status will change to reflect this violation. Two types of threshold values can be set: Warning (orange) and Critical (red).

1 In the Sensor list, select the sensor for which you want to manage the thresholds by clicking the eye icon.

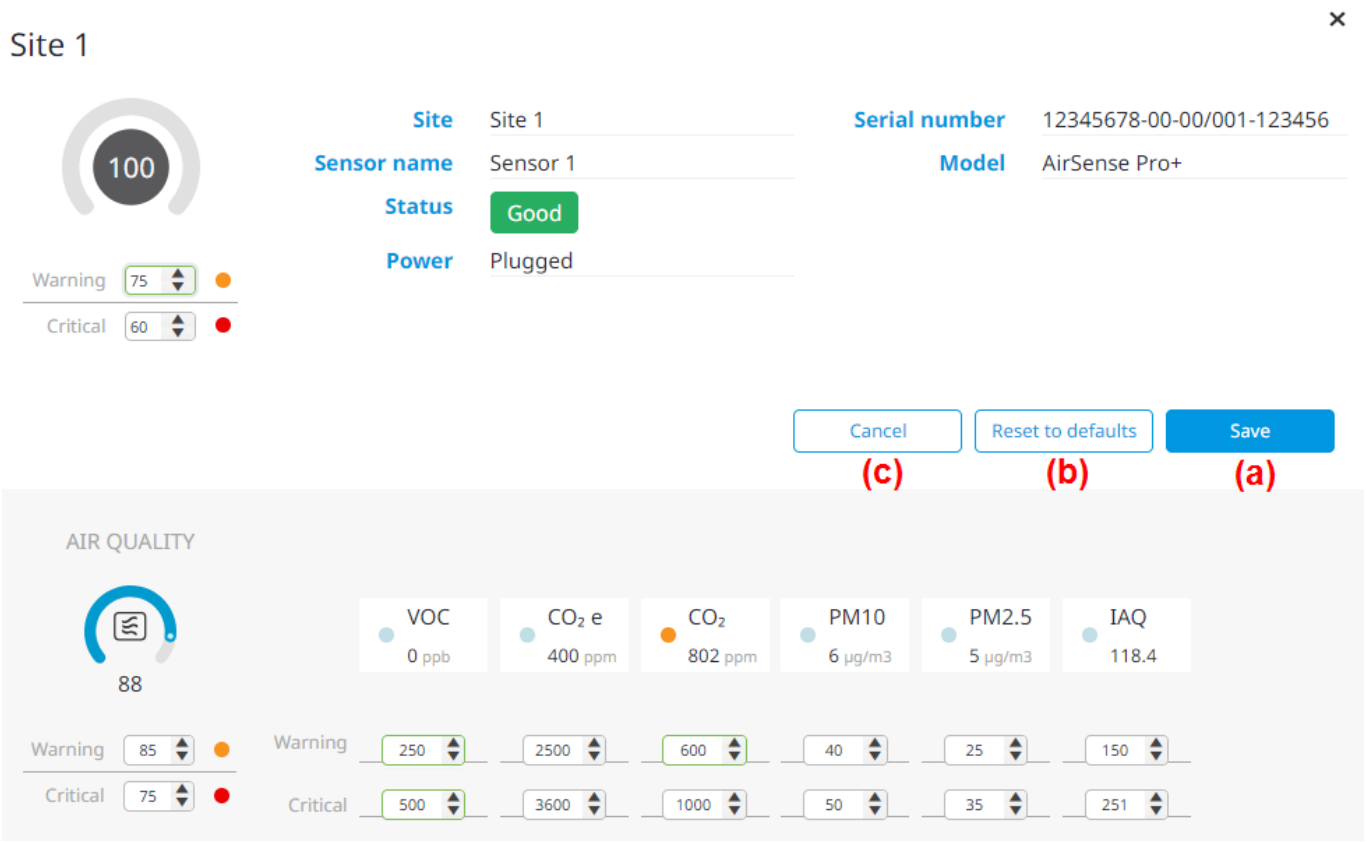


Result: A detailed view for the sensor appears on the right side of the page. It displays the Global value, the value for each category of parameters, as well as the currently measured values for every parameter. In addition, all Warning (orange) and Critical (red) threshold values are displayed.



2 Select Edit threshold to enable editing mode.

3 Set the threshold values for every parameter. You can enter the value by typing in the respective field, or use the arrows that appear when a specific threshold field is selected.



INFORMATION

Threshold values MUST be entered as full numbers and CANNOT contain decimals. The value entered should be between minimum and maximum value. The value for the Warning threshold can never exceed the value for the Critical threshold. If the value entered is incorrect for any of these reasons, the threshold field outline will be marked red.

4 Click Save (a) to save changes, or click Cancel (c) to exit out of editing mode and discard any pending changes. Clicking Reset to defaults (b) resets all threshold values to the default values.

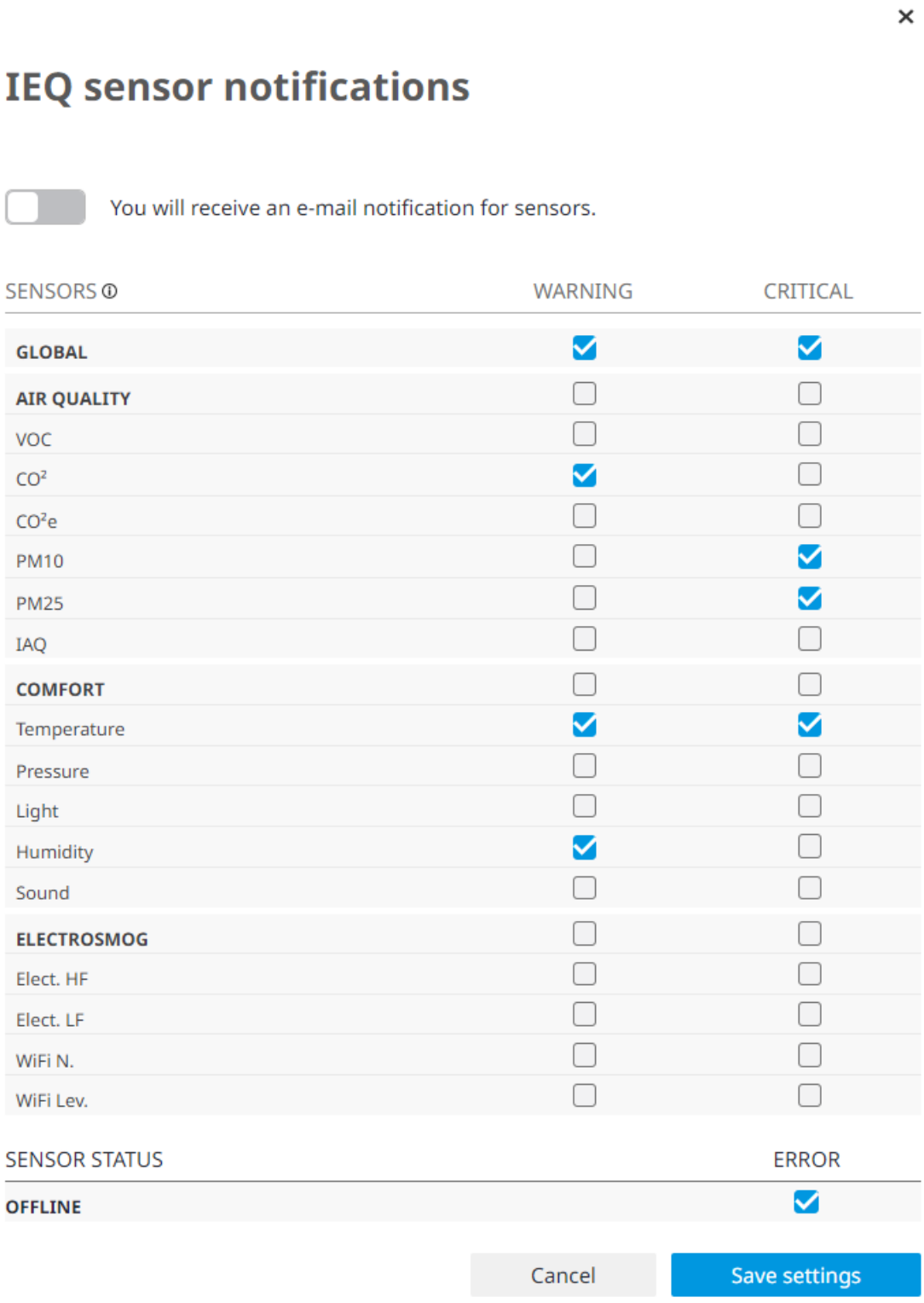
To configure sensor notifications

After setting sensor thresholds, you can let Daikin Cloud Plus notify you via e-mail when a certain threshold value is exceeded.

1 From the Account settings drop-down menu, select Account Settings.

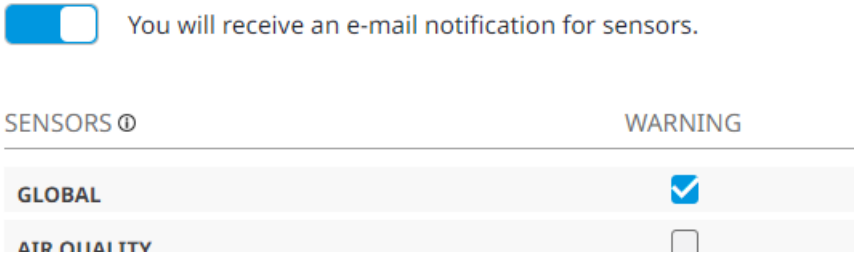
2 Under Associated sites select the sensor notification icon of the site for which you want to enable notifications.

Result: A settings panel appears on the right side of the page.



3 Select the checkboxes for every threshold you want to receive notifications for when exceeded. When multiple thresholds are selected, the notification will trigger when any of the selected thresholds is exceeded. You can also choose to receive a notification when a sensor error occurs.

4 Enable sensor notifications with the toggle switch. If you do not set the toggle switch in the on position, sensor notifications will not be enabled. Note that the toggle switch can only be set in the on position when at least 1 threshold is selected.



5 Click Save settings.

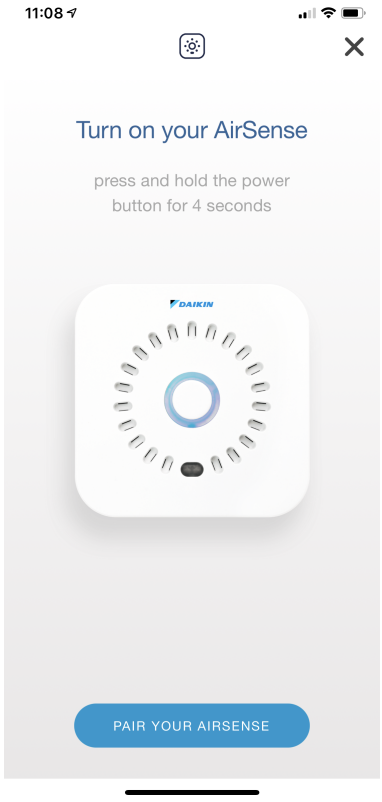
Result: Sensor notifications for this site are now enabled.

To pair a sensor to a site

Prerequisite: The Daikin AirSense app is required in order to pair a sensor with a site. The app can be downloaded from the App Store or Google Play. When pairing a sensor, make sure you have access to both the app and Daikin Cloud Plus at the same time.

1 Open the Daikin AirSense app and log in using the credentials received from your Daikin representative.

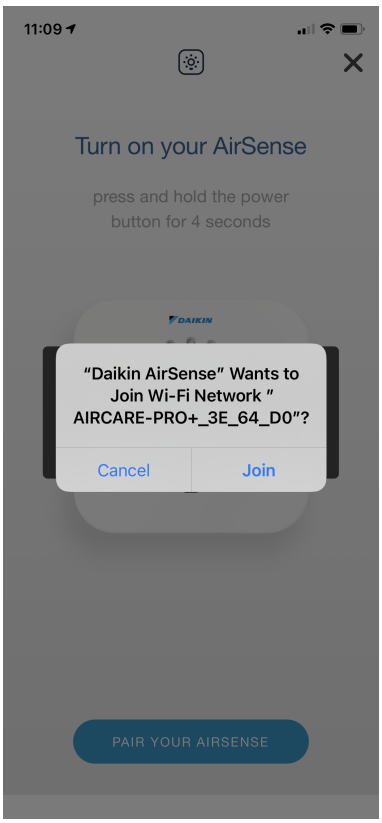
2 Press and hold the power button on your sensor for 4 seconds.



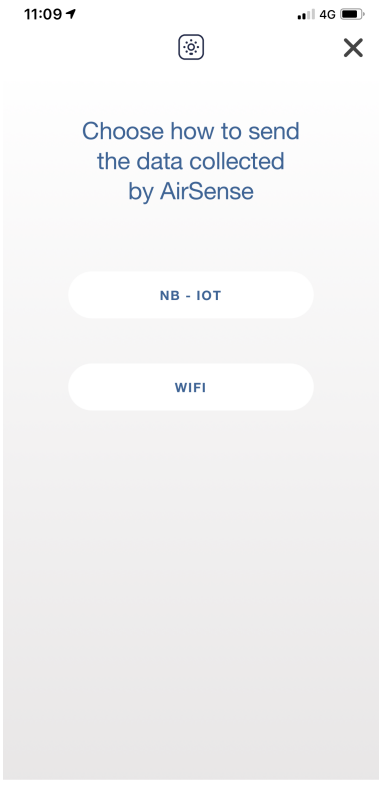
Result: The sensor shows a blue light, followed by a green light, then begins to blink with a blue light every second. The sensor is now in configuration mode and ready to be paired.

3 Scan the QR code on your sensor using the app.

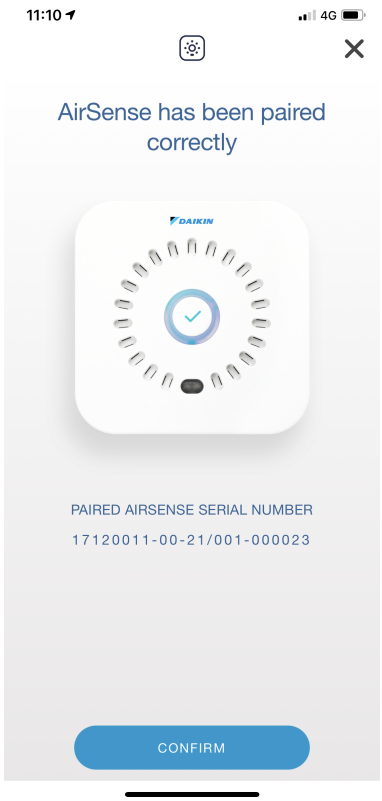
4 Allow the app to join the sensor's Wi-Fi network.



5 Choose your data collection method.



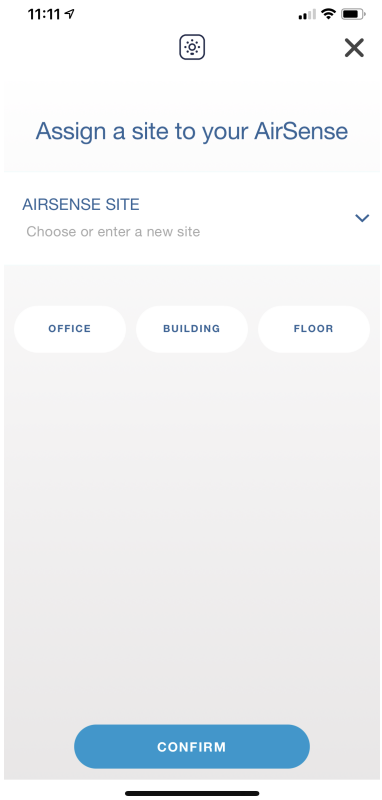
Result: The sensor is now paired with the app.



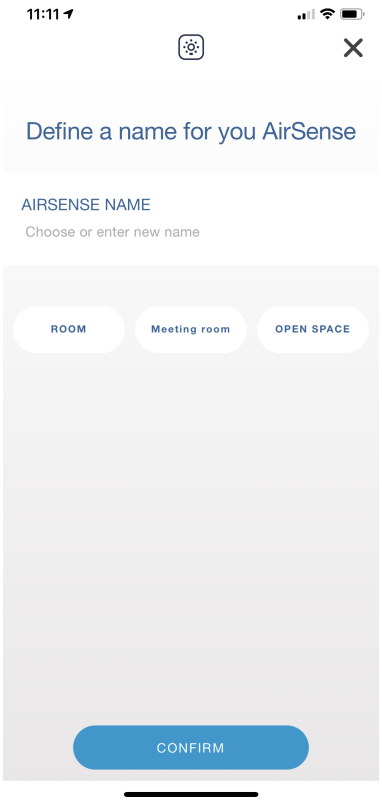
INFORMATION

Depending on your location, the data collection method can be either NB-IoT or WiFi. NB-IoT is not supported in all countries.

6 Assign a site to the sensor.



7 Name your sensor. Note that the name entered here is the sensor name that will be shown in Daikin Cloud Plus.

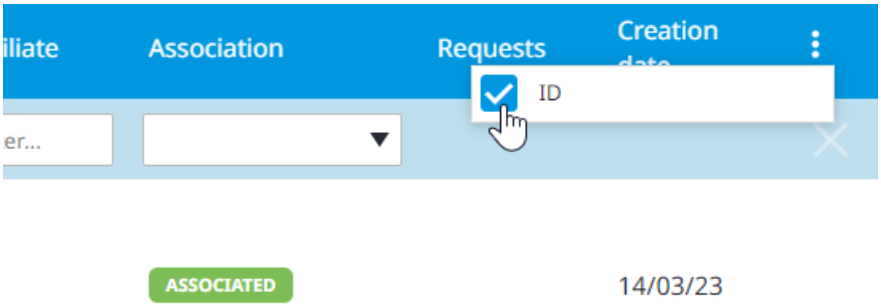


8 In Daikin Cloud Plus, go to ADMINISTRATION > SITE LIST.

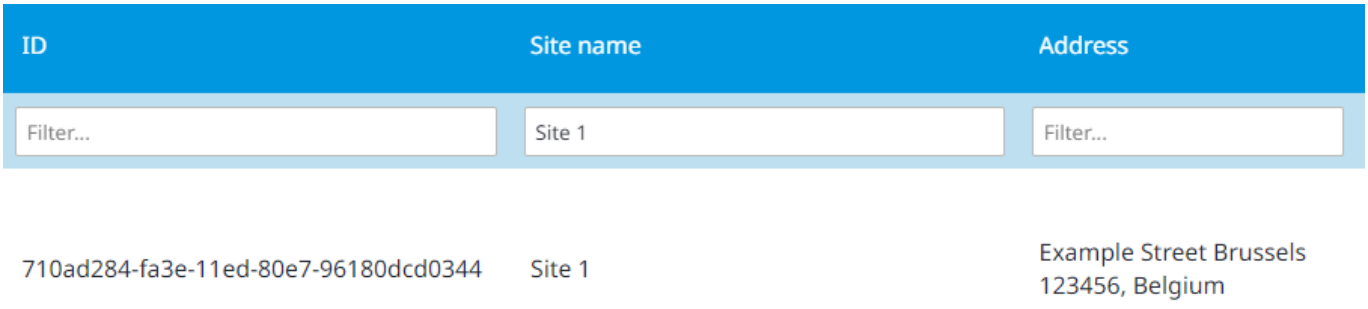
Result: The currently available sites are displayed.

9 Find your site in the list.

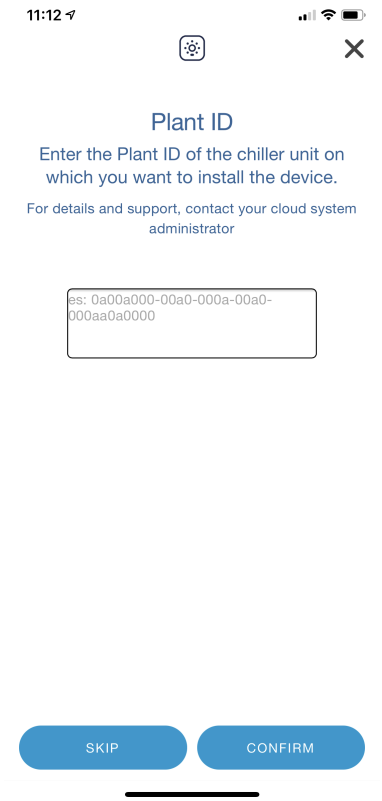
10 If the ID column is not visible, enable it. Click the vertical ellipsis and select the ID checkbox to enable the ID column.



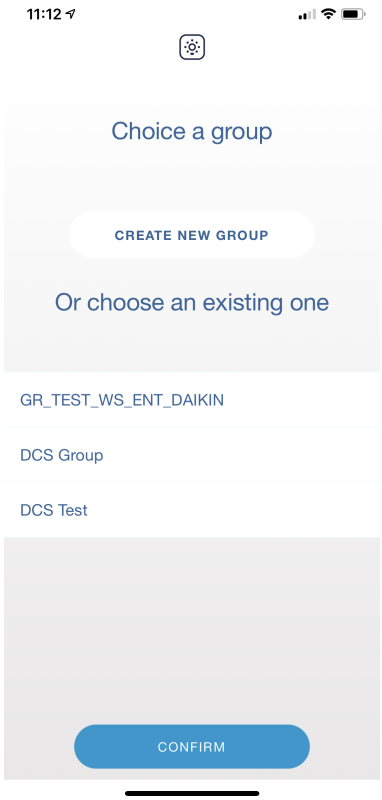
11 Find the ID number for your site in the ID column.



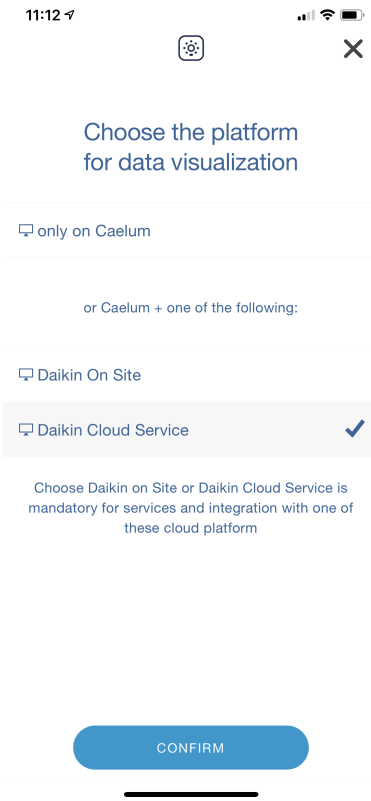
12 Return to the Daikin AirSense app and enter the site ID number from the previous step as the Plant ID.



13 Create or choose a group for your sensor.



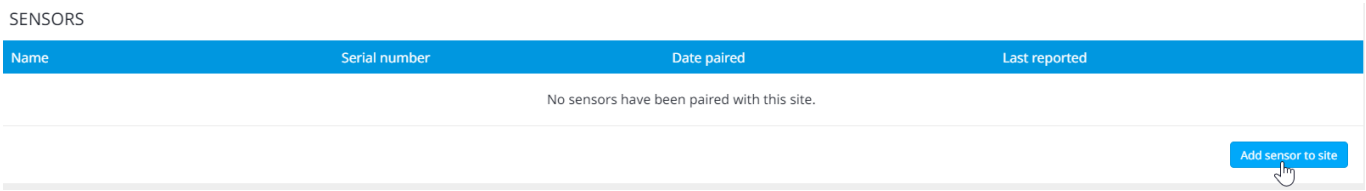
14 Select Daikin Cloud Plus as the data visualisation platform.



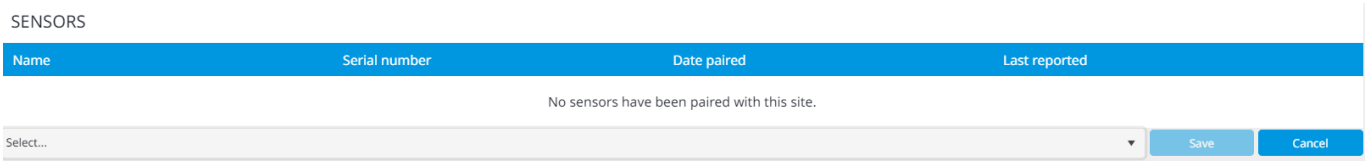
15 In Daikin Cloud Plus, go to the site details of your site. You can get there by clicking the site name in the site list.

16 Scroll down to SENSORS.

17 Click Add sensor to site.



Result: A drop-down menu appears.



18 Select the sensor from the drop-down menu.

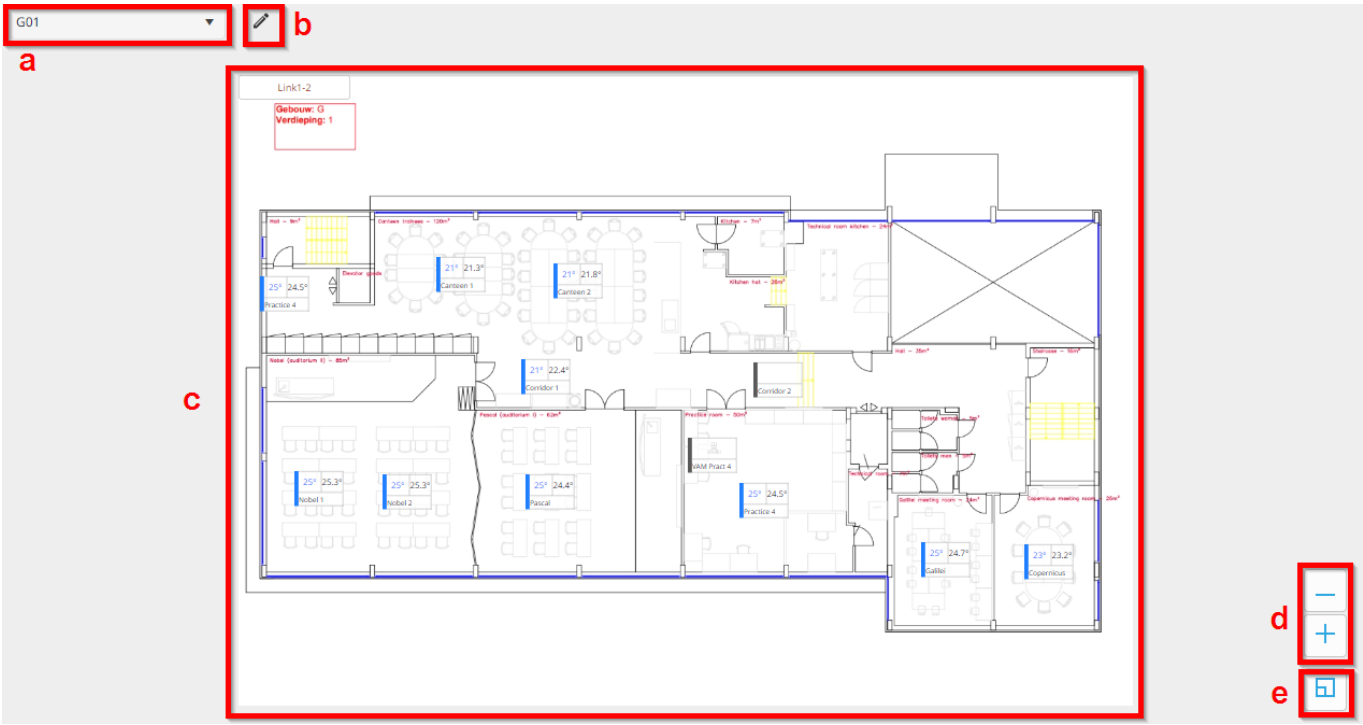
19 Click Save.

Result: The sensor is paired with the site. It may take a couple of seconds before it appears in the list. The sensor is now also visible on the Sensor list page.

4.5.3 Layout view

Layout view offers an alternative and intuitive way of monitoring and controlling equipment, in addition to the "4.5.1 Equipment list" [▶ 15]. It allows you to visualise sites and equipment by creating a floor plan of your site and arranging interactive elements on top of the floor plan. However, you are not limited to the recreation of floor plans. For example, you can also use this functionality to map the architecture of large and complex units (e.g. air handling units) to a more easily

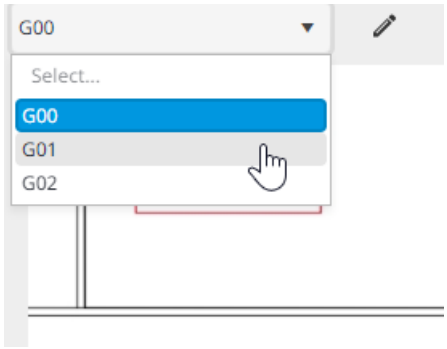
accessible control panel. For more information about Layout view and how to set up screens to interact with, see "4.11.6 Layout settings" [▶ 196].



a Screen selection drop-down list
b Rearrange screen order
c Layout view
d Zoom buttons
e Minimise display button (sets the view to the minimum zoom level)

To use layout view

1 From the drop-down list, select a screen.



Result: The selected screen is displayed.

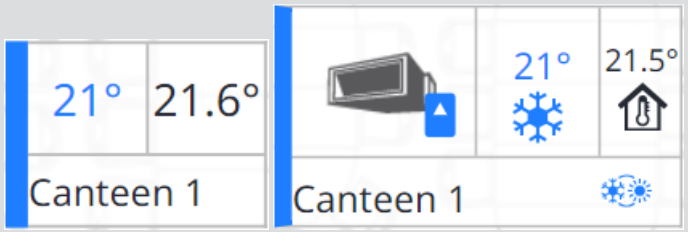
2 If necessary, adjust the zoom level using the buttons:

Button	Description
+	Increase the zoom level
−	Decrease the zoom level
◱	Set the zoom level to the minimum value

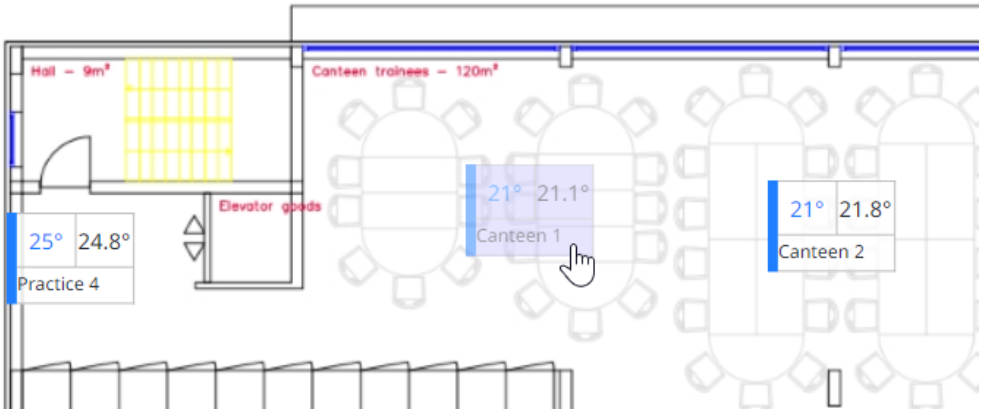
INFORMATION
The currently selected zoom level persists across browser sessions.

INFORMATION

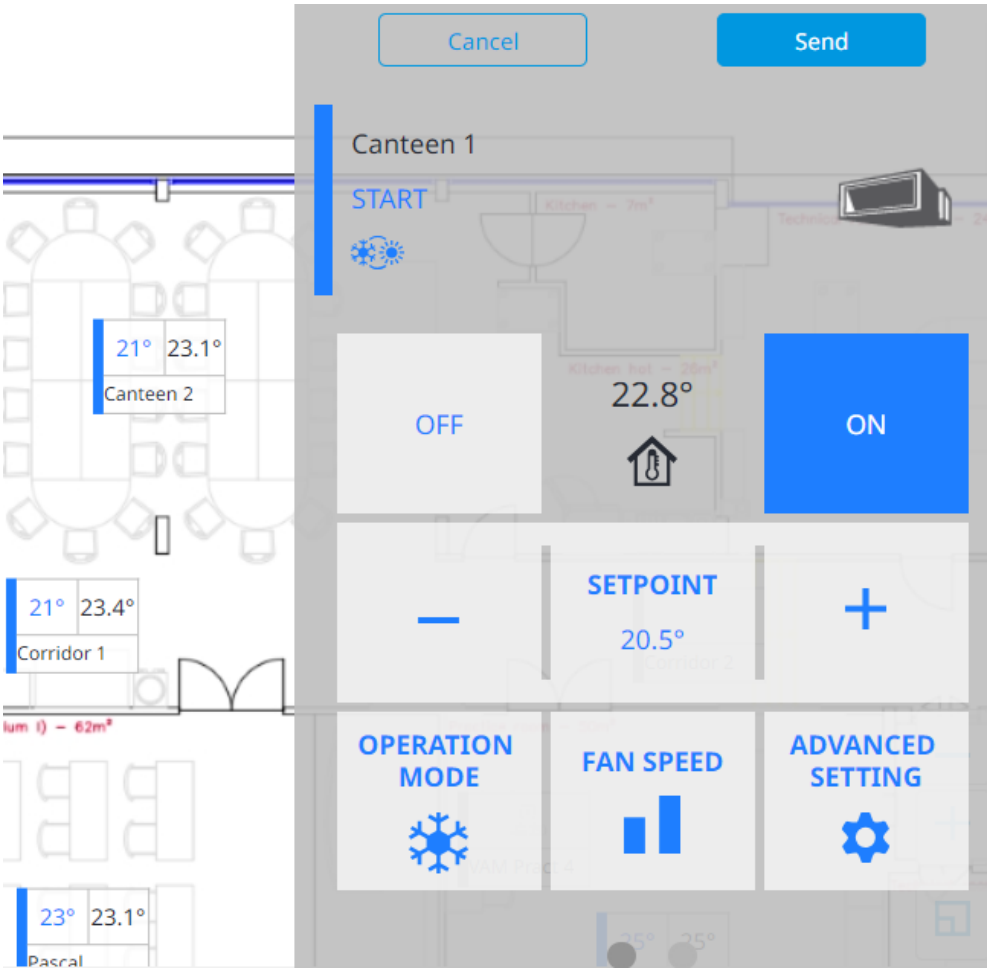
Depending on the current zoom level, equipment or zone tiles may have a more or less detailed appearance.



3 Click or tap the tile of the equipment you want to control. You can control a single unit, but also a zone.



Result: The control panel for the selected equipment or zone opens on the right side of the page.

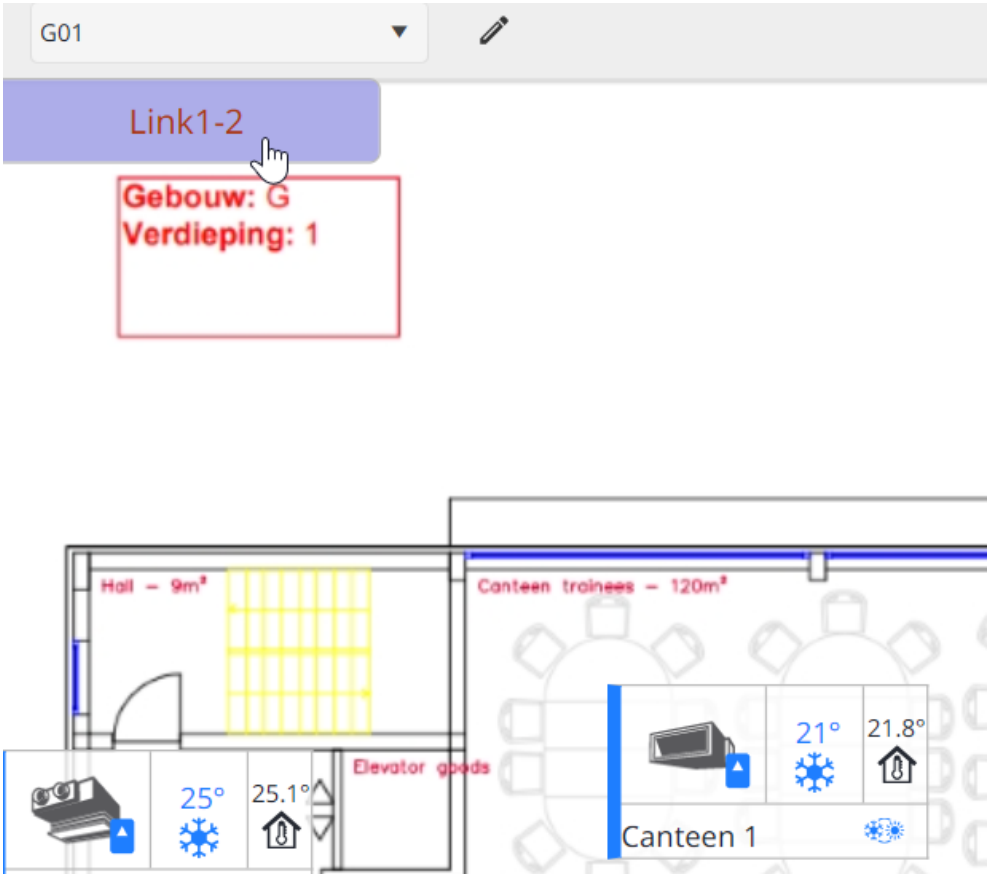


4 Change the desired settings. For more information about controlling units using the control panel and available settings, see "4.5.1 Equipment list" [▶ 15].

5 After changing any setting, click Send in the control panel to apply the settings.

Result: The actions are applied to the unit.

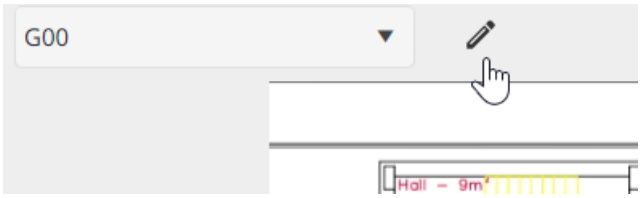
6 Click link buttons (if present) to directly switch to another screen without having to use the drop-down list.



To rearrange the screen order

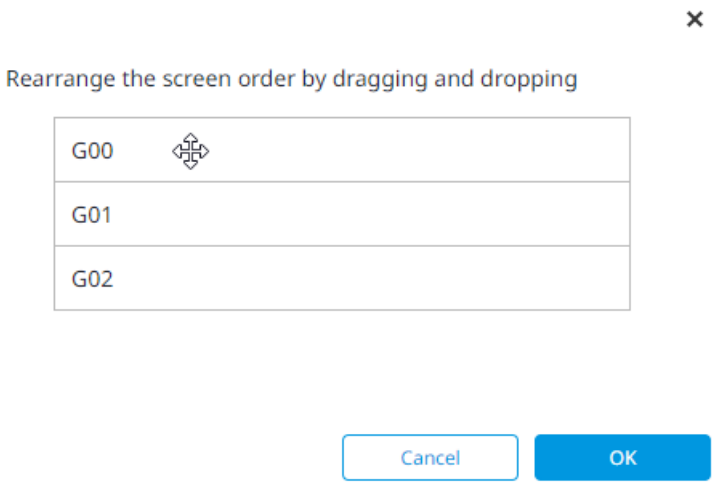
The currently displayed screen can be selected using the screen selection drop-down list. However, the order in which the screens appear in the drop-down list can be customized.

1 In Layout view, select the pencil icon.



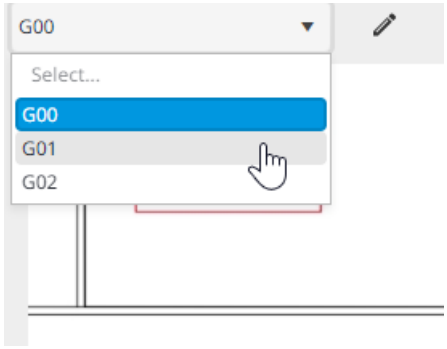
Result: A panel appears on the right side of the page.

2 Drag and drop the screen names to arrange them in the desired order. The order set here will be the order in which the screens are displayed in the drop-down list (top to bottom).



3 Click OK.

Result: The screen order is changed.



Device-specific controls

Depending on the device used to access Daikin Cloud Plus, some actions in the layout view user interface are performed in different ways.

Action	PC	Tablet
Select equipment or zone tile	Left click	Tap
Deselect equipment or zone tile	Left click on the background image	Tap the background image
Use link button	Left click	Tap
Scroll	Left click and drag the background image up/ down	Swipe the background image up/down
Increase/decrease zoom level	Scroll mouse wheel up/ down	Pinch in/out

4.5.4 Schedule

INFORMATION

Schedules run locally on the DC+ Edge controller. In case of an internet outage, schedules will continue to be executed as normal.

INFORMATION

When the DC+ Edge is installed in parallel with another centralised controller (i.e. there is a Main/Sub relationship between different controllers), like the iTM, schedules that need to run on the DC+ Edge can ONLY be managed via Daikin Cloud Plus. In such a configuration, the iTM CANNOT be used to configure or run schedules on the DC+ Edge controller, as there is no direct communication between the DC+ Edge and the iTM Schedules configured on the iTM are NOT stored on the DC+ Edge and will NOT be visualised in Daikin Cloud Plus.

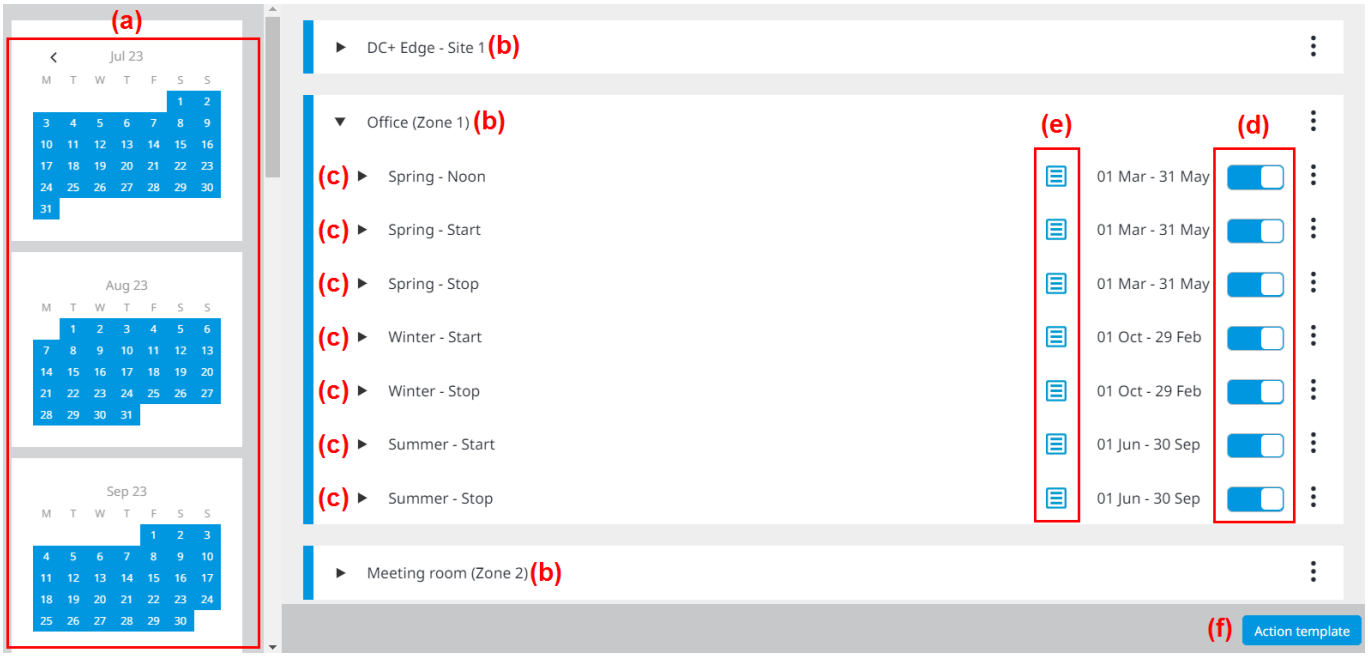
Schedules in Daikin Cloud Plus make use of the following concepts:

- Programs (scheduled actions that apply to a zone)
- Special days (exceptions to programs)
- Action template (templates for programs)
- See the table below for more information. Note that for programs to function correctly, the Daylight saving time setting has to be set correctly. Verify on the site details page to make sure this is the case.

Item	Description	Remarks
Program	Programs are scheduled actions that are applied to 1 or more zones. All units that belong to the zone will follow the actions defined by the program for the specified period. You can choose to exclude certain units from the program, if the program should not apply to every single unit in the zone.	▪ Maximum 20 programs per zone ▪ Maximum 20 actions per program
Special day calendar	The special day calendar allows you to define special days (e.g. holidays or closed days). Like programs, the special day calendar can be linked to 1 or more zones. The purpose of special days is to be used as exceptions to programs that would otherwise be active. For example, an office has configured a program to turn all units in a zone off after 8 PM, because by that time, everyone has left the office. However, the 1st of May is a holiday and falls on a Monday this year. Adding the 1st of May to the special day calendar and including that special day in the program allows overriding the program for that day. The units that belong to the zone can exceptionally be turned off for the whole day.	▪ Maximum 5 special days per zone ▪ Special days persist in the following years[(a)]
Action template	Action templates are templates for programs. Unlike a program, an action template only defines actions, and not the period when actions should take place. Action templates are useful when you have many different zones with units that need to run the same or similar programs. It is possible to create an action template starting from an already existing program.	▪ Action templates are saved per user ▪ Maximum 5 action templates per user

[(a)] Special days will also apply to the following years once set. If a special day is set to 1/5/2023, it will also be applied on 1/5/2024. Review the special day calendar every year if you have included public holidays of which the date changes depending on the year.

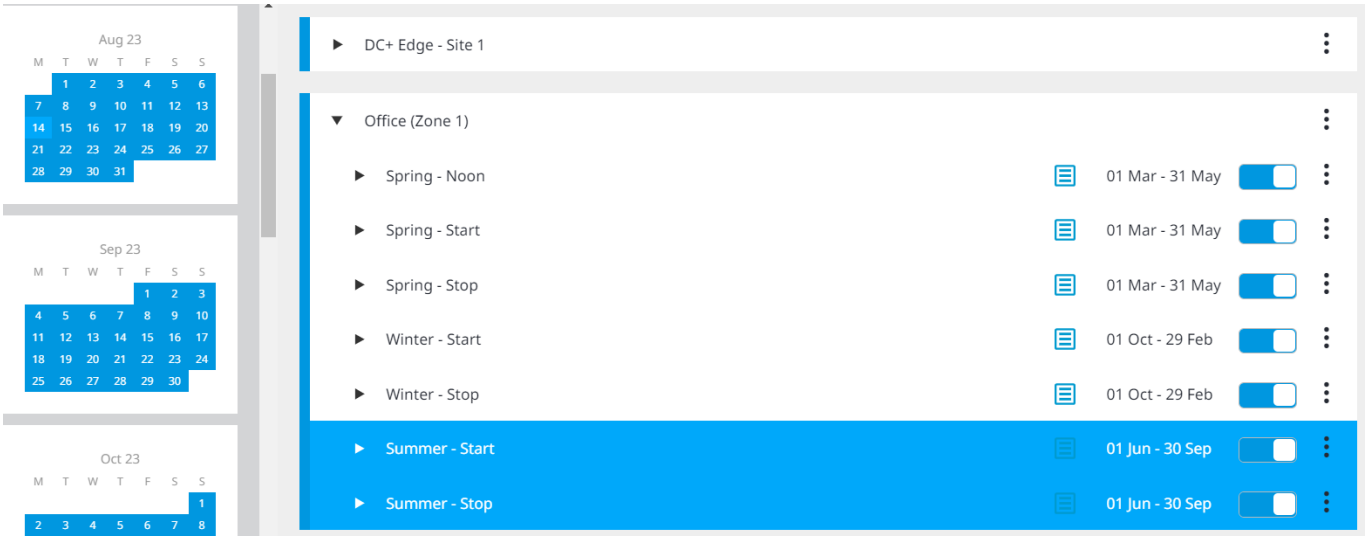
The Schedule page contains the following elements:



a Calendar view
b Zones
c Programs
d Program toggle switch
e Program action list button
f Action template button

When a zone is expanded, all the programs (b) linked to that zone are visible. You can easily enable or disable a program with the program toggle switch (d).

In the calendar view (a), dates that are marked blue indicate dates for which at least 1 program is active. When hovering over a specific date, the active program(s) for that date are indicated in blue in the list of programs.



INFORMATION

Only the programs that are linked to the zone that is currently expanded are included in the calendar view.

INFORMATION

The calendar view displays the upcoming 12 months, starting from the current month. Using the left and right arrows on the top and bottom of the calendar view, you can change which month is displayed first.

To create a program

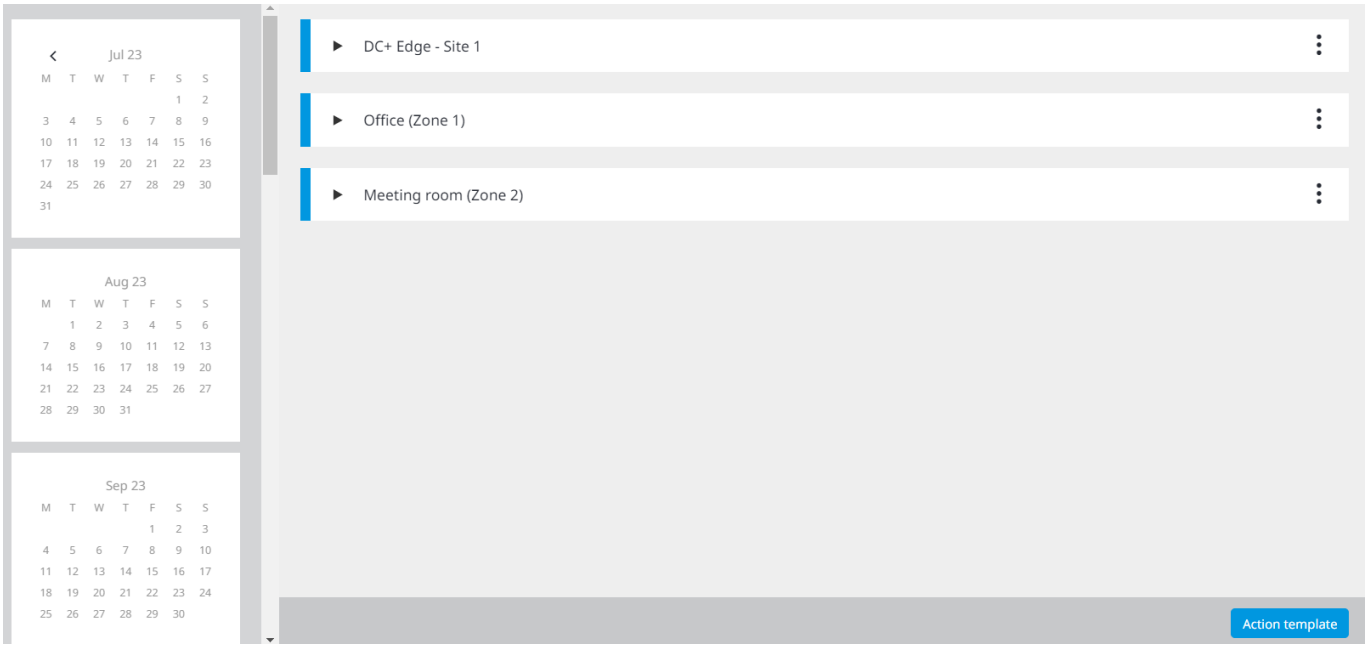
You can create multiple programs for different periods of the year. Note that programs are created for and applied to zones, not individual units.

INFORMATION

Scheduled actions set by programs can still be overruled by controlling actions on the physical unit itself or through other controlling features on the platform. For example, even if a program alters the setpoint of a unit from 22°C to 20°C, you can still manually alter the setpoint by controlling the unit via the "4.5.1 Equipment list" [▸ 15] or "4.5.3 Layout view" [▸ 38].

1 In the sidebar, go to MONITORING & OPERATION > SCHEDULE.

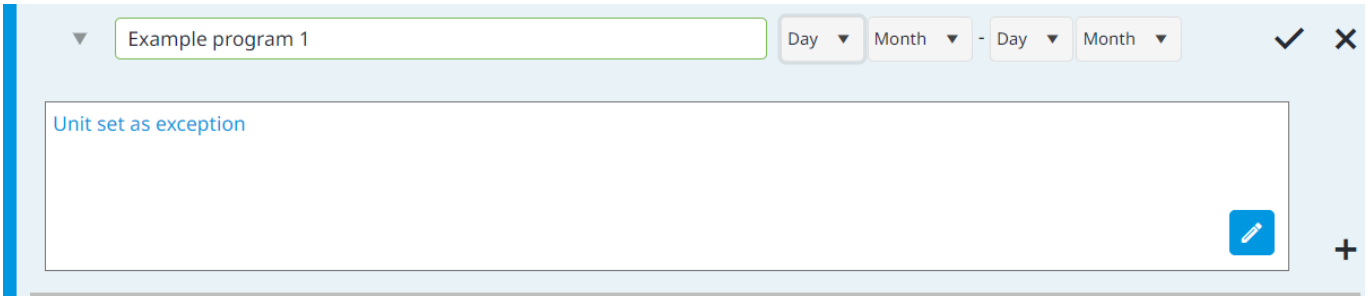
Result: The following page is displayed.



2 Click the vertical ellipsis of the zone for which you want to create a program and select Add program.

Result: The program settings appear.

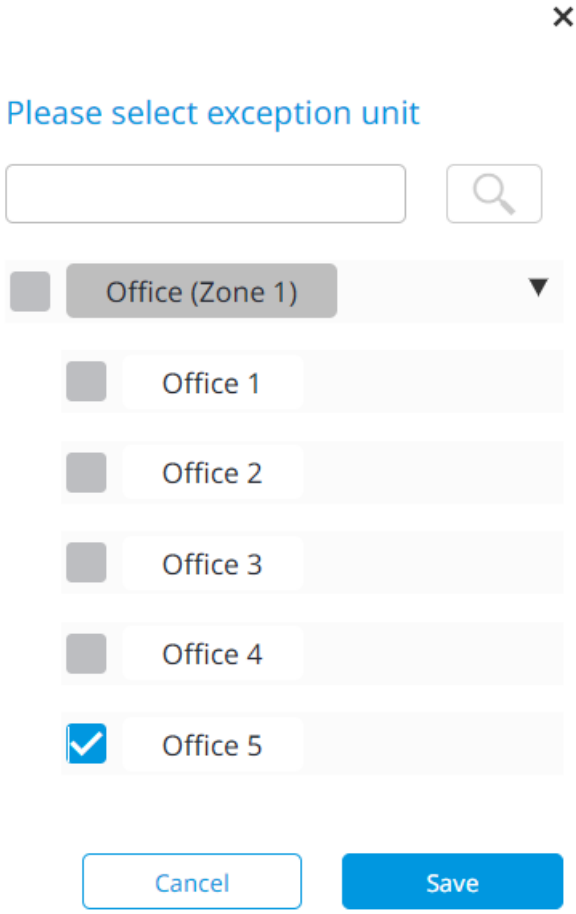
3 Name the program.



4 Use the drop-down lists to set a starting and ending time for the program. This is the period during which the program will run when enabled.

5 If required, click the pencil icon to set units as an exception. The selected units will be excluded from the program.

Result: A settings panel appears on the right side of the page.



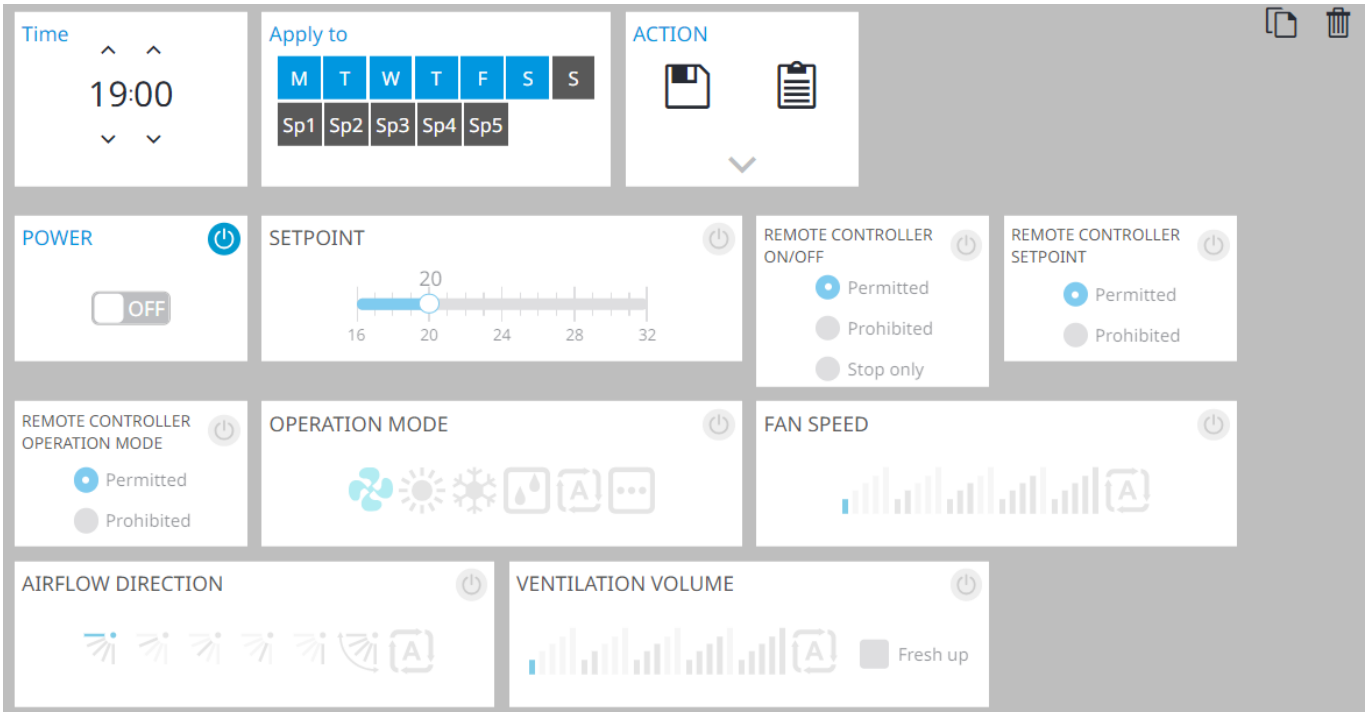
6 Select the units you want to exclude from the program. Click the downward facing arrow next to the zone name to expand the available units. You can also search for units that belong to the zone by typing in the search field, then click the magnifying glass icon to search.

7 Click Save.

Result: The selected units are excluded from the program.

8 Click **+** to add an action to the program.

9 Specify the time when the action should occur. Click the arrows to increase or decrease the hour and minutes.



10 Select the days of the week or the special days (Sp1~Sp5) when the program should be active. For more information about setting special days, see "To edit the special day calendar" [▸ 51].

11 Optional: click the clipboard icon to apply an existing action template. For more information about creating action templates, see "To create an action template" [▸ 48].

12 Enable the setting(s) you want to include in the program by selecting the power icon.

13 Configure the setting(s) for the program (e.g. change operation mode, turn the power on/off, alter the setpoint, ...). The possible actions correspond to the actions you can perform using the control panel in the "4.5.1 Equipment list" [▸ 15] or the "4.5.3 Layout view" [▸ 38].

14 Click + to add another action to the program. Alternatively, you can also duplicate an already configured program action by clicking the duplicate icon. This is useful for quickly adding program actions that differ only slightly. You can set up to 20 actions per program. Click the trashcan icon to delete an existing action from the program.

15 Optional: click the disk icon to save the action as an action template to be used later.

16 Click ✓ to save the program.

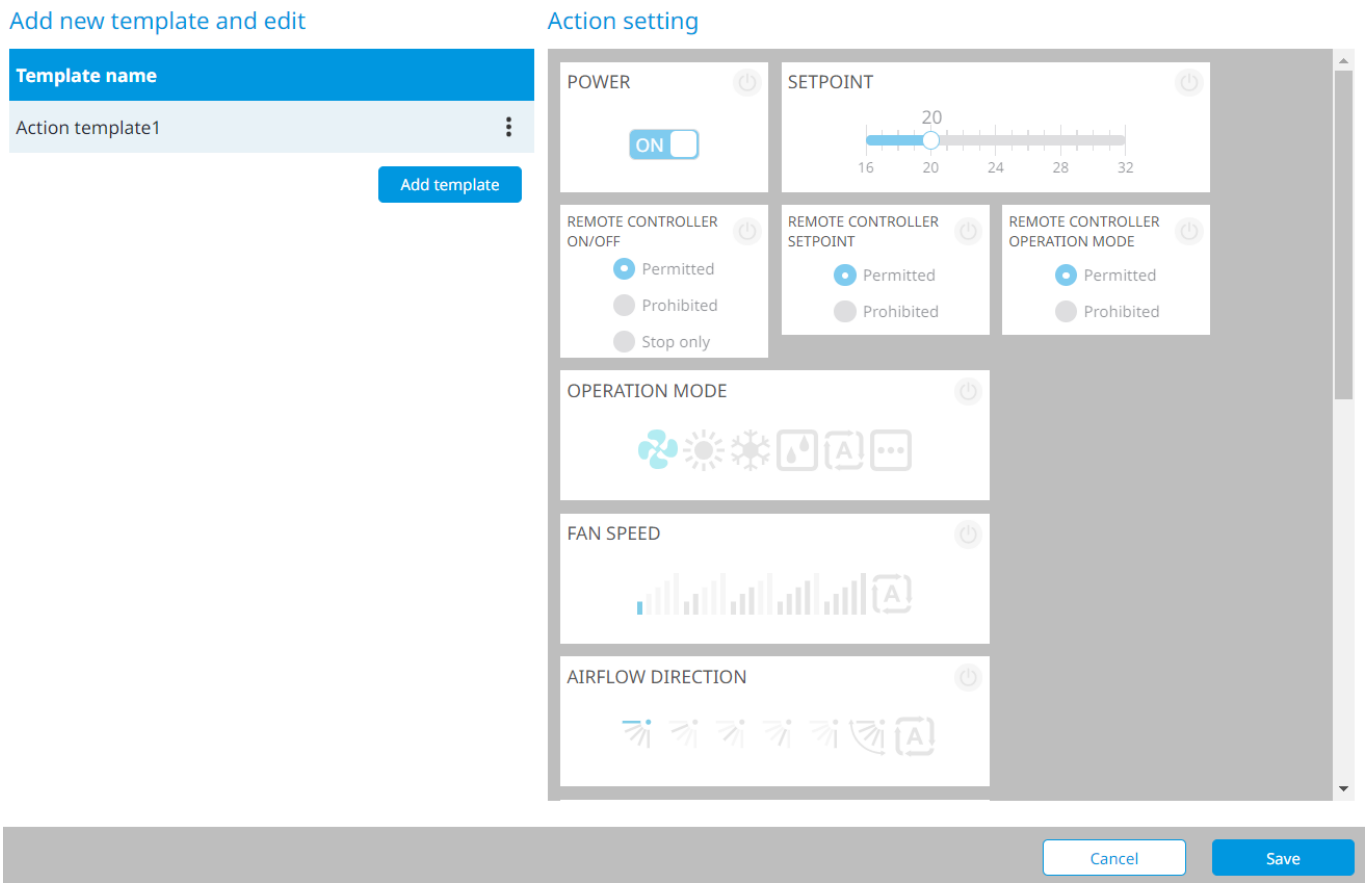
Result: The program is created.

To create an action template

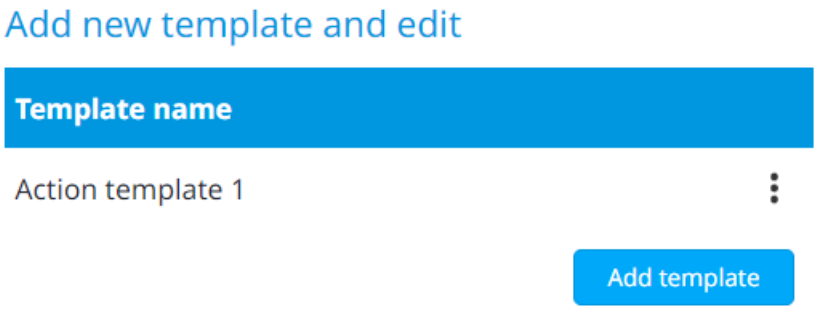
1 In the sidebar, go to MONITORING & OPERATION >SCHEDULE.

2 Select Action template.

Result: A settings panel is displayed.

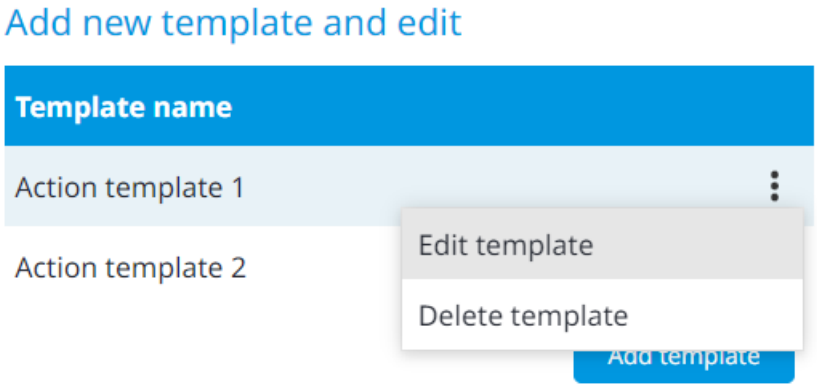


3 Select Add template.



Result: A new action template is added to the list of action templates.

4 Click the vertical ellipsis of the icon and select Edit template.



5 Name the action template.

6 Under Action setting, enable the actions you want to include in the action template by selecting the power icon.

7 Set the actions for the action template (e.g. change operation mode, turn the power on/off, ...). The possible actions correspond to the actions you can perform using the control panel in the "4.5.1 Equipment list" [▸ 15] or the "4.5.3 Layout view" [▸ 38].

8 Click ✓ to save the action template.

9 Click Save.

Result: The action template is created. The template can now be used for the setting the actions of programs.

To view scheduled program actions

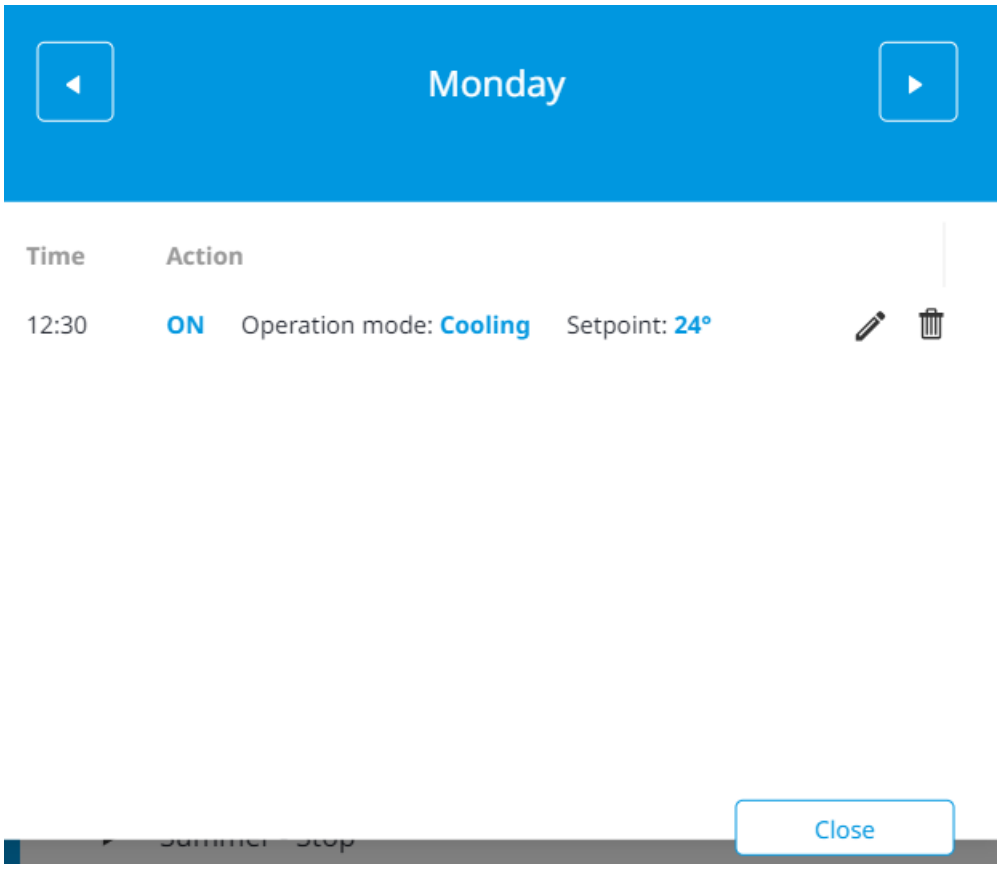
There are 2 ways to view scheduled actions of a program.

Viewing the action list

1 In the sidebar, go to MONITORING & OPERATION > SCHEDULE. Click arrow next to the zone name to display the programs linked to the zone.

2 Click the action list icon of a program.

Result: A pop-up window is displayed.



3 Use the arrows to cycle between the different days of the week and special calendar days. For every day, the scheduled time and actions are listed. From here, you can choose to edit or delete the program.

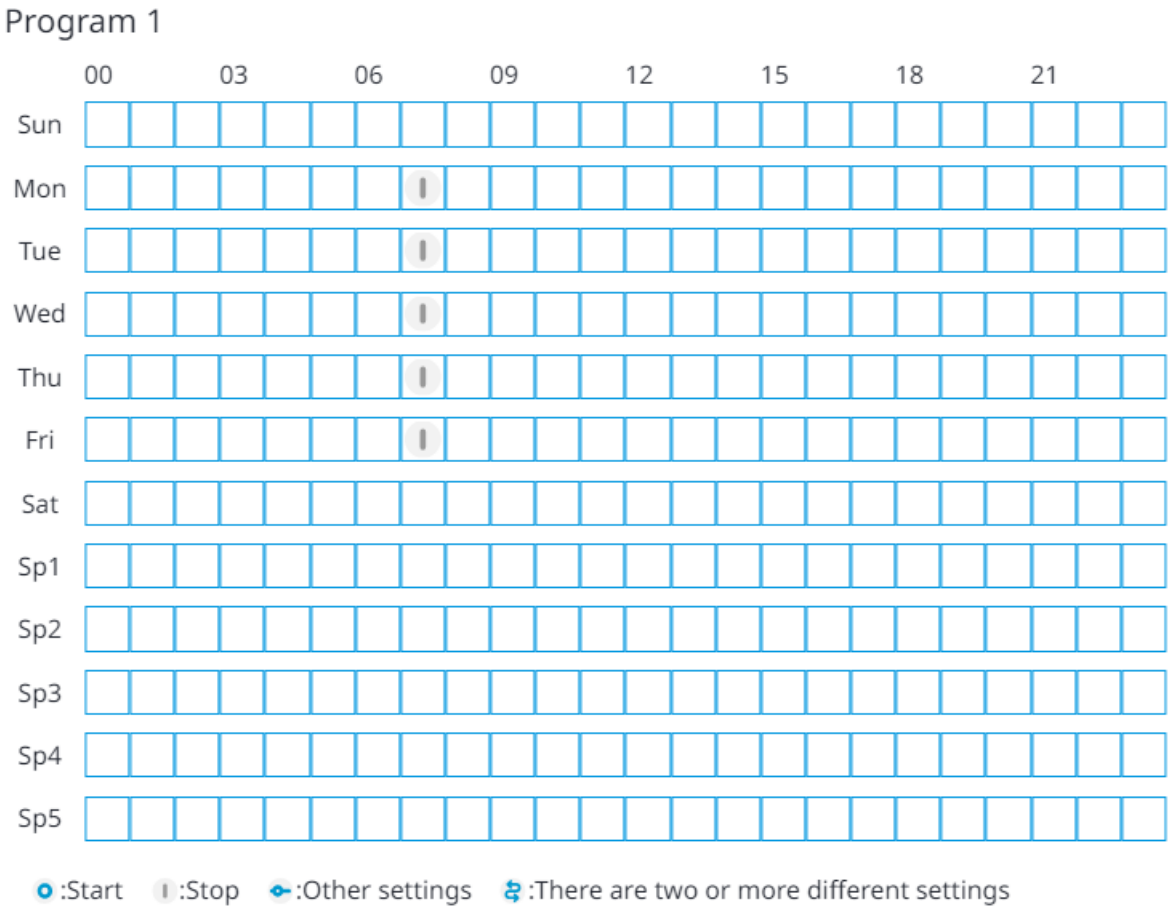
4 Click Close to return to the Schedule page.

Viewing the program summary

1 Click the vertical ellipsis of a program.

2 Select Program summary.

Result: A pop-up window is displayed. Here, an hour-by-hour overview displays a schematic overview of scheduled actions.



3 Click Close to return to the Schedule page.

To edit the special day calendar

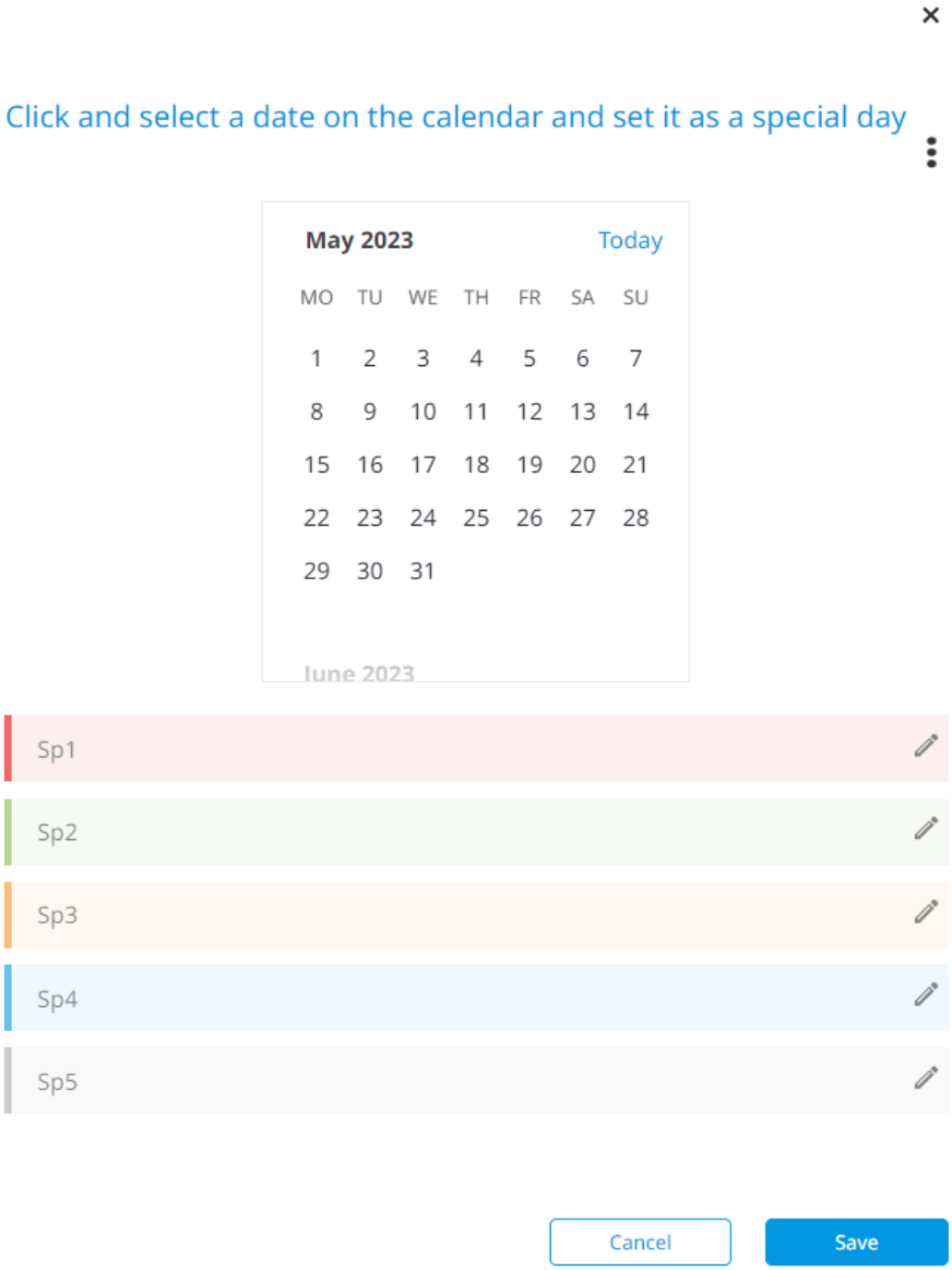
You can set special days in the special day calendar, which can then be used in programs. Note that when special days are added, they are also automatically added to the special day calendars of the next years.

1 In the sidebar, go to MONITORING & OPERATION > SCHEDULE.

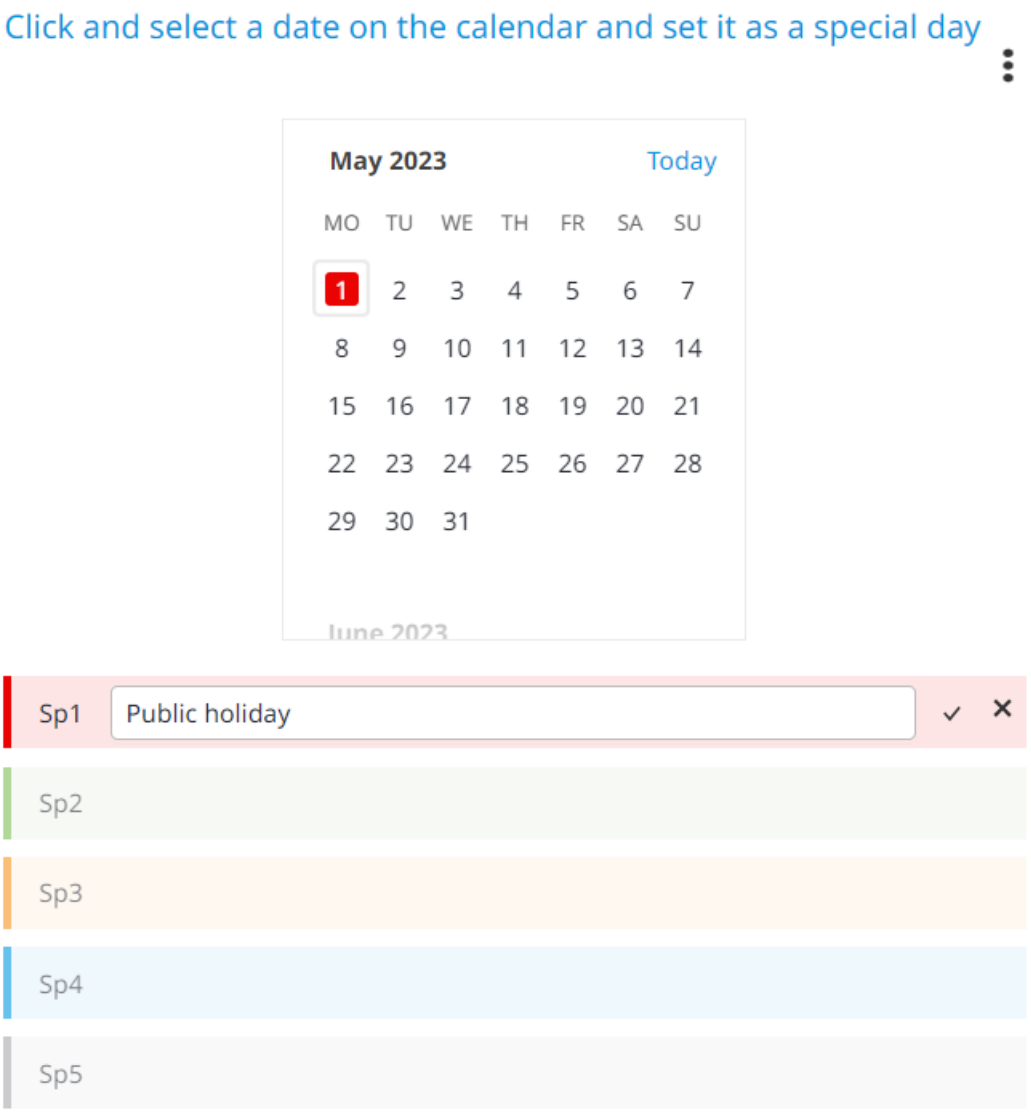
2 Click the vertical ellipsis of the zone for which you want to edit the special day calendar.

Result: A settings panel is displayed on the right side of the page.

3 Click the pencil icon for any of the 5 special days.



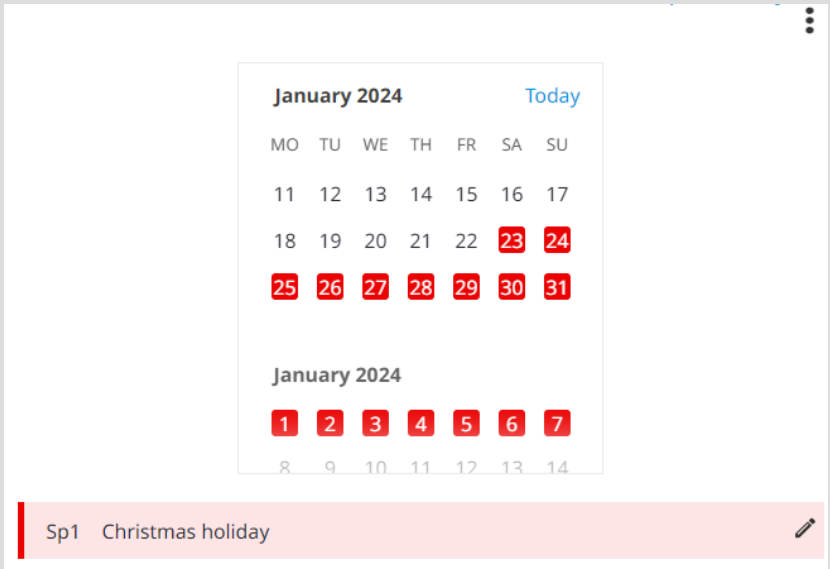
4 Name the special day.



5 Select a date from the calendar. You can scroll up or down to go back or forward in time. The currently selected date will be marked in the same colour as the special day that is currently being set (e.g. red).

INFORMATION

When editing the special day calendar, you can include multiple days at once. For example, you could add all holidays to Sp1, and use the other 4 special day calendar slots for other purposes.



6 Click ✓ to confirm.

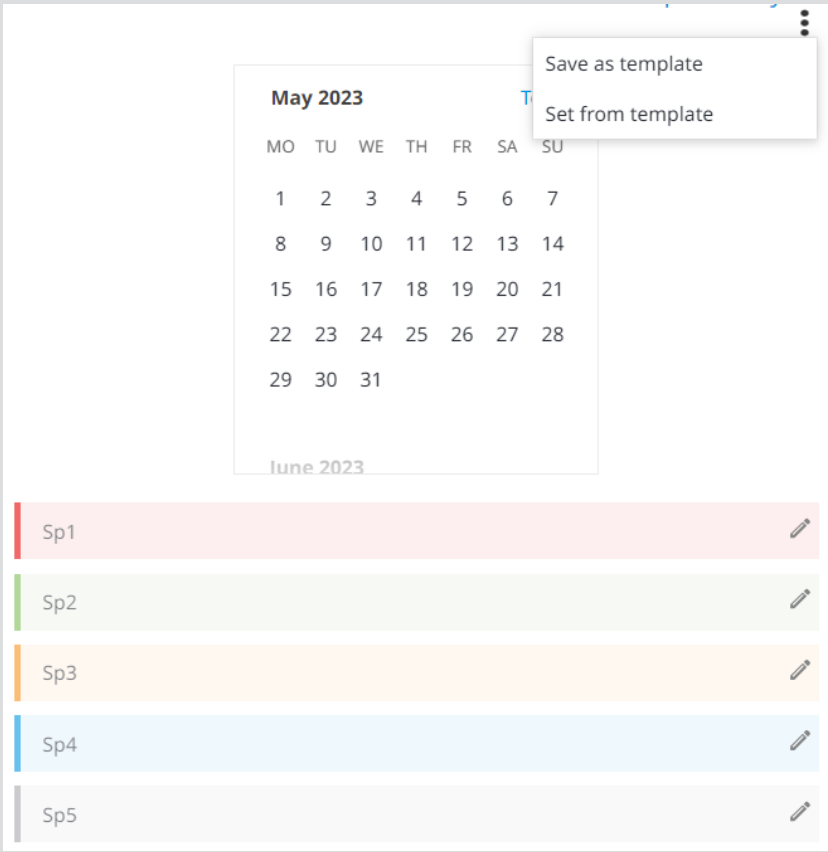
7 Repeat steps 1-6 for every special day you want to set.

8 Click Save.

Result: The special day calendar is saved.

INFORMATION

In case you want to use the same special day calendar for another zone, you can save the special day calendar as a template. To do this, click the vertical ellipsis while editing the special day calendar and select Save as template.



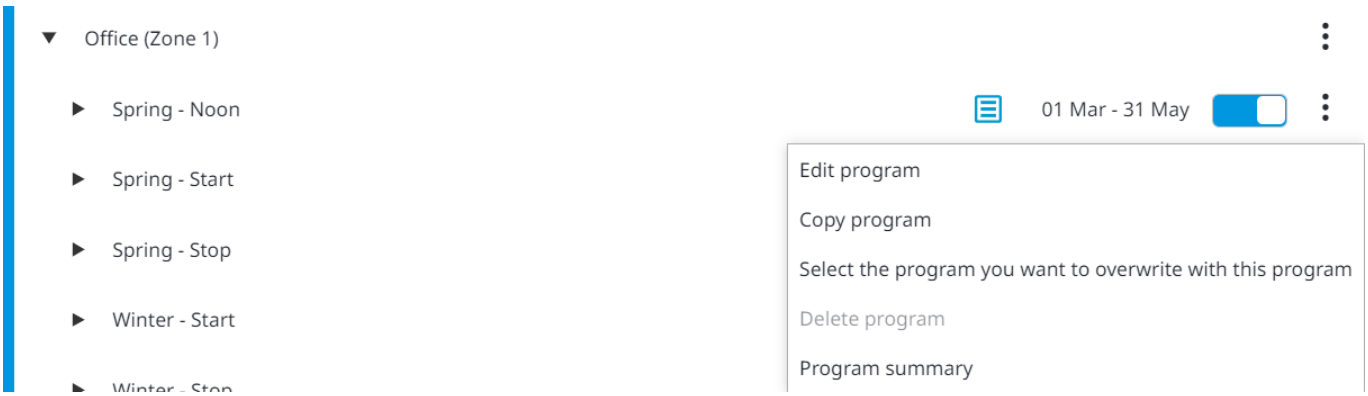
In another zone, edit the special day calendar and select Set from template.

To manage programs and special day calendars

Once a program has been created, it can be enabled or disabled by setting the slider in the on/off position.

In addition to creating programs, you can copy, edit, overwrite and delete programs. The special day calendar can be copied separately or together with a program. Note that some actions are performed on a program level, and others on the zone level:

Type of operation	Level
Edit program	Program
Copy program	Program
Delete program	Program
Overwrite program	Program
Copy program and special day calendar to another zone	Zone
Copy special day calendar to another zone	Zone



To edit an existing program

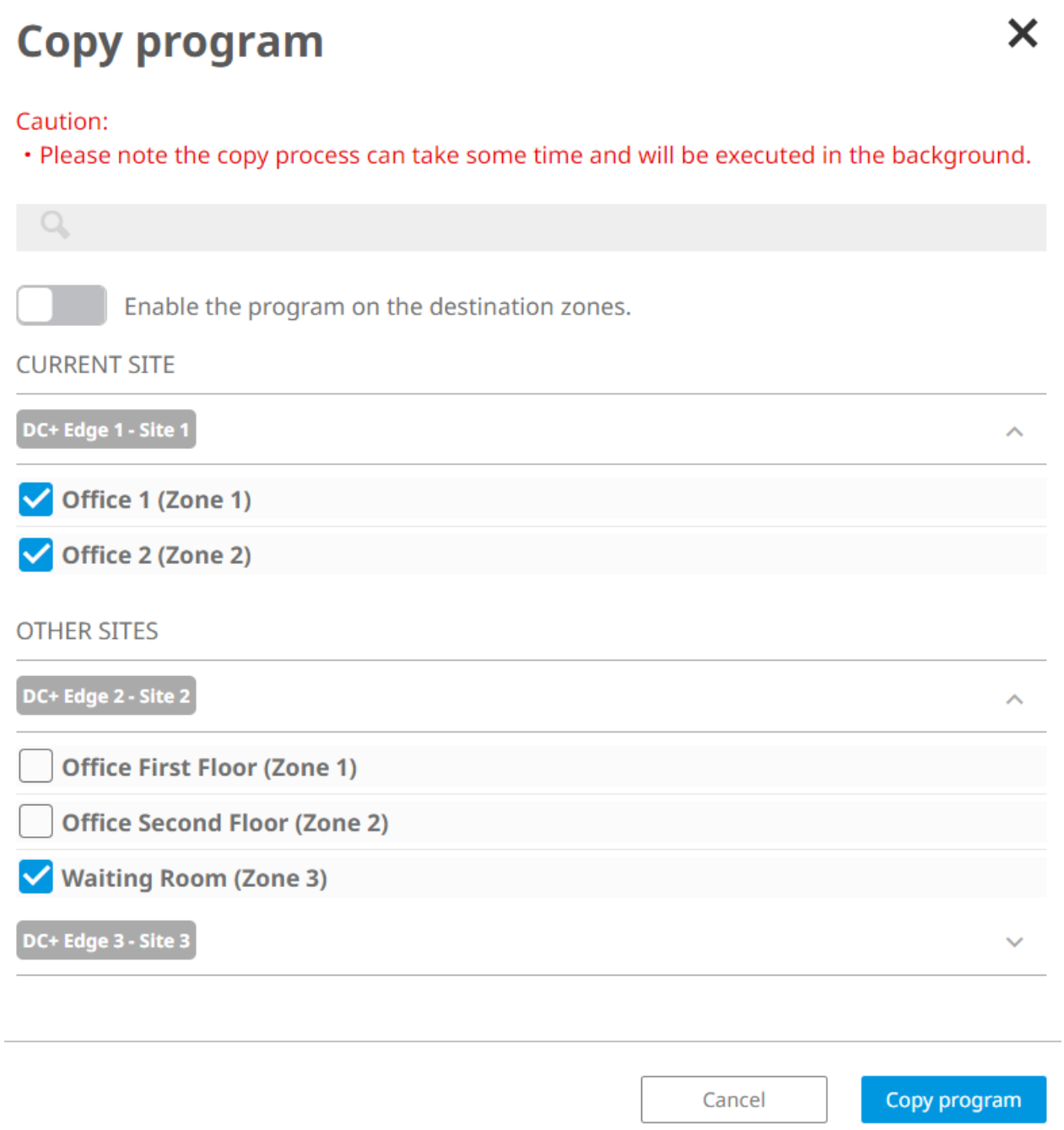
1. Click the vertical ellipsis of the program you want to edit.
2. Select Edit program.
3. Edit the program as required. The same steps as in "To create a program" [▸ 46] apply.
4. Click ✓ to save any changes made to the program.

   Result: The changes to the program are saved.

To copy a program

1. Click the vertical ellipsis of the program you want to copy.
2. Select Copy program.

   Result: A settings panel appears on the right side of the page.



3 Select the checkbox of the zone to which you want to copy the program. You can select multiple zones that belong to either the currently selected site, or to other zones that belong to other sites you have access to.

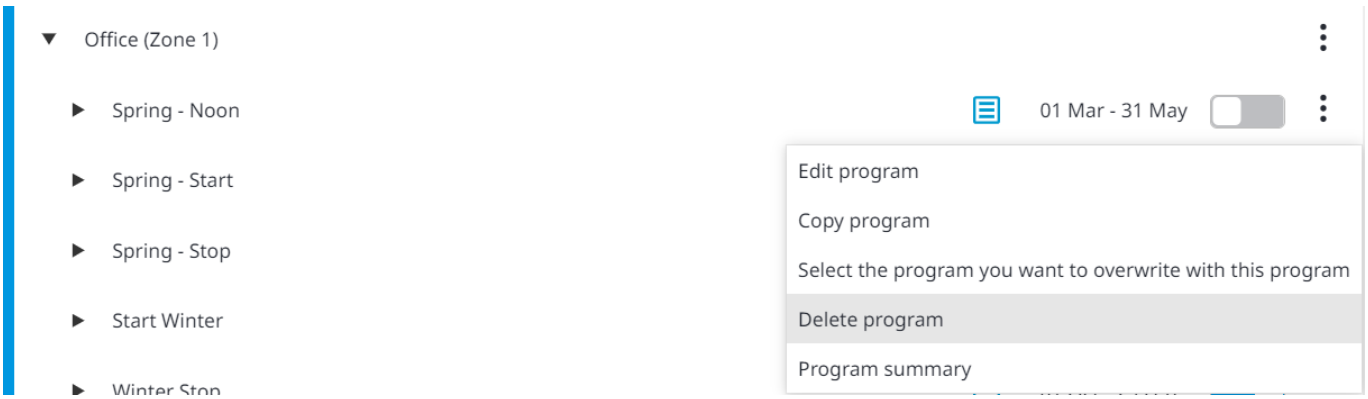
4 In case you want to immediately enable the program on the destination zones, turn on the toggle switch.

5 Click Copy program.

Result: The program is copied to the selected zone(s).

To delete a program

1 Disable the program using the program toggle switch. Programs that are active cannot be deleted.



2 Click the vertical ellipsis of the program you want to delete.

3 Select Delete program.

4 Select Yes in the pop-up window to confirm.

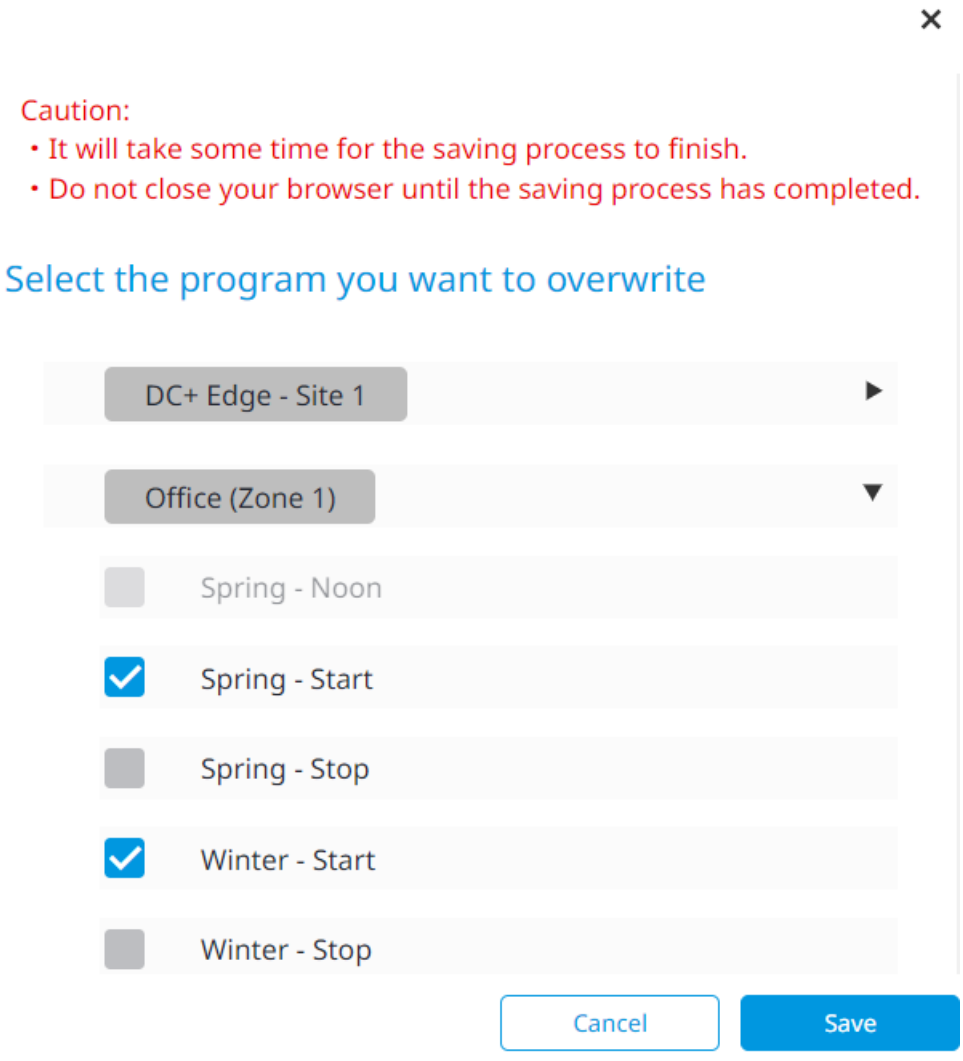
Result: The program is deleted.

To overwrite a program

1 Click the vertical ellipsis of the program you want to use to overwrite another program. The program that you select will overwrite another program, so be sure that the correct program is selected.

2 Click Select the program you want to overwrite with this program.

Result: A settings panel appears on the right side of the page.



3 Click the arrows to expand all possible options for each zone.

4 Select the checkboxes of the programs you want to overwrite with the program that was selected in steps 1-2.

5 Click Save.

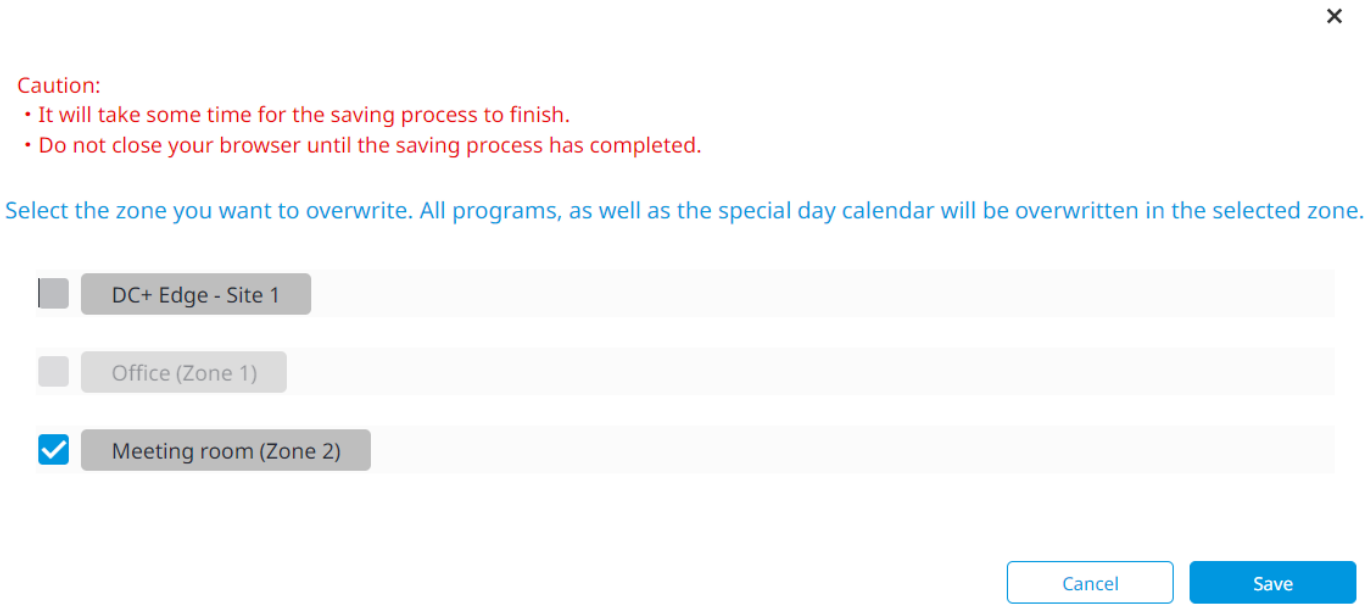
Result: The programs are overwritten with the selected program.

To overwrite the programs and the special day calendar of another zone

1 Click the vertical ellipsis of the zone to which the special day calendar belongs. Be sure to select the zone, not the program.

2 Click Select the zone you want to overwrite with this zone.

Result: A settings panel appears on the right side of the page.



3 Select the checkbox.

4 Click Save.

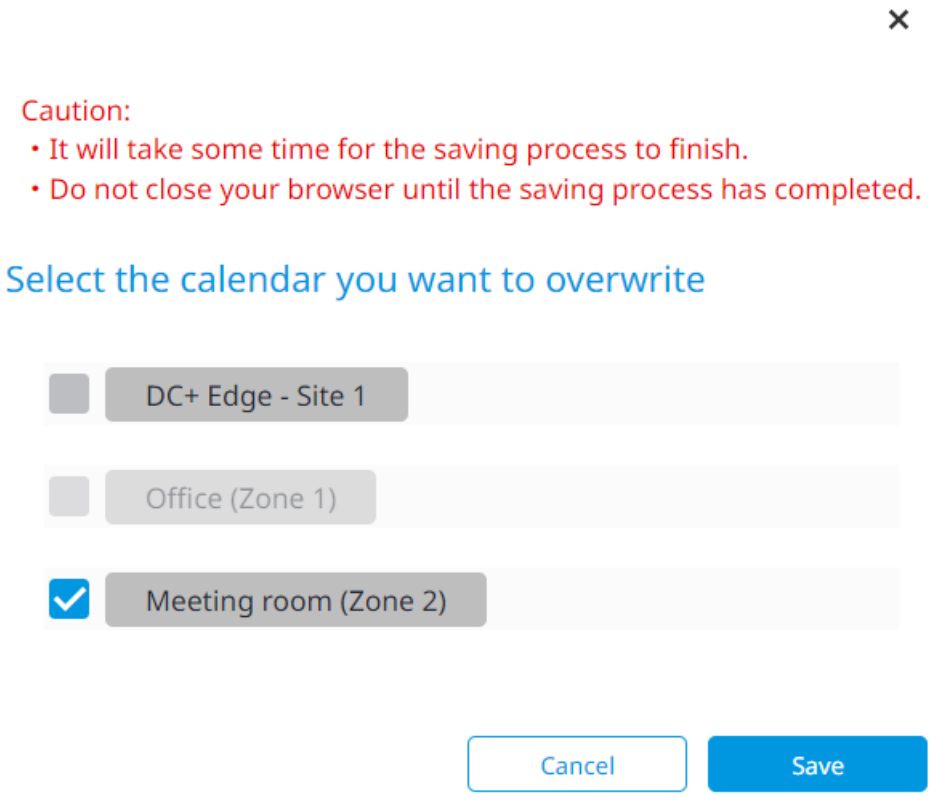
Result: All programs, as well as the special day calendar will be overwritten in the selected zone.

To copy only the special day calendar to another zone

1 Click the vertical ellipsis of the zone to which the special day calendar belongs.

2 Select Copy this special day calendar to.

Result: A settings panel appears on the right side of the page.



3 Select the checkboxes of the zones to which you want to copy the special day calendar. You can select multiple zones.

4 Click Save.

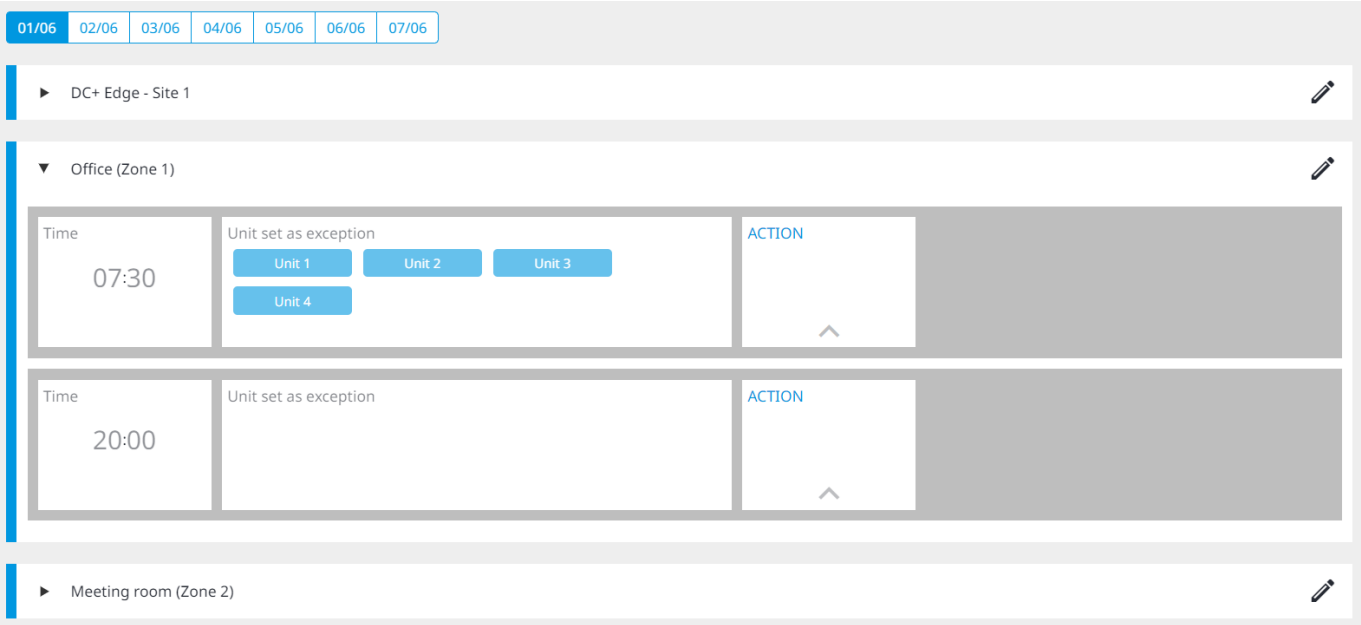
Result: The special day calendar is copied to the selected zone(s).

4.5.5 Schedule execution

Schedule execution provides an overview of the upcoming schedule for the next 7 days for every zone. Similarly to the Schedule page, it lists all the zones and the programs linked to the zones. You can use this page to override a regularly occurring program. For example, if a meeting is planned on a Saturday, while the office is normally closed on Saturdays, you can create an exception for that day.

To create a schedule exception

1 In the sidebar, go to MONITORING & OPERATION > SCHEDULE EXECUTION.



2 Select for which of the 7 upcoming days you want to create a schedule exception.

3 Click the arrow next to the zone name to expand the zone.

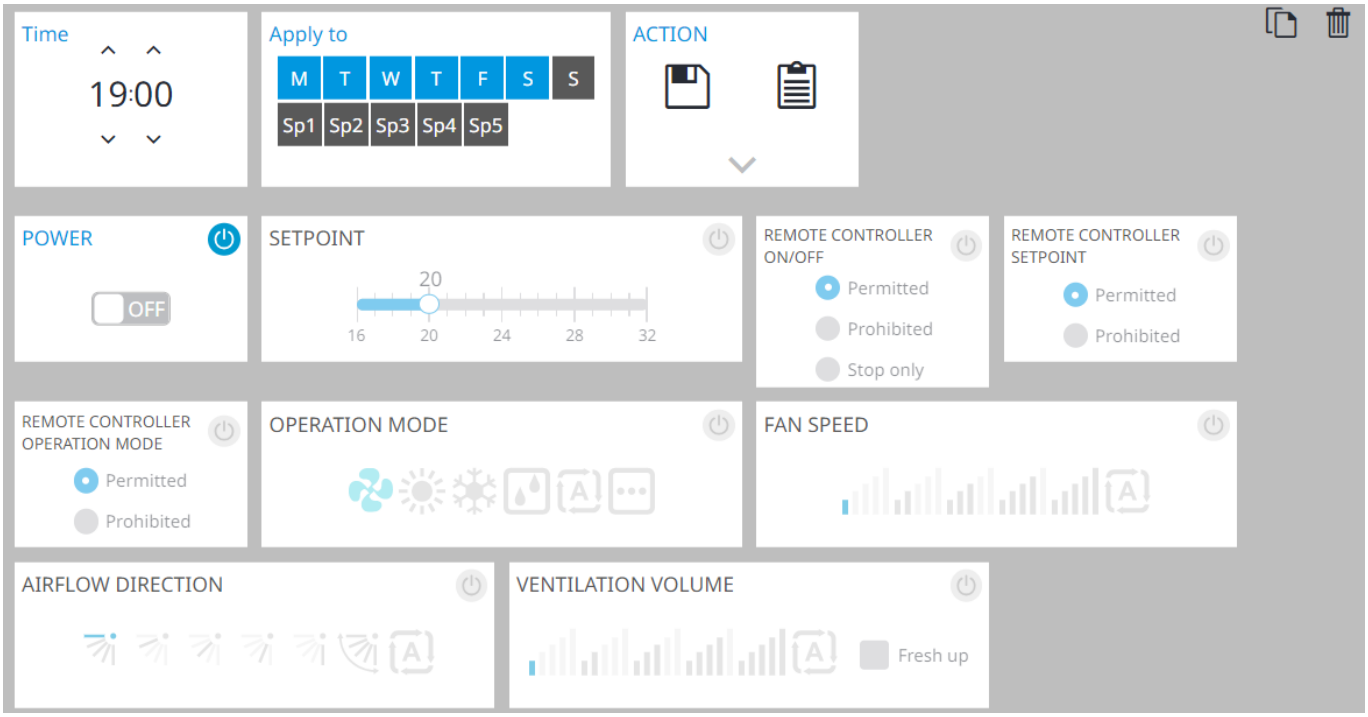
Result: Programs that are active on the selected day for that zone appear.

4 Expand or collapse the program settings by clicking the downward facing arrow.

Result: The program settings are displayed in detail.

5 Click the pencil icon.

Result: The programs linked to the zone become editable.



6 From here, there are several options:

- Edit the existing program. This is a good option for making small changes to already existing programs for a single day. See "To create a program" [▸ 46] for more information about how to edit programs.
- Add new program for that day only. You can apply an action template or create an entirely new program. When the program has been created, you can also save it as an action template for later use. Alternatively, you can also copy an existing program by clicking the copy button and use that as the base for a new program. See "To create a program" [▸ 46] for more information about how to create programs.
- Delete the program for a single day only. Select the trashcan icon to delete the program.

7 Click ✓ to save the changes made to the program(s).

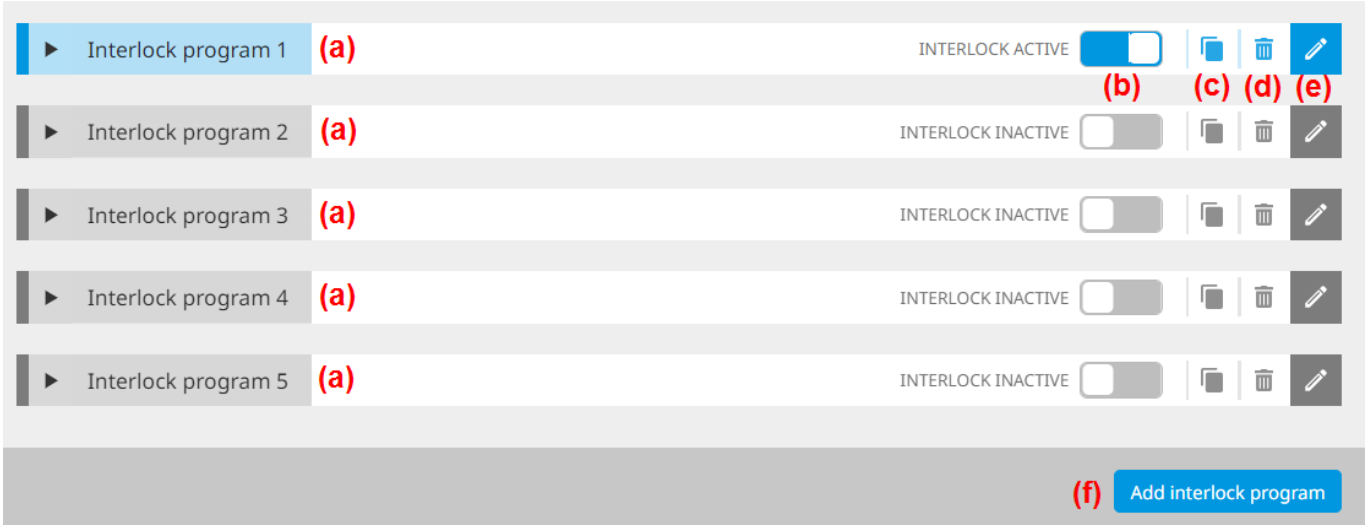
INFORMATION

Changes made to programs on this page are only applied to the selected day. If you edit or delete a program here, the changes to the program will NOT be reflected to the actual program itself.

4.5.6 Interlocking

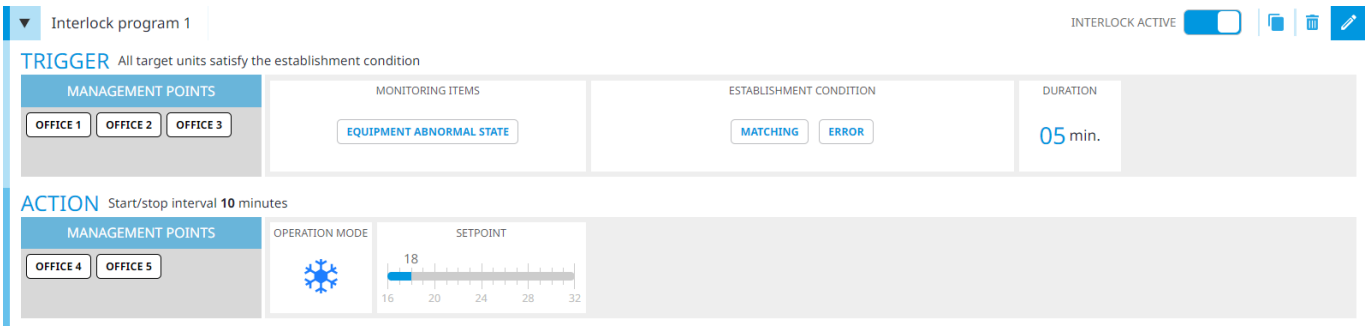
Interlocking allows you to set up the triggering of a responding action after a certain event occurs. The responding action can be applied to 1 or more units of choice. An interlock program always consists out of at least 1 trigger and 1 action, but multiple triggers and responding actions can be set in order to create more complex interlock programs. For example, you can link the closing of a digital input named "Burglar alarm" to the on/off state of all the units in the building. The contact of the alarm is active only when the entire staff has left the building, making it no longer needed for any units in the building to be turned on.

The Interlocking page contains the following elements:



a Interlock program name
b Interlock program toggle switch
c Copy button
d Delete button (trashcan icon)
e Edit button (pencil icon)
f Add interlock program button

When an interlock program is expanded, all the triggers and actions for that interlock program are visible. You can easily enable or disable an interlock program with the interlock program toggle switch. Interlock programs that are currently enabled are displayed in blue, disabled interlock programs are displayed in grey.



INFORMATION

A maximum of 500 interlock programs can be created per DC+ Edge. An interlock program can have up to 25 actions and triggers (combined).

A step-by-step program wizard in the Daikin Cloud Plus user interface guides you through the creation of interlock programs. For more information about how to set up an interlock program, see "To create an interlock program" [▸ 63]. Setting up an interlock program involves the following steps:

Wizard step	Description
Interlock info	▪ Name the interlock ▪ Select the trigger type (units or sensors)
Triggers	▪ Select the initiating action for the triggering to happen ▪ Add 1 or more triggers, define the monitoring condition, establishment condition, and duration for each trigger
Interval	Set the time that needs to pass before the responding action is triggered
Actions	Add 1 or more responding actions
Confirmation	Review the interlock program before saving

INFORMATION

Interlock programs that use units as trigger type run locally on the DC+ Edge, meaning that they will continue to be executed during an internet outage. However, interlock programs that use sensors as a trigger type run in the cloud, and will cease to be executed during an internet outage.

To create an interlock program

INFORMATION

Since the interface for creating interlock programs is generic, it is possible to create complex programs which may not necessarily work as expected when configured incorrectly. Daikin Cloud Plus does NOT alert you if you make conflicting or otherwise incorrect settings. Before making use of interlock programs, be sure that the settings are correct.

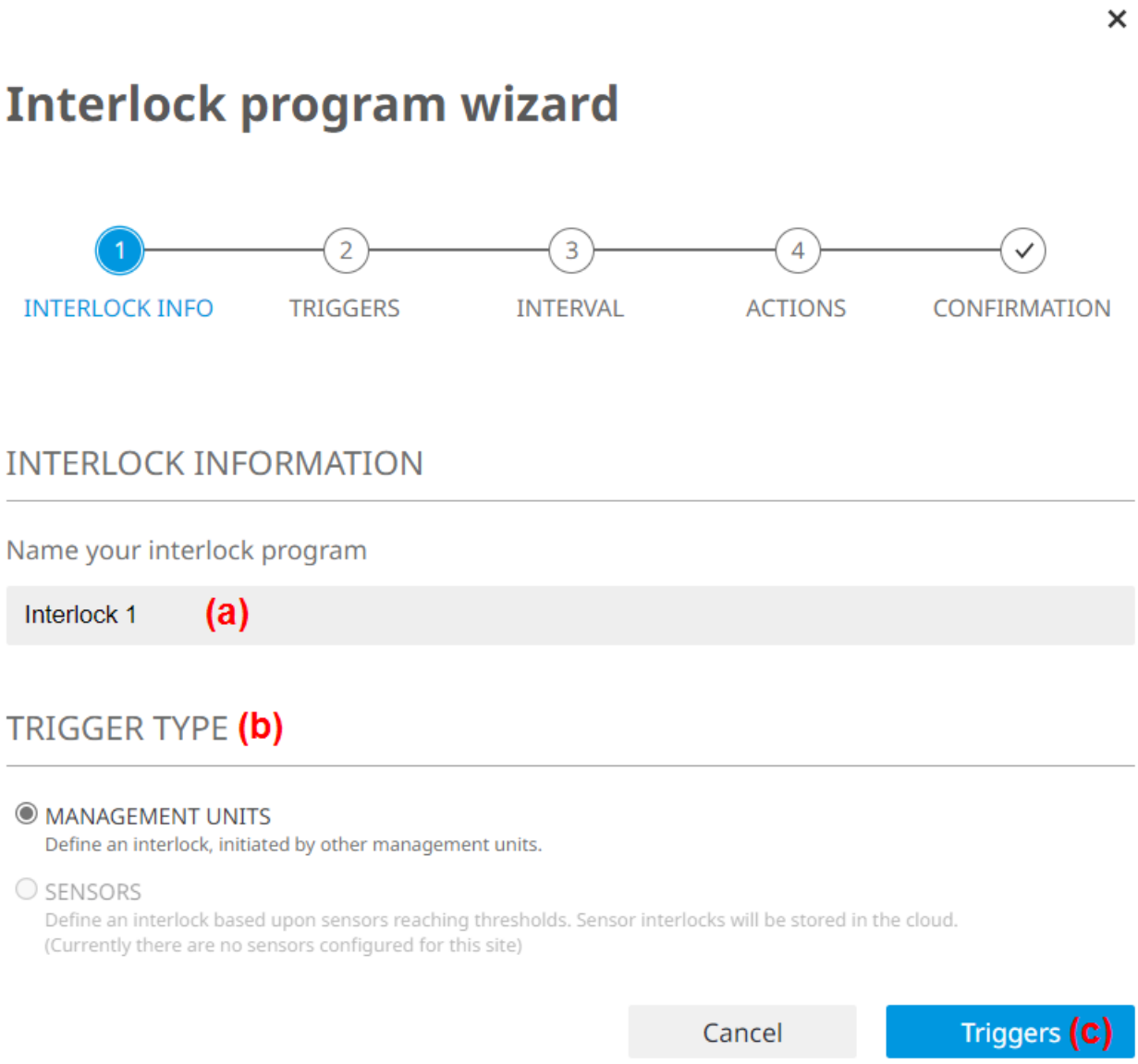
1 In the sidebar, go to MONITORING & OPERATION > INTERLOCKING.

2 Select Add interlock program.

Result: The interlock program wizard appears on the right side of the page.

Wizard step 1 - Interlock info

3 Name (a) the interlock program.



Select a trigger type (b). Decide whether you want a responding action to happen based on other units or equipment fulfilling a condition, or on sensors reaching certain thresholds.

Trigger type	Trigger examples
MANAGEMENT UNITS	▪ An indoor unit is in an error state ▪ A Dio contact closes when the lights are turned on
SENSORS	▪ An IEQ sensor detects that the CO^2 concentration exceeds the configured threshold of 600 ppm ▪ An IEQ sensor detects that the noise level in a room exceeds the configured threshold of 75 dB For more information about sensors and sensor thresholds, see "4.5.2 Sensor list" [▸ 26].

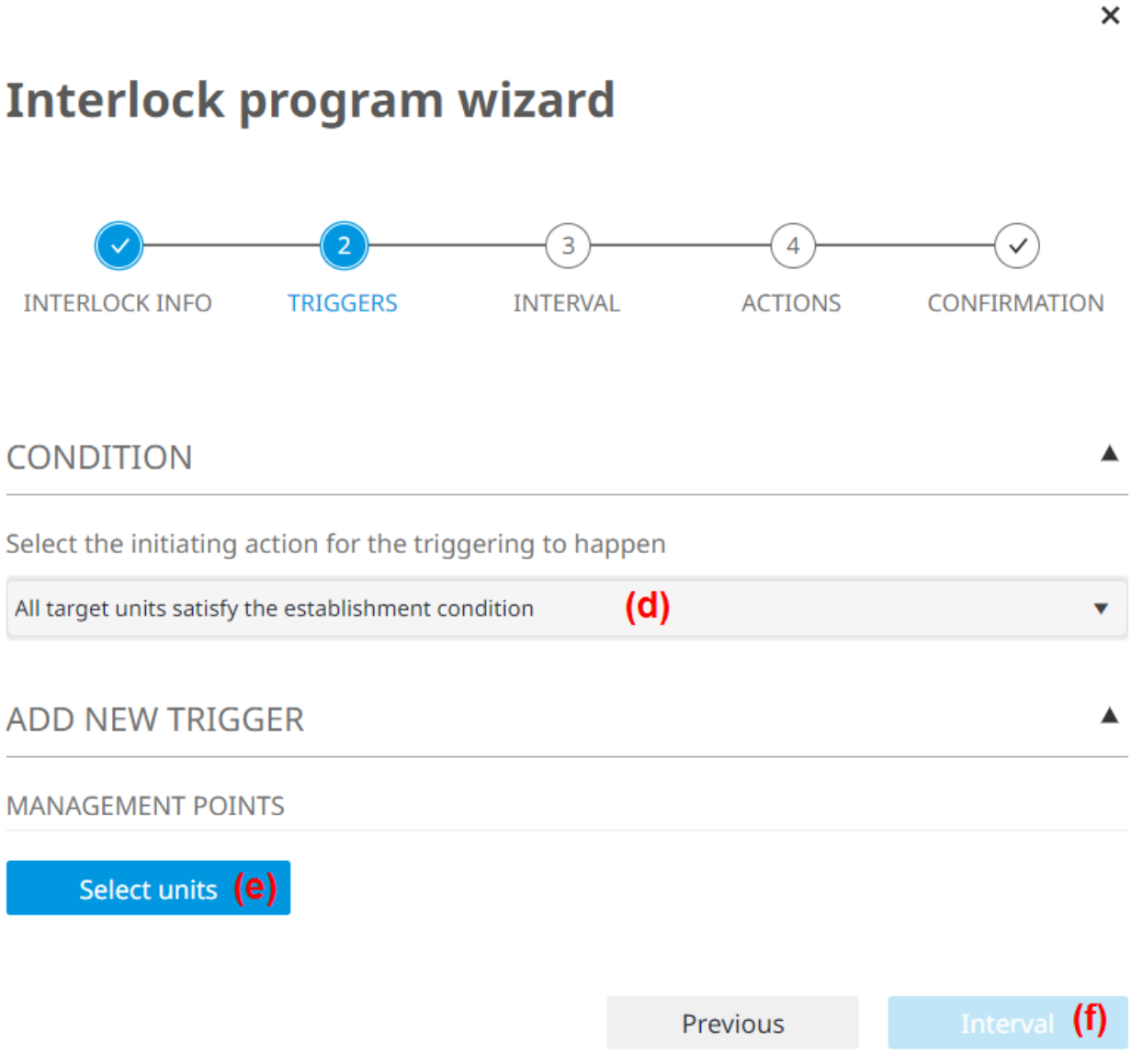
INFORMATION

Sensor thresholds are stored in the cloud. When DC+ Edge loses connection to the cloud, interlock programs that use sensor thresholds as trigger are NOT executed.

4 Select Triggers (c) to continue.

Wizard step 2 - Triggers

5 Select an establishment condition option from the drop-down list (d). The option that is selected here will determine in which scenario the triggering of an action should happen. For example, if you want all units to turn OFF as soon as 1 unit is in an error state, you can select One of the target units satisfies the establishment condition.



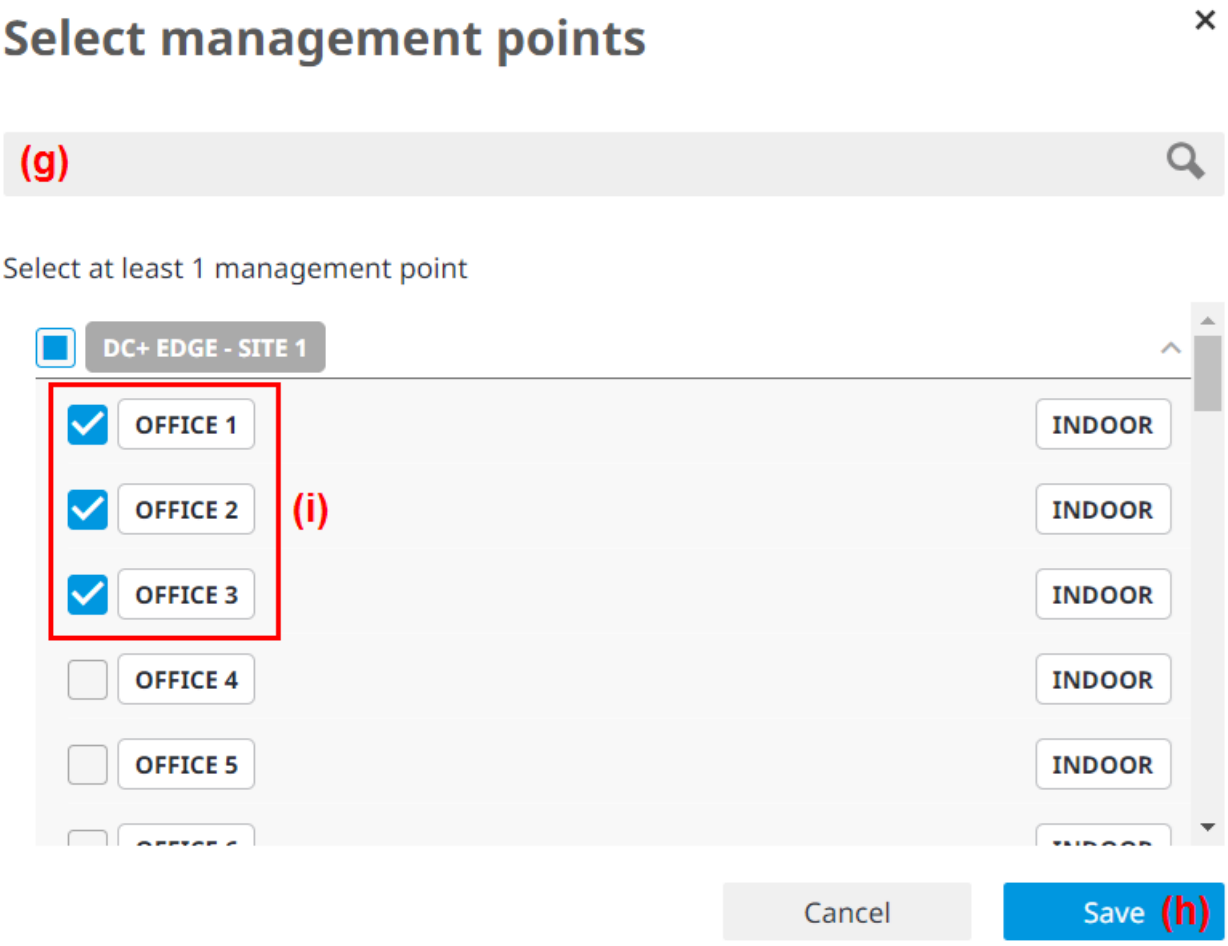
Example: you consider a selection of units being in an error state as being the trigger, you can define the condition for this trigger to happen in several ways. The following options are available:

Condition	Example
All target units satisfy the establishment condition	Condition: all selected units are in an error state
One of the target units satisfies the establishment condition	Condition: just 1 of the selected units is in an error state

Condition	Example
None of the target units satisfy the establishment condition	Condition: none of the selected units is in an error state
One of the target units does not satisfy the establishment condition	Condition: 1 of the selected units is NOT in an error state

6 Add a new trigger. First, add management points (units or equipment) by clicking Select units (e).

7 Select the checkboxes of the management points (i) you want to include in the trigger. Use the search bar (g) to find specific management points faster.



8 Click Save (h).

Result: The management points are selected. The MONITORING ITEMS section appears.

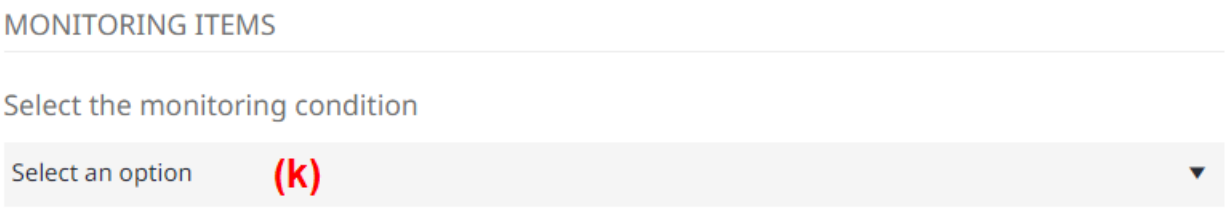
INFORMATION

You can select multiple management points as long as they belong to the same category. For example, when 2 indoor units are selected, you can no longer select any outdoor units. If you want to include outdoor units as a possible trigger as well, add a separate trigger with the outdoor units selected.

INFORMATION

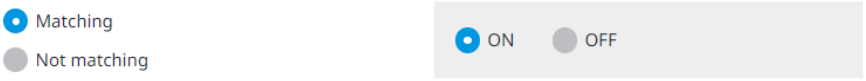
Up to 64 management points can be influenced by a single interlock program. However, this number is shared between the management points targeted under the Triggers and Actions sections of the interlock program wizard.

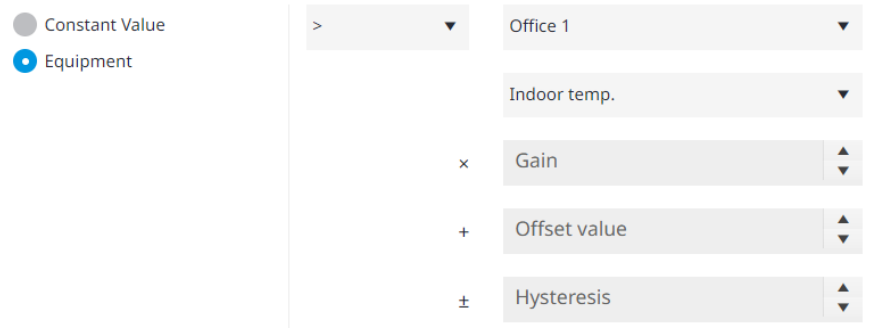
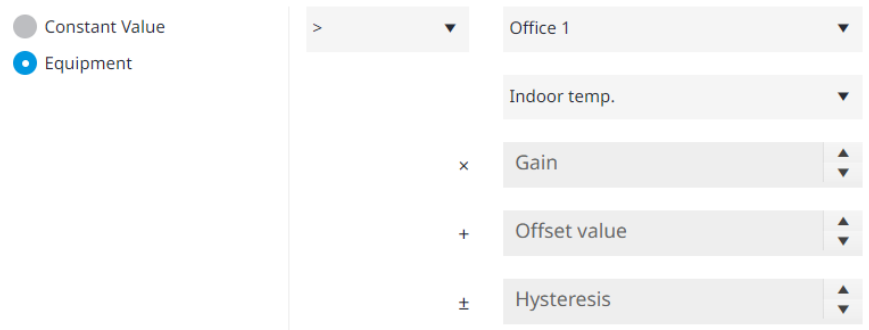
9 Under MONITORING ITEMS, select a monitoring condition from the drop-down list (k). Depending on the selected management points, different options are available. Consult the table below for an overview of which items are available for a specific management point.

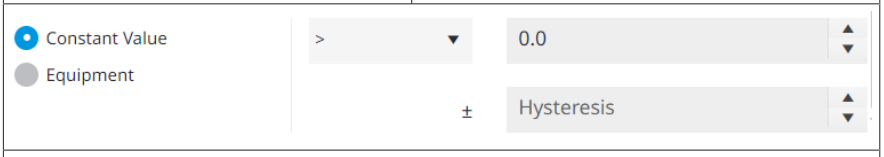
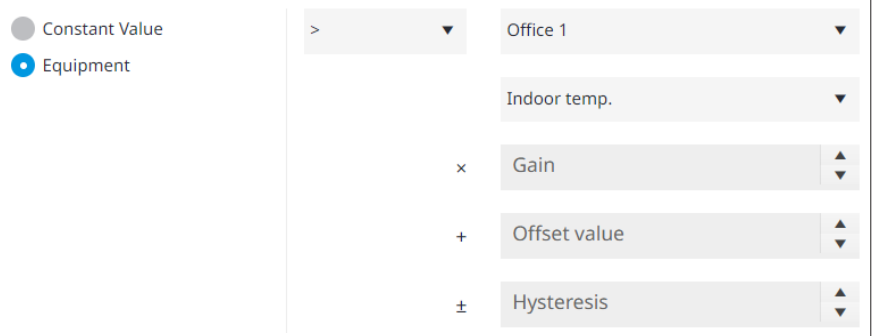
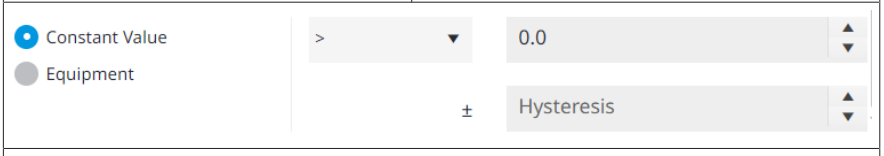
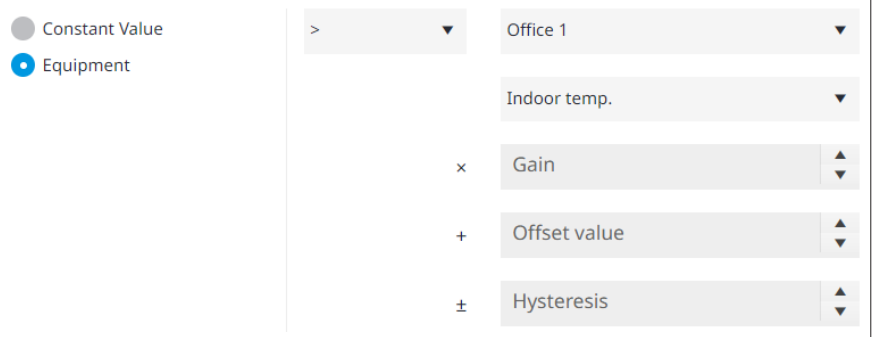


Monitoring condition	Management point				
	Indoor unit	Outdoor unit	Ventilation	Di/Dio	Mi
Start and stop status	●	–	●	●	
Equipment abnormal state	●	–	●	●	
Operation mode	●	–	–	–	
Analog (Indoor temp.)	●	–	–	–	
Analog (Outdoor temperature.)	–	●	–	–	
Analog (Cooling set temp.)	●	–	–	–	
Analog (Heating set temp.)	●	–	–	–	
Multi state	–	–	–	–	●

10 Under ESTABLISHED CONDITION, configure the way the trigger is established. Depending on the selected monitoring item, different options are available.

Monitoring condition	Establishment condition	
	Modifier	Possible condition
Start and stop status	Matching Not matching	ON OFF
		
Equipment abnormal state	Matching Not matching	Normal Error
		

Monitoring condition	Establishment condition	
	Modifier	**Possible condition**
Operation mode	Matching Not matching	Fan Heating Cooling Dry Automatic Dependent
		
Analog (Indoor temp.)	> or <	Constant value (–100~100)[a] Equipment: select equipment and value type to compare to[b]
		
		
Analog (Outdoor temperature.)	> or <	Constant value (–100~100)[a] Equipment: select equipment and value to compare to[b]
		
		

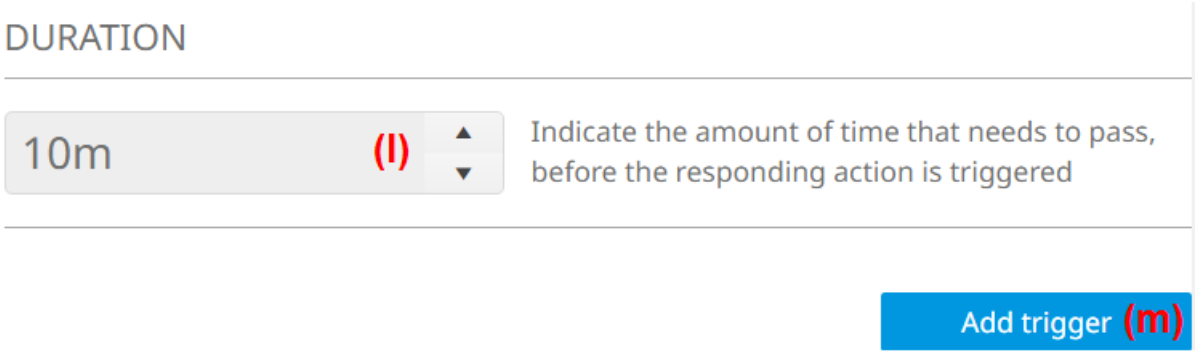
<table>
<tr><th rowspan="2">Monitoring condition</th><th colspan="2">Establishment condition</th></tr>
<tr><th>Modifier</th><th>Possible condition</th></tr>
<tr><td rowspan="3">Analog (Cooling set temp.)</td><td>> or <</td><td>Constant value (–100~100)[a]
Equipment: select equipment and value type to compare to[b]</td></tr>
<tr><td colspan="2"> 
</td></tr>
<tr><td colspan="2"> 
</td></tr>
<tr><td rowspan="3">Analog (Heating set temp.)</td><td>> or <</td><td>Constant value (–100~100)[a]
Equipment: select equipment and value type to compare to[b]</td></tr>
<tr><td colspan="2"> 
</td></tr>
<tr><td colspan="2"> 
</td></tr>
<tr><td rowspan="2">Multi state</td><td>Matching
Not matching</td><td>Any user-defined value (BACnet). See the installer reference guide for more information.</td></tr>
<tr><td colspan="2"> 
</td></tr>
</table>

[a] Hysteresis value can be set.
[b] Possible value types: indoor temperature, cooling setpoint, heating setpoint. Gain, Offset and Hysteresis values can also be set.

For analog values, the establishment condition is set using a conditional expression, where the analog value is compared to a either a constant value, or a value measured by another piece of equipment. When comparing to a constant value, only a Hysteresis value can be set. In the latter, you can make use of the following 3 values to compensate for differences in the values measured by different units and adjust measurements where needed:

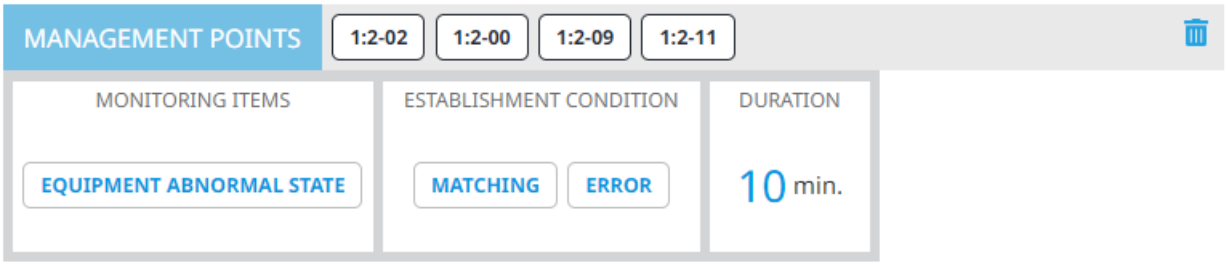
	Description
Gain (×)	Only available when comparing against measured values of other equipment. Value used to adjust the trigger establishment condition by multiplying the value of the equipment or unit selected for comparison. The Gain value cannot be negative. When not applicable, set to 1.
Offset (+)	Only available when comparing against measured values of other equipment. Value that allows you to further offset the value adjusted by the gain value. For example, when comparing indoor and outdoor temperature. The Offset value can be negative. When not applicable, set to 0.
Hysteresis (±)	Value that sets a dead band (±) to help avoid an interlocking program from being executed too often due to minor changes in measured values. When not applicable, set to 0.

11 Under DURATION, set the trigger duration (l). The duration is the amount of time that needs to pass before the responding action is triggered. For example, when only 1 indoor unit needs to be in an error state (condition), you can also define how long this error state should last, before an action is triggered (e.g. 10 minutes). In this case, the unit would be in an error state for 10 minutes before anything happens.



12 Select Add trigger (m).

Result: The trigger is added. An overview of the trigger is displayed.



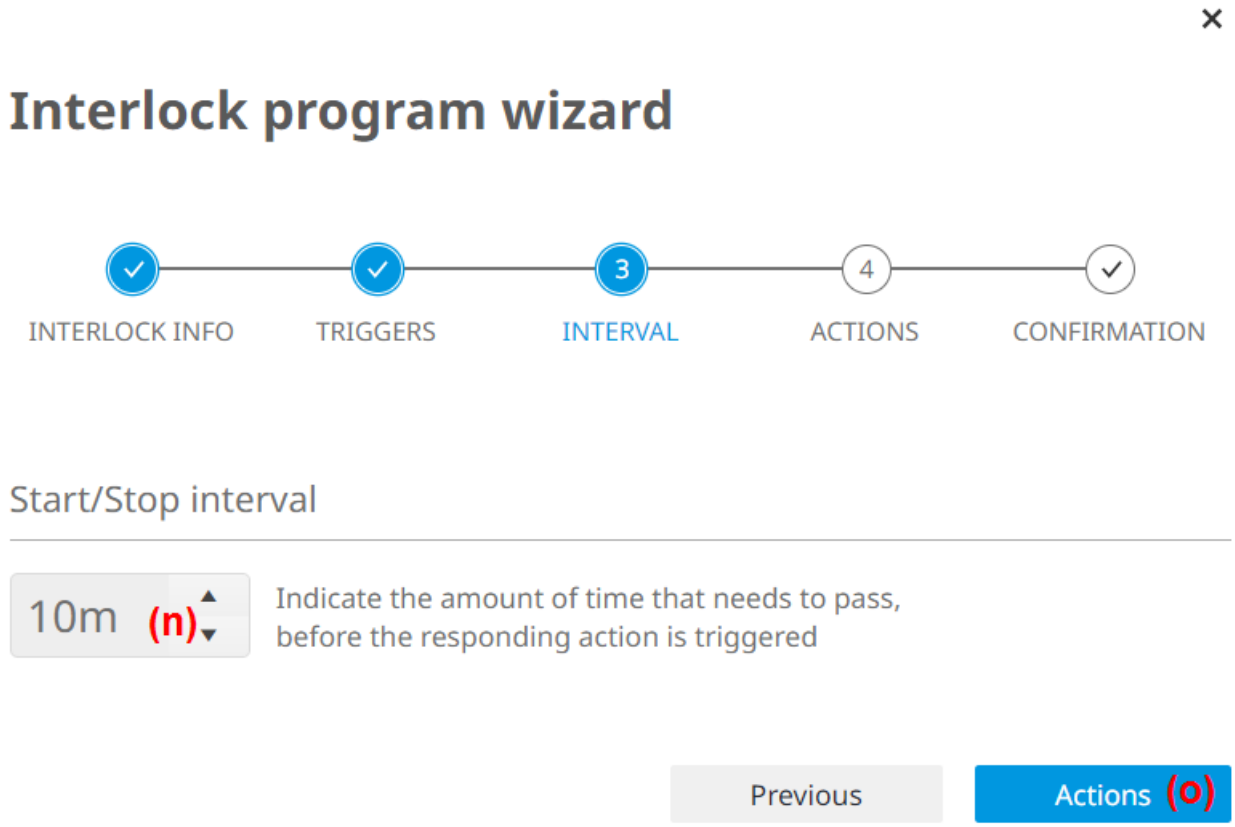
13 If you want to add more than 1 trigger, repeat the steps above for every trigger you want to define. For example, if you want to stop operation for all units regardless of whether an indoor unit or outdoor unit is in an error state, you can configure a first trigger for indoor units, and a second one for outdoor units. You can also delete any triggers by clicking the trashcan icon.

14 Select Interval (f) to continue.

Wizard step 3 - Interval

15 Enter a value (n) for the Start/Stop interval or use the up and down arrows to increase or decrease the value (maximum 30 minutes). This value corresponds to the amount of time that needs to pass before a responding action is triggered.

Note: : the set interval differs from the trigger duration that was defined before. For example, if the trigger duration is set to 10 minutes, and the Start/Stop interval is also 10 minutes, the action will only be triggered if the trigger condition is established for 10 minutes, then, another 10 minutes later, the action will be triggered.



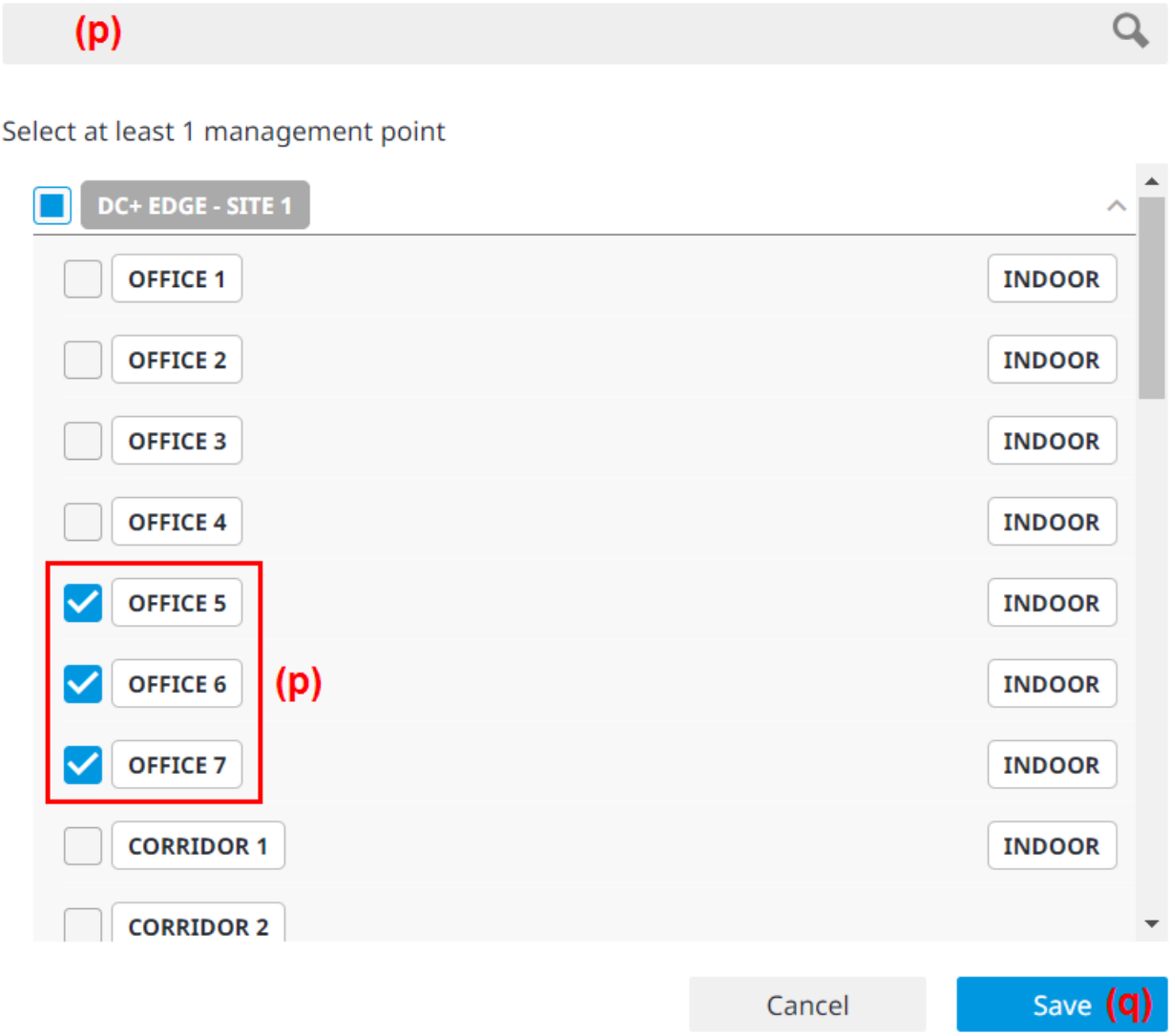
INFORMATION

In case the monitoring item was set to an analog value (e.g. indoor temperature), the minimum interval that can be set is 1 minute. For other monitoring items (e.g. operation mode, start/stop, error state), the interval can be set between 0 and 30 minutes.

16 Click Actions (o) to continue.

Wizard step 4 - Actions

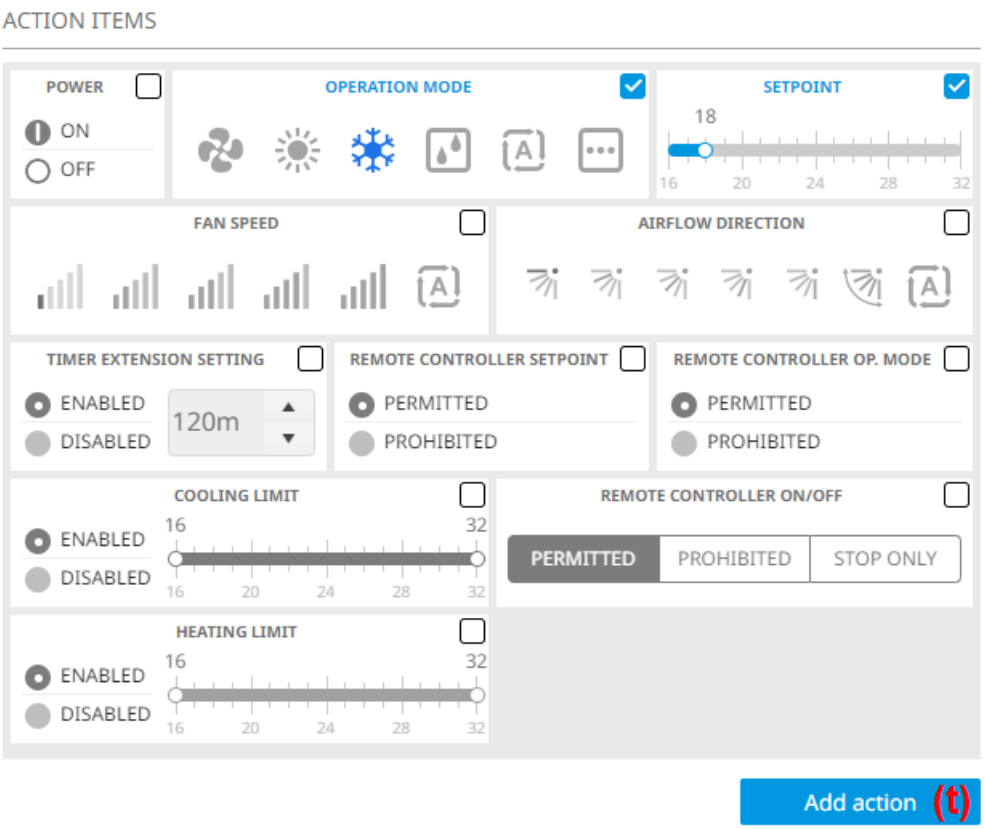
17 Add a new action. First, add management points by clicking Select units.



18 Select the checkboxes of the management points you want to include in the action (r). Use the search bar (p) to find specific management points faster.

19 Click Save (q).

20 Define the actions that you want the targeted units or equipment to perform. Select the check boxes of the responding action(s) you want to include in the interlock program. Then, configure the setting(s) for the action (e.g. change operation mode, turn the power on/off, alter the setpoint, ...). The possible actions correspond to the actions you can perform using the control panel in the "4.5.1 Equipment list" [▸ 15] or the "4.5.3 Layout view" [▸ 38]. Note that action items that are active are indicated in blue. All other (greyed out) action items will not be considered when adding the action.



21 Click Add action (t).

Result: The responding action is added. An overview of the responding action is displayed.

22 If you want to add multiple actions, repeat the steps above. You can also delete any actions by clicking the trashcan icon.

23 Click Confirmation to continue.

Result: An overview of the entire interlock program (triggers and actions) is displayed.

Wizard step 5 - Confirmation

24 Verify the information in the overview.

25 Click Save interlock.

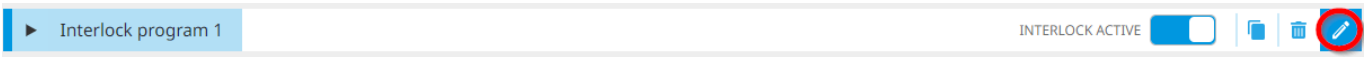
Result: The interlock program is created. It is listed on the Interlocking page.

To manage interlock programs

Once you have created at least 1 interlock program, you can perform several actions from the Interlocking page. You can copy, delete and edit interlock programs. For more information about the creation of interlock programs, see "To create an interlock program" [▸ 63].

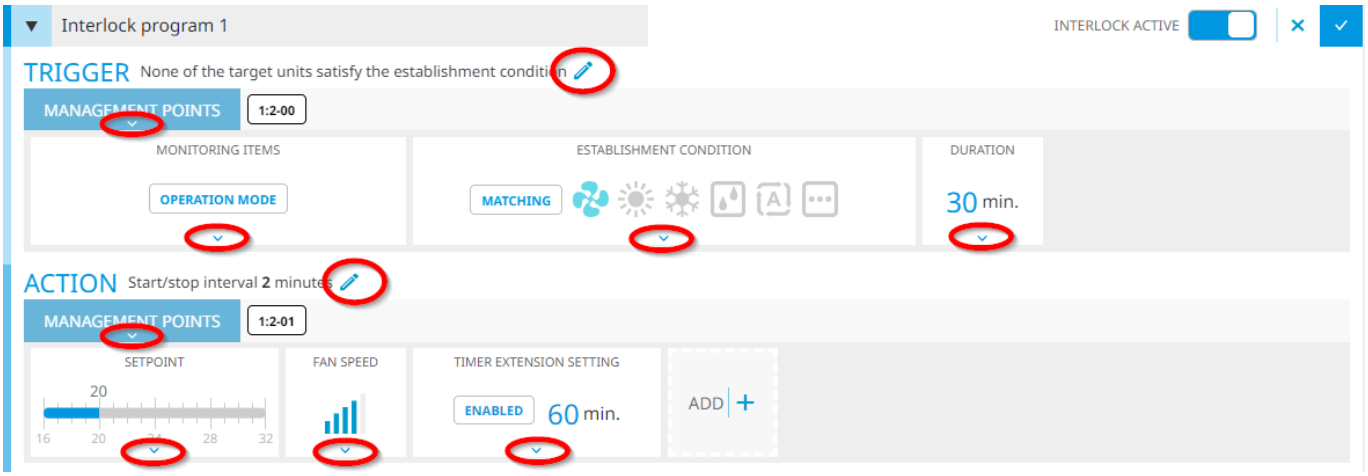
To edit an existing interlock program

1 Click the pencil icon of the interlock program you want to edit.



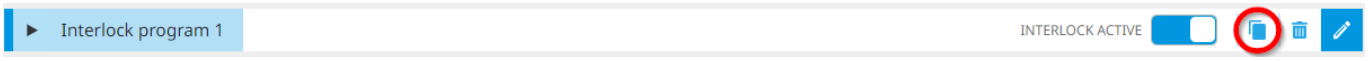
Result: The interlock program becomes editable.

2 Edit any of the items in the interlocking program by clicking either the pencil icon (to edit Trigger and Action) or any of the downward facing arrows (to edit any other program item). You can also add more actions to the existing interlock program, or change the name of the program.



To copy an existing interlock program

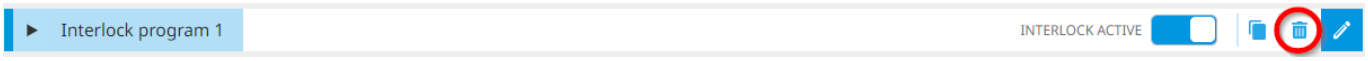
1 Click the copy icon of the interlock program you want to copy.



Result: The interlock program is copied. The name of the new program is the name of the interlocking program that was copied, preceded by "COPY". You can edit the program in order to rename it.

To delete an interlock program

1 Click the trashcan icon of the interlock program you want to delete.



2 Click Yes in the pop-up message to confirm.

Result: The program is deleted.

4.5.7 Forced stop

Some emergency situations may require an emergency shutdown of all or specific units in the system, e.g. in the event of a fire. Forced stop allows you to create programs which can achieve this on a zone basis. Forced stop programs can be triggered by an input signal from a Di, Dio, External Di or External Dio. Additionally, a default forced stop program is automatically created and enabled for each DC+ Edge after initial commissioning.

NOTICE

When the forced stop contact input is closed, a stop signal is sent to all connected devices. There is no hard guarantee that all devices have effectively stopped and remain stopped during the time the forced stop contact input is active.

INFORMATION

Outdoor units cannot be targeted by Forced stop programs.

To enable or disable the default forced stop program

1 In the sidebar, go to MONITORING & OPERATION > FORCED STOP.

2 Click the arrow next to the DC+ Edge name.

Result: The section expands. Existing Forced stop programs are listed, as well as the default Forced stop program (Forced stop of all air conditioners).

3 Set the slider to the ON/OFF position to enable/disable the default Forced stop program.

Result: The default Forced stop program is now enabled/disabled.

> **INFORMATION**
> The position of the program slider does NOT force any units to stop operating, it merely enables or disables the Forced stop program itself. The default Forced stop program cannot be edited or deleted, however it can be disabled by setting the slider to the OFF position.

To create a forced stop program

> **INFORMATION**
> Up to 31 Forced stop programs can be created per DC+ Edge.

1 In the sidebar, go to MONITORING & OPERATION > FORCED STOP.

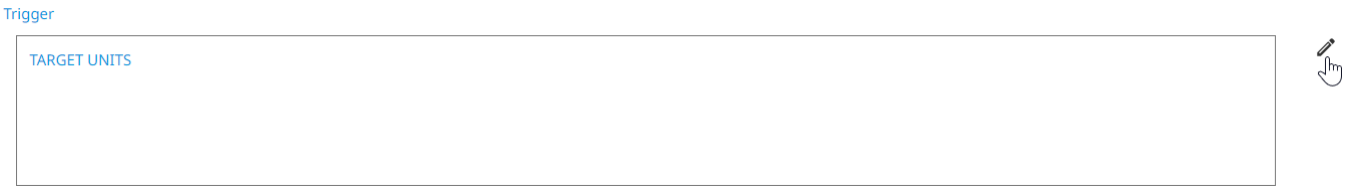
2 Select + on the right side of the page to add a new Forced stop program.

Result: The following screen appears.

3 Name the Forced stop program.

4 Select a Release mode for the program. When Auto is selected, the Forced stop program will end automatically once the triggering input signal is off. Units that were targeted will resume normal operation automatically, which includes any scheduled actions. If you select Manual, Forced stop has to be disabled manually on site, even when the triggering input signal is off. Then, the Forced stop program also has to be disabled manually. See "To manually disable forced stop" [▸ 78] for more information.

5 Under Trigger, click the pencil icon.



Result: A panel appears on the right side of the page.

6 Select the check box(es) of the equipment you want to use as the trigger input signal for the Forced stop program (Di, Dio, or External Di/Dio). Narrow down the list of equipment by entering a device name in the search field, then click the magnifying glass to search.

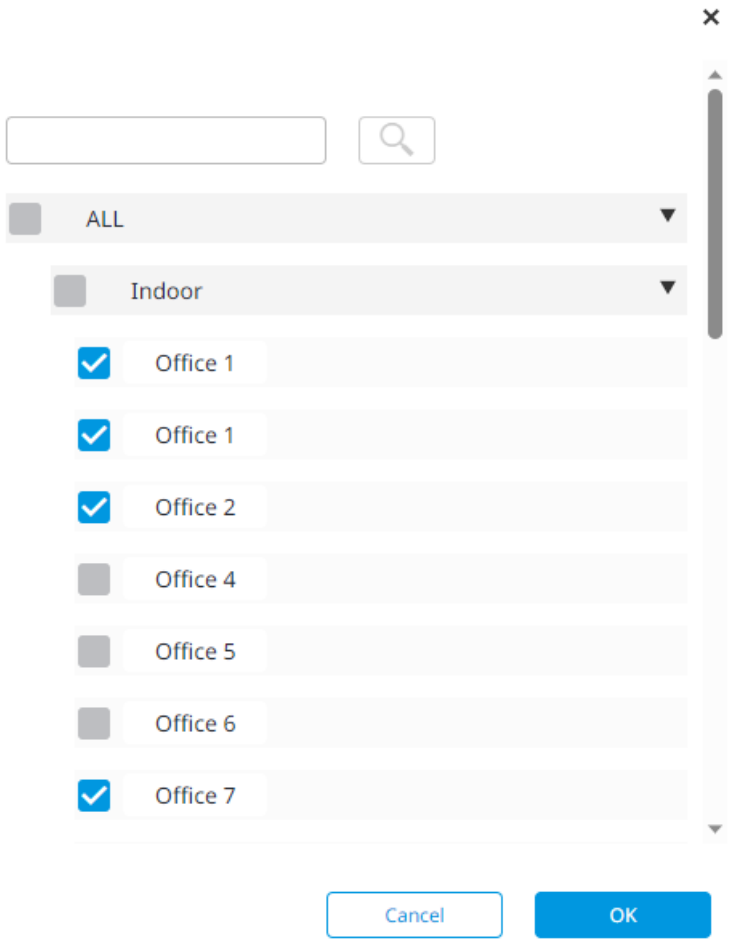
7 Click OK to confirm.

8 Under Target, select Specify as exception from the drop-down list if the selected units will be an exception to the Forced stop program (the selected units are not turned OFF when the program is active). Select Specify as target if the selected units must be targeted by the Forced stop program. Note that the shutdown targets for the Forced stop program are indoor units.

9 Under Target, click the pencil icon.

Result: A panel appears on the right side of the page.

10 Select the checkbox(es) of the units you want to include in the Forced stop program (either as an exception to the program, or as a target).



11 Click OK to confirm.

12 Click ✓ in the top right.

Result: The Forced stop program is created.

To manage forced stop programs

You can edit, copy or delete created Forced stop programs.

To edit a Forced stop **program**

1 Click the vertical ellipsis of the program you want to edit.

2 Select Edit program.

Result: The Forced stop program settings appear.

3 Edit the program as required. See "To create a forced stop program" [▸ 75] for more information.

4 Click ✓ to save the program.

To copy a Forced stop **program**

1 Click the vertical ellipsis of the program you want to copy.

2 Select Copy program.

Result: The Forced stop program is copied.

To delete a Forced stop **program**

1 If the Forced stop program is enabled, disable the program using the toggle switch. A Forced stop program must be disabled, otherwise it cannot be deleted.

2 Click the vertical ellipsis of the program you want to delete.

3 Select Delete program.

Result: The Forced stop program is deleted.

To manually disable forced stop

You can manually disable a Forced stop program that is currently active.

> **NOTICE**
> Before manually disabling a Forced stop program, make sure that the emergency input signal is OFF.

1 In the red alert bar, click Settings. You can also go to MONITORING & OPERATION > FORCED STOP from the sidebar.

2 Expand the Forced stop program you want to disable by clicking the arrow. If the program is active, Waiting for cancellation is displayed next to the program name.

Result: The Forced stop program is expanded.

3 Click Cancel.

Result: The Forced stop program is disabled.

4.6 Energy management monitoring

The ENERGY MANAGEMENT MONITORING section of Daikin Cloud Plus offers functionality to visualise and/or output data related to the power consumption and temperature of units at a site. Below is an overview of the available pages and their usage.

Page	Usage	Creation of patterns possible
"4.6.1 Temperature monitoring" [▸ 79]	Visualise temperature data of units	Yes
"4.6.2 Energy consumption" [▸ 83]	Visualise current energy consumption of units and compare it to target values	Yes
"4.6.3 Energy performance" [▸ 87]	Visualise the energy performance of a single outdoor unit	No
"4.6.4 Outdoor unit comparison" [▸ 89]	Compare the energy consumption of multiple outdoor units at a site	No
"4.6.5 Multi-site comparison" [▸ 92]	Compare the energy consumption of different sites	No
"4.6.6 Meter monitoring" [▸ 95]	Visualise energy consumption as measured by power meters	No
"4.6.7 Meter list" [▸ 98]	View information about connected power meters	–
"4.6.8 Operation data output" [▸ 99]	Export operation data of target units	Yes
"4.6.9 Pattern settings" [▸ 104]	Set up patterns to visualise data	–

While not required, some pages can make use of a pattern to visualise or output data. For more information, see "4.6.9 Pattern settings" [▸ 104].

4.6.1 Temperature monitoring

You can visualise temperature monitoring data for a specific indoor unit. However, you also have the option to use a pattern, which allows visualising the data for multiple indoor units. Patterns needs to be created first. For more information, see "4.6.9 Pattern settings" [▸ 104].

Temperature monitoring allows you to consult the temperature graphs of:

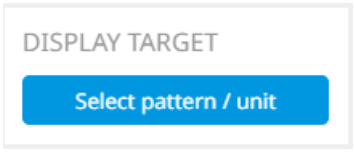
- the outdoor temperature,
- the room temperature, as measured by the thermistor mounted in the remote controller(s) connected to the indoor units,
- the room temperature, as measured by the thermistor mounted inside the indoor units,
- the setpoint temperature.

Using patterns, this page can be used to visualise data on 2 different axes at the same time. This can be useful in case you want to compare data for several indoor units, for example.

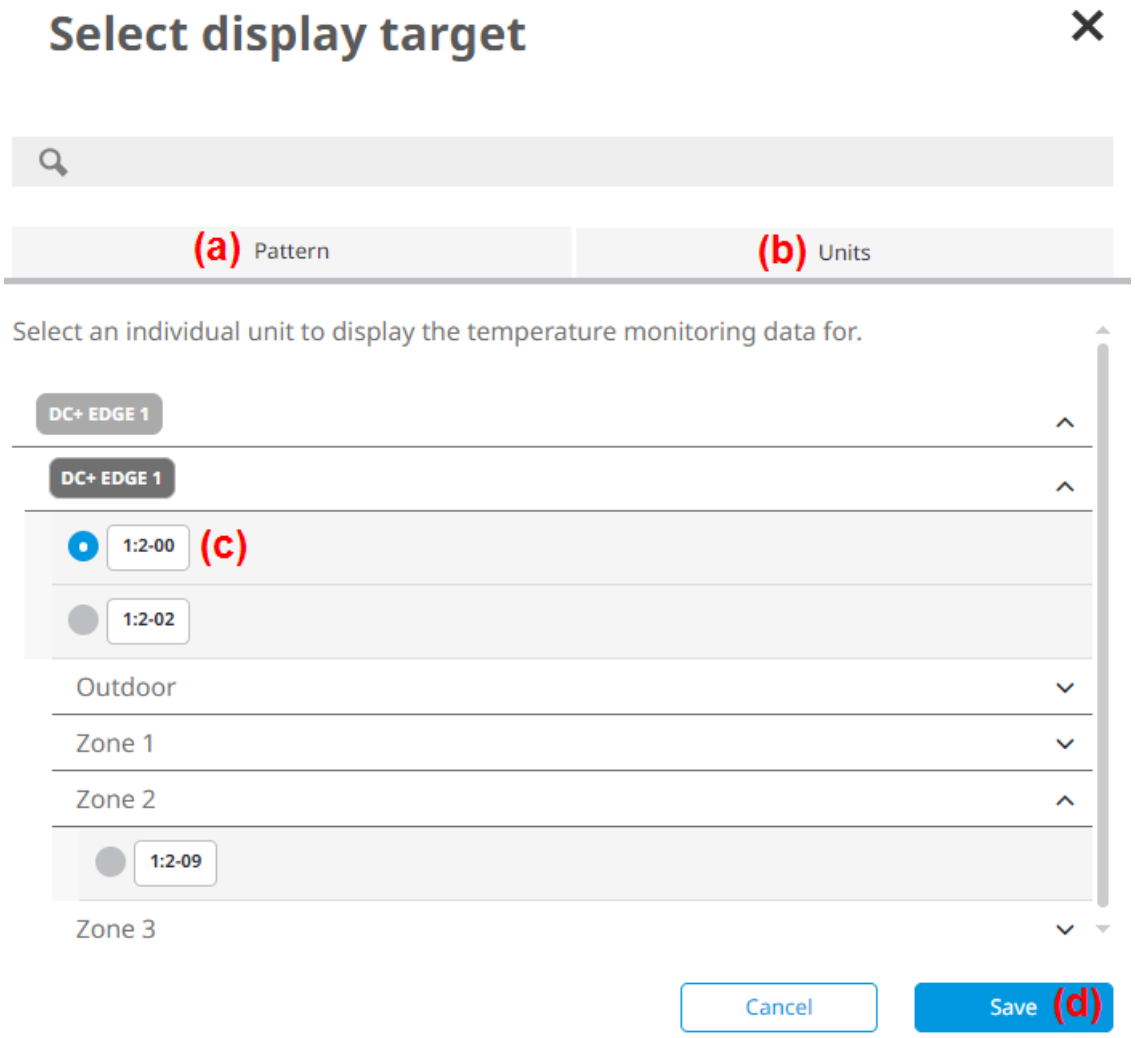
To visualise temperature data

1 In the sidebar, go to ENERGY MANAGEMENT MONITORING > TEMPERATURE MONITORING.

2 Click Select pattern / unit on the right side of the page.



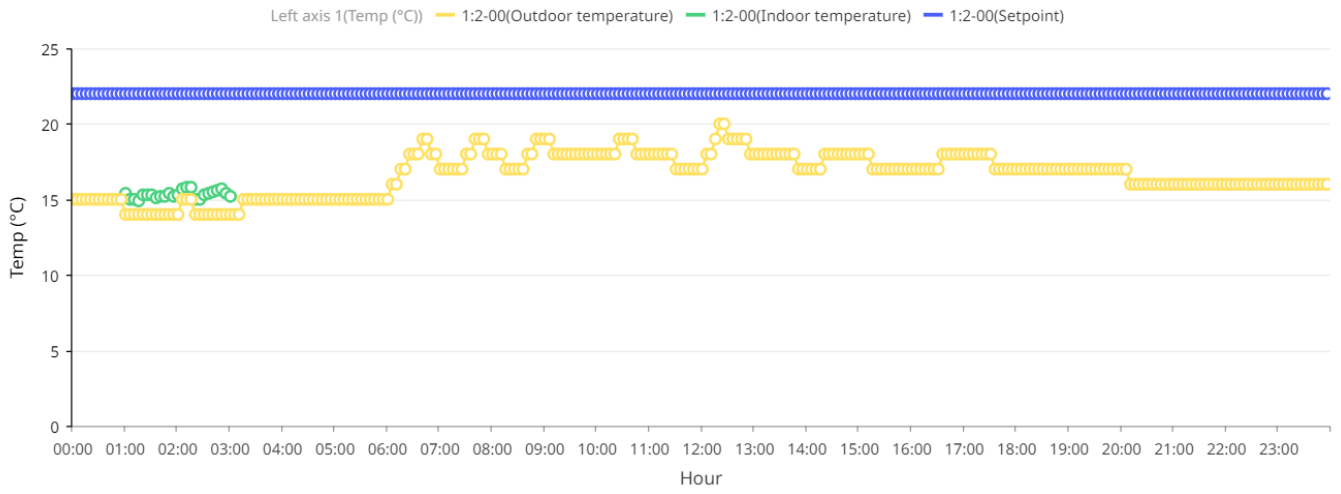
3 Choose whether you want to use a pattern (a) to visualise temperature data, or select a specific unit (b) to visualise temperature data for. The latter option does not require you to create a pattern first, and will immediately visualise the data for the selected unit.



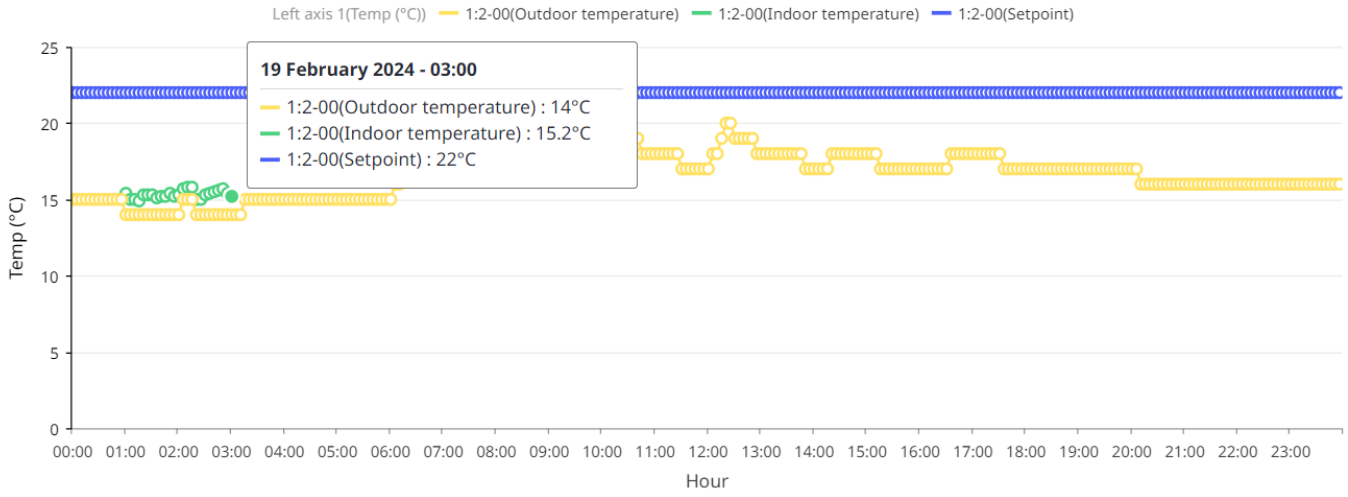
4 Select an individual unit (c) to display the temperature data for. If you want to make use of a pattern to visualise temperature data, you can select a pattern instead.

5 Click Save (d).

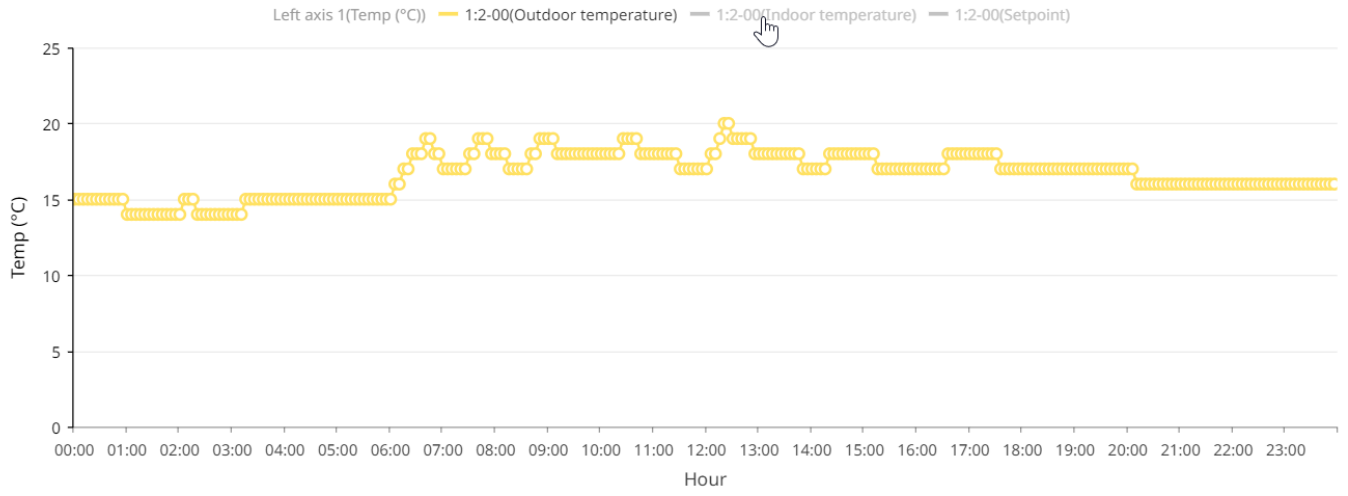
Result: The data for the selected unit is visualised. In case of a pattern, the data is visualised according to the pattern.



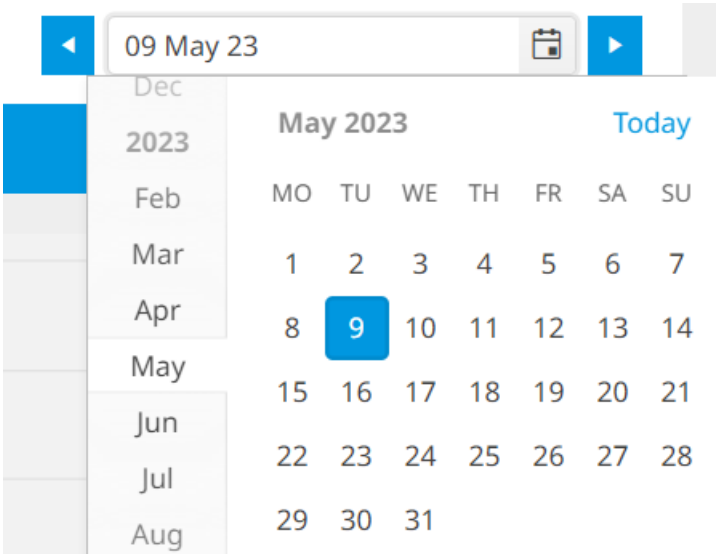
6 Hover over any data point of the graph to display detailed information.



7 Hide or unhide the data of any of the units by clicking the unit legend item above the graph. The unit for which the data is hidden is greyed out in the legend.



8 Change the visualisation period by selecting any of the tabs (Day, Week, Month, Year). You can specify the exact start and end date using the calendar picker. The arrow buttons allow you to jump back and forward in time quickly. Once a date or date range is selected, the graph refreshes automatically.

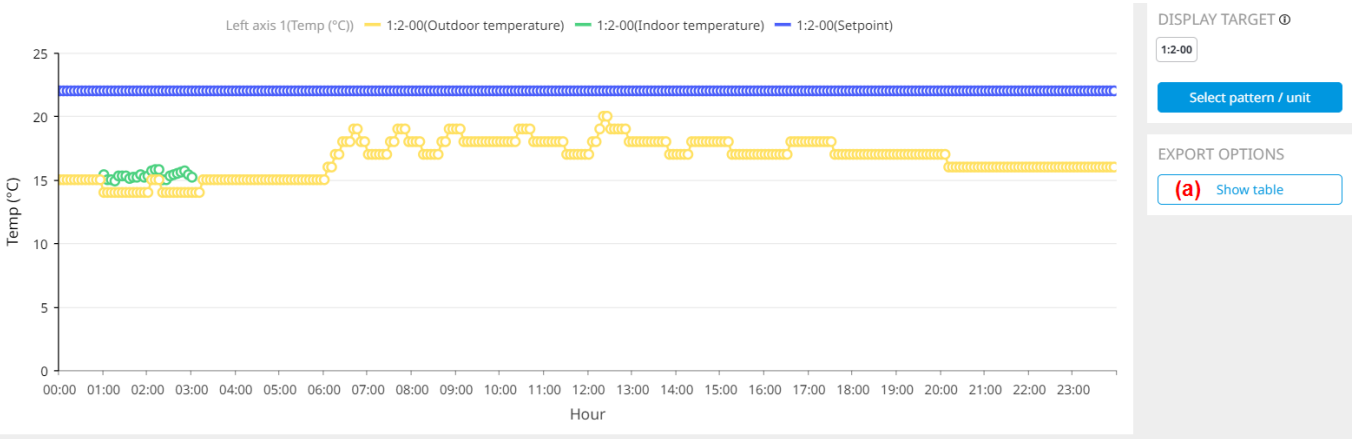


INFORMATION

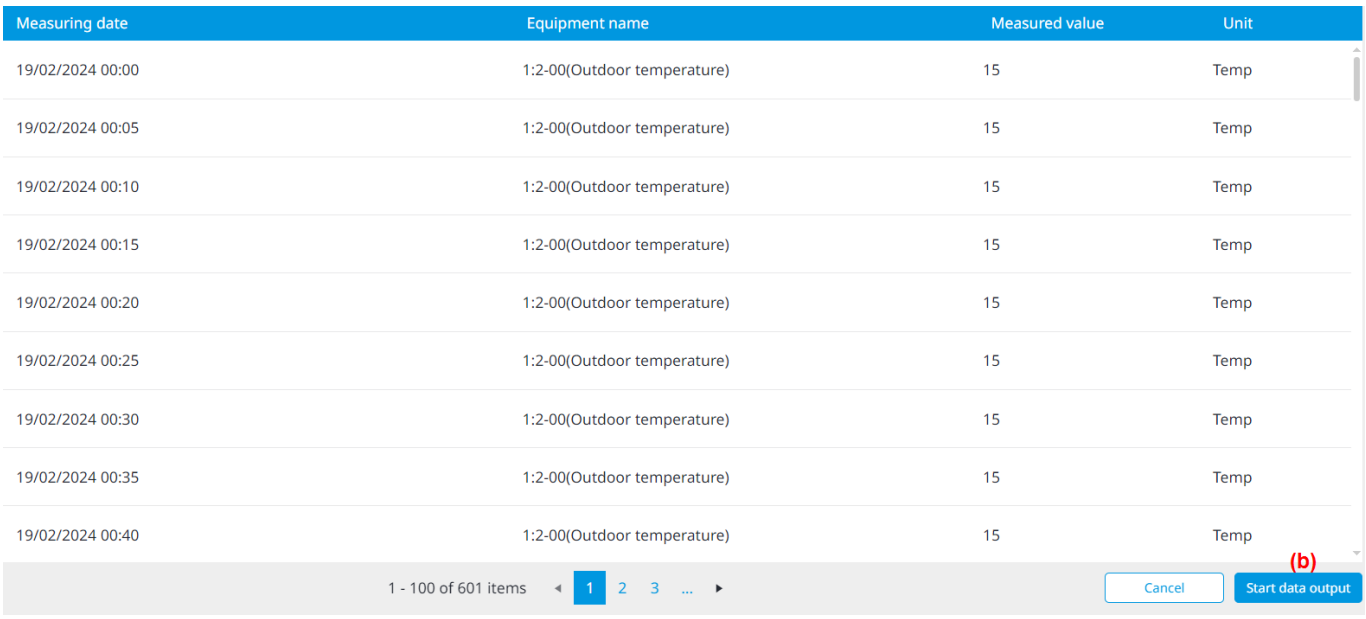
When you select a pattern to visualise data and leave the page, the pattern will automatically already be selected when you return to the page at a later time. However, when a specific unit is selected, this is NOT the case.

To export temperature data

1 Click Show table (a) under EXPORT OPTIONS.



Result: The data is visualised in table form.



2 Select Start data output (b).

Result: The data is downloaded as an Excel file.

4.6.2 Energy consumption

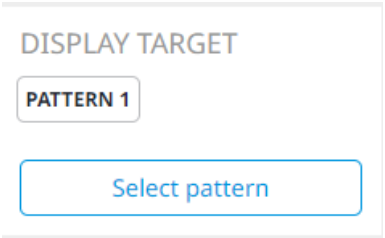
You can visualise energy consumption data for a specific site. However, you also have the option to use a pattern, which allows visualising the data for multiple units on a site and choose which unit data should be included in the visualisation. Patterns needs to be created first. For more information, see "4.6.9 Pattern settings" [▸ 104].

Energy consumption allows you to consult and compare the energy consumption data of units, even across different sites you have access to. This makes it a useful tool to not only compare the energy consumption of individual units located at a site, but also the energy consumption of units and/or entire sites.

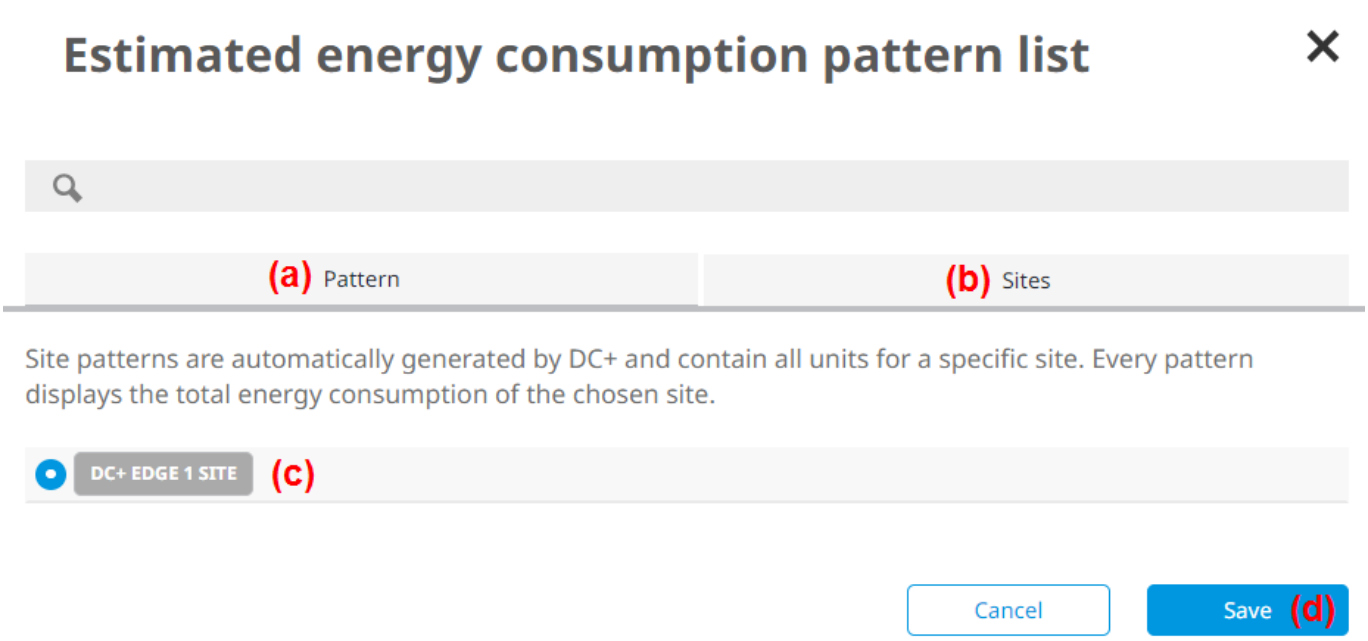
To visualise energy consumption

1 In the sidebar, go to ENERGY MANAGEMENT MONITORING > ENERGY CONSUMPTION.

2 Click Select pattern on the right side of the page.



3 Choose whether you want to use a pattern (a) to visualise energy consumption data, or select specific site (b) to display energy consumption data for. The latter option does not require you to create a pattern first, and will immediately visualise the data for all units of the selected site.



4 Select a specific site (c) to display the energy consumption data for. If you want to make use of a pattern to visualise energy consumption data, you can select a pattern instead.

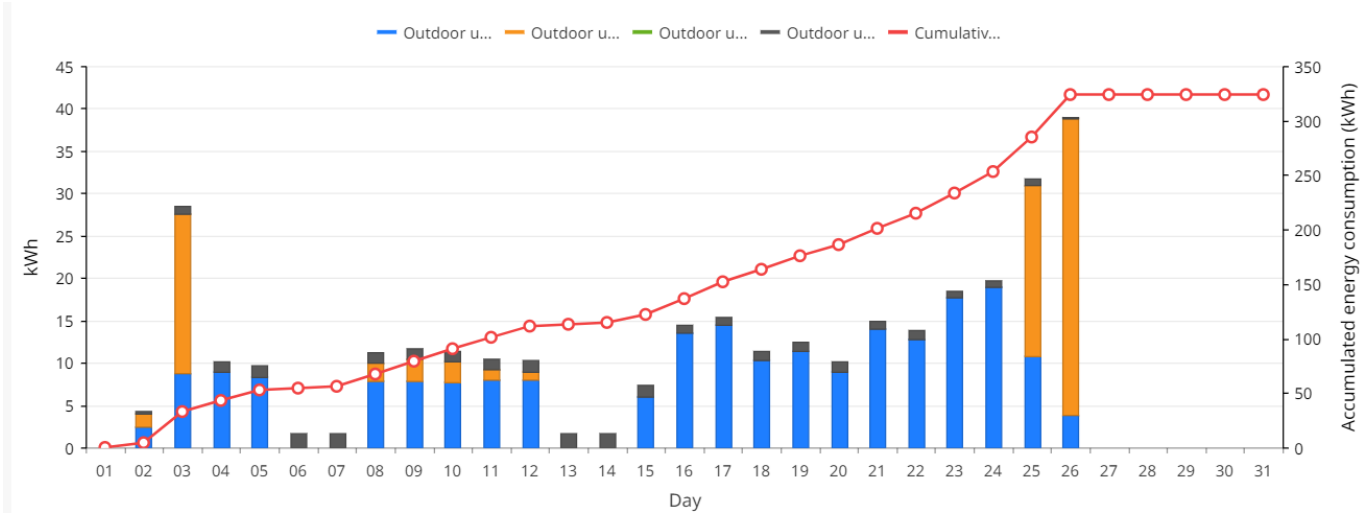
5 Click Save (d).

INFORMATION

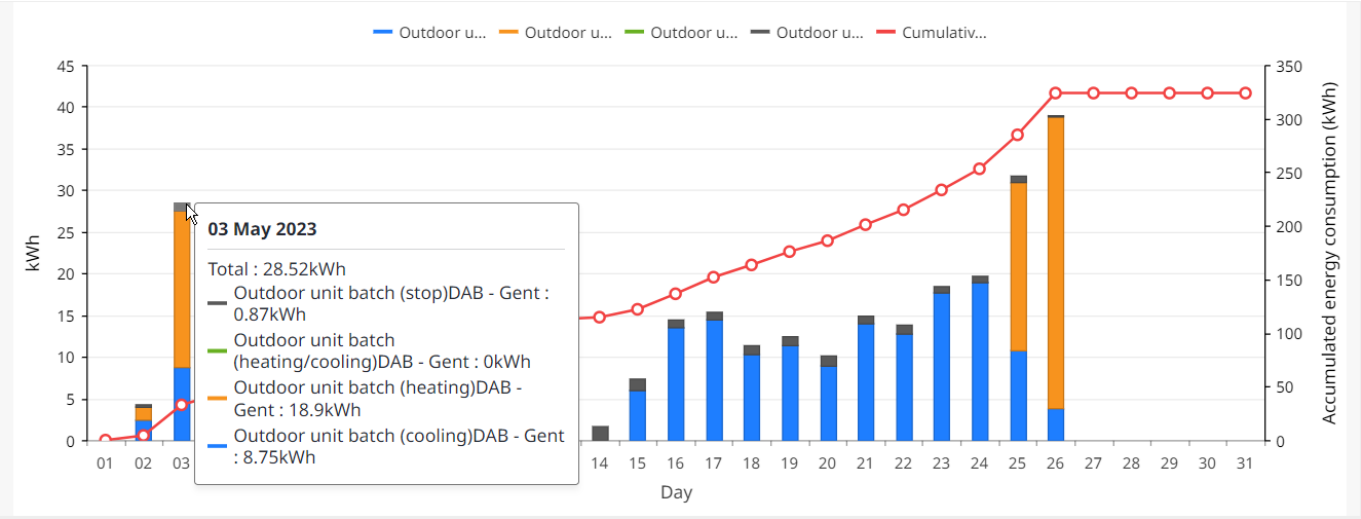
Monthly energy consumption target values for the current year can be set on the Target energy settings page. Go to ENERGY MANAGEMENT MONITORING > PATTERN SETTINGS and select the Energy consumption tab. Then under the pattern options, select Target energy settings. See "4.6.9 Pattern settings" [104] for more information.

6 Click OK.

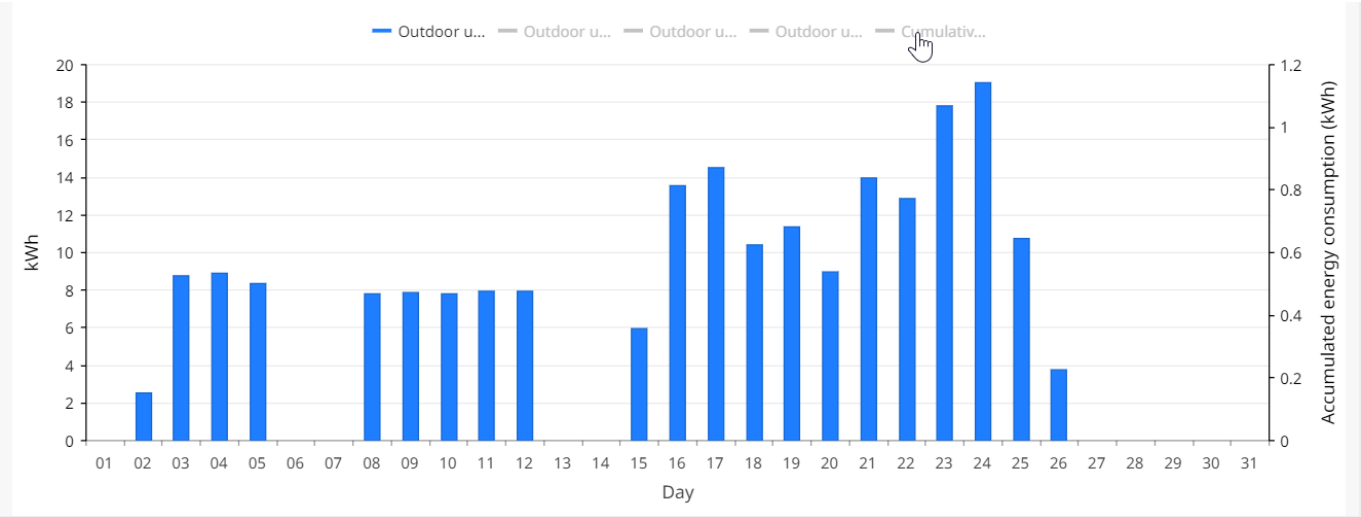
Result: The data for the selected site is visualised. In case of a pattern, the data is visualised according to the pattern.



7 Hover over any data point of the graph to display detailed information about the energy consumption.

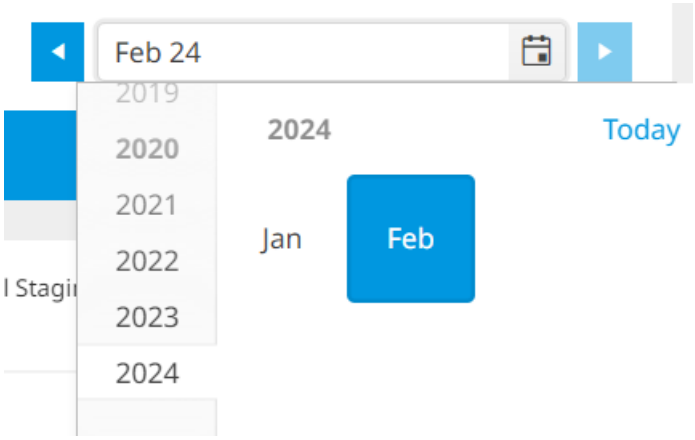


8 Hide or unhide the energy consumption data by clicking the unit legend item above the graph. Hidden information is greyed out in the legend.



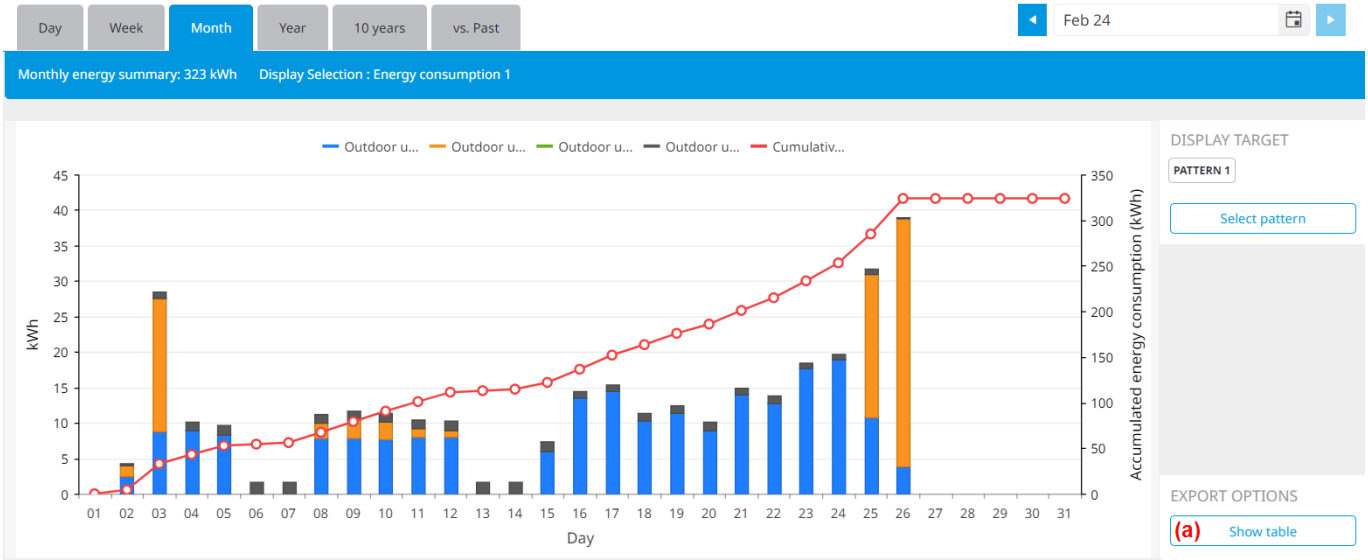
> **INFORMATION**
>
> Hiding energy consumption data can alter the scale of the left Y-axis, which shows the energy consumption in kWh. This may also give the impression that the data values have changed. If the selected pattern is set to display Cumulative energy consumption, the right Y-axis shows the accumulated energy consumption (kWh). If Outdoor temperature is selected, the Temperature (°C) is displayed on the right Y-axis instead.

9 Change the visualisation period by selecting any of the tabs (Day, Week, Month, Year, 10 years, vs. Past). You can specify the exact date using the calendar picker. The arrow buttons allow you to jump back and forward in time quickly. Once a date or date range is selected, the graph refreshes automatically. When you select vs. Past, 2 calendar fields become available, allowing you to compare the data for 2 different years.



To export energy consumption data

1 Click Show table (a) under EXPORT OPTIONS.



Result: The data is visualised in table form.

2 Select Start data output (b).

Measuring date	Outdoor unit batch (cooling)	Outdoor unit batch (heating)	Outdoor unit batch (heating/cooling)	Outdoor unit batch (stop)	Unit	Cumulative energy consumption	Unit
19/02/2024 01:00	0	1.06	0	0	kWh	1.06	kWh
19/02/2024 02:00	0	1.32	0	0	kWh	2.38	kWh
19/02/2024 03:00	0	0.04	0	0	kWh	2.42	kWh
19/02/2024 04:00	0	0	0	0	kWh	2.42	kWh
19/02/2024 05:00	0	0	0	0	kWh	2.42	kWh
19/02/2024 06:00	0	0	0	0	kWh	2.42	kWh
19/02/2024 07:00	0	0	0	0	kWh	2.42	kWh
19/02/2024 08:00	0	0	0	0	kWh	2.42	kWh
19/02/2024 09:00	0	0	0	0	kWh	2.42	kWh

1 - 100 of 168 items 1 2

(b)

Cancel Start data output

Result: The data is downloaded as an Excel file.

4.6.3 Energy performance

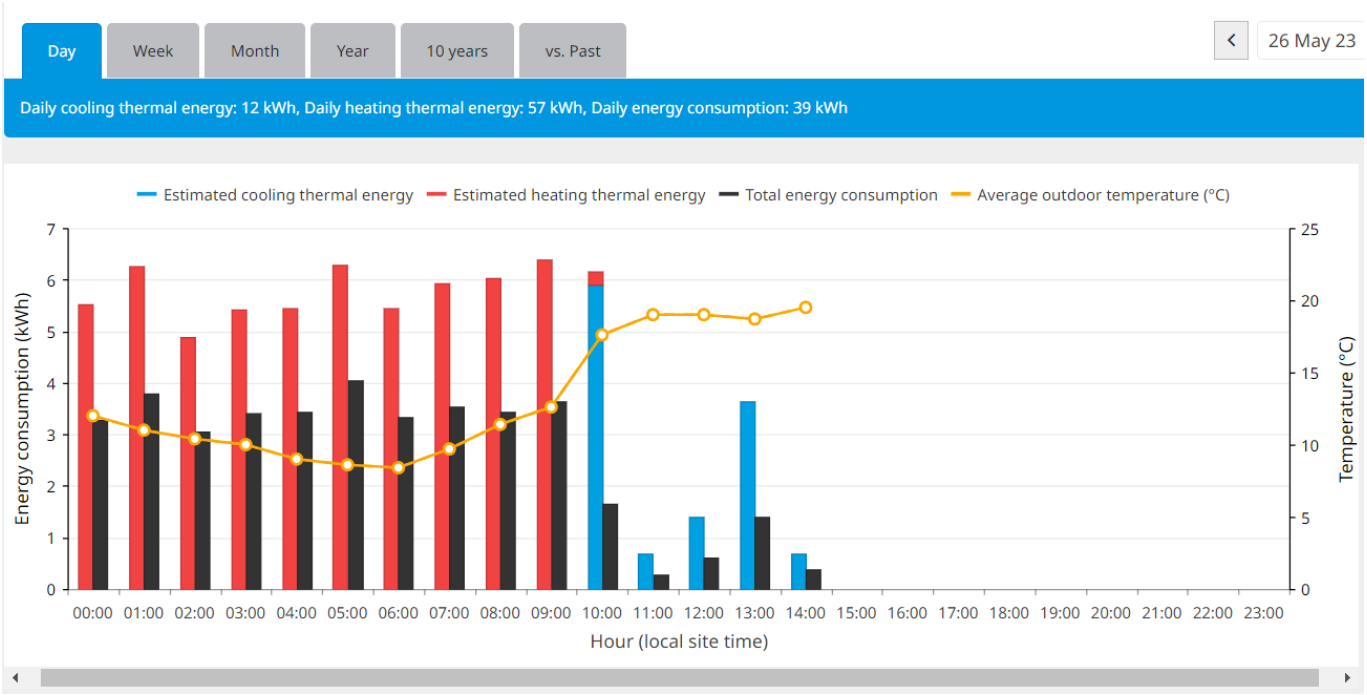
Energy performance allows you to visualise the energy performance of outdoor units over time. The generated charts display estimated thermal heating and cooling energy consumption, as well as the total estimated energy consumption.

> **INFORMATION**
>
> The energy consumption values are approximations based on measured operation data of the system. Due to the variable nature of the installation and site conditions, the values may vary from the actual consumption. The purpose of the provided values is to be used in relative comparison over time.

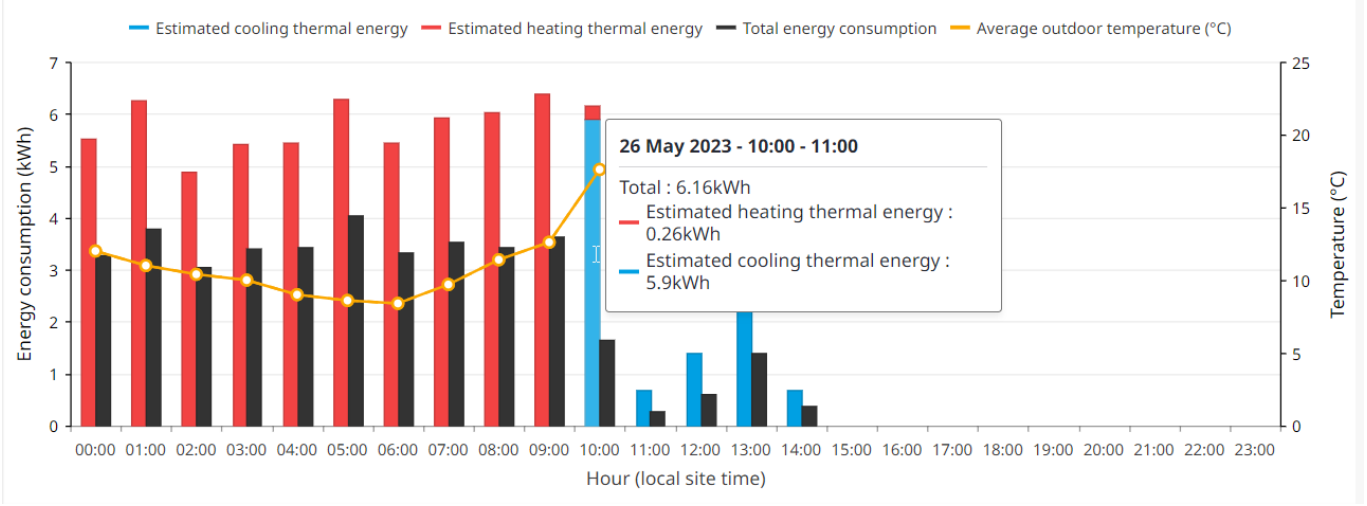
To visualise outdoor unit energy performance data

1 In the sidebar, go to ENERGY MANAGEMENT MONITORING > ENERGY PERFORMANCE.

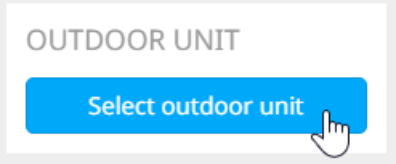
Result: The energy performance of the current day is displayed for the selected outdoor unit.



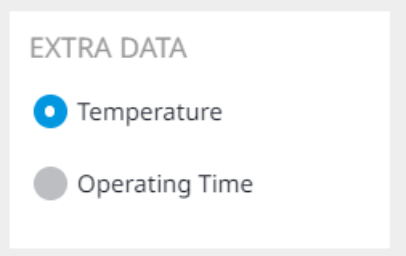
2 Hover over any data point of the graph to display detailed information about the energy performance.



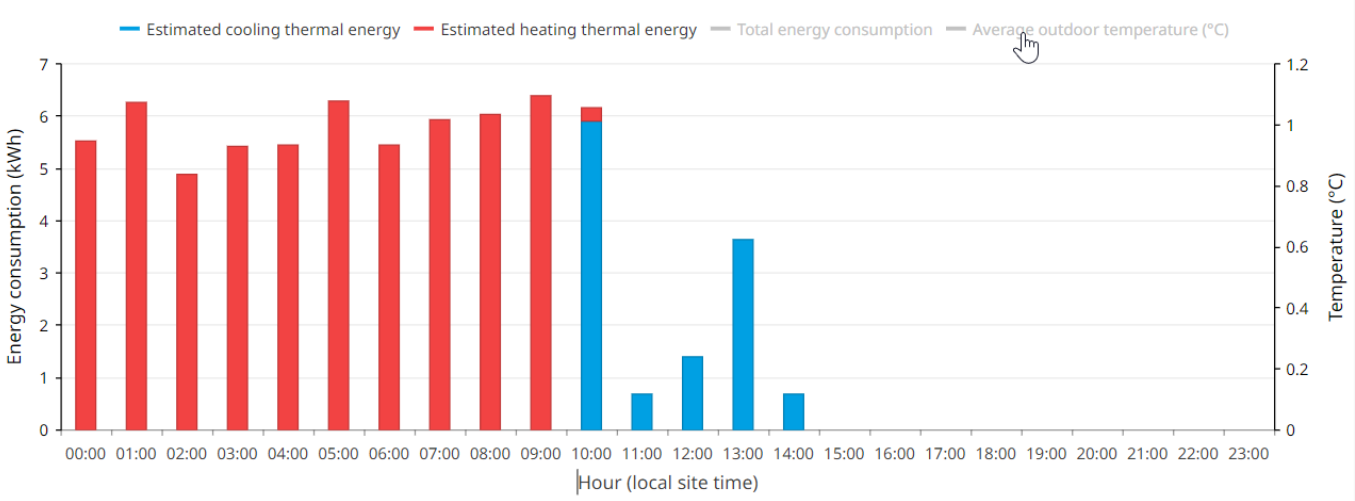
3 Under Outdoor unit, click Select outdoor unit to change the unit you want to display the energy performance data for.



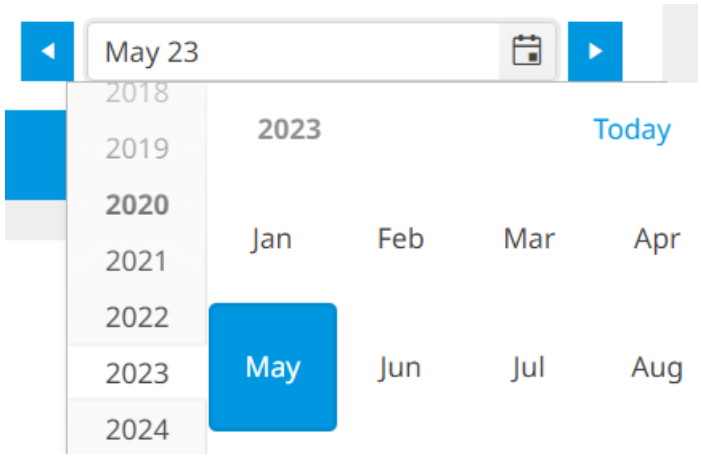
4 Under EXTRA DATA, select whether you want to display Temperature or operating time on the right Y-axis.



5 Hide or unhide the energy performance data by clicking any of the legend items above the graph.

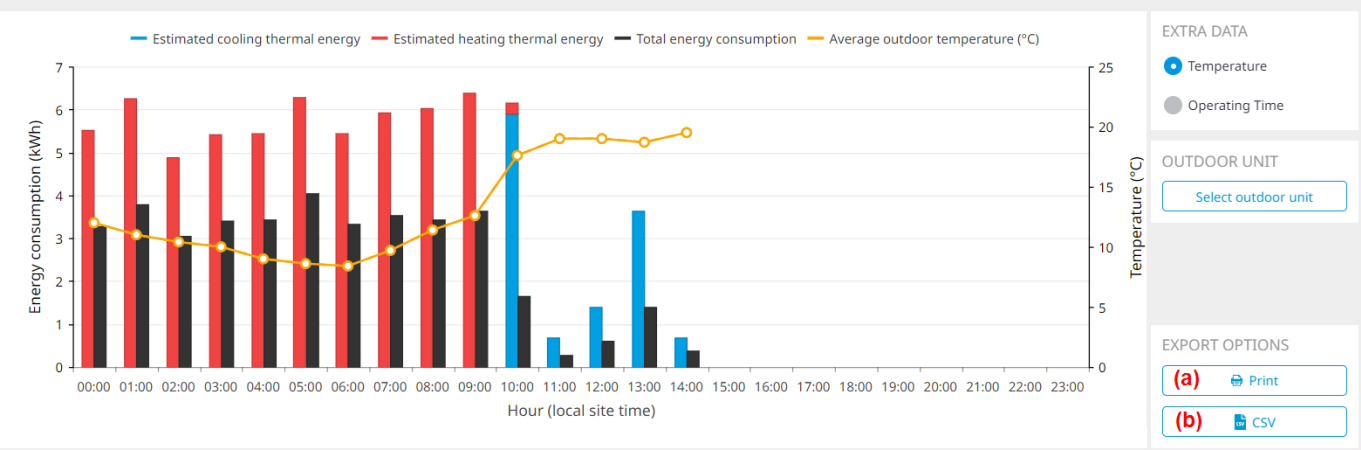


6 Change the visualisation period by selecting any of the tabs (Day, Week Month, Year, vs. Past). You can specify the exact date using the calendar picker. The arrow buttons allow you to jump back and forward in time quickly. Once a date or date range is selected, the graph refreshes automatically. When you select vs. Past, 2 calendar fields become available, allowing you to compare the data for 2 different years.



To export outdoor unit energy performance data

You can choose to print the current graph view, or export the data to a CSV file.



1 To print the graph view, click Print (a) under EXPORT OPTIONS.

Result: A printing dialog window opens.

2 To export the data, click CSV (b) under EXPORT OPTIONS.

Result: The data is downloaded as a CSV file.

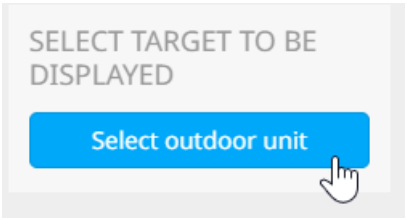
4.6.4 Outdoor unit comparison

Outdoor unit comparison allows you to visualise and compare the energy consumption of multiple outdoor units at a site.

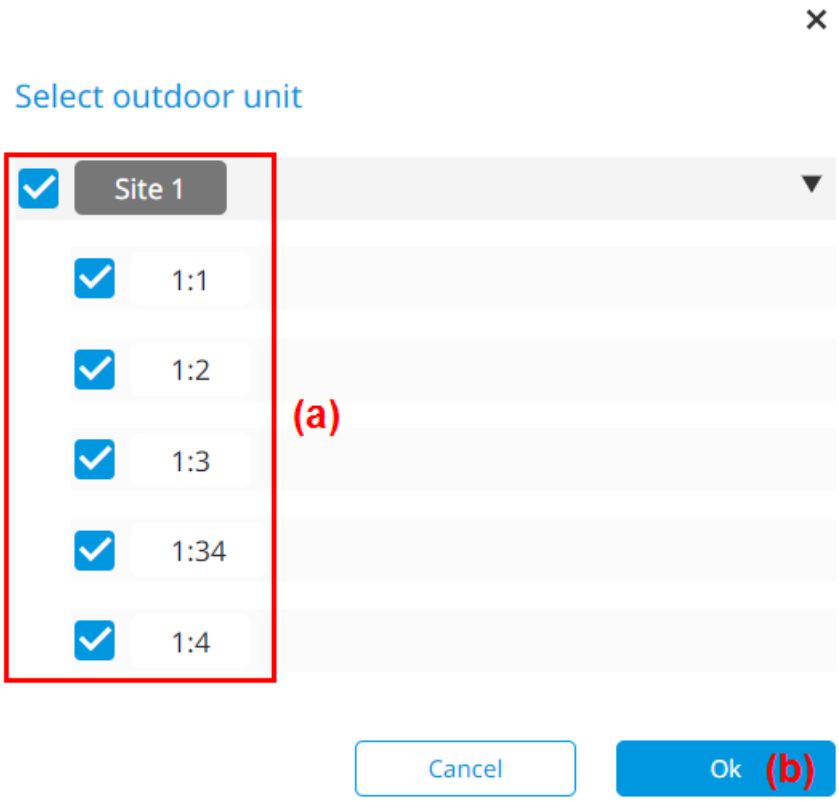
To compare outdoor unit energy consumption

1 In the sidebar, go to ENERGY MANAGEMENT MONITORING > OUTDOOR UNIT COMPARISON.

2 Click Select outdoor unit on the right side of the page.

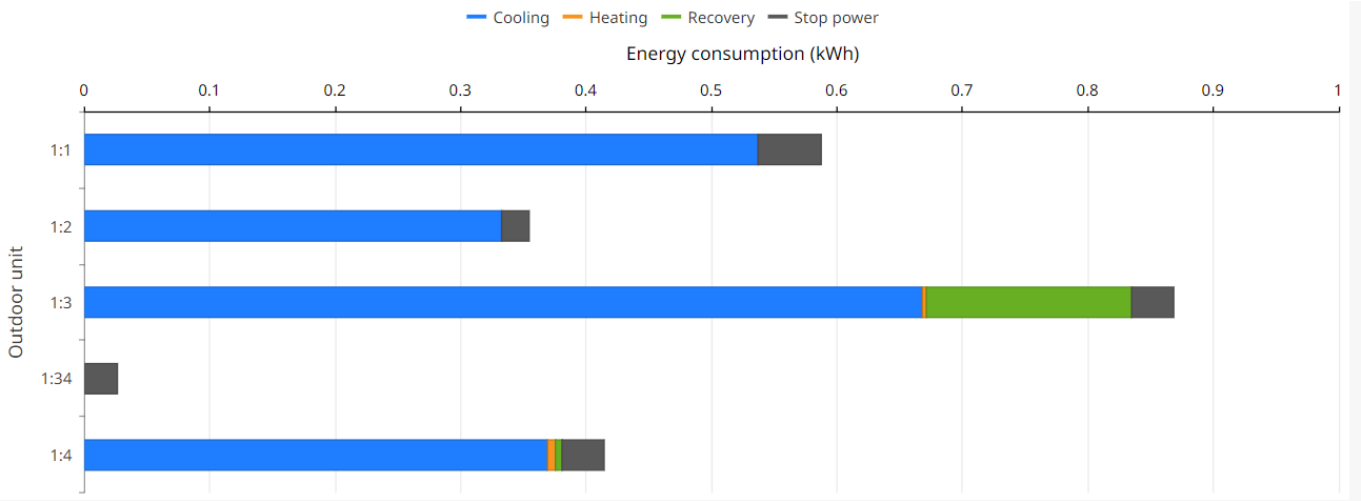


3 Select the checkboxes of the outdoor units (a) you want to compare. You can choose to select all units that belong to a site by clicking the checkbox next to the site name. Clicking the downward-facing arrow next to the site name will reveal all units that belong to that site, and only specific units can be selected.

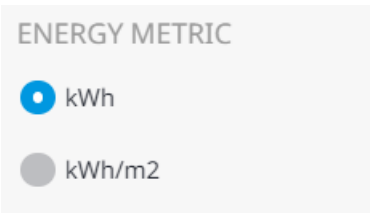


4 Click OK (b).

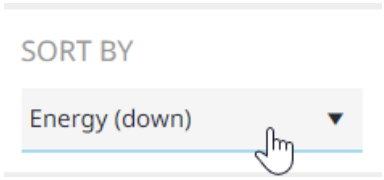
Result: The graph shows the energy consumption of the selected outdoor units.



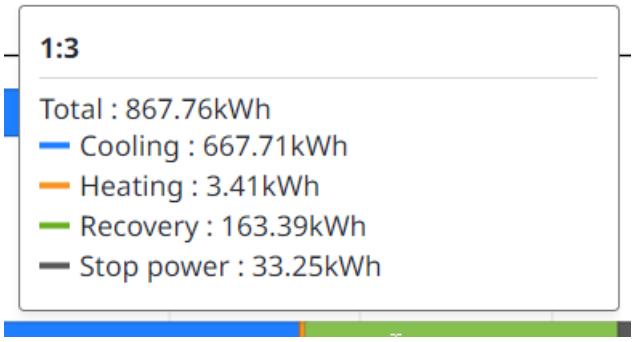
5 Choose an energy metric (kWh or kWh/m^2) to display.



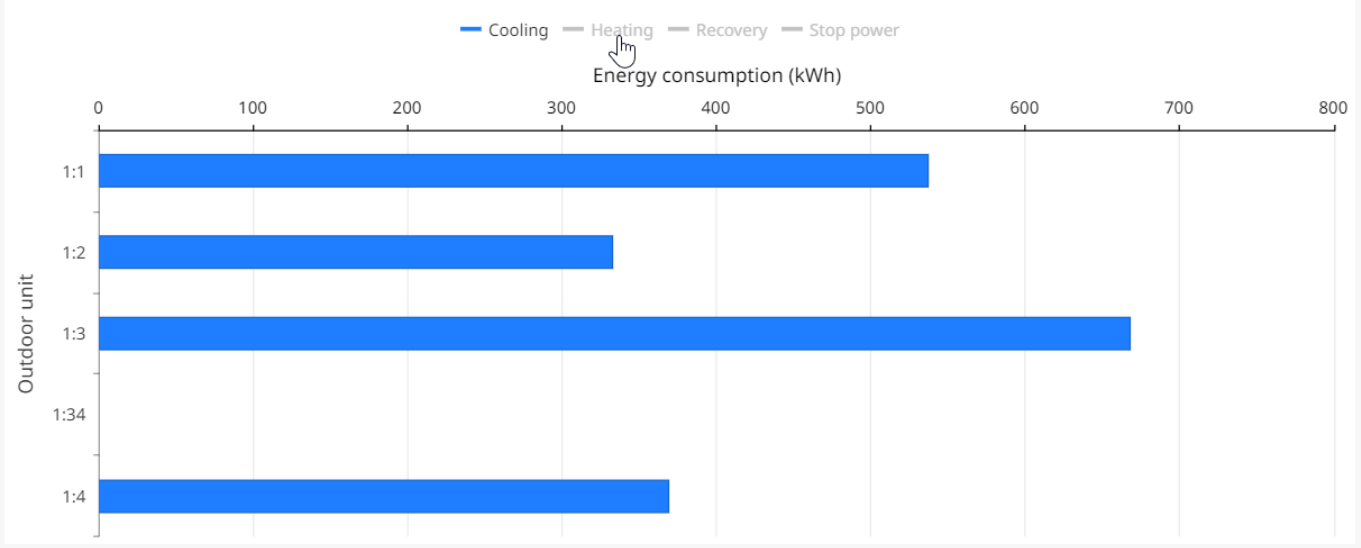
6 Optionally, choose a sorting order for the units in the graph from the drop-down list. You can sort by energy consumption (up/down) or by name (up/down).



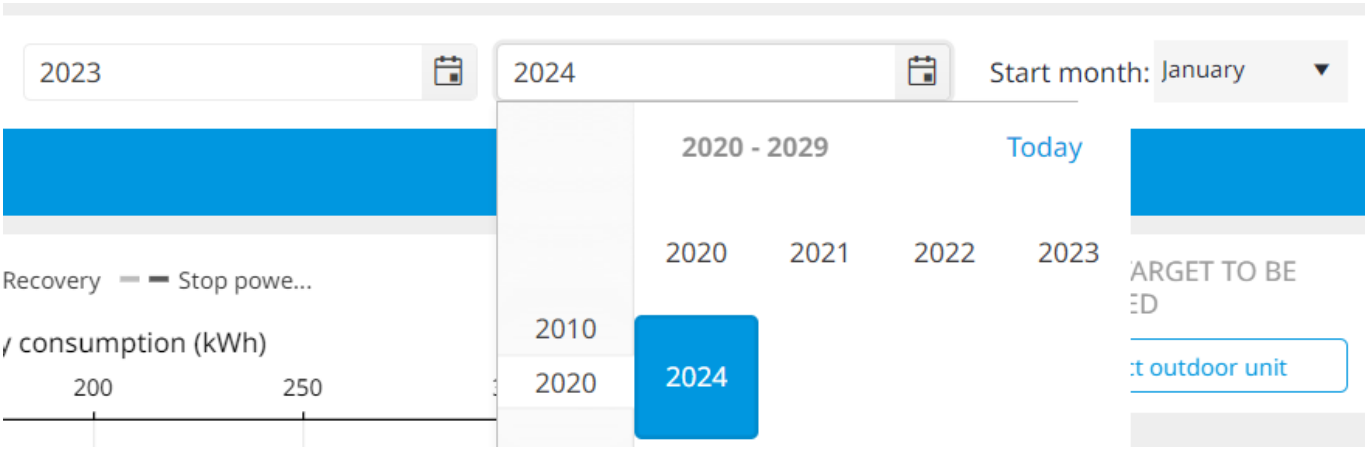
7 Hover over any data point of the graph to display detailed information about the outdoor unit energy consumption.



8 Hide or unhide a specific type of energy consumption data (Heating, Cooling, Recovery, Stop power by clicking the unit legend item above the graph). Hidden items are greyed out in the legend.

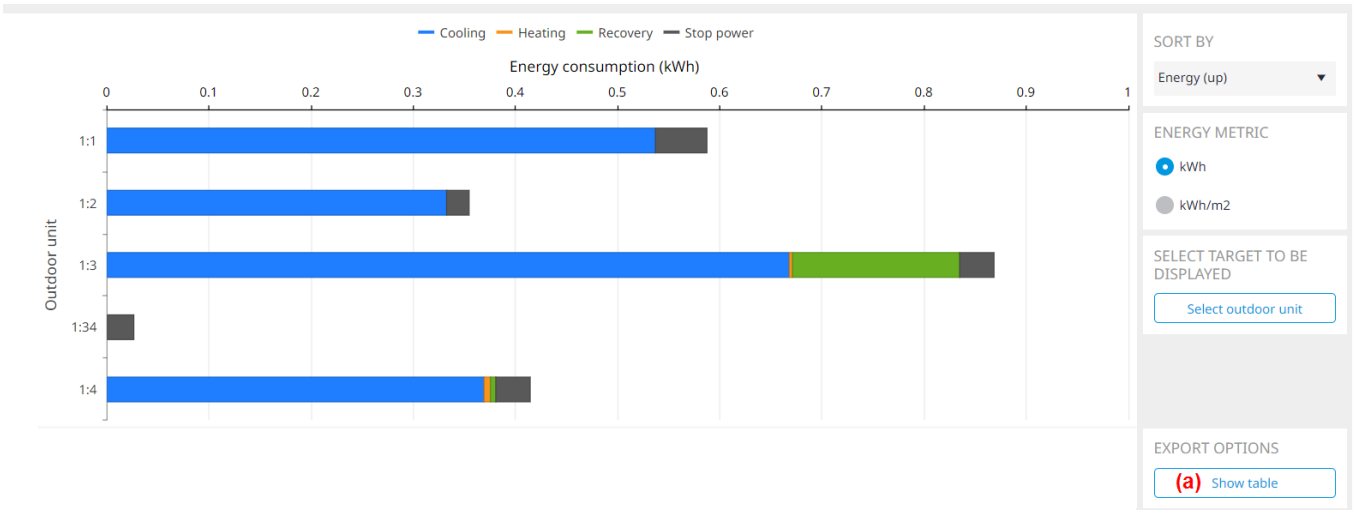


9 Change the visualisation period by selecting any of the tabs (Day, Week, Month, Year, vs. Past). You can specify the exact date using the calendar picker. Once a date or date range is selected, the graph refreshes automatically. When you select vs. Past, 2 calendar fields become available, allowing you to compare the data for 2 different years. It is also possible to select the starting month from the drop-down list.



To export outdoor unit comparison data

1 Click Show table (a) under EXPORT OPTIONS.



Result: The data is displayed in table form.

Measuring date	Equipment name	Cooling	Heating	Recovery	Stop power	Unit
2023	1:1	536.87	0	0	50.46	kWh
2023	1:2	332.76	0	0	21.65	kWh
2023	1:3	667.71	3.41	163.39	33.25	kWh
2023	1:34	0	0	0	25.71	kWh
2023	1:4	368.68	6.32	5.25	33.97	kWh

1 - 5 of 5 items ◂ 1 ▸ Cancel (b) Start data output

2 Select Start data output (b) under EXPORT OPTIONS.

Result: The data is downloaded as an Excel file.

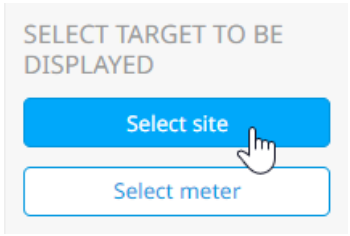
4.6.5 Multi-site comparison

Multi-site comparison allows you to compare the energy consumption of different outdoor units at all the sites you have access to. The graphs generated on this page show the aggregated data.

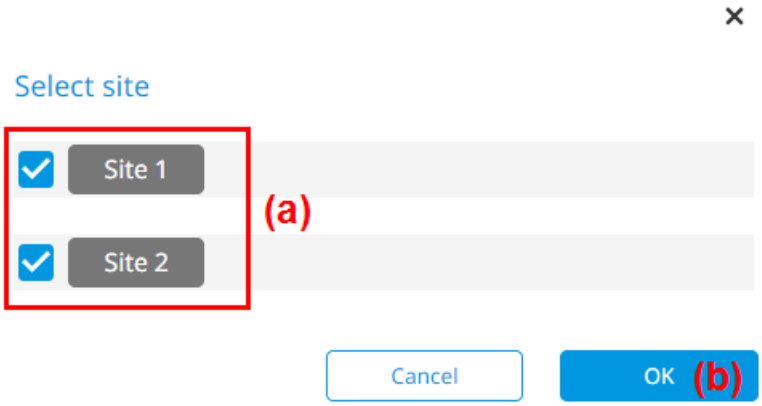
To compare multi-site energy consumption

1 In the sidebar, go to ENERGY MANAGEMENT MONITORING > MULTI-SITE COMPARISON.

2 Click Select site on the right side of the page.

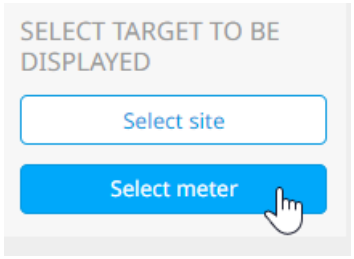


3 Select the sites (a) you want to include in the comparison by clicking the checkbox next to the site name.

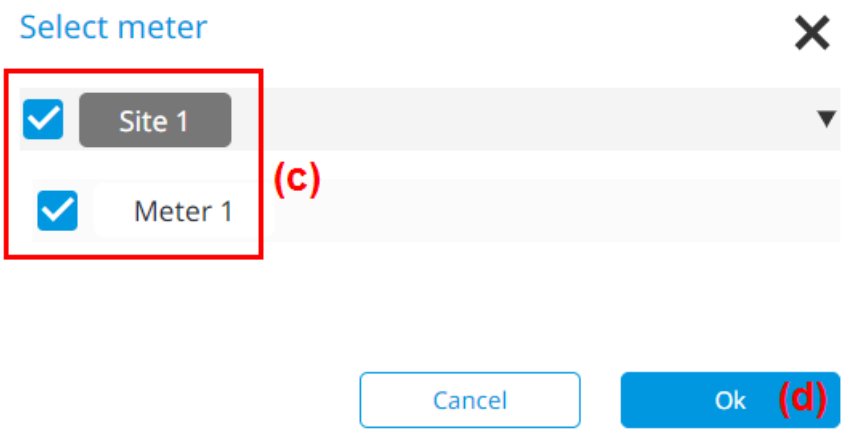


4 Click OK (b).

5 If you want to include specific meters in the comparison, click Select meter on the right side of the page.



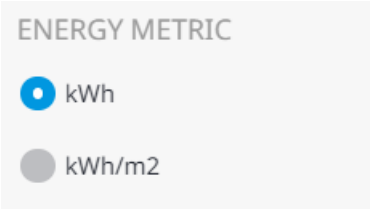
6 Select the meters (c) you want to include in the comparison. You can choose to select all meters of a site by clicking the checkbox next to the site name. Alternatively, clicking the arrow next to the site name will reveal all meters that belong to that site, and only specific meters can be selected.



7 Click OK (d).

Result: The graph shows the multi-site energy consumption of the selected sites and/or meters.

8 Under ENERGY METRIC, select an energy metric (kWh or kWh/m^2) to display.

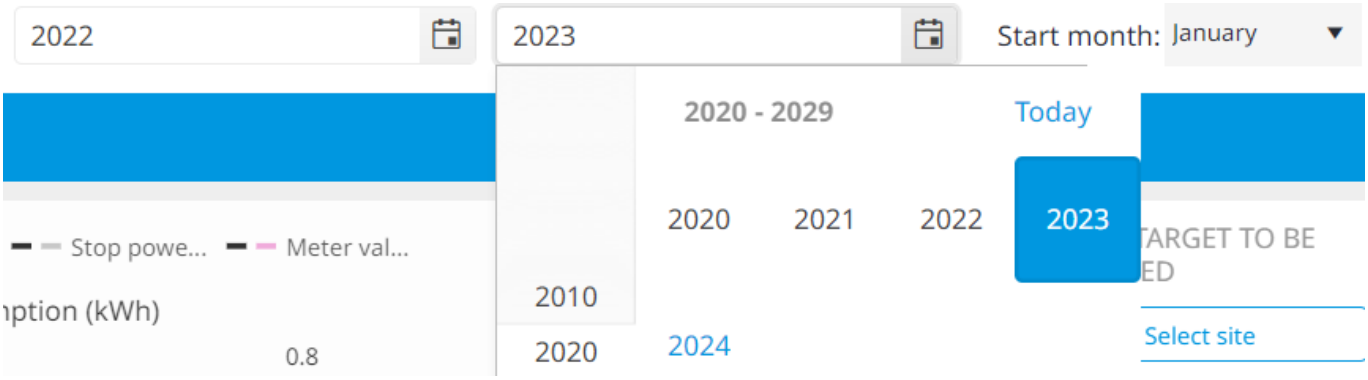


9 Optionally, choose a sorting order for the sites and/or meters in the graph from the drop-down list. You can sort by energy consumption (up/down) or by name (up/down).

10 Hover over any data point of the graph to display detailed information about the multi-site energy consumption.

11 Hide or unhide a specific type of energy consumption data (Heating, Cooling, Recovery, Stop power) by clicking the unit legend item above the graph. Hidden items are greyed out in the legend.

12 Change the visualisation period by selecting any of the tabs (Day, Week, Month, Year, vs. Past). You can specify the exact date using the calendar picker. Once a date or date range is selected, the graph refreshes automatically. When you select vs. Past, 2 calendar fields become available, allowing you to compare site data for 2 different years. It is also possible to select the starting month from the drop-down list.



To export multi-site energy consumption data

1. Click Show table under EXPORT OPTIONS.

   Result: The data is displayed in table form.

2. Select Start data output.

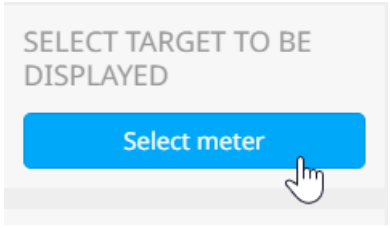
Result: The data is downloaded as an Excel file.

4.6.6 Meter monitoring

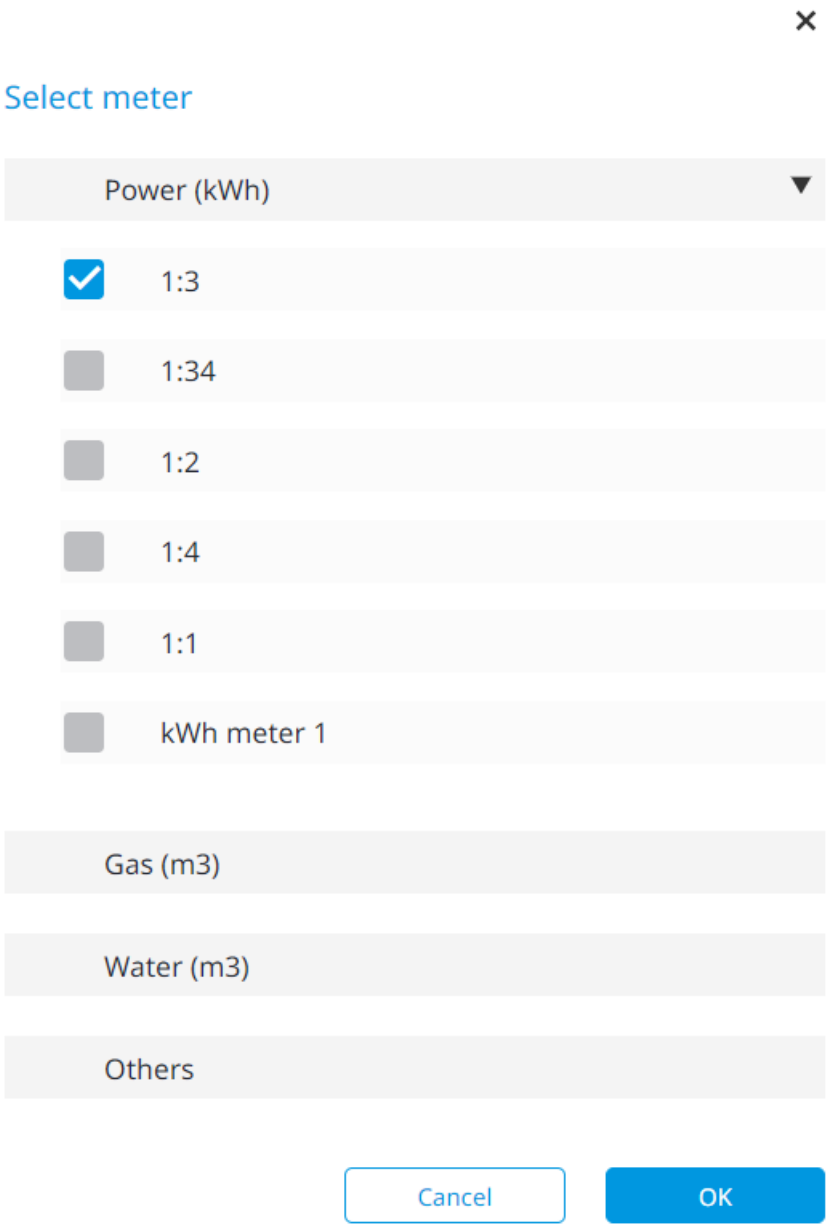
Meter Monitoring allows you to consult measured power consumption data of meters present in the system.

To visualise meter energy consumption

1. In the sidebar, go to ENERGY MANAGEMENT MONITORING > METER MONITORING.
2. Click Select meter on the right side of the page.



3. Select the downward-facing arrow for the meter type (Power, Gas, Water (m^3), Others) to display the meters for that type of meter.

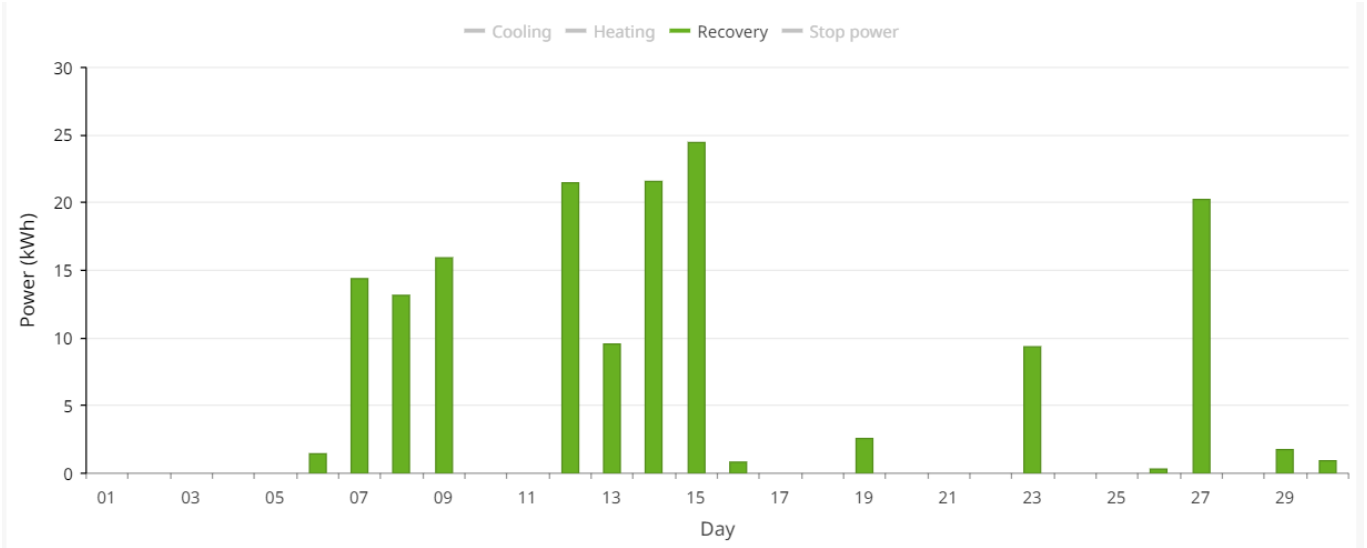


4 Select the checkbox of the meter for which you want to display energy consumption data.

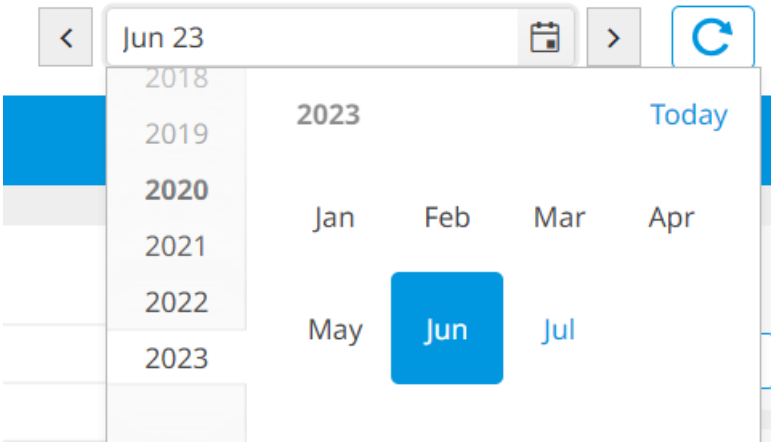
5 Click OK.

Result: The graph shows the energy consumption data for the selected meter.

6 Hide or unhide energy consumption data by clicking the unit legend item above the graph. Hidden information is greyed out in the legend.



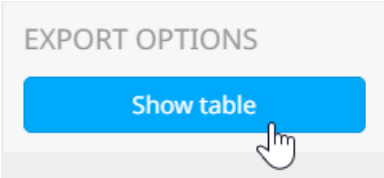
7 Change the visualisation period by selecting any of the tabs (Year, Month, Day). You can specify the exact date using the calendar picker. The arrow buttons allow you to jump back and forward in time quickly. When you select Year, the starting month can be selected from the drop-down menu.



8 Click the refresh button to refresh the visualisation.

To export meter energy consumption data

1 Click Show table under EXPORT OPTIONS.



Result: The data is displayed in table form.

Date	Equipment name	Unit	Cooling	Heating	Heating and cooling	Stopped
29/06/2023 00:00	1:3	kWh	0	0	0	0.07
29/06/2023 01:00	1:3	kWh	0	0	0	0.07
29/06/2023 02:00	1:3	kWh	0	0	0	0.07
29/06/2023 03:00	1:3	kWh	0	0	0	0.07
29/06/2023 04:00	1:3	kWh	0	0	0	0.07
29/06/2023 05:00	1:3	kWh	0	0	0	0.07
29/06/2023 06:00	1:3	kWh	3.57	0	0	0
29/06/2023 07:00	1:3	kWh	1.49	0	0	0.03
29/06/2023 08:00	1:3	kWh	3.26	0	0	0
29/06/2023 09:00	1:3	kWh	3.1	0	0	0
29/06/2023 10:00	1:3	kWh	4.71	0	0	0

1 - 24 of 24 items 1 Cancel Start data output (a)

2 Select Start data output (a).

Result: The data is downloaded as an Excel file.

4.6.7 Meter list

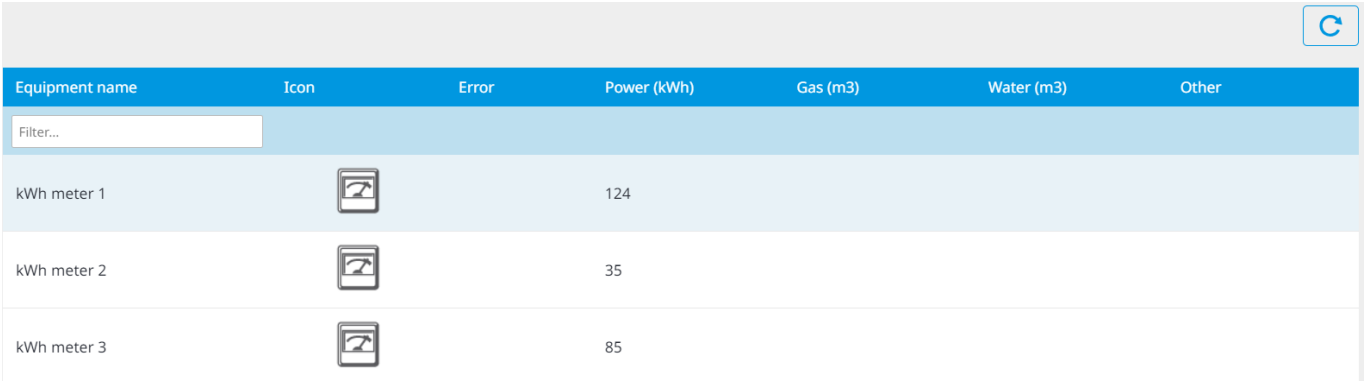
The METER LIST shows an overview of all meters (Pi , External Pi, Virtual Pi) connected to the system.

INFORMATION

Meters are set up during system commissioning in Daikin Cloud Plus Commissioning and cannot be set up from within Daikin Cloud Plus. The Meter list page merely provides an overview of meters currently present in the system. For more information, see the installer reference guide.

INFORMATION

This page does NOT refresh automatically. Use the refresh button to refresh the page manually in order to view the latest recorded data.



The values displayed for Power, Gas, Water (m^3) and Others are reset after every period. The displayed value is the value of 5 minutes before the current time (e.g. at 9:00, the data for 8:55 is displayed).

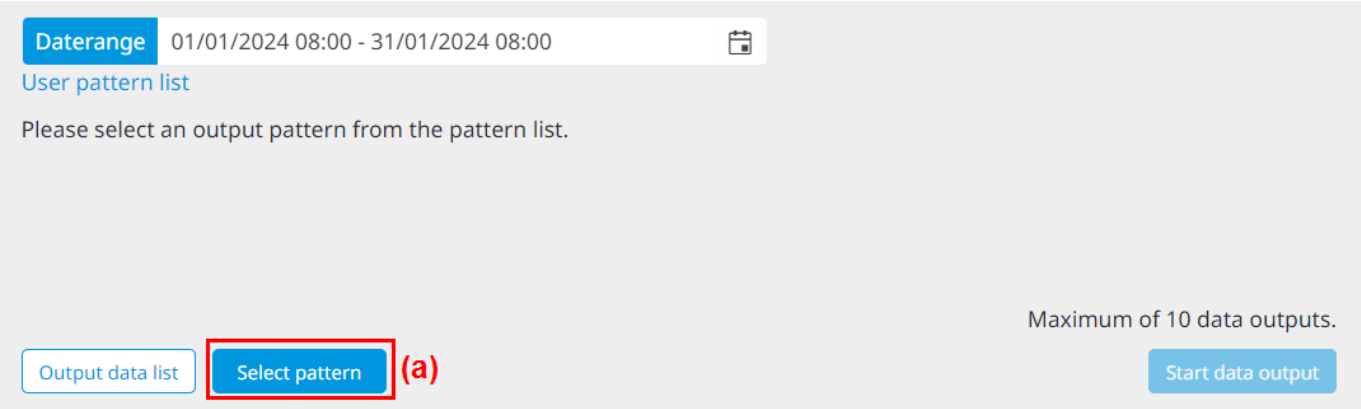
If there is a communication error or an equipment error for the meter, ⚠ is displayed next to the meter icon. In case there is a communication or equipment error, more information is displayed in the Error column. A virtual Pi will display a communication or equipment error when any of the equipment linked to it is in error. Also, when a communication error or equipment error occurs for equipment registered to the virtual Pi, only the communication error is displayed.

4.6.8 Operation data output

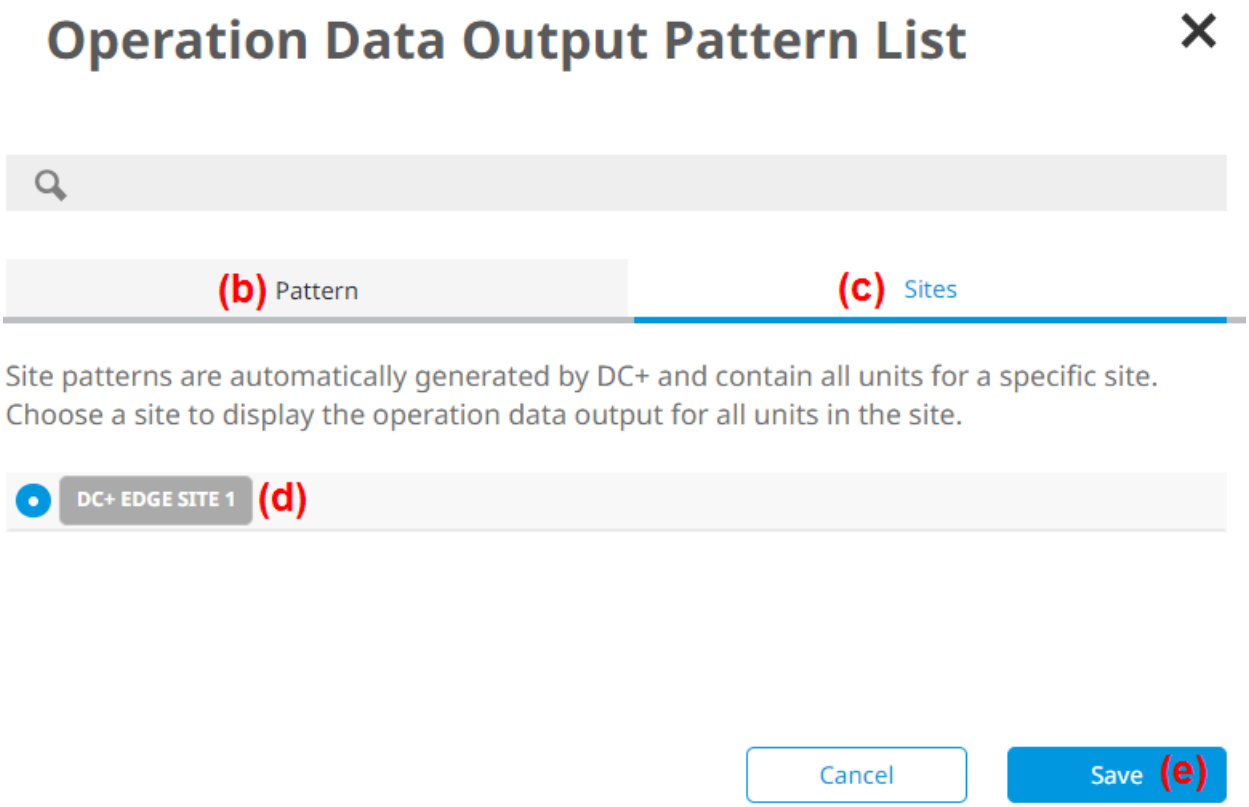
Operation data output allows you to export the energy monitoring data to an Excel file. In order to export any data, a pattern needs to be created first. For more information, see "4.6.9 Pattern settings" [▸ 104].

To export operation data

1. In the sidebar, go to ENERGY MANAGEMENT MONITORING > OPERATION DATA OUTPUT.
2. Click Select pattern (a).



Result: A list of available patterns is displayed.



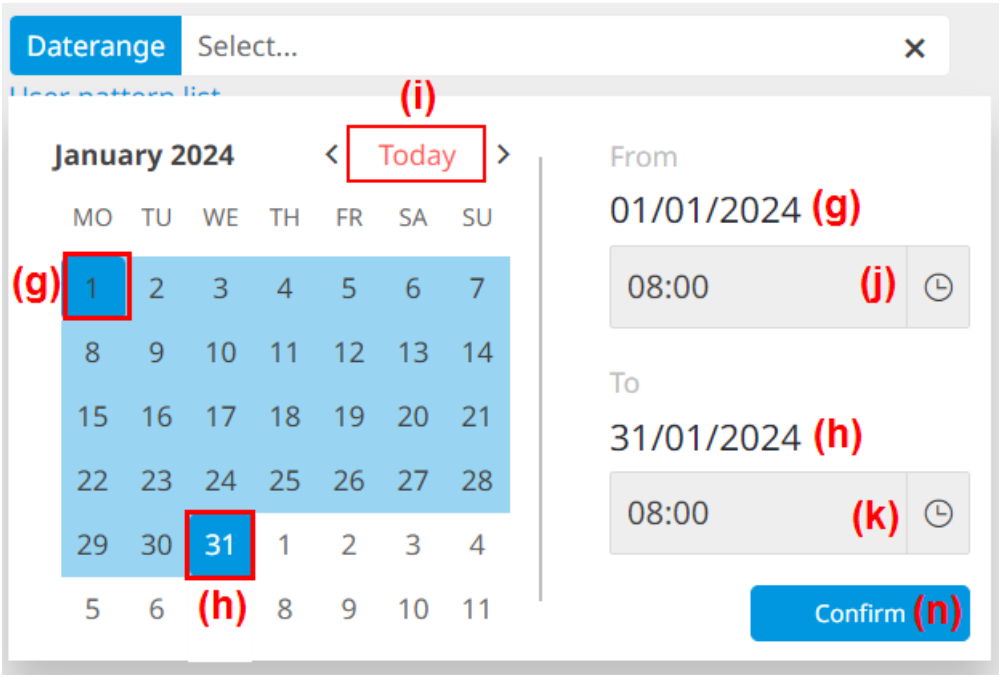
3 Choose whether you want to use a pattern (b) to output operation data, or whether you want to output operation data for a specific site (c). The latter option does not require you to create a pattern first, and will output operation data for all units that belong to the site.

4 Select a site (d) to output operation data for. If you want to make use of a pattern to output operation data, you can select a pattern instead.

5 Click Save (e).

Result: The selected pattern and its interval are now listed on the Operation data output page. The units and equipment linked to the selected pattern appear under Target Equipment.

6 Specify the period for which you want to output operation data. First, click the calendar icon (f) to show the calendar. Then, click once on a date to set a starting date (g). Click again to set the ending date (h). You can also click Today (i) to quickly set the current date.



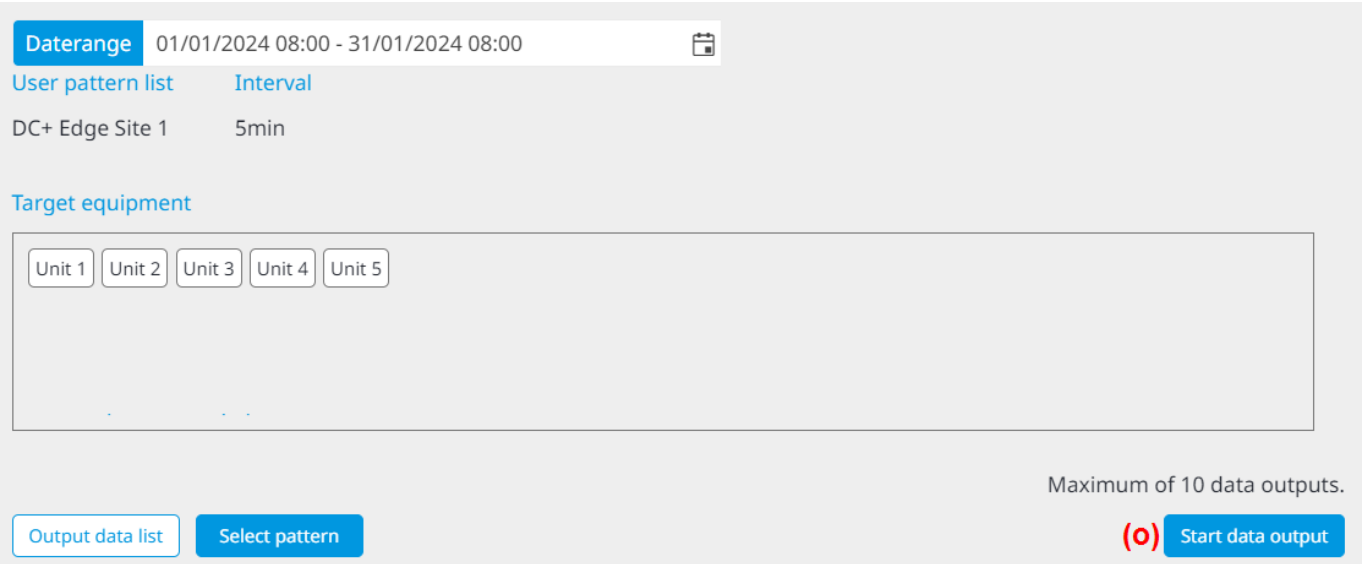
7 Enter time manually in the start and end time field (j, k), or click the clock icon to set specific start and/or end times and click Set (l). You can also click Now (m) to set the field to the current time quickly.

8 Click Confirm (n).

Result: The date range is set.

> **INFORMATION**
>
> The starting date can be set from January 1st, 5 years ago, until the current date. However, the maximum period for which data can be output is 6 months.

9 Click Start data output (o).



Result: The Operation data output list appears. This lists the last 10 output tasks that have been started. Here you can also consult the data output progress.

> **INFORMATION**
>
> Daikin Cloud Plus can store the information of up 10 output tasks. You can access and download operation data for these tasks at a later time. However, if the maximum number of output tasks is already stored, at least 1 data output task must be deleted in order to free up space for new tasks.

10 Once the progress has reached 100%, select Download (p) to download the data output Excel file.

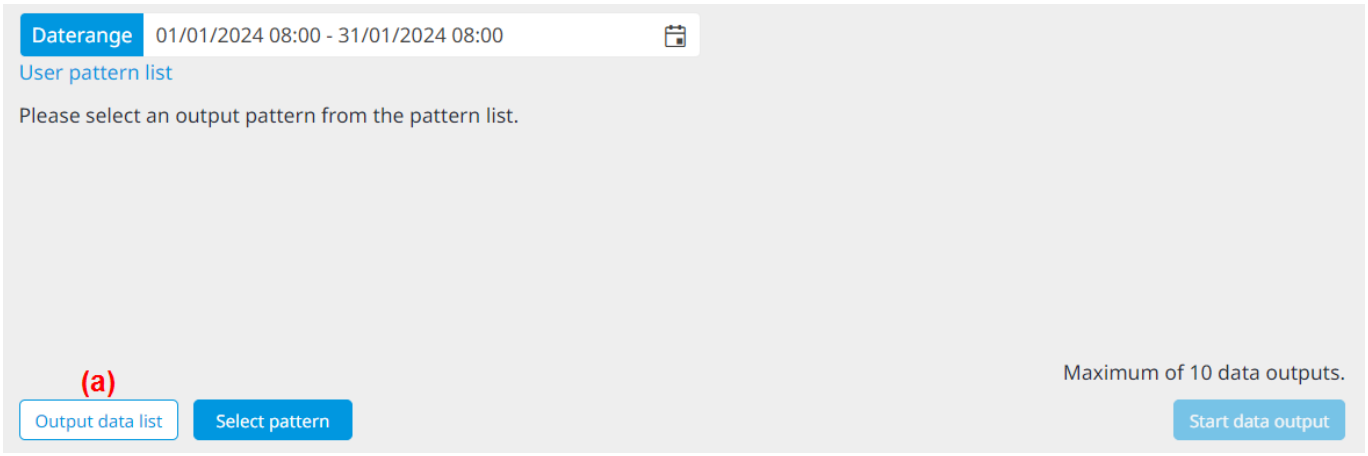
Result: The data output file starts downloading.

To delete stored operation data

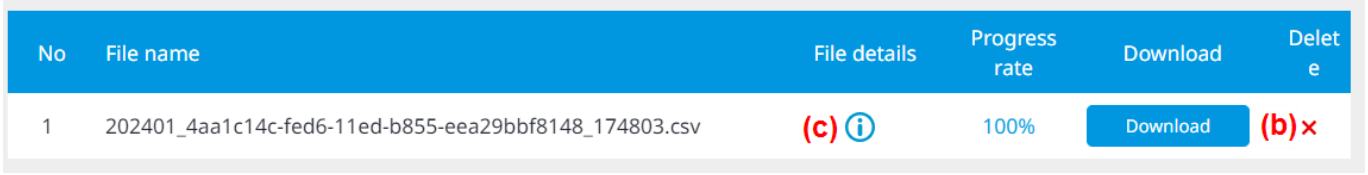
When the operation data for 10 output tasks has been stored, some operation data must be deleted to be able to output new operation data.

1 In the sidebar, go to ENERGY MANAGEMENT MONITORING > OPERATION DATA OUTPUT.

2 Select Output data list.



Result: A list of previously stored operation data is displayed.



3 Click the red cross (b) to delete the operation data. Alternatively, click the information icon (c) to go the details of that operation data output task.

4 Click Delete data output and confirm in the pop-up window.

Export format

The file name of the output file follows a specific naming scheme (`YYYYMM_Pattern name_HHMMSS.csv`). The resulting Excel file contains the following data:

Data	Decription
Measurement date	Date and time when the value of each piece of equipment was measured. The interval between measurements is defined when creating the operation data output pattern (5, 10, 30 or 60 minutes). See "4.6.9 Pattern settings" [▸ 104] for more information. When using an automatically generated pattern for a site, the interval is 5 minutes by default.
Energy consumption[a]	Energy consumption of the outdoor unit (in kWh) or meter (Pi, External Pi or virtual Pi, in kWh or m^3) selected in "4.6.9 Pattern settings" [▸ 104].

Data	Decription
Analog value[a]	Analog values for indoor units: outdoor temperature (°C), indoor temperature (°C), setpoint (°C).

[a] Depending on how many units and pieces of equipment are selected in the pattern settings, more columns may be present in the Excel file.

4.6.9 Pattern settings

Daikin Cloud Plus uses patterns in order to visualise and/or output data on certain pages. Patterns can be seen as templates that define the graph output. A pattern combines several settings for the graph output, such as specific energy consumption preferences. Additionally, a pattern specifies which units the pattern should apply to. The following pages can make use of patterns in order to visualise or output data:

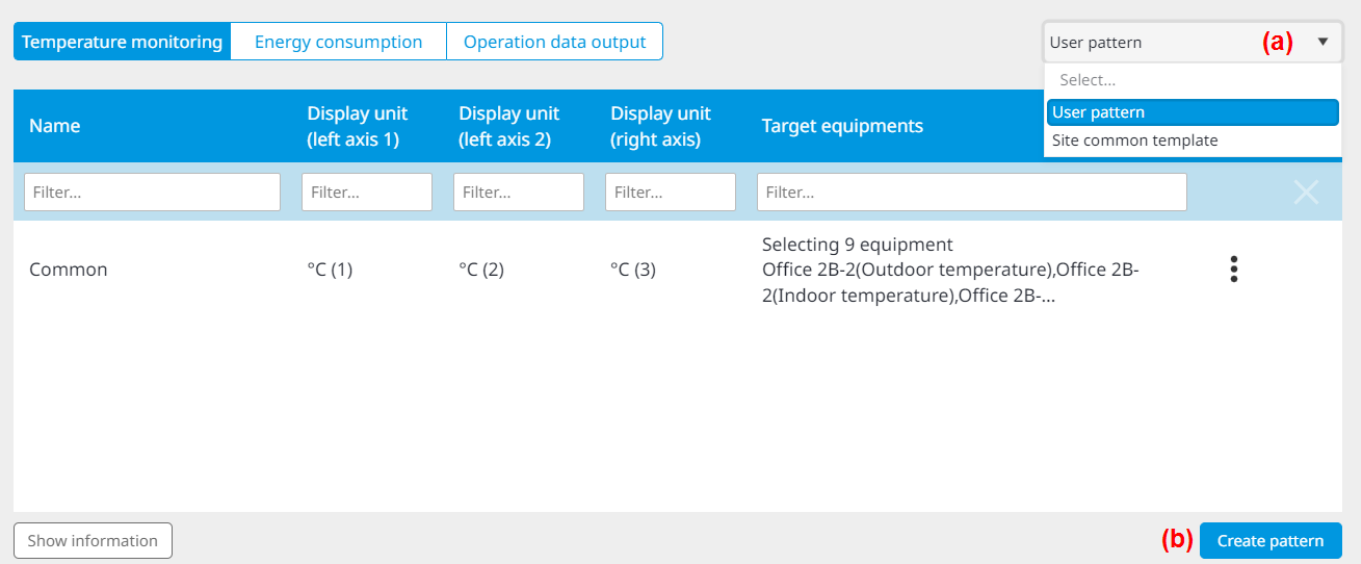
- "4.6.1 Temperature monitoring" [▸ 79]
- "4.6.2 Energy consumption" [▸ 83]
- "4.6.8 Operation data output" [▸ 99]

Patterns can be created on both user and site level. User patterns are linked to the user that created the pattern. This means that other users that may have access to the same site will not be able to select user created patterns of other users in order to visualise or output data for that site. In this case, a site pattern (Site common template) can be created to make it available to all users that have access to the site.

Page	Maximum number of patterns	
	User pattern	Site pattern
"4.6.1 Temperature monitoring" [▸ 79]	20 per user	20 per site
"4.6.2 Energy consumption" [▸ 83]	50 per user	50 per site
"4.6.8 Operation data output" [▸ 99]	20 per user	20 per site

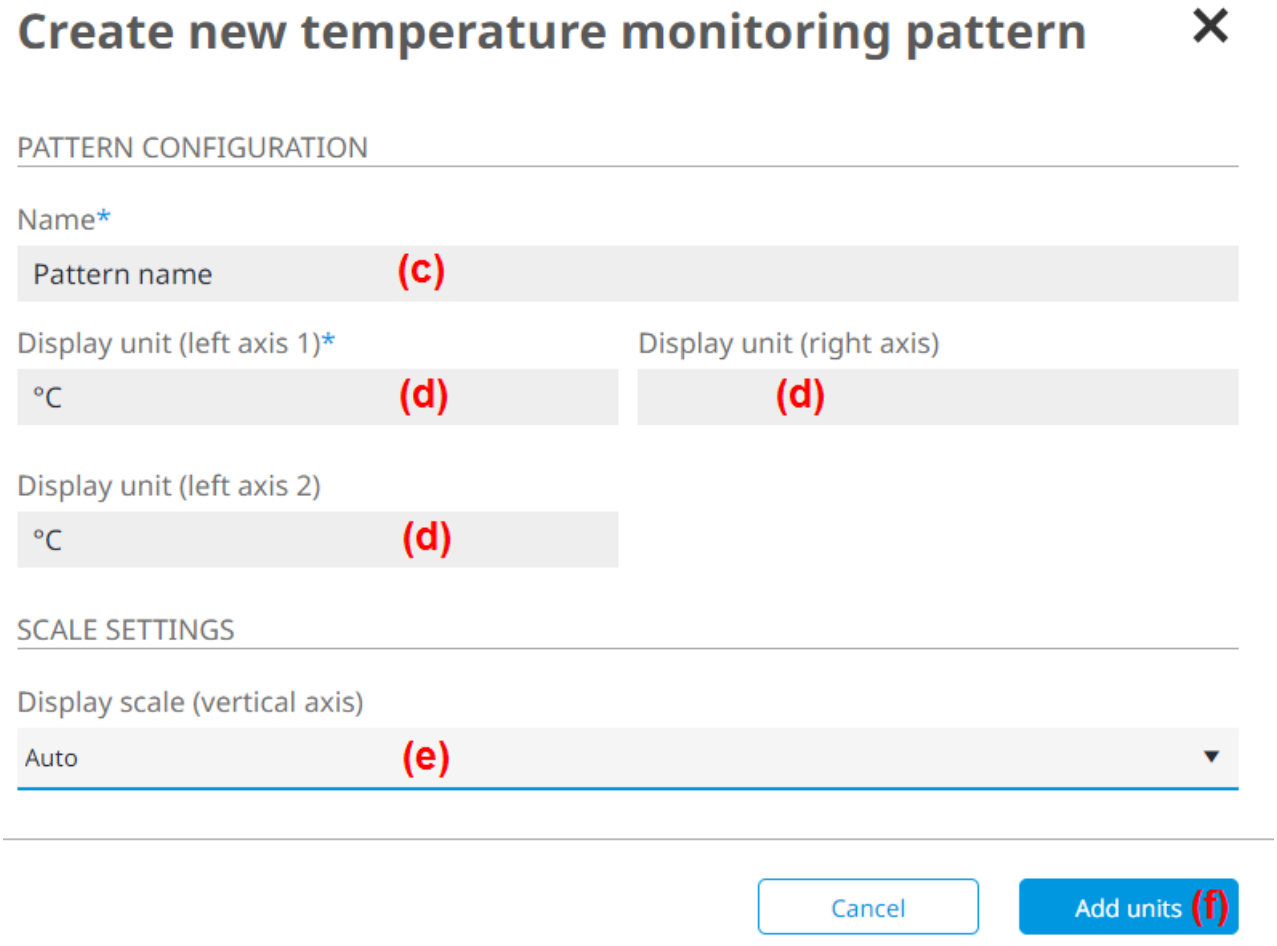
To create a pattern for temperature monitoring

1. In the sidebar, go to ENERGY MANAGEMENT MONITORING > PATTERN SETTINGS.
2. Select the Temperature monitoring tab.
3. From the drop-down list (a), select whether you want to create a User pattern or a Site common template.



4 Select Create pattern (b).

Result: A settings panel appears on the right side of the page.



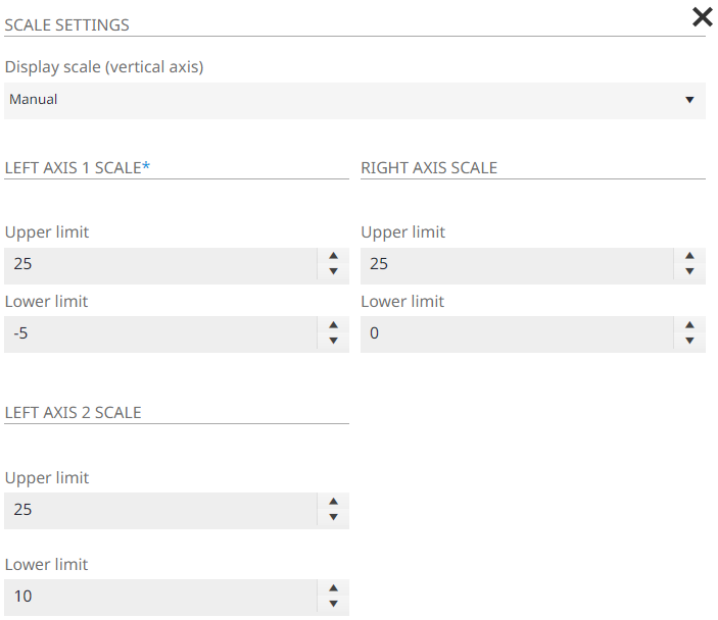
5 Enter a Name (c) for the pattern.

6 Enter the Display unit for the axes you want to include in the temperature graph (d). The display unit is the text that will be displayed on the axes when the graph is generated.

INFORMATION

You can define up to 3 axes (2 left, 1 right), but at least 1 axis must be defined to create the pattern. You must ALWAYS enter a display unit for Left axis 1, however the other axes can be left blank if they are not required. Fields that are left blank will be ignored.

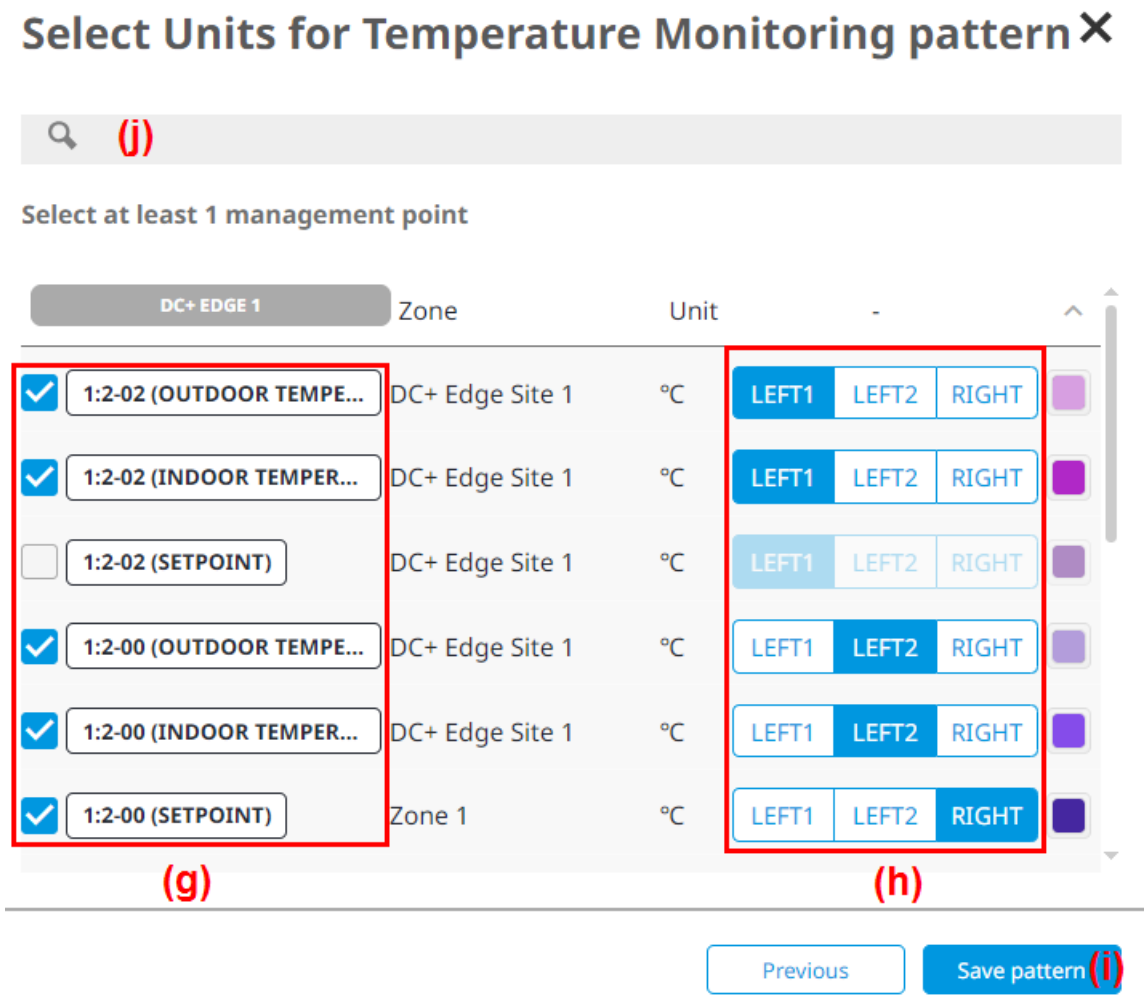
7 Choose a display scale for the vertical axis from the drop-down list (e).

Display scale	Description
Automatic	The vertical axes of the graph are scaled automatically according to the values included in the graph.
Manual	Manually define how the vertical axes of the graph are scaled by setting upper and lower limits (–9999~9999) for every axis. The lower limit value must always be lower than the upper limit. You can enter a value for every limit or use the arrows next to every field to increase or decrease the value. The fields for axes that are not defined can be left blank. 

8 Click Add units (f).

Result: A list of units appears. This list includes all the units that belong to sites you have access to.

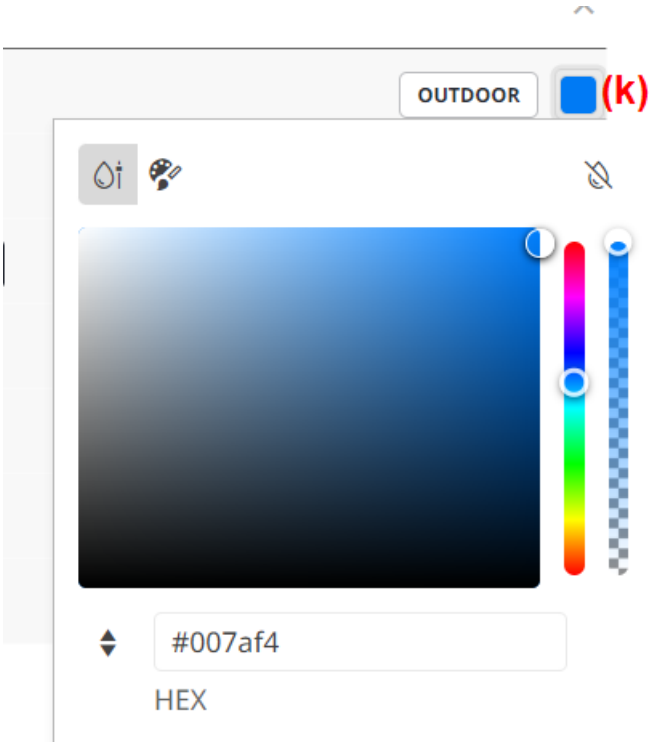
9 Select the check boxes of the unit data (g) you want to include in the graph. Then select on which axis (h) to display the data. For every unit, you can select the outdoor temperature, indoor temperature, and setpoint independently. When you select an item, a graph colour is assigned automatically.



INFORMATION

Up to 20 items can be included in the pattern across all axes. If more than 20 items are selected, you will NOT be able to save the pattern.

10 To change the graph display colour for a selected item, click the colour (k) to open the colour picker. Select a colour, then click anywhere outside of the colour picker to confirm the chosen colour.



11 To find units more easily, use the search bar (j) to search on unit name.

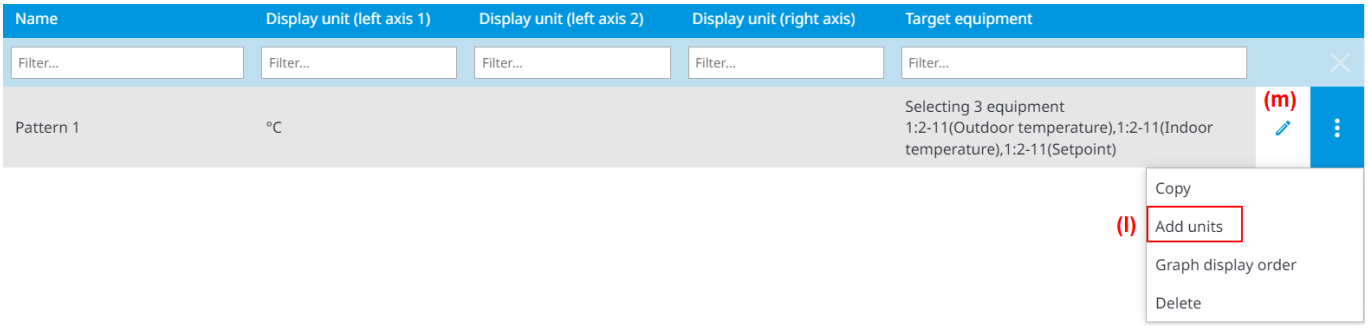
12 Click Save pattern (i).

13 Select Yes in the pop-up window.

Result: The pattern is created.

14 If you want to include more unit data in the graphs after the pattern has already been created, click the vertical ellipsis of the pattern and click Add units (l).

Result: A settings panel appears on the right side of the page.



15 Modify which data to include in the graph, then save the pattern again.

Result: The unit data is added to the pattern.

16 To edit the pattern name, display units, or to modify the axis scale settings, hover over the pattern and click the pencil icon (m).

Result: A settings panel appears on the right side of the page.

17 Modify the pattern settings, then save the pattern again.

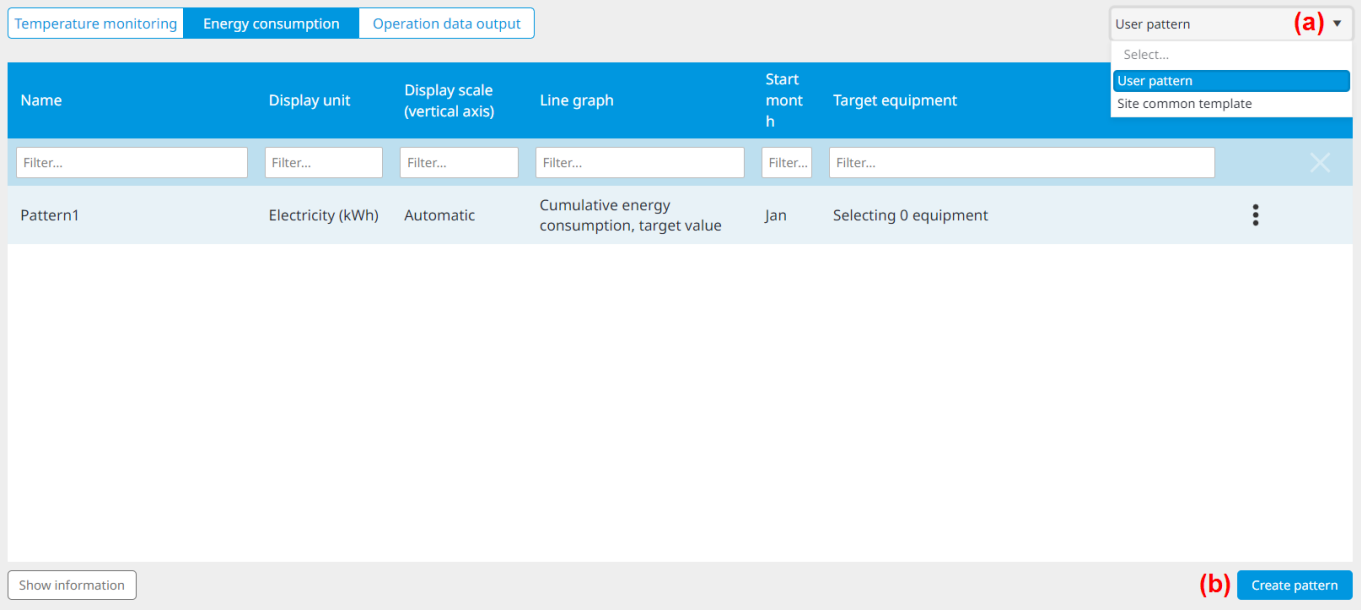
Result: The pattern is ready to be used. See "4.6.1 Temperature monitoring" [▸ 79] for more information.

To create a pattern for energy consumption

1 In the sidebar, go to ENERGY MANAGEMENT MONITORING > PATTERN SETTINGS.

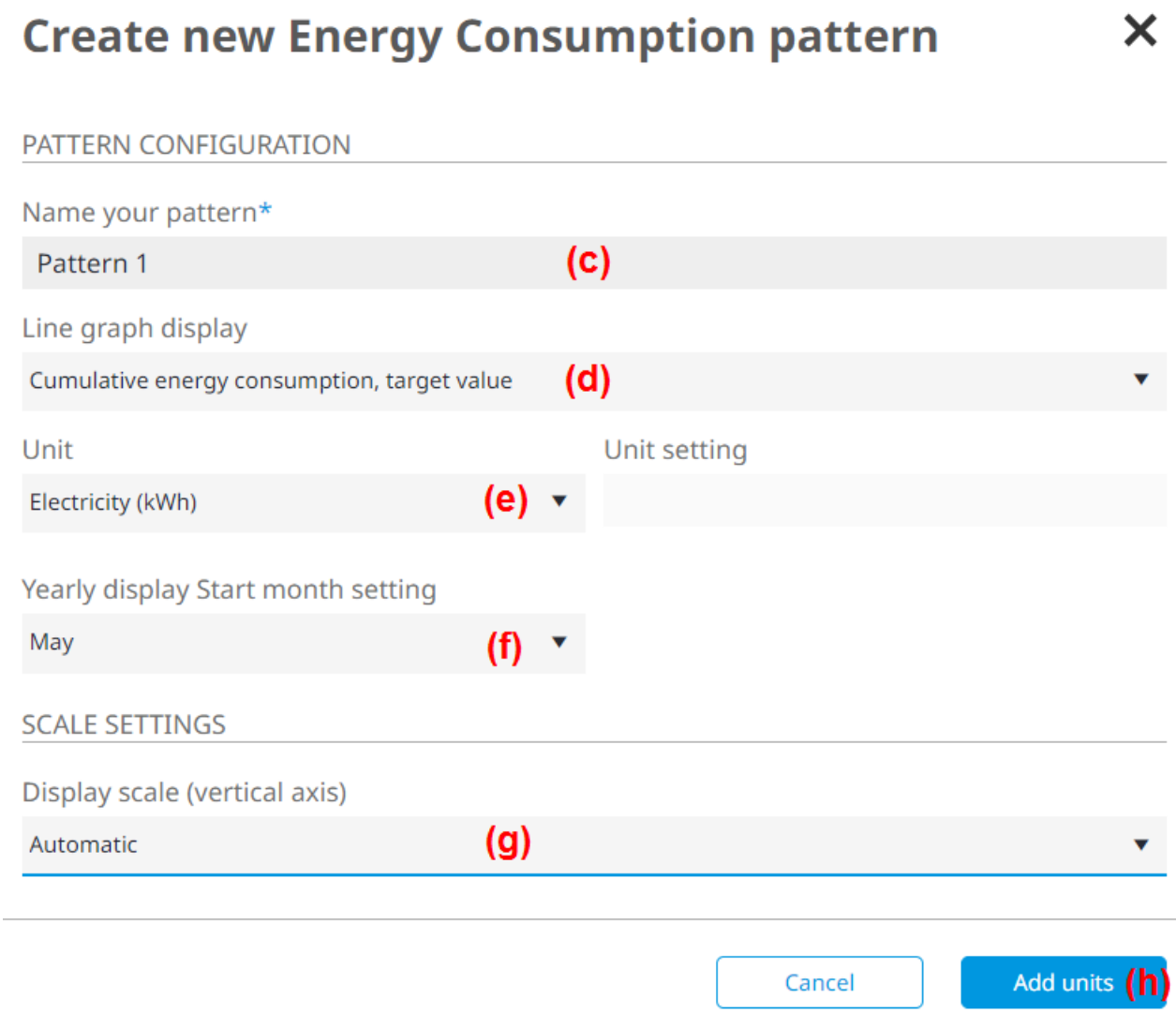
2 Select the Energy consumption tab.

3 From the drop-down list (a), select whether you want to create a User pattern or a Site common template.



4 Select Create pattern (b).

Result: A settings panel appears on the right side of the page.



5 Enter a Name (c) for the pattern.

6 From the drop-down list, select the type of line graph (d) to display.

Line graph display type	Description
Cumulative energy consumption, target value	In addition to the energy consumption values, the graph displays both the cumulative energy consumption as well as the target energy consumption values as configured in Target energy settings. See "To manage the energy target settings" [▸ 117] for more information.
Outdoor temperature	In addition to the energy consumption values, the graph displays the outdoor temperature.

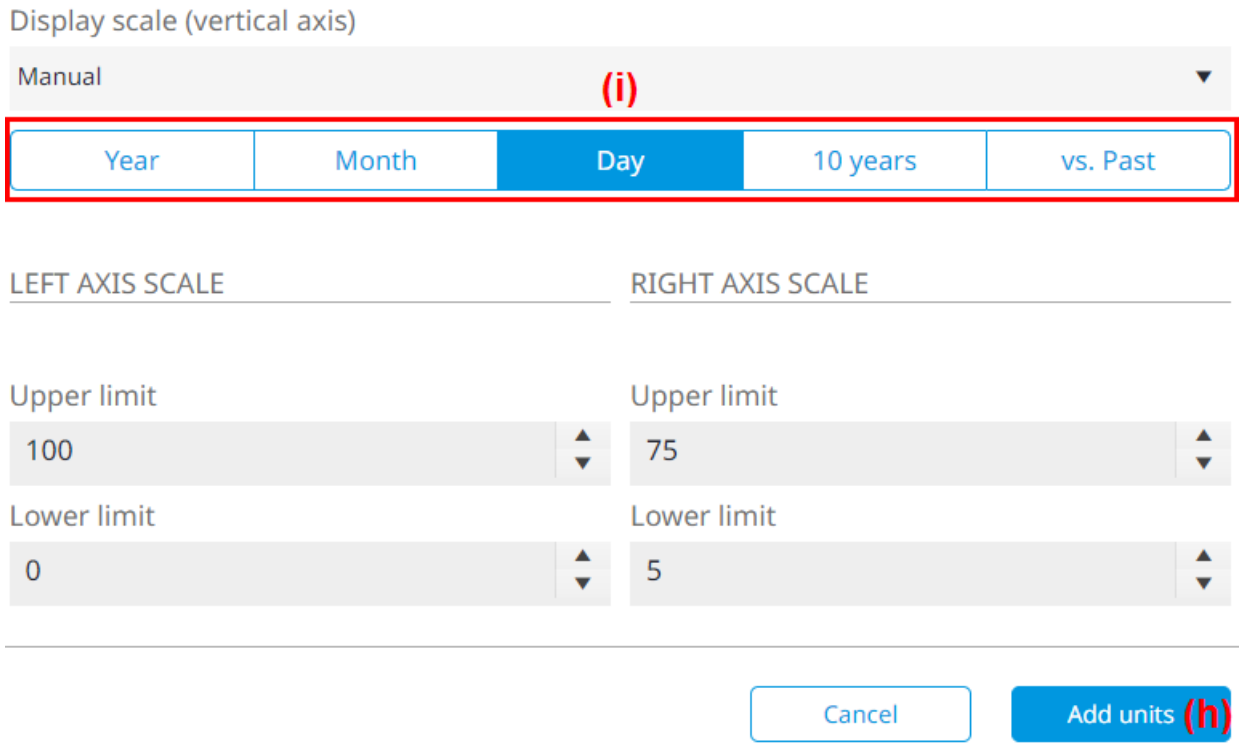
7 Select a Display unit (e) from the drop-down list. You can choose between Electricity (kWh), Gas (m^3), Water (m^3), and Other. When you select Other, enter a display unit in the Display unit field.

8 Select the starting month for the graph from the drop-down list (f).

9 Choose a display scale for the vertical axis from the drop-down list (g).

Display scale	Description
Automatic	The vertical axes of the graph is scaled automatically according to the values included in the graph.
Manual	Manually define how the vertical axes of the graph are scaled by setting upper and lower limits. You can enter a value for every limit or use the arrows next to every field to increase or decrease the value.

10 In case the display scale is set to Manual, set the upper and lower limits for the vertical axes for every period tab (i).



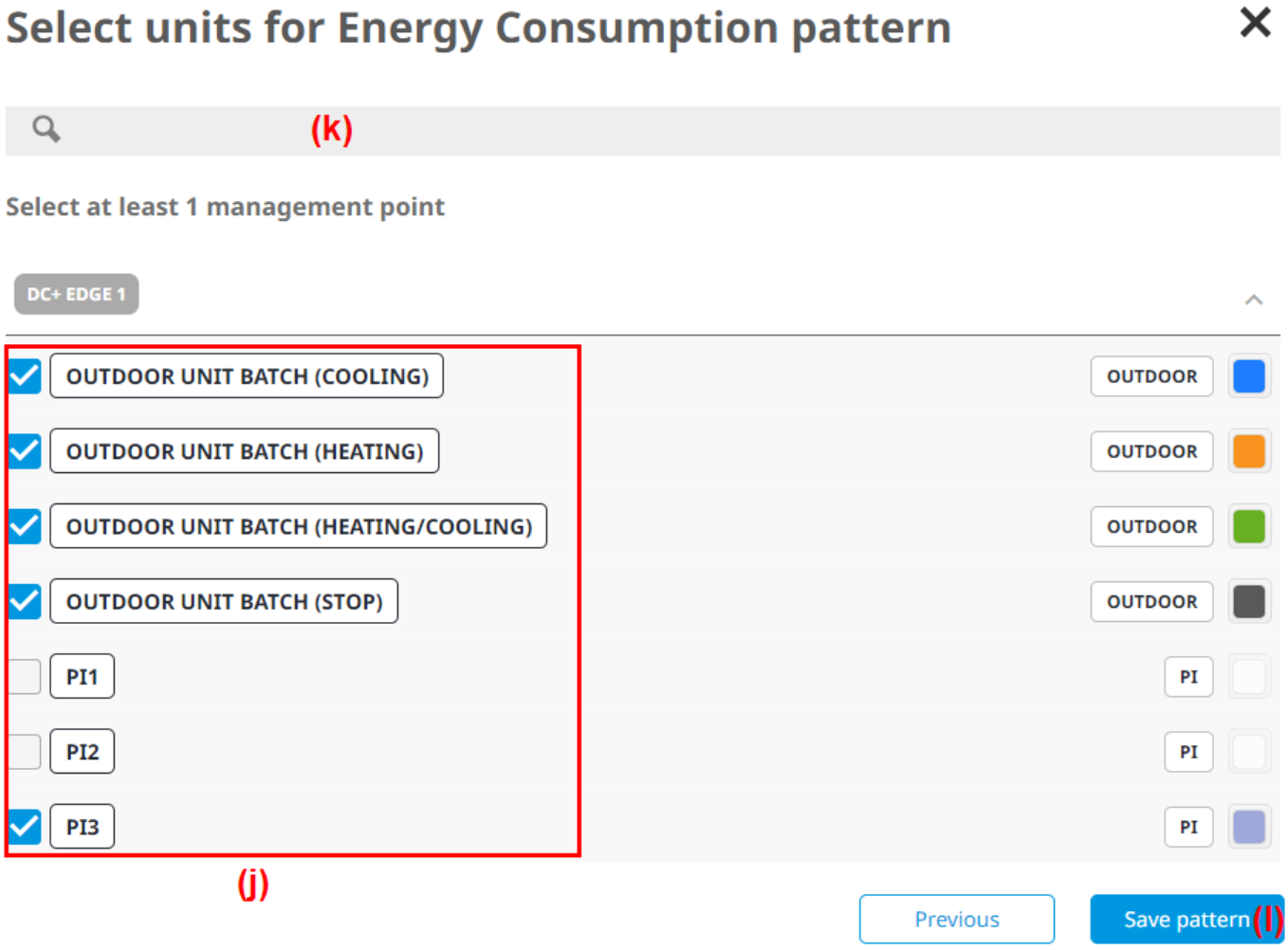
Note that the data visualised on both axes in the graph on the Energy consumption page will be presented differently depending on the selected combination of line graph display type and period tab (Year, Month, Day, 10 years, vs. Past). Refer to the table below in order to determine how the data is visualised for every possible combination, and take this into account when manually setting limits.

Line graph display type	Axis	Value	Period tab				
			Year	Month	Day	10 years	vs. Past
Cumulative energy consumption, target value	Left vertical axis	Energy consumption	Monthly	Daily	Hourly	Yearly	Monthly
	Right vertical axis	Cumulative energy consumption	For 1 year	For 1 month	For 1 day	For 10 years	For 1 year

Line graph display type	Axis	Value	Period tab				
			Year	Month	Day	10 years	vs. Past
Outdoor temperature	Left vertical axis	Energy consumption	Monthly	Daily	Hourly	Every year	Monthly
	Right vertical axis	Outdoor temperature	–	–	–	–	–

11 Click Add units (h).

Result: A list of equipment appears. This includes all the equipment that belongs to sites you have access to.

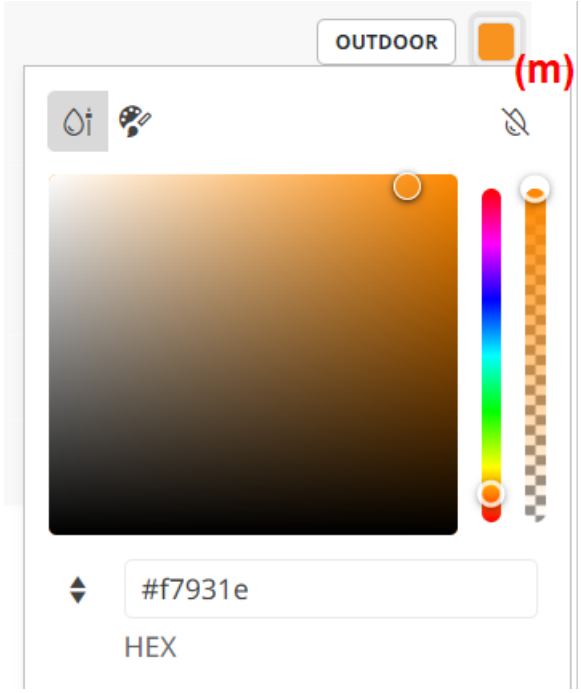


12 Select the checkboxes (j) of the unit or meter data you want to include in the graph. When you select an item, a graph colour is assigned automatically.

INFORMATION

Selecting any energy consumption data will automatically select all 4 types of data for that outdoor unit (heating, cooling, heating/cooling and stop). Up to 50 items can be included in the pattern. If more than 50 items are selected, you will NOT be able to save the pattern. Note that every type of energy consumption data counts as 1 item, so selecting the energy consumption data for 1 outdoor unit counts as 4 items.

13 To change the graph display colour for a selected item, click the colour (m) to open the colour picker. Select a colour, then click anywhere outside of the colour picker to confirm the chosen colour.



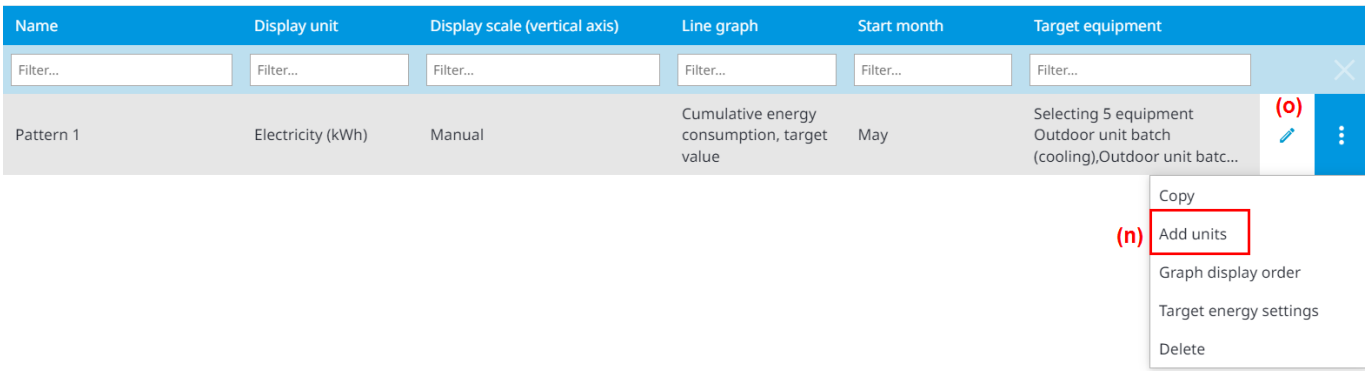
14 To find units more easily, use the search bar (k) to search on unit name.

15 Click Save pattern (l).

16 Select Yes in the pop-up window to confirm.

Result: The pattern is created.

17 If you want to include more equipment data in the graphs after the pattern has already been created, click the vertical ellipsis of the pattern and click Add units (n).



Result: A settings panel appears on the right side of the page.

18 Modify which data to include in the graph, then save the pattern again.

Result: The equipment data is added to the pattern.

19 To edit the pattern settings, hover over the pattern and click the pencil icon (o).

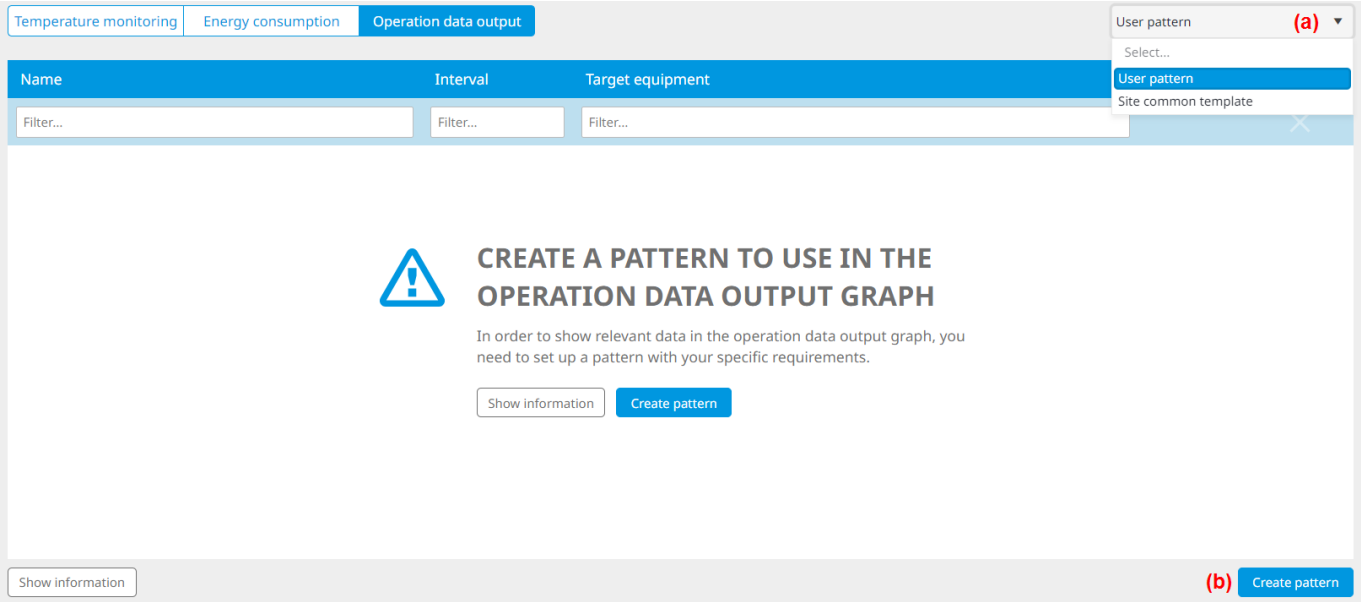
Result: A settings panel appears on the right side of the page.

20 Modify the pattern settings, then save the pattern again.

Result: The pattern is ready to be used. See "4.6.2 Energy consumption" [▸ 83] for more information.

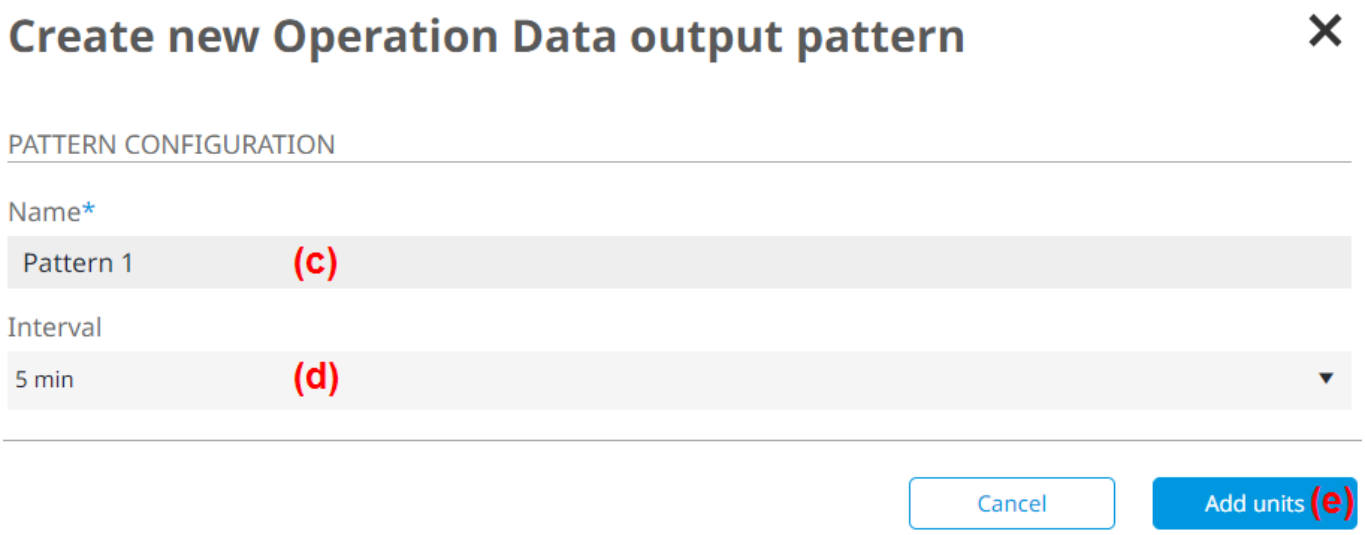
To create a pattern for operation data output

1. In the sidebar, go to ENERGY MANAGEMENT MONITORING > PATTERN SETTINGS.
2. Select the Operation data output tab.



3. From the drop-down list (a), select whether you want to create a User pattern or a Site common template.
4. Select Create pattern (b).

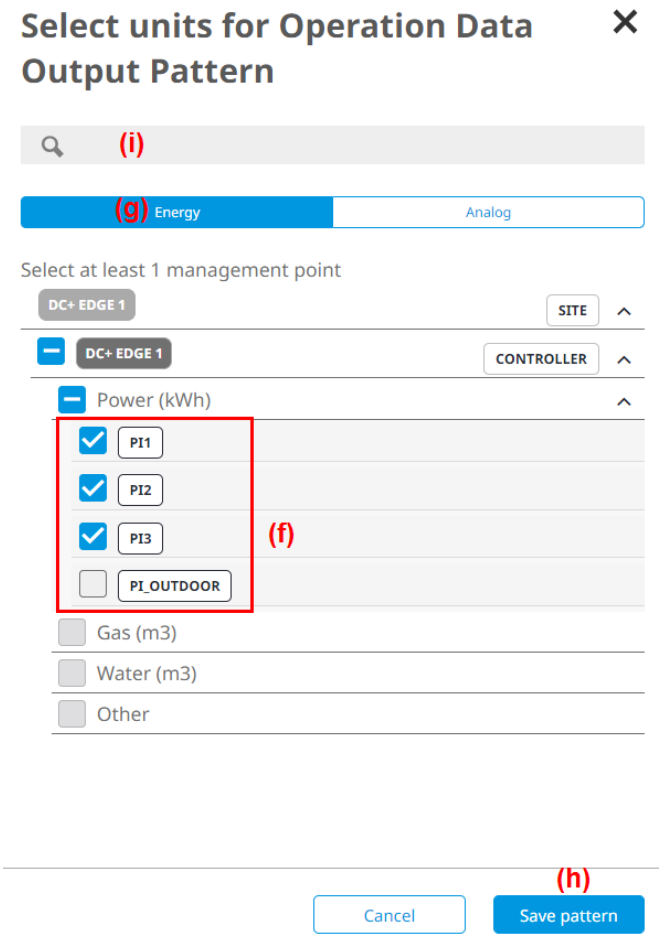
   Result: A settings panel opens on the right side of the page.

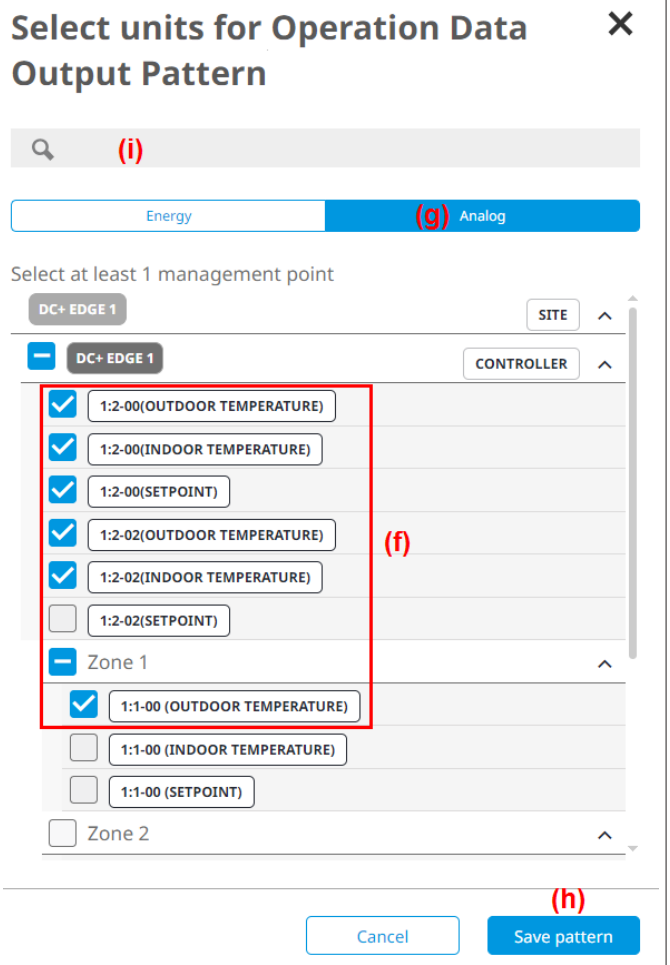


5. Enter a Name (c) for the pattern.
6. Choose a data output Interval from the drop-down list (d). This value determines how frequently operation data is output: every 5 minutes, 10 minutes, 30 minutes or 60 minutes.
7. Click Add units (e).

   Result: A list of equipment appears. This list includes all the equipment that belongs to sites you have access to.
8. For each tab (g), select the checkboxes (f) of the equipment you want to include in the data output pattern. Click the downward facing arrow next to the site or controller name to expand all options.

Energy	ANALOG
This tab lists all outdoor units and meters (Pi, External Pi, virtual Pi).	This tab lists all indoor units and External Ai.





INFORMATION

Up to 50 items can be included in the pattern. If more than 50 items are selected, you will NOT be able to save the pattern. It is also NOT possible to select items that belong to different sites. If any item is selected under the Energy tab, you will only be able to select items from that same site in the ANALOG tab.

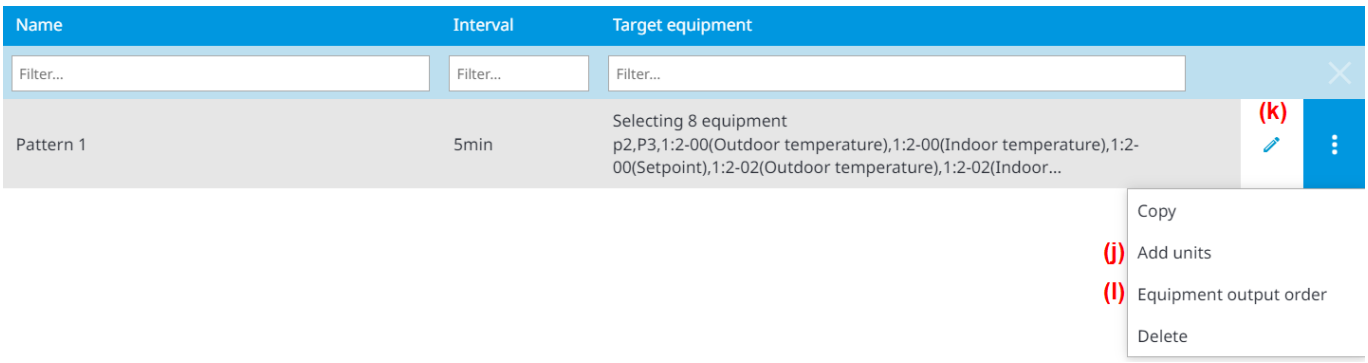
9 To find equipment more easily, use the search bar (i) to search on equipment name.

10 Click Save pattern (h).

11 Select Yes in the pop-up window to confirm.

Result: The pattern is created.

12 If you want to include more equipment after the pattern has already been created, click the vertical ellipsis of the pattern and select Add units (j).



Result: A settings panel appears on the right side of the page.

13 Modify which data to include in the data output pattern, then save the pattern again.

Result: The equipment data is added to the pattern.

14 To edit the pattern settings, hover over the pattern and click the pencil icon (k).

Result: A settings panel appears on the right side of the page.

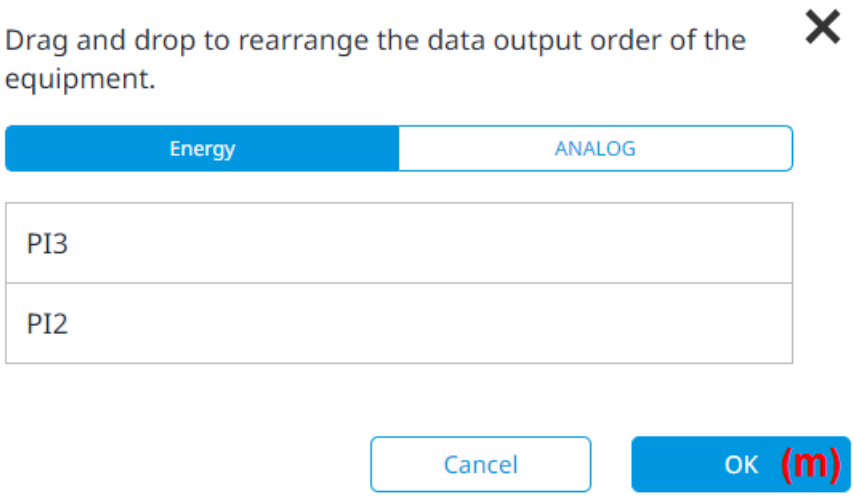
15 Modify the pattern settings, then save the pattern again.

Result: The pattern settings are saved.

16 Optional: to change the data output order, click the vertical ellipsis of the pattern and select Equipment output order (l).

Result: A settings panel appears on the right side of the page.

17 For both the Energy and the ANALOG tab, drag and drop the equipment to rearrange it in the desired order.



INFORMATION

The order in which equipment is arranged here (top to bottom) will determine the order of operation data in the resulting Excel file (left to right) when exported. For both the Energy and ANALOG tab, the item at the top will be the leftmost item. The Energy data is always displayed on the left, compared to ANALOG data.

18 Click OK to confirm (m).

Result: The data output order has been changed. The pattern is ready to be used. See "4.6.8 Operation data output" [▸ 99] for more information.

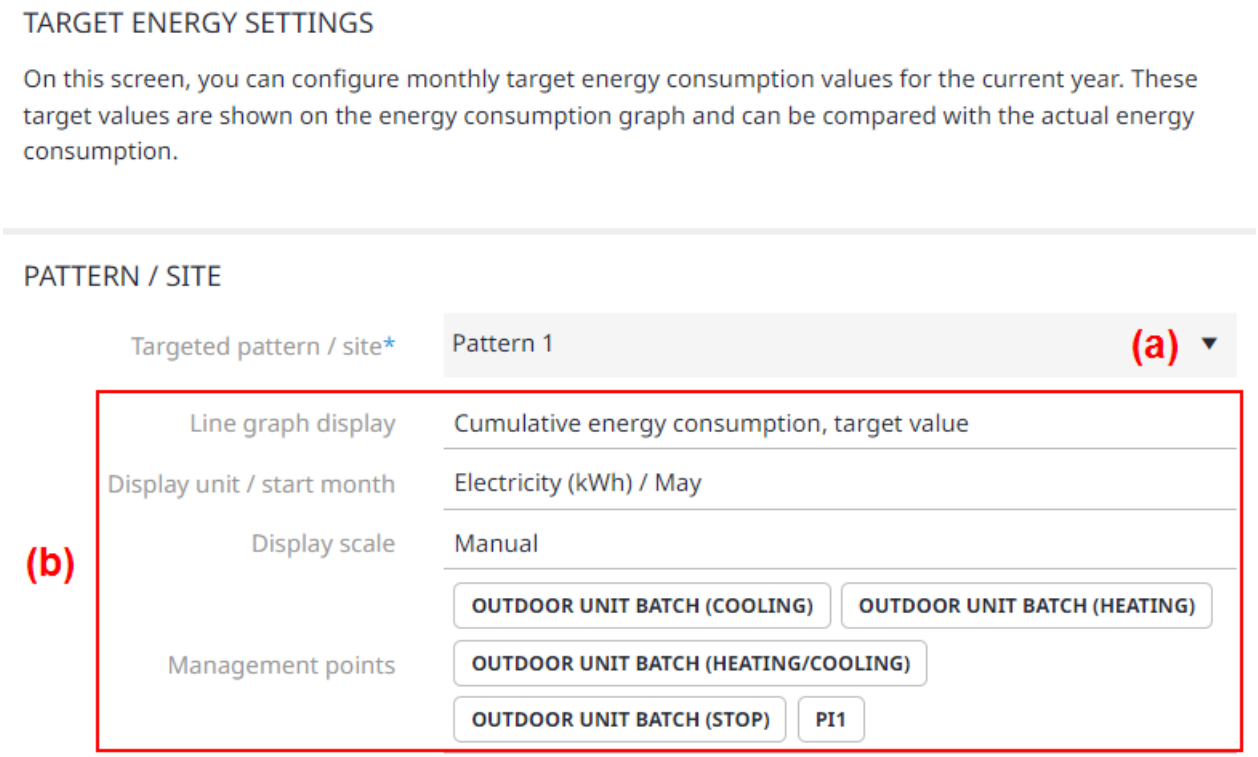
4.6.10 Target energy settings

On the Target energy settings page you can configure monthly target energy consumption values for the current year. These target values can serve as a reference and are indicative only. These values can then be displayed in the Energy consumption page. See "To visualise energy consumption" [▸ 83] for more information.

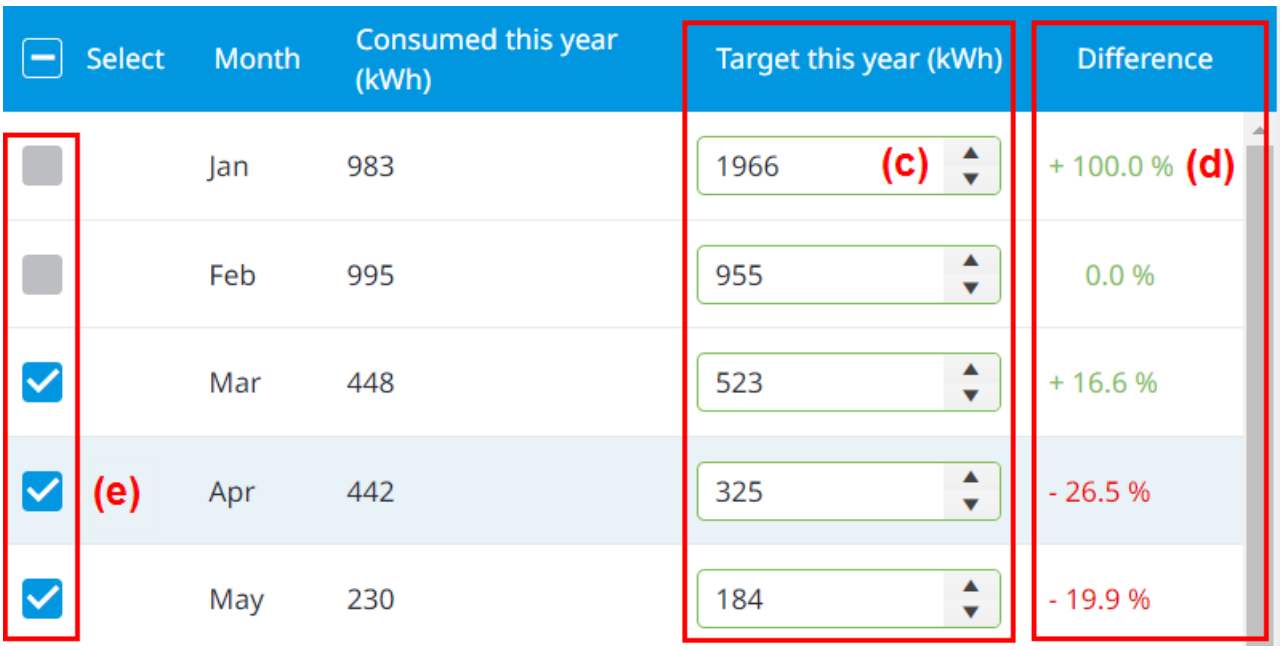
To manage the energy target settings

> **INFORMATION**
> Target energy settings are NOT available to operators.

1. In the sidebar, go to ENERGY MANAGEMENT MONITORING > TARGET ENERGY SETTINGS.
2. From the drop-down list (a), select a pattern.



Result: The details of the pattern (b) are displayed. The table on the right side of the page updates once a pattern is selected. The amount of kWh consumed this year for each month is displayed.

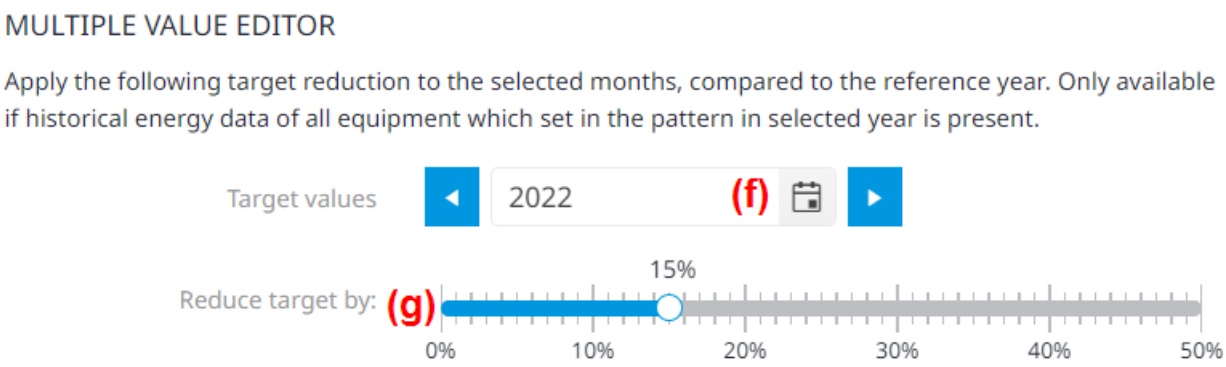


3 Determine a target for 1 month by editing the Target this year (c) column. Use the up and down arrows to adjust the value, or enter a value in the field.

Result: The difference is automatically calculated (d).

4 To apply a target reduction to multiple months at once (as a percentage), select the checkboxes of the months (e).

5 If desired, select another reference year. Use the date picker (f) or the left and right arrows to select a reference year.



6 Apply a target reduction (in percentage) by moving the slider (g).

Result: For the selected months, the targets and differences automatically adjust.

7 If you want to display the target energy consumption values on the Energy consumption page, select Yes. If you want to hide the target energy consumption values again, select No.

8 Click Save.

Result: Target energy consumption values are now displayed on the Energy consumption page.

4.7 Energy management control

4.7.1 Demand control

About demand control

Demand control is a control function intended to limit the maximum power demand of a building (for example, a site that makes use of heavy machinery or a factory) with the goal of reducing electricity usage fees. In some countries, utility or grid providers may utilise peak demand pricing strategies in order to reduce peak power demand during specific times. Demand control considers the total energy consumption of a building or site, and aims to limit the power consumption of any HVAC units connected to the DC+ Edge, prioritising the demand required by other machines on site. As a result, Daikin Cloud Plus is able to suppress the total power demand as to not exceed the target demand value. In combination with PV installations, demand control can help flatten peaks in power demand, so that the PV installation can cover electricity demand of a building more efficiently.

Demand control will interfere when a set limit is likely to be exceeded, controlling units accordingly as to not exceed the target demand value. This is done by inputting pulse signals from a power meter or pulse converter to the Pi port of the DC+ Edge.

Note that while demand control aims to control units as to not exceed the target demand value, comfort may be impaired when excessive control is performed on the targeted units. To limit discomfort as much as possible, however, control is performed as to not exceed the target energy value, while keeping actual energy consumption close to the target energy value.

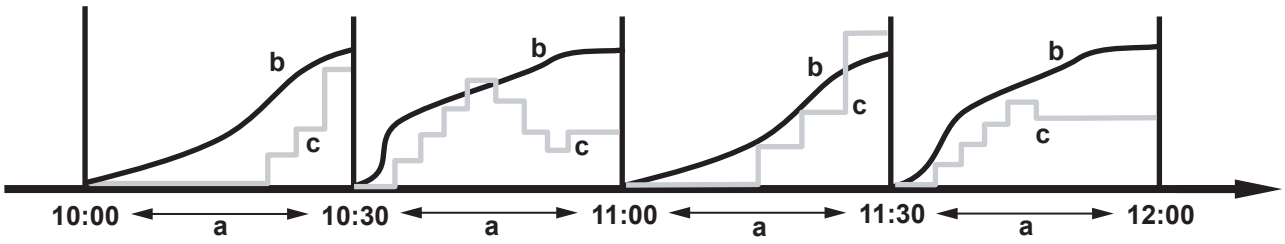
Demand period and load cutoff levels

Demand control operates in periods of 30 minutes, and every 30 minutes a new period starts. A single period of 30 minutes is a demand period. The trigger for the start of the period can be configured (see "Control settings" [▸ 135]), but the duration of a demand period always remains a fixed 30 minutes.

During every demand period, the DC+ Edge continuously monitors for a demand pulse signal (read out from a Pi), which it uses to determine a load cutoff level so as to not exceed the set target demand value. According to the cutoff level, demand control is performed to suppress power consumption according to the cutoff level.

Up to 8 configurable load cutoff levels are supported. Every 10 seconds, Daikin Cloud Plus checks the current power consumption and whether the target demand value will potentially be exceeded. If this condition is met 6 times in a row, the cutoff level increases by 1. When the cutoff level is increased, but that increase does not sufficiently limit power consumption according to the set target value, the cutoff level is increased by 1 once more.

The higher the cutoff level, the more severe the actions should be configured in order to lower the power consumption. When the target demand value is not in risk of being exceeded 6 times in a row (i.e. for 60 seconds), the cutoff level goes down by 1 instead. This process is repeated for as long as demand control is active. Note that there are settings which also influence when cutoff levels can increase or decrease, such as the return time and cutoff time. For more information, see "Control settings" [▸ 135]. When units are not actively controlled (i.e. the load cutoff level has not increased yet), they are considered to be at level 0. This level is essentially the normal operational state of the unit, where no demand control has been applied yet.



a Demand period (fixed 30 minutes)
b Power consumption
c Cutoff level over time

Daikin Cloud Plus can control units in the following ways:

- Indoor unit setpoint control
- Outdoor unit capacity control
- On/Off control

All types of control are applied to control groups, which contain the actual units that are under demand control. All types of control support up to 8 load cutoff levels, which are fully configurable. For more information about the configuration of control groups, see "Control group settings" [▸ 124].

Units under demand control

You can recognise a unit that is currently under demand control in the equipment list by the demand control icon that is displayed on the equipment tile:

If demand control is enabled, but the unit is not currently controlled by demand control (is at level 0), then the icon will not appear on the equipment list tile. The icon only appears when the load cutoff level is 1 or higher.

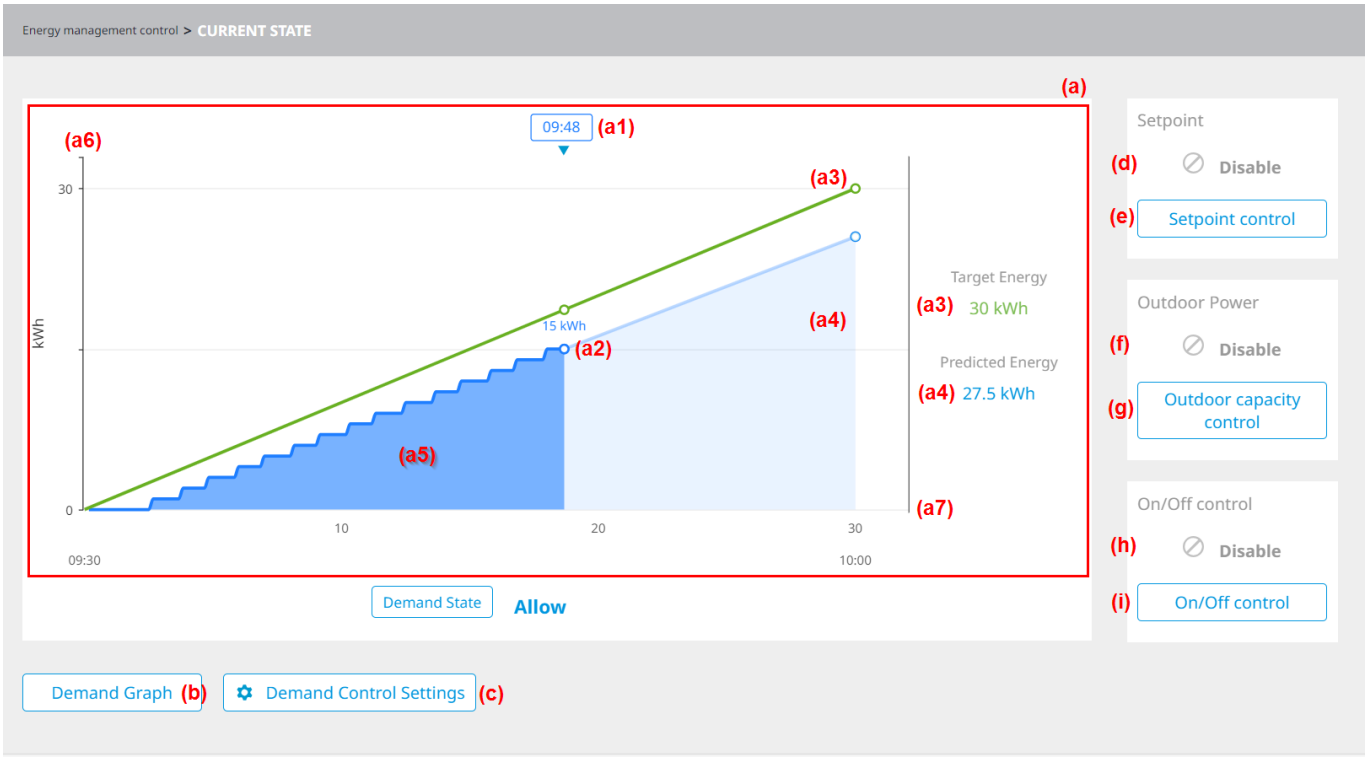
INFORMATION

Units under setpoint control can still have their setpoint changed by schedules or interlock programs. Manual changes to the setpoint (via a remote controller, for example) are also still possible. However, setpoint control will overrule the setpoint again and alter it to a value based on the reference setpoint (i.e. level 0, before any demand control is applied) when a load cutoff level is triggered.

Note that the way demand control is set up depends greatly on the site, which units are included in the system, and the location of these units. While demand control settings are configured within Daikin Cloud Plus, some preparatory work (e.g. connecting the pulse meter or pulse converter to the DC+ Edge, configuring and registering the Pi in Daikin Cloud Plus Commissioning) is required before demand control can be configured. For more information, see the installer reference guide.

Current state

This page provides an overview of the current state of demand control of the system. The page consists out of the following items:



Item	Description
(a) Current state graph	Displays a graph with details about the energy consumption for the current demand period (30 minutes): ▪ (a1) Current time ▪ (a2) Current kWh value ▪ (a3) Target Energy consumption: the target is half of the value (in kWh) set in "Control settings" [▸ 135], since the demand period is only 30 minutes. ▪ (a4) Predicted Energy consumption (after demand control is performed) ▪ (a5) Actual energy consumption ▪ (a6) kWh axis ▪ (a7) Time axis (minutes) The graph quickly shows the current state of demand control. The blue regions (a4+a5) show the past and predicted energy consumption for the current demand period. Whenever the target energy consumption (a3) is at risk of being exceeded, a higher cutoff level for one or more of the control methods is triggered (e.g. the indoor unit setpoint is adjusted). As a result, the energy consumption (a5) is able to stay below the target energy consumption (a3). Note that the actual and predicted energy consumption stays close to, but always slightly below the target energy consumption in order to limit discomfort. The graph is refreshed automatically every minute.
(b) Demand Graph button	Opens the demand graph page. Here you can view and export historical demand data. See "To view past demand values" [▸ 122] for more information.
(c) Demand Control Settings button	Takes you to "Control settings" [▸ 135], where you can configure the time synchronisation method, as well as set the target demand value (in kW). On this page, you can also set values for the return time and cutoff time.
(d) Setpoint control status	Displays the current control state of Setpoint control. If enabled, shows the current cutoff level.

Item	Description
(e) Setpoint control button	Takes you to "Control group settings" [▶ 124], where Setpoint control can be configured for each control group.
(f) Outdoor Power status	Displays the current control state outdoor capacity control. If enabled, shows the current cutoff level.
(g) Outdoor Capacity Control button	Takes you to "Control group settings" [▶ 124], where the Outdoor Capacity Control can be configured for each control group.
(h) On/Off control status	Displays the current control state of On/Off control. If enabled, shows the current cutoff level.
(i) On/Off control button	Takes you to "Control group settings" [▶ 124], where On/Off control can be configured for each control group.

To view past demand values

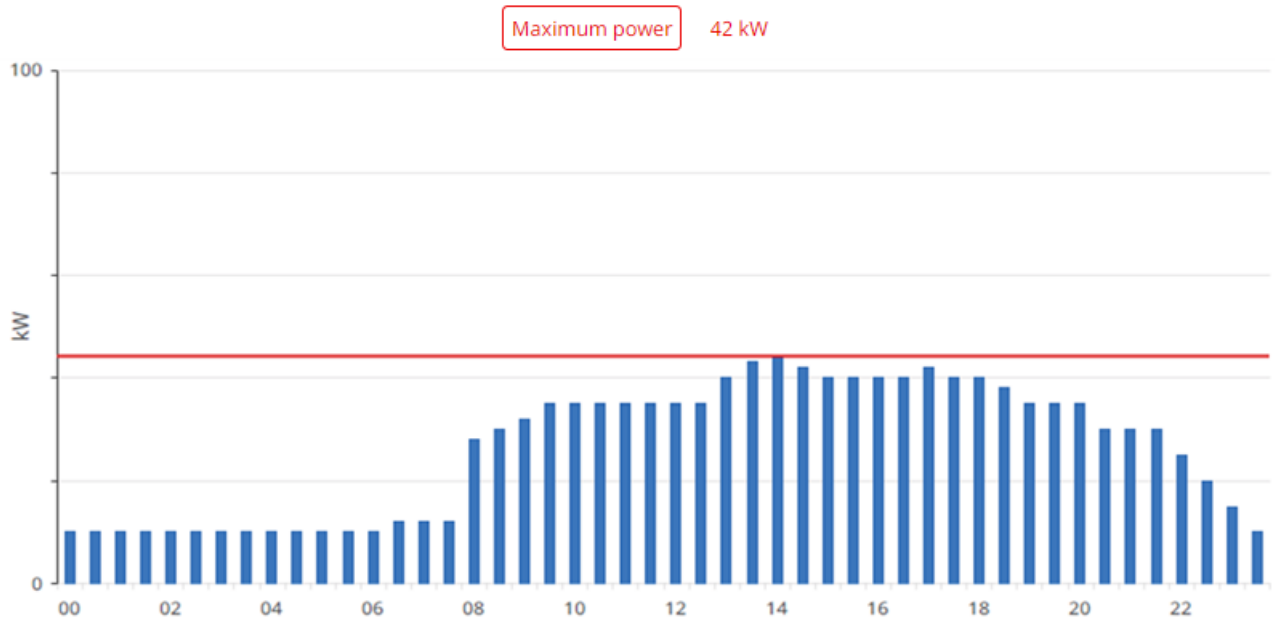
1 In the sidebar, go to ENERGY MANAGEMENT CONTROL > CURRENT STATE.

2 Click the Demand Graph button.

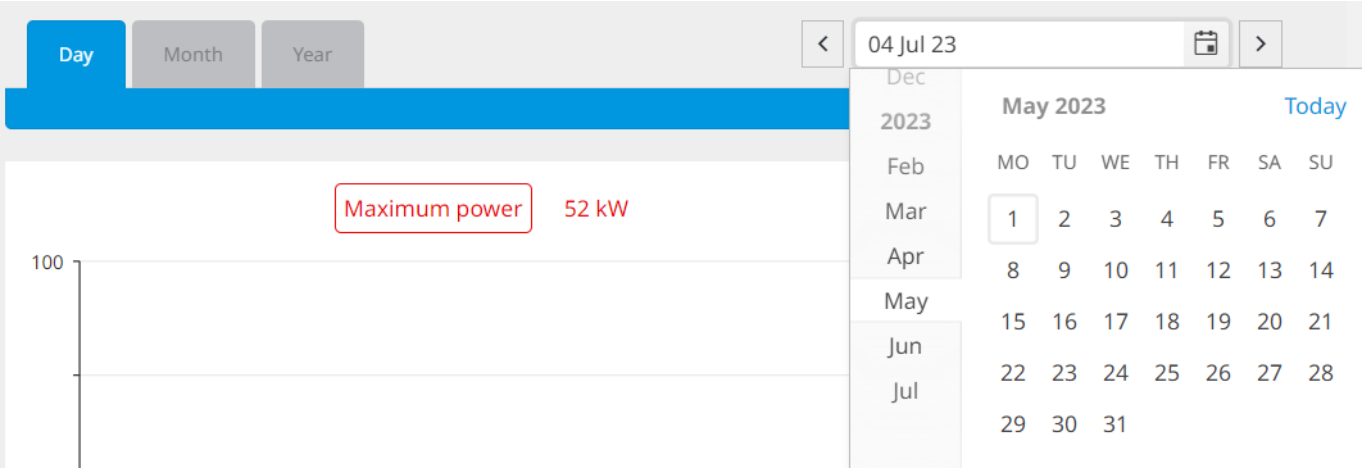
Result: The Demand Graph page is displayed. The graph shows the past demand values for the selected period. The blue bars represent the maximum power demand for each day, month or, year. The red line indicates the maximum power for the selected period, which is also indicated in kW above the graph.

INFORMATION

Since the values represented in the graph are in kW, and not in kWh, the values do NOT represent actual power consumption.



3 Change the visualisation period by selecting any of the tabs (Day, Month, Year). You can specify the exact date by using the calendar picker.



4 Scroll down to find the demand control data in table form. Depending on the period that is selected, more or fewer columns may be visible.

Period	Power (kW)	Target power (kW)	Maximum predicted power (kW)	Maximum cutoff level
00:00	10	60	11	Allow
00:30	10	60	11	Allow
01:00	10	60	11	Allow
01:30	10	60	11	Allow

The table contains the following information:

Column	Description
Period / Day / Month	Displays the data measurement period. Depending on the selected view, the value displayed in this column can be the time (when Day is selected), the day of the month (when Month is selected) or the month number (when Year is selected).
Power (kW)	Power demand value for every demand period. Only visible when the Day view is selected.
Target power (kW)	Target power value for every demand period. Only visible when the Day view is selected.
Maximum predicted power (kW)	Maximum predicted power value for every demand period. Only visible when the Day view is selected.
Maximum cutoff level	Displays the highest cutoff level that was reached for every demand period. Only visible when the Day view is selected.
Maximum power demand (kW)	Maximum power demand value for every day or month, depending on the view (Month or Year).

5 Click the Excel button to download the demand data. This is only possible for daily demand data.

Result: The demand data is exported to an Excel file.

Control group settings

On this page, you can check and configure settings for control groups. You can configure settings for control groups under the following types of control:

Control type	Description
Setpoint control	Set the starting cutoff level, shift amount for each cutoff level, as well as upper limits for cooling and heating. No changes can be made when the setting is enabled. See "To configure setpoint control" [▸ 124].
Outdoor Capacity Control	Set the starting cutoff level and the capacity value for each cutoff level. No changes can be made when the setting is enabled. See "To configure outdoor capacity control" [▸ 130].
On/Off control	Set the starting cutoff level for On/Off control. No changes can be made when the setting is enabled. See "To configure on/off control" [▸ 132].

Each type of control supports up to 8 load cutoff levels that can be configured. Based on current and previous power consumption, as well as the target value (in kW), the DC+ Edge decides the current load cutoff level that is applied. The levels work over a demand period of 30 minutes. Whenever a cutoff level is triggered, units in the control group will respond to the setting associated with that cutoff level. A higher cutoff level denotes a higher degree of control that is applied to units, and thus a lower power consumption.

Example: you configure a setpoint shift of 3°C at level 2, and a capacity of 40% for outdoor units at level 3. While at cutoff level 2, with the temperature shift of 3°C applied, the system triggers cutoff level 3 to limit power consumption more. The outdoor unit is now limited to 40% of its capacity. However, the setpoint shift that was initiated at cutoff level 2 still applies. It is not necessary to reapply the 3°C setpoint shift for level 3. However, because other ways of modifying setpoints are still possible (via the remote controller, schedules, interlock programs, …) it is recommended to also set the value for cutoff level 3 to 3°C as well.

INFORMATION

Units that are targeted by other controls or that are included in other control groups cannot be added to a control group.

INFORMATION

Daikin Cloud Plus supports a predetermined amount of 8 control groups (labeled A~H) maximum (per control type).

To configure setpoint control

You can set up control groups to control the temperature of units by shifting the setpoint depending on the current load cutoff level.

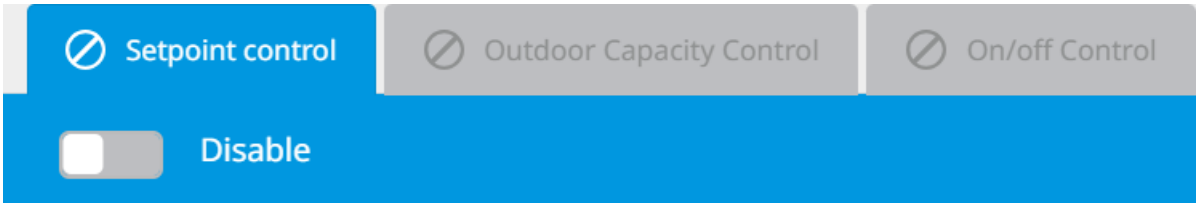
INFORMATION

Units under setpoint control can still have their setpoint changed by schedules or interlock programs. Manual changes to the setpoint (via a remote controller, for example) are also still possible. However, setpoint control will overrule the setpoint again and alter it to a value based on the reference setpoint (i.e. level 0, before any demand control is applied) when a load cutoff level is triggered.

1 In the sidebar, go to ENERGY MANAGEMENT CONTROL > CONTROL GROUP SETTINGS.

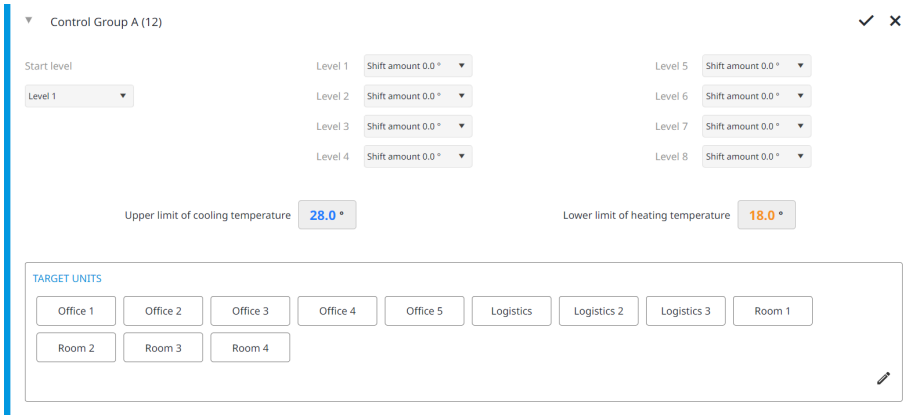
2 Select the Setpoint control tab.

3 If the control is enabled, disable it. When enabled, editing is not possible.

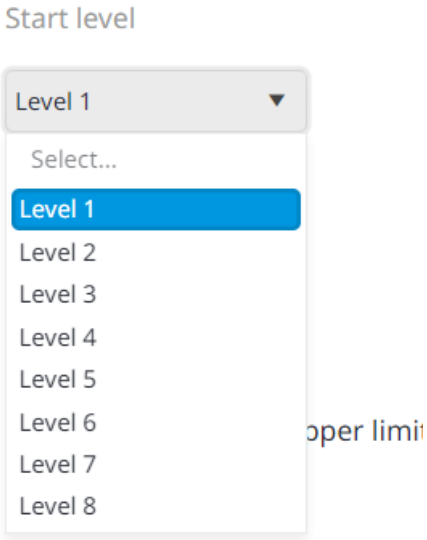


4 Click the downward facing arrow next to a control group to expand the settings for that control group.

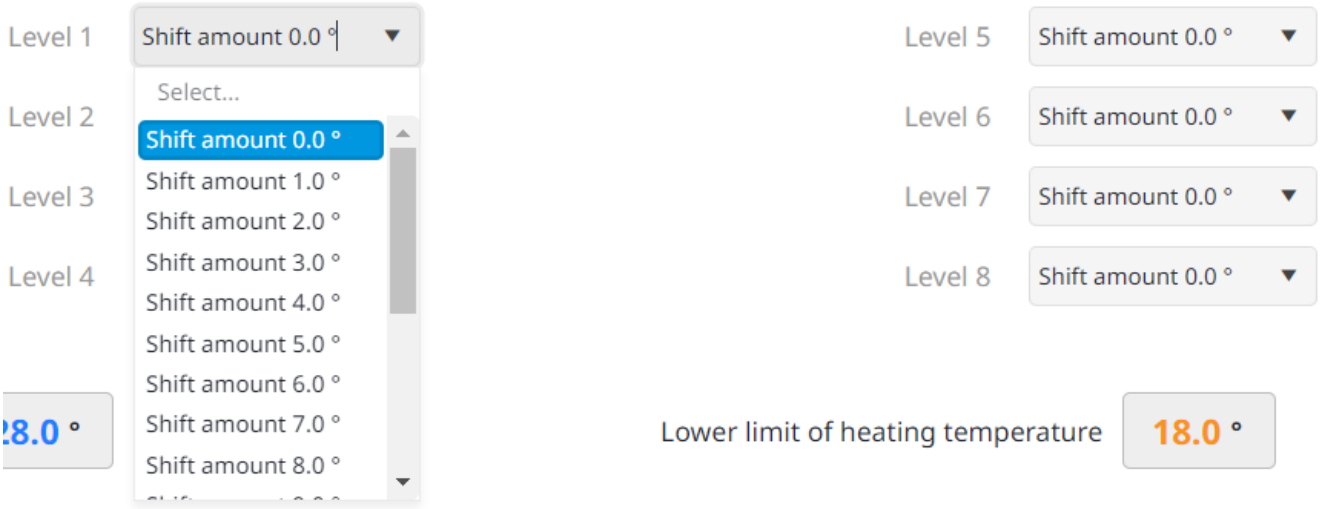
Result: The control group settings become editable.



5 Select a Start level from the drop-down list. This is the cutoff level at which the setpoint control will begin (8 levels are available).



6 Select a setpoint Shift amount (0~16°C, 1°C increments, or ThermoOFF) from the drop-down list for each cutoff level.

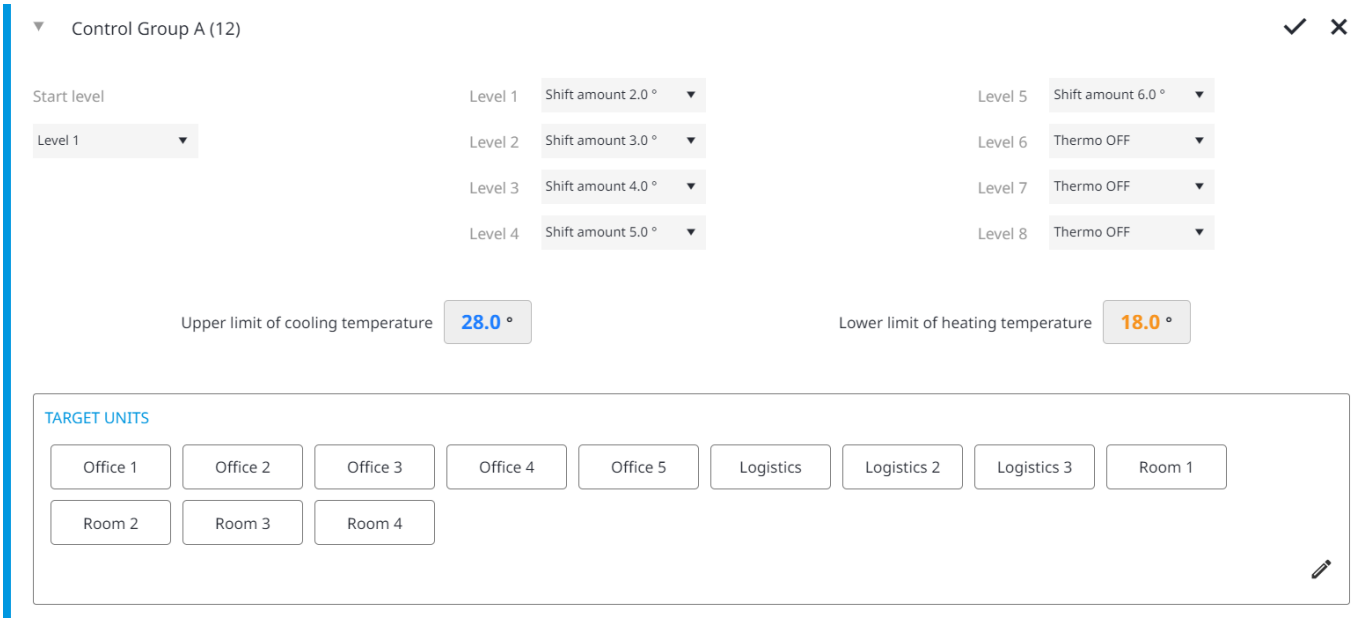


It is important to configure the shift amount for each level so that the higher the cutoff level is, the lower the power consumption will be. Compare the 2 situations below:

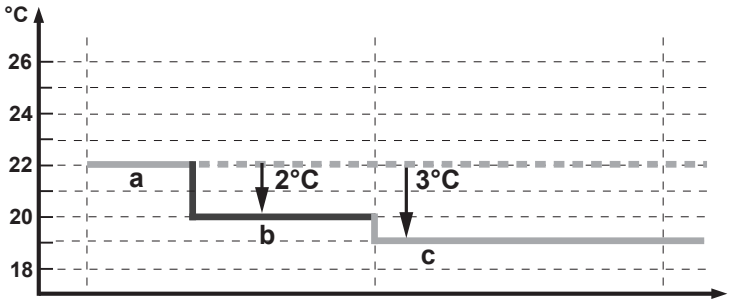
Correct settings		Incorrect settings	
Cutoff level 1	2.0°C	Cutoff level 1	Thermo OFF
Cutoff level 2	3.0°C	Cutoff level 2	3.0°C
Cutoff level 3	Thermo OFF	Cutoff level 3	2.0°C

Note that the shift amount that is set per level is a temperature shift based on the reference temperature. The reference temperature can be seen as level 0, where no control is applied.

Example: the reference temperature for a unit in heating mode is 22°C. The following settings have been configured for the control group:



Daikin Cloud Plus reads out the Pi power consumption and imposes an increase in cutoff level as to not exceed the target demand value. Cutoff level 1 is triggered, and a temperature shift of 2°C is applied. The setpoint is changed to 20°C. When cutoff level 2 is triggered, a temperature shift of 3°C is applied and the setpoint is changed to 19°C.



a Reference temperature (level 0) — 22°C
b Cutoff level increased to level 1 — setpoint changes to 20°C
c Cutoff level increased to level 2 — setpoint changes to 19°C

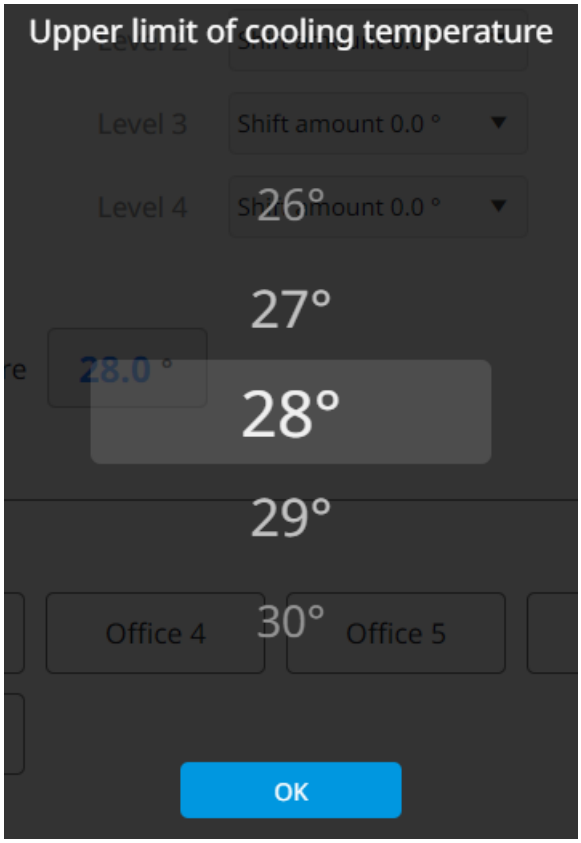
INFORMATION

The reference temperature is the setpoint that is set either after enabling temperature control, or the setpoint at the time of enabling temperature control. Depending on the operation mode of the units in the control group, setpoint shifting will influence the cooling or heating setpoint respectively.

INFORMATION

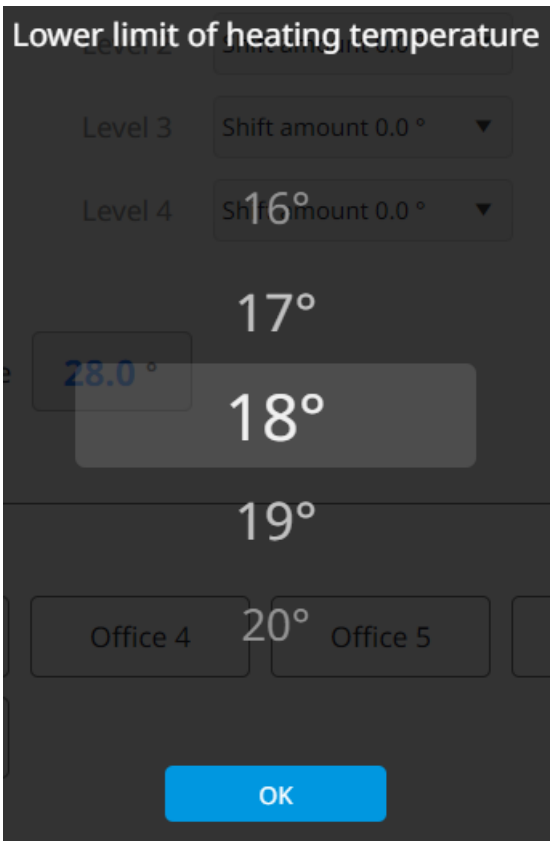
Not all units can be temperature controlled. For other units, the temperature can be controlled, but ThermoOFF is not available. See "Demand control targets" [▸ 138] for more information about the compatibility of units with certain types of demand control.

7 Set an upper temperature limit for cooling (15°C~35°C, 1°C increments) in the overlay, then click OK to confirm.



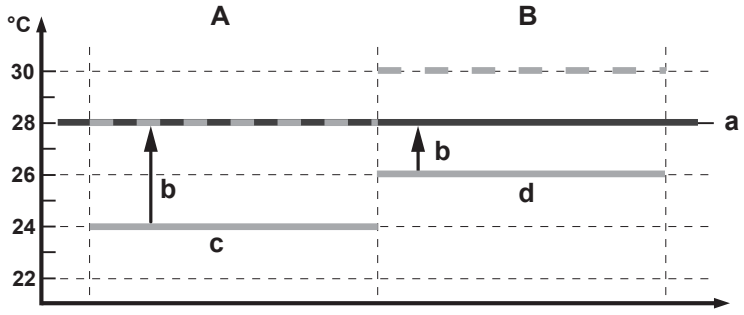
Setting an upper limit ensures that none of the units that belong to the control group can exceed this value, in order to prioritise reducing power.

8 Set a lower temperature limit for heating (15°C~35°C, 1°C increments) in the overlay, then click OK to confirm.



When a temperature shift occurs that would cause the setpoint to drop below the set limit, the setpoint will stay at the lower limit instead. For example, when the setpoint in heating mode is 19°C, and a temperature shift of 2°C is applied when the lower temperature limit for heating is set to 18°C, the setpoint will be altered to 18°C (and not 17°C).

The following example illustrates the importance of the reference temperature when setting limits. Control group A and B are both objects of demand control. The upper limit for cooling is set to 28°C for both control groups. An increase in load cutoff level is configured to shift the setpoint by 4°C in both scenarios. The reference setpoint for control group A is 24°C. When the cutoff level is triggered, the cooling setpoint changes to 28°C. For control group B, the reference setpoint is 26°C. When the cutoff level is triggered, the cooling setpoint changes to 28°C. In this case, the upper limit prevents the cooling setpoint from being increased to 30°C.

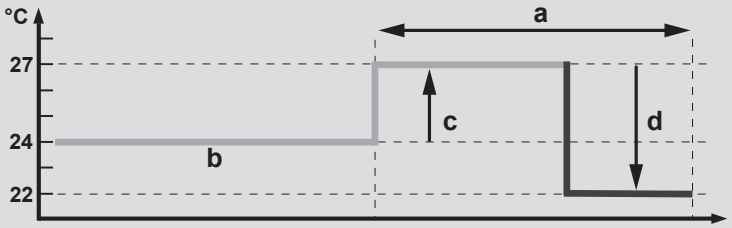


A, B Control groups
a Upper limit (cooling) — 28°C
b Setpoint shift due to increase in cutoff level (e.g. from level 0 to level 1)
c Room A reference setpoint (cooling) — 24°C
d Room B reference setpoint (cooling) — 26°C

Depending on how high (or low, in case of heating) limits are set, you can choose to prioritise comfort over power reduction, or vice versa. In case of control group A, the limit allows for more comfort, while control group B prioritises power reduction over comfort.

INFORMATION

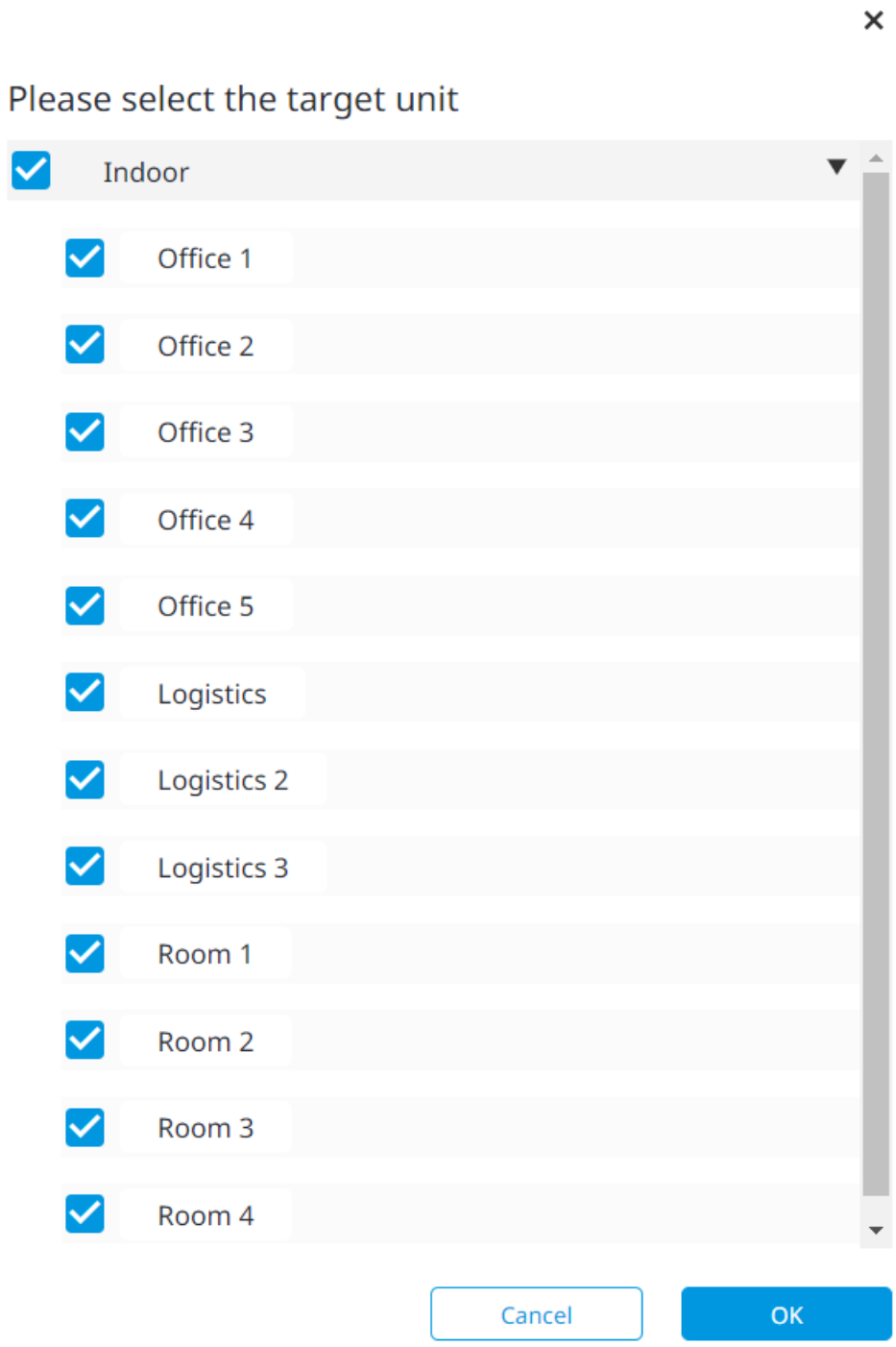
When setpoint control is active, make sure to not alter the setpoint from the remote controller. Even when demand control is active, the unit still accepts setpoint changes from the local remote controller. Consider the following example:



The reference setpoint (b) is 24°C. When demand control (a) triggers an increase in cutoff level (c), the setpoint shifts to 27°C. However, when someone changes the setpoint using the remote controller (d), the setpoint is lowered to 22°C. While demand control will overrule the altered setpoint again when a next load cutoff level is triggered, this manual intervention can still cause the target demand value to be exceeded briefly. To apply demand control more efficiently, prohibit operation from the local remote controller.

9 Click the pencil icon to select the target units.

Result: A settings panel appears on the right side of the page.



10 Select the checkboxes of the units you want to include in the control group.

11 Click OK.

12 Click ✓ to save the settings.

13 Repeat the previous steps for every control group you want to add.

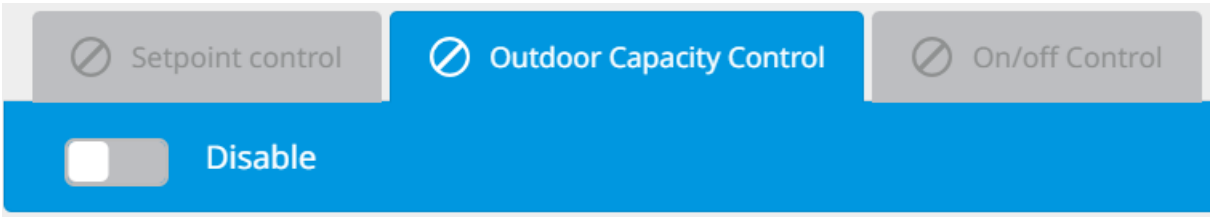
To configure outdoor capacity control

In order to reduce the power consumption of outdoor units, you can set up control groups to limit the percentage of capacity that the outdoor unit is able to utilise depending on the current load cutoff level. For example, when the capacity value is set to 70%, the unit can operate at only 70% of its total heating/cooling capacity, which results in less power consumption.

1 In the sidebar, go to ENERGY MANAGEMENT CONTROL > CONTROL GROUP SETTINGS.

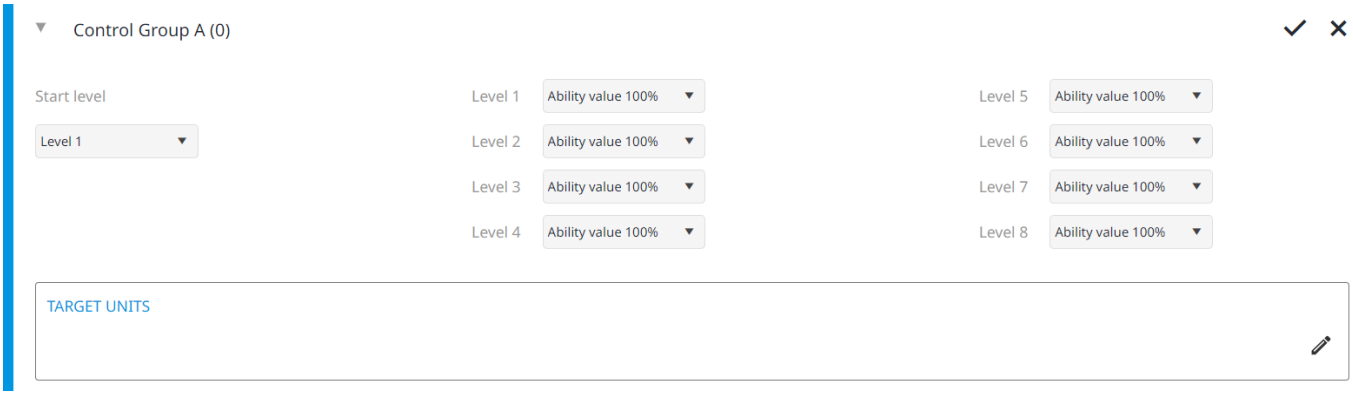
2 Select the Outdoor Capacity Control tab.

3 If the control is enabled, disabled it. When enabled, editing is not possible.

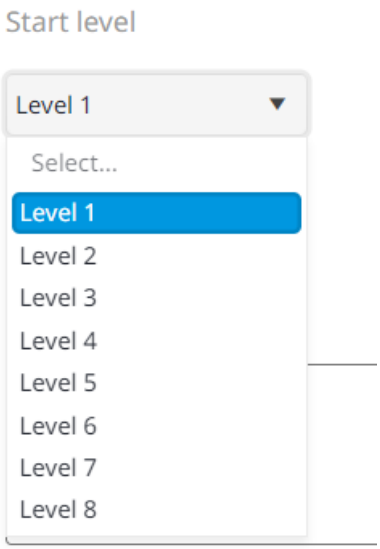


4 Click the downward facing arrow next to a control group to expand the settings for that control group.

Result: The control group settings become editable.



5 Select a Start level from the drop-down list. This is the cutoff level at which the capacity control will begin.



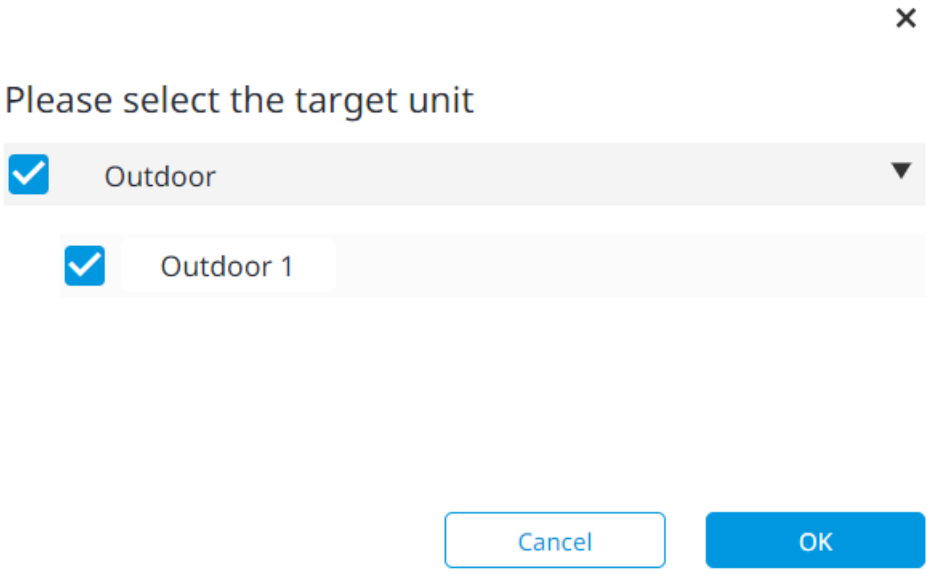
6 Select the capacity from the drop-down list for each cutoff level. This value (in %) determines how much capacity of the outdoor unit is able to utilise at each given cutoff level.

It is important to configure the capacity for each level so that the higher the cutoff level is, the lower the power consumption will be. Compare the 2 situations below:

Correct settings		Incorrect settings	
Cutoff level 1	70%	Cutoff level 1	0%
Cutoff level 2	40%	Cutoff level 2	40%
Cutoff level 3	0%	Cutoff level 3	70%

7 Click the pencil icon to select the target units.

Result: A settings panel appears on the right side of the page.



8 Select the checkboxes of the units you want to include in the control group.

9 Click OK.

10 Click ✓ to save the settings.

11 Repeat the previous steps for every control group you want to add.

To configure on/off control

In order to reduce the power consumption of units, you can set up control groups to control the on/off state of units depending on the current load cutoff level. For example, you can choose to stop certain units from operating when a specific load cutoff level is reached.

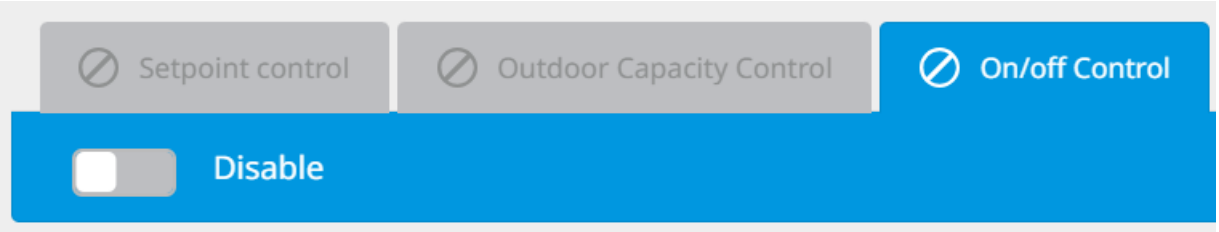
INFORMATION

Not all units and/or equipment can be turned on/off by demand control. See "Demand control targets" [▸ 138] for more information about the compatibility of units with certain types of demand control.

1 In the sidebar, go to ENERGY MANAGEMENT CONTROL > CONTROL GROUP SETTINGS.

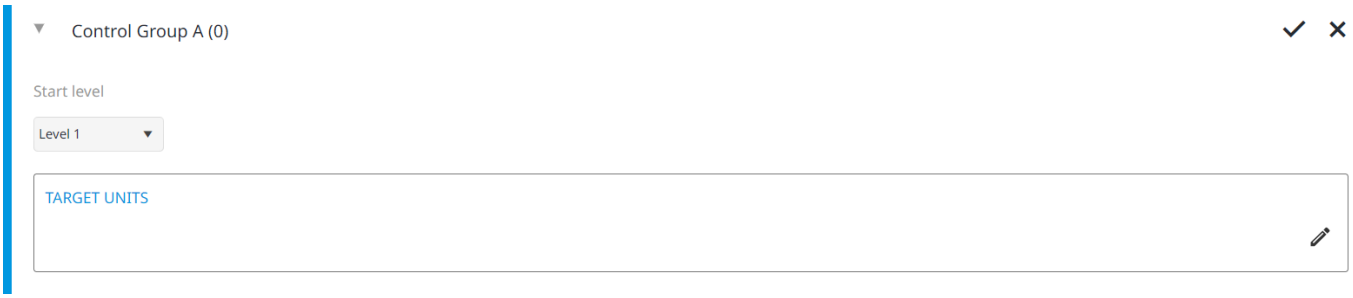
2 Select the On/Off control tab.

3 If the control is enabled, disabled it. When enabled, editing is not possible.

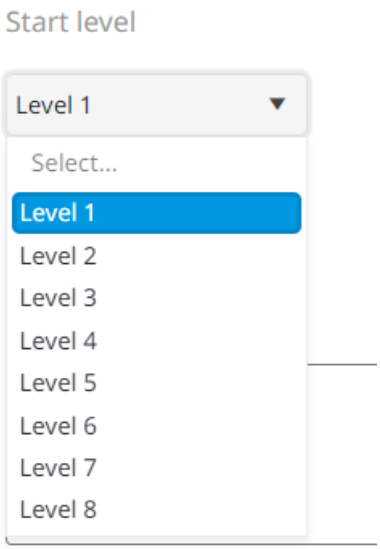


4 Click the downward facing arrow next to a control group to expand the settings for that control group.

Result: The control group settings become editable.

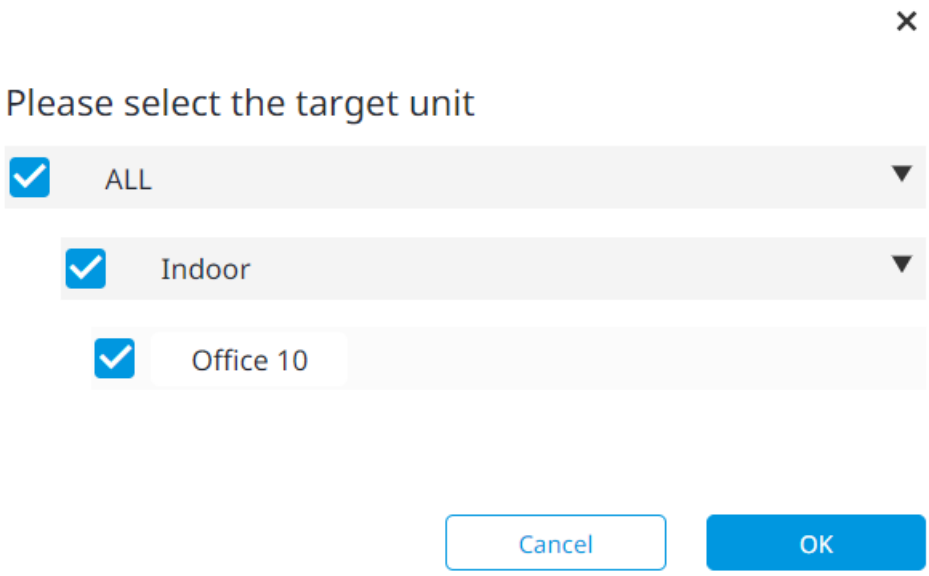


5 Select a Start level from the drop-down list. This is the cutoff level at which the on/off control will begin.



6 Click the pencil icon to select the target units.

Result: A settings panel appears on the right side of the page.



7 Select the checkboxes of the units you want to include in the control group.

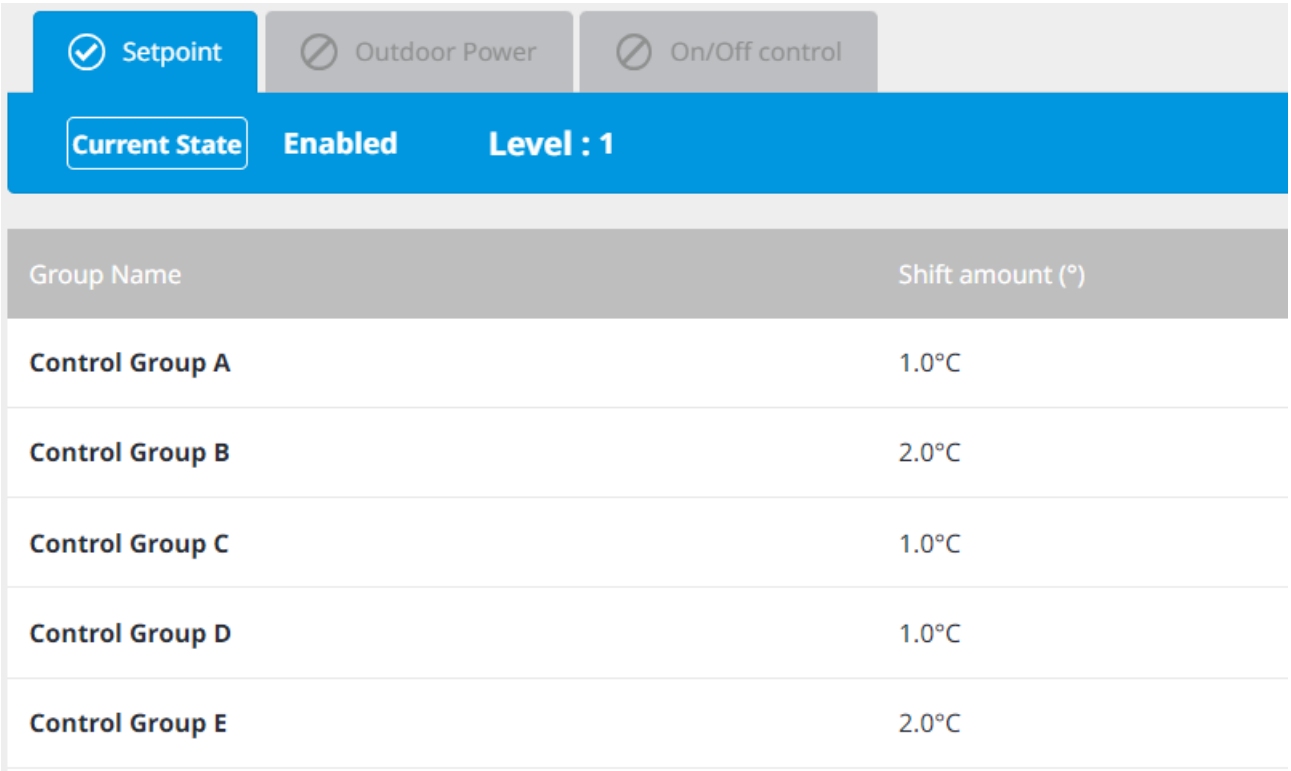
8 Click OK.

9 Click ✓ to save the settings.

10 Repeat the previous steps for every control group you want to add.

Control state

This page can be used to check the control status for each type of demand control. It is refreshed automatically every 60 seconds.



The icon in the tab indicates whether a type of control is currently active or not:

Icon	Description
	Type of demand control that is currently enabled.

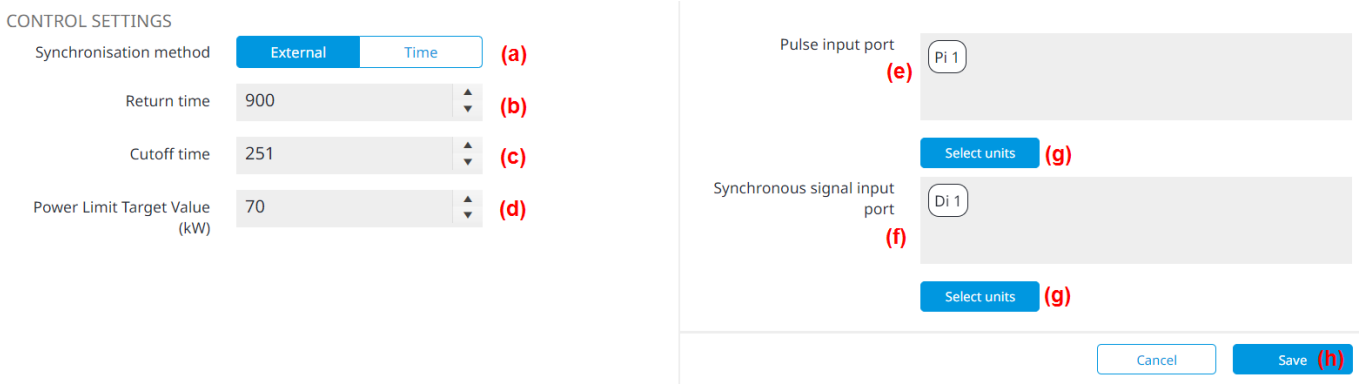
Icon	Description
	Type of demand control that is currently disabled.

When a tab is selected, it will also indicate when the control type is enabled or disabled. In addition, the current cutoff level is also displayed. Depending on the selected control type, the data in the table will display the following items for each control group (A~H):

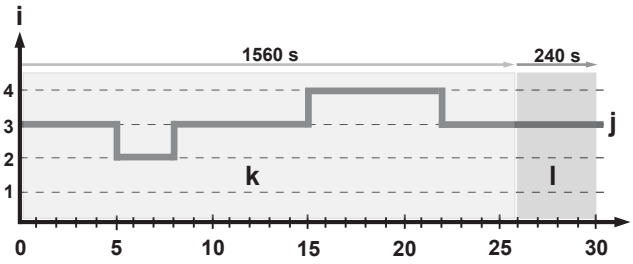
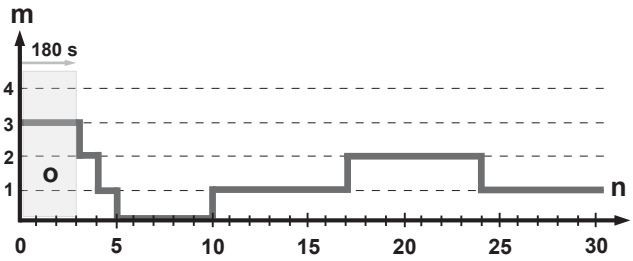
Control type	Description
Setpoint control	Shift amount (in °C) for the current cutoff level
Outdoor Capacity Control	Capacity value (in %) for the current cutoff level
On/Off control	On/off status for the current cutoff level

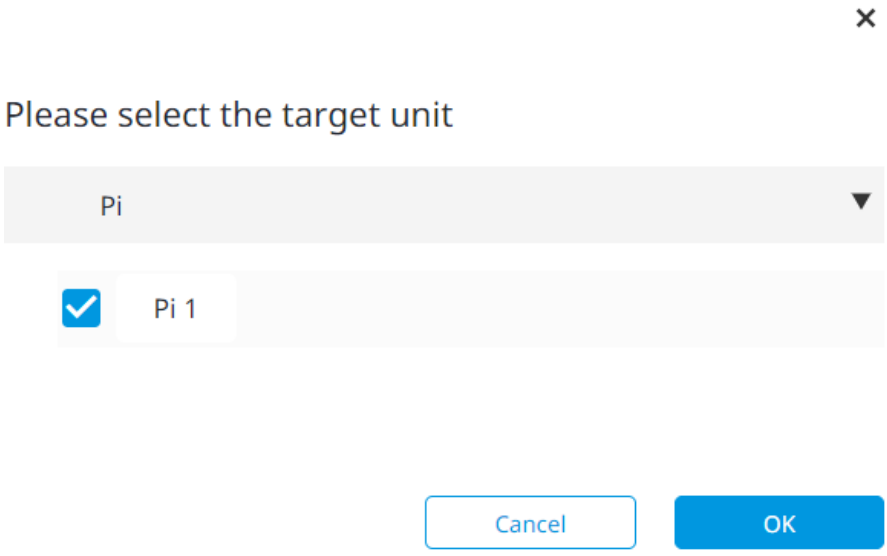
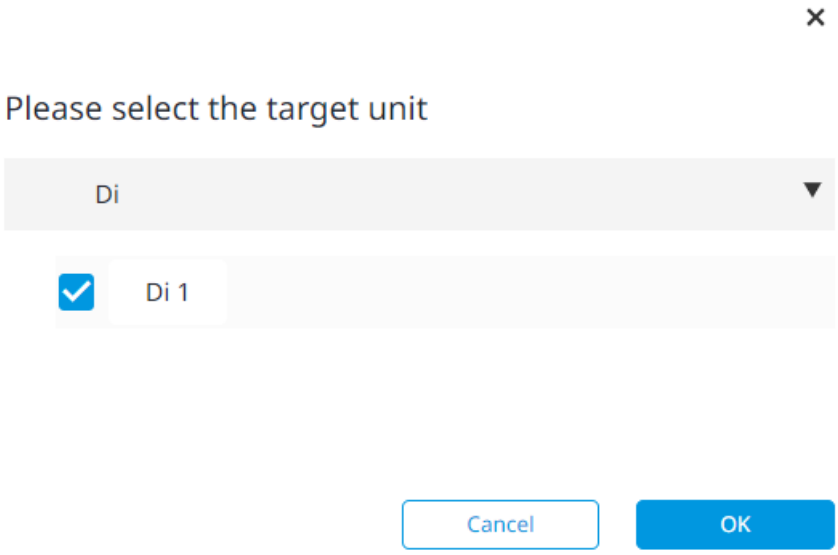
Control settings

This page allows you to configure demand control settings.



Item	Description
(a) Synchronisation method	Sets the synchronisation method for determining the starting trigger of a demand period: ▪ Time: time is used as the trigger for starting a new demand period. A new demand period starts every 30 minutes (fixed). For example, a demand period starts at 10:00, followed by the next demand period at 10:30, then at 11:00 and so on. ▪ External: use a timed signal pulse of a Di as the trigger for starting a new demand period. Note that demand control still expects a pulse input every 30 minutes when this synchronisation method is selected. For example, when a pulse input triggers the start of the demand period at 10:27, the next pulse input is expected at 10:57, then 11:27, and so on. When a pulse input signal cannot be acquired or the timing is incorrect, the system reverts to using Time as a synchronisation method.

Item	Description
(b) Return time	When demand control lowers the cutoff level right before the end of a demand period, this may cause the set demand target value to be exceeded. To avoid this, you can set the return time in seconds (900~1680 seconds). The return time is the time during which demand control is able to switch to a lower cutoff level. Thus, this setting also determines the time at the end of the demand period during which the load cutoff level cannot drop down any longer (i.e. the non-return time). After the return time has passed, demand control will not lower the cutoff level until the end of the demand period, not even when this would not result in the target demand value being exceeded. **Example:** when set to 4 minutes (=240 seconds), before minute 26, the load cutoff level can still be lowered. Starting from minute 26 of the demand period, the cutoff level will not go down anymore. A demand period equals 1800 seconds (=30 minutes): 1800 seconds – 240 seconds = 1560 seconds (=26 minutes). In this example, the cutoff level is 3 after the return time has passed. The cutoff level stays at 3 until the end of the demand period, even if lowering the cutoff level to 2 would not exceed the set target demand value.  ▪ (i) Load cutoff level axis ▪ (j) Load cutoff level over time ▪ (k) Return time ▪ (l) Non-return time
(c) Cutoff time	Sets the cutoff time in seconds (90~300 seconds). The cutoff time determines how long it will take before demand control switches to a lower load cutoff level after a new demand period starts. **Example:** the previous demand period ended on a load cutoff level of 3. The cutoff time is set to 3 minutes (=180 seconds). The load cutoff level stays at level 3 for the first 3 minutes of the demand period, after which it is gradually lowered to 0.  ▪ (m) Load cutoff level axis ▪ (n) Load cutoff level over time ▪ (o) Cutoff time

Item	Description
(d) Power Limit Target Value (kW)	Set a target value for the maximum demand (in kW). Note that a demand period is 30 minutes, so for any given demand period the system will reach only half of this target value (indicated in kWh). **Example:** the target value is set to 100 kW. Demand control controls the units as to not exceed this target. The graph for the current demand period shows 50 kWh as target energy value, since a demand period equals 30 minutes.
(e) Pulse input port	Set a Pi to be used as the pulse input port for applying demand control. Click Select units (g) to select a target unit, then select the checkbox of the Pi you want to add as target. Click OK to confirm.  Note that External Pi equipment is not displayed in the list.
(f) Synchronous signal input port	Only visible when the synchronisation method is set to External. Select a unit (Di) to be the input for the demand control synchronisation method. Click Select units (g) to select a target unit, then select the checkbox of the Di you want to add as target. Click OK to confirm. 

When you have configured the values for all settings, click Save (h) to apply the settings.

INFORMATION

When you save changes made on this page while demand control is active, demand control with cutoff level 8 will be applied until the next demand period.

Demand control targets

The table below provides an overview of demand control functions for each type of unit and/or equipment (Yes = compatible, No = not compatible, – = not applicable).

Type		Demand control				
		Setpoint control		Outdoor Capacity Control	On/Off control	
		Temperature shift	**Thermo OFF**		**Control**	**Auto recovery[a]**
Indoor unit	VRV	Yes	Yes	–	Thermo OFF	Yes
	Sky Air	Yes	Yes	–	Thermo OFF	Yes
	Room air conditioner[b]	Yes	No	–	No	No
	Medium temperature air conditioner	No	No	–	Thermo OFF	Yes
Outdoor unit	VRV	–	–	Yes[c]	–	–
Ventilation	VAM / VKM	–	–	–	Stop control	Yes[d]
Equipment	Dio	–	–	–	Stop control	Yes[d]
	External Dio	–	–	–	Stop control	Yes[d]
	BACnet Dio	–	–	–	Stop control	Yes[d]

[a] When the load cutoff level lowers to a certain level, the unit automatically returns to operation.

[b] Temperature shifting is available for J-type indoor units or later. These units can be added to control groups for On/Off control, however, Thermo OFF and stop control will not be applied to the units. Adding the units to control groups for temperature control is also possible, but in this case the thermostat cannot be turned off.

[c] The demand address for the outdoor unit MUST be set and valid.

[d] When the auto recovery setting is enabled, units or equipment stopped by demand control will restart automatically once demand control is no longer active.

4.7.2 PPD collection total

Power proportional distribution (in this manual sometimes abbreviated as PPD) is an optional function of the DC+ Edge. Using a power meter, it measures the total amount of power used by air conditioning units in buildings with multiple different user groups, for example, in tenant buildings. This allows building owners to calculate usage fees for each tenant. The calculation results can also be output to an Excel file for further processing outside of Daikin Cloud Plus.

INFORMATION

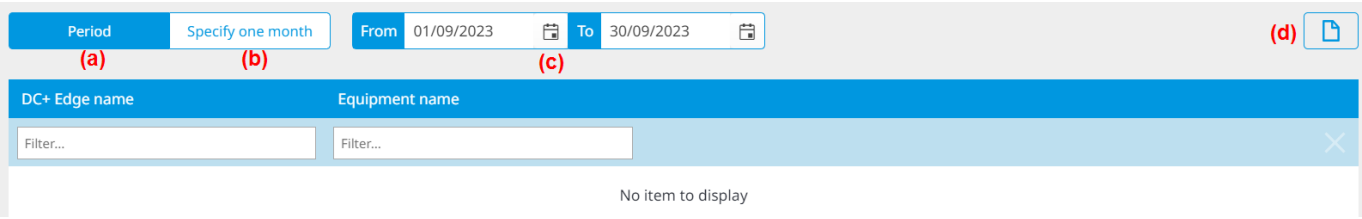
Power proportional distribution needs to be set up in order to make use of this functionality. For more information about power proportional distrbution, see the installer reference guide.

To export PPD data

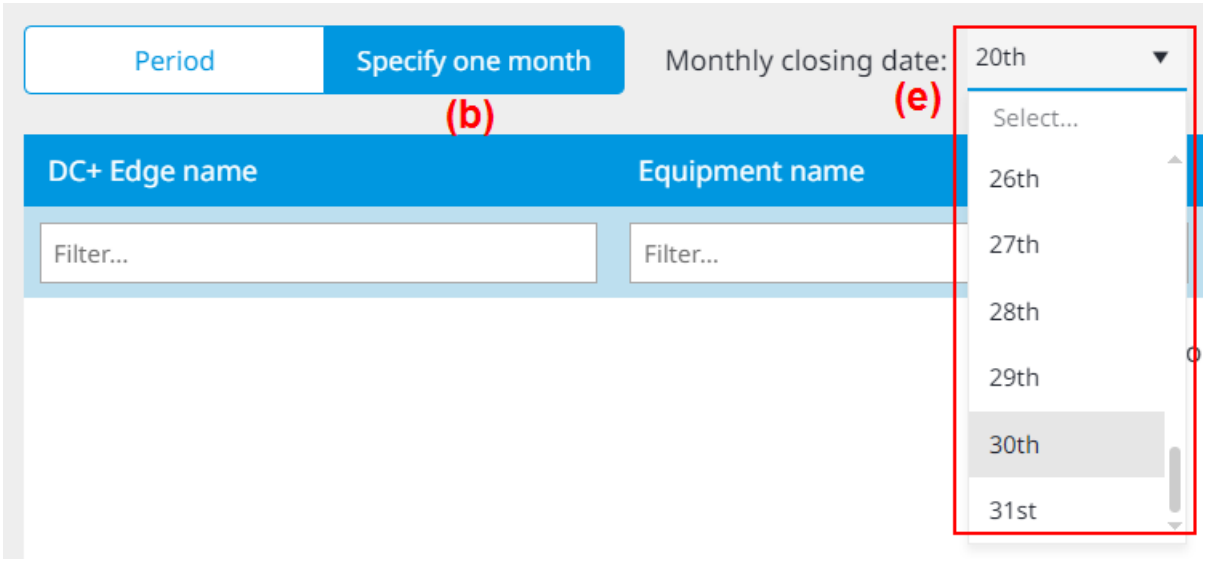
1 In the sidebar, go to ENERGY MANAGEMENT CONTROL > PPD COLLECTION TOTAL.

2 Choose for which period you want to export PPD data. You can choose to specify a period, or select a single month to export data for.

3 In case Period (a) is selected, select a start and an end date using the date picker (c). You can also use the left and right arrows next to the date fields to adjust the date fields.



4 In case Specify one month (b) is selected, select which day of the month you want to use as the final day of the month from the drop-down list (e).



Result: The PPD data is displayed in the table. It shows the amount of power used for the specified period, as well as the idle power.

DC+ Edge name	Equipment name	Daytime Used Pwr (kWh)	Daytime Idle Pwr (kWh)
Filter...	Filter...		
DC+ Edge - Site 1	Office 2B-1	4.262	0.000
DC+ Edge - Site 1	Office 2B-2	15.293	0.000
DC+ Edge - Site 1	Office 2B-3	6.583	0.000
DC+ Edge - Site 1	Office A-2	31.951	0.000
DC+ Edge - Site 1	Office A-3	38.423	0.000
DC+ Edge - Site 1	Office A-4	39.870	0.000
DC+ Edge - Site 1	Office A-5	29.691	0.000
DC+ Edge - Site 1	Office A-6	2.065	0.000

5 Click the export button (d).

6 Click Yes in the pop-up window to confirm.

Result: The data is downloaded.

The resulting downloaded file is a .zip file. The file name is in the following format: `PPD_(start date)_(end_date)`. In the .zip file, a folder is created for every DC+ Edge. Every folder contains the following files:

- Zone.csv: information about the zones, zone hierarchy and unit information.
- Total.csv: total amount of power used by every unit within the selected period.
- Hourly.csv: hourly breakdown of the amount of power used by every unit within the selected period.

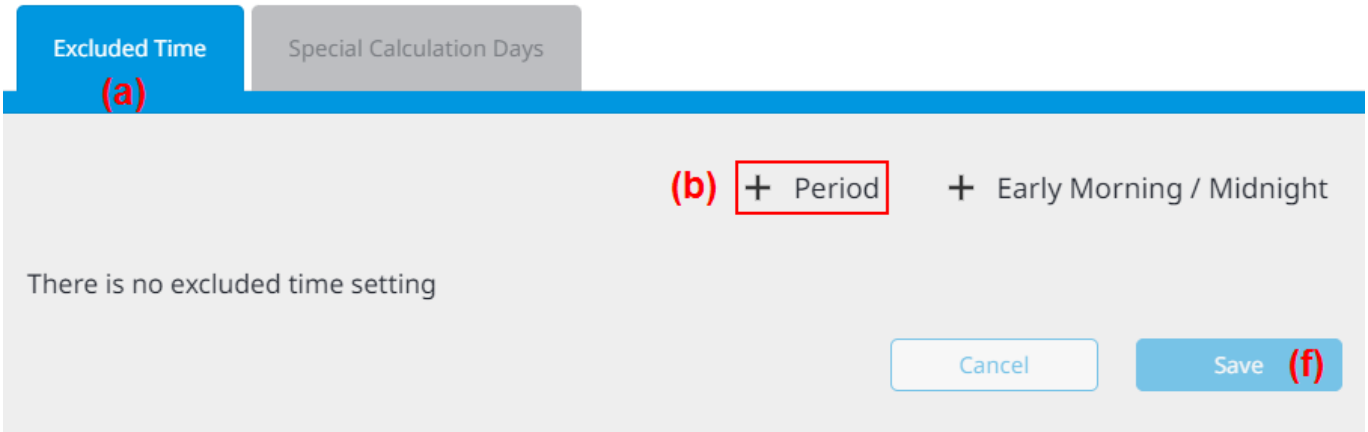
4.7.3 PPD collection period setup

This page allows you to configure a specific time slots or whole days to be excluded from the set data collection period. In addition, it is possible to set exceptions for special days, during which the data calculation should also not be performed. This also makes it possible to exclude recurring days from the calculations. When a certain amount of time is excluded, all energy usage for every indoor unit is treated as 0. Note that times excluded from data calculations are set on a site level.

To exclude a specific period

To exclude an uninterrupted period

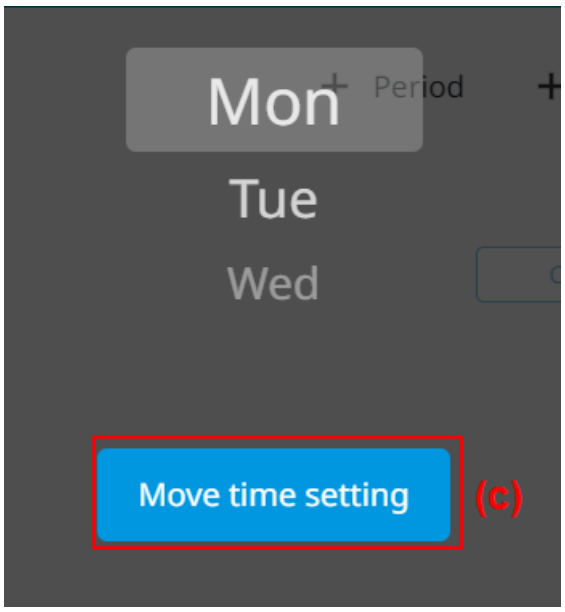
1 In the sidebar, go to ENERGY MANAGEMENT CONTROL > PPD COLLECTION PERIOD SETUP.



2 Select the Excluded Time tab (a).

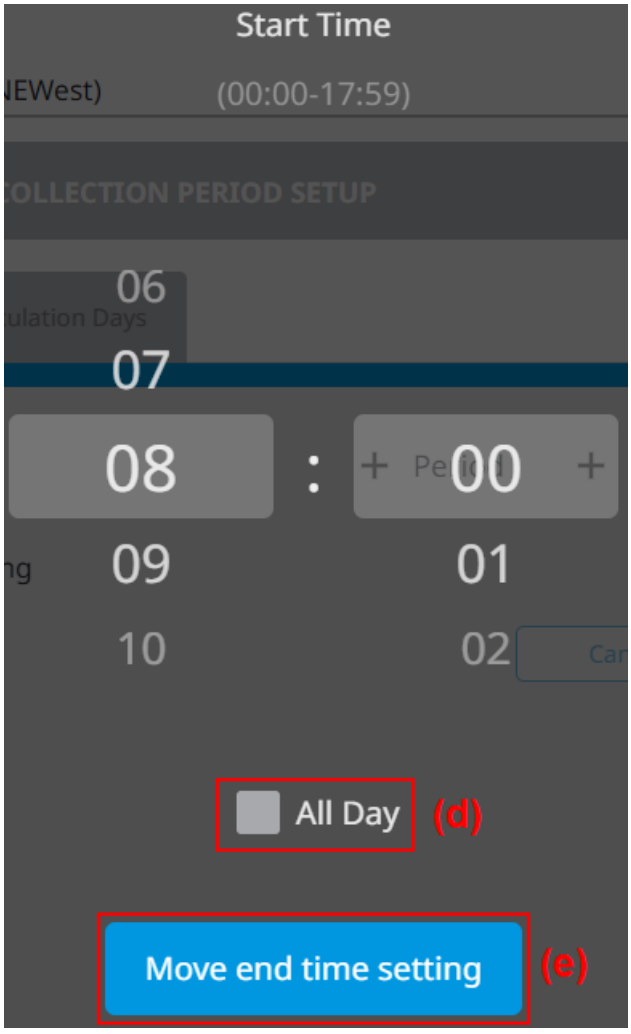
3 Select Period (b).

4 Specify the day of the week you want to exclude from the calculations in the overlay.



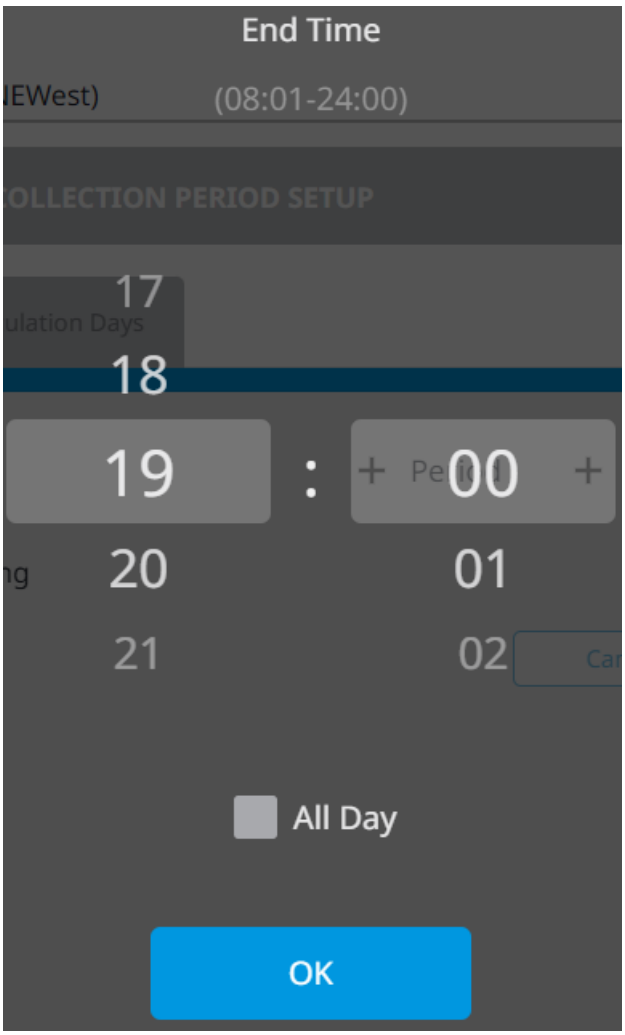
5 Click Move time setting (c).

6 Specify the start time in the overlay. Alternatively, you can include the entire day (24 hours) by selecting the All Day checkbox (d). In this case, click OK, and the excluded day will be added.



7 Click Move end time setting (e).

8 Specify the end time in the overlay.



9 Click OK.

Result: The selected day and time is now an added as an excluded time.

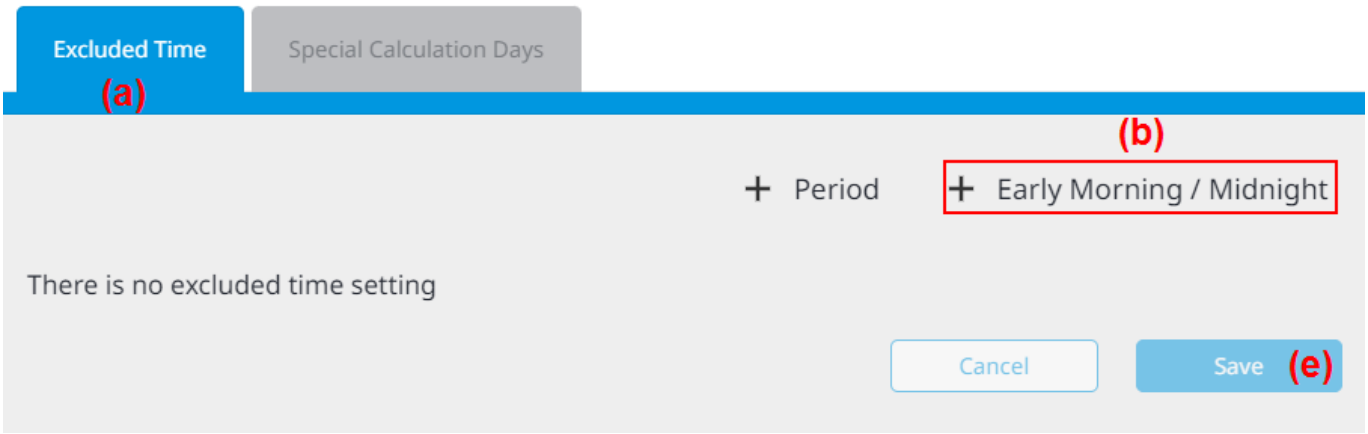
10 Click Save (f).

11 Click Yes in the pop-up window to confirm.

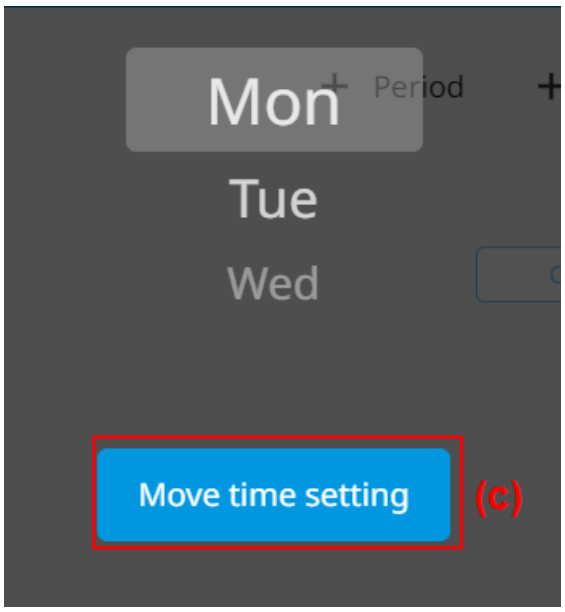
To exclude an interrupted period

You can specify time to be excluded in 2 blocks (in the morning and at night), as opposed to a single uninterrupted period.

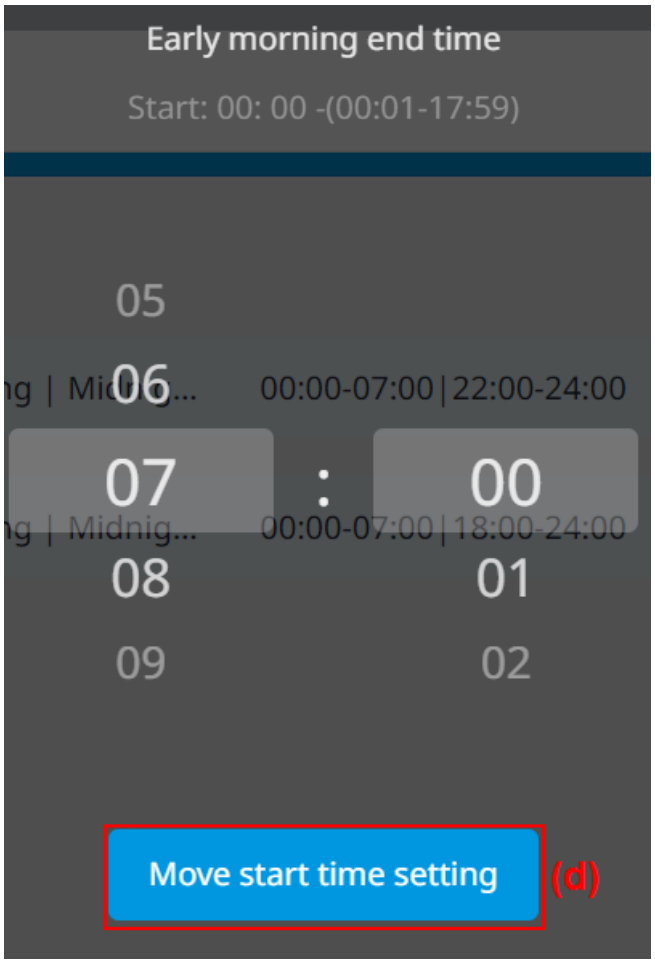
1 In the Excluded Time tab (a), select Early Morning / Midnight (b).



2 Specify the day of the week you want to exclude from the calculations in the overlay. Then, click Move time setting (c).



3 In the overlay, specify the end time for the first block of excluded time. At this time, the excluded time of the morning block ends, and data calculation will be performed again. Note that the morning block always starts at 00:00.

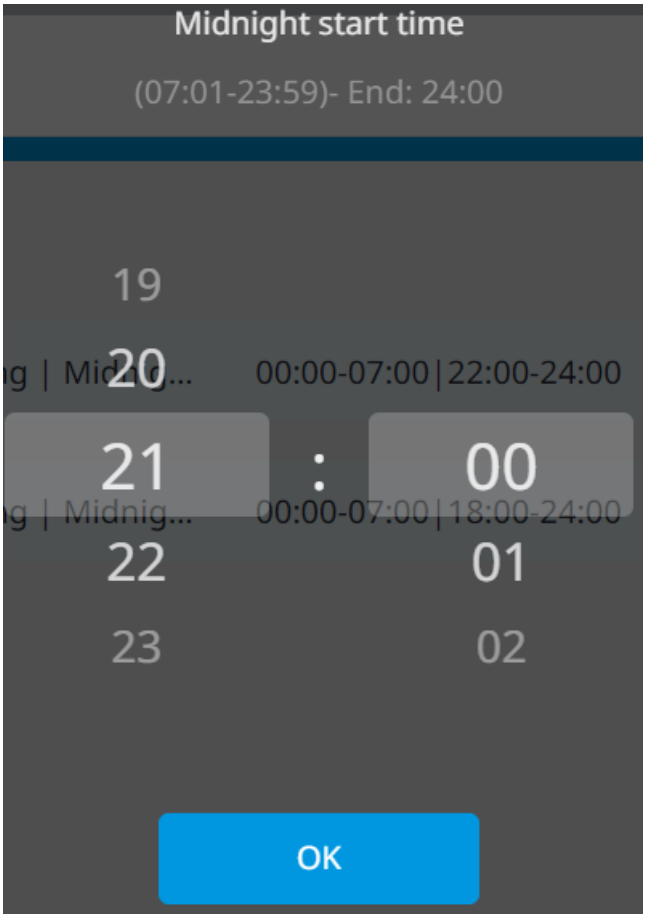


INFORMATION

The Early morning end time (00:00) and the Midnight start time (24:00) are fixed and CANNOT be edited.

4 Click Move start time setting (d).

5 Specify the start time for the second block of excluded time. At this time, the excluded time of the night block starts, and data calculation will stop for this block of time.



6 Click OK.

Result: The selected day and time blocks are now an added as excluded time.

7 Click Save (e).

8 Click Yes in the pop-up window to confirm.

INFORMATION

The excluded time only applies to data recorded after the excluded time was added and applied. It does NOT influence already recorded data.

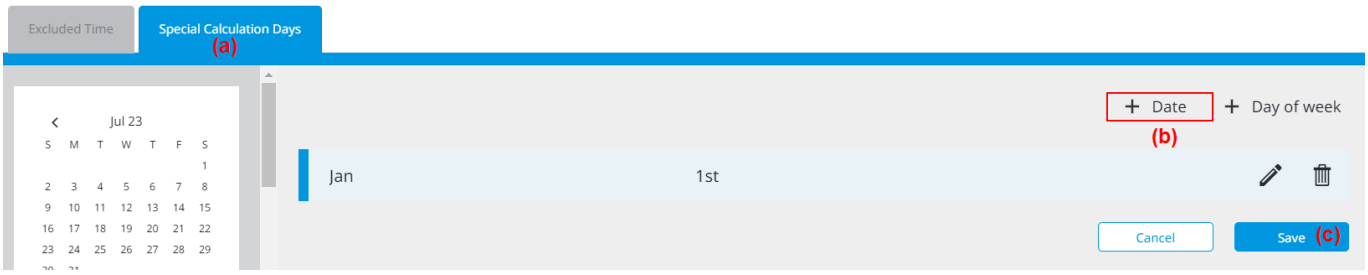
To add special calculation days

You can add special calculation days as exceptions. These days are excluded from the set data calculation period. It is possible to set single special calculation days (e.g. for a public holiday) and recurring special calculation days (e.g. the first Sunday of every month).

To add a special calculation day for a specific date

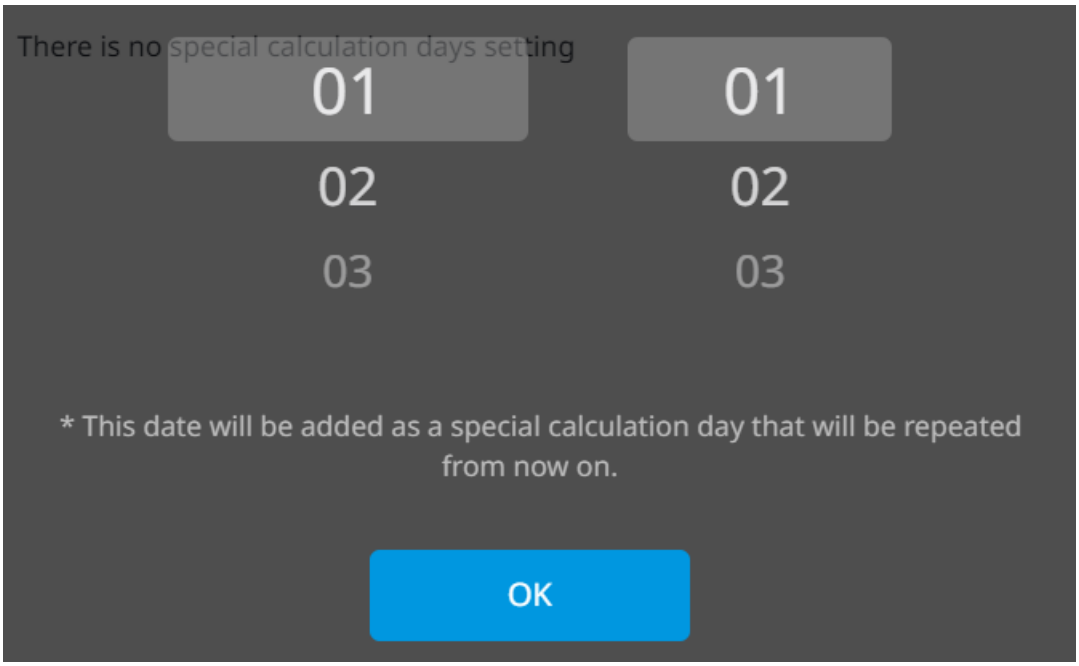
1 In the sidebar, go to In the sidebar, go to ENERGY MANAGEMENT CONTROL > PPD COLLECTION PERIOD SETUP.

2 Select the Special Calculation Days tab (a).



3 Select Date (b).

4 Specify a date (month, day) in the overlay.



5 Click OK.

Result: The selected date is set as a special calculation day.

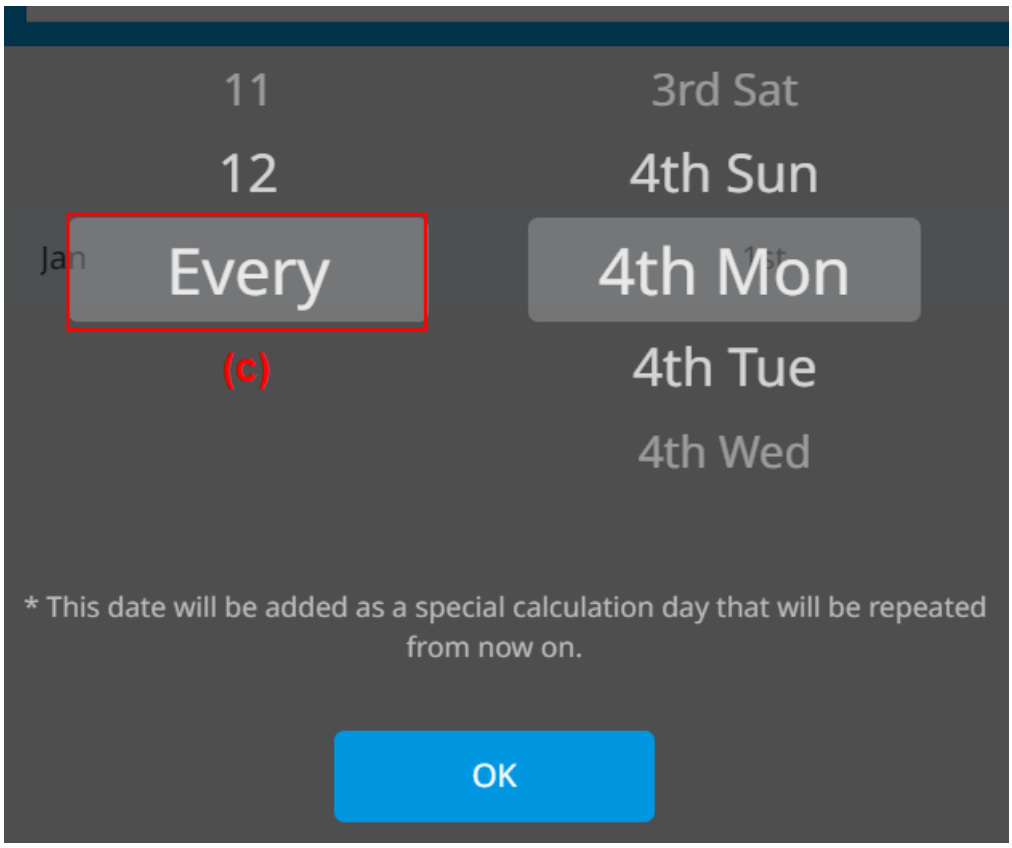
6 Click Save (c).

7 Click Yes in the pop-up window to confirm.

To add a special calculation day for a day of the week

1 In the Special Calculation Days tab, select Day of week (a).

2 In the overlay, specify the month and day of the week to add as a special calculation day (month, day). For example, you can add the first Monday of April as a special day, but if you want every fourth Monday of the month to be an exception, you can select Every (c) to create a recurring special day based on the day of the week.



3 Click OK.

Result: The selected date is set as a special calculation day.

4 Click Save (b).

5 Click Yes in the pop-up window to confirm.

To manage excluded time and special calculation days

In addition to defining excluded time, you can edit, enable or disable, and delete excluded time from the PPD collection period setup page. Special calculation days can be edited or deleted.

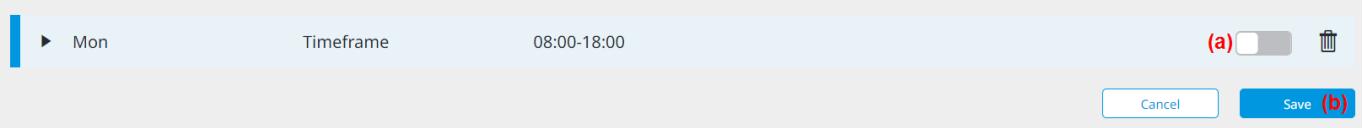
INFORMATION

Any changes made to excluded time will NOT be saved unless they are saved first.

To enable/disable excluded time

1 Select the Excluded Time tab.

2 Click the toggle switch (a) next to the excluded time that you want to enable or disable.



3 Click Save (b).

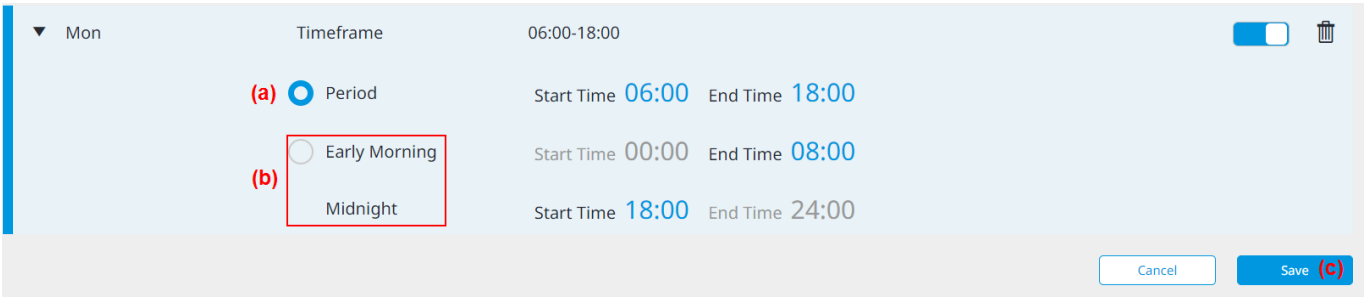
4 Click Yes in the pop-up window to confirm.

Result: The excluded time will now be ignored by the system when performing data calculations.

1 **To edit excluded time**

2 Select the Excluded Time tab.

3 Expand the excluded time panel by clicking anywhere on the excluded time.



4 If desired, change the selection from Period (a) to Early Morning / Midnight (b).

5 Edit any of the start or end times by clicking on them. The times in blue can be edited in the overlay that appears when clicked.

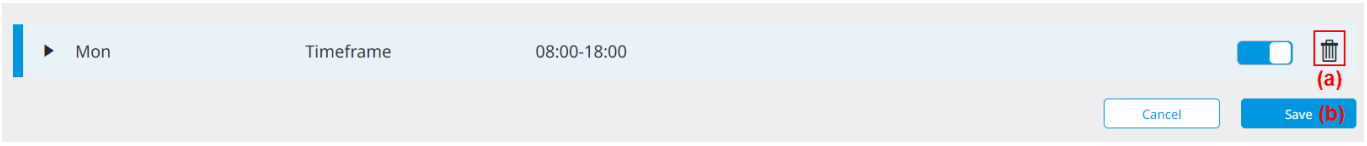
6 Click Save (c).

7 Click Yes in the pop-up window to confirm.

To delete excluded time

1 Select the Excluded Time tab.

2 Click the trashcan icon (a) next to the excluded time that you want to delete. There is no confirmation before the excluded time is deleted.



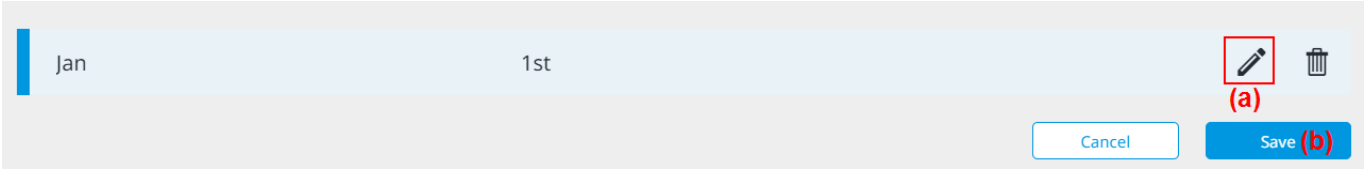
3 Click Save (b).

4 Click Yes in the pop-up window to confirm.

To edit special calculation days

1 Select the Special Calculation Days tab.

2 Click the pencil icon (a) of the special calculation day you want to edit.



3 Edit the date or day of the week in the overlay.

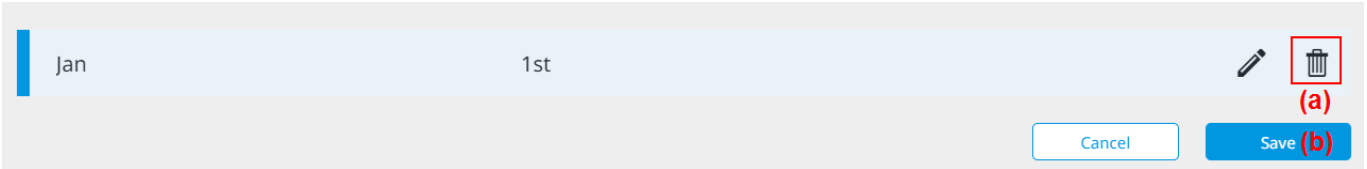
4 Click Save (b).

5 Click Yes in the pop-up window to confirm.

To delete special calculation days

1 Select the Special Calculation Days tab.

2 Click the trashcan icon (a) of the special calculation day you want to delete. There is no confirmation before the special calculation day is deleted.



3 Click Save (b).

4 Click Yes in the pop-up window to confirm.

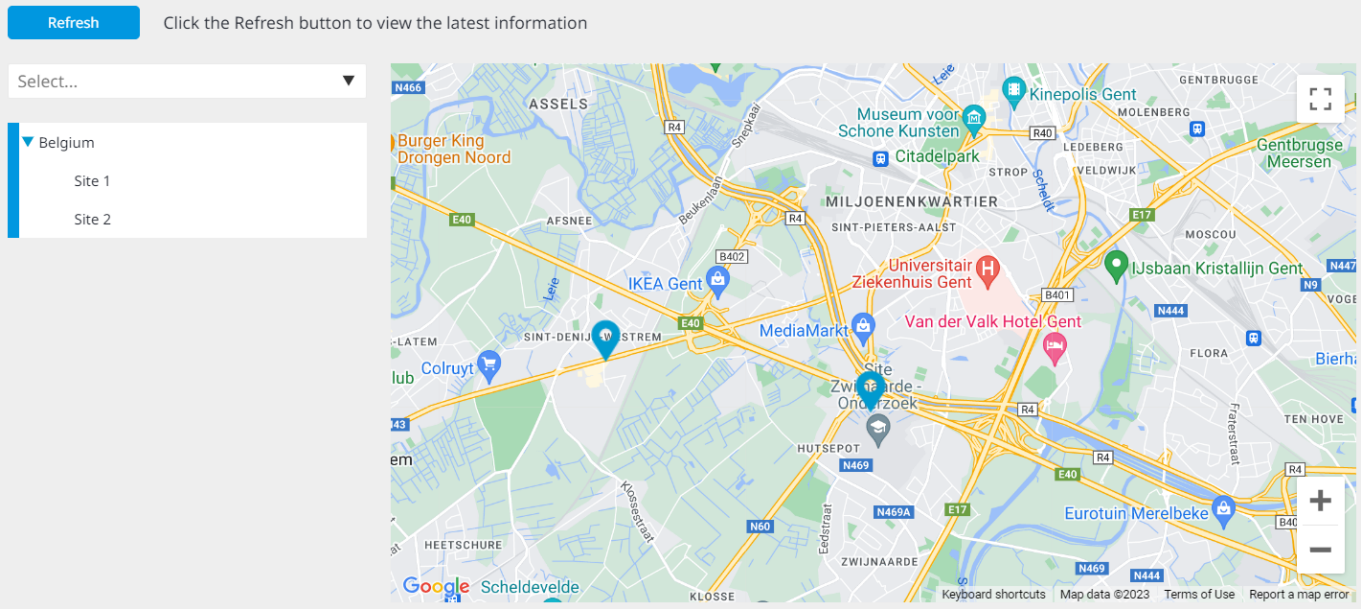
4.8 Multi-site management

When you have multiple installations in different sites, Multi-site management provides a convenient overview of all sites you have access to.

4.8.1 To perform multi-site management

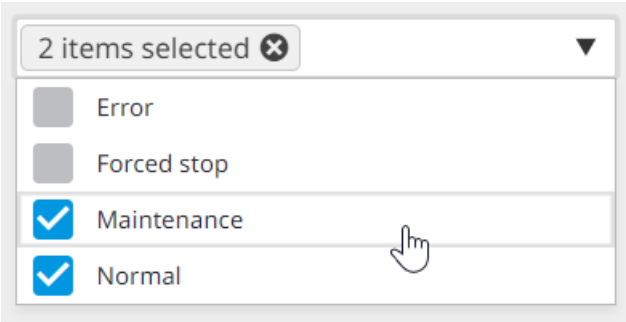
1 In the sidebar, go to MULTI-SITE MANAGEMENT.

Result: The map view opens. All sites you have access to are pinned on the map. The pin colour corresponds to the status of the site (Blue = normal, Red = error, maintenance or forced stop). The available sites are also listed by location on the left side of the map.



2 Click Refresh to view the latest information.

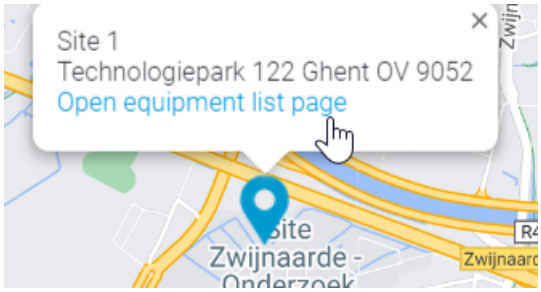
3 From the drop-down list, select a site status (multiple can also be selected) to filter the available sites by status.



Result: The map view updates, showing only the sites that match the selected status.

4 Click a site pin on the map to display more information about that site.

5 Click the link (Open equipment list page) in the information pop-up to immediately go to the equipment list of that particular site.



4.9 Remote diagnostics

4.9.1 Site history

This page can provide an overview of all activity that happened at a site. This can range from certain users changing unit settings (e.g. changing the operation mode of a unit) to the DC+ Edge restarting, unit states, changes in operation etc. You can also export this historical activity to an Excel file.

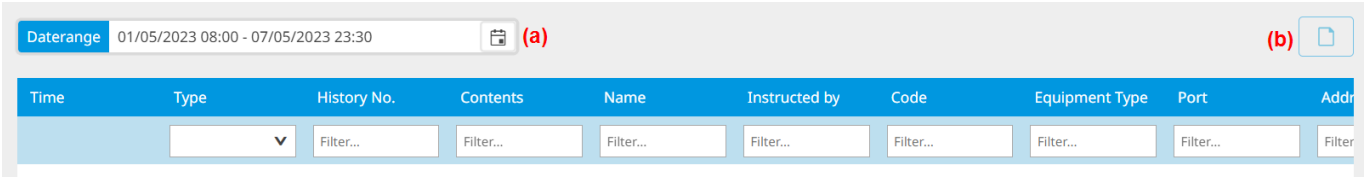
INFORMATION

This page ONLY appears in the sidebar if you are the owner of at least 1 site.

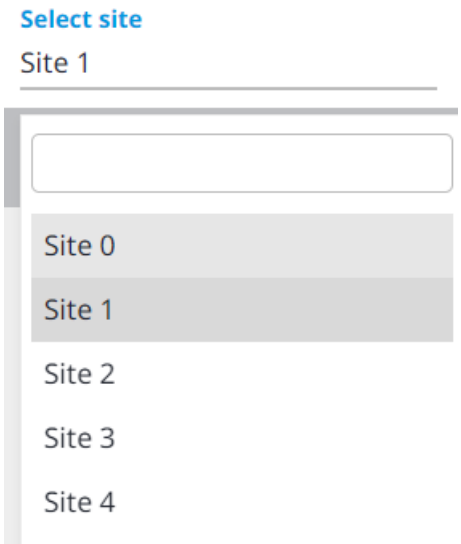
To manage the site history

1 In the sidebar, go to REMOTE DIAGNOSTICS > SITE HISTORY.

Result: The following page is displayed.

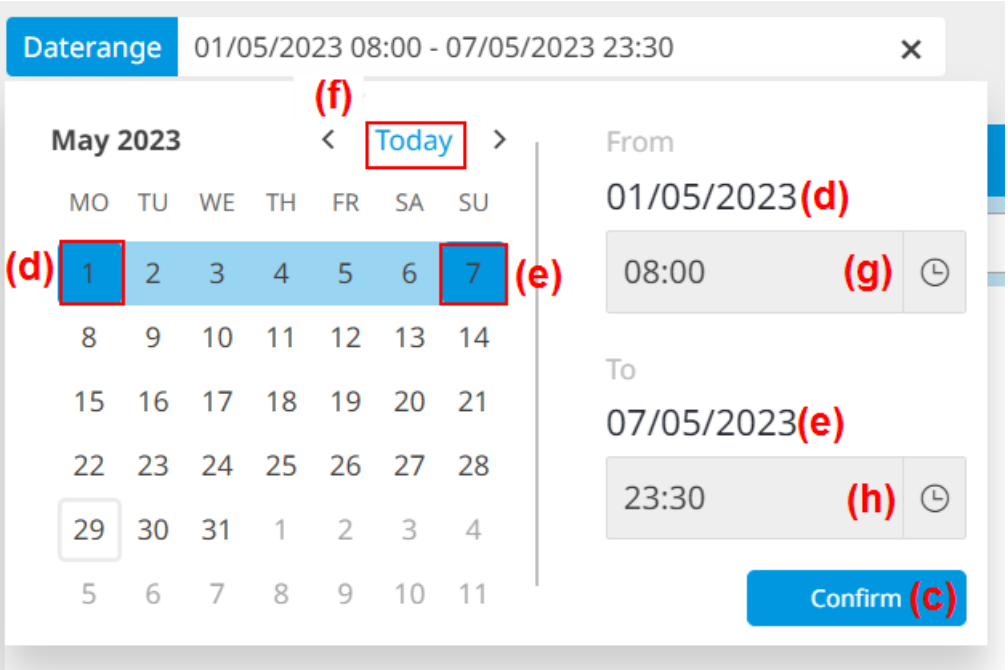


2 Select the site for which you want to view the site history from the site picker.



4–0

3 Specify a period for which you want to display the site history. First, click the calendar icon (a) to show the calendar. Then, click once on a date to set a starting date (d). Click again to set the ending date (e). You can also click Today (f) to quickly set the current date.



4 Enter the time manually in the start and end time field (g, h), or click the clock icon to set specific start and/or end times and click Set (i). You can also click Now (j) to set the field to the current time quickly.

5 Click Confirm (c).

Result: The site history is displayed for the selected period.

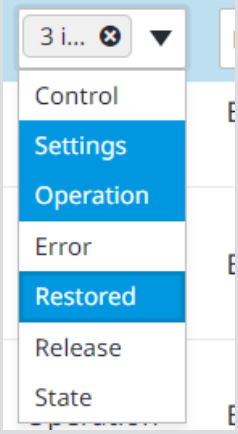
Time ↑	Type	History No.	Contents	Name	Instructed by	Code	Equipment Type	Port	Address
		Filter...	Filter...	Filter...	Filter...	Filter...	Filter...	Filter...	Filter...
22/05/23 12:37	Settings	D005	Thermal environment trend pattern setting change (TemperaturePat)	Site 1	Example User				
22/05/23 14:31	Settings	D006	Data output pattern setting change (dataoutput)	Site 1	Example User				
22/05/23 14:32	Settings	D006	Data output pattern setting change (dataoutput)	Site 1	Example User				
22/05/23 14:32	Settings	D006	Data output pattern setting change (dataoutput)	Site 1	Example User				
22/05/23 15:12	State	A036	DC+ Edge Start	DC+ Edge - Site 1					
22/05/23 15:13	State	B018	Start	1:2-00			Indoor	1	2-00

6 Use the filters under the column headers to display only particular information. To filter by Type, select 1 or more items from the drop-down list. To filter by other items (e.g. History No, Contents, Name, ...) simply type in the respective fields.

Time	Type	History No. ↑	Contents	Name	Instructed by	Code	Equipment Type	Port	Address
	1 i...	Filter...	Start	1:2-00	Filter...	Filter...	Filter...	1	2-00
22/05/23 15:13	State	B018	Start	1:2-00			Indoor	1	2-00
22/05/23 15:18	State	B018	Start	1:2-00			Indoor	1	2-00
22/05/23 15:25	State	B018	Start	1:2-00			Indoor	1	2-00
22/05/23 15:25	State	B018	Start	1:2-00			Indoor	1	2-00
26/05/23 01:00	State	B018	Start	1:2-00			Indoor	1	2-00
22/05/23 15:13	State	B023	Remote controller start/stop (Permitted)	1:2-00			Indoor	1	2-00
22/05/23 15:19	State	B023	Remote controller start/stop (Permitted)	1:2-00			Indoor	1	2-00

INFORMATION

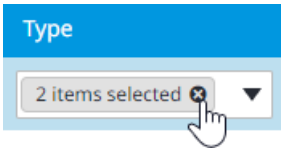
To filter by more than a single Type, select an item from the drop-down list first. Then, click the drop-down list again to select another item. Items that are currently included in the filter are marked in blue.



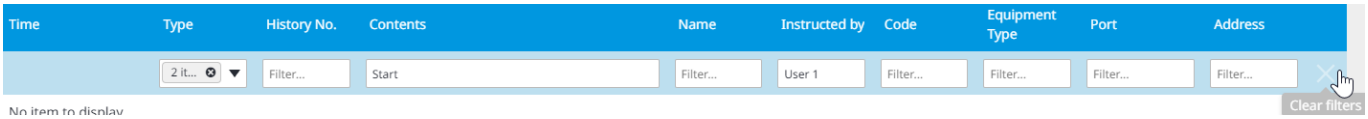
7 Further sort filtered information by clicking a column header to sort information in ascending order. Clicking the column header again will sort the information in descending order. If you click a column header a third time,

sorting will not be applied anymore. You can tell which sorting order is currently applied to the column by the arrow that follows the column header. Note that you can only sort 1 column at a time.

8 To clear a drop-down filter, click the small "x".



9 To clear all filters, click the "X" at the right side of the site history table.



10 Click the export button (b) to export the site history to Excel format.

11 Click Download in the pop-up window to confirm.

Result: The site history is downloaded.

> **INFORMATION**
>
> When you export site history, the resulting file will contain ALL site history for the specified period. Filters are NOT reflected in the Excel file.

4.9.2 Alarm history

This page provides an overview of all malfunctions (including DIII alarms), prediction logic warnings and IEQ sensor sensor threshold passings that occurred on your available sites. DC+ Edge controllers are constantly monitoring connected units, sensors and equipment at the sites. They are able to detect alarms and transmit these to the cloud. This happens when the alarm begins and when it stops. For more information about disabling/enabling alarm notifications, see "4.4.1 Application settings" [▸ 13] and "4.11.1 Site list" [▸ 168].

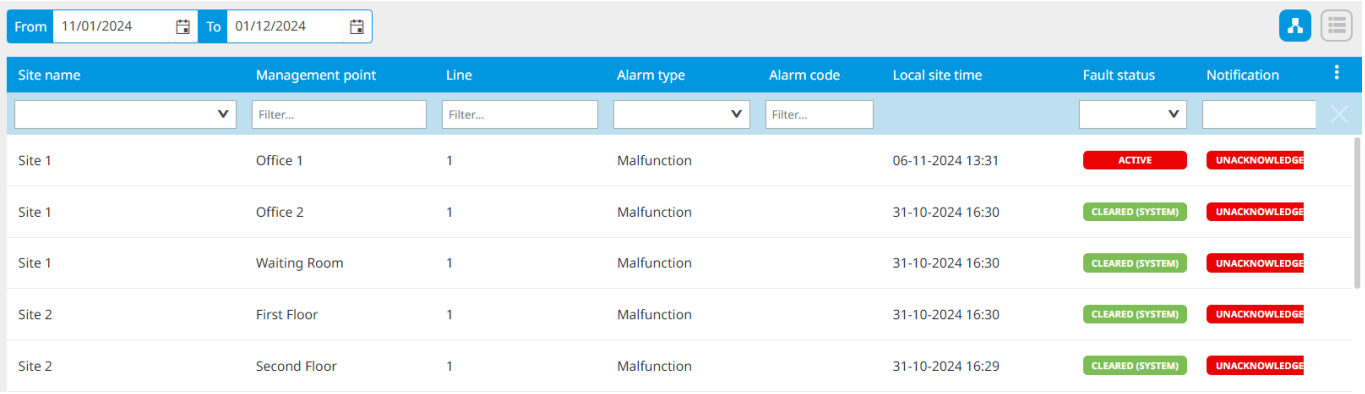
To manage the alarm history

Alarms always enter the system with the Active status. Once an alarm has been resolved, the status changes to Cleared.

Alarm status		Description
ACTIVE	Active	The alarm is currently ongoing.
CLEARED	Cleared	The alarm has been resolved.

1 In the sidebar, go to REMOTE DIAGNOSTICS > ALARM HISTORY.

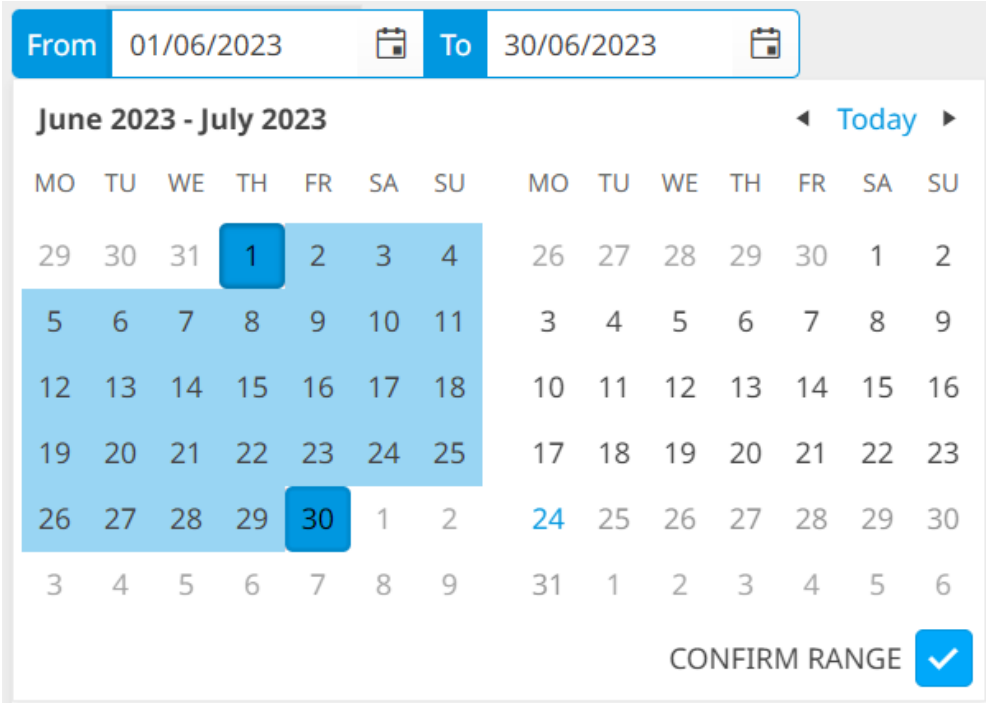
Result: An overview of alarms at your sites is displayed.



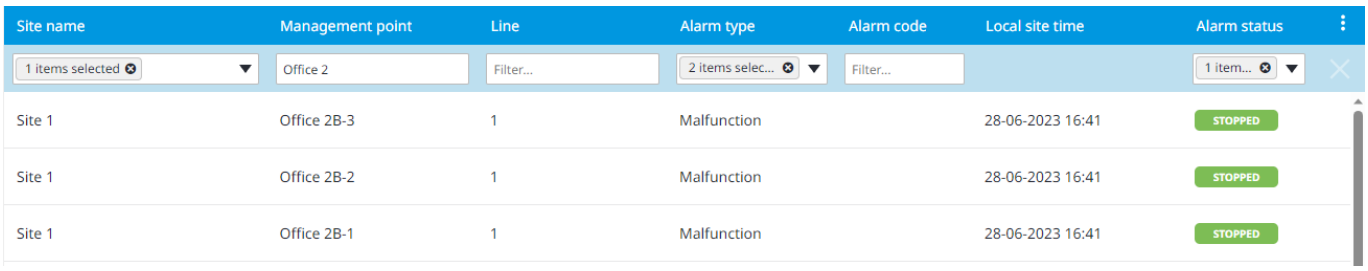
2 From the top right corner of the page, select a view. The view determines how the alarms are displayed in the overview. The following views are available:

Alarm status		Description
	Bundled view	Alarms for every management point are grouped together. This is the default view when the page is opened.
	List view	Alarms for all management points are listed individually.

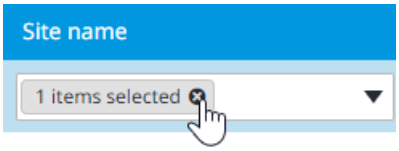
3 Use the calendar picker to specify a period for which you want to view alarms. Select a From and To date, then click Confirm Range.



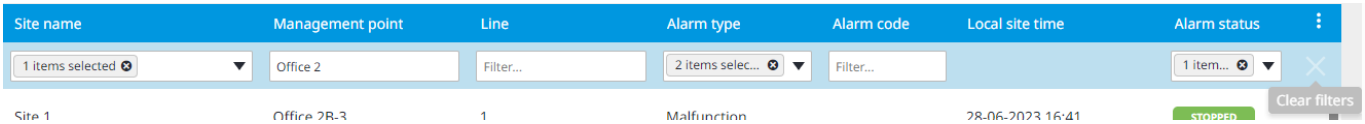
4 Use the filters under the column headers to display only particular information. To filter by Site name or Alarm type, select an item from the drop-down list. You can filter alarms by other alarm (e.g. Alarm code) labels by typing in the respective fields.



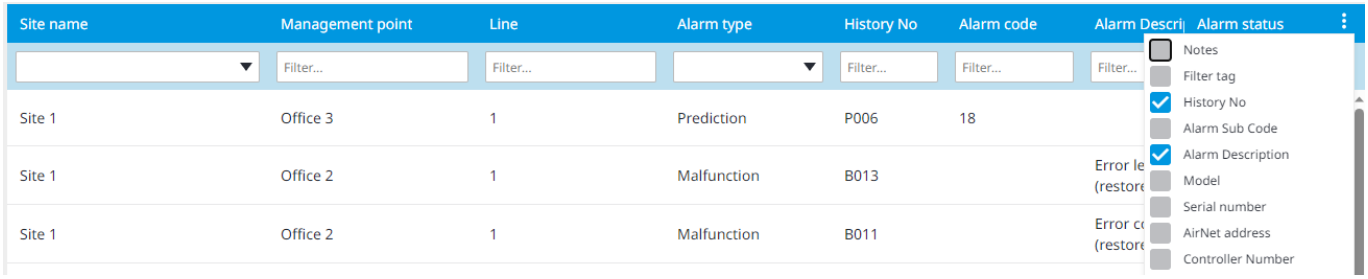
5 To clear a drop-down filter, click the small "x".



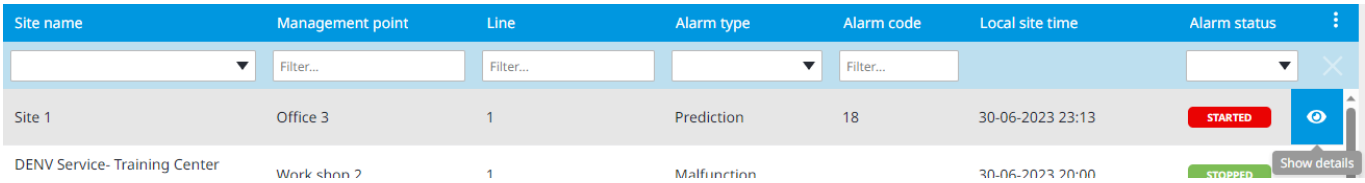
6 To clear all filters, click the "X" at the right side of the alarm table.



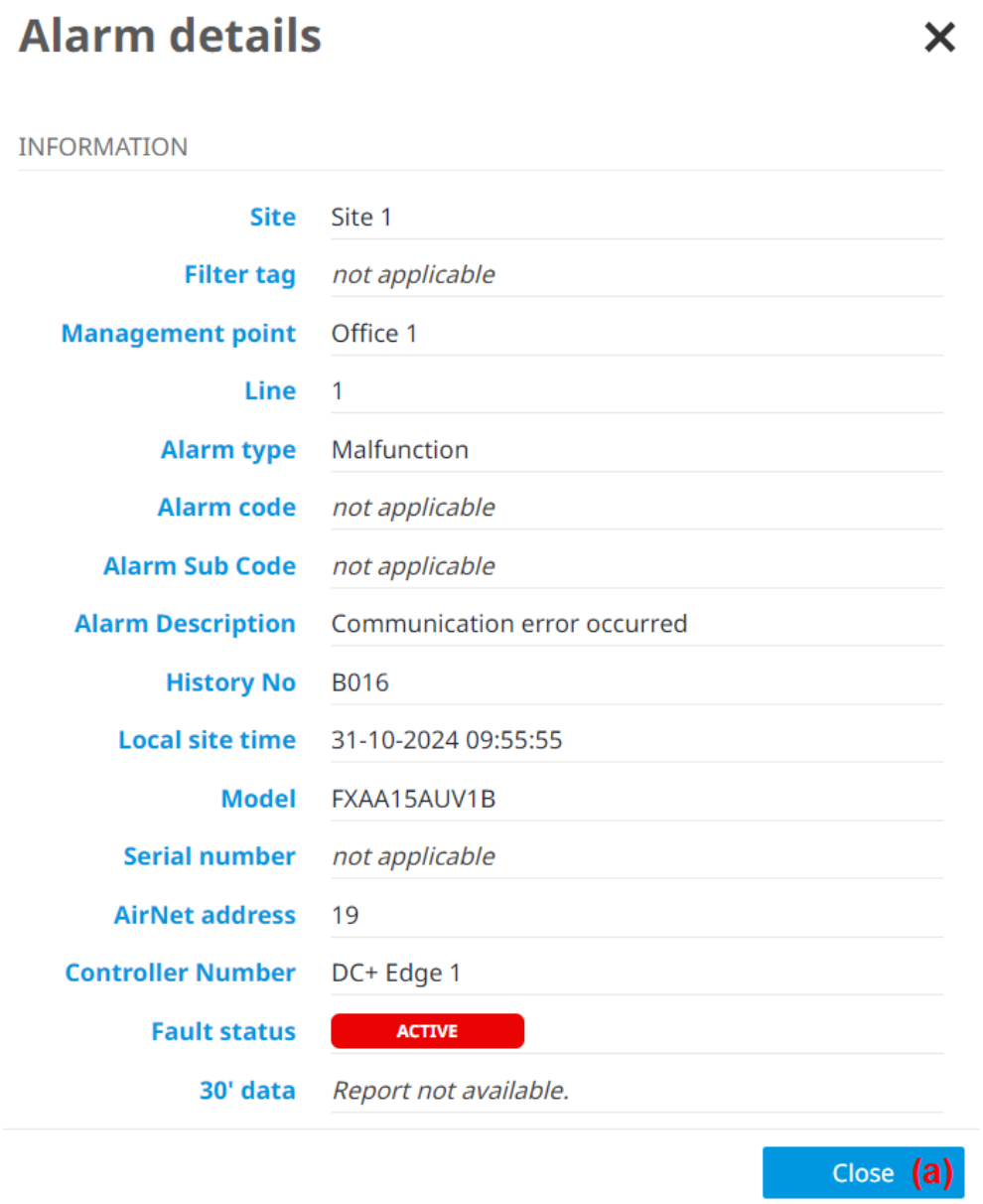
7 You can include more types of information in the alarm overview. Click the vertical ellipsis and select the checkboxes of the alarm labels you want to include.



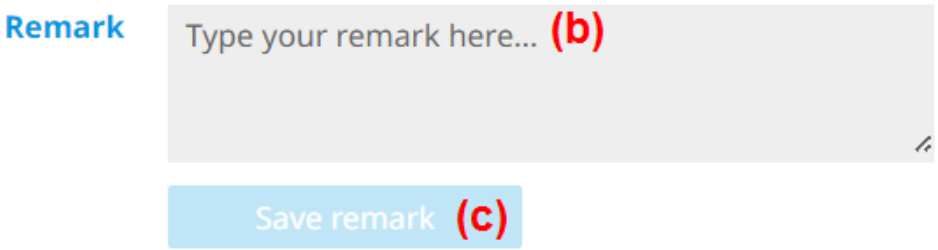
8 Click an alarm (individual or bundled) to display a more information about the alarms for a specific management point, or about an individual alarm.



Result: A detailed overview of the alarm appears on the right side of the page. For more information about what alarm codes and how to resolve them, see the documentation of the unit in question. For more information about exporting alarm data, see "To export alarm history data" [▸ 156].

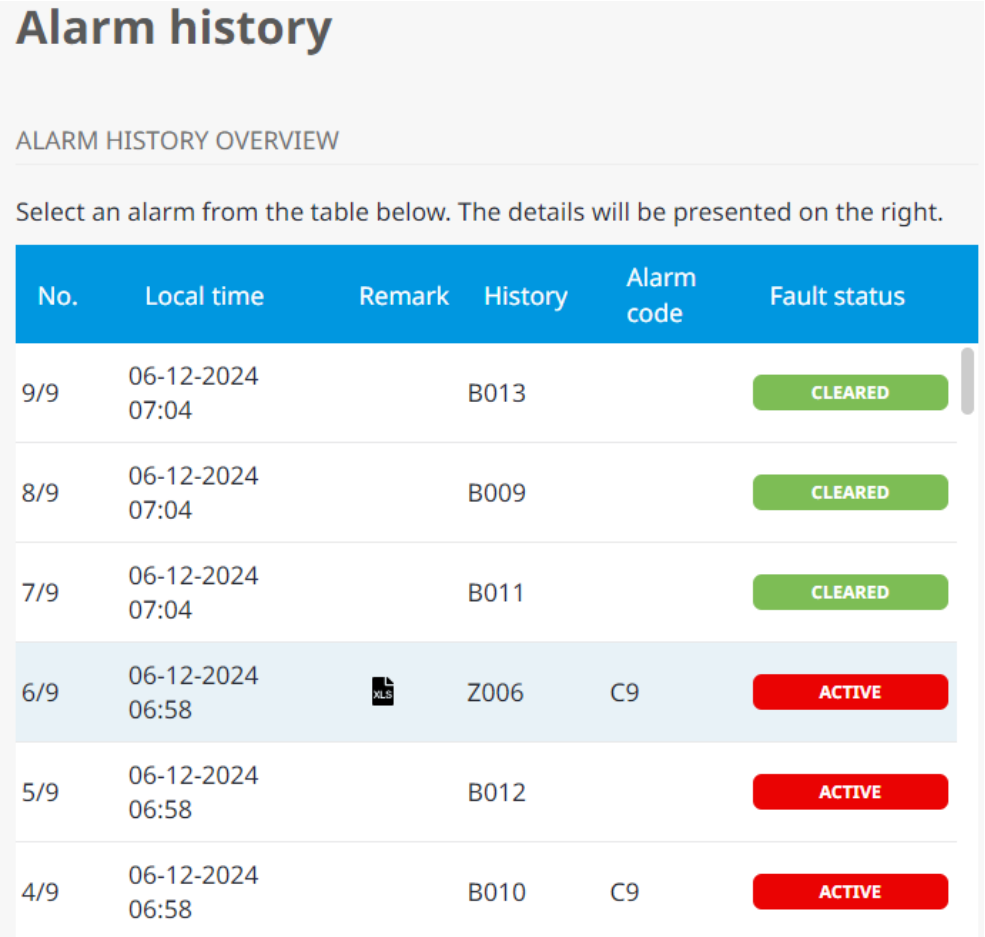


9 Optionally, add a remark (b) to the alarm. Then click Save remark (c) to save.



10 Switch to another alarm occurrence for the same management point from the Alarm history section. This allows you to quickly consult the details for any alarm linked to the management point.

Result: The details of the selected alarm are displayed in the Alarm details section.



11 Click Close (a) to return to the main overview.

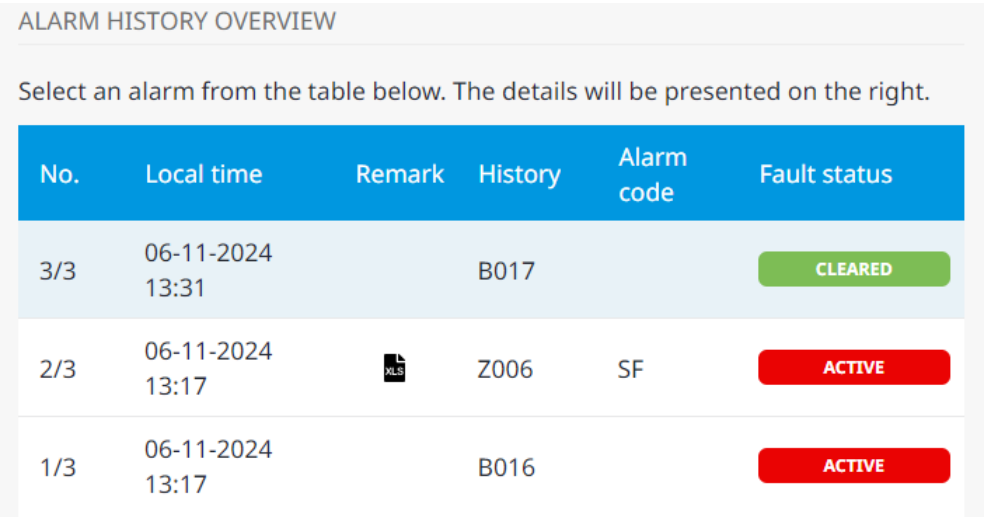
To export alarm history data

1 In the sidebar, go to REMOTE DIAGNOSTICS > ALARM HISTORY.

2 Select an alarm from the overview. This action can be performed while using the bundled view or the list view.

Result: A settings panel appears on the right side of the page.

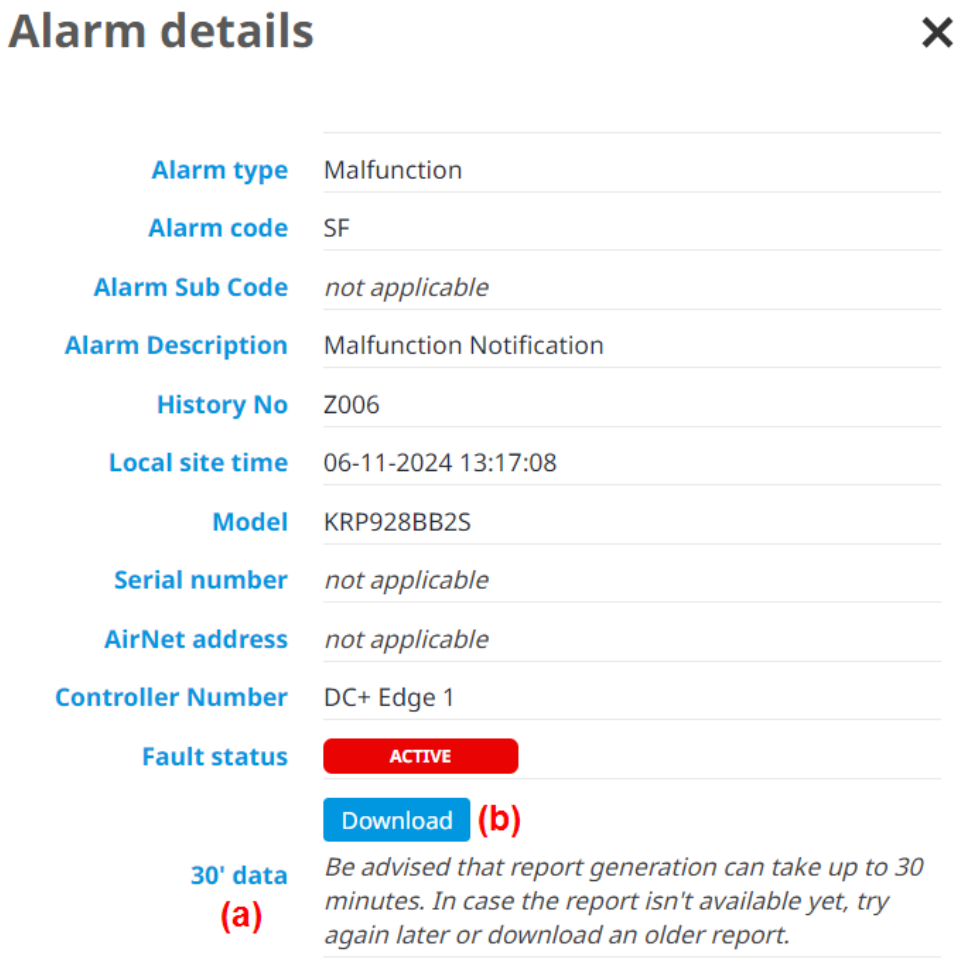
3 Under Alarm history, look for alarm occurrences which have a report available. Alarms for which a report is available are marked with an icon (XLS) in the overview.



4 From the overview, click an alarm occurrence for which a report is available.

Result: The Alarm details section is updated with the details of the selected alarm.

5 Go to 30' data (a) and click Download (b). If no data is available for the alarm, this option does not appear.



Result: The alarm history data is downloaded automatically.

> **INFORMATION**
> Generating a report for the alarm history data can take up to 30 minutes. If no report is available yet, try again at a later time or download an older report.

To change the notification status of an alarm

The notification status of an alarm influences how Daikin Cloud Plus Commissioning handles notifications for a specific alarm. This is relevant for users who have enabled e-mail notifications for one or more sites. By changing the notification status of an alarm, you can ensure that users with e-mail notifications enabled stop receiving notifications when the alarm has been resolved, or when the underlying issue is known but is still being resolved. The following statuses can be set:

Notification status		Description
UNACKNOWLEDGED	Unacknowledged	This is the initial status. Users receive e-mail notifications as long as the alarm is active.
ACKNOWLEDGED	Acknowledged	Users no longer receive e-mail notifications for the active alarm.

Notification status		Description
RESOLVED	Resolved	User no longer receive e-mail notifications for this alarm, as the alarm has been cleared. However, when a new alarm for the same management point occurs, users are notified of the alarm again.

The notification status can be changed from Unacknowledged to Acknowledged and vice versa. You can also skip the Acknowledged status and resolve the alarm straight away. Once an alarm is set to Resolved, you cannot go back to the other two statuses.

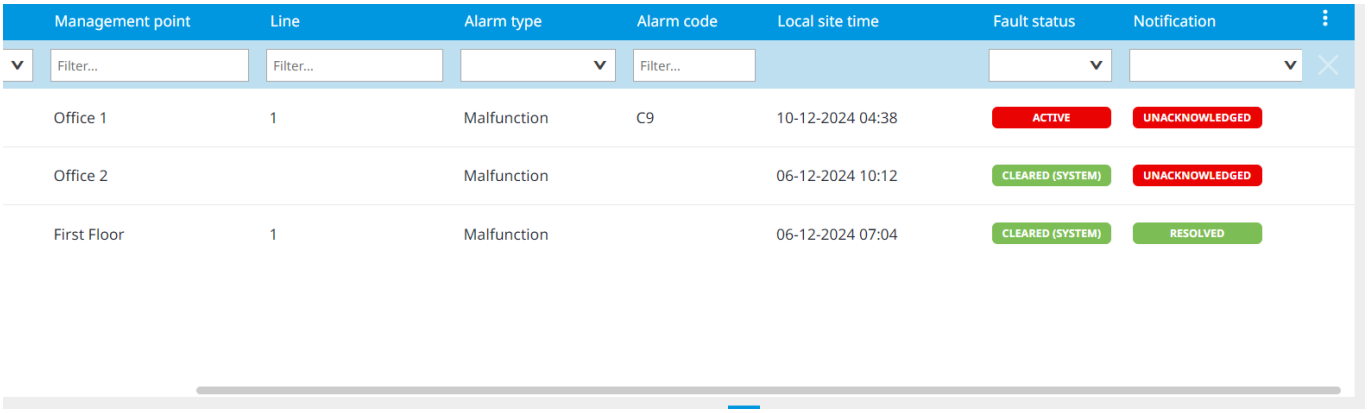
The notification status is not to be confused with the fault status of an alarm, which gives information about the actual status of the alarm itself.

Prerequisite: Bundled view is selected.

Prerequisite: There is at least 1 alarm in the overview.

1 In the sidebar, go to REMOTE DIAGNOSTICS > ALARM HISTORY.

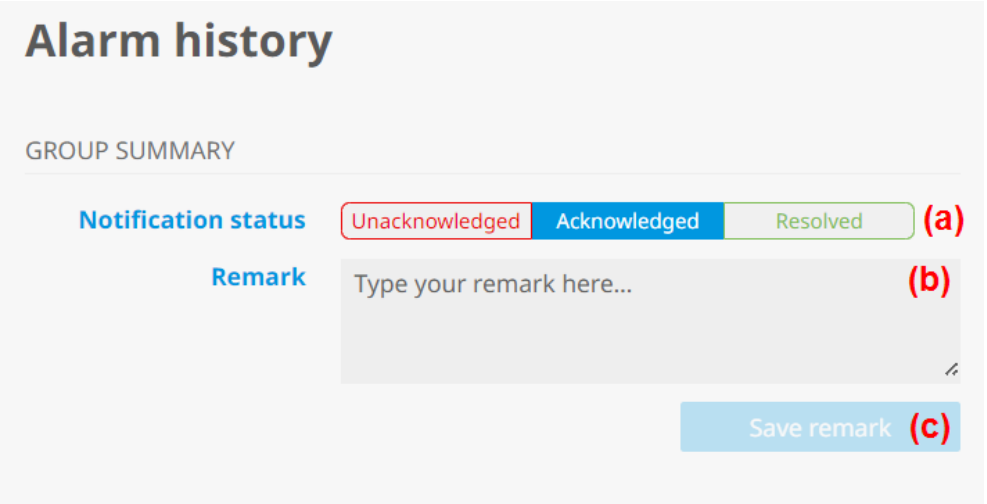
Result: An overview of alarms at your sites is displayed. The notification status for the alarm is listed in the overview. Whenever an alarm occurs, the notification status is always Unacknowledged.



2 Select an alarm.

Result: A settings panel appears on the right side of the page.

3 Under Alarm history, select the notification status (a) you want to apply:



4 Optionally, add a remark (b) to the alarm. Then, click Save remark (c) to save it.

5 Click Close.

Result: The alarm overview is displayed. The notification status for the alarm has changed.

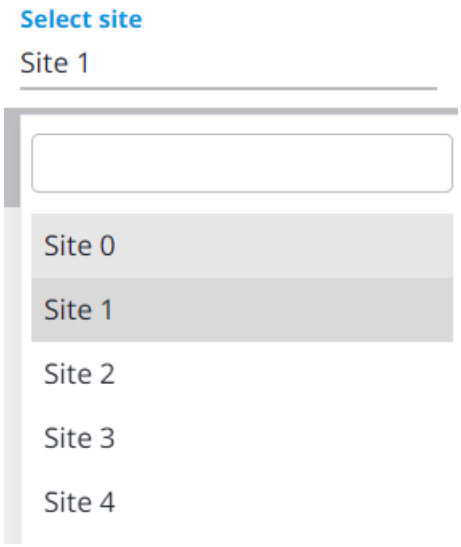
4.9.3 Prediction logic

This page allows you to enable malfunction prediction logic for units connected to a DC+ Edge. If this function is enabled, and the system predicts the malfunction of a unit, an alarm is generated and sent to the "4.9.2 Alarm history" [▸ 152] page. In addition to this, you can also enable e-mail notifications for future alarms. In order to receive these e-mails, enable notifications for the site that generates the alarms. See "To manage notifications for a site" [▸ 176] for more information about managing notifications for sites.

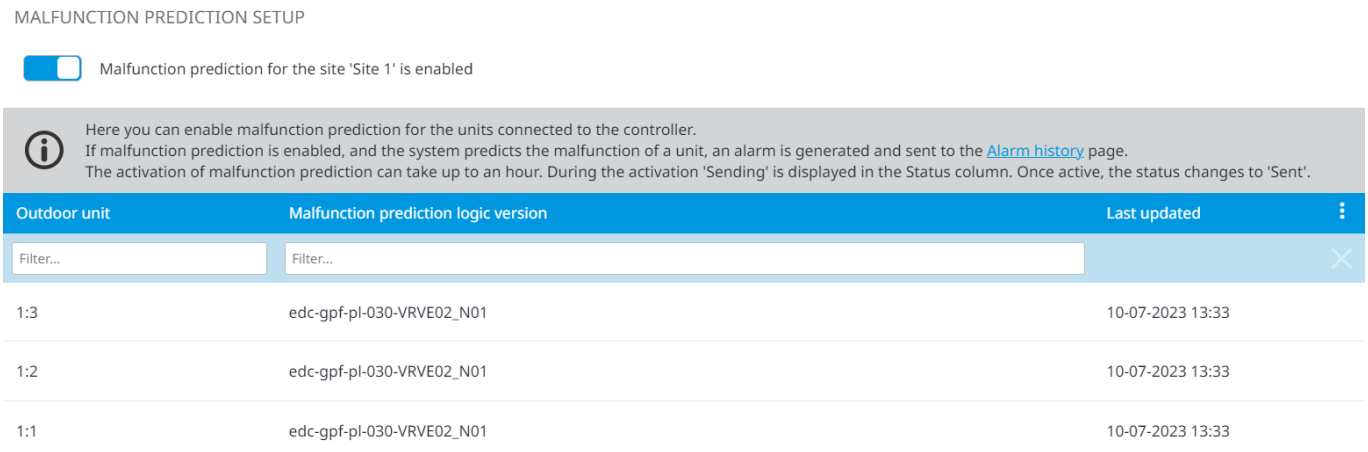
To enable or disable prediction logic for a site

1 In the sidebar, go to REMOTE DIAGNOSTICS > PREDICTION LOGIC.

2 Select the desired site from the site picker.



3 Set the toggle switch in the on/off position to enable/disable malfunction prediction.



Result: Malfunction prediction is enabled for the site.

INFORMATION

The activation of malfunction prediction logic can take up to an hour.

4.10 Data collection settings

4.10.1 Data output

Daikin Cloud Plus stores detailed historical data about system events (e.g. changes to unit settings and states, malfunctions, etc.). DATA OUTPUT allows you to consult this data in Daikin Cloud Plus, or output the data to a file.

INFORMATION

Data output is NOT available when using a smartphone or tablet to access Daikin Cloud Plus. Please use a computer (PC) to use this functionality.

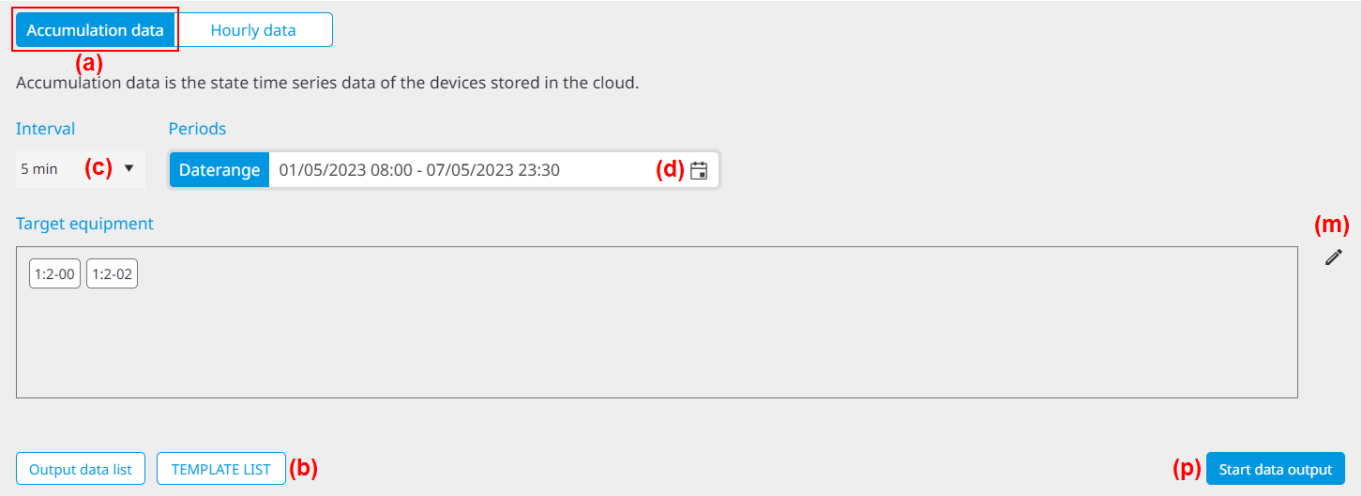
To export accumulation data

You can export Accumulation data from Daikin Cloud Plus. Accumulation data is all equipment data that the system has stored and collected for every unit or piece of equipment so far. You can define a period, interval, and target units to export a subset of this data.

INFORMATION

It can take up to 2 hours for equipment data to be stored. If the current time is 17:00, only the equipment data up to 15:00 has already been stored.

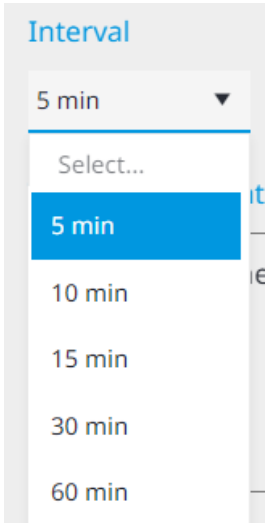
1 In the sidebar, go to DATA COLLECTION SETTINGS > DATA OUTPUT.



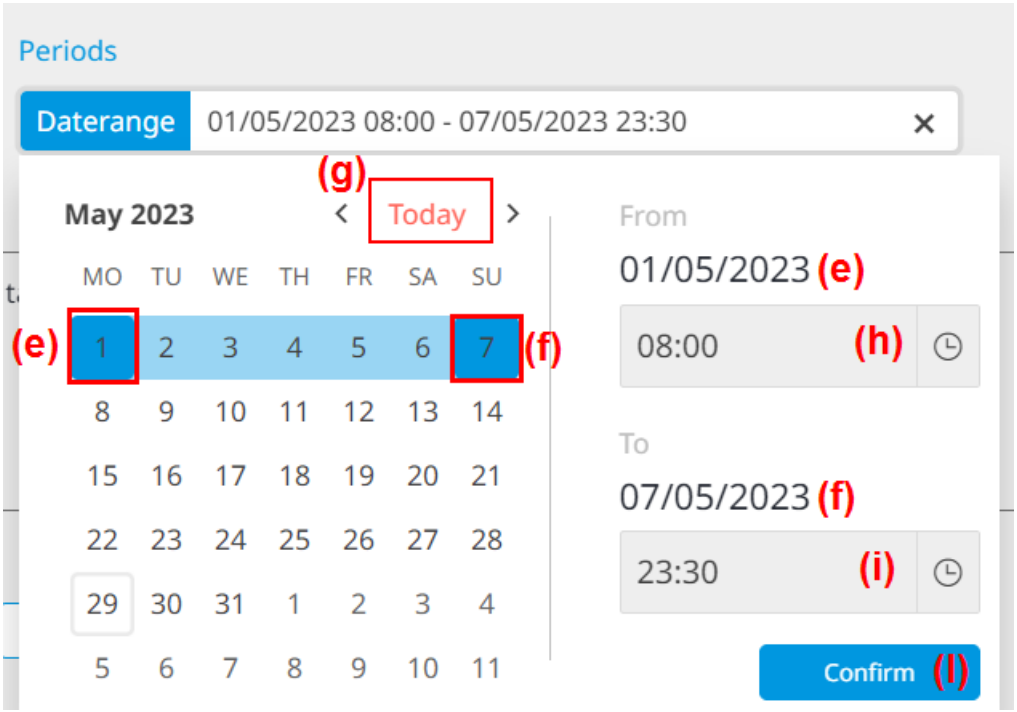
2 Select Accumulation data (a).

3 Optional: Select TEMPLATE LIST (b) to apply a template. If you have not yet created any templates, see "To create a data export template" [▶ 165] for more information.

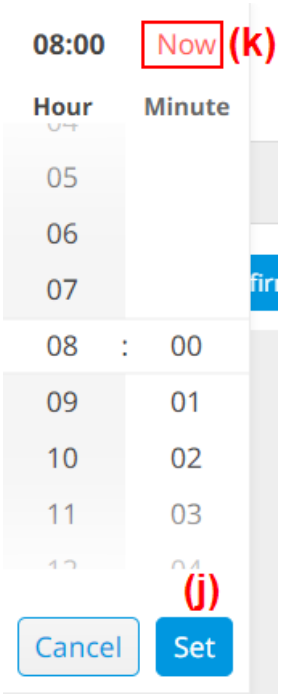
4 Select an Interval (c) from the drop-down menu. You can choose between 5 minutes, 10 minutes, 15 minutes, 30 minutes and 60 minutes.



5 Specify the period for which you want to export Accumulation data. First, click the calendar icon (d) to show the calendar. Then, click once on a date to set a starting date (e). Click again to set the ending date (f). You can also click Today (g) to quickly set the current date.



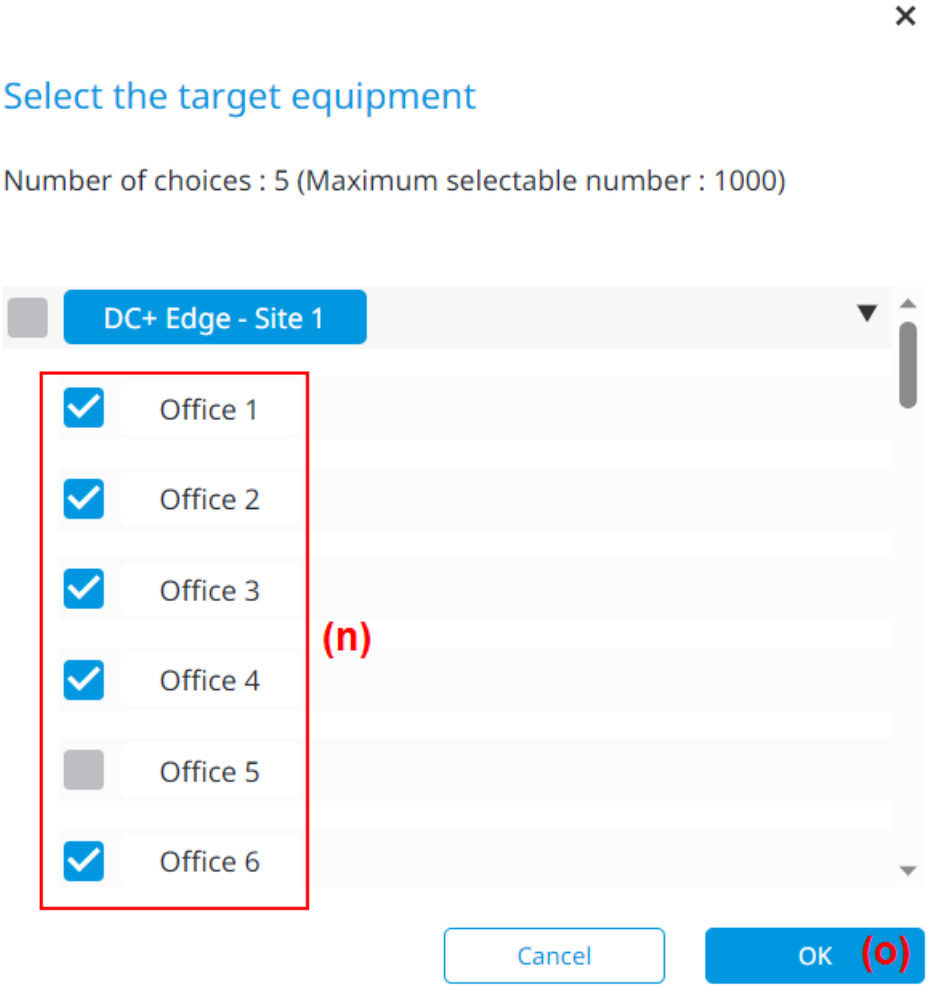
6 Enter time manually in the start and end time field (h,i), or click the clock icon to set specific start and/or end times and click Set (j). You can also click Now (k) to set the field to the current time quickly.



7 Click Confirm (l).

8 Click the pencil icon (m) to add target equipment.

Result: A settings panel appears on the right side of the page.

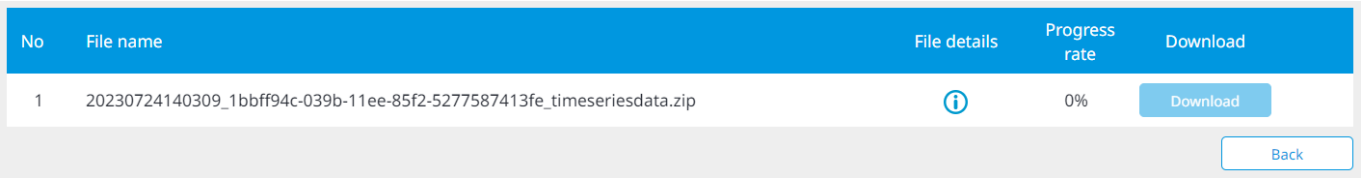


9 Select the checkboxes (n) of the units and/or equipment you want to target.

10 Click OK (o).

11 Click Start data output (p).

Result: The Output data list appears. This page lists the last 10 output tasks that have been started. Here you can consult the data output progress.



INFORMATION

Daikin Cloud Plus can store the information of up to 10 output tasks. You can access and download data for these tasks at a later time. However, if the maximum number of output tasks is already stored, at least 1 data output task must be deleted in order to free up space for new tasks.

12 Once the progress has reached 100%, click Download to download the .zip file that contains the accumulation data.

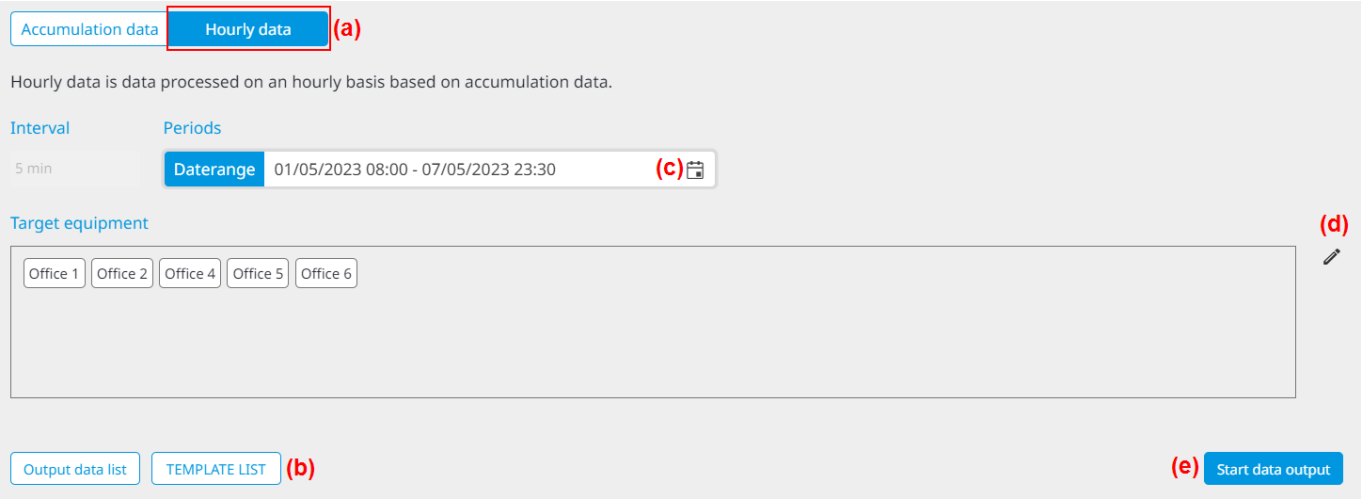
To export hourly data

You can export Hourly data from Daikin Cloud Plus. Hourly data is data processed on an hourly basis, derived from stored equipment data (Accumulation data) that is stored and collected by the system.

INFORMATION

It can take up to 20 minutes for hourly data to be stored. If the current time is 17:00, only the hourly data up to 16:30 has already been stored.

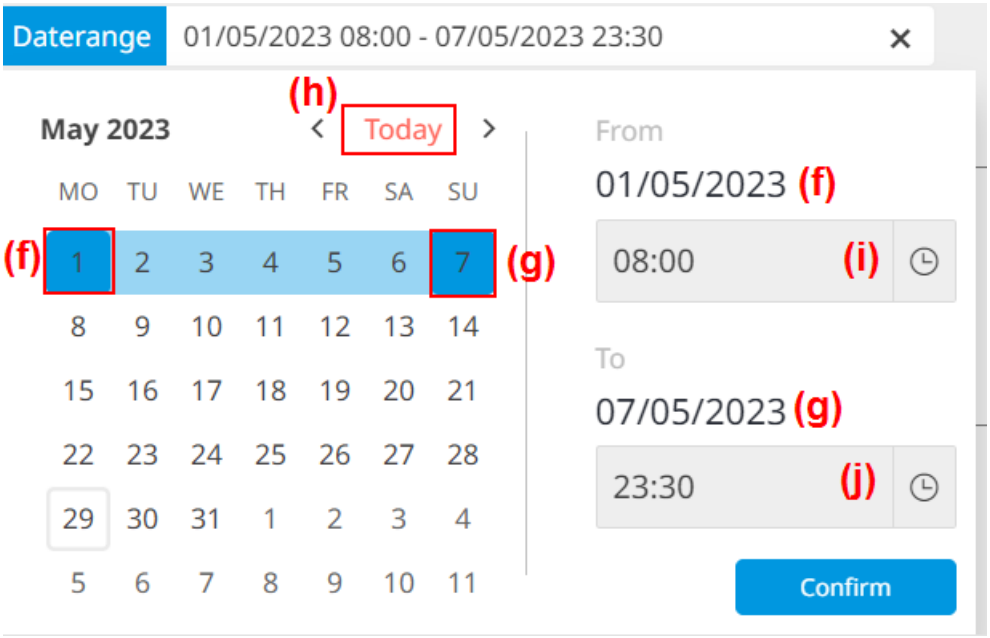
1 In the sidebar, go to DATA COLLECTION SETTINGS > DATA OUTPUT.



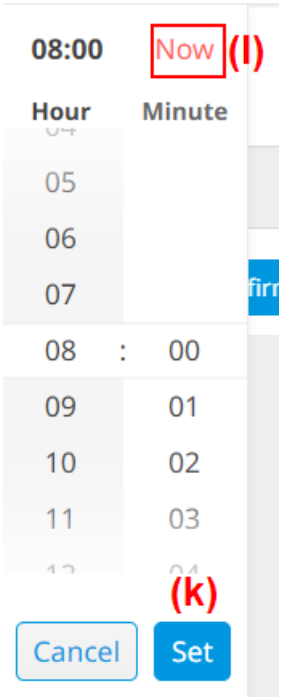
2 Select Hourly data (a).

3 Optional: Select TEMPLATE LIST (b) to apply a template. If you have not yet created any templates, see "To create a data export template" [▸ 165] for more information.

4 Specify the period for which you want to export Hourly data. First, click the calendar icon (c) to show the calendar. Then, click once on a date to set a starting date (f). Click again to set the ending date (g). You can also click Today (h) to quickly set the current date.



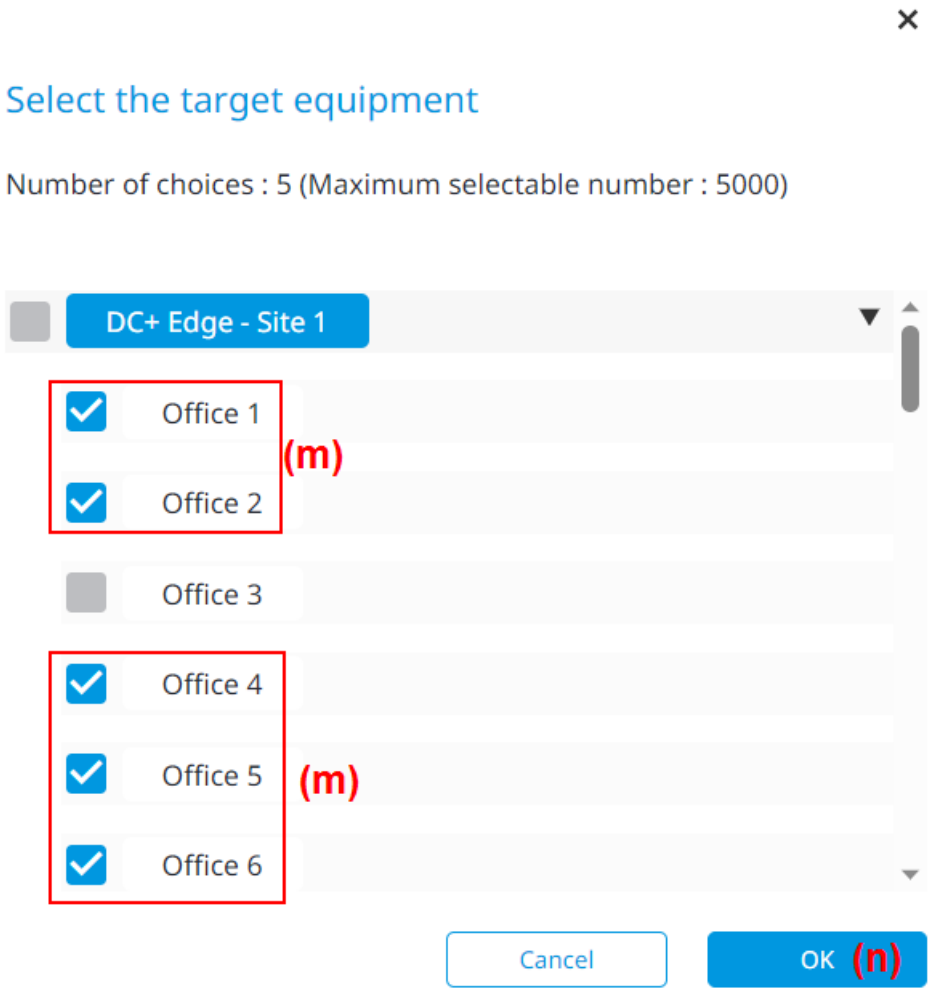
5 Enter the time manually in the start and end time field (i, j), or click the clock icon to set specific start and/or end times and click Set (k). You can also click Now (l) to set the field to the current time quickly.



6 Click Confirm.

7 Click the pencil icon (d) to add target equipment.

Result: A settings panel appears on the right side of the page.



8 Select the checkboxes (m) of the units and/or equipment you want to target.

9 Click OK (n).

10 Click Start data output (e).

Result: The Output data list appears. This page lists the last 10 output tasks that have been started. Here you can consult the data output progress.

INFORMATION

Daikin Cloud Plus can store the information of up to 10 output tasks. You can access and download data for these tasks at a later time. However, if the maximum number of output tasks is already stored, at least 1 data output task must be deleted in order to free up space for new tasks.

11 Once the progress has reached 100%, select Download to download the .zip file that contains the Hourly data.

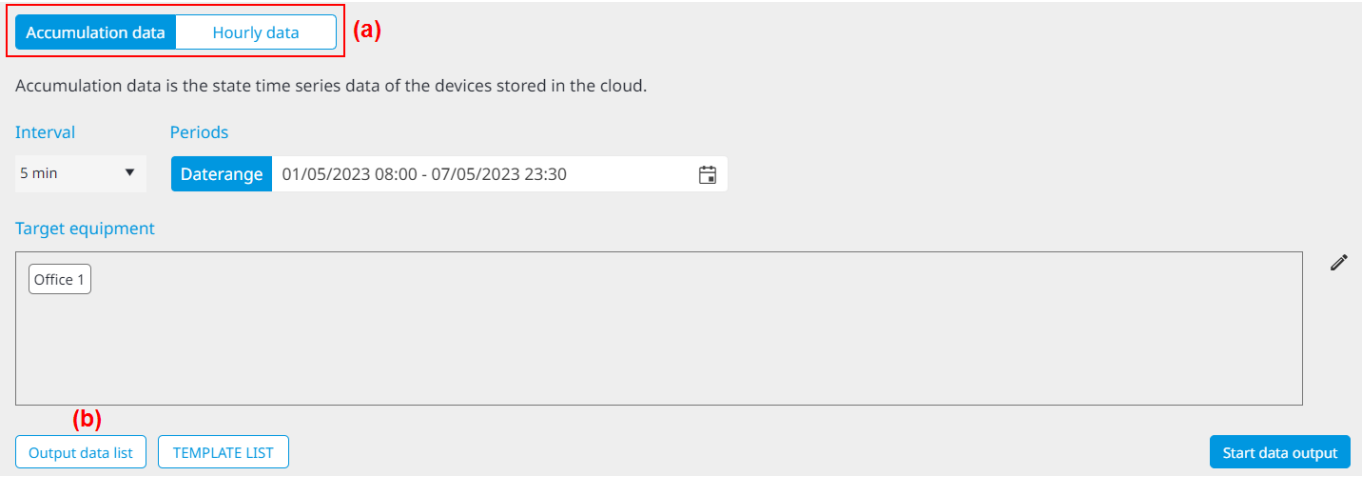
To create a data export template

You can create a template for exporting data to export data more easily by saving data output tasks that were performed previously as a template.

INFORMATION

Templates are NOT shared between Accumulation data and Hourly data, they must be created separately for each type of export. However, the procedure for creating templates is the same.

1 In the sidebar, go to DATA COLLECTION SETTINGS > DATA OUTPUT.

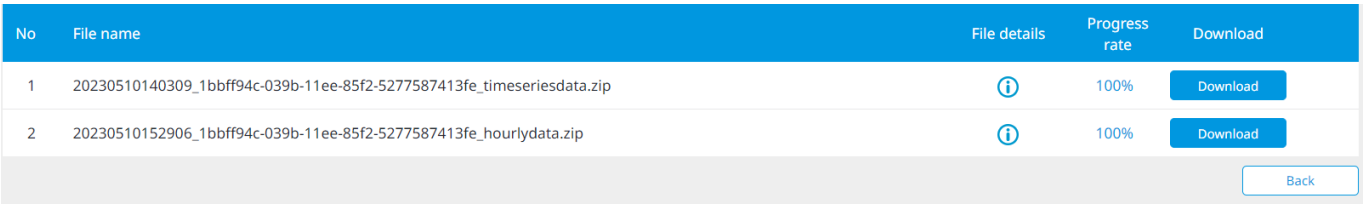


2 Select whether you want to create a template for Accumulation data or Hourly data (a).

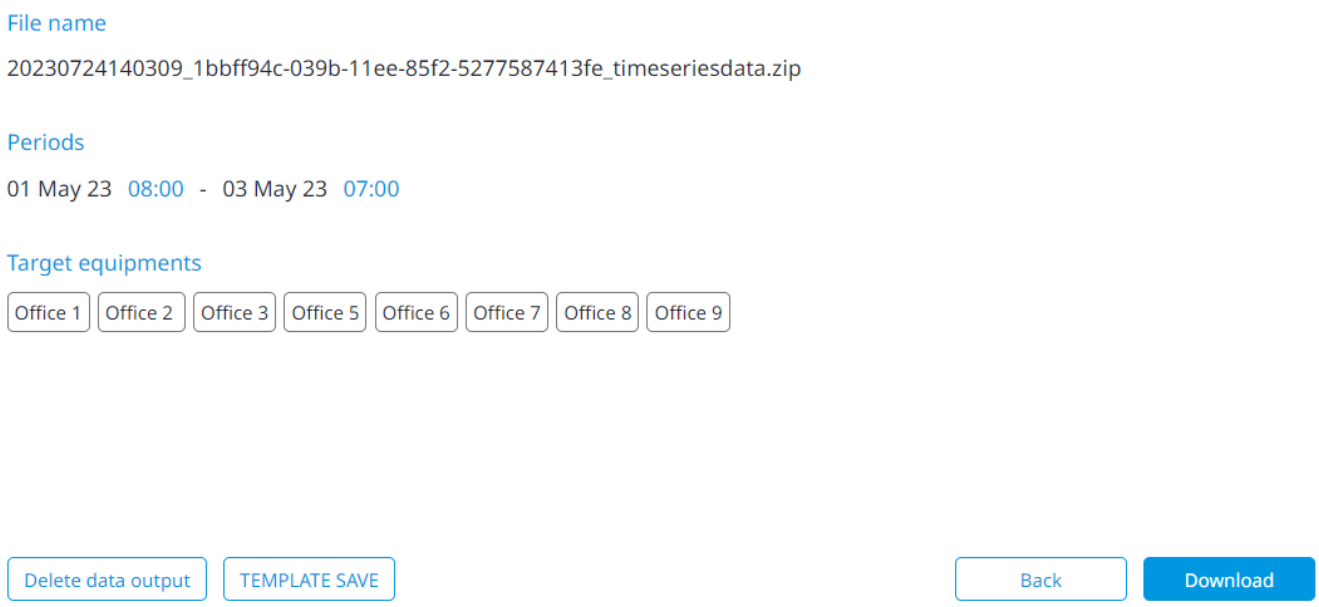
3 Define the conditions for the data output, and create at least 1 data output. See "To export accumulation data" [▸ 160] and "To export hourly data" [▸ 163] for more information. The conditions that you set for the data output will be included in the template.

4 Select Output data list (b).

5 Click the information icon of the data output task.

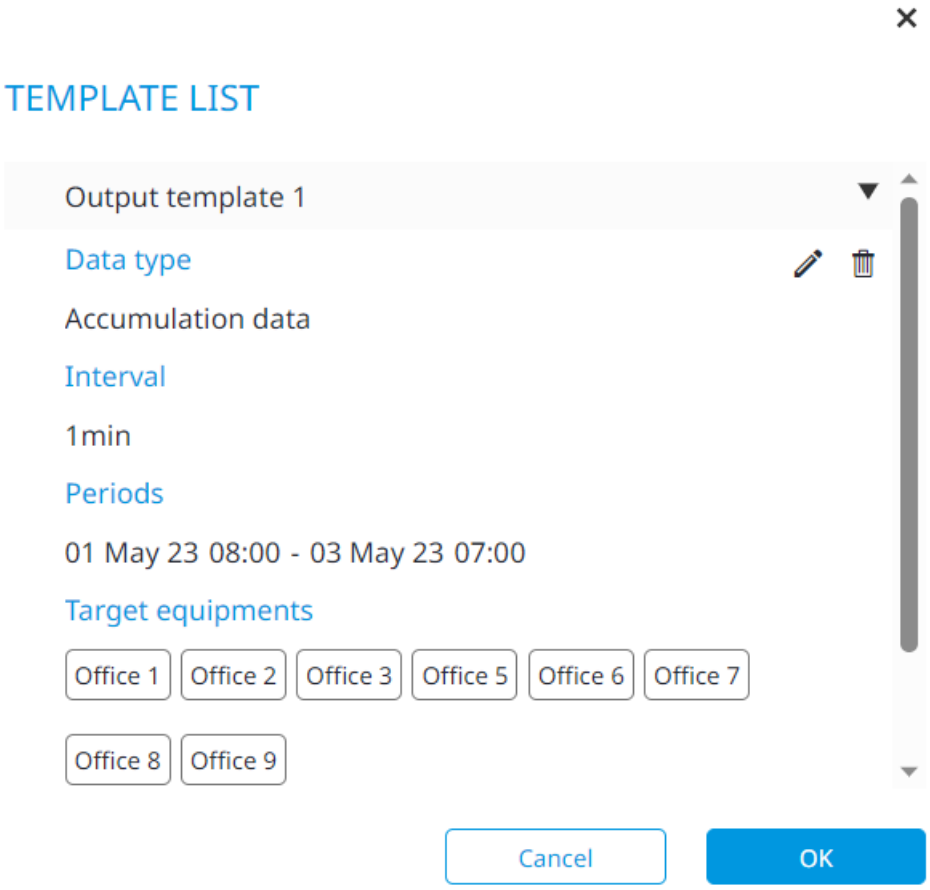


Result: The details of the data output task are displayed.



6 Click TEMPLATE SAVE.

Result: A settings panel appears on the right side of the page.



7 Click the pencil icon to rename the template. If you click the trashcan icon, the template will be deleted.

8 Click ✓ to confirm the template name.

9 Verify that the template information is correct. For example, if you notice a unit you want to exclude from the template, or if you want to change the period, you must first create another data output task with those conditions.

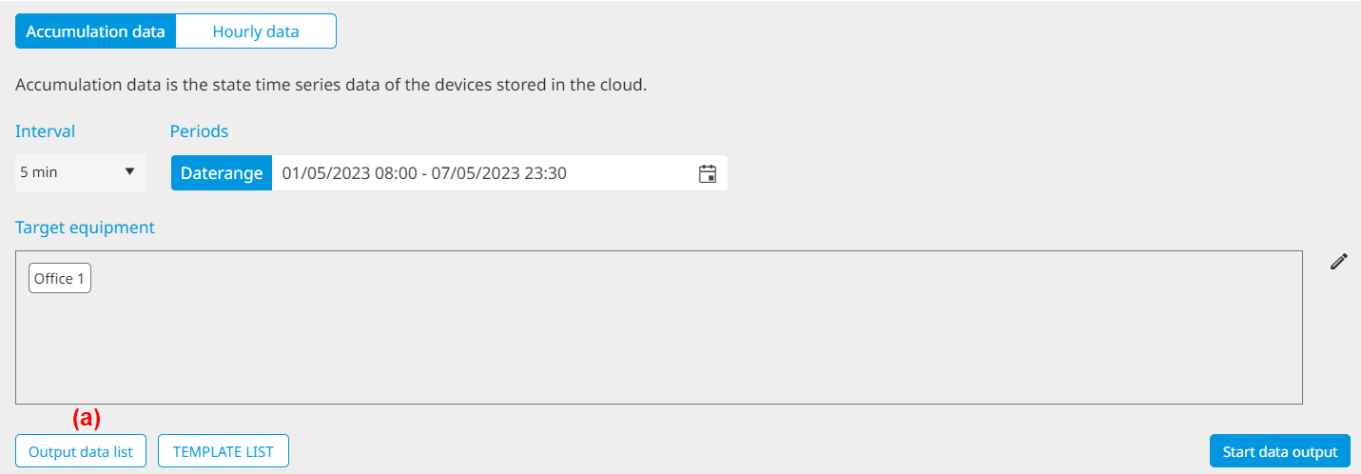
10 Click OK.

11 The data output template is saved.

To delete data output tasks

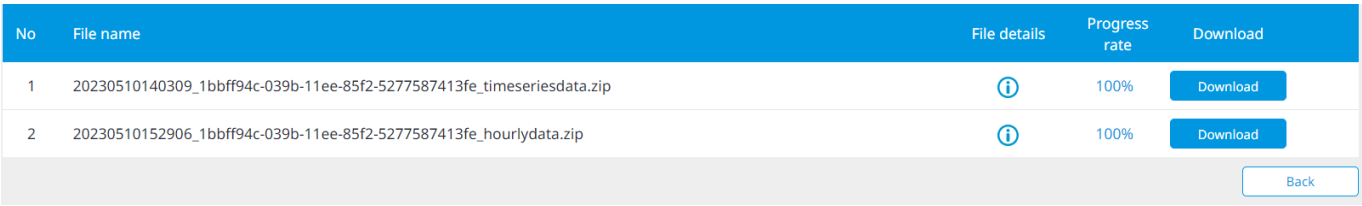
When data for 10 output tasks has been stored, some data must be deleted to be able to create new data output tasks.

1 In the sidebar, go to DATA COLLECTION SETTINGS > DATA OUTPUT.

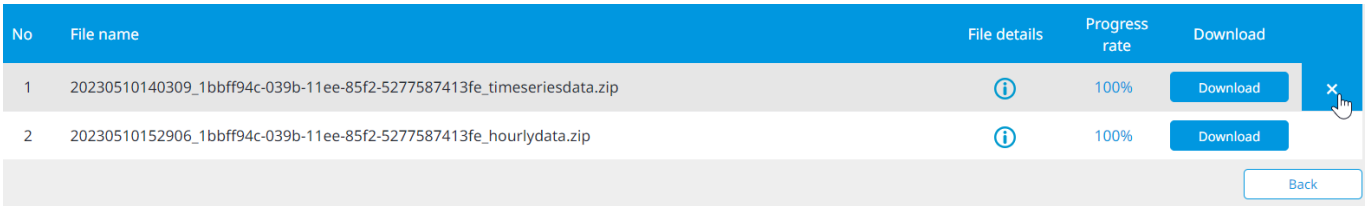


2 Select Output data list (a).

Result: A list of previously stored data output tasks is displayed.



3 Hover over a data output task in the list to display the delete icon ("x"). Click the icon to delete that output task. Alternatively, you can click the information icon and delete the output task from the details page.



4 Select Yes in the pop-up window to confirm.

Result: The data output task is deleted.

4.11 Administration

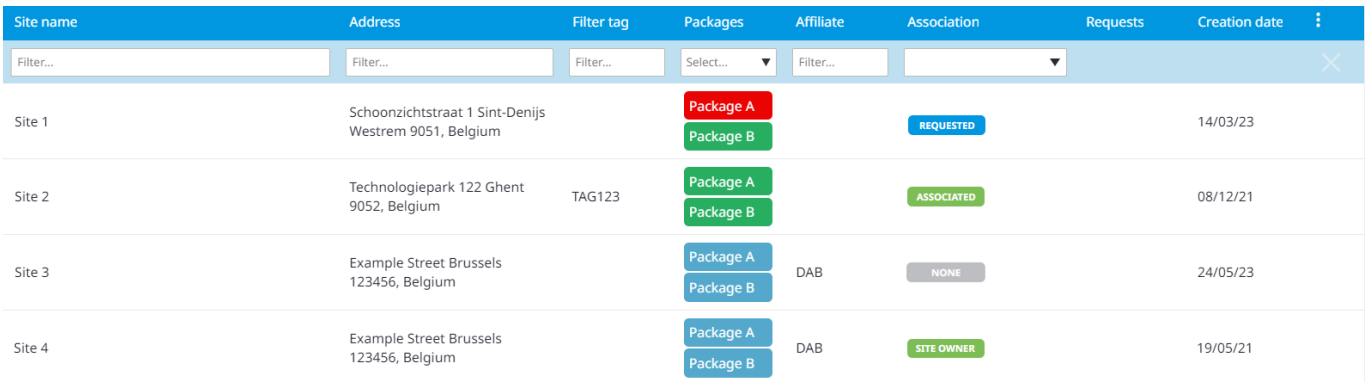
4.11.1 Site list

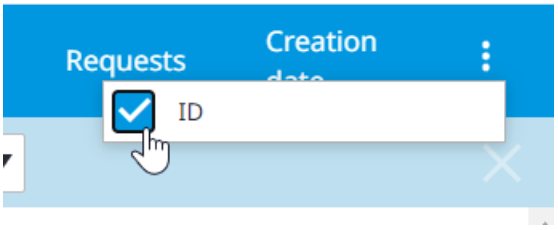
Site list provides an overview of all sites:

- you are currently associated to,
- you are the owner of,
- from your affiliation (in case you are an affiliate).

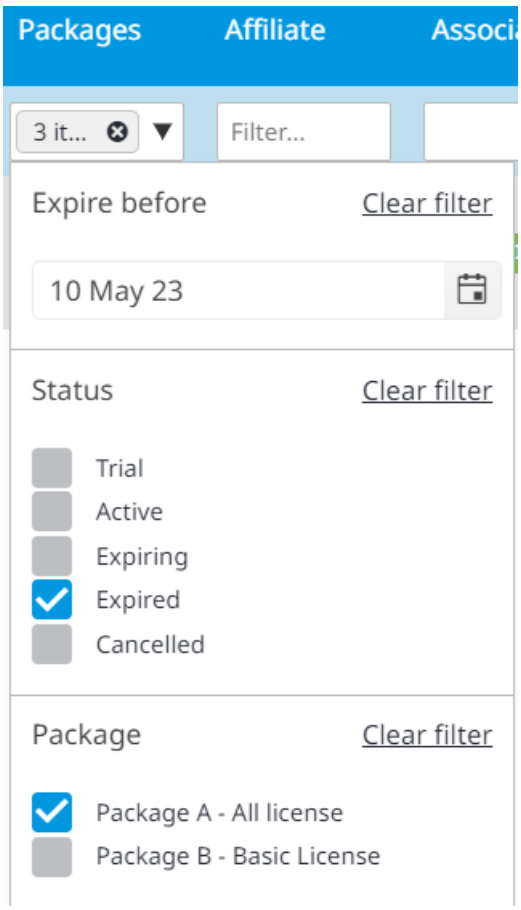
> **INFORMATION**
> As an affiliate, all sites from your affiliation will be visible in the site list. However, this does NOT mean you have access to all these sites, merely that you can request to access them from this list.

In the site list table, you can see the following site details for every site:



Item	Description
Site name	Name given to the site during site creation.
Address	Physical address of the site.
Filter tag	Tag that can (optionally) be set when creating or editing the site. The tag can be used to quickly filter for a specific site in case a lot of sites are listed in the site list.
Packages	Shows information about the site packages.
Affiliate	Shows the site affiliation (if any).
Association	Shows your association status for that site.
Requests	Shows the number of pending requests for that site. If nothing is shown, there are currently no pending association requests.
Creation date	Shows when the site was first created.
ID	This column is hidden by default. It can be displayed by clicking the vertical ellipsis on the top right and selecting the ID checkbox.  The site ID is used to pair sensors to a site. For more information about sensors, see "4.5.2 Sensor list" [▸ 26].

By using the drop-down lists, you can filter sites by expiry date, package status and package type. You can also combine filter criteria to quickly find sites in the site list.

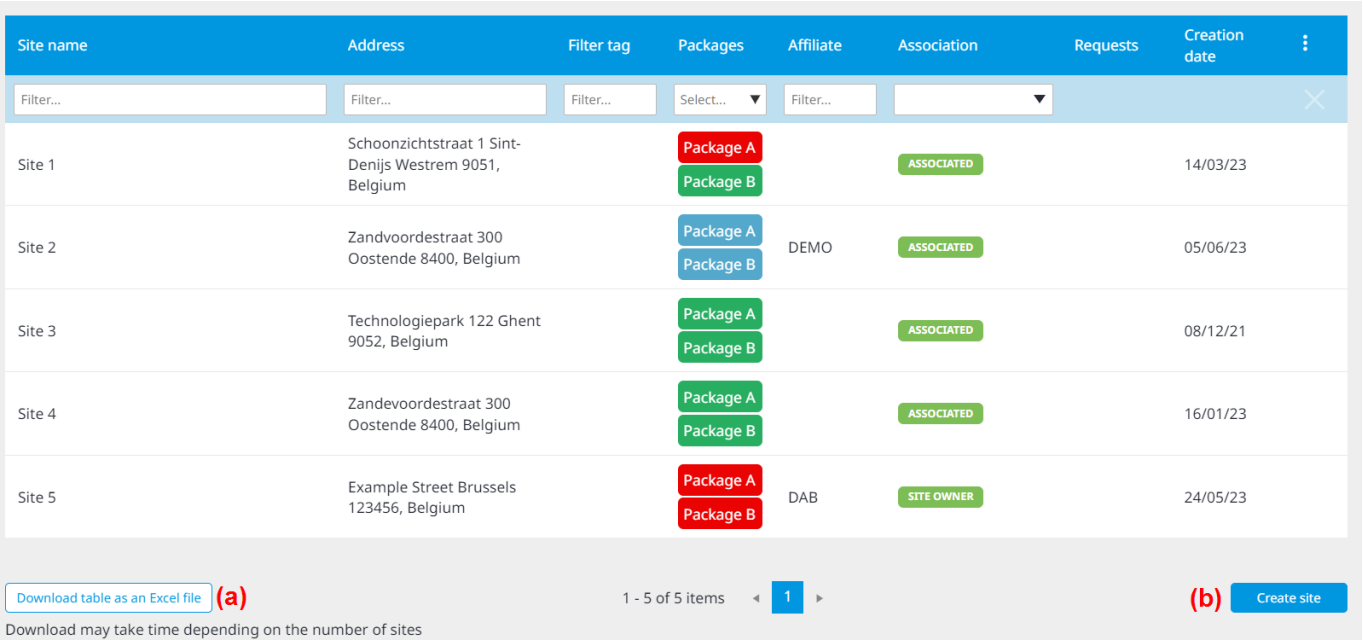


Package status		Description
Package A	Trial	A trial package is active for this site.
Package A	Active	The package is paid and active.
Package A	Expiring	The package will expire soon.
Package A	Cancelled	The package has either expired or has been cancelled. In case the package was cancelled, you can reactivate it by requesting an extension.

Association: shows your association status for that site:

Association state		Description
NONE	None	You have not requested access yet. You are not associated to the site and cannot view or edit its data.
REQUESTED	Requested	You have requested to be associated to the site, but the invite still has to be approved by a site owner.
ASSOCIATED	Associated	You are associated to the site. You can view and modify site data, depending on your user role.
SITE OWNER	Site owner	You are owner of the site.

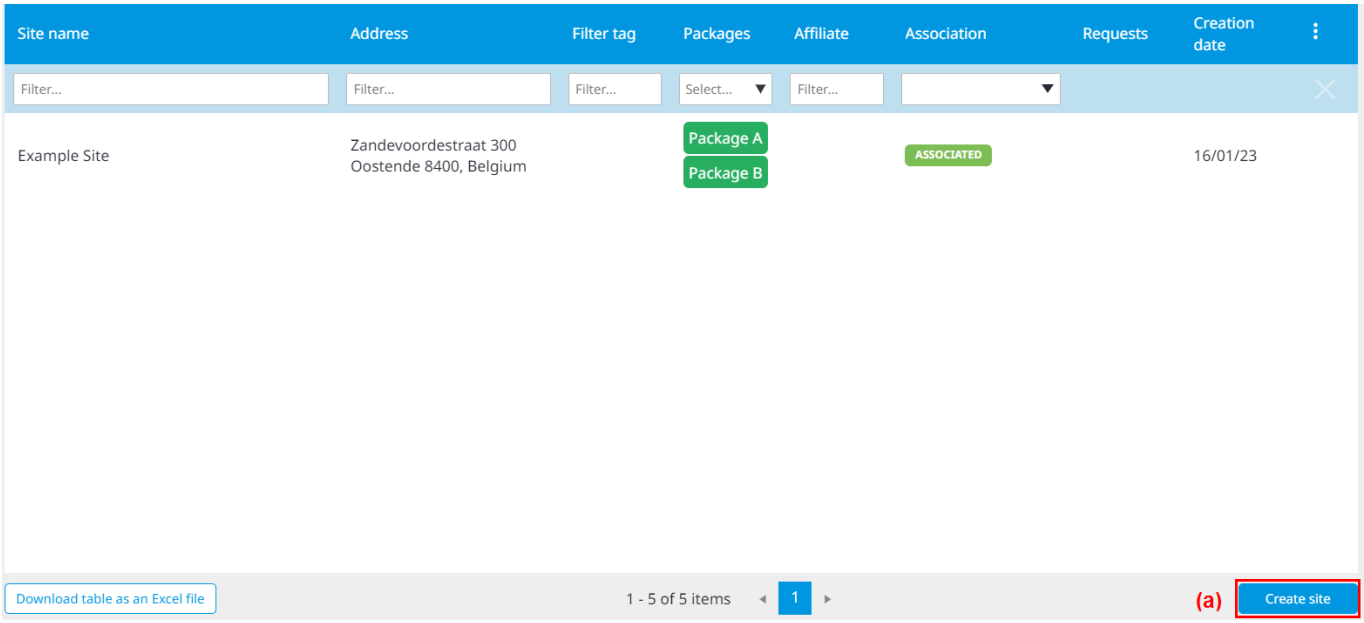
Additionally, on this page you can choose to export the whole Site list as an Excel file (Download table as an Excel file) (a), or create a new site (Create site) (b). For more information about site creation, see "To create a new site" [▸ 171].



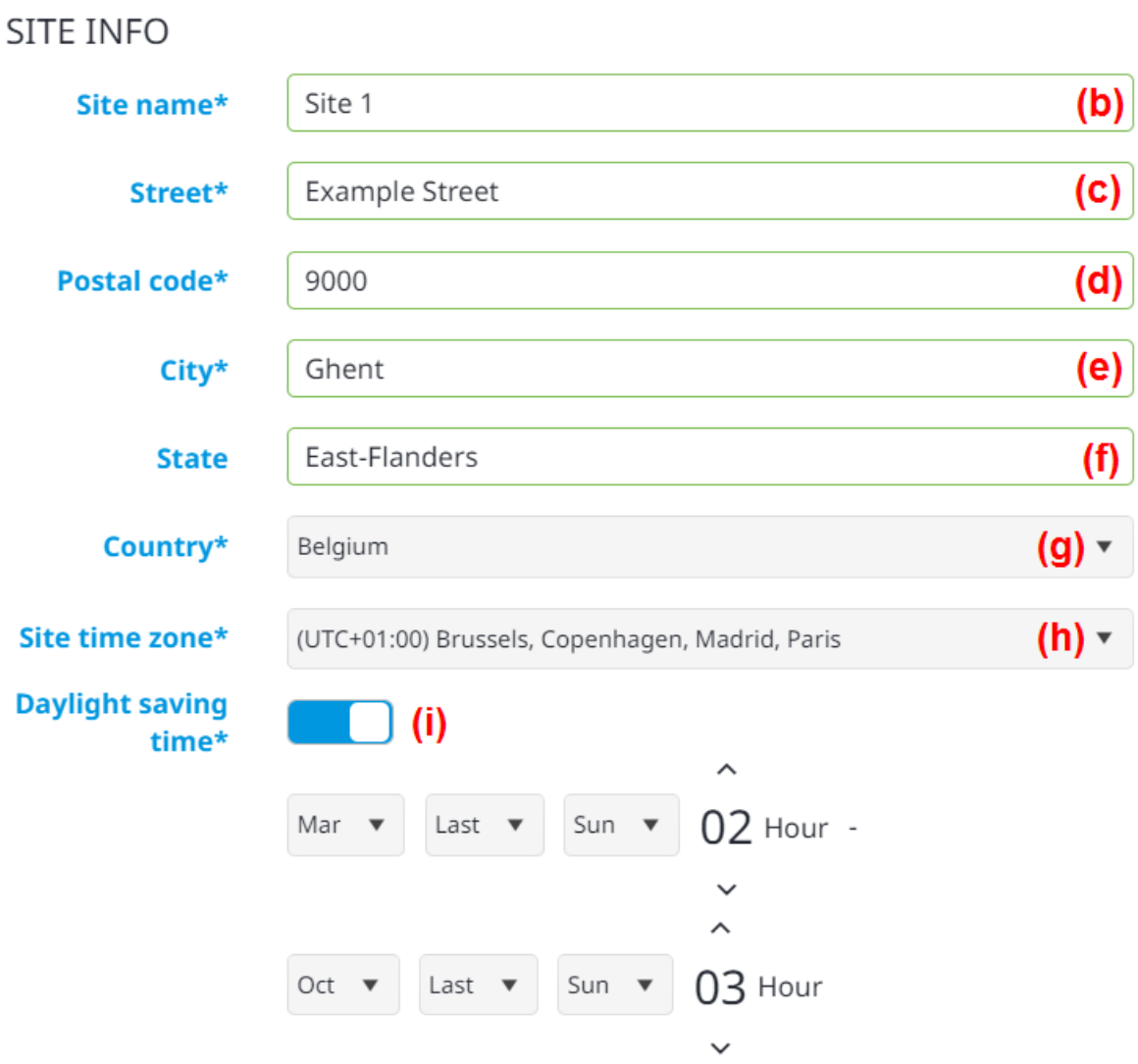
To create a new site

1 In the sidebar, go to ADMINISTRATION > SITE LIST.

2 Select Create site (a).



3 Enter the basic site details: Site name (b), Street (c), Postal code (d), City (e), State (f), and select a Country (g) from the drop-down list. Items marked with * are mandatory. Other items are optional.



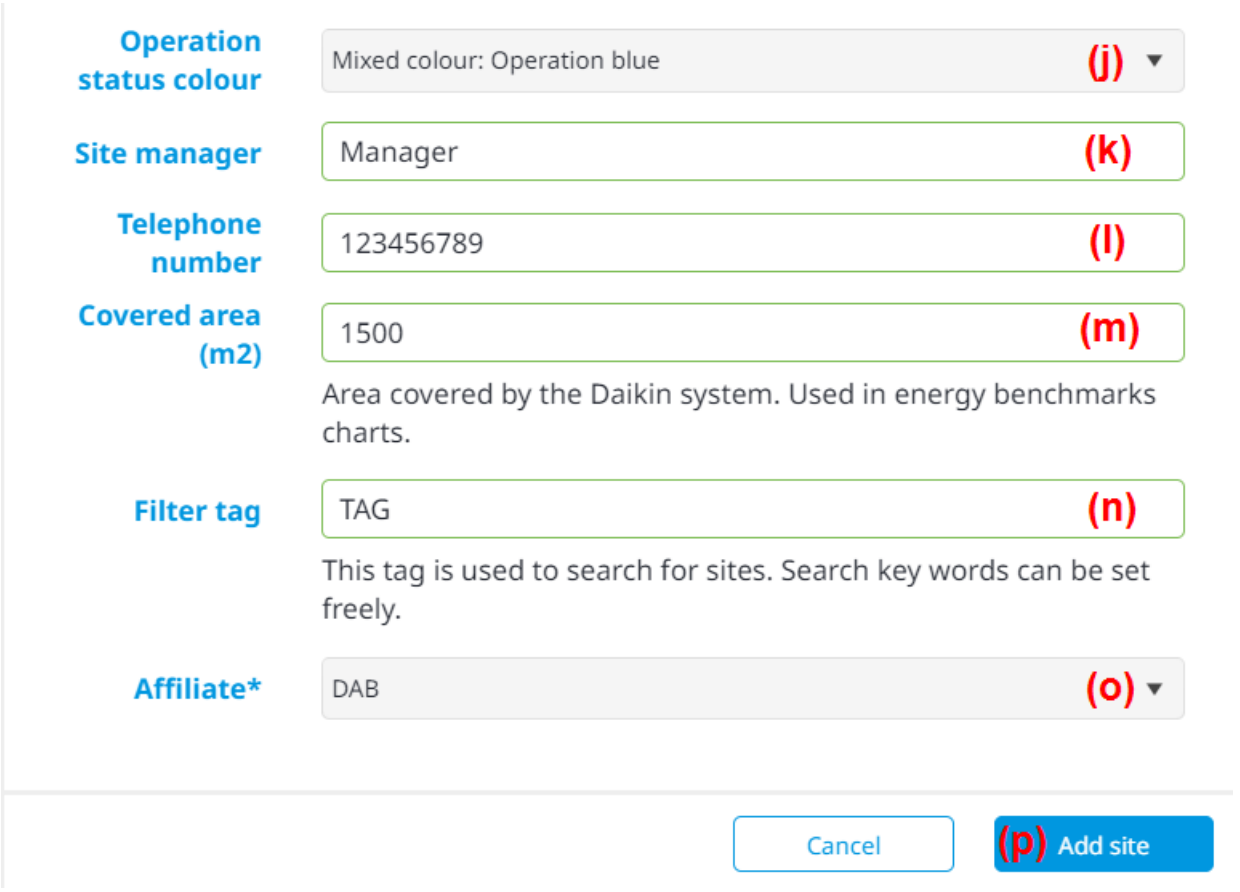
4 Select the Site time zone (h) from the drop-down list.

5 Choose whether or not to enable Daylight saving time for the site using the toggle switch (i). If enabled, the daylight savings time are updated based on the selected time zone (h). In the example above, daylight savings time starts on the last Sunday of March (the clock advances from 2:00 AM to 3:00 AM), and ends the last Sunday of October (the clock turns back from 3:00 AM to 2:00 AM). You cannot manually change the daylight savings time.

INFORMATION

It is important to configure time-related site settings correctly, as a lot of Daikin Cloud Plus functionality relies on the site time to perform actions at the appropriate time (e.g. schedules). It is also ONLY possible ot change time-related settings in Daikin Cloud Plus, and not in the other applications used during commissioning.

6 Select an Operation status colour (j) from the drop-down list. The selected colour theme will determine the colours displayed on equipment list tiles. This can still be changed at a later point.



7 Specify (optional) details such as the Site manager (k), Telephone number (l), Covered area (m2) (m) and the Filter tag (n). The Filter tag can help you find a site more easily in the Site list.

8 Select an Affiliate (o) from the drop-down menu. It is important that the correct affiliate is selected, as this can no longer be changed after the site has been created. Once the site is created, the affiliate also handles contract creation. If you are not sure which affiliate to select, contact your local Daikin representative.

9 Click Add site (p).

Result: The site is created.

INFORMATION

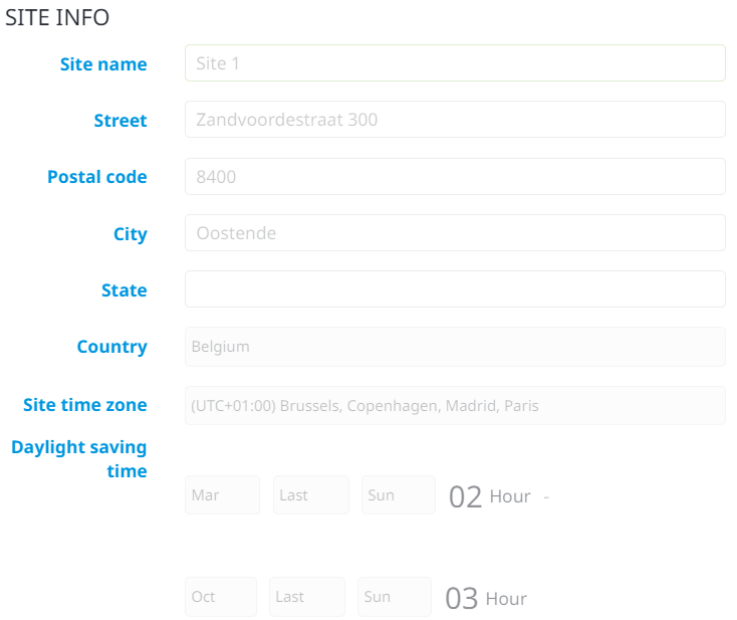
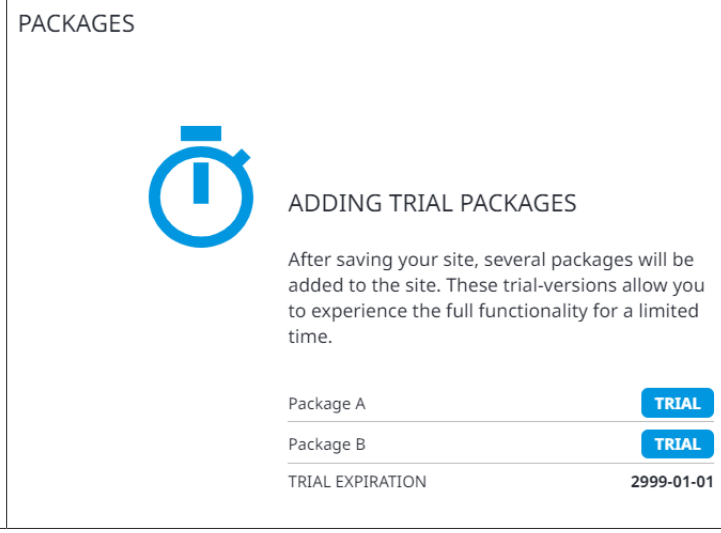
After saving your site, trial packages (package A and B) are activated for the site temporarily. This allows the user to experience the full functionality of Daikin Cloud Plus for a limited amount of time (30 days). In order to set up a service contract for the user, contact a Daikin affiliate or representative. If no service contract is created within 30 days of the commissioning, nor the user or installer will be able to access their site in Daikin Cloud Plus any longer.

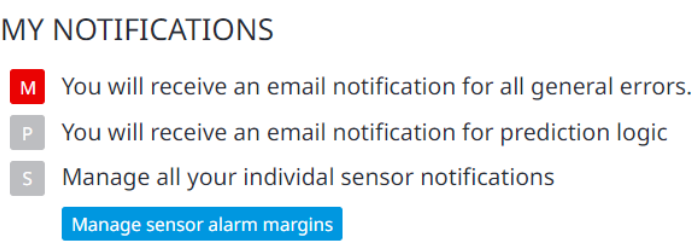
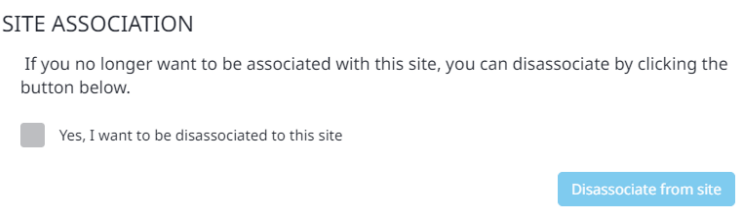
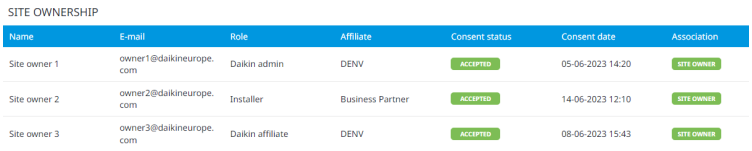
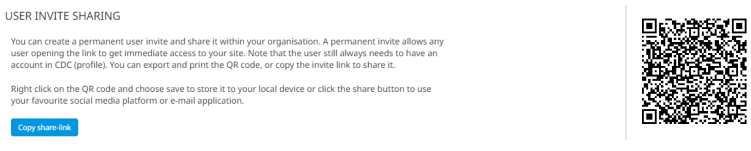
About contract creation

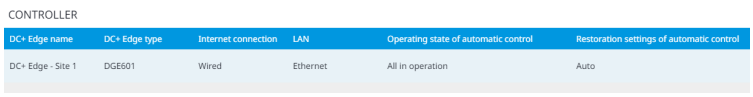
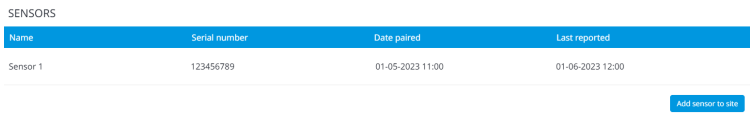
After creating a site, trial versions of package A and package B are activated for the site automatically. This allows you to experience the full functionality of Daikin Cloud Plus for a limited time. To use the application after the trial period, you must create a contract for the installation. Contracts are created externally (i.e. not in Daikin Cloud Plus) by affiliates. For more information about contracts, contact your Daikin affiliate. Once the contract is created and active, you can consult the status of the contract in "4.11.5 DC+ Edge control" [▸ 195].

Site details

The Site details page displays a variety of useful sections that provide information about a site and its users. See the overview below for more information about each section.

Section	Description
Site info	Section that contains all information related to the site. This information is entered during site creation (see "To create a new site" [▸ 171]) and can be edited by the owners of the site. 
Packages	Provides information about which packages are currently active and when they expire. For more information about packages states, see "4.11.1 Site list" [▸ 168]. 

Section	Description
My notifications	This section allows you to enable or disable e-mail notifications for malfunctions and prediction alarms. See "To manage notifications for a site" [▸ 176] for more information. 
Site association	This section allows a user to associate to the site. If the user is already associated to the site, the user can disassociate here. See "Site association and ownership" [▸ 178] for more information. If you are already the owner of the site, this section is not displayed. 
Site ownership	This table provides an overview of all the site owners and their information. If you are an owner, you can also invite other users to become an owner of the site. See "Site association and ownership" [▸ 178] for more information. 
Users	This table provides an overview of all users associated to the site and their information. You can also invite users to your site. See "Site association and ownership" [▸ 178] for more information. Note that this table is only visible to the owners of the site. Anyone can see the site owners, but only the owners can see the users. 
User invite sharing	This section provides an invite link and QR code that can be copied and shared to allow people to associate to the site. See "Site association and ownership" [▸ 178] for more information. 

Section	Description
Controller	This section provides basic information about the DC+ Edge controller. 
Sensors	This section provides information about paired IEQ sensors. This section also allows you to pair new sensors to the site. For more information, see "To pair a sensor to a site" [▸ 33]. 

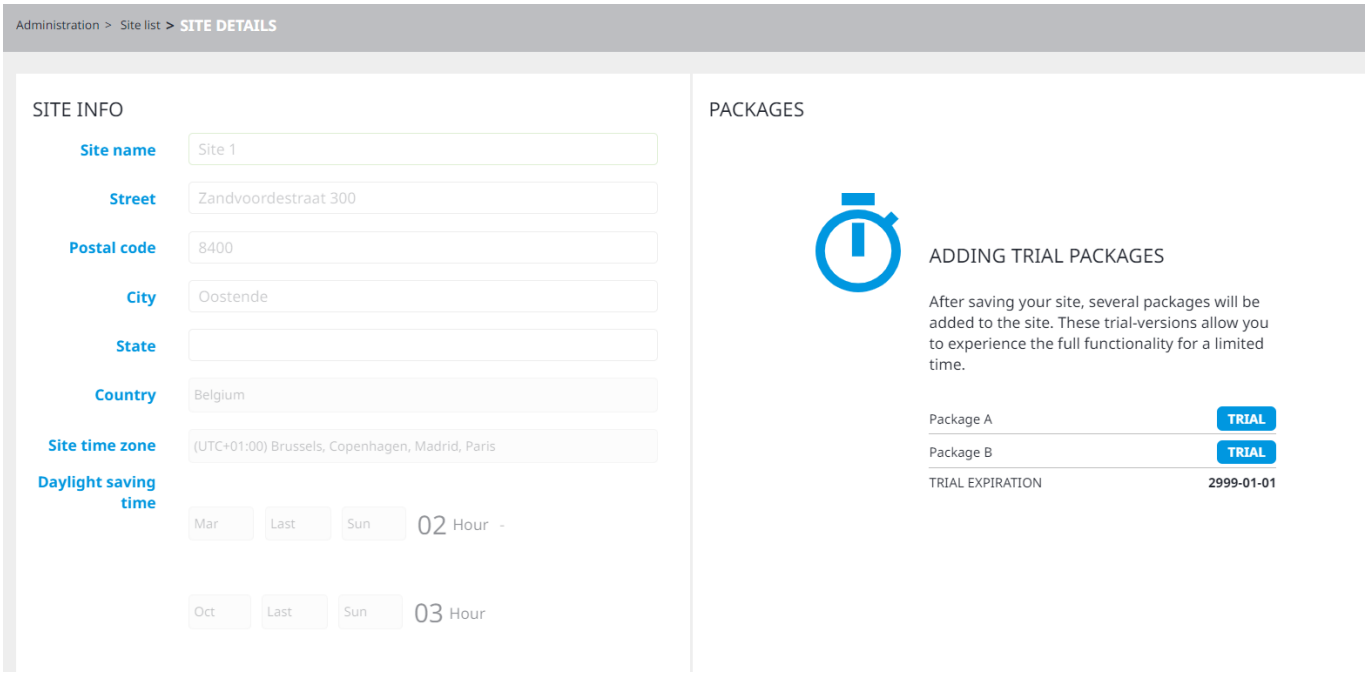
To view site details

1. In the sidebar, go to ADMINISTRATION > Site list.

   Result: The Site list appears.

2. Hover over a site in the table and click the eye icon that appears.

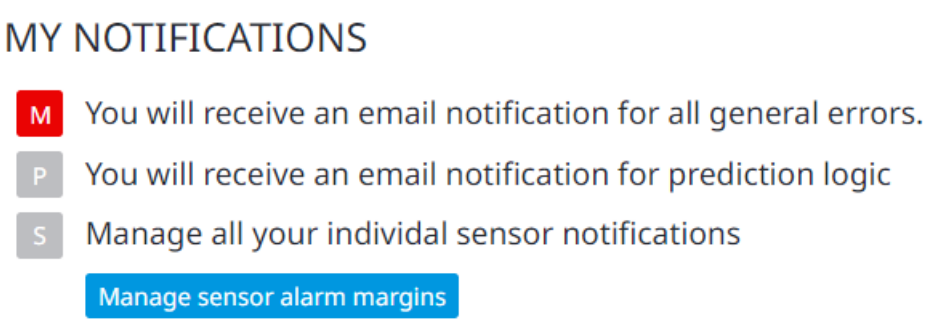
Result: The Site details page is displayed.



To manage notifications for a site

Prerequisite: You are on the site details page of the site you want to manage notifications for. See "To view site details" [▸ 176] for more information.

1. Scroll down to My notifications.



2 Disable or enable notifications for the site by clicking the respective icons. If an icon is greyed out, you will not receive notifications for that type of malfunction or alarm.

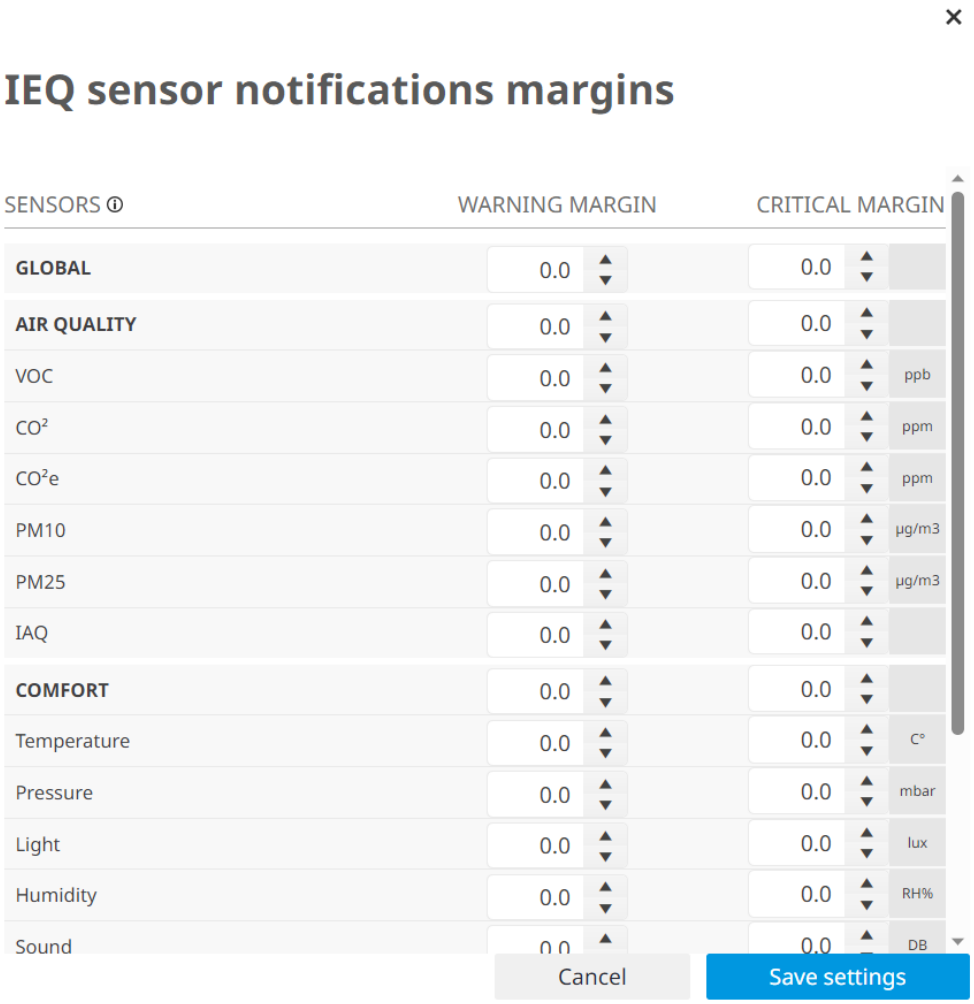
Notification type	Active	Inactive
Malfunction	M	M
Prediction Logic alarm	P	P
Sensor Alert	S	S

INFORMATION

Notifications for all sites can also be managed from "4.4.1 Application settings" [▶ 13]. If you have access to a lot of sites and need to manage notifications for each site, it may be more convenient than it is to use this page.

3 When you enable sensor notifications, you can also set margins for every possible value or parameter. First, click Manage sensor alarm margins.

Result: A settings panel appears on the right side of the page.



4 Under Warning margin and Critical margin, adjust the margin value for every parameter. You can enter a value in the text fields, or simply adjust the margin value by using the up and down arrow buttons. The sensor alert will only be activated once a sensor crosses ist threshold value AND the set margin for that threshold value. Note that the margins are sensor specific, and are set for the whole site.

5 Click Save settings.

Site association and ownership

Daikin Cloud Plus users can either be associated to, or owner of a site. Users who are associated to a site can see who the owner of the site is, and can request to be associated to the site. When a site is created, the site does not have an owner yet. As the user who created the site, you are automatically associated to the site, but the owner needs to be set manually.

The following table shows the features that are ONLY available to site owners.

Page	Description
"4.9.1 Site history" [▶ 149]	View and manage site history
"Site details" [▶ 174]	▪ View all users of the site ▪ Invite users to become associated to the site
"4.11.4 DC+ Edge update" [▶ 193]	View and update the DC+ Edge software version

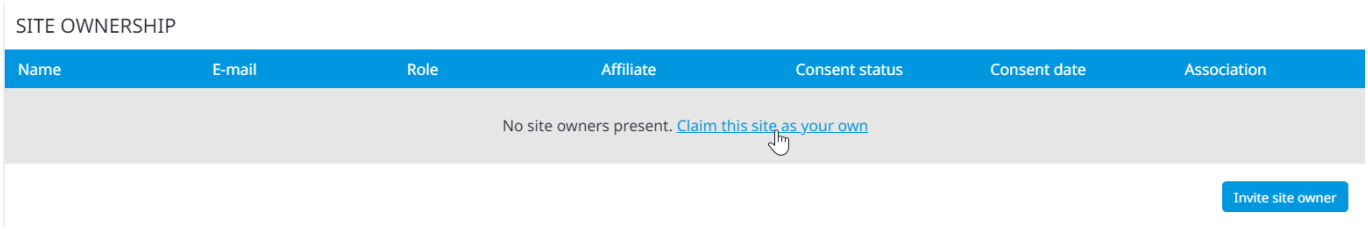
To claim ownership of a site without an owner

A site can have no owner. This is either because there are still pending invitations for ownership that have not been accepted yet, or because the previous owner has renounced ownership. In this case, it is possible for users associated to the site to claim ownership of the site. If you are not associated to the site, associate yourself to the site first from the Site association section.

1 From the Site list table, select the site you want to become the owner of by hovering over it and clicking the eye icon that appears.

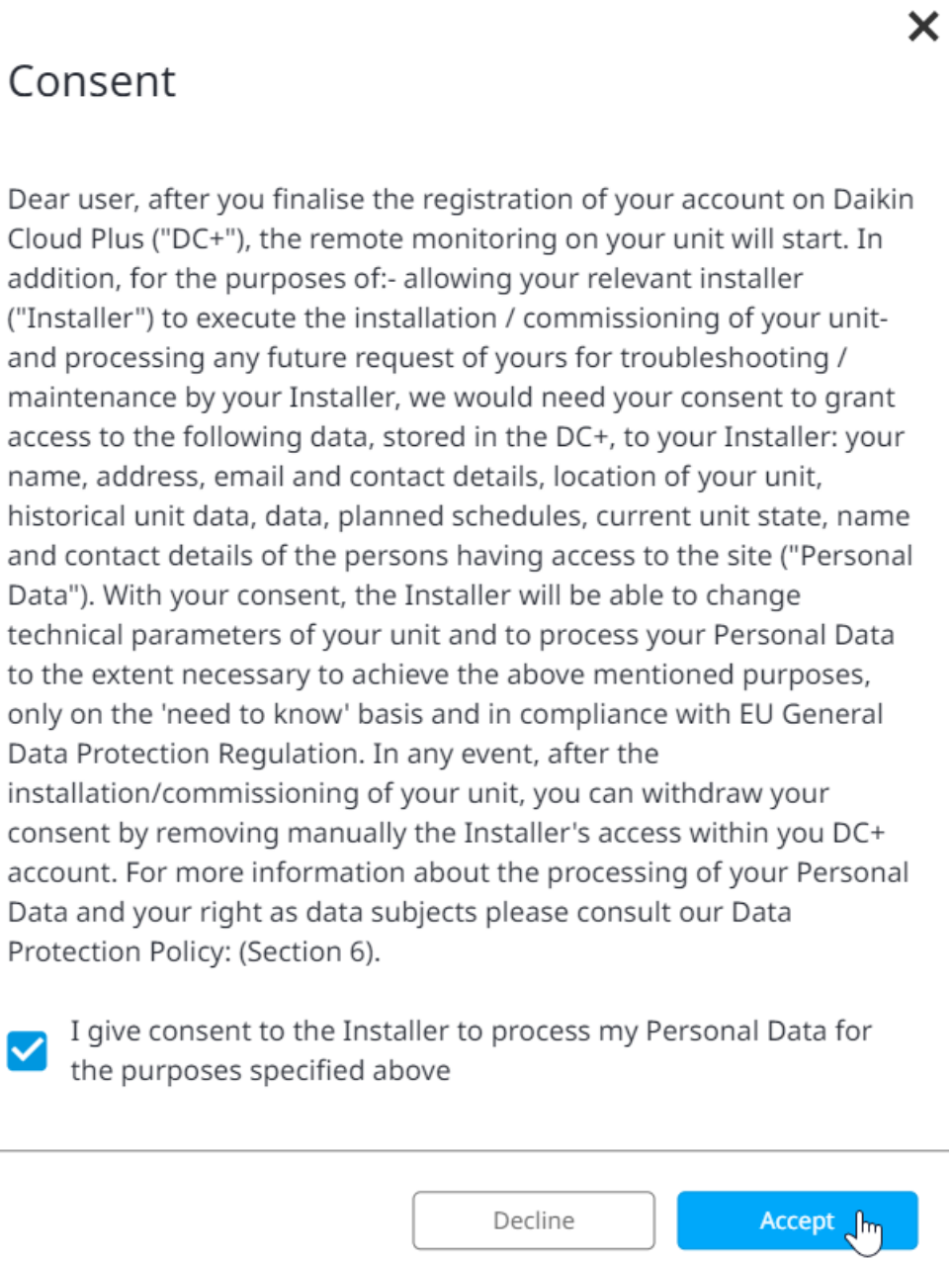
Result: The Site details page opens.

2 Under Site ownership, click Claim this site as your own .



Result: A pop-up window appears.

3 Click Accept.



Result: You are now the owner of the site. Your name and e-mail address are visible to others in the Site ownership table of that site.

To invite a user to become owner of a site

Once a site has owner, other owners can ONLY be invited by a site owner.

Prerequisite: You are the owner of the site.

1 From the Site list table, select the site you want to invite a user to be the owner of by hovering over it and clicking the eye icon that appears.

Result: The Site details page opens.

2 Under Site ownership, click Invite site owner.

SITE OWNERSHIP

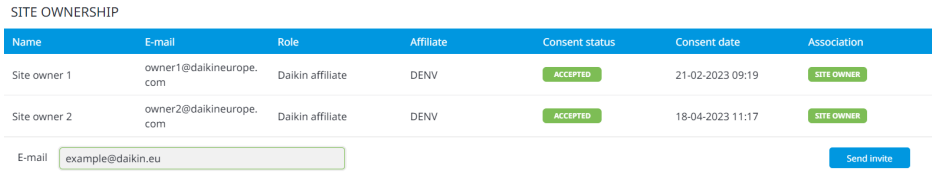
Name	E-mail	Role	Affiliate	Consent status	Consent date	Association
Site owner 1	owner1@daikineurope.com	Daikin affiliate	DENV	ACCEPTED	21-02-2023 09:19	SITE OWNER
Site owner 2	owner2@daikineurope.com	Daikin affiliate	DENV	ACCEPTED	18-04-2023 11:17	SITE OWNER

Invite site owner

3 Enter the e-mail address of the user you want to invite as the owner.

INFORMATION

Make sure the user you are inviting has registered a Daikin ID. If the user does NOT have a Daikin ID, the invitation e-mail will NOT be sent.



4

5 Click Send invite.

Result: The user receives an invitation to become a site owner. The user has to accept this invitation and give consent first in order to become a site owner.

To invite a user to your site

You can invite a user to become associated to your site.

Prerequisite: You are the owner of the site.

1 From the Site list table, select the site you want to invite a user to by hovering over it and clicking the eye icon that appears.

Result: The Site details page opens.

2 Under Users, select Invite user to site.

USERS

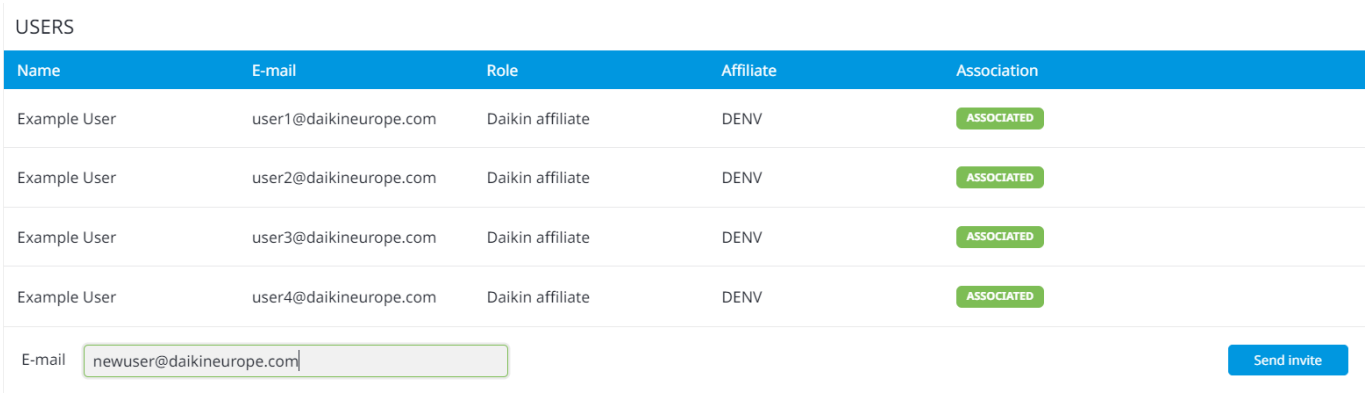
Name	E-mail	Role	Affiliate	Association
Example User	user1@daikineurope.com	Daikin affiliate	DENV	ASSOCIATED
Example User	user2@daikineurope.com	Daikin affiliate	DENV	ASSOCIATED
Example User	user3@daikineurope.com	Daikin affiliate	DENV	ASSOCIATED
Example User	user4@daikineurope.com	Daikin affiliate	DENV	ASSOCIATED

Invite user to site

INFORMATION

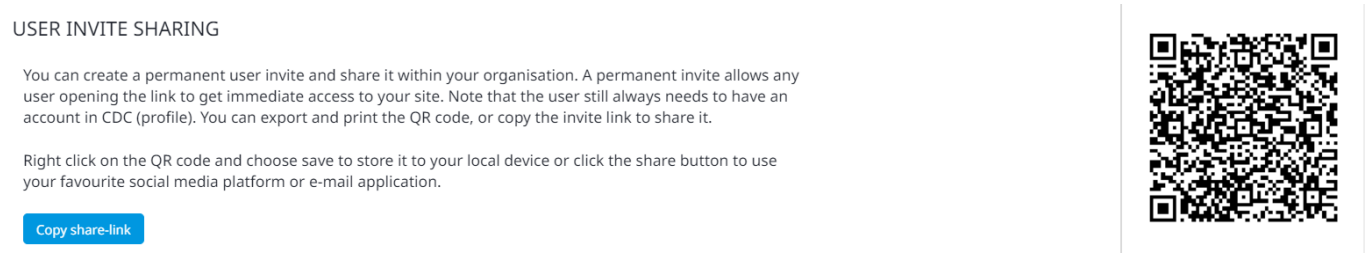
Make sure the user you are inviting has registered a Daikin ID. If the user does NOT have a Daikin ID, the invitation e-mail will NOT be sent.

3 Enter the e-mail address of the user you want to invite.



Result: The user receives an invitation to become associated to the site. The user has to accept this invitation first.

Alternatively, on the Site details page, you can also copy the share-link to share with anyone, regardless of whether they belong to the same affiliation:

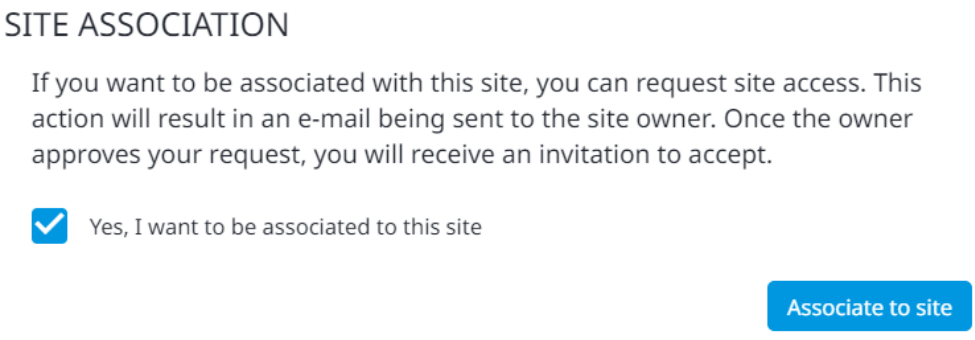


When opening the link, the recipient will end up on the Site details page, where they can request site association.

To associate to a site

If you are not associated to a site yet, you can still associate to sites visible to you in the site list. As a Daikin affiliate, you can request association to all sites in your affiliation. If you are not a Daikin affiliate, you can still associate to a site when a site owner invites you by sending an invite link.

1. From the Site list, go to the Site details of the site you want to associate to. In case of an invite link, you will already be on the correct page when you open the link.
2. Under Site association, select the checkbox and click Associate to site.



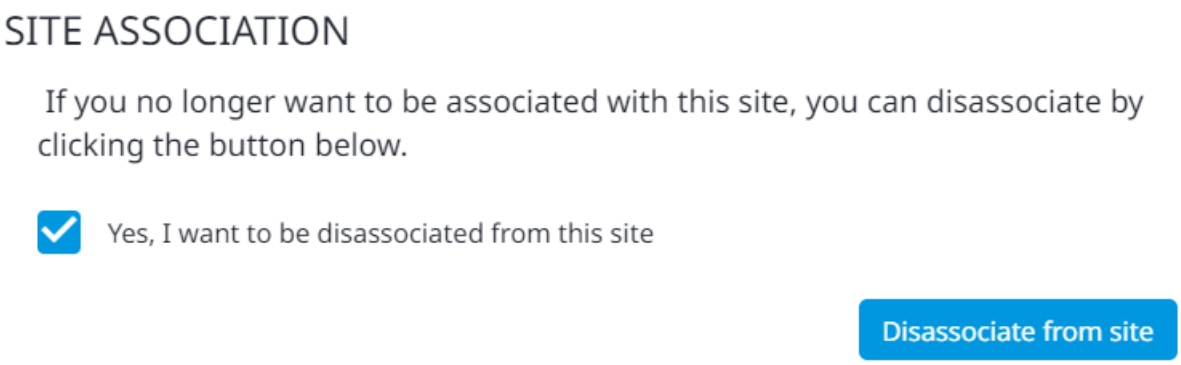
Result: Your association is requested. The owner will have to accept it.

To disassociate from a site

1. From the Site list table, select the site you want to disassociate from by hovering over it and clicking the eye icon that appears.

Result: The Site details page opens.

2 Under Site association, select the checkbox and click Disassociate from site



Result: You are no longer associated to the site.

To delete a site

> **NOTICE**
> Deleting a site CANNOT be undone. Make sure you actually want to delete the site before proceeding.

Once a site has been created, it cannot be deleted until some elements are removed manually. Some need to be removed in Daikin Cloud Plus, but certain elements that are linked to the site can only be removed in Daikin Cloud Plus Commissioning.

Deleting interlock programs and zones

The following steps are performed in Daikin Cloud Plus.

1 In the sidebar, go to MONITORING & OPERATION > INTERLOCKING and delete any existing interlock programs. See "To manage interlock programs" [▸ 73] for more information on how to delete an interlock program.

2 In the sidebar, go to ADMINISTRATION > ZONE LIST and delete any zones that have been created. Note that the default zone cannot be deleted. See "To manage zones" [▸ 188] for more information on how to delete zones.

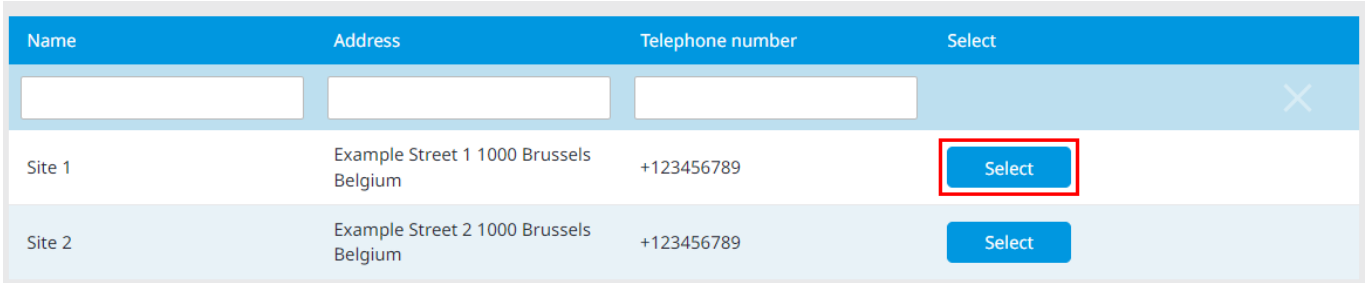
Result: All interlock programs and user-created zones are deleted.

Deleting all equipment and the controller

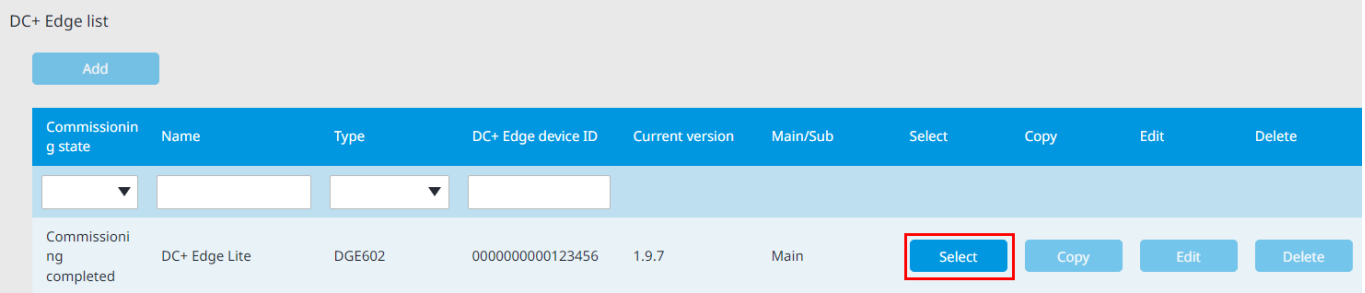
The following steps are performed in Daikin Cloud Plus Commissioning.

Delete all units and equipment. This includes DIII equipment, any I/O (Di, Dio , Pi), external equipment, as well as BACnet equipment (both objects and groups). Previous steps must be completed before performing this step.

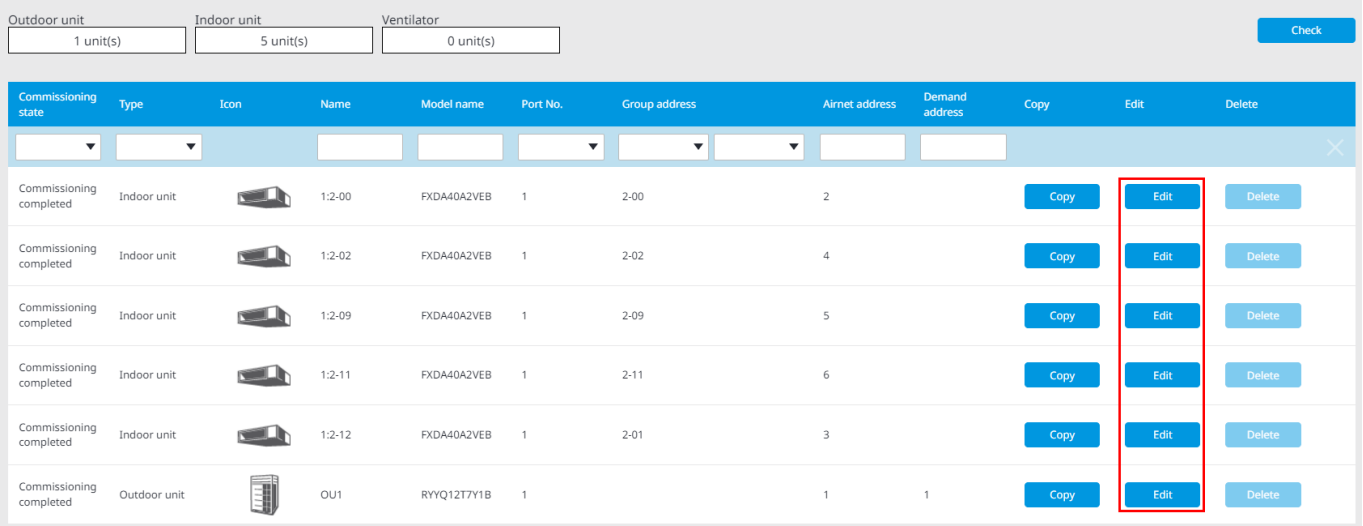
3 Select the site that you want to delete.



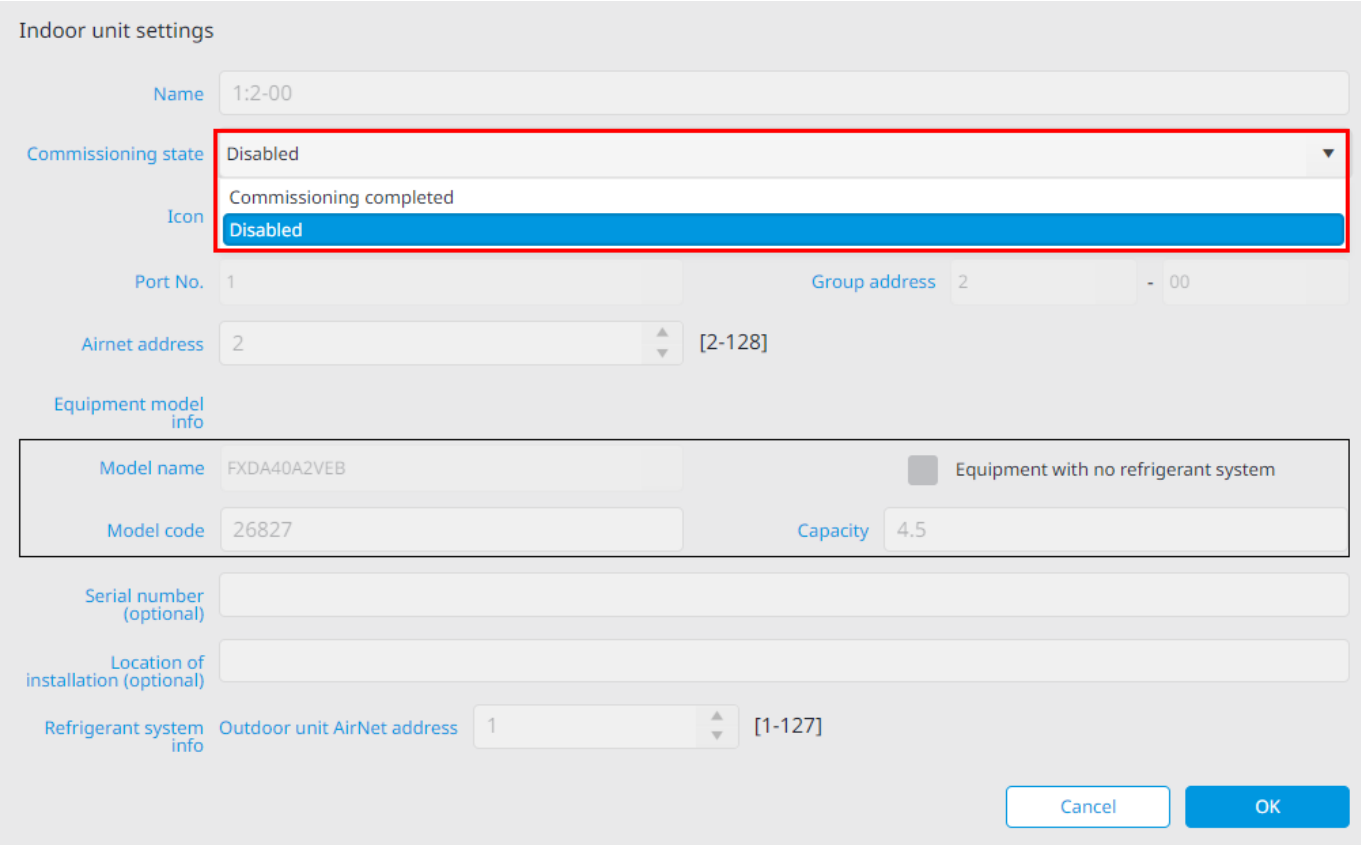
4 Select the controller that is linked to the site from the DC+ EDGE LIST.



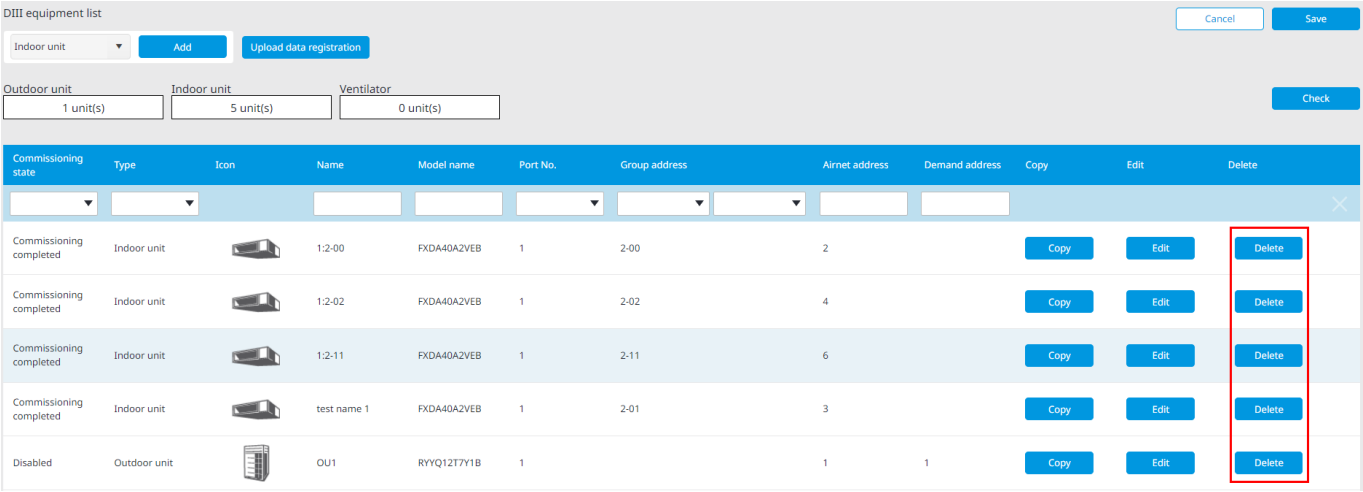
5 Set the commissioning status of all equipment to Disabled. To do this, click Edit next to a piece of equipment to open its settings.



6 In the settings menu, set the commissioning status to Disabled using the drop-down list. Then, click OK to confirm. Repeat this step for all equipment that needs to be deleted.



7 Click Delete to delete equipment from the list. Click OK in the pop-up window to confirm. Repeat this step for all equipment that needs to be deleted. If the Delete button is greyed out, this means that the commissioning status has not been changed to Disabled.



8 Once all equipment has been deleted, click Save on the top right of the page. Then, click OK in the pop-up window to confirm.

9 Repeat the procedure for all types of equipment.

Result: All units and equipment from the respective equipment list pages is deleted. The following pages should no longer list any equipment:

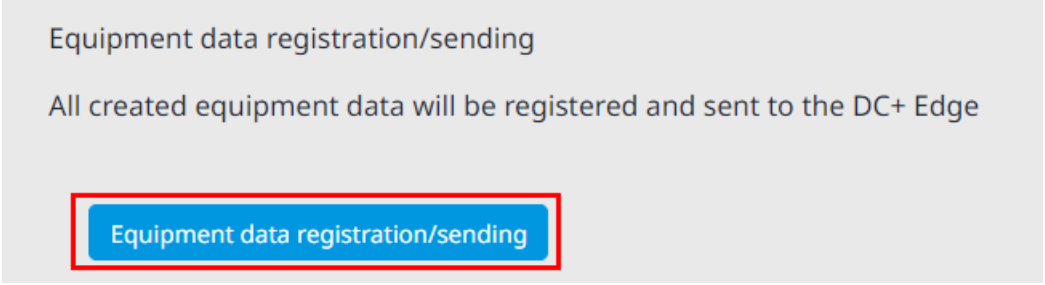
- DIII EQUIPMENT LIST
- Pi/Di/Dio LIST
- EXTERNAL EQUIPMENT LIST
- BACNET EQUIPMENT LIST

INFORMATION

When deleting a BACnet group, it is not required to change the commissioning status to Disabled before you are able to delete the group. When the group is deleted, all objects that are in the group are also deleted automatically. However, for individual BACnet objects that do NOT belong to a group, the commissioning status still has to be changed to Disabled before they can be deleted.

10 In the sidebar, go to EQUIPMENT DATA REGISTRATION/SENDING.

11 Click Equipment data registration/sending.

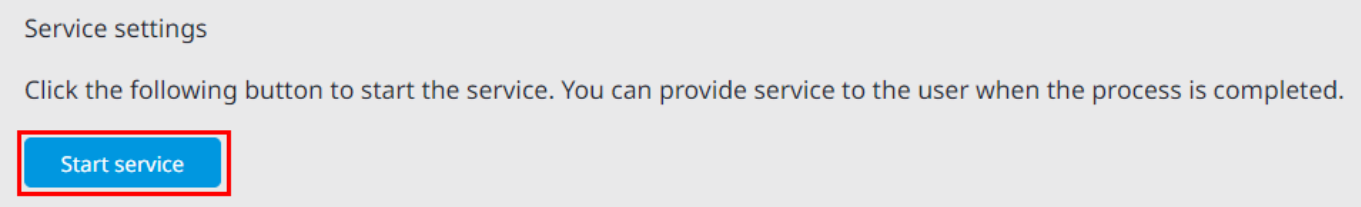


12 Click OK in the pop-up window to confirm.

13 Click Close in the pop-up window once the process has completed.

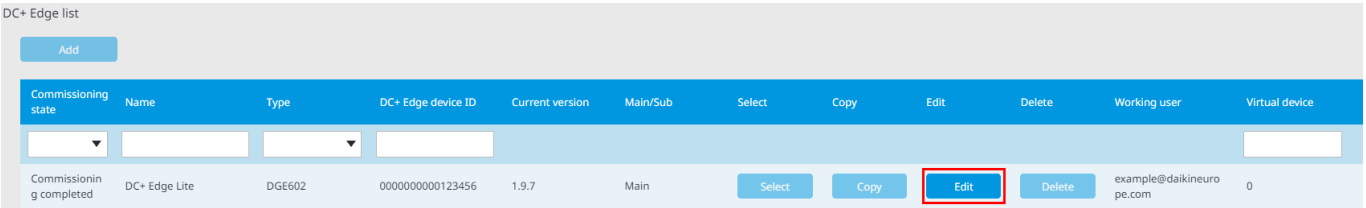
Result: The DC+ Edge restarts.

14 In the sidebar, go to SERVICE SETTINGS and select Start service.

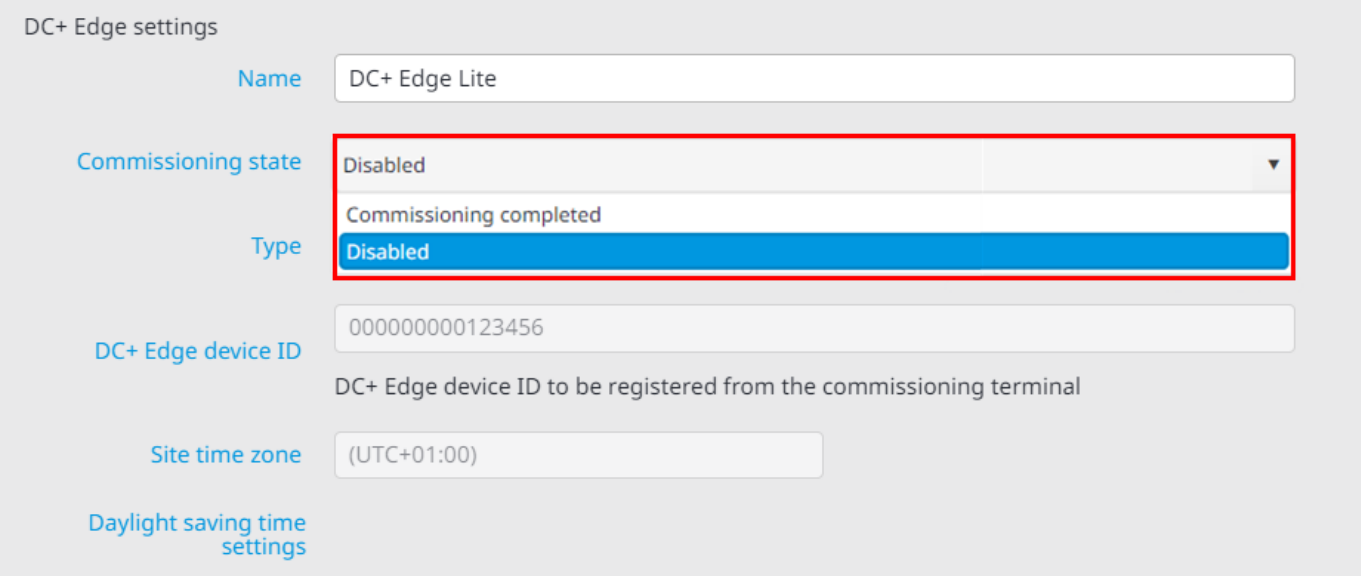


15 In the sidebar, go to DC+ EDGE > DC+ EDGE LIST.

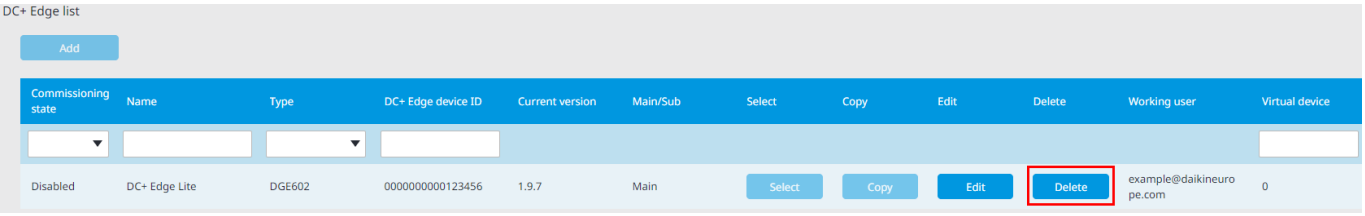
16 Click Edit.



17 Set the commissioning status to Disabled using the drop-down list. Then, click Registration to confirm. The system will only allow you to change the commissioning status of the controller if all equipment has been deleted.



18 Click Delete to delete the controller. The system will only allow you to delete the controller when the previous steps have been performed.



19 Click Save.

Result: All units, equipment, and the controller are deleted.

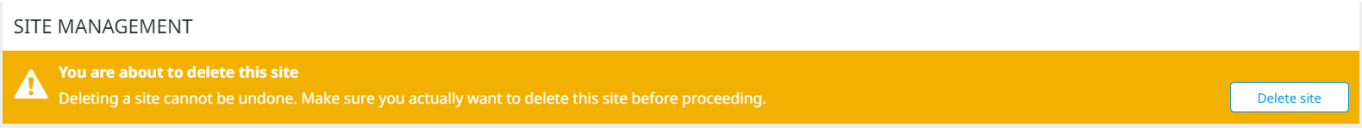
Deleting sensors, users, and the site

The following steps are performed in Daikin Cloud Plus.

20 In the sidebar, go to ADMINISTRATION > SITE LIST and go to the site you want to delete. Then, remove all users and other owners (except for yourself) from the site.

21 Under SENSORS, delete all sensors that are paired with the site.

22 Scroll down to Site management and click Delete site.



23 Click Yes in the pop-up window to confirm.

Result: The site is deleted.

4.11.2 Zone list

You can group units in zones to make the cloud set-up correspond to your real configuration. You can group units according to unit type, or by physical location. In order to do that, Daikin Cloud Plus uses zones. The zone on site level, i.e. the default zone, is created automatically during the commissioning process.

INFORMATION

The default zone CANNOT be renamed or deleted.

To reduce the peak load electric power when units are started or stopped (for example, during batch operations that apply to zones, e.g. schedules), it is better to avoid all units from being started or stopped at the same time. This can be achieved by setting a sequential start/stop interval for units in a zone. See "To edit the sequential start/stop interval" [▸ 191] for more information.

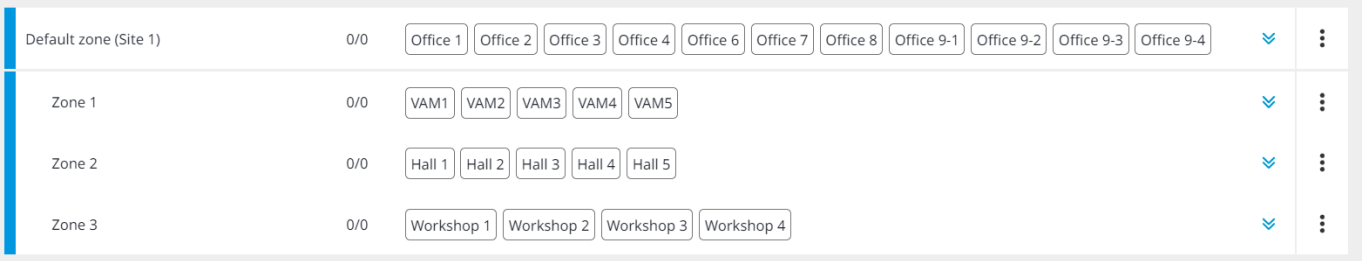
Each unit can only be added to 1 zone. This also means that actions applied to a zone (i.e. from the "4.5.1 Equipment list" [▸ 15] or "4.5.3 Layout view" [▸ 38]) will only be applied to the units belonging to that zone. If there are zones lower in hierarchy, the actions will not be applied to the units in those zones. For example, in the following situation, zone 1 has 2 zones lower in hierarchy below it.

Since units can only belong to a single zone at a time, when an action is applied to zone 1, the action will only be applied to the units on that zone level (i.e. unit 3~7). The action is NOT applied to zone 1-1 (unit 8~10) or zone 1-2 (unit 11~12).

To manage zones

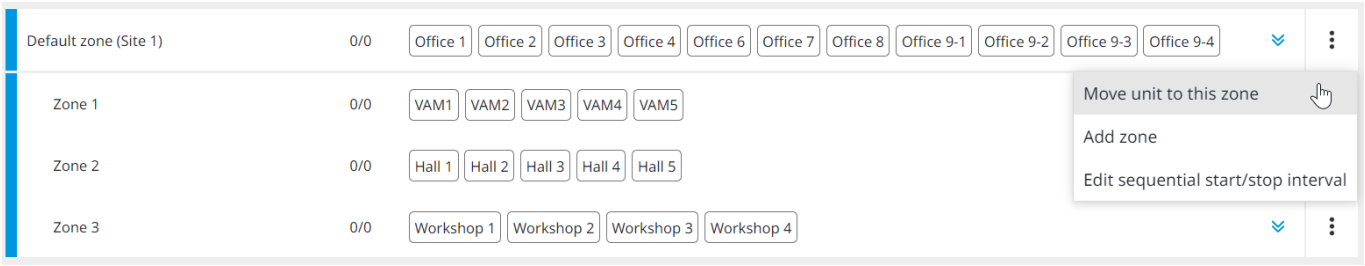
1 In the sidebar, go to ADMINISTRATION > ZONE LIST.

Result: The currently available zones are displayed.



2 From the site picker, select the site for which you want to create 1 or more new zones.

3 Click the vertical ellipsis of the default zone.



4 Select Add zone.

Result: A zone name field appears.

5 Enter a name for the new zone.

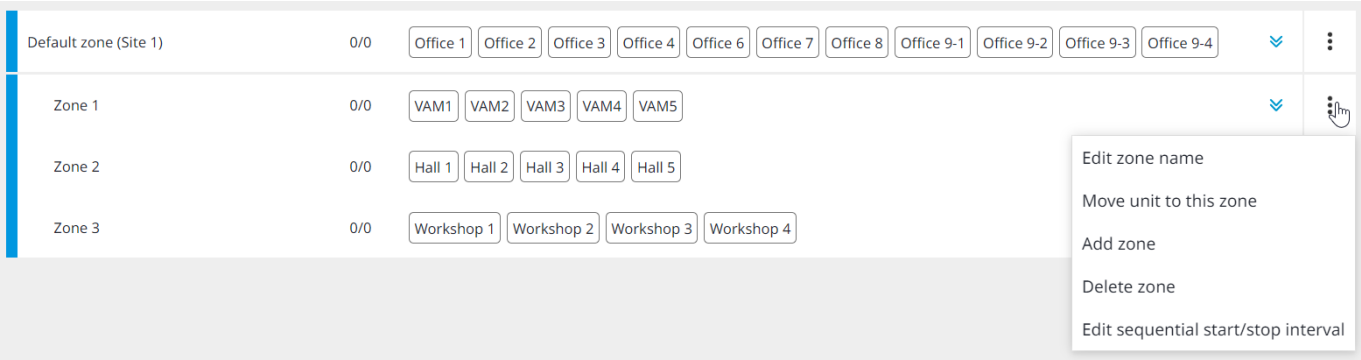
6 Click ✓ to confirm.

Result: The zone is created.

INFORMATION

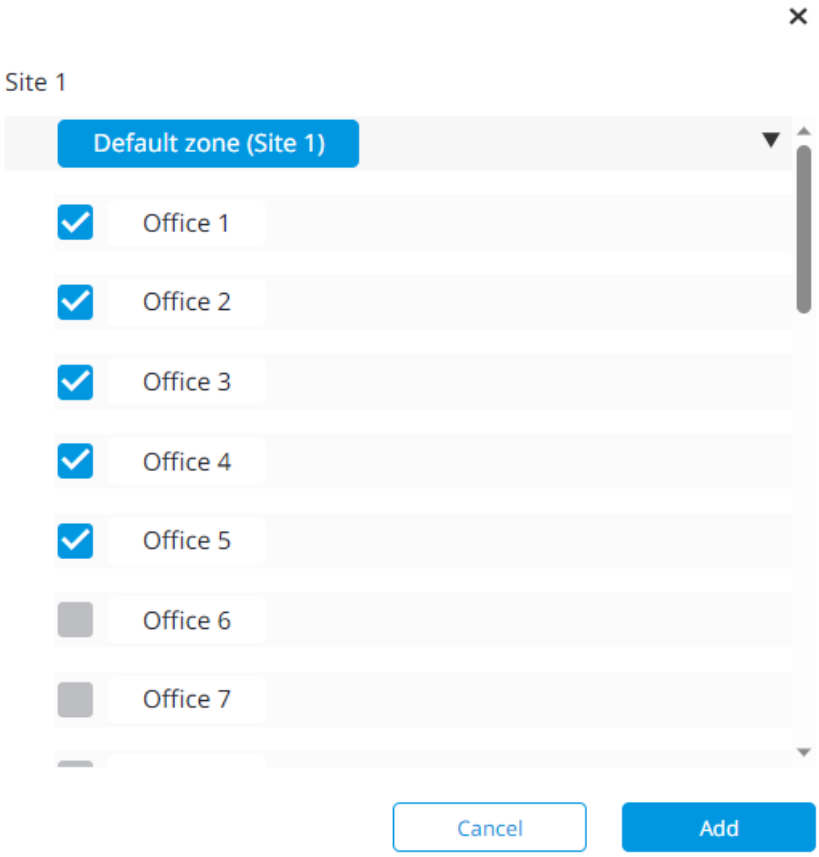
Zones can be created under existing zones to create a hierarchical structure. You can create up to 5 zone levels. The option to add a zone to the fifth level will be greyed out. Note that zones can also NOT be moved once they have been created.

7 To move a unit to a zone, click the vertical ellipsis of the site to which you want to move the unit. Note that if no zones have been set up yet, all units belong to the default zone. You can move units to other zones after creating them. You can also always move units from a zone back to the default zone.



8 Select Move unit to this zone.

Result: A settings panel appears on the right side of the page.



9 Select the check boxes of the units you want to move to the zone. Units that already belong to a zone (other than the default zone) cannot be selected. If you want to move units from an existing zone to another zone, move them to the default zone first.

10 Click Add.

Result: The units are moved to the selected zone.

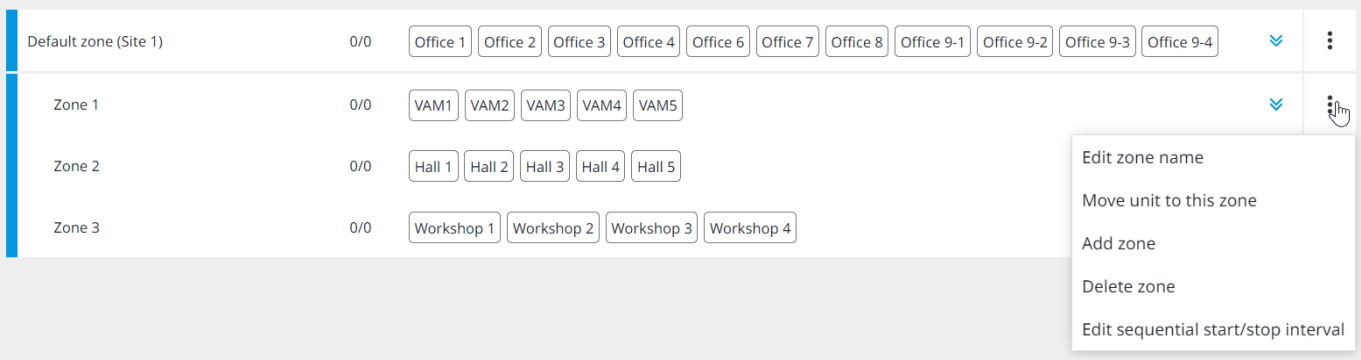
11 Edit a zone name by clicking the vertical ellipsis. Then, select Edit zone name.

Result: The zone name field becomes editable.

12 Click ✓ to confirm.

Result: The zone name is updated.

13 To delete an existing zone, click the vertical ellipsis of the zone you want to delete, then select Delete zone.



14 Select Yes in the pop-up window to confirm.

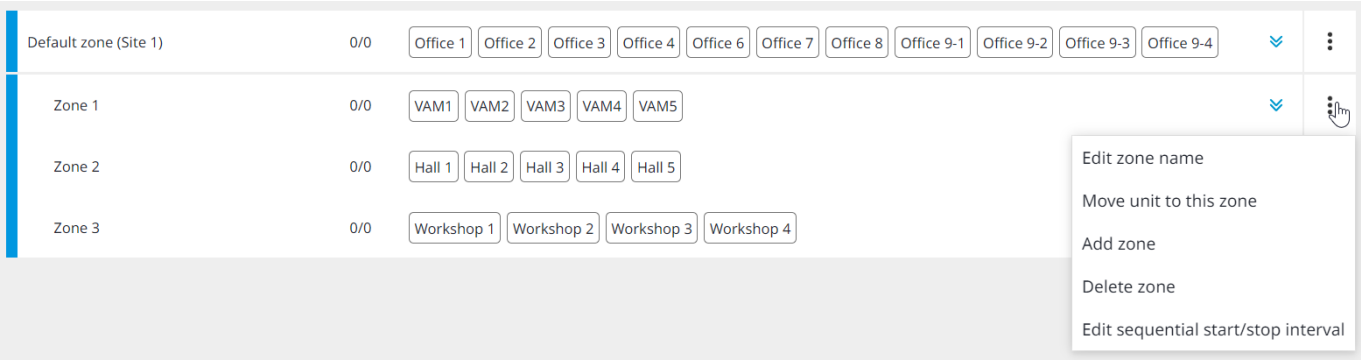
Result: The zone is deleted.

> **INFORMATION**
>
> When a zone containing 1 or more units is deleted, the units are automatically moved back to the default zone. Note that the default zone CANNOT be deleted.

To edit the sequential start/stop interval

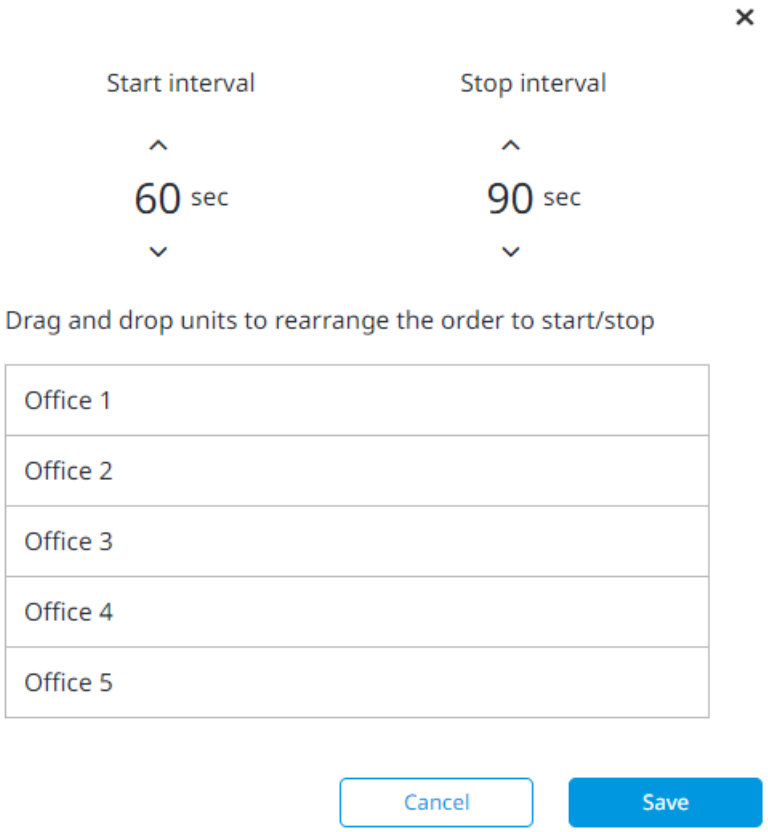
To reduce the peak load electric power when units are started or stopped, it is recommended to prevent all units of a zone from being started or stopped simultaneously. For this reason, you can configure a sequential start/stop interval on zone level. The interval determines how long the system waits between units to start or stop a unit.

1 Click the vertical ellipsis of the zone for which you want to configure the start/stop interval.



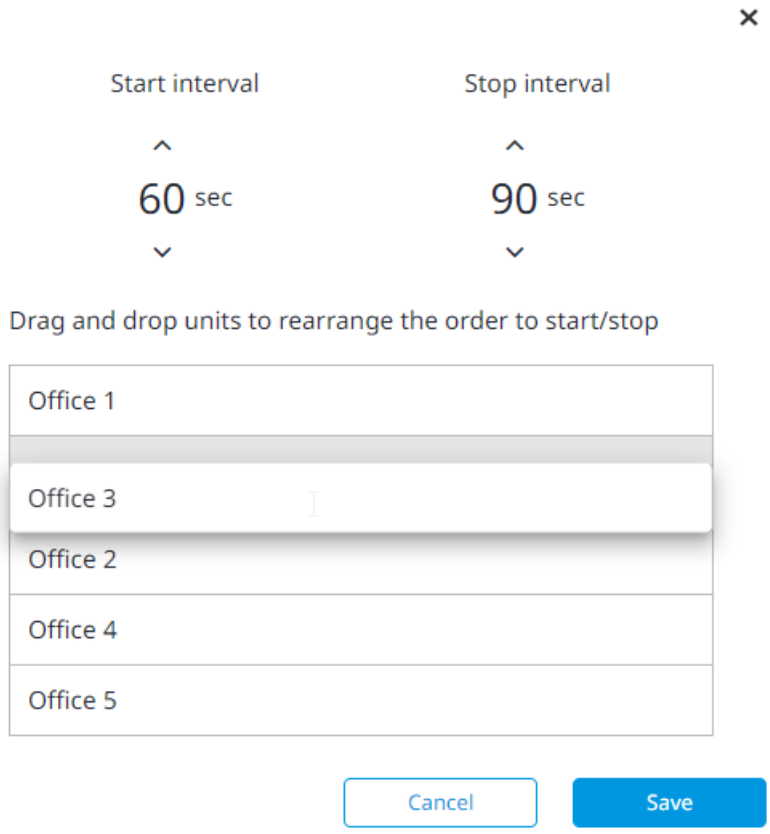
2 Select Edit sequential start/stop interval.

Result: A settings window appears on the right side of the page.



3 Use the up and down arrows to set a value (in seconds) for the Start interval and the Stop interval. The maximum value is 180 seconds.

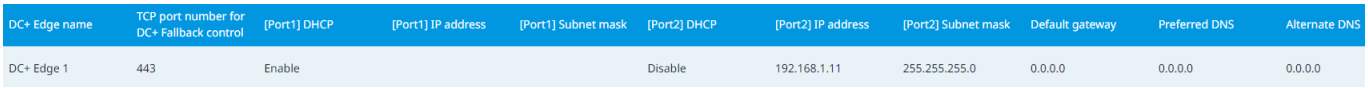
4 Drag and drop the units in the order in which they should start and stop.



5 Click Save.

4.11.3 DC+ Edge network information

DC+ Edge network information provides an overview of all network-related information for the DC+ Edge.



DC+ Edge name	TCP port number for DC+ Fallback control	[Port1] DHCP	[Port1] IP address	[Port1] Subnet mask	[Port2] DHCP	[Port2] IP address	[Port2] Subnet mask	Default gateway	Preferred DNS	Alternate DNS
DC+ Edge 1	443	Enable			Disable	192.168.1.11	255.255.255.0	0.0.0.0	0.0.0.0	0.0.0.0

Item	Description
(a) DC+ Edge name	Displays the name of the currently selected DC+ Edge.
(b) TCP port number for DC+ Fallback control app	TCP port number for the DC+ Fallback control app. The default port number is 443.
(c) [Port1] DHCP	Displays the DHCP status for LAN port 1.
(d) [Port1] IP address	Displays the IP address for LAN port 1. If DHCP is disabled for the LAN port, nothing is displayed.
(e) [Port1] Subnet mask	Displays the subnet mask for LAN port 1. If DHCP is disabled for the LAN port, nothing is displayed.
(f) [Port2] DHCP	Displays the DHCP status for LAN port 2.
(g) [Port2] IP address	Displays the IP address for LAN port 2. If DHCP is disabled for the LAN port, nothing is displayed.
(h) [Port2] Subnet mask	Displays the subnet mask for LAN port 2. If DHCP is disabled for the LAN port, nothing is displayed.
(i) Default gateway	Displays the default gateway address.
(k) Preferred DNS	Displays the preferred DNS server address.
(l) Alternate DNS	Displays the alternate DNS server address.

If required, network settings can be changed in the DC+ Fallback control application. See "4.12.6 Network settings" [▸ 219] for more information.

4.11.4 DC+ Edge update

INFORMATION

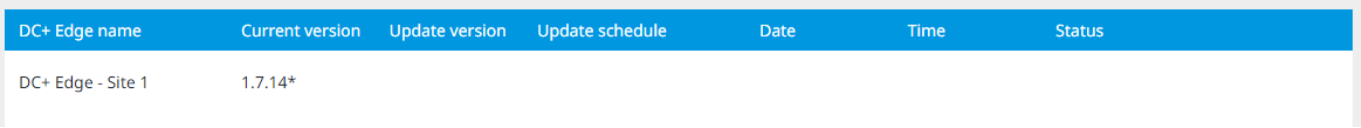
This page ONLY appears in the sidebar if you are the owner of at least 1 site.

This page provides information about the current software version running on the DC+ Edge controller and allows you to update the software version. It is also possible to schedule a software update.

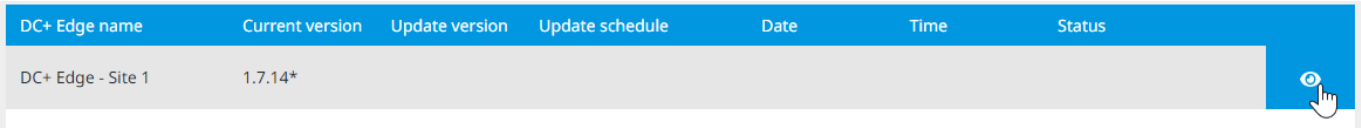
To update the DC+ Edge software version

1 In the sidebar, go to ADMINISTRATION > DC+ EDGE UPDATE.

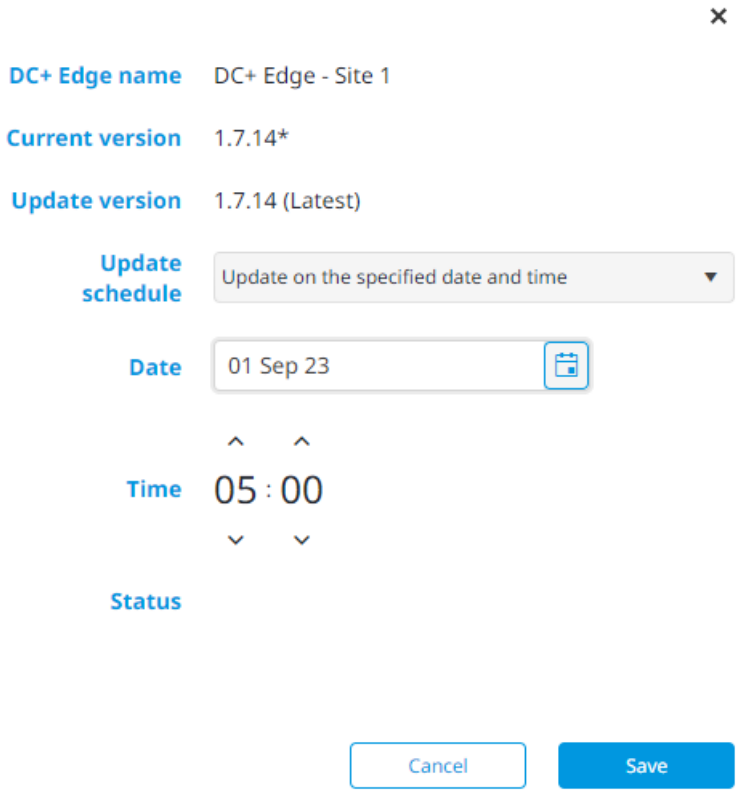
Result: The following page is displayed. It shows the current software version of the DC+ Edge controllers of the sites you are the owner of. If Current version is marked with an asterisk, a newer software version is available for that DC+ Edge.



2 Hover over a DC+ Edge in the list and click the eye icon that appears.



Result: A settings panel appears on the right side of the page.



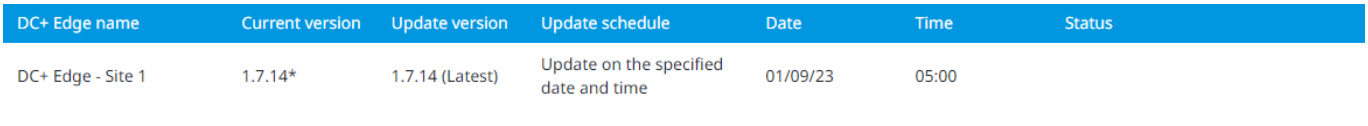
3 From the drop-down menu, select whether you want to update immediately (Update now) or schedule an update at a later time (Update on the specified date and time).

4 If you choose to schedule the update, select a Date using the calendar picker. Also select a Time. Use the arrows to adjust the time.

5 Click Save.

6 Click Yes in the pop-up window to confirm.

Result: Depending on which option was chosen, the software update is performed, or scheduled and visible on the DC+ Edge update page.



NOTICE

Performing a software update will restart the DC+ Edge. If you have any schedules or interlock programs running, they will NOT be executed when the controller is restarting. If enabled, demand control will be applied once the controller restarts. Lastly, the restart also influences the power proportional distribution results.

4.11.5 DC+ Edge control

DC+ Edge control allows you to consult basic information about the DC+ Edge and view the contract status. Here, you can also temporarily suspend the contract linked to the DC+ Edge.

INFORMATION

This page is NOT accessible to end users. Only installers and higher can access this page.

To consult and edit the contract status

You can verify the contract status (after creating a contract with an affiliate, for example), or temporarily suspend your contract.

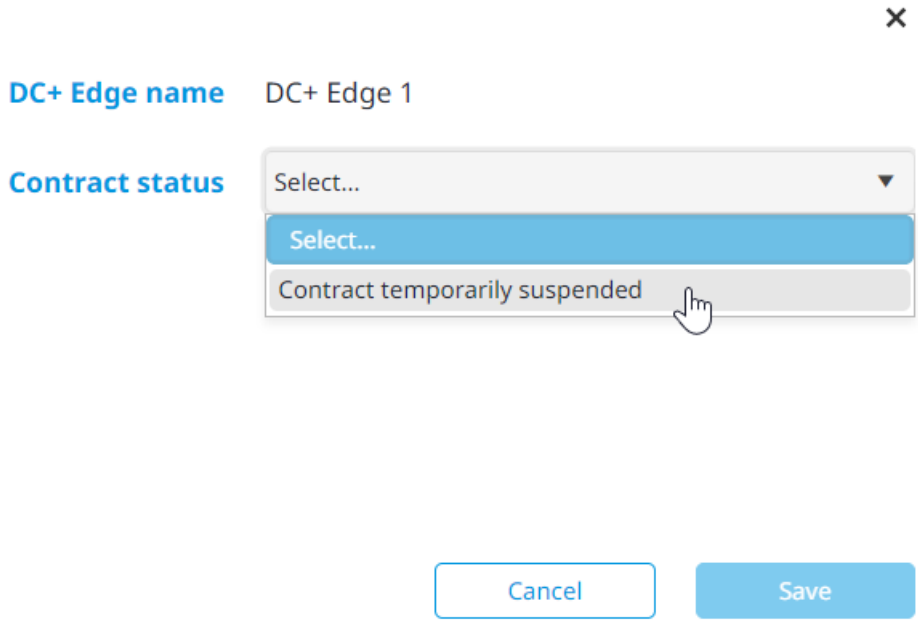
1 In the sidebar, go to ADMINISTRATION > DC+ EDGE CONTROL.

Result: The current Contract status for the DC+ Edge is displayed. There are 3 possibilities: Contract temporarily suspended, Contract concluded, and Contract terminated.

2 To edit the contract status, hover over the DC+ Edge in the list and click the eye icon.

Result: A settings panel appears on the right side of the page.

3 From the Contract status drop-down list, select Contract temporarily suspended.



4 Click Save.

4.11.6 Layout settings

Before the Layout view functionality (see "4.5.3 Layout view" [▸ 38]) can be used, a layout must be created. There are several steps that make up layout creation:

Step	Description
Add screens	Use an image of the site's floorplan to create a screen. Note that you are not limited to actual building floor plans. For example, you can also create screens in order to map the architecture and controls of more complex units, such as air handling units. See "To add a screen" [▸ 196] for more information.
Add equipment and/or zone tiles to a screen	Add equipment and/or zones to the screen, to allow users to control equipment and/or zones directly from the screen. See "To add equipment or zone tiles to a screen" [▸ 199] for more information.
Add link buttons	Add link buttons to the screen, to allow users to navigate quickly between different screens (e.g. for different floors in a building). See "To add a link button" [▸ 204] for more information.
Create a screen group	Structure the site screens by grouping them together in screen groups. See "To create and edit a screen group" [▸ 207] for more information.
Preview the layout	Preview and test the layout, or check what a screen looks like to a specific user. See "To preview the layout" [▸ 210] for more information.

To add a screen

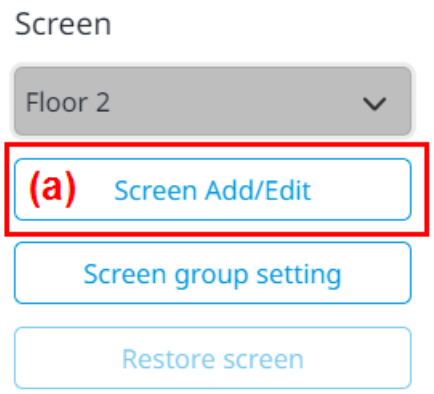
To display any information on the Layout view page, at least 1 screen must be created. This screen can then be displayed on the Layout view page.

Prerequisite: The site for which you want to create a layout is selected.

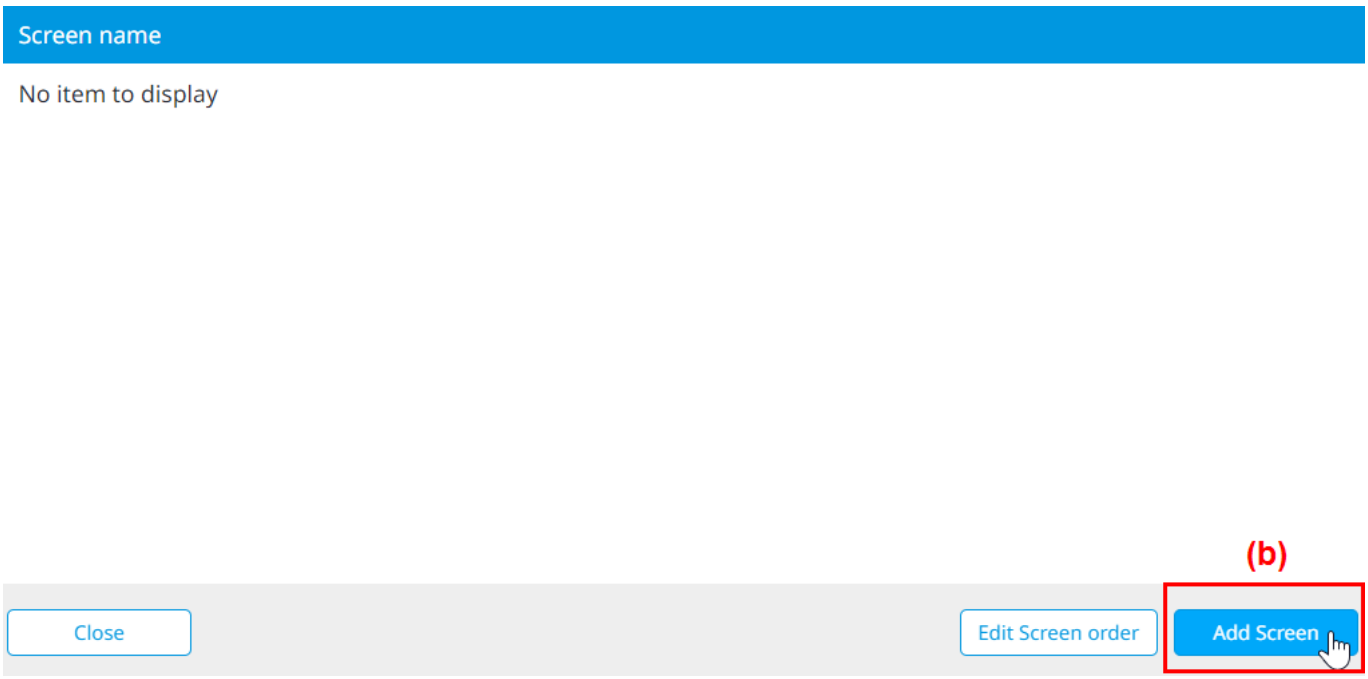
1 In the sidebar, go to ADMINISTRATION > LAYOUT SETTINGS.

Result: The following options appear on the right side of the page. These options are always visible when on the main Layout Settings page.

2 Under Screen, click Screen Add/Edit (a).

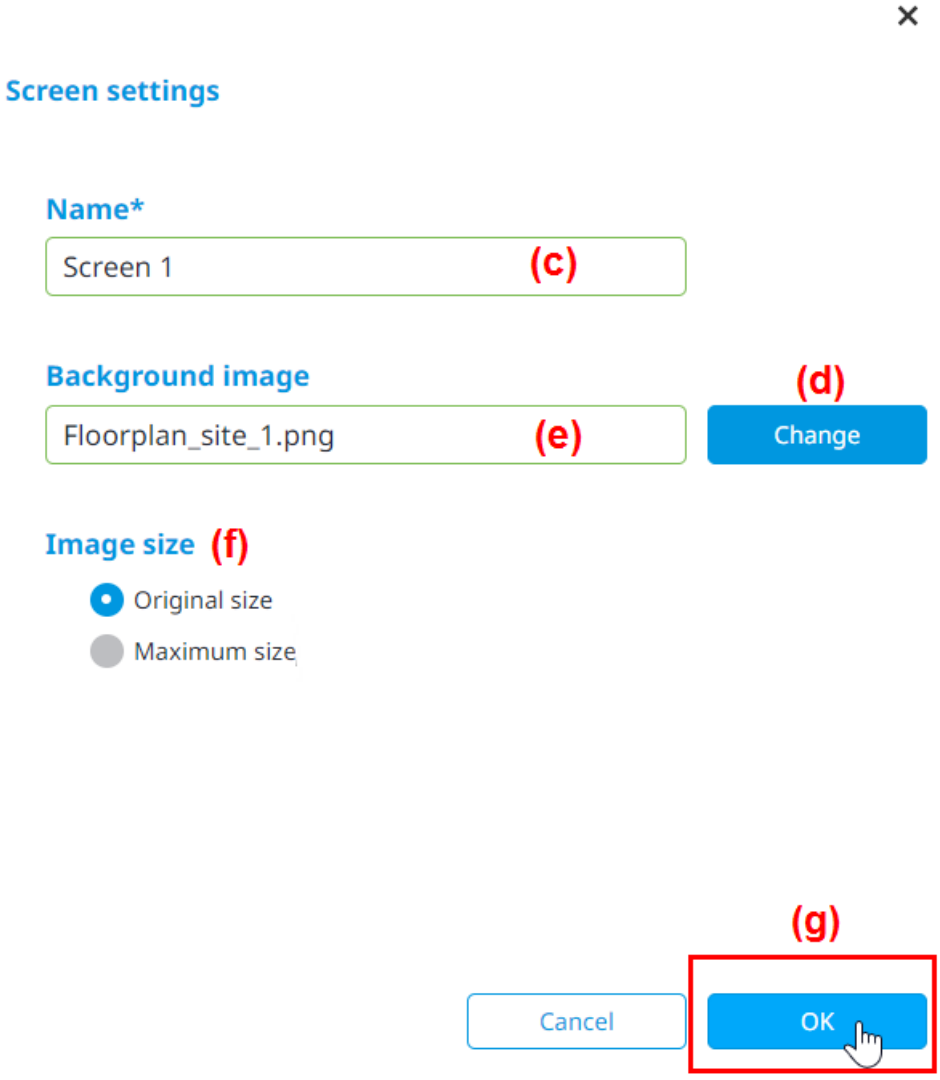


Result: A list of screens is displayed.



3 Click Add Screen (b).

Result: A settings panel appears on the right side of the page.



4 Give the screen a Name (c).

INFORMATION

Duplicate screen names are NOT allowed.

5 Select Change (d).

Result: A system dialog window opens.

6 Select an image file to use as background image (e).

INFORMATION

The image MUST comply with the following requirements, otherwise it CANNOT be uploaded as a background image.

- File format: JPEG or PNG.
- File size: less than 500 kB
- Image dimensions (length x width): minimum 800x600 px and maximum 1700x1300 px

7 Select an Image size (f) option:

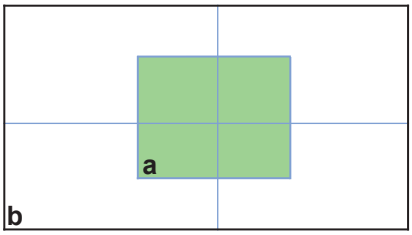
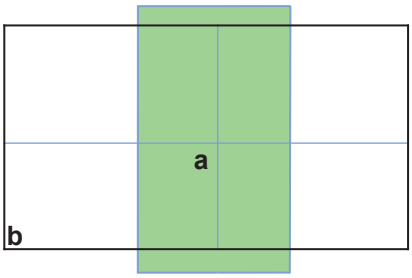
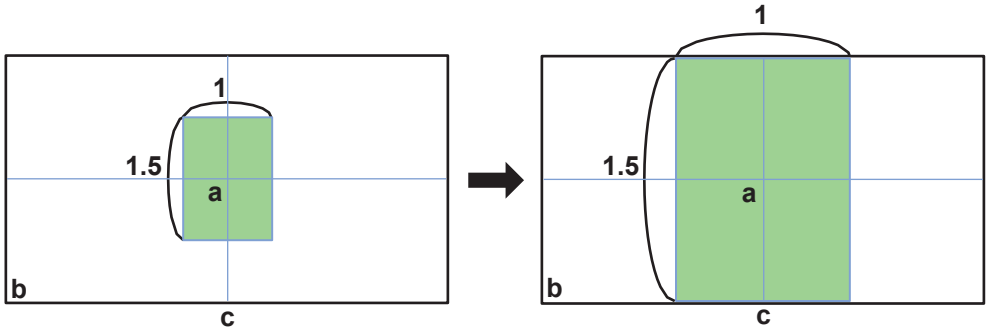
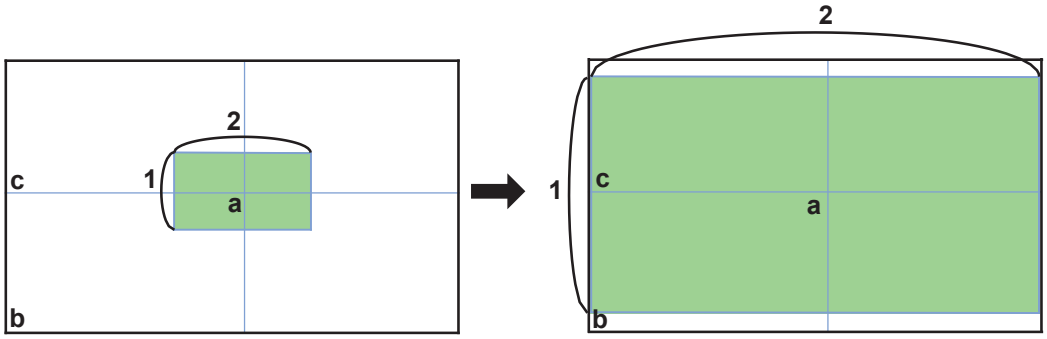
Image size	Description
Original size	The selected image is displayed in its original size. Select this option if you want to use the size of the background image as is. ▪ In case the background image (a) is smaller than the screen display (b).  ▪ In case the background image (a) is larger than the screen display (b). 

Image size	Description
Maximum size	The selected image is enlarged and scaled to fit to the maximum screen display size. However, the aspect ratio of the selected image remains fixed. Select this option if you want the background image to be as large as possible. ▪ In case of a vertical background image (a), the image is scaled to fit the screen display (b) according to the vertical axis (c).  ▪ In case of a horizontal background image (a), the image is scaled to fit the screen display (b) according to the horizontal axis (c).  Note that the maximum screen display (b) size is 2460 px wide and 1400 px long.

8 Click OK (g).

Result: The screen is created.

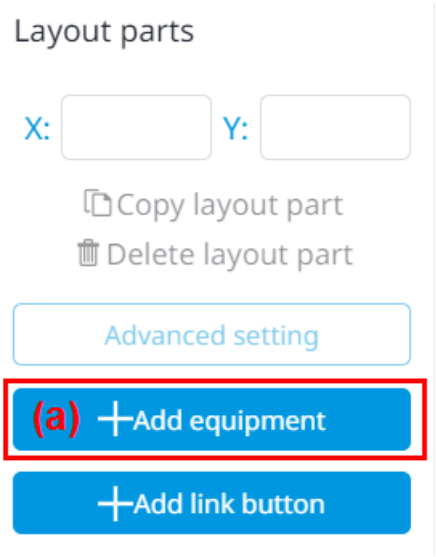
9 Repeat the steps above for every screen you want to create.

To add equipment or zone tiles to a screen

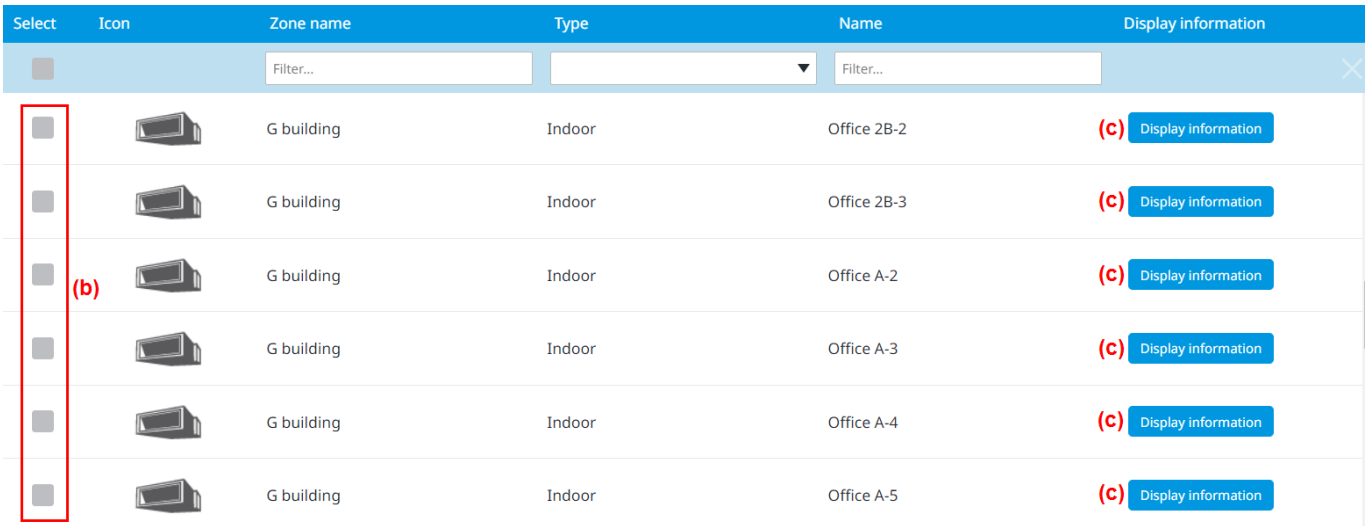
Once at least a single screen has been created, tiles for equipment and zones can be placed onto the background image.

1 In the sidebar, go to ADMINISTRATION > LAYOUT SETTINGS.

2 Under Layout parts, select Add equipment (a).

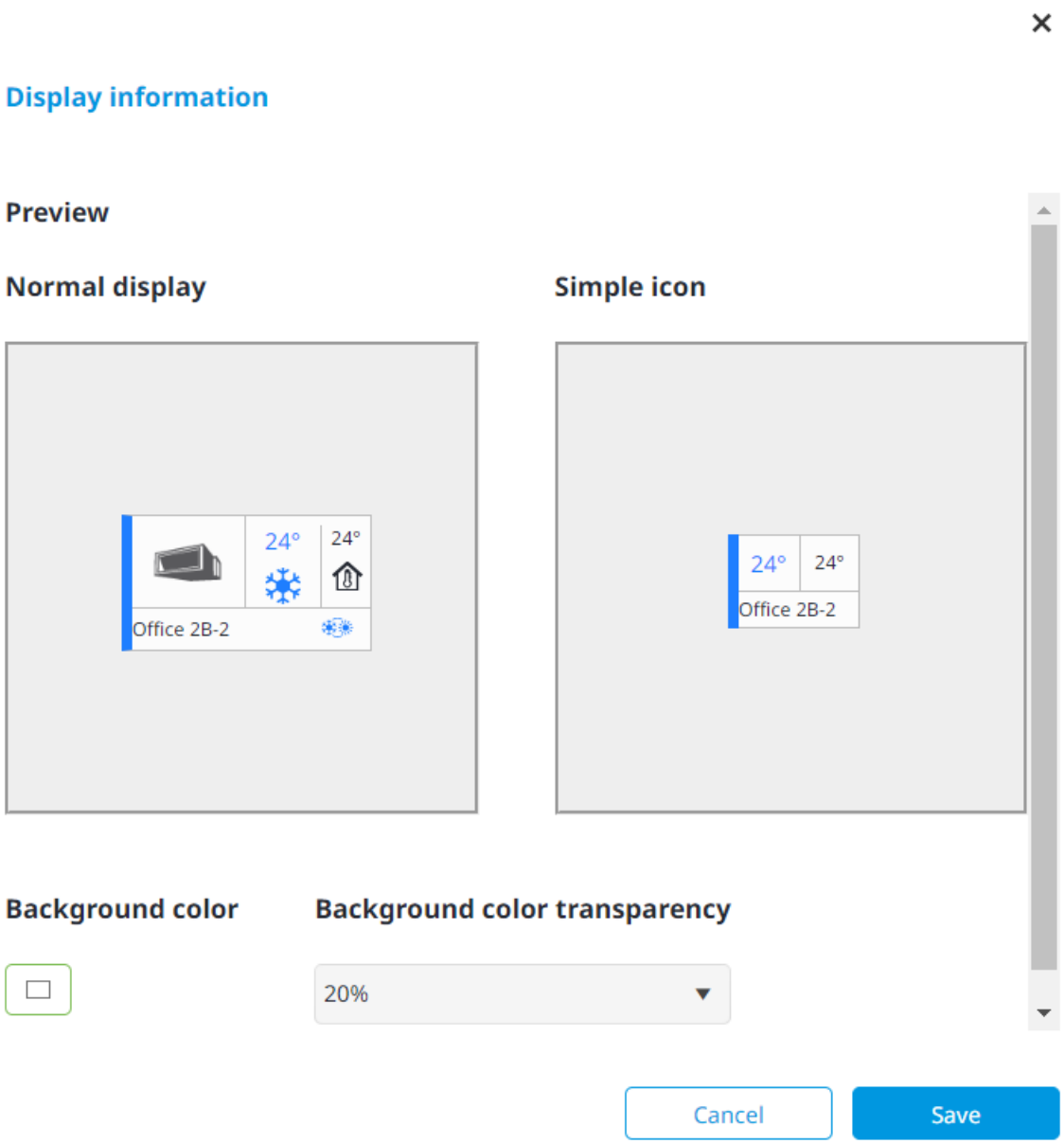


Result: A list with all available zones and equipment is displayed.

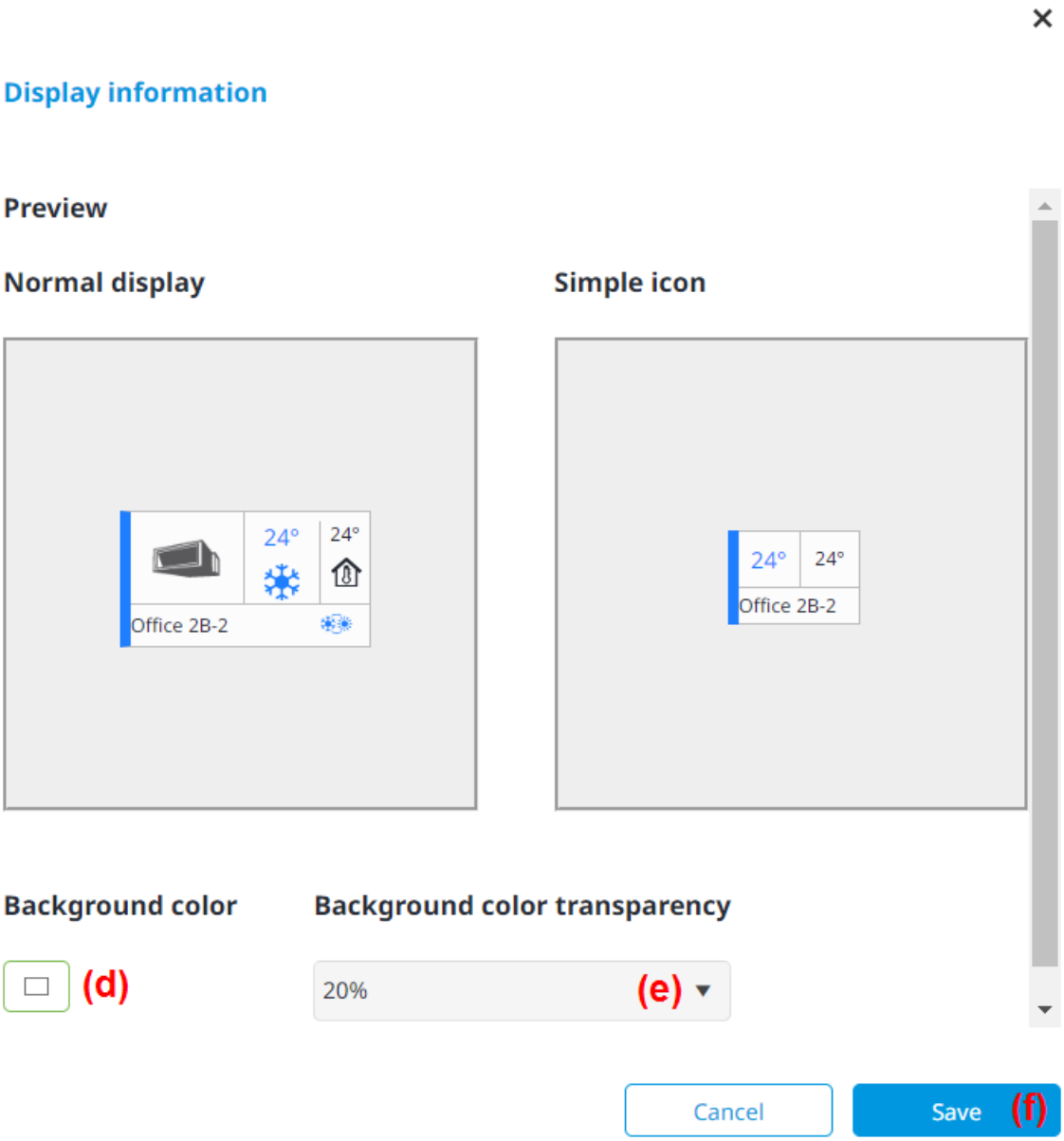


3 Mark the checkboxes (b) of the zones or equipment you want to add to the screen.

4 Click the Display information (c) button for a preview of the zone or equipment tile.

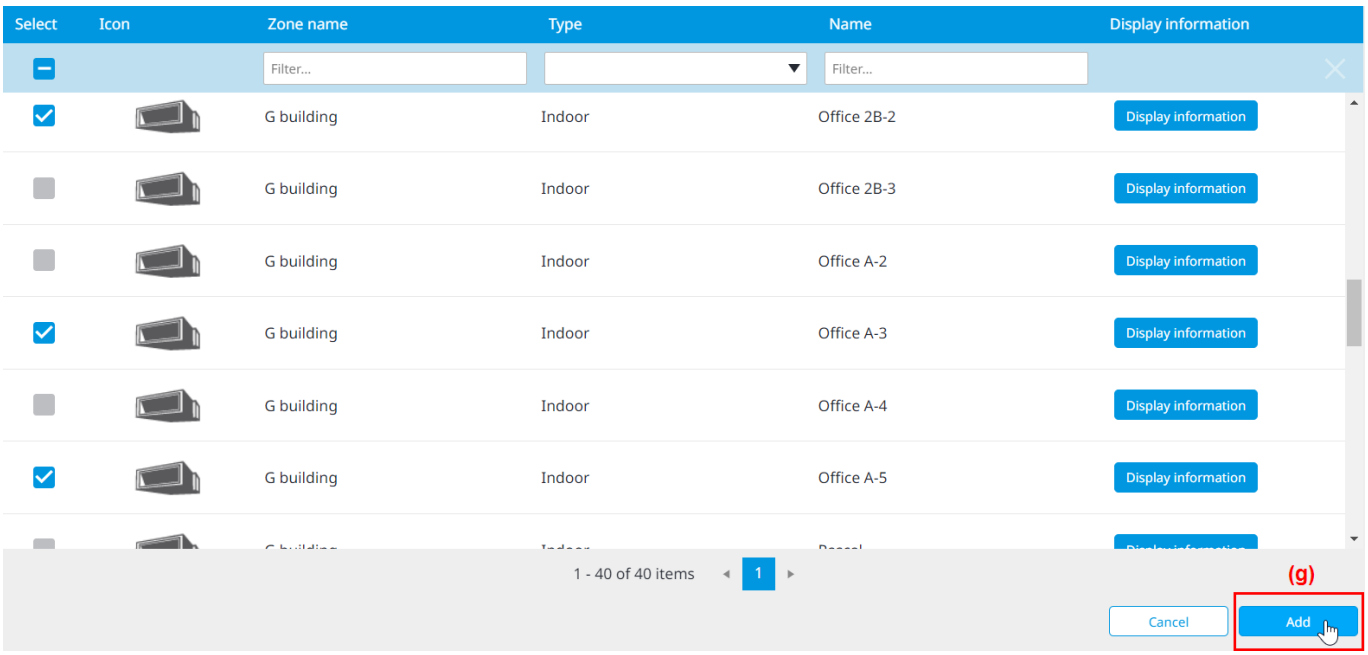


5 Change the Background color (d) of the tile by using the colour picker, and select a Background color transparency (e) value from the drop-down list.



6 Click Save (f).

7 Click Add (g).

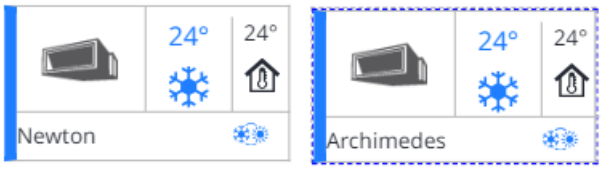


Result: The Layout Settings page is displayed. The selected equipment and/or zone tiles have been added to the screen.

INFORMATION

By default, new tiles are added to the screen in the upper leftmost corner (coordinates X:0, Y:0). When adding multiple tiles at once, tiles are added to the screen in such a way that they do not overlap.

8 Click a tile to select it, then drag and drop the tile to the desired location on the screen. Alternatively, you can enter X and Y coordinates to position tiles on the screen. The currently selected tile has a dotted line around it. It is also possible to select and move multiple tiles at once (Ctrl + left click).

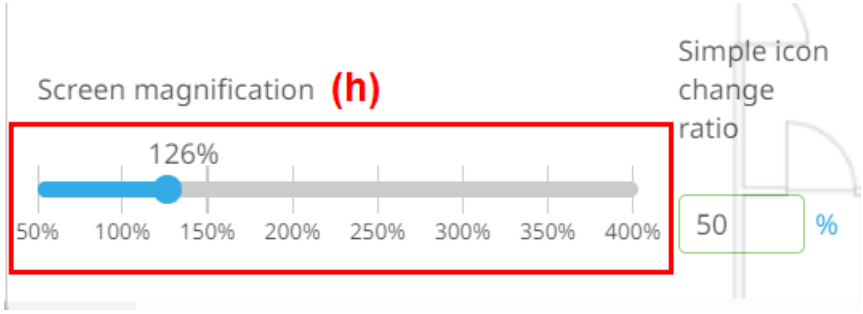


INFORMATION

Whenever an equipment or zone tile or a link button is selected, the X and Y coordinates for that item are displayed on the right side of the page. The top left corner of the screen has coordinates X:0 and Y:0.

- Increasing the X coordinate moves an item to the right, decreasing the X coordinate moves an item to the left.
- Increasing the Y coordinate moves an item down, decreasing the Y coordinate moves an item up.

9 Use the zoom slider (h) to increase or decrease the zoom level. Here, you can also define starting from which zoom level simplified tiles should be displayed instead of normal tiles (Simple icon change ratio).



10 Click Confirm save.

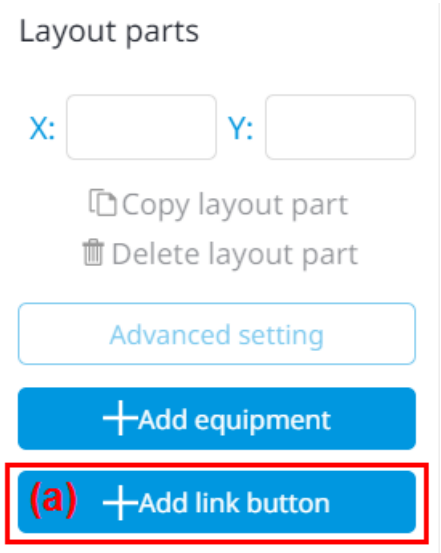
Result: The equipment and/or zone tiles are added to the screen.

To add a link button

To facilitate switching to different screens in Layout view (e.g. when a building has multiple floors), link buttons can be added to screens. Users can click or tap the link button instead of selecting a screen from the drop-down list.

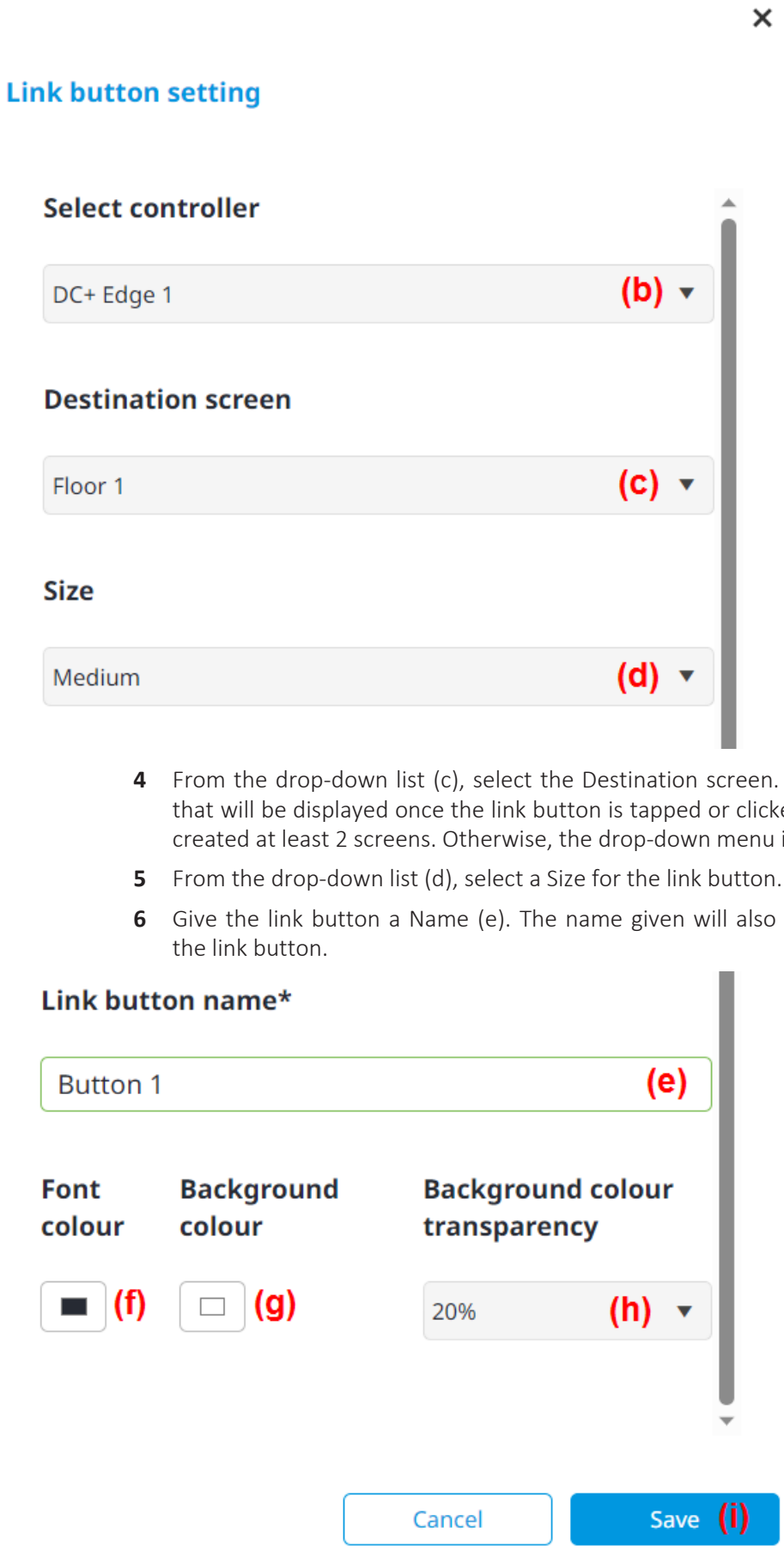
1 In the sidebar, go to ADMINISTRATION > LAYOUT SETTINGS.

2 Select Add link button (a) under Layout parts.



Result: A settings panel opens on the right side of the page.

3 From the drop-down list (b), select the DC+ Edge controller for which you want to add a link button.



4 From the drop-down list (c), select the Destination screen. This is the screen that will be displayed once the link button is tapped or clicked. You must have created at least 2 screens. Otherwise, the drop-down menu is greyed out.

5 From the drop-down list (d), select a Size for the link button.

6 Give the link button a Name (e). The name given will also appear as text on the link button.

INFORMATION

The number of characters that can be entered depends on the selected link button size.

- Small: maximum 5 characters
- Medium: maximum 10 character
- Large: maximum 20 characters

7 Change the Font colour (f) and the Background color (g) of the link button by using the colour picker, and select a Background color transparency value from the drop-down list (h).

8 Click Save (i).

Result: The Layout Settings page is displayed. The link button has been added to the screen.

INFORMATION

By default, new link buttons are added to the screen in the top left corner (coordinates X:0, Y:0).

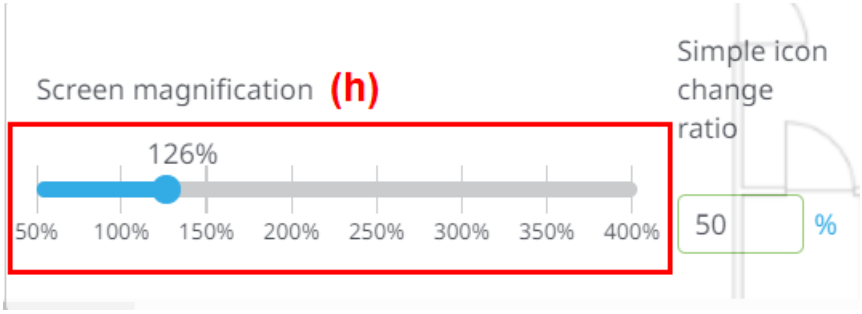
9 Click the link button to select it, then drag and drop the button to the desired position on screen. Alternatively, you can enter X and Y coordinates to position the button on screen. The currently selected button has a dotted line around it. It is also possible to select and move multiple link buttons simultaneously (Ctrl + click).

INFORMATION

Whenever an equipment or zone tile or a link button is selected, the X and Y coordinates for that item are displayed on the right side of the page. The top left corner of the screen has coordinates X:0 and Y:0.

- Increasing the X coordinate moves an item to the right, decreasing the X coordinate moves an item to the left.
- Increasing the Y coordinate moves an item down, decreasing the Y coordinate moves an item up.

10 Use the zoom slider (k) to increase or decrease the zoom level if required.



11 Click Confirm save.

Result: The link button is added to the screen.

INFORMATION

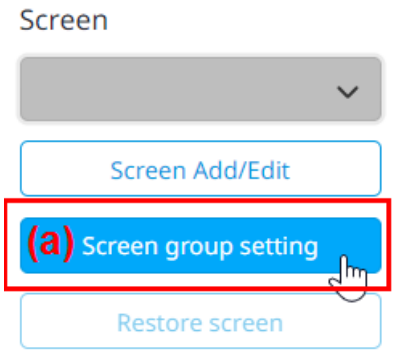
The appearance of link buttons is not affected by the current zoom level. Only equipment and zone tiles change between the simplified and normal appearance depending on the zoom level.

To create and edit a screen group

You can create screen groups to further organise and structure the screens of a site.

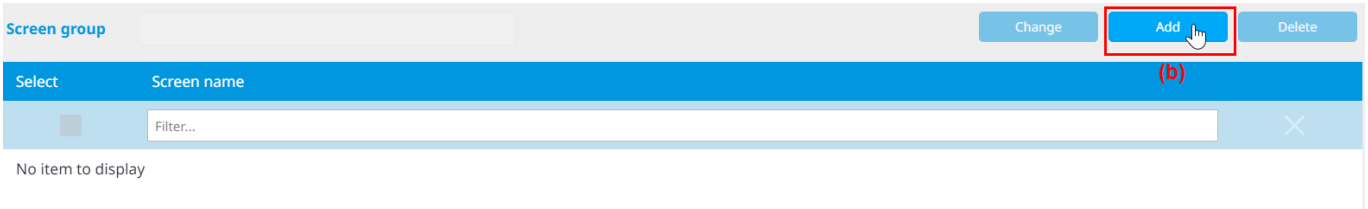
1 In the sidebar, go to ADMINISTRATION > LAYOUT SETTINGS.

2 Select Screen group setting (a).



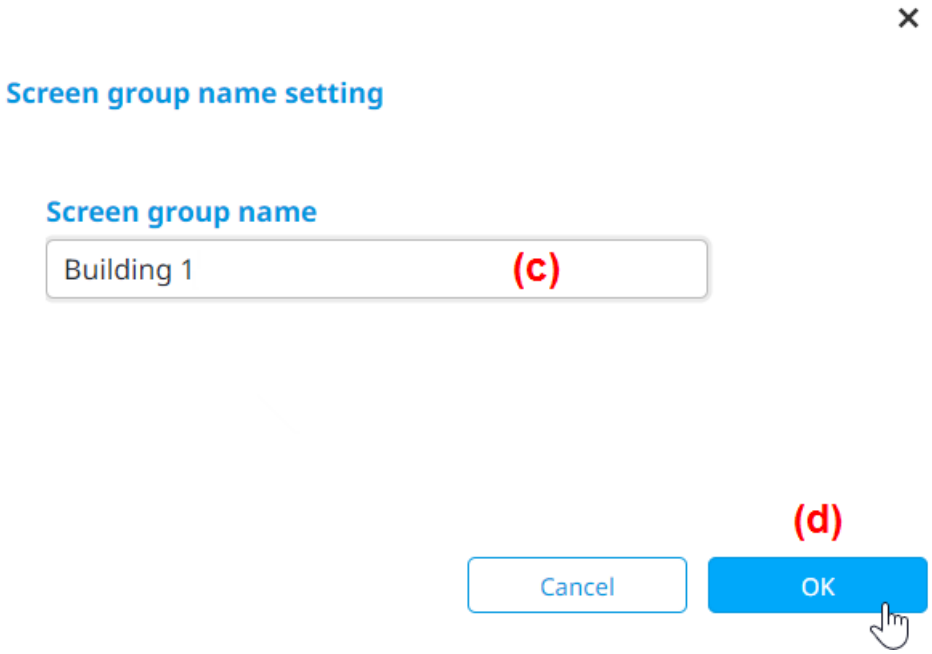
Result: The Screen group page is displayed.

3 Click Add (b).



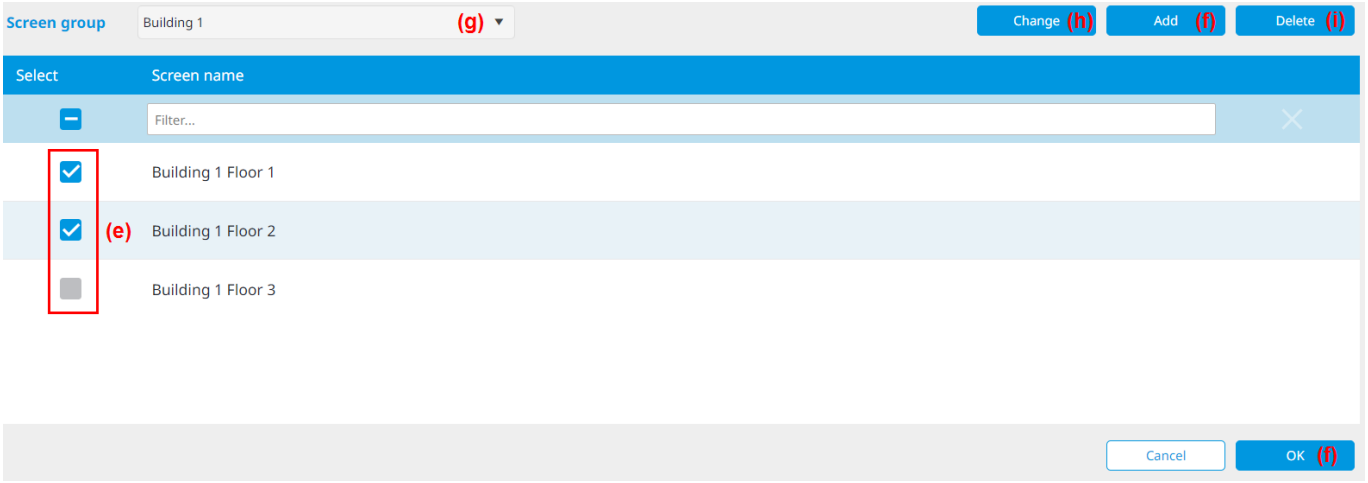
Result: A settings panel appears on the right side of the page.

4 Give the screen group a Name (c).



5 Click OK (d).

6 Select the checkboxes (e) of the screens you would like to add to the screen group.



7 Click OK (f).

Result: The screen group is created and includes the selected screens.

8 To edit an existing screen group, select the screen group you want to edit from the drop-down list (g) on the Screen group page. You can then add or remove screens from the group by selecting the checkboxes (e). Then, click OK (f) to save the screen group.

9 To modify the name of the screen group, select Change (h) on the Screen group page. Change the Name (c) of the screen group, then, click OK (d) to confirm.

10 To delete a screen group, select the screen group you want to delete from the drop-down list on the Screen group page and select Delete (i).

11 Click Yes in the pop-up window to confirm.

INFORMATION

Deleting a screen group does NOT delete the screens that belong to that screen group.

Other options

Alignment options

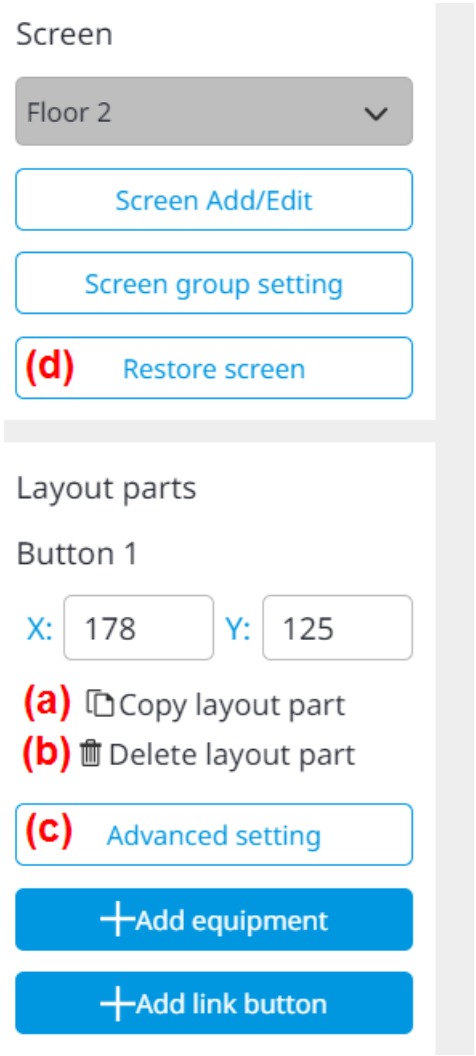
If multiple parts (equipment or zone tiles, link buttons) are selected, some additional alignment options are displayed on the top right of the screen. Note that these options are grayed out unless 2 or more items are selected.

Icon	Description
	Vertical align top: aligns the top edges of the selected parts vertically with the most upper part that is selected.
	Vertical align bottom: aligns the bottom edges of the selected parts vertically with the most bottom part that is selected.
	Horizontal align left: aligns the left edges of the selected parts horizontally with the leftmost part that is selected.
	Horizontal align right; aligns the right edges of the selected parts horizontally with the rightmost part that is selected.
	Vertical align center: distributes the space between the selected parts evenly, on the horizontal axis, [a]

Icon	Description
	Horizontal align center: distributes the space between the selected parts on the vertical axis evenly[a]

[a] Option will be grayed out if fewer than 3 parts are selected.

Additional layout part options



Option	Description
(a) Copy layout part	Copies the selected layout part. You can also select multiple parts to copy.
(b) Delete layout part	Deletes the selected layout part. You can also select multiple parts to delete.
(c) Advanced setting	Opens a settings panel for the seleced part (equipment, zone, or button) with the same settings that are available when adding or creating the part. Depending on the selected part, you can modify the tile colour, transparency, or rename the part in case of a link button.

Restore screen

The screen can be restored to the state it was in before any changes were made to it. For example, when a link button is added to a screen, and 2 zones are moved, clicking Restore screen (d) will discard those changes. Note that only changes that have not been saved yet (i.e. before Confirm save is clicked) can be discarded this way.

To preview the layout

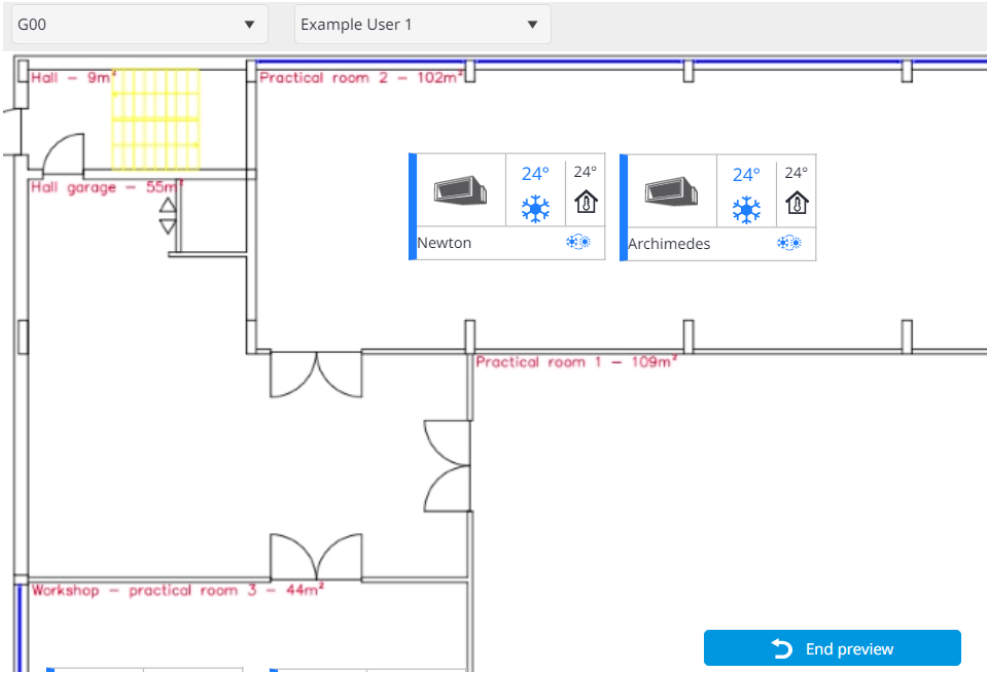
You can preview a layout before saving any changes made to a screen. This will show the screen as it would appear in Layout view. In addition, the layout preview can be used to check what the layout looks like for a specific user.

1 Under Screen, select the screen you want to preview from the drop-down list.

Result: The selected screen is displayed on the Layout Settings page.

2 Click Preview.

Result: A preview of the selected screen is displayed.



3 From the drop-down list, select a user to check how the screen is displayed for that particular user.

4 Select End preview to return to the page.

Other options

Alignment options

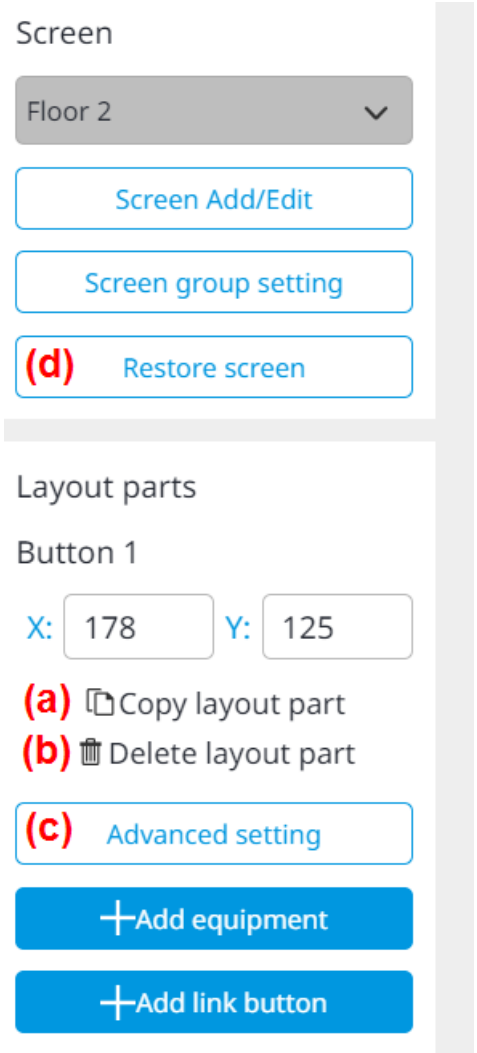
If multiple parts (equipment or zone tiles, link buttons) are selected, some additional alignment options are displayed on the top right of the screen. Note that these options are grayed out unless 2 or more items are selected.

Icon	Description
	Vertical align top: aligns the top edges of the selected parts vertically with the most upper part that is selected.
	Vertical align bottom: aligns the bottom edges of the selected parts vertically with the most bottom part that is selected.
	Horizontal align left: aligns the left edges of the selected parts horizontally with the leftmost part that is selected.

Icon	Description
	Horizontal align right; aligns the right edges of the selected parts horizontally with the rightmost part that is selected.
	Vertical align center: distributes the space between the selected parts evenly, on the horizontal axis, [a]
	Horizontal align center: distributes the space between the selected parts on the vertical axis evenly[a]

[a] Option will be grayed out if fewer than 3 parts are selected.

Additional layout part options



Option	Description
(a) Copy layout part	Copies the selected layout part. You can also select multiple parts to copy.
(b) Delete layout part	Deletes the selected layout part. You can also select multiple parts to delete.

Option	Description
(c) Advanced setting	Opens a settings panel for the seleced part (equipment, zone, or button) with the same settings that are available when adding or creating the part. Depending on the selected part, you can modify the tile colour, transparency, or rename the part in case of a link button.

Restore screen

The screen can be restored to the state it was in before any changes were made to it. For example, when a link button is added to a screen, and 2 zones are moved, clicking Restore screen (d) will discard those changes. Note that only changes that have not been saved yet (i.e. before Confirm save is clicked) can be discarded this way.

Device-specific controls

Depending on the device used to access Daikin Cloud Plus, some actions in the Layout Settings user interface are performed in different ways.

Action	PC	Tablet
Select part (equipment or zone tile, link button)	Left click	Tap
Select multiple parts	Ctrl + left click	Tap a part, then long tap another part
Deselect part	Left click on the background image	Tap the background image
Move part	Drag and drop / Arrow keys	Drag and drop
Scroll	Left click and drag the background image up/down	Swipe the background image up/down
Increase/decrease zoom level (if not using the zoom level slider)	Scroll mouse wheel up/down	Pinch in/out

4.12 DC+ Fallback control

In the unlikely event of that the DC+ Edge loses connection to the cloud (e.g. during an internet outage), the DC+ Fallback control application can be used to perform basic monitoring and control tasks over the local network. The application must be used on a device (smartphone or tablet) that is connected to the same network to which the DC+ Edge controller is connected.

Please download the application directly via the application store of your device (App Store or Google Play). For Android, Android10.0 or higher is required. For Apple devices, iOS 14.0 or higher is required.

INFORMATION

DC+ Fallback control and DC+ Edge connect CANNOT run on a single device simultaneously.

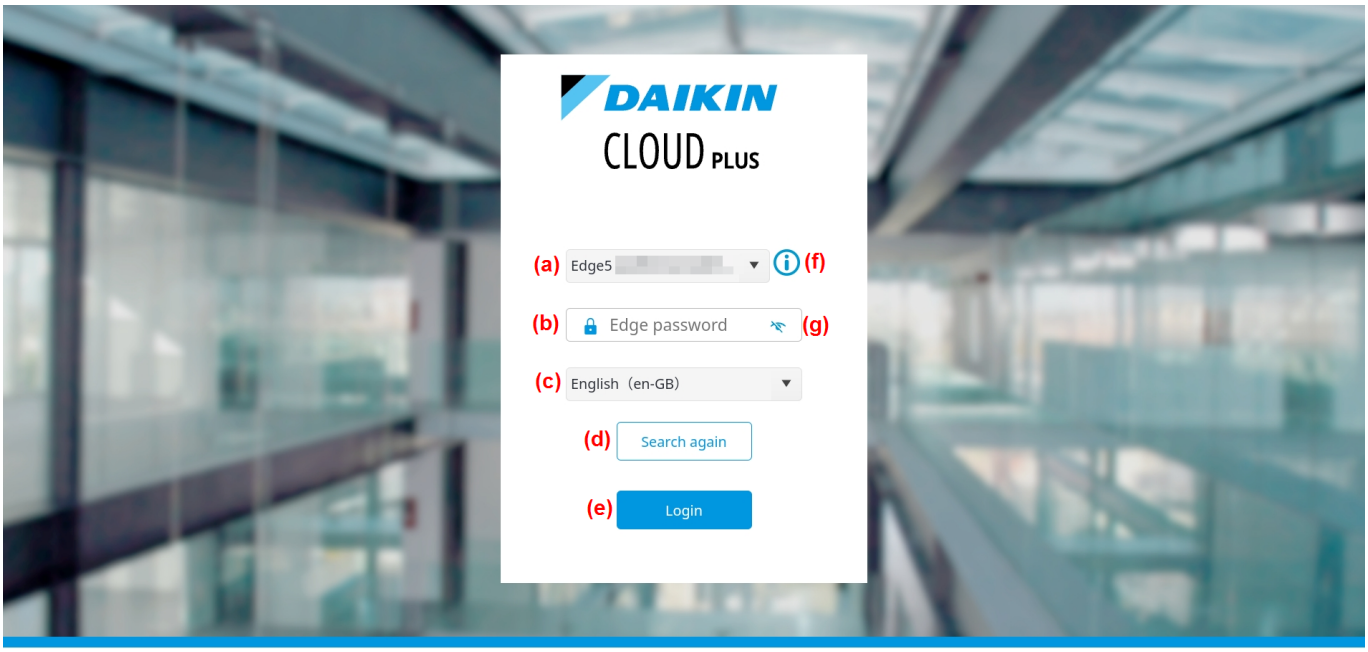
4.12.1 To log in

1 Open the DC+ Fallback control application on your device.

Result: The application starts searching for DC+ Edge controllers present on the local network automatically. Once a DC+ Edge is found, the log in screen is displayed. The application keeps searching for DC+ Edge controllers in the background.

INFORMATION

When starting the application for the first time on an Apple device (iOS 14.0 or iPadOS 14.0 or higher), the application requests permission to access the local network. You must allow the application to acces the local network in order to connect to the DC+ Edge.



2 From the drop-down list (a), select the DC+ Edge to connect to. You can click the information icon (f) to display the IP address and the subnet mask of the currently selected DC+ Edge.

If the DC+ Edge does not appear in the drop-down list:

- Verify that the tablet is connected to the same local network as the DC+ Edge (i.e. the router that the DC+ Edge is connected to).
- Verify that the DC+ Edge is turned on.
- Verify that the LAN cable that connects the DC+ Edge to the router is properly connected.

Then, try to find the DC+ Edge by clicking Search again (d).

3 Enter the password (b). You can click the eye icon (g) to display or hide text in the password input field.

INFORMATION

The initial password is set during commissioning. See the installer reference guide for more information. If you do not know the password, contact your Daikin representative or the installer who commissioned the system. When an incorrect password is entered 5 times in a row, you will NOT be able to attempt to log in for 10 minutes.

4 Select a language from the drop-down list (c).

5 Click Login (e).

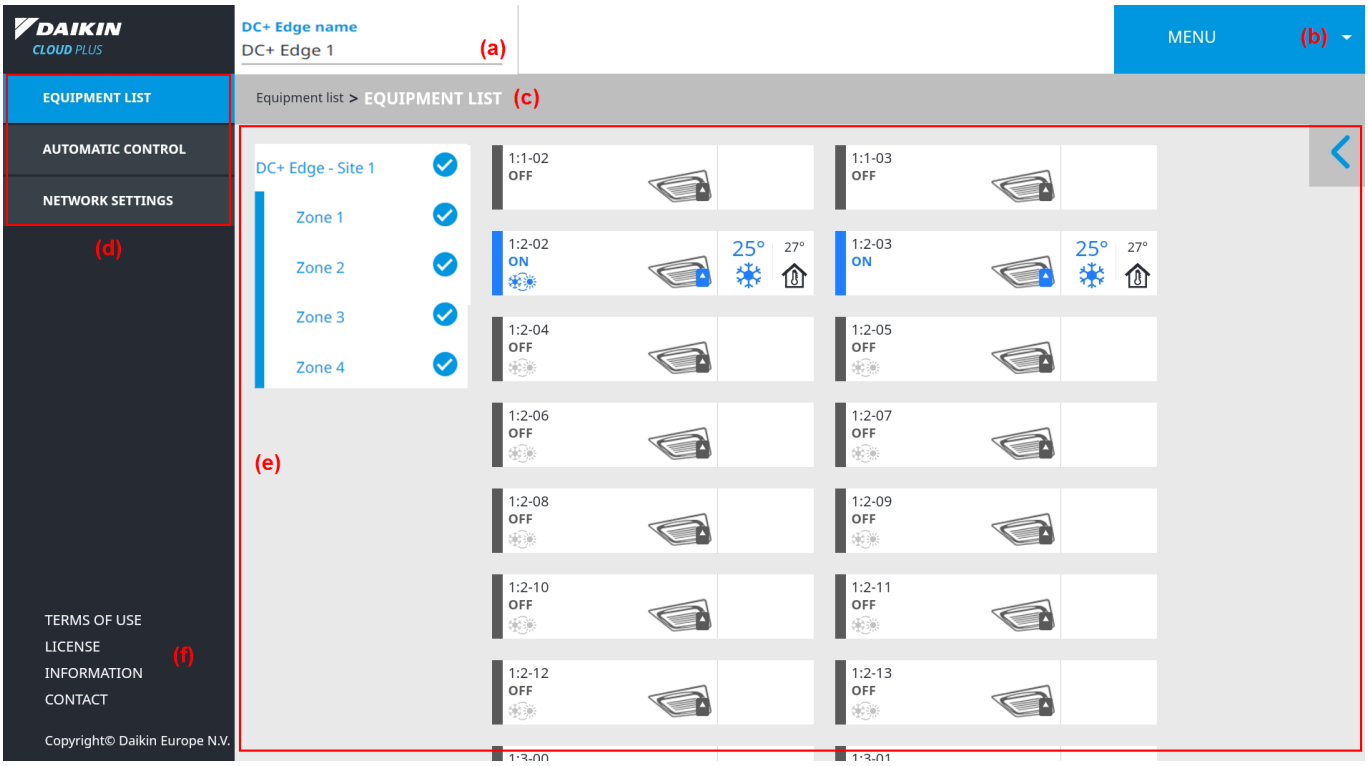
Result: You are logged in and connected to the DC+ Edge over the local network.

INFORMATION

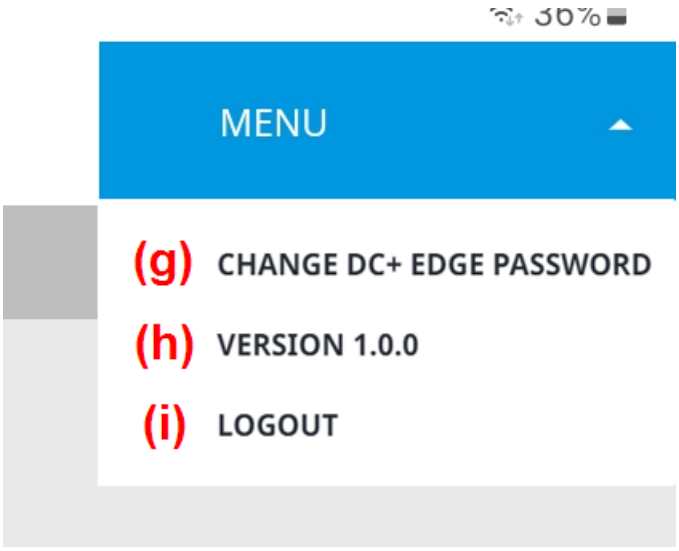
A maximum of 2 devices can be simultaneously connected to the DC+ Edge over the local network.

4.12.2 User interface

The user interface of DC+ Fallback control consists out of the following major parts:



- An upper toolbar (a) that displays the DC+ Edge you are currently connected to over the local network.
- Drop-down menu (b). This menu allows you to change the DC+ Edge password (g) that is required to log into the DC+ Fallback control. When collapsed, it also displays the current version of the application (h). It also allows you to log out of the application (i).



- Breadcrumbs (c) that give you feedback on where you are in the structure of the user interface.
- A content section (e) displaying the actual requested data.
- Footer with various useful links (f) that can be accessed at all times.

INFORMATION

The user interface is responsive, which means it looks good on all devices. It will react to the available display size. This means that the sidebar can be hidden on devices with smaller screens, for example. If this is the case, you can press the "hamburger" icon to expand the sidebar.

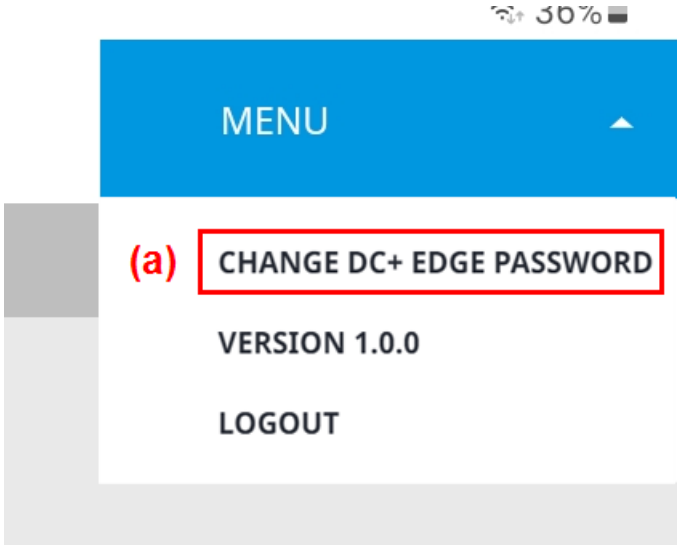
INFORMATION

When selecting items from drop-down lists, it is possible that the selected item is NOT actually selected yet before you tap an empty space on screen. After you select an item from a drop-down list, tap an empty space to update the currently selected item.

4.12.3 To change the DC+ Edge password

After logging in with the initial password, you can change the DC+ Edge password.

1. Tap MENU in the top right corner.
2. From the drop-down list, select Change DC+ Edge password (a).



Result: The following page is displayed.

3 Enter the current DC+ Edge password (b).

4 Enter the new password (c).

INFORMATION

The new password MUST meet the following requirements:

- It should contain only single-byte alphanumeric characters.
- It should at least contain 1 of the following special characters: = + ^ $ * . [ ] { } ( ) ? - “ ! @ # % & / \ , > < ‘ : ; | _ ~ `SPACE.
- It should be at least 10 and maximum 64 characters.
- It should at least contain 1 capital letter (A-Z).
- It should at least contain 1 lowercase letter (a-z).
- It should at least contain 1 number.
- It should not start with a blank space.

5 Verify the the new password (d).

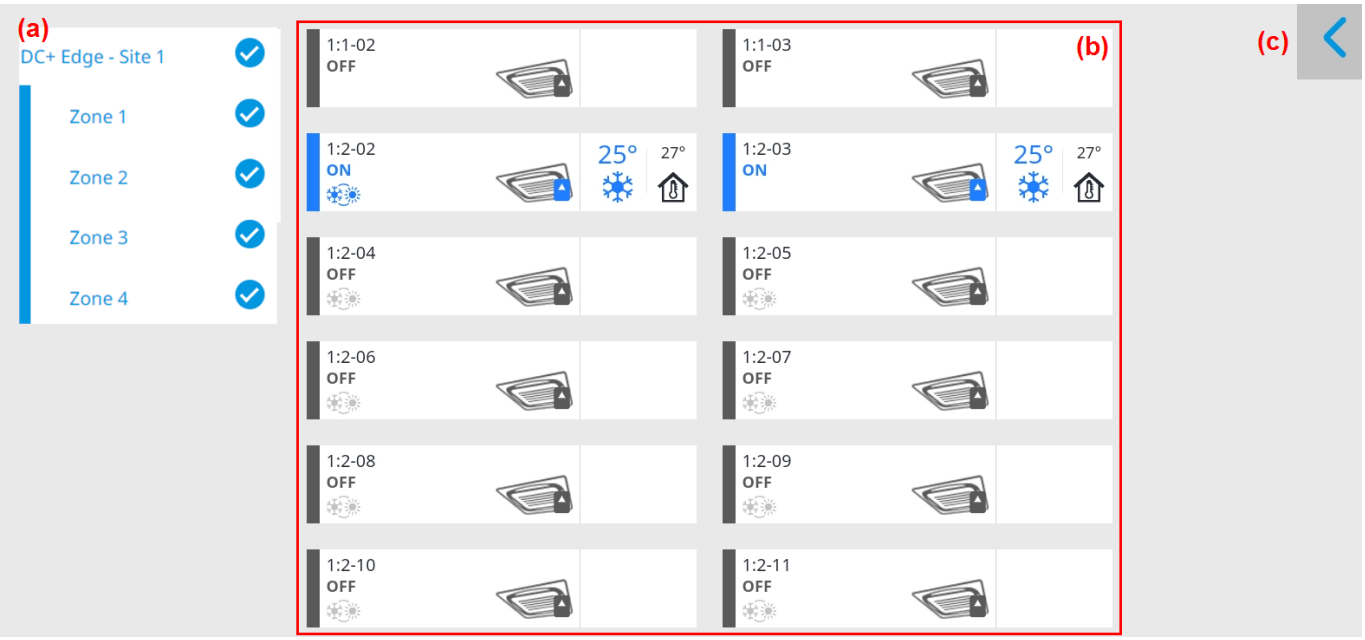
6 Check the passwords input fields by clicking the eye icon (e).

7 Tap Change password (f) to confirm.

Result: The password has been changed.

4.12.4 Equipment list

Similarly to the equipment list in Daikin Cloud Plus, the equipment list allows you to monitor and control indoor units that are connected to the DC+ Edge. The equipment list functions the same as the equipment list in Daikin Cloud Plus, however, only indoor units can be controlled. See "4.5.1 Equipment list" [▸ 15] for more information.



The page contains the following elements:

- Zone list (a): allows you to only select indoor units that belong to specific zones. Outdoor units cannot be monitored or controlled with DC+ Fallback control.
- Equipment tiles (b): all pieces of equipment belonging to the selected DC+ Edge and/or zones.
- General control panel (c): this panel allows you to apply actions to multiple indoor units immediately. If the panel is collapsed, it can be expanded by tapping the arrow in the top right of the page.

INFORMATION

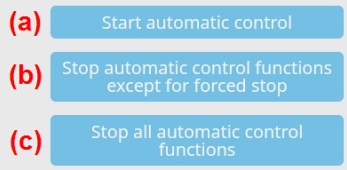
The room temperatures displayed on unit tiles are temperatures measured by the sensor built into the unit. Because of this, the displayed temperatures may differ slightly from the actual temperature.

4.12.5 Automatic control

Automatic control is functionality that allows you to manage automatically scheduled actions (schedules, interlock programs, forced stop programs) when the DC+ Edge is offline. There are 3 available options:

The setting, which automatically restarts the automatic control function from a stopped state when the communication returns to normal, is currently ON. * If the setting is OFF, automatic control will remain stopped even when communication is restored. If the setting is ON, automatic control automatically restarts when communication is restored.

Automatic control is a set of functions that include schedule and interlocking control. If automatic control is stopped, these automatic control functions will be disabled. Press the Start automatic control button to resume automatic control.



Item	Description
(a) Start automatic control	Starts Automatic control. Scheduled actions (e.g. schedules, interlock programs, forced stop programs) are executed as normal. Note that interlock programs based on IEQ sensor triggers are stored in the cloud, and will not be executed even when the DC+ Edge is offline and Automatic control is started. When tapping the button, also tap OK in the pop-up window after to confirm you want to start Automatic control.
(b) Stop automatic control functions except for forced stop	Stops any Automatic control functions that are running, except for forced stop programs. When tapping the button, also tap OK in the pop-up window after to confirm. If Automatic control is already started, you can stop it instead.
(c) Stop all automatic control functions	Stops all any Automatic control functions. Any scheduled actions (e.g. schedules, interlock programs, forced stop programs) will NOT be executed, not even forced stop programs. After tapping the button, also tap OK in the pop-up window after to confirm.

Note: during commissioning, the DC+ Edge can be configured to automatically recover automatic controls after the DC+ Edge reconnects to the cloud. When this is the case, automatic controls will be enabled again automatically, even if they were stopped (c) via the DC+ Fallback control app. This behaviour can be changed

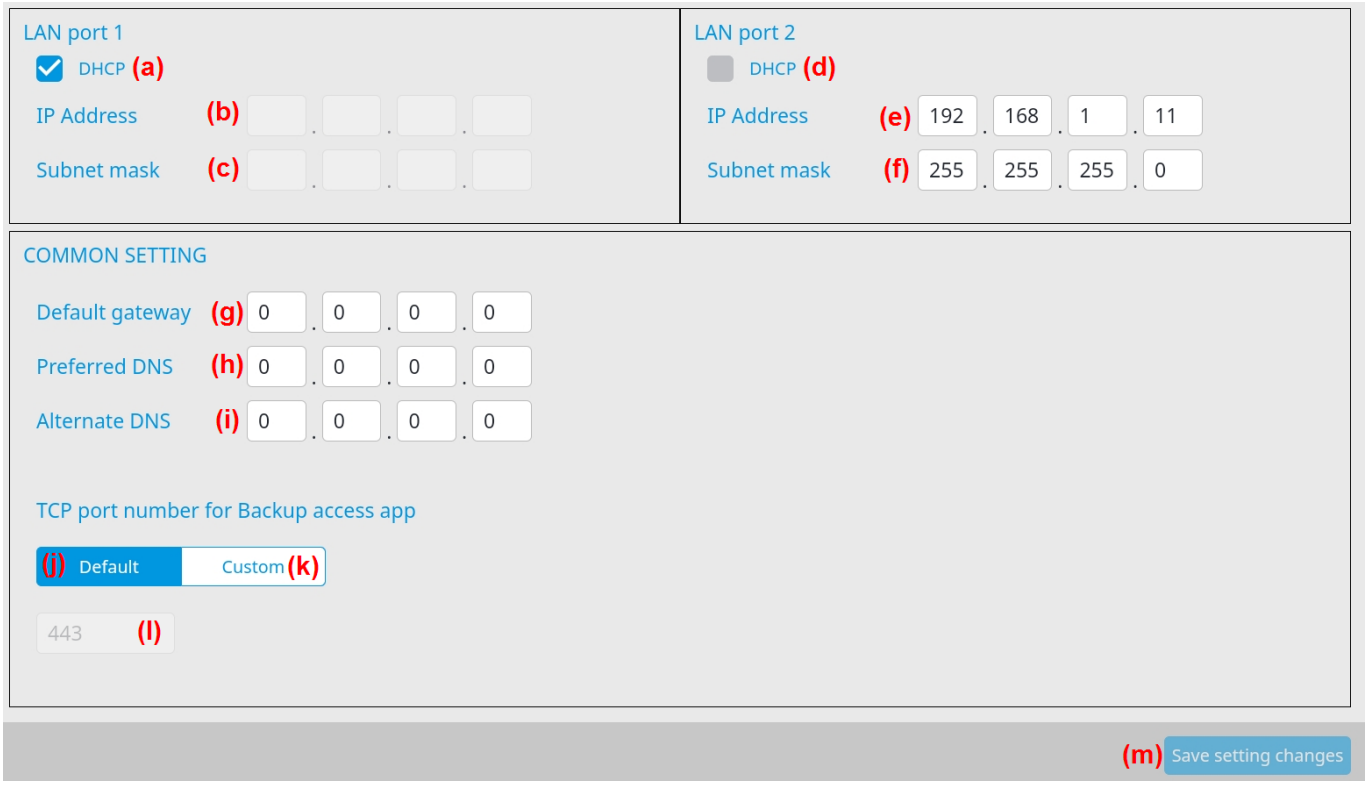
so that automatic controls have to be enabled again manually. For more information, see the commissioning chapter of the installer reference guide.

4.12.6 Network settings

This page allows you to configure whether you want to connect to the DC+ Edge with a fixed IP address or using DHCP. You can also modify the TCP port number used for the DC+ Fallback control application.

INFORMATION

Settings for LAN port 2 are NOT editable in case DGE602A51 is used.



DHCP connection

1. Select the DHCP checkbox (a, d) to enable DHCP for that LAN port.
2. Tap Save setting changes (m).

NOTICE

When DHCP is enabled, do NOT input any settings for the default gateway or for any of the DNS server addresses. These settings overrule DHCP settings. If the addresses are set incorrectly, this may result in loss of network connectivity, and the DC+ Edge will be in an offline state.

Fixed IP address connection

1. Uncheck the DHCP checkbox (a, d) to disable DHCP.
2. Enter values for the IP Address (b, e) and Subnet mask (c, f).
3. Enter values for the Default gateway (g), Preferred DNS (h) and Alternate DNS (i).

INFORMATION

The Default gateway, Preferred DNS and Alternate DNS are shared between LAN port 1 and LAN port 2.

4 Tap Save setting changes (m).

To change the TCP port number for DC+ Fallback control app

1 Change the selection from Default (j) to Custom (k). The default TCP port is 443.

Result: The TCP port number field (l) becomes editable.

2 Enter a TCP port number in the field (l).

3 Tap Save setting changes (m).

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