



ABB i-bus[®] KNX

Overview of KNX sensors and user operation

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.



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.

KNX

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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.



ABB Trevion®

A touch of perfection

ABB-Trevion® includes a 2.4" display with black glass surface for higher contrast, which keeps the display readable even at a tilted viewing angle. Users can choose between light and dark mode and haptic feedback through vibration contribute to an intuitive operation.

The 2.4" display has an integrated bus coupler (monoblock) and can be used in a KNX system as well as in an ABB-free@home® installation. The three sizes (55, 63, 70) allow the use in the switch programs such as Busch-balance® SI, future® linear, Busch-art linear®, SAGA™, ALBA and Sidus.

In addition to the bus supply from KNX or ABB-free@home®, the display requires an additional voltage supply with 24 V DC. This can be implemented, for example, via the second pair of wires or a flush-mounted power supply unit. In addition to the internal temperature sensor, an external temperature sensor (e.g. 6228/T) can be connected via an inlet.

- 12 control functions
- Max. 4 functions per page
- Swipe operation similar to a smartphone
- Information page for up to 12 status messages (KNX)
- Proximity/brightness sensor
- Room temperature controller included
- Internal temperature sensor
- One binary input/external temperature input

ABB Trevion® Keypads

Experience modern sensor technology combined with sleek design and a unique usability concept through capacitive surfaces.

The keypads can be configured flexibly as a 1-fold up to 4-fold touch sensor (one order code) so it is adaptable to individual needs and can be reconfigured subsequently. Multi-color LEDs visualize changes in movement or brightness through the animated light guide.

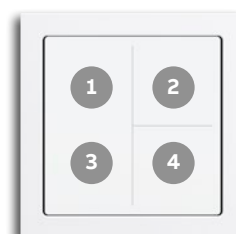
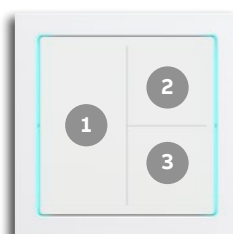
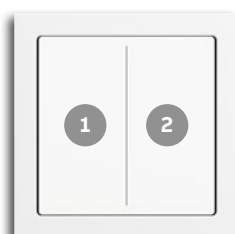
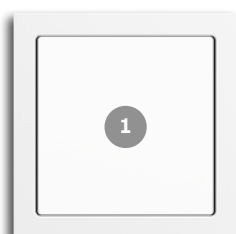




ABB Trevion® presents a revolutionary sensor technology that can be harmoniously integrated into many of our switch ranges due to its size. You can choose between two options: a 2.4" touch display or a capacitive control surface with LED light guides.



Design and functionality in sync.

ABB Trevion®'s display and keypads match many of our switch design ranges. With its innovative swipe function, animated light guide, and customizable display and control elements, it adds a touch of perfection to any home!

Advantages for you at a glance



High-quality sensor assortment with an extensive scope of functionality



Compatibility with ABB i-bus® KNX, ABB-free@home® and ABB flexTronics® inserts (only keypads)



Customizable design of display and control elements, integrable into many of our design ranges



Smooth usability thanks to swipe function, supported by an animated multi-color light guide

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.

Which functions do you need? Make a selection with our configurator.



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

86 × 86



Motion detector Watch dog 180°

86 × 115



Room outside sensor 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:

<https://tacteo-configurator.eu.mybuildings.abb.com>



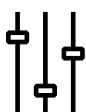
Flat and theft-proof

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.



Premium customization for special projects

In addition to the existing configuration, you now have the option to configure the ABB tacteo® sensors even more individually. You can configure the sensors with your own brand icons, fonts and logos, which can be placed freely on the glass surface for a completely unique appearance.

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.



— Busch-VoiceControl® KNX

Busch-VoiceControl® KNX offers the unique possibility of controlling buildings completely by voice command with the digital speech assistants Apple HomeKit, Amazon Alexa, Google Assistant and Alice from Yandex. 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.



— amazon alexa



— Google Assistant



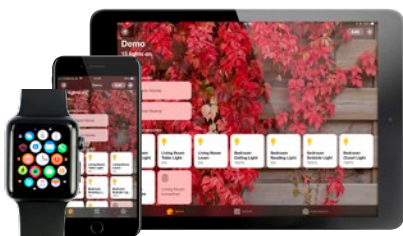
- Approved solution for four systems
- Integration of lighting, heating and blind control systems
- All four voice commands can be used simultaneously
- Control up to 150 functions
- HomeKit certification allows control of the KNX system from other HomeKit devices, such as the iPad, iPhone and Apple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



— busch-jaeger.de/en/product/building-systems-engineering-knx/busch-voicecontrol



—
Use HomePod to control functions via
your Apple HomeKit connection



—
Apple HomeKit



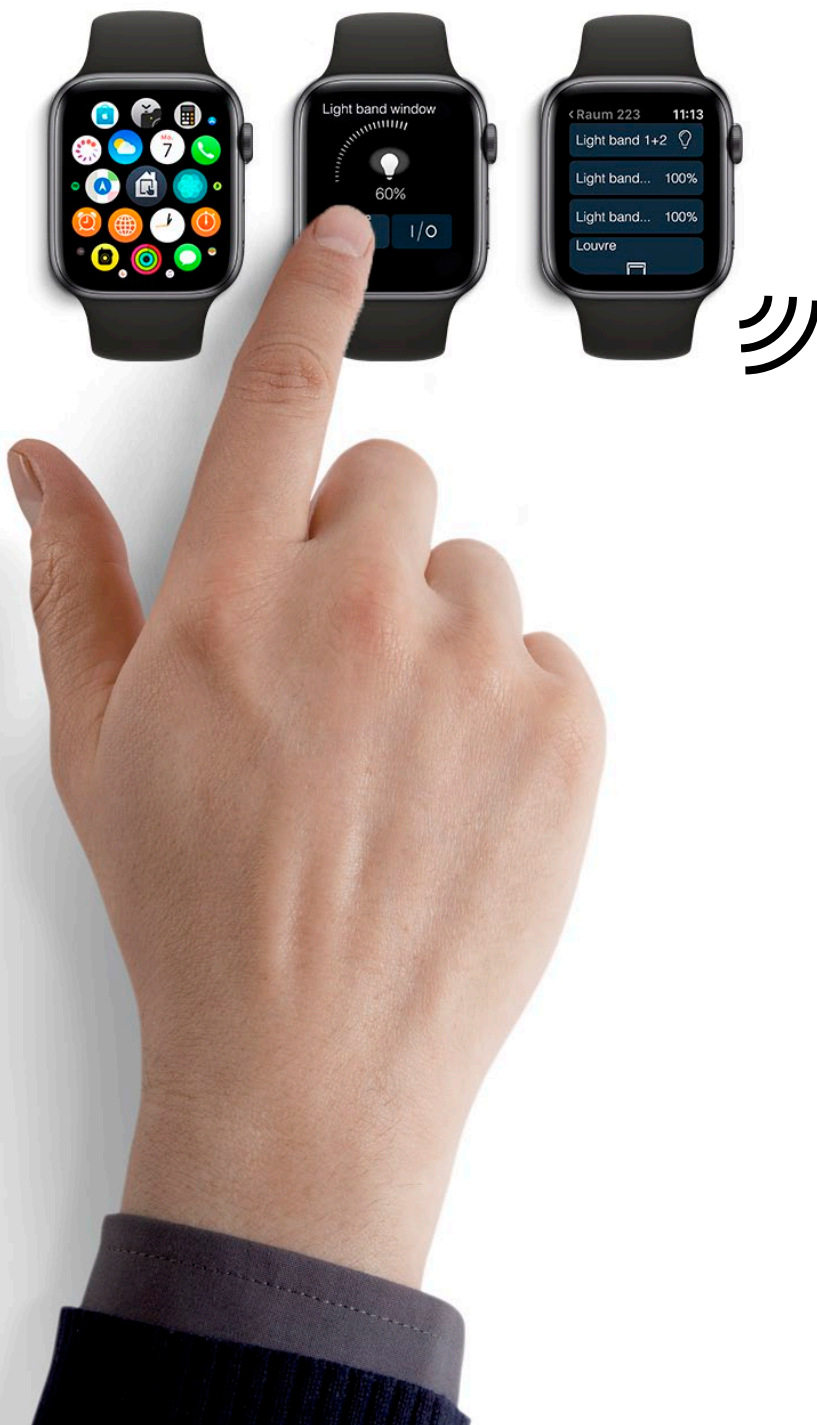
—
Apple TV
Apple HomePod

—
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HomePod and iPod Touch
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a trademark of Apple Inc.

Busch-ControlTouch® KNX

Easy KNX remote control with mobile device

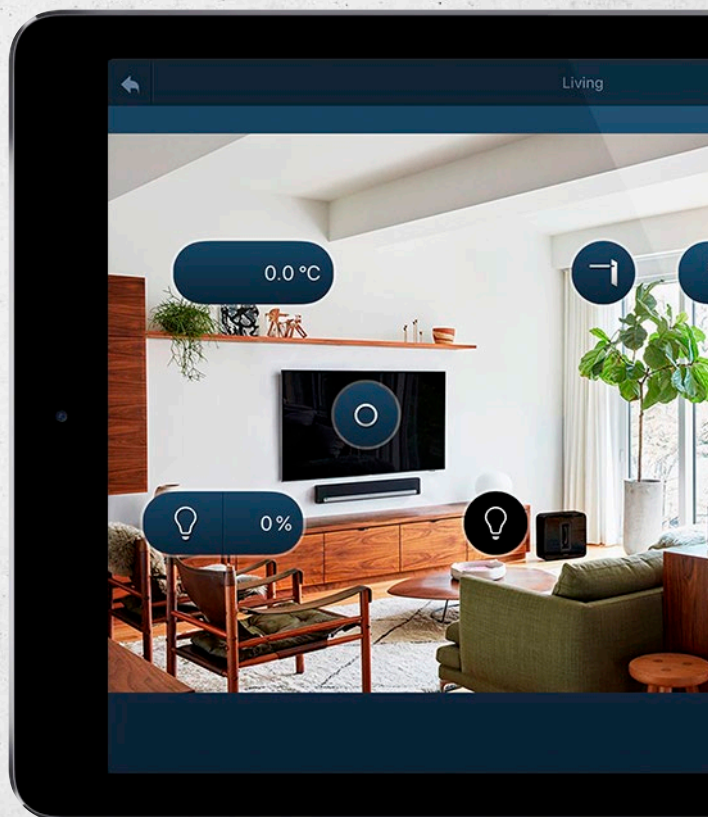
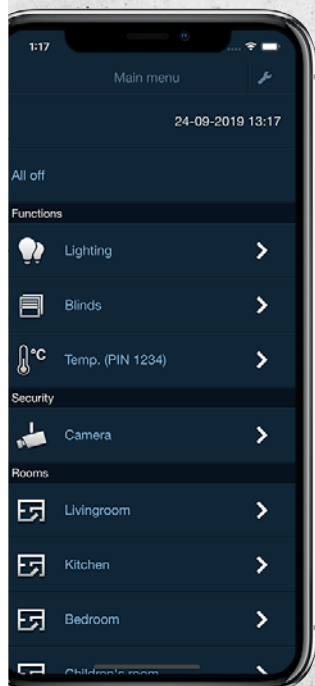
Busch-ControlTouch® KNX. Previously only operated via a switch, the KNX system can now be operated remotely using a smart device. Clear control for installer and customer alike.



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 compact system has a KNX, a LAN and a 10-36 V connection for an external power supply. It is additionally equipped with a button 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.



Works with
SONOS

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

The ABB RoomTouch® family

As individual as your home

The Busch-RoomTouch® 4" is a sensor-controlled, HD touch display for your Busch-free@home® and KNX system. The control element has an integrated room temperature controller and allows you to control up to 12 functions.

With the user-friendly and customizable interface, all functions can be easily controlled, for example, by opening the blinds with a swipe up or closing them with a swipe down. You can also create personalized room scenes, control the panel by swiping through the menu or tapping to confirm an action such as turning on the lights.

- 12 control functions
- KNX Data Secure for maximum data protection
- Up to 12 status information can be shown (e.g. fault / alarm messages)
- One random touch to activate a pre-defined "coming in" scene or function
- Haptic feedback (vibration)
- Integrated proximity and brightness sensor
- Integrated room temperature controller
- Anti-glare mode for use in dark, complementing the day and night mode of the device
- Flexible visualization (1-4 functions per page)
- Integrated binary input and external temperature sensor input

ABB RoomTouch® 4" can be used for both ABB free@home® as well as for KNX. It picks up the UI of the ABB-free@home® Next app and expands its possibilities:

- Sleek product design
- Simple UI and easy operability, e.g. of RGB lights or blind positions
- Clear labeling of the functions
- Wide viewing angle thanks to its IPS glass display

Installation:

ABB RoomTouch® 4" only requires a standard flush mounting box and can therefore be installed quickly and without special accessories. A 24 V DC supply is required as an additional power supply, which can be implemented, for example, via the second pair of wires in the bus line.

For additional protection, e.g. in public areas, the display can be optionally equipped with anti-theft protection to prevent removal or sabotage of the display.



Compatibility with ABB i-bus® KNX, ABB-free@home®; optional coupling with external temperature sensors or conventional switches



Slim & timeless design in black and white with IPS glass display



Global availability thanks to compliance to standards including VDE, British Standard, and Swiss standard with standard installation boxes



Smooth usability when swiping with clear readability, flexible visualization (1-4 functions per page) and user-friendly UI





Das Busch-RoomTouch® 5" ist ein sensorgesteuertes, HD-Touch-Display für dein KNX System. Das Bedienelement verfügt über einen integrierten Raumtemperaturregler und ermöglicht dir die Steuerung von bis zu 30 Funktionen. Dabei überzeugt unser Busch-RoomTouch® durch eine moderne Bedienoberfläche und das elegante Design.



reddot winner 2020



Focus Open 2020
Silver



nominated
2020

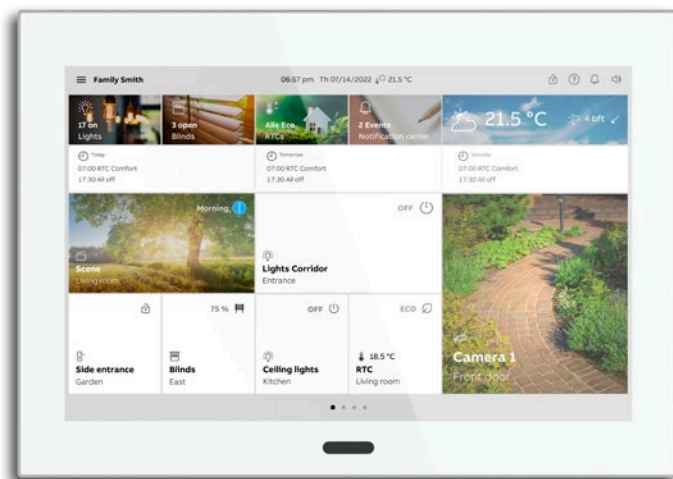


GERMAN
DESIGN
AWARD
WINNER
2021

ABB SmartTouch® 10"

Elegant central control for smart buildings

ABB SmartTouch® 10" combines smart building automation ABB i-bus® KNX or ABB-free@home®, and ABB-Welcome door communication in one device, providing central monitoring and control of your smart building devices.



gold



rose gold



graphite



stainless steel



- Connect to the Welcome APP for remote door answering
- Integrate IP cameras over wi-fi connection
- Presence simulation
- Integrated induction loop for hearing aids
- Capacitive glass surface for swiping gestures
- Access and view the weather forecast for the coming 5 days

Choose to interact with the elegantly designed 10" IPS screen with 1280x800 resolution.

The high-quality capacitive display can be operated intuitively at the touch of a finger and with swipe gestures. This allows you to switch and dim the light, control the blinds and regulate the heating in the entire building, control time programs, audio devices and presence simulation via the tip of a finger.

Complete scenes can be created from all these functions to design your perfect environment for work, rest, or play. Time programs can also help you manage your energy consumption, for example by scheduling night-time modes to automatically close blinds and turn off lights.

Maximum convenience and security

With ABB SmartTouch® 10" there is no need for an additional indoor station for ABB-Welcome, door calls can now be simply received via the touchscreen or the matching App. Creating a whole new dimension of home control - with maximum convenience and security.



reddot award
product design 2022



reddot winner 2022
interface design



nominated
2022





Ready when you are

Providing up to 450 control elements ABB SmartTouch® 10" delivers all the capability you'll need when you are ready to grow and extend your smart building installation as you add new smart devices and appliances.

Control your way

Modify dashboards with a few clicks to display your favourite functions on the home screen putting you in control of your environment quickly and easily.

Stylish new addition to your home

The 14 mm thin design of the ABB SmartTouch® 10" offers a stylishly attractive appearance, 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. Available in 4 sophisticated and contemporary colors, Gold, Rose Gold, Graphite and Stainless Steel with Black or white glass ABB SmartTouch® 10" is sure to enhance any interior.

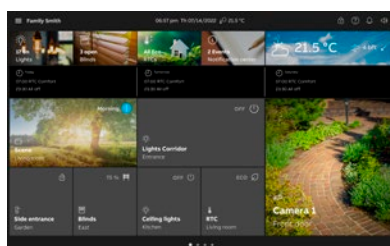
14 mm for 10",
flush mounted
installation



23 mm for 10",
surface mounted
installation



My Home



Hotel

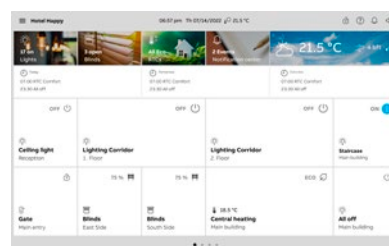


ABB-Welcome IP

IP touch

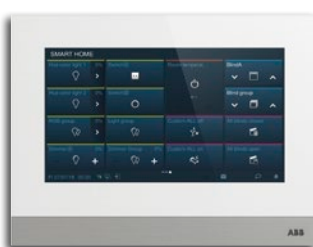
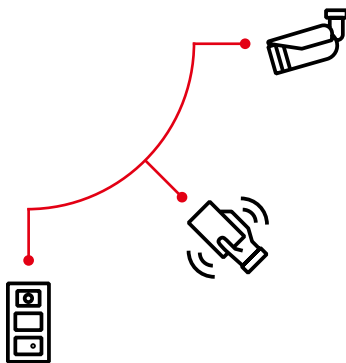
The IP touch 7 and 10 control panels are IP-based and provide a far greater number of options for building control.

- 01 IP touch 7, White glass
- 02 IP touch 7, Black glass
- 03 IP touch 10, Black glass

IP technology is dedicated to the creation of a more intelligent community that can realize the unlimited connection and control of devices. It makes every home and building become a comfortable and safe place.

Powerful and beautiful. The ABB's IP touch is available in two timeless classic colors: white and black glossy glass. The end strips are easily changed with a variety of material and color options, delivering the look you desire. The integration with home and building automation makes it the best universal visualization panel in residential and non-residential areas.

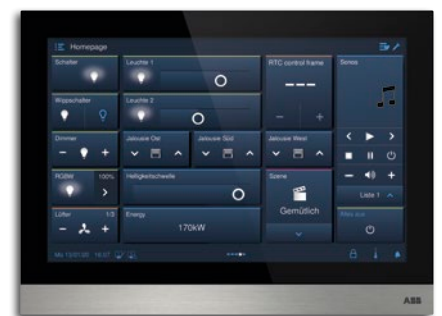
- With high resolution display
- Intuitive GUI on sliding screen
- Selection of installation box options ensure easy installation on all kind of walls
- Induction loop for hearing aid
- Only 7.8 mm depth when flush mounted
- Both LAN and Wifi version to connect to home network
- With up to 64 controls on the 7 and 100 controls on the 10 divided over max. 8 pages
- Works with ABB-free@home®
- Works with ABB i-bus® KNX



01



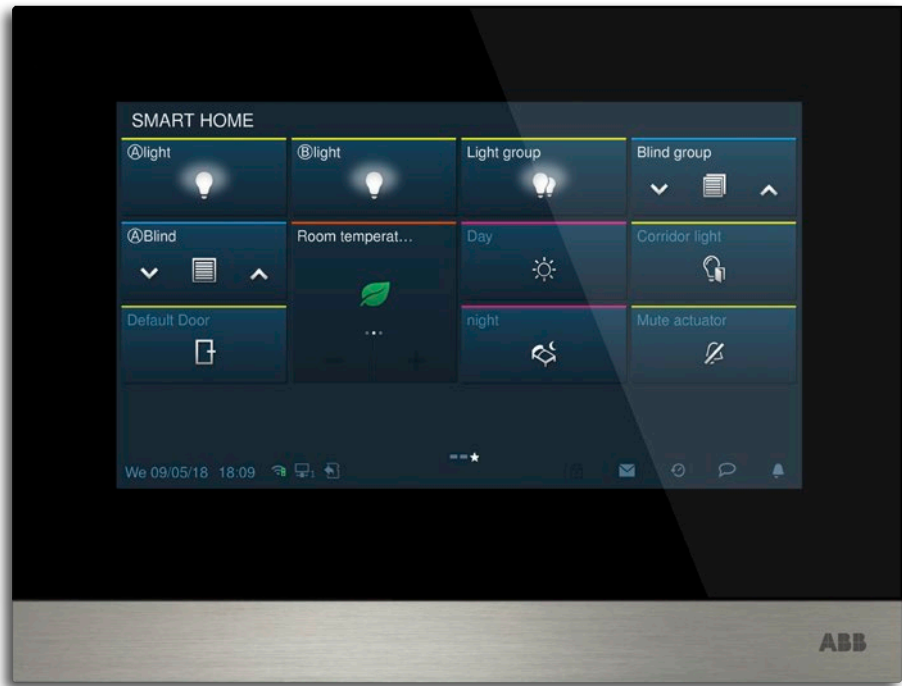
02



03

7.8 mm for 7",
flush mounted
installation

22 mm for 7",
surface mounted
installation



01

Home and building dashboard

Main menu with easy settings for door communication, video surveillance and home automation. The ABB IP touch ensures that comprehensive functions in a room or entire building are centrally visualized, easy and intuitively operated in a comfortable and efficient manner.

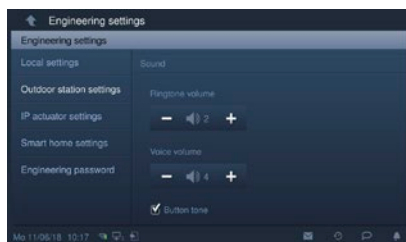
Slim elegant design

Extremely slim in both flush and surface mounted installations, featuring front frameless genuine glass in black and white with easily changeable end strip in different colors, it is incredibly beautiful while powerfully functional.

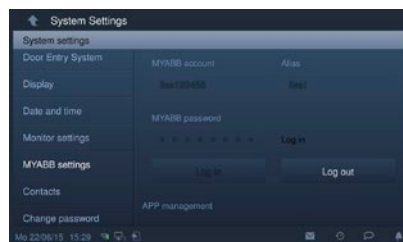
One device, all kinds of possibilities

Feel confident knowing what is going on when you are away from home by viewing a snapshot image or recorded video. It is also very easy when hosting a party to leave an audio message or set the automatic unlock time range.

- 01 Dashboard
- 02 Visualization tool
- 03 App connection
- 04 App
- 05 External intercom
- 06 Internal intercom



02



03



04



05



06

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 Rotary control element

— 02 3gang control element

— 03 Flush-mounted movement sensor

— 04 carat® glass black

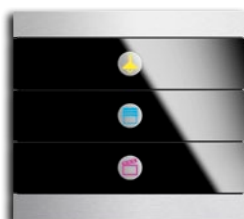
— 05 3gang control element with single-line display and temperature controller

— 06 Rotary control element with 3gang control element

— 07 Rotary control element with single-line display



— 01



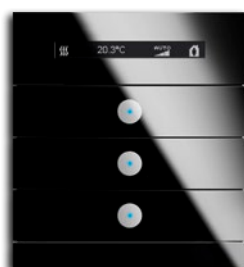
— 02



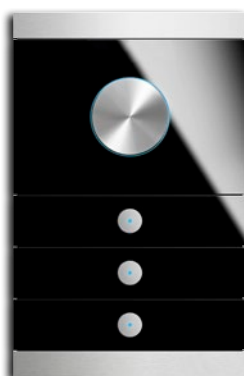
— 03



— 04



— 05



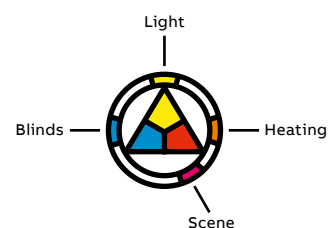
— 06



— 07

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

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.





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

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 mono-chromatic 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.

ABB Tenton®

Versatile in function and design

ABB has optimized its range of KNX room control units for commercial buildings and now offers easy-to-use room temperature controllers. The design and function of the operating elements can be selected according to your individual requirements and elements can be labeled individually.

01 Room temperature controller extension unit with control function 6gang ABB Tenton®



01

02 Room temperature controller with CO₂/moisture sensor and control function 6gang ABB Tenton®



02

03 Room temperature controller extension unit with control function 10gang ABB Tenton®



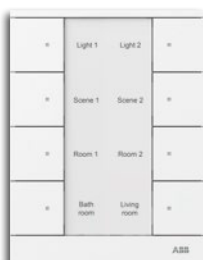
03

04 Room temperature controller with CO₂/moisture sensor and control function 10gang ABB Tenton®



04

05 Control element 8gang ABB Tenton®



05

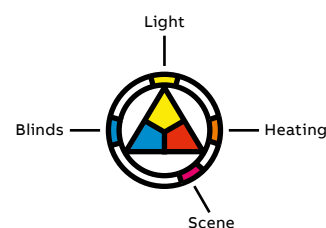
06 Control element 12gang ABB Tenton®

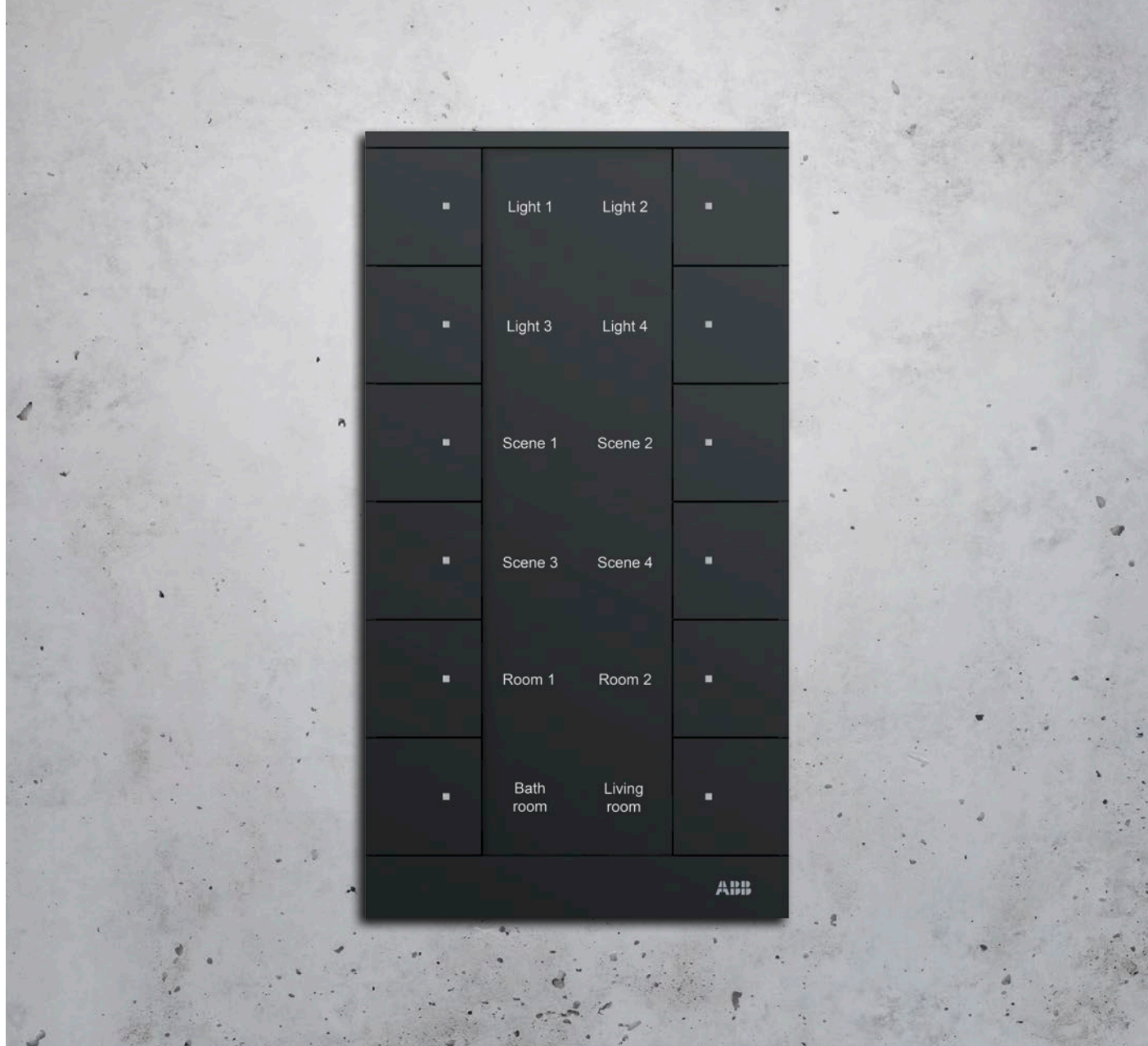


06



reddot award 2019
winner





Customized for You

For the clear designation of the ABB Tenton® control elements a labelling tool is available online with which you can position any text and instructive symbols individually for every product. The respective size can be freely selected from the recommended values. Your entries are displayed the way they will be seen later on the device. And this optionally on a foil in matt black with white text as well as aluminium silver or studio white with black text.

- Now also in studio white matt, matt black and aluminium silver
- Available with integrated room temperature controllers and CO₂/humidity sensor
- Surface and flush-mounted installation
- Controls all room functions from HVAC to shading and lighting

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



—
01

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



—
02

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

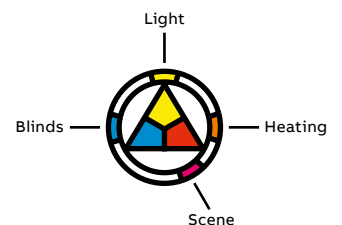


—
03

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



—
04





—
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.

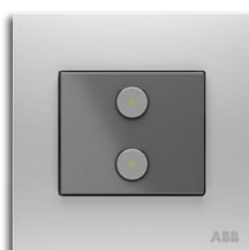
- Multiple functions:
switching, dimming, blinds
- Value transmitter, value dimming sensor
- Light scene extension unit
- Step-type switch
- Short/long operation
- 13 freely programmable IR channels
- 8 light scenes
- LCD display room temperature controller

Millenium KNX

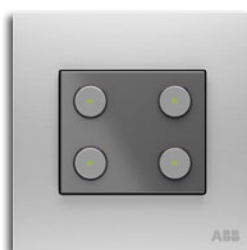
Everything under control

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.

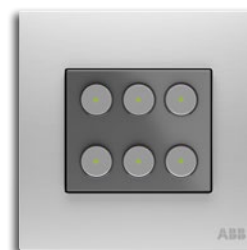
- 01 Switch Sensor
2gang KNX
- 02 Switch Sensor
4gang KNX
- 03 Switch Sensor
6gang KNX
- 04 Switch Sensor
6gang KNX with IR
- 05 Busch-Watchdog
180° KNX
- 06 Room Thermostat
KNX



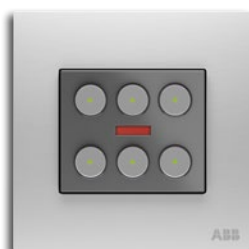
01



02



03



04



05



06

— 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



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The Millenium 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. Millenium 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.

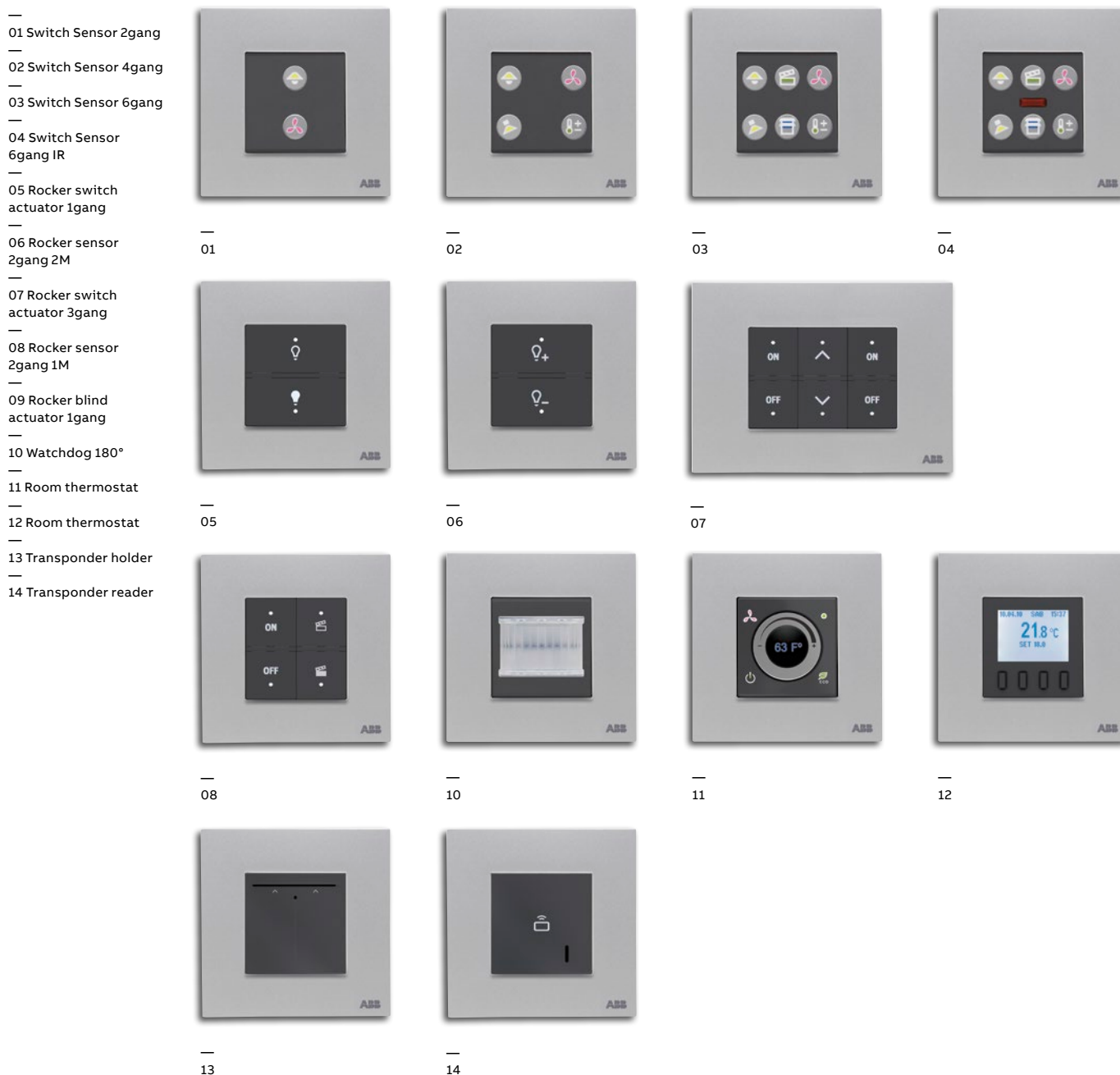


- **Multiple functions:**
switching, dimming, blinds
sending values, scenes, etc.
- Incl. 10 logic channels
- Sequence actuator
- Logic gates
- Control element: switch contacts
- Status/orientation light
(red/green/OFF)

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.





—
Zenit offers two different mounting plates for KNX sensors, corresponding to different market standards: Square boxes with 60 mm distance between screws and rectangular boxes with 83.5 mm distance between screws.



- 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

Access control

The right choice for hotels applications

ABB's access control KNX-based solutions are perfectly adaptable not only to the needs of hotel industry operators, but also to the hospitality sector in general (apartment hotels, B&Bs, holiday apartments, and resorts).

Advantages

ABB access control is based on MIFARE transponder technology, exploiting its flexibility and security:

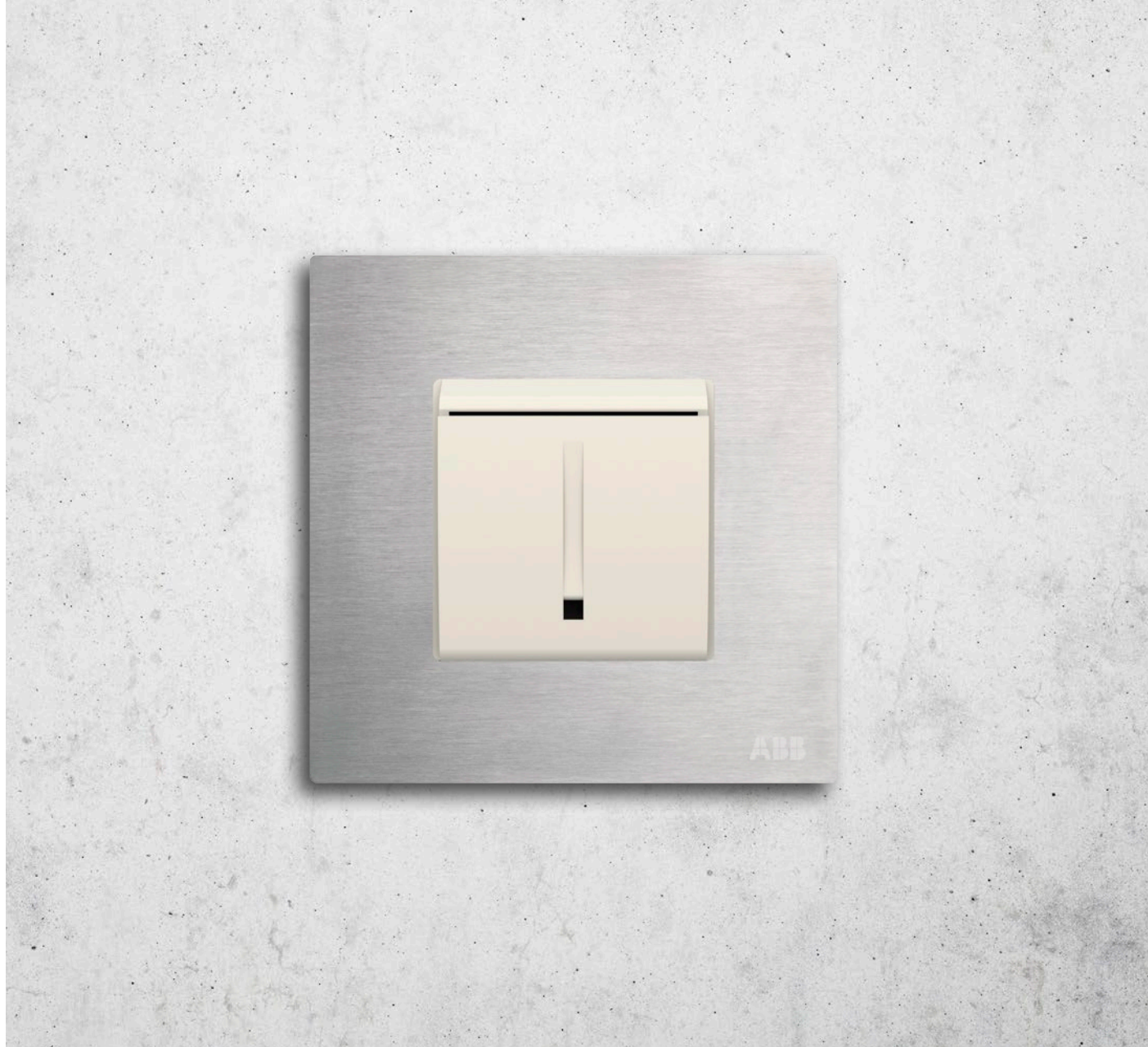
- Simplified and centralized management of all hotel functions from the front desk via the supervision software.
- Energy efficiency and cost savings (activation of the room's electrical devices only when occupied by the guest).
- Safety, thanks to room access via transponder card.
- Additional guest services integrated, managing access to every hotel common areas.



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01



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02



- 01 Transponder reader
- 02 Transponder holder
- 03 Set of 10 MIFARE transponder cards
- 04 ABB RoomGuard software



03



04

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



— 03



— 04



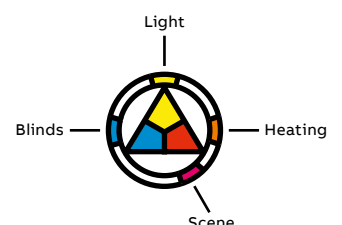
— 05



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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.

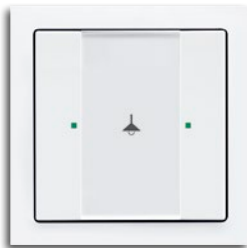
- Multiple functions:
switching, dimming, blinds
- Push-button
- Value transmitter, value dimming sensor
- Light scene extension unit
- Step-type and multiple operation
- Labellable switch rockers
- LED colour code concept

Standard control elements

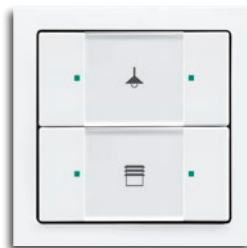
Quality as our basis

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.

- 01 Standard control element, 1/2gang
- 02 Standard control element, 2/4gang
- 03 Standard control element, 4/8gang



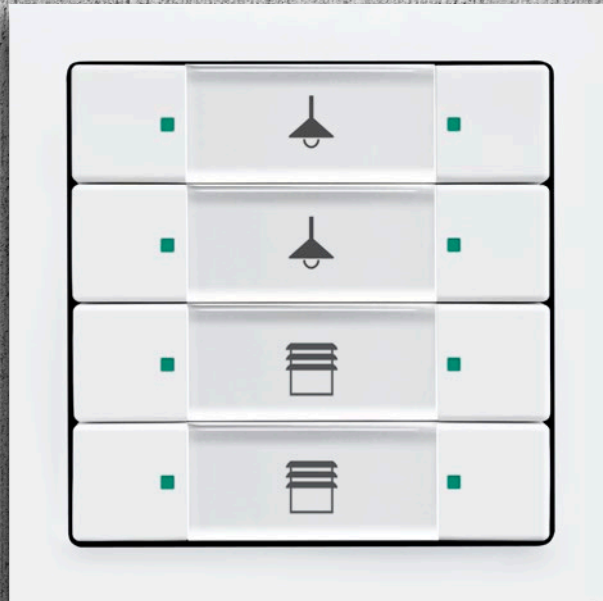
01



02



03



- 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)

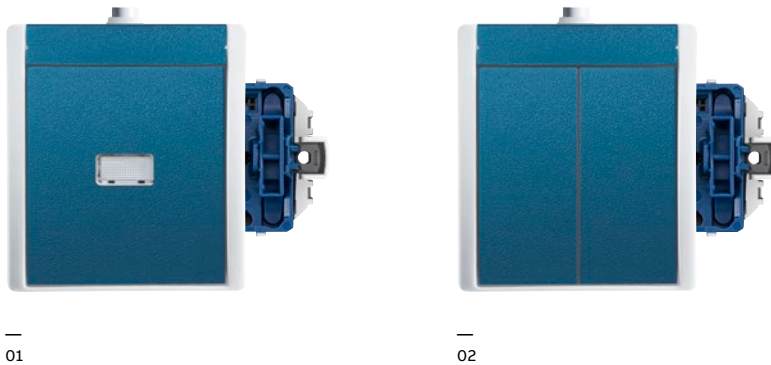
Push-button coupling unit

The efficient solution for all ABB switch ranges*

The push-button coupling unit with a centre position offers maximum flexibility.

—
01 Push-button coupler, 1/2gang for ocean® with integrated bus coupler

—
02 Push-button coupler, 2/4gang for ocean® with integrated bus coupler



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

Design without limits

Installed in a flush-mounted wall box, it accepts switch rockers from conventional switch ranges* like a completely standard flush-mounted insert. Covers from all conventional ranges can now be used for KNX. This offers maximum freedom in the selection of the switch range and makes retrofitting easier.

The push-button coupling unit includes the complete range* of switches for KNX. Switch rockers from all switch ranges can now be converted to KNX push buttons, which not only switch on and off, but also dim or show the status with an LED (6108/01 and 6108/04 only). 1gang and 2gang models for single and 2gang switch rockers are available. Special models for water-protected installation allow covers from, for example, the ocean® surface-mounted range to be used. This means that KNX sensors can also be safely installed in a cellar, outside on a patio or in commercial applications. Temperature range: –25 °C to 45 °C

- Easy mounting and uncomplicated commissioning
- All flush-mounted switch ranges* can be used for the ABB i-bus® KNX
- Affordable solution for renovations
- Status/orientation light (red/green/OFF) (only with 1gang push-button/switches)
- Integration in surface-mounted water protected units

*Except impuls, basic55® and All Weather 44



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 Push-button coupler
2gang with inte-
grated bus coupler
—

02 Push-button coupler
4gang with inte-
grated bus coupler
—

03 6-fold KNX sensor
—

04 Busch-Watchdog
sensor 180FM
standard, select

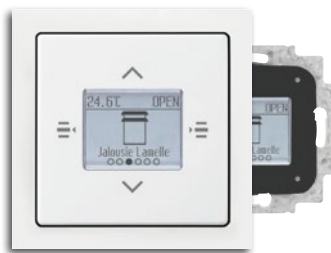


—
01

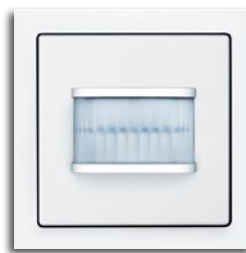


—
02

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



—
03



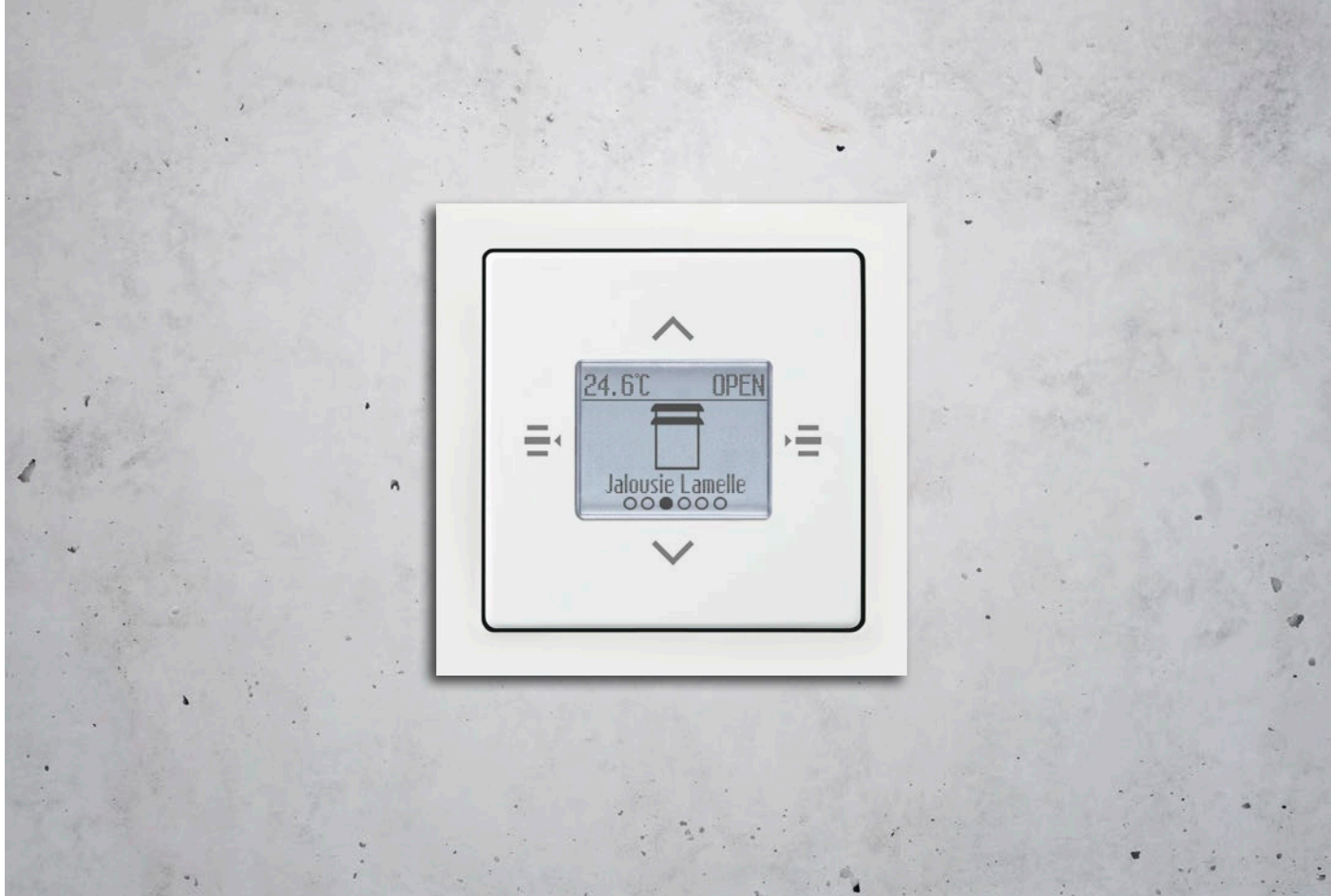
—
04

—
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.

- 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®



— 01



— 02



— 03



— 04



— 05

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 Room temperature controller with display

—
02 Room temperature controller with universal input, 5gang

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

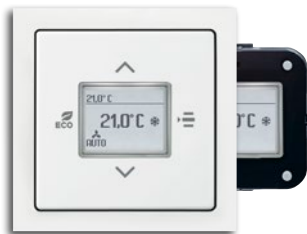
—
04 Room temperature controller*, Commercial, with 5gang universal input for heating/cooling operation, FM

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



—
01

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



—
02



—
03

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

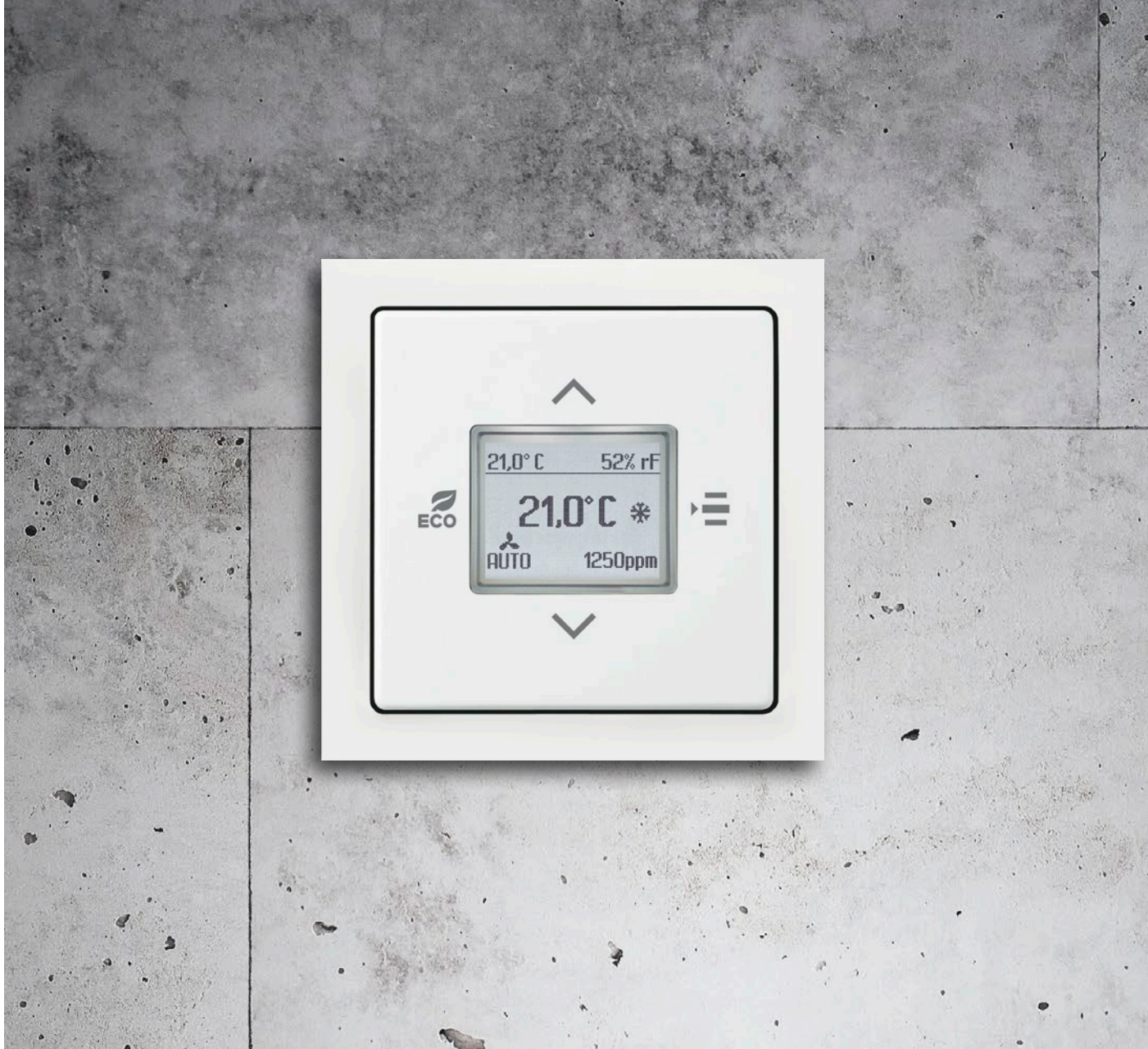


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04



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05

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



- 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.

SMART BUILDING

The perfect connection. A pleasant and productive environment is created with building automation that functions as a holistic system and combines various functions. For today and tomorrow.





KNX



	ABB SmartTouch® 10	ABB RoomTouch® 5"	ABB RoomTouch® 4"
Article no.	ST/U10.x.1-xxx	RT/U30.0.1-8xx	RT/U12.0.1-8xx
KNX control elements	450	30	12
Pages	25	10	15
Alarm messages	80	20	12
Notification via e-mail	x	x	x
Notification via push notification	x	x	x
Alarm control unit	x	x	x
LAN connection	x	x	x
Presence simulation	20 objects	x	x
Scenes	100	16	12
Logic functions	30	10	10
Internal RTC	3	1	2
RGB control element	■	■	■
Timers and schedulers	40 timers	10 timers	10 timers
ABB-Welcome IP	x	x	x
ABB-Welcome	Direct 2-wire	x	x
Favourites page	2	x	x
Operation via Smartphone	x	x	x
Operation via PC	x	x	x
Power supply	20 - 30 V DC	20 - 32 V DC	20 - 32 V DC
Touch	Capacitive	Capacitive	Capacitive
Cover	Glass	Glass	Glass
Display size	10 inch	5 inch	4 inch
Pixel	1280 x 800	720 x 1280	420 x 420

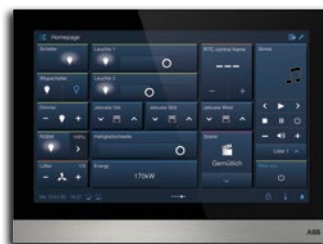
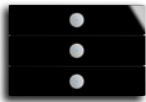


ABB Trevion® Display 2,4"	IP touch 7	IP touch 10	Busch-ControlTouch®
SD/U12.xx.1-825	H8236-xx	H8237-xx	CT/S2.1
12	64	100	∞
15	8	8	∞
12	80	80	∞
x	x	x	■
x	x	x	■
x	x	x	x
x	■	■	■
x	10 objects	10 objects	∞
12	16	16	∞
10	10	10	200 and scripts
2	■	■	x
■	■	■	■
10 timers	10 timers	10 timers	∞
x	■	■	x
x	x	x	x
x	1	1	x
x	x	x	■
x	x	x	■
20 - 32 V DC	PoE or 24V DC	PoE or 24V DC	10 - 36 V DC
Capacitive	■	■	—
Glass	Glass	Glass	—
4 inch	7 inch	10 inch	—
420 x 420	1024 x 600	1280 x 800	—

Technical data

Program	Busch-priOn® suitable for KNX bus coupler 6120/12-101 or 6120/13 (depending		
			
	6340-xx-101 1/2gang	6341-xx-101 rotary control element	6342-xx-101 3/6gang
KNX function			
Switching, rocker switch total	■	–	■
Switching, rocker switch left/right	■	■	■
Dimming, rocker switch total	■	–	■
Dimming, rocker switch left/right	■	–	■
Blind, rocker switch total	■	–	■
Blind, rocker switch total left/right	■	■	■
Short-long operation, rocker switch left/right	■	–	■
Value sender, rocker switch total	■	–	■
Value sender, rocker switch left/right	■	–	■
Value dimming sensor, rocker switch total	■	■	■
Red/green LED status illumination (red/green/off)	–	–	–
RGB LED function illumination + status illumination	1 LED per rocker switch	1 LED per button	1 LED per rocker switch
Setting the RTC operating mode	■	–	■
Value sender, 2 objects, rocker switch left/right	■	–	■
Light scene extension unit with light scene memory function	■	–	■
Level switch, rocker switch total	■	–	■
Level switch, rocker switch total left/right	■	–	■
Multiple operation, rocker switch left/right	■	–	■
IR remote control channels (up to 13 channels)	–	–	–
Light scene unit (8 scenes for up to 8 actuators)	–	–	–
Light scene unit (10 scenes for up to 10 actuators)	–	–	–
Programmable shift key	–	–	–
Proximity function	–	–	–
Room temperature controller only			
Temperature reading	–	–	–
RTC settings	–	–	–
Illuminated display	–	–	–
Fan coil operation for heating and cooling	–	–	–
Media box/CD/DVD/radio	–	–	–
Short-time timer	–	–	–
Weekly timer	–	–	–
Alarm clock	–	–	–
Messages	–	–	–
Screen saver	–	–	–
Display text/value	–	–	–
Device lock	–	–	–
Logic function (including light scenes)	■	■	■
Busch-Watchdog 4 channels	–	–	–

on the specific combination)

Busch-triton® (next generation) Monoblock



6344-xx-101



6351-825-101 end strip top with information display, room temperature controller, IR receiver and proximity sensor + 6342-xx-101 3/6gang



6350-825-101 end strip top with IR receiver and proximity sensor



6352-xx-101 end strip bottom with temperature sensor

6320/10 1/2gang
6320/30 3/6gang
6320/50 5/10gang6321/38 3/6gang with RTC
6321/58 5/10gang with RTC

-	■	-	-	■	■
-	■	-	-	■	■
-	■	-	-	■	■
-	■	-	-	■	■
-	■	-	-	■	■
-	■	-	-	■	■
-	■	-	-	■	■
-	■	-	-	■	■
-	■	-	-	■	■
-	-	-	-	1 LED per rocker switch	1 LED per rocker switch
-	1 LED per rocker switch	-	-	-	-
-	■	-	-	■	■
-	■	-	-	■	■
-	■	-	-	■	■
-	■	-	-	■	■
-	■	-	-	■	■
-	■	■	-	■	■
-	-	-	-	■	■
-	-	-	-	-	-
-	-	-	-	■	■
-	■	■	-	-	-
-	-	-	■	-	■
-	■	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	■	-	-	-	-
-	-	-	-	-	-
■	■	-	-	-	-
■	-	-	-	-	-

Technical data

Program	Millenium				
					
	RS/U 2.1 2 rockers, 2 binary inputs	RS/U 1.1 1 rocker	RA/U 1.16.1 1 switch actuator 16A, 2 rockers	RA/U 2.8.1 2 switch actuators 8A, 2 rockers	RB/U 1.1 1 blind actua- tor 230V, 1 large rocker
KNX function					
Switching, button pair	■	■	■	■	■
Switching, button upper/lower	■	■	–	–	–
Dimming, button pair	■	■	■	■	■
Dimming, button upper/lower	■	■	–	–	–
Blind, button pair	■	■	■	■	■
Blind, button upper/lower	■	■	–	–	–
LED status illumination	■	■	■	■	■
Scene 1 byte	■	■	■	■	■
Scene - 5 objects 1 bit	■	■	■	■	■
KNX functions - binary inputs					
Switching	■	■	■	■	■
Switching, short-long operation	■	■	■	■	■
Dimming	■	■	■	■	■
Blind	■	■	■	■	■
Value transmitter	■	■	■	■	■
Scene 1 byte	■	■	■	■	■
Scene - 5 objects 1 bit	■	■	■	■	■
KNX functions - actuators					
Switch Actuator	–	–	■	■	–
Staircase lighting	–	–	■	■	–
Delayed ON/OFF	–	–	■	■	–
Logic	–	–	■	■	–
Scene	–	–	–	–	–
Shutter Actuator	–	–	–	–	■
Scene	–	–	–	–	■

Program	Zenit		
			
	RT/U 1.1.xx Room thermostat	TR/U 1.1.xx Transponder reader	TH/U 1.1.xx Transponder holder
KNX function			
Switching	–	■	■
Dimming	–	■	–
Blind	–	■	–
Room Temperature Controller			
Temperature reading	■	–	–
RTC settings	■	–	–
Illuminated display	■	–	–
Fan coil operation for heating and cooling	■	–	–
Access Control			
Card Reading (MIFARE)	–	■	■
Switch Actuator	–	■	■
Electric lock delay (Linked to valid access control cards)	–	–	■
Delayed (Linked to valid access control cards)	–	■	–
Staircase lighting function (not linked to valid access control cards)	–	■	■
Scene (not linked to valid access control cards)	–	■	■

Technical data

Program	Multifunction control elements, suitable for KNX bus coupler 6120/12-101 and 6120/13			
				
	6125/02 1/2gang 6126/02 2/4gang 6127/02 4/8gang	6129/01 3/6gang with IR	6128/28 2/4gang with RTC	6122/01 standard
KNX function				
Switching, rocker switch total	■	■	■	–
Switching, rocker switch left/right	■	■	■	–
Dimming, rocker switch total	■	■	■	–
Dimming, rocker switch left/right	■	■	■	–
Blind, rocker switch total	■	■	■	–
Venetian blind, rocker switch total left/right	■	■	■	–
Short-long operation, rocker switch left/right	■	■	■	–
Value sender, rocker switch total	■	■	■	–
Value sender, rocker switch left/right	■	■	■	–
Value dimming sensor, rocker switch total	■	■	■	–
Red/green LED status illumination (red/green/off)	–	–	–	–
RGB LED function illumination + status illumination	Two LEDs per rocker switch	Two LEDs per rocker switch	Two LEDs per rocker switch	–
Setting the RTC operating mode	■	■	■	–
Value sender, 2 objects, rocker switch left/right	■	■	■	–
Light scene extension unit with light scene memory function	■	■	■	–
Level switch, rocker switch total	■	■	■	–
Level switch, rocker switch total left/right	■	■	■	–
Multiple operation, rocker switch left/right	■	■	■	–
IR remote control channels (up to 5 channels)	–	■	–	–
Room temperature controller only				
Temperature reading	–	–	■	–
RTC settings	–	–	■	–
Illuminated display	–	–	■	–
Fan coil operation for heating and cooling	–	–	■	–
Logic function (including light scenes)	■	■	■	■
Busch-Watchdog 4 channels	–	–	–	■
ABB				
basic55®	–	–	–	–
future® linear	■	■	■	■
alpha exclusive/nea	–	–	–	–
Busch-axcent®	■	■	■	■
solo®	■	■	■	■
pure stainless steel	■	■	■	■
carat®	■	■	■	■
ocean®	–	–	–	–
All Weather 44	–	–	–	–

Technical data

Program	FM room temperature controller		
			
	6108/18 6108/18-BS	6109/18	6109/28
Control element			
Standard function	–	–	–
Additional function	–	–	–
Indication			
Display	■	■	■
Actual temperature display	■	■	■
Status display via text and/or ICON	–	■	■
RTC			
Manual operation	■	■	■
Heating and/or cooling with/without additional stage	■	■	■
Fan coil	■	■	■
Master/slave	■	■	■
Basic load	■	■	■
Internal and/or external actual temperature sensor	■	■	■
Internal actual temperature sensor	■	■	■
Air quality			
CO ₂	–	–	■
Humidity	–	–	■
Air pressure	–	–	■
Universal input/binary input			
Switching/alarm	–	■	■
Dimming	–	■	■
Blind	–	■	■
Value	–	■	■
Scene	–	■	■
Switching sequences	–	■	■
Multi	–	■	■
Pulse counter	–	■	■
Universal analogue input e.g. external sensors			
0–10 V (external)	–	■	■
1–10 V (external)	–	■	■
Upper/lower threshold value	–	■	■
Universal input of external temperature sensor (PT1000 or 6226/T)			
Actual temperature sensor	–	■	■
Temperature limiter	–	■	■
ABB			
basic55®	■	■	■
future® linear	■	■	■
alpha exclusive/nea	–	■	■
Busch-axcent®	■	■	■
solo®	■	■	■
pure stainless steel	■	■	■
carat®	■	■	■
ocean®	–	–	–
All Weather 44	–	–	–

Technical data

Program		ABB tacteo® KNX			
					
Square (vert.)	(86 mm x 86 mm)	TB/U1.1.1-CG	TB/U2.4.1-CG	TB/U4.4.1-CG	TB/U6.4.1-CG
Square (horiz.)	(86 mm x 86 mm)		TB/U2.5.1-CG	TB/U4.5.1-CG	TB/U6.5.1-CG
Vertical	(86 mm x 115 mm)	TB/U1.2.1-CG	TB/U2.7.1-CG	TB/U4.7.1-CG	TB/U6.7.1-CG
Horizontal	(115 mm x 86 mm)	TB/U1.3.1-CG	TB/U2.8.1-CG	TB/U4.8.1-CG	TB/U6.8.1-CG
Premium customization		TB/U1-CG	TB/U2-CG	TB/U4-CG	TB/U6-CG
Control element					
Standard function		■	■	■	■
Additional function		■	■	■	■
Indication					
Display		–	–	–	–
Actual temperature display		–	–	–	–
Status display via text and/or ICON		–	–	–	–
RTC					
Manual operation		–	–	–	–
Heating and/or cooling with/ without additional stage		–	–	–	–
Fan coil		–	–	–	–
Master/slave		–	–	–	–
Basic load		–	–	–	–
Internal and/or external actual temperature sensor		–	–	–	–
Internal actual temperature sensor		■	■	■	■
Installation					
VDE		■	■	■	■
BS		■	■	■	■
IT	(only as 115 mm x 86 mm)	■	■	■	■
NEMA	(only as 86 mm x 115 mm)	■	■	■	■



TR/U.1.1-CG

TBW/U.1.1-CG

TA/U3.1.1-CG

TR/U.2.1-CG
TR/U.3.1-CG
TR/U-CG

TBW/U.2.1-CG
TBW/U.3.1-CG
TBW/U-CG

TA/U3.2.1-CG
TA/U3.3.1-CG
TA/U3-CG

■	-	■
■	-	-
■	-	-
■	-	-
■	-	-
■	-	-
■	-	-
■	-	-
■	-	-
■	-	-
■	■	■
■	■	■
■	■	■
■	■	■

Technical data

Program		ABB tacteo® KNX		
				
Vertical	(86 mm x 157 mm)	TB/U12.7.1-CG	TBR/U4.7.1-CG	TSN/U.2.1-CG
Horizontal	(157 mm x 86 mm)	TB/U12.8.1-CG	TBR/U4.8.1-CG	
Premium customization		TB/U12-CG	TBR/U4-CG	TSN/U-CG
Control element				
Standard function		■	■	■
Additional function		■	■	–
Indication				
Display		–	■	–
Actual temperature display		–	■	–
Status display via text and/or ICON		–	■	–
RTC				
Manual operation		–	■	–
Heating and/or cooling with/ without additional stage		–	■	–
Fan coil		–	■	–
Master/slave		–	■	–
Basic load		–	■	–
Internal and/or external actual temperature sensor		–	■	–
Internal actual temperature sensor		■	■	■
Installation				
VDE		■	■	■
BS		■	■	■
IT	(only as 157 mm x 86 mm)	–	–	■
NEMA	(only as 86 mm x 157 mm)	■	■	■

Program	ABB Tenton®			
				
	SBS/U6.0.1-xx	SBR/U10.0.1-xx	SBC/U6.0.1-xx	SB/U12.0.1-xx
Control element				
Standard function	■	■	■	■
Additional function	■	■	■	■
Indication				
Display	■	■	■	–
Actual temperature display	■	■	■	–
Status display via text and/or ICON	■	■	■	–
RTC				
Manual operation	■	■	■	–
Heating and/or cooling with/ without additional stage	■	■	■	–
Fan coil	■	■	■	–
Master/slave	■	■	■	–
Basic load	■	■	■	–
Internal and/or external actual temperature sensor	■	■	■	–
Internal actual temperature sensor	■	■	■	■
Installation				
VDE	■	■	■	■
BS	■	■	■	■
IT	–	–	–	–
NEMA	■	■	■	■

Technical data

Program	ABB Trevion®	
		
	KK/U4.55.1 KK/U4.63.1 KK/U4.70.1	SD/U12.55.11-825 SD/U12.63.11-825 SD/U12.70.11-4015
KNX function		
Switching, rocker switch total	■	■
Switching, rocker switch (2-Button)	■	■
Dimming, rocker switch total	■	■
Dimming, rocker switch (2-Button)	■	■
Sliding Dimming, rocker	■	■
Blind, rocker switch total	■	■
Venetian blind, rocker switch total (2-Button)	■	■
Sliding blinds, rocker	■	■
Switching sequence	■	■
Switching sequence (2-button)	■	■
Light scene extension unit with light scene memory function	■	■
Send value/Multiple operation	■	■
RGB-Control	–	■
Informationpage	–	■
Weekly-Timer	–	■
Alarmfunktion	■	■
Room temperature controller		
Internal RTC's	–	2
Temperature reading	–	■
RTC settings	–	■
Illuminated display	–	■
Fan coil operation for heating and cooling	–	■
RGB-Function/Status/Animation-LED	■	–
Internal Temperatursensor	■	■
Binary Input/ external temperaturzre sensor	–	■
Logic function (including light scenes)	■	■
ABB		
Busch-balance® SI	■	■
future®/future® linear	■	■
Busch-axcent®/Busch-axcent® pur	■	■
solo®	■	■
pure stainless steel	■	■
carat®	■	■
Busch-Dynasty®	■	■



Notes

Lined area for notes, consisting of multiple horizontal lines.



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Busch-Jaeger Elektro GmbH P.O. Box
58505 Lüdenscheid
Germany

Freisenbergstraße 2
58513 Lüdenscheid
Germany

www.busch-jaeger.com
info.bje@de.abb.com

Central sales service:

Phone +49 (0) 2351 956-1600 Fax +49
(0) 2351 956-1700

**Pascal Engineering
Certified System Integrator**

No. 4, Lintang Bayan Lepas 4
Taman Perindustrian, Fasa 4,
11900 Bayan Lepas, Penang

Contact:
Office: +604 643 2318

Visit us at <https://pascal.com.my>

