



Smarter Solutions for Home and Building Automation

Every Smart Building is unique and so are you. We offer you a diversity of different solutions and systems for your requirements. You can combine these and design your unique Smart Building. This brochure provides you with an overview of possibilities to make your building smarter.

Smarter Solutions for Home and Building Automation

ABB i-bus® KNX

ABB-free@home®

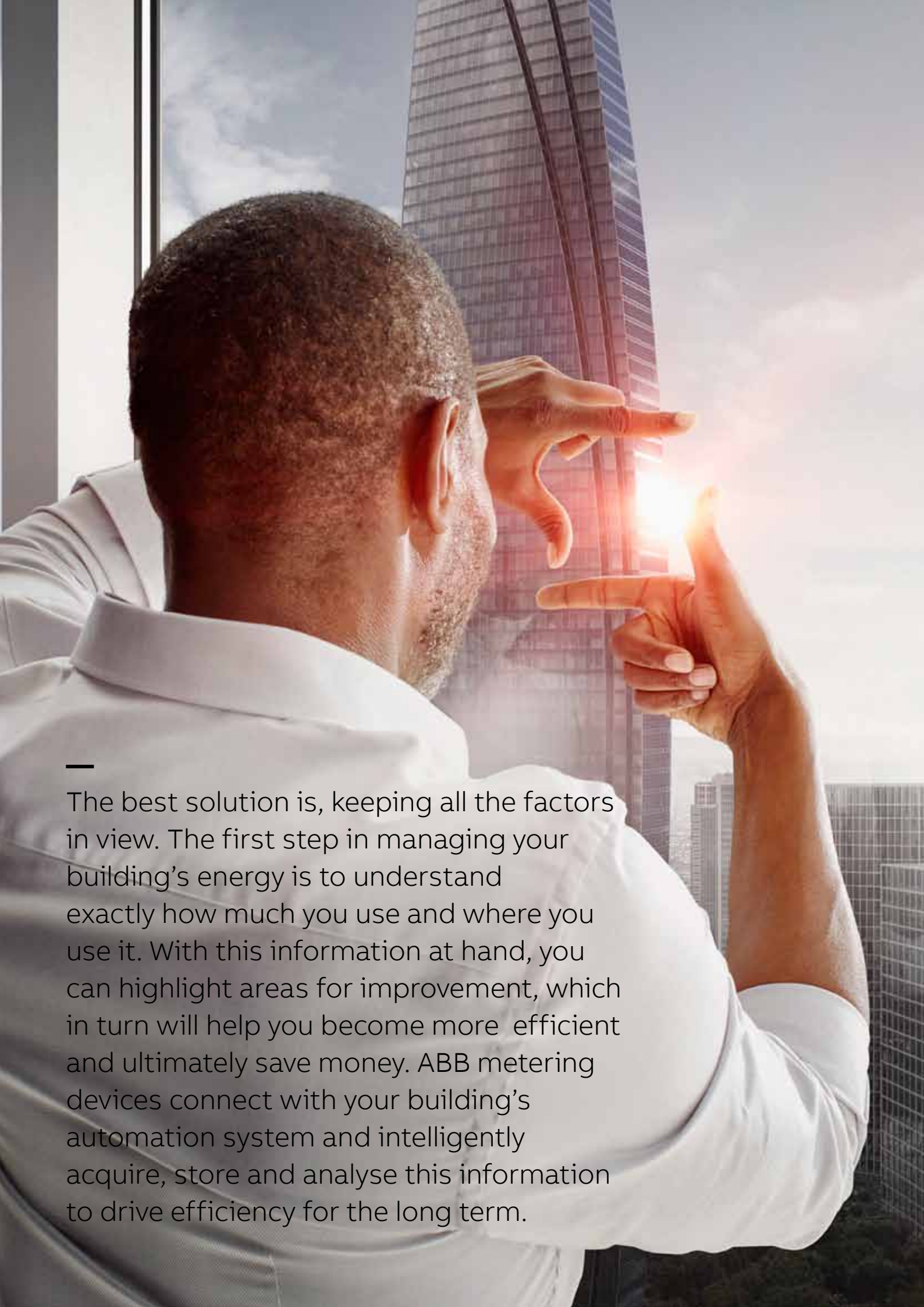
ABB-Welcome

**ABB IVIE range of modular
switches**

ABB design switches

You may also visit our KNX website:





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The best solution is, keeping all the factors in view. The first step in managing your building's energy is to understand exactly how much you use and where you use it. With this information at hand, you can highlight areas for improvement, which in turn will help you become more efficient and ultimately save money. ABB metering devices connect with your building's automation system and intelligently acquire, store and analyse this information to drive efficiency for the long term.



Wherever energy comes from, it goes to the right place. Electricity is a commodity you don't always appreciate until it's suddenly not there. At ABB it's our mission to supply you with the electricity you need, the moment you need it – such as when plugging in an appliance or turning on a switch. We take high-voltage energy from the source of generation and transmit it instantly to the business or home where it will be used.

The right reaction comes automatically, in every situation. Being able to automatically control your building not only adds flexibility to building management, it has a positive effect on efficiency, security and productivity too. With products and services such as movement detectors, harmonious lighting, door communication, automated heating, air-conditioning, ventilation and shutter management, ABB offers a range of possibilities to put building control firmly into your hands.

Everything under control, wherever you want it. There's more to making buildings smarter than just remotely controlling room temperatures or automatically controlling lighting. A fully integrated system not only offers you convenience, it also makes your buildings more secure, more energy efficient and will save you money. What's more, ABB Ability™ software gives you a complete overview of your smart buildings from anywhere, at any time.

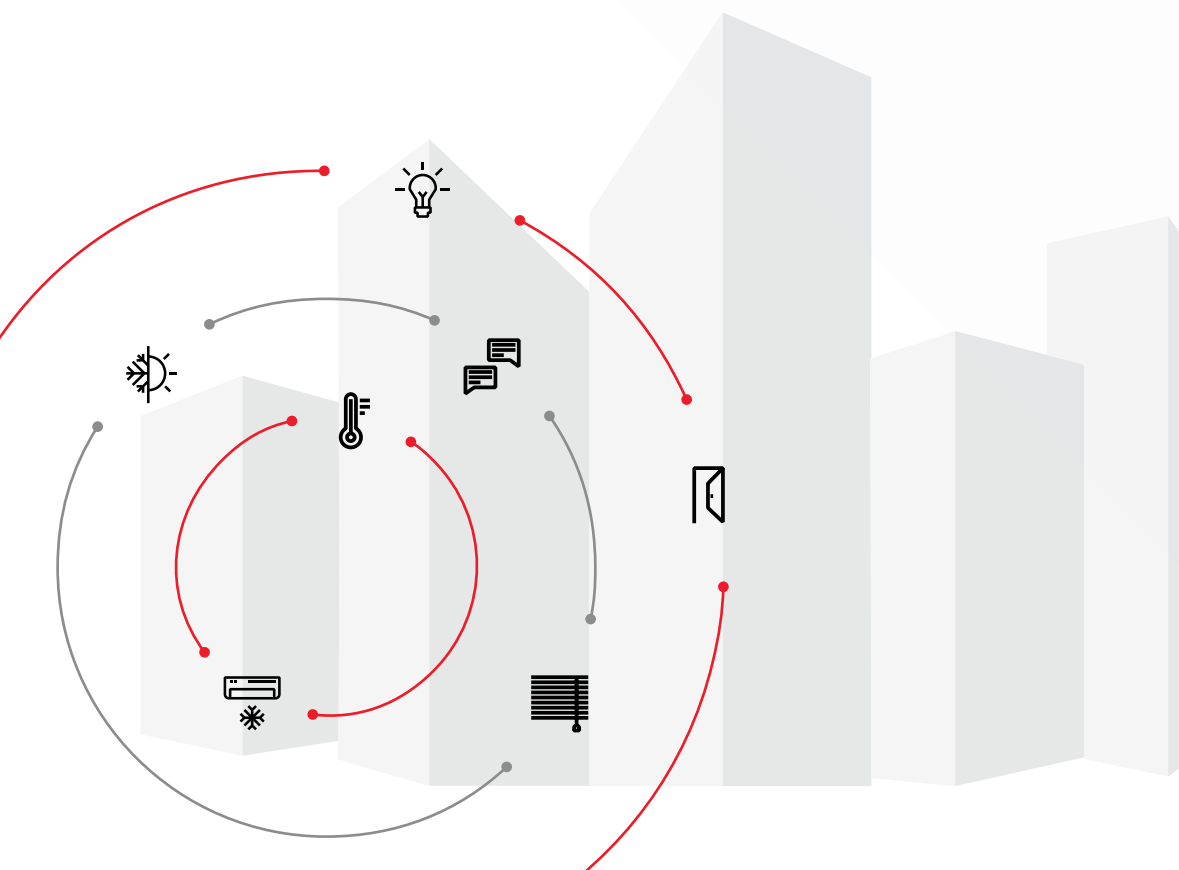
CONNECTIVITY

Shaping the future of the digital world today requires fully automated solutions that can be networked with all other intelligent devices.

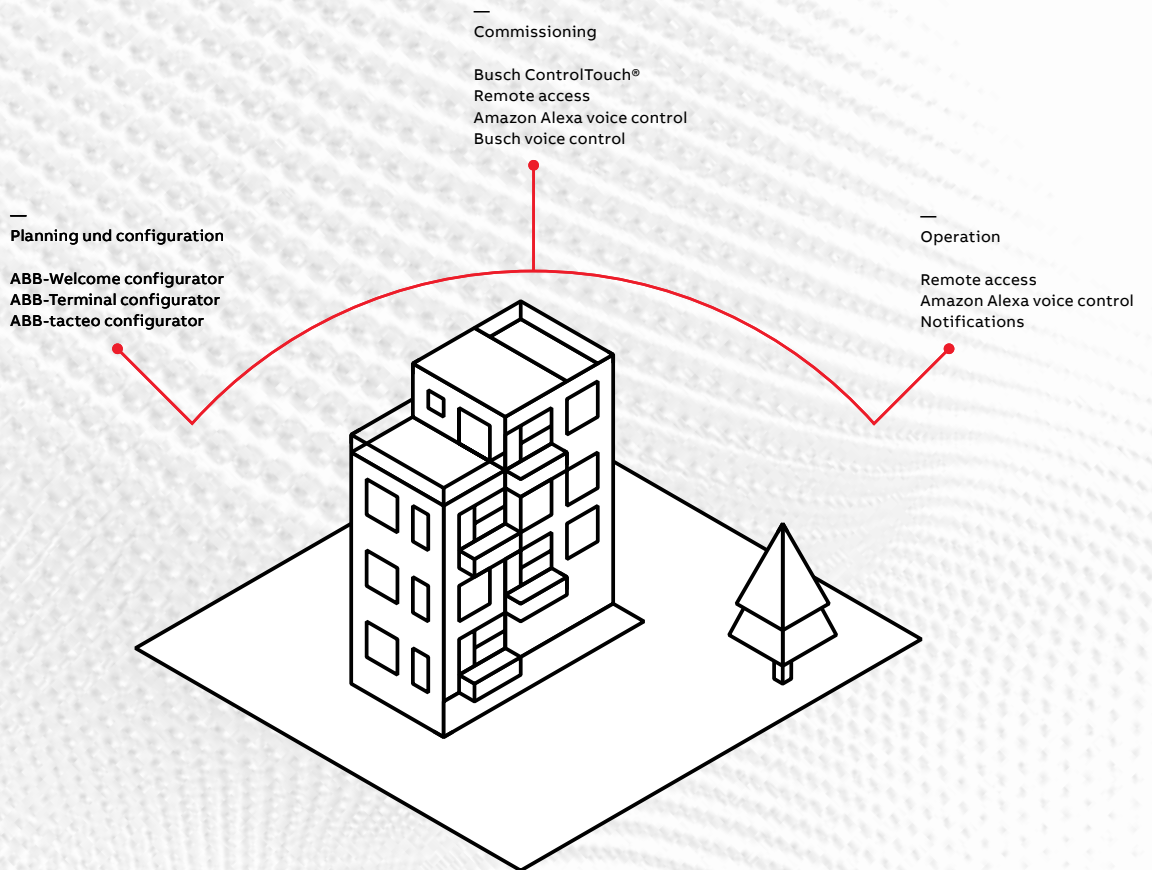
Powerful digital solutions in a single portfolio

MyBuildings portal powered by ABB Ability™

Controlling and planning smart buildings is now easier than ever: ABB bundles its digital services for Smarter Home and Building in the MyBuildings portal (formerly my.abb-livingspace.com) under the ABB Ability umbrella. The online portal gives you access to many of ABB's tools and services that you can use for your individual needs. You have the option to configure KNX systems, fire alarm technology, door entry system or ABB-tacteo KNX as well as to extend system functionality with remote access or Amazon Alexa voice control. You can also connect your smart system to a mobile device.



Plan, configure and modify as desired with the MyBuildings portal powered by ABB Ability™



A central contact point for Smarter Building services.



Global availability of ABB services.



24/7 monitoring for best worldwide availability.



Regular cyber security: audits and tests by independent third parties.

You may also visit our MyBuildings portal under mybuildings.abb.com:



ABB i-bus[®] KNX



KNX sensors ABB i-bus® KNX

Operation and display the direct way

Networked structures work more efficiently than individual systems. They reduce energy consumption and thus operating costs in buildings, while adding distinguishing detail to the room decor.



ABB KNX control elements form the interface between this state-of-the-art technology and the user. They provide comfort and security. They control lighting, heating, fresh air supply and blinds. They integrate media technology



and the Internet. With Building Space®, ABB sets new standards: while powerful, intelligent technology with energy-saving functions works reliably in the background, the control elements are visible and clearly arranged, guaranteeing intuitive operation for the end user.

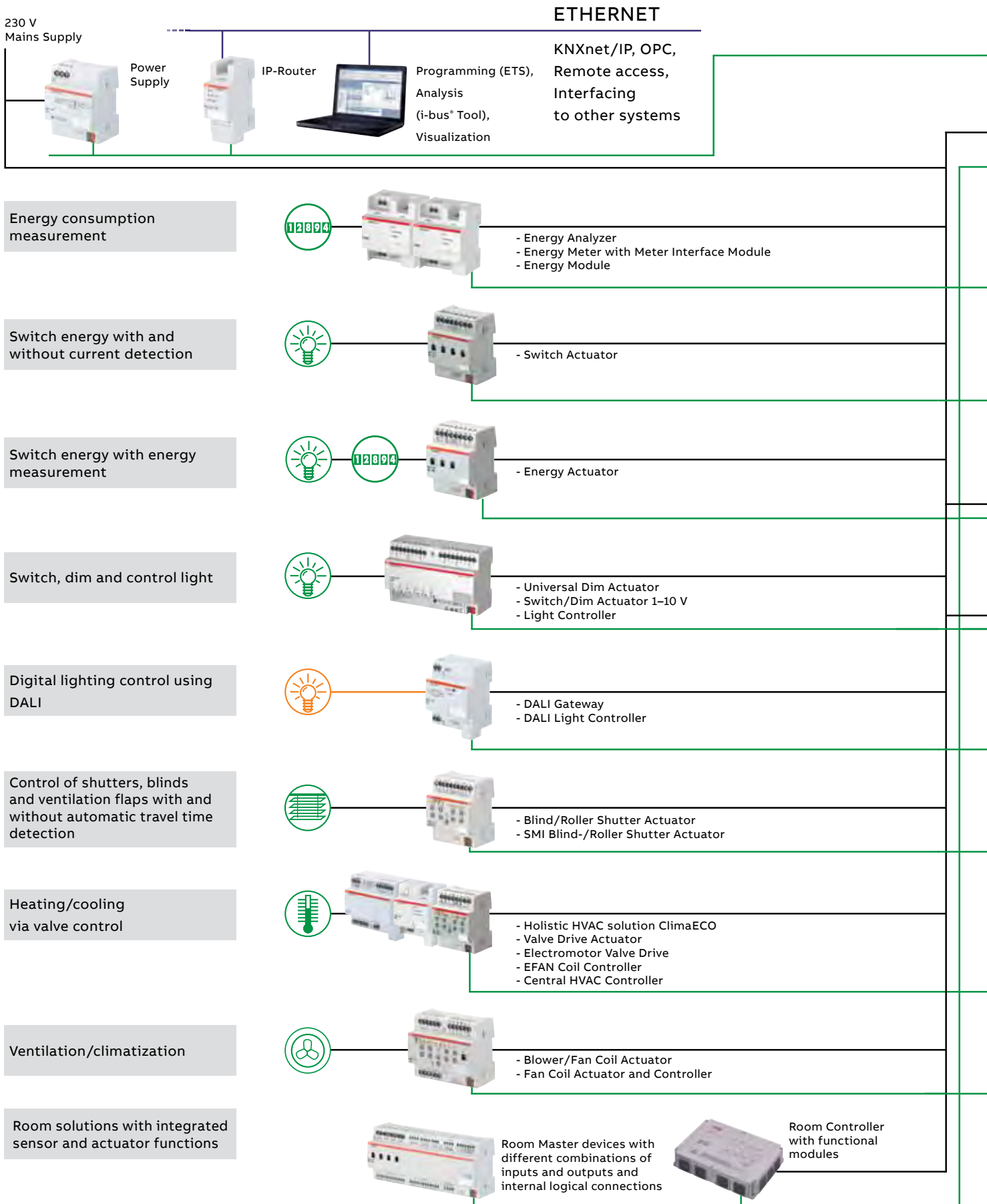
Further information

Further information can be obtained on the Internet, in our product, solution, and assortment brochures, or from the central sales service under +49 (0) 2351 956-1600.

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Smarter Solutions for Home and Building Automation

ABB i-bus® KNX – Overview



KNX-Main Line/TP

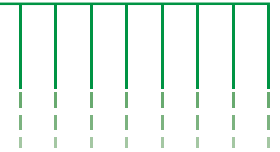
Line 1 2 3 4 ... 13 14 15

Power Supply



Line Coupler

- 64 devices/line
- 15 lines/area with superordinated main line
- max. 15 areas with superordinated area line



- Binary Input



Detect and evaluate switching commands

- Analogue Input



Capture, evaluate and monitor physical values

- Weather Station and Weather Sensor



Evaluate and monitor meteorological data (wind, temperature, rain, etc.)



Remote control via internet

Display operating conditions and control functions

- Presence Detector
- Movement Sensor
- Light Sensor

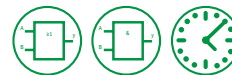


Detect presence and movement

Measure brightness levels

Lighting Control

- Logic Module
- Application Unit Logic
- Application Unit Time
- Time Switch



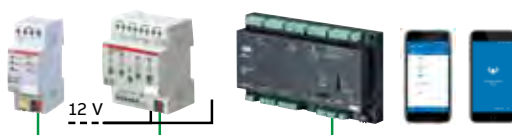
Perform logical operations and trigger timer-controlled functions

- Room Thermostat
- Air Quality Sensor



Capture, evaluate, monitor and control room conditions, temperature, air quality, etc.

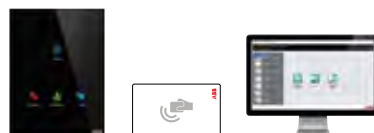
- Security Terminal
- Security Module
- KNX Security Panel
- Fault Monitoring Unit
- Monitoring Unit
- Data Logging Unit



Monitor operating conditions, signal technical faults, recognize hazards and trigger alarms

Security System

- Room outside sensor with card reader
- Transponder Card
- Configuration Software



Access Control system for hotel rooms

SMART BUILDING

Rooms with intelligence. Modern building automation has become more efficient than ever in order to meet the many demands of people living and working in the building. Adaptable systems turn the modern functional building into a smart building. They create an environment in which communication and creativity can freely express themselves. Ideal for efficiency, perfect for the future.

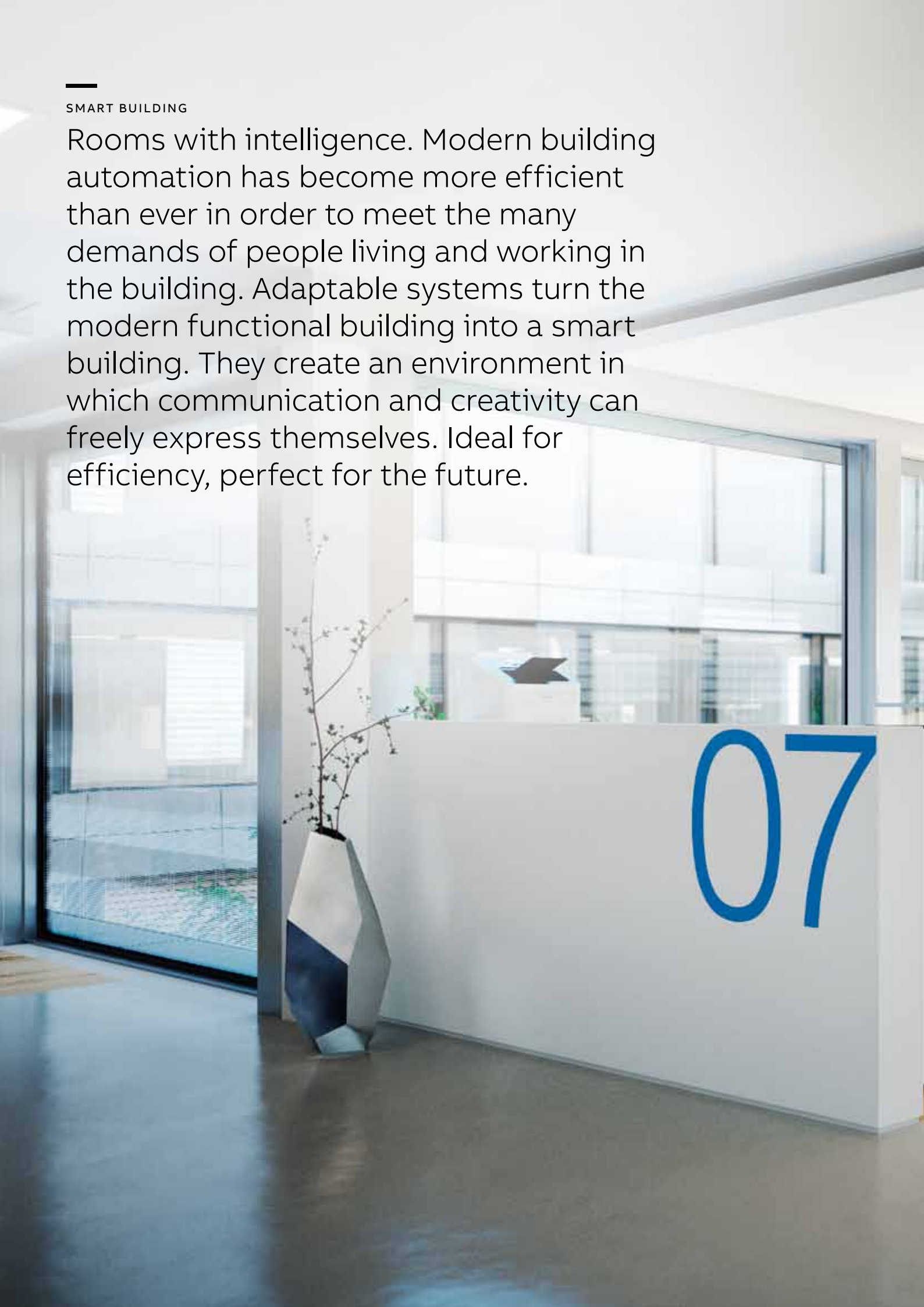




ABB-tacteo® KNX

The individual touch

Intelligent control that adapts to your individual needs.



The ABB-tacteo® KNX sensor is a capacitive control element for the intelligent building automation of high-end luxury hotels, offices and public and residential buildings.

ABB-tacteo® KNX meets all the requirements that a modern design demands – the highest levels of quality and above all comfort: from blinds, lighting and heating to media and access, everything is easy to control.

Are you an architect planning a building with maximum functionality and a personal touch? Do you desire a modern home that is as individual as you are? Design your KNX sensor with the ABB-tacteo® configurator, completely as you like. The number of functions is variable and can be determined according to your specific needs and wishes. Individually configured as required, each sensor is unique in design and function.

Product overview

You can find the complete product range online at abb.com/tacteo



Six symbol control element

86 × 86



Four symbol control element with room temperature control

86 × 157



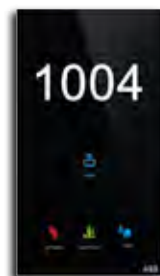
Room outside sensor with card reader

86 × 115



Motion detector Watch dog 180°

86 × 115



Room outside sensor with card reader and room number

86 × 157



ABB-tacteo® KNX combines maximum functionality with a personal atmosphere. For first-class hotels, residential buildings and public buildings with the highest standards of design.

Advantages for you at a glance



Configurator and simple ordering process

Design your KNX sensors exactly as you want them. You determine the design and functions, you can define icons and texts and also select the colours of the housing and buttons – completely in keeping with the established colour control concept. As soon as the configuration is completed and the finished sensors are saved, you will receive an individual design ID. All of your project sensors, including ID, are added to a parts list. This list allows the wholesaler to produce your personal sensors. Thanks to the design ID, the unique sensors can be retrieved and ordered again at a later date. The configurator can be found at:

tacteo-configurator.
my.abb-livingspace.com



Hotel access control

The ABB-tacteo® KNX range offers secure access control for the hotel and hospitality industry. The sensor performs all the management tasks of a hotel operation, which can be controlled from a central point.



Flat and theft-proof

The frameless and extra-flat KNX sensor sits almost flush with the wall and blends harmoniously into any wall design. Peace of mind is provided by the optional removal guard, which protects the KNX sensor from theft.



Intuitive operation

The capacitive KNX glass sensors react without any touch or contact. When moving your hand towards the sensor, the status lighting switches on automatically. On the other hand, touching the sensor with the entire palm of your hand triggers a preprogrammed function. With a tap of the finger the desired function can be activated.

Busch-ComfortTouch®

Every day an individual experience

Simplicity and user-friendliness. The Busch-ComfortTouch® not only offers an extremely versatile range of switching and control functions for KNX systems, but also satisfies the highest design requirements. Its visualisation lifts intuitive operation to a whole new level.

—
01 Busch-ComfortTouch® 12.1 glass black



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01

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02 Busch-ComfortTouch® 12.1 white glass



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02



reddot design award
winner 2013

—
03 Busch-ComfortTouch® 9 glass black



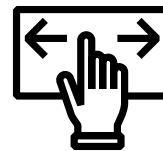
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03

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04 Busch-ComfortTouch® 9 white glass



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04

Busch-ComfortTouch® unites the functions of a home control system with an information and entertainment centre. You can use Busch-ComfortTouch® to switch lamps on and off, dim them, control blinds, set room temperature or select scenes by combining functions – even via remote control.

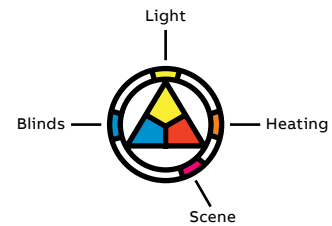


These functions are of interest not only for private households – the system is often used in doctors' surgeries, offices, restaurants or stores to provide attractive lighting, soft background music or comfortable room climates. A presence-simulation function and alarm message display provide added security. It is also possible to display images from surveillance cameras. The system can be connected to the Internet, enabling you to call up e-mails, the latest stock market news, the weather forecast or traffic information. Operation is simple and easy via touchscreen. A menu created individually for the user with clearly assigned buttons and a unique colour-coding concept allows simple and intuitive operation.

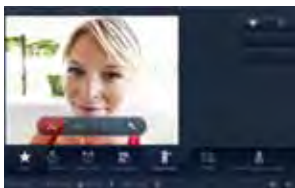


Colours that make life easier

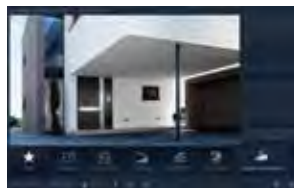
A colour-coding concept and durable LED technology make Busch-ComfortTouch® extremely easy to operate. The colouring provides feedback on the function currently selected. Yellow for lighting, blue for blind control, magenta for scenes and orange for heating control.



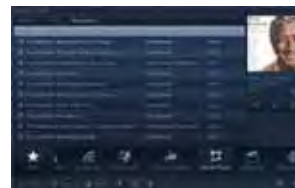
Door communication



Video surveillance



Media player



Control of household appliances



The system is controlled via the Busch-ComfortTouch® – it couldn't be easier. Buttons with text and symbols allow intuitive operation. Just a touch of the finger, and you can call up the MP3 player and play individual titles or playlists. And the volume is regulated via the panel, too. The ideal solution, not only for homes – the system is, for example, popular in restaurants. No more CDs lying around, no more finding space for a conventional hi-fi system. The system can also be used to call up light scenes for various situations, from a cosy dinner at home to night-time lighting for store windows, at the press of a button or via a time-controlled function. Another

useful feature is the handy memo field allowing you to write text by hand – use it, for example, to write a shopping list or to leave messages for others. Colour pictures from surveillance cameras on stairways or outside the building can be called up on the display, offering added security. This allows you to keep an eye on the building at all times – handy, for example, for checking the surrounding area before opening the door for customers in the morning or when the doorbell rings.

Busch-SmartTouch®

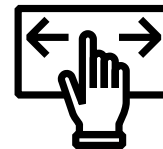
Your control panel for smart buildings.

The new Busch-SmartTouch® combines all the options of smart KNX control with modern door communication. Innovative and elegant. For every wall.

—
01 Busch-SmartTouch®
black
—
02 Busch-SmartTouch®
white



The Busch-SmartTouch® combines the functionality of smart home automation and the comfort of modern door communication. And it does this with an extremely slim, elegant device with a high-quality 7" touch panel whose capacitive glass surface makes operation possible with total ease. Fully intuitive, as with a smartphone - with the tip of the finger and swiping gestures.

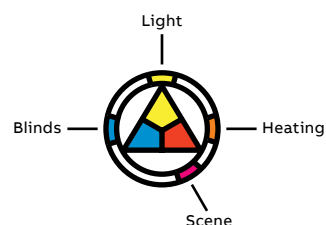


With its 13 mm thin design the Busch-SmartTouch® always offers a stylishly attractive appearance everywhere, whether installed flush-mounted or surface-mounted. And on a non-slip table stand it is also perfectly suited for reception counters or in bar areas.

A total of 480 control elements can be implemented on up to 30 pages in familiar optics. The user can freely define his favourite page and also easily set up and control time programs.

Colours that make life easier

A colour-coding concept and durable LED technology make Busch-SmartTouch® extremely easy to operate. The colouring provides feedback on the function currently selected. Yellow for lighting, blue for blind control, magenta for scenes and orange for heating control.





- Capacitive glass surface for swiping gestures
- Elegant bar made of brushed stainless steel
- Integrated induction loop for hearing aids

The indoor video station makes possible the smooth integration into ABB-Welcome with total comfort - without additional power supply. From video surveillance and up to image presentation. The new induction loop for hearing aids makes undisturbed communication and undistorted audio enjoyment possible.

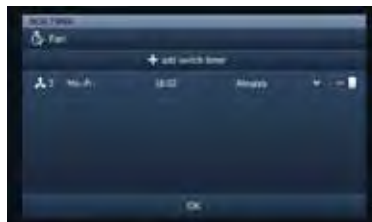
All KNX functions can be used via the clearly arranged user interface of the Busch-SmartTouch®. Such as switching and dimming of lights in the entire building, controlling blinds and regulating the heating. Or controlling time programs, audio devices and presence simulation via the tip of a finger.

The capability of the Busch-SmartTouch® knows no limits and opens totally new dimensions for home automation - with a high degree of comfort, safety and energy efficiency.

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Door Entry



—
Time programs



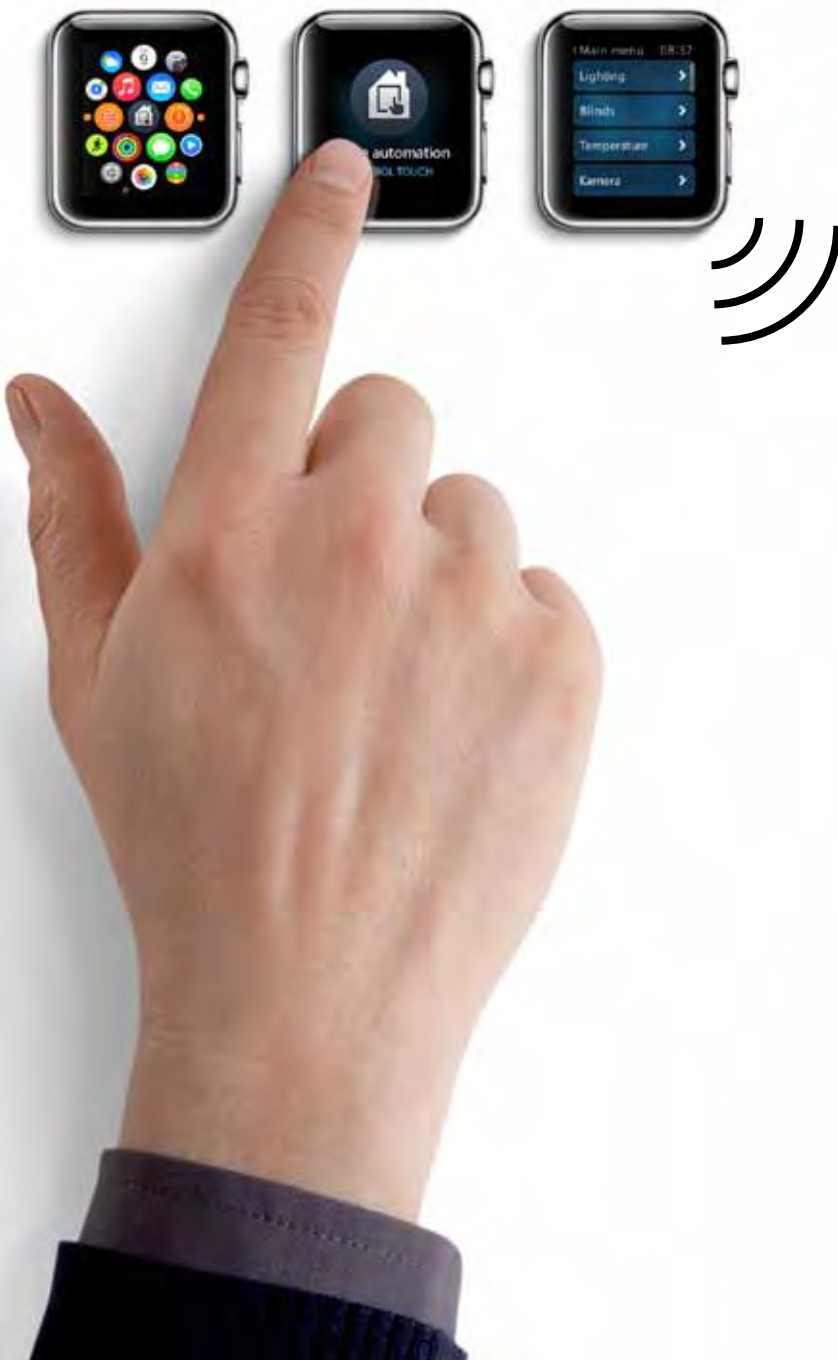
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Favorites



Busch-ControlTouch® KNX

Easy KNX remote control with mobile device

Busch-ControlTouch® KNX. Previously only operated via the Busch-ComfortTouch® or via a switch, the KNX system can now be operated remotely using a smart device. Clear control for installer and customer alike.



Smartphones, tablets and smartwatches turn into a practical remote control, thanks to Busch-ControlTouch® KNX. It connects the KNX installation with the IP network, allowing control of all KNX functions in the building. Applications for iOS and Android create intuitive operation, allowing switches, dimmers, blinds, scenes, IP cameras, UPnP devices (for instance Sonos wireless boxes), Philips Hue lamps and many more to be integrated into the system.

Local user support can assign roles with user rights. Additional product features include Scene Editor, RGB/RGBW support, week timer with practical astro function, optional presence and alarm notifications via push messages or e-mail. Busch-ControlTouch® KNX also enables the creation of individual logic scripts. The end customer can also activate remote control via ETS programming, without requiring a VPN tunnel. The compact system has a KNX, a LAN and a 5–36 V connection for an external power adaptor. It is additionally equipped with two buttons for restarts and two LED lamps for the display of status and connection.

The complete commissioning of the module and the changes are made web-based via the myABB-LivingSpace Internet portal. Easy upload from ETS projects allows a smooth engineering workflow, reducing time and money. GridView allows quick navigation and operation within two clicks. Suitable for private housing, offices, large housing complexes or commercial properties – the Busch-ControlTouch® KNX takes modern, intelligent living and working to the next level.



KNX



- For smartphones and tablets (iOS and Android) and Apple Watch
- Web-based commissioning
- Intuitive and comfortable operation
- IP cameras, UPnP devices (for instance Sonos wireless boxes) and Philips Hue lamps can be integrated
- Error and alarm messages via push messages

Busch-VoiceControl® KNX

Control completely by voice

The building of the future recognises the needs of its users. It reacts individually – automatically and without being asked to do so.

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01 Busch-VoiceControl® KNX



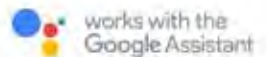
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01



—
amazon alexa



—
Google Assistant



Busch-VoiceControl® KNX offers the unique possibility of controlling buildings completely by voice command with the digital speech assistants Apple HomeKit, Amazon Alexa and Google Assistant. Whether switches, dimmers, blinds or thermostats, you decide which functions you wish to control with your voice.

Capable of managing a range of building functions including lighting, heating and window blinds, the Busch-VoiceControl® KNX can manage up to 150 functions and is fully configurable via the secure and simple to use MyBuildings portal, powered by ABB Ability, the company's cloud based, industry-leading portfolio of digital solutions.

Thanks to the Busch-VoiceControl® KNX device it is possible to receive information about the current status of the building, including room temperature, light intensity and humidity. It will also detect any motion or occupancy within the property, giving added reassurance to the homeowner when they are away from the house.

- Approved solution for three systems
- Integration of lighting, heating and blind control systems
- All three voice commands can be used simultaneously
- Control up to 150 functions
- HomeKit certification allows control of the KNX system from other HomeKit devices, such as the iPad, iPhone and Apple TV



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busch-jaeger.de/busch-voicecontrol
abb.com/knx



—
Use HomePod to control functions via
your Apple HomeKit connection



—
Apple HomeKit



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Apple TV
Apple HomePod



—
Apple, iPad, iPad Air, iPhone,
HomePod and iPod Touch
are trademarks of Apple Inc.
registered in the USA and
other countries. HomeKit is
a trademark of Apple Inc.

Busch-priOn®

The central control unit

Busch-priOn® allows you to control and monitor functions in the entire room. Light, scenes, timer, blind control unit, heating control unit – all functions are controlled simply and intuitively via a rotary knob, and freely programmable functions can be called up via the rocker switches. Busch-priOn® is a non-fixed, modular concept.



01



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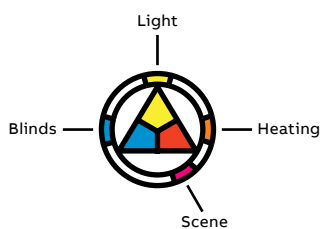


03



04

Busch-priOn® is ideal in combination with the carat® switch series, which has surfaces in the same design.



- 01 Rotary control element
- 02 3gang control element
- 03 Flush-mounted movement sensor
- 04 carat® glass black

The rotary control element is equipped with a freely programmable button which can be pressed and turned. It can be used to switch and dim individual lamps, but also to switch on whole groups of lamps with one press of a button and vary their brightness continuously via the knob. The single control element is equipped with a freely programmable “large” operating button. It can be assigned to one function and can carry out a maximum of two commands. The triple-button control element is equipped with three freely programmable control buttons. Each can be assigned to one function and can carry out a maximum of two commands.



reddot design award
best of the best 2008

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Busch-priOn® received special commendation in the category “Best of the Best”, winning the “Red Dot Award: Communication Design 2008” for its interface design. It is available in the colours glass black, studio white (glossy), stainless steel and white glass.



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07

08

- Dimming, blinds, value, light scenes, logic functions, time functions
- Illuminated knob and colour-coding concept
- Anti-theft protection
- Day/night operation
- Replaceable labelling symbol

—
05 3gang control element with single-line display and temperature controller

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06 2gang combination

—
07 3gang combination

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08 Rotary control element with single-line display

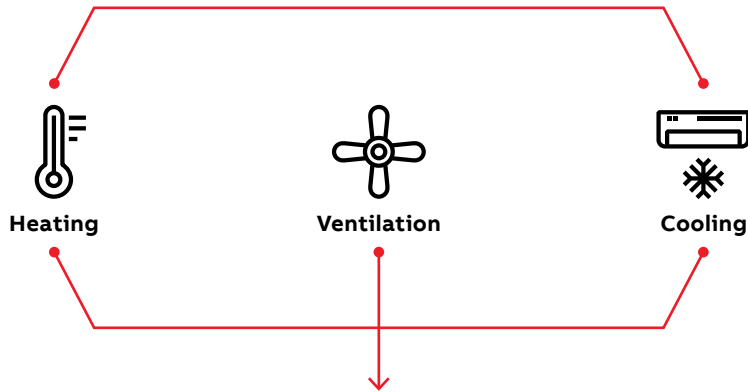
A single-line display with integrated room temperature controller has been designed for the Busch-priOn® 3gang control element, technically reduced to the basics and optically elegant. It is particularly easy to read due to the monochromatic design for white-on-black information. The room temperature controller, information functions like time and date, up to 17 freely programmable text displays, IR sensor and proximity sensor have been integrated into the display. The design of the display is available in the colour and material glass black only.

Operation is intuitive, supported by the colour-coding concept. It is possible to freely combine several Busch-priOn® elements with each other. The user can choose from three surface designs: black, blue and silver. Busch-priOn® is a non-fixed, modular-design system. The rocker switch element allows you to call up freely programmable functions such as light scenes, blind functions or specific lamps. The Busch-priOn® flush-mounted movement sensor can be used individually or with other Busch-priOn® modules. Practical because users thus do not have to look for the light switch and are greeted with light when first entering a dark room.

HVAC automation from the room level to the management level

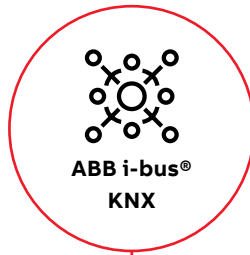
HVAC – multiple functions

Heating, ventilation, and air-conditioning technology is made up of various systems that are now integrated into one system.



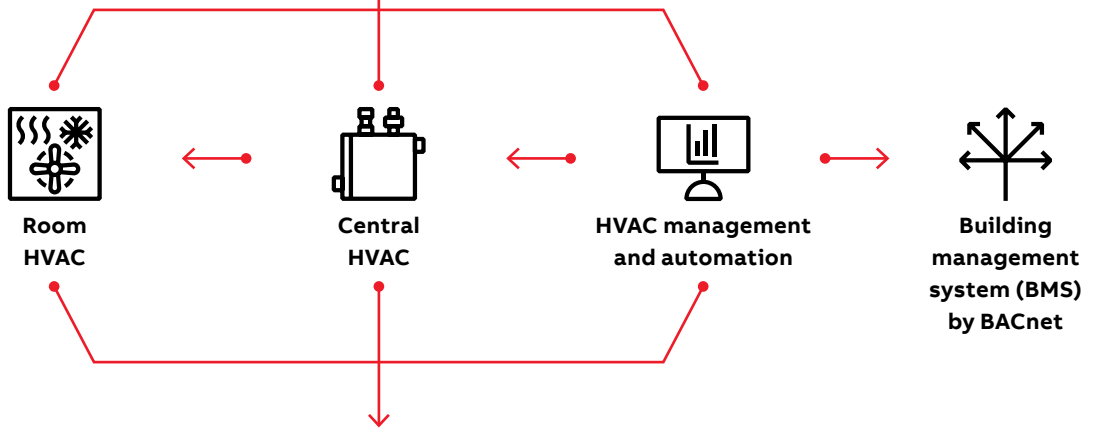
KNX – a standardized system

With the proven ABB i-bus® KNX system it is possible to automate all HVAC applications and combine them into a single solution.



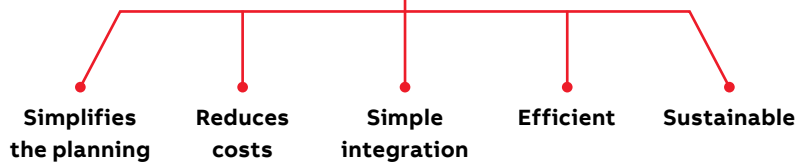
HVAC – levels

ClimaECO combines the three different levels of HVAC automation, ranging from management level to central HVAC systems (generation and distribution) to room automation (energy consumption).



ClimaECO – a holistic solution

ClimaECO bundles all functions and solutions for HVAC automation into a single integrated system. This saves you time and effort with planning, integration, and maintenance, while significantly increasing energy efficiency in buildings.



Smarter Solutions for Home and Building Automation

ABB i-bus® KNX – Heating, Ventilation and Air Conditioning – ClimaECO Sensor



Living and working with a feeling of well-being.

And here the air in the room is one of the most important factors. Because the body takes an ideal temperature for granted and therefore easily reacts to changes. Heated or air-conditioned rooms can be optimally adjusted – to a consistently pleasant ambience.

The KNX ClimaECO Sensors for stand-alone applications.

The ClimaECO Sensor with display is a room temperature controller for ventilator convectors or conventional systems for heating and cooling. This option offers complete air-conditioning for rooms. The temperature can be adjusted precisely for personal comfort. The fan speeds can be selected by push buttons. Even very large rooms can be heated or cooled to a comfortable temperature quickly – with additional air-conditioning units. The KNX ClimaECO Sensor can be operated individually. The bus coupler is integrated into the control element.

Function

- Temperature sensor
- RTC setting
- Illuminated display
- Fan Coil operation for heating and cooling

Features

- Very easy to operate with large, clear display
- Complete air conditioning
- Fan speeds can be manually selected
- Integrated bus coupler
- Surface-mounted, independent switching program
- Colours: studio white

Busch-triton®

Elegant ergonomics

With freely programmable switch rockers, backlit label fields and IR sensor, Busch-triton® is ideal for any application and, with its elegant design, it is commonly installed in hotels and public areas. Busch-triton® is equipped with an integrated bus coupler and IR receiver. The unit is composed of control element and integrated bus coupler with everything required to control building systems elegantly and comfortably.

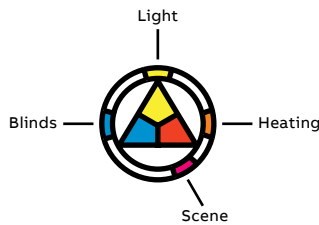


—
01 1/2gang control element with rear-illuminated labelling area and IR reception

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02 3/6gang control element with rear-illuminated labelling area and IR reception

—
03 5/10gang control element with rear-illuminated labelling area and IR reception

—
04 5/10gang control element with rear-illuminated labelling field, integrated room thermostat, LCD display and IR reception





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The Busch-triton® is available in five stunning colours, offering exactly the right ambience for any environment. The colours offer exactly the right accent to the carat®, impuls, alpha and future® linear ranges – such as the use of the colour-coordinated socket outlets or motion detectors.

- Multiple functions:
switching, dimming, blinds
- Value transmitter, value dimming sensor
- Light scene extension unit
- Step-type switch
- Short/long operation
- 13 freely programmable IR channels
- 8 light scenes
- LCD display room temperature controller

Millenium KNX

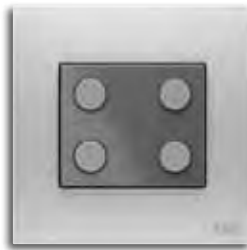
Everything under control

Millenium is the first metal range with KNX technology, the most intelligent way to manage spaces and optimise performance in terms of energy savings. Millenium is based on a combinable concept, creating a comprehensive range suitable for all needs. This makes it the ideal collection for all types of homes, hotels, offices and shops.

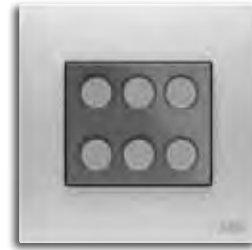
- 01 Switch Sensor
2gang KNX
- 02 Switch Sensor
4gang KNX
- 03 Switch Sensor
6gang KNX
- 04 Switch Sensor
6gang KNX with IR
- 05 Busch-Watchdog
180° KNX
- 06 Room Thermostat
KNX



01



02



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— The Millenium range is only available in the following countries: China, Dubai, India, Kuwait, Oman, Qatar, Saudi Arabia, Singapore, UAE and UK. Frames and special mounting plates for KNX sensors have to be ordered from: ABB, S.A. Low Voltage Products Niessen, Oiartzun/Spain www.abb.es/niessen



The Millennium range offers special mounting plates for KNX sensors to reduce the height and improve the aesthetics for ultra-slim design. The KNX sensors allow the buttons to be replaced with desired symbols in order to adjust the sensors to specific design and needs like light, blind, scene, RTC or fan coil. Millennium offers a wide and elegant choice of finishes in stainless steel material: from brushed stainless steel, to the soft new touch given by silk black, and the luxury of the sophisticated gold finishes, matt gold and antique gold.



- **Multiple functions:**
switching, dimming, blinds
sending values, scenes, etc.
- Incl. 10 logic channels
- Sequence actuator
- Logic gates
- Control element: switch contacts
- Status/orientation light
(red/green/OFF)

Zenit KNX

Suitable for every need

Zenit is based on a combinable concept which, creating a comprehensive range, is suitable for all needs. Optimising comfort, safety and efficiency in homes and buildings. Providing comfort solutions to satisfy all types of needs and projects. Ensuring safety and protection of persons and goods. Saving energy by using only the amount of energy required.

—
01 Switch Sensor
2gang KNX



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01

—
02 Switch Sensor
4gang KNX



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02

—
03 Switch Sensor
6gang KNX



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03

—
04 Switch Sensor
6gang KNX with IR



—
04

—
05 Busch-Watchdog
180° KNX



—
05

—
06 Room Thermostat
KNX



—
06

—
The Zenit VDE range is only available in the following countries: Spain, Portugal, Russia, France. The Zenit NEMA range is only available in the following countries: Latin America, Australia, Thailand, Vietnam. Sensors, frames and special mounting plates for KNX sensors have to be ordered from: ABB, S.A., Low Voltage Products Niessen, Oiartzun/Spain, www.abb.es/niessen



Zenit offers two different mounting plates for KNX sensors, corresponding to different market standards: VDE and NEMA.



- **Multiple functions:** switching, dimming, blinds sending values, scenes, etc.
- Incl. 10 logic channels
- Sequence actuator
- Logic gates
- Control element: switch contacts
- Display elements: LED to indicate the function

Multifunction control elements

For various ranges with LED colour-code concept

The multifunction control elements with LED colour-code concept. Meeting the highest demands for comfort and technology. They come with two RGB LEDs per rocker switch, which conform to a consistent colour concept. This makes the function obvious at a glance, and the rockers can be additionally fitted with pictograms. Each side of a rocker switch can have its own function – each for calling up one light scene, for instance. This turns a 4gang control element into an 8gang control element.

- 01 Multifunction control element 1/2gang
- 02 Multifunction control element 2/4gang
- 03 Multifunction control element 4/8gang
- 04 Multifunction control element 2/4gang, integrated room thermostat
- 05 Multifunction control element 3/6gang with IR reception
- 06 FM movement detector standard
- 07 FM movement detector comfort



01



02



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04



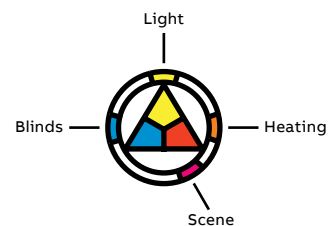
05



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07





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Different shapes, colours and materials fulfil every requirement. KNX control elements are available in the carat®, pure stainless steel, solo®, Busch-axcent® and future® linear programmes. The complete range of conventional switches from these series is available, so there are no limits to the options for combining KNX components.

- **Multiple functions:**
switching, dimming, blinds
- **Push-button**
- **Value transmitter, value dimming sensor**
- **Light scene extension unit**
- **Step-type and multiple operation**
- **Labellable switch rockers**
- **LED colour code concept**



Standard control elements

Quality as our basis

The standard control elements are available as 1/2gang, 2/4gang or 4/8gang models. Every switch rocker has two LEDs, which display the status of the connected loads. The separate switch rockers are freely programmable and are suitable for switching and dimming, as well as for operating blinds and as a light scene extension unit. They can also be used in commercial applications. Anti-vandal protection has also been integrated – an important factor for installations in public areas.

- Multiple functions: switching, dimming, blinds
- Push-button
- Value transmitter, value dimming sensor
- Light scene extension unit
- Freely programmable
- Labellable switch rockers
- Status/orientation light (red/green/OFF)

— 01 Standard control element, 1/2gang

— 02 Standard control element, 2/4gang

— 03 Standard control element, 4/8gang



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01



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02



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03



Room thermostat fan coil

Surface-mounted with integrated bus coupler and display

Living and working with a feeling of well-being. And here the air in the room is one of the most important factors. Heated or air-conditioned rooms can be optimally adjusted – to a consistently pleasant ambience.

- Very easy to operate with large, clear display
- Complete air conditioning
- Fan speeds can be manually selected
- Integrated bus coupler
- Surface-mounted, independent switching program
- Colours: studio white, aluminium silver

The KNX fan coil room temperature controller for stand-alone applications

The fan coil room temperature controller with display is a room temperature controller for ventilator convectors or conventional systems for heating and cooling. This option offers complete air conditioning for rooms. The temperature can be adjusted precisely for personal comfort. The fan speeds can be selected by push buttons. Even very large rooms can be heated or cooled to a comfortable temperature quickly – with additional air conditioning units. The KNX fan coil room temperature controller can be operated individually. The bus coupler is integrated into the control element.

Functional building range

A custom-made solution for every project

The comprehensive KNX range enables you to be creative. Increasing demands made on versatile functionality in the functional building sector require the total compatibility of all components.



01



02

Available in the ranges: future® linear, basic55®, solo®, Busch-axcent®, carat®, pure stainless steel



03



04

Available in the ranges: future® linear, basic55®, solo®, Busch-axcent®, carat®, alpha

Innovative and space-saving

For everyone who desires maximum functionality in a minimum of space there is now an exclusive solution available. Because the new 6gang KNX sensor fits into a flush-mounted box. And thanks to its display, it is very easy to operate.



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Available in the ranges: Zenit, Uniart

01 Push-button coupler 2gang with integrated bus coupler

05 Push-button coupler 2gang with integrated bus coupler

02 Push-button coupler 4gang with integrated bus coupler

06 Push-button coupler 4gang with integrated bus coupler

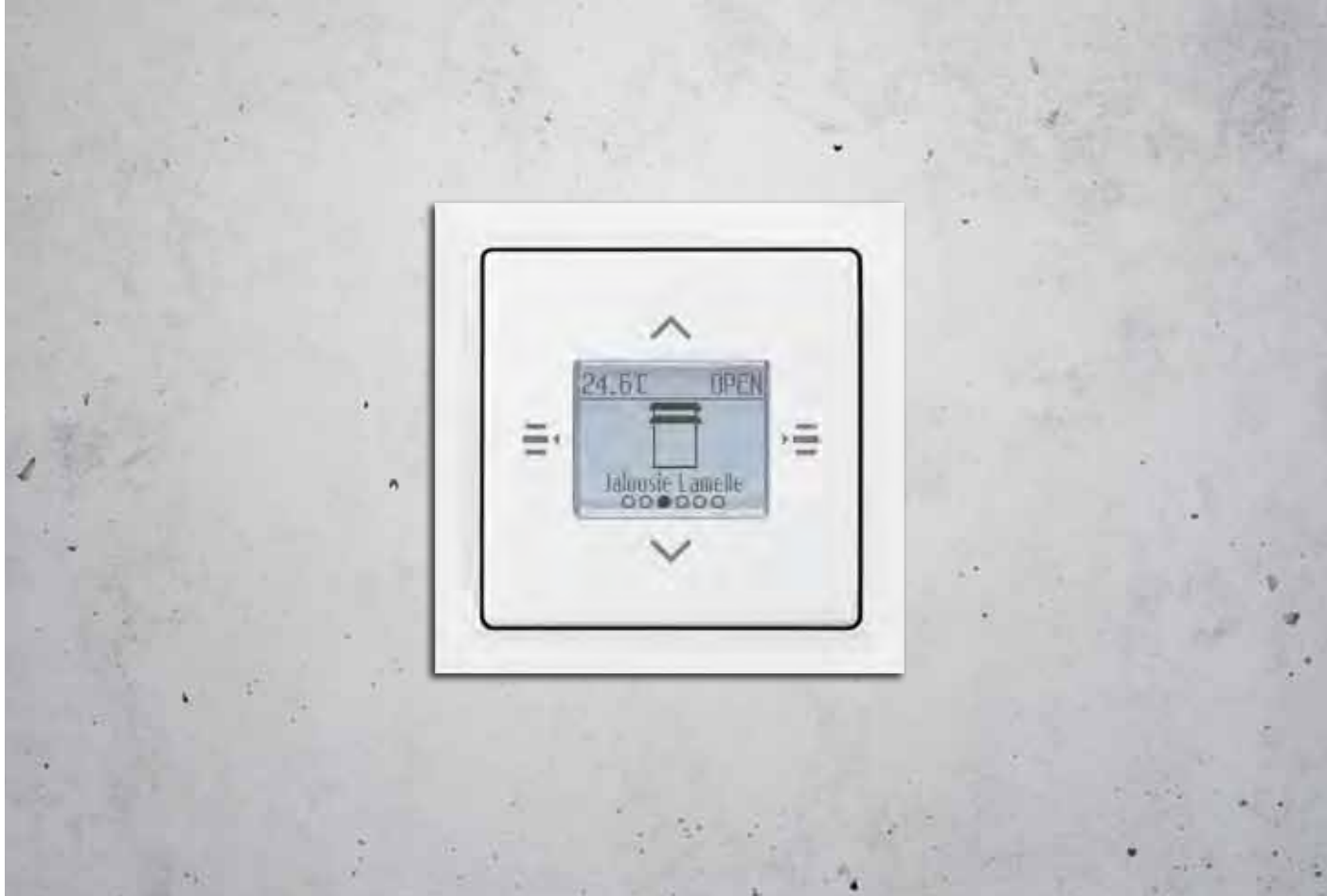
03 6-fold KNX sensor

07 Busch-Watchdog sensor 180FM

04 Busch-Watchdog sensor 180FM standard, select

standard, select

- Push-buttons with integrated temperature sensor
- Colour concept
- Sensors available with icons for easy operation



- 01 carat®
- 02 Busch-axcent®
- 03 solo®
- 04 future® linear
- 05 basic55®
- 06 Zenit
- 07 Zenit NEMA
- 08 Zenit NEMA



— 01



— 02



— 03



— 04



— 05



— 06



— 07



— 08

A single standard creates flexible solutions

ABB i-bus® KNX allows all compact devices to be connected via KNX bus coupler and the native ETS application. Whether light, heating, blinds or the control of scenes – extended options with reduced effort. Compact devices with bus coupler are made operational via the native ETS application. The ABB colour code is used with each flush-mounted push-button coupling unit to display light, heating, blinds and scenes with matching switches and a clear overview. Also, temperature sensors are integrated. Up to five switches are connected to a single flush-mounted device via binary inputs.

Functional building range

Atmosphere is more than just temperature

The temperature in a room means more than merely the temperature. Proper balance is created with pleasant air quality and the correct room temperature. This is taken care of with the new sensors, which precisely measure several values: humidity, air pressure, temperature and – very important – the CO₂ content. Upper and lower limit values create an optimal working atmosphere: windows open and close and fans switch on and off.



01

Available in the ranges:
basic55®, future® linear, solo®, Busch-axcent®, carat®, pure stainless steel

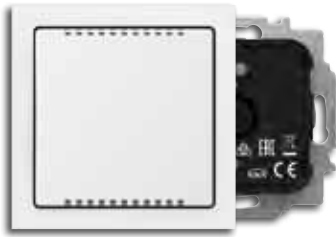


02



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Available in the ranges:
basic55®, future® linear, solo®, Busch-axcent®, carat®, pure stainless steel and alpha



04



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*Available in the ranges:
basic55®, future® linear, solo®, Busch-axcent®, carat®, pure stainless steel and alpha



06

Available in the ranges:
Zenit, Uniart

01 Room temperature controller with display

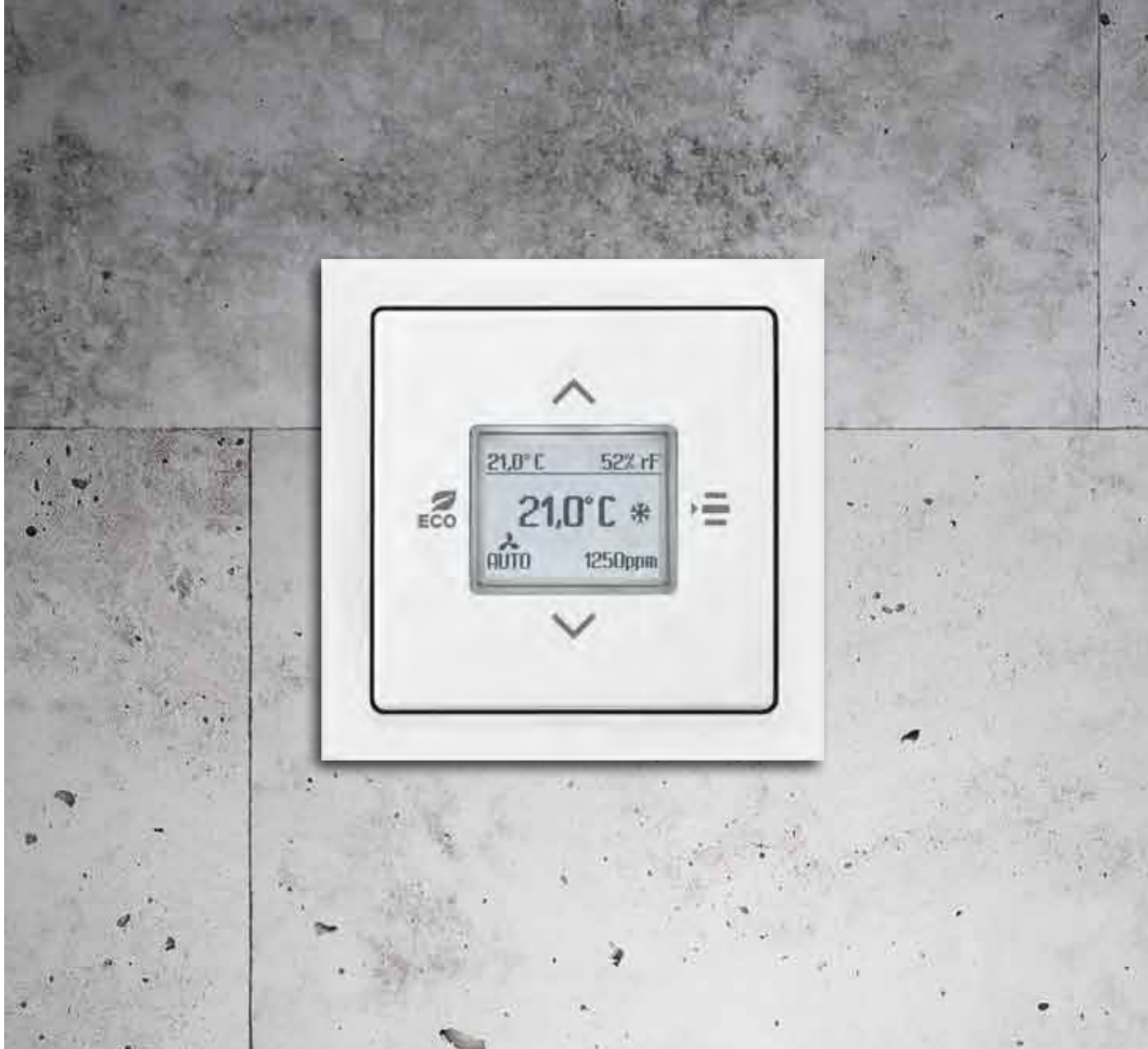
02 Room temperature controller with universal input, 5gang

03 Room temperature controller/CO₂/humidity with universal input, 5gang

04 Room temperature controller*, Commercial, with 5gang universal input for heating/cooling operation, FM

05 Room temperature controller with 5gang universal input for heating/cooling operation, FM

06 Room temperature controller with display



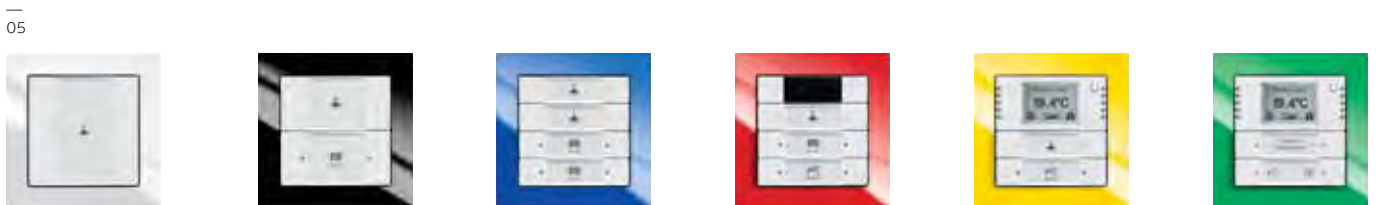
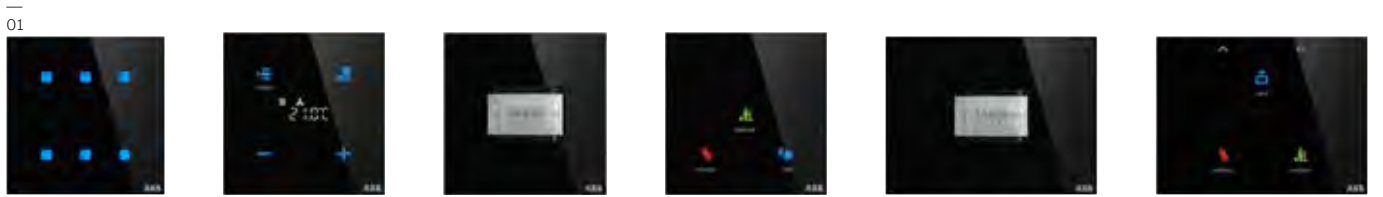
- One display for CO₂, humidity, temperature and air pressure
- Switching thresholds for CO₂ and humidity parameterisable via IKNX
- Red illuminated display when thresholds are exceeded
- Activation of window opener or fan
- Adjustable switch-off delay
- Easy programming

Danger source CO₂

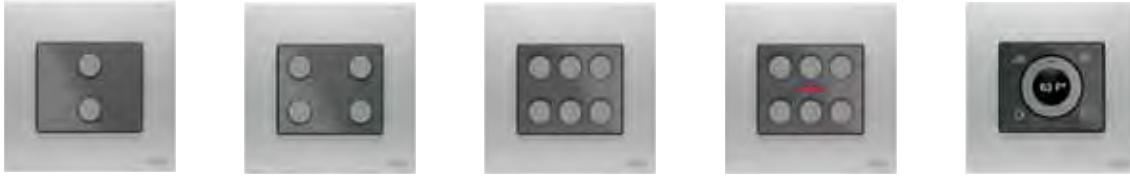
The CO₂ value fluctuates considerably when people are present in meeting rooms, conference rooms and classrooms. To prevent discomfort, lack of concentration and drop in performance, the precise room air sensor monitors the CO₂ concentration and controls the ventilation system and windows fully automatically and subtly. It fits into the flush-mounted box and can be integrated into almost all ABB switch ranges. Clarity in every way.

Smarter Solutions for Home and Building Automation

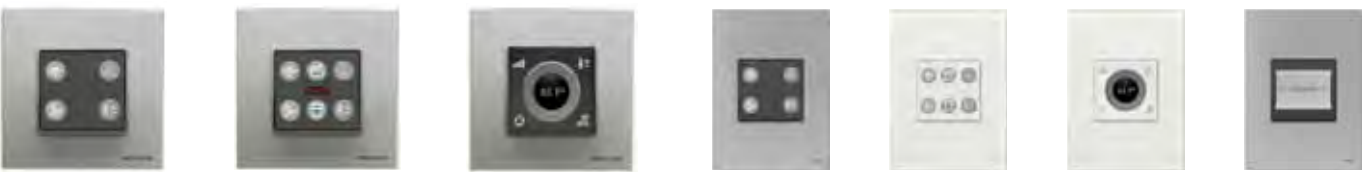
ABB i-bus® KNX - User Operation - Design Ranges - Unique diversity of the range



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11



— 01 Tacteo

— 02 ClimaECO

— 03 carat®

— 04 pure stainless steel

— 05 Busch-axcent®

— 06 future® linear

— 07 Millenium*

— 08 Zenit for VDE/NEMA markets

— 09 Busch-triton®

— 10 Busch-priOn®

— 11 Bus Coupling Unit –
for conventional Busch-Jaeger series**

Further information regarding the ABB switch ranges are available on <http://new.abb.com/low-voltage/products/residential-products/switch-ranges>



* Millenium and Zenit series are only available in selected markets.

** Busch-Jaeger switch ranges only available for selected markets. For further information please contact your local ABB office.

ABB-free@home®





044 – 045

Free choice

046 – 047

Total networking

048 – 049

Easy to use

050 – 051

Simple effortless

052 – 055

So easy, any one can do it



Free choice

Live as your heart desires

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 remotely controlled. Via a switch on the wall, via voice control or with a smartphone, tablet or personal computer.

The pleasure of simplicity

ABB-free@home® makes daily life easier. You can manage blinds, lights, heating, air-conditioning and door communication using just one system. The smartphone becomes the remote control in the house. It allows you to raise the blinds and switch on the radio in the kitchen with the touch of a button while you are still in bed – or to deactivate all lights and devices 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.



Open for new ideas

With ABB-free@home® everyone can determine for themselves how they want to use the smart living technologies. Both individual functions, such as heating or control of blinds, or a combination of different functions can be implemented. Over the course of time the system can also be flexibly extended, if one so desires. Freedom of choice at all times.



Blinds



Light



Heating



Air-conditioning



Door communication



Total networking

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 ABB-free@home®, sun protection and energy-saving could not be easier. Opening and closing, as well as adjustment of slats can be automated and controlled with switches, ABB-free@homeTouch (two sizes are available: 7" and 4.3") or

the app for smartphone or tablet. In addition, a 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. The relevant data are combined in the System Access Point and are precisely implemented. The panel displays a comprehensive overview of all measured values and time settings.





Weather station

One thing is certain: the weather cannot be precisely predicted. The weather station records the brightness, temperature, rain and wind speed outside the home. Weather data are sent immediately and linked with actuators to automatically control functions. All important data are clearly displayed in the ABB-free@home® app.

- Provides numerous control options, dependent on brightness, temperature, rainfall and wind speed
- Shows weather data on the smartphone, tablet and display
- Reliably protects blinds and awnings against the effects of weather
- Optimises energy efficiency



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 slats. In combination with a wind sensor, the roller blinds, exterior blinds and awnings close up completely and are locked during high wind conditions.

Easy to use

A variety of control options

The new independence. Creating the perfect indoor climate or ideal illumination can now be done via flexible and precise remote control – with the touch of a finger or voice commands. Operation as simple as desired.

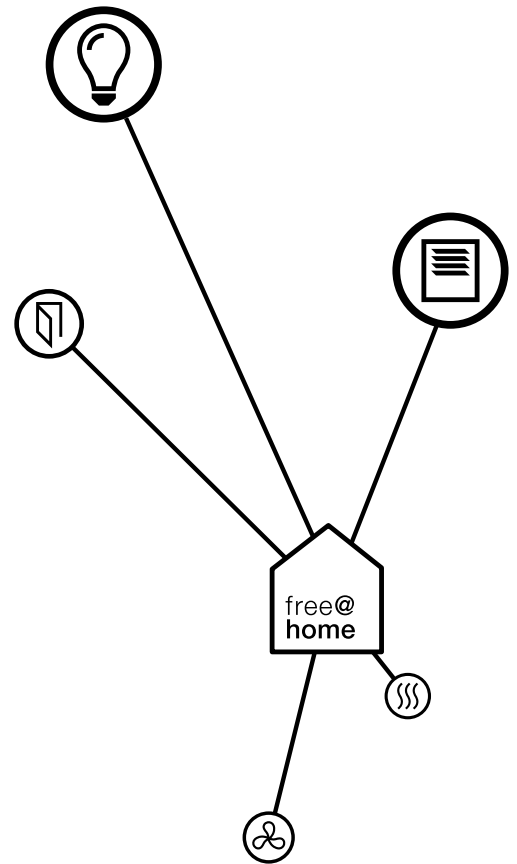


"Alexa, play music that puts me in a happy mood."



Alexa

Amazon Echo controls lamps, light switches and thermostats, plays music, supplies news and much more and all this simply via voice control.



"Switch on the ceiling light in the living room."

"Okay. The light 'ceiling light' in the living room has been switched on."

Voice control

The intelligent voice control makes the ABB-free@home® app respond to every word. If you say "Switch the ceiling light on", the system will ask "Do you mean the 'ceiling light' in the kitchen, in the living room or in the bathroom?". Very handy if you don't feel like getting up at the moment.



Tablet and smartphone

The operating concept provides the highest flexibility and mobility because everyone has the choice to control the functions also mobile via the smartphone or tablet. And thanks to the ABB-free@home® app, also with the tip of the finger while travelling. Easier than ever.



ABB-free@homeTouch

Thanks to its two different colours (black and white) and its two different sizes (7" and 4.3"). Offers up to 16 functions, and intuitive operation via tapping or swiping. Easy to set up and even easier to operate – plus making adjustments is a snap.

The modern switch

The easiest operation is the one everyone is used to. And today's wall switch is always in the right place. This is especially so because the wireless version makes additional cabling unnecessary. Switches are the better performers.

Simply effortless

This saves valuable labour time

Now easier than ever. Only a few components are needed to install ABB-free@home®. For the direct activation of light, the entire system only requires a bus cable, the sensor/actuator unit, a power supply and a System Access Point for programming.

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



01

The System Access Point

The nerve centre of the ABB-free@home® system is the System Access Point. It provides access for computer, tablet or smartphone via WLAN. This allows the functions of the system to be defined and remotely 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 creates its own WLAN and the software necessary for project planning and commissioning is already on board. 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.



02

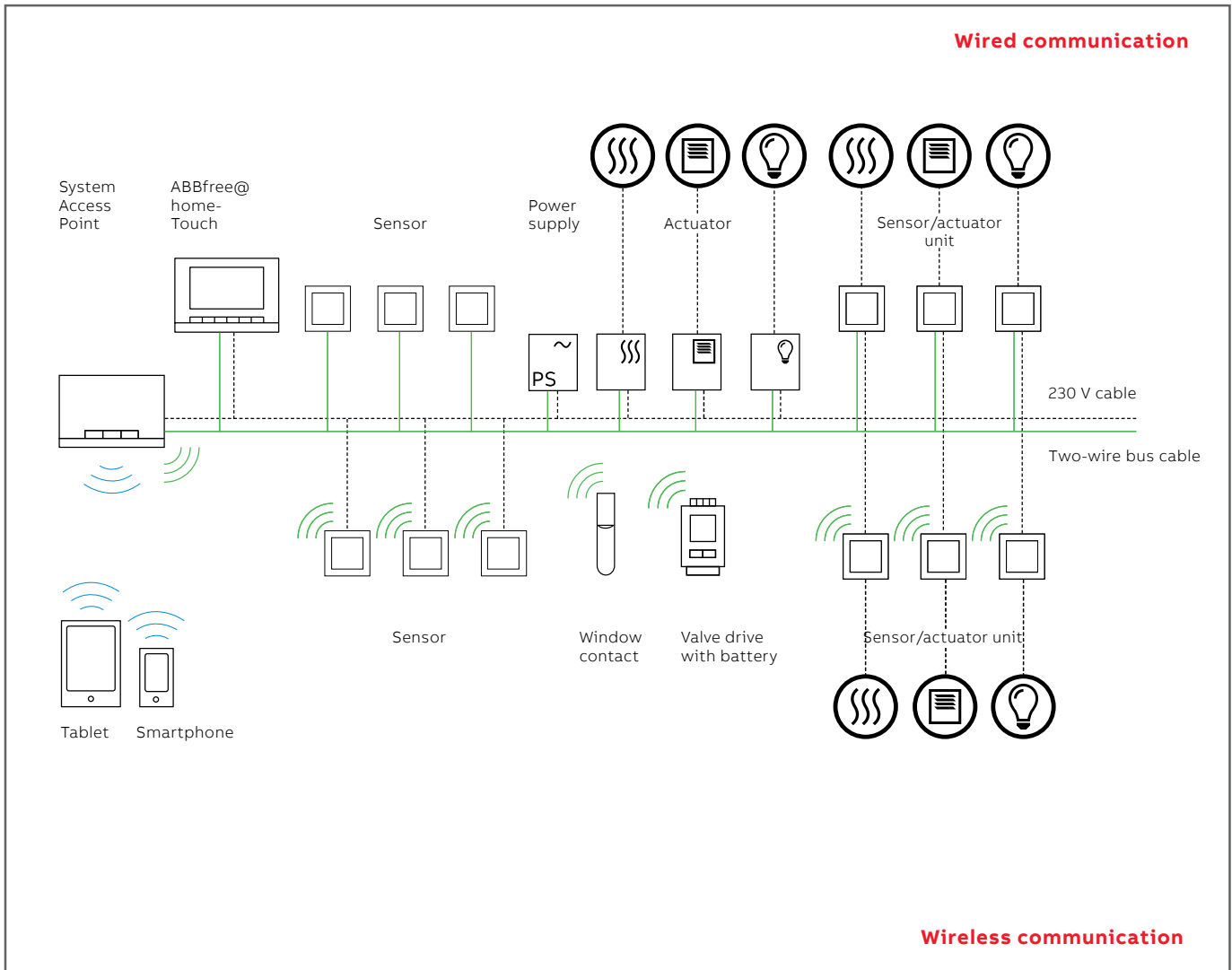
03

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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 switches and devices, such as window contacts, for example. Push-buttons, room temperature controllers and movement detectors are available as sensors.



Central distribution board with rail-mounting actuator

The installation of central rail-mounting actuators in the consumer unit 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.

Sensor/actuator unit for decentralised control

All in one. With 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.



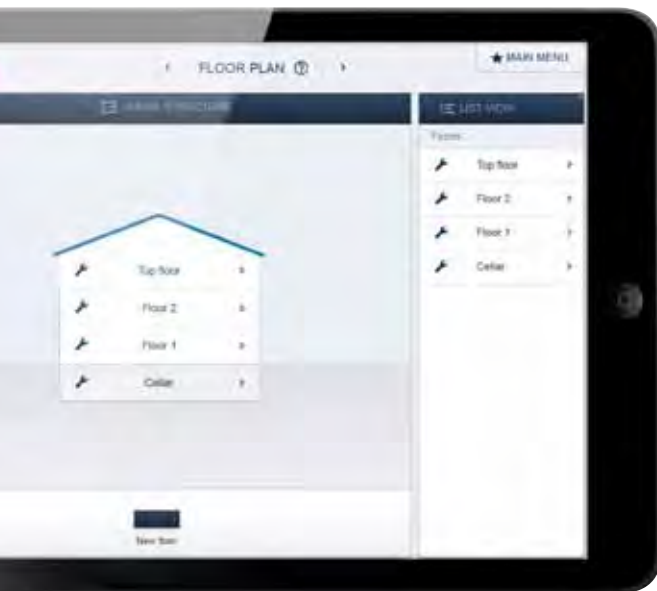
Sensor/actuator unit

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

So easy, anyone can do it

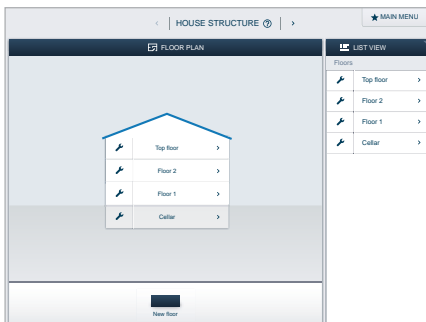
Creating scenes

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



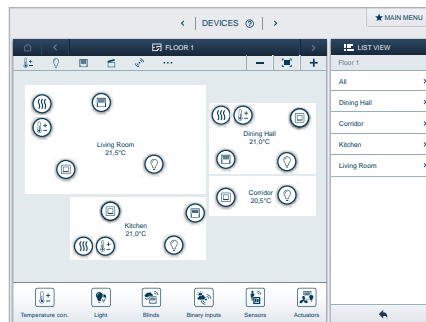
Easy to install – and even easier to operate

The ABB-free@home® app has been optimised for use in daily life. The wizard guides one through the system. The most important functions are clearly marked with self-explanatory icons. It makes no difference whether the components are connected in the two-wire bus or wirelessly. One has control over a uniform system. For maximum security, a personal password can be activated when logging in. This protects the home automation system against unauthorized access and tampering.



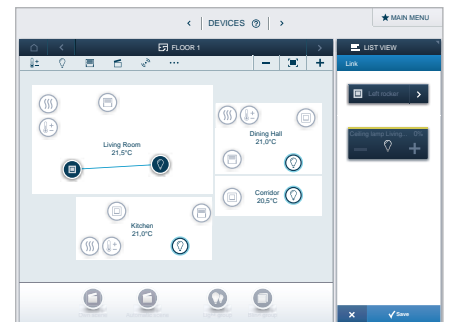
The house

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.



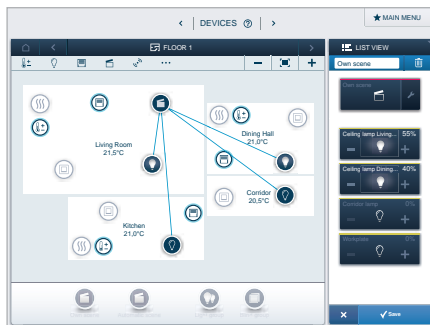
Combining

And finally, the elements can be combined according to individual preferences and requirements.



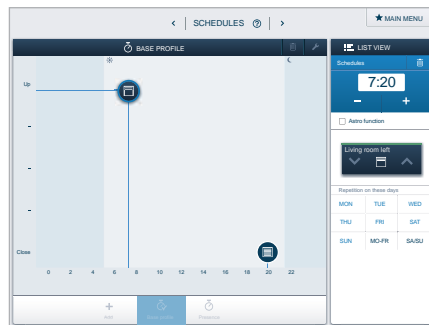
Simple and time-saving

The electrician performs the initial configuration of the system via app. Operation is particularly fast and saves on costly billable hours.



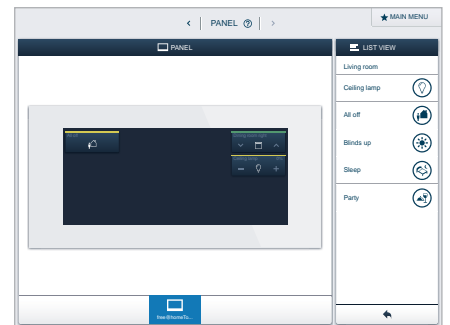
Scene control

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.



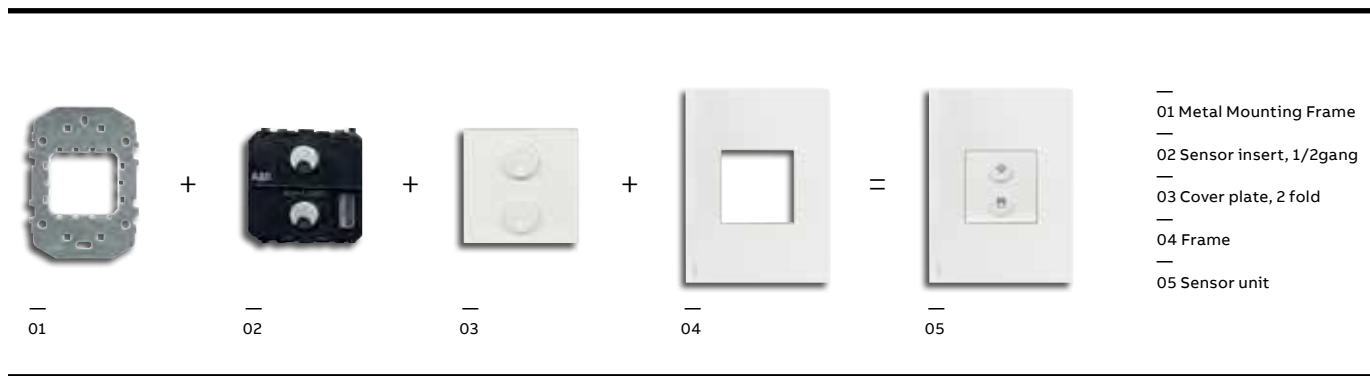
Time control

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

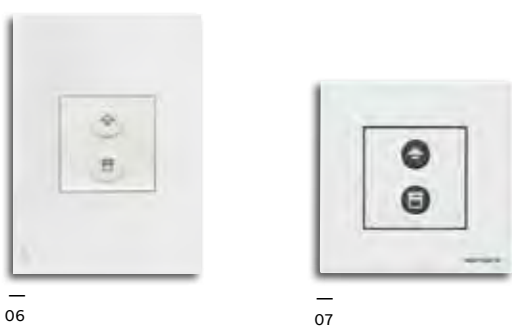


Panel setting

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



- 01 Metal Mounting Frame
- 02 Sensor insert, 1/2gang
- 03 Cover plate, 2 fold
- 04 Frame
- 05 Sensor unit



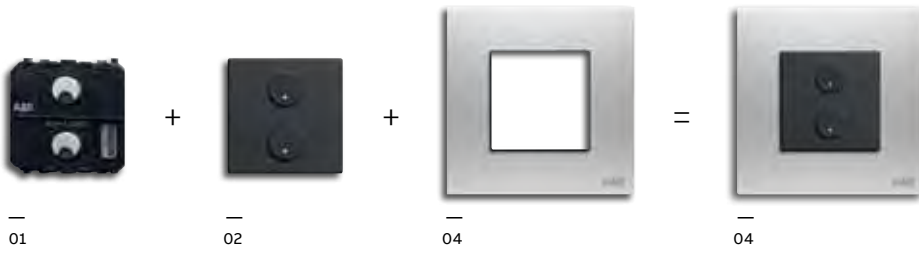
- 06 Zenit NEMA
- 07 Zenit VDE

Color options for frames and cover plates
Zenit

Color	Code (c)	Color	Code (c)
anthracite	AN	white	BL
aluminum silver	OX	white glass	CB
champagne	CV	black glass	CN
stone slate	PZ	wengue wood	WG
silver	PL		

Available symbols for push buttons

Symbol	Code (i)	Color	Code (i)
No symbol		Scene	S
Light	L	Dimmer	D
Blind	B		








- 01 Switch actuator
- 02 Rocker, 2 fold push buttons
- 03 Frame
- 04 ABB-free@home® Switch Sensor 1/2gang KNX







- 05 ABB-free@home® 1/2gang switches
- 06 ABB-free@home® Room temperature controller
- 07 ABB-free@home® Movement detector
- 08 ABB-free@home® 2/4gang switches

Color options for frames and cover plates
Millenium

Color	Code (c)	Color	Code (c)
 anthracite	AN	 matt gold	MG
 antique gold	AG	 silk black	SB
 brushed stainless steel	ST		

Available symbols for push buttons

Symbol	Code (i)	Color	Code (i)
No symbol		 Scene	S
 Light	L	 Dimmer	D
 Blind	B		

DOOR ENTRY SYSTEM

Your gateway to the world

ABB-Welcome





058–059

Infinite possibilities

060–061

**Customize to fit your
needs**

062–063

**One solution for all
requirements**

064–065

Full-range of products

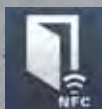
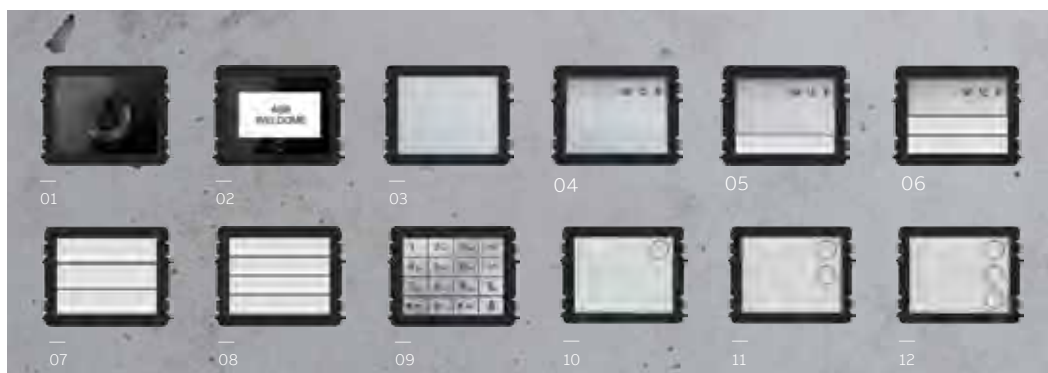
Infinite possibilities

Our customers' requirements vary from the most basic to the complex. With twelve functional modules, ABB-Welcome provides the answer for all these needs. This modularity delivers the optimum door communication solution for all types of new construction and retrofit applications. Modularity also allows for a reduction in stock for our distributors and quick service replacements should the need arise.





Modular design means more flexibility. For a single family home, many combinations of outdoor stations are possible to create the desired solution according to the requirements of the builder, architect, installer and the aesthetic taste of the owner.



- 01 ABB-Welcome camera module
- 02 ABB-Welcome display module with card reader
- 03 ABB-Welcome nameplate module
- 04 ABB-Welcome audio module, no buttons
- 05 ABB-Welcome audio module, 1/2 buttons
- 06 ABB-Welcome audio module, 2/4 buttons
- 07 ABB-Welcome pushbutton module, 3/6 buttons
- 08 ABB-Welcome pushbutton module, 4/8 buttons
- 09 ABB-Welcome keypad module
- 10 ABB-Welcome pushbutton module, 1button with/without NFC/IC
- 11 ABB-Welcome pushbutton module, 2 buttons with/without NFC/IC
- 12 ABB-Welcome pushbutton module, 3 buttons with/without NFC/IC

Customize to fit your needs



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01 Flush mounted

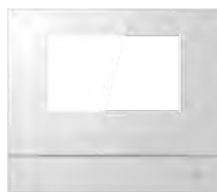
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02 Surface mounted

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03 Desktop

Simple and elegant, yet discreet, the 4.3-inch hands-free indoor station is perfect in any living environment.



- ABB-Welcome Indoor station, 4.3-inch white**
- 4.3-inch display with six capacitive touch buttons (resolution of 480 x 272 pixels)
 - Up to 50 images can be saved
 - Intercom functions



White



Silver



Black



Golden



Blue



Induction Loop

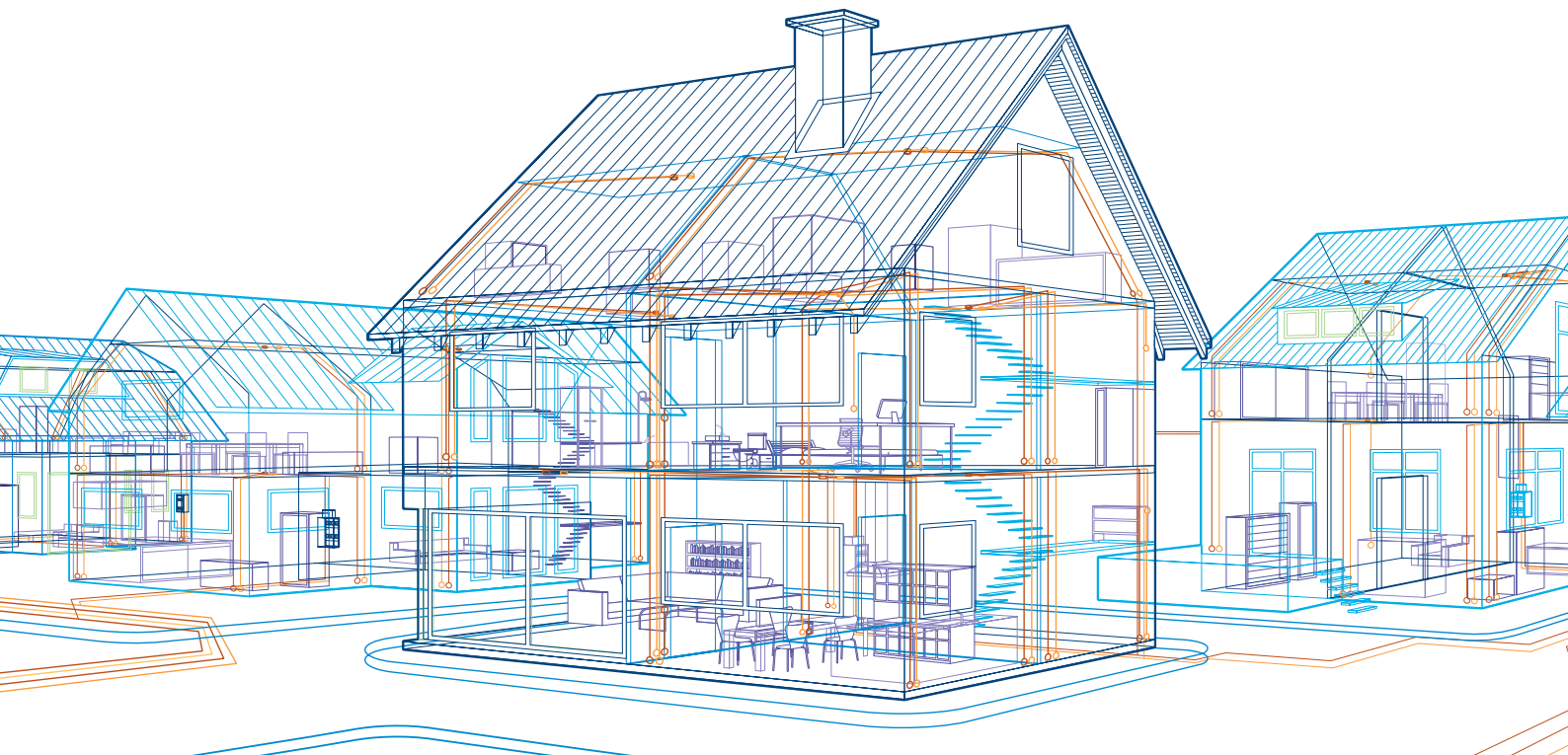
The ABB-Welcome 4.3-inch video indoor station allows users to select frames with five different colors to blend with any environment.

One solution for all requirements

With the extensive range of engineered products and its simple, two-wire connection technology, ABB-Welcome is the answer to all your needs, whether for new construction or the renovation of old buildings.

ABB-Welcome capacity

- 600 m from gate station to last indoor station
- 250 indoor stations for per building
- 60 buildings
- 9 guard units
- 9 outdoor stations for each apartment (including gate stations, outdoor stations and second confirmed outdoor stations)



More is possible. ABB-Welcome systems offer flexible solutions for single homes and large residential complexes. With modular construction and two-wire technology it is easy to plan, install and activate the Welcome system. The 2-wire bus technology makes any installation possible to fully meet the requirements of the user.



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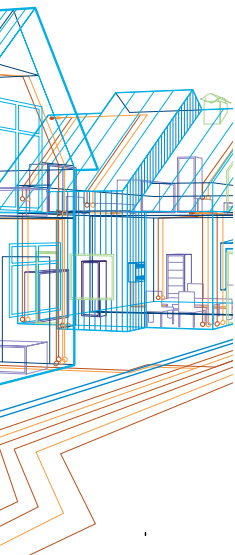


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- 01 One-family house
- 02 Multi-family house
- 03 Apartment building
- 04 High-rise building
- 05 Residential Complex



Full-range of products

ABB-Welcome outdoor station- stainless steel



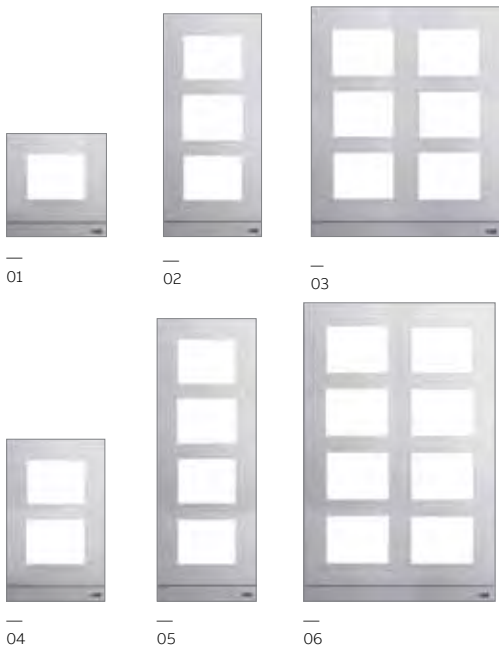
01 02 03



04 05 06

- 01 ABB-Welcome outdoor station, one button with/without NFC/IC
- 02 ABB-Welcome outdoor station, two buttons with/without NFC/IC
- 03 ABB-Welcome outdoor station, three buttons with/without NFC/IC
- 04 ABB-Welcome outdoor station, four buttons with/without NFC/IC
- 05 ABB-Welcome outdoor station, six buttons with/without NFC/IC
- 06 ABB-Welcome outdoor station, Keypad with display

ABB-Welcome outdoor station- aluminum



01 02 03
04 05 06



07 08



- 01 ABB-Welcome outdoor station cover frame, 1 module, Dimensions: 128 x 125 x 19 mm
- 02 ABB-Welcome outdoor station cover frame, 3 modules, Dimensions: 274 x 125 x 19 mm
- 03 ABB-Welcome outdoor station cover frame, 6 modules, Dimensions: 274 x 230 x 19 mm
- 04 ABB-Welcome outdoor station cover frame, 2 modules, Dimensions: 201 x 125 x 19 mm
- 05 ABB-Welcome outdoor station cover frame, 4 modules, Dimensions: 347 x 125 x 19 mm
- 06 ABB-Welcome outdoor station cover frame, 8 modules, Dimensions: 347 x 230 x 19 mm
- 07 ABB-Welcome basic outdoor station, one button
- 08 ABB-Welcome basic outdoor station, two buttons

ABB-Welcome indoor station



- 01 ABB-Welcome video indoor station, 7-inch hands-free
- 02 ABB-Welcome video indoor station, 4.3-inch hands-free
- 03 ABB-Welcome video indoor station, 4.3-inch handset
- 04 ABB-Welcome video indoor station, basic 4.3-inch hands-free
- 05 ABB-Welcome 7-inch video hands-free indoor station
- 06 ABB-Welcome audio indoor station, handset, three buttons
- 07 ABB-Welcome audio indoor station, six buttons
- 08 ABB-Welcome audio indoor station, hands-free

ABB-Welcome system devices



- 01 ABB-Welcome telephone gateway
- 02 ABB-Welcome IP gateway
- 03 ABB-Welcome gateway
- 04 ABB-Welcome outdoor video distributor
- 05 ABB-Welcome mini system controller
- 06 ABB-Welcome system controller
- 07 ABB-Welcome lift control module
- 08 ABB-Welcome M adaptor
- 09 ABB-Welcome 2-wire adaptor
- 10 ABB-Welcome video distributor
- 11 ABB-Welcome switch actuator
- 12 ABB-Welcome camera interface
- 13 ABB-Welcome guard unit
- 14 Mini dome camera analogue
- 15 Dome camera analogue, lens manually adjustable
- 16 Standard camera analogue, lens manually adjustable

Sleek and convex design in different finishes

Thanks to the complete system, The Ivie series provides a comprehensive range of solutions for building concepts. The convex and sleek design not only provides quality and style to the overall building, but is easy to install.



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03

Different finishes and combinations:

- 01 Anthracite grey mechanisms in Silver plate
- 02 Silver mechanisms in Anthracite Grey plate
- 03 Anthracite grey mechanisms in White plate



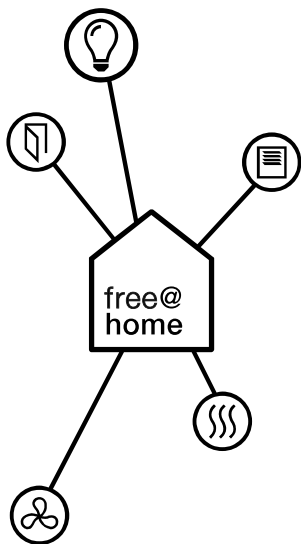
Flexibility in design which provides total control

The IVIE range is the first Indian range to incorporate wired and wireless home automation systems together. This range can be integrated with ABB-free@home® home automation system, which is the most intelligent way of managing spaces with energy saving.



Great comfort, safety and energy efficiency for buildings

ABB-free@home® sensor for switching control, blind control, dimming and scene control.



Light switches

A piece of design in your interior

Discover the wide range of designs, colours, finishes and functions and find the best solutions with innovative technology. Let modern light switches highlight the individual design of your living space.

VDE Standard



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01 carat®

02 Busch-dynasty®

03 pure stainless steel

04 solo®

05 Busch-axcent®

06 future® linear

07 Zenit

08 Millenium



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ABB India helpline:

Technical telephone support for customers and channel partners.
Toll free: (BSNL) 1800 420 0707
email: lp.contactcenter@in.abb.com

www.abb.com/knx