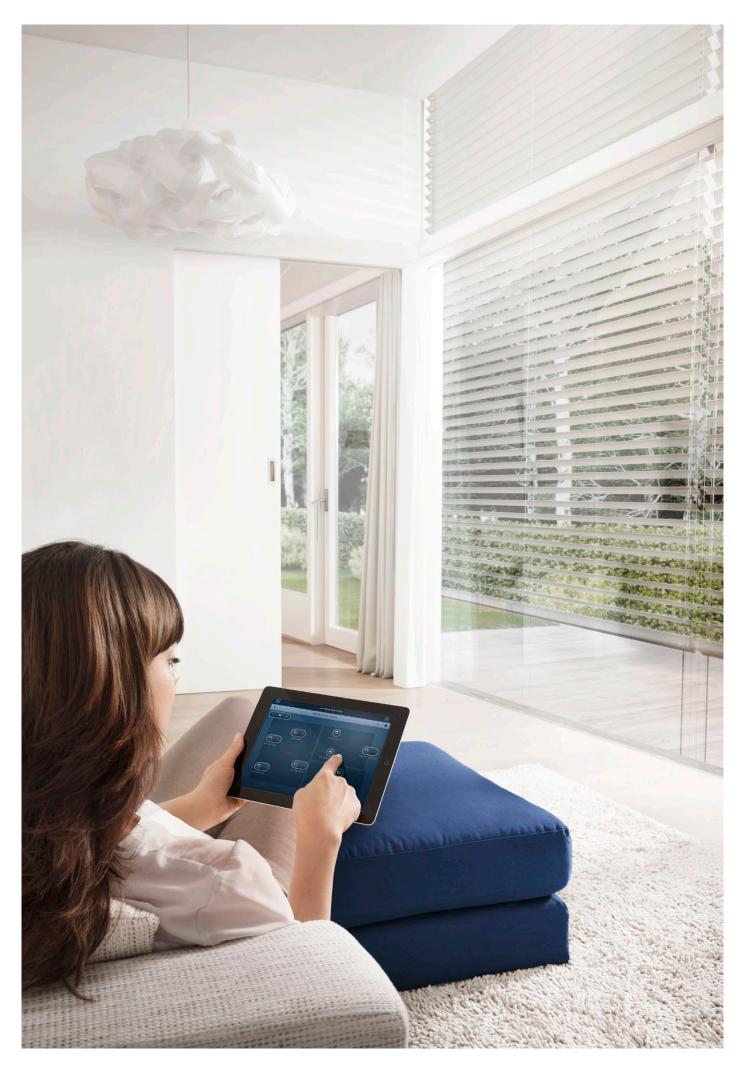


# ABB-free@home® Making home automation easier than ever







### Just as you like it The Smart Home



Perfect daily routine. With ABB-free@home® the entire home can be controlled as usual with switches, and now even more practical: with the smartphone, tablet, or computer. Via touch or voice control. One not only switches, one regulates home automation mobile and smart, precise and continuously variable. For example, is the light atmosphere to be changed, tapping on the touch screen or a simple voice command moves the blinds, the colours of the lights change - this is how one experiences the future already today.

## Content







Freedom

System

Advantages

Intelligent home	10	Personal comfort scenes	18	The entire house under control	2
Total networking	12	Presence simulation	20	Easy to operate via app	3
		The everything-off function	22	Easy to setup	3
		NEW: Voice-control	24	One system – different types of installations	3



### Range

Individual possibilities

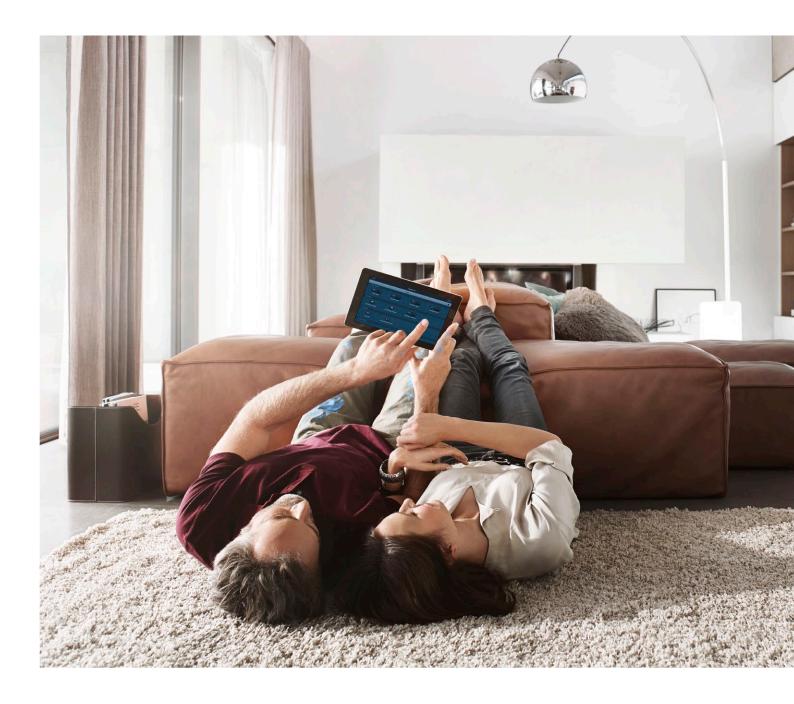
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Liberating. As innovative home automation ABB-free@home® offers an endless number of possibilities for creative design. This allows the home to be equipped in line with endless personal concepts and preferences. Both today and in the future.





## Free choice To live life as desired



Smart. ABB-free@home® transforms the house or the apartment into an intelligent home. Whether blinds, lights, heating, air-conditioning or door communication – comfort, safety and efficiency can finally be remote controlled. Via a switch on the wall, via voice-control or with a smartphone, tablet or personal computer.





#### Open for new ideas

With ABB-free@home® all functions in the house can be managed automatically – according to time plan, temperature and movement detector – or be called up at the touch of a button. And here, every combination of the various functions is possible.



Blind



Light



Heating



Air-conditioning



Door communication

#### Many advantages for operation

More pleasant living. The ABB-free@home® home automation makes daily life easier. Blinds, lights, heating, air-conditioning and door communication can be controlled together: The smartphone becomes the remote control in the house. The blinds can be moved up and the radio in the kitchen can

be switched on with the touch of a button while you are still in bed – or all lights and devices are deactivated via a switch when leaving the house. Very convenient. Extremely comfortable. Very energy efficient. The setting of these scenes is as easy as can be – to suit the mood or situation.

### Total network Blinds, lights, heating, air-conditioning, door communication

Comfortable right from the start. It begins with commissioning and continues later when used as a part of daily life. With ABB-free@home® all applications in and around the house are amazingly easy to combine.

#### **Blinds**

Whether blind, roller blind, awning or roller door – with the ABB-free@home® home automation, sun protection and energy saving could not be easier. Opening and closing as well as adjustment of lamella can be controlled with a switch, ABB-free@homeTouch or app for smartphone or tablet. In addition, a conventional weather station for protection during a storm, a timer or astro function can be used. It automatically adjusts the blind according to sunrise and sunset.

- » Flexible options for control
- » Storm, rain and wind protection which responds to the weather
- » Simple operation
- » Optimized energy efficiency due to improved insulation
- » Optimum timing









#### Blind switch

Ready for all operating modes. With either a short or long press of the button for roller blinds, exterior blinds or awnings as well as adjustment of lamella. Together with a wind sensor the roller blinds, exterior blinds and awnings close up completely and are locked during high wind.





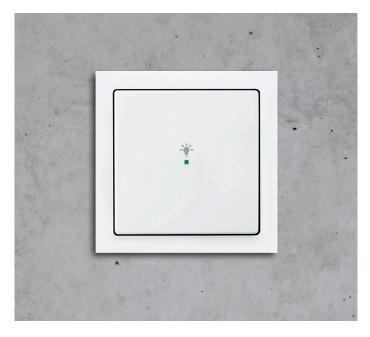
#### Philips hue LED

Simply integrate the Philips hue LEDs into the system and control them via ABB-free@home®. This allows hue lamps to be comfortably controlled via a switch on the wall, or in a scene together with other lamps. And everything even when the smartphone or tablet is not available.

#### Light control

Life begins with light. With ABB-free@home® it can be optimally used, whether for illuminating individual rooms or the entire house. For example, with striking light scenes – for different moods and to suit the occasion. A pleasant side effect here is the cost-saving and environmentally friendly use of energy.

- » Easy to adjust light scenes
- » Central or remote control
- » Fast activation of emergency lighting
- » Support of energy efficiency
- » Flexible use
- » Philips hue LED integration











#### Dimmer and movement detector

With ABB-free@home®, rooms or entire buildings can be illuminated according to your requirements. Each situation receives suitable light – whether striking light scenes or emergency lighting. All lights are switched on at once.



#### Heating and air-conditioning

Providing comfort and energy-saving. The optimum room temperature can be adjusted with ABB-free@home® individually or according to the specific requirement, depending on the time of day and the function of the room. In ECO mode, the temperature is automatically lowered at night or when the house is empty. The heating can be automatically shut off when a window is open. This reduces the consumption of energy whether for conventional heaters or under-floor heating.



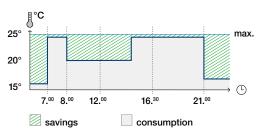






- » Heating to suit specific requirements: depending on the daily routines instead of specific requirements
- » For heaters or under-floor heating
- » Support of energy efficiency
- » ECO mode
- » Local operation or remote controlled via app for smartphone and tablet
- » Automatic deactivation when a window is open (in combination with window sensor)

Energy saving due to the individual control of heating dependent on the time of day









#### Door communication

The ABB-Welcome door communication system can be integrated into ABB-free@home®. The door communication and home automation can be used together with ABB-free@homeTouch 7". For example, the light switches on when the doorbell rings to see visitors more clearly. And for reasons of safety, the video camera records pictures of visitors at the door when no one is home.

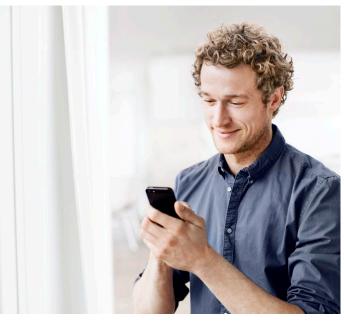
#### Picture directly on the display

Practical and comfortable. The image of the video camera can be displayed on the tablet or smartphone via the Welcome app. In this way, any visitors who ring the bell can be recognised even if you are not at home (requires the ABB-Welcome IP gateway and ABB-Welcome outdoor video station).



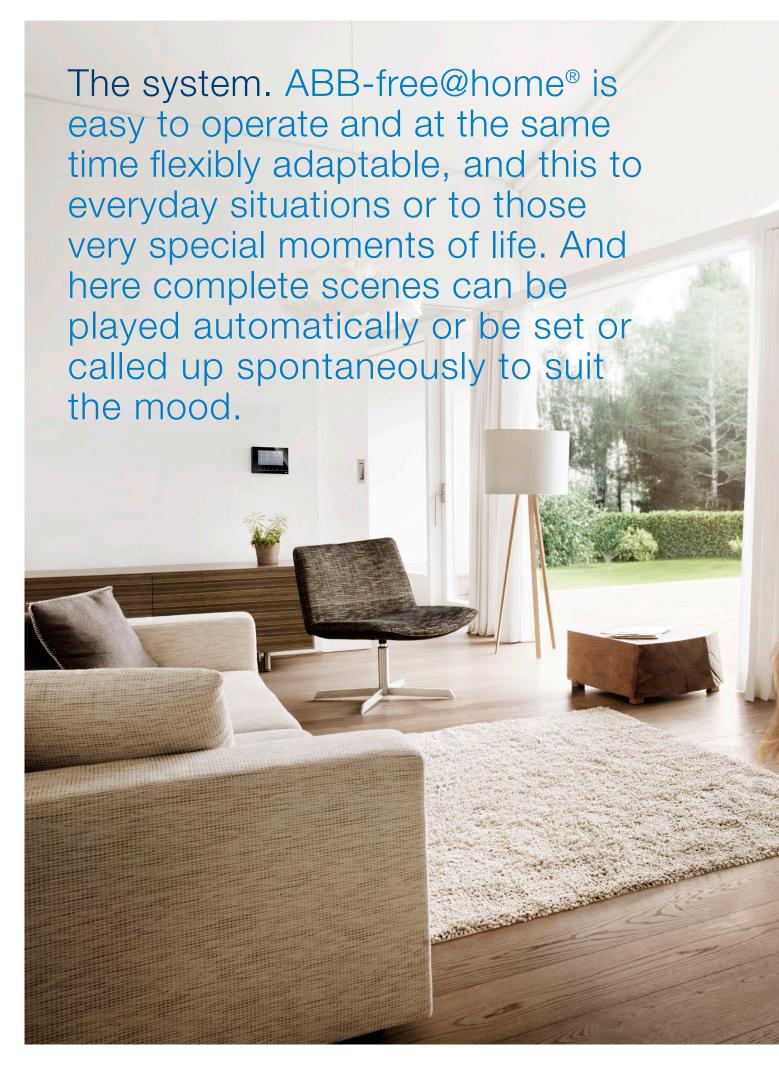


- » Large touch display (17.8 cm), to recognize who is at the door
- » Easy operation keys for opening doors, mute function and light
- » Integrated picture memory
- » Configuration of "Welcome scenes" when a visitor rings the bell or the door opener is opened

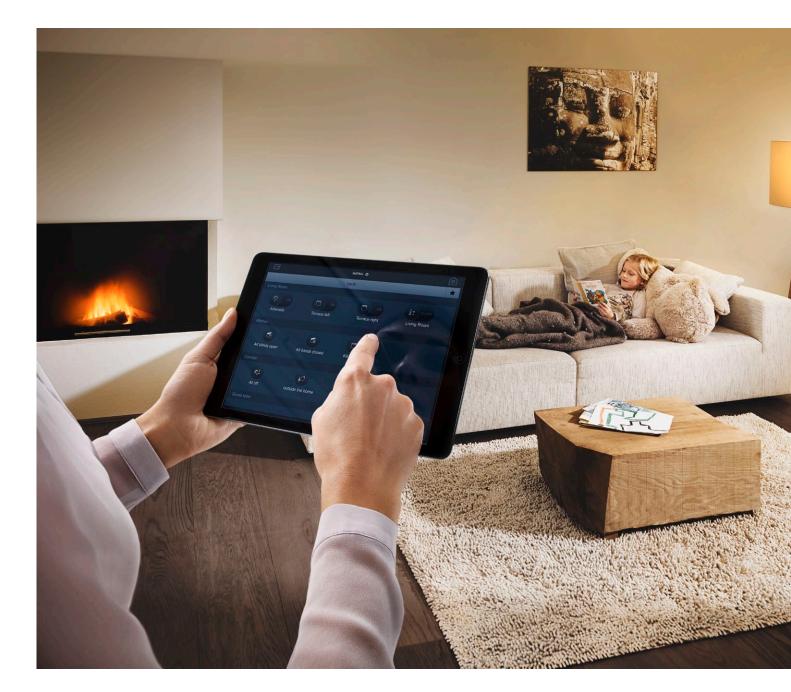


#### Smart control via app and voice

Smartphone or tablet become the central control unit of the door communication. The ABB-Welcome app also makes remote control via the internet possible. This makes communication possible with all visitors. Now you are everywhere at home.







Atmosphere at the press of a button With a personal comfort scene

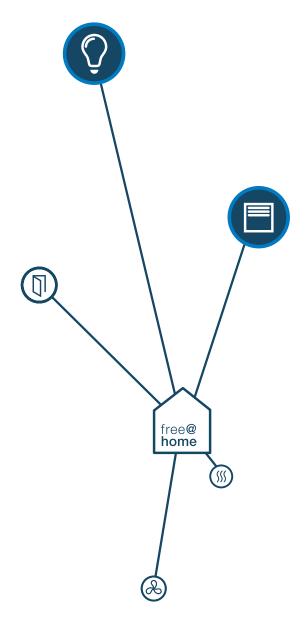
The perfect evening after a day at work. ABB-free@home® prepares a pleasant reception when arriving at home. With a colourful display of light and ambient room temperature. Precisely the right atmosphere for relaxing.





All functions of the Philips hue LEDs can be integrated in a scene. Aside from the brightness, also the colour shade can be defined in a scene.



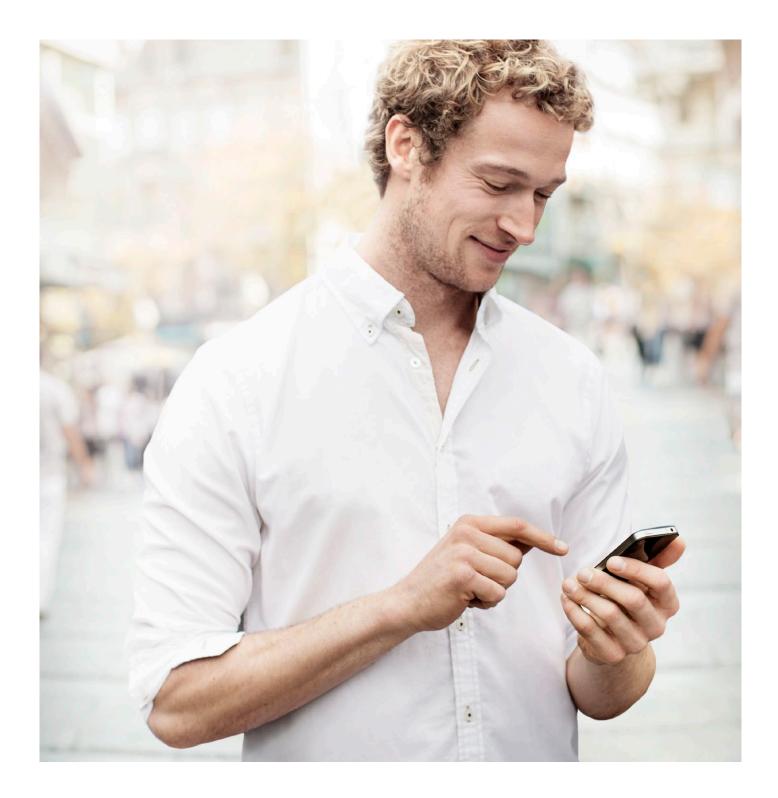


#### Fast change of scenes

A single press of the button on the switch, on the ABB-free@homeTouch, smartphone or tablet suffices to call up a complete scene. This, for example, allows a living room to be transformed in a matter of seconds to suit an occasion – for welcoming guests or for a pleasant evening of relaxation.

#### Simply one's own scenes

To create or change one's own individual scenes is child's play with ABB-free@home®. An intelligent assistance function helps to put together the desired functions. This, for example, allows the working light, cooker hood and Internet radio to be simultaneously activated via a binary output, while the light at the dinner table can be dimmed – again with a press of a button.





#### A complete overview

Always in the know about what is happening at home. With the ABB-free@home® app you can check at any time whether all the windows are closed or if someone has forgotten to switch off the lights.

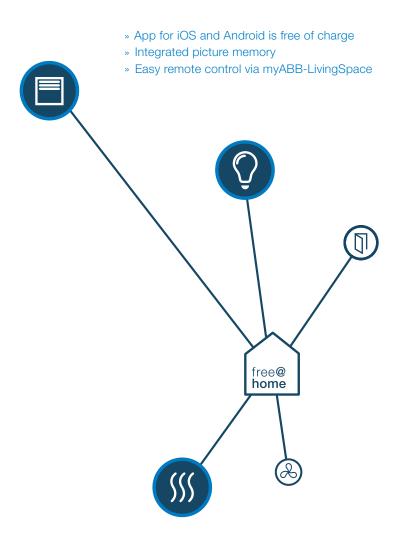


#### **Everything controllable**

Via the connection to the myABB-LivingSpace portal, now most functions of ABB-free@home® can be controlled and activated via remote control. This makes it possible to maintain control – even while on holiday.

## Present and yet not at home With presence simulation

Everything is in perfect order at home. Because ABB-free@home® brings life into rooms that are at times unoccupied. For this the system stores the habits of the residents beforehand during their presence and then calls them up during their absence.





#### Remote control for everything

Always a good feeling. The presence simulation of ABB-free@home® records the weekly sequence of the devices. This means that it's response is completely the same whether the residents are present or absent. Whether on a business trip, on holiday or while shopping around the corner. With the app on the smartphone, remote control and a safety check of the entire home is possible from anywhere in the world.

#### Automatic protection against wind

During wind and storm ABB-free@home® together with a conventional weather station cares for the independent upward movement of the blinds. This prevents damage such as buckling of the lamella or broken window panes. This function is of particular benefit during one's absence because changes in the weather occur unexpectedly.



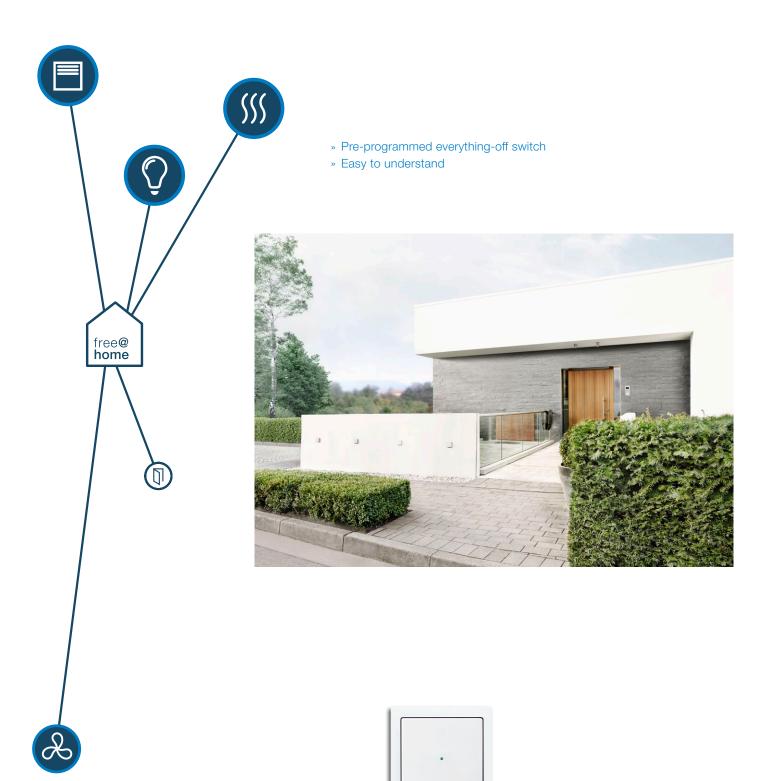
### Everything off with a single function Sure is sure

The simplest type of switch-off. ABB-free@home® offers it with the everything-off function. It is especially practical when leaving the house. It simultaneously switches off all networked devices in all rooms.

#### Assuredly off

In principle the everything-off function works just like a preset scene. In this case all networked devices are simultaneously switched off in all rooms. Aside from safety, this also benefits energy efficiency. The everything-off function is especially

practical also at the bedside. Before falling asleep the entire lighting in the house can be switched off with just a press of a button. A very practical function to ensure comfort and safety.

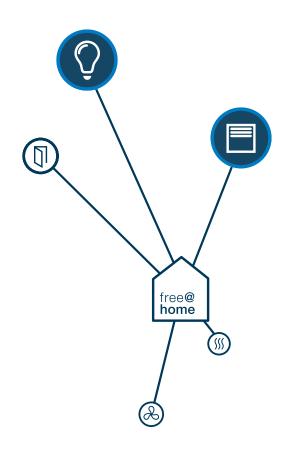


#### Near and far

The central switch for the everything-off function can be located on the wall near the front door and, of course, at any other location in the house. And for mobile use it can be displayed in the app on the smartphone or tablet.

### The house obeys your voice With voice-control

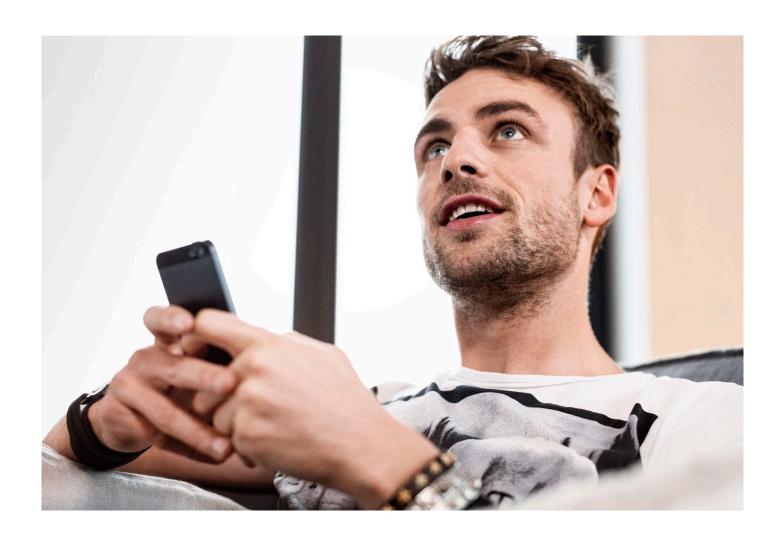
Comfort due to intelligence. A dialogue without misunderstandings, with everything that makes a home smart. Because the voice directly controls light, climate and safety. No unanswered questions: The voice commands are confirmed acoustically with a clear answer. Control is maintained in an appealing manner. A very pleasant way to control the entire house.



#### Command and answer

"Switch on the lights in the living room". One sentence that fixes everything. "Okay, all lights in the living room have been switched on", the system answers. In this way one is always sure that the wishes have been understood and implemented. Intuitively, without having to mind the structure of the sentence, the user controls everything he wants to. The intelligent

speech recognition processes the sentences reliably. Even when one has questions about the system itself, one gets a clear answer. The new ABB-free@home® update makes it very easy. Special programming is not required. The previously defined names of rooms, floors and devices are simply taken over. The dialogue can begin.





#### Notifications

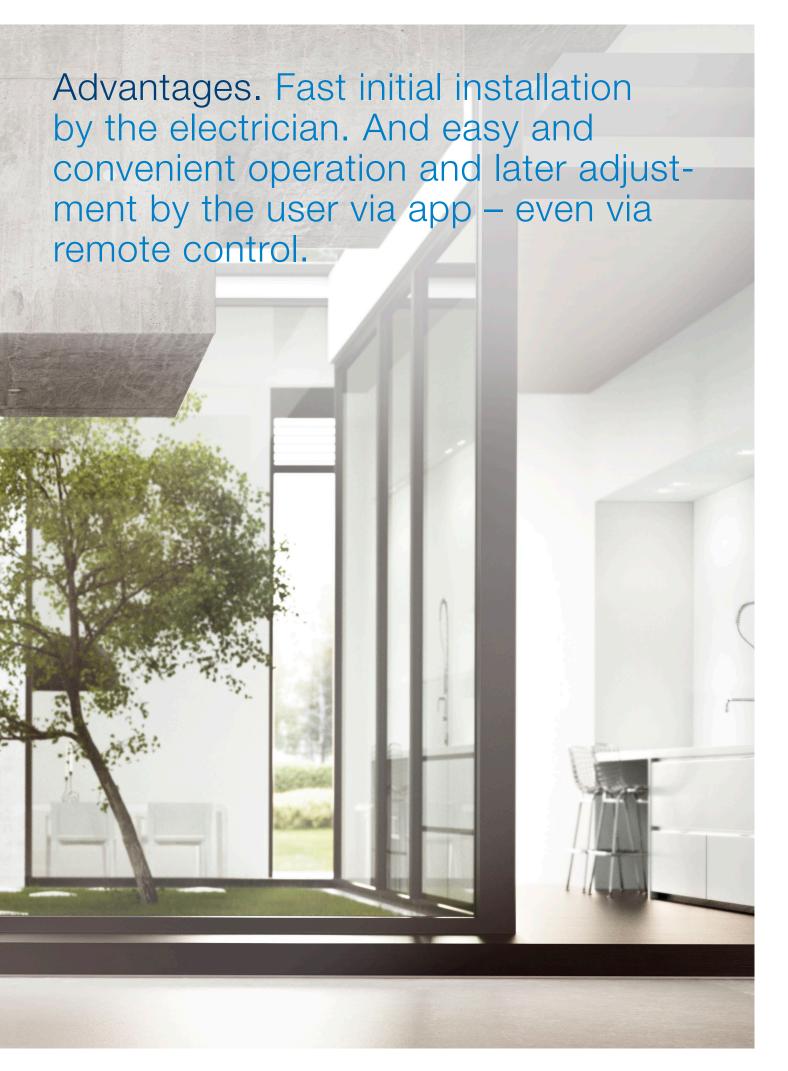
Always up-to-date. ABB-free@home® informs you about current events at home – such as when a movement detector detects a movement or when a window has been open for a long period of time. Either as e-mail or push-notification\* on the smartphone.

#### Voice control

The activation of the voice control in the ABB-free@home® app suffices to control the climate, lights and safety in the entire house via voice input. Very simple, without having to learn special commands and without laborious configuration. A clear statement.

<sup>\*</sup> Notifications on the screen of the smartphone or tablet, even when the display is switched off or one is located in a different app.

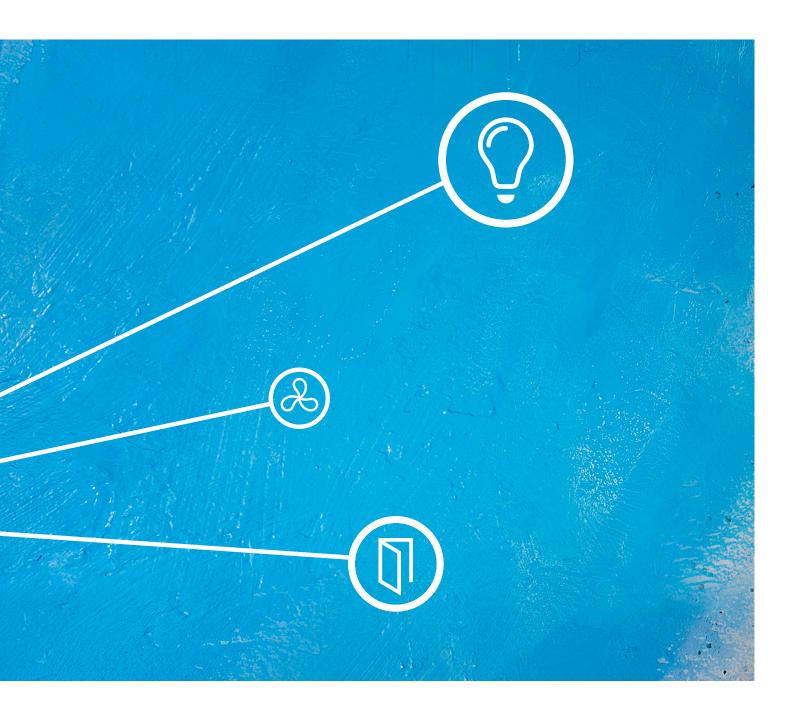






## The entire house under control Simply in the network

Comfortable and user-friendly. ABB-free@home® is very easy to operate. It enables the blinds, lighting, heating, air-conditioning and door communication to be controlled from near and far via computer, tablet or smartphone. And with the ABB-free@home-Touch also from a central location in the house or as usual via a switch on the wall.





#### Ready to start immediately

ABB-free@home® can be made operational in a fast and cost-saving way. The reason: Configuration and operation is as easy as surfing on a website – thanks to the free app. No additional software is required. The initial configuration is performed by the electrician. Later settings and adjustments can be made by yourself with every commercially available computer or tablet – with HTML 5 independent of platform.

# One pointer is sufficient For the app that is extremely easy to operate

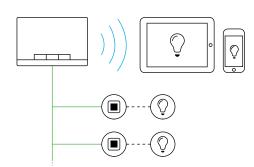
Home automation has never been easier with the ABB-free@home® app. It is suitable for controlling the entire technology in the networked house. And to make adjustments is as uncomplicated as surfing the Internet.



#### **Everything is possible**

The unique user interface has been developed specially for ABB-free@home®. It can be used via the internet browser on a PC or laptop as well as on smartphones and tablets. An app which adapts the user surface to the mobile operation (iOS/Android) has been developed specially for use with smartphones or tablets.





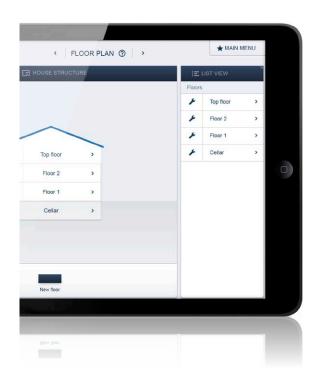
#### Perfectly connected

The System Access Point is connected with different sensors and actuators via the 2-wire bus technology. During commissioning an optional ad hoc connection can be established with the tablet if, for example, no router has yet been installed. Later the System Access Point and the mobile devices will be integrated into the home network. Global access to the ABB-free@home® system is possible via the myABB-LivingSpace platform.



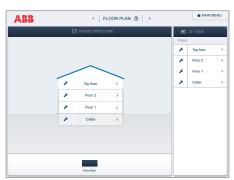
## As easy as shifting the armchair Creating scenes

Intuitive operation. The ABB-free@home® app is easy to understand. To start with, all available devices in the rooms are activated on the display, allowing the favourite settings to be made immediately via drag-and-drop.



#### Easy to install - and even easier to operate

Operation of the ABB-free@home® app has been optimized for use in day to day life. The so-called wizard guides one through the system. The most important functions are illustrated very clearly with icons that are self explanatory. A personal password can be activated when logging in, for maximum safety. This protects the home automation against unauthorized access.



#### The house

First the electrician sets up the floor plan with its floors and rooms.



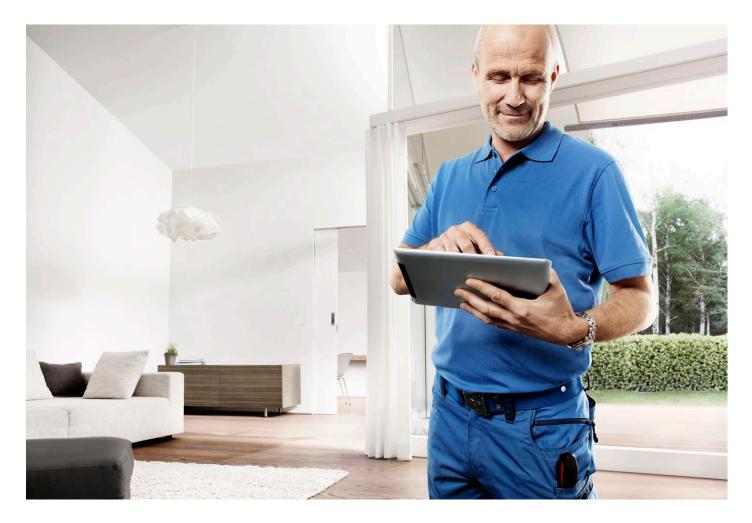
#### Assigning

Then the sensors in the app are integrated in the floor plan and assigned in the system.



#### Combining

And finally, the elements can be combined according to wish and requirement.



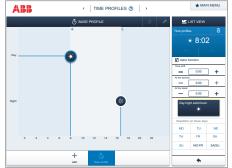
#### Simple and time-saving

The initial configuration of the system by the electrician is carried out via app. Operation is particularly fast and saves high-cost working hours.



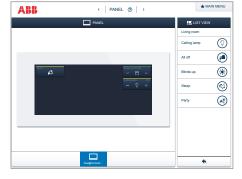
#### Scene control

The user can easily combine the switches and devices available in each room to create personal scenes. The lighting scene for an evening on the sofa, for example.



#### Time control

Roller blinds can be automatically moved and lights can be switched at any time or dependent on sunrise or sundown.



#### Panel setting

The most important functions can be controlled from a central location in the house and easily changed later at any time.

## Simply less effort This saves valuable working hours

As easy as ever. Only few components are required for the installation of ABB-free@home®. For the direct activation of light, the entire system only requires a bus cable in green, the sensor/actuator unit, a power supply and a System Access Point for programming.



#### **The System Access Point**

The System Access Point is the nerve center of the ABB-free@home® system. It provides access for computer, tablet or smartphone via WLAN. This allows the functions of the system to be defined and remote controlled – even after installation. The System Access Point can also be combined with a network router – via LAN or WLAN. Just connect and you're done. For convenience, the System Access Point makes its own WLAN and the software necessary for project planning and commissioning available. This makes you independent from the structural conditions and no additional software is required. As soon as you are finished with programming you can save the status and restore it again at any time.

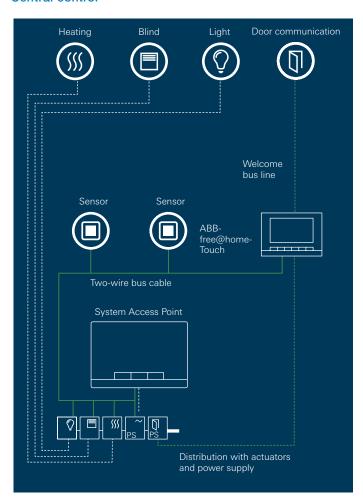


#### The actuators and sensors

Actuators for switching, dimming and control are available for ABB-free@home®. The flush-mounted binary inputs also allow the integration of conventional sensors, such as window contacts, for example. Push-buttons, room temperature controllers and movement detectors are available as sensors.

01	System Access Point
02	Sensor, 1gang
03	Switch actuator, 4gang
04	Binary input, 2gang, flush-mounted
05	Power supply
	02 03 04

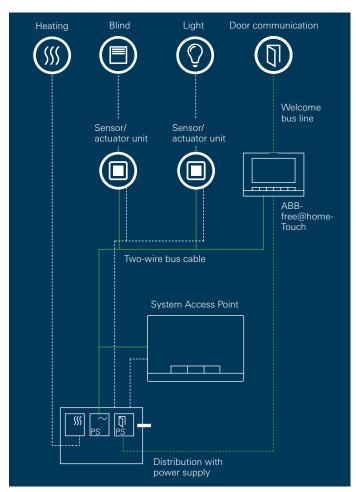
#### Central control



#### Central installation distributor with rail-mounting actuator

The installation of central rail-mounting actuators in the switch cabinet makes the installation of the sensors even easier - as only the bus line is located in the flush-mounted box. With this method, the costs for each channel can be reduced.

#### **Decentralized control**



#### Sensor/actuator unit for decentralized control

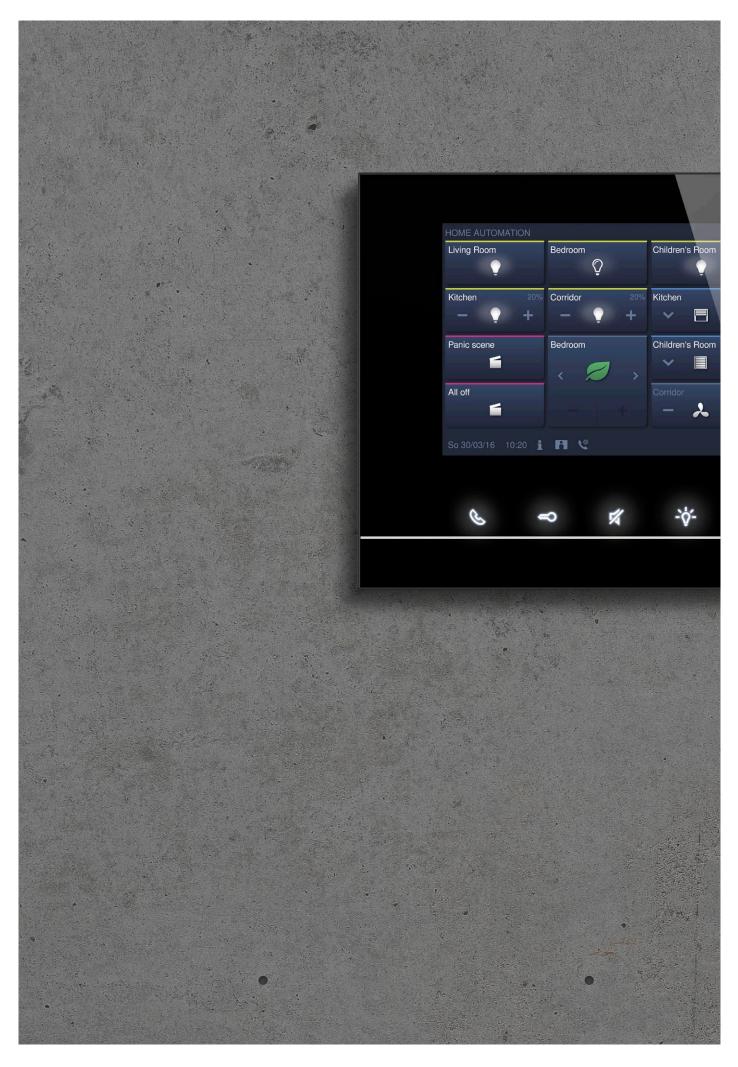
All in one. In case of the sensor/actuator unit, both the sensor and actuator are located in a single device to save space. The basic function of the unit is pre-configured, which makes programming the basic function unnecessary - but possible if required. The 230-Volt line is wired as usual.



#### Sensor/actuator unit

The sensor/actuator unit combines a control element and, for example, a switch actuator in the one flush-mounted housing. It is installed in the same way as a flush-mounted switch. The device has already been pre-programmed: which means that the light can be switched on directly after installation – without programming. The sensor/actuator unit can, of course, be freely re-configured via the user interface, just like all other sensors and actuators.

## Range



## The range Modularity makes everything possible







	System Access Point	ABB-free@homeTouch 7"
Article no.	SAP-S-1-84	DP7-S-6xx
Description	For commissioning and remote control of the	For ABB-free@home® and ABB-Welcome. For the central
	ABB-free@home® system. Allows the execution of astro	control of up to 16 configurable functions and display
	and time programs. Commissioning and remote control is	of the video image of an ABB-Welcome outdoor station.
	executed via web interface or app. No additional com-	SD card slot for extension of the picture memory. Suitable
	missioning software is required. Easy commissioning with	as room temperature controller extension unit. For surface
	WLAN ad-hoc mode. Connection to the home network	mounting.
	via WLAN client mode or via CAT cable.	
Dimensions (H×W×D)	110 mm × 170 mm × 31 mm	155 mm × 218 mm × 29 mm
Technical data	Display elements: LED for status display	Display size: 17.8 cm (7")
	Nominal voltage: 230 V~	Display resolution: 800 × 480
	Rated frequency: 50 Hz/60 Hz	Display elements: TFT touch display
	Protection type of device: IP 20	Protection type of device: IP 30











	Rocker, 1gang	Rocker, 2gang
Article no.	SR-1-8x	SR-2-8x
Dimensions (H×W)	80 mm × 80 mm	80 mm × 80 mm
Program	future® linear	future® linear
Available with the following icons (blind, light, dimmer, scene)	\$ <b>*</b> 9± <b>≤</b>	











	Rocker, 1gang	Rocker, 2gang
Article no.	SR-1-21x, SR-1-914	SR-2-21x, SR-2-914
Dimensions (H×W)	81 mm × 81 mm	81 mm × 81 mm
Program	Reflex SI/Busch-Duro 2000® SI/ Busch-balance® SI	Reflex SI/Busch-Duro 2000® SI/ Busch-balance® SI
Available with the		
following icons (blind,		
light, dimmer, scene)		













	Movement detector	Movement detector
Article no.	MD-F-1.0.1-8x	MD-F-1.0.1-21x, MD-F-1.0.1-914
Description	With select lens for detection with animal access.	With select lens for detection with animal access.
	For automatic switching of ABB-free@home® actuators	For automatic switching of ABB-free@home® actuators
	dependent on movement and brightness.	dependent on movement and brightness.
Dimensions (H×W)	80 mm × 80 mm	81 mm × 81 mm
Program	future®linear	Reflex SI/Busch-Duro 2000® SI/Busch-balance® SI
Technical data	Detection range: frontal 6 m, lateral 3 m	Detection range: frontal 6 m, lateral 3 m
	Opening angle: 180°	Opening angle: 180°
	Brightness limit value: 1-500 lux	Brightness limit value: 1-500 lux
	Protection type of device: IP 20	Protection type of device: IP 20
	Installation depth: 9 mm	Installation depth: 9 mm













	Room temperature controller	Room temperature controller
Article no.	CP-RTC-8x	CP-RTC-21x, CP-RTC-914
Description	As cover for ABB-free@home®	As cover for ABB-free@home®
	room temperature controller 6224/2.0.	room temperature controller 6224/2.0.
Dimensions (H×W)	80 mm × 80 mm	81 mm × 81 mm
Program	future® linear	Reflex SI/Busch-Duro 2000® SI/Busch-balance® SI







free@home for Android

#### The ABB-free@home® app

The activation of the voice control in the ABB-free@home® app suffices to control the climate, lights and safety in the entire house via voice input: "Switch on the lamp in the living room", "Move all the blinds up", and whatever else you wish, without having to learn special commands, without laborious configuration. The previously defined names of rooms, floors and devices continue to be used without interruption. Everything remains in the one system for the future.







	Switch actuator sensor, 1/1gang	Dim actuator sensor, 1/1 gang	Blind actuator sensor, 1/1 gang
Article no.	SSA-F-1.1.1	SDA-F-1.1.1	SBA-F-1.1.1
Description	For switching 230 V~ loads. With	For dimming 230 V~ loads. With inte-	For controlling blind and awning
	integrated switch actuator. Switching	grated universal dimming actuator for	motors. With integrated blind actuator
	function is available also without	controlling different lamps. The dim-	Blind function is available also without
	prior programming (pre-configured).	ming function is available also without	prior programming (pre-configured).
	Only to be used in combination with	prior programming (pre-configured).	Only to be used in combination with
	ABB-free@home® 1gang rockers.	Only to be used in combination with	ABB-free@home® 1gang rockers.
		ABB-free@home® 1gang rockers.	
Dimensions (H×W×D)	71 mm × 71 mm × 45 mm	71 mm × 71 mm × 45 mm	71 mm × 71 mm × 45 mm
Technical data	Outputs: 1× normally open contact,	Outputs: 1× dimming channel	Outputs: 1× switchover contacts/nor-
	floating	Type of load: 230 V incandescent	mally open contact, potential-bound
	Type of load: resistive	lamps and low-voltage halogen lamps	Nominal power: 920 VA
	Nominal current: 10 A	with conventional transformers	Nominal current: 4 A
	Nominal power: 2300 W	or electronic transformers	Type of load: blind operating mode
	Type of load: capacitive	Nominal power: 10-180 W/VA	Protection type of device: IP 20
	Nominal current: 10 AX	Type of load: LEDi and energy-saving	Installation depth: 32 mm
	Protection type of device: IP 20	lamps; typical	
	Installation depth: 32 mm	Nominal power: 2-80 W/VA	
		Protection type of device: IP 20	
		Installation depth: 32 mm	







	Binary input, 2gang, flush-mounted	Binary input, 4gang, flush-mounted	Fan coil actuator, MDRC
Article no.	BI-F-2.0.1	BI-F-4.0.1	FCA-M-2.3.1
Description	Conventional push-buttons or auxiliary	Conventional push-buttons or auxiliary	For controlling blower convectors. Sup-
	contacts can be connected to 2 chan-	contacts can be connected to 4 chan-	ports 2-pipe and 4-pipe system for heating
	nels. The information of the contact	nels. The information of the contact	and cooling. The fan speed levels can be
	enquiry can be used for activating	enquiry can be used for activating	switched using a changeover or step switch
	ABB-free@home® actuators or for	ABB-free@home® actuators or for	function. Three contacts for switching a
	recording status information. The con-	recording status information. The con-	three-stage fan. Two contacts for activat-
	tact polling voltage is made available	tact polling voltage is made available	ing the heating and cooling valves. With
	from the binary input itself. Extension	from the binary input itself. Extension	two binary inputs for connecting dewpoint
	of the connecting cables possible by a	of the connecting cables possible by a	and condensation contacts. The scanning
	maximum of 10 m. Flush-mounted de-	maximum of 10 m. Flush-mounted de-	voltage is provided by the device. The bus
	vice for installation in a 60 mm device	vice for installation in a 60 mm device	connection is provided via the enclosed bus
	box or distribution box.	box or distribution box.	terminal.
Dimensions (H×W×D)	39 mm × 40 mm × 12 mm	39 mm × 40 mm × 12 mm	90 mm × 108 mm × 64 mm
Technical data	Inputs: 2	Inputs: 4	Supports 24 V and 230 V valves
	Polling voltage: 20 V-	Polling voltage: 20 V-	Outputs: 3x Normally open contact,
	Protection type of device: IP 20	Protection type of device: IP 20	potential free
			Suitable for: AC3
			Rated current: 6 A
			Output voltage: 230 V~
			Protection type of device: IP 20
			Module width: 6 MW







	Flush-mounted device Room temperature controller	Sensor unit, 1gang	Sensor unit, 2gang	
Article no.	RTC-F-1	SU-F-1.0.1	SU-F-2.0.1	
Description	Control element with room tempera-	For transmitting switching, push-	For transmitting switching, push-	
	ture control function for controlling	button, dimming and blind commands	button, dimming and blind commands	
	commercially available actuating drives	to an ABB-free@home® actuator.	to an ABB-free@home® actuator.	
	(continuous controllers) in connec-	Only to be used in combination with	Only to be used in combination with	
	tion with 6164/0.6, 6254/0.12. With	ABB-free@home® 1gang rockers.	ABB-free@home® 2gang rockers.	
	display of set-value temperature.			
	Only to be used in combination with			
	ABB-free@home® room temperature			
	controller cover plates 6235-xxx.			
Dimensions (H×W×D)	71 mm × 71 mm × 30 mm	71 mm × 71 mm × 23 mm	71 mm × 71 mm × 23 mm	
Technical data	Display elements:	Control elements:	Control elements:	
	Display of operating mode via LCD	button contact top/bottom	button contact top/bottom	
	Protection type of device: IP 20	display elements: LED as	display elements: LED as	
	Installation depth: 14 mm	light for orientation or display of	light for orientation or display of	
		switching state	switching state	
		Protection type of device: IP 20	Protection type of device: IP 20	
		Installation depth: 9 mm	Installation depth: 9 mm	







	Power supply	Binary input, 4gang	Switch actuator, 4gang
Article no.	PS-M-64.1.1	BI-M-4.0.1	SA-M-0.4.1
Description	Power supply with integrated choke.	Records 10 to 230 V AC/DC signals	For switching 4 independent 230 V~
	Fast diagnosis due to LED display for	via 4 channels.	loads. Each contact has a manual opera-
	operational readiness and errors.	The information of the signal evaluation	tion function independent of auxiliary
	readilless and errors.	can be used for activating ABB-free@	voltage for additionally displaying the
		home® actuators or for recording	contact setting.
		status information.	
Dimensions (H×W×D)	90 mm × 72 mm × 64 mm	90 mm × 36 mm × 64 mm	90 mm × 72 mm × 64 mm
Technical data	Display element: operating/overload LED	Inputs: 4	Outputs: 4
	Nominal voltage: 230 V~, +10 %/-15 %	Protection type of device: IP 20	Type of load: AC1
	Secondary: 30 V, +2 V/-2 V	Module width: 2 MW	Nominal current: 16 A, at cos φ 0.8
	Rated frequency: 50 Hz/60 Hz		Output voltage: 230 V~
	Outputs: 1		Type of load: AC3
	Nominal current: 640 mA		Nominal current: 8 A, at cos φ 0.45
	Protection type of device: IP 20		Protection type of device: IP 20
	Module width: 4 MW		Module width: 4 MW



#### Weather station for ABB-free@home®

For recording and transmitting the brightness, the temperature, the wind speed and rain. Weather data can be linked with actuators to automatically control functions. Weather data can be visualized in the ABB-free@home web interface and in the ABB-free@home app. Dimensions: (H  $\times$  W  $\times$  D): 108 mm  $\times$  121 mm  $\times$  227 mm. Article no. WS-1





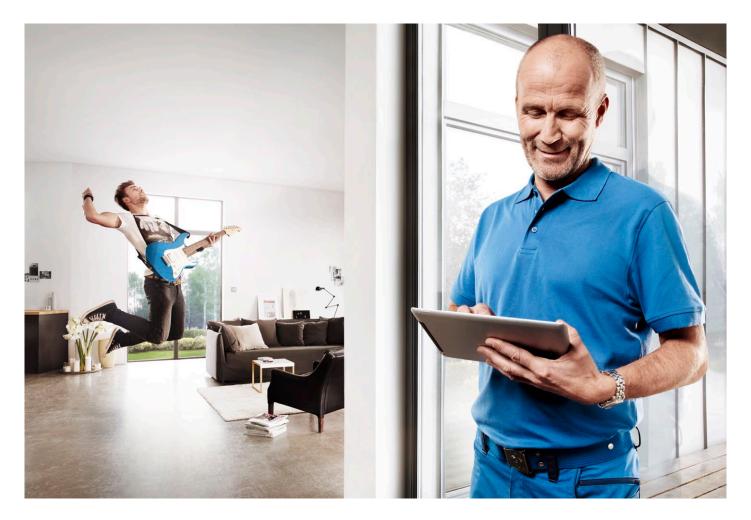
	Sensor/Switch actuator, 8/8gang	Dim actuator, 4gang
Article no.	SA-M-8.8.1	DA-M-0.4.2
Description	The binary inputs can be used as an interface for convenient	Multi-channel universal dimming actuator for controlling LEDs,
	operation of free@home systems via potential free pushbut-	incandescent lamps, 230 V halogen lamps, low-voltage
	tons or for reading technical binary signals. The switching	halogen lamps with conventional or electronic transformers,
	outputs can be switched independently as a function of other	and dimmable energy-saving halogen lamps. For dimmable
	sensors connected to the bus.	retrofit LED lamps (LEDi). Parallel switching of channels for
		increasing the loads through wire bridges possible. The
		outputs can be switched parallel in any combination. Outputs
		automatically recognise the connected load. In addition, the
		operating mode can be selected manually. Status display of
		the outputs via LED
Dimensions (H × W × D)	90 mm×144 mm×64 mm	90 mm×144 mm×64 mm
Technical data	Inputs: 8	Display elements: status display of outputs via LED
	Polling voltage: 32 V	Nominal voltage: 230 V~
	Max. cable length: ≤100m	Rated frequency: 50 Hz/60 Hz
	Outputs: 8	Outputs: 4× dimming channel
	Suitable for: AC1	Type of load: 230 V incandescent lamps and low-voltage
	Rated current: 6 A, at cos φ 0.8	halogen lamps
	Output voltage: 230 V~	with conventional transformers or electronic transformers
	Suitable for: AC3	Nominal power: 10-315 W/VA
	Rated current: 6 A, at cos φ 0.45	Type of load: LEDi and energy-saving lamps; typical
	Protection class of device: IP 20	Nominal power: 2-80 W/VA
	Module width: 8 MW	Protection type of device: IP 20
		Module width: 8 MW







	Blind actuator, 4gang	Heating actuator, 6gang	Heating actuator, 12gang
Article no.	BA-M-0.4.1	HA-M-0.6.1	HA-M-0.12.1
Description	For controlling 4 independent blind	For controlling thermoelectric	For controlling thermoelectric
	or roller shutter drives. The outputs	actuating drives in heating/cooling	actuating drives in heating/cooling
	are inversely blocked.	systems. The outputs are protected	systems. The outputs are protected
		against short-circuit and overload.	against short-circuit and overload.
Dimensions (H×W×D)	90 mm × 72 mm × 64 mm	90 mm × 72 mm × 64 mm	90 mm × 144 mm × 64 mm
Technical data	Outputs: 4	Outputs: 6	Outputs: 12
	Type of load: AC3	Type of load: resistive	Type of load: resistive
	Nominal current: 6 A, at cos φ 0.45	Nominal current: 160 mA	Nominal current: 160 mA
	Output voltage: 230 V~	Protection type of device: IP 20	Protection type of device: IP 20
	Protection type of device: IP 20	Module width: 4 MW	Module width: 8 MW
	Module width: 4 MW		



## Communicative and competent The ABB partner close to you

Advice and assistance close to you. Your electrician will be happy to explain to you in detail the advantages of ABB-free@home® in a face-to-face discussion. This will allow home automation to be planned to suit your individual requirements.



#### The suitable electrician

The electrician familiar with ABB-free@home® can be found at www.abb.com/freeathome. Simply enter your postcode – and the firms in your region will be displayed.

Now scan the QR code to find out more about the advantages of ABB-free@home®.

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