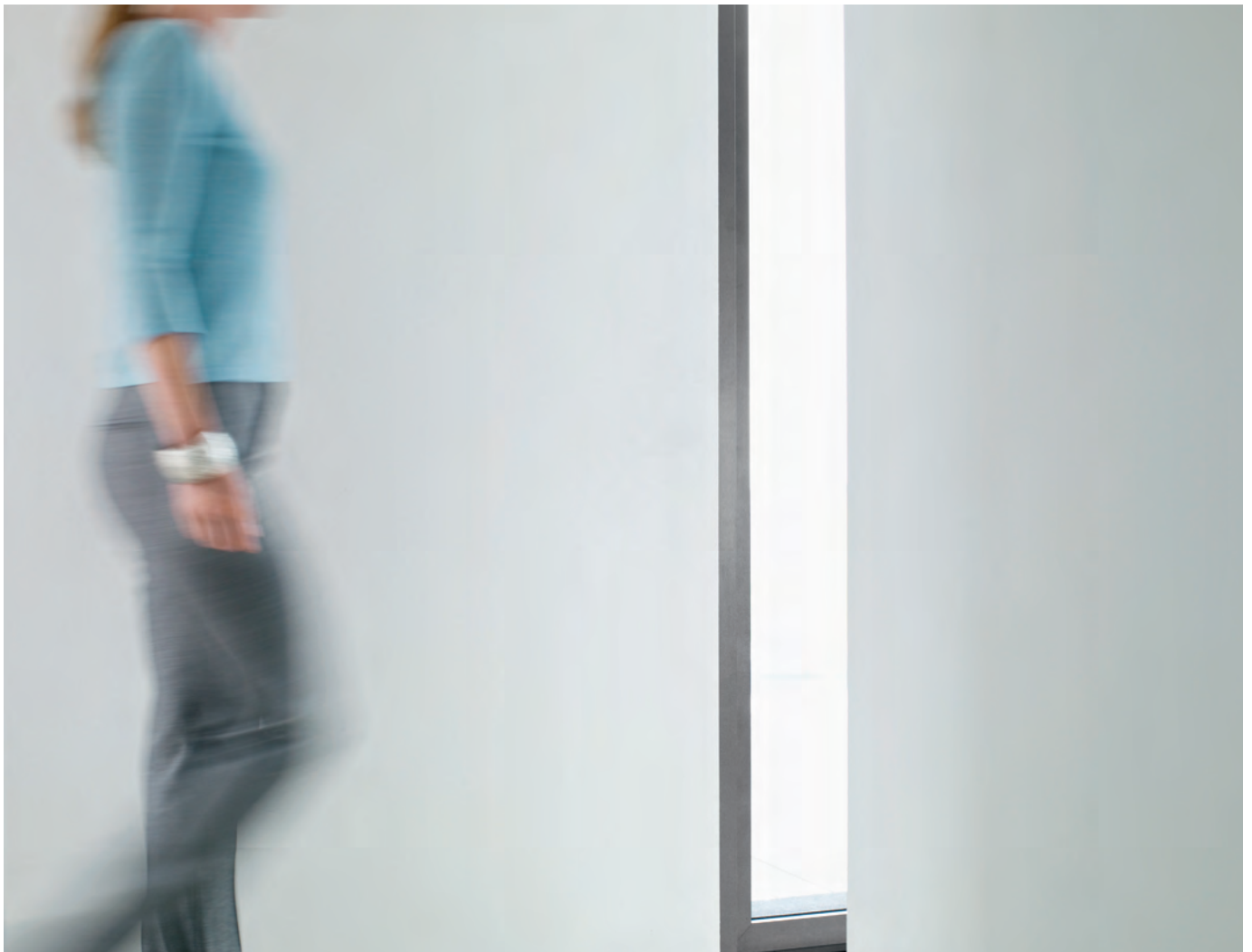


Movement detector. A watchdog that never sleeps.

It welcomes visitors and deters burglars. It sees everything and can turn night into day, if needed. The new generation of Busch-Watchdog stands for state-of-the-art, comprehensive detection and many useful service functions.



01



Movement detector

- 01 Busch-Watchdog 220 WaveLINE.
Colour: white
- 02 Busch-Watchdog Presence tech
BasicLINE Corridor
- 03 Busch-Watchdog 180 flush-mounted comfort
sensor. Switch series solo®.
Colour: davos studio white.
- 04 Busch-Comfort switch.
Switch series solo®. Colour: davos studio white.



*Certified for barrier-free living.

Contents

Movement detector

Busch-Watchdog, surface-mounted*	p. 328
Corner adapter	p. 330
IR remote control	p. 330
Busch-Watchdog presence tech	p. 332
Busch-Watchdog, flush-mounted*	p. 334
Twilight switch	p. 337
Busch-Comfort switch	p. 338



02



03



04



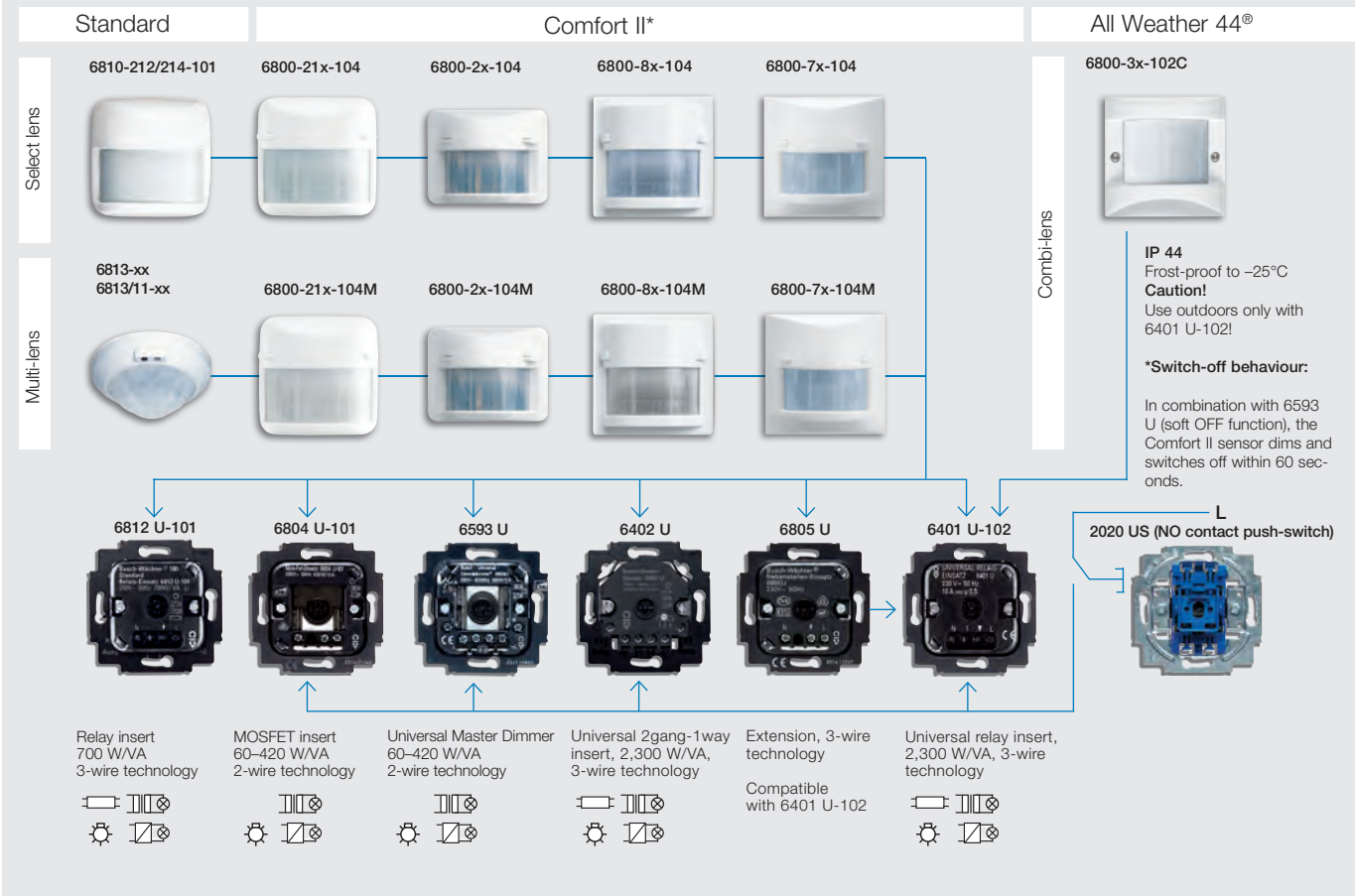
This switch can sense your needs.

A flush-mounted movement detector is, for all intents and purposes, just a light switch – one you don’t have to

press. It activates when it gets dark and it senses body heat. It will switch on automatically to show you the

way – perfect! When you have no free hands.

Selection guide: the Busch-Watchdog flush-mounted range



Slide switch

Always on, allways off, or automatic mode can be individually selected using the slide switch. Optionally, the slide switch can be fixed to automatic mode using a screw on the back side, e.g. in public buildings.

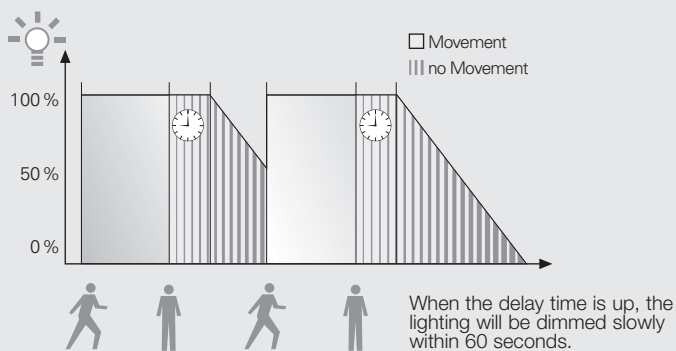
Simply Safe and comfortable – provides you an extra hand

Hold on to what's precious: put your kids to bed without a care – Busch-Watchdog lights your way.

The convenient combination: The movement detector and dimmer of ABB/Busch-Jaeger do not suddenly leave you in the dark.

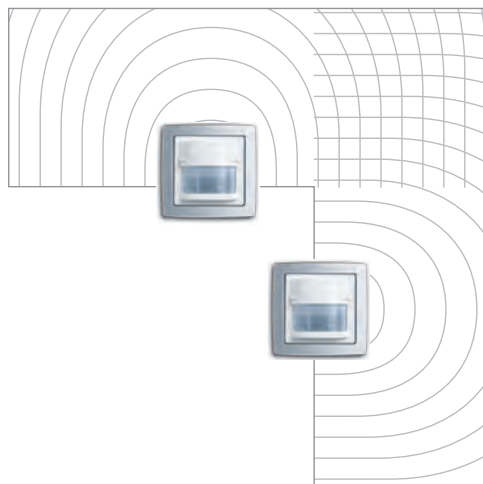
Flush-mounted insert: Dimmer 6593 U

Busch-Watchdog sensor: 6800-xx-104M



Application of main and auxiliary units

If more than only one movement detector is requirement, additional movement detectors can be installed using extension inserts. This makes sense, for example, in the case of L-shaped corridors.



Busch-Wächter® 180 flush-mounted comfort sensor II insert: 6800-xx-104 (M)

Extension insert insert: 6805 U
for main unit, e.g. 6401 U-102, 6402 U,
6804 U-101, 6593 U and 6550 U-101

Busch-Comfort switch – The switch with four comfort levels.

It can be operated like a normal switch – but offers additional possibilities that have never been combined in this way before in one device. Non-contact, manual or

time-controlled switching – functional, versatile and aesthetic – the new comfort switch that offers unparalleled flexibility.



The new Busch-Comfort switch offers different levels of comfort and thus a variety of switching possibilities. It can even be implemented fully automatically and the light can be switched on and off again if a person is detected. It can however also leave the light on and act as a semi-automatic function, until it is switched off again manually by pressing the button. In addition, the Busch-Comfort switch can also act as a timer. In this case it reacts when a button is pressed and automatically switches the light off later at a pre-determined time, if it no longer detects any presence. In addition, the Busch-Comfort switch can be used as a completely normal switch that reacts exclusively to manual operation. Its extension unit input makes it possible to integrate

it into almost all two-way and back-to-back connections. The 2-wire insert is ideally suited for retrofitting, while the new relay insert permits the connection of universal loads. No matter what function you decide on: despite its technical possibilities the Busch-Comfort switch almost looks like a normal switch and is just as easy to use.

The integrated sensor is barely noticeable due to its flat construction, and an LED located on the lens tells everyone who enters or leaves the room that the switch must be operated manually. At the same time, the LED is used as an orientation light and ensures that the switch can be found easily, even in the dark.



Adjustment possibilities on the back of the control element



The flat lens is available in various finishes tones and matches the colour of the rocker switch.

The relay switch insert (6816 U) for switching universal loads up to 2,300 W/VA is also suited for fluorescent and energy-saving lamps. The comfort switch can thus be used for all load types almost everywhere.

01



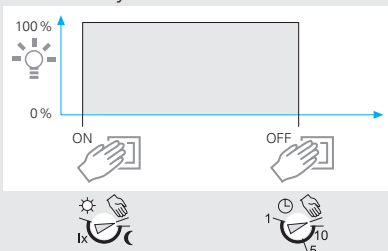
02



01 Busch-Comfort switch insert (6815 U)
2-conductor connection

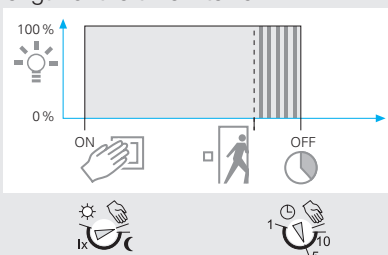
02 Busch-Comfort switch relay insert (6816 U)
3-conductor connection

Basic comfort: Switches in the normal way.



In operation mode basic-comfort the comfort switch is operated manually. This manual operation at any time is fundamentally the basis of all comfort levels. No matter what you imagine – you can always perform every switching procedure from every main or auxiliary switch. Sometimes you just want to do things differently than planned.

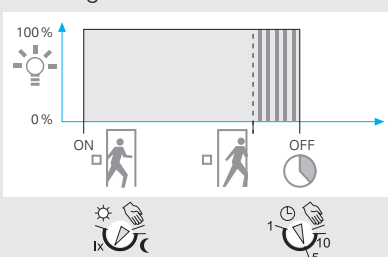
Timing comfort: Manual switching-on function but with automatic switching-off function – you can determine the length of the time interval.



Everyone has experienced it: You enter the house and the light is still on because someone has just gone through the corridor. After a few steps, you are suddenly in the dark – the set time has expired. With the Busch-Comfort switch, such unpleasant, dangerous events are a thing of the past. It detects again that someone is still in the corridor and the selected follow-up time starts again from the beginning.



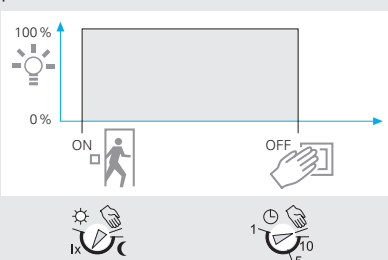
Maximum comfort: Fully automatic switching.



The light is switched on as soon as someone enters the detection range. The duration of activation can be freely selected between 1 and 10 minutes. The nice thing is: if someone enters the detection range again, this time is reset and restarts before the light goes off. Also the brightness threshold, from which the light automatically switches on, can be set and adjusted to the circumstances. This leaves you undisturbed and flexible – even when the use of a room or the light conditions change. If Busch-Comfort switch relay inserts are used, they can be switched in parallel.



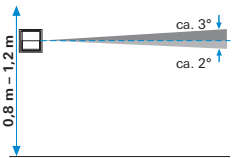
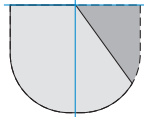
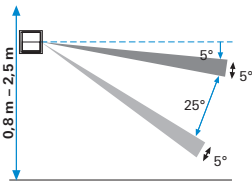
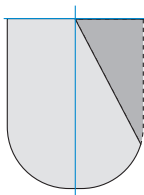
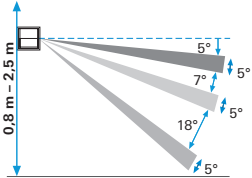
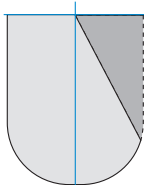
Medium comfort: Automatic switching-on function but is switched off by hand – sometimes less automation is preferable.



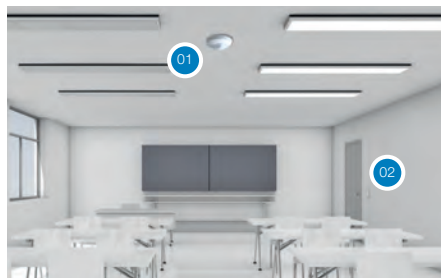
The Busch Comfort switch turns on the light automatically and leaves it switched on for as long as you like. If you remain quiet or leave the detection range of the device for a brief period, the light remains on. You can carry on with your work without any disturbance and the light does not go out again until the button is pressed.



Detection zones of Busch-Watchdog, flush-mounted

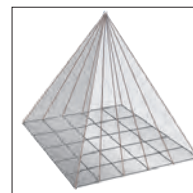
Detection levels		Detection zone		Limiting the detection zone																		
Select lens		Mounting ht. 0,8–1,2 m	Front 12 m	Side 8 m	Horizontal Mask along the side using the blind 	Vertical No narrowing possible since there is only one detection level.																
Multi-lens		Mounting ht. 1,2 m 2,0 m 2,5 m	Front 10 m 12 m 15 m	Side 2,5 m 4 m 5 m	Horizontal Mask along the side using the blind 	By masking off the wide range, detection can be limited to the close range. <table><tr><th>Mounting ht.</th><th>Remote</th><th>Close</th></tr><tr><td>1,2 m</td><td>10 m</td><td>2 m</td></tr><tr><td>2,0 m</td><td>12 m</td><td>3 m</td></tr><tr><td>2,5 m</td><td>15 m</td><td>3,5 m</td></tr></table>	Mounting ht.	Remote	Close	1,2 m	10 m	2 m	2,0 m	12 m	3 m	2,5 m	15 m	3,5 m				
Mounting ht.	Remote	Close																				
1,2 m	10 m	2 m																				
2,0 m	12 m	3 m																				
2,5 m	15 m	3,5 m																				
Combi lens		Mounting ht. 1,2 m 2,0 m 2,5 m	Front 9 m 12 m 15 m	Side 4 m 8 m 10 m	Horizontal Mask along the side using the blind 	zaklejając obszar daleki lub średni można ograniczyć wykrywanie do obszaru położonego w bliskiej odległości <table><tr><th>Mounting ht.</th><th>Remote</th><th>Medium</th><th>Close</th></tr><tr><td>1,2 m</td><td>9 m</td><td>3 m</td><td>1 m</td></tr><tr><td>2,0 m</td><td>12 m</td><td>8 m</td><td>3 m</td></tr><tr><td>2,5 m</td><td>15 m</td><td>11 m</td><td>3,5 m</td></tr></table>	Mounting ht.	Remote	Medium	Close	1,2 m	9 m	3 m	1 m	2,0 m	12 m	8 m	3 m	2,5 m	15 m	11 m	3,5 m
Mounting ht.	Remote	Medium	Close																			
1,2 m	9 m	3 m	1 m																			
2,0 m	12 m	8 m	3 m																			
2,5 m	15 m	11 m	3,5 m																			

Application example: DualLINE presence detector

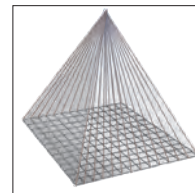


- 01 Busch-Watchdog presence tech DualLINE insert: 6813/11-xxx and insert 6402 U
- 02 Push-button
- 03 1 sensor of other manufacturers
- 04 4 sensors and mirror/lens system of Busch-Watchdog presence tech. The detection system consisting of sensors and mirrors is far superior to common movement sensors. Even the smallest movement is detected.

03



04



Today, presence detectors are a vital part of all publicly and commercially used buildings and result in great savings. The new Busch-Watchdog presence dualLINE. It doesn't just monitor, it also offers many useful additional functions.

- » Control two independent lighting rows by only one presence detector dependent on daylight.
- » Either fully automatic or semiautomatic mode: activation and deactivation is controlled only by the presence detector or activation is controlled by a push-switch, while deactivation takes place automatically.

- » In fully automatic operation, the presence detector can be switched to continuous OFF using the push-switch; activation using the push-switch is possible at any time.
- » Manual continuous lighting is possible via push-switch: the automatic return to automatic mode takes place when no more movement is detected.

Overview of Busch-Watchdog, surface-mounted



**Busch-Watchdog
220 AlarmLINE**
6849 AGM-204



**Busch-Watchdog
220 ProfessionalLINE**
6845/11 AGM-204



**Busch-Watchdog
280 ProfessionalLINE**
6846 AGM-204



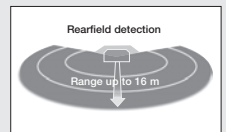
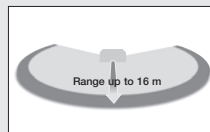
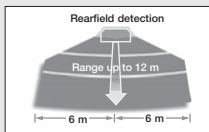
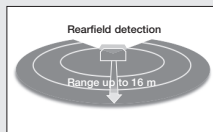
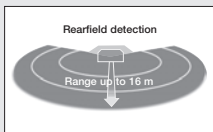
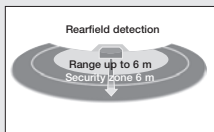
**Busch-Watchdog
90 ProfessionalLINE**
6853 AGM-204



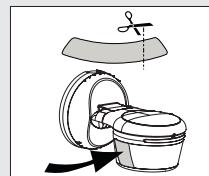
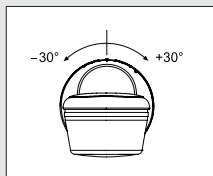
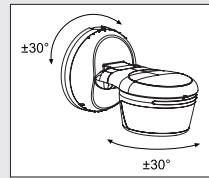
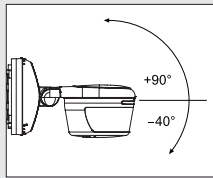
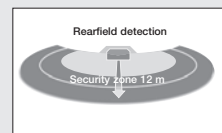
**Busch-Watchdog 220
SelectLINE**
6845 AGS-204



**Busch-Watchdog
220 WaveLINE**
6745 AGM-204

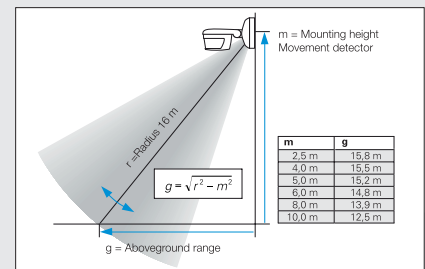


**Busch-Watchdog
BasicLINE**
6844 AGM-204-500



Setting the transmission range

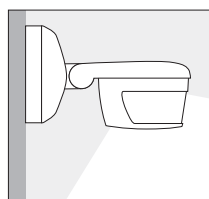
- » Regulation of the range due to turning, switching, or partially covering
- » The optimum mounting height is 2.50 m.



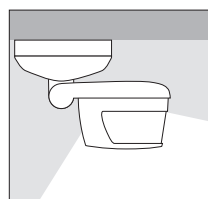
Mounting possibilities

- 01 Wall mounting
- 02 Ceiling mounting
- 03 Corner mounting (using the corner adapter)
- 04 Corner adapter for Busch-Watchdog ProfessionalLINE insert:: 6887-xx

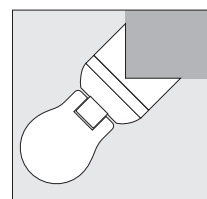
01



02



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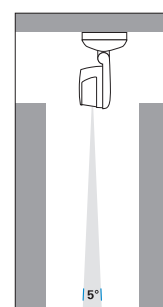
04
















Busch-Watchdog 220 SelectLINE

- » Particularly thin, discoidal detection zone
- » Horizontally aligned detection with a flat, wide-area cover, e.g. suitable for warehouse passageways in large industrial premises
- » In case of an attachment height of 1.5 metres, for example – horizontally

aligned – a one-metre-high area in which no detection takes place arises. Animals are thus not detected, while people always are.



Modular design of electronic inserts and control elements

		Switching					Dimming				Blind	
Flush-mounted insert		Universal relay insert 6401 U-102	Universal 2gang1 way insert 6402 U	Relay insert 6812 U-101	MOSFET insert 6804 U-101	Extension insert 6805 U	Universal master dimmer insert 6593 U	Memory touch-type controller 6550 U-101	Memory 2gang-1way dimmer, 2gang 6565 U	Memory touch dimmer 6560 U-101	Basic blind insert 6418 U	Blind control II insert 6411 U-101/6411 U/S-101
Switch/dim. cap.		2,300 W/VA All loads 10 AX	2,300 W/VA All loads 10 AX	700 W/VA All loads 3 A	60-240 W/VA, 230 V incandescent and halogen lamps, low-voltage halogen lamps with conventional or Busch-electronic transformers	Active Watchdog extension for 6401 U-102, 6402 U, 6804 U-101, 6593 U, and 6550 U-101	60-420 W/VA expandable by 6594 U up to 735 W/VA 230 V incandescent and halogen lamps, low-voltage halogen lamps with conventional or Busch-electronic transformers	ECG = 0/1-10 V, LEDs with electronic control gear, 700 W/VA, higher contact load possible with external relay, 50 mA control current	2 x 40-315 W/VA, 230 V incandescent and halogen lamps, low-voltage halogen lamps with electronic transformer	20-500 W/VA, 230 V incandescent and halogen lamps, low-voltage halogen lamps with conventional transformer	690 VA, 3 A at cos φ 0.5	690 VA, 3 A at cos φ 0.5
Timer control element	 Comfort timer control element 6455	X Timer with maintained contact (for switching lights, pumps etc.)					X (Timer with adjustable brightness values)	X (timer with adjustable brightness values)				X (timer with 3-minute contact for lowering and raising blinds)
	 Standard timer control element 6456										X (timer with 3-minute contact for lowering and raising blinds)	
Surface mounting	 Busch-Watchdog presencetech DualLINE 6813/11-xxx	X *) (either semi-automatic or fully automatic operation)	X *) (for controlling two independent lighting rows)	X *) (fully automatic operation only)	X *) (either semi-automatic or fully automatic operation)	X *)	X *) (constant light regulation, either semiautomatic or fully automatic operation)	X *) (constant light regulation, either semiautomatic or fully automatic operation)				
	 Busch-Watchdog presencetech 6813-xxx-101	X *)	X *) (heating, air conditioning, ventilation function, Output 2 with switch-on/switch-off delay in relation to Output 1)	X *)	X *)	X *)	X *) (constant light regulation)	X *) (constant light regulation)				
	 Busch-Watchdog sensor All-Weather 44 with combination lens 6800-3x-102C	X (only 6401 U-102 for outdoor use, frost-proof up to -25°C)	X (Output 2 with switch-on/switch-off delay in relation to Output 1)					X				
	 Busch-Watchdog comfort sensor (multilens) 6800-xxx-104(M)	X	X (Output 2 with switch-on/switch-off delay in relation to Output 1)	X	X	X	X (Soft OFF mode: dim down/switch off within the final minute/switch-off warning)	X				
	 Busch-Watchdog sensor standard 6810-21x	X	X (Output 2 with switch-on/switch-off delay in relation to Output 1)	X	X	X	X	X				
Control element	 Busch-Remote control IR control element 6067-xxx-xxx	X *) (latching relay)	X *) (latching relay, 2 NO contacts, separate slave contact for light and fan control)									
	 Busch-Remote control IR control element 6066-xxx-xxx		X *) (electronic serial switch, remote-controllable, 2 NO contacts)				X	X				X
	 Busch-Blind control II control element 6430-xxx-xxx		X (electronic 2gang switch, 2 NO contacts)								X	X
	 Control Element for Memory 2gang dimmer 6545-xxx								X			
	 Touch dimmer control element 6543-xxx-10x	X) (latching relay)	X (latching relay, 2 NO contacts, separate slave contact for light and fan control)				X	X		X		
		Switching					Dimming				Blind	

Busch-Watchdog 220 WaveLINE

Due to the distribution of the sensor and actuator functions across two devices, this Busch-Watchdog opens up completely new application possibilities. The sensor can be placed fully freely wherever it optimally monitors the entire detection range. It works particularly energy-saving so that the high-power batteries used last up to 10 years. If it detects a movement, it then transfers the switch-on signal to the built-in receiver, which can even be installed in a deep flush-mounted socket outlet underneath a push-switch near the lamp. In addition, it is possible to assign several sensors to a single actuator and thus reliably monitor even angled areas. The mounting of the WaveLINE

Watchdog could not be easier. Wiring is not required due to battery operation. With only one fastening screw, the wall connection socket is quickly attached to the wall. In the process, a rubber absorber provides perfect adjustment in case of an uneven foundation. Adapters for mounting to house corners or downpipes are also available. The sensor itself is then connected to the wall connection socket via a bayonet lock and can be turned by 30°, for example, for the equalisation of slopes. A battery test can be performed directly on the device and the sending of a low-battery message to a detector is also possible.







Even without the supply voltage, movement can be reliably detected. The battery-operated watchdog sensors can be mounted onto any terrain.


- 01 Busch-Watchdog 220 WaveLINE insert:: 6745 AGM-204
- 02 Built-in receiver WaveLINE insert:: 6701
- 03 WaveLINE LED display insert:: 6730-xx na 6404 U

» It is possible to display the detection of a movement using an LED on the Busch-Watchdog.




These presence detectors are complete devices with integrated relay.


	Detection range (ø at 2.5 m installation height)	Connection for push-button	Semi-automatic or automatic	IP 54 (only with surface-mounted housing 6888)	Remote control 6843
 BasicLINE mini 6811 EB	6 m				
 BasicLINE 6814 U	7 m	X	X		
 Corridor 6818 U	24 m	X		X	X
 Busch-Watchdog BasicLine 6844 AGM-204-500	12 m	X		X	

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Watchdog® Presence tech BasicLINE 1) Electronic movement detector for detecting thermal motion. Additional possibility for switch-on via normally open push-button switch. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Outputs: 1x Normally open contact, potential-bound Suitable for: 230 V incandescent lamps Rated power: 1000 W Suitable for: 230 V halogen lamps Rated power: 2000 W Suitable for: Fluorescent lamps Rated power: 1000 W Detection range: frontal: 12 m, lateral: 12 m Detection angle: 240 ° Brightness limit value: 10 Lux - 200 Lux , Daytime operation Mounting height: 2.5 m Protection class (Device): IP 55 Temperature range (Device): -20 °C to 40 °C Dimensions: (L x W x D): 95 mm x 76 mm x 118 mm		
	NEW		
204 white	6844 AGM-204-500	6800-0-2507	1

1) In combination with a relay/contactator, an RC suppressor 6899 has to be used.

	Busch-Watchdog 220 AlarmLINE 1) incl. IR remote control Electronic movement detector for detecting thermal motion. For potential-free operation. With additional, separately evaluated detection level (safety zone). With optical alarm and second switch output for detection in the safety zone. Remote control possible via IR remote control 6841 (included in delivery). Remote configurable via IR service remote control 6842. With display for detection and operation mode. With ground and rear-field detection. With planar compensation: +/- 30°. With high-quality lens for optimum detection. Detection sensitivity selectable in 3 steps. Surveillance density: 104 sectors with 416 switching segments. All functions controlled by microprocessor. Permanent light and presence simulation can be activated via remote control. With automatic range stabilization. With automatic interference suppression. With automatic dazzle-proofing. With brightness-independent test mode for evaluating the detection zone. Additional possibility for switch-on via normally open push-button switch. Switch-off delay: 10 sec to 30 min or short-time pulse 1 sec adjustable. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz/60 Hz Outputs: 1x Normally open contact, potential-bound Suitable for: ohmic, capacitive and inductive loads Rated current: 10 AX, cos 0.6 Rated power: 2300 W/VA Control/Signal outputs: 1, Normally open contact, potential free Rated power: 0.12 - 2300 W/VA Detection range: frontal: 16 m, lateral: 16 m Detection range 2: frontal: 6 m, lateral: 6 m Detection angle: 220 ° Brightness limit value: 0.5 Lux - 300 Lux , Daytime operation Mounting height: 2.5 m Protection class (Device): IP 55 Temperature range (Device): -25 °C to 55 °C Dimensions: (L x W x D): 97 mm x 97 mm x 159 mm		
201 brown	6849 AGM-201	6800-0-2311	1
204 white	6849 AGM-204-500	6800-0-2314	1
208 silver metallic	6849 AGM-208	6800-0-2313	1
35 anthracite	6849 AGM-35	6800-0-2312	1



1) In combination with a relay/contactator, an RC suppressor 6899 has to be used.


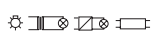
Product	Article-No.	Order-No.	Pack/Qty
	Busch-Watchdog 220 WaveLINE 1) 2) 3) Wireless movement detector for detecting thermal motion. With display for detection and status indication. With ground and rear-field detection. With planar compensation: +/- 30°. With high-quality lens for optimum detection. Detection sensitivity selectable in 3 steps. Surveillance density: 84 sectors with 336 switching segments. All functions controlled by microprocessor. With automatic range stabilization. With automatic interference suppression. With automatic dazzle-proofing. With automatic battery monitoring. With brightness-independent test mode for evaluating the detection zone. Can be combined with WaveLINE 6701 built-in receiver. Compatible with WaveLINE KNX gateway TP-RF 6770. For standalone and group operation. Switch-off delay: 3 min. (standalone mode), adjustable at actuator (group operation). Send frequency: 868 MHz. Range in free field: approx. 100 m Power supply: 3x 1.5 V batteries, type: mignon cell batteries (IEC LR06, AA). Battery life: approx. 5 years Rated voltage: 4.5 V- Detection range: frontal: 16 m, lateral: 16 m Detection angle: 220 ° Brightness limit value: 0.5 Lux - 300 Lux , Daytime operation Mounting height: 2.5 m Protection class (Device): IP 55 Temperature range (Device): -25 °C to 55 °C Dimensions: (L x W x D): 97 mm x 97 mm x 159 mm		
201 brown	6745 AGM-201	6700-0-0019	1
204 white	6745 AGM-204	6700-0-0018	1/10
208 silver metallic	6745 AGM-208	6700-0-0021	1
35 anthracite	6745 AGM-35	6700-0-0020	1

1) Battery not included in delivery.


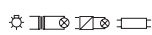
2) Recommended battery type: lithium batteries: IEC FR06 (LR91 AA 1.5V).

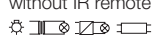
3) Alternative battery type: alkaline-manganese batteries: IEC LR06 (AA 1.5V).

Product	Article-No.	Order-No.	Pack/Qty
	Built-in wireless receiver 3 wire connection (neutral conductor required). For wireless switching of electrical loads. For functions: permanent ON/1gang/1way, timer and light scene control. For Busch Watchdog® WaveLINE. For WaveLINE 6721-xx universal signalling unit. Compatible with WaveLINE KNX gateway TP-RF 6770. Switch-off delay: 60 to 30 min., adjustable. Repeater function can be activated for extended range. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). For universal attachment or installation. For installation in (deep) flush-mounted boxes to German Standard DIN 49073, Part 1. Controllable up to 48 transmission addresses. Send/receive frequency: 868 MHz. Range in free field: approx.100 m Control element: Adjustable potentiometer Display elements: Status indication of output via LED. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz/60 Hz Inputs: 1 Polling voltage: 230 V~, Sensing pulse, L-wire Outputs: 1x Normally open contact Suitable for: Resistive load Rated current: 10 A Output voltage: 230 V~ Rated power: 2300 W Suitable for: capacitive Rated current: 10 AX Output voltage: 230 V~ Rated power: 2300 VA Suitable for: inductive Rated current: 10 A, cos 0.6 Output voltage: 230 V~ Rated power: 2300 VA Protection class (Device): IP 20 Temperature range (Device): -25 °C to 55 °C Dimensions: (L x W x D): 47 mm x 48 mm x 30 mm Installation depth: 30 mm		
	 6701	6700-0-0022	1/10
white			

	Busch-Watchdog 90 ProfessionalLINE 1) Electronic movement detector for detecting thermal motion. With display for detection and operation mode. With ground and rear-field detection. With planar compensation: +/- 30°.		
	With high-quality lens for optimum detection. Surveillance density: 50 sectors with 200 switching segments. With brightness-independent test mode for evaluating the detection zone. Additional possibility for switch-on via normally open push-button switch. Switch-off delay option: 1 / 3 or 5 min. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz/60 Hz Outputs: 1x Normally open contact, potential-bound Suitable for: ohmic, capacitive and inductive loads Rated current: 16 AX, cos 0.6 Rated power: 3680 W/VA Detection range: frontal: 12 m, lateral: 6 m Detection angle: 90 ° Brightness limit value: 3 Lux / 15 lux / daytime operation Mounting height: 2.5 m Protection class (Device): IP 55 Temperature range (Device): -25 °C to 55 °C Dimensions: (L x W x D): 97 mm x 97 mm x 159 mm		
	 6853 AGM-201 6853 AGM-204-500 6853 AGM-208 6853 AGM-35-500	6800-0-2318 6800-0-2321 6800-0-2320 6800-0-2322	1 1/10 1 1
201 brown			
204 white			
208 silver metallic			
35 anthracite			


1) In combination with a relay/contact, an RC suppressor 6899 has to be used.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Watchdog 220 ProfessionalLINE 1) Electronic movement detector for detecting thermal motion. Remote control possible via IR remote control 6841 (included in delivery). Remote configurable via IR service remote control 6842. With display for detection and operation mode. With ground and rear-field detection. With planar compensation: +/- 30°.		
	With high-quality lens for optimum detection. Detection sensitivity selectable in 3 steps. Surveillance density: 84 sectors with 336 switching segments. All functions controlled by microprocessor. Permanent light and presence simulation can be activated via remote control. With automatic range stabilization. With automatic interference suppression. With automatic dazzle-proofing. With brightness-independent test mode for evaluating the detection zone. Additional possibility for switch-on via normally open push-button switch. Switch-off delay: 10 sec to 30 min or short-time pulse 1 sec adjustable. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz/60 Hz Outputs: 1x Normally open contact, potential-bound Suitable for: ohmic, capacitive and inductive loads Rated current: 16 AX, cos 0.6 Rated power: 3680 W/VA Detection range: frontal: 16 m, lateral: 16 m Detection angle: 220 ° Brightness limit value: 0.5 Lux - 300 Lux , Daytime operation Mounting height: 2.5 m Protection class (Device): IP 55 Temperature range (Device): -25 °C to 55 °C Dimensions: (L x W x D): 97 mm x 97 mm x 159 mm		
	incl. IR remote control		
	 6845 AGM-201-500 6845 AGM-204-500 6845 AGM-208-500 6845 AGM-35-500	6800-0-2301 6800-0-2300 6800-0-2303 6800-0-2302	1 1/10 1 1
201 brown			
204 white			
208 silver metallic			
35 anthracite			

without IR remote control			
	 6845/11AGM-201-500 6845/11AGM-204-500 6845/11 AGM-35-500 6845/11AGM-208-500	6800-0-2335 6800-0-2334 6800-0-2336 6800-0-2337	1 1/10 1 1
201 brown			
204 white			
35 anthracite			
208 silver metallic			

1) In combination with a relay/contact, an RC suppressor 6899 has to be used.



Product	Article-No.	Order-No.	Pack/Qty
	Busch-Watchdog 220 SelectLINE 1) Electronic movement detector for detecting thermal motion. Remote control possible via IR mobile remote control 6841. Remote configurable via IR service remote control 6842. With display for detection and operation mode. With planar compensation: +/- 30°. With high-quality lens for optimum detection. Detection sensitivity selectable in 3 steps. Surveillance density: 28 sectors with 112 switching segments. All functions controlled by microprocessor. Permanent light and presence simulation can be activated via remote control. With automatic range stabilization. With automatic interference suppression. With automatic dazzle-proofing. With brightness-independent test mode for evaluating the detection zone. Additional possibility for switch-on via normally open push-button switch. Switch-off delay: 10 sec to 30 min or short-time pulse 1 sec adjustable. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz/60 Hz Outputs: 1x Normally open contact, potential-bound Suitable for: ohmic, capacitive and inductive loads Rated current: 16 AX, cos 0.6 Rated power: 3680 W/VA Detection range: frontal: 16 m, lateral: 16 m Detection angle: 220 ° Brightness limit value: 0.5 Lux - 300 Lux , Daytime operation Mounting height: 1.1 m - 1.5 m alternative: 2.5 m Protection class (Device): IP 55 Temperature range (Device): -25 °C to 55 °C Dimensions: (L x W x D): 97 mm x 97 mm x 159 mm		
204 white	6845 AGS-204	6800-0-2315	1/10
35 anthracite	6845 AGS-35	6800-0-2316	1

1) In combination with a relay/contactator, an RC suppressor 6899 has to be used.

**Busch Watchdog 280 ProfessionalLINE 1)
incl. IR remote control**

Electronic movement detector for detecting thermal motion.

Remote control possible via IR remote control 6841
(included in delivery).

Remote configurable via IR service remote control 6842.

With display for detection and operation mode.

With ground and rear-field detection.

With planar compensation: +/- 30°.

With high-quality lens for optimum detection.

Detection sensitivity selectable in 3 steps.

Surveillance density: 110 sectors with 440 switching
segments.

All functions controlled by microprocessor.

Permanent light and presence simulation can be activated
via remote control.

With automatic range stabilization.

With automatic interference suppression.

With automatic dazzle-proofing.

With brightness-independent test mode for evaluating the
detection zone.

Additional possibility for switch-on via normally open push-
button switch.

Switch-off delay: 10 sec to 30 min or short-time pulse 1 sec
adjustable.

Rated voltage: 230 V~, +10 % / -10 %

Rated frequency: 50 Hz/60 Hz

Outputs: 1x Normally open contact, potential-bound

Suitable for: ohmic, capacitive and inductive loads

Rated current: 16 AX, cos 0.6

Rated power: 3680 W/VA

Detection range: frontal: 16 m, lateral: 16 m

Detection angle: 280 °

Brightness limit value: 0.5 Lux - 300 Lux , Daytime operation

Mounting height: 2.5 m

Protection class (Device): IP 55

Temperature range (Device): -25 °C to 55 °C


Dimensions: (L x W x D): 97 mm x 97 mm x 159 mm

204 white
201 brown
35 anthracite

6846 AGM-204-500
6846 AGM-201-500
6846 AGM-35-500


6800-0-2307 1
6800-0-2308 1
6800-0-2309 1

1) In combination with a relay/contactator, an RC suppressor 6899 has to be used.



Product	Article-No.	Order-No.	Pack/Qty
	Corner adapter For Busch Watchdog 220 Professional/SelectLINE. For detection on two sides of the house, in combination with Busch Watchdog® 280 ProfessionalLINE. Assembly is on the corner of the house. Suitable for mounting on down-pipes For flush or surface wiring. Mounting height: 2.5 m Dimensions: (L x W x D): 97 mm x 100 mm x 60 mm		
	201 brown	6887-201-500	6899-0-0293 1
	204 white	6887-204-500	6899-0-0292 1
	35 anthracite	6887-35-500	6899-0-0294 1

	IR remote control 1) For Busch Watchdog 220 Professional/SelectLINE. For Busch Watchdog 280 ProfessionalLINE. For Busch Watchdog 220 AlarmLINE. The following functions can be activated: For function: Permanent lighting ON/OFF (4 hr). Presence simulation ON/OFF. With coded transmission signal. Power supply: lithium button cell battery Type CR2025. Range: frontal 6 m Rated voltage: 3 V- Dimensions: (L x W x D): 87 mm x 40 mm x 7 mm		
	6841-500	6899-0-0296	1



1) Battery included in delivery.

	IR Service remote control 1) For Busch Watchdog 220 Professional/SelectLINE. For Busch Watchdog 280 ProfessionalLINE. For Busch Watchdog 220 AlarmLINE. The following functions/settings can be activated depending on device type: For function: Permanent lighting ON/OFF (4 hr). Presence simulation ON/OFF. For function: Optical alarm active/inactive. For function: Switch output safety zone active/inactive. Test operation ON/OFF. Direction detection ON/OFF. Automatic switch-off (after 90 min.) ON/OFF. Daytime operation of safety zone active/inactive. Potential-free operation active/inactive. Sensitivity - / normal/ +. Reset to factory default settings. With coded transmission signal. Power supply: lithium button cell battery Type CR2025. Range: frontal 6 m Rated voltage: 3 V- Dimensions: (L x W x D): 94 mm x 53 mm x 7 mm		
	6842	6899-0-0299	1

1) Battery included in delivery.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Watchdog® Presence tech BasicLINE mini ¹⁾ ²⁾ For switching lighting systems that depend on brightness and movement. Low mounting height due to separate sensor/actuator concept. Detection range (installation height 3m, up to 6m in diameter). Continuously variable detection sensitivity. With brightness-independent test mode for evaluating the detection zone. With detection display in test mode. Ceiling installation using integrated spring bracket. Surveillance density: 19 sectors with 76 switching segments. Switch-off delay: approx. 1 sec - 15 min or short-time pulse adjustable. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Outputs: 1x Normally open contact, potential-bound Suitable for: 230 V incandescent lamps Rated power: 2000 W Suitable for: Energy-saving bulbs Rated power: 7 - 400 W Suitable for: Fluorescent lamps Rated current: 4 AX, cos 0.5 Rated power: 1000 W/VA Detection angle: 360 ° Brightness limit value: 10 Lux - 1000 Lux , Daytime operation Mounting height: 2 m - 5 m Protection class (Device): IP 20 Protection class (Sensor): IP 40 Temperature range (Device): 0 °C to 45 °C Installation depth: 77 mm IEC 60669-2-1		
	<div> <div>NEW</div>  </div> alpine white 6811 EB-500 6800-0-2517 1/30		

- 1) When mounting the actuator through the drilled hole of the sensor an installation depth of ≥ 205 mm is to be taken into account.
 2) In combination with a relay/contact, an RC suppressor 6899 has to be used.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Watchdog® Presence tech BasicLINE ¹⁾ For switching lighting systems that depend on brightness and movement. For semiautomatic and fully automatic operation. Additional activation/deactivation possibility through pushbutton input. Detection range (for installation height 2.5 m, circular, 7 m in diameter). Adaptation of the detection range possible using the included masking elements. With brightness-independent test mode for evaluating the detection zone. With detection display in test mode. Mounting possibility in combination with built-in installation boxes and device sockets. Ceiling installation using integrated spring bracket. Adjustment elements accessible on the front side. 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. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Outputs: 1x Normally open contact, potential-bound Suitable for: 230 V incandescent lamps Rated power: 2000 W Suitable for: Energy-saving bulbs Rated power: 7 - 400 W Suitable for: Fluorescent lamps Rated current: 4 AX, cos 0.5 Rated power: 1000 W/VA Detection angle: 360 ° Brightness limit value: 10 Lux - 2000 Lux Mounting height: 2 m - 4 m Protection class (Device): IP 40 Temperature range (Device): 0 °C to 45 °C Dimensions: (L x W x D): 111 mm x 111 mm x 59 mm Installation depth: 41 mm IEC 60669-2-1		
	<div> <div>NEW</div>  </div> alpine white 6814 U-500 6800-0-2518 1/24		

- 1) In combination with a relay/contact, an RC suppressor 6899 has to be used.



Product	Article-No.	Order-No.	Pack/Qty
	Busch-Watchdog® Presence tech BasicLINE Corridor 1) 2) For switching lighting systems that depend on brightness and movement. Additional activation/deactivation possibility through pushbutton input. Detection range (for installation height 2.5 m, circular, up to 24 m in diameter). Adaptation of the detection range possible using the included masking elements. With brightness-independent test mode for evaluating the detection zone. With detection display in test mode. With automatic motion detection. With automatic sensitivity adaptation. Mounting possibility in combination with built-in installation boxes and device sockets. Ceiling installation using included dust protection socket. Adjustment elements accessible on the front side. Surveillance density: 215 sectors with 860 switching segments. Switch-off delay: approx. 10 sec - 30 min or short-time pulse adjustable. Remote control possible via IR service manual transmitter 6843. Use outdoors possible due to combination with surface-mounted housing 6888. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Outputs: 1x Normally open contact, potential-bound Suitable for: 230 V incandescent lamps Rated power: 2000 W Suitable for: Energy-saving bulbs Rated power: 7 - 400 W Suitable for: Fluorescent lamps Rated current: 4 AX, cos 0.5 Rated power: 1000 W/VA Detection angle: 360 ° Brightness limit value: 10 Lux - 2000 Lux Mounting height: 2 m - 3 m Protection class (Device): IP 40 Temperature range (Device): -20 °C to 45 °C Dimensions: (L x W x D): 110 mm x 110 mm x 70 mm Installation depth: 48 mm IEC 60669-2-1 NEW 		
alpine white	6818 U-500	6800-0-2519	1/18

- 1) The maximum detection range depends on the mounting site and ambient conditions.
 2) In combination with a relay/contactors, an RC suppressor 6899 has to be used.

	Surface mounting box For Busch-Watchdog® Presence tech BasicLINE Corridor 6818 U. For surface mounting and increase of the protection type. Protection class (Device): IP 54 Temperature range (Device): -20 °C to 45 °C Dimensions: (L x W x D): 106 mm x 106 mm x 26 mm		
alpine white	6888	6899-0-2305	1/90

	Protective basket For ceiling presence detectors. for Busch Watchdog Presence tech (6813-101-500), For Busch-Watchdog® Presence tech Dualline 6813/11-xxx. For Busch-Watchdog® Presence tech BasicLINE 6814 U. For Busch-Watchdog® Presence tech BasicLINE Corridor 6818 U. For Busch Smoke Alarm® BasicLINE (6830-24/0x). For Busch Smoke Alarm® ProfessionalLINE (6826-84). For Busch Heat Alarm ProfessionalLINE (6827-84). Also applicable in connection with surface-mounted housings 6885-xxx and 6888. For Busch-Watchdog Presence KNX 6161/10-xxx and 6131/11-xxx. Dimensions: (L x W x D): 180 mm x 180 mm x 98 mm		
alpine white	6898	6899-0-2304	1/12

Product	Article-No.	Order-No.	Pack/Qty
	IR Service remote control 1) For Busch-Watchdog® Presence tech BasicLINE Corridor 6818 U. The following functions/settings can be implemented. Permanent light on/off (8 h). Setting of the brightness limit value. Setting of the current ambient light value as the brightness limit value. Setting of switch-off delay or short-time pulse. Saving and duplication of the saved values. Activate test mode. Reset to factory default settings. Activation/deactivation of the button lock. Power supply: lithium button cell battery Type CR2032. Range: frontal 3 m Rated voltage: 3 V- Dimensions: (L x W x D): 106 mm x 50 mm x 8 mm		
	6843	6800-0-2511	1/120


- 1) Battery included in delivery.

	Busch-Watchdog Presence tech 1) For switching and dimming lighting systems that depend on brightness and movement. For constant light regulation in combination with Dimmer insert 6593 U or 6550 U-101. For heating/air-conditioning/ventilation adjustment in combination with serial insert 6402 U. For relay insert switch 6401 U-102, 6402 U and 6812 U-101. For MOS-Fet insert 6804 U-101. For extension insert 6805 U. Remote control possible via IR mobile remote control 6010-25. Surveillance zone (for installation height 2.5 m): circular, 8 m diameter. Intelligent turn-on delay. Surveillance density: 72 sectors with 640 switching segments. Switch-off delay: approx. 10 sec - 30 min or short-time pulse 1 sec adjustable. Detection angle: 360 ° Brightness limit value: 5 Lux - 1000 Lux Mounting height: 2 m - 8 m Protection class (Device): IP 20 Temperature range (Device): 0 °C to 35 °C 60669-2-1, British Standard EN 60669-2-1		
24 studio white matt	6813-101-500	6800-0-2178	1/10
183 aluminium silver	6813-183-101-500	6800-0-2324	1

- 1) Please order the respective flush mounted insert separately.

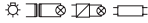
	Busch-Watchdog Presence tech DualLINE 1) For switching and dimming lighting systems that depend on brightness and movement. For constant light regulation in combination with Dimmer insert 6593 U or 6550 U-101. For the control of 2 independent light strips in combination with 2gang 1way unit 6402 U. For semiautomatic and fully automatic operation. For relay insert switch 6401 U-102, 6402 U and 6812 U-101. For MOS-Fet insert 6804 U-101. For extension insert 6805 U. Remote control possible via IR mobile remote control 6010-25. Surveillance zone (for installation height 2.5 m): circular, 8 m diameter. Intelligent turn-on delay. Surveillance density: 72 sectors with 640 switching segments. Switch-off delay: approx. 1 sec - 20 min or short-time pulse adjustable. Detection angle: 360 ° Brightness limit value: 5 Lux - 1000 Lux Mounting height: 2 m - 8 m Protection class (Device): IP 20 Temperature range (Device): 0 °C to 35 °C 60669-2-1, British Standard EN 60669-2-1		
24 studio white matt	6813/11-24-500	6800-0-2350	1
183 aluminium silver	6813/11-183-500	6800-0-2352	1



- 1) Please order the respective flush mounted insert separately.

Product	Article-No.	Order-No.	Pack/Qty
	Surface mounting box For Busch Watchdog Presence tech. For the installation of a flush-mounted insert in combination with the Busch-Watchdog Presence tech 6813/(11)-xx-(101) or the Busch-Watchdog Presence tech KNX 6131/10-xxx or Busch-Watchdog Presence tech DualLINE KNX 6131/11-xxx. Protection class (Device): IP 20		
24 studio white matt	6885-500	6899-0-0282	1/10
183 aluminium silver	6885-183-500	6899-0-0298	1

	Busch-Watchdog MOS-Fet Insert 1) 2) 3) 4) 5) 6) 2-wire connection. For Busch Watchdog 180 flush mounted Sensor Standard 6810-21x-101. For Busch Watchdog 180 flush mounted sensor Comfort II 6800-xxx-104 and 6800-xxx-104M. For Busch Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. Combinable with Busch Watchdog extension insert 6805 U. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz/60 Hz Suitable for: 230 V incandescent lamps, 230 V halogen lamps and low-voltage halogen lamps with conventional transformers or Busch Electronic Transformer. Rated power: 60 - 420 W/VA Temperature range (Device): 0 °C to 35 °C British Standard EN 60669-2-1		
	6804 U-101-500	6800-0-2219	1/10



- 1) In case of electronic transformers, 5 % transformer losses.
- 2) In the case of conventional transformers, take ~20% transformer loss into account.
- 3) Cannot be connected to compact fluorescent lamps, ECG or CCG.
- 4) Not suitable for activating the staircase time delay.
- 5) Cannot be used to control relays.
- 6) Requires an NIS international socket, E-No. 372507676.

	Busch-Watchdog relay mechanism 3 wire connection (neutral conductor required). For Busch Watchdog 180 flush mounted Sensor Standard 6810-21x-101. For Busch Watchdog 180 flush mounted sensor Comfort II 6800-xxx-104 and 6800-xxx-104M. For Busch Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. Rated voltage: 230 V, +10 % / -10 % Rated frequency: 50 Hz Outputs: 1x Normally open contact, potential-bound Suitable for: 230 V incandescent lamps, 230 V halogen lamps, fluorescent lamps and low-voltage halogen lamps, that are operated via transformers. Rated power: 700 W/VA Temperature range (Device): 0 °C to 55 °C British Standard EN 60669-2-1		
	6812 U-101-500	6800-0-2160	1/10


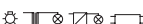
Product	Article-No.	Order-No.	Pack/Qty
	Busch-Universal master dimmer Insert 1) 2) 3) Touch Dimmer with light-level memory and intelligence for universal operation Selectable Soft-ON/OFF function and memory function. Capacity expansion via output-side, parallel connectable load line with a power module 6594 U up to 735 W/VA possible. For incandescent lamps, 230 V tungsten halogen lamps and low-voltage halogen lamps with conventional transformers or electronic transformers. Short-circuit protected, overload-protected. With touch control. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). Without control cover. For control cover with control lamp 6543-xxx-10x. For Busch-Remote control IR control cover 6066-xxx-10x and 6067-xxx-10x. For Comfort timer control element 6455. For Busch Watchdog 180 flush mounted Sensor Standard 6810-21x-101. For Busch Watchdog 180 flush mounted sensor Comfort II 6800-xxx-104 and 6800-xxx-104M. For Busch Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. Combinable with Busch Watchdog extension insert 6805 U. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Rated power: 60 - 420 W/VA IEC 60669-2-1, British Standard EN 60669-2-1		
	6593 U-500	6590-0-0171	1/10


- 1) In the case of conventional transformers, take ~20% transformer loss into account.
- 2) In case of electronic transformers, 5 % transformer losses.
- 3) In conjunction with 6800-xxx-104 (M) a Soft Off can be adjusted.

	Busch-Universal relay switch insert 3 wire connection (neutral conductor required). For Busch Watchdog 180 flush mounted Sensor Standard 6810-21x-101. For Busch Watchdog 180 flush mounted sensor Comfort II 6800-xxx-104 and 6800-xxx-104M. For Busch Watchdog 180 FP sensor for All Weather 44® 6800-3x-102C. For Busch Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. For Comfort timer control element 6455. For Busch-Remote control IR control cover 6067-xxx-10x. For control cover with control lamp 6543-xxx-10x. Combinable with Busch Watchdog extension insert 6805 U. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz/60 Hz Outputs: 1x Normally open contact, potential-bound Suitable for: 230 V incandescent lamps, 230 V halogen lamps, fluorescent lamps and low-voltage halogen lamps, that are operated via transformers. Rated current: 10 AX Rated power: 2300 W/VA Temperature range (Device): -25 °C to 55 °C British Standard EN 60669-2-1		
	6401 U-102-500	6401-0-0049	1/10


Product	Article-No.	Order-No.	Pack/Qty
	Busch-Memory touch-type controller ¹⁾ 2) 3 wire connection (neutral conductor required). For controlling ballast units for fluorescent lamps with control output 1-10 V DC, control current max. 50 mA DC. For control cover with control lamp 6543-xxx-10x. For Busch-Remote control IR control cover 6066-xxx-10x and 6067-xxx-10x. For Comfort timer control element 6455. For Busch Watchdog 180 flush mounted Sensor Standard 6810-21x-101. For Busch Watchdog 180 flush mounted sensor Comfort II 6800-xxx-104 and 6800-xxx-104M. For Busch Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. Combinable with Busch Watchdog extension insert 6805 U. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). For LED control via control gears Without control cover. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Rated power: 700 W/VA IEC 60669-2-1, British Standard EN 60669-2-1		
	 6550 U-101-500	6550-0-0042	1

- 1) Non-illuminable.
2) with integrated making-current limiter


	Busch-Universal 2gang 1way insert 3 wire connection (neutral conductor required). For the serial switch operating mode: 2 separate outputs, 2 separate extension inputs. For operation mode time switch: Output 1 (e.g. illumination), Output 2: switch-on/off delayed, dependent on output 1 (e.g. fan control). For Busch Watchdog 180 flush mounted Sensor Standard 6810-21x-101. For Busch Watchdog 180 flush mounted sensor Comfort II 6800-xxx-104 and 6800-xxx-104M. For Busch Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. For Busch-Remote control IR control cover 6066-xxx-10x and 6067-xxx-10x. For control cover 6430-xxx-10x and 6543-xxx-10x. Combinable with Busch Watchdog extension insert 6805 U. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Outputs: 2x Normally open contact, potential-bound Suitable for: 230 V incandescent lamps, 230 V halogen lamps, fluorescent lamps and low-voltage halogen lamps, that are operated via transformers. Rated current: 10 AX Rated power: 2300 W/VA Temperature range (Device): 0 °C to 35 °C British Standard EN 60669-2-1		
	 6402 U-500	6401-0-0051	1/10

	Insert for combination with flush-mounted inserts ¹⁾ 3 wire connection (neutral conductor required). For extending Busch Watchdog 180 flush mounted and Busch Watchdog Presence tech installations. For combination with relay insert 6401 U-102 and 6402 U. For combination with MOS-Fet insert 6804 U-101. For combination with Dimmer insert 6593 U and 6550 U-101. For Busch Watchdog 180 flush mounted Sensor Standard 6810-21x-101. For Busch Watchdog 180 flush mounted sensor Comfort II 6800-xxx-104 and 6800-xxx-104M. For Busch Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Control/Signal outputs: 1, electronic output, potential-bound Temperature range (Device): 0 °C to 35 °C		
	6805 U-500	6800-0-2161	1/10


- 1) Not combinable with relay switch insert 6812 U-101.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Watchdog 180 flush mounted standard sensor ¹⁾ With select-lens For automatic switching of devices dependent on motion and brightness. For relay insert switch 6401 U-102, 6402 U and 6812 U-101. For MOS-Fet insert 6804 U-101. For Dimmer insert 6593 U. For extension insert 6805 U. Surveillance density: 18 sectors with 72 switching segments. Switch-off delay: 80 sec. Detection range: frontal: 12 m, lateral: 8 m Detection angle: 180 ° Brightness limit value: 5 Lux - 250 Lux , Daytime operation Mounting height: 0.8 m - 1.2 m Protection class (Sensor): IP 20 Temperature range (Device): 0 °C to 35 °C		
212 white	6810-212-101-500	6800-0-2162	1
214 alpine white	6810-214-101-500	6800-0-2163	1
	Busch-Duro 2000® SI Reflex SI		

- 1) Please order the respective flush mounted insert separately.

	Busch-Watchdog 180 flush mounted comfort sensor II ¹⁾ With select-lens For automatic switching of devices dependent on motion and brightness. For relay insert switch 6401 U-102, 6402 U and 6812 U-101. For MOS-Fet insert 6804 U-101. For Dimmer insert 6593 U. For extension insert 6805 U. With integrated selector switch for ON-AUTOMATIC-OFF (lockable). Soft phase-out: In combination with the 6593 U (mode of operation: Soft OFF) the illumination is dimmed down within 60 sec and switched off. Surveillance density: 18 sectors with 72 switching segments. Switch-off delay: 10 sec to 30 min or short-time pulse 1 sec adjustable. Detection range: frontal: 12 m, lateral: 8 m Detection angle: 180 ° Brightness limit value: 5 Lux - 250 Lux , Daytime operation Mounting height: 0.8 m - 1.2 m Protection class (Sensor): IP 20 Temperature range (Device): 0 °C to 35 °C		
212 white	6800-212-104-500	6800-0-2164	1
212 white	6800-212-104-500	6800-0-2164	1
	Busch-Duro 2000® SI Reflex SI		


- 1) Please order the respective flush mounted insert separately.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Watchdog 180 flush mounted comfort sensor II 1) With select-lens For automatic switching of devices dependent on motion and brightness. For relay insert switch 6401 U-102, 6402 U and 6812 U-101. For MOS-Fet insert 6804 U-101. For Dimmer insert 6593 U. For extension insert 6805 U. With integrated selector switch for ON-AUTOMATIC-OFF (lockable). Soft phase-out: In combination with the 6593 U (mode of operation: Soft OFF) the illumination is dimmed down within 60 sec and switched off. Surveillance density: 18 sectors with 72 switching segments. Switch-off delay: 10 sec to 30 min or short-time pulse 1 sec adjustable. Detection range: frontal: 12 m, lateral: 8 m Detection angle: 180 ° Brightness limit value: 5 Lux - 250 Lux , Daytime operation Mounting height: 0.8 m - 1.2 m Protection class (Sensor): IP 20 Temperature range (Device): 0 °C to 35 °C		

alpha

20 platinum 2)	6800-20-104	6800-0-2068	1
21 bronze 2)	6800-21-104	6800-0-2069	1
22G ivory	6800-22G-104	6800-0-2070	1
24 studio white matt	6800-24-104-500	6800-0-2168	1
24G studio white	6800-24G-104-500	6800-0-2170	1
260 palladium 2)	6800-260-104	6800-0-2118	1/10
266 titanium 2)	6800-266-104	6800-0-2120	1/10


- 1) Please order the respective flush mounted insert separately.
2) Surface painted.

	Busch-Watchdog 180 flush mounted comfort sensor II 1) With select-lens For automatic switching of devices dependent on motion and brightness. For relay insert switch 6401 U-102, 6402 U and 6812 U-101. For MOS-Fet insert 6804 U-101. For Dimmer insert 6593 U. For extension insert 6805 U. With integrated selector switch for ON-AUTOMATIC-OFF (lockable). Soft phase-out: In combination with the 6593 U (mode of operation: Soft OFF) the illumination is dimmed down within 60 sec and switched off. Surveillance density: 18 sectors with 72 switching segments. Switch-off delay: 10 sec to 30 min or short-time pulse 1 sec adjustable. Detection range: frontal: 12 m, lateral: 8 m Detection angle: 180 ° Brightness limit value: 5 Lux - 250 Lux , Daytime operation Mounting height: 0.8 m - 1.2 m Protection class (Sensor): IP 20 Temperature range (Device): 0 °C to 35 °C		
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impuls

74 alpine white	6800-74-104-500	6800-0-2172	1
79 champagne metallic 2)	6800-79-104	6800-0-2081	1
72 ivory	6800-72-104	6800-0-2338	1/10
774 studio white matt 2)	6800-774-104	6800-0-2504	1
775 black matt 2)	6800-775-104	6800-0-2502	1
777 blackberry 2)	6800-777-104	6800-0-2357	1
783 aluminium silver 2)	6800-783-104	6800-0-2340	1

- 1) Please order the respective flush mounted insert separately.
2) Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Watchdog 180 flush mounted comfort sensor II 1) With select-lens For automatic switching of devices dependent on motion and brightness. For relay insert switch 6401 U-102, 6402 U and 6812 U-101. For MOS-Fet insert 6804 U-101. For Dimmer insert 6593 U. For extension insert 6805 U. With integrated selector switch for ON-AUTOMATIC-OFF (lockable). Soft phase-out: In combination with the 6593 U (mode of operation: Soft OFF) the illumination is dimmed down within 60 sec and switched off. Surveillance density: 18 sectors with 72 switching segments. Switch-off delay: 10 sec to 30 min or short-time pulse 1 sec adjustable. Detection range: frontal: 12 m, lateral: 8 m Detection angle: 180 ° Brightness limit value: 5 Lux - 250 Lux , Daytime operation Mounting height: 0.8 m - 1.2 m Protection class (Sensor): IP 20 Temperature range (Device): 0 °C to 35 °C		

future® linear

81 anthracite	6800-81-104	6800-0-2268	1
82 savanna/ivory white	6800-82-104	6800-0-2099	1/10
83 aluminium silver 2)	6800-83-104	6800-0-2325	1
84 davos/studio white matt 2)	6800-84-104	6800-0-2101	1/10
884 studio white matt 2)	6800-884-104	6800-0-2497	1
885 black matt 2)	6800-885-104	6800-0-2506	1

solo®

82 savanna/ivory white	6800-82-104	6800-0-2099	1/10
84 davos/studio white	6800-84-104	6800-0-2101	1/10
87 toscana/purple 2)	6800-87-104	6800-0-2107	1
803 meteor/grey metallic 2)	6800-803-104	6800-0-2484	1
815 sahara/yellow	6800-815-104	6800-0-2482	1

Busch-axcent®

84 davos/studio white	6800-84-104	6800-0-2101	1/10
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carat®

81 anthracite	6800-81-104	6800-0-2268	1
82 savanna/ivory white	6800-82-104	6800-0-2099	1/10
84 davos/studio white	6800-84-104	6800-0-2101	1/10

pure stainless steel 2)

866 stainless steel	6800-866-104	6800-0-2343	1
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- 1) Please order the respective flush mounted insert separately.
2) Surface painted.
*) Phase-out type



Product	Article-No.	Order-No.	Pack/Qty
	Busch-Watchdog 180 flush mounted comfort sensor II 1) 2) With multi-lens For automatic switching of devices dependent on motion and brightness. For down-to-ground detection. For relay insert switch 6401 U-102, 6402 U and 6812 U-101. For MOS-Fet insert 6804 U-101. For Dimmer insert 6593 U. For extension insert 6805 U. With integrated selector switch for ON-AUTOMATIC-OFF (lockable). Soft phase-out: In combination with the 6593 U (mode of operation: Soft OFF) the illumination is dimmed down within 60 sec and switched off. Surveillance density: 28 sectors with 112 switching segments. Switch-off delay: 10 sec to 30 min or short-time pulse 1 sec adjustable. Detection range: frontal: 15 m, lateral: 5 m Detection angle: 180 ° Brightness limit value: 5 Lux - 250 Lux , Daytime operation Mounting height: 0.8 m - 1.2 m alternative: 2.5 m Protection class (Sensor): IP 20 Temperature range (Device): 0 °C to 35 °C		
	Busch-Duro 2000® SI		
212 white	6800-212-104M-500	6800-0-2166	1
214 alpine white	Reflex SI		
	6800-214-104M-500	6800-0-2167	1


1) installation: slide switch top.
2) Please order the respective flush mounted insert separately.

	Busch-Watchdog 180 flush mounted comfort sensor II 1) 2) With multi-lens For automatic switching of devices dependent on motion and brightness. For down-to-ground detection. For relay insert switch 6401 U-102, 6402 U and 6812 U-101. For MOS-Fet insert 6804 U-101. For Dimmer insert 6593 U. For extension insert 6805 U. With integrated selector switch for ON-AUTOMATIC-OFF (lockable). Soft phase-out: In combination with the 6593 U (mode of operation: Soft OFF) the illumination is dimmed down within 60 sec and switched off. Surveillance density: 28 sectors with 112 switching segments. Switch-off delay: 10 sec to 30 min or short-time pulse 1 sec adjustable. Detection range: frontal: 15 m, lateral: 5 m Detection angle: 180 ° Brightness limit value: 5 Lux - 250 Lux , Daytime operation Mounting height: 0.8 m - 1.2 m alternative: 2.5 m Protection class (Sensor): IP 20 Temperature range (Device): 0 °C to 35 °C		
	<i>alpha</i>		
20 platinum 3)	6800-20-104M	6800-0-2084	1
21 bronze 3)	6800-21-104M	6800-0-2085	1
22G ivory	6800-22G-104M	6800-0-2086	1
24G studio white	6800-24G-104M-500	6800-0-2171	1
260 palladium 3)	6800-260-104M	6800-0-2119	1/10
266 titanium 3)	6800-266-104M	6800-0-2121	1/10


1) installation: slide switch top.
2) Please order the respective flush mounted insert separately.
3) Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Watchdog 180 flush mounted comfort sensor II 1) 2) With multi-lens For automatic switching of devices dependent on motion and brightness. For down-to-ground detection. For relay insert switch 6401 U-102, 6402 U and 6812 U-101. For MOS-Fet insert 6804 U-101. For Dimmer insert 6593 U. For extension insert 6805 U. With integrated selector switch for ON-AUTOMATIC-OFF (lockable). Soft phase-out: In combination with the 6593 U (mode of operation: Soft OFF) the illumination is dimmed down within 60 sec and switched off. Surveillance density: 28 sectors with 112 switching segments. Switch-off delay: 10 sec to 30 min or short-time pulse 1 sec adjustable. Detection range: frontal: 15 m, lateral: 5 m Detection angle: 180 ° Brightness limit value: 5 Lux - 250 Lux , Daytime operation Mounting height: 0.8 m - 1.2 m alternative: 2.5 m Protection class (Sensor): IP 20 Temperature range (Device): 0 °C to 35 °C		
	<i>impuls</i>		
72 ivory	6800-72-104M	6800-0-2339	1
74 alpine white	6800-74-104M-500	6800-0-2173	1
79 champagne metallic 3)	6800-79-104M	6800-0-2097	1
774 studio white matt 3)	6800-774-104M	6800-0-2505	1
775 black matt 3)	6800-775-104M	6800-0-2503	1
777 blackberry 3)	6800-777-104M	6800-0-2358	1
783 aluminium silver 3)	6800-783-104M	6800-0-2341	1


1) installation: slide switch bottom.
2) Please order the respective flush mounted insert separately.
3) Surface painted.


Product	Article-No.	Order-No.	Pack/Qty
	Busch-Watchdog 180 flush mounted comfort sensor II ¹⁾ ²⁾ With multi-lens		
	For automatic switching of devices dependent on motion and brightness.		
	For down-to-ground detection.		
	For relay insert switch 6401 U-102, 6402 U and 6812 U-101.		
	For MOS-Fet insert 6804 U-101.		
	For Dimmer insert 6593 U.		
	For extension insert 6805 U.		
	With integrated selector switch for ON-AUTOMATIC-OFF (lockable).		
	Soft phase-out: In combination with the 6593 U (mode of operation: Soft OFF) the illumination is dimmed down within 60 sec and switched off.		
	Surveillance density: 28 sectors with 112 switching segments.		
	Switch-off delay: 10 sec to 30 min or short-time pulse 1 sec adjustable.		
	Detection range: frontal: 15 m, lateral: 5 m		
	Detection angle: 180 °		
	Brightness limit value: 5 Lux - 250 Lux , Daytime operation		
	Mounting height: 0.8 m - 1.2 m alternative: 2.5 m		
	Protection class (Sensor): IP 20		
	Temperature range (Device): 0 °C to 35 °C		
	future® linear		
81 anthracite	6800-81-104M	6800-0-2269	1
82 savanna/ ivory white	6800-82-104M	6800-0-2100	1
83 aluminium silver ³⁾	6800-83-104M	6800-0-2327	1
84 davos/studio white	6800-84-104M	6800-0-2102	1/10
884 studio white matt ³⁾	6800-884-104M	6800-0-2498	1
885 black matt ³⁾	6800-885-104M	6800-0-2500	1
solo®			
82 savanna/ ivory white	6800-82-104M	6800-0-2100	1
84 davos/studio white	6800-84-104M	6800-0-2102	1/10
87 toscana/purple ³⁾	6800-87-104M	6800-0-2108	1
803 meteor/ grey metallic ³⁾	6800-803-104M	6800-0-2485	1
815 sahara/yellow	6800-815-104M	6800-0-2483	1
Busch-axcent®			
84 davos/studio white	6800-84-104M	6800-0-2102	1/10
carat®			
81 anthracite	6800-81-104M	6800-0-2269	1
82 savanna/ ivory white	6800-82-104M	6800-0-2100	1
84 davos/studio white	6800-84-104M	6800-0-2102	1/10
pure stainless steel ³⁾			
866 stainless steel	6800-866-104M	6800-0-2344	1

- 1) installation: slide switch top.
2) Please order the respective flush mounted insert separately.
3) Surface painted.
*) Phase-out type

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Watchdog 180 flush mounted comfort sensor II for All Weather 44® ¹⁾ ²⁾ With combi-lens		
	For automatic switching of devices dependent on motion and brightness.		
	For use outdoors.		
	For down-to-ground detection.		
	For relay switch insert 6401 U-102.		
	IP 44 only in conjunction with cover frames All Weather 44®.		
	Surveillance density: 40 sectors with 160 switching segments.		
	Switch-off delay: 10 sec to 30 min or short-time pulse 1 sec adjustable.		
	With screw-type terminal.		
	Detection range: frontal: 15 m, lateral: 10 m		
	Detection angle: 180 °		
	Brightness limit value: 5 Lux - 250 Lux , Daytime operation		
	Mounting height: 0.8 m - 1.2 m alternative: 2.5 m		
	Protection class (Sensor): IP 44		
	Temperature range (Device): -25 °C to 55 °C		
	Position for installation: vertical		
31 brown	6800-31-102C	6800-0-2353	1
32 white	6800-32-102C	6800-0-1898	1
33 aluminium silver	6800-33-102C	6800-0-2354	1
34 alpine white	6800-34-102C	6800-0-1674	1
35 anthracite	6800-35-102C	6800-0-1740	1

- 1) Delivered with sealing ring.
2) Please order the respective flush mounted insert separately.



	RC-quenching circuit		
	For protection against the damage or destruction of electronic devices due to overvoltages.		
	For wiring network-interconnected inductivities (e.g.. relay, protection, fluorescent lamps, transformers, etc.).		
	Eliminates functional disturbances on electronic devices, e.g. automatic circuit reclosure (clocking) of a motion detector.		
	Rated voltage: 230 V~, +10 % / -10 %		
	Rated frequency: 50 Hz		
	6899	6899-0-0231	10

	Twilight switch ¹⁾ ²⁾		
	With labelling field.		
	Labelling field 57.8 x 9.8 mm		
	Switch-on/switch-off delay: approx. 3-6 min non-adjustable.		
	Rated voltage: 230 V~		
	Rated frequency: 50 Hz		
	Rated current: 16 AX		
	Rated power: 3680 W/VA		
	Brightness limit value: 3 Lux - 500 Lux nominal		
	Protection class (Device): IP 44		
	Temperature range (Device): -35 °C to 55 °C		


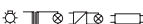
53 grey	2240 W-53	6500-0-0791	1/10
54 alpine white	2240 W-54	6500-0-0792	1/10

- 1) See lettering sheets 1799-13 and lettering software.
2) window non-illuminable.




Product	Article-No.	Order-No.	Pack/Qty
	Busch-Comfort switch 2-wire insert ^{1) 2) 3) 4)} 2-wire connection. For Busch-Comfort switch sensors 6815-xxx. Operation in 1gang 2way installations via push switch-unit for combination with flush-mounted units. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Suitable for: 230 V incandescent lamps, 230 V halogen lamps and low-voltage halogen lamps with conventional transformers or Busch Electronic Transformer. Rated power: 40 - 300 W/VA Temperature range (Device): 0 °C to 35 °C British Standard EN 60669-2-1		
	 6815 U	6800-0-2270	1/10


- 1) In case of electronic transformers, 5 % transformer losses.
 2) In the case of conventional transformers, take ~20% transformer loss into account.
 3) Not suitable for activating the staircase time delay.
 4) Output cannot be connected in parallel.

	Busch-Comfort switch relay mechanism ^{1) 2) 3)} 3 wire connection (neutral conductor required). For Busch-Comfort switch sensors 6815-xxx. Operation in 1gang 2way installations via push switch-unit for combination with flush-mounted units. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Suitable for: 230 V incandescent lamps and low-voltage halogen lamps with conventional transformers or electronic transformer. Rated power: 2300 W/VA Suitable for: 230 V halogen lamps Rated power: 1200 W Suitable for: Fluorescent lamps Rated current: 10 AX, cos 0.5 Rated power: 2300 VA Temperature range (Device): 0 °C to 35 °C British Standard EN 60669-2-1		
	 6816 U	6800-0-2355	1/10

- 1) In case of electronic transformers, 5 % transformer losses.
 2) In the case of conventional transformers, take ~20% transformer loss into account.
 3) Output can be connected in parallel.


	Busch-Comfort switch control element ¹⁾ With neon lamp. For 2-wire insert 6815 U. For relay insert 6816 U. Adjustable operating mode: semiautomatic mode, automatic switch-on, manual switch-off. Adjustable operating mode: automatic timer, manual switch-on, automatic (timer and motion-controlled) switch-off. Adjustable operating mode: automatic mode, automatic (motion-controlled) switch-on and switch-off. Push switch function possible at all times. Switch-off delay: 1 to 10 min., adjustable. Surveillance density: 9 sectors with 28 switching segments. Detection range: frontal: 5 m, lateral: 3 m Detection angle: 170 ° Brightness limit value: 0.5 Lux - 300 Lux , Daytime operation Mounting height: 0.8 m - 1.2 m Protection class (Sensor): IP 20 Temperature range (Device): 0 °C to 35 °C		
212 white	6815-212	6800-0-2271	1/10
	Reflex SI		
214 alpine white	6815-214	6800-0-2272	1/10

- 1) Please order the respective flush mounted insert separately.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Comfort switch control element ¹⁾ With neon lamp. For 2-wire insert 6815 U. For relay insert 6816 U. Adjustable operating mode: semiautomatic mode, automatic switch-on, manual switch-off. Adjustable operating mode: automatic timer, manual switch-on, automatic (timer and motion-controlled) switch-off. Adjustable operating mode: automatic mode, automatic (motion-controlled) switch-on and switch-off. Push switch function possible at all times. Switch-off delay: 1 to 10 min., adjustable. Surveillance density: 9 sectors with 28 switching segments. Detection range: frontal: 5 m, lateral: 3 m Detection angle: 170 ° Brightness limit value: 0.5 Lux - 300 Lux , Daytime operation Mounting height: 0.8 m - 1.2 m Protection class (Sensor): IP 20 Temperature range (Device): 0 °C to 35 °C		

20 platinum ²⁾	6815-20	6800-0-2273	1/10
21 bronze ²⁾	6815-21	6800-0-2274	1/10
22G ivory	6815-22G	6800-0-2275	1/10
24 studio white matt	6815-24	6800-0-2276	1/10
24G studio white	6815-24G	6800-0-2277	1/10
260 palladium ²⁾	6815-260	6800-0-2282	1/10
266 titanium ²⁾	6815-266	6800-0-2283	1/10

- 1) Please order the respective flush mounted insert separately.
 2) Surface painted.

	Busch-Comfort switch control element ¹⁾ With neon lamp. For 2-wire insert 6815 U. For relay insert 6816 U. Adjustable operating mode: semiautomatic mode, automatic switch-on, manual switch-off. Adjustable operating mode: automatic timer, manual switch-on, automatic (timer and motion-controlled) switch-off. Adjustable operating mode: automatic mode, automatic (motion-controlled) switch-on and switch-off. Push switch function possible at all times. Switch-off delay: 1 to 10 min., adjustable. Surveillance density: 9 sectors with 28 switching segments. Detection range: frontal: 5 m, lateral: 3 m Detection angle: 170 ° Brightness limit value: 0.5 Lux - 300 Lux , Daytime operation Mounting height: 0.8 m - 1.2 m Protection class (Sensor): IP 20 Temperature range (Device): 0 °C to 35 °C		
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future® linear

81 anthracite	6815-81	6800-0-2284	1/10
82 savanna/ivory white	6815-82	6800-0-2285	1/10
83 aluminium silver ²⁾	6815-83	6800-0-2342	1/10
84 davos/studio white	6815-84	6800-0-2286	1/10
884 studio white matt ²⁾	6815-884	6800-0-2499	1/10
885 black matt ²⁾	6815-885	6800-0-2501	1/10

solo®

82 savanna/ivory white	6815-82	6800-0-2285	1/10
84 davos/studio white	6815-84	6800-0-2286	1/10
87 toscana/purple ²⁾	6815-87	6800-0-2289	1/10
803 meteor/grey metallic ²⁾	6815-803	6800-0-2481	1/10
815 sahara/yellow	6815-815	6800-0-2480	1/10

Busch-axcent®

84 davos/studio white	6815-84	6800-0-2286	1/10
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carat®

81 anthracite	6815-81	6800-0-2284	1/10
82 savanna/ivory white	6815-82	6800-0-2285	1/10
84 davos/studio white	6815-84	6800-0-2286	1/10

pure stainless steel ²⁾

866 stainless steel	6815-866	6800-0-2345	10/10
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- 1) Please order the respective flush mounted insert separately.
 2) Surface painted.
 *) Phase-out type

