More information and details

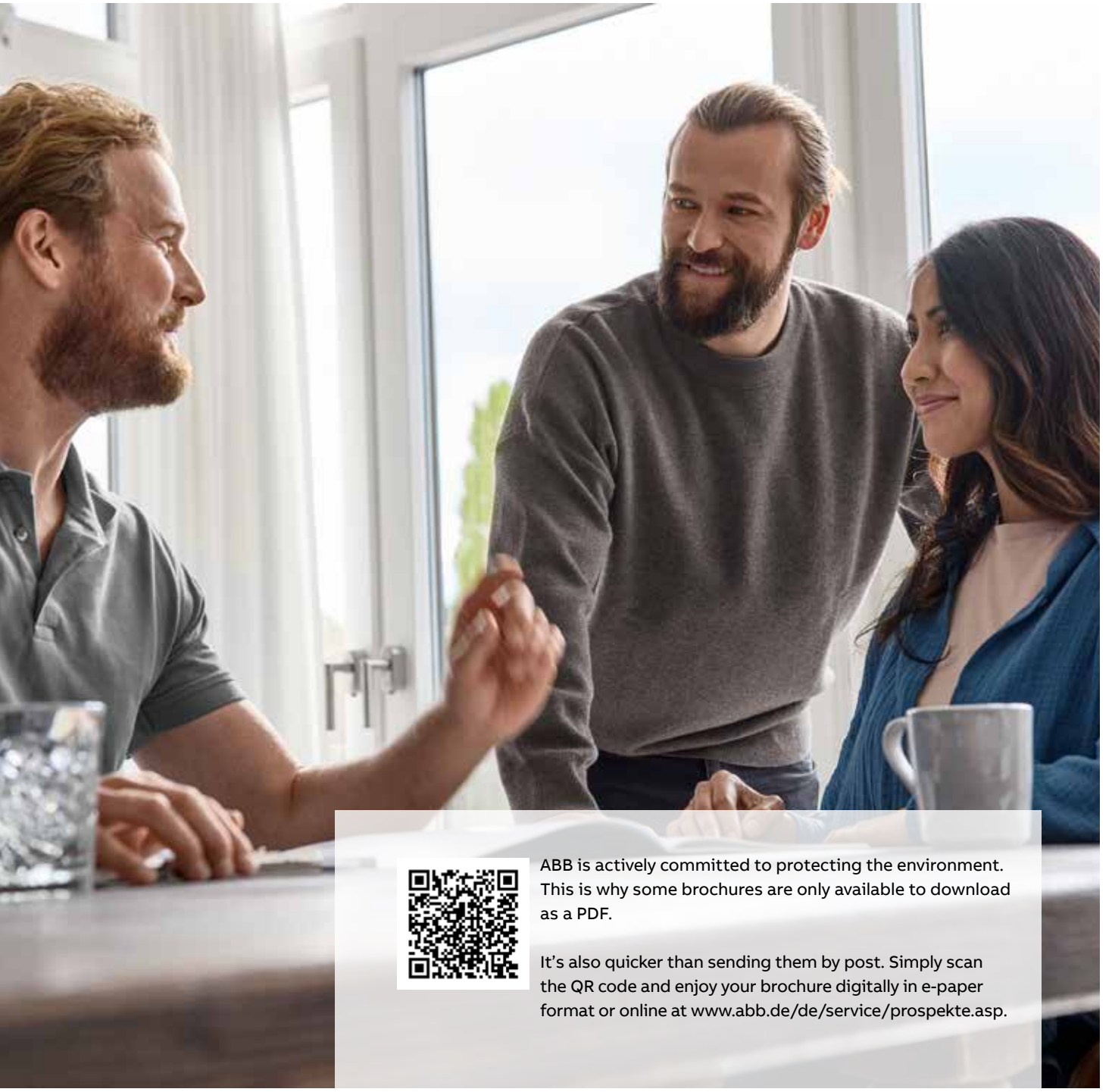

ABB is actively committed to protecting the environment. This is why some brochures are only available to download as a PDF.

It's also quicker than sending them by post. Simply scan the QR code and enjoy your brochure digitally in e-paper format or online at www.abb.de/de/service/prospekte.asp.

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Find more information by scanning the code

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Rev A -12-2021

The new standard for flexible installations

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Flexible options for every home

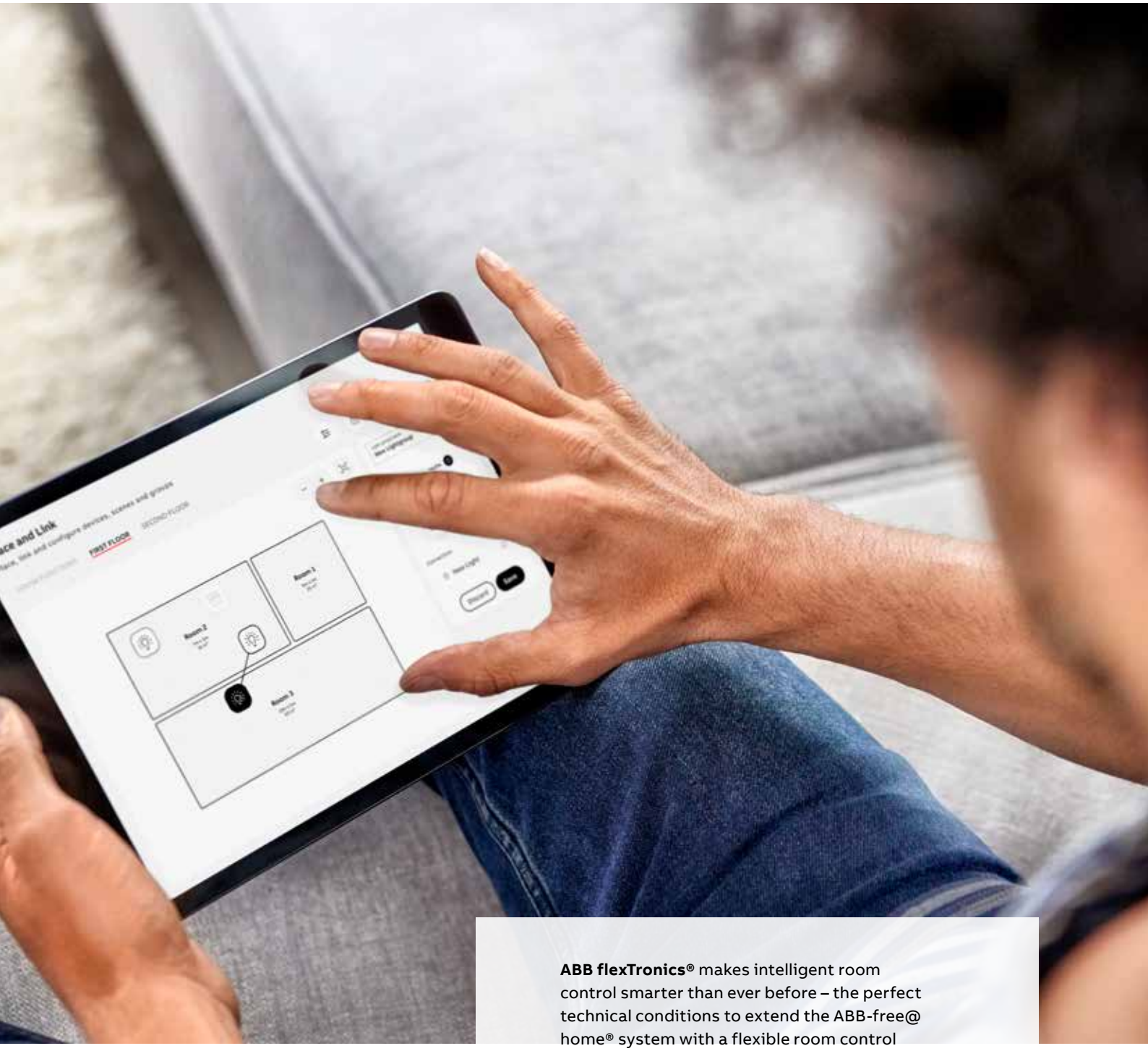


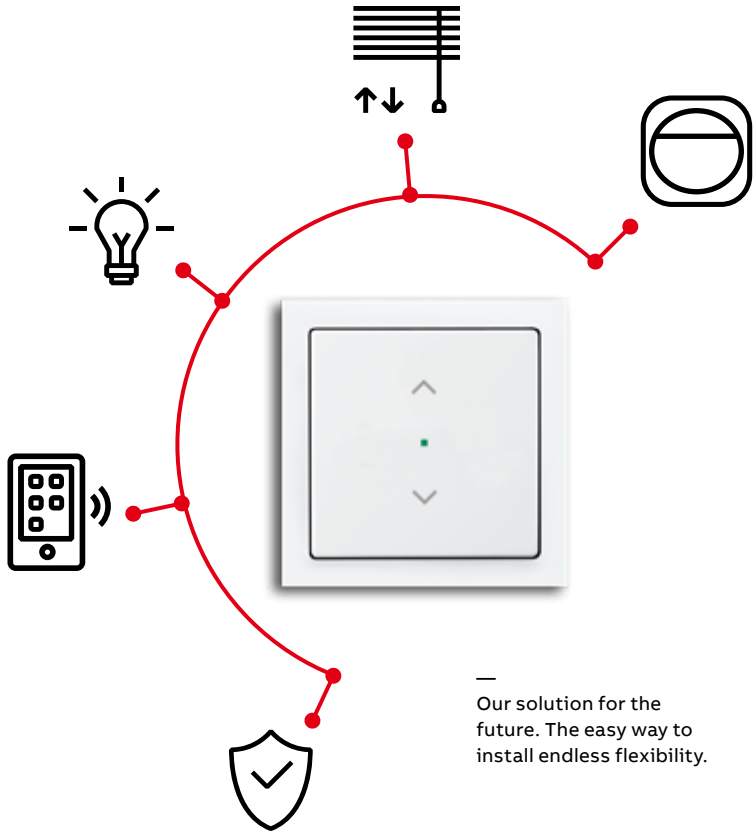
ABB flexTronics® makes intelligent room control smarter than ever before – the perfect technical conditions to extend the ABB-free@ home® system with a flexible room control version for beginners. A future-ready system with the option to upgrade.

Live with more flexibility
Today, intelligent homes are made up of systems that adapt to the residents' individual lifestyles – smart, flexible and sustainable. And this is exactly what our room controls for beginners aim to offer. The flexible ABB flexTronics® single operation, ABB-free@home® flex device control and ABB-free@home® flex room control can be extended at any time and are therefore ideal for new builds and renovations. After all, no two homes are ever the same.

Connection
Control ABB-free@home® flex with Bluetooth – straight from your smartphone or tablet. The additional wireless communication can also be used for networked room control and can be upgraded later to ABB-free@home® via the ABB-free@home® System Access Point.

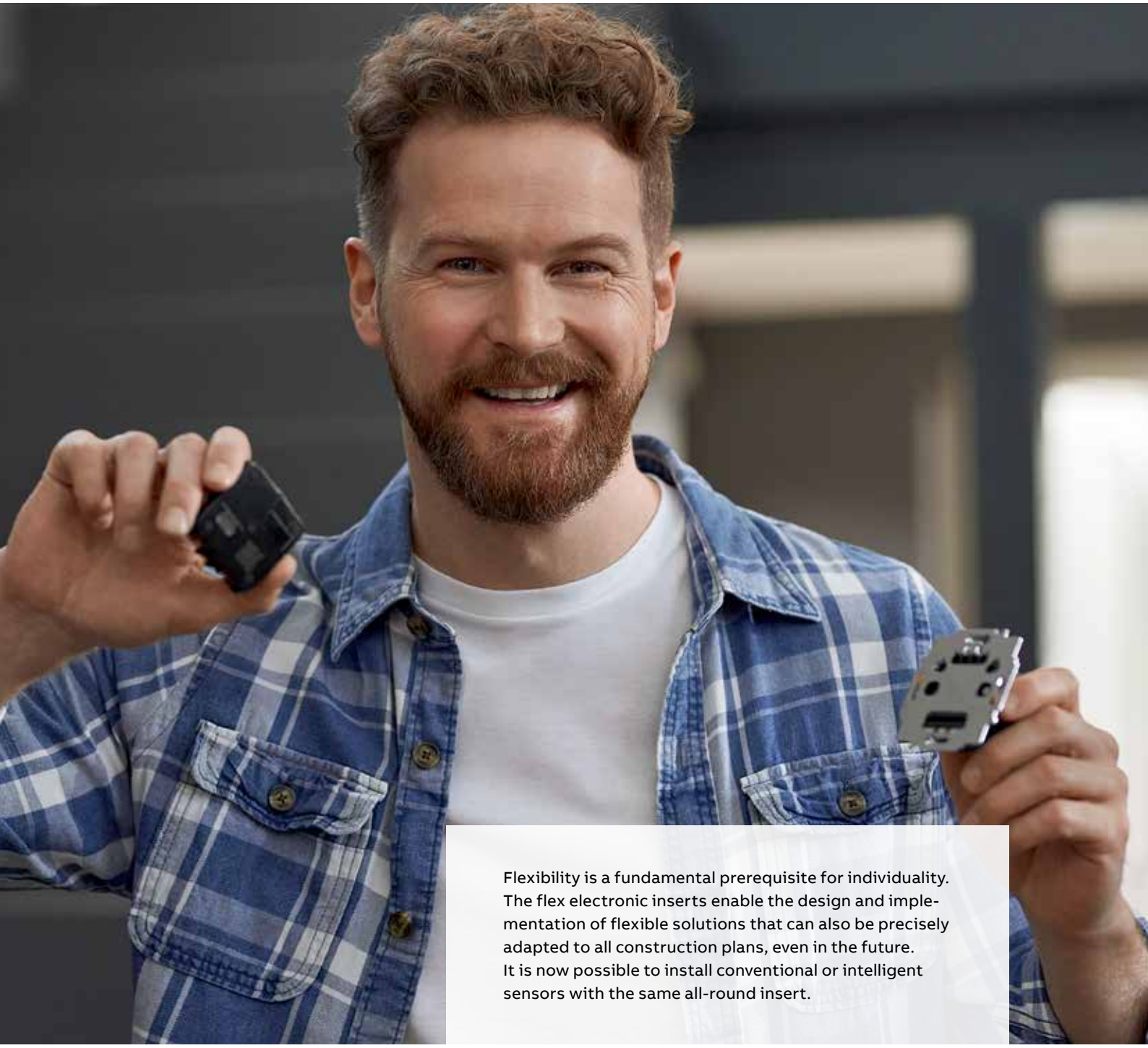
Customisation
The ABB-free@home® flex devices can be configured via the app for precise tailoring to individual requirements and habits. Customised controls can also be set for lights and blinds.

Modularity
The ABB flexTronics® and ABB-free@home® flex inserts and control elements can be individually combined. Together, they enable intelligent room control.

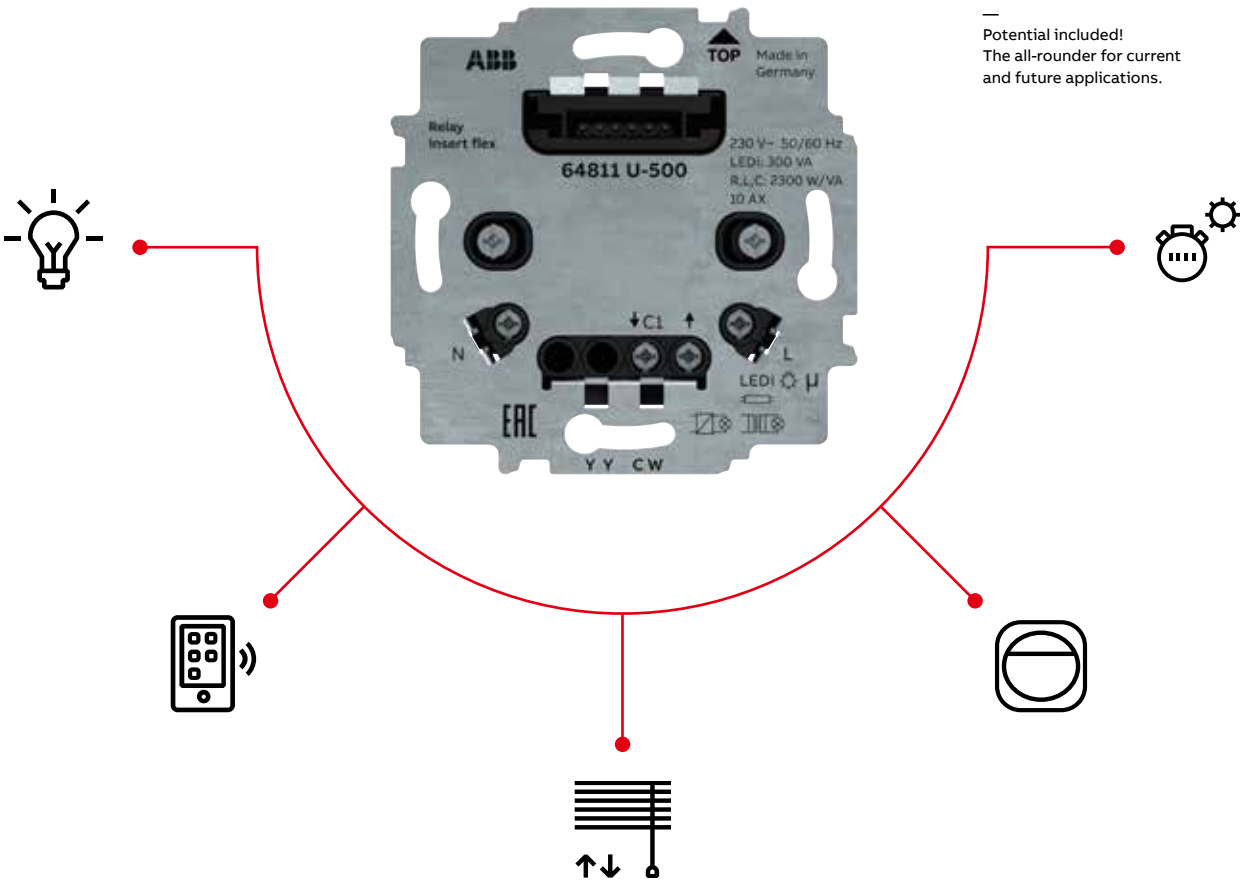


—
Our solution for the future. The easy way to install endless flexibility.

Flexible installation and configuration



Flexibility is a fundamental prerequisite for individuality. The flex electronic inserts enable the design and implementation of flexible solutions that can also be precisely adapted to all construction plans, even in the future. It is now possible to install conventional or intelligent sensors with the same all-round insert.



—
Potential included!
The all-rounder for current and future applications.

One element makes all the difference
Practical and easy to plan: a system that enables an astonishingly large number of applications with just a few modules and wires – this is typical of flex. With their modern flush design, the flex inserts are easy to install; front measuring points enable perfect service.

FEATURES AT A GLANCE

Fine-wire protection
Safe and fast connection of flexible and rigid wires

Adjustable bearer ring
Compensates for minor unevenness during mounting

Flush design
Measuring just 25 mm, there is plenty of space for cables and terminals

Uniform interface
Several flexible combination options exist between sensor and actuator

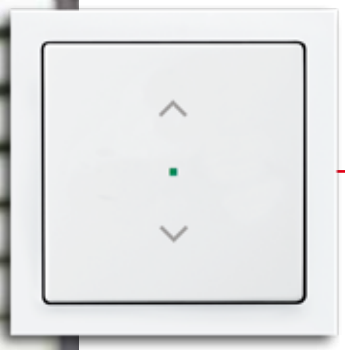
plusWire®
The modern extension operation with even more flexibility

Feel-good factor: smarter home

More and more people are discovering the convenience of controlling a room's lights and blinds via their smartphone or tablet. With the ABB-free@home® flex range and the corresponding APP ABB-free@home® Next, control is simple and intuitive. Our commitment: smart control that is always user-friendly and easy to configure.

As your partner for electrical installations and smart home solutions, we accompany you through your projects and support you with our products, tools and services – after all, the smartest solutions are always the product of teamwork.

A set above the rest
Safety and ambience are just two convincing arguments for the new room control.

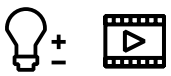


—
Modern blind control with adjustable timer function via smartphone app

Blind control
Blinds not only ensure privacy, but also provide protection from the weather through the integration of a weather station. Thanks to room control, blinds can be controlled simply and conveniently at any time of the day or night. Open, fully closed or with the slats tilted to various angles – discover the limitless options.

- Simple replacement of existing blind control
- Convenient blind setting via smartphone or tablet
- Practical timer with straightforward setting of the existing timer

The times of the sunrise and sunset vary throughout the year
Thanks to the astro function, the timer will automatically adjust switching times in line with these changes. In summer, for example, the outdoor lighting is switched off a bit earlier or the blinds are opened. In winter, the light switches on a bit earlier in the evening and the blinds are closed.



—
Light dimmer for perfect ambience, including scene control

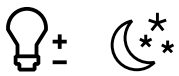
Garden lighting
There's no warmer welcome than the garden illuminated in all its splendour. Outdoors, however, lighting is much more than a design feature.

Thanks to a range of lighting scenes and automatic on/off function, ABB-free@home® flex guarantees orientation and safety. Always set precisely to suit the time of day, weather and season.

- Different lighting scenes are easy to access
- Convenient, automatic on/off feature in combination with the integrated astronomical timer
- Increased safety in the dark through outdoor lighting

—
ABB Watchdog 180 flex comfort sensor with multi-lens

Comfort meets efficiency
Sustainability is our mission. This is why ABB-free@home® flex is designed as a future-ready solution that uses precise light and blind control throughout the day to save energy.

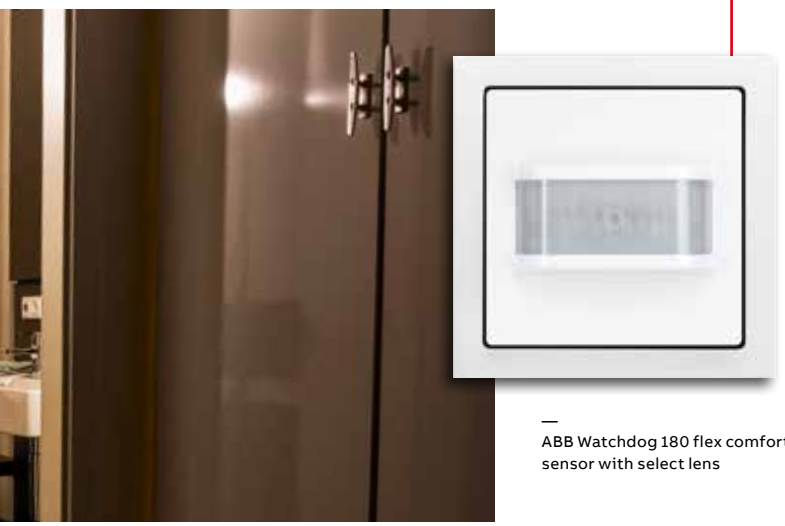


—
A good night's sleep with preset lighting

Stairs
The connecting element in our living spaces. Although they only tend to be a transitional area, straightforward lighting is especially crucial for stairwells. With hands full of shopping, our minds already on the next floor, having to worry about switching the light on is no longer a problem with the ABB-Wächter® 180 flex comfort sensor with multi-lens.

- Individual light settings including dimming function
- Four detection levels cover the entire staircase area
- Energy-saving effect thanks to automatic on/off function

—
Light dimmer for the perfect illumination, including scene control



—
ABB Watchdog 180 flex comfort sensor with select lens

Bathroom
Nice and bright in the morning, dimmed and atmospheric in the evening and night – when it comes to the bathroom, the lighting requirements could hardly be more diverse.

With a combination of motion detectors and dimmers, the ABB-Wächter® 180 flex comfort sensor with select lens creates customised lighting ambiences in harmony with our natural biorhythm.

- Customisable lighting settings, adjusted to the time of day and situation
- Dimmer function supports the natural biorhythm and ensures sustainable electricity consumption

Children's room
Night night, sleep tight – and please don't wake up until morning light! Thanks to a two-way control element, the ABB-free@home® flex can switch lights on and off and also offers preset lighting scenes such as the Good Night mode, which automatically dims the lights in the children's room. This way, your little angels are guaranteed not to stir when you peek in to check on them in the evening.

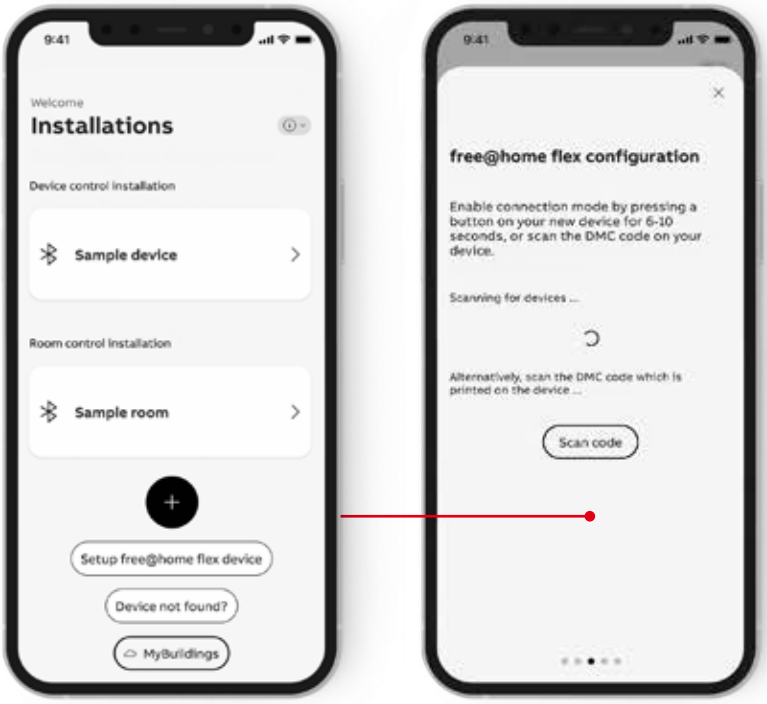
- Two-way control element with on/off function and configurable lighting presets
- Atmospheric lighting for a peaceful night's sleep

APP ABB free@home® Next

Of course, we are also set up for the future virtually. Digital set-up, customised configuration and then extension to complete home control – the potential of the APP ABB-free@home® Next makes all of this possible. From smart room control to controlling an entire household indoors, outdoors and even when you're not at home.

APP ABB-free@home® functions

- Lighting control
- Blind control
- Remote control
- Timer
- Stay-on times presets/scenes/positions

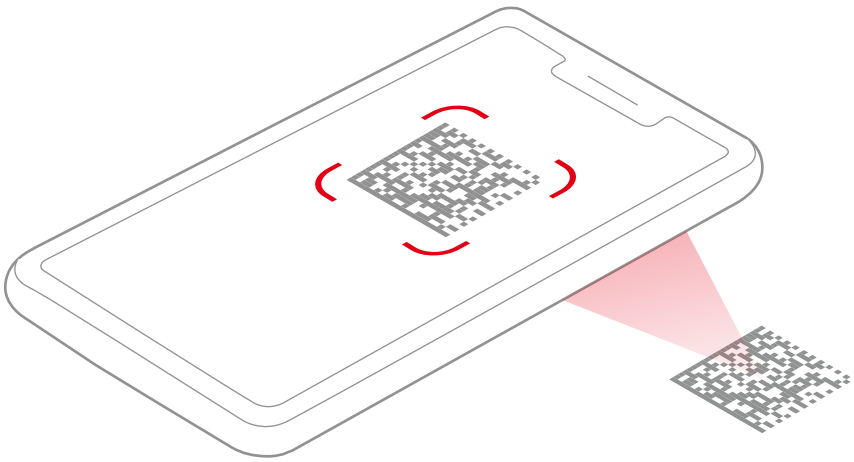


—
Under 'New installations', a new device can be added to an existing installation (here: sample house) or a new installation can be created.

The app with it all. After all, ABB-free@home® flex and ABB-free@home® use the same app – complete with identical, self-explanatory menu navigation: 'Set up a new Bluetooth device' automatically appears as soon as Bluetooth is enabled on the mobile device, the device is in teach-in mode/factory setting or the app is opened.

General installation settings can be configured in the installation area. These include:

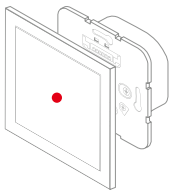
- Location important for the calculation of the astro function
- Project handover: e.g. from the electrician's smartphone to the customer's smartphone
- Room control migration: network several devices together at a later date
- Devices: overview of all devices in the installation
- Firmware: update area



Even faster with the DataMatrix code
Set-up via app isn't just easy, but can also be extremely fast – simply scan the control element configuration DMC code and you're done.

Flexible extension levels

The various extension levels guarantee comprehensive flexibility and individuality from the very outset. The various levels build on each other logically. This means that individual features, rooms or the entire system can be easily extended and adapted.

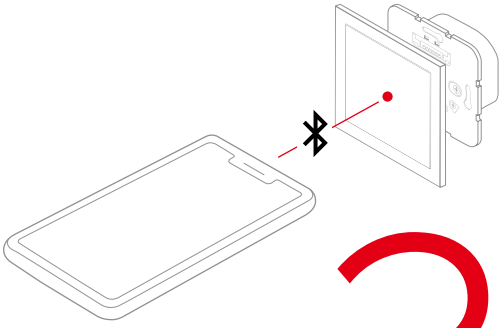


1

ABB flexTronics® – single operation

The manual single operation has everything required for subsequent extension to smart device control.

- Stand-alone operation
- Familiar operation as with a conventional electronic insert
- Additional features like value/position memory for rocker switches

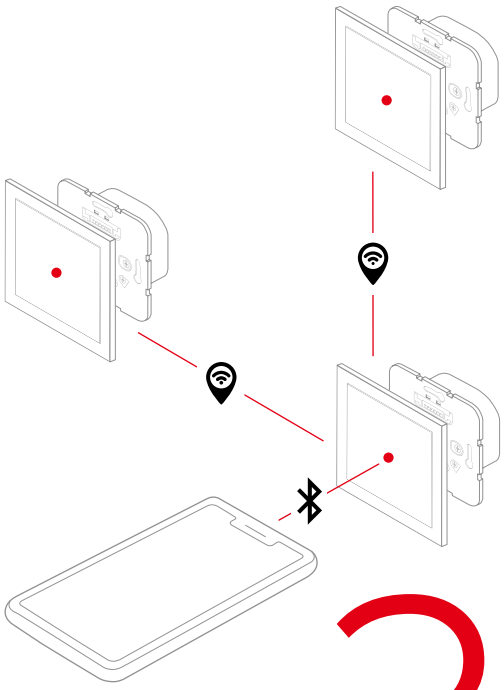


2

ABB-free@home® flex – device control

Device control via the app using Bluetooth enables the digital remote control of several inserts.

- Stand-alone operation of inserts
- Remote control and configuration of the corresponding insert via app using Bluetooth
- Several inserts can be compiled into one project in the app in order to simplify switching between devices

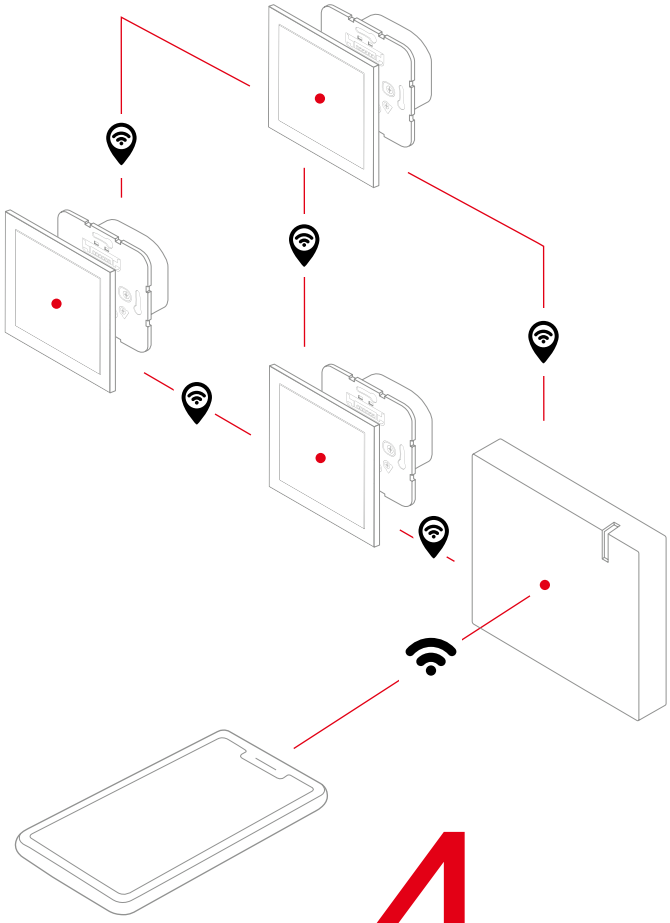


3

ABB-free@home® flex – room control

Room control works wirelessly or with wires and connects the various inserts.

- Networking of inserts via plusWire® or free@home® Wireless
- No System Access Point required
- For wireless connection, myABB registration is required (Virtual System Access Point)



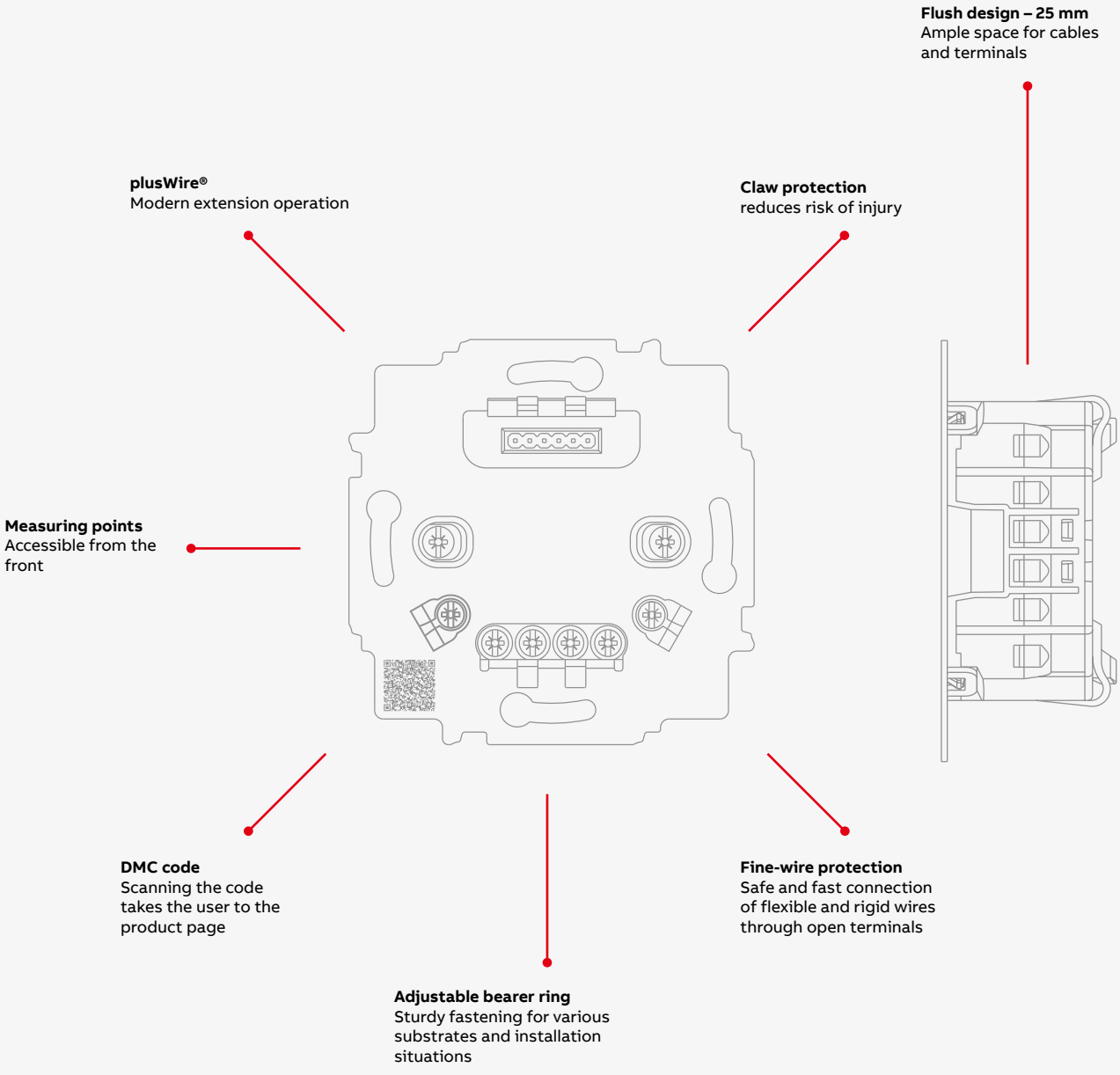
4

ABB-free@home® – home control

ABB-free@home® controls the entire home – indoors and outdoors, every room and even in the garden.

- Networking of inserts via plusWire® or free@home® Wireless
- Connection of wireless control elements
- to the ABB-free@home® System Access Point
- Full networkability with complete functionality such as voice control, external access, etc. …

One permanent insert



Simply wireless
With an upgrade, only the control element is replaced, since the corresponding insert already contains all wireless operation options.

ABB flexTronics®

The ABB flexTronics® control element is the classic attachment for single operation and offers a gentle introduction to blind management and light control.

Back-up battery
Settings are saved even in the event of a power cut

Status LED
Orientation light

Scenes
Presets and values can be saved and enabled

ABB-free@home® flex

The ABB-free@home® flex control element is ideal for complete room solutions or interconnected smart home systems. It can also be controlled via the app using Bluetooth.

Parameters
Simple configuration via smartphone app

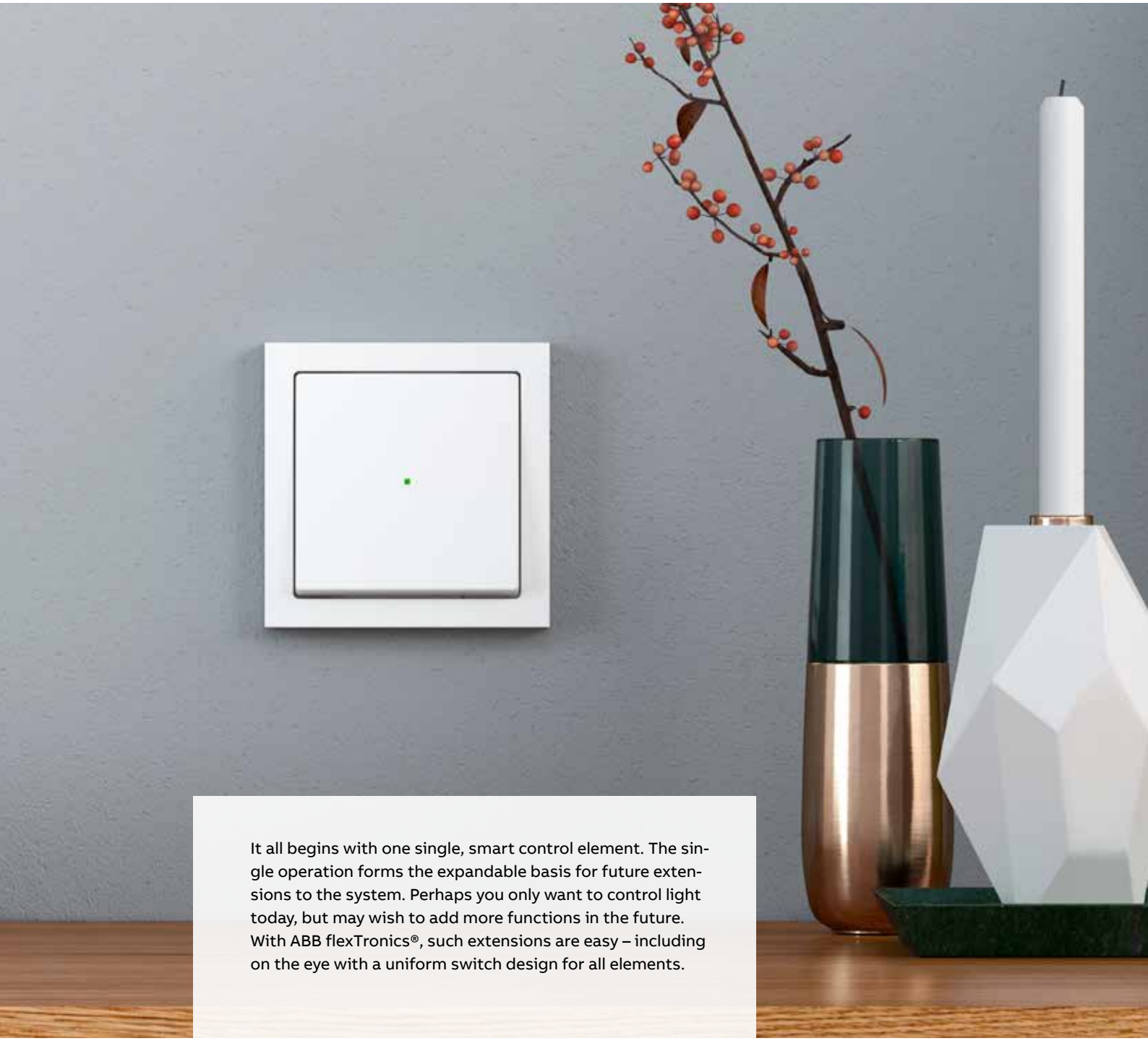
Timer
Integrated astro function/timer

Device control via Bluetooth interface
Direct connection to smartphone

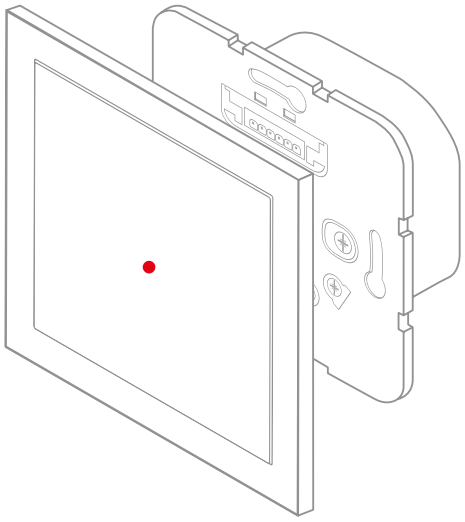
Room control via remote control
Via the APP ABB-free@home® Next and myABB account

Complete home control via ABB-free@home® Wireless
For connection to a free@home System Access Point

ABB flexTronics® – single operation



It all begins with one single, smart control element. The single operation forms the expandable basis for future extensions to the system. Perhaps you only want to control light today, but may wish to add more functions in the future. With ABB flexTronics®, such extensions are easy – including on the eye with a uniform switch design for all elements.



1

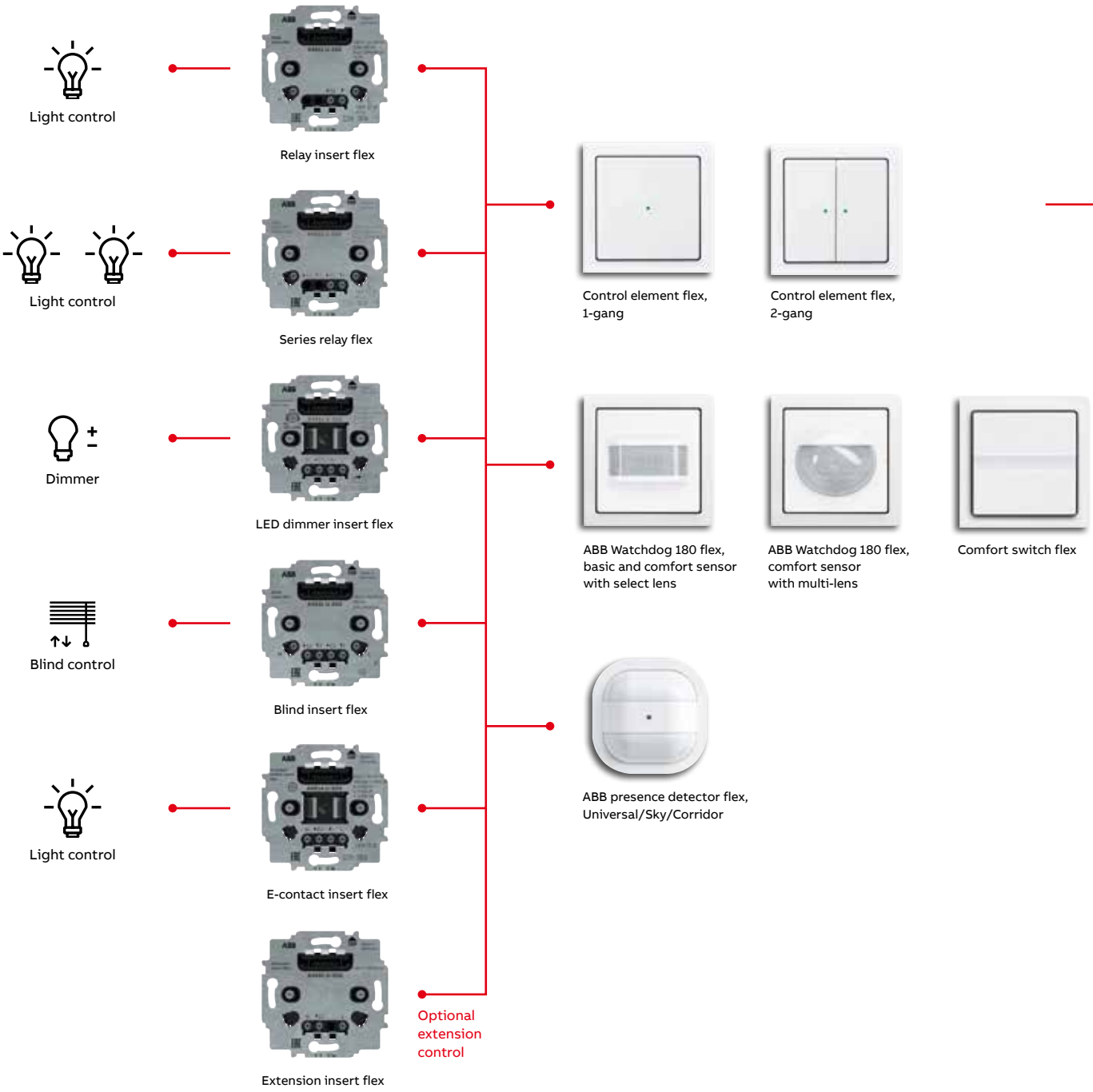
Perfect for everyone who wants to stay flexible – installed today for tomorrow
Regardless of what you want to use it for, the flex insert is easy to mount and, unless requested otherwise, equipped with a classic control rocker. It has all the technology required for future extensions – to upgrade, the element is simply removed and replaced by the relevant wireless module.

Control on the left, store values on the right. The control element with two-way rocker can be used to store values, such as various shading positions for ‘ventilation/tilt’ for night-time or customised light values for the dimmer

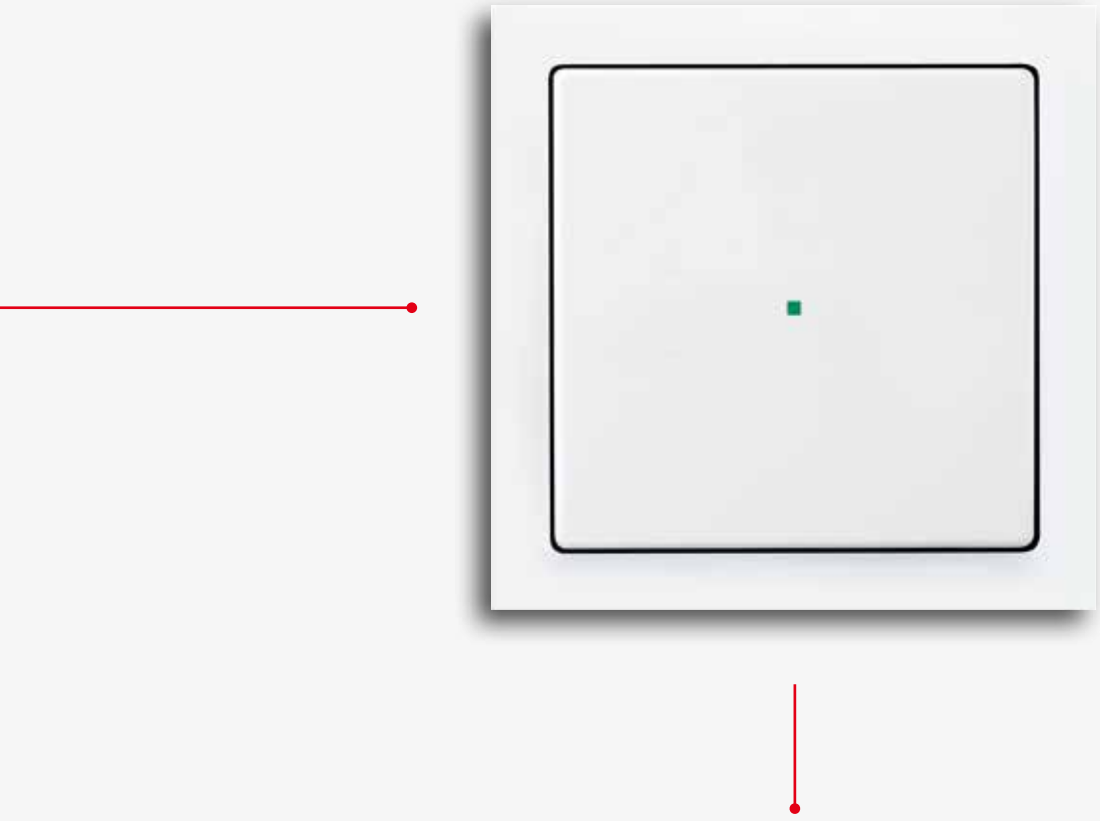
Modern communication channels

The perfect fit
The versatile flex range has a modular design. In other words, all control elements and inserts can be combined as required. ABB flexTronics® is compatible with all conventional push-buttons and practically our entire switch range, thus offering maximum flexibility.

In addition to the increased selection of combinable inserts, it has also been technically upgraded. It now offers several new features for reliable use and easy installation.



Convenient control
Easy-to-operate large rocker for convenient operation with visually flush central position



Status LED
Orientation light

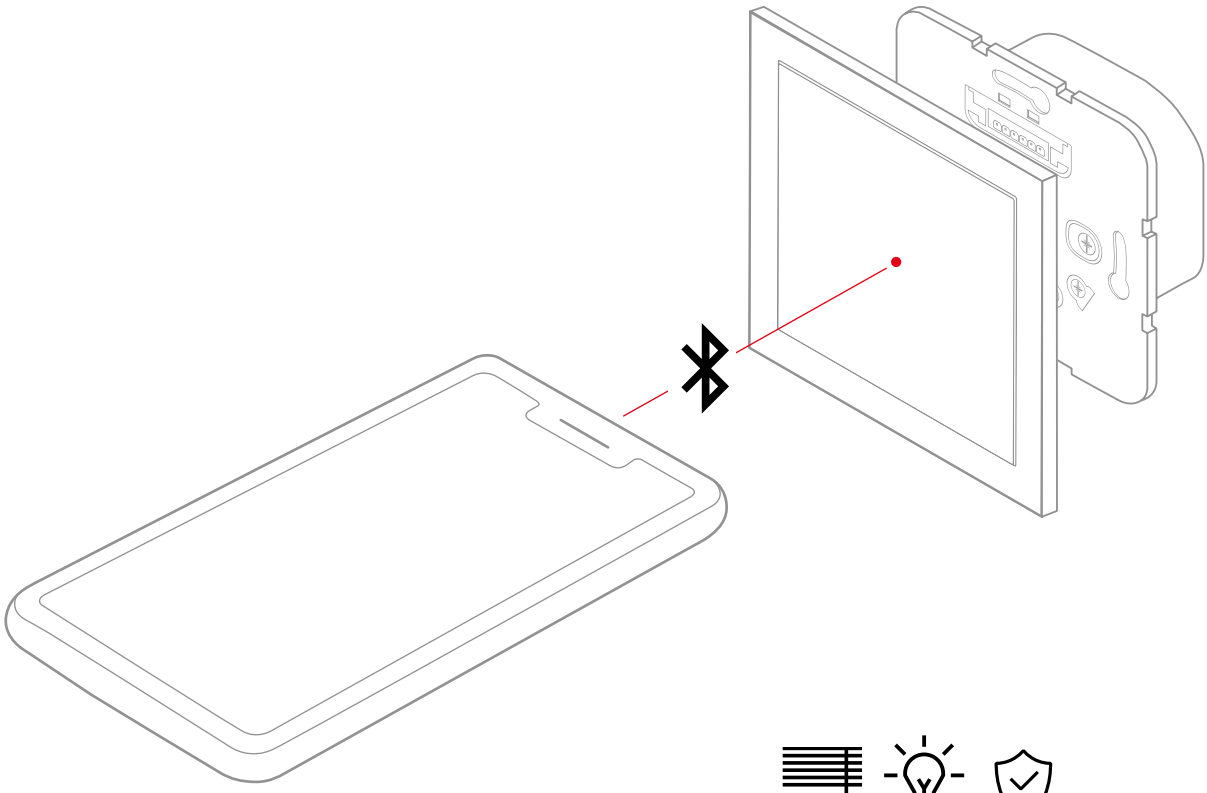
Upgrade
Easy to replace with wireless devices with additional functions

There's more inside
The intelligent room control starts with the individually combinable ABB-free@home® flex modules. Wireless connectivity enables installation in any room and, thanks to the flat electronic inserts, is incredibly convenient. The comprehensive range of functions can be flexibly scaled and extended at any time – without any need to drill or rewire. From room control to entire home control, ABB-free@home® flex is always ready for the future.

ABB free@home® flex – device control

2

More comfort at home
One click is all it takes. The ABB-free@home® flex device settings can be adapted to individual requirements and circumstances via the app. The clear interface design, user-friendly menu navigation and countless other convenient functions guarantee simple configuration and straightforward interaction with every control element. The app enables several devices to be compiled in one project. This ensures rapid access to all devices.



Everything under control. User-friendly configuration and control via Bluetooth on smartphone or tablet.

Controllable comfort for your home. With a single central element for all functions, device control of blinds, lighting and motion detectors is easy and convenient via smartphone or tablet – The perfect solution for beginners.

Modules for an intelligent system

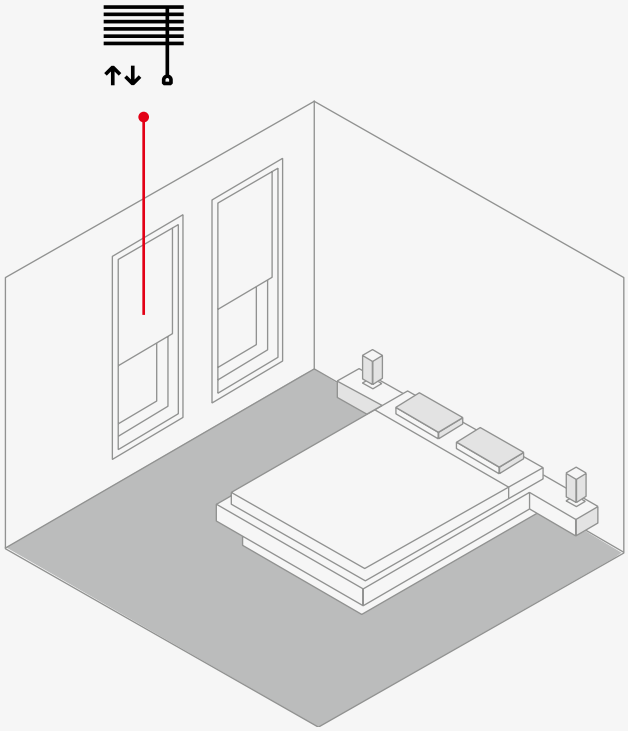
As powerful as the sum of its parts
When combined, our modules demonstrate what room control can offer. From light control through blind management, all the way to motion and presence detectors, all functions are easy to configure, operate and compile in one project in the APP ABB-free@home® Next. All that is required is a Bluetooth connection.

Modularity
The ABB-free@home® flex inserts and control elements can be individually combined. Together, they enable intelligent room control.

Lighting control
- Remote control
- Timer
- Dimmer values/scenes
- Stay-on times
- Astro function

Blind control
- Remote control
- Timer
- Astro function
- Shading position

Motion detector
- Remote control
- Timer
- Stay-on times
- Astro function
- Set switching thresholds
- Disable manual operation



Light control

Blind control

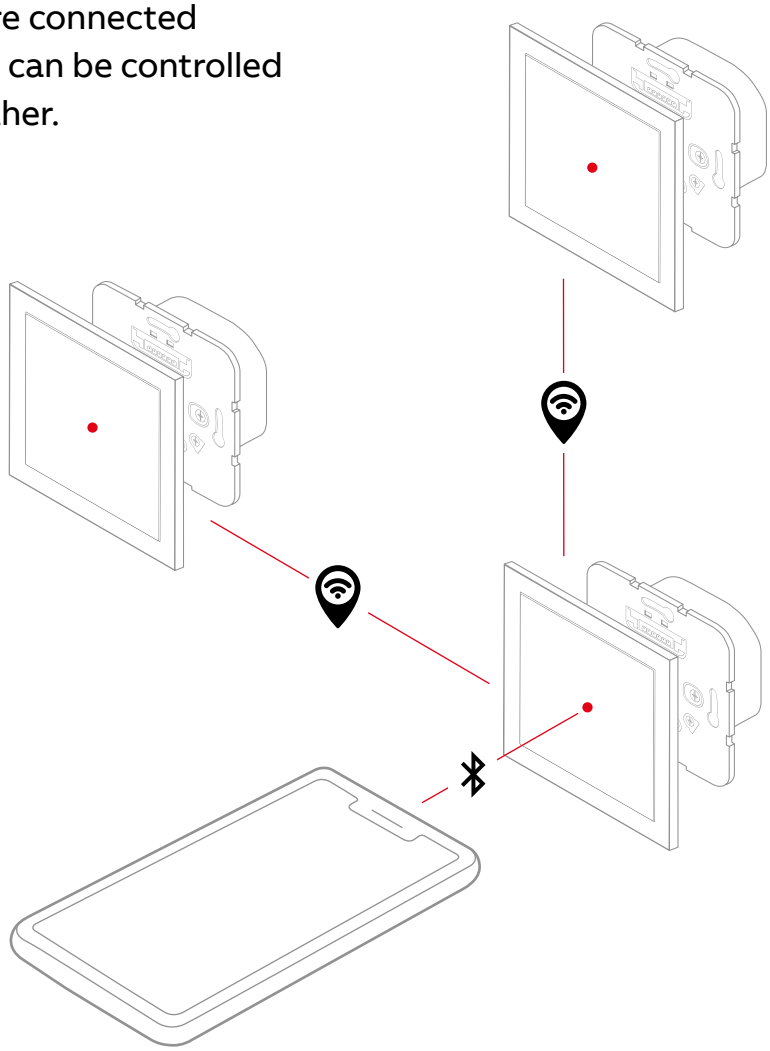
Motion detection

Practical and future-ready
The variety of control element or presence detector functions and combinations is practically endless. Functions can be changed at any time simply by replacing control elements – all inserts and elements are completely compatible. These are advantages that also impress in practice: flexible use, connection, customisation and extension from the very outset.

ABB free@home® flex – room control

Networking is the keyword of the future
Including when it comes to room control. The advantages are obvious: the functionality of our intelligent room control can be flexibly scaled via radio and/or plusWire®. Several devices can thus be connected to each other. For comfort that is virtually invisible, but can be felt every single day.

Future-ready room control
Blind management, light control and motion detectors are connected with each other and can be controlled individually or together.

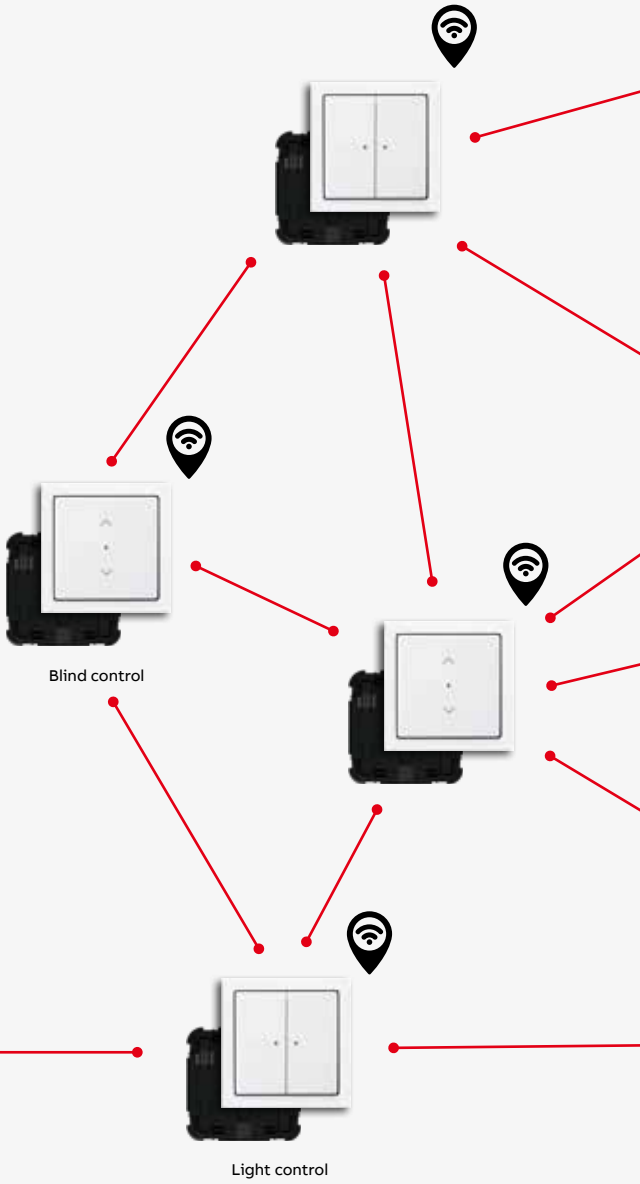


3

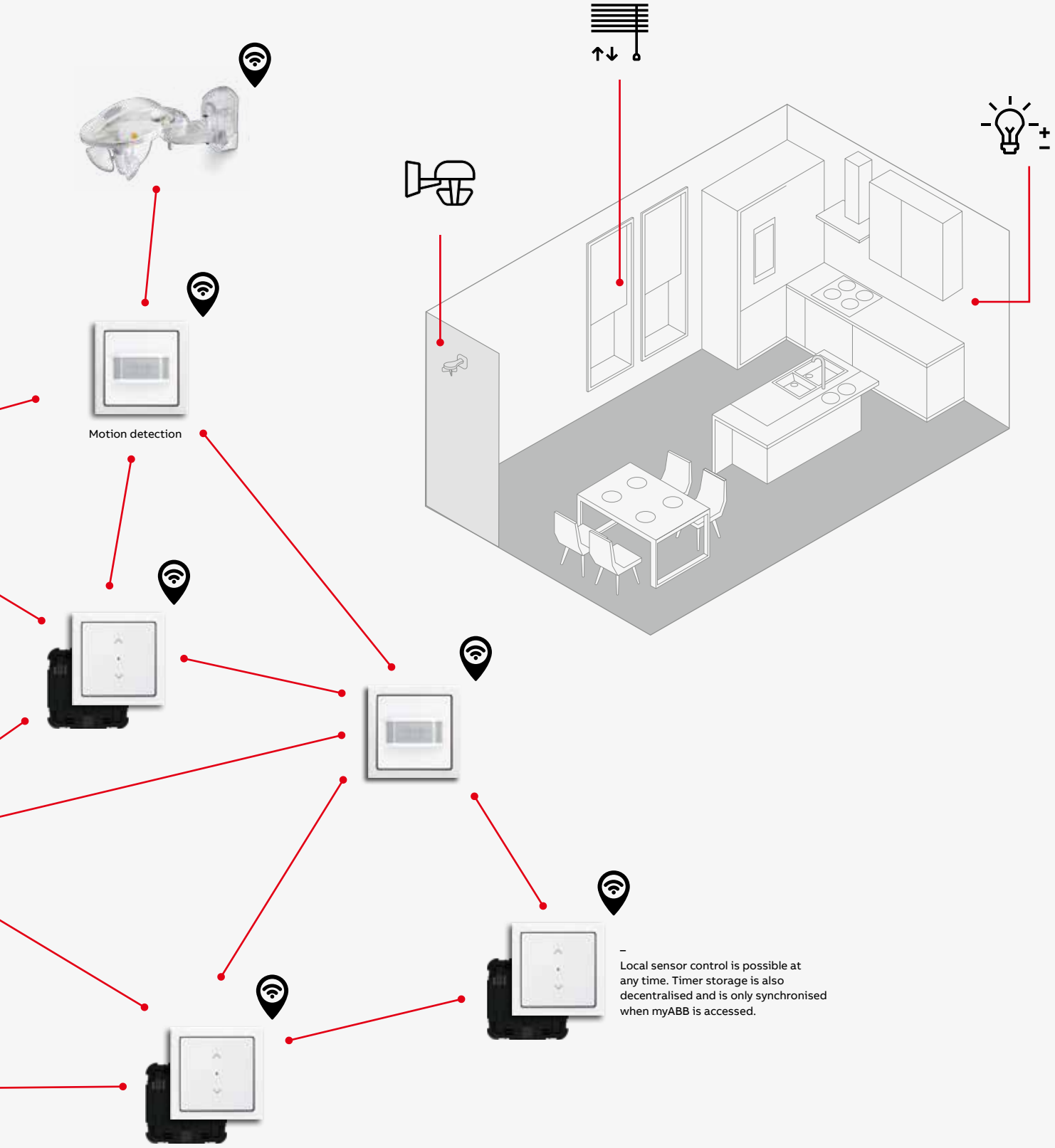
The mesh network ensures greater range and more stable communication. The intelligent room control also works without a separate System Access Point. myABB registration and smartphone pairing is required. All necessary device data is stored in the cloud.

Wireless upgrade without conversions

Comprehensive solutions made easy
Within the room control installation, up to 32 devices can be connected via a wireless mesh network. These are configured and operated via the ABB-free@home® Next app when connected to one of the devices using Bluetooth.



myABB Cloud
This cloud replaces the System Access Point. This is usually the heart of the network and distributes the current status of devices to the various participants.



–
Local sensor control is possible at any time. Timer storage is also decentralised and is only synchronised when myABB is accessed.

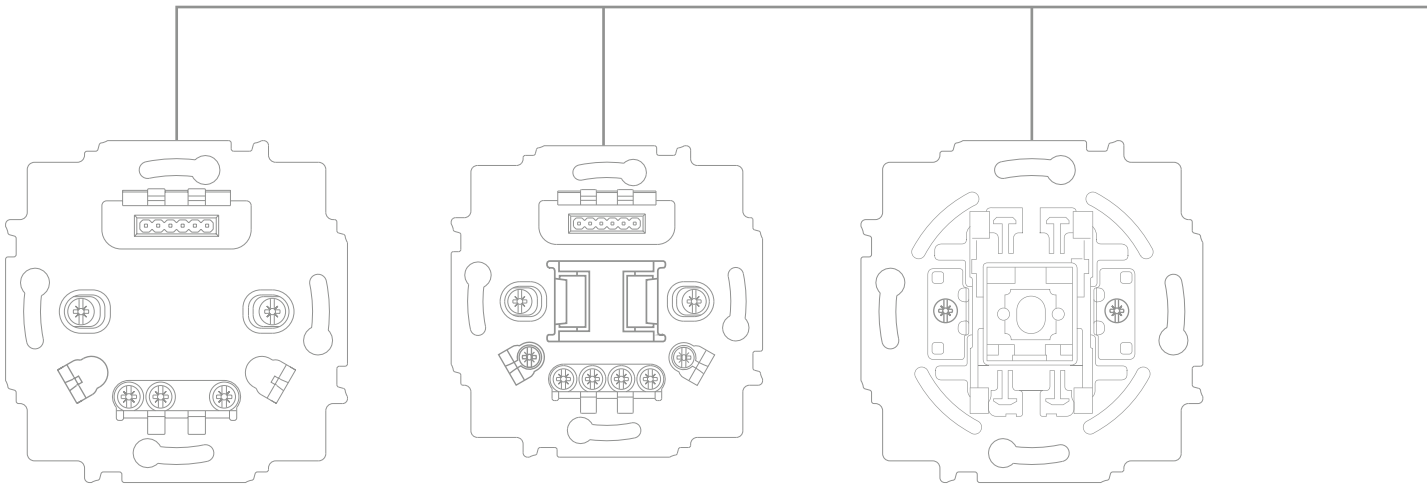
Best connections guaranteed

No System Access Point is required for the wireless mesh network. myABB registration and smartphone pairing is required. The myABB Cloud serves as a kind of virtual System Access Point where all required device data is stored. All other networking is completely wireless.

This offers the advantage that, through the mesh network, we can guarantee stable ranges and networks anywhere and any time. Important: in order to ensure simple and intuitive handling, smartphone access to one of the devices continues to be via Bluetooth.

plusWire®

The modern extension operation for even more flexibility
plusWire® unites several flex inserts with each other via just one wire and is simply integrated into the installation cable; no separate cable is necessary. In contrast to a standard extension, additional information can be exchanged between the inserts, thus offering even more functionality and convenience.

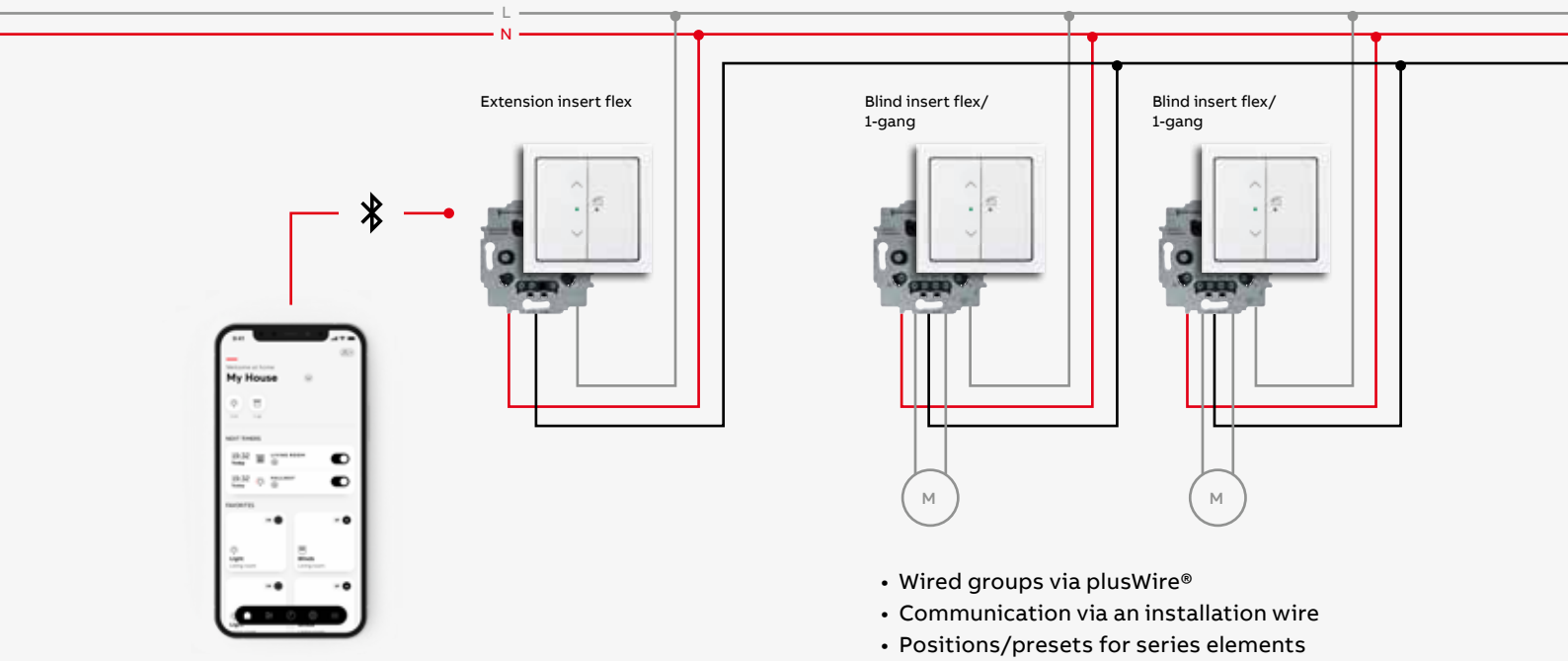


–
plusWire® not only enables information to be exchanged between the new inserts. Conventional push-buttons can also be used as an extension via the same wire. During installation, conventional push-buttons and flex inserts can even be combined with each other.

Information includes

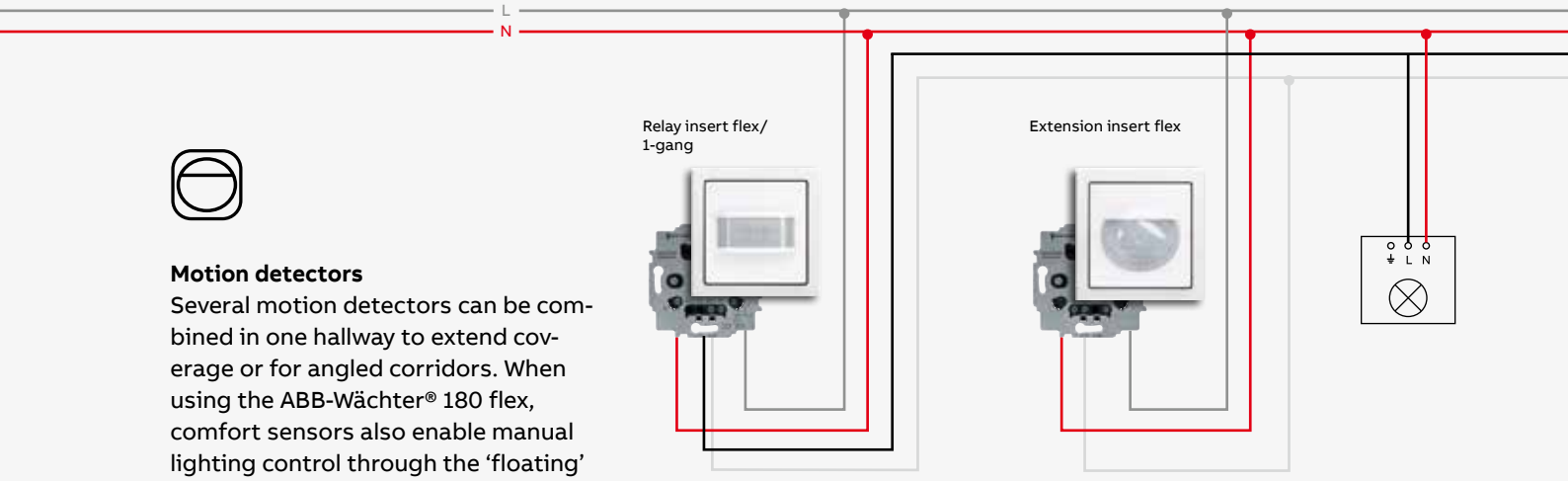
- Short press: on
- Short press: off
- Short press: stop
- Long press: dim up/raise
- Long press: dim down/lower
- Brightness-independent switching
- Brightness-dependent switching
- Stay-on time expired

Central blind control
Intermediate solutions make the installation even more flexible. For instance, ‘only’ the central insert can be fitted with a flex wireless control element, enabling the entire group to be controlled remotely or operated via a timer.



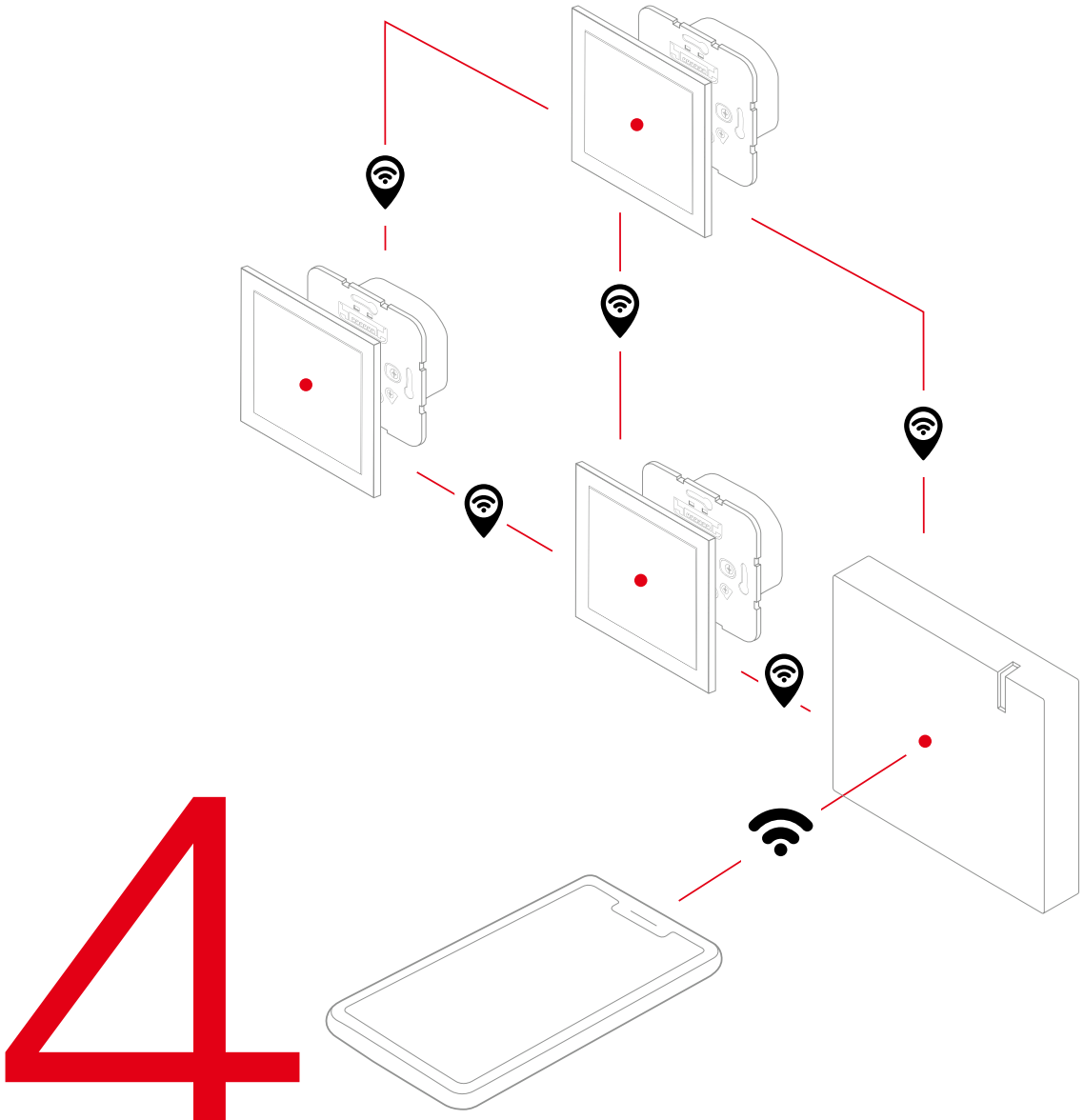
- Wired groups via plusWire®
- Communication via an installation wire
- Positions/presets for series elements
- Decentralised stored positions called from the series element of the central insert

Motion detectors
Several motion detectors can be combined in one hallway to extend coverage or for angled corridors. When using the ABB-Wächter® 180 flex, comfort sensors also enable manual lighting control through the ‘floating’ rocker. Defined on/off switching is possible above or below the detection lens.



–
The comfort sensor with multi-lens is ideal for use in stairwells

ABB-free@home® flex home control



4

Next-level home control
More convenience, same hardware – room control is easily upgraded to a comprehensive smart home system without any need for replacement. Central element: the ABB-free@home® System Access Point guarantees access to the tried-and-tested range of functions offered by ABB-free@ home®. Only in this way can all products be wirelessly integrated into ABB-free@home®. Our smart home control is therefore perfect for both new builds and renovation or refurbishment projects.

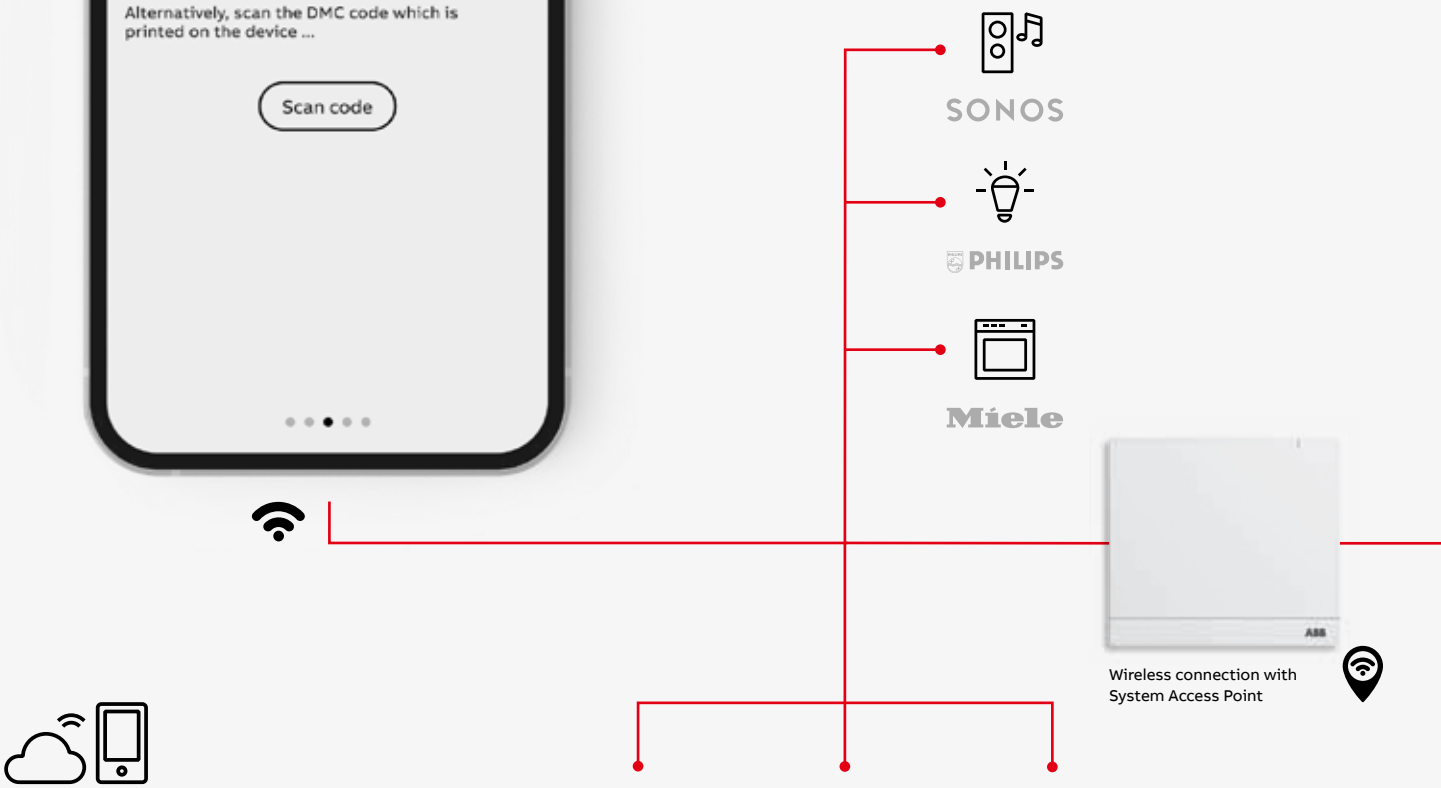
A networked home made easy
ABB-free@ home® enables the smart configuration and control of blinds, lights, heating, climate and door communication.

ABB-free@home® is the comprehensive smart home solution for the entire home. ABB-free@ home® flex room control can be upgraded to complete home control using the existing hardware. This means intelligent connectivity for more convenience and energy efficiency.

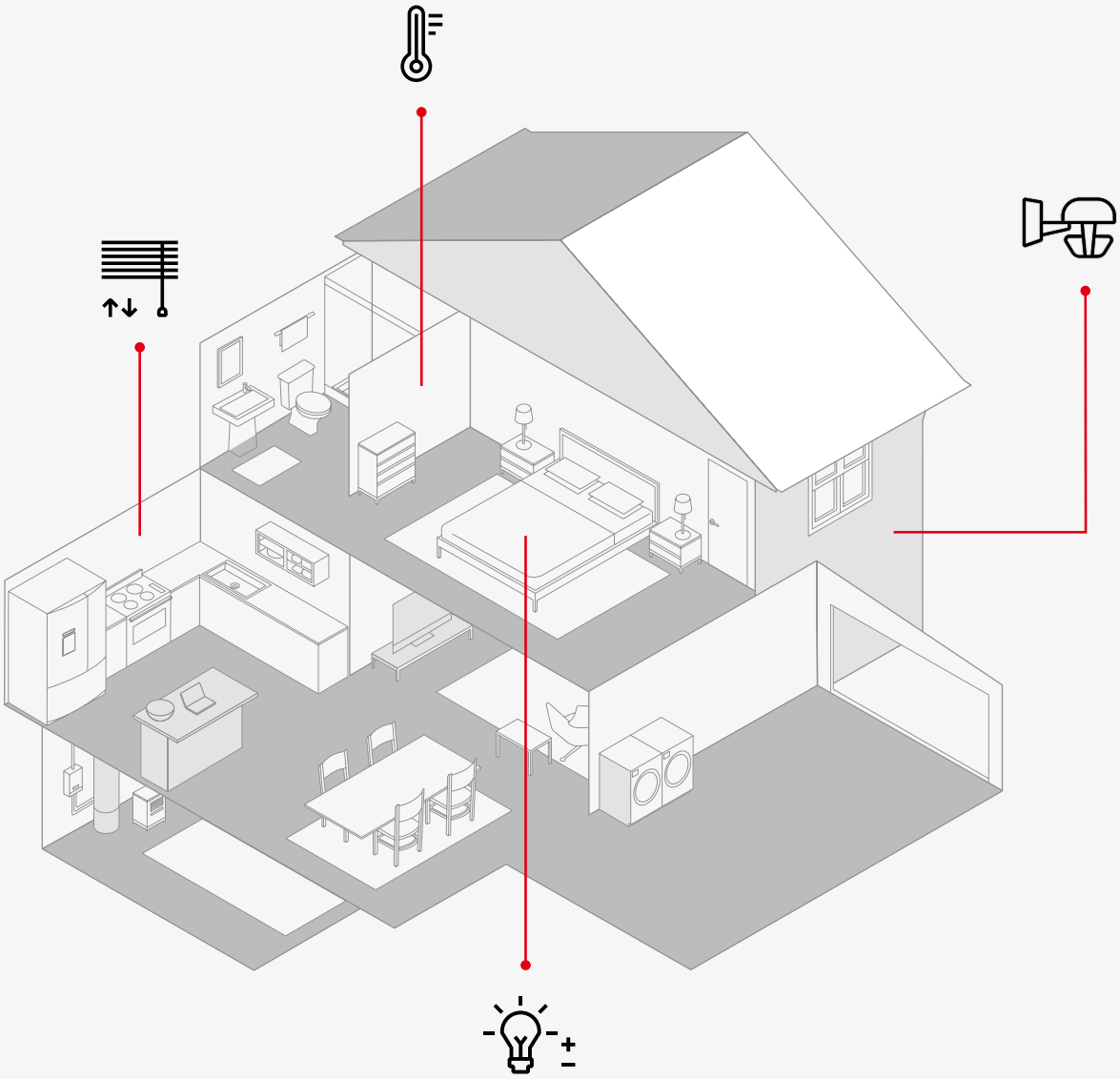
Smart from cellar to attic

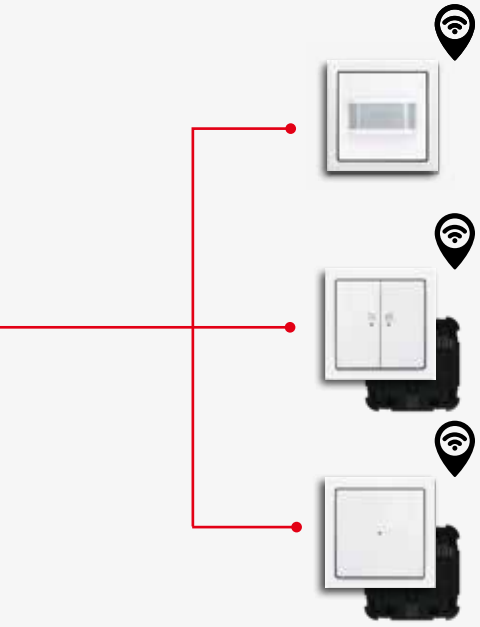
Upgrading really is this simple
Firstly, the inserts are connected via ABB-free@home® flex. To do this, device combinations with the flex wireless control elements are transferred to an added System Access Point. They can then be contacted like a free@home wireless participant. All previous settings are transferred to the ABB-free@home app next to create a comprehensive solution for the entire home.

As the heart of the system, the ABB-free@home® System Access Point ensures seamless upgrading to ABB-free@home®. In this case, Bluetooth is automatically disabled.



Compatibility for flexibility
Future-ready together! Interaction with other smart devices like Sonos, Phillips Hue and Alexa is extremely easy to set up.





– When connecting to ABB-free@home®, the Bluetooth connection is disabled

The modular ABB-free@home® offers maximum flexibility, simple retrofitting of individual features and completely customised configuration – from timer control to storm, rain and wind protection. All functions can be used individually or combined with other application scenarios.

- Central functions (all off, panic…)
- Access from outside
- Alexa/Google voice control
- Music control/Sonos
- ABB-Welcome/ABB-Welcome IP
- ABB smoke alarm
- Home appliances

How flexible would you like your home to be?

ABB flexTronics®

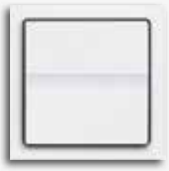
Control element flex, 1-gang
64711

Control element flex, 2-gang
64721

Presence detector flex Universal
64753

Presence detector flex Sky
64754

Presence detector flex Corridor
64755



Comfort switch flex
64765

Motion detector flex Basic
64761

Motion detector flex Comfort
64762

Motion detector flex Multi
64764

Relay insert flex, 1-gang
64811 U

Relay insert flex, 2-gang
64821 U

Blind insert flex, 1-gang
64831 U

ABB-free@home® flex

Control element flex, 1-gang, wireless
62711-WL

Control element flex, 2-gang, wireless
62721-WL

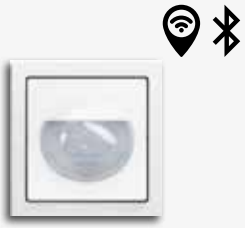
Weather station flex, wireless
WS-1-WL

Presence detector flex Universal, wireless
62753-WL

Presence detector flex Sky, wireless
62754-WL

Presence detector flex Corridor, wireless
62755-WL

Motion detector Comfort flex, wireless
62762-WL



Motion detector Multi flex, wireless
62764-WL

LED dimmer insert flex, 1-gang
64851 U

Universal e-contact flex, 1-gang
64814 U

Extension insert flex
64891 U

Technical data

Products	Relay insert flex, 1-gang	Relay insert flex, 2-gang	Universal e-contact flex, 1-gang
Item	64811 U	64821 U	64814 U
Load incandescent lamp	2,300 W	2 × 1,840 W	10–240 W
Load HW/NV	2,300 W/VA	2 × 1,150 W/VA	10–240 W/VA
Load LEDi	300 W/VA	2 × 300 W/VA	3–240 W/VA
Load LS lamps	2,300 VA; 10 AX	2 × 1,150 VA; 2 × 5 AX	
Load motor			
Installation depth	25 mm	25 mm	25 mm
“N” required	√	√	√
Extension / plusWire®	1	2	2
Protection class	IP20	IP20	IP20

1) Restrictions are possible with lower loads in 2-wire mode!

Products	ABB presence detector flex, Universal sensor	ABB presence detector flex, Sky sensor	ABB presence detector flex, Corridor sensor
Item	64753-XXX/62753-XXX-WL	64754-XXX/62754-XXX-WL	64755-XXX/62754-XXX-WL
Wireless	– / ●	– / ●	– / ●
Mounting height	Up to 3 m	6 m / 12 m	Up to 3 m
Detection walking person	Ø 12 m	Ø 18 m/Ø 24 m	crosswise 24 m × 3 m / lengthwise 14 m × 3 m
Detection seated person	Ø 10 m	–	–
Detection angle	360°	360°	360°
Sectors / switching segments	72/640	72/640	72/640
Switch-off delay	1–30 min/pulse 1 s	1–30 min/pulse 1 s	1–30 min/pulse 1 s
Installation height	35 mm	35 mm	39 mm
Protection class	IP20	IP20	IP20

LED dimmer insert flex, 1-gang

Blind insert flex, 1-gang

Extension insert flex

	64851 U	64831 U	64891 U
	10–240 W Phase 1))		
	3–100 W/VA Phase 1)) 3–240 W/VA Phase 1))		
	3–100 W/VA Phase 1)) 3–240 W/VA Phase 1))		
		4A	
	25 mm	25 mm	25 mm
	optional	√	√
	1	2	1
	IP20	IP20	IP20

ABB Watchdog 180 flex Basic sensor, select lens

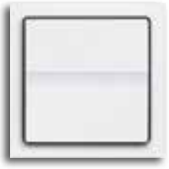
ABB Watchdog 180 flex Comfort sensor, select lens

ABB Watchdog 180 flex Comfort sensor, multi lens

Products

Item	64761-XXX	64762-XXX/62762-XXX-WL	64764-XXX/62764-XXX-WL
Wireless	–	– / ●	– / ●
Mounting height	0.8 m–1.2 m	0.8 m–1.2 m	0.8 m–1.1 m/2.2 m
Crosswise detection	12 m	12 m	8 m/8 m
Lengthwise detection	5 m	5 m	7 m/4 m
Opening angle	180°	180°	180°
Sectors / switching segments	14/56	14/56	54/224
Switch-off delay	10 s–30 min/pulse 1 s	10 s–30 min/pulse 1s	10 s–30 min/pulse 1 s
Brightness threshold	1–500 lux/day mode	1–500 lux/day mode	1–500 lux/day mode
Switch-off warning	–	√	√
Manual operation	–	√	√
Installation height	22 mm	22 mm	31 mm
Protection class	IP20	IP20	IP20

Products	Control element flex, 1-gang	Control element flex, 2-gang
Item	64711/62711-WL	647121/62721-WL
Wireless	– / ●	– / ●
Protection class	IP20	IP20



Busch-Comfort switch® flex, control element	
	64765-XXX
	–
	0.8 m–1.2 m
	5 m
	3 m
	170°
	9/28
	1–10 min
	5–500 lux
	–
	√
	21 mm
	IP20

Products	Weather station flex, wireless
Item	WS-1-WL.11
Wireless	●
Brightness (measuring range)	1–100,000 lux
Wind speed (measuring range)	2–30 m/s
Temperature (measuring range)	–20 °C to +55 °C
Rain sensor	√
Protection class	IP44