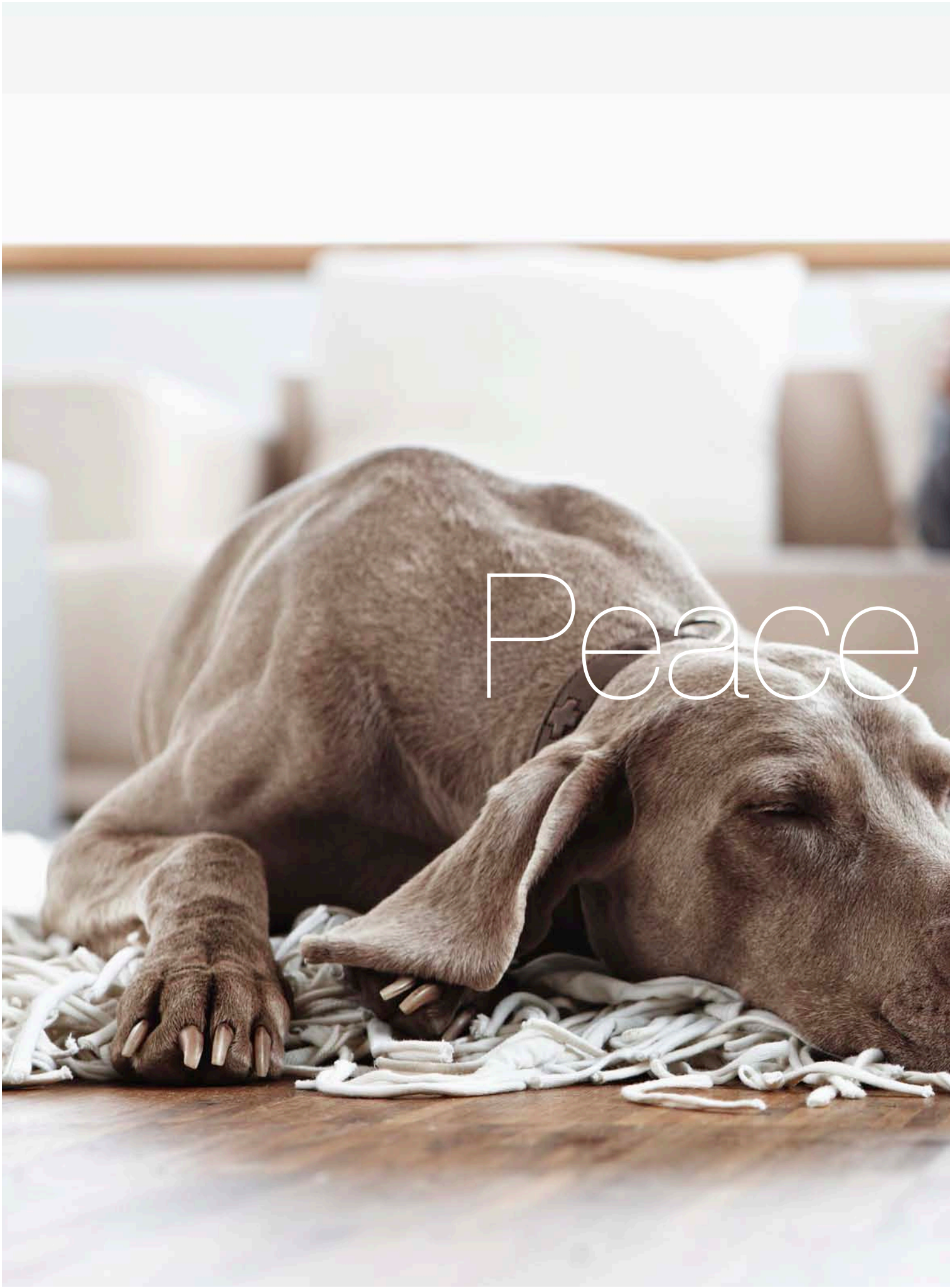
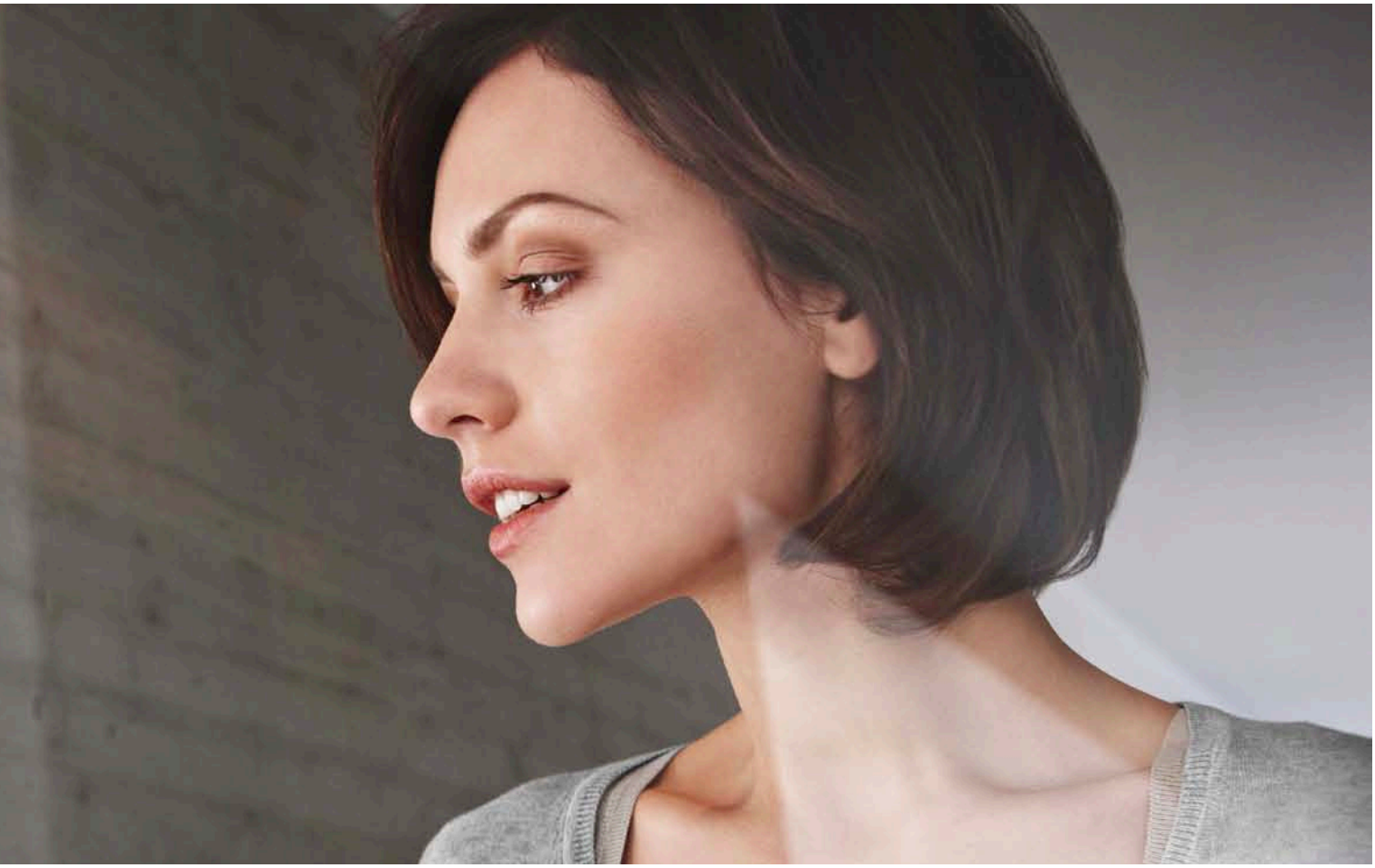
Safety with comfort
Busch-Watchdog

Power and productivity
for a better world™


Peace

of mind
you can rely on.

Wide awake day and night.
Busch-Watchdogs.



Busch-Watchdogs. These innovative and high-quality optical movement detectors by Busch-Jaeger simply make life more comfortable. They are alert, helpful, efficient. And they automatically manage many tasks in every sector of the building. Indoors and outdoors. When it comes to safety, you know precisely when the light is needed. And other functions such as heating and air-conditioning can be intelligently and reliably integrated. Busch-Watchdogs are a unique combination of design, safety, efficiency and comfort.

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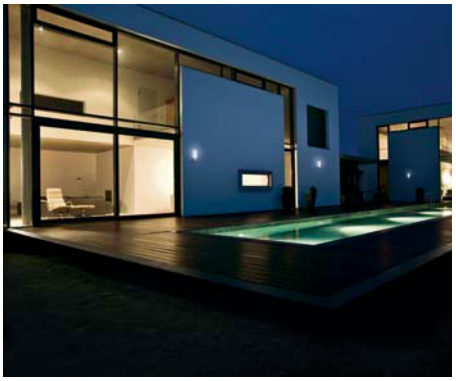

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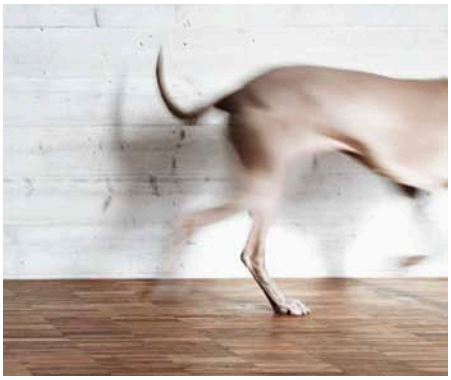

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01 Design

Optically simply perfect.
Busch-Watchdogs.

reddot design award
winner 2012

Whoever wants to design living space tastefully also makes high demands on the details. That is why progressive technology must also impress with its shape and colour. The innovative movement detectors from Busch-Jaeger are the intelligent combination of trend-setting comfort functions and inspiring design. They fascinate the observer with their modern, straight-lined design and enrich every architectural concept.

designed by
ABB

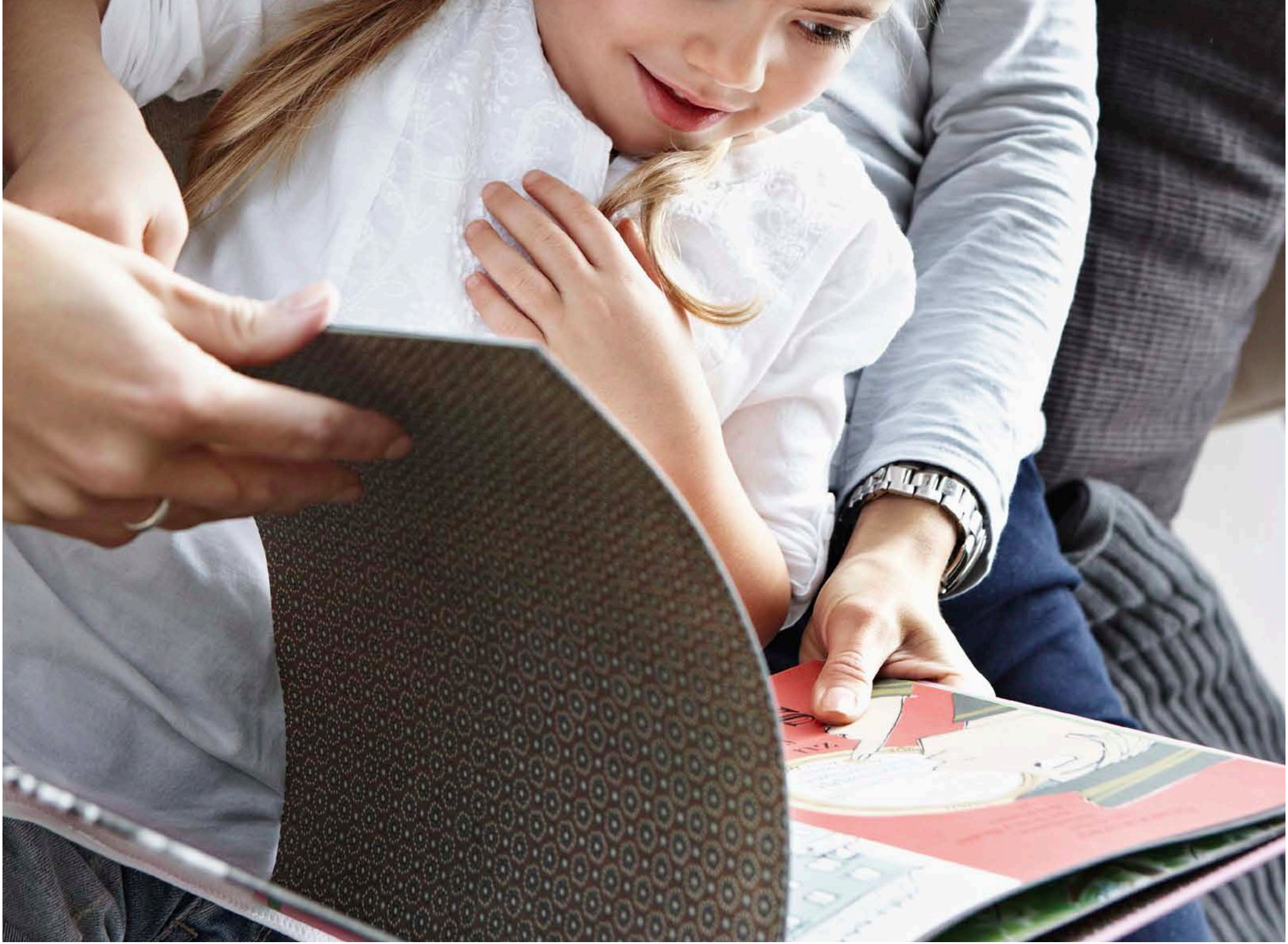
Trend-setting technology. Artistically set into the scene.

Innovative products. To set them into the scene in an optically high-class manner is no easy task. That is why we are glad to have had a world-class expert on our side for the design of the exclusive Busch-Watchdog: Hadi Teherani. The star architect has turned these trend-setting movement detectors into incomparable pieces of art. And he has impressively proved that high-class technology and exciting design harmonize perfectly.

Only the best for the best.
The internationally renowned star architect Hadi Teherani is famous for his innovative and emotional product and interior design. His special trademark: extremely high demands on himself and his objects. He has proved his unique talent for spectacular design impressively in the development of office furniture, sanitary objects, floor and wall coverings, shops, exhibition stands, a television studio and the legendary Busch-iceLight®. A unique style which harmonizes perfectly with products such as the Busch-Watchdog, Busch-MasterLight®, ABB-Welcome and Busch-priOn®.

International design standard.
This time Hadi Teherani has used his expertise and ingenuity to create the fascinating Busch-Watchdogs. His concept of clear lines perfectly matches the philosophy of Busch-Jaeger. The consistent reduction to the essential has led to the flatter corpus. The innovative devices impress with the colours white, anthracite, brown and silver metallic. And they also harmoniously integrate themselves into the most demanding architectural concept.

02
Safety



Always alert, absolutely reliable. Busch-Watchdogs.

Quality of life requires safety. Whether in the private home or in the commercial sector. Busch-Watchdogs are the perfect partner for a feeling of safety. The Busch-Watchdog 70/110 MasterLINE and Busch-Watchdog 220/280 MasterLINE range impress with intelligence, elegance and reliability. There is a large selection of various models available for the most varied applications. Whether outdoor or indoor, whether for terraced houses or industrial plants – Busch-Watchdogs keep watch day and night to ensure safety.

01

02

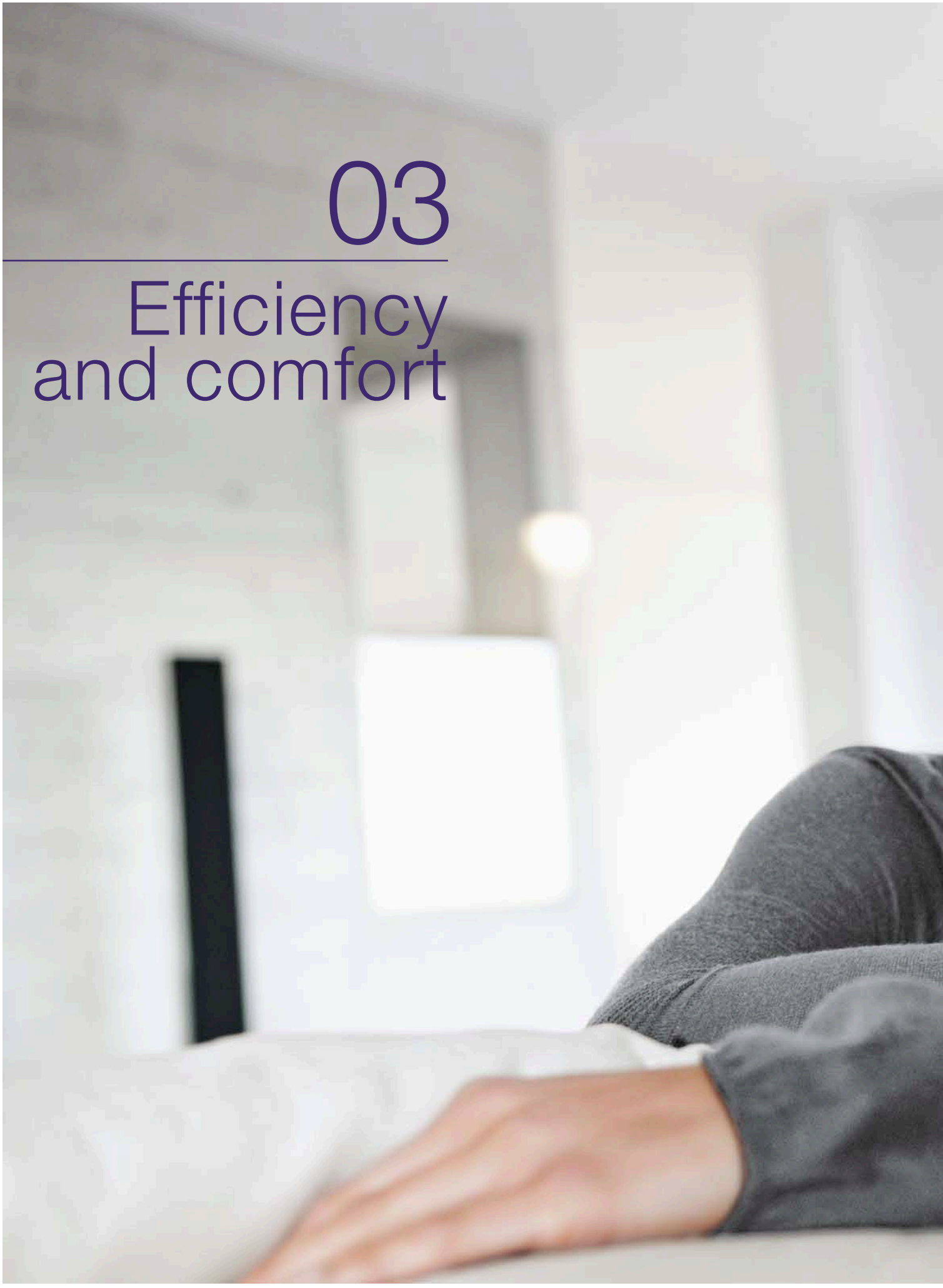
01 Busch-Watchdog 70 MasterLINE

02 Busch-Watchdog 220 MasterLINE

The pleasantness of safety.
The Busch-Watchdog not only looks good. It also impresses with its inner quality. High-quality, intelligent technology gives safety a new dimension. And it gives one a feeling of safety, inside and out. The intelligent Busch-Jaeger movement detectors miss nothing. They respond instantly when needed. For example, they detect immediately when a light is to be switched on or off, and they are a reliable signpost in the dark. These high-quality detection systems guarantee uninterrupted surveillance in all areas. They ensure that your sleep is peaceful, chase away thieves and switch the light on and off when you are on holiday.

03

Efficiency and comfort



Always there when needed. At minimal consumption.

Everything under control. With the innovative movement detectors from Busch-Jaeger for indoors one is never alone. Just like a guiding spirit they are always there when needed. For example, they reliably switch on the light when the offspring goes on a tour of discovery during the night. Busch-Watchdogs master this situation with consummate ease. And their intelligent technology also saves energy. Is it not reassuring to know that there is someone in the house who keeps watch over everything?

01

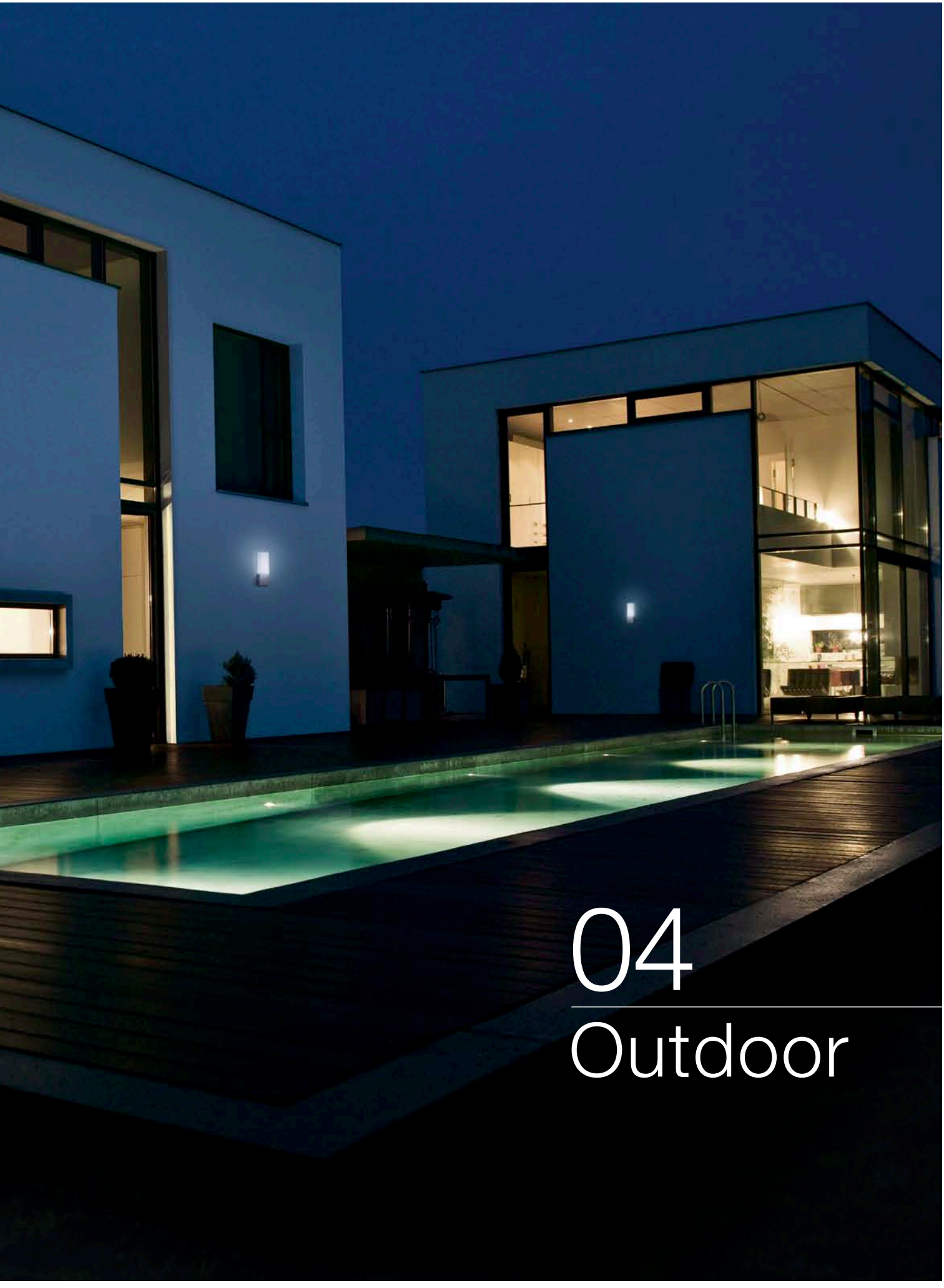
02

01 Busch-Watchdog 180 Standard, flush-mounted

02 Busch-Watchdog 180 Comfort, flush-mounted

Alert and always helpful.
The flush-mounted Busch-Watchdog 180 is really brainy, because it thinks along and knows precisely when light is required. Especially in a stairwell, hall and cellar, where one only remains for a brief period, a comfortable and automatic switching of light is very helpful. That is why the light only shines when it is really required. Which also has a positive effect on energy costs. Flush-mounted Busch-Watchdogs sense the body heat of a person entering the room and then safely light the way. And they keep an eye on efficiency. They dim the light and switch it off when it is no longer required.

They also fit perfectly into the living area. Because flush-mounted movement detectors must match perfectly with the light switch combination while at the same time reliably fulfil their detecting function. That is why they are not too flat, otherwise they would lose some of their performance for physical reasons. Nor do they protrude too far, otherwise they would appear too bulky and unaesthetic. In spite of this requirement the flush-mounted Busch-Watchdog 180 offers a coverage of up to 10 m to each side and 15 m frontal. This is what makes it an all-round talent.



04
Outdoor

» Modern aesthetics
» Superior signpost
» Innovative LED technology

Sign of the times.
The Busch-MasterLight®.

Modern style, safety and elegance. The Busch-MasterLight® is much more than merely a light at the front door. It is the modern and aesthetic opportunity to show ones true colours. This innovative lamp enhances the individual style of the house and is the perfect supplement for the new Busch-Watchdogs. It safely shows visitors the way. And with its innovative LED technology with 16 different colours it is more variable and efficient than any other lamp.

Clear, elegant optics.
The Busch-MasterLight® impresses with its aesthetic, inspiring design. And the white translucent luminary with specially developed optical fibre for uniform light distribution. For this, the slim LED lamp, which is mounted flat on the wall, is a mere 33 mm deep. That is why it matches perfectly with the new Busch-Watchdog generation and the outdoor station of the ABB-Welcome range. This also ensures a uniform design in front of the house.

The Busch-MasterLight® presents itself in the colours white, anthracite, brown and silver metallic. This is how this lamp together with its clear shape adapts itself harmoniously to all imaginable facade colours. And it can be precisely mounted on uneven stonework. And this thanks to a level adjustment, a special soft component on the rear of the wall connection box.

Exemplary efficiency.
The Busch-MasterLight® is extremely economical due to its innovative LED technology with nine LED lamps. It uses a minimum of power at a high luminosity. The luminous efficiency of the LEDs corresponds approximately to a 40 Watt incandescent lamp. This ensures adequate illumination for the entrance area of the house if it is mounted close to the door. When dusk falls the LED switches the light on with approximately 15% of the maximum brightness value. The brightness can also be automatically switched to 100%. For example, when a Busch-Watchdog detects a person approaching the house.

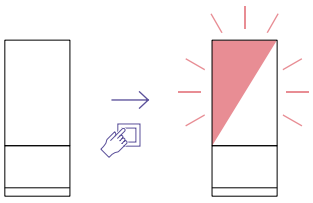
Illuminatingly different.
The Busch-MasterLight® can set to 16 different colours. For example, to match the facade or set a special accent. It is made possible due to the different colours of the LEDs. The Busch-MasterLight® uses five white LEDs and four LEDs the colours of which are adjustable. The mixing of white, red, green and blue light results in new shades of colour. This is another advantage of the innovative LED technology, in addition to energy efficiency.

House number included.
The house number can be clearly seen from a distance. It can be easily fixed to the luminous area with self-adhesive numbers and letters which also match the design.

Precise and straight.
The Busch-MasterLight® has a 3-point rear side made of aluminium. This allows it to be mounted precisely on uneven stonework. The desired colour of the light can be set via the extension unit input in the house with the push-button. It simultaneously serves as a panic button to activate the red and white flashing emergency-call signal. When required, the push-button can also be used to immediately set the light to 100% intensity, as well as adjust the colours.

» Modern design
» Light colours are adjustable
» Dusk light
» Emergency-call signal

It's a matter of personal taste.
The Busch-MasterLight®. It invites to a game with colours and always shines anew on request. 16 different shades of colour are available for selection, which can be varied according to wish and mood. This allows you to keep setting the entrance area colourfully into the scene.



Alarm function.
The alarm function is activated by pressing on the auxiliary switch. The lamp in this case flashes red and white. This alerts the neighbours, passersby and the rescue services to the site of an emergency. Even without knowing its function the rescue services are definitely made aware of the flashing light. They recognize the glued-on house number and quickly find the right direction. A new press of the button cancels the alarm function.

Ideal for terraced houses. Busch-Watchdog 70 / 110 MasterLINE.

Sure's sure. The two models Busch-Watchdog 70 MasterLINE and Busch-Watchdog 110 MasterLINE are movement detectors with a reduced detection range. This makes them ideal for use in small terraced houses. Due to the small distance between the pavement and the house, it prevents the light from being constantly switched on when persons pass the house. Or when someone moves on the neighbouring property. They offer a homogeneous range of twelve meters toward the front and four meters toward each side. Four detection levels provide precise detection also during a frontal approach.

Busch-Watchdog 70 / 110 MasterLINE.
» Modern design
» Especially for terraced houses
» Reduced detection range
» High-quality switching relay
» Remote operation and remote parameterisation (only Busch-Watchdog 110 MasterLINE)

The colour to match the facade.
The Busch-Watchdog 70 / 110 MasterLINE models are available in modern colours – white, brown, anthracite and silver metallic. For harmonious interaction with every architectural style.

Easy and fast to install.
The movement detector can be easily positioned onto the wall connection box by latching it. And it can be protected against dismantling by means of an additional screw connection. The universal cable feed options make the devices suitable for all types of installations. The cable connections are made only after the bottom part of the device has been mounted.

Easy to adjust.
The coverage of the Busch-Watchdog 70 / 110 MasterLINE amounts to 12 m toward the front and 4 m to each side. Important functions of the Busch-Watchdog 110 MasterLINE, such as continuous light On, continuous Off, presence simulation, saving of brightness switching threshold, are easy and especially comfortable to operate with the IR remote control. The functions of both models can be set directly on the device. The convenient status display on the device, for example, informs about the duration of the Off status of the Busch-Watchdog. The LED is located behind the lens and can also be easily seen from a distance. Useful: switch-off delay and brightness switching threshold can be adjusted separately.

Information about the remote control is available on pages 62 – 63.

Everything safely under control. Busch-Watchdog 220 / 280 MasterLINE.

Design and function. Due to modern, pure optics these innovative movement detectors adapt to every environment. Optimal for larger properties and free-standing houses. They also impress with elegant, modern colours: white, anthracite, brown and silver metallic. A special feature is the easy, time-saving installation due to simple latching onto the wall connection box. Both models can also be remotely operated with the IR remote control.

01

02

01 Busch-Watchdog 220 MasterLINE

02 Busch-Watchdog 280 MasterLINE

All-around safety.
The detection range is 220° / 280° and the coverage 16 m to all sides. Four detection levels, no gaps in detection, detection at two sides of the house with the aid of the corner adapter (only Busch-Watchdog 280 MasterLINE).
Including ground and rear-field detection, creep zone protection and switch-on of light when stepping out of the door.
In contrast to the Busch-Watchdog 220 MasterLINE the Busch-Watchdog 280 MasterLINE offers a wider lens and a larger detection angle of 280°. All loads can be connected, maximum 3,680 W/VA.

A multitude of functions and simple to operate.
The models are, like all Busch-Watchdogs, easy to operate. They additionally offer interesting functions such as operating mode, twilight setting, switch-off delay and short-time pulse. Also the automatic range stabilisation remains constant during different outdoor conditions. Busch-Watchdog 220 / 280 MasterLINE impresses with automatic interference suppression and presence simulation – ideal during the holiday period. Another advantage: even more safety with dismantling obstacle.

Busch-Watchdog 220 MasterLINE including IR remote control
The convenient IR remote control comes with this versatile movement detector and makes safety even more comfortable. It is used to control functions such as continuous light On, continuous Off or early return of continuous light into the previous operating mode. It can be used to activate or deactivate the presence simulation and save the current brightness value as brightness threshold value. On the device itself the functions such as operating mode, twilight setting, switch-off delay and short-time pulse for activating the stairwell timer switches are activated. This model is also a special attention-getter. It surprises with its extravagant dark lens.

Information about the remote control is available on pages 62 – 63.

Busch-Watchdog 220 MasterLINE.
» For free-standing buildings
» Display for detection and operation mode
» Detection range 220°, 16 m towards all sides
» Remote operation and remote parameterisation
» Dismantling obstacle

Busch-Watchdog 280 MasterLINE.
» For the surveillance of two sides of the house
» Display for detection and operation mode
» Detection range 280°, 16 m towards all sides
» Remote operation and remote parameterisation
» Dismantling obstacle

Exclusive safety. Busch-Watchdog 220 MasterLINE premium.

High-quality technology. Award winning design. The Busch-Watchdog 220 MasterLINE premium impresses with its comfortable functions. Continuous light On, continuous Off, presence simulation and saving of brightness switching threshold are easy to activate on the device or comfortably operate with the IR remote control. It additionally offers a 2-zone operation and a second switching output. A first-class movement detector to match high-class architecture.

» For first-class architecture
» Display for detection and operation mode
» Remote operation and remote parameterisation
» Dismantling obstacle
» Additional, floating switch contact
» Integrated twilight switch
» 2-zone operation

Fast and safe to install.
The installation is particularly easy due to latching onto the wall connection box. The device can also be protected against direct dismantling by means of additional screw connection. Its is compatible with the mounting holes of all previous Busch-Watchdog models and offers a wall connection box with level adjustment. Universal cable feed options are added to this. The 230 V devices or small loads (e.g. 12 V devices) can also be connected without difficulty via the additional, floating contact.

Comfort at the press of a button.
The convenient IR remote control saves unnecessary movement. It can be used to comfortably set and control all important functions from any location in the room.

Information about the remote control is available on pages 62 – 63.

Optically and technically trend-setting.
With the Busch-Watchdog 220 MasterLINE premium the second switching output can be used as a twilight switch independent of movement. Thus the front door or ambience illumination is switched on at twilight and off again in the morning when there is sufficient brightness according to the times of sunrise or sunset. Even non-typical twilight, which is caused by seasonally bad weather, is automatically taken into consideration by the system. In addition, the second switching output can be combined with a timer to occasionally switch-off the illumination at night, between 1 a.m. and 5 a.m. for example. Alternatively, also a camera can be connected to the second switching output. If a visitor gets too close to the house, the second output is activated and one could start the recording of an outdoor camera. A special safety aspect is the 2-zone operation. In case of an approach, the path lighting is switched on, and if a person further approaches the house, the entrance lighting is switched on. When a person moves away from the house it functions in reverse order. Also the simultaneous switch-on of both types of illumination can be selected.

Four detection levels provide perfect surveillance in all situations. This includes setting options such as creep zone protection and switching on when stepping out of the door. The detection range is 220° and the coverage 16 m to all sides.

Extra flexible.
Busch-Watchdog 220 WaveLINE.

Subdued and intelligent. The distribution of the sensor and actuator function to two devices opens up totally new possibilities for application. The sensor can be mounted in any location – preferably where it has the best overview. And it is so economical that its high-performance batteries last up to 10 years. If it detects a movement, it transmits the switch-on signal to the built-in actuator, which can even be installed in a deep flush-mounted wall box underneath a push-button. Of special interest: Since this rather flexible movement detector operates with batteries and does not require any cables, it can be retrofitted at any time without a problem.

» For properties without a clear overview
» Cableless retrofitting
» Wireless transmitter for ideal positioning in the detection range
» Detection and status indication
» Battery operation for line-independent installation

01 WaveLINE LED display

02 Built-in receiver WaveLINE

Variable and alert.
The detection range is 220° and the coverage 16 m to all sides. Several Busch-Watchdogs 220 WaveLINE can be assigned to a single actuator. This allows angled and hilly areas to be completely monitored. The device operates without cables. This opens up entirely new methods of application. The sensor can be mounted at any conceivable location.

The batterie test is carried out on the device. The transmission of a low-battery telegram is possible. If it detects movement it transmits the switch-on signal to the built-in actuator. The wireless design of the Busch-Watchdog 220 WaveLINE makes it suitable not only for an optimal installation in a complex detection range, but also for retrofitting, which would be impossible with a cable-bound device.

» Two movement channels for evening/night
» KNX-based
» Up to three switching thresholds during twilight
» Precise detection during frontal approach

Especially comfortable. Busch-Watchdog 220 MasterLINE KNX.

The new quality of safety. The Busch-Watchdog 220 MasteLINE KNX has everything that is expected of movement detectors. Intelligent technology combined with modern aesthetic design. With this technically high-quality, surface-mounted device you can control, monitor and integrate lights, blinds, heating and many other areas of modern building automation.

Design and comfort.
The Busch-Watchdog 220 MasterLINE KNX is a KNX bus-based installation device for house networking. It impresses with comfortable operation and the Powertool for simplifying device programming. Only the most important parameters are displayed, the remainder must be activated as required. Excellent detection even during twilight. The twilight switch is not influenced by other lighting.

Nothing escapes its notice.
The detection range is 220° and the coverage 16 m to all sides. No gaps in detection, homogeneous, large detection range. Four detection levels with precise detection also during frontal approach. Additional ground and rear-field detection. Even in case of changing outdoor conditions the Busch-Watchdog 220 MasterLINE KNX keeps the range constant. And the automatic interference suppression serves to prevent undesired activations. For example, when a tree moves in the wind and the leaves rustle. An important detail to prevent the movement detector from being constantly triggered during a storm.

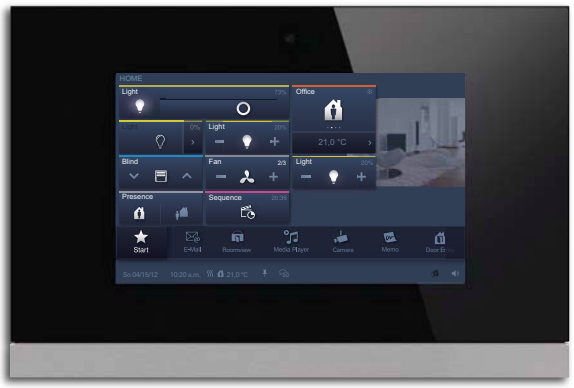
Easy to install and operate.
The Busch-Watchdog 220 MasterLINE KNX offers setting options such as the twilight switch, creep zone protection and activation when stepping out of the door; it has two movement channels for evening and night and is extremely flexible in its application. The wall connection box has a level adjustment for uneven walls as well as six cable entries.

Technology of the highest standard. Busch-Watchdog 220 MasterLINE KNX premium.

Even more comfort. With bus-based KNX technology. With four movement channels for day, evening and night. Twilight and brightness switch with up to three switching thresholds. It offers ten logic functions to implement complex scenarios. Together with the Busch-ComfortTouch® the entire house can be controlled – even via remote control.

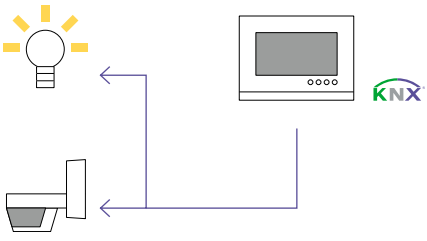
Everything under control everywhere.
The convenient IR remote control KNX ensures comfort all around. With it one has everything under perfect control from anywhere around the house and can reliably and quickly create optimum conditions. That saves annoying movements and creates a new dimension of the highest level for experiencing the modern living style.

Information about the remote control is available on pages 62 – 63.

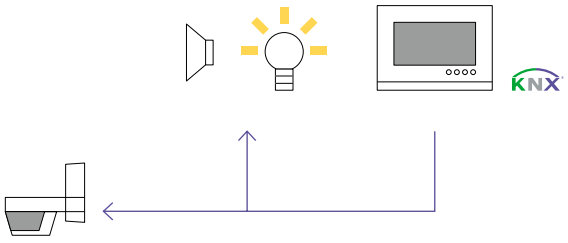


Manager of the house.
The new Busch-ComfortTouch® 9 and 12.1 are multifunctional switching centres for the entire house. This perfect comfort control makes everything easier to operate and is at the same time the modern indoor video station for the ABB-Welcome system. The large, clearly arranged display allows the light, heating, air-conditioning, blinds, safety, entertainment, information and the intercom to be easily checked and controlled. In the individual rooms as well as in the entire building. Available from 2013.

» Four movement channels
» KNX-based
» Twilight and brightness switch
» Ten logic functions
» Temperature sensor with up to three switching thresholds
» Remote operation



Firsthand information.
Together with the Busch-ComfortTouch® the Busch-Watchdog makes everyday life even more comfortable and safe. They reliably watch indoors and outdoors – not even the smallest movement escapes their detection. For example, if a person enters the surveillance sector the Busch-Watchdog instantly sends this information to the Busch-ComfortTouch®. In this way you are informed even before the doorbell rings.

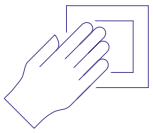


Additional safety.
An additional option for optimising safety is offered by an additional controllable switching output. As soon as someone enters the safety zone of the house an optical or acoustic alarm signal is triggered in addition to the activation of the light. In this way you are doubly informed when someone uninvited is in the house.

Greater mobility. Greater flexibility.
The remote control for the entire house. Busch-ComfortTouch App. Available for smartphones and tablets. Available from April 2013.

05
Indoor

Perfect support.
Busch-Comfort switch.



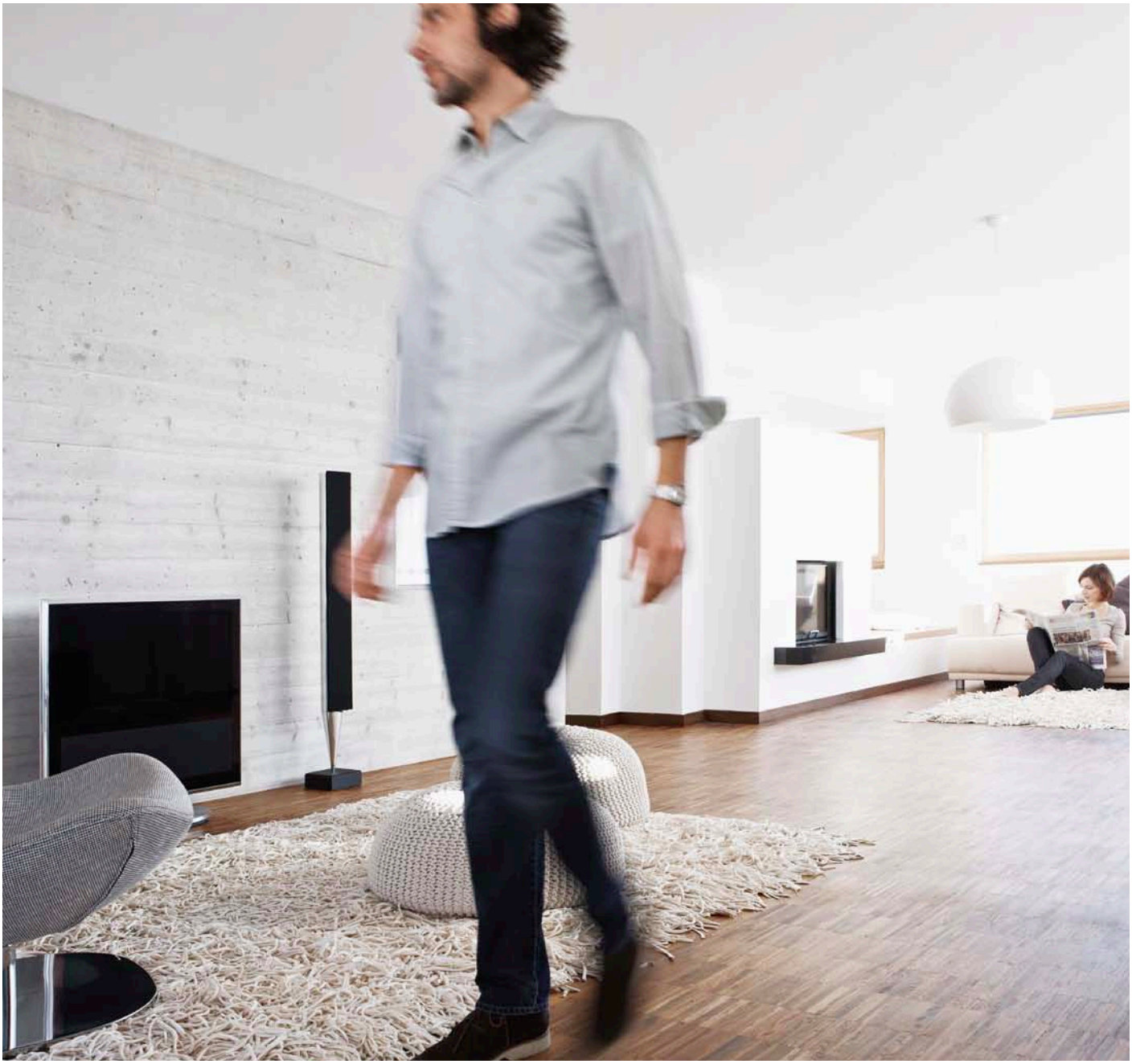
Functional and attractive. The elegant Busch-Comfort switch can be operated just like a normal light switch, without affecting the automatic mode. However, it offers interesting functions which have not been available in a device of this type up to the present. It can be switched contact-less, manually or time controlled. The Busch-Comfort switch demonstrates what is expected of technology today. At an excellent price-performance ratio.

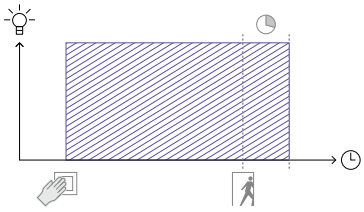
Always a solution that convinces.
The Busch-Comfort switch offers different comfort stages for each requirement. For example, it can be used as fully automatic. In this case it switches the light on and off independently when a movement is registered. And the semi-automatic version leaves the light on until it is switched off manually.

Always at the right time.
Busch-Comfort switches also operate ideally as automatic time control. With this version the light is switched with the press of a button and switched off again after a pre-programmed time if no movement is registered. Of course, they can also be used as a normal light switch that only responds to manual operation.

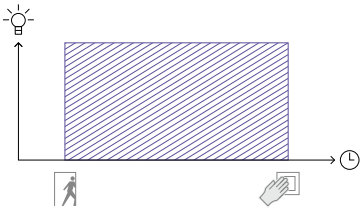
Informative and stylish.
The integrated sensor does not catch the eye because of its flat construction. And an LED in the lens informs everyone who enters or leaves the room that the light switch must be operated manually. Very useful. The LED at the same time serves as a light for orientation and is therefore a safe signpost in the dark. Aside from their technical qualities the Busch-Comfort switches are also beautiful. Their design impresses with straight-lined, timeless elegance and matches every living room concept. It is available in almost all Busch-Jaeger switch ranges.

Everything under control.
The Busch-Comfort switch sees everything. And no wonder, with a detection range of 5 m frontal and 3 m lateral.

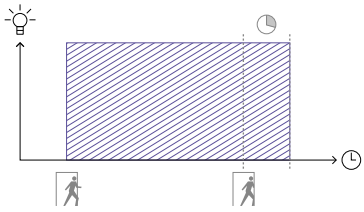




Time comfort.
Manually on, but switching off automatically.
For stairwells as staircase light timer switch. You come home and the light is still on because someone else just came through the corridor. After a few steps you are suddenly in the dark because the set time has expired. The innovative Busch-Watchdogs reliably prevent such, at times dangerous, situations from occurring. They register again when a person is in the corridor and start the selected switch-off delay anew.



Medium comfort.
Automatic on, but switching off manually.
The angled cellar or workroom. Busch-Comfort switches turn on the light automatically and leave it switched on as long as you need it. If you do not move or you temporarily leave the detection range, the light remains switched on. This allows you to concentrate on your work and decide yourself when it needs to be dark again.

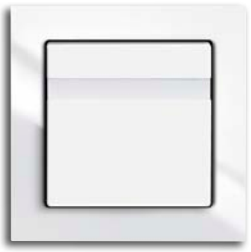


Maximum comfort.
Never switch by hand again.
For transit rooms such as corridor, cellar and toilet. The light is switched on automatically when someone enters the detection range. The switch-off delay can be selected between one to ten minutes. Special safety: If a person again passes through the detection range, the timer setting starts anew from the beginning. Also the brightness threshold from which the light switches itself on can be adapted to the prevailing conditions. This gives you freedom and flexibility – even when the light conditions change. Busch-Comfort switch relay inserts can also be switched in parallel.

Elegance and intelligence.
Busch-Comfort switch.

01

02



03

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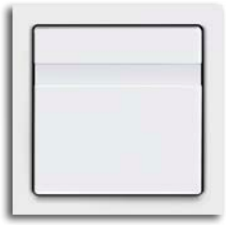


06

07

08

01 Busch-Comfort switch, switch range carat®

02 Busch-Comfort switch, switch range **solo®**

03 Busch-Comfort switch, switch range Busch-***a**xcent®*

04 Busch-Comfort switch, switch range *alpha*

05 Busch-Comfort switch, switch range ***pure** stainless steel*

06 Busch-Comfort switch, switch range future® linear

07 Busch-Comfort switch, switch range Reflex SI Linear

08 Busch-Comfort switch, switch range Reflex SI

Intelligent sensor.
An LED in the lens indicates to every one entering or leaving the room that the switch must be activated manually. The LED at the same time serves as an orientation light to be able to find the switch quickly and safely.

2-wire insert without relay.
Depending on the type of load, the 2-wire insert can be used in all installation conditions, even when there is no neutral conductor available in the flush-mounted wall box. However, not all types of lamps can be switched. For example, it cannot switch energy-saving lamps, fluorescent lamps and LED lamps. The load limit of the 2-wire insert is 300 W/VA.

Relay insert.
For switching universal loads up to 2,300 W/VA. Is also suited for fluorescent and energy-saving lamps.
This now makes the Busch-Comfort switch suitable for all types of loads and usable almost anywhere.

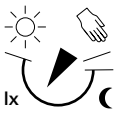
09 10

09 Busch Comfort-Switch insert, 2-wire connection

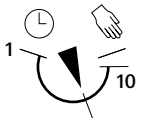
10 Busch Comfort-Switch insert, 3-wire connection

Flexibility in application.
Its intelligent extension unit input makes it possible to integrate it into almost all two-way and intermediate switches. Only the remaining two-way and intermediate switches need to be replaced by push-buttons. For extension unit operation the existing wires of the two-way and intermediate switches can be used. The 2-wire insert is ideally suited for retrofitting. And the relay insert makes it possible to connect universal loads. Exemplary. No matter which function is preferred, the Busch-Comfort switch displays itself as a normal light switch and is just as easy to operate.

Comfort is just a matter of the right setting.
Busch-Comfort switches make life easier and more beautiful. The numerous setting options fulfil every wish for perfect light control. And at the same time they automatically care for comfort, safety and efficiency throughout the entire house.



Switches on light when required.
With the handwheel you fix at which brightness or twilight situation the device is to respond. The further the potentiometer is turned in the direction of the moon, the darker it must be for the Busch-Comfort switch to respond. That is why it will switch more infrequently the darker it has been set. If the Busch-Comfort switch is not to switch on automatically at all, even during absolute twilight, it should be turned beyond the moon. It can now only be switched on manually.



Switches the light off when required.
This potentiometer is used to define the switch-off delay in minutes after the last detection of movement. If the maximum switch-off delay of ten minutes is not sufficient, it may be turned up to the hand icon. This means that the light must now be switched off manually.

Hands free for the important things. Busch-Watchdog 180, flush-mounted

The convenient home help. The flush-mounted Busch-Watchdog 180 is the ideal movement detector for the stairwell, hall and large rooms without a clear overview. They react as soon as they register body heat. And they leave no one standing in the dark.

01

02

01 Busch-Watchdog 180 Standard, flush-mounted

02 Busch-Watchdog 180 Comfort, flush-mounted

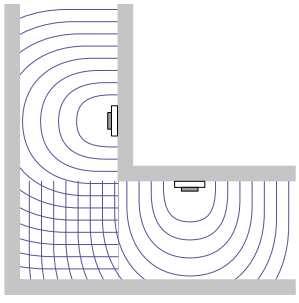
The optimum shape.
A flush-mounted movement detector must match perfectly with its surroundings while at the same time reliably fulfilling its detecting function. The flush-mounted Busch-Watchdog 180 Standard and the flush-mounted Busch-Watchdog 180 Comfort are optimally designed for this. Not too flat and not to high. Nothing escapes their notice. The flush-mounted Busch-Watchdog 180 Standard is available in the design of the Reflex SI Linear switch range. The flush-mounted Busch-Watchdog 180 Comfort on the other hand is available in almost all Busch-Jaeger switch ranges. It additionally has a comfortable sliding switch for individually setting the light control.

Everything under control.
The flush-mounted Busch-Watchdog 180 offers a large range of effectiveness, especially during a frontal approach. As soon as someone enters the door, the switching process is triggered. It switches off automatically when exiting. The detection angle is 180° and extends laterally up to the wall. In spite of its compact dimensions it has a transmission range of 12 m frontal and, depending on the model, from 5 to 8 m lateral. Depending on the spatial conditions, the connection of an additional movement detector is recommended, which is connected as auxiliary post. For example, when an area that does not lie within the detection range is accessed.

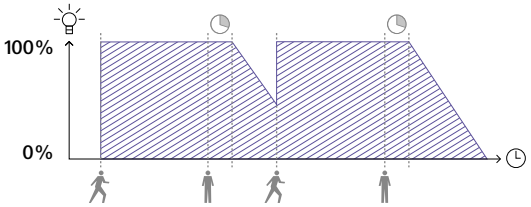
Intelligent combination.
The flush-mounted Busch-Watchdog 180 Comfort in connection with a Busch-Dimmer® does not switch the light off suddenly, but dims it slowly within a period of 60 seconds. The switch-off delay time and twilight value can be flexibly set, it is freely selectable up to 30 minutes.

Three lenses for each surveillance situation.
Depending on design and application the Busch-Watchdog models have three different lenses: select lens, multi-lens and combination lens. With the select lens, for example, domestic animals are not detected in the lower area, the multi-lens also detects persons that are on the stairs and the combination lens detects every angle of the surveillance area.

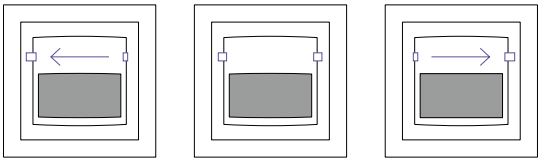
Information on the lenses is available on pages 80 – 81.



Application of main and auxiliary unit.
If more than only one movement detector is required, additional movement detectors can be installed using extension inserts. This is a convenient solution for windy cellars or L-shaped corridors.



Light whenever needed.
The flush-mounted Busch-Watchdog 180 Comfort does not switch the light off suddenly but, in connection with a Busch-Dimmer®, dims it slowly within a period of 60 seconds. It does this as soon as it no longer detects movement and the set switch-off delay has expired. This switch-off warning means that one does not immediately stand in the dark but has the opportunity to move into the detection range which then switches back to 100% brightness.

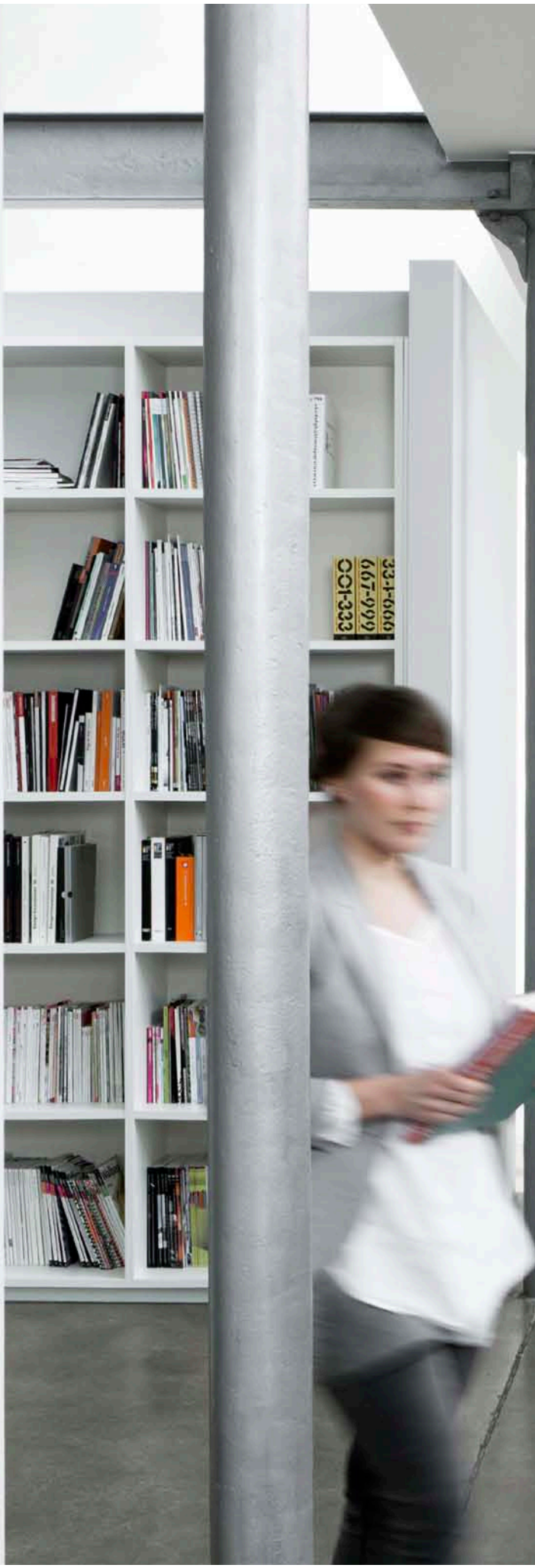


Off | Automatic mode | On

Slide switch.
Continuous light, no light, or automatic mode can be individually selected using the flush-mounted Busch-Watchdog 180 slide switch.

06

Industry solutions



A good workmate.
Reliable and efficient.

Saving costs with innovation. Not only lighting systems but heating systems and air-conditioning systems can be controlled intelligently and efficiently with the presence detector. The choice of the right model depends on the height of the ceiling, the size of the room, the installation situation and the type of movement to be detected. This is because in corridors that are in continuous use there are other detection situations than in offices in which sometimes only the fingers move on a keypad.

01 02 03 04

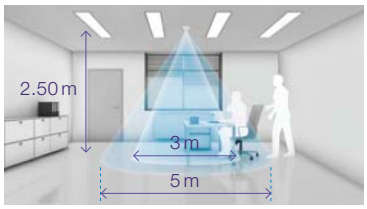
01 Busch-Watchdog Presence tech

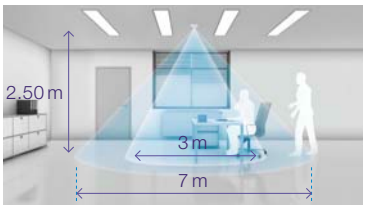
02 Busch-Watchdog Presence tech BasicLINE Corridor

03 Busch-Watchdog Presence tech BasicLINE

04 Busch-Watchdog Presence tech BasicLINE mini

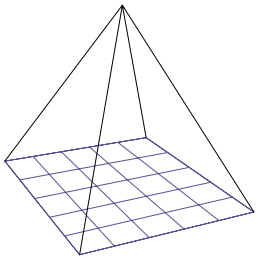
Efficiency at the workplace. Busch-Watchdog Presence tech.





Products	Busch-Watchdog Presence tech BasicLINE mini	Busch-Watchdog Presence tech BasicLINE
Article number	6811 EB-500	6814 U-500
Incandescent lamps	2,000 W	2,000 W
Halogen load and fluorescent lamp	max. 1,000 W/VA[3]	max. 1,000 W/VA[3]
Compact fluorescent lamp	7 W – 400 W	7 W – 400 W
IR remote control[4]	–	–
External pushbutton input	–	**X**
Detection LED[1]	X	X
Operation mode[5]	A	A/HA
Detection range[2]	5 m	7 m[10]
Max. mounting height	5 m	4 m
Protection class	IP 20	IP 40
Sensitivity of inner cones[8]	High	High
Sensitivity of outer cones[8]	Medium	Medium
Ceiling mounting without VDE box	X	X
Surface mounted (plaster)	–	–

The ideal manager. For large-scale offices, underground car parks or dark corridors. Busch-Watchdog Presence tech perfectly controls not only lighting systems but also heating, ventilation and air-conditioning systems. With the utmost efficiency. They become active at the slightest movement. Result: Connected loads are available precisely when they are required. Without having to pre-define individual habits of use or work processes.



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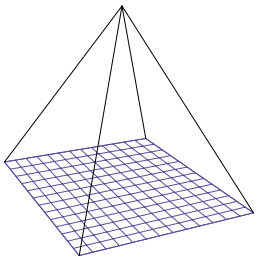
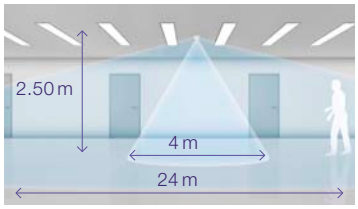


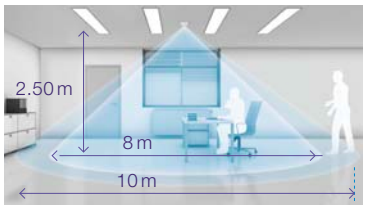
02

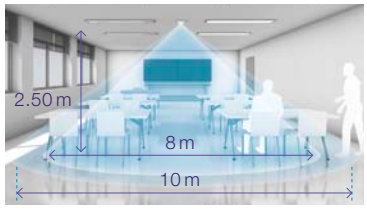
There is no better way.
The detection system consisting of four sensors and mirrors is far superior to conventional movement sensors. Even the smallest movement is reliably detected and triggers a response.

01 Detection system of conventional movement detectors

02 Busch-Watchdog detection system







Busch-Watchdog Presence tech BasicLINE Corridor	Busch-Watchdog Presence tech Busch-Watchdog Presence tech DualLINE	Busch-Watchdog Presence tech KNX Busch-Watchdog Presence tech DualLINE KNX
6818 U-500	6813-101-500 / 6813/11-xx-500	6131/10-500 / 6131/11-500
2,000 W	max. 2,300 W[7]	–
max. 1,000 W/VA[3]	max. 2,300 W/VA[7]	–
7 W – 400 W	7 W – 500 W / max. 20 pieces[7]	–
6843	6010-25-500	– / 6010-25-500*
X	X[6]	–
X	–	–
A	A/HA	A, ZA, HA, M
24 m (tangential) / 8 m (central)[10]	8 m	8 m
3 m	8 m	8 m
IP 40/54[9]	IP 20	IP 20
High	Very high	Very high
Medium	High	High
X	–	–
IP 54 with surface-mounted housing (6888)	IP 20 (6885-xxx)	IP 20 (6885-xxx)

[1] Only in test mode
[2] Detection range (2.5 m installation height)
[3] CFL 7 W – 400 W
[4] IR remote control to be ordered separately
[5] A = automatic mode, M = manual mode, ZA = automatic time control, HA = semi-automatic
[6] With the following flush-mounted inserts: 6401 U-102-500 (2,300 W/VA, 3-wire connection system) / 6402 U-500 (2,300 W/VA, 3-wire) 6804 U-101-500 (60 – 420 W/VA, 2-wire connection system) / 6593 U-500 (60 – 420 W/VA universal dimmer) and 6550 U-101-500 (700 W/VA, 1 – 10 V DC, max. 50 mA DC for ballast)
[7] Dependent on flush-mounted insert 6401 U-102-500 (2,300 W/VA, 3-wire connection system) / 6402 U-500 (2,300 W/VA, 3-wire connection system) / 6812 U-101-500 (700 W/VA 3-wire connection system) / 6804 U-101-500 (60 – 420 W/VA, 2-wire connection system) / 6593 U-500 (60 – 420 W/VA universal dimmer) and 6550 U-101-500 (700 W/VA, 1 – 10 V DC, max. 50 mA DC for ballast)
[8] Sensitivity of detection: very high = movement of hand, high = movement of arm, medium = walking movement
[9] Use with surface-mounted housing 6888-500, * Busch-Watchdog Presence tech DualLINE
[10] The detection range with a central approach is reduced

Light, when it is needed.
And the reverse.

Illumination that thinks along. In offices, hotels or public buildings light must function reliably and safely. But only when it is actually needed. Unnecessary switching of light means additional use of energy. The intelligent Busch-Watchdogs handle this task impressively and especially economically in all areas.

01 Busch-Comfort switch

02 Flush-mounted Busch-Watchdog 180 Comfort

03 Busch-Watchdog 180 All-Weather, flush-mounted

The Busch-Comfort switch.
The Busch-Comfort switch can be operated just like a normal light switch. It offers different comfort stages and with it various options for individual light control. It can be switched contact-less, manually or time controlled. The Busch-Comfort switch can be used in automatic mode. When it registers a person, the light is switched on.

Busch-Watchdog 180 Comfort, flush-mounted.
Continuous light, almost no light, or automatic mode can be individually selected directly on the device using the slide switch. Optionally, the slide switch can be set to automatic mode using a screw on the rear side and locked against unauthorized switching.

Busch-Watchdog 180 All-Weather, flush-mounted.
They are of useful assistance in wet rooms such as industrial kitchens or underground car parks. They switch the light automatically on and off. And since it can get wet rather quickly here during cleaning work, the flush-mounted Busch-Watchdog 180 All-Weather is protected against water splashes. That is why it always functions, and is not only attractive but also very safe.

To ensure the business keeps operating. Busch-Watchdog 220 MasterLINE select.

Smart and alert. The small disc-type surveillance zone makes the Busch-Watchdog 220 MasterLINE especially attractive for applications in the commercial sector. The detection range is 220° and the coverage 16 m to all sides. At the appropriate installation height it additionally offers a 1-meter-high area from the ground in which no detection is carried out. However, if a person approaches, it responds immediately. It additionally offers functions such as continuous light On, continuous Off, presence simulation or storage of the brightness switching threshold, which can be activated/deactivated via the IR remote control. It is suitable for mounting on walls and ceilings.

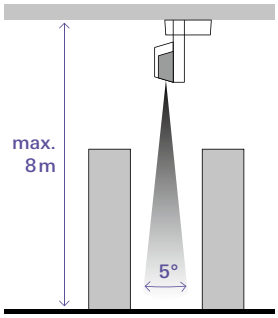
01

02

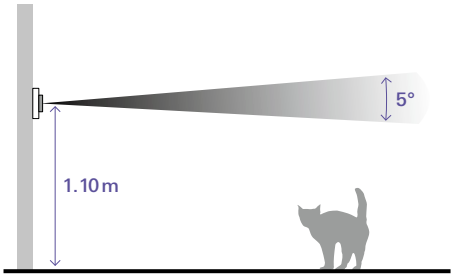
01 Busch-Watchdog 220 MasterLINE select, side view

02 Busch-Watchdog 220 MasterLINE select, bottom view

» For commercial systems
» Disc-type detection level
» Display for detection and operation mode
» Remote operation and remote parameterisation
» Dismantling obstacle
» Curtain function due to detection characteristics



Precise surveillance.
The ceiling installation is suitable especially for the precise surveillance of warehouse thoroughfares and parking areas. The detection range operates like a curtain. It is also ideal for private buildings in the country where wild animals move around. They don't normally come so close to the house that they enter the detection curtain. This prevents false triggering.

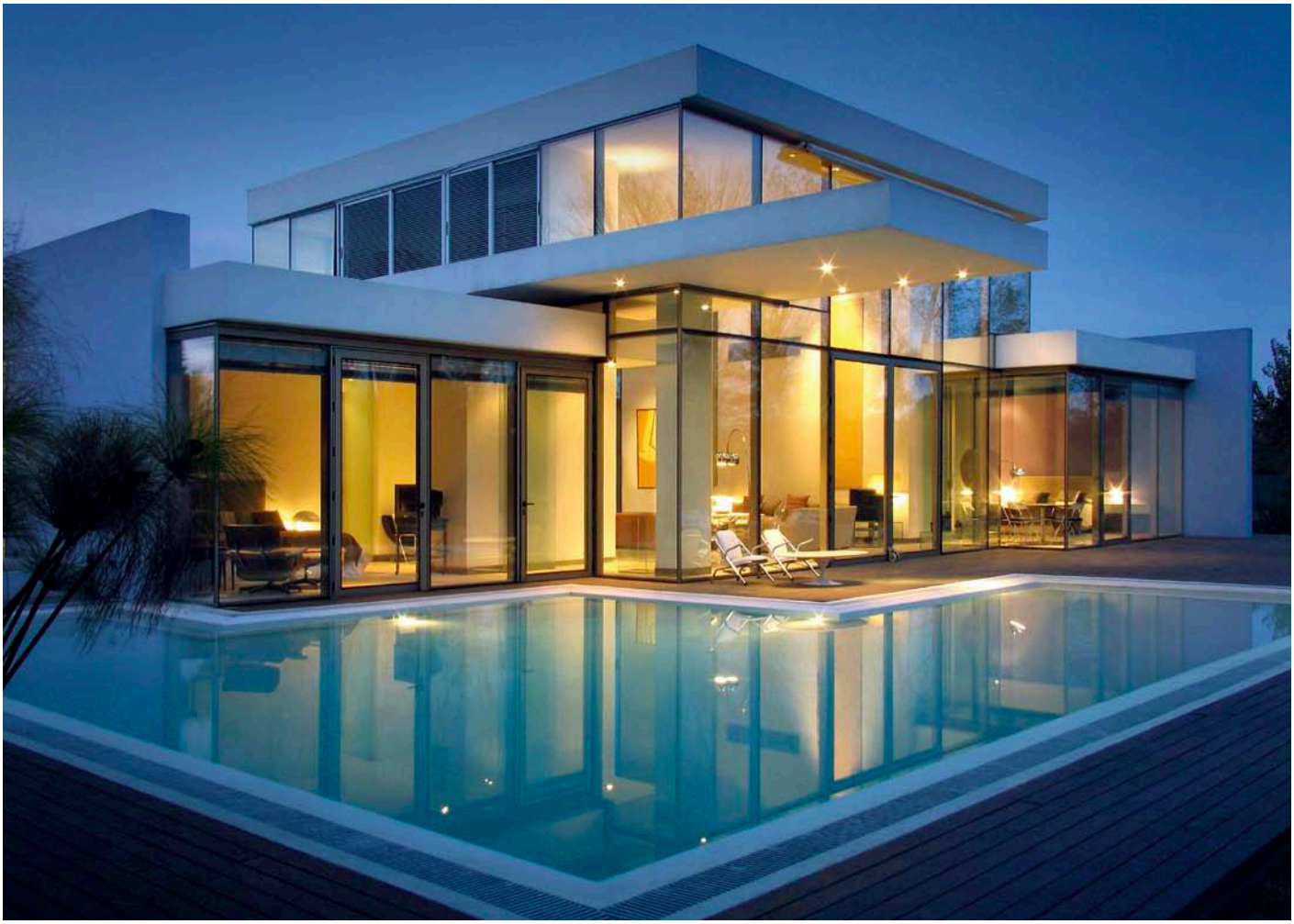


Sees everything except small animals.
The perfect partner for comfortable indoor surveillance. At an installation height of 1.10 m with horizontal alignment the flush-mounted Busch-Watchdog 180 does not detect small animals.

07
Range

designed by
ABB

Easy to install anywhere. Busch-Watchdogs.



01

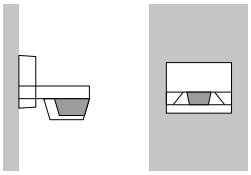
02

01 Busch-Watchdog 70 / 110 MasterLINE

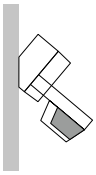
02 Busch-Watchdog 220 / 280 MasterLINE

A Busch-Watchdog simply sees everything. This is made possible due to the precise adjustment option of the coverage through turning, swinging or partly covering the lens. This applies to every Busch-Watchdog 220/280 MasterLINE. This allows the detection image to be adjusted precisely in the desired direction. The mounting height of 2.50 m guarantees optimal function of the movement detector. Simple, time-saving installation on the wall connection box with a convenient latch-on lock. Precise installation even on uneven stonework with a soft component on the rear side of the socket. The mounting hole is compatible with all previous models. Connection via four screwless terminals with the appropriate fastening lugs. And with the wireless Busch-Watchdog 220 WaveLINE not even cables need to be installed.

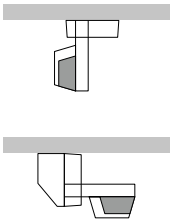
Every building is unique.
Modern living styles with a lot of glass frontage and structural extravagance often allow only limit possibility for expert installation. The Busch-Watchdog movement detectors from Busch-Jaeger are extremely flexible and can be optimally installed even in difficult conditions.



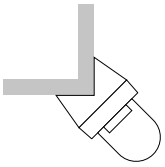
Wall mounting.
The classic installation.
The Busch-Watchdog movement detectors can be easily and quickly installed. In the classical position on the wall. It is one of the most popular mounting situations.



Wall mounting with gradient.
Each task is carried out with consummate ease.
Busch-Watchdogs are multitalented. Even in complicated installation situations, such as in a building on a hill or with a gradient, the movement detector with the corner adaptor can be installed and adjusted in such a way that it offers the most optimum possibility for detection.



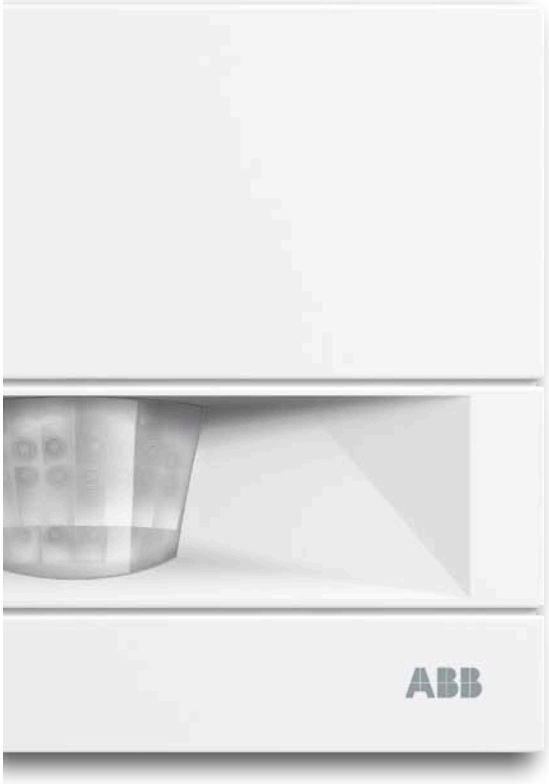
Ceiling mounting.
All good things come from above.
When the Busch-Watchdog is to be installed on the ceiling, there are two versions. From the bottom for a wide detection range. Or with a corner adapter, to be able to position the device correctly.



Corner mounting.
Thinking around corners.
A Busch-Watchdog accepts all challenges. Thanks to a detection range of up to 280°, even the most difficult surveillance tasks are child's play. In combination with a special corner adapter it is installed easily and quickly without any difficulty.

Very convenient. Extension unit operation.
For example, when an exit is not within the detection range of the movement detector the extension unit push-button is a convenient solution. It can be used to manually activate the lighting when leaving the room. Persons who are approaching from a different direction are detected by the movement detector and the lights switch on automatically.

Effortless control and management. From any location.



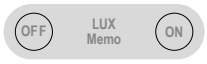
Control via transmitter.
The IR remote control makes it easy to handle the daily routine. Because it permits easy access from anywhere in the home. For many models* for the outdoor area the practical remote controls are available from Busch-Jaeger as an option. This, for example, allows continuous light On, continuous light Off, or presence simulation to be comfortably activated. It also allows the saving of the brightness switching threshold. This makes it easy to keep everything under control.

*With the Busch-Watchdog 220 MasterLINE, white, anthracite lens, the IR remote control is included. And the Busch-Watchdog 220 MasterLINE KNX premium includes the IR remote control KNX. For other models they are available as an option.

IR service remote control.
The IR service remote control has been specially developed for commissioning the Busch-Watchdog MasterLINE movement detector at the customer's place. It assists the electrical installer to remotely operate and adjust all functions, test mode and setting of the response characteristics.

IR remote control.
With the IR remote control you are always fully in charge of safety and comfort. The functions and settings can be handled easily without a ladder or an electrical installer.

IR remote control KNX.
This intelligent remote control has seven freely assignable buttons. This allows any KNX functions to be comfortably controlled outdoors.

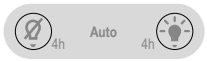


Brightness switching threshold.
Off. Deletes the brightness switching threshold saved via the remote control and activates the setting of the brightness potentiometer on the device.

On. Stores the current brightness value as brightness threshold value on the device.

Presence simulation.
Off. Deactivation of presence simulation. There is a reset to the operating mode that was active before the activation of the presence simulation.

On. Activation of the presence simulation. Light activation at twilight. Switchover to automatic mode at around 10:30 p.m. This gives the impression that persons are present in the building while you are on holiday.



Continuous light.
Continuous Off. The movement detector is deactivated for four hours and returns automatically to the previous operating mode. Extremely comfortable, such as during a garden party for example.

Auto. Early return of continuous light into the operating mode that was active before pressing the continuous Off or continuous light On button.

Continuous light On. The movement detector is deactivated for four hours even when one remains outside the detection range for a longer period and requires light. It then automatically returns to the previous operating mode.

Everything from one source.
The IR remote control KNX has seven neutral buttons which are programmed by the electrical installer after consultation with the client. They can be occupied with Watchdog-based or freely definable functions. For example, for additionally activating the fountain when when the lighting is switched on. Or for enabling different lighting groups in the garden which are to be switched on via the movement detector (path illumination, decorative illumination, etc.).

All remote controls are coded and must be programmed to the Busch-Watchdog during initial commissioning. This code (16 bit, corresponds to 65,536 possible variations) prevents movement detectors in the surrounding area to be influenced unintentionally or deliberately.

Shapes and colours.
Overview of product range.

01

02

03

04

01 **Busch**-MasterLight®, white

02 **Busch**-Master**L**ight®, anthracite

03 **Busch**-Master**L**ight®, brown

04 **Busch**-Master**L**ight®, silver metalic

05

06

07

08

05 Busch-Watchdog 70 / 110 MasterLINE, white

06 Busch-Watchdog 70 / 110 MasterLINE, anthracite

07 Busch-Watchdog 70 / 110 MasterLINE, brown

08 Busch-Watchdog 70 / 110 MasterLINE, silver metallic

09

10

11

12

13

09 Busch-Watchdog 220 MasterLINE, white*

10 Busch-Watchdog 220 MasterLINE, anthracite*

11 Busch-Watchdog 220 MasterLINE, brown*

12 Busch-Watchdog 220 MasterLINE, silver metallic*

13 Busch-Watchdog 220 MasterLINE,white, lens anthracite, including IR remote control

14

15

16

17

14 Busch-Watchdog 280 MasterLINE, white

15 Busch-Watchdog 280 MasterLINE, anthracite

16 Busch-Watchdog 280 MasterLINE, brown

17 Busch-Watchdog 280 MasterLINE, silver metallic

* Applies to the Busch-Watchdog 220 models MasterLINE, Busch-Watchdog 220 MasterLINE premium, Busch-Watchdog 220 WaveLINE, Busch-Watchdog 220 MasterLINE KNX, Busch-Watchdog 220 MasterLINE KNX premium and Busch-Watchdog 220 MasterLINE select.

18 19 20

18 Busch-Comfort switch

19 Busch-Watchdog 180 Standard, flush-mounted

20 Busch-Watchdog 180 Comfort**, flush-mounted

21 22 23 24 25

21 Busch-Watchdog 180 All-Weather, flush-mounted, alpine white

22 Busch-Watchdog 180 All-Weather, flush-mounted, white

23 Busch-Watchdog 180 All-Weather, flush-mounted, anthracite

24 Busch-Watchdog 180 All-Weather, flush-mounted, brown

25 Busch-Watchdog 180 All-Weather, flush-mounted, aluminium silver

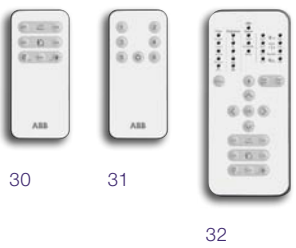
26 27 28 29

26 Busch-Watchdog Presence tech

27 Busch-Watchdog Presence tech BasicLINE Corridor

28 Busch-Watchdog Presence tech BasicLINE

29 Busch-Watchdog Presence tech BasicLINE mini



30 31 32

30 IR service remote control

31 IR remote control

32 IR remote control KNX

** Available in almost all switch ranges.

Safe and comfortable.
Intelligent technology in detail.

Busch-MasterLight®

Functions

» Design to match the new generation of the Busch-Watchdog and the outdoor station of the ABB-Welcome door communication
» LED lamp mounted flat on the wall (33 mm)
» Illuminant translucent white
» Homogeneous distribution of light with large luminous area due to a specially designed optical fibre
» The entrance to the house is highlighted with this basic light
» The house number can be fixed to the luminous area with the self-adhesive numbers and letters that have been supplied and also match the lamp.
» The house number can also be clearly seen and read by strangers
» A device to match the colour of the facade is always available
» Direct cable connection on the device (screw-type terminal)
» Doorway illumination is twilight dependent. When twilight sets in the LED switches the light on with approximately 15% of the maximum brightness value (ca. 1.2 W)
» Individual setting of the twilight value at which the light is switched on automatically
» For example, via an extension unit input in combination with a Busch-Watchdog the light can be switched to 100% brightness when a person approaches the house
» LED luminous efficiency 9 W (corresponds to a 40 W incandescent lamp)
» Saving of energy with innovative LED technology with nine LEDs
» 16 different lamp colours
» Colours can also be set directly on the device
» An additional extension unit input also activates the alarm function
» In white, anthracite, brown and silver metallic

Busch-Watchdog 70 MasterLINE

Functions

» Ideal for terraced houses
» Detection range 12 m towards the front and 4 m towards each side
» With four detection levels, precise detection also during frontal approach
» Movement detector mounted flat on the wall with high quality of detection
» The device can be protected against direct dismantling by means of additional screw connection
» Wall connection box with level adjustment, i.e. soft component on the rear of the wall connection box
» The status display on the device informs about the respective operating mode
» Signalling the detection for easy commissioning or for diagnostics purposes
» Option for interconnection to other loads
» With near-field surveillance, activation when exiting the door
» Automatic range stabilisation
» Automatic interference suppression
» All loads can be connected, maximum 1,400 W/VA (6 AX)
» In white, anthracite, brown and silver metallic

Busch-Watchdog 110 MasterLINE

Additional functions to the Busch-Watchdog 70 MasterLINE

» Remote operation
» Important functions such as continuous light On, continuous Off, presence simulation, saving of the brightness switching threshold can be deactivated/activated with the IR remote control without a setting on the device
» Saving energy. The time for the forced switch-off depends on the set switch-off delay; however, a maximum of 90 minutes
» Switch-off delay and brightness switching threshold can be adjusted separately
» All loads can be connected, maximum 2,300 W/VA (10 AX)

Busch-Watchdog 220 MasterLINE

Functions

» Ideal for individual buildings
» Detection range 220°, 16 m towards all sides
» With four detection levels
» The device can be protected against direct dismantling by means of additional screw connection
» The mounting hole is compatible with all previously available Busch-Watchdog models
» Important functions such as continuous light On, continuous Off, presence simulation, saving of the brightness switching threshold can be deactivated/activated with the IR remote control without a setting on the device
» Remote operation and remote parameterisation, further settings/functions can now be disconnected/connected via the IR service remote control
» Saving energy. The time for the forced switch-off depends on the set switch-off delay, a maximum of 90 minutes
» Signalling the detection for easy commissioning or for diagnostics purposes
» Easy installation of cables without clamps
» No gaps in detection, homogeneous, large detection range
» Ground and rear-field detection
» Creep zone protection and activation when exiting the door
» Automatic range stabilisation. In case of changing outdoor conditions the Busch-Watchdog keeps the range constant
» Automatic interference suppression
» Presence simulation (while on holiday, for example). Continuous light is activated at nightfall, and from 10:30 p.m. the normal watchdog function continues.
» All loads can be connected, maximum 3,680 W/VA
» Available in white, anthracite, brown and silver metallic, also in white with anthracite-coloured lens

Busch-Watchdog 280 MasterLINE

Additional functions to the Busch-Watchdog 220 MasterLINE

» Detection range 280°, 16 m towards all sides
» Detection on two sides of the house with the aid of the corner adaptor
» In white, anthracite, brown and silver metallic

Busch-Watchdog 220 MasterLINE premium

Additional functions to the Busch-Watchdog 220 MasterLINE

» Floating operating mode (230 V devices or small loads, such as 12 V devices)
» 2-zone operation
» Twilight switch mode: The second switching output can be configured as twilight switch independent of movement
» Two detection levels of 1 m towards all sides as well as second switching output (first the path illumination, then main entrance illumination)
» In white, anthracite, brown and silver metallic

Busch-Watchdog 220 WaveLINE

Additional functions to the Busch-Watchdog 220 MasterLINE

- Large-scale surveillance (with and without available activation)
- Retrofitting with available activation
- Reduction of installation expenditure
- Communication between sensor and actuator is wireless via HF (high frequency)
- Soft component absorber for uneven walls
- Use of conventional penlight batteries
- No operating voltage supply at the surveillance area
- Battery operation for line-independent installation. Can also be used where no mains voltage is available.
- No remote control possible due to high service life of batteries
- Battery service life between 5 to 10 years (depending on the type of battery used)
- Option of battery test, display via LED on the device
- Low-battery telegram for evaluation at corresponding display or signalling units
- Wireless control for ideal positioning to the detection range
- Large-scale surveillance. Combination of several sensors is possible.
- Retrofitting with available continuous light switching
- Reduction of installation expenditure, since laying of cables is unnecessary
- Creep zone protection in the detection range
- Microprocessor evaluation
- Dazzleproof
- Test mode (automatic transfer to standard after 10 minutes)
- Any type of loads
- In white, anthracite, brown and silver metallic

Busch-Watchdog 220 MasterLINE select

Additional functions to the Busch-Watchdog 220 MasterLINE

- With one detection level
- Detection with animal access
- No ground and rear-field detection
- In white, anthracite, brown and silver metallic

Busch-Watchdog 220 MasterLINE KNX

Additional functions to the Busch-Watchdog 220 MasterLINE

» Wall connection box with level control
» Six cable entries
» Parameter settings via Powertool
» Simplification of device parameterisation. Only the most important parameters are displayed, the remainder must be activated
» With two movement channels, e.g. for different settings for evening and night
» The same options for parameterisation as the flush-mounted Watchdog KNX
» Numerous setting options, flexible use
» One twilight switch with up to three switching thresholds, excellent detection during twilight
» The twilight switch is not influenced by other illumination within the system
» The status display on the device for the respective operating mode
» In white and silver metallic

Busch-Watchdog 220 MasterLINE KNX premium

Additional functions to the Busch-Watchdog 220 MasterLINE KNX

» With four movement channels, e.g. for different settings for evening and night
» One twilight/brightness switch with up to three switching thresholds, excellent detection during twilight
» Temperature sensor with up to three switching thresholds
» Ten logic functions to implement complex functions

Busch-Comfort switch

Functions

» Acts like a light switch
» Adjustable operating mode: semiautomatic mode, automatic switch-on, manual switch-off.
» Adjustable operating mode: automatic time control, manual switch-on, automatic (timer and motion-controlled) switch-off
» Adjustable operating mode: automatic mode, automatic (motion-controlled) switch-on and switch-off
» Push button switch function possible at all times
» Detection with animal access
» Detection range: frontal 5 m, lateral 3 m
» Opening angle: 170°
» Available in all Busch-Jaeger switch ranges (except Decento® and impuls)

Flush-mounted Busch-Watchdog 180 Standard / Comfort

Functions

» For automatic switching of loads dependent on movement and brightness
» For detection with animal access
» For relay insert 6401 U-102-500, 6402 U-500 and 6812 U-101-500
» For MOSFET insert 6804 U-101-500
» For LED dimmer insert 6524 U-500
» For dimmer insert 6593 U-500
» For extension insert 6805 U-500
» Surveillance density: 18 sectors with 72 switching segments
» Switch-off delay: 80 sec
» Protection sensor: IP 20
» Detection range: frontal 12 m, lateral 8 m
» Brightness limit value: 5 lux to daytime operation

Additional functions to the Busch-Watchdog 180 FM Comfort

» Opening angle: 180°
» Mounting height: 0.80 m – 1.20 m
» Available in switch range Reflex SI Linear
» For automatic switching of loads dependent on movement and brightness
» For detection with animal access
» With integrated selector switch for Off/automatic/On (lockable)
» Soft phase-out: In combination with the 6593 U-500 (operating mode: Soft OFF) the illumination is dimmed down within 60 sec and switched off
» Switch-off delay: 10 sec to 30 min or short-time pulse 1 sec adjustable
» Available in all Busch-Jaeger switch ranges (except Decento® and impuls)

Busch-Watchdog 180 flush-mounted All-Weather

Functions

» Attractive, modern design
» For outdoor use
» For automatic switching of loads dependent on movement and brightness
» With three detection levels for detection down to the ground
» IP 44 only in combination with frame All-Weather 44
» Detection range: frontal 15 m, lateral 10 m
» Opening angle: 180°
» In alpine white, white, anthracite, brown and aluminium silver

Busch-Watchdog Presence tech

Functions

» For brightness- and movement-dependent switching and dimming of lighting
» Detection range (for installation height of 2.50 m), circular up to 8 m in diameter
» For constant light regulation in combination with dimmer insert 6593 U-500 or 6550 U-101-500
» For heating/air-conditioning/ventilation regulation in combination with series insert 6402 U-500
» For relay insert 6401 U-102-500, 6402 U-500 and 6812 U-101-500
» For MOSFET insert 6804 U-101-500
» For extension insert 6805 U-500
» Remote operation via IR remote control 6010-25-500
» Intelligent switch-on delay
» Surveillance density: 72 sectors with 640 switching segments
» Switch-off delay: approx. 10 sec – 30 min or short-time pulse adjustable to 1 sec
» Opening angle: 360°
» Brightness limit value: 5 lux – 1,000 lux
» Protection type: device IP 20

Busch-Watchdog Presence tech BasicLINE Corridor

Functions

» For switching lighting systems that depend on brightness and movement.
» Additional activation/deactivation possibility through push-button input
» Detection range (for installation height of 2.50 m), circular up to 24 m (tangential) / 8 m (central) in diameter.
» Brightness-dependent test mode for evaluating the detection range
» Detection display in test mode
» Mounting possibility in combination with wall boxes and surface-mounted boxes
» Ceiling installation using the enclosed dust protection box
» Adjusting elements accessible on the front side
» Automatic transit recognition
» Surveillance density: 215 sectors with 860 switching segments
» Switch-off delay: approx. 10 sec – 30 min or short-time pulse adjustable
» Remote operation
» Use outdoors possible due to combination with surface-mounted housing 6888
» Opening angle: 360°
» Brightness limit value: 10 lux – 2,000 lux

Busch-Watchdog Presence tech BasicLINE

Functions

» For switching lighting systems that depend on brightness and movement
» Additional activation/deactivation possibility through push-button input
» Detection range (for installation height of 2.50 m), circular up to 7 m in diameter
» Brightness-dependent test mode for evaluating the detection range
» Detection display in test mode
» Mounting possibility in combination with wall boxes and surface-mounted boxes
» Ceiling installation using integrated spring bracket
» Adjusting elements accessible on the front side
» Adaptation of the detection range possible using the enclosed masking elements
» For semiautomatic and fully automatic operation
» Low mounting height (31 mm)
» Surveillance density: 32 sectors with 128 switching segments
» Switch-off delay: approx. 5 sec – 30 min or short-time pulse adjustable
» Opening angle: 360°
» Brightness limit value: 10 lux – 2,000 lux

Busch-Watchdog Presence tech BasicLINE mini

Functions

» For switching lighting systems that depend on brightness and movement
» Detection range (for installation height of 3 m), circular up to 6 m in diameter
» Brightness-dependent test mode for evaluating the detection range
» Detection display in test mode
» Ceiling installation using integrated spring bracket
» Low mounting height due to separate sensor/actuator concept
» Surveillance density: 19 sectors with 76 switching segments
» Switch-off delay: approx. 1 min – 15 min or short-time pulse adjustable
» Opening angle: 360°
» Brightness limit value: 10 lux – 1,000 lux, daytime operation

IR service remote control

Functions

» Specially developed for programming the Busch-Watchdog MasterLINE movement detector at the customer
» It assists the electrical installer to remotely operate and adjust all functions, test mode and setting of the response characteristics
» Display of values/settings currently stored in the remote control
» Switch-off delay, brightness-value threshold and sensitivity can be selected
» Dynamic forced switch-off
» 2-zone operation
» Synchronous operation
» Twilight switch operation (only Busch-Watchdog 220 MasterLINE premium)

IR remote control

Functions

» With the IR remote control you are always fully in charge of safety and comfort
» The functions and settings can be comfortably controlled from anywhere in the home
» Brightness switching threshold
» Presence simulation
» Permanent light

IR remote control KNX

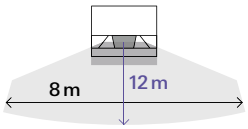
Functions

» The IR remote control KNX has seven neutral buttons which are programmed by the electrical installer after consultation with the client
» They can be occupied with Watchdog-based or freely definable functions
» This allows any KNX functions to be comfortably controlled outdoors. For example, for additionally activating the fountain when the lighting is switched on. Or for enabling different lighting groups in the garden which are to be switched on via the movement detector (path illumination, decorative illumination, etc.).
» Modern design to match the Busch-Watchdog 220 MasterLINE KNX premium
» Four movement channels
» Twilight / brightness channel with three switching thresholds
» Temperature channel with three switching thresholds
» Ten logic functions
» Twilight switch
» Artificial light calculation

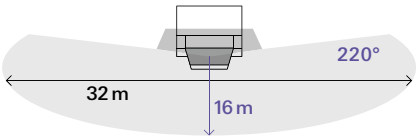
Detection ranges outdoors.
Always everything under control.

The right Busch-Watchdog is available for every requirement.
There are many different surveillance situations. Whether terraced houses, angled properties, stairwells or industrial plants. The Busch-Watchdog fulfils every wish for perfect safety.

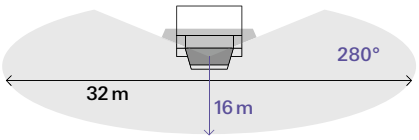
Busch-Watchdog 70 MasterLINE.



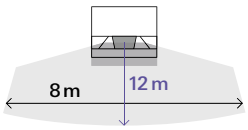
**Busch-Watchdog 220 MasterLINE,
Busch-Watchdog 220 WaveLINE,
Busch-Watchdog 220 MasterLINE KNX and
Busch-Watchdog 220 MasterLINE KNX premium.**



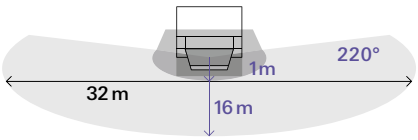
Busch-Watchdog 280 MasterLINE.



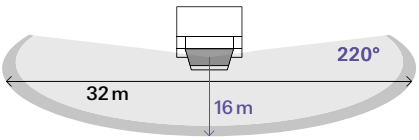
Busch-Watchdog 110 MasterLINE.

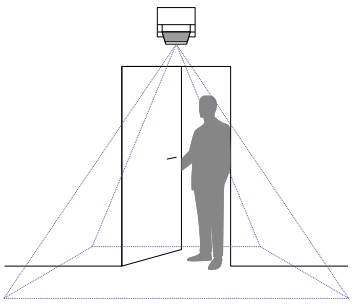


Busch-Watchdog 220 MasterLINE premium.



Busch-Watchdog 220 MasterLINE select.





Technology that thinks ahead.
The Busch-Watchdog impresses with its intelligent detection ranges. And it gives the aspects of safety and comfort a new quality. A typical feature of comfort is the practical rear-field detection. When stepping out of the house it automatically switches on the outdoor lights. That means you do not step from the illuminated hallway directly into the dark, but are greeted by a reassuring light in front of the door.

Overview of the multitalent.
For outdoor use.

Technical Data.

Products	Busch-Watchdog 70 MasterLINE	Busch-Watchdog 110 MasterLINE	Busch-Watchdog 220 MasterLINE	Busch-Watchdog 280 MasterLINE
Article number	6854 AGM-xxx-500	6855 AGM-xxx-500	6847 AGM-xxx-500, 6847/8 AGM-204-500, 6847/11 AGM-xxx-500	6867 AGM-xxx-500
Detection range	–	–	220°	280°
Detection levels	4	4	4	4
Creep zone protection in the detection range	X	X	X	X
Coverage[3]	12 m frontal, 4 m lateral	12 m frontal, 4 m lateral	16 m frontal, 16 m lateral	16 m frontal, 16 m lateral
LED detection check	X	X	X	X
Light activation via break switch	X	X	X	X
Switching outputs	1 x non-isolated	1 x non-isolated	1 x non-isolated	1 x non-isolated
Back field detection	–	–	X	X
Remote operation via IR remote control, 6841-101-500	–	X	X	X
Remote parameterisable IR service remote control, 6842-101-500	–	X	X	X
Presence simulation via IR remote control	–	X	X	X
Continuous light switching (4 hours) via IR remote control	–	X	X	X
Continuous Off (4 hours) via IR remote control	–	X	X	–
Tripping delay	1 / 3 / 5 minutes	10 s to 30 minutes	10 s to 30 minutes	10 s to 30 minutes
Recommended mounting method	Screw-type terminals	Screw-type terminals	Wago screw terminals	Wago screw terminals
Twilight sensor	3 / 15 lux/∞ (daytime operation)	3 lux/∞ (daytime operation)	0.5 – 300 lux/∞ (daytime operation)	0.5 – 300 lux/∞ (daytime operation)
Mounting height	2.50 m	2.50 m	2.50 m	2.50 m
Dimensions (H x W x D)	100 × 125 × 33 mm	100 × 125 × 33 mm	115 × 125 × 141 mm	115 × 125 × 141 mm
Any type of loads	X	X	X	X
Suitable for wall and ceiling installation[2]	X/–	X/–	X/X	X
Additional functions	–	–	–	–

[1] Depending on the switch actuator used
[2] The use of the corner adapter 6868-xxx-500 may depend on the mounting location.
[3] Mounting height of 2.50 m.

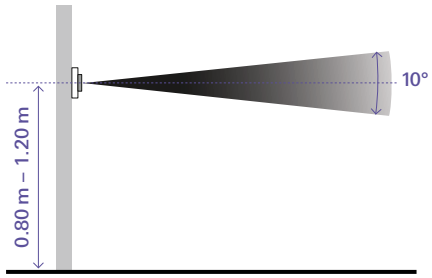
Busch-Watchdog 220 MasterLINE premium	**Busch-Watchdog 220 WaveLINE**	**Busch-Watchdog 220 MasterLINE select**	**Busch-Watchdog 220 MasterLINE KNX**	**Busch-Watchdog 220 MasterLINE KNX premium**
6848 AGM-xxx-500	6747 AGM-xxx-500	6847 AGS-xxx-500	6179/01-xxx-500	6179/02-xxx-500
220°	220°	220°	220°	220°
4	4	1	4	4
–	X	X	X	X
16 m frontal, 16 m lateral	16 m frontal, 16 m lateral	16 m frontal, 16 m lateral	16 m frontal, 16 m lateral	16 m frontal, 16 m lateral
X	–	X	–	–
X	–	X	KNX	KNX
1 x non-isolated 1 x floating	–[1]	1 x non-isolated	2 movement channels	4 movement channels
X	X	–	X	X
X	–	X	–	With 6179-500
X	–	X	–	–
X	–	X	–	–
X	–	X	–	–
X	–	X	X	X
10 s to 30 minutes	10 s to 30 minutes[1]	10 s to 30 minutes	10 s to 18 hours	10 s to 18 hours
Wago screw terminals	Integrated battery compartment	Wago screw terminals	KNX screwless terminals	KNX screwless terminals
0.5 – 300 lux/∞ (daytime operation)	0.5 – 300 lux/∞ (daytime operation)	0.5 – 300 lux/∞ (daytime operation)	1 – 1,000 lux	1 – 80,000 lux
2.50 m	2.50 m	1.10 m – 1.50 m or 2.50 m	2.50 m	2.50 m
115 × 125 × 141 mm	115 × 125 × 141 mm	115 × 125 × 141 mm	115 × 125 × 141 mm	115 × 125 × 141 mm
X	–	X	–	–
X	X	X	X	X
–	–	–	3 x Twilight threshold	3 × Twilight/brightness threshold 3 × Temperature threshold 10 × Logic functions

Surveillance for every requirement. Detection levels indoors.

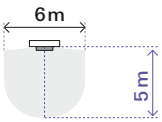
Every room is different.
No matter what is required of an optimum and efficient indoor area: Busch-Jaeger always has the perfect solution. Whether with the Busch-Comfort switch or the different lenses for the flush-mounted Busch-Watchdog 180 – everything is safely and comfortably monitored.

Busch-Comfort switch.
Acts as light switch; however, it detects a frontal area of 5 m and a lateral area of 3 m

Detection levels.

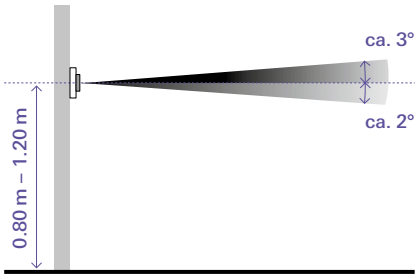


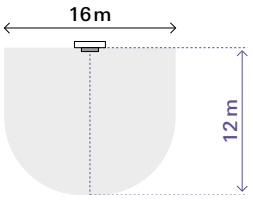
Detection ranges.



Mounting height from 0.80 m to 1.20 m

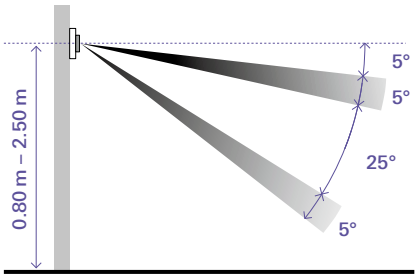
Select lens.
Monitors an area above approximately 1.2 m. Small animals are therefore not detected.

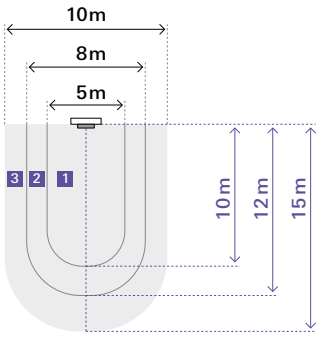




Mounting height from 0.80 m to 1.20 m

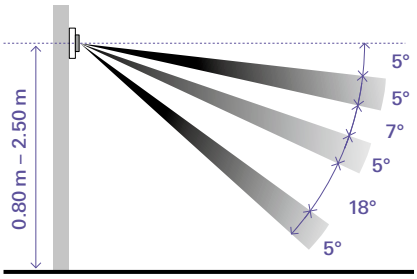
Multi-lens.
Due to the detection range even persons on the stairs are recognized.

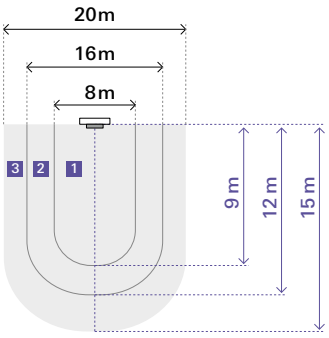




1 Mounting height of 1.20 m
2 Mounting height of 2 m.
3 Mounting height of 2.50 m.

Combination lens.
Largest possible detection of the entire area to be monitored.





1 Mounting height of 1.20 m
2 Mounting height of 2 m.
3 Mounting height of 2.50 m.

A multitude of functions at a glance. For indoor use.

Technical Data.

Products	**Busch-Watchdog Sensor Standard**	**Busch-Watchdog Sensor Comfort**	**Busch-Watchdog Sensor 180 flush-mounted All-Weather with combination lens**	**Busch-Watchdog Presence tech[1]**	**Busch-Watchdog Presence tech DualLINE[1]**
Article number	6810-21x-500	6800-xxx-104 (M)	6800-3x-102C	6813-xxx-101-500	6913/11-xxx-500
Universal Relay Insert, 6401 U-102-500	X	X	X (Use only 6401 U-102-500 outdoors, frost-proof up to –25°C)	X	X (either semiautomatic or fully automatic operation)
Universal Serial Insert 6402 U-500	X (Output 2 with switch-on/switch-off delay in relation to Output 1)	X (Output 2 with switch-on/switch-off delay in relation to Output 1)		X (Heating, air-conditioning and ventilation function)	X (For the control of two independent light rows, optionally also automatic/ semi-automatic operation)
Relay insert 6812 U-101-500	X	X		X	X (fully automatic operation only)
MOSFET insert, 6804 U-101-500	X	X		X	X (either semiautomatic or fully automatic operation)
Extension insert, 6805 U-500	X	X		X	X
Universal central dimmer insert, 6593 U-500	X	X (Soft OFF mode: dim down/switch-off within the final minute/switch-off prewarning)		X (Constant light control)	X (Constant light control, either semi-automatic or automatic operation)
Memory touch-type controller 6550 U-101-500	X	X		X (Constant light control)	X (Constant light control, either semi-automatic or automatic operation)

[1] Remote control option with IR remote control 6010-25-500.

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