



Modern VDE standard wiring accessories

Make your life more comfortable

Æ

- Wide choice of designs, styles, shapes and materials
- Wide choice of functions
- High quality and safety products
- Integrated building automation

Welcome home!

Get inspired by modern wiring accessories.



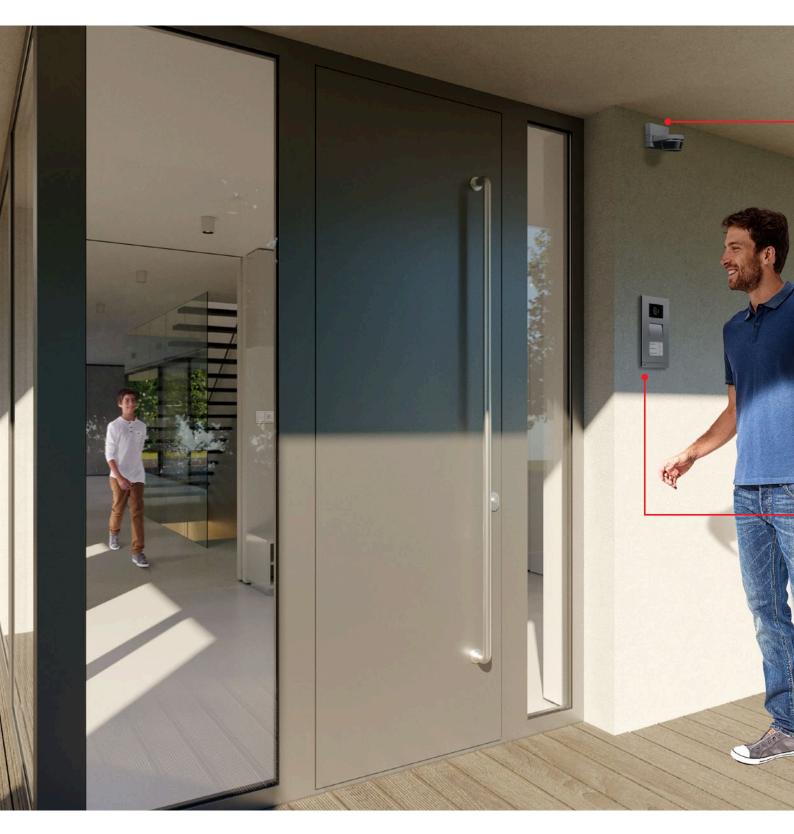
Are you planning to build a family house, renovate a flat, or just upgrade a single room? Let yourself be inspired by the example of our family and their home.

Electrical installations are not just switches and socket outlets. It is a living blood flow that gives the house energy and has a significant impact on the convenience of living, safety, energy savings as well as aesthetics.

Every family member will feel truly at home thanks to well-chosen, modern wiring that allows easy-to-use lighting settings, the blinds to be controlled remotely, temperature control and total safety when connecting and using appliances and various entertainment devices. We offer innovative technology with a sense for detail and overall design. Our family has fulfilled its dream in new housing. We went over every detail of the wiring project and consulted our electrician on everything. Walk with us through the house and find inspiration.

You will see that ABB's modern wiring elements offer you more than you could have imagined. Think about the future. About lifelong well-being. Just like us!

Entrance – exterior The first impression of the house



A place for your visitor's comfort and your safety. Day and night. A place where your privacy and public space meet.





Movement detectors

Movement detectors safely detects people's movement. Automatically lights the way for the invited, discourages the uninvited. Ideal for installation in multiple locations. Some types can even see around corners.



Intercom

Audio or video solutions with a durable and stylish ABB-Welcome station. Perfect, undisturbed, sound or a combination of sound and video. With the video outdoor station you can see every visitor clearly, day or night. One bell for you, another for the children's room when their friends visit.



Tips and tricks ABB-Welcome can connect up to 15 analogue cameras using the appropriate interface to transfer the image to a home video phone inside the house.

Entrance hall Welcome home!

This is where you open the door to visitors; your comfort and safety begins here. An important place for many control features in your home.



Movement detector

Light is always available. Whether you enter the house with your hands full or you are just going downstairs and leaving. Simple, effective, and cost-saving. No more fumbling around for a switch. As soon as someone enters the door, the switching process is triggered. And it automatically switches off again when the person exits the room. Busch-Watchdog 180.



Video intercom

Not one step further. With the ABB-Welcome touchscreen, you always know who is ringing at the front door or the gate. Do you want to remotely open the gate, the front door, or turn on lights for guests? Just press the right button.



Everything-off

If you decide for smart wiring and home automation, you can put the whole house into "standby" mode and secure it with the push of a button when you leave. Therefore, the central switch for the everything-off function can be located on the wall near the front door and, of course, at any other location in the house. In principle the everything-off function works just like a preset scene. In this case all networked devices are simultaneously switched off in all rooms.



7

Kitchen and dining room A place for ideas

Recipes and ingredients for your kitchen. The place where our family spends a lot of time and literally savours.



Work surface lighting

You can divide it into separate sections and light them individually or as a whole. Always have light available whenever you need it. You can use LED glow switches to easily find your way in the dark.



Blinds

Welcome the sun in the morning, enjoy the privacy offered by blinds in the evening. The blind management system is suitable for controlling all motor-driven blinds, roller blinds and awnings.



Sockets

There is always a critical shortage in the kitchen. Did you know that you can use multi-gang frames that can take up to 5 sockets, or a combination with a switch and other devices? You will definitely appreciate a socket with a 2in1 USB charger.







Smoke and heat alarm detectors and leakage guard To be on the safe side. What if the children forgot to turn off the cooker or the pipes break? Early warning – minimum damage.



Total room lighting

A switch or dimmer. You choose. The dining room and the kitchen are often like a soul and a body. So, it is important to think of a central place when entering the room or passing through to another part of the house.



Sound system

A radio and loudspeaker harmoniously designed to match your entire kitchen. Small and inconspicuous. With the option of playing music from your mobile devices via Bluetooth or NFC.



Tips and tricks Think ahead about where you will place certain appliances in the kitchen so you won't lack sockets. Draw everything in advance.

Living room A place where the entire family meets



	+	-
•	ee"	
•	6	•
•	8 ²⁶	•

ZigBee wireless lighting control

ZigBee Light Link can control individually any radio-controlled lamp independently from classical installation. No wire is needed. Remote control is managed with a button on the wall or via a smartphone or tablet.



Thermostat

in the same look as other electrical elements and, of course, with a lot of functions to ensure thermal and thus user comfort. A room thermostat or floor heating? You choose.



Video indoor station

Why go to the front door when you can see your visitor from where you are located? From here you can open the gate, the front door, and even light the way. With the intercom function, you can also call the kids for lunch from their room or for a fairy tale before bedtime. The centre and crossroads of every house. It's here that we meet with family and friends. A place for fun and relaxation. A place that represents us. Take care of it.



Blinds and their control

Many blinds are best served by the Busch-Timer®. Sun or twilight functions and automatic control. It can also be connected to a dimmer to control the lighting luminosity and the blinds at a selected time.



Lighting, light scenes – dimmers The ideal lighting for every occasion. Meeting friends or watching TV. The right light mood each time with touch dimmers and switches. In terms of size and space, you will certainly welcome having control from several places. LED light sources can also be dimmed.



Sockets and multimedia – use of multi-gang frames

The living room is where a lot of electronics concentrate. Smart TV, Satellite, HiFi, home cinema, WiFi, or fixed internet connections. HDMI, USB data, WLAN, and speakers. Wired, signal and data control. You can literally create a nest of sockets. Both power and multimedia. The socket outlets with overvoltage protection are also recommended in this case.



Fast charging for smartphones Busch-powerDock offers fast charging of smartphones with USB-C connector or Apple Lightning connector. Flush-mounted device therefore available always at the same place.

The bedroom A zone of comfort and safety

Our private space where the day begins and ends, a place that needs special care. Light and sound upon request, thermal comfort and safety.



Safety while sleeping

Busch-Smoke alarm detector. Sure! Because your sense of smell is inactive at night. The sensor detects smoke even before the fire ignites.



Lighting and its control

You definitely won't be asking whose turn it is to turn the lights off. The intermediate switch near each bed makes it easy to turn the lights on and off as you wish. You can also use the IR remote control – a handheld transmitter (switching, dimming, blinds).



Air quality sensor

Fresh air gives you good sleep. With the WaveLine® sensor each window and heat recovery unit knows when to ventilate.



Tips and tricks

No cables leading to your bed? It doesn't matter. Take advantage of wireless switching for lights or blinds. Wireless switches can be attached anywhere. For instance, on the bedside table.





Blinds

In the bedroom, you will appreciate automatic blind control of the blinds according to light conditions. Up and down. Automatically. Without disturbance. Busch-Timer® ensures convenient operation according to the time and the day of the week, all this synchronized with a dimmer.





Dimmers – ambience on demand An alternative to an ordinary switch. Using the rotary dimmer you can apply a lighting scene in a moment. A dimmer can be installed as the main control at the bedroom entrance and for each bed. Tired eyes also welcome light regulation.

Media

Some people enjoy falling asleep during a good film, others get up with the radio. TV + R + SAT sockets should not be missing from the bedroom, even if you do not plan to have a TV there. What if... You need discreet sound? Then there is the discreet, built-in internet radio Busch-iNet®.



Sockets + WLAN sockets Do you like a reading lamp at your bedside table? Then a socket for each one will come in handy. Ideally with USB charging. You will also appreciate the wireless internet connection.



Treat yourself to a pleasant bath that you enjoy with all your senses. Relax and unwind. Get ready for a soothing atmosphere of water, heat, light, and sound.



Switches and sockets

You can divide the bathroom into separate sections and light them individually or as a whole. Socket outlets with a hinged lid or with increased degree of protection (IP 44) can be used near to the washbasin.



Tips and tricks

Choose from three types of radio in the sound system. If you choose a radio with Bluetooth, you can connect an MP3 player or smartphone. AudioWorld is a flush mounted sound system in the design of the switches and sockets.



A thermostat for the right climate The ladder radiator or underfloor heating started at the right time. A warm floor – an ideal start to relaxation thanks to a thermostat for floor heating and the pleasant touch of the floor after bathing.

Ventilation and control for opening windows

Welcome the sun in the morning, enjoy the privacy offered by blinds in the evening. Up or down at a press of a button.





Sound for relaxation

A radio and loudspeaker harmoniously designed to match your entire bathroom. Small and inconspicuous. With the option to play music from your mobile devices via Bluetooth or NFC.



Children's room Cosy, practical, and safe

A room for those who are most dear to us. Our children. They need enough living space to give them room to play, learn, and sleep peacefully.



Indoor station

Friends at the gate can directly call to children in their room or you can call them for dinner from another home phone via the intercom.



Sockets – even kids want to be online

A data socket or socket for WiFi and USB charging are often a necessity for children today. Whether using a smartphone, tablet, PlayStation, or notebook, they need to be constantly online. Or for gaming or doing their homework.





Tips and tricks

When choosing a home intercom, you can choose from two versions. Hands free or with a handset. Both versions provide excellent sound, intercom features, and the option to remotely open the gate for a visitor or turn on the light at the entrance.

Children and socket use

ABB sockets are equipped with safety shutters as standard. They put up resistance, making it almost impossible for little children to plug anything into the socket.

Air quality sensor

Automatically takes care of the air quality in the children's room, opening the window or starting the fan if necessary.

Smoke alarm

We also recommend installing the Busch-Smoke alarm detector. It can be connected by wires or wirelessly to other sensors in the house. It warns the whole family long before a fire flares up. Waking you safely and with time in hand.



Sockets – safety first Protecting children and electronics

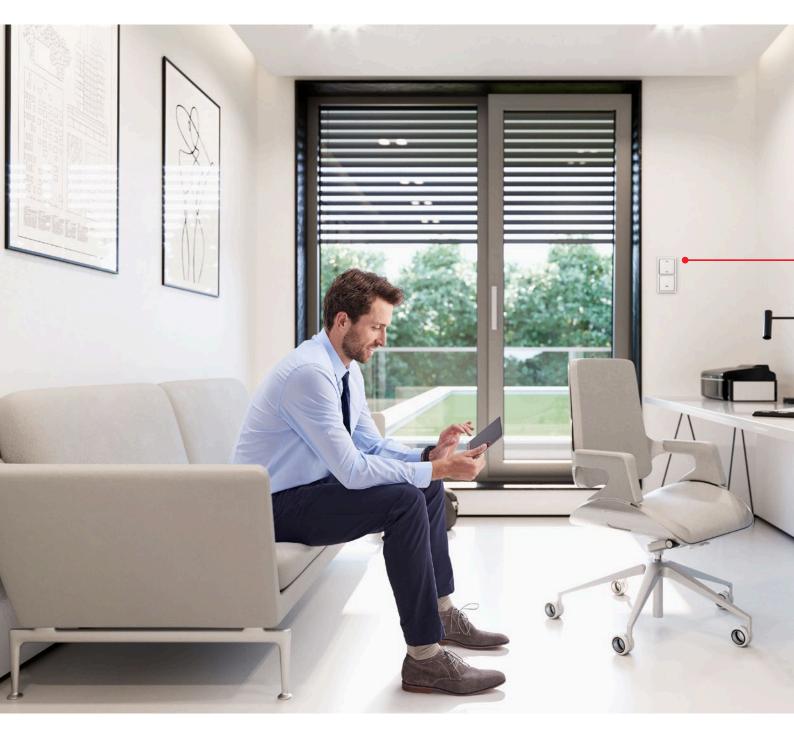
Certain rooms for smaller children should be equipped with safety sockets with built-in earth leakage circuit breaker, as they may try to plug something in that does not belong there. With these sockets, they are completely safe. For connected devices such as computers, it is advisable to connect them to a socket outlet with overvoltage protection. This prevents them from damage, for example, in the event of a nearby lightning strike.



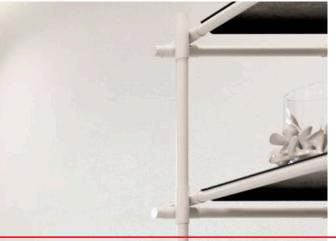
Lights and blinds

The practical combination of a light switch and a blind control. The switch can be illuminated by LED lamp for better orientation in the dark. The small arrows show the direction of the blind control.

The study Combining pleasant with practical



A modern, peaceful home office for work or simply a place to relax and think. Efficiency and connectivity. And time for the family during a break.





Lights and blinds - individual settings

For working on the computer or relaxation, it is important to have the lighting in the right place, to adjust the blinds and to have individual settings for comfort. An ideal place to combine a dimmer and a blind control. Touch dimmer remembers the light level set last time. Busch-Blind control II switch can be completed e.g. with burglar alert sensor.



Sockets for perfect connectivity

Where else than in the study would communication and data sockets come in so handy? Telephone and mobile connections, a data socket for fixed or wireless internet. You can use a standard socket with a USB charger for charging mobile devices, leaving one power socket free.



Sockets – protecting electronics against surges

Your laptop, desktop, and data storage are all connected. Your data is under control. However, it is necessary to protect your electronics from possible surges. Therefore, it is important to think about installing surge protection sockets when planning a study. These power sockets are best combined into multi-gang frames. They save space and all connections are under control.

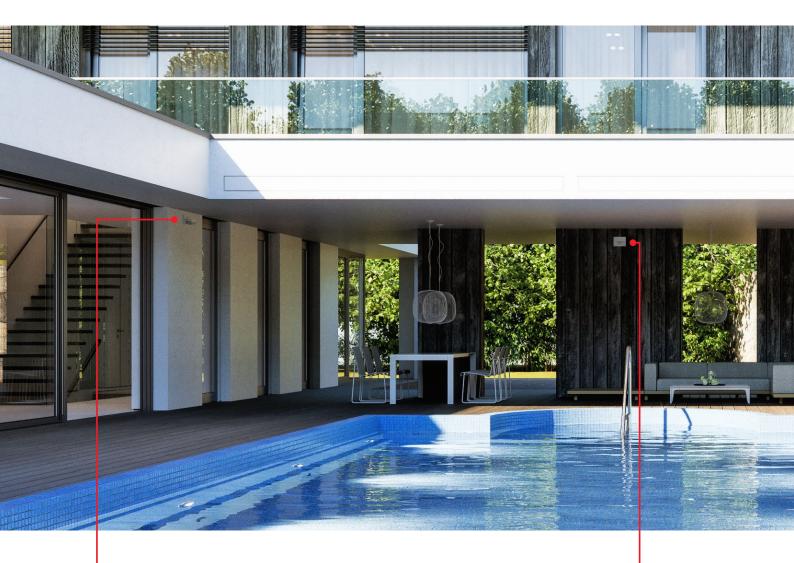




Tips and tricks

With modern dimmers, you can even dim LED bulbs and other light sources. The right choice of dimmer and bulb will save energy with the right lighting.

Terrace, garden, swimming pool A practical house inside and outside





Lighting and lighting scenes

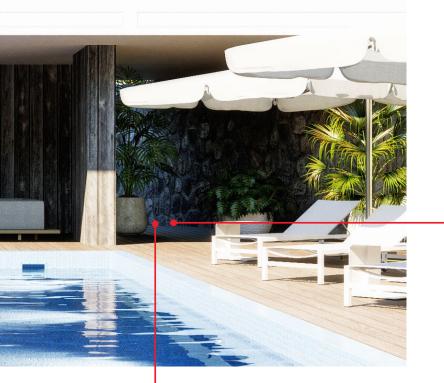
During a garden party and barbecue or an evening of relaxing in the pool, you will certainly appreciate the possibility to remotely control indoor and outdoor lighting, switching the watchdog modes from automatic to standard lighting. Thus, you can create individual lighting scenes. For instance with the Busch-Watchdog 220 MasterLINE with IR remote control.



Lighting and automatic switching

The watchdogs, such as the Busch-Watchdog 110 MasterLINE, will ensure that lights are switched on for you wherever you are around the house. At the same time, you have an indication of when uninvited guests enter your property. You can also use the watchdogs to simulate your presence. Some of the models also see around corners. A place for active and passive relaxation, children's play, and work. Because we spend a lot of time here, it is important that the electrical system is, above all, safe and practical.







Sockets with a residual-current device

A typical place for their use and maximum safety for the whole family. A wide variety of appliances are attached to outdoor sockets. If water accidentally gets into a socket, the mower runs over a cable, an appliance develops a fault or drops into some water, the built-in current protector disables the socket's current in milliseconds.



Surface mounted, water protected

Ocean® range convinces with not only by design but also by functionality, because it is robust, easy to install and versatile. Ideal for outdoor use. A combination of light switch and socket outlet always comes in handy.



Controlling terrace roofing

Nothing will catch you by surprise. Not baking hot sun rays or even rain. You can also use the controller for the blinds to adjust outdoor awnings, front window blinds, and roller blinds. Either by using standard controllers for blinds or units more resistant to inclement weather conditions and designed for outdoor use.



Tips and tricks

The watchdog can be wirelessly connected to ordinary switches equipped with a wireless remote-control receiver. Depending on the motion sensors, lighting can be automatically turned on and off from the driveway to the entrance. Subsequent automatic shutdown is a matter of course.

Garage / workshop Above all practical

We do not only park our cars here. The family stores its bikes and the man of the house keeps his gardening equipment, high-pressure cleaner, and "workshop corner" here. A garage should be practical and comfortable. Mainly to accommodate everything that is used outdoors.

What to look for in a garage?

- Easy-to-use garage door control, both remotely and with a switch
- Light switches
- Robust, safe, and practical sockets
- Temperature monitoring





Robust sockets outlets and switches

In every garage or workshop, sockets and switches specially designed for using appliances in an environment with higher dust or humidity levels is desirable. They are mounted to the plaster and protected against dirt and moisture.



Safe and robust sockets

For connecting power tools, lawn mowers, or high-pressure washers for cleaning cars, it is best to use sockets with a built-in residual current device. Damaged power cords, equipment failure, water penetration, etc. These can all cause electric shocks. Sockets with a residual-current device will protect you. GARAGE / WORKSHOP







Heat alarm

In contrast to a smoke alarm, the Busch-Smoke alarm detector reacts to a dangerous temperature increase in the room. It is not confused by exhaust fumes. However, a connected appliance may malfunction while you are away or a heating appliance may accidentally be left on.



Safe and reliable sockets

To start more powerful electric motors, it is advisable to have at least one industrial socket in the garage. It may not be necessary every day, but what do you do when it is necessary and you don't have one? Ideally, a wallmounted version. It can be mounted on plaster, both inside and outside. It resists weathering and rough handling.

Dimmers Always the perfect light



How to create a lighting ambience according to your mood and the occasion. In short, to make you feel good. And what's more. Dimmers save energy.

Which light sources can be dimmed?

- LED bulbs and energy saving bulbs
- Halogen lamps for 230 V
- Halogen lamps powered by a transformer
- Fluorescent lamps, LED panels, and LED tapes

Different dimmer types exist for different types of light source. Always consult your electrician. You choose your favourite design range and the method of control.



Benefits

- Regulate light intensity
- Energy savings
- Dimming LED sources

Where is it most often used?

- The living room
- The bedroom
- The children's room

Dimmer types

- With a rotary knob
- Touch dimmer 1-gang or 2-gang
- IR control dimmer

With the dual controller, two different light sources can be dimmed independently.



Tips and tricks

You can use a dimmer in the same place you planned to use a standard switch. You can also use multi-gang frames and place the controller for the blinds in the same place as the dimmer. You can thus control lighting and the blinds from one place. Or, you can use 2-way or intermediate switch to control the same light source with the dimmer.

01



02

— 01 Busch-Memory

2gang dimmer

02 LED dimmer with rotary control

03 Busch-Memory dimmer

Rotary control

Adjust brightness by turning the knob. Reduce or increase light intensity. Pressing the knob switches the light on or off. After switching off, it remains set at the last brightness value.

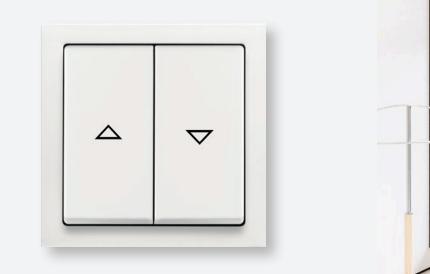


Touch control

An easy-to-use dimming solution to control brightness by gently pressing the cover. Lighting intensity is chosen by how long you press. A short touch turns the lighting on/off. This type of dimmer is equipped with for the last brightness setting. In the two-button design, two light sources can be dimmed from one point.

Blind management The right amount of light and shade

Enjoy comfort without running from window to window or room to room. Let the sun into the house whenever you want it. Did you know that a controller will also protect the blinds in windy conditions?





01

01 Blind switch 2gang --02 Blind switch with rotary knob --03 Compact timer

04 Blind switch

What types of shade technology can be controlled?

- Interior blinds and roller blinds
- Shutters and roller blinds
- Sunshades
- Roof windows
- Other similar devices with an electric drive

Where is it most often used?

• Virtually all living rooms

Up and down or even rotate the slats

For electronic controllers, you can use both functions in automatic or manual mode.

And what about control according to the amount of sunlight?

When a twilight sensor is connected to the automatic controller the blinds will be closed at dusk and opened at dawn.

Can the blinds be controlled wirelessly?

Yes, just like the lighting. Simply use the device for wireless remote control. Radio frequency and infrared.

Safety

The wind sensor recognizes when it is necessary to protect the blinds or sunshades from wind damage and pulls them up. The glass break sensor provides information about any unwanted intrusions.

Energy savings

In winter, you can let the sun in to heat the house. In summer, they provide shade and saving on air-conditioning.

Controller types for blinds

- With a mechanical rotary switch
- With a blind switch / push switch
- Touch with touch control element
- Comfortable
- with preset switching times/date



Benefits

- High convenience
- Energy savings for heating/cooling
- Safety



Tips and tricks

 \triangle

 ∇

04

The requirement for using a blind controller is that the blinds be driven by electric motors. Bear this in mind when consulting with the designer. Blinds save heating and air conditioning energy.





Rotary and switch control

The blind switches and rotary switches permit the operation of the blind or roller shutter in two different directions of movements through separate rockers.

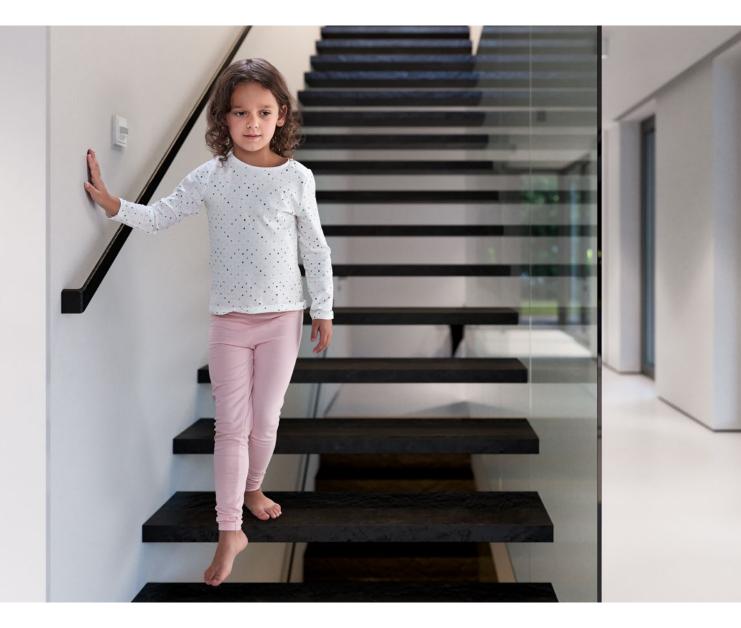
Touch control

With this controller you can control blinds in groups. Through the whole house at once or in each room.

Easy-to-use controllers for blinds

They work in either manual or automatic mode and detect whether the blinds are at the end or at a pre-set intermediate position. In automatic mode, the blinds operate according to set times stored in memory. The comfort timer offers the widest range of modes: weekday, weekend, group or central control, twilight sensor connection, etc.

Movement and presence detectors Automatic switching



Where to use them effectively

- In places where it is necessary to have light available without having to touch a switch (entrance halls, staircases, corridors)
- When you need to be warned about people's movement (exterior)

Settings

- Delayed turn off (the light is on for as long as you set it to be)
- Threshold level of illumination the sensor responds to light conditions. On a bright day it sees you, but does not light up. After dusk, it switches on according to movement.



Tips and tricks

The range of the motion sensor is dependent on the direction of movement in relation to it. The highest range is achieved when walking around the sensor; walking head-on towards the sensor considerably decreases its range. It is therefore worthwhile considering which direction of movement is the most common. Automatic switches. The ideal solution for places where you want or need to always have light available. Indoors and outdoors. People's movement always switches the lighting on. At the right time, for an ideal time.

Benefits

- Comfortable automatic switching
- Energy and cost savings the light is used only when needed
- Security detects movement and illuminates the area. Can also simulate presence inside the house.
- Connected to a dimmer = gradual reduction of light intensity
- Flush mounted movement detectors in a design which matches the other wiring accessories in the interior.

Wall mounting

- Comfortable automatic switching
- It responds to the movement of people and ignores, for example, pets
- Instead of a standard switch

Ceiling mounting

- When fitted into the ceiling, the whole room is covered
- When fitted onto a wall, only the part
- of the room where the cone faces is covered



Movement detectors

No more searching for the light switch. Lights up automatically when you enter. One movement and light is always there. On the staircase, in the corridor etc. It can be connected to a dimmer and brightness decreases after 60 seconds. When there is no movement, they switch off.

01



Presence detectors

Automatically switch on/off and control lighting. Inconspicuous, placed on the ceiling and capture a large area. Can also activate heating and air conditioning based on presence. Remote control via smart phones App or hand transmitter is possible.



01 ABB Watchdog 180 flex, comfort

02 Busch-Presence detector universal, BT, DALI

03 Busch-Watchdog Presence tech BasicLINE

Outdoor movement detectors

For the pleasant feeling and safety

Watching day and night. Vigilant, efficient, and economical. Watchdogs have eyes everywhere. They even see around corners and along walls and are not confused by pets running through the garden. So you know exactly what's going on around the house in the evenings, plus automatic light.



Watchdogs

Outdoor automatic switches that "watch" driveways, monitoring movement along the walls, some of them can guard both walls at once. They are designed for tough outdoor conditions:

- Resistant water, frost, sun
- Intelligence
 - eliminates weather influences
 - remote control
 - recognizes people
- A unique design
- All-round use

Settings and installation

- Monitors the space in front of, under, and even behind the sensor
- The field of capture can be adjusted
- rotation in two axes according to the terrain
 can be decreased by covering the lens
- delay setting
- use of IR remote control
- shutdown delay
- threshold level for switching on lights
- presence simulation during holiday
- wall and ceiling mounting



01 Busch-Watchdog 220/280 MasterLINE

02 Busch-Watchdog 70/110 MasterLINE

Areas monitored by the watchdogs

03 Busch-Watchdog 70/110 MasterLINE

04 Busch-Watchdog 220 MasterLINE

05 Busch-Watchdog 280 MasterLINE

06 Busch-Watchdog 220 MasterLINE select

Sensing the surroundings of the house and larger spaces

Sensors with extremely wide coverage areas. They literally watch the entire surroundings and some types even see "around the corner". With a range of up to 16 m. Can be used in many places around the house and garden. Remote control option. With a twilight switch, it can switch lighting on/off independently of movement.

Area of detection

Choose the watchdog features that perfectly match your needs. Range and detection is very individual depending on the type of device. Most devices have spatial characteristics with just one exception.

- Range of up to 16 m
- A sensing angle of up to 280°



Lighting for driveways and terraces

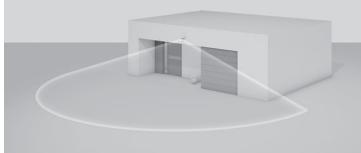
Ideal for lighting on driveways, terraces, or the entrance to a terraced house. A unique look – they are almost flush to the facade.



Tips and tricks – did you know that...

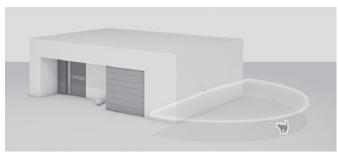
- An outdoor watchdog placed at the entrance to your house will light up before you step out the door?
- Lighting can be switched on for several hours thanks to the remote control, for example, during a garden party?
- The watchdog can simulate the presence of people and turn lights on during your vacation?
- You can install the wireless watchdog as an extra in locations where cables cannot reach?





06

04



02

Remote control

Comfortable controlling the light from any point in the room



Two transmission systems

- Radio-frequency (RF)
 - the signal also penetrates obstacles
 - the signal spreads through the entire space
- The infrared (IR)
 - the transmitter needs to be pointed at the receiver



What can be controlled and switched on/off wirelessly?

- Lighting
- Blinds, roller blinds, sunshades, gates, windows
- Movement and presence detectors

How it works

It is necessary to always have at least one receiver and one transmitter.

- transmitter = manual remote control
- receiver = switch, dimmer, or controller for blinds with an integrated IR receiver

You can control the lighting and blinds from the comfort of an armchair. Why get up from the TV when it can be solved so elegantly thanks to light switches, dimmers, and blinds with built-in IR receivers?





Tips and tricks When detecting motion around the house, the watchdog can turn on remote lighting for both the given area and house entrance.

ZigBee wireless lighting control

ZigBee Light Link can control individually any radio-controlled lamp independently from classical installation. No wire is needed. Remote control is managed with a button on the wall or via a smartphone or tablet.



01



03

WaveLINE

Any light can be operated remotely from different places. The existing light switch can be replaced with wall-mounted transmitters which are glued wherever needed and linked via radio signal. The light is then remotely controlled via a separately mounted actuator.

01 ZigBee Light Link wall-mounted transmitter, 2 channels 02 Remote control

WaveLINE RF 03 Wavel INF

transmitter 2-channel RF



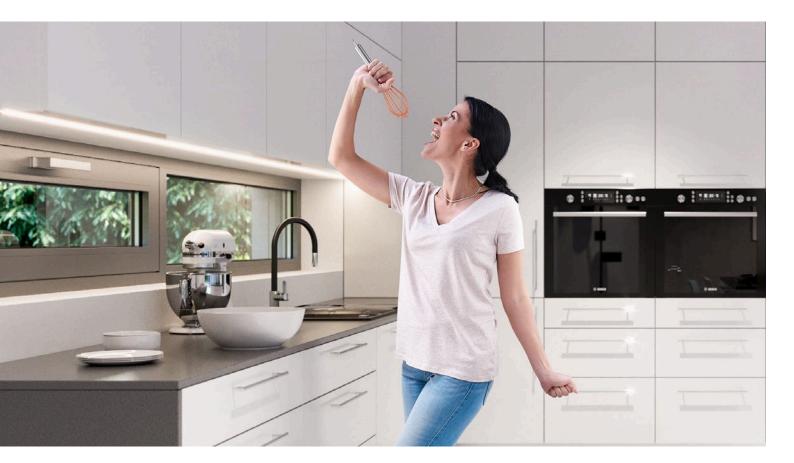
02

Remote control WaveLINE RF

The remote control is used as mobile control for the WaveLINE. Loads can be controlled individually and scenes can be started.

Multimedia Music in each and every room

A radio or player that does not take up space and looks great. A sound system with a design that matches your wiring accessories. In the bathroom or in the kitchen... From the favourite song to the latest news and up to audio books.



Features

- Flush mounted radio and loudspeaker
- Can be freely combined with most of ABB switch ranges
- Digital radio, internet radio or docking station for smartphone for own music playback
- Remote control possible via smartphones
- Additional functions such as time and date display, alarm function, timer, radio station storage, ...



Benefits

- Attractive design
- Quality sound
- Connectivity with ceiling loudspeakers
- Bluetooth technology available

01 Busch-Radio DAB+ and loudspeaker

- 02 Built-in loudspeaker
- 03 Busch-Radio iNet
- 04 Busch-Radio BTconnect DAB+ and loudspeaker

Loudspeaker types

- Flush mounted in the design of wiring accessories
- Larger, more powerful:
 built-in
 - built into wet areas
 - into ceiling voids (HiFi)
- Output 6 30 W (RMS)





Listen to your favorite music

The new generation of digital radio for the best entertainment in your home. The ingeniously simple way to bring music and information into the kitchen, bathroom or bedroom - without taking up too much space and without tangled cables. In combination with the Busch-AudioWorld® loudspeaker this solution is the next generation of modern home entertainment.

01

03





Music via Bluetooth

The Bluetooth interface of the Busch-Radio BTconnect DAB+ makes it possible to stream all music content from the mobile device to the inwall device. The speakers used for playback are flush-mounted and conveniently out of the way. Radio broadcasting can also be transmitted to paired Bluetooth loudspeakers.

Listen to internet radio

¢

PROG

+ tunein

CRo1

A radio that uses a WiFi interface and an Internet connection. Save your favourite internet radio and listen. With tune-in, you can listen to up to 70 000 radio stations. It works with smartphones and tablets.



Tips and tricks

Take advantage of multi-gang frames, where the built-in radio and speaker can be in one frame with sockets (kitchen) or a lighting switch (bathroom, bedroom), and so on. Wiring accessories that are is design-matched and play.

Thermostats – convenient heating control Harmony, aesthetics, and energy savings

Thermostats are always in sight. Use the possibility to replace a standard thermostat from your heat source with one that matches your design and exactly match the needs of individual rooms and control requirements. Maximum design, convenience, and energy savings.



Thermostat types by measurement method

Choose the right type according to the functionality, comfort level, and heat source.

- Spatial (measures ambient air temperature)
- Underfloor
- Combined thermostat

Some ABB devices are universal, and operating modes can be set by switching – manually or electronically.

What thermal sources

do the thermostats control?

- Electric and gas boilers
- Electric and water underfloor heating
- Electric and water heating ladders and radiators

Can thermostats even control cooling?

Yes, and it is possible to control both heating and cooling devices individually or switch them.

01

Energy savings

Significant energy savings can be achieved with auxiliary programmable thermostats and time switches. Setting modes for day/night, work days/weekends, summer/winter, or holidays.

Can heating be controlled in individual rooms?

It brings significant energy savings and a high level of comfort in terms of thermal comfort. Check with your electrician about the ABB-free@home® solution.



Benefits

- Designs that match your wiring accessories
- A wide choice of thermostat types and controls
- Energy savings for heating/cooling
- The possibility to control heating individually in each room

\bigcup

Consult your electrician!

As ABB design lines are available with thermostats with differing properties and because some boilers are not suitable for control using conventional thermostats, you should consult your electrician.



01 Thermostat for heating/cooling

02 Digital thermostat with weekly switching hours

03 Thermostat for heating/cooling with manual settings and display

04 Thermostat for heating/cooling with a sliding switch to select heating or cooling

Programmable thermostats with weekly switching hours

Spatial, floor, or combined with a timer. Time sequences and temperatures are stored in memory. Programming can be done for days of the week. One for work days and one for weekends. You can set the ideal temperature for a given time for each day. In night mode, it saves energy by lowering the temperature. With a remote control for underfloor heating.

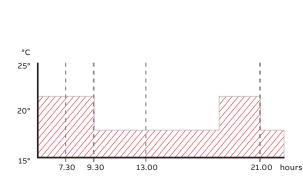
02



03

Thermostats with manual settings and display

Ideal room thermostat for individual temperature settings. Do you like a warm bathroom at the right time? With automatic switching to night mode. Also suitable for underfloor heating.





Thermostats with manual settings

Simple intuitive control/dial setting. The temperature is set by turning the knob. Switching day/ night or heating/cooling modes.

Multimedia, communication, charging Data convenience, security, and freedom

Sockets are one of the most important and most useful components in wiring. We think of everything, we are thinking about you! Smart TV, HiFi system, computer, and tablet. Signal, charging data! Everything where you need it. Convenient and with all cables managed.





01 Socket outlet

Socket outlet and communication unit types

- Radio / TV / Satellite terminal sockets for signal reception
 - TV + R
- TV + R + SAT
- Data
 - HDMI
 - USB
 - VGA
- Telephone + ISDN
- Communication universal
- Audio
- USB charging



Benefits

- Data and all cables managed.
- High-quality signal transmission
- Wireless and cable internet always at your fingertips



Warning – safety sockets

All electronic devices should be connected to sockets with surge protection. This prevents them from overvoltage (thunderstorms) or undervoltage. See the "Safety" section.



HDMI socket

A simple connection for full HD TVs, Blu-ray, DVDs, satellites, AV receivers, and game consoles.

VGA connection socket

No need to worry if you have an older device and need an analogue signal.













Loudspeaker connection box

E

UP-WLAN-Accesspoint

Whether you have a stereo, 5 + 1 AV receiver, or even 7 + 1, we can lead the cables conveniently behind the wall. With clamps, CINCH, RJ, etc. High quality sound and picture and all cables managed.

For convenient access to wireless internet. WiFi means independence. Unobtrusive connection for

your PC, tablet, smartphone, and TV always at hand.

Wifi

USB power adapter

It protects expensive electronics and computers from the effects of surges, for example, in the event of a lightning strike.

Charging station Busch-powerDock

Fast charging of smartphones with USB-C and Apple Lightning connectors.

Power + USB charger

A practical combination of a standard power socket and a USB socket for charging. This allows smartphones and tablets to be charged at a fixed location during power operation.

USB charging station insert

Micro USB connecting cable for charging smartphone, MP3 player, camera or other devices.

Telephone, ISDN, and IP data sockets

Sockets for telephone and data connections (including ADSL, VDSL ...) are available for partial and combined solutions.



Tips and tricks

For perfect cable management, for example, in a study or living room, use multi-gang frames so you can place up to 5 different sockets next to each other, combining them as needed with 230 V devices, including power surge protection sockets!



Safety devices It's worth foreseing

40

Safety plays an important role in wiring accessories. A lot can happen! Occasionally the life can be endangered and some device can be damaged. With modern safety devices you are on safe side.



— 01 Sockets outlets with built-in RCD (residual current detector)

02 Socket outlet with surge protection

03 FI-SCHUKOmat®

04 SCHUKO® socket outlet with marking "EDV"





EDV

01

Typical examples of when a socket with a residual-current device protects you

- Faulty cable/insulation of an appliance
- Severing an electric cable with a mower, or a saw at work
- Water getting into a socket or appliance, or even an appliance falling into water with a person
- While swimming in a pool, filling swimming pools, watering the garden
- An electrical appliance has an undetected fault
- Unwanted handling by children inserting a foreign object into a socket

Socket outlets with built-in RCD (residual current detector)

When the socket outlet detects a faulty current, it turns off in milliseconds. Depending on installation type and environment:

- interior
 - exterior with an increased degree of protection in a damp and dusty environment

01 Socket outlet with hinged lid

02 Blind switch/ push switch with and labelling field

03 Plug and connector, 16 - 32 A, IP 67

04 Switch with increased IP protection

Recommended areas of use

- Bathrooms, swimming pools
- Workshops and garages and sockets used in an outdoor environment
- The children's room
- Balconies and terraces

Socket types with

surge protection

- With optical fault signalling
- With acoustic fault signalling

When can a surge happen?

- A lightning strike during a storm
- Overvoltage pulses when switching home appliances
- A passing tram, trolley bus
- Proximity to manufacturing facilities

Switches, socket outlets and connectors for wet and dusty environments

Reliable, durable and safe. Adapted to the environment where they are used. They are suitable wherever electrical appliances are connected in an outdoor or dusty environment or where moisture, water, or dirt may occur. Whether a bathroom, workshop, garage, or swimming pool.

Why protect electronics and appliances from overvoltage?

- The unnecessary cost of purchasing new appliances and electronics – TV, HiFi, PC, game consoles, etc.
- DAT protection (PC damage, PC freeze, etc.)
- Fire prevention
- Avoiding breakdowns and damage due to repeated, minor surges
- Extending the lifespan of appliances
- Saving time when dealing with insurance companies

Basic principles of protection

It is necessary to protect equipment from the adverse effects of a surge comprehensively – not just its power line, but also all other possible input paths:

- Antenna leads
- Cable lines
- Data or communication interfaces
- Power sockets with surge protection

U °

Important warning

Consult your electrician about surge protection systems and the requirements for installing them.







02



Signalling systems Smoke and heat alarms

The biggest danger is when you sleep and the human sense of smell is inactive. This is the time when timely information about a fire or its outbreak is life-saving. One device and its perfect "smell" and pirecing sound = protects the whole family from fire.

01 Busch-Smoke alarm detector

02 Busch-Heat alarm detector

Busch-Smoke alarm detector ProfessionalLINE

It is a very sensitive electronic device that can detect smoke from a smouldering source or an open fire, and warns of the potential outbreak of fire before a fire flares up.

Busch-Heat alarm detector ProfessionalLINE

Warns of an excessive temperature rise with an acoustic alarm. It is designed for rooms with a high presence of dust or steam where a smoke detector is not suitable. For example, in the kitchen. It only responds to a dangerous temperature.

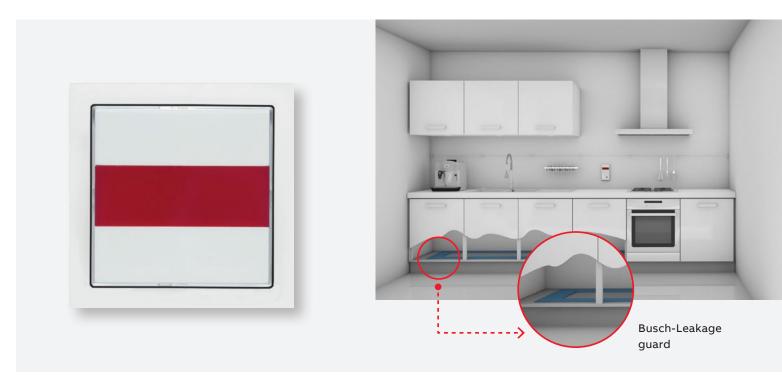
Connecting several alarms

Smoke/temperature alarms in different rooms or throughout the house can be connected when using alarms with an RF module. 01



Signalling systems Water leakage

The alarm and fault message system monitors kitchens and cellars for unwanted water ingress. The sensor rows guarantee a comprehensive detection by means of which both a sudden and a slow formation of moisture can be detected.



03

03 Alarm signalling panel

04 Leakage guard with cancel push button

05 Busch-Infoline® Sensor tape





Water leakage alarm set

consists of a strip with a sensor, which is attached, for example, to the kitchen cupboard under the sink or to the floor. Once a threshold amount of water reaches the tape a signal is transmitted to a relay that communicates with a solenoid valve that shuts down the water supply to prevent flooding and damages. It transmits both acoustic and LED optical signals.

Signalling systems Air quality sensor

An increased concentration of CO_2 in an unventilated room causes feelings of fatigue, lack of concentration, and headaches. The sensor measures air quality, but also automatically controls fans and can open windows.

Air quality sensor

What does the air quality sensor measure?

- CO_2 (500 2 000 ppm) concentration
- Relative air humidity (20 80 %)
- Room temperature (0 35 °C)
- Air pressure (30 1 100 hPa)



Worldwide offer of ABB socket outlets Solution for each installation standard

It is not an important factor where in the world you connect your appliance to a power supply. ABB has a solution for each installation standard.

01 VDE Standard Socket outlet with earthing pin

02 British Standard Switched socket outlet

03 Chinese socket outlet

04 Euro American socket outlet

05 VDE Standard SCHUKO socket outlet



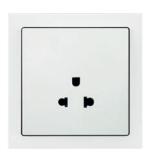
01



02

_____04







— 03 _____05

ABB-Welcome – door communication Audio and videophones for comfort and security

The front door is a gateway between two worlds, it separates and protects your own living space. ABB-Welcome creates new possibilities of communication between the two worlds. Comprehensive comfort with greater safety along with stylistically suitable design.

01 ABB-Welcome Touch

02 ABB-Welcome video outdoor station

03 ABB-Welcome audio outdoor station

04 ABB-Welcome indoor audio station, hands-free

05 ABB-Welcome indoor audio station with handset

06 Communication with smartphones and tablets

07 ABB-Welcome video



01

ABB-Welcome

The right solution for every requirement. With the wide range of well-designed products, optimum door communication can be made a reality for all types of buildings. Without great effort due to the 2-wire bus technique. And always with high-quality materials that are carefully matched.

Modern door communication solution

- Audio
- Video
- Combined

ABB-Welcome Touch

Simple, modern, hands-free video phone with 7" (17.8 cm) touch screen. Colourful display gives you a perfect view of who's ringing at your front door. With 6 easy operation keys for door openers, mute function, snapshot, and light. Picture of the visitor could be stored.

ABB-Welcome outdoor stations

Whether you choose audio or video, you can be sure to get perfect sound and picture day or night. The pads are a significant component. Anyone who rings has 3 images recorded by the camera in a home video phone. The camera is equipped with a light sensor and IR LEDs for high-quality images even at night.

- High quality, multifunctionality, timeless design
- Flush-mounted or surface-mounted
- Video camera with automatic day/
- night switchover
- Modularity:
- encrypted keypad
- card reader
- high quality backlight







04

03

Indoor audio stations Handset or hands-free versions

Large buttons and intuitive symbols provide convenient control and LED diodes clearly indicate status. With the hands-free version, your hands will always be free. Indoor audio station can also match with ABB light switch designs.

Communication with smartphones and tablets

With the Welcome app (for iOS and Android), you can use your mobile device as a video phone. You will always know who's ringing at your door, even if you're not home. All family members can open it. For instance, from the garden.

Video indoor station

Thanks to the intuitive design, all functionalities are only a fingertip away, with additional programmable buttons enabling flexible customization to cover all needs. The video indoor station solution provides the best level of security for your network and data while protecting your home and your family's well-being.





iOS 🖷





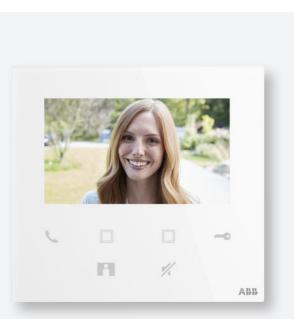
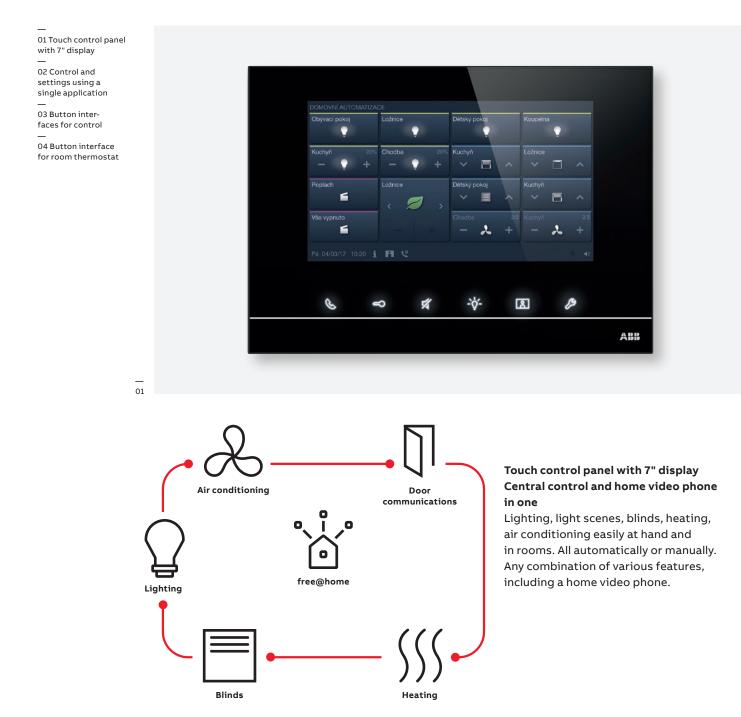


ABB-free@home[®] Transform the house into an intelligent home

A perfect and comprehensive solution for wiring without compromise. The whole house or the apartment can be under control intelligently, easily, and quickly. Lighting, blinds, heating, air-conditioning, door communication or sound systems can finally be remote controlled. Via a switch on the wall, via voice-control or with a smartphone, tablet or personal computer. Very convenient, extremely comfortable, very energy efficient.







02



Easier and enjoyable living every day

More pleasant living. The ABB-free@home® automation makes daily life easier. Blinds, lights, heating, air-conditioning and door communication can be controlled together. The smartphone becomes the remote control in the house. The blinds can be moved up and the radio in the kitchen can be switched on with the touch of a button while you are still in bed or all lights and devices are deactivated via a switch when leaving the house.

Solutions for the future

You can build your home with ABB-free@home® and its features and create the architecture freely and gradually. Simply start and choose the necessary functionalities and ways of controlling them and then just expand. It will always be easy. Whether you opt for a bus or wireless lines, ABB-free@home® is flexible and adaptable. As for its control, time, and requirements on convenience and energy savings and the budget.

Controls and individual parts of the ABB-free@home® system

- Button interfaces (lighting, blinds, dimming, scenes)
- 4.3" and 7" touchscreens
- Tablet/smartphone with a mobile app
- PIR motion sensors
- In the switchboard:
- Actuators for controlling individual circuits
- Binary inputs for connecting other devices to the system (window contacts, pump switching, garage door end sensor, etc.)

03







carat[®] Everyday indulgence

Extraordinary and distinct design, of the highest quality. Each piece becomes a unique object of any interior. It attracts attention and that is the point. Solid frames made from bronze, polished steel or glossy glass, show immediately their real value and an exquisite owner's taste. The aesthetics together with innovative functions make every day luxurious.



Porcelain anthracite/ black matt



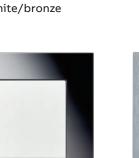
Ivory white/bronze



UV-resistant, free of PVC and halogen Frame: genuine materials.

Materials

Anthracite/stainless steel



Studio white/glass black











Studio white/white glass

Ivory white/gold

Busch-dynasty® Opulence with a story

It's like a painting with a stylish frame. Inspired by a real fairy tale, which takes you to a different world. Exclusive design, the finest material and perfect effect. The frames decorated with curved latticework. Polished and antique brass. Beauty and functionality come together to attain perfection. Something unique for your residence.



Polished brass, decor, ivory white



Antique brass, decor, ivory white



Polished brass, ivory white



Polished brass, decor, anthracite



Antique brass, decor, anthracite



Polished brass, anthracite





Antique brass, ivory white



Antique brass, anthracite



Ivory white



Anthracite

pure stainless steel Lasts a lifetime

Fascinatingly bold straight lines in a time proof material. It is pure stainless steel. Fingerprints? It is impossible, thanks to the unique finishing. An accord of aesthetics, functions and durability. Absolute quality. Pure stainless steel is simply permanent.



Switch/push-switch



Blind control switch



2gang 1way/2way switch



Materials

The series is surface-coated in a special manufacturing process. This means that fingerprints or other greasy spots are reduced to a minimum (anti-fingerprint).





Busch-Comfort switch



20A double pole switch with marking and indicator

solo® Beauty at a fingertip

Delicate shades of the cover-plates and cool chrome come together. Natural attraction. They make a harmonious unit. Let solo® switches and socket outlets shine. They will become a significant design piece of any interior. Beauty which touches every day.



Studio white/chrome matt



Ivory/chrome matt



Grey metallic/ chrome gloss



Cover: thermoplastic cover (PC), impact-proof and fracture-resistant, UV-resistant, free of PVC and halogen.

Materials

Studio white/studio white

56



Busch-axcent® Subdued and elegant

Busch-axcent[®] combines puristic optics and qualitative highvalue thermoplastic with modern subdued colors which give their style an unobtrusive elegant appearance.



Studio white/ white



Studio white/ black



Studio white/ maison-beige



Studio white/ château-black



Studio white/ entrée-grey



Mounting sets for Busch-axcent® flat allow flush-mounted installation of the Busch-axcent® range

Busch-axcent® pur Genuine high-quality materials for individualists

At a time, in which individualism becomes ever more important, the desire for a home that gives expression to personality is on the increase. The modified Busch-axcent® pur range does justice to this desire: with new materials of even higher quality and individuality as well as colors in combination with the usual puristic optics of Busch-axcent®.





studio white / titanium



Anthracite / platinum



Black matt/black matt







Black matt / paper blue





Black matt / slate grey





Black matt/paper brown





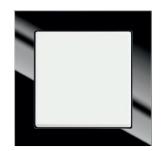
Black matt/concrete grey

Busch-axcent® pur Accents in glass

The new color range of Busch-axcent® pur harnesses the latest trends and adds a colorful flourish to unique room designs. In pure elegance of optically appealing glass.



White glass / studio white



Black glass/ studio white

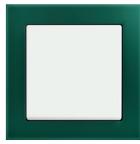


NEW



Studio white matt/ glass coral

NEW



Studio white matt/ glass avocado

NEW



Studio white matt/ glass purple

NEW



Studio white matt/ glass oyster



Studio white matt/ glass ocean



Studio white matt/ glass sun

future® linear Embrace the unknown

Timeless design combined with functionality, make for the perfect wiring accessory. Clear straight lines and harmonious colours which will last forever. Light switch with a soft and velvety touch fascinates the senses. Perfectly matches a modern style of living. Endless delight.



Studio white



Ivory white

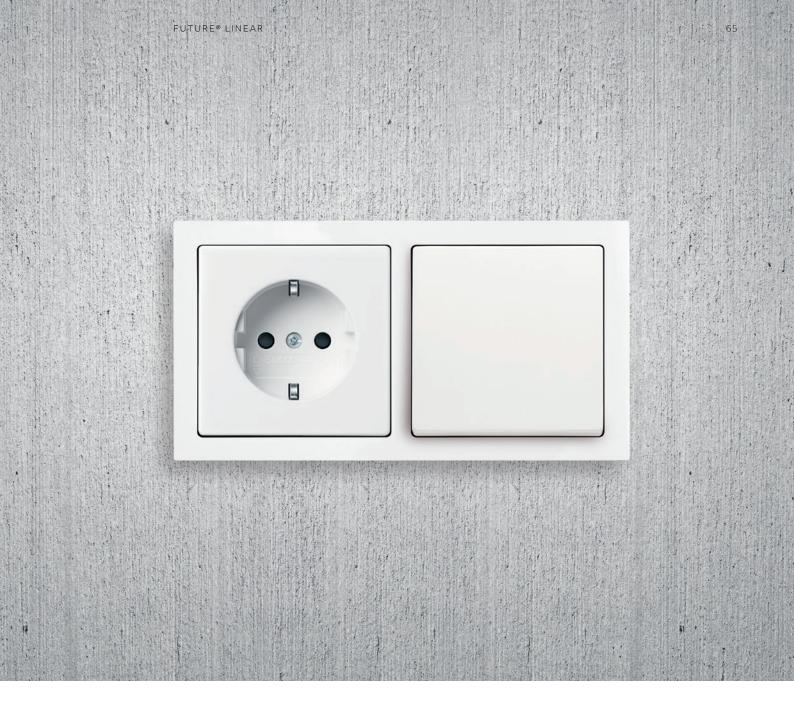


Aluminiumsilver

Materials

Cover: thermoplastic cover (PC), impact-proof and fracture-resistant, UV-resistant, free of PVC and halogen.





* softtouch – stimulating colours with pleasant haptics and a hard-wearing surface



Anthracite



White matt*



Black matt *

basic55® One concept. Numerous possibilities.

Square but still round, white but colourful. A smart concept which inspires the imagination and acknowledges the desire for individual styling. Elements formed into a creative solution. White rockers and frames fine-tuned with discreet colour rings. The concept which makes its own style.



Alpine white/ alpine white



Alpine white/ blue



Alpine white/ silver



Alpine white/ luminous



Alpine white/ yellow



Alpine white/ light green



Alpine white/ apricot



Alpine white/ orange



White/white





Chalet-white/ château-black



Entrée-grey/ chalet-white



Château-black/ château-black



Maison-beige/ chalet-white



Foyer-red/ chalet-white



Champagne



Bistro-blue/ chalet-white



Château-black/ chalet-white

Sky Niessen Touch your imagination

A light switch range offering minimalistic design. Very slim and balanced. Distinct materials like glass, stainless steel, ash wood or more modest options; all guaranteeing quality. An object of desire, a jewel to decorate the most exclusive of environments. Feel special every day, feel the sky in your hands with Sky Niessen switches.



Soft white



Duna



Soft black



Silver



Taupe



Comodoro



Antic gold



Ash frame – white switch



Stainless steel







Stainless steel frame – chrome switch



Black glass frame – chrome switch



White glass frame – chrome switch



White glass



Black glass



Natural wenge frame – silver switch

Zenit Natural in its habitat

Zenit is forever a good decision, it becomes a corner stone for your projects. You can always count on it! Modular system with a wide choice of functionalities for greater comfort. Appreciated design. Various frame materials from more modest finishes to glass, steel or even slate. Blends into its surroundings or presents itself gracefully. All you need to do is choose.





Silver



Champagne



Anthracite

White



Pearl glass frame – white switch



White glass



Champagne glass frame – anthracite switch



Black glass frame – silver switches



Coffee glass frame – silver switch







Graphite glass frame – champagne switch



Slate frame – silver switch



Stainless steel frame – anthracite switch



Wenge frame – silver switch

Impressivo Zest for life

Convenient, adaptable and modular. Has got the ability to do whatever you can imagine. A modern design combined with functions which meet all requirements of contemporary living. Impressivo amazes with its flexibility. Flush and surface mounting is possible in common dry and wet environments.



White



Aluminium



Materials UV-resistant, free of PVC and halogen.

Anthracite



Swing[®]L Understated beauty

A modest combination of colours and white. A modern square design. A compelling offer of light switches and socket outlets for your daring reconstruction plans. Easy fitting thanks to their flat installation depth. Find fun in the functional.







White/white

White/light grey





lvory/ivory

White/creamy









White/brick colour



Ideal for blocks of flats and refurbishment projects, due to the small installation depth.

Tips and tricks Q&A

We are confident that you've all found your own solutions for modern wiring in your new home. Before you meet your electrician, prepare everything you want in bullets. Room by room. You can be sure the electrician will be surprised by your knowledge and will be able to meet your requirements even better. And you will achieve your dream!



Lighting and its control

- Switch
- Switch / intermediate switch
- Dimmer
 - rotary dial control
 - touch short-range control
- automatic lighting through motion



Heating – thermostats

- Individual room control
- Centrally
- Centrally and remote
- Automatic / manual control



Blinds and control methods

- Individual windows
- Group control the entire room at once
- Central throughout the house
- Automatic control based on an assessment of physical quantities



Sockets

- Think about the right number
- Use a multi-gang frame.
- Where do you use USB sockets most often?
- Data, media, audio, video, internet data we have a socket and connector for everything





Wireless remote control

Is there a place in the house that cables can't get to and it would be useful to have a light switch there? Ask for a wireless solution and attach the switch to glass, furniture, anywhere ...



Lighting for the driveway, garden, etc. Then think of the watchdog who will light up your way or reveal an uninvited guest.



Safety

- Smoke and temperature alarms
- Signalling moisture and water leaks
- Plug your electronics into surge protection sockets
- Sockets with a residual-current device
- instantly detects a malfunction in an appliance
- protects small family members from unwanted contact with electricity



Do you want to save on energy or have a light switch at hand?

- Use automatic motion switches
- Use a dimmer



Radio and sound If you want a discreet radio or play music from your mobile phone:

- In the bathroom
- In the kitchen
- In the bedroom



What do I want to emphasise and what do I need from wiring?

- Convenience
- Energy savingsSafety
- Jarety
- I need basic functions
- ${\mbox{ \bullet}}$ I put emphasis on the design of the controls
- I prefer basic features and design

Overview of devices and their designs A wide range of wiring









Device name	carat®	Busch-Dynasty®	pure stainless steel	solo®	
Rocker switch 1gang	•	•	•	•	
Rocker switch 2gang	•	•	•	•	
SCHUKO [®] socket outlet	•	٠	•	•	
SCHUKO® socket outlet with overvoltage protection	•	٠	•	٠	
Socket outlet with earth leakage circuit breaker (RCD)	•	٠	•	•	
SCHUKO® socket outlet with USB charger	•	٠	•	•	
Earth-pin socket outlet	•	•	•	•	
Dimmer with rotary control	•	٠	•	•	
Dimmer with touch control	•	٠	•	•	
Movement detector	•	٠	•	•	
Blind control switch/push-switch	•	٠	•	٠	
Blind control switch with rotary knob	•	٠	•	•	
Comfort programmable blind control	•	٠	•	•	
RF remote control	•	٠	•	•	
ZigBee wireless control	•	٠	•	•	
Thermostat with rotary control	•	٠	•	•	
Programmable thermostat with display	•	٠	•	•	
Sound system	•	٠	•	•	
TV outlet	•	٠	•	•	
Loudspeaker connection box	•	٠	•	٠	
Communication units	•	٠	•	•	
USB charger device	•	٠	•	•	
FI-DOS socket with a residual-current device	•	•	•	•	
ABB-free@home® operation	•	٠	•	•	
KNX operation	•	•	•	•	
Door entry system	•	•	•	•	



Busch-axcent®/













Busch-axcent® pur	future® linear	basic55®	Sky Niessen	Zenit	Impressivo	Swing®L
•	•	•	•	•	•	•
•	•	•	۲	٠	•	•
•	•	•	۲	٠	•	•
•	•	•				
•	•	•	•	•	•	•
•	•	•	•	•	•	
•	•	•	•	•		•
•	•	•	•	•	•	•
•	•	•	•	•	•	
•	•	•	•	•	•	•
•	•	•	•	•	•	•
•	•	•			•	
•	•	•			•	
•	•	•	•	•	•	
•	•	•				
•	•	•	•	•	•	•
•	•	•	•	•	•	
•	•	•	•	•	•	
•	•	•	•	•	•	•
•	•	•	•	•	•	•
•	•	•	•	•	•	
•	•	•	•	•	•	
•	•	•	•	•	•	•
•	•	•	•	•	•	
•	•	•	•	•	•	
•	•	•				



ABB Group

ABB Electrification Smart Buildings Division

abb.com/lightswitches

