Product manual | **11.07.2025**

Busch-free@home®

BI-M-xx.230.1.11
Binary input, xgang, 10-230 V AC/DC, MDRC
BI-M-xx.20.1.11
Binary input, xgang, contact scanning, MDRC

BUSCH-JAEGER

1 Notes on the instruction manual

Please read through this manual carefully and observe the information it contains. This will assist you in preventing injuries and damage to property and ensure both reliable operation and a long service life for the device.

Please keep this manual in a safe place.

If you pass the device on, also include this manual along with it.

Busch-Jaeger accepts no liability for any failure to observe the instructions in this manual.

If you require additional information or have questions about the device, please contact Busch-Jaeger or visit our Internet site at:

www.BUSCH-JAEGER.de

2 Safety

The device has been constructed according to the latest valid regulations governing technology and is operationally reliable. It has been tested and left the factory in a technically safe and reliable state.

However, residual hazards remain. Read and adhere to the safety instructions to prevent hazards of this kind.

Busch-Jaeger accepts no liability for any failure to observe the safety instructions.

2.1 Information and symbols used

The following Instructions point to particular hazards involved in the use of the device or provide practical instructions:

Danger

Risk of death / serious damage to health

– The respective warning symbol in connection with the signal word "Danger" indicates an imminently threatening danger which leads to death or serious (irreversible) injuries.

Warning

Serious damage to health

– The respective warning symbol in connection with the signal word "Warning" indicates a threatening danger which can lead to death or serious (irreversible) injuries.

Caution

Damage to health

– The respective warning symbol in connection with the signal word "Caution" indicates a danger which can lead to minor (reversible) injuries.

Attention

Damage to property

– This symbol in connection with the signal word "Attention" indicates a situation which could cause damage to the product itself or to objects in its surroundings.

NOTE

This symbol in connection with the word "Note" indicates useful tips and recommendations for the efficient handling of the product.

This symbol alerts to electric voltage.

2.2 Intended use

The device must only be operated within the specified technical data.

The binary inputs serve as interface for operating Busch-free@home® systems via conventional push-buttons or for coupling technical binary signals.

The device is a modular DIN-Rail component (MDRC) for installing on the mounting rail.

The integrated bus coupler makes possible the connection to the free@home Bus bus.

2.3 Improper use

Each use not listed in Chapter 2.2 “Intended use“ on page 5 is deemed improper use and can lead to personal injury and damage to property.

Busch-Jaeger is not liable for damages caused by use deemed contrary to the intended use of the device. The associated risk is borne exclusively by the user/operator.

The device is not intended for the following:

- Unauthorized structural changes
- Repairs
- The use in bathroom areas
- Insert with an additional bus coupler

2.4 Target group / Qualifications of personnel

Installation, commissioning and maintenance of the device must only be carried out by trained and properly qualified electrical installers.

The electrical installer must have read and understood the manual and follow the instructions provided.

The electrical installer must adhere to the valid national regulations in his/her country governing the installation, functional test, repair and maintenance of electrical products.

The electrical installer must be familiar with and correctly apply the "five safety rules" (DIN VDE 0105, EN 50110):

1. Disconnect
2. Secure against being re-connected
3. Ensure there is no voltage
4. Connect to earth and short-circuit
5. Cover or barricade adjacent live parts

2.5 Safety instructions

Danger - Electric voltage!

Electric voltage! Risk of death and fire due to electric voltage of 100 … 240 V.

Dangerous currents flow through the body when coming into direct or indirect contact with live components. This can result in electric shock, burns or even death.

- Work on the 100 … 240 V supply system may only be performed by authorised and qualified electricians.
- Disconnect the mains power supply before installation or dismantling.
- Never use the device with damaged connecting cables.
- Do not open covers firmly bolted to the housing of the device.
- Use the device only in a technically faultless state.
- Do not make changes to or perform repairs on the device, on its components or its accessories.

2.6 Environment

Consider the protection of the environment!

Used electric and electronic devices must not be disposed of with domestic waste.

– The device contains valuable raw materials which can be recycled. Therefore, dispose of the device at the appropriate collecting depot.

All packaging materials and devices bear the markings and test seals for proper disposal. Always dispose of the packaging material and electric devices and their components via the authorized collecting depots and disposal companies.

The products meet the legal requirements, in particular the laws governing electronic and electrical devices and the REACH ordinance.

(EU Directive 2012/19/EU WEEE and 2011/65/EU RoHS)

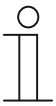
(EU REACH ordinance and law for the implementation of the ordinance (EC) No.1907/2006).

3 Setup and function

The devices are binary inputs for installing on the mounting rail. The devices have four or ten channels and serve as interface for the convenient operation of Busch-free@home® systems via conventional push-buttons or for reading out technical binary signals.

- Four or ten binary inputs in the one device
- Detection of technical signals
  - BI-M-xx.20.1.11: Floating binary signals
  - BI-M-xx.230.1.11: 10 ... 230 V signals (AC/DC)

The devices are supplied with power via the bus and require no additional power supply.



Notice
Basic information about system integration is contained in the system manual. It is available for downloading at www.busch-jaeger.de/en/smarter-home/systems/abb-freehome.

3.1 Scope of supply

The scope of supply contains the binary input including bus terminal for coupling to the free@home Bus.

3.2 Overview of types

Article number	Product name	Sensor channels
BI-M-4.20.1.11	Binary input 4gang, contact scanning, MDRC	4
BI-M-10.20.1.11	Binary input 10gang, contact scanning, MDRC	10
BI-M-4.230.1.11	Binary input, 4gang, 10-230 V AC/DC, MDRC	4
BI-M-10.230.1.11	Binary input, 10gang, 10-230 V AC/DC, MDRC	10

Table:1 Overview of types

3.3 Functions

3.3.1 Function overview

The following table provides an overview of the possible functions of the device.

Icon of the user interface	Information
	**Name:** Control element (rocker) Control element for the control of Busch-free@home® functions. Every sensor function can be selected, for example a blind sensor, dimming sensor.
	**Name:** Movement detector Sensor for movement- and brightness-dependent control of Busch-free@home® functions
	**Name:** Window contact Signals an open window (Application: Automatic deactivation of the heating when the window is open)
	**Name:** Frost alarm Triggers a frost alarm (Application: Automatic retraction of the blinds, and roller blinds or awnings)
	**Name:** Rain alarm For detecting a rain alarm (Application: Automatic retraction of the blinds or roller blinds or awnings)
	**Name:** Wind alarm For detecting a wind alarm (Application: Automatic retraction of the blinds or roller blinds or awnings)
	**Name:** Heating/Cooling changeover Is used for the switchover of heating/cooling in two-pipe heating/cooling systems
	**Name:** Detection of flooding Triggers a flooding alarm (Application: Sending a notification, blocking the water supply with a solenoid valve via an actuator)

Table:2 Function overview

3.3.2 Description of functions

Control element (rocker)

The function rocker is to be used if push-buttons are connected to the binary input. Whether a push-button or a rocker is used, must be set under “Devices, scenes & groups” in the System Access Point. There the respective binary input is to be selected, to then couple two channels under “Settings - channel selection” for the connection of a rocker.

Notice
Channels can only be coupled as long as they have not been allocated to other Busch-free@home® devices.

Switching of (light) electric circuits

If the rocker function is used in combination with a switch actuator, for switching a lamp, for example, the function "Control element" is to be selected. The rocker connected to channel A (binary input) activates the channel allocated to the switch actuator, and the rocker connected to channel B (binary input) deactivates the channel allocated to the switch actuator.

This equally applies to channel coupling A+B, C+D, E+F, G+H and I+J.

Switching and dimming of lamps

If a single or double push-button connected to a binary input is to be used together with a dimmer to dim a lamp, the "Dimming sensor" function is to be selected for the binary input.

– Single push-button

  Dimming brighter or darker is carried out with an alternating long press of the push-button rocker. A brief press switches the lamp on or off.

– Double push-button

  The long press of the rockers connected to channels A and C (coupling A+B and C+D) causes the light to become brighter. A brief press is used to switch the lamp on. Dimming darker is made with a long press of the rockers connected to channels B and D. A brief press of these rockers is used to switch the lamp off.

  This equally applies to channel coupling A+B, C+D, E+F, G+H and I+J.

Operating blinds

The operation of blinds can be carried out via single or double push-buttons.

– Single push-button

  A long button press leads alternately to upward or downward movement of the blind, the roller blind or the awning. A brief press of the push-button during a movement leads to a stop. After a movement has been stopped, further brief presses of the push-button cause the slats to be adjusted opposite to the direction of the previous movement.

– Double push-button

  A long press of the rockers connected to channels A and C (coupling A+B and C+D) causes the blinds to move up and a brief press to a stop and the upward movement of the slats. The downward movement or adjustment of the slats in a downward direction is carried out analogous with the rockers connected to channels B and D.

  This equally applies to channel coupling A+B, C+D, E+F, G+H and I+J.

Switch operation with switch-off delay

If a push-button connected to a binary input is to be used for switching staircase lighting, the "Staircase lighting sensor" function is to be selected. In the configuration of the associated switch actuator (to which the lamps of the staircase are connected), the "Switch-off delay" can be configured. The switch-off delay indicates how long a channel of the switch actuator remains in the ON state after being switch on. If the staircase lighting has already been switched on by the press of a push-button, the switch-off delay can be extended (retriggered) by a renewed press of the push-button.

If several switching channels are to be activated via the binary output, the respective channels of the binary input (to which the staircase push-buttons are connected) are to be linked with the channels of the switch actuator (to which the staircase lamps are connected). Each channel of a switch actuator can be programmed with its own switch-off delay.

Force-position sensor On/Off

If several binary inputs are connected to a channel of a switch actuator, this channel can initially be operated from all binary inputs. After configuring a channel of the linked binary input with the function "Force-position sensor ON/OFF", the sensor force-position for the channel of the switch actuator can be activated or deactivated with a press of the push-button of the rocker connected to this channel. After the activation the operation of the affected switch actuator channel is blocked by all other devices. In the parameter settings of the binary input the forced behaviour can be configured, and it can be specified whether the channel of the switch actuator concerned is to be switched on (Force-position ON) or off (Force-position OFF).

Blind force-position

This function makes possible a forced behaviour of blinds via the blind actuator. The forced behaviour can be configured in the parameter setting of the binary input: The associated blinds (and roller blinds or awnings) can be moved to the top end position (Force-position top) or to the bottom end position (Force-position bottom).

Movement detector

This function is to be selected if a movement detector is connected to the binary input for light control. If the binary input is connected with a switch actuator, the duration of the light of the lamps connected to the switch actuator can be set via parameter "Switch-off delay" in the parameter settings of menu "Allocation" of the System Access Point. The duration of the light extends again automatically by the switch-off delay if persons continue to be detected by the movement detector.

Window contact

The window contact function is to be selected if a window contact is connected to the binary input. If the associated channel of the binary input is connected with the room temperature controller, the room temperature controller switches to "Frost protection" mode when an open window is detected and reduces the set-point temperature for the respective room by 7°C, to prevent unnecessary loss of energy.

Frost alarm, rain alarm and wind alarm

These functions are to selected when connecting the relevant sensors, to protect blinds or roller blinds from damage. The channel of a binary input configured with this function is to be linked with one or several channels of a blind actuator (blind and roller blind or awning). During a frost alarm the respective channel of the blind actuator is blocked to make movement impossible. During rain or wind alarm the blind is moved to the end position and then the associated channel of the blind actuator is blocked. Operating the blind with further Busch-free@home® devices or Venetian blind switches is then impossible.

Heating/Cooling changeover

This function is to be selected if there is to be a manual switchover between heating and cooling via a connected switch. If the associated heating/cooling system offers a corresponding binary output for heating/cooling, it can be connected to the binary input.

Detection of flooding

This function is to selected when connecting the relevant sensors, to protect your house or your apartment from damage. If the associated channel of the binary input is connected with an actuator, this can activate a solenoid valve when a water leak is detected, to block the water supply.

3.4 Device overview

BI-M-xx.20.1.11

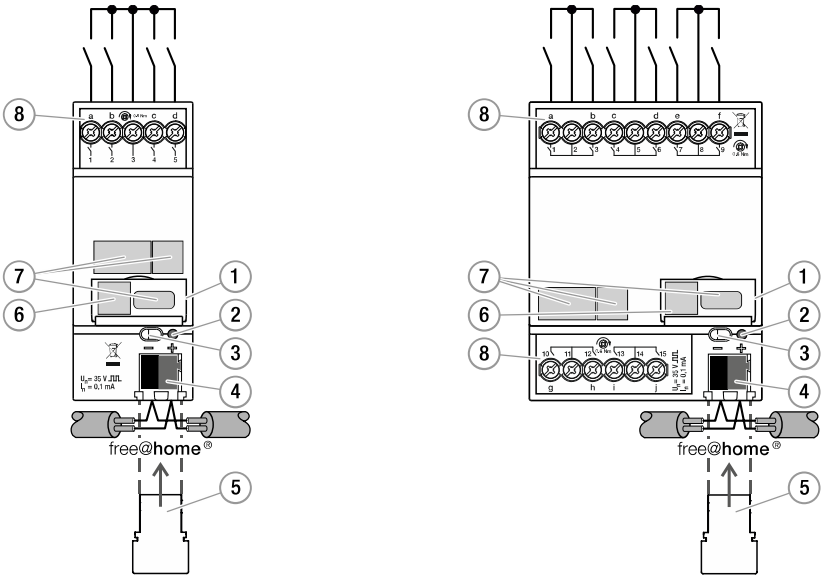


Fig. 1: Overview of devices Binary input, xgang, contact scanning, MDRC

BI-M-xx.230.1.11

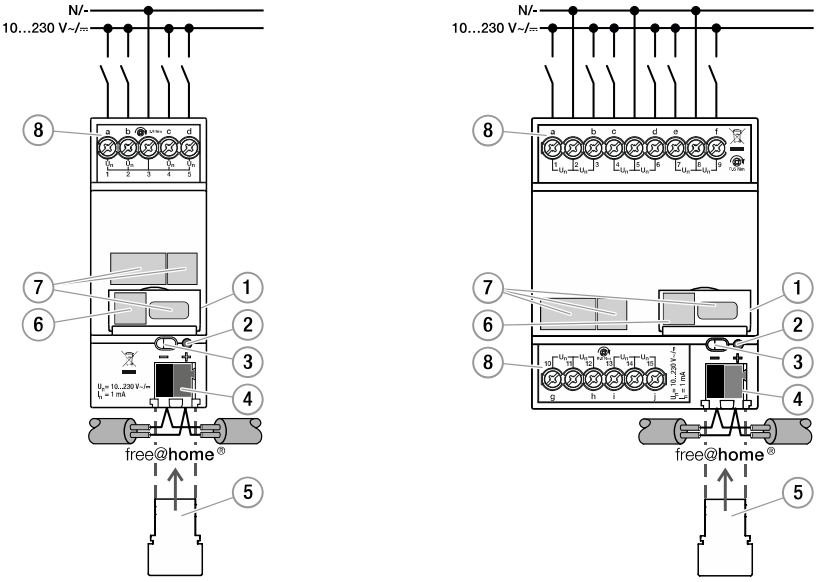


Fig. 2: Overview of devices Binary input, xgang, 10-230 V AC/DC, MDRC

[1] Label holder
[2] Identification LED
[3] Identification button for device identification during commissioning
[4] Bus connection terminal
[5] Cover cap
[6] 2D code
[7] Identification label
[8] Connecting terminals

4 Technical data

Designation		Value
Power supply		21 ... 31 V DC
Bus subscribers		1 (5 mA)
Power loss		Max. 0.3 W
Connection (free@home Bus)		Bus connection terminal, Screwless 0.6 - 0.8 mm
Connection (inputs)	Type of connection	Screw-type terminal with combi-head (PZ 1)
	Tightening torque	0.5 ... 0.6 Nm
	Conductor cross section	Flexible: 1 x 0.2 - 0.4 mm^2 / 2 x 0.2 ... 1.5 mm^2 Rigid: 1 x 0.2 - 0.6 mm^2 / 2 x 0.2 ... 1.5 mm^2 With wire end sleeve without plastic sleeve: 1 x 0.25 - 4 mm^2 / 2 x 0.25 ... 0.75 mm^2 With wire end sleeve without plastic sleeve: 1 x 0.25 - 4 mm^2 With TWIN wire end sleeve: 1 x 0.5 - 2.5 mm^2
	Length, wire end sleeve contact pin	≥ 10 mm
Admissible cable length between sensor and device input		max.100 m, single
Input	BI-M-xx.20.1.11 Polling current Polling voltage	 ≤ 0.1 mA ≤ 35 V DC (pulsed)
	BI-M-xx.230.1.11 Input current Voltage range	 ≤ 1 mA 0 ... 230 V AC/DC
Safety		Short-circuit-proof, Overload protection, Reverse polarity protection
Type of protection		IP 20
Protection class		III
Overvoltage category		III
Degree of contamination		2
Air pressure		≥ 80 kPa (corresponds to air pressure at 2 000 m above NN)
Humidity		≤ 95%, no dew
Ambient temperature		-5°C - +45°C
Storage temperature		-20°C - +70°C

Table:3 Technical data

4.1 Dimensional drawings

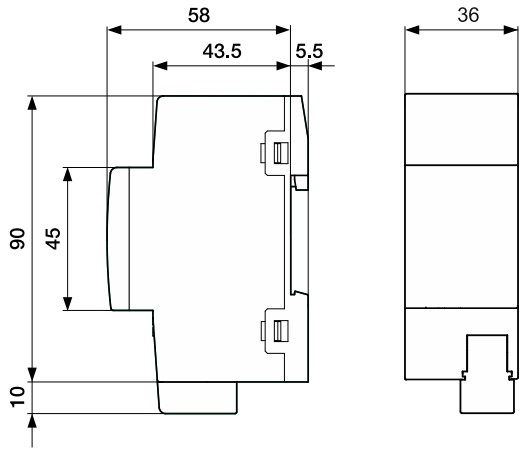


Fig. 3: Dimensions BI-M-4.20.1.11 / BI-M-4.230.1.11 (all dimensions are in mm)

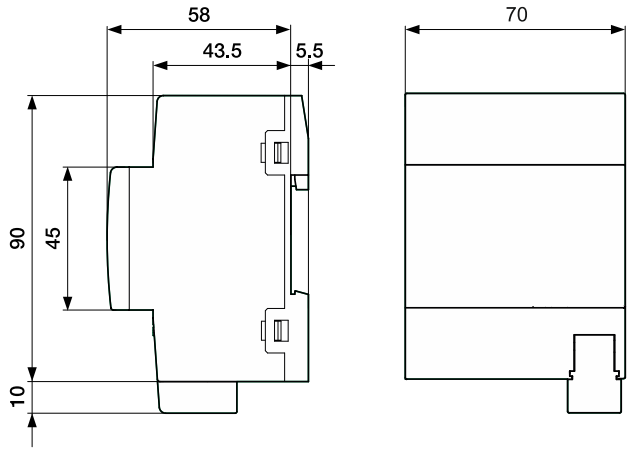


Fig. 4: Dimensions BI-M-10.20.1.11 / BI-M-10.230.1.11 (all dimensions are in mm)

5 Connection, installation / mounting

5.1 Planning instructions

Note

Planning and application instructions for the system are available in system manual for Busch-free@home®. This can be downloaded via www.busch-jaeger.de/en/smarter-home/systems/abb-freehome.

5.2 Safety instructions

Danger - Electric shock due to short-circuit!

Risk of death due to electrical voltage of 100 to 240 V during short-circuit in the low-voltage line.

– Low-voltage and 100 - 240 V lines must not be installed together in a flush-mounted box!
– Observe the spatial division during installation (> 10 mm) of SELV electric circuits to other electric circuits.
– If the minimum distance is insufficient, use electronic boxes and insulating tubes.
– Observe the correct polarity.
– Observe the relevant standards.

Danger - Electric voltage!

Install the device only if you have the necessary electrical engineering knowledge and experience.

- Incorrect installation endangers your life and that of the users of the electrical system.
- Incorrect installation can cause serious damage to property, e.g. due to fire.

The minimum necessary expert knowledge and requirements for the installation are as follows:

- Apply the "five safety rules" (DIN VDE 0105, EN 50110):
  1. Disconnect
  2. Secure against being re-connected
  3. Ensure there is no voltage
  4. Connect to earth and short-circuit
  5. Cover or barricade adjacent live parts
- Use suitable personal protective clothing.
- Use only suitable tools and measuring devices.
- Check the type of supply network (TN system, IT system, TT system) to secure the following power supply conditions (classic connection to ground, protective earthing, necessary additional measures, etc.).
- Observe the correct polarity.

5.3 Circuit diagrams

BI-M-xx.20.1.11

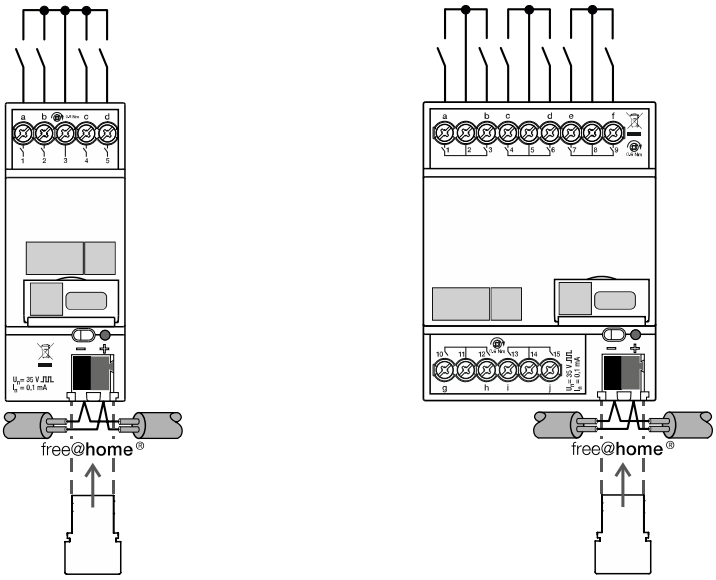


Fig. 5: Electrical connection Binary input, xgang, contact scanning, MDRC

BI-M-xx.230.1.11

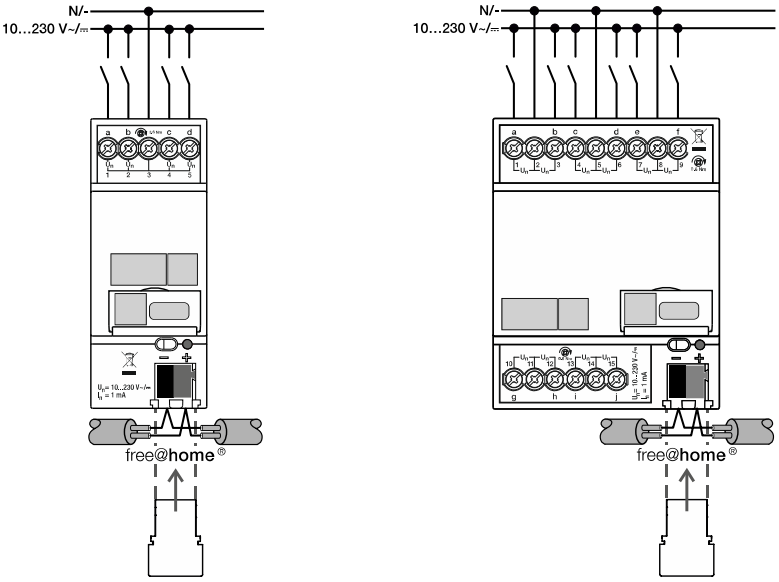


Fig. 6: Electrical connection Binary input, xgang, 10-230 V AC/DC, MDRC

5.4 Electrical connection

– The bus line connection is established by means of the enclosed bus connection terminal.
– The description of the terminals is found on the housing.
– The connecting cables can be lengthened to a maximum of 100 m.

Notice
The device is ready for operation after the bus voltage has been applied.

5.5 Mounting / dismantling

- The device is a modular DIN-Rail component (MDRC) in Pro M-Design. It is designed for the installation in electric distributors and small housings with a mounting rail of 35 mm (according to DIN EN 60715).
- The stick-on label is to be removed and glued into the list (see system manual System Access Point).
- Access to the device must be guaranteed for operation, testing, inspection, maintenance and repairs according to DIN VDE 0100-520.

5.6 Dismantling

Dismantling is carried out in the reverse order to mounting.

6 Commissioning

It is assumed that the basic commissioning steps of the overall system have already been carried out. Knowledge about the basic functions of the commissioning software of the System Access Point is assumed.

Commissioning of the device is carried out via the web-based interface of the System Access Point or the Busch-free@home® Next App. The System Access Point establishes the connection between the Busch-free@home® participants and the smartphone, tablet or PC. The System Access Point is used to identify and program the participants during commissioning.

Devices which are physically connected to the free@home Bus bus, log themselves automatically into the System Access Point. They transmit information about their type and supported functions (“Functions“ on page 9).

During initial commissioning all devices are given a universal name (e.g. "Sensor/switch actuator 1/1gang"). The installer can change these names within the commissioning process to names specific for the system (in case of an actuator, e.g. to "Living room ceiling light").

The devices must be parameterised for the use of additional functions.

Notice

General information about commissioning and parameterization is available in the Busch-free@home® system manual.

6.1 Allocation of devices and definition of channels

The devices integrated into the system must be identified, i.e. they are allocated to a room according to their function and are given a name.

The allocation is carried out via the web-based user interface of the System Access Point or the Busch-free@home® Next App.

6.1.1 Add device

Fig. 7: Devices, scenes and groups

1. Select "Devices, scenes & groups" via the main menu or the page menu in the user interface of the System Access Point.
   – The "Building plan" opens.

Fig. 8: Opening the building plan and list of components (example illustration)

2. Tap on the round plus icon [1] at the bottom right.
   – The menu "Select component" opens.
3. Tap on the desired characteristic in the list of components.
   – The menu with the available devices, functions and actuators opens.

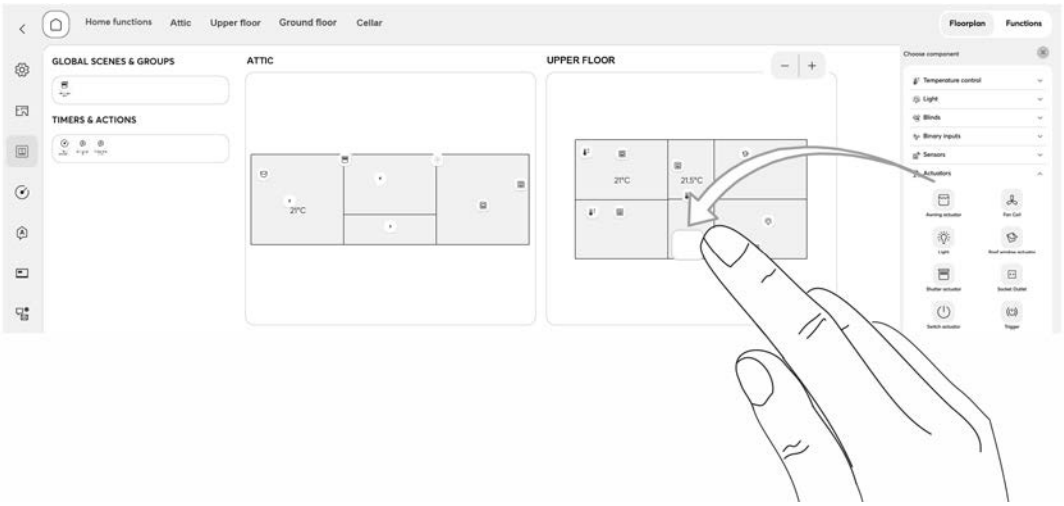


Fig. 9: Pulling the device out of the menu bar (example illustration)

4. Select the desired device and pull it into the building plan via drag-and-drop.
   – If you pull a new device into a room via drag-and-drop, a pop-up window opens in which all devices that are located in the system are listed and which have not been allocated to a room. The devices are suitable respectively for the selected application (e.g. all blind actuators, if the blind application has been selected).

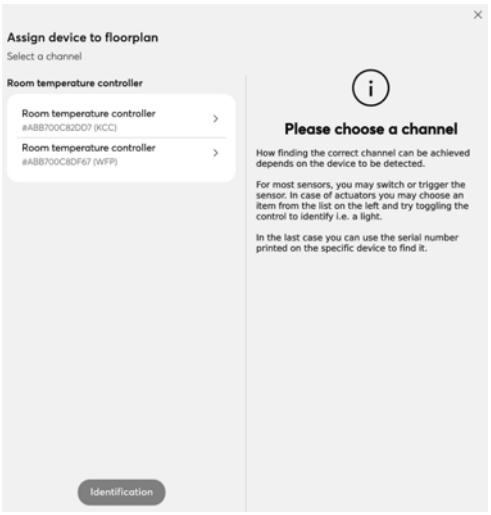


Fig. 10: Pop-up window with the suitable devices (example illustration)

5. Select the corresponding channel.

The device can be identified via the serial number or via switching.

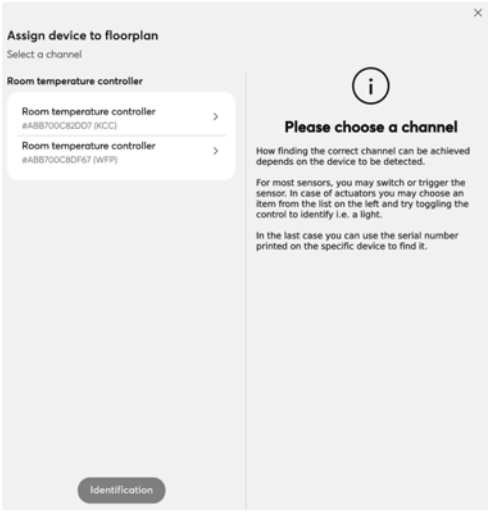


Fig. 11: Allocation of devices

A window opens which lists all the devices suitable for the application selected.

Identification via serial number

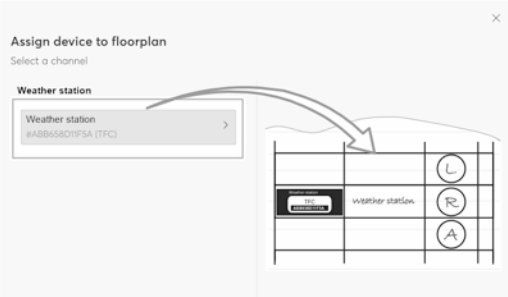


Fig. 12: Identification via serial number

6. Compare the serial number and the short ID of the identification label printed on the device with the numbers and IDs in the list. This is how the searched for device and possibly the searched for channel are identified.
   The specifications of the identification label should also be transmitted to the device plan.

Identification via switching

If several devices are listed in the device list, you can identify them by switching the actual device.

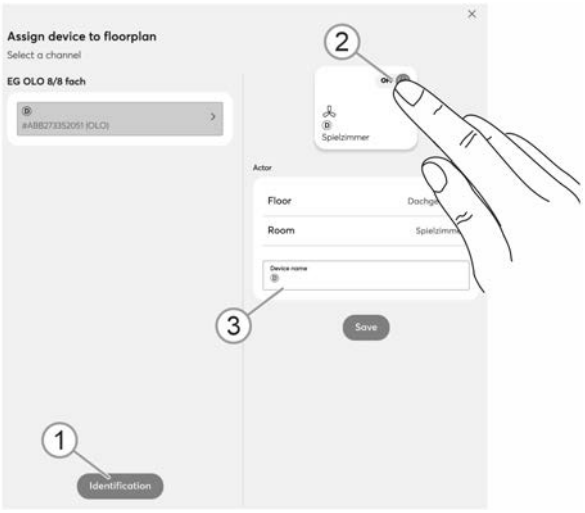


Fig. 13: Identification via switching (example illustration)

1. Open the device list.
2. Press the "Identification" button [1] and then switch the actual device.

   Or, as alternative, press only button [2] in the web interface.

   – The connected load is switched.
   – The device is then selected automatically in the device list.

Assigning a name

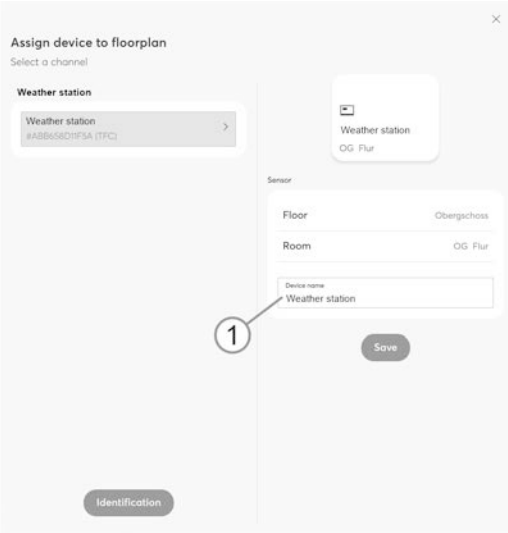


Fig. 14: Assigning a name (example illustration)

3. Enter a name that is easy to understand and under which the application is to be displayed later, e.g. "South-wall weather station".
4. Tap the "Save" button to take over the adjustments.
   – This takes over the entry.

6.2 Setting options per channel

General settings and special parameter settings can be made for each channel.

The settings are made via the web-based user interface of the System Access Point or the Busch-free@home® Next App.

Select device

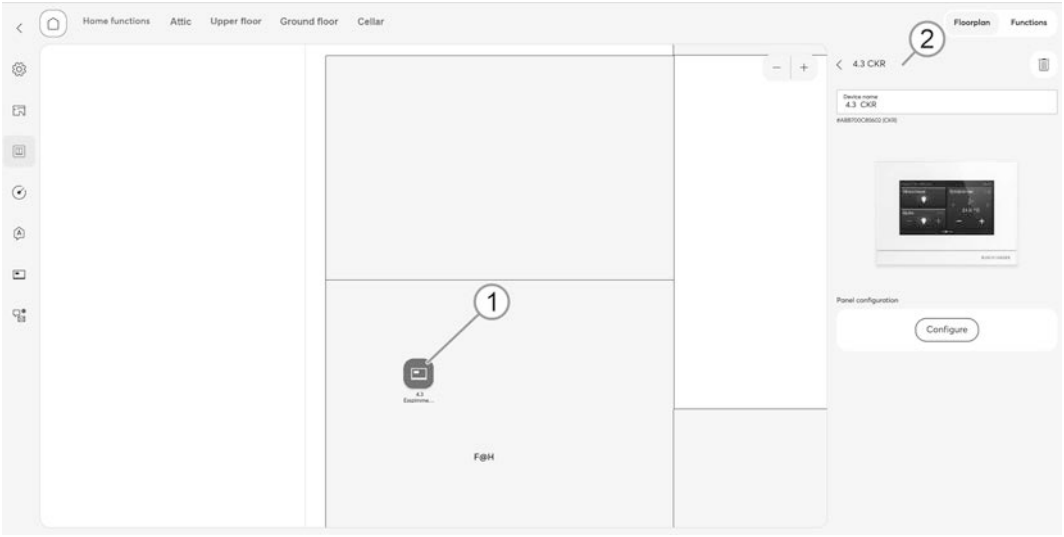


Fig. 15: Selecting device

1. Select the device icon [1] in the floor plan of the working area view.
   – All setting options for the respective channel are displayed in the list view [2].

Open overview of devices

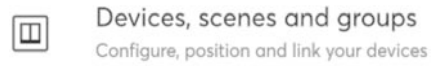


Fig. 16: Devices, scenes and groups

1. Select "Devices, scenes & groups" via the main menu or the page menu in the user interface of the System Access Point.
   – The "Building plan" opens.

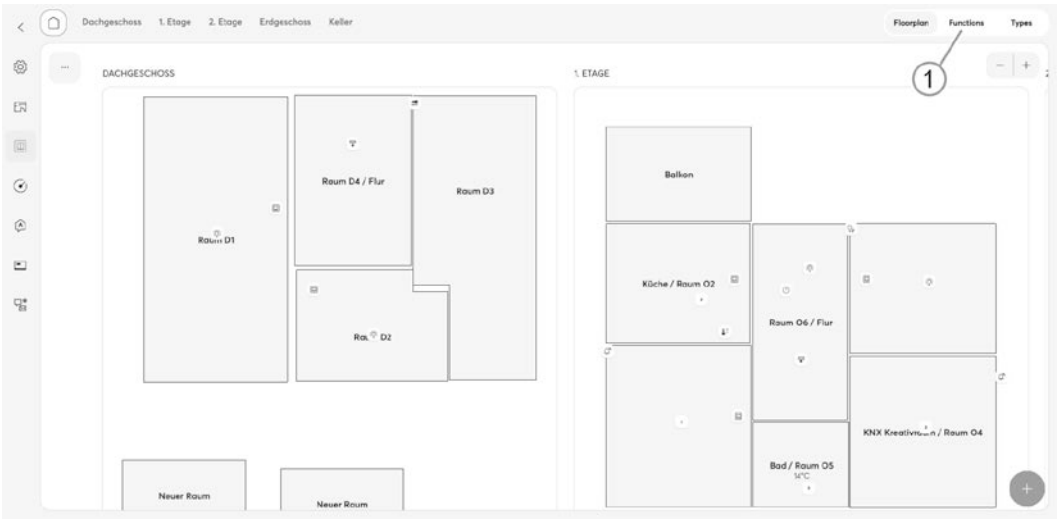


Fig. 17: Open overview of devices (example illustration)

2. Select the "Functions" button [1].
   – The overview of devices opens.
   – Here you can view all devices that are located in your Busch-free@home® system. The overview page displays information about the device name and the position of the respective device.

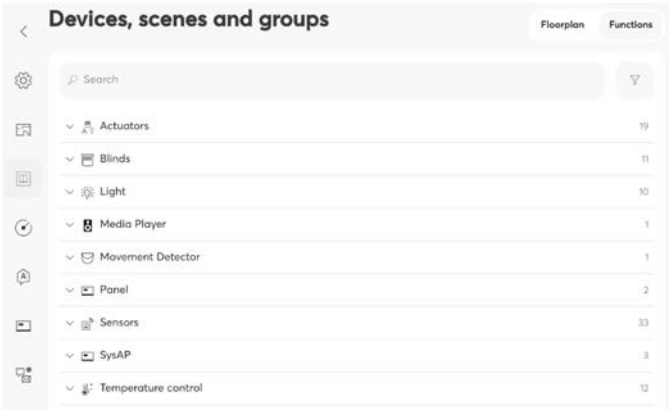


Fig. 18: Overview of devices (example illustration)

3. Tap on a device category.
   – The list of available devices opens.
4. Tap on the device whose information you want to edit.
   – The information about the respective device is displayed on the right in the device menu.

6.3 Parameters

Channel name
Here an individual name can be assigned to the channel.

Position
The parameter is used to specify the position of the actuator in the virtual building ground plan (floors and rooms).

Block local operation	
Yes	With this function the operation can be deactivated via the sensor. Operation is then only possible via the app.
No	Local operation is possible.

Function	
Control element	For controlling push-buttons. These can be activated and deactivated.
Movement detector	For light control with the movement detector.
Window contact	For the automatic deactivation of the heating when the window is open.
Frost alarm	For the automatic retraction of the blinds, and roller blinds or awnings at frost alarm.
Rain alarm	For the automatic retraction of the blinds, and roller blinds or awnings at rain alarm.
Wind alarm	For the automatic retraction of the blinds, and roller blinds or awnings at wind alarm.
Heating/Cooling changeover	For the switchover between operating modes heating and cooling in two-pipe heating/cooling systems.
Detection of flooding	For the automatic activation of an actuator at flooding alarm.

Notice

If the function is to be changed, the link to the actuator channel must be removed beforehand. Only then can additional functions be selected.

Contact type	
Here the contact type for the push-button sensor is selected.	
Normally open contact	The contact is closed by actuating the switch.
Normally closed contact	The contact opens when the switch is actuated.

Sensor type	
Push-button	This sensor type is intended for operation with a mechanical push-button. The actuator status is inverted with every activation of the input (only rising edge).
Switch (switchover)	Reverser and push-button invert the existing status of the actuator. With this type of sensor a classic 2 way circuit can be implemented. Here the reverser inverts the actuator status during each change of the input signal (rising and falling edge) and can be operated in combination with a mechanical reverser.
Switch (direct)	This sensor type sends the value to the actuator, that is also attached to the binary input, independent of the previous status of the actuator. This makes a 1:1 illustration possible, but no 2 way circuit can be implemented. For example: When a single lamp is to precisely follow the status of the contact of an external movement detector or a mechanical switch.

6.4 Links

Configuring, positioning and linking of the devices is carried out via menu "Devices, scenes and groups".

Sensors and dimming actuators can be linked with each other. This allows simple On/Off circuits or two-way circuits to be implemented.

The link is made via the configuration mode in the building plan of the Web-based user interface of the System Access Point.

1. Open the building plan
   - via menu "Devices, scenes and groups" on the main page
   - via the switch icon in the menu bar on the left side
   - from the list of functions, via the "Floor plan" button

6.4.1 Linking sensor and actuator

Devices, scenes and groups
Configure, position and link your devices

Configuring, positioning and linking of the devices is carried out via menu "Devices, scenes and groups".

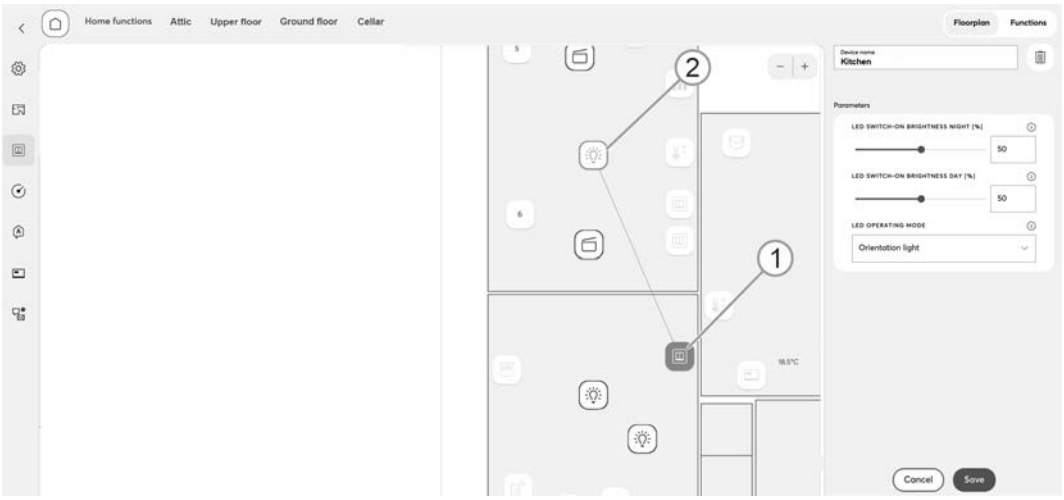


Fig. 19: Linking sensor and actuator (example illustration)

1. Select the sensor [1] in the building plan that is to be linked with the actuator (detailed information is available in the system manual).
2. Select the actuator [2] that is to be switched by the sensor.
3. If necessary, make changes to the parameter settings.
4. Tap on "Save" to take over the settings.
   – A blue connecting line indicates the link between the two devices.
   – The selection can be cancelled via the "Deselect" button.

Notice
A sensor can be linked with several actuators.
A sensor can additionally be linked with scenes.

Light scenes and light groups

A light scene means calling up a preset light situation (e.g. preset dimming value) via a single push-button. For a light group, a group of lamps is switched simultaneously by means of a single push-button.

Light scenes and light groups can be configured via menu "Devices, scenes & groups" of the System Access Point. There the corresponding function "Light scene" or "Light group" is to be added and linked with the corresponding channel of a binary sensor (to which a push-button is connected for calling up light scenes, for example), as well as the corresponding channels of the switch actuators (to which the lamps that are included in the light scene are connected). In the list view the light scene can be configured and stored by clicking on the respective lamps. If double push-buttons are used, the channels are not to be coupled. Each of the two rockers can be used to call up a specific light scene.

7 Update

A firmware update is carried out via the web-based user interface of the System Access Point.

8 Maintenance

The device is maintenance-free. In case of damage, e.g. during transport or storage), do not perform repairs. Once the device is opened, the warranty is void.

Access to the device must be guaranteed for operation, testing, inspection, maintenance and repairs (according to DIN VDE 0100-520).

8.1 Cleaning

Caution! - Risk of damaging the device!

- When spraying on cleaning agents, these can enter the device through crevices.
  - Do not spray cleaning agents directly onto the device.
- Aggressive cleaning agents can damage the surface of the device.
  - Never use caustic agents, abrasive agents or solvents.

Clean dirty devices with a soft dry cloth.

– If this is insufficient, the cloth can be moistened slightly with a soap solution.

9 Notes

10 Index

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