

ABB i-bus® KNX

Overview of KNX sensors and user operation

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.



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-tacteo® KNX

The individual touch

Intelligent control that adapts to your individual needs.





White glass

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

















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



Four symbol control element with room temperature control



Room outside sensor with card reader

e sensor Motion detector der Watch dog 180°



Room outside sensor with card reader and room number

86×86

86×157

86×115

86×115

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-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.

01 Busch-VoiceControl® KNX

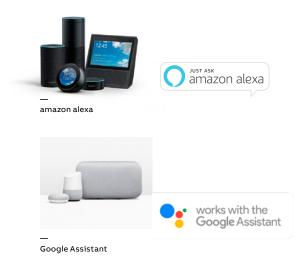


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Busch-VoiceControl® KNX offers the unique possibility of controlling buildings completely by voice command with the digital speech assistants Apple HomeKit, Amazon Alexa and Google Assistant. Whether switches, dimmers, blinds or thermostats, you decide 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 Home-Kit devices, such as the iPad, iPhone and Apple TV



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



Use HomePod to control functions via your Apple HomeKit connection



Apple HomeKit



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-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

02 Busch-ComfortTouch® 12.1 white glass

03 Busch-ComfortTouch® 9 glass black

04 Busch-ComfortTouch® 9 white glass



02





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03



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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.

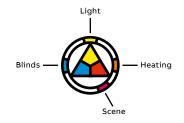


These functions are of interest not only for private households - the system is often used in doctors' surgeries, offices, restaurants or stores to provide attractive lighting, soft background music or comfortable room climates. A presencesimulation function and alarm message display provide added security. 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-ControlTouch® KNX

Easy KNX remote control with mobile device

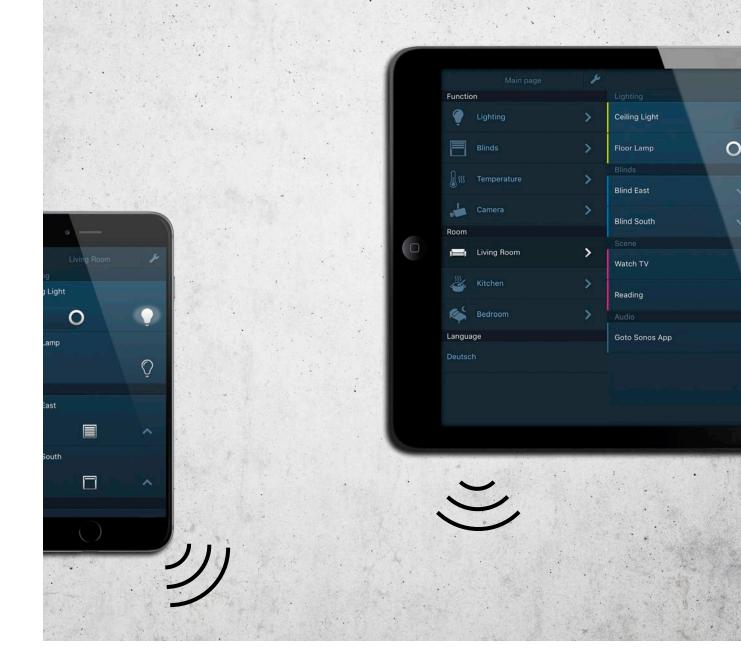
Busch-ControlTouch® KNX. Previously only operated via the Busch-ComfortTouch® or via a switch, the KNX system can now be operated remotely using a smart device. Clear control for installer and customer alike.



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-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.

02

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.

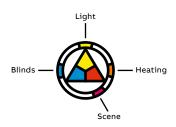


A total of 480 control elements can be implemented on up to 30 pages in familiar optics. The user can freely define his favourite page and also easily set up and control time programs.



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.





Time programs



Favorites



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.



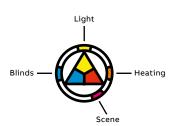








Busch-priOn® is ideal in combination with the carat® switch series, which has surfaces in the same design.



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.











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

O5 3gang control
element with single-line
display and temperature controller

06 2gang combination

07 3gang combination

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.

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.







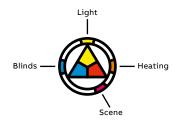


011/2gang control element with rearilluminated labelling area and IR reception

02 3/6gang control element with rearilluminated labelling area and IR reception

03 5/10gang control element with rearilluminated labelling area and IR reception

O4 5/10gang control element with rear-illuminated labelling field, integrated room thermostat, LCD display and IR reception







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



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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 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.

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



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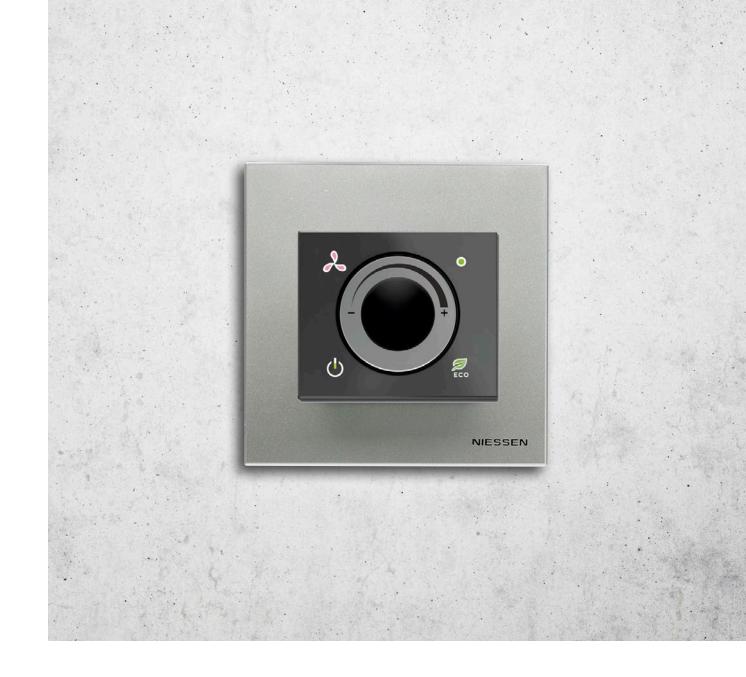


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The Zenit VDE range is only available in the following countries: Spain, Portugal, Russia, France. The Zenit NEMA range is only available in the following countries: Latin America, Australia, Thailand, Vietnam. Sensors, frames and special mounting 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.

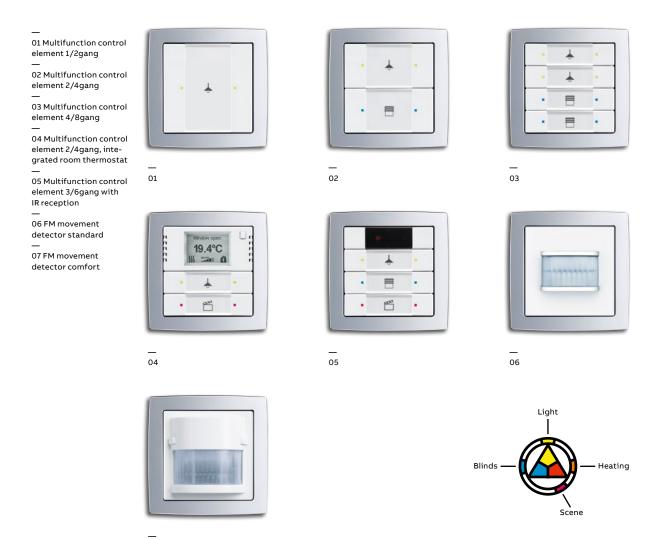


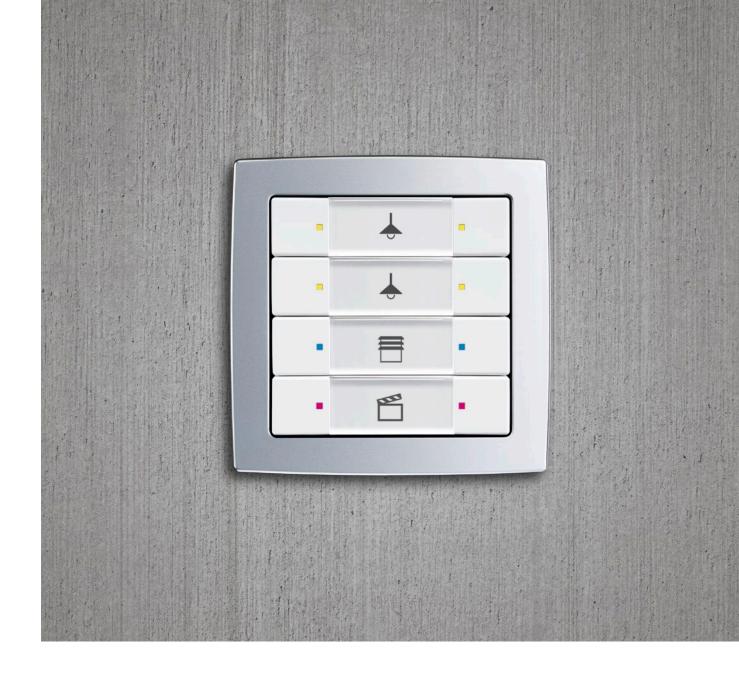
- Multiple functions: switching, dimming, blinds sending values, scenes, etc.
- Incl. 10 logic channels
- Sequence actuator
- Logic gates
- Control element: switch contacts
- Display elements: LED to indicate the function

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.







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



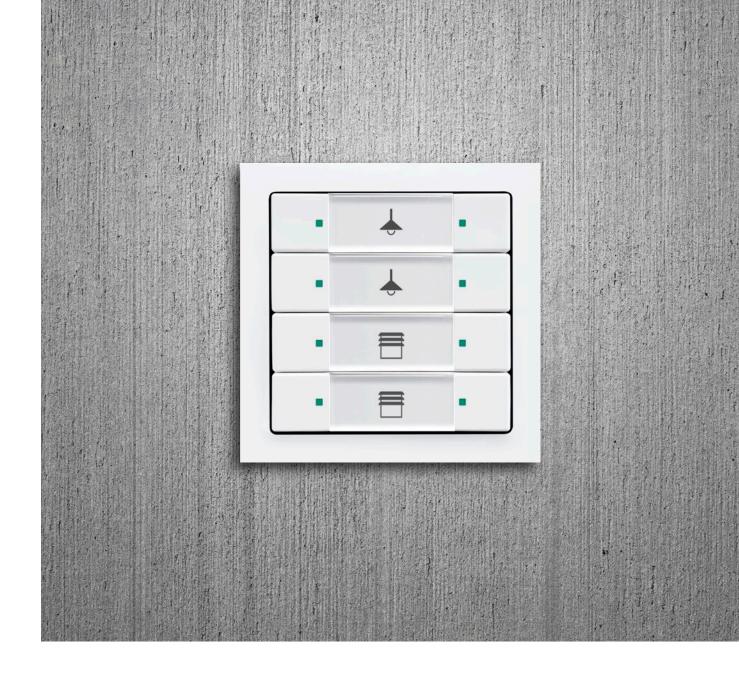
01



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- Multiple functions: switching, dimming, blinds
- Push-button
- $\bullet \ \ \mbox{Value transmitter, value dimming sensor}$
- 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.

O1 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

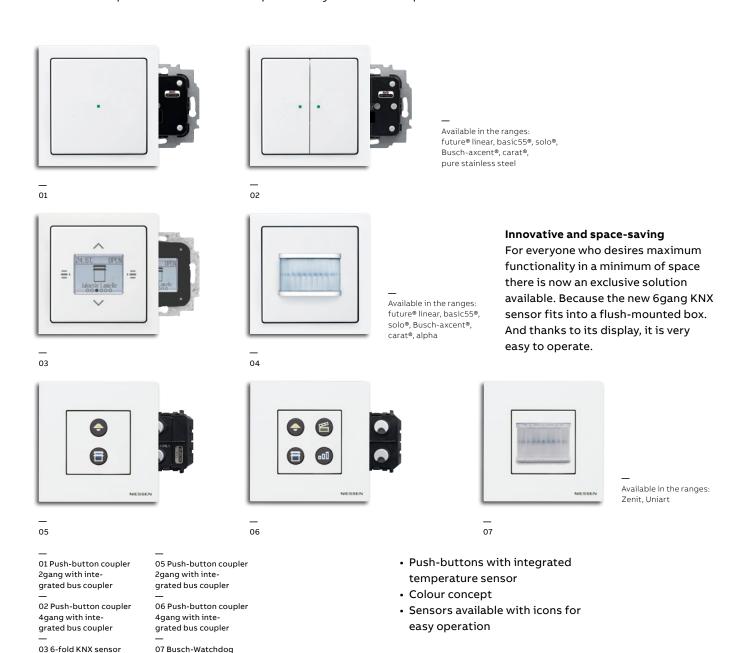
sensor 180FM

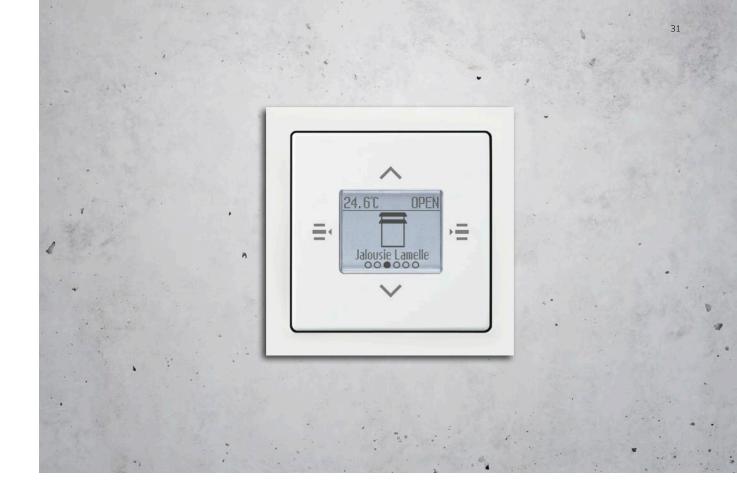
standard, select

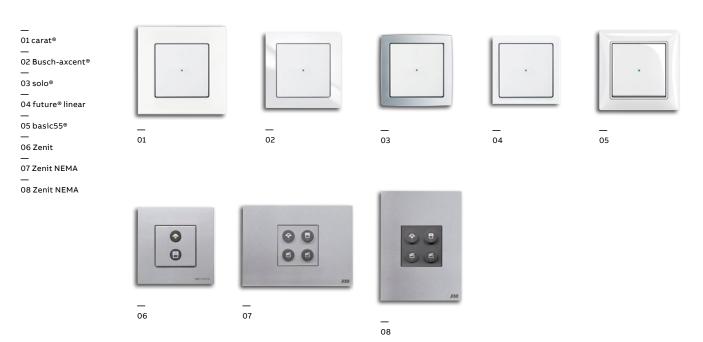
04 Busch-Watchdog

sensor 180FM standard, select

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.







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.



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

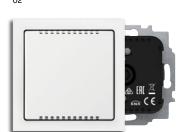


21,0°C *
21,0°C *
21,0°C *
255ppm

**E55ppm

*

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



ABS
STORMS-5-A.

BY
STORMS-5-A.

BY
STORMS-5-A.

STORMS-5

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



Available in the ranges: Zenit, Uniart controller with display

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02 Room temperature
controller with
universal input, 5gang

01 Room temperature

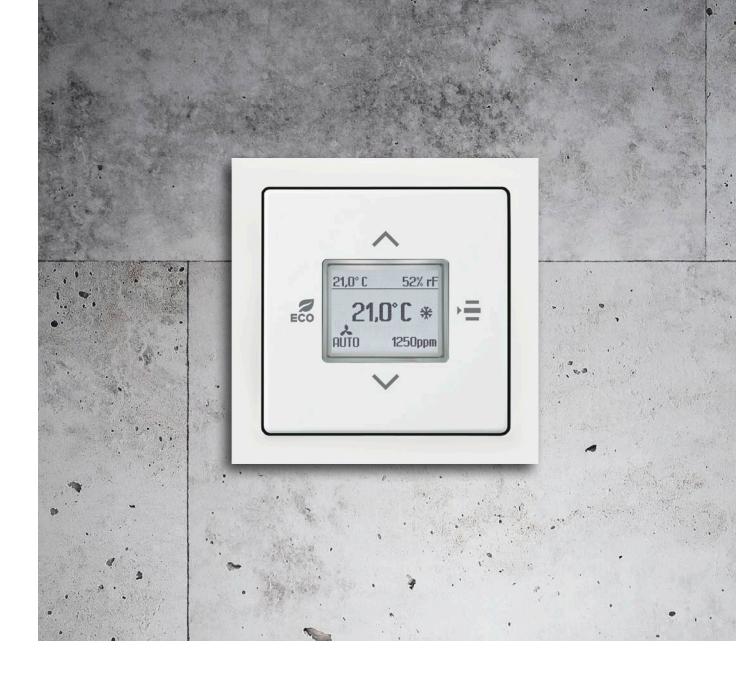
O3 Room temperature controller/CO₂/ humidity with universal input, 5gang

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

06



- 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 CO_2 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 CO_2 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.





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



6344-xx-101 8.89 cm (3.5") TFT colour display with rotary control element

VAIV from a tile on				
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)

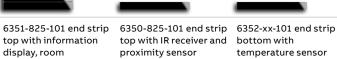
Busch-triton® (next generation) Monoblock







top with information display, room temperature controller, IR receiver and $% \left\{ \mathbf{r}^{\prime}\right\} =\left\{ \mathbf{r}^{\prime}\right\} =\left$ proximity sensor + 6342-xx-101 3/6gang



temperature sensor



6320/10 1/2gang 6320/30 3/6gang 6320/50 5/10gang



6321/38 3/6gang with RTC 6321/58 5/10gang with RTC

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Busch-Watchdog 4 channels

Millenium Program 6125/20-500 6126/20-500 6129/20-500 6129/21-500 6122/20-500 6124/20-500 2/4gang 3/6gang with 1/2gang 3/6gang KNX function Switching, button pair Switching, button upper/lower Dimming, button pair Dimming, button upper/lower Blind, button pair Blind, button upper/lower Short-long operation, button upper/lower Value transmitter, button pair Value transmitter, button upper/lower Value dimming sensor, button pair Value dimming sensor, upper/lower RGB LED function illumination + status illumination Setting the RTC operating mode Value transmitter, 2 objects, button upper/lower Light scene extension unit with light scene memory function Step switch, button pair Step switch, button upper/lower Multiple operation, button upper/lower 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 10 logic channels (incl. light scene, $actuator, sequence \ actuator, logic \ gates,$ etc.)

Program Zenit













6125/98-509 1/2gang

6126/98-509 2/4gang

6129/98-509 3/6gang

6129/98-509 3/6gang with IR

6122/98-509 6124/88-509

KNX function		I	ı	1	I	"
Switching, button pair			•	•	_	_
Switching, button upper/lower					-	-
Dimming, button pair					-	-
Dimming, button upper/lower					-	-
Blind, button pair					-	-
Blind, button upper/lower					-	-
Short-long operation, button upper/lower					-	-
Value transmitter, button pair					-	-
Value transmitter, button upper/lower			•	•	-	-
Value dimming sensor, button pair			•		-	-
Value dimming sensor, upper/lower			•		_	-
RGB LED function illumination + status illumination		•			-	-
Setting the RTC operating mode					-	-
Value transmitter, 2 objects, button upper/lower			•		-	-
Light scene extension unit with light scene memory function					-	-
Step switch, button pair					-	-
Step switch, button upper/lower					-	-
Multiple operation, button upper/lower					-	-
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	-	-	-	-	-	
10 logic channels (incl. light scene, actuator, sequence actuator, logic gates, etc.)					-	
Busch-Watchdog 4 channels	-	_	_	_		

Program

reciniicai data

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 +	Two LEDs per rocker	Two LEDs per rocker	Two LEDs per rocker	-
status illumination	switch	switch	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	_			
Busch Wateridog 4 charmers				
ABB				
basic55®	_	_		_
future® linear				
alpha exclusive/nea	_	_	_	_
Busch-axcent®				
solo®				
pure stainless steel				
carat®				
ocean®	-	_	_	-
All Weather 44	-	_	_	-

FM Watchdog with integrated bus coupler Standard control elements, bus coupler included with package FM push-button coupling unit with integrated bus coupler















6122/10 6122/10-BS-500

6125/01 1gang 6126/01 2gang 6127/01 4gang 6108/06 6108/06-BS 1/2gang 6108/07 6108/07-BS 2/4gang

6108/60 6-fold KNX sensor 6108/06-AP 1/2gang 6108/07-AP 2/4gang

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-	Two LEDs per rocker switch	-	-		1 LED	-
-	-	One LED per rocker switch	One LED per rocker switch	-	-	-
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Program FM room temperature controller







6108/18 6108/18-BS 6109/18

6109/28

	6108/18 6108/18-BS	6109/18	6109/28	
Control element				-
Standard function				
Additional function				
Indication				
Display				
Actual temperature display	<u>-</u>	-	_	
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	<u>-</u>	_		
Internal actual temperature sensor	<u>-</u>	_		
Air quality				
CO ₂	_	_		
Humidity	_	-	_	
Air pressure	_	_		
Universal input/binary input	_	_	-	
Switching/alarm				
Dimming	_	-	<u> </u>	
Blind		<u>-</u>	-	
Value		-	_	
			=	
Scene	_			
Switching sequences	_	<u> </u>	_	
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			<u>=</u>	
alpha exclusive/nea	_		_	
Busch-axcent®			<u> </u>	
solo®				
pure stainless steel				
carat®				
ocean®	_	_	-	
All Weather 44	_	_	_	





6109/08

6109/05

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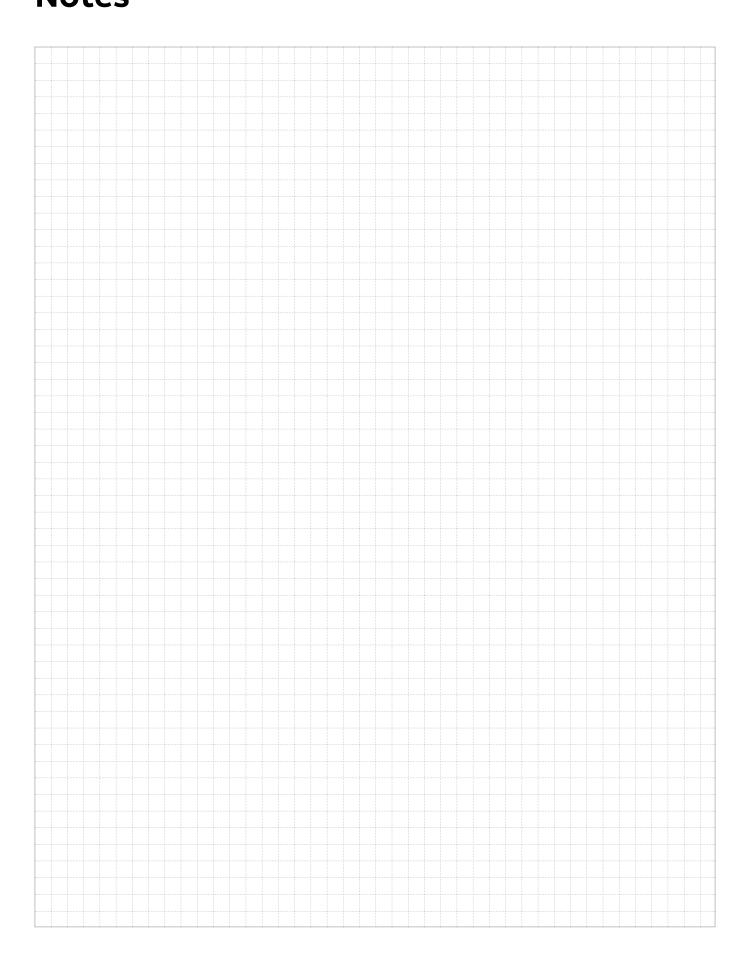
	Program	ABB-tacteo®
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Square (vert.)	(86 mm x 86 mm)	TB/U1.1.1-CG	TB/U2.4.1-CG	TB/U4.4.1-CG	TB/U6.4.1-CG
Square (horiz.)	(86 mm x 86 mm)		TB/U2.5.1-CG	TB/U4.5.1-CG	TB/U6.5.1-CG
Vertical	(86 mm x 115 mm)	TB/U1.2.1-CG	TB/U2.7.1-CG	TB/U4.7.1-CG	TB/U6.7.1-CG
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
Control element	t				
Standard functi	on				
Additional funct	tion				
Indication					
Display		-	-	_	_
Actual temperat	ure display	-	-	-	-
Status display vi	ia text and/or ICON	_	-	-	_
RTC					
Manual operation	on	_	_	_	_
Heating and/or without addition		-	-	-	-
Fan coil		_	_	_	_
Master/slave		-	-	-	_
Basic load		_	-	-	-
Internal and/or eactual temperat		-	-	-	-
	emperature sensor				
Installation	•				
VDE					
BS					•
IT (or	nly as 115 mm x 86 mm)				

± ************************************		<u>*</u>	<u> </u>	<u> </u>	<u> </u>
TR/U.1.1-CG	TBW/U.1.1-CG	TA/U3.1.1-CG	TLM/U.1.1-CG	TKK/U.1.1-CG	TKM/U.1.1-CG
TR/U.2.1-CG TR/U.3.1-CG	TBW/U.2.1-CG TBW/U.3.1-CG	TA/U3.2.1-CG TA/U3.3.1-CG	TLM/U.2.1-CG TLM/U.3.1-CG	TKK/U.3.1-CG	TKM/U.3.1-CG
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Program	ABB-tacteo®			
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Vertical (86 mm x 157 mm) Horizontal (157 mm x 86 mm)	TB/U12.7.1-CG TB/U12.8.1-CG	TBR/U4.7.1-CG TBR/U4.8.1-CG	TSN/U.2.1-CG	TSM/U.2.1-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)				

Notes





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