ABB-free@home® and REACT 2
Your energy breaks free

System integration

PV panels

REACT 2

WLAN - Router

System Access Point

Home   Grid   EV Charging
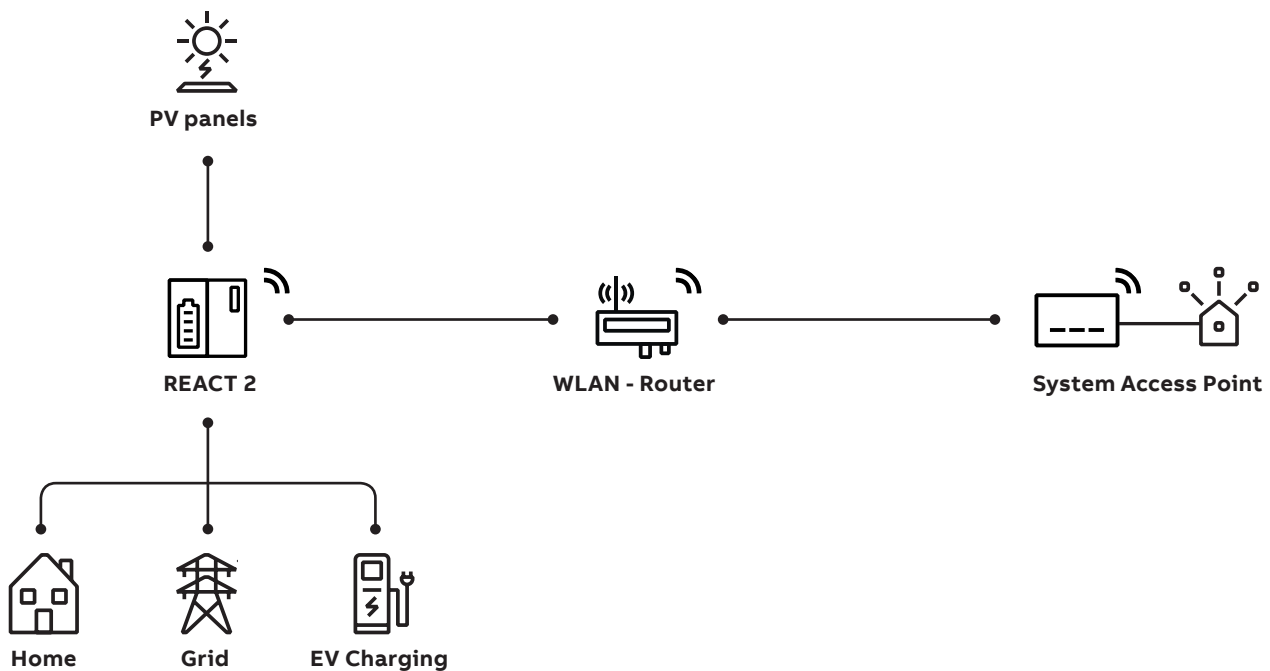
The integration of ABB REACT 2 into ABB-free@home® is carried out thanks to the integration of ABB-free@home® protocol into REACT 2. The data of REACT 2 are transmitted via the IP protocol to the ABB-free@home® system access point, which in turn controls the other ABB-free@home® devices.

Prerequisite for the integration of the REACT into ABB-free@home® are:
• An ABB REACT 2 (solar + storage inverter)
• A router
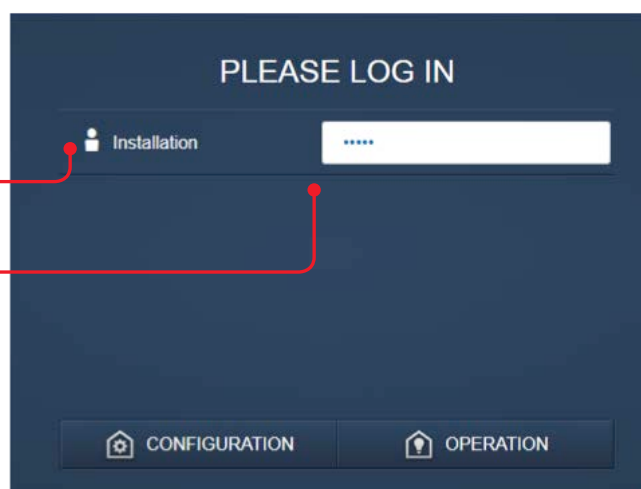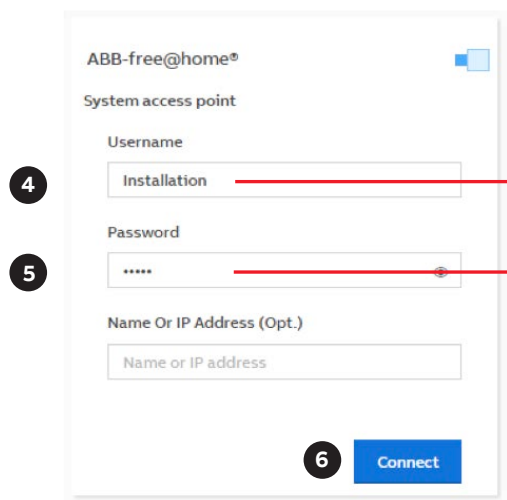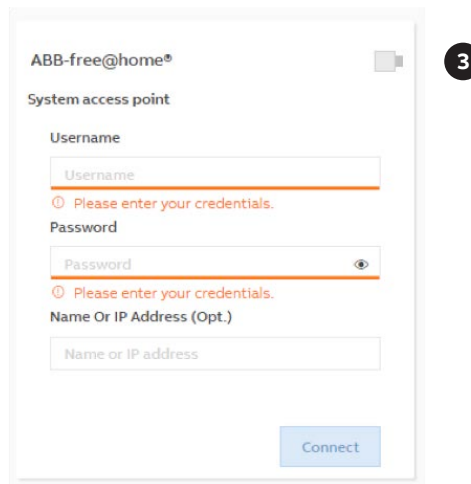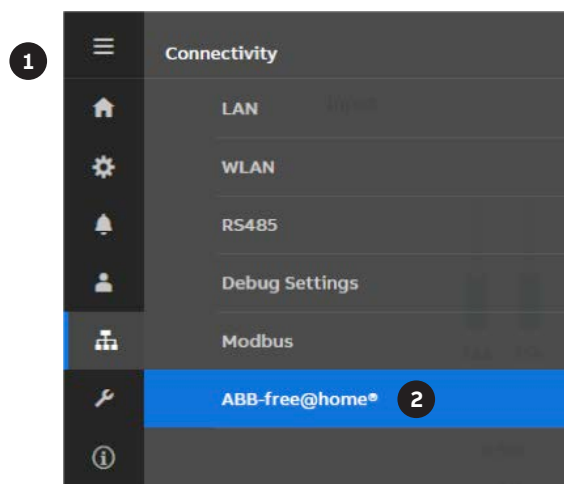• An operable ABB-free@home® system

Preparatory work
Commissioning of the ABB-free@home® and of ABB REACT 2 systems. Both systems must be located in the same Local Area Network.
1 - Carry out a firmware update of the ABB-free@home® System Access Point to Version 2.2.2 or higher
(via automatic update or manual update).
2 - Carry out firmware update of ABB REACT 2 to version 0.4.1 wor higher (check REACT manual for the procedure).

ABB REACT 2 setup

1 - Access the ABB REACT 2 webserver (follow the user manual instructions).
2 - Access as «administator»
3 - Click on Connectivity icon (1), ABB-free@home® menu (2)
4 - Enable ABB-free@home® protocol (3)

5 - Insert Username and Password (4) and (5). Credentials must be the same for the ABB-free@home® System access point log in. Click on Connect (6)
6 - System Access Point name and/or IP address field is required only if there are two or more Free@home System access points in the same network. Leave it blank if only one System Access Point is present in the network.

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ABB Free@home setup

Establish the connection to user interface of the System Access Point (see ABB-free@home® System Manual)

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Allocating devices to rooms

In this step the devices connected to the system must be identified. For this they are allocated to a room according to their function and are given a descriptive name.
The application that is actually available depends on the devices connected to the system. In the "Add device" bar only the devices/functions that are connected with the system are displayed. They remain in the bar until they are shifted onto the floor plan. This means that the list keeps getting shorter as the devices are being positioned:

• In the "Add devices" bar, select the desired application and pull it via drag and drop onto the floor plan.
• A pop-up window opens which lists all the devices that are connected to the bus and suitable for the selected application.
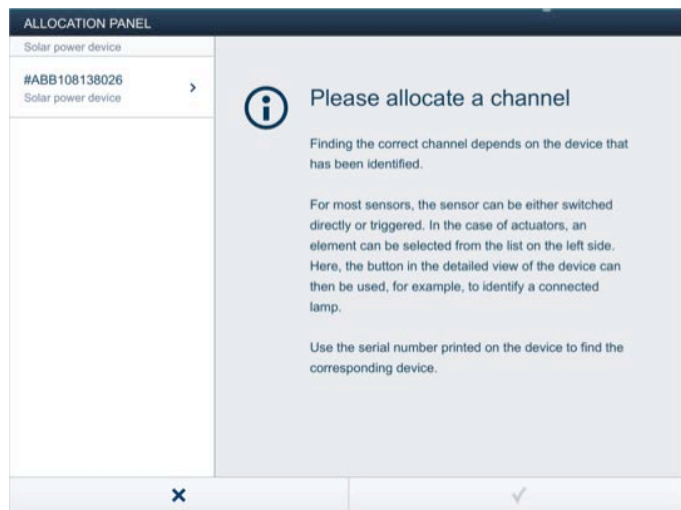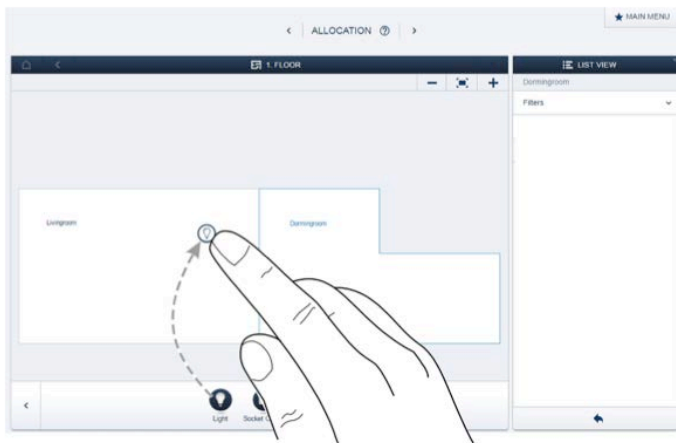

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Identification

If after positioning on floor plan there are still several possible devices in the pop-up window for selection, the device which switches the desired function must be selected now.

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Identification serial number

The device you are searching for can be found comparing the six Y digits of #ABBxxxYYYYYY (available on the device configuration – List view) with the six Y digit of SN aabbYYYYYY located on the label of the inverter unit (see image below).
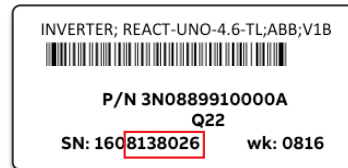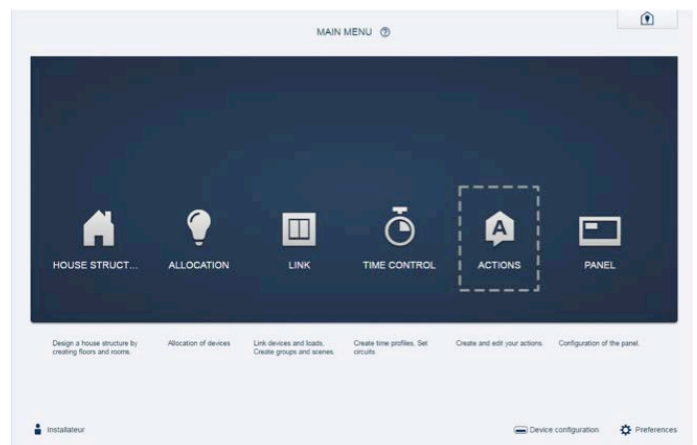

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Specifying a name
• When the device has been found, enter a name that is easy to understand and under which the application is to be dis played late (e.g. "REACT")
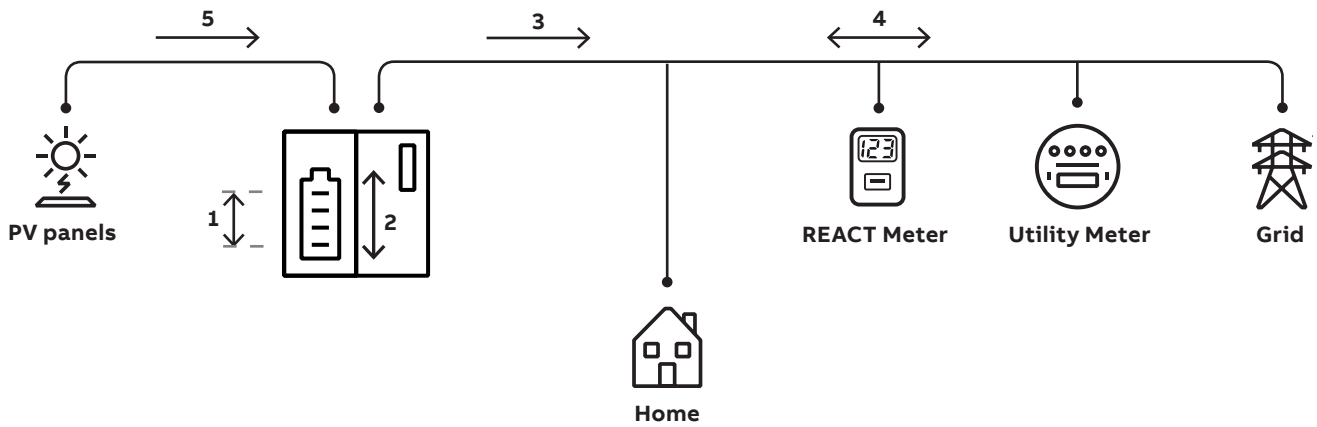• Press the tick at the bottom right to take over the entries
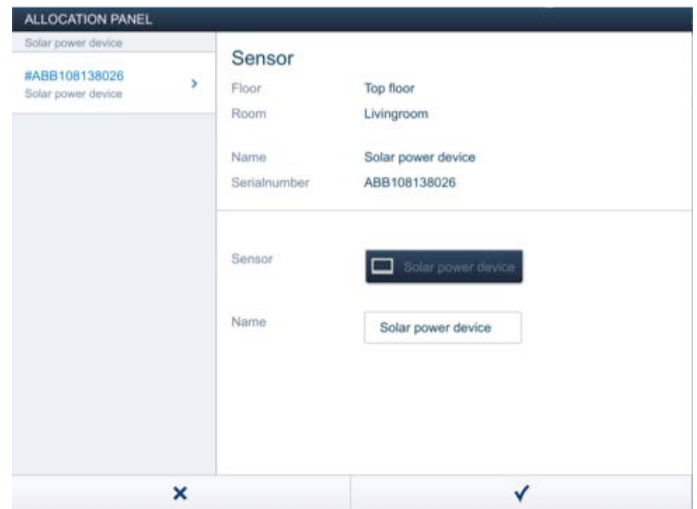
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Actions

In menu "Actions" you can configure simple "When-then" relationships.

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Event in case of REACT presence

PV panels   1   2   REACT Meter   Utility Meter   Grid

Home

	Signal		Unit	Description
1	Battery level		%	Battery state of charge
2	Battery power		kW	<0 charging phase; >0 discharging phase
3	Inverter output power		kW	Right now PV inverter output power
4	Power to grid		kW	>0 power injection into the grid; <0 power absorbed from the grid
5	Solar power production		kW	Right now PV inverter power on the DC side

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PV plant monitoring via display
It can be possible to monitor the most important energy flows
in the house via free@home touch and/or free@home
mobile app.

Solar power production (kW)

Grid power

Imported energy today

Total Battery Power

Battery level

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Troubleshooting
If the solar inverter is not visible on the free@home network please check the connection state on the inverter webserver UI page (see ABB REACT setup paragraph).

Connection state	Check
Connection State ❌ Connection Failed: no ABB-free@home system access point discovered	If both systems (REACT and System access point) have been provisioned in the same network, router should support bonjour service for self-discovering process. If this is not the case, insert system access point name or system access point IP adress in the REACT logger setting page.
Connection State ❌ Connection Failed: ABB-free@home system access point username and/or password	If user name and/or password set on the REACT webserver are correct.