



CasaConnect KNX

Building Control Center

Article number 71200



elsner

Installation, setting, operation

1. Description	7
1.1. Area of use	8
Scope of delivery	8
Information about the control center	9
Control possibilities	10
Automatic functions of the motors and devices	10
Safety module and presence simulation	12
1.1.1. Technical data	13
2. Operation	15
2.1. Start page	16
2.1.1. Weather details display	17
2.2. The touch display	20
2.3. Operate motors and devices manually	20
2.3.1. The manual menu	20
Examples of manual pages	21
Key functions and display fields	22
Info icons	23
2.3.2. Group keys	26
2.3.3. CasaConnect KNX App	26
2.3.4. Navigate in the system menu	27
2.4. Internet (browser)	28
2.5. Slide show	29
3. Installation and commissioning	31
3.1. Procedure	32
3.1.1. Operating system	32
3.1.2. Protective film	32
3.1.3. Installation notes	32
3.1.4. Safety information about automatic and alarm functions	33
Power outage, maintenance work, etc.	33
3.1.5. Installation of the control center (assembly instructions)	34
3.1.6. Preparing the installation location	34
3.1.7. Preparing the control unit	34
3.1.8. Connection and installation of the control unit	37
3.2. Start up control center	37
4. Basic settings in the ETS	39
4.1. Procedure	40
4.2. KNX transmission protocol	40

Abbreviations	40
4.2.1. List of all communication objects	40
4.3. Setting of the parameters	47
4.3.1. General settings	47
4.3.2. Display	48
4.3.3. Date and time	48
4.3.4. Location	48
4.3.5. Sun position	49
4.3.6. Alarm/Central functions	49
Alarm functions	49
Central functions	49
4.3.7. Weather data	50
4.3.8. Function blocks	52
Block A	52
Block B	55
Block C	62
4.4. Symbol overview	65

5. Basic settings in the Control Center 75

5.1. Procedure	76
5.2. The "Set screen" menu	76
5.2.1. KNX settings	77
5.2.2. Assign group buttons	82
5.2.3. Scenes	83
5.2.4. Start page	84
5.2.5. Manual page	85
5.2.6. Weather display	86
5.2.7. Safety module	86
5.2.8. Presence simulation	90
5.3. System setting	91
5.3.1. Settings	92
Enter time and date manually	92
Change language	92
Set up screen	92
Switch off/on key tone	94
Select time zone	94
Enter location	94
5.3.2. Service settings	95
Cleaning mode	95
Reset (restart)	95
Reset to factory settings	95
Internal area	96
Remote setup / remote maintenance	96
5.3.3. Access code	96

5.3.4. Use SD card	98
Save and load configuration data	98
Show pictures on the display	99
5.3.5. KNX bus	99
5.3.6. Internet	100
Connection status	100
Connection type	100
Network name (SSID)	100
Create connection (button at top right)	100
Mac address	101
5.3.7. Email message	101
Email sender address	101
Email recipient address	101
5.3.8. Device information	101
Check for updates	101
Version history	102
Manual	102
CasaConnect KNX, user interface, KNX interface	102
License	102

6. Automatic 103

6.1. Procedure	104
6.2. Set automatic mode	104
6.2.1. Safety information about automatic and alarm functions	105
Power outage, maintenance work, etc. (restart the controls)	105
6.3. Adjust general automatic settings	105
6.3.1. Adjust twilight value	105
6.3.2. Adjust movement delays (shades)	106
6.3.3. Set time switch period	106
6.3.4. Set time switch event	107
6.3.5. Set night back cooling (ventilation)	107
6.3.6. Adjust frost alarm	108
6.3.7. Set movement limit (windows)	109
6.3.8. Set wind delay (shades)	109
6.3.9. Specify automatic reset	109
6.4. Set automatic mode for motors and devices	110
6.4.1. Set automatic sun protection	110
Alarm functions	111
Shade settings	111
Set automatic mode	111
6.4.2. Set window automatic mode	117
Alarm functions	118
Ventilation settings	118
Set automatic mode	118

6.4.3. Set automatic ventilation	124
Alarm functions	125
Ventilation settings	125
Set automatic mode	125
6.4.4. Set temperature regulator	129
6.4.5. Set light automatic mode	130

7. Tables, maintenance 133

7.1. Maintenance and care	134
7.2. Units for sun and wind	134
7.3. Disposal	135
7.4. Alarm and error messages	135
Network error	135
Alarm display in the weather data area	136
Not all the weather data is received correctly	137
No connection to KNX bus	138
Alarm	138
7.5. Safety module settings	139
7.6. Personal settings data of automatic mode	139

This manual is amended periodically and will be brought into line with new software releases. The change status (software version and date) can be found in the contents footer. If you have a device with a later software version, please check **www.elsner-elektronik.de** in the menu area "Service" to find out whether a more up-to-date version of the manual is available.

Clarification of signs used in this manual



Safety advice.



Safety advice for working on electrical connections, components, etc.

DANGER!

... indicates an immediately hazardous situation which will lead to death or severe injuries if it is not avoided.

WARNING!

... indicates a potentially hazardous situation which may lead to death or severe injuries if it is not avoided.

CAUTION!

... indicates a potentially hazardous situation which may lead to trivial or minor injuries if it is not avoided.



ATTENTION! ... indicates a situation which may lead to damage to property if it is not avoided.



"Control unit"

The symbol is followed by a menu path. In this menu the settings just described can be changed.



"Manual"

The symbol is followed by chapter information with a page number. In this chapter you will find additional information about the setting just described.

ETS

In the ETS tables, the parameter default settings are marked by underlining.

1. Description

1.1. Area of use

The **CasaConnect KNX Control Center** is a control unit for the KNX building bus system. The graphical touchscreen and the integrated automatic functions allow easy central setting and operation of the technical equipment installed in the building. The basic configuration is made using ETS.

Please use these operating instructions in order to match the automatic functions to your needs and to facilitate comfortable manual operation.

Functions and properties of the CasaConnect KNX control center:

- **KNX controls** with access to the participants in the KNX building system
- **Colour touch-display** 10.1 inches for manual operation, for system set-up and for setting the basic and automatic functions.
- **Network connection** via LAN or WLAN
- **Browser** for displaying websites, etc.
- **Remote access** required via network for system set-up, diagnostics and activation by the user
- Slide show from SD card as screen saver
- Data storage on SD card (backup of the settings)
- Integrated loudspeaker (4 tweeters, 1 broadband loudspeaker)
- **24 Scenes** for calling up individually set actuation positions and switching conditions. With a scene, multiple motors and devices are addressed simultaneously so that a suitable atmosphere is created with the touch of a finger ("TV", "Eating", etc.).
- **80 channels type A** for motors (blinds, shutters, awnings, windows), fans and lights (switching, dimming, RGB(W), colour temperature). Each with extensive automatic functions
- **120 channels type B** for control and display elements (dimmers, buttons), sensors, alarms, and the transmission of floating point values and text messages
- **15 channels type C**, which are used as temperature regulator extensions, i.e. a heating or cooling system is controlled with this according to the KNX requirements for HVAC applications
- **3 alarm objects** and **4 central objects** with function allocation on the display
- Individually settable **presence simulation**
- **Safety module** for messages from an alarm system with memory for event log
- Integrated **HCL(Human Centric Lighting) controls**: The biodynamic light controls change light colour and brightness over the course of the day

Scope of delivery

- Central control and operating unit
- SD card in card slot

Information about the control center

So that the **CasaConnect KNX Control Center** can be used to its full, envisaged extent, the following information must be available in the LNX system:

Information in the KNX system	required
Wind speed	for wind alarm
Precipitation	for rain and frost alarm
Outdoor temperature	for frost alarm
Date and time	for time controls
Outside brightness	for sun protection
Location	Optional for sun protection (manual input possible on the device)
Wind direction	Optional for facade control if there is a wind alarm
Indoor room temperature	Optional for air-conditioning/air quality
Indoor room humidity	Optional for air-conditioning/air quality
VOC of the indoor air	Optional for air-conditioning/air quality
CO ₂ of the indoor air	Optional for air-conditioning/air quality
VOC of the outdoor air	Optional for air-conditioning/air quality
CO ₂ of the outdoor air	Optional for air-conditioning/air quality
relative humidity of the outdoor air	Optional for air-conditioning/air quality
absolute humidity of the outdoor air	Value can be displayed but not used for automatic functions
Air pressure of the outside air	Value can be displayed but not used for automatic functions
Colour temperature	Value can be displayed but not used for automatic functions
UV index	Value can be displayed but not used for automatic functions
Heat radiation	Value can be displayed but not used for automatic functions

Presence / motion detectors, window contacts, smoke alarms and water leak alarms can also be integrated into the safety module.

If the **CasaConnect KNX Control Center** is used exclusively to a strongly restricted extent, without controlling motors (blinds, awnings, shutters, windows), this is also possible without the information above, e.g. purely time-dependent light controls is possible.

Control possibilities

The following motors and devices in the **KNX system** can be controlled by the **CasaConnect KNX**:

Function block A (for motors or lights):

- Awnings
- Blinds
- Shutters
- Windows and sliding roofs
- Lighting
- Dimmers
- Fans

Function block C (for temperature regulator):

- Temperature regulators

The following information and commands from the KNX system can be included or represented in the control center:

Function block B (for connecting control and display elements, sensors and alarms):

- Key commands
- Status of window/door contacts
- Motion detector
- Smoke warning
- Other alarm messages such as water leaks
- Temperature, floating point...

Automatic functions of the motors and devices

Automatic functions for windows/sliding roofs:

- Open from a selectable indoor temperature
- Open from a selectable indoor humidity
- Open according to the CO₂ content of the room (only with CO₂ sensor)
- Open according to the VOC content of the room (only with VOC sensor)
- Close when the supply air temperature is higher than the room temperature
- Open in steps
- Open to a specific position (actuation position settable)
- Night back cooling (settable period)
- Keep open in a settable period
- Colour restriction: Limit movement range to selectable position at selectable outdoor temperature
- Outdoor temperature lock: Lock below a selectable outdoor temperature
- Keep closed in a settable period
- Wind alarm: Close completely or to only provide a gap if a selectable wind speed is exceeded

- Rain alarm: Close completely or to only provide a gap during rainfall
- Frost alarm: Close if there is precipitation below a selectable outdoor temperature

Step windows are gradually opened. An opening position can be set for sliding windows.

Automatic functions for awnings:

- Extend according to brightness and sun position
or retract regardless of the brightness (extension only manual)
or leave extended irrespective of brightness (privacy protection, automatic retraction only if there is a rain or wind alarm)
- Actuation position settable
- Leave retracted until a selectable indoor temperature is reached
- Retract at night/twilight
- Retract daily (settable period)
- Outdoor temperature lock: Lock below a selectable outdoor temperature
- Extend for a selectable period
- Frost alarm: Retract if there is precipitation below a selectable outdoor temperature
- Wind alarm: Retract if a selectable wind speed is exceeded
- Rain alarm: Retract for precipitation

Automatic functions for blinds:

- Close according to brightness and sun position
or keep open regardless of brightness (closing only time-controlled or manually)
or keep closed irrespective of brightness (privacy protection, automatic retraction only if there is a rain or wind alarm) with reversal in order to let in light
- Movement position and blind position can be set (slat adjustment possible according to sun height)
- Leave open until a selectable indoor temperature is reached
- Close at night/twilight
- Close daily (adjustable period)
- Outdoor temperature lock: Lock below a selectable outdoor temperature
- Extend for a selectable period
- Frost alarm: Retract if there is precipitation below a selectable outdoor temperature
- Wind alarm: Retract if a selectable wind speed is exceeded
- Rain alarm: Retract for precipitation

Automatic functions for shutters:

- Close according to brightness and sun position
or keep open regardless of brightness (closing only time-controlled or manually)

or keep closed irrespective of brightness (privacy protection, automatic retraction only if there is a rain or wind alarm)

- Actuation position settable
- Leave open until a selectable indoor temperature is reached
- Close at night/twilight
- Rain automatic: Move to selectable position if there is precipitation
- Close daily (adjustable period)
- Outdoor temperature lock: Lock below a selectable outdoor temperature
- Frost alarm: Retract if there is precipitation below a selectable outdoor temperature
- Wind alarm: Retract if a selectable wind speed is exceeded
- Rain alarm: Retract for precipitation

Automatic functions for ventilation:

- Ventilate from a selectable indoor temperature
- Ventilate from a selectable indoor humidity
- Ventilation according to the CO₂ content of the room (only with CO₂ sensor)
- Ventilation according to the VOC content of the room (only with VOC sensor)
- Winter switching: Supply air is closed below a selectable outdoor temperature
- Summer switching: Supply air is closed if the outside temperature is higher than the room temperature.
- Minimum and maximum speed of motorised fans settable
- Night back cooling (settable period)
- Daily/weekly forced ventilation (settable period)
- Prevent ventilation if cooling/air-conditioning is active

Automatic functions for temperature regulators:

- Switch on mode (Comfort, Standby, Eco) after a selectable time/event

Automatic functions for light:

- Switch on daily (period can be set, with and without twilight detection)
- Switch on at twilight
- Dimming value settable
- RGB(W) value settable
- Colour temperature settable

Safety module and presence simulation

Safety module:

- Monitoring of motion detectors and/or door contacts, etc., for example
- Activation of specific alarms
- Overview of up to 64 alarm messages
- Sending alarm messages to email addresses

Presence simulation:

- Sequence of up to 16 events (e.g. switch on light, move blind, etc.)
- Event start at a specific time with or without random delay

1.1.1. Technical data

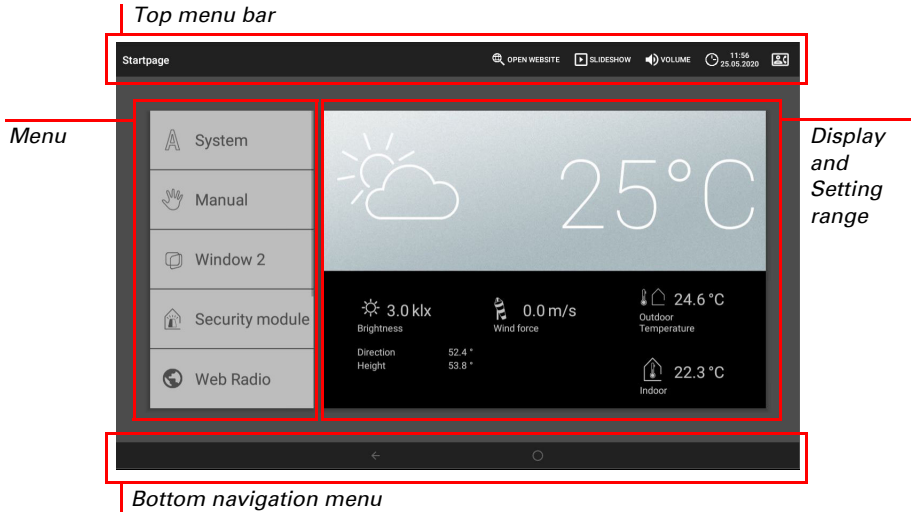
Casing	Glass, plastic
Colour	black
Assembly	Flush-mounted (in 2 standard switch sockets or a double socket)
Protection class	IP20
Size	Display front approx. 279 × 185 (W × H, mm), Installation depth approx. 30 mm
Display resolution	1280 × 800 pixels
Weight	approx. 1.2 kg
Ambient temperature	Operation 0...+55°C, Storage -30...+70°C
Ambient humidity	5...95% rF, avoid condensation
Operating voltage	20...32 V DC. A suitable mains unit can be purchased from Elsner Elektronik.
Bus current	approx. 10 mA
Power consumption	Readiness max. 17 W
Data output / Bus communication	KNX +/- bus plug terminals
Group addresses	max. 2000
Allocations	max. 2000
Communication objects	1979
WLAN frequency band	2.4 GHz and 5 GHz
Loudspeaker	integrated
Moving parts	none (fanless)

The product conforms to the conditions of the EU Directives.

2. Operation

2.1. Start page

With the **CasaConnect KNX Control Center** you can centrally operate the technology connected via the KNX bus, e.g. raise and lower shades, switch devices on and off, and dim lights. All basic and automatic settings are also shown on the display after the basic configuration has been set in the ETS.



Top menu bar:

The internet browser (*Open website*) and *Volume* can be reached at any time via the top menu bar. Time and date are displayed. Clicking the alarm icon displays the last active alarm messages. In addition, the start button for the slide show appears here as soon as an SD card with pictures is loaded.

Menu left links (start menu):

In the menu on the left-hand side you can see the *System* menu, via which you can reach all basic and automatic settings.

Via the *Manual* menu you can set the position and condition for the motors and devices configured in the ETS.

In the *Safety module* the alarm system can be switched on or off, open alarms are displayed and the last 64 events in the event memory can be viewed.

In the *Presence simulation* menu, the simulation is switched on or off.

The selected *Favourites* for the manual operation and the websites saved as *Bookmarks* are displayed here.

So that the menu item is displayed in the Manual menu and/or in the Start menu, the display has to be activated in the setting "Manual menu" in the installation settings.

☐ System > Set screen > ... > Manual menu

Display and setting area right:

The start image of the control center shows the current *weather data and, if configured in the ETS, other sensor data. If applicable, the display pages can be scrolled through using the arrow in the lower area.*

When navigating in the settings (submenus), the functions/parameters are displayed and set here.

Bottom navigation menu:

The **bottom display edge** contains a **navigation menu** with "Back" arrow and a circle. Tap the circle to return to the start page. If the start page is active, stay on the circle longer to activate the screen saver.

2.1.1. Weather details display

The current weather and indoor data is displayed on the large screen on the right.

General weather symbol and outside temperature:

Sunny or cloudy



Rain



With a precipitation message and temperatures above -3 °C it rains

Snow

With a precipitation message and temperatures under -3 °C it snows.

Night**Sun details:**

Light intensity: Brightness in lux (lx) or kilolux (klx)

Direction: Compass direction (azimuth) in degrees

Height: Elevation above the horizon in degrees

Wind:

The wind speed is displayed in metres per second (m/s) and the windsock changes:



Calm: up to 1.9 m/s



Weak wind: 2.0 to 9.9 m/s



Strong wind: from 10.0 m/s






If a wind alarm has been triggered for a motor, an warning is displayed next to the wind symbol.

Outside air data (first page):



Outside temperature at the weather station in degrees Celsius (°C)
Humidity in % rF
CO₂ content in ppm

For the outside temperature value, **night back cooling**, **frost alarm** and **window movement limit** are shown alternately as soon as the corresponding function is active.


-  3.3. Set night back cooling (ventilation)
-  3.3. Adjust frost alarm
-  3.3. Set movement limit (windows)

Indoor data:



Temperatures in degrees Celsius (°C)
Humidity in % rF
CO₂/VOC content in ppm

You can set which room data should be displayed (e.g. if multiple sensors are connected).

- ☐ System > Set screen > Weather display
-  5.2.6. Weather display, Page 86

Outside air data (second page):



Air pressure in hPa



Absolute humidity in g/kg
Precipitation in l/h

VOC content in ppm



Wind direction in degrees (°)

Sun data (second page):

Colour temperature in Kelvin (K)



UV index
Heat radiation in W/m²

2.2. The touch display

The manual controls and the default setting of the automatic functions and the basic setting are performed via the permanently installed touch display of the control center. The button surfaces are actuated by pressing the display in the respective area. If a button is pressed, there is optical feedback and a brief audio signal is emitted. The key tone can be switched off.

- System > System settings > Settings > Key tone
- 📖 5.3.1. Settings > Switch off/on key tone, Page 94

Operating the display with long fingernails will not damage the display screen or the touch function. Touching with very hard and pointed objects (e.g. made from glass, gemstone or metal) should be avoided because this can cause scratches.

2.3. Operate motors and devices manually

The start menu is on the left of the start page. Selected **Favourites** for the manual operation and the websites saved as bookmarks can be displayed beneath the system ad manual menu button. So that a motor/device is displayed in as a favourite, the display has to be activated in the setting "Manual menu" in the installation settings.

You can change the display sequence in the start menu:

- System > Set screen > > Start page
- 📖 5.2.4. Start page

2.3.1. The manual menu

- Start menu > Manual

The page for manual operation is reached via the **Manual menu** button on the start page.

So that a motor/device is displayed here, the display has to be activated in the setting "Manual menu" in the installation settings. Motors/devices, scenes and group buttons are displayed either singly or as subject groups.

Motors or devices with the same function (e.g. all blinds in a room) are aggregated in a **group button**. These motors/devices are also operated with the button.

- 📖 5.2.2. Assign group buttons, Page 82

Different functions are collated in a **subject group** in order to create more overview in the manual menu. The following groups are available:

- Central function: for group keys and scenes
- All visible functions: all functions that have been activated in the manual menu
- Room control: for heatings, air-conditioning and fans
- Floors: for different floors in a building
(Individual rooms can also be defined per floor)
- Output for motors and devices

- Input: for sensors

You can change the display sequence in the manual menu here:

☐ System > Set screen > Manual page

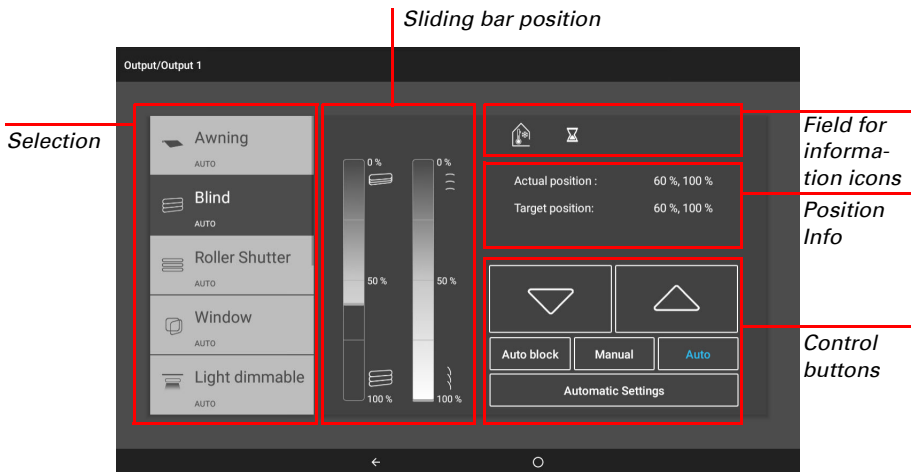
📖 5.2.5. Manual page, Page 85

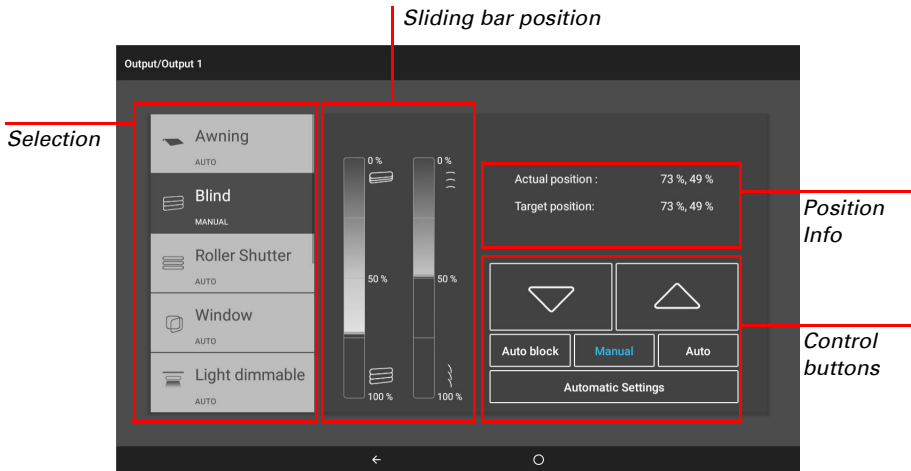
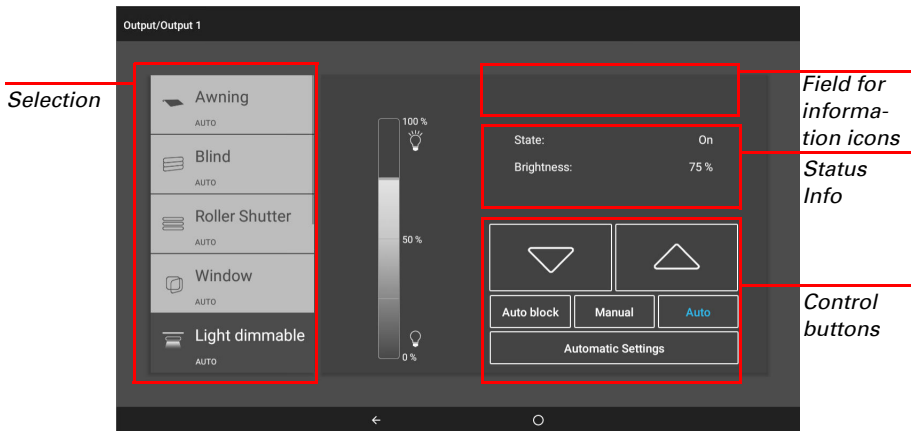


As soon as a subject group has been activated, motors and devices are no longer displayed in the manual menu!

Examples of manual pages

Blinds in automatic mode:



Blind after manual movement:**Dim lights to automatic mode:****Key functions and display fields****Up/down keys:**

The keys **Up** and **Down** have a timer automatic.

A **motor** can be precisely positioned by briefly pressing it (less than 1 second, short audio signal). For blinds and shutters, only a brief step movement command is issued. If the button is held for more than 1 second (same audio signal: state signal), the motor moves automatically to the end position. Briefly pressing the opposite direction stops the motor.

For shades and windows, the movement position is shown in percent above the Up-/Down buttons (for blinds, also the slat position).

Automatic lock / manual / automatic

Whether a motor or device is in automatic mode or has been operated manually, can be detected from the blue marking on the key and the text in the list on the left. You can switch mode by pressing a key.

After any manual operation, the drive or unit remains in manual mode. The automatic functions are then switched off, only rain and wind protection are executed. The respective automatic mode can be reactivated by hand ("Auto" button) or for all motors and devices (Building on automatic; Page 85). In addition, an automatic reset can be activated in the automatic settings of each motor group and each device, both at a fixed time and after a manual operation. You can access these and other settings of a drive/unit directly with the "Automatic Settings" button.

Pressing the "Auto block" button pauses the automatic system (blue button font). Pressing it again ends the automatic mode pause (text on the button white).

Info icons

Alongside position and status information, icons on the manual page show how automatic mode is currently working and whether there is a block, which inhibits manual operation for example.

Icon GREY: Function has been set up in the automatic menu but is not currently active.

Icon WHITE: Function is active.

Icon RED: Alarm active.

Block by the rain, wind or frost alarm



If a motor group should currently be locked for manual operation by rain or frost alarm, no up/down arrows are displayed. The red icons show the alarm for the relevant motor groups.

If there is a **frost alarm**, the icon for the button is identified by a surrounding. Press the button for approx. 1 second in order to release manual operation. The frost lock will then only be active for this drive again when it is reactivated manually or the next time the frost alarm is triggered.



ATTENTION

Property damage due to movement of frozen-solid shades!

Motor and curtain can be damaged if a frozen solid outside shade is moved.

- Before switching off the frost alarm manually, ensure that the rails are not frozen.

Icons for different functions:



Wind alarm!
Manual operation locked.



Rain alarm!
Manual operation locked.



Frost alarm!
Manual operation locked.



Block active!
E.g. ventilation prevented because of active fire, block as a result of safety contact.



Automatic block:
E.g. after wind alarm



The indoor sensor selected for automatic mode is defective.



The drive performs a reference run.

Icons for shades:



Brightness to low.
No shading



Shading active as sun position is correct.



Indoor temperature too low.
No shading



Outside temperature too low.
No shading



Brightness requires shade



Night closing active.



Time closing active



Time opening active



Retraction and extension delay has not yet expired.

Icons for windows/ventilation:



CO2/VOC value too high.
Ventilation active.



Humidity too high.
Ventilation active.



Outside temperature too high.
No ventilation



Outside temperature too low.
No ventilation



Night back cooling active



Indoor temperature too high.
Ventilation/air-conditioning active.



Night temperature for ventilation active.



Waiting time between steps at the step window.



Gap ventilation active.



Time ventilation active.



Time closing active.



Outside temperature too low.
Limited opening position for windows.



Air-conditioning unit in use.
Ventilation prevented.



Circulation air for heat gain



Circulation air for preventing condensation.

Icons for light:



Twilight/night.
Light on.



Time switching.

Icons for heating:



Indoor temperature too low.
Heating on.

2.3.2. Group keys

It is possible to operate multiple motors or devices simultaneously via a joint group button (internal software button). For example, all windows can be closed by pressing just one key. You can set up these group keys in the system menu.

- System > Set screen > Group keys
- 📖 5.2.2. Assign group buttons, Page 82

2.3.3. CasaConnect KNX App

The **CasaConnect KNX App** is available for Android and for iOS free of charge in the respective App stores.

Install the App on the mobile device. As soon as the mobile device and **CasaConnect KNX** are in the same network (WLAN), the **CasaConnect KNX Control Center** can be remote-controlled using the App.

Up to nine mobile devices can be connected with the **CasaConnect KNX Control Center** at the same time.

Access via the App to the control center can be password-protected or completely prevented.

□ System > System settings > Access codes

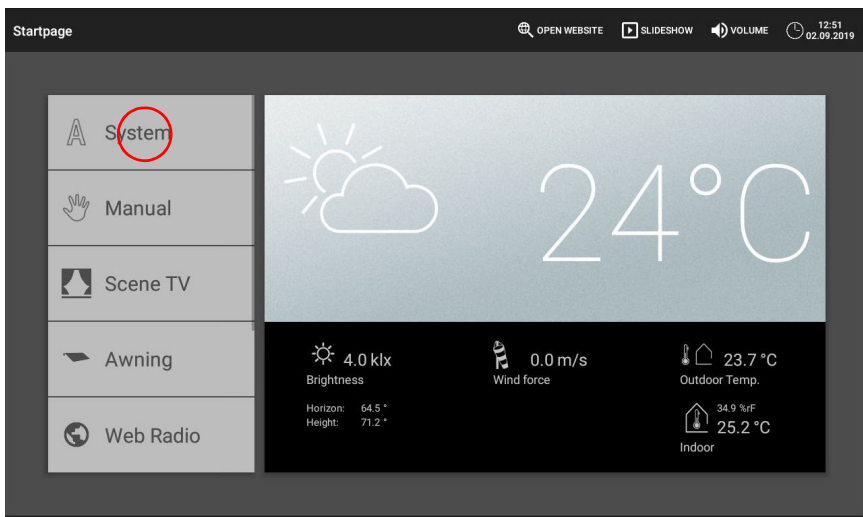
📖 Access code

If you want to operate the control center and your building technology when on-the-go, then use the **CasaConnect KNX App** and set up a secure VPN connection to your building network. App access via VPN only works after the App has been used once in the internal WLAN. IP address assignment should be set in the internet router for DHCP so that the same IP address is always assigned.

If two **CasaConnect KNX** control centers are installed in the building, they must be connected to different WLAN networks so that App control is possible.

2.3.4. Navigate in the system menu

All settings for motors and devices for automatic mode and the control center are changed in the system menu, which you reach via the **system** button. The menu can be protected with a password, see 5.3.3. Access code, Page 96.



You can make the following settings in three menus:

System setting:

- **Settings:** Change individual data such as time/date and time zone and match the screen display to your personal preferences
- **Service:** Restart the control center, reset to factory settings, change internal settings and start remote maintenance
- **Access code:** Set an access code that protects the "Set screen" and "Set automatic" menus from unauthorised changed.

- *SD card*: Save the setting details for the control center on SD card or read from SD card
- *KNX bus*: View the physical address and activate/deactivate programming mode
- *Internet*: Set up the internet/network connection
- *Email message*: Send alarm message to email address
- *Device information*: Load updates and view software versions of the control center

Set screen:

- KNX settings
- Set up group switches and scenes for the manual menu
- Set up the start page and the manual menu
- Weather data
- Control safety functions
- Configure presence simulation

Set automatic mode:

- Specify automatic functions of the individual motors and devices
- Adjust general automatic settings: Twilight value, movement delays, time switch, ventilation lock, night back cooling, frost alarm, movement restriction, wind delay and automatic reset

On the **bottom edge of the display** you will see a **Navigation menu** with "Back" arrow and a circle, which takes you back directly to the start page.

2.4. Internet (browser)

The **CasaConnect KNX Control Center** has a browser for accessing internet pages on the WorldWideWeb. Note, however, that the control center is not suitable for rendering resource-intensive web pages.

There must be an internet connection in order to use the browser.

 5.3.6. Internet, Page 100

Start the browser via "Open website" in the top menu bar. Enter the web address (URL). Navigate by touching the screen (touch display).

Websites can be shown in the display area on the right or as full screen. The switch field is located on the lower edge of the display. The "Create bookmark" button is also located here. With this, you create a link (bookmark button) in the start menu beneath the system and manual functions, through which the website can be accessed quickly.

You can edit the name of a bookmark later in the menu:

☐ System > Set screen > Start page > Bookmark

You can also delete individual bookmarks here.

PDF documents cannot be displayed or downloaded in the browser of the **CasaConnect KNX Control Center**.

Full screen mode can be enabled and a website can be saved as a bookmark using the two "Full screen" and "Create bookmark" buttons at the bottom right.

2.5. Slide show

The **CasaConnect KNX** can display digitally saved picture data as a slide show. The picture data for this must be saved on an SD card.

The card socket is located on the right-hand side of the device. The SD card is pushed into the slot, until it clicks into place.

To remove, briefly press the card into the socket so that it jumps out.



The picture files must fulfil the following requirements:

- The files must be saved in the top directory level on the card (master directory)
- File format: Bitmap (BMP, without RLE compression), Jpeg (JPG), GIF or PNG (without transparency)
- For pictures with a page ratio other than 16:10, black bars are added to the top and bottom or left and right. The display has a resolution of 1280 × 800 pixels
- Colour intensity 24 bit or 16 bit

If picture data is saved on the card, the "Slide show" button is displayed on the right of the upper menu bar, with which you can directly start it. The image changes approx. every 5 seconds (for images with 24-bit colour intensity). To interrupt the slide show, touch the screen or remove the SD card.

3. Installation and commissioning

3.1. Procedure



Installation, check, installation and troubleshooting of the control center may only be performed by an expert electrician (according to VDE 0100).

1. The **installation** of the control center and the other KNX participants must be carried out by an electrician. Information in the installation instructions, for example also about the installation location, must be observed.
See this chapter.
2. After completing the installation work, the **KNX integration** in the control center must be performed in the **ETS**.
See chapter 4 "Basic settings in the ETS" on page 39.
3. In the *System > Installation* menu, the control center have to be **fundamentally set up**.
See chapter 5.2 "The "Set screen" menu" on page 76.
4. **Further settings** for time receipt, screen saver, network connection, access code, updates etc. can be made at any time in the *System > System settings* menu.
See chapter 5.3 "System setting" on page 91.
5. The **Automatic functions** have to be adjusted in the *System > Set automatic* menu to the structural situation and the individual presets of the users.
See chapter 6 "Automatic" on page 103.

3.1.1. Operating system

The **CasaConnect KNX** works with the Android operating system. However, the control center work independently so no third-party Apps may be installed!

3.1.2. Protective film

Remove the protective film from the display. Otherwise, there is a risk that the touch operation will be deactivated. If this should happen, the control center must be restarted so that the touch display works again.

3.1.3. Installation notes



Installation, testing, operational start-up and troubleshooting should only be performed by an authorised electrician.



CAUTION! **Live voltage!**

There are unprotected live components inside the device.

- Inspect the device for damage before installation. Only put undamaged devices into operation.

- Comply with the locally applicable directives, regulations and provisions for electrical installation.
- Immediately take the device or system out of service and secure it against unintentional switch-on if risk-free operation is no longer guaranteed.

Use the device exclusively for building automation and observe the operating instructions. Improper use, modifications to the device or failure to observe the operating instructions will invalidate any warranty or guarantee claims.

Operate the device only as a fixed-site installation, i.e. only in assembled condition and after conclusion of all installation and operational start-up tasks, and only in the surroundings designated for it.

Elsner Elektronik is not liable for any changes in norms and standards which may occur after publication of these operating instructions.

3.1.4. Safety information about automatic and alarm functions



WARNING!

Risk of injury from automatically moving components!

System parts may start automatically as a result of the automatic controls and can put people in danger.

- People must not enter the movement range of motorised moving parts.
- If staying outside the building, make sure that the return path/access is not blocked (danger of being locked out).
- During maintenance and cleaning work, switch off the system.

Rain alarm for automatically controlled windows:

If rain is entering, it may be some time before rain is detected by the sensors in the system, depending on the amount of rain and outside temperature. In addition, a closing time for electric windows or sliding roofs has to be included in the calculation. Moisture-sensitive objects should therefore not be placed in areas where they could be damaged by entering precipitation.

Icing-up of rails of the shades:

Be aware that the rails of blinds, awnings and shutters, which are fitted outside, can ice up. If a motor is then moved, shades and motors can be damaged.

Power outage, maintenance work, etc.

If there is a power outage or bus voltage failure, no commands, safety or protection functions (e.g. secure position in there is a wind or rain alarm) can be executed in the KNX system! If the full extent of functions is also to be guaranteed if the mains power

fails, an emergency generator with corresponding switching from mains to emergency operation should be installed on site.

Settings stored in the program are also retained after the power outage.

After a restart (e.g. restoration of power after a power outage or after a manual reset), motors and devices, for which an automatic reset is set, are in automatic mode.

3.1.5. Installation of the control center (assembly instructions)

3.1.6. Preparing the installation location



The device may only be installed and operated in dry indoor rooms. Avoid condensation.

3.1.7. Preparing the control unit

The **CasaConnect KNX** can be installed in 2 standard sockets, however, a double socket has more space for the cables.

The **CasaConnect KNX** is delivered assembled. The device, which comprises the display unit and support plant, therefore has to be dismantled. After installation and connection, the device is reassembled in the reverse order.



Step 1 Display from below

The display unit is screwed to the support plate from below. Loosen the screws.



Step 2 Display from the side

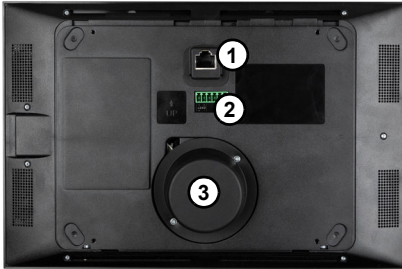
Pull the display unit forward from the lower area by simultaneously pushing from below against the two catches, and hang it from the top edge.

The display can now be removed.



Display from above

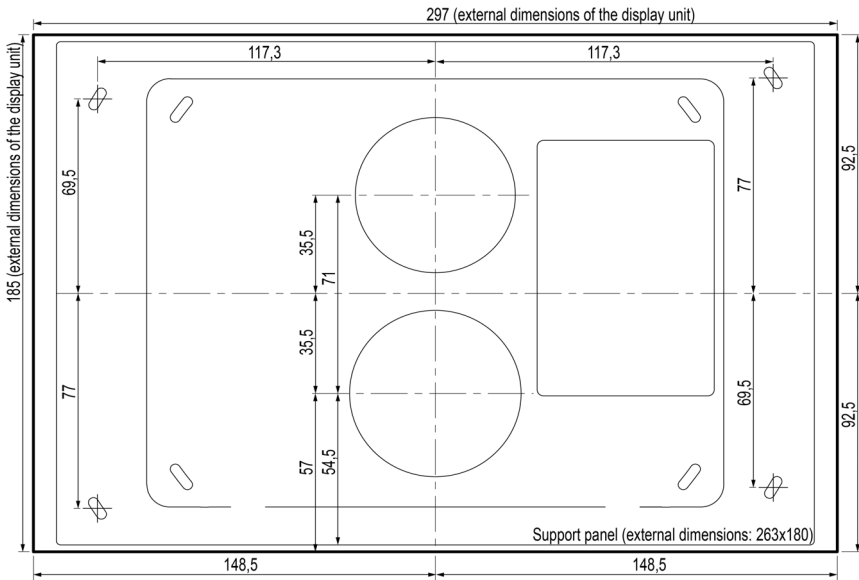
Detail view: Notices and mounts of the display unit.



Display rear

- 1 Network cable connection (optional)
- 2 KNX bus and auxiliary voltage connection
- 3 Loudspeaker with cover

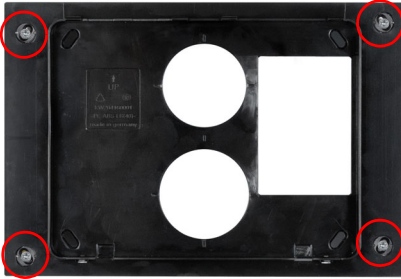
When handling the display unit, take care with the loudspeaker (3). This is magnetic and connected with sensitive cables.



All dimensions in mm

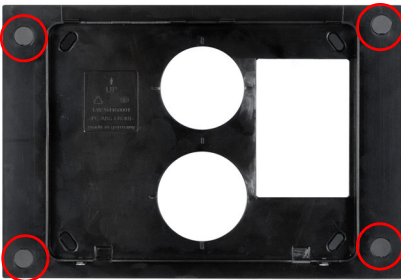
Step 3 Support plate as drill template

Use the support panel as a drill template. Place it over the position of the two standard switch boxes and mark the 4 drill holes for the 4 fixing screws.



Step 4 *Support panel on wall*

Screw the support plate to the wall using 4 screws. Use suitable fastening material for the base. 4 countersunk cross-slot screws (WN57, 3.5x35mm, galvanised) with matching anchors (S5) are supplied.



After commissioning the screws should be covered with the supplied covers.

For maintenance, the covers can be carefully levered out in order to gain access to the screws.

Pass all connection cables through the top socket and the top opening of the support plate.

3.1.8. Connection and installation of the control unit



Display rear connections

Connect KNX (red + / black -) and 24 V DC auxiliary voltage (yellow + / white -). For a cable network connection, connect the network cable to the Ethernet socket.

1	Auxiliary voltage	+	yellow
2	Auxiliary voltage	-	white
5	KNX	+	red
6	KNX	-	black

Cover the support plate screw connection with the caps provided.

Hang the display unit at the top of the support plate and fold it down (step 2). The display snaps in but also has to be secured with 2 screws (step 1).

3.2. Start up control center



ATTENTION

Damage to device due to short circuit!




Moisture in the device can cause a short-circuit. E.g. if the device is moved from a cold to a warm room and condensation forms as a result.

- If applicable, allow to dry before commissioning.

After installation, cabling of the system and checking all connections, switch on the bus and auxiliary power.

The control center start and the display initially shows the model (CasaConnect KNX). When the control center are fully started, the control center start with a weather data display. Weather data is displayed if this has been configured in the ETS and as soon as the control center receive data via the KNX bus. The weather animation can only be seen if no error messages are being displayed.

If configured in the ETS, the time is displayed automatically when the time/date are received, otherwise the time can be set manually. The time zone and location must also be set.

- ☐ System > System setting > Settings > Time and date
 5.3.1. Settings > Enter time and date manually, Page 92
- ☐ System > System settings > Settings > Time zone
 5.3.1. Settings > Select time zone, Page 94
- ☐ System > System settings > Settings > Location
 5.3.1. Settings > Enter location, Page 94

4. Basic settings in the ETS

4.1. Procedure

After the correct installation and commissioning, you should first make the basic settings in the ETS (see this chapter). Then you can set up the control center in the control menu **System > Set screen** (See chapter 5.2 "The "Set screen" menu" on page 76.).

After programming in the ETS, a reset must be performed at the control center (also for changes).

📖 5.3.2. Service settings, Reset

☐ System > System setting > Service > Reset

4.2. KNX transmission protocol

Abbreviations

Flags:

C: Communication

R: Read

W: Write

T: Transmit

U: Update

4.2.1. List of all communication objects

1-69: General objects, sensor data, display settings:

No.	Text	Function	Flags	DPT type	Factor
1	Software version	Output	L-KÜ	[217.1] DPT_Version	2 Bytes
2	Device malfunction	Output	L-KÜ	[1.1] DPT_Switch	1 Bit
3	Lock object outputs	Input	-SK-	[1.1] DPT_Switch	1 Bit
5	Date/time	Input	-SKÜ	[19.1] DPT_DateTime	8 Bytes
6	Date	Input	-SKÜ	[11.1] DPT_Date	3 Bytes
7	Time	Input	-SKÜ	[10.1] DPT_TimeOfDay	3 Bytes
8	Date and time query	Input/Output	-SKÜ	[1] 1.xxx	1 Bit
9	Presence simulation Start/Stop	Input/Output	LSKÜ	[1.1] DPT_Switch	1 Bit
10	Location latitude [°]	Input	-SKÜ	[14.7] DPT_Value_AngleDeg	4 Bytes

No.	Text	Function	Flags	DPT type	Factor
11	Location longitude [°]	Input	-SKÜ	[14.7] DPT_Value_AngleDeg	4 Bytes
13	Sun position azimuth [°]	Output	L-KÜ	[14.7] DPT_Value_AngleDeg	4 Bytes
14	Sun position elevation [°]	Output	L-KÜ	[14.7] DPT_Value_AngleDeg	4 Bytes
15	Alarm 1	Input/Output	-SKÜ	[1.17] DPT_Trigger	1 Bit
16	Alarm 2	Input/Output	-SKÜ	[1.17] DPT_Trigger	1 Bit
17	Alarm 3	Input/Output	-SKÜ	[1.17] DPT_Trigger	1 Bit
18	Central 1	Input/Output	-SKÜ	[1.17] DPT_Trigger	1 Bit
19	Central 2	Input/Output	-SKÜ	[1.17] DPT_Trigger	1 Bit
20	Central 3	Input/Output	-SKÜ	[1.17] DPT_Trigger	1 Bit
21	Central 4	Input/Output	-SKÜ	[1.17] DPT_Trigger	1 Bit
22	Call up scene	Input/Output	-SKÜ	[18.1] DPT_SceneControl	1 Byte
30	Outside air temperature [°C]	Input	-SKÜ	[9.1] DPT_Value_Temp	2 Bytes
31	Outside air relative humidity[%]	Input	-SKÜ	[9.7] DPT_Value_Humidity	2 Bytes
32	Outside air absolute humidity [depending on setting]	Input	-SKÜ	depending on the setting	depending on setting
33	Outside air pressure [Pa]	Input	-SKÜ	[14.58] DPT_Value_Pressure	4 Bytes
34	Outside air VOC [ppm]	Input	-SKÜ	[9.8] DPT_Value_AirQuality	2 Bytes
35	Outside air CO ² [ppm]	Input	-SKÜ	[9.8] DPT_Value_AirQuality	2 Bytes
36	Outside air particle density [ppm]	Input	-SKÜ	[9.8] DPT_Value_AirQuality	2 Bytes
40	Wind main sensor speed [m/s]	Input	-SKÜ	[9.5] DPT_Value_Wsp	2 Bytes

No.	Text	Function	Flags	DPT type	Factor
41	Wind main sensor malfunction	Input	-SKÜ	[1.1] DPT_Switch	1 Bit
42	Wind main sensor direction	Input	-SKÜ	[14.7] DPT_Value_AngleDeg	4 Bytes
43	Wind sensor 1 speed [m/s]	Input	-SKÜ	[9.5] DPT_Value_Wsp	2 Bytes
44	Wind sensor 1 malfunction	Input	-SKÜ	[1.1] DPT_Switch	1 Bit
45	Wind sensor 2 speed [m/s]	Input	-SKÜ	[9.5] DPT_Value_Wsp	2 Bytes
46	Wind sensor 2 malfunction	Input	-SKÜ	[1.1] DPT_Switch	1 Bit
47	Wind sensor 3 speed [m/s]	Input	-SKÜ	[9.5] DPT_Value_Wsp	2 Bytes
48	Wind sensor 3 malfunction	Input	-SKÜ	[1.1] DPT_Switch	1 Bit
49	Wind sensor 4 speed [m/s]	Input	-SKÜ	[9.5] DPT_Value_Wsp	2 Bytes
50	Wind sensor 4 malfunction	Input	-SKÜ	[1.1] DPT_Switch	1 Bit
51	Precipitation	Input	-SKÜ	[1.5] DPT_Alarm	1 Bit
52	Precipitation malfunction	Input	-SKÜ	[1.1] DPT_Switch	1 Bit
53	Precipitation volume [l/h]	Input	-SKÜ	[9.26] DPT_Rain_Amount	2 Bytes
54	Sunlight outside brightness [lux]	Input	-SKÜ	[9.4] DPT_Value_Lux	2 Bytes
55	Sunlight colour temperature [K]	Input	-SKÜ	[7,600] DPT_Absolute_Colour_Temperature	2 Bytes
56	Sunlight UV index	Input	-SKÜ	[5.5] DPT_DecimalFactor	1 Byte
57	Sunlight UV index text	Input	-SKÜ	[16.1] DPT_String_8859_1	14 Bytes
58	Sunlight heat radiation sensor 1 [W/m²]	Input	-SKÜ	[9.22] DPT_PowerDensity	2 Bytes
59	Sunlight heat radiation sensor 2 [W/m²]	Input	-SKÜ	[9.22] DPT_PowerDensity	2 Bytes
60	Sunlight heat radiation sensor 3 [W/m²]	Input	-SKÜ	[9.22] DPT_PowerDensity	2 Bytes
61	Sunlight heat radiation sensor 4 [W/m²]	Input	-SKÜ	[9.22] DPT_PowerDensity	2 Bytes
66	Select screen saver	Input/Output	-SKÜ	[5.10] DPT_Value_1_Ucount	1 Byte

No.	Text	Function	Flags	DPT type	Factor
67	Automatic switch-off On/Off	Input/Output	-SKÜ	[1.1] DPT_Switch	1 Bit
68	Automatic brightness on/off	Input/Output	-SKÜ	[1.1] DPT_Switch	1 Bit
69	Display brightness [%]	Input/Output	-SKÜ	[5.1] DPT_Scaling	1 Byte

70-1109 Function block A:

80 channels for awnings, blinds, shutters, windows, light (notable LED lights with colour settings), fans.

Each channel has a maximum of 13 objects. Function, flags, DPT type and size depend on the respective setting.

Block - channel	Object no.		Block - channel	Object no.
A-1	70-82		A-11	200-212
A-2	83-95		A-12	213-225
A-3	96-108		A-13	226-238
A-4	109-121		A-14	239-251
A-5	122-134		A-15	252-264
A-6	135-147		A-16	265-277
A-7	148-160		A-17	278-290
A-8	161-173		A-18	291-303
A-9	174-186		A-19	304-316
A-10	187-199		A-20	317-329

Block - channel	Object no.		Block - channel	Object no.
A-21	330-342		A-31	460-472
A-22	343-355		A-32	473-485
A-23	356-368		A-33	486-498
A-24	369-381		A-34	499-511
A-25	382-394		A-35	512-524
A-26	395-407		A-36	525-537
A-27	408-420		A-37	538-550
A-28	421-433		A-38	551-563
A-29	434-446		A-39	564-576
A-30	447-459		A-40	577-589

Block - channel	Object no.		Block - channel	Object no.
A-41	590-602		A-51	720-732
A-42	603-615		A-52	733-745
A-43	616-628		A-53	746-758
A-44	629-641		A-54	759-771
A-45	642-654		A-55	772-784
A-46	655-667		A-56	785-797
A-47	668-680		A-57	798-810
A-48	681-693		A-58	811-813
A-49	694-706		A-59	824-836
A-50	707-719		A-60	837-849

Block - channel	Object no.		Block - channel	Object no.
A-61	850-862		A-71	980-992
A-62	863-875		A-72	993-1005
A-63	876-888		A-73	1006-1018
A-64	889-901		A-74	1019-1031
A-65	902-914		A-75	1032-1044
A-66	915-927		A-76	1045-1057
A-67	928-940		A-77	1058-1070
A-68	941-953		A-78	1071-1083
A-69	945-966		A-79	1084-1096
A-70	967-979		A-80	1097-1109

1110-1589 Function block B:

120 channels for operation, display, input

Each channel has a maximum of 4 objects. Function, flags, DTP type and size depend on the respective setting.

Block - channel	Object no.		Block - channel	Object no.
B-1	1110-1113		B-11	1150-1153
B-2	1114-1117		B-12	1154-1157
B-3	1118-1121		B-13	1158-1161
B-4	1122-1125		B-14	1162-1165
B-5	1126-1129		B-15	1166-1169
B-6	1130-1133		B-16	1170-1173
B-7	1134-1137		B-17	1174-1177
B-8	1138-1141		B-18	1178-1181
B-9	1142-1145		B-19	1182-1185
B-10	1146-1149		B-20	1186-1189

Block - channel	Object no.		Block - channel	Object no.
B-21	1190-1193		B-31	1230-1233
B-22	1194-1197		B-32	1234-1237
B-23	1198-1201		B-33	1238-1241
B-24	1202-1205		B-34	1242-1245
B-25	1206-1209		B-35	1246-1249
B-26	1210-1213		B-36	1250-1253
B-27	1214-1217		B-37	1254-1257
B-28	1218-1221		B-38	1258-1261
B-29	1222-1225		B-39	1262-1265
B-30	1226-1229		B-40	1266-1269

Block - channel	Object no.		Block - channel	Object no.
B-41	1270-1273		B-51	1310-1313
B-42	1274-1277		B-52	1314-1317
B-43	1278-1281		B-53	1318-1321
B-44	1282-1285		B-54	1322-1325
B-45	1286-1289		B-55	1326-1329
B-46	1290-1293		B-56	1330-1333
B-47	1294-1297		B-57	1334-1337
B-48	1298-1301		B-58	1338-1341
B-49	1302-1305		B-59	1342-1345
B-50	1306-1309		B-60	1346-1349

Block - channel	Object no.		Block - channel	Object no.
B-61	1350-1353		B-71	1390-1393
B-62	1354-1357		B-72	1394-1397
B-63	1358-1361		B-73	1398-1401
B-64	1362-1365		B-74	1402-1405
B-65	1366-1369		B-75	1406-1409
B-66	1370-1373		B-76	1410-1413
B-67	1374-1377		B-77	1414-1417
B-68	1378-1381		B-78	1418-1421
B-69	1382-1385		B-79	1422-1425
B-70	1386-1389		B-80	1426-1429

Block - channel	Object no.		Block - channel	Object no.
B-81	1430-1433		B-91	1470-1473
B-82	1434-1437		B-92	1474-1477
B-83	1438-1441		B-93	1478-1481
B-84	1442-1445		B-94	1482-1485
B-85	1446-1449		B-95	1486-1489
B-86	1450-1453		B-96	1490-1493
B-87	1454-1457		B-97	1494-1497
B-88	1458-1461		B-98	1498-1501
B-89	1462-1465		B-99	1502-1505
B-70	1466-1469		B-100	1506-1509

Block - channel	Object no.		Block - channel	Object no.
B-101	1510-1513		B-111	1550-1553
B-102	1514-1517		B-112	1554-1557
B-103	1518-1521		B-113	1558-1561
B-104	1522-1525		B-114	1562-1565
B-105	1526-1529		B-115	1566-1569
B-106	1530-1533		B-116	1570-1573
B-107	1534-1537		B-117	1574-1577
B-108	1538-1541		B-118	1578-1581
B-109	1542-1545		B-119	1582-1585
B-110	1546-1549		B-120	1586-1589

1590-1979 Function block C:

15 channels for temperature regulators.

Each channel has a maximum of 26 objects. Function, flags, DTP type and size depend on the respective setting.

Block - channel	Object no.		Block - channel	Object no.
C-1	1590-1615		C-11	1850-1875
C-2	1616-1641		C-12	1876-1901
C-3	1642-1667		C-13	1902-1927
C-4	1668-1693		C-14	1928-1953
C-5	1694-1719		C-15	1954-1979
C-6	1720-1745			
C-7	1746-1771			
C-8	1772-1797			
C-9	1798-1823			
C-10	1824-1849			

1980-1995: Alarm module:

No.	Text	Function	Flags	DPT type	Factor
1980	Read event memory alarm (up/down)	Input	-SK-	[1.7] DPT_Step	1 Bit
1981	Event memory message text	Output	L-KÜ	[16.0] DPT_String_ASCII	14 Bytes
1982	Event memory alarm name alarm	Output	L-KÜ	[16.0] DPT_String_ASCII	14 Bytes
1983	Event memory message time stamp	Output	L-KÜ	[16.0] DPT_String_ASCII	14 Bytes
1984	Alarm monitoring, read triggered alarm (up/down)	Input	-SK-	[1.7] DPT_Step	1 Bit
1985	Alarm monitoring, triggered alarm name	Output	L-KÜ	[16.0] DPT_String_ASCII	14 Bytes
1986	Intern ready to switch live	Output	L-KÜ	[1.1] DPT_Switch	1 Bit
1987	Switch internal live/off	Input/Output	LSKÜ	[1.1] DPT_Switch	1 Bit
1988	External ready to switch live	Output	L-KÜ	[1.1] DPT_Switch	1 Bit
1989	Switch external live/off	Input/Output	LSKÜ	[1.1] DPT_Switch	1 Bit
1990	Live acknowledgement	Output	L-KÜ	[1.16] DPT_Ack	1 Bit
1991	Live condition text	Output	L-KÜ	[16.0] DPT_String_ASCII	14 Bytes
1992	Alarm acknowledgement	Input	-SK-	[1.16] DPT_Ack	1 Bit
1993	Signaller external flashing lights	Output	L-KÜ	[1.1] DPT_Switch	1 Bit
1994	Signaller external sirens	Output	L-KÜ	[1.1] DPT_Switch	1 Bit
1995	Signaller internal	Output	L-KÜ	[1.1] DPT_Switch	1 Bit

4.3. Setting of the parameters

4.3.1. General settings

Here you can make general settings for the ETS, including the basic properties of data transmission. A different transmission delay prevents an overload of the bus shortly after the reset.

Device name	CasaConnect KNX [free text]
Maximum telegram rate	1 • 2 • 3 • <u>5</u> • 10 • 20 <u>Telegrams per second</u>
Transmission delays (after programming and power-up)	

Sun position	<u>5 s</u> • 10 s • 30 s • 1 min • ... • 2 h
Function blocks	5 s • <u>10 s</u> • 30 s • 1 min • ... • 2 h

Here you can set whether you want to use a malfunction or lock object.

Use malfunction object	<u>No</u> • Yes
Use lock object	<u>No</u> • Yes
Value before first Communication (only if lock object is used)	<u>0</u> • 1

Lock object locks all outgoing communication objects

4.3.2. Display


Here you can set whether you want to use screen objects (screen saver, brightness, automatic brightness, automatic switch-off). The screen objects are inputs and outputs and serve, for example, the automatic transfer of screen settings if there are multiple control centers.

Use screen objects	<u>No</u> • Yes
--------------------	-----------------

An activated automatic switch-off or brightness overwrites any brightness value received from the bus.

4.3.3. Date and time

The current time and date are needed for many of the control functions. A time signal can therefore either be provided by the KNX system (for example, this can come from a weather station with GPS receiver) or can be entered manually in the **CasaConnect KNX Control Center**.

 Enter time and date manually, Page 92

Here you set how the **CasaConnect KNX Control Center** receives the time from the KNX system. The same must be selected here as set for the timer (one or two objects).

Object type	<ul style="list-style-type: none"> • <u>two separate objects</u> • one common object
Query date and time cyclically	<u>No</u> • Yes
Transmission cycle of the object "Date and time query" (in s) (only if periodically is required)	50 ... 420; <u>120</u>

4.3.4. Location

The location is needed for the sun position calculation and is set by the KNX objects.

If no location data is received via KNX, the location shown on the display is used.

📖 Enter location, Page 94

4.3.5. Sun position

The sun position calculated by the control center from the location and time can be provided by the KNX bus to other participants.

Here you can set the transmission behaviour and format of the sun position.

Sun position	<ul style="list-style-type: none"> • <u>Do not send</u> • send periodically • send if there is a change • send on change and periodically
Transmission format (<i>only if sent</i>)	2 Byte (DPT9.*) • 4 Byte (DPT14.007)
on change of (<i>is only transmitted if "on change" is selected</i>)	<u>1 degree</u> • 2 degrees • ... • 15 degrees
Send cycle (<i>is sent only if "periodically" is selected</i>)	<u>5 s</u> • 10 s • 30 s • 1 min • ... • 2 h

4.3.6. Alarm/Central functions

Alarm functions

Here you can set whether you want to use alarm object 1...3. This input object can be linked to 2 scenes: If the alarm is triggered, the first scene is called. When the alarm is acknowledged, the second scene is called.

If an alarm object is used, you can still set the icon displayed by the control center (See "Symbol overview" on page 65). The icon can also be selected subsequently at the control center.

☐ System > Set screen > Alarm > Alarm obj. 1-3 > Channel icon

📖 Alarm:, Page 77

Use alarm object 1...3	<u>No</u> • Yes
displayed icon (<i>if only corresponding alarm object is used</i>)	<u>0</u> ... 65535

Central functions

Here you can set whether you want to use central object 1...4. This input object can be linked to a scene: If the event occurs, the first scene is called.

If a central object is used, you can still set the icon displayed by the control center (See "Symbol overview" on page 65). The icon can also be selected subsequently at the control center.

☐ System > Set screen > Central function > Central obj. 1-4 > Channel icon

📖 Central function:, Page 78

Use central object 1...4	<u>No</u> • Yes
displayed icon (if only corresponding central object is used)	<u>0</u> ... 65535

4.3.7. Weather data

The various weather data can be used for automatic mode and/or displayed on the start page. This can be seen in the following table:

	Value is displayed on the start page	Value can be used for automatic mode	The following can be detected
relative humidity	Yes	Yes	No
absolute humidity	Yes	Yes	No
Air pressure	Yes	Yes	No
VOC	Yes	Yes	No
CO ₂	Yes	Yes	No
Wind speed	Yes	Yes	Yes
Wind direction	Yes	Yes	No
Precipitation	Yes	Yes	Yes
Precipitation volume	Yes	No	No
Outside brightness	Yes	Yes	No
Colour temperature	Yes	No	No
UV index	Yes	No	No
UV index text	Yes	No	No
Heat radiation	Yes	No	No

This data has to be recorded by other KNX participants and provided in the KNX system so that it can be used by the **CasaConnect KNX**.

As the inputs for wind and precipitation are used for the safety functions of wind and rain alarms, they can be monitored here.

Use monitoring of wind and precipitation objects	No • <u>Yes</u>
Wind objects (only if "Monitoring" is active)	5 s • 10 s • 30 s • <u>1 min</u> • ... • 2 h
Precipitation objects (only if "Monitoring" is active)	5 s • 10 s • 30 s • <u>1 min</u> • ... • 2 h

If the **CasaConnect KNX** does not receive any wind measurements or precipitation status within a set period, the wind or rain alarm is triggered at the control center. Motors with the corresponding automatic settings for wind or rain protection then receive the command via the bus to move to the safe position.

No data / time (**CasaConnect KNX** does not receive any time information from the bus after starting / resetting):

- "Please set time" is displayed on the screen of the **CasaConnect KNX** instead of the weather animation.

No weather data (CasaConnect KNX) does not receive an outdoor temperature value, wind value and precipitation status from the bus after starting / resetting):

- "Not all weather data received correctly" is displayed on the screen of the **CasaConnect KNX** instead of the weather animation.
- There is no automatic control active and the frost, wind and rain alarms are cautiously active, i.e. motors with the appropriate settings for frost, wind and rain protection receive the command via the bus to move to the safe position.
- The normal automatic operation is only started again when the following weather data has been received: Wind value, precipitation status, outdoor temperature value.

Set which data you want to use:

Outside air

Use relative humidity	<u>No</u> • Yes
Use absolute humidity	<u>No</u> • Yes
Use air pressure	<u>No</u> • Yes
Use VOC	<u>No</u> • Yes
Use CO ₂	<u>No</u> • Yes

Wind

Use main sensor speed	Yes
Use main sensor malfunction object	<u>No</u> • Yes
Use main sensor direction	<u>No</u> • Yes
Use sensor 1...4 speed	<u>No</u> • Yes
Use sensor 1...4 malfunction object	<u>No</u> • Yes

Precipitation

Use precipitation	Yes
Use precipitation malfunction object	<u>No</u> • Yes
Use precipitation volume	<u>No</u> • Yes

Sunlight

Use outside brightness	Yes
Use colour temperature	<u>No</u> • Yes
Use UV index	<u>No</u> • Yes
Use UV index text	<u>No</u> • Yes
Use heat radiation sensor 1...4	<u>No</u> • Yes


4.3.8. Function blocks


Commands are exchanged with the actuators, but also with the operating devices and sensors in the KNX system via the function blocks. For this, specific functions are assigned to channels in the individual blocks.


Enable the function blocks required here and set the number of channels for the respective type.


The channels selected here appear in the manual menu of the **CasaConnect KNX** but not on the start page (default setting).

The display setting can be changed subsequently in the menus

 System > Set screen > KNX settings > Function block A/B/C > ... > Manual menu

 Function block A (motors, light and fan regulator): Manual menu:, Page 79

 Function block B (switching/dimming, operation and displays, alarm): Manual menu:, Page 80

 Function block C (temperature regulator): Manual menu:, Page 82

Type A channels can control drives (blinds, shutters, awnings, windows, fans) or lights (switches, dimming, RGB(W), colour temperature).

Number of channels type A	<u>0</u> • 10 • 20 • 30 • ... • 80
---------------------------	------------------------------------

Type B channels serve to connect control and display elements, sensors and alarms.

Number of channels type B	<u>0</u> • 10 • 20 • 30 • ... • 120
---------------------------	-------------------------------------

Type C channels serve as temperature regulator extension.


Number of channels type C	<u>0</u> • 10 • 15
---------------------------	--------------------


Block A

The menu item only appears if it is selected for "function blocks" that channels of type A are to be used.

With these 80 channels, the data for awnings, blinds, shutters and windows is transmitted. The channels are also required for light (notably LED lights with colour settings) and fans.


Enter a name for the channel and select an icon (See "Symbol overview" on page 65). The name and icon can also be selected subsequently at the control center.

 System > Set screen > Function block A > ... > Name / Icon channel

 Function block A (motors, light and fan regulator):, Page 78

The name of the channel can also be changed subsequently on the **CasaConnect KNX Control Center**.

If "Blind" is selected in the ETS as the type of output, the type o output can be changed on the **CasaConnect KNX** later. The setting "Type of output" is displayed in the control center menu, in which a different motor can be selected. The most recent change in the ETS or the control center applies.

 Function block A (motors, light and fan regulator):, Page 78

Name	Channel A-1...80 [free text]
displayed icon	<u>0</u> ... 65535
Type of output	<ul style="list-style-type: none"> • <u>Do not use</u> • Blind • Awning • Shutters • Windows • Switch light • Switch + dim light • Switch + dim light + colour temperature • RGB • RGBW • Fans

Type of output: Blind, awning, shutter, window

The safety object (output object) is sent periodically to the motor after the set interval. If an error occurs to the **CasaConnect KNX** and thus the safety object is no longer received by the motor within the set period, the motor moves to the safe position. Set the transmission cycle of the safety object here.

Safety object transmission cycle	5 s • 10 s • 30 s • 1 min • ... • 2 h; <u>5 min</u>
----------------------------------	---

Type of output: Switch + dim light + colour temperature

The light colour and brightness can be changed over the course of the day with the bi-dynamic light controls.

Set the minimum and maximum colour temperature and whether you want to use the HCL controls and, if applicable, when the values should be sent.

The minimum and maximum colour temperature should correspond to the colour temperature range of the lights.

The HCL controls are set on the **CasaConnect KNX** display:

 6.4.5. Set light automatic mode, Page 130

The light colour of a light source can be set via the colour temperature. A colour temperature of less than 3300 K corresponds to a warm white light colour, 3300 to 5300 K corresponds to a neutral white and above 5300 K corresponds to a daylight-white light colour.

How often the brightness and colour temperature values are sent to the bus can be set with the two "Send values at ..." settings.

Minimum colour temperature	<u>1500</u> ... 16000
Maximum colour temperature	1500 ... 16000; <u>6500</u>
Use HCL controls	<u>No</u> • Yes

Transmit values for	
Brightness change larger (in %) (only if HCL control is used)	1 ... 50; <u>5</u>
or	
Colour temperature change larger (in Kelvin) (only if HCL control is used)	1 ... 500; <u>50</u>

Type of output: RGB

The object type has to be selected here the same as set for the light (a joint or separate object).

Object type for RGB	<ul style="list-style-type: none"> • <u>separate</u> for red, green, blue • together for red, green, blue
Use separate brightness object	<u>No</u> • Yes

Type of output: RGBW

Object type for RGB+W	<ul style="list-style-type: none"> • <u>separate</u> for red, green, blue and white • together for red, green and blue, separate for white • together for red, green, blue and white
Use separate brightness object	<u>No</u> • Yes

Type of output: Fans

The type of contract selected here has to be the same as set for the fan.

With the setting "Control fans via dimming object in manual mode", not only can the fan be switched on and off with the buttons, but also as a result of a long-term "Dimming" command.

Type of control	<ul style="list-style-type: none"> • <u>smooth</u> • Staged (Bit-object per step) • Staged (Byte-object)
Control fan via dimming object in manual mode (only for smooth controls)	<u>No</u> • Yes
Number of steps (only for smooth controls with Bit object)	1 • 2 • <u>3</u> • 5
Switch on step 1...4 also for step 2...5 (to 5) (only for smooth controls with Bit object and multiple steps)	<u>No</u> • Yes
Number of steps (only for smooth controls with Byte object)	1 ... 99; <u>10</u>

Block B

The menu item only appears if it is selected for "function blocks" that channels of type B are to be used.

A distinction can be made between 4 groups for these 120 channels:

1. Operation: Motors, lights or fans can be operated, for example, with these commands.
2. Display: With this, values can be displayed on the screen of the control center
3. Input: With this, values, scenes, icons and text can be entered on the screen, e.g. in order to change the limit values set in the ETS.
4. Sensors: The sensors set here can be selected on the screen (important for automatic functions)

Enter a name for the channel and select an icon (See "Symbol overview" on page 65).

The name and icon can also be selected subsequently at the control center.

□ System > Set screen > Function block B > ... > Name / Icon channel

📖 Function block B (switching/dimming, operation and displays, alarm);, Page 80

The name of the channel can also be changed subsequently on the **CasaConnect KNX Control Center**. The most recent change in the ETS or the control center applies.

📖 Function block B (switching/dimming, operation and displays, alarm);, Page 80

Name	Channel B-1...120 [free text]
displayed icon	<u>0</u> ... 65535

Type of output	<ul style="list-style-type: none"> • <u>Do not use</u> • Control long-term/short-term • Control on/off • Control switching/dimming • Display 1/0 • Display icon • Display 8bit value (0... 255) • Display 8bit value (0...100%) • Display 8bit value (0...360°) • Display 16bit counter without mathematical sign • Display 16bit counter with mathematical sign • Display 16bit floating point • Display 32bit counter without mathematical sign • Display 32bit counter with mathematical sign • Display 32bit floating point • Display text • Input 1/0 • Input icon • Input scene • Input 8bit value (0... 255) • Input 8bit value (0...100%) • Input 8bit value (0...360°) • Input 16bit counter without mathematical sign • Input 16bit counter with mathematical sign • Input 16bit floating point • Input 32bit counter without mathematical sign • Input 32bit counter with mathematical sign • Input 32bit floating point • Input text • Alarm message • Sensor temperature • Sensor temperature, humidity • Sensor temperature, humidity, CO2 • Sensor temperature, humidity, VOC
----------------	--

Operation

This section describes inputs for commands from keys, rockers, switches

Type of output: Control long-term/short-term

If you use the actuation or slat position, the display on the **CasaConnect KNX Control Center** shows the current actuation and slat position.

Use actuation position	<u>No</u> • Yes
Use slat position	<u>No</u> • Yes

Type of output: Control on/off

Use feedback	<u>No</u> • Yes
For object value 1	
Text	<u>One</u> [free text]
Symbol	<u>0</u> ... 65535
For object value 0	
Text	<u>Zero</u> [free text]
Symbol	<u>0</u> ... 65535

Type of output: Control switching/dimming

Use brightness	<u>No</u> • Yes
Icon for light ON	<u>0</u> ... 65535
Icon for light OFF	<u>0</u> ... 65535

Display

This section describes inputs, which trigger the text and icon displays on the screen.

Type of output: Display 1/0

For object value 1	
Text	<u>One</u> [free text]
Symbol	<u>0</u> ... 65535
For object value 0	
Text	<u>Zero</u> [free text]
Symbol	<u>0</u> ... 65535

Type of output: Display icon

Value range 1 has the highest priority.

If value ranges overlap, the one with the highest priority is used.

Value range 1...10	
displayed icon	<u>0</u> ... 65535
Start value range	<u>0</u> ... 255
End value range	<u>0</u> ... 255

Type of output: Display 8bit value (0... 255)

Unit	[Free text]
------	-------------

Type of output: Display 8bit value (0...100%)

Unit	% [Free text]
------	---------------

Type of output: Display 8bit value (0...360°)

Unit	° [Free text]
------	---------------

Type of output: Display 16bit counter without mathematical sign

Unit	[Free text]
------	-------------

Type of output: Display 16bit counter with mathematical sign

Unit	[Free text]
------	-------------

Type of output: Display 16bit floating point

Display value = Value of bus * a * b

Conversion factor a	-0.0001 • 0.0001 ... -10000 • 10000; <u>1</u>
Conversion factor b	<u>1</u> ... 65535
Unit	[Free text]

Type of output: Display 32bit counter without mathematical sign

Unit	[Free text]
------	-------------

Type of output: Display 32bit counter with mathematical sign

Unit	[Free text]
------	-------------

Type of output: Display 32bit floating point

Display value = Value of bus * a * b

Conversion factor a	-0.0001 • 0.0001 ... -10000 • 10000; <u>1</u>
Conversion factor b	<u>1</u> ... 65535
Unit	[Free text]

Input

This section describes outputs for touch surfaces of input of values on the screen of the control center.

Type of output: Input 1/0

Transmission behaviour	<ul style="list-style-type: none"> • <u>press=1</u>, release=0 • <u>press=1</u>, release=nothing • <u>press=0</u>, release=1 • <u>press=0</u>, release=nothing • <u>press=release</u>
For object value 1	
Text	<u>One</u> [free text]
Symbol	<u>0</u> ... 65535
For object value 0	
Text	<u>Zero</u> [free text]
Symbol	<u>0</u> ... 65535

Type of output: Input icon

Value range 1 has the highest priority.

If value ranges overlap, the one with the highest priority is used.

If multiple value ranges have the same value to be transmitted, only the icon with the highest priority is displayed.

Value range 1...10	
displayed icon	<u>0</u> ... 65535
Start value range	<u>0</u> ... 255
End value range	<u>0</u> ... 255
Value to be sent	<u>0</u> ... 255

Type of output: Input scene

Scene number	<u>1</u> ... 64
Scenario function	<u>Call up</u> • Call up and storage

Type of output: Input 8bit value (0... 255)

Unit	[Free text]
Value can be adjusted via display	No • <u>Yes</u>
Start value	<u>0</u> ... 255
Minimum value (only if value can be set via display)	<u>0</u> ... 255
Maximum value (only if value can be set via display)	0 ... <u>255</u>

Type of output: Input 8bit value (0...100%)

Unit	% [Free text]
Value can be adjusted via display	No • <u>Yes</u>
Start value	<u>0</u> ... 100
Minimum value (only if value can be set via display)	<u>0</u> ... 100
Maximum value (only if value can be set via display)	0 ... <u>100</u>

Type of output: Input 8bit value (0...360°)

Unit	° [Free text]
Value can be adjusted via display	No • <u>Yes</u>
Start value	<u>0</u> ... 360
Minimum value (only if value can be set via display)	<u>0</u> ... 360
Maximum value (only if value can be set via display)	0 ... <u>360</u>

Type of output: Input 16bit counter without mathematical sign

Unit	[Free text]
Value can be adjusted via display	No • <u>Yes</u>
Start value	<u>0</u> ... 65535
Minimum value (only if value can be set via display)	<u>0</u> ... 65535
Maximum value (only if value can be set via display)	0 ... <u>65535</u>

Type of output: Input 16bit counter with mathematical sign

Unit	[Free text]
Value can be adjusted via display	No • <u>Yes</u>
Start value	-32768 ... 32767; <u>0</u>
Minimum value (only if value can be set via display)	<u>-32768</u> ... 32767
Maximum value (only if value can be set via display)	-32768 ... <u>32767</u>

Type of output: Input 16bit floating point

Display value = Value of bus * a * b

Bus value = Input value / a / b

Conversion factor a	-0.0001 • 0.0001 ... -10000 • 10000; <u>1</u>
Conversion factor b	<u>1</u> ... 65535
Unit	[Free text]
Value can be adjusted via display	No • <u>Yes</u>
Start value (in 0.1)	-2147483648 ... 2147483647; <u>0</u>
Minimum value (in 0.1) (only if value can be set via display)	<u>-2147483648</u> ... 2147483647
Maximum value (in 0.1) (only if value can be set via display)	-2147483648 ... <u>2147483647</u>

Type of output: Input 32bit counter without mathematical sign

Unit	[Free text]
Value can be adjusted via display	No • <u>Yes</u>
Start value	<u>0</u> ... 4294967295
Minimum value (only if value can be set via display)	<u>0</u> ... 4294967295
Maximum value (only if value can be set via display)	0 ... <u>4294967295</u>

Type of output: Input 32bit counter with mathematical sign

Unit	[Free text]
Value can be adjusted via display	No • <u>Yes</u>
Start value	-2147483648 ... 2147483647; <u>0</u>
Minimum value (only if value can be set via display)	<u>-2147483648</u> ... 2147483647
Maximum value (only if value can be set via display)	-2147483648 ... <u>2147483647</u>

Type of output: Input 32bit floating point

Display value = Value of bus * a * b

Bus value = Input value / a / b

Conversion factor a	-0.0001 • 0.0001 ... -10000 • 10000; <u>1</u>
Conversion factor b	<u>1</u> ... 65535
Unit	[Free text]
Value can be adjusted via display	No • <u>Yes</u>
Start value (in 0.1)	-2147483648 ... 2147483647; <u>0</u>
Minimum value (in 0.1) (only if value can be set via display)	<u>-2147483648</u> ... 2147483647
Maximum value (in 0.1) (only if value can be set via display)	-2147483648 ... <u>2147483647</u>

Type of output: Input text

Value can be adjusted via display	Yes
-----------------------------------	-----

Type of output: Alarm message

Alarm message A/B

On *use of the safety module*, see chapter 7.5. Safety module settings, Page 139

Text	Alarm A/B [Free text]
Symbol	0 ... 65535
Receipt monitoring	do not use • 5 s • 10 s • ... • 2 h
Object value when acknowledging alarm	0 • 1
Use in safety module	<ul style="list-style-type: none"> • Do not use • as outer skin intruder alarm • as inner skin intruder alarm • as vandalism alarm • as closure alarm • as malfunction alarm • as attack alarm • as technical alarm (group 1) • as technical alarm (group 2)

Sensors

This section describes inputs for sensors.

Type of output: Sensor temperature

Type of output: Sensor temperature, humidity

Type of output: Sensor temperature, humidity, CO₂

Type of output: Sensor temperature, humidity, VOC

When selecting the sensor, the selected sensors appear on the display of the **CasaConnect KNX**.

Block C

The menu item only appears if it is selected for "function blocks" that channels of type C are to be used.

The data for each connected temperature regulator can be transmitted with these 15 channels. I.e. the setpoints for an independent temperature regulator connected via the KNX bus can be specified with the **CasaConnect KNX Control Center**.

Enter a name for the channel and select an icon (See "Symbol overview" on page 65). The name of the channel can also be changed subsequently on the **CasaConnect KNX Control Center**. The most recent change in the ETS or the control center applies.

 Function block C (temperature regulator);, Page 81

Name	Channel C-1...15 [free text]
displayed icon	<u>0</u> ... 65535

Specify whether you want to use the type of output as temperature regulator extension.

Type of output	<ul style="list-style-type: none"> • <u>Do not use</u> • Temperature regulator extension
----------------	--

Type of output: Temperature regulator extension

The **mode** may be switched with two 8 bit objects of different priority. Objects "... HVAC mode (Prio 2)" for switching in everyday operation and "... HVAC mode (Prio 1)" for central switching with higher priority.

The objects are coded as follows:

0 = Auto

1 = Comfort

2 = Standby

3 = Eco

4 = Building protection

Alternatively, you can use three objects, with one object switching between eco and standby mode and the two others are used to activate comfort mode or frost/heat protection mode. The comfort object then blocks the eco/standby object, and frost/heat protection objects have the highest priority. Objects

"... Mode (1: Eco, 0: Standby)",

"... comfort activation mode" and

"... frost/heat protection activation mode"

Switch mode via	<ul style="list-style-type: none"> • two 8-bit objects (HVAC modes) • three 1-bit objects
-----------------	---

Specify which modes you can activate from the display.

Allow activation of the following modes from the display	
Comfort	<u>No</u> • Yes
Comfort extension	<u>No</u> • Yes
Standby	<u>No</u> • Yes
Eco	<u>No</u> • Yes
Protection	<u>No</u> • Yes

Then define the **type of setting**. Heating and/or cooling may be controlled in two stages.

Type of control	<ul style="list-style-type: none"> • <u>Single stage heating</u> • <u>Dual-stage heating</u> • <u>Single-stage cooling</u> • <u>Single-stage heating + single-stage cooling</u> • <u>Dual-stage heating + single-stage cooling</u> • <u>Dual-stage heating + dual-stage cooling</u>
-----------------	---

You may enter separate set point values for each mode or use the comfort set point as a basic value.

Setting the setpoints	<ul style="list-style-type: none"> • <u>separately</u> • <u>with comfort set point as a basis</u>
Evaluation of the status object	<ul style="list-style-type: none"> • <u>0 = Heating 1 = Cooling</u> • <u>1 = Heating 0 = Cooling</u>
Switching object value before first Communication (only if switching object is used)	<u>0</u> • 1

Setpoint Comfort

Comfort mode is usually used for daytime mode when people are present. A temperature range is defined for the comfort set point, in which the nominal value may be modified.

If setpoints are set separately:

Min. object value heating/cooling (in 0.1 °C)	-300...800; <u>160</u>
Max. object value heating/cooling (in 0.1 °C)	-300...800; <u>280</u>

If the comfort set point value is used as a basis:

If the comfort value is used as the basis, the increase/reduction of this value is stated.

Minimum object value (in 0.1°C)	-300...800; <u>160</u>
Maximum object value (in 0.1°C)	-300...800; <u>280</u>
Reduction by up to (in 0.1°C)	1...100; <u>50</u>
Increase by up to (in 0.1°C)	1...100; <u>50</u>

Setpoint Standby

Standby mode is usually used for daytime mode when people are absent.

If setpoints are set separately:

Min. object value heating/cooling (in 0.1 °C)	-300...800; <u>160</u>
Max. object value heating/cooling (in 0.1 °C)	-300...800; <u>280</u>

Setpoint Eco

Eco mode is usually used for night mode.

If setpoints are set separately:

A temperature range is defined, in which the set point can be modified.

Min. object value heating/cooling (in 0.1 °C)	-300...800; <u>160</u>
Max. object value heating/cooling (in 0.1 °C)	-300...800; <u>280</u>

When heating and cooling are used:

Set the evaluation of the status object here.

Evaluation of the status object	<ul style="list-style-type: none"> • <u>0</u> = Heating 1 = Cooling • 1 = Heating <u>0</u> = Cooling
---------------------------------	--

Fan coil control

The fan coil control enables the fan of convector heating/cooling systems to be controlled.

Activate the fan coil control.

Use fan coil control	<u>No</u> • Yes
----------------------	-----------------

Select whether the first fan step should also be switched on if the second and third steps are running and whether the second fan should also be switched of if the third step is running.

Switch on level 1 also for level 2 to 3	<u>No</u> • Yes
Switch on level 2 also for level 3	<u>No</u> • Yes

4.4. Symbol overview

The following icons are stored in the internal library of the **CasaConnect KNX**:

Lighting



0001
*Ceiling lights
on*



0002
*Ceiling lights
off*



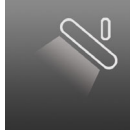
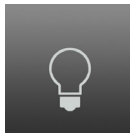
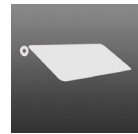
0003
*Direct lights
on*

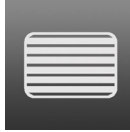
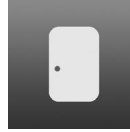
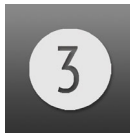
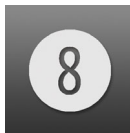


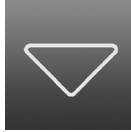
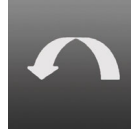
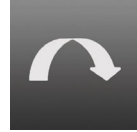
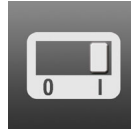
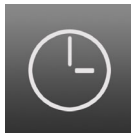
0004
*Direct lights
off*

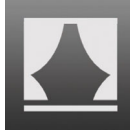
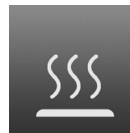
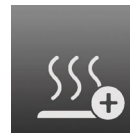


0005
*Wall lights
on*

**0006***Wall lights
off***0007***Spot on***0008***Spot off***0009***Suspended
lights on***0010***Suspended
lights off***0011***Floor lights
on***0012***Floor lights
off***0013***Standard lamp
on***0014***Standard lamp
off***0015***Table lamp on***0016***Table lamp off***0017***Light bulb
on***0018***Light bulb
off***0019***Indirect lights
on***0020***Indirect lights
off***Motors****0031***Blind
extended***0032***Blind
retracted***0033***Shutters
extended***0034***Shutters
retracted***0035***Awning
extended***0036***Awning
retracted***0037***Windows
open***0038***Windows
closed***0039***Sliding door
open***0040***Sliding door
closed*

**0041***Garage door
open***0042***Garage door
closed***0043***Door
open***0044***Door
closed***0045***Lock
unlocked***0046***Lock
locked***0047***Roof window
open***0048***Roof window
closed***0049***Light dome
open***0050***Light dome
closed***Operation****0081***Display
black***0082***Display
Green***0083***Display
Blue***0084***Display
red***0085***Number
0***0086***Number
1***0087***Number
2***0088***Number
3***0089***Number
4***0090***Number
5***0091***Number
6***0092***Number
7***0093***Number
8***0094***Number
9***0095***Operating ar-
row*

**0096***Operating arrow***0097***Operating arrow***0098***Operating arrow***0099***Skip back***0100***Skip forward***0101***plus***0102***minus***0103***Tool***0104***Switch on***0105***Switch off***0106***On/off***0107***Standby***0108***Time***0109***Manual***0110***Automatic***0111***OK***0112***Ramp 1 ascending***0113***Ramp 1 descending***0114***Ramp 2 ascending***0115***Ramp 2 descending***0116***Bell***0117***Bin white***0118***Bin Blue***0119***Bin Brown***0120***Bin yellow*

**0121***Bin
Green***0122***Bin
Grey***0123***Scene***climate****0126***Heater
on***0127***Heater
off***0128***Underfloor
heating***0129***Wall
heating***0130***Ceiling
heating***0131***Underfloor
cooling***0132***Wall
cooling***0133***Ceiling
cooling***0134***Night
cooling***0135***Absent***0136***Present***0137***party***0138***Fans
on***0139***Fans
off***0140***Fans
Level 1***0141***Fans
Level 2***0142***Fans
Level 3***0143***Fans
Level 4***0144***Heating***0145***Heating
plus*



0146
Heating
minus



0147
Cooling



0261
Present
Heating



0262
Present
Cooling



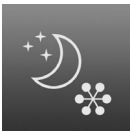
0267
Absent
Heating



0268
Absent
Cooling



0273
Night
Heating



0274
Night
Cooling



0279
Building pro-
tection



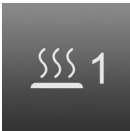
0280
Building pro-
tection



0281
Building protec-
tion



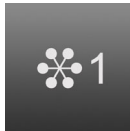
0286
Presence
Time



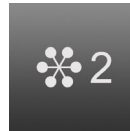
0288
Heating
Level 1



0289
Heating
Level 2



0290
Cooling
Level 1

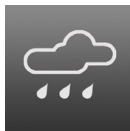


0291
Cooling
Level 2

Sensors



0156
Sun



0157
Precipitation



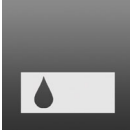
0158
Tank



0159
Pyranometer



0160
Humidity



0161
Ground damp



0162
Outdoor temperature



0163
Indoor temperature



0164
Well



0165
Pond



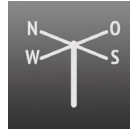
0166
Wet



0167
Snow fall



0168
Frost



0169
Wind direction



0170
Wind intensity strong



0171
Wind intensity weak



0172
CO2



0173
Cloudy



0174
VOC

Multimedia



0186
TV



0187
Projector



0188
Projector screen



0189
Socket



0190
Music



0191
Play



0192
Pause



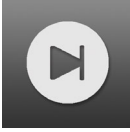
0193
Reverse run



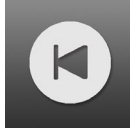
0194
Forward run



0195
Stop



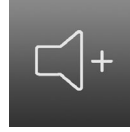
0196
Forward



0197
Back



0198
Loudspeaker



0199
*Volume
louder*



0200
*Volume
quieter*

Safety



0216
*Motion
detector*



0217
Siren



0218
Caution



0219
Key



0220
*Intruder
in the house*



0221
*Intruder
outside the*



0222
Intruder



0223
*Siren
in the house*



0224
*Siren
outside the*

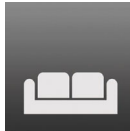
House



0236
House



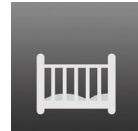
0237
Dining room



0238
Living room



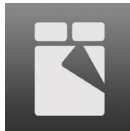
0239
Kitchen



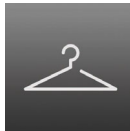
0240
*Children's
room*



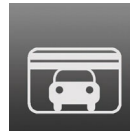
0241
Bathroom



0242
Bedroom



0243
Wardrobe



0244
Garage



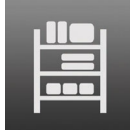
0245
Carport



0246
Garden



0247
Utility room



0248
Storage room



0249
Laundry room

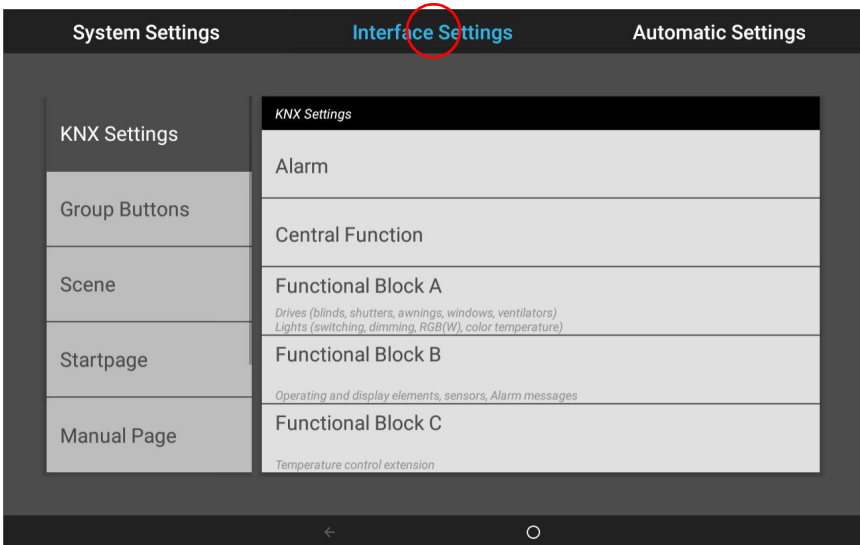
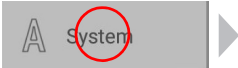
5. Basic settings in the Control Center

5.1. Procedure

After the correct installation and commissioning, you should first make the basic settings in the ETS (See chapter 4 "Basic settings in the ETS" on page 39.). Then you can set up the control center in the control menu **System > Set screen** (this chapter).

5.2. The "Set screen" menu

□ System > Set screen



In the **System > Set screen** menu you can make the following settings:

- KNX settings (including naming the functions, display in the manual and start menu)
- Create group keys and scenes for the manual menu (with the possible settings of type, name, display in the manual menu and allocation of the motor groups)
- Set up the start page and the manual menu (channel sequence and bookmark management)
- Weather data (adjustment of the temperature display on the weather station and selection of the indoor sensor for the weather data display)
- Set-up safety module
- Set up presence simulation

In order to be able to make the basic settings, the control center must be correctly installed, commissioned and the ETS configuration set up.

📖 3. Installation and commissioning, Page 31

📖 4. Basic settings in the ETS, Page 39

5.2.1. KNX settings

Basic KNX settings can be made here. In particular, the display is set up by individual functions in the manual and start menu.

☐ System > Set screen > KNX settings

Alarm:

Select the individual alarm objects from the list on the right and apply them consecutively. If no settings have been made, the fields show **Alarmobj.. 1...3**. If an alarm object has already been configured, the function or name is displayed instead.

Configure the alarm functions in the ETS first.

📖 Alarm functions, Page 49

Name:

Displays the name of the alarm object. Touch the field and enter the desired name using the keyboard that appears.

Symbol:

Displays the selected symbol. Touch the field and select a symbol from the lists.

Manual menu:

Shows whether the alarm is displayed in the manual menu and in the start menu. Touch the field and make your selection.

The display on the start page is below the menu items "System" and "Manual menu".

The display sequence can be set in the menus

☐ System > Set screen > Start page or manual menu

📖 5.2.4. Start page, Page 84

📖 5.2.5. Manual page, Page 85

Call up scene upon activation:

Select which scene should be run when activating the alarm object.

Configure the scenes beforehand.

📖 5.2.3. Scenes, Page 83

Call up scene upon deactivation:

Select which scene should be run when deactivating the alarm object.

Configure the scenes beforehand.

📖 5.2.3. Scenes, Page 83

Central function:

Select the individual central objects from the list on the right and apply them consecutively. If no settings have been made, the fields show **Centralobj.. 1...4**. If a central object has already been configured, the function or name is displayed instead.

Configure the central functions in the ETS first.

📖 Central functions, Page 49

Name:

Displays the name of the central object. Touch the field and enter the desired name using the keyboard that appears.

Symbol:

Displays the selected symbol. Touch the field and select a symbol from the lists.

Manual menu:

Shows whether the central function is displayed in the manual menu and in the start menu. Touch the field and make your selection.

The display on the start page is below the menu items "System" and "Manual menu".

The display sequence can be set in the menus

☐ System > Set screen > Start page or manual menu

📖 5.2.4. Start page, Page 84

📖 5.2.5. Manual page, Page 85

Call up scene upon activation:

Select which scene should be run when activating the central object.

Configure the scenes beforehand.

📖 5.2.3. Scenes, Page 83

Function block A (motors, light and fan regulator):

A list of all the motors and lights is displayed, which have been set up in the ETS for communication with the control center.

📖 4.3.8. Function blocks, Page 52

Push the button for the motor / lights that you want to set up.

Function:

Display of the block with number and type of input or output.

Name:

Displays the name of the motor / lights. Touch the field and enter the desired name using the keyboard that appears.

The name of the channel can also be entered in the ETS. The most recent change in the ETS or the control center applies.

📖 Block A, Page 52

Symbol:

Displays the selected symbol. Touch the field and select a symbol from the lists.

Type of output:

This menu only appears if "Blind" has been selected in the ETS for type of output and shows the type of output. Tap the field in order to change the type of output (awning, windows, blinds or shutters).

Manual direction (motors):

Shows the direction of the motor's movement. Touch the field to change the direction of movement.

Manual menu:

Shows whether the motor / light is displayed in the manual menu and in the start menu. Touch the field and make your selection.

The display on the start page is below the menu items "System" and "Manual menu".

The display sequence can be set in the menus

☐ System > Set screen > Start page or manual menu

📖 5.2.4. Start page, Page 84

📖 5.2.5. Manual page, Page 85

Minimum dimming value (lights):

Displays the minimum manual dimming value. Touch the field and enter the desired minimum dimming value.

Maximum dimming value (lights):

Displays the maximum manual dimming value. Touch the field and enter the desired maximum dimming value.

Function block B (switching/dimming, operation and displays, alarm):

A list of all the operation and display elements, and all sensors and alarm messages are displayed, which have been set up in the ETS for communication with the control center.

📖 4.3.8. Function blocks, Page 52

Push the button of the **Alarm message / Sensor/operation/display element** that you want to set.

Function:

Display of the block with number and type of input or output.

Name:

Shows the name of the sensor/control/display element. Touch the field and enter the desired name using the keyboard that appears.

The name of the channel can also be entered in the ETS. The most recent change in the ETS or the control center applies.

📖 Block B, Page 55

Symbol:

Displays the selected symbol. Touch the field and select a symbol from the lists.

Manual menu:

Shows whether the group button is displayed in the manual menu and in the start menu. Touch the field and make your selection.

The display on the start page is below the menu items "System" and "Manual menu".

The display sequence can be set in the menus

☐ System > Set screen > Start page or manual menu

📖 5.2.4. Start page, Page 84

📖 5.2.5. Manual page, Page 85

Alarm message A/B (only for alarm message):

Configure the alarm message here.

Text:

Shows the text of the alarm message. Touch the field and change the text.

Symbol:

Displays the selected symbol. Touch the field and select a symbol from the lists.

Use in safety module:

Shows the use of the alarm message in the safety module. Touch the field and make your selection.

The different possible selections are explained in the following chapter:

📖 7.5. Safety module settings, Page 139

Switching delay external (only for intruder alarm):

Shows whether an intruder alarm is triggered after an external switching on after the alarm delay time has expired. Touch the field and make your selection.

Switching delay by detector (only for intruder external):

Shows whether the alarm is live immediately after the detector is deactivated or only after the alarm delay time has expired. Touch the field and make your selection.

Retain alarm (not for intruder):

Shows whether the alarm should remain active after the detector has returned to "Off" but the message has not yet been acknowledged. If "Yes" is selected, the alarm does not disappear until the message has been acknowledged AND the detector returns to "Off". Touch the field and make your selection.

Flashing background light (only for "do not use" in the safety module):

Shows whether the background lighting flashes with the alarm. Touch the field and make your selection.

Emit alarm tone (only for "do not use" in the safety module):

Shows whether an alarm tone is emitted. Touch the field and make your selection.

Email notification (only for "do not use" in the safety module):

Shows whether an email notification is sent if there is an alarm. Touch the field and make your selection.

Snooze function after acknowledgement (not for installation/close alarm):

Shows the period, after which an alarm is reactivated after the acknowledgement. Touch the field and make your selection.

Function block C (temperature regulator):

A list of all the temperature regulators is displayed, which have been set up for communication with the control center (ETS).

📖 4.3.8. Function blocks, Page 52

Push the button for the temperature regulator that you want to set up.


Function:

Display of the block with number and type of output.

Name:

Shows the name of the temperature regulator. Touch the field and enter the desired name using the keyboard that appears.

The name of the channel can also be entered in the ETS. The most recent change in the ETS or the control center applies.

 Block C, Page 62

Symbol:

Displays the selected symbol. Touch the field and select a symbol from the lists.


Manual menu:


Shows whether the regulator is displayed in the manual menu and in the start menu. Touch the field and make your selection.

The display on the start page is below the menu items "System" and "Manual menu".

The display sequence can be set in the menus

☐ System > Set screen > Start page or manual menu

 5.2.4. Start page, Page 84

 5.2.5. Manual page, Page 85

5.2.2. Assign group buttons

Multiple motors or devices can be operated simultaneously in the manual menu via a joint group button (internal software button). 20 group keys are available.

☐ System > Set screen > Group keys

Select the individual buttons from the list on the right and apply them consecutively. If no settings have been made, the fields show **Group button 1...20**. If a button has already been configured, the function or name is displayed instead.

Type of button:

Shows the set button function. Touch the field and select:

- Reserve (unused)
- Group button

Name:

Shows the name of the button. Touch the field and enter the desired name using the keyboard that appears.


Manual menu:


Shows whether the group button is displayed in the manual menu and in the start menu. Touch the field and make your selection.

The display on the start page is below the menu items "System" and "Manual menu".

The display sequence can be set in the menus

☐ System > Set screen > Start page or manual menu

 5.2.4. Start page, Page 84

 5.2.5. Manual page, Page 85

Channels:

Shows which motors/devices are assigned to the group button. Touch the field and select the motor groups or a device.



ATTENTION

Only drives/devices that have the same function should be operated together with one button (e.g. only blinds or only windows).

5.2.3. Scenes

In scenes, you define the status of various motors and devices so that they can then be accessed with just one push of a button. You can also specify, for example, that the light should be dimmed and the shutters closed at the same time, and save this as "TV evening" scene.

Scenes can only be configured directly on the **CasaConnect KNX Control Center** and not in the ETS. However, the configured scenes can be used via the input/output object 22 ("Call scene") in the KNX system.

24 scenes are available in the **CasaConnect KNX Control Center**.

☐ System > Set screen > Scenes

Select a scene from the list on the right and apply it. If no settings have been made, the fields show **Scene 1...24**. If a scene has already been configured, the name is displayed instead.

Name:

Shows the name of the scene. Touch the field and enter the desired name using the keyboard that appears.

Manual menu:


Shows whether the scene is displayed in the manual menu and in the start menu. Touch the field and make your selection.


Default setting: Display in manual mode "Yes", in start menu "No".

The display in the start menu is below the menu items "System" and "Manual menu".

The display sequence and other representation options can be set in the menus

☐ System > Set screen > Start page or manual menu

 5.2.4. Start page, Page 84

 5.2.5. Manual page, Page 85

Channels:

Shows which motors/devices are assigned to the scene. Touch the field and select the motor groups or a device.

Touch each individual motor that should be included in the scene and set the actuation position. Set the status for each device, e.g. On or Off.

5.2.4. Start page

New bookmarks on the start page can be created with the web browser open. Use the "Create bookmark" button at the bottom right.

Favourites and bookmarks are displayed on the left side of the start page. You can set different display options here.

☐ System > Set screen > > Start page

Display sequence:

Touch the field to specify the display sequence of the favourites and bookmarks. All entries are shown in a list. Hold an entry by the list symbol on the right and move it to the desired position.

So that a motor is displayed as favourite, the setting "Start page" at the "Manual menu" item has to be activated.

☐ System > Set screen > KNX settings > ... > Manual menu.

Bookmark:

To insert a bookmark See chapter 2.4 "Internet (browser)" on page 28.

Change name:

Touch the field to change the name of the bookmark. Select the bookmark from the list, touch it and enter a name.

Delete bookmark:

Touch the field to delete a bookmark. Select the bookmark in the list and confirm the deletion.

Building on automatic:

Select here whether the "Building on automatic" function is to be displayed on the start page.

With this function, all drives and lights for which an automatic reset has been set are put back into automatic mode.

5.2.5. Manual page

The menu item "Manual menu" is on the left side of the start page. This manual page shows motors and devices for the manual operation.

☐ System > Set screen > Manual page

So that a motor or device is displayed in the manual menu, the setting "Manual menu" has to be activated in the installation settings.

☐ System > Set screen > KNX settings > ... > Manual menu.

Display sequence:

Touch the field to specify the display sequence in the manual menu. All entries are shown in a list. Hold an entry by the list symbol on the right and move it to the desired position.

Subject groups:

Touch the field to create subject groups.



As soon as a subject group has been activated, motors and units in the manual menu are no longer displayed singly.

All groups are shown in a list. Hold an entry by the list symbol on the right and move it to the desired position.

Activate the groups that you want to use by tapping the checkbox. A pencil icon appears, which touch to edit the group.

- All visible channels (not possible selections)
- Central function (scenes, group button)
- Room controls (heating, air-conditioning)
- Floor (all functions)
- Output (motors, group keys)
- Input (sensors)

You can activate, sort and edit other subgroups in each group.

Name:

Displays the name of the subgroup. Touch the field and enter the desired name using the keyboard that appears.

Symbol:

Shows the selected symbol for the subgroup. Touch the field and select a symbol from the lists.

Assign channels:

Touch the field and select the functions to be added to the group. Only the functions that go with the subject are displayed for each group.

Display sequence:

Touch the field to specify the display sequence of the selected channels. All entries are shown in a list. Hold an entry by the list symbol on the right and move it to the desired position.

5.2.6. Weather display

The current data received by the bus is displayed on the start page. The displayed temperature of the weather station can be adjusted. If multiple temperature sensors are installed, select the sensor here, the data from which should be displayed on the start page.

☐ System > Set screen > Weather data

Outdoor temperature:

Touch the field to set the sensor for the outdoor temperature. If the weather station is selected, you can adjust the displayed temperature value here. This adjusted value is also used for the control center!

Indoor temperature:

Shows which sensor is used for the indoor temperature display on the start page. If several sensors are installed, touch the field to select the desired sensor.

5.2.7. Safety module

In the safety module, motion detectors and/or door contacts, for example, can be monitored and specific alarm signals can be executed and/or alarm messages sent to email addresses when they are activated.

☐ System > Set screen > > Safety module

Name:

Displays the name of the safety module. Touch the field and enter the desired name using the keyboard that appears.

Manual menu:


Shows whether the safety module is displayed in the manual menu and in the start menu. Touch the field and make your selection.


Default setting: Display in manual mode "Yes", in start menu "No".

The display in the start menu is below the menu items "System" and "Manual menu".

The display sequence and other representation options can be set in the menus

☐ System > Set screen > Start page or manual menu

 5.2.4. Start page, Page 84

 5.2.5. Manual page, Page 85

Live switching:

Touch the field to configure the live switching of the safety module.

Switching delay external:

Set the live switching delay here if a detector is installed in the entrance area. As a result, you have time to leave the house during the delay before the detectors in the entrance area are live.

This delay time only applies to external live switching (e.g. via an absence button or the door lock), not if you set the alarm at the control center.

Alarm delay:

Set the alarm delay here. If a detector is triggered in the entrance area, for which a delay has been set, the alarm is only reported after the end of this time.

Display activation acknowledgement:

This is where you set how long the message, which has been successfully activated, is displayed and at the same time a "1" is sent to the KNX bus.

Display error message:

This where you set how long an error message is displayed if activation failed.

Deactivation code for external live:

If desired, specify a code here for deactivating the external live switching.

Alarm:

Touch the field to set how an alarm is reported.

Signal message duration:

Activation duration of external signal flashing light:

This is where you set how long an external flashing light remains on after an alarm.

Activation duration of external signal siren:

This is where you set how long an external siren remains on after an alarm.

Activation duration of internal signal:

This is where you set how long the internal signal remains on after an alarm.

Assign signal:

This is where you assign the different signals to the various alarm types.

- External live: The user is outside the building. All indoor and outer skin alarms are live.
- Internal live: The user is in the building. Only the outer skin alarms are live.
- Not live: Neither the indoor nor the outer skin alarm is live.


For each alarm status set, specify which alarm signal should be activated for the different live statuses. The live statuses are described above.

- Intruder alarm
- Vandalism alarm
- Attack (irrespective of the live status)
- Malfunction
- Technical alarm 1/2

Recipient for notifications:

Assign email recipients for the various alarm types (see chapter 7.5. Safety module settings, Page 139). The email addresses have to be entered beforehand.

☐ System > System setting > Email message

 5.3.7. Email message, Page 101

- External live: The user is outside the building. All indoor and outer skin alarms are live.
- Internal live: The user is in the building. Only the outer skin alarms are live.
- Not live: Neither the indoor nor the outer skin alarm is live.

For each alarm status set, specify which email recipient should be informed of the different live statuses.

- Intruder alarm
- Vandalism alarm
- Attack (irrespective of the live status)
- Malfunction
- Technical alarm 1/2

Edit text messages:

Touch the field to edit the text messages of the safety module, which are displayed on the screen and sent to the KNX bus. A maximum of 14 characters are permitted for each.

Switching texts:Not live and not ready:

Enter the text here for the status "Not live and not ready".

Default setting: "Not live"

Not live and ready:

Enter the text here for the status "Not live and ready".

Default setting: "Ready"

External live:

Enter the text here for the status "External live".

Default setting: "Ext. live"

Internal live:

Enter the text here for the status "Internal live".

Default setting: "Int. live"

Delay time active:

Enter the text here for the status "Delay time active".

Default setting: "Delay active"

Alarm text:Intruder alarm

Enter the text for "Intruder alarm" here.

Default setting: "Intruder alarm"

Malfunction:

Enter the text for "Malfunction" here.

Default setting: "Malfunction"

Vandalism alarm:

Enter the text for "Vandalism alarm" here.

Default setting: "Vandalism"

Attack:

Enter the text for "Attack" here.

Default setting: "Attack"

Technical alarm 1:

Enter the text for "Technical alarm 1" here.

Default setting: "Tech. alarm 1"

Technical alarm 2:

Enter the text for "Technical alarm 2" here.

Default setting: "Tech. alarm 2"

Other:

No triggered alarm:

Enter the text for "No triggered alarm" here.

Default setting: "----"

Bus power outage:

Enter the text for "Bus power outage" here.

Default setting: "Bus Reset"

Restart the control center:

Enter the text for "Restart the control center" here.

Default setting: "Restart"

5.2.8. Presence simulation

You can call up to 16 events with the presence simulation simultaneously or consecutively, to give the appearance that people are in the building. A settable delay for the start time makes the simulation more realistic.

☐ System > Set screen > Presence simulation

Name:

Shows the name of the presence simulation. Touch the field and enter the desired name using the keyboard that appears.

Manual menu:


Shows whether the presence simulation is displayed in the manual menu and in the start menu. Touch the field and make your selection.


Default setting: Display in manual mode "Yes", in start menu "No".

The display in the start menu is below the menu items "System" and "Manual menu".

The display sequence and other representation options can be set in the menus

☐ System > Set screen > Start page or manual menu

 5.2.4. Start page, Page 84

 5.2.5. Manual page, Page 85

Configuration:

Touch the field to configure the presence simulation.

Select an event from the list and apply it. If no settings have been made, the fields show **Event 1...16**. If an event has already been configured, the function is also shown underneath.

Three conditions can be defined, when an event should start, e.g. when a motor (blind or shutter) is extended/retracted or when a light is switched on or off.

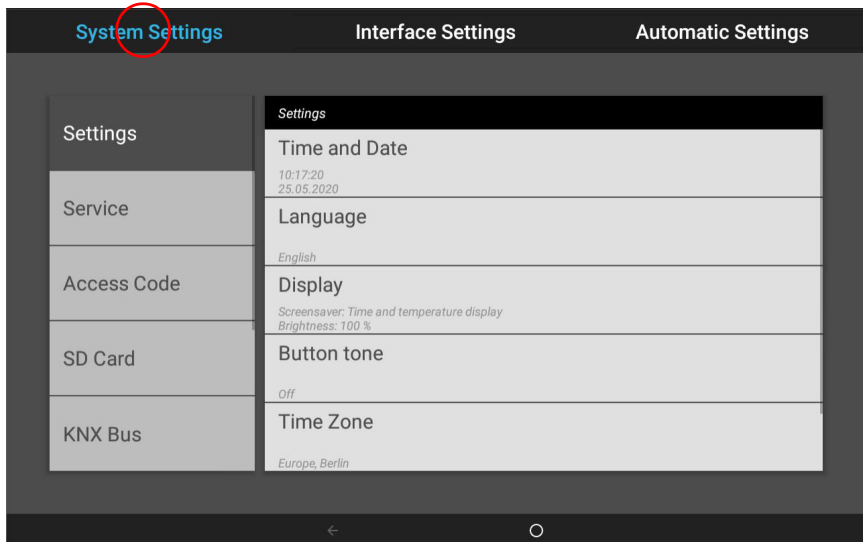
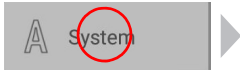
- Time: Event starts at specific time
- Time and brightness: Event starts if a set brightness is undercut in a defined period.
- Event X: Event starts as soon as Event X has started

With a random delay, a range can be set, from which a value is selected at random. The start time of an event is delayed by this value.

The motor / light is selected with the "Select function" button.

5.3. System setting

□ System > System setting



In the **System > System settings** menu you can make the following settings:

- Settings: Change individual data such as time/date and time zone and match the screen display to your personal preferences

- Service: Activate the cleaning mode, restart the control center, reset to factory settings, change internal settings and start remote maintenance
- Access code: Set an access code that protects the "Set screen" and "Set automatic" menus from unauthorised changed.
- SD card: Save the setting details for the control center on SD card or read from SD card
- Internet: Set up the internet/network connection
- Email message: Specify the sender and recipient email address
- Device information: Load updates and view software versions of the control center

5.3.1. Settings

In the **System > System settings > Settings** menu you can make the following settings:

- Time and date
- Language
- Screen
- Key tone
- Time zone
- Location

Enter time and date manually

Date and time are displayed in the top right of the start page. Normally, the data is received via the bus. It is mostly received within approx. 10 minutes of the system starting.

If there is no time signal, "Please set time!" is displayed on the screen. In this case, set the time manually.

Time and date:

Shows the current time and date. Tap the field to enter the data manually.

Change language

The display can be set to German, English, French and Italian.

Language:

Shows the currently selected language. Touch the field to select a different language.

Set up screen

Display settings can be modified on the display or in the ETS menu.

 4.3.2. Display, Page 48

The **CasaConnect KNX** can display picture file, time/temperature as a screen saver or simple a black screen. The screen saver is activated if the display has not been touched for 5 minutes.

In addition, the screen brightness can be adjusted automatically to the ambient brightness and the screen can switch off when it is dark.

Screen:

Shows which screen saver is currently active and whether automatic brightness is switched on. Touch the screen to see the menu.

Screen saver:

Select the screen saver:

- Without
- Black screen
- Time and temperature display
- Pictures from SD card. "Slide show" or "Single picture" can be selected for the picture display. The "Slide show" shows all pictures on the SD card one after the other. With "Single picture", you can select the image from the SD card.

In order to show digital picture data as a slide show, save the files to a micro SD card. The picture files must fulfil the following requirements:

- The files must be saved in the top directory level on the card (master directory)
- File format: Bitmap (BMP, without RLE compression), Jpeg (JPG), GIF or PNG (without transparency)
- For pictures with a page ratio other than 16:10, black bars are added to the top and bottom or left and right. The display has a resolution of 1280 × 800 pixels
- Colour intensity 24 bit or 16 bit

The card socket is located on the right-hand side of the device. The SD card is pushed into the slot, until it clicks into place. To remove, briefly press the card into the socket so that it jumps out.

If picture data is saved on the card, the "Slide show" button is displayed on the right of the upper menu bar, with which you can directly start it. The image changes approx. every 45 seconds (for images with 24-bit colour intensity). To interrupt the screen saver, touch the screen or remove the SD card.

Automatic switch-off:

With the automatic switch-off, you set whether the display lighting should be switched off when the room is dark. If no command is given for around 5 minute when it is dark, the automatic switch-off darkens the screen again.

To do this, set the sensitivity of the brightness sensor. If the sensitivity is high, the control unit only switches off when the room is very dark. If the sensitivity is low, the room may still be relatively bright when the display lighting is switched off.

Default setting: "medium"

For the automatic switch-off, the central control unit of the **CasaConnect KNX Control Center** records the brightness. If it is bright in the room, the display lighting is automatically switched on. If the screen is touched, it also re-activates.

Brightness-dependent:

The automatic brightness function adjusts the display screen to the light conditions in the room (the darker the room, the darker the display screen lighting).

If automatic mode is off, the screen brightness can be set as in percent by using a slider.

Brightness during operation:

If this function is on, the brightness is increased to the set percentage if the screen is touched. This ensures good legibility. If no instructions are entered for around 1 minute, the screen brightness is reduced again.

Switch off/on key tone

The key tone, which is emitted as feedback when a button is touched, can be switched off and on again.

Key tone:

Shows whether the key tone is on or off. Touch the field to change the setting.

Select time zone

So that the date and time can be displayed correctly, the time zone must be entered.

Time zone:

Shows the time zone currently set. Touch the field to change the setting.

The time zone can be entered "by location" or "user defined". Touch the field to switch between the options.

When selecting by location, choose the city from the list provided. For user-defined setting, enter the time zone based on GMT (Greenwich Mean Time).

Enter location

The location is automatically received by the bus. If there is no location signal, set the location here.

The information on the location of the building is necessary in order to correctly indicate the position of the sun. If you do not provide this location data, the blinds will not be correctly controlled.

Location:

Shows the current location. Touch the field and select a **City** or **coordinates** (longitude and latitude).

5.3.2. Service settings

In the **System > System settings > Service** menu you can make the following settings:

- Cleaning mode
- Reset (restart)
- Reset to factory settings
- Internal area
- Remote maintenance

Cleaning mode

Touching the "Cleaning mode" menu item switches off the touch function of the screen for 60 seconds. During this period, the screen can be wiped with a damp cloth. Please always use this function to clean the control center, otherwise functions may be unintentionally triggered or adjusted by cleaning.

Reset (restart)

Reset starts the central control system software again. The automatic mode settings are retained. After starting, the motors and devices, for which an automatic reset is set, are in automatic mode.

Tap the menu item to restart the control center. The reset has to be confirmed again.

Reset to factory settings



ATTENTION

Property damage due to incorrect use of the service functions!

Resetting deletes all data stored in the control center. There are no longer any automatic controls.

Resetting the control center to factory settings deletes all the settings made in the control center (all system and automatic settings). Only the status of the last ETS download is kept, i.e. all the data specified in the KNX device application (ETS).

Touch the menu item if you want to reset the control center to the basic settings. Enter code "81" and confirm. The control center is restarted. When resetting, the backup file is also overwritten (See "Backup function:" on page 98.).

Internal area



ATTENTION


Property damage due to incorrect use of the internal area function!

The internal area is not needed in the normal function of the control center.


The internal area is only needed by the manufacturer's service and offers the option to change basic properties of the device. The area is protected by an access card.

Remote setup / remote maintenance

Access to the **CasaConnect KNX Control Center** is possible via the internet using the remote maintenance function. An internet connection is needed for this. A service technician can then see and change the settings without being on site. To be able to use remote maintenance, the device must be connected to the internet.


 5.3.6. Internet, Page 100

Access to the control center is only possible if remote maintenance is also started on the device. This is not a remote control option! If you want to operate the control center and your building technology when on-the-go, then use the CasaConnect KNX App and set up a secure VPN connection to your building network.

 2.3.3. CasaConnect KNX App, Page 26

Remote maintenance:

The automatic screen switch-off is deactivated during remote maintenance. Activate it again after the session, if required.

 System > System settings > Settings > Screen

Start remote maintenance software:

Touch the field to open the software. Follow the instructions. To create the connection, the device ID of the **CasaConnect KNX** must be input at the PC used for the remote maintenance. Then every menu and function of the **CasaConnect KNX** can be viewed and controlled from the PC.

End remote maintenance software:

Touch the field to end the remote maintenance session.

5.3.3. Access code

In the menu area **System > System setting > Access code** you can set up access codes in order to protect the control center from unauthorised access. The menus „System setting“, „Set screen“ and „Set-up automatic“ can be protected.

Manual operation of the control center remains free at all times.

Access to the menus of the central unit:

Enter code:

Touch the field and enter the desired access code. The code is shown unencrypted. Confirm it. The control center now requests this code as soon as the system menu is tapped on the start page.

If you have forgotten the current code, enter the code "123" and confirm by pressing the "OK" button for a long time (> 1 s).

Change code:

Touch the field and enter the existing code. Confirm, and enter the new access code. The control center will ask for this new code before displaying the menus.

Delete code:

Touch the field and enter the existing code. Confirm it and the control center no longer have an access code. If you forget the current code, enter the unlock code "123" to delete the code.

Access by App (via smartphone/tablet):

Shows whether an access code is needed for accessing the control center by App. Touch the field and make your selection.

No, Do not allow access, prohibits any access by App to the control center.

Access **without access code** allows free access. The control functions can be used with any smartphone, on which the App is installed and is connected to the same WLAN.

Access **with access code** allows App operation of the control center only after a code has been entered. Enter the desired PIN number.

5.3.4. Use SD card

The **CasaConnect KNX Control Center** can load data from a micro SD card.

□ System > System settings > SD card

The SD card storage is needed for:

- Screen saver data
- Update files for software updating
- Saving settings (configuration file)

The card socket is located on the right-hand side of the device. The SD card is pushed into the slot, until it clicks into place.

To remove, briefly press the card into the socket so that it jumps out.



The card is detected automatically. If picture data is saved on the card, the "Slide show" button is displayed on the right of the upper menu bar, with which you can directly start it. The image changes approx. every 5 seconds (for images with 24-bit colour intensity). To interrupt the slide show, touch the screen or remove the SD card.

Information about possible picture information can be found in chapter Set up screen, Page 92.

Save and load configuration data

The SD card is also used as a storage and transmission medium for setting data (all settings in the menus "System", "Set screen" and "Set Automatic"):

- for the automatic backup
- to save the personal settings, for example a summer and a winter configuration

Backup function:

The configuration data for the control center is automatically saved as a backup on the SD card supplied 5 minutes after each change (memory requirement approx. 5 MB). When resetting to factory settings, the backup file is also overwritten after 5 minutes.

If you insert the SD card with the backup into a new/other device, you will be asked if you want to load the backup.

You can also select the file with the file name "Auto_ "Serial number"" in the menu area **System > System setting > SD card > Load auto-backup** and thus load the automatically saved configuration data. The parameters for this are reloaded (provided the functions of the respective channel are identical).

Load config.:

Touch the field in order to view all the configuration files in the card's master directory. Touch an entry to load the file. The control center are restarted.

Save config.:

Touch the field in order to save the setting data for the control center on the SD card. Select an existing configuration from the list in order to save it. Or add a new configuration and enter the desired name it should be saved as.

Delete config.:

Touch the field in order to view all the configuration files in the card's master directory. Touch an entry to delete the file (deletion must be confirmed).

Load auto backup:

Touch the field to restore a backup. Select the desired backup.

Show pictures on the display

The **CasaConnect KNX** can display digitally saved picture data as a slide show or a single image. The picture data for this must be saved on an SD card.

Information about possible picture information can be found in chapter Set up screen, Page 92.

The sequence of the catalogue of individual images and of the slide show corresponds to the sequence in which the images were saved onto the card. The images are not sorted according to name.

To return to the start page, touch the screen or remove the SD card.

Slide show:

Touch the field to start the slide show. The images are displayed in the same sequence as they were saved onto the card. The image changes approx. every 5 seconds (for images with 24-bit colour intensity).

Single picture:

Touch the field if you want to display a single picture. All pictures stored on the card are displayed. Select the desired picture.

5.3.5. KNX bus

Individual address:

The individual address (KNX bus address) of **CasaConnect KNX** is displayed here. When delivered, this is: 15.15.255.

Programming mode:

If programming mode is active, the individual address of the **CasaConnect KNX** can be changed in the ETS.

5.3.6. Internet

The **CasaConnect KNX Control Center** is internet-ready and can be connected to a network by cable (Ethernet/LAN) or WiFi (WLAN).

□ System > System settings> Internet

The network connection is needed for:

- Use of Apps (with smartphones and tablets in the same network/WLAN)

If the **CasaConnect KNX** is also connected to the internet via the internal network, the following functions are also possible:

- Accessing web contents in the control center' browser
- Remote access (e.g. for system set-up, diagnosis)

The Ethernet/LAN connection socket can be reached after the display has been accepted. Note the information regarding assembly.



Protect your network with the latest encryption technology and change passwords regularly!

Connection status

Shows the current status (disconnected or connected).

Connection type

Shows the type of connection (Ethernet or WLAN). Tap the field to set up the connection.

WLAN: Wireless connection. If WLAN has been confirmed, the additional field "Network name" is displayed for the additional set up.

Ethernet: Cable connection via the LAN socket on the circuit board. No further settings necessary.

Network name (SSID)

The network is selected and set up here under the setting WLAN. Enter a network name or touch "Find networks" in order to see all the available networks.

Create connection (button at top right)

You can only "Create connection" using this touch field once a network has been selected. The password for the network is requested.

If required, you can disconnect the connection again using the same button.

Mac address

The MAC address (Media-Access-Control address) is the hardware address of each single network adapter and serves as the unique identifier of the device in the network. This is also called the physical address or device address.

5.3.7. Email message

If you want to send an alarm message by email from the safety module, a valid email address for sending and at least one recipient address must be entered.

□ System > System setting > Email message

Email sender address

Email outbox server

Select your email outbox server from the list or enter it (user-defined).

Email address

Enter your email address.

Password

Enter your password to access the email server/provider.

Sent test email

Tap the field to send a test email to your email address.

Email recipient address

Enter up to 16 email addresses, to which the alarm messages can be sent. Alongside entering the email address using the keypad, you can also send a test email to the entered email address.

5.3.8. Device information

□ System > System settings > Device information

Check for updates

Shows the currently installed version and facilitates the installation of SD card or the search for updates on the internet. Follow the download and installation instructions on the display.

The software for the **CasaConnect KNX Control Center** can be updated during normal operation. If the control center are connected to the internet, the control center download updates automatically after confirmation. Alternatively, you load the new

software from the Elsner Elektronik website and save it to the SD card. After inserting the SD card into the socket on the **CasaConnect KNX**, continue.

Version history

Shows the status of the version history of the Control Center. Tap the field to display the version history of the **CasaConnect KNX Control Center**.

Manual

Shows the status of the current Control Center manual. Tap on the field to call up the individual chapters of the manual.

CasaConnect KNX, user interface, KNX interface

The current software versions of the area are displayed.

License

The license from third parties is displayed.

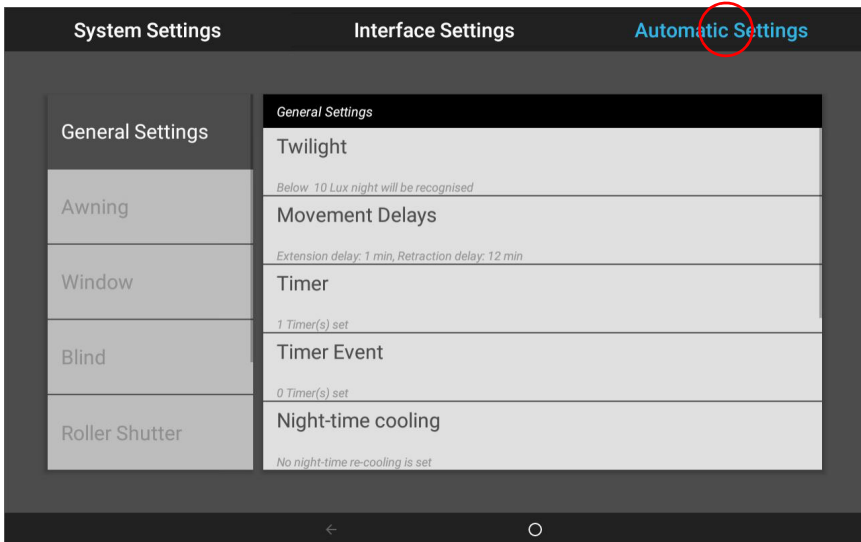
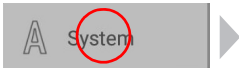
6. Automatic

6.1. Procedure

So that you can set the automatic functions in this chapter, the basic setting must already be made in the ETS (See chapter 4 “Basic settings in the ETS” on page 39) and in the System control menu (See chapter 5 “Basic settings in the Control Center” on page 75).

6.2. Set automatic mode

❑ System > Set automatic mode



In the **System > Set automatic** menu you can make the following settings:

- Specify automatic functions of the individual motors and devices
- Adjust general automatic settings: Twilight value, movement delays, time switch, ventilation lock, night back cooling, frost alarm, movement restriction, wind delay and automatic reset

To be able to set the automatic functions, the basic settings in the ETS and in the control menu **Set screen** must already have been made.

📖 4. Basic settings in the ETS, Page 39

📖 5. Basic settings in the Control Center, Page 75

Please adjust the settings for motors and devices to the individual circumstances. Only in this way can alarm and lock functions such as rain and wind warnings help, for example, to protect outside awnings or to prevent rain entering through windows.

6.2.1. Safety information about automatic and alarm functions



WARNING!

Risk of injury from automatically moving components!

System parts may start automatically as a result of the automatic controls and can put people in danger.

- People must not enter the movement range of motorised moving parts.
- Comply with corresponding building regulations (see directive for motorised windows, doors and gates BGR 232 etc.).
- Always disconnect the system from the power for maintenance work and cleaning (e.g. switch off/remove fuse).

Power outage, maintenance work, etc. (restart the controls)

If there is a power outage, motors and devices are no longer controlled by the system! If the full extent of functions is also to be guaranteed if the mains power fails, an emergency generator with corresponding switching from mains to emergency operation should be installed on site.

Settings stored in the program are also retained after the power outage.

Note: After each restart (e.g. restoration of power after a power outage or after a manual reset), motors and devices, for which an automatic reset is set, are in automatic mode.

If cleaning or maintenance work is to be carried out, the system should be made safe by switching off the fuse installed on-site and securing it against being switched on again. In this way you ensure that the connected motors cannot start up.

6.3. Adjust general automatic settings

☐ System > Set automatic > General settings

The settings applied here are used for all motors and devices, or they apply to specific functions stated in the corresponding chapter (e.g. for all shades).

6.3.1. Adjust twilight value

☐ System > Set automatic > General settings > Twilight

The twilight value is the brightness limit, beneath which twilight / night is detected. Please note that brightness values of just below 10 lux can be achieved in moonlit

nights. If the twilight value is set below 10 lux, shades that are set for "Night closing" remain open due to the moonlight or open during the night.

Twilight:

Displays the twilight limit value. Tap the field to adjust the value using the slide regulator.

Default setting: 10 Lux.

6.3.2. Adjust movement delays (shades)

□ System > Set automatic > General settings > Movement delays

The movement delay prevents the sun protection from constantly opening and closing if the sunlight conditions keep changing quickly.

The brightness has to be above the light intensity value set for the sun protection uninterrupted for the extension delay period (e.g. 1 minute) before the shade moves out. The light intensity has to be below the value for the set retraction delay period (e.g. 12 minutes) without interruption before the shade is retracted again. By selecting the delay smartly, passing clouds are "ignored" and the shade still responds quickly to the sun.

Movement delays:

Displays the extension and retraction delay in minutes. Tap the field and use the slider to adjust the delay for extending when the sun comes out and for retraction.

Default setting: Extension 1 minute, retraction 12 minutes.

6.3.3. Set time switch period

□ System > Set automatic > General settings > Time switch period

16 periods can be set in the weekly clock, which can be used for various automatic functions. The start and end time, and day of the week, are set for each period.

Time switch period:

Displays how many time switches are set. Tap the field to set up the time switches.

Select period from the list on the right and apply it. If no settings have been made, the fields show **Time switch period 1...16**. The entered name is shown later.

Enter an **Name** to help you allocate the time switch to the motor or device later.

Select the **Start** and **End**.

Select the **Days of the week**, when the time switch is to apply.

6.3.4. Set time switch event

☐ System > Set automatic > General settings > Time switch event

32 times can be set in the weekly clock, which can be used for temperature regulators. The time and day of the week are set for each time.

Time switch event:

Displays how many time switches are set. Tap the field to set up the time switches.

Select an event from the list on the right and apply it. If no settings have been made, the fields show **Time switch event 1...32**. The entered name is shown later.

Enter an **Name** to help you allocate the time switch to the motor or device later.

Select a **Time**.


Select the **Days of the week**, when the time switch is to apply.

6.3.5. Set night back cooling (ventilation)

☐ System > Set automatic > General settings > Night back cooling

Night back cooling via windows and ventilation units is enabled if a set outdoor temperature is exceeded for a longer period.

"Night back cooling" is then displayed on the start page.

 7.4. Alarm and error messages > Night back cooling, Page 137

The window(s) and ventilator(s) which are used for the night back cooling, as well as the time period over which these are activated, can be set in the automatic operation functions for the individual windows and ventilators.

Night back cooling:

Shows the settings for the night back cooling as soon as the re-cooling has been setup. Tap the field to apply the configuration.

Switch the night back cooling **On** in order to set up and use for windows / fans.

Use the slider to set how high the **outside temperature** must have been in the last few hours in order to start the cooling.

Default setting: 16°C.

Set the **duration**, for which the outdoor temperature must have been above the minimum temperature (trigger period).

Default setting: 48 hours


Night back cooling is ended when the set outdoor temperature has been undercut by 2°C for a specific period. This period depends on the trigger period set and the duration of the temperature exceedance. It is a maximum of one third of the set trigger period (e.g. max. 16 hours for a 48-hour trigger period).

6.3.6. Adjust frost alarm

☐ System > Set automatic > General settings > Frost alarm

The frost alarm for blinds and windows will be active when during or after precipitation the outdoor temperature falls below a defined level.

"Frost alarm" is then displayed on the start page.

 7.4. Alarm and error messages > Frost alarm, Page 136

Use the automatic functions of the individual shades and windows to set which shades are retracted if there is a frost alarm and which windows are closed. The frost alarm locks all automatic functions and manual operation for these motors.

The following situations trigger the frost alarm:

- The outdoor temperature is below the set frost alarm temperature and it is beginning to rain/snow.
- The outdoor temperature drops below the set frost alarm temperature while it is raining/snowing.
- It has rained/snowed. The outdoor temperature falls below the set frost alarm temperature within the set readiness period after the end of the precipitation

The frost alarm ends in the following situation:

- The outdoor temperature remains above the set dew point temperature for the period of time.

Frost alarm:

Shows the settings for the frost alarm as soon as it has been set up. Tap the field to apply the configuration.

Switch the frost alarm **On** in order to set it up and use it for motors.

First determine when the frost alarm is to be triggered.

Use the slider to set the **outside temperature** which must be **undercut** in order to trigger the frost alarm.

Default setting: 2.0°C.

Then set how many **hours** after precipitation the frost alarm standby mode should be active. Select the standby period in a way ensuring that the humidity left from the previous precipitation has all dried up.

Default setting: 5 hr

Now enter the conditions for the end of the frost alarm.

Set the **Outdoor temperature** that has to be **exceeded**.

Default setting: 5.0°C.

And how many **hours** this temperature has to be exceeded for. Select the period such that ice is then fully thawed.

Default setting: 5 hr

6.3.7. Set movement limit (windows)

□ System > Set automatic > General settings > Movement limit

The movement limit determines that a window only opens partly when the outdoor temperature is low. This prevents excessive cooling of the room.

"Movement limit" is then displayed on the start page.

📖 7.4. Alarm and error messages > Window movement limit, Page 137

The degree to which the opening should be limited is set within the automation functions for the different windows.

Colour restriction:

Shows the settings for the movement limit as soon as it has been set up. Tap the field to apply the configuration.

Switch the movement limit **On** in order to set up and use for windows.

First specify the **outdoor temperature** below which the movement range of the windows should be limited.

Default setting: 2.0°C.

Then set how many **hours** the outdoor temperature must be above the set outdoor temperature so that the movement limit is raised again.

Default setting: 8 hours

6.3.8. Set wind delay (shades)

□ System > Set automatic > General settings > Wind delay

If the wind limit for a motor is exceeded, the wind alarm is triggered for 5 minutes. If the wind value is exceeded again during this period, the waiting time of 5 minutes starts again.

An additional delay after the wind alarm can be set for shades, during which the automatic shade system is locked. This means the controls initially remain switched off after the wind alarm if the shade was in automatic mode before the wind alarm. Manual operation is already possible again, however.

Wind delay:

Shows the duration of the wind delay. Touch the field to adjust the duration using a slider.

Default setting: 0 minutes.

6.3.9. Specify automatic reset

□ System > Set automatic > General settings > Automatic reset

After a manual operation, the motor or device remains in manual mode, automatic mode is switched off. However, you can set it so that automatic mode switched on again after a certain time. Motors and devices are also reset to automatic with the general automatic reset.

Automatic resets prevent the motors from being operated manually and then remaining in an unfavourable position (window remains accidentally open, blind retracted despite the sun).

The general automatic reset and reset after a manual operation can be activated and deactivated in the automatic menu for each working group and each device separately.

Automatic reset:

Shows the time of the automatic reset and the period to reset after manual operation. Tap the field to adjust the two settings.

Set the **Time for the daily automatic reset**.

Default setting: 3:00 a.m.

Set the **Period after manual operation**, after which automatic mode should be enabled again.

Default setting: 60 minutes.

6.4. Set automatic mode for motors and devices

6.4.1. Set automatic sun protection

☐ System > Set automatic mode > Awning | Blind | Shutters

You can change the following automatic settings for awnings, blinds and shutters:

- Light intensity
- Sun direction
- Sun height
- Actuation position shading
- Slat position (for blinds)
- Indoor sensor is evaluated
- Indoor temperature lock
- Night closing
- Rain automatic
- Timed closing (with actuation position)
- Outdoor temperature lock
- Behaviour during outdoor temperature lock
- Timed opening
- Frost alarm
- Wind sensor which is evaluated and delay
- Wind alarm
- Rain alarm

- Automatic reset
- Manual switching

If two contradictory automatic functions overlap, the automatic function further down the list has priority.

icing-up of rails of the shades:

Be aware that the rails of blinds, awnings and shutters, which are fitted outside, can ice up. If a motor is then moved, shades and motors can be damaged.

Alarm functions

The alarm functions are applied to shades in manual mode and automatic mode.

Shades are retracted if there is a **frost, wind or rain alarm** and cannot be extended manually.

Shade settings

The settings are only executed if a blind is in automatic mode and none of the alarm functions named above is active.

The **outdoor temperature lock** has the highest priority, followed by **timed closing** (extend), **night closing** (extend) and **indoor temperature lock** (keep retracted).

The **Automatic shading according to light intensity** is performed only when the direction and height of the sun are correct.

Set automatic mode

Light intensity:

Shows the brightness from which shades are deployed. Touch the field to set the shading.

Set whether the sun protection is extended **never, always or depending on brightness**. In the setting "Never", the sun protection does not react to the brightness and remains retracted. In the setting "Always", it remains extended. The controls are time and twilight-dependent, if applicable, and it is also controlled through manual movement.

Default setting: Brightness-dependent.

You set the **light intensity** limit value for the "Brightness-dependent" setting.

Default setting: 40 kLux.

So that the automatic controls react, the light intensity value must be exceeded or undercut for the duration of the delay times. This prevents constant extension and retraction.

tion of the shades if the light conditions are rapidly alternating. The movement delays can be adjusted.

☐ System > Set automatic > General settings > Movement delays

📖 6.3.2. Adjust movement delays (shades), Page 106

Sun direction:

Shows the area (direction of the sky) where the sun must be so that the shade is opened. Touch the field to set the direction of the sun. The setting is only active if shading is deployed depending on the brightness.

Use the keys to select: from **All sides**, **West**, **South-West**, **South**, **South-East** or **East**. Or enter the angle range numerically in °.

Default setting: All sides.

As long as no time signal is received and the time has not been set manually ("Please set time" is displayed on the start page), shades are only controlled depending on light intensity, temperature and alarm messages, the sun position is not considered.

Sun height:

Shows the area (height above the horizon) where the sun must be so that the shade is opened. Touch the field to set the angle using a slider. The setting is only active if shading is deployed depending on the brightness.

Default setting: 0-90°.

As long as no time signal is received and the time has not been set manually ("Please set time" is displayed on the start page), shades are only controlled depending on light intensity, temperature and alarm messages, the sun position is not considered.

Actuation position shading:

Shows the actuation position in percent for automatic mode. Touch the field to set the position using a slider. 0% = fully retracted, 100% = fully extended.

Default setting: 100%.

Select whether a reference run is to be carried out before the shading position.

If **No** is selected, the shade moves directly to the set position.

If **Yes** is selected, the shade first retracts completely and then moves to the set position.

Slat position (only blinds):

Shows the behaviour of the slats in automatic mode. Touch the field to adjust the setting.

Select whether the slats should follow the sun.

If **No** is selected, set the position using the slider. 0% = horizontal, 100% = closed. Default setting: 75%.

If **Yes** is selected, sun position tracking is active. Set the slat position for the four pre-defined sun angles.

Default setting: 0° to 15°: 100% (closed), 15° to 30°: 75%, 30° to 45°: 50%, 45° to 90°: 0% (horizontal).

Sensor selection:

Shows the indoor sensor, which is evaluated for controlling the shades. Touch the field and select a sensor.

Default setting: No sensor.

If no sensor is selected, the indoor temperature is not taken into account for the controls of the shading.

Indoor temperature:

Shows the setting for the indoor temperature block. The setting is only active if an indoor sensor is selected. Touch the field to adjust the indoor temperature block.

Select **OFF** if the shading should depend on the indoor temperature (default setting).

Change to **ON** to set the desired temperature.


Default setting: 25.0 °C.

By using the indoor temperature block, the sun's energy is used to heat the room. If the indoor temperature is below the set value, e.g. in the morning, then the shades remain retracted despite the sun.

As soon as the set indoor temperature is exceeded, the lock is lifted and the shades released.

If the indoor temperature decreases, the block is activated as soon as the temperature is more than 3.0°C below the set value (hysteresis). Note that the shades are not retracted until the retraction delay time has expired.

☐ System > Set automatic > General settings > Movement delays

 6.3.2. Adjust movement delays (shades), Page 106

Night closing:

Shows whether the shades are extended or not at night. Touch the field and switch the night closing on or off.

The limit value, from which twilight/night is detected, can be adjusted.

☐ System > Set automatic > General settings > Twilight

 6.3.1. Adjust twilight value, Page 105

Rain automatic:

Shows whether the rain automatic is switched on. Touch the field and turn the rain automatic on or off for this shade and adjust the driving position and slat position if necessary.

Default setting: No.


The rain automatic is used to clean the curtains by rain and/or to protect the window panes from wetness by moving the shade to a selectable position.

The rain automatic can only be activated when the rain alarm is deactivated.

Timed closing:

Touch the field to select periods when the shade should be extended. Enable one or more periods in the list.

If you want to change the periods, touch the tool icon.

 6.3.3. Set time switch period, Page 106

Timed closing: Actuation position:

Shows the actuation position in percent for the time closing, also the slat position for blinds. Touch the field to set the position using a slider. Actuation position: 0% = fully retracted, 100% = fully extended.

Default setting: 100%.

Slat position: 0% = horizontal, 100% = closed.

Default setting: 100%

Outdoor temperature:

Shows the setting for the outside temperature block. Touch the field to adjust the block.

Select **OFF** if the shading should depend on the outside temperature (default setting).

Change to **ON** to set the desired temperature.

Default setting: 5.0°C.

The block is lifted again only when the temperature rises more than 2.0 °C over the pre-set value (hysteresis).

The block only applies to automatic operation; no shading based on light intensity or the position of the sun takes place. The output still reacts to wind, rain and frost alarm even when the outdoor temperature block is active, as well as to night and timed travel commands and manual travel commands.

This is different to the frost alarm which retracts the shading and locks it against manual operation. When using the outdoor temperature block, please note that the shade rails or other mechanical components can remain iced even when the outdoor temperature has already risen to a relatively high value.



ATTENTION

Property damage due to movement of frozen-solid shades!

Motor and curtain can be damaged if a frozen solid outside shade is moved.

- Use the frost alarm function to achieve reliable protection against damage due to icing.

Outdoor temperature: Behaviour:

Shows the behaviour of the shades if the outdoor temperature lock is triggered. The setting will only be activated once an outdoor temperature has been set.

Select whether the shades should be retracted if the outdoor lock temperature is undercut.

If **Yes** (retract), the shade is retracted after the end of the travel delay time (default)

If **Non** (do not move), the shade remains in the current position. When the rain or wind alarm is triggered, the shade will still be retracted (the alarm has priority over temperature block).

Timed opening:

Touch the field to select periods when the shade should be retracted. Enable one or more periods in the list.

If you want to change the periods, touch the tool icon.

 6.3.3. Set time switch period, Page 106


The shades are raised at the start of the timed opening but can still be closed manually. After the timed opening, the normal automatic shade controls are performed again.


Frost alarm:

Shows whether the shade is retracted if there is a frost alarm. Touch the field in order to switch the frost alarm on or off for this shade.

The frost alarm retracts the sun shade if the outdoor temperature is low and it is raining/snowing at the same time. This protects external shades from damage due to freezing and movement if the rails are frozen.

The conditions for triggering frost alarm (outdoor temperature, period) are set in the "General settings" menu.

 System > Set automatic > General settings > Frost alarm

 6.3.6. Adjust frost alarm, Page 108

If there is a frost alarm, manual operation of the shade is initially blocked. You can remove the manual block by hand however. To do this, select the corresponding shade in the Manual menu and hold down the button with the frost alarm icon for approx. 1 second. Manual operation is released again. The block will then be first active for this motor again when it is reactivated manually or the next time the frost alarm is triggered.

Note that the running rails of the shades or other mechanical parts may still be frozen, even if the outdoor temperature has climbed to quite high values.



ATTENTION

Property damage due to movement of frozen-solid shades!

Motor and curtain can be damaged if a frozen solid outside shade is moved.

- For sensitive curtains, set frost alarm range generously.
- Before switching off the frost alarm manually, ensure that the rails are not frozen.

Wind sensor:

Shows the delay for the wind sensor. Touch the field to select the sensor (if there are several wind sensors), and to set how long the wind limit value must be exceeded before the wind alarm is triggered.

Default setting: 5 s.

Wind alarm:

Shows the value, from which the wind alarm is triggered. Touch the field and set the wind speed.

Default setting: 6.0 m/s.

If the shade should not react to the wind (e.g. for indoor awnings, shutters), switch the wind alarm **OFF**.

The wind alarm protects sensitive curtains from wind damage by retracting the shades.

A wind alarm actuated for the motor will remain active for 5 minutes. In addition, a wind delay can be set for shades. After the end of the wind alarm, the automatic controls are switched off for the specified period. Manual operation is already possible again, however.

☐ System > Set automatic > General settings > Wind delay

📖 6.3.8. Set wind delay (shades), Page 109

Rain alarm:

Shows whether the rain alarm is switched on. Touch the field and switch the rain alarm on or off for this shade.

Default setting: No.

The rain alarm protects sensitive curtains from rain by retracting the shades.

The rain alarm can only be activated if the rain automatic is deactivated.

Automatic reset:

Shows which automatic resets apply to these shades. Touch the field in order to activate the daily automatic reset and/or reset after a manual operation.

The general Automatic Reset occurs daily at the same time. In addition, automatic mode can be reactivated a certain period after a manual operation. You can set the time or period for automatic resets.

❑ System > Set automatic > General settings > Automatic reset

📖 6.3.9. Specify automatic reset, Page 109

Manual switching:

Shows whether a position message is used by the motor to switch from automatic to manual, i.e. whether automatic mode is switched off by pressing a button if there is an external manual operation.

Default setting: No.

6.4.2. Set window automatic mode

❑ System > Set automatic mode > Windows

You can change the following automatic settings for windows:

- Indoor sensor is evaluated
- Indoor temperature
- Humidity
- CO₂ (only if receiving CO₂ values via the bus)
- VOC (only if receiving VOC values via the bus)
- Supply air temperature
- Number of steps
- Actuation position ventilation
- Night back cooling (with indoor temperature and actuation position)
- Timed ventilation (with actuation position)
- Movement limit and position
- Outdoor temperature
- Outside air VOC
- Timed closing
- Wind sensor which is evaluated and delay
- Wind ventilation with direction and position
- Wind alarm
- Rain alarm
- Gap ventilation (with position)
- Frost alarm
- Automatic reset
- Manual switching

If two contradictory automatic functions overlap, the automatic function further down the list has priority.

Rain alarm for automatically controlled windows:

If rain is entering, it may be some time before rain is detected by the sensors in the system, depending on the amount of rain and outside temperature. In addition, a closing time for electric windows or sliding roofs has to be included in the calculation. Moisture-sensitive objects should therefore not be placed in areas where they could be dam-

aged by entering precipitation. Please also bear in mind that in the event of a power failure and rainfall, a window will not be automatically closed if no emergency generator is installed.

Alarm functions

The alarm functions are applied to windows in manual mode and automatic mode.

All windows are closed if there is a **frost, wind or rain alarm** and cannot be extended manually. Gap ventilation during a rain alarm is an exception; in automatic mode it only restricts the window's range of motion.

Ventilation settings

The settings are only executed if a window is in automatic mode and none of the alarm functions named above is active.

Timed closing has the highest priority, followed by the **VOC value of the outside air** (keep closed and open), the **outdoor temperature lock** (keep closed), **timed ventilation** (open), **supply air temperature lock** (keep closed) and **night back cooling** (open).

This means that e.g. timed ventilation or night back cooling will only occur, when the exterior temperature lies over the pre-set value for the outdoor temperature block.

Automatic ventilation according to temperature or humidity of VOC/CO₂ is only performed if no block is active.

Set automatic mode

Sensor selection:

Shows the indoor sensor, which is evaluated for controlling the windows. Touch the field and select a sensor.

Default setting: No sensor.

If no sensor is selected, the indoor temperature and humidity are not taken into account for the controls of the window.

Indoor temperature:

Shows the indoor temperature from which ventilation is active. The setting is only active if an indoor sensor is selected. Touch the field to adjust the indoor temperature.

Select **OFF** if the window should not react to the indoor temperature (default).

Change to **ON** to set the desired temperature.

Default setting: 21.0°C.

The window is opened as soon as the temperature lies above the pre-set value. However, it is only closed again when the temperature sinks by more than 2.0 °C under the pre-set value (hysteresis).

Humidity:

Shows the humidity from which ventilation is active. The setting is only active if an indoor sensor is selected. Touch the field to adjust the humidity.

Select **OFF** if the window should not react to the humidity (default).

Change to **ON** to set the desired humidity.

Default setting: 80%.

The window is opened as soon as the air humidity lies above the pre-set value. However, it is only closed again when the humidity sinks by more than 3.0% under the pre-set value (hysteresis).

CO₂ (carbon dioxide):

Shows the CO₂ concentration from which ventilation is active. The setting is only active if an indoor sensor with CO₂ sensor is selected. Touch the field to adjust the CO₂ value.

Select **OFF** if the window should not react to CO₂ (default).

Switch to **ON** in order to set the CO₂ concentration range.

Default setting: Open above 1000 ppm, close below 700 ppm.

VOC (mixed gas):

Shows the VOC concentration from which ventilation is active. The setting is only active if an indoor sensor with VOC sensor is selected. Tap the field to adjust the VOC value.

Select **OFF** if the window should not react to VOC value of the indoor air (default).

Switch to **ON** in order to set the VOC concentration range.

Default setting: Open above 1000 ppm, close below 700 ppm.

Supply air temperature:

Shows whether the window is closed if the supply air temperature is greater than the room temperature (heat protection). Touch the field and switch the supply air temperature sensor on or off.

Default setting: No (off).

The supply air temperature-block becomes active as soon as the supply air temperature lies above the room temperature. The block is however only deactivated again when the supply air temperature sinks more than 3.0 °C below the room temperature (hysteresis).

Number of steps:

Shows the number of opening steps for the window. Touch the field in order to activate the **step windows** and set the number of steps.

Default setting: No step mode.

With step windows, in automatic mode the window first opens one step wide when the limit values are exceeded. Then the control center check every 3 minutes whether the set room temperature or humidity is still being exceeded and if necessary then moves up a step.



ATTENTION

Property damage due to use of step/sliding roof operation with unsuitable window motors!

Not all window motors are suitable for stage/step operation or sliding roof operation.

- Only use this function with motors that have been recommended for step/sliding roof operation by the manufacturer.

Actuation position ventilation:

Shows the actuation position in percent for automatic mode. Touch the field to set the position using a slider. 0% = closed , 100% = fully open.

Default setting: 100%.

Night back cooling:

Touch the field to set the times for night back cooling. The setting is only active if the general settings for night back cooling have already been applied.

☐ System > Set automatic > General settings > Night back cooling

6.3.5. Set night back cooling (ventilation), Page 107

Enable one or more periods in the list. If you want to change the periods, touch the tool icon.

6.3.3. Set time switch period, Page 106

Be careful that your timer settings do not prevent night back cooling operations!

NBC: Indoor temperature (night back cooling):

Shows the indoor temperature, to which room is cooled. Touch the field to set the indoor temperature, until which the window remains open during the night back cooling.

The setting will only be activated once a night back cooling temperature has been set.

Default setting: 20.0°C.


NBC: Actuation (night back cooling):

Shows the actuation position in percent during night back cooling. Touch the field to set the position using a slider (0% = closed, 100% = fully open). The setting will only be activated once a night back cooling temperature has been set.

Default setting: 30%.

Timed ventilation:

Touch the field to set the ventilation period. Enable one or more periods in the list. If you want to change the periods, touch the tool icon.

 6.3.3. Set time switch period, Page 106

The window is only opened if the set outdoor temperature is reached. At the end of the ventilation time, normal automatic ventilation takes place according to temperature and humidity.

Timed ventilation: Actuation position:

Shows the position to which the window opens if timed ventilation is active. The setting is only active if timed ventilation has been switched on. Touch the field and set the maximum open position (0% = closed, 100% = fully open).


Default setting: 100%.


The window can still be fully opened manually.

Colour restriction:

Shows whether the movement limit is switched on for lower outside temperatures for this window. Touch the field to change the setting.

The conditions for triggering the movement limit (outdoor temperature, period) are set in the "General settings" menu.

 System > Set automatic > General settings > Movement limit

 6.3.7. Set movement limit (windows), Page 109

Colour restriction: Position:

Shows the position to which the window opens if the movement limit is on. The setting is only active if movement limit range has been switched on. Touch the field and set the maximum open position (0% = closed, 100% = fully open).

Default setting: 50%.

The window can still be fully opened manually.

Outdoor temperature:

Shows the setting for the outside temperature block. Touch the field to adjust the block.

Select **OFF** if the window should depend on the outside temperature (default setting).

Change to **ON** to set the desired temperature.

Default setting: 1.0°C.

The block is lifted again only when the temperature rises more than 2.0 °C over the pre-set value (hysteresis).

The effect of the block is that the window remains in the current position. The outside temperature block can be used, for example, if the window should not be used for ventilation (cold protection for plants).

The outdoor temperature block only applies for automatic operation; no ventilation then takes place. When the rain or wind alarm is triggered, the window will be closed despite the outdoor temperature block (the alarm has priority over temperature block).

Manual operation remains possible, even if the window is locked because of a low outdoor temperature.

Outside air VOC:

Shows the VOC concentration of the outside air, from which the ventilation is prevented. The setting is only active if an outdoor sensor with VOC sensor is selected. Tap the field to adjust the VOC value.

Select **OFF** if the window should not react to VOC value of the outdoor air (default).


Switch to **ON** in order to set the VOC concentration range.

Default setting: Close above 800 ppm, unlock below 500 ppm.

Timed closing:

Touch the field to select periods when the window should be closed. Enable one or more periods in the list.

If you want to change the periods, touch the tool icon.

 6.3.3. Set time switch period, Page 106

Shut-off times prevent the windows, for example, from opening and closing at night, and thus causing noise. Note that night back cooling is not possible during the set period.

Wind sensor:

Shows the delay for the wind sensor. Touch the field to select the sensor (if there are several wind sensors), and to set how long the wind limit value must be exceeded before the wind alarm is triggered.

Default setting: 5 s.

Wind ventilation:

Shows whether the window remains ajar when it is windy. This setting is only active when the wind alarm has been switched on. Touch the field in order to switch gap opening on or off if there is a wind alarm.

With gap opening, the window can still be opened slightly despite a wind alarm.

Wind ventilation: Direction:

Shows the wind direction, for when wind ventilation opens. The setting is only active if wind ventilation has been switched on. Tap the field and set the direction, from which the wind is coming.

Default setting: 0° to 360°.

Wind ventilation: Position:

Shows the position to which the window opens for wind ventilation. The setting is only active if wind ventilation has been switched on. Touch the field and set the open position (0% = closed, 100% = fully open).

Default setting: 15%.

Wind alarm:

Shows the value, from which the wind alarm is triggered. Touch the field and set the wind speed.

Default setting: 8.0 m/s.

If the window should not react to wind, switch the wind alarm **OFF**.

The wind alarm protects the system and equipment from damage by closing the window. Manually opened windows are also closed if there is a wind alarm.

A wind alarm actuated for the motor will remain active for 5 minutes. If the saved value is exceeded in these 5 minutes, the stoppage time will be restarted.

Rain alarm:

Shows whether the rain alarm is switched on. Touch the field and switch the rain alarm on or off for this window.

Default setting: No.

The rain alarm provides protection from humidity damage by closing the window. Manually opened windows are also closed if there is a rain alarm.



ATTENTION

Damage from entering rain!

Depending on the amount of rain and the temperature, some time may pass until

a sensor detects rain.

- Do not place items that are sensitive to humidity near automatic windows.
- Calculate movement time for closing the window.

Rain alarm: Gap ventilation:

Shows whether the window remains ajar when it is raining. This setting is only active when the rain alarm has been switched on. Touch the field in order to switch off gap opening if there is a rain alarm.

When gap opening, the window can still be opened slightly despite a rain alarm.

Rain alarm: Position:

Shows the position to which the window opens for gap ventilation. The setting is only active if gap ventilation has been switched on. Touch the field and set the open position

(0% = closed, 100% = fully open).


Default setting: 5%.


Frost alarm:

Shows whether the window is closed if there is a frost alarm. Touch the field in order to switch the frost alarm on or off for this window.

The frost alarm closes the window if the outdoor temperature is low and it is raining/snowing at the same time. This prevents damage from ice (e.g. at the seal).

The conditions for triggering frost alarm (outdoor temperature, period) are set in the "General settings" menu.

 System > Set automatic > General settings > Frost alarm

 6.3.6. Adjust frost alarm, Page 108


If there is a frost alarm, there is no timed ventilation or night back cooling.


If there is a frost alarm, manual operation of the window is initially blocked. You can remove the manual block by hand however. To do this, select the corresponding window in the Manual menu and hold down the button with the frost alarm icon for approx. 1 second. Manual operation is released again. The block will then be first active for this motor again when it is reactivated manually or the next time the frost alarm is triggered.

Automatic reset:

Shows which automatic resets apply to this window. Touch the field in order to activate the daily automatic reset and/or reset after a manual operation.

The general Automatic Reset occurs daily at the same time. In addition, automatic mode can be reactivated a certain period after a manual operation. You can set the time or period for automatic resets.

 System > Set automatic > General settings > Automatic reset


 6.3.9. Specify automatic reset, Page 109

Manual switching:

Shows whether a position message is used by the motor to switch from automatic to manual, i.e. whether automatic mode is switched off by pressing a button if there is an external manual operation.

Default setting: No.

6.4.3. Set automatic ventilation

 System > Set-up automatic > Ventilation

You can change the following automatic settings for roof ventilation and supply air units:

- Indoor sensor evaluated for the fan
- Indoor temperature

- Humidity
- CO₂ (only if receiving CO₂ values via the bus)
- VOC (only if receiving VOC values via the bus)
- Ventilation intensity
- Night back cooling (and indoor temperature and intensity for night back cooling) or night mode
- Incoming air temperature (only for supply air units)
- Timed ventilation (with intensity for timed ventilation)
- Outdoor temperature
- Outside air VOC
- Timed closing
- Automatic reset
- Manual switching

If two contradictory automatic functions overlap, the automatic function further down the list has priority.

Alarm functions

If there is a **fire alarm** from a smoke detector, ventilation is activated and cannot be influenced either by the automatic controls or manually.

Ventilation settings

Ventilation according to **temperature, humidity and CO₂** is checked every second. For exhaust units, the power is increased as the values above the setpoint increase. However, the power is not reduced until the new required ventilation intensity is 20% lower than the current intensity (delay/hysteresis). The set minimum and maximum ventilation intensity is maintained.

For supply air units, the ventilation flap is opened as soon as one of the values is above setpoint. However, it is not closed again until the new required ventilation intensity is 20% lower than the current intensity (delay/hysteresis).

Set automatic mode

Sensor selection:

Shows the indoor sensor, which is evaluated for the controls. Touch the field and select a sensor.

Default setting: No sensor.

If no sensor is selected, the indoor temperature and humidity are not taken into account for the controls.

Indoor temperature (ventilation):

Shows the indoor temperature from which ventilation is active. The setting is only active if an indoor sensor is selected. Touch the field to adjust the indoor temperature.

Select **OFF** if the ventilation should not depend on the indoor temperature.

Change to **ON** to set the desired temperature. The ventilation starts as soon as the temperature exceeds the set value. The ventilation is stopped if the temperature sinks by more than 2.0°C below the pre-set value (hysteresis).

Humidity:

Shows the humidity from which ventilation is active. The setting is only active if an indoor sensor is selected. Touch the field to adjust the humidity.

Select **OFF** if the ventilation should not depend on the humidity.

Change to **ON** to set the desired humidity. The ventilation starts as soon as the humidity exceeds the set value. The ventilation is stopped if the humidity sinks by more than 3.0% under the pre-set value (hysteresis).

CO₂ (carbon dioxide):

Shows the CO₂ concentration from which ventilation is active. The setting is only active if an indoor sensor with CO₂ sensor is selected. Touch the field to adjust the CO₂ value.

Select **OFF** if the ventilation should be on irrespective of the CO₂ concentration.

Switch to **ON** in order to set the CO₂ concentration range. At the start value, ventilation begins at the smallest preset speed. The speed increases to the second value (maximum speed).

Default setting: Start above 1000 ppm, end below 700 ppm.

VOC (mixed gas):

Shows the VOC concentration from which ventilation is active. The setting is only active if an indoor sensor with VOC sensor is selected. Tap the field to adjust the VOC value.

Select **OFF** if the window should not react to VOC value of the indoor air (default).

Switch to **ON** in order to set the VOC concentration range.

Default setting: Open above 1000 ppm, close below 700 ppm.

Ventilation intensity:

Shows the minimum and maximum ventilation intensity. The ventilation intensity depends on the difference between current value and setpoint and the following factors: Temperature, relative humidity and CO₂/VOC content. If the minimum ventilation intensity is set to 20%, for example, but the difference between the actual value and setpoint is very low and only requires 10% ventilation, the ventilation jumps automatically to the minimum ventilation intensity set here (20%). Corresponding to the maximum ventilation intensity.

Default setting: Start ventilation at 10% and increase to maximum of 80%.

Exhaust intensity (exhaust units):

For exhaust units, shows the speed range for automatic exhaust air. Touch the field and set the start and maximum values.


The higher the indoor temperature, humidity (and CO₂) above the set values, the faster the fan.

Ventilation intensity heating (fan heaters):

For fan heaters, shows the speed range for automatic heating. Touch the field and set the intensity.


Night back cooling:

Touch the field to set the times for night back cooling. The setting is only active if the general settings for night back cooling have already been applied.

 System > Set automatic > General settings > Night back cooling

 6.3.5. Set night back cooling (ventilation), Page 107

Enable one or more periods in the list. If you want to change the periods, touch the tool icon.

 6.3.3. Set time switch period, Page 106

Be careful that your timer settings do not prevent night back cooling operations! The set supply air temperature lock cannot prevent night back cooling either.

NBC: Indoor temperature (night back cooling):

Shows the indoor temperature, to which room is cooled. Touch the field to set the indoor temperature, until which the ventilation is active during the night back cooling. The setting will only be activated once a night back cooling temperature has been set. Default setting: 20.0°C.

NBC: Intensity (night back cooling):

For exhaust air units, shows the speed during night back cooling. Touch the field to adjust the strength using a slider. The setting will only be activated once a night back cooling temperature has been set.

Default setting: 30%.

Supply air temperature (supply air device):

Shows whether a supply air unit is closed if the incoming air temperature is greater than the room temperature (heat protection). Touch the field and switch the supply air temperature sensor on or off.

Default setting: No (off).


The supply air temperature-block becomes active as soon as the supply air temperature lies above the room temperature. The block is however only deactivated again

when the supply air temperature sinks more than 3.0 °C below the room temperature (hysteresis).

For devices from other manufacturers, the outside temperature at the weather station is used as the value for the supply air temperature.

Timed ventilation:

Touch the field to set the ventilation period. Enable one or more periods in the list. If you want to change the periods, touch the tool icon.

 6.3.3. Set time switch period, Page 106

The supply air flaps are only opened if the set outdoor temperature is reached. At the end of the ventilation time, normal automatic ventilation takes place according to temperature and humidity.

Timed ventilation: Intensity (exhaust units):

For exhaust units, shows the speed at which the time-controlled ventilation is performed. The setting will only be activated once a ventilation time has been set. Touch the field and adjust the intensity.

Default setting: 30%.

Outdoor temperature (supply air units):

For exhaust units, shows whether the winter switching is active. Tap the field to set the outdoor temperature from which the ventilation unit should remain closed (winter switching).

Default setting: OFF or 1.0°C.

Outside air VOC:

Shows the VOC concentration of the outside air, from which the ventilation is off. The setting is only active if an outdoor sensor with VOC sensor is selected. Tap the field to adjust the VOC value.

Select **OFF** if the window should not react to VOC value of the outdoor air (default).


Switch to **ON** in order to set the VOC concentration range.

Default setting: Close above 800 ppm, unlock below 10 ppm.

Timed closing:

Touch the field to select periods when the ventilation should be closed. Enable one or more periods in the list.

If you want to change the periods, touch the tool icon.


 6.3.3. Set time switch period, Page 106

Automatic reset:

Shows which automatic resets apply to this ventilation. Touch the field in order to activate the daily automatic reset and/or reset after a manual operation.

The general Automatic Reset occurs daily at the same time. In addition, automatic mode can be reactivated a certain period after a manual operation. You can set the time or period for automatic resets.

☐ System > Set automatic > General settings > Automatic reset

 6.3.9. Specify automatic reset, Page 109

Manual switching:

Shows whether a position message is used by the motor to switch from automatic to manual, i.e. whether automatic mode is switched off by pressing a button if there is an external manual operation.

Default setting: No.

6.4.4. Set temperature regulator


☐ System > Set-up automatic > Temperature regulator

You can change the following automatic settings for heating or cooling/air-conditioning:

- Time switch mode
- Automatic reset
- Manual switching

Time switch mode:

Tap the field to set the times, from which the temperature mode (Comfort, Standby, Eco) changes and set the accompanying priority ("Prio 2" for switching in everyday mode and "Prio 1" for central switching with higher priority). Enable one or more times in the list. If you want to change the periods, touch the tool icon.

 6.3.4. Set time switch event, Page 107

Automatic reset:

Shows which automatic resets apply to this heating. Touch the field in order to activate the daily automatic reset and/or reset after a manual operation.

The general Automatic Reset occurs daily at the same time. In addition, automatic mode can be reactivated a certain period after a manual operation. You can set the time or period for automatic resets.

☐ System > Set automatic > General settings > Automatic reset

 6.3.9. Specify automatic reset, Page 109

Manual switching:

Shows whether feedback from the channel is used to switch from automatic to manual, i.e. whether automatic mode is switched off by pressing a button if there is an external

manual operation.

Default setting: No.

6.4.5. Set light automatic mode

☐ System > Set-up automatic > Light


For lights, you can change the following automatic settings (depending on light and ETS setting):

- Timed switching
- Twilight switching
- Dimming value for on and off
- RGB value for on and off
- RGBW value for on and off
- HCL controls (biodynamic light control)
- Automatic reset
- Manual switching

If there is a smoke alarm, all lights are switched on.

Timed switching:

Touch the field to set the lighting periods. Enable one or more periods in the list. If you want to change the periods, touch the tool icon.

 6.3.3. Set time switch period, Page 106

As soon as you additionally activate the twilight setting, the light will only be turned on at twilight in the selected time periods.

Twilight:

Shows whether the light is switched on at twilight/night. Touch the field and switch the function on or off.

If the twilight setting is active, the light is only turned on at twilight in the time periods selected above.

The limit value, from which twilight/night is detected, can be adjusted.

☐ System > Set automatic > General settings > Twilight

 6.3.1. Adjust twilight value, Page 105

Dimmer value ON:

Shows the brightness of the lamp if it is switched on. Touch the field and adjust the brightness of the lamp.

Default setting: 50%.

Dimmer value OFF:

Shows the brightness of the lamp if it is switched off. Touch the field and adjust the brightness of the lamp.

Default setting: 0%.

RGB value ON:

Shows the RGB value of the lamp if it is switched on. Tap the field and adjust the RGB value of the light by setting the individual colour proportions (red, green and blue).

Default setting: Red: 0%, Green: 0%, Blue: 0%.

RGB value OFF:

Shows the RGB value of the lamp if it is switched off. Tap the field and adjust the RGB value of the light by setting the individual colour proportions (red, green and blue).

Default setting: Red: 0%, Green: 0%, Blue: 0%.

RGBW value ON:

Shows the RGBW value of the lamp if it is switched on. Tap the field and adjust the RGBW value of the light by setting the individual colour proportions (red, green, blue and white proportion).

Default setting: Red: 0%, Green: 0%, Blue: 0%, white proportion: 0%.

RGBW value OFF:

Shows the RGBW value of the lamp if it is switched off. Tap the field and adjust the RGBW value of the light by setting the individual colour proportions (red, green, blue and white proportion).

Default setting: Red: 0%, Green: 0%, Blue: 0%, white proportion: 0%.

HCL controls:

Shows up to 8 sub-sequences (periods) of HCL controls. Tap the respective sub-sequence and enter the start and end time of the sub-sequence and the end of the brightness and the colour temperature. The control center calculate the linear progress of the values between the start and end value.

The aim of the HCL controls is to imitate the natural change of the sunlight over the course of the day through a general adjustment of the light temperature and brightness of the artificial light. This is supposed support the rhythm of a day for people, which is why is this type of light control is called "Human Centric Lighting" (HCL).

Automatic reset:

Shows which automatic resets apply to these lights. Touch the field in order to activate the daily automatic reset and/or reset after a manual operation.

The general Automatic Reset occurs daily at the same time. In addition, automatic mode can be reactivated a certain period after a manual operation. You can set the time or period for automatic resets.

☐ System > Set automatic > General settings > Automatic reset

📖 6.3.9. Specify automatic reset, Page 109

Manual switching:

Shows whether feedback from the channel is used to switch from automatic to manual, i.e. whether automatic mode is switched off by pressing a button if there is an external manual operation.

Default setting: No.

7. Tables, maintenance

7.1. Maintenance and care



WARNING!

Risk of injury from automatically moving components!

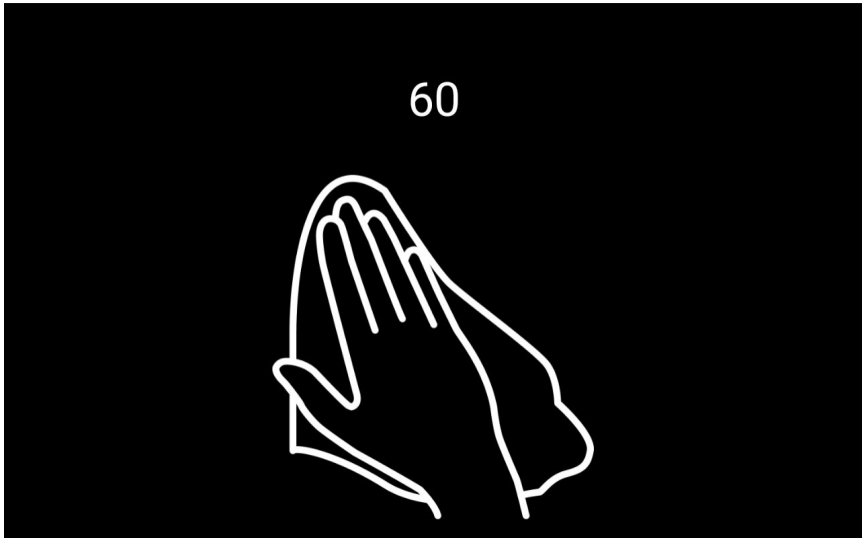
System parts may start automatically as a result of the automatic controls and can put people in danger.

- Always disconnect the system from the mains power before maintenance or cleaning.

Abrasive / detergent cleaning agents and aggressive care products must not be used for cleaning. Remove fingerprints from the touchscreen ideally using a wet cloth or a microfibre cloth. Use the cleaning mode for this. This function locks the touch display for 60 seconds and thus prevents functions from being triggered or adjusted unintentionally during cleaning.

☐ System > System settings > Service > Cleaning mode

📖 Cleaning mode, Page 95



If there is a power outage, the data entered by you is saved for approx. 10 years. A battery is not required for this. The clock has to be reset after mains power has been restored. This is done automatically if a time signal is received.

7.2. Units for sun and wind

The display of sun intensity is in lux or kilolux and is shortened in the display to lx or klx. The value 1 is reached even with overcast skies, 20 klx if the sun has just come out

again and 100 klx is reached when there are cloudless skies at noon. Experience indicates that extending shades above 40 klx is to be recommended.

The display of wind speed is in meters per second and is shortened in the display to m/s. Depending on the position of the building and the installation position of the weather station, different values may be optimal in order to protect the shade or window. Observe the response of the awning or blinds or the window to wind and then correct the wind value accordingly.

The following table should make it easier to find the optimal values for your situation:

Description	m/s	km/h	Beaufort	Knots
Calm	< 0.3	< 1	0	< 1
Light air	0.3-1.5	1-5	1	1-3
Light breeze	1.6-3.3	6-11	2	4-6
Gentle breeze	3.4-5.4	12-19	3	7-10
Moderate breeze	5.5-7.9	20-28	4	11-16
Fresh breeze	8.0-10.7	29-38	5	17-21
Strong breeze	10.8-13.8	39-49	6	22-27
Moderate gale	13.9-17.1	50-61	7	28-33
Fresh gale	17.2-20.7	62-74	8	34-40
Strong gale	20.8-24.4	75-88	9	41-47
Whole gale	24.5-28.4	89-102	10	48-55
Storm	28.5-32.6	103-117	11	56-63
Hurricane	> 32,6	> 117	12	> 63

7.3. Disposal

After use, the device must be disposed of in accordance with the legal regulations. Do not dispose of it with the household waste!

7.4. Alarm and error messages

Messages about an active alarm are displayed by the corresponding, red icons on the manual page of the relevant motor or device, for example if there is a wind alarm or rain alarm.

📖 2.3.1. The manual menu > Info icons, Page 23

In addition, various alarms and error messages are shown on the start page:

Network error



If the LAN/Ethernet network connection is interrupted, a crossed-out network cable icon is displayed in the top right of the start page.

Check the function of the router and the network cable.

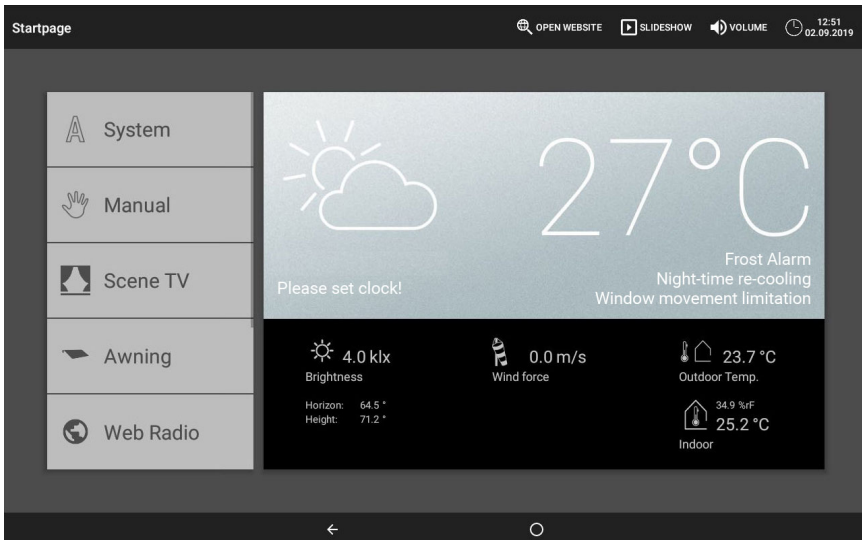


If the network connection via WLAN is interrupted, a crossed-out radio symbol icon is displayed in the top right corner of the start page.

Check the function of the wireless router.

Alarm display in the weather data area

In the weather data area, the following alarm messages can be displayed as soon as an alarm is active.



Please set time!

is displayed during commissioning or following a restart of the control center. As soon as the weather station receives a time signal, this display disappears. If nothing is received, please set the clock manually.

System > Automatic settings > General settings > Time and date

Enter time and date manually, Page 92

Frost alarm

is displayed while the frost alarm is active (precipitation at low outside temperatures).

6.3.6. Adjust frost alarm, Page 108

Night back cooling

is displayed while night back cooling is active.

📖 6.3.5. Set night back cooling (ventilation), Page 107

Window movement limit

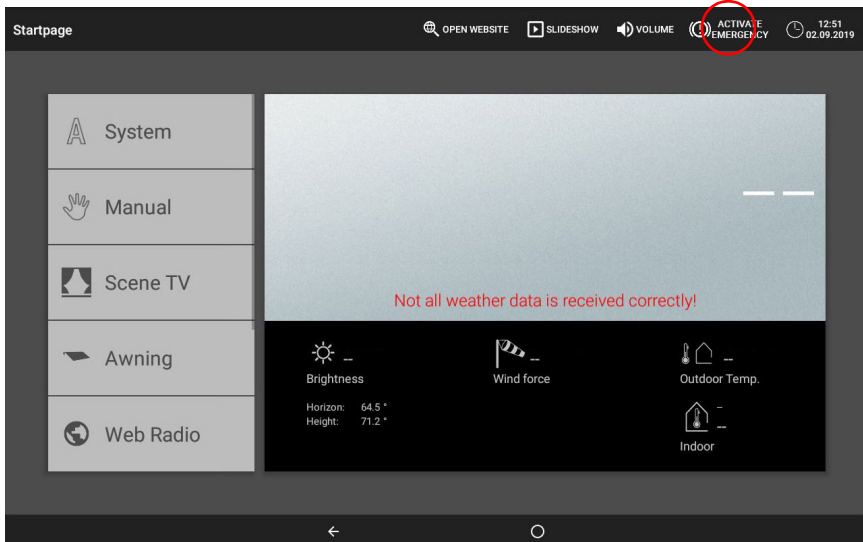
is displayed while the window movement limit is active (low outside temperature over a longer period).

📖 6.3.7. Set movement limit (windows), Page 109

Not all the weather data is received correctly

If a weather sensor is not connected via the KNX bus or if the weather sensor is defective, the wind, rain and frost alarms are activated as a precaution.

For motors and devices without a wind, rain or frost alarm, manual operation in the menu **Manual** remains possible. Motors that react to wind, rain or frost alarms move to the safe position.



However, so that motors can still be operated manually, activate the emergency mode via the key in the top right of the display. You can deactivate the emergency mode again with the same key.



ATTENTION!

Damage from wind, rain or frost.

In emergency mode, all safety functions are disabled.

- Only use emergency mode briefly in order to position drives manually and then switch it off again.
- Emergency mode also remains active if weather data is received again. Switch it off again manually!

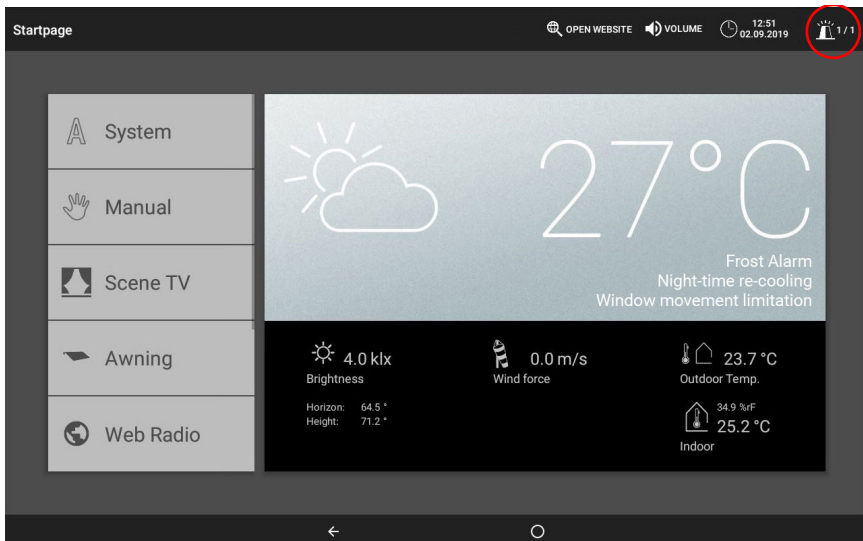
No connection to KNX bus

shows a malfunction or defect in the KNX interface. No communication with the bus takes place. Check the KNX connection.

Alarm

The icon at the top right shows that an alarm has been triggered. The first number behind it counts the number of alarm messages not acknowledged, the second number shows the total number of alarm messages. Alarm messages with the setting "Retain alarm" also continue to be displayed, even if the message has been reset by the KNX bus. The alarm message is only hidden after the alarm has been acknowledged.

📖 Alarm message A/B (only for alarm message);, Page 80



7.5. Safety module settings

Alarm messages can be assigned to different categories in the safety module, resulting in different responses being triggered. The following table shows the possible allocations of the alarm messages if an alarm is triggered AND the live switching conditions exist.

Use in the Safety module	Response
Do not use	Alarm message is not used in the safety module, but can trigger set responses
as intruder alarm outer skin	for internal and external live switching, an intruder alarm is triggered
as intruder alarm Indoor skin	for external live switching, an intruder alarm is triggered
as vandalism alarm	a vandalism alarm is triggered irrespective of live switching status
as closure alarm	live switching is prevented until the cause of the closure alarm has been corrected
as malfunction alarm	a malfunction is reported and live switching is prevented until the cause has been corrected, irrespective of the live switching status
as attack alarm	an attack vandalism alarm is triggered irrespective of live switching status
as technical alarm (group 1/2)	a technical alarm is triggered irrespective of the live switching status (e.g. fire alarm, leak alarm)

7.6. Personal settings data of automatic mode

Awnings, blinds, shutters:

	Output						
Name							
	Function						
	Light intensity (kLux)						
	Sun direction						
	Sun height						
	Actuation position						
	Slat position						

Slat position for Sun height	0°-15°						
	15°-30°						
	30°-45°						
	45°-90°						
Indoor sensor							
Indoor temperature (°C)							
Night closing?							
Rain automatic							
Time closing (period)							
Actuation position timer							
Outdoor temperature (°C)							
Behaviour?							
Timed opening?							
Frost alarm?							
Wind sensor							
Wind alarm in (m/s), time overrun							
Rain alarm?							
Automatic reset?							
Manual switching?							

Movement delay extend (min)	
Movement delay retract (min)	
Twilight value (lux)	

Window:

Output							
Name							
Normal, sliding window or step window?							
Indoor sensor							
Indoor temperature (°C)							
Humidity (%)							
CO2/VOC (ppm)							
Supply air temperature							

Output						
Name						
Actuation position/number of steps						
Night back cooling (Period, temp, position)						
Timed ventilation (period)						
Movement restriction						
to position						
Outdoor temperature (°C)						
Time closing (period)						
Wind sensor						
Wind ventilation						
Wind ventilation direction						
Wind ventilation position						
Wind alarm in (m/s), time overrun						
Rain alarm?						
Gap ventilation in rain? Position						
Frost alarm?						
Automatic reset?						
Manual switching?						

Ventilation units:

Output						
Name						
Indoor sensor						
Indoor temperature (°C)						
Humidity (%)						
CO2/VOC (ppm)						
Ventilation intensity						
Night back cooling fan (Period, temperature, intensity)						
Supply air temperature						

Output						
Name						
Timed ventilation (Period, intensity)						
Outdoor temperature (°C)						
Timed closing						
Automatic reset?						
Manual switching?						

Ventilation lock through air-conditioning (min)	
--	--

Temperature regulator:

Output						
Name						
Timed closing mode						
Automatic reset?						
Manual switching?						

Light:

Output						
Name						
Time switch (period)						
Twilight switching						
On for alarm?						
Dimmer value on						
Dimmer value off						
RGB value on						
RGB value off						
RGBW value on						
RGBW value off						
HCL controls						
Automatic reset?						
Reset following manual operation?						

General settings:

Twilight value (Lux)	
Extension delay shades (min)	
Retraction delay shades (min)	
ventilation lock after cooling (min)	
Night back cooling: Temperature (°C), for longer than (min)	
Frost alarm: Outdoor temperature (°C), readiness (h)	
Window movement limit (°C)	
Wind delay shade automatic (min)	
Time point for General Automatic Reset	
Automatic reset following a manual intervention (min)	

Periods of the time switch:

	Name	from	to
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			

	Name	from	to
15			
16			

Events of the time switch:

	Name	Time
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29		

	Name	Time
30		
31		
32		

Questions about the product?

You can reach the technical service of Elsner Elektronik under
Tel. +49 (0) 70 33 / 30 945-250 or
service@elsner-elektronik.de

We need the following information to process your service request:

- Type of appliance (model name or item number)
- Description of the problem
- Serial number or software version
- Source of supply (dealer/installer who bought the device from Elsner Elektronik)

For questions about KNX functions:

- Version of the device application
- ETS version used for the project

elsner

Elsner Elektronik GmbH Control and Automation Engineering

Sohlengrund 16
75395 Ostelsheim
Germany

Phone +49 (0) 70 33 / 30 945-0 info@elsner-elektronik.de
Fax +49 (0) 70 33 / 30 945-20 www.elsner-elektronik.de
