ABB i-bus® KNX
Smart Home and
Intelligent Building Control
Product Range Overview

ATRINA
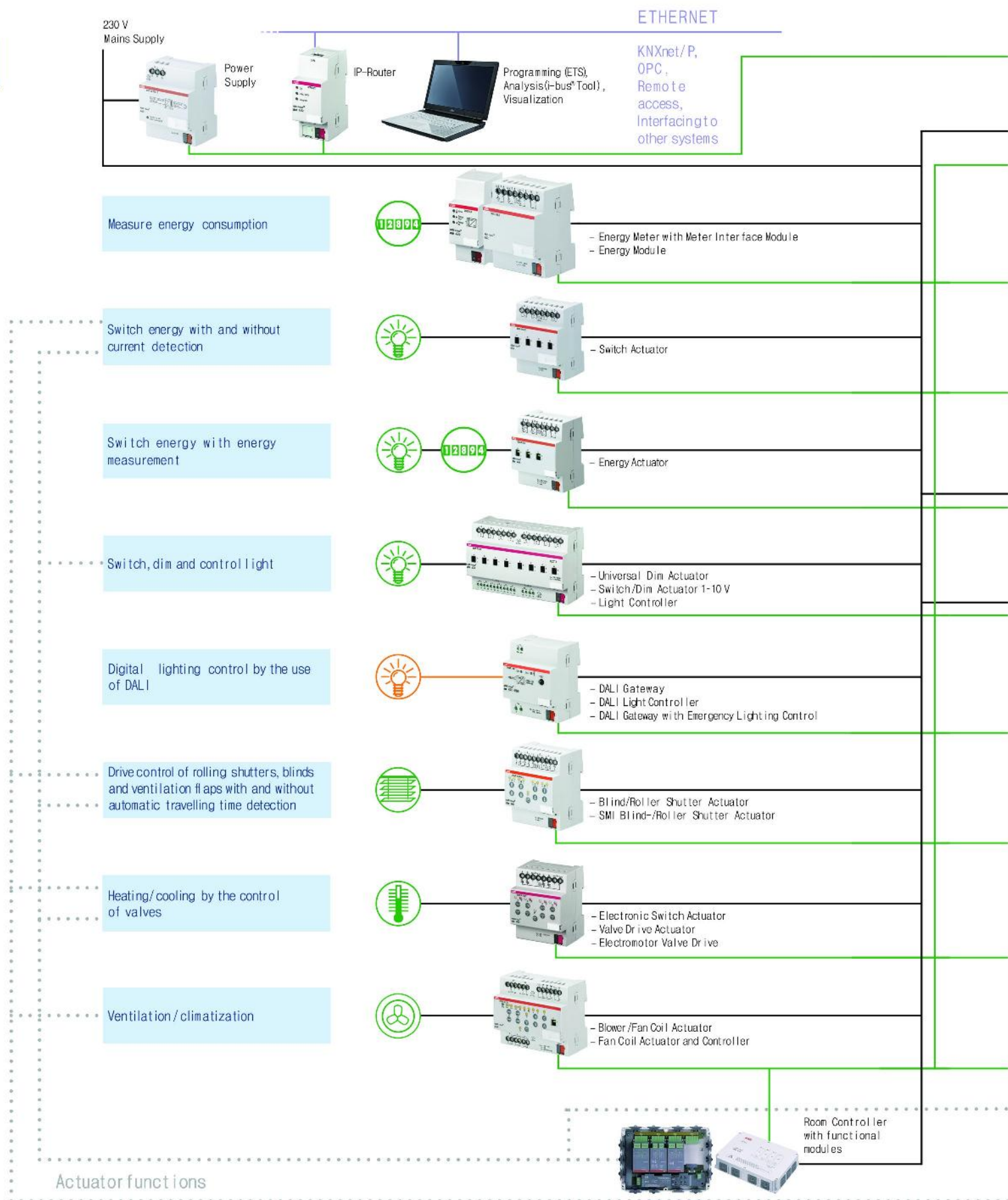BUILDING AUTOMATION

Power and productivity
for a better world™

ABB

ABB i-bus® KNX
Contents

Comfort
Safety
Efficiency
Emotion
Design

ABB i-bus® KNX – Overview

Power
Supply

IP-Router

Programming (ETS),
Analysis(i-bus®Tool),
Visualization

KNXnet/P,
OPC,
Remote
access,
Interfacing to
other systems

Measure energy consumption

– Energy Meter with Meter Interface Module
– Energy Module

Switch energy with and without current detection

– Switch Actuator

Switch energy with energy measurement

– Energy Actuator

Switch, dim and control light

– Universal Dim Actuator
– Switch/Dim Actuator 1-10 V
– Light Controller

Digital lighting control by the use of DALI

– DALI Gateway
– DALI Light Controller
– DALI Gateway with Emergency Lighting Control

Drive control of rolling shutters, blinds and ventilation flaps with and without automatic travelling time detection

– Blind/Roller Shutter Actuator
– SMI Blind-/Roller Shutter Actuator

Heating/cooling by the control of valves

– Electronic Switch Actuator
– Valve Drive Actuator
– Electromotor Valve Drive

Ventilation/climatization

– Blower/Fan Coil Actuator
– Fan Coil Actuator and Controller

Room Controller
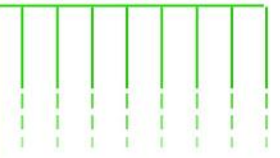with functional
modules

Actuator functions

Line 1 2 3 4 ... ... 13 14 15

Power Supply

Line Coupler

- 64 devices/line
- 15 lines/area with superordinated main line
- max. 15 areas with superordinated area line

- Binary Input

Detect and evaluate switching commands

- Analogue Input

Capture, evaluate and monitor physical values

- Weather Station and Weather Sensor

Evaluate and monitor meteorological data (wind, temperature, rain, etc.)

Display operating conditions and control functions

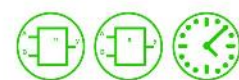- Presence Detector
- Movement Sensor
- Light Sensor

Detect presence and movement

Measure brightness level

Lighting Control

- Logic Module
- Application Unit Logic
- Application Unit Time
- Time Switch

Perform logical operations and trigger timer-controlled functions

- Room Thermostat
- Air Quality Sensor

Capture, evaluate, monitor and control room conditions, temperature, air quality, etc.

- Security Terminal
- Security Module
- KNX Security Panel
- Fault Monitoring Unit
- Monitoring Unit
- Data Logging Unit

12 V

Monitor operating conditions, signal technical faults, recognize hazards and trigger alarms

Security System

Room Master devices with differentcoMWinations of inputs and outputs and internal logical interconnection

Sensor functions

Solutions for rooms with sensor and actuator functions

ABB i-bus® KNX
Power Supplies

SV/S 30.160.1.1

Power Supply, 160 mA, MDRC   NEW

KNX power supplies generate and monitor the KNX system voltage (SELV). The bus line is de-coupled from the power supply by an integrated choke.
The voltage output is short–circuit and overload protected.
The two–color LED indicates device output status. With two–coloured status indicator and wide range input from 85···265 V AC, 50/60 Hz.

Description	MW	Type	Order code	Price 1 pc. €	Pack unit pc.	Weight 1 pc. kg
	4	SV/S 30.160.1.1	2CDG110144R0011		1	0.30

SV/S 30.320.1.1

Power Supply, 320 mA, MDRC   NEW

KNX power supplies generate and monitor the KNX system voltage (SELV). The bus line is de-coupled from the power supply by an integrated choke.
The voltage output is short–circuit and overload protected.
The two–color LED indicates device output status.
With two–coloured status indicator and wide range input from 85···265 V AC, 50/60 Hz.

Description	MW	Type	Order code	Price 1 pc. €	Pack unit pc.	Weight 1 pc. kg
	4	SV/S 30.320.1.1	2CDG110166R0011		1	0.30

SV/S 30.640.3.1

Power Supply, 640 mA, MDRC   NEW

KNX power supplies generate and monitor the KNX system voltage (SELV). The bus line is de-coupled from the power supply by an integrated choke.
The voltage output is short–circuit and overload protected.
The two–color LED indicates device output status.
Device type SV/S 30.640.3.1 has an additional 30 V DC short–circuit and overload protected voltage output that can be used to power an additional bus line (in combination with a sepa-rate choke).
With two–coloured status indicator and wide range input from 85···265 V AC, 50/60 Hz.

Description	MW	Type	Order code	Price 1 pc. €	Pack unit pc.	Weight 1 pc. kg
	4	SV/S 30.640.3.1	2CDG110167R0011		1	0.30

ABB i-bus® KNX
Power Supplies

SV/S 30.320.2.1

Power Supply with diagnostics, 320 mA, MDRC **NEW**

Compact Power Supply with integrated choke. Quick diagnostics by LED display and ETS communication objects. Analysis of the operating state and the bus line possible by means of ABB i–bus tool.

Description	MW	Type	Order code	Price 1 pc. €	Pack unit pc.	Weight 1 pc. kg
	4	SV/S 30.320.2.1	2CDG110145R0011		1	0.26

SV/S 30.640.5.1

Power Supply with diagnostics, 640 mA, MDRC **NEW**

Compact Power Supply with integrated choke. Quick diagnostics by LED display and ETS communication objects. Analysis of the operating state and the bus line possible by means of ABB i–bus tool. Additional voltage output to supply an additional line in conjunction with an additional choke.

Description	MW	Type	Order code	Price 1 pc. €	Pack unit pc.	Weight 1 pc. kg
	4	SV/S 30.640.5.1	2CDG110146R0011		1	0.26

SU/S 30.640.1

Uninterruptible Power Supply, 640 mA, MDRC

Power supply with integrated choke for supplying a bus line from an uninterrupted supply. Quick diagnostics via LED display for operational readiness, fault and battery level as well as a floating contact for a fault signal indication. The accumulator module or up to 2 rechargeable batteries can be charged in normal operation by the voltage supply. The bus voltage is provided by the batteries in the event of a mains failure.

Description	MW	Type	Order code	Price 1 pc. €	Pack unit pc.	Weight 1 pc. kg
	8	SU/S 30.640.1	GHQ6310049R0111		1	0.55

AM/S 12.1

Battery Module, 12 V DC, MDRC

With lead–gel battery for use in uninterruptible power supply SU/S 30.640.1 and for maintaining the bus voltage during a mains failure for 10 minutes (at full load). Connection is made via 4–core standard cable.

Description	MW	Type	Order code	Price 1 pc. €	Pack unit pc.	Weight 1 pc. kg
	8	AM/S 12.1	GHQ6310062R0111		1	0.81

ABB i-bus® KNX
Inputs

Application

Operation of KNX systems via conventional push buttons and switches

Processing of binary signals (signalling contacts)

Benefits

Flexible application due to wide-range inputs

Reduced stock requirement due to streamlined product range

Simplified commissioning using the copy function

Product

BE/S 4.20.2.1 with 4 inputs
for contact scanning and manual operation

BE/S 4.230.2.1 with 4 wide-range inputs and manual operation

BE/S 8.20.2.1 with 8 inputs
for contact scanning and manual operation

BE/S 8.230.2.1 with 8 wide-range inputs and manual operation

Wide-range inputs and a streamlined range – The new ABB i-bus® KNX Binary Inputs.

ABB i-bus® KNX Binary Inputs serve as an interface for operation of KNX systems via conventional push buttons and switches as well as for processing binary signals (signalling contacts).

In contrast to the existing solutions, where the input voltages of 24 V and 230 V required separate devices, the new Binary Inputs now feature wide-range inputs, which can process voltage signals ranging from 10 to 230 V AC/DC. This offers the installer significantly greater flexibility

In addition to two devices with 4 and 8 wide-range inputs, the new ABB i-bus® KNX Binary Input product range is rounded off by two devices with 4 and 8 inputs with scanning voltage. On these types, a pulsed scanning voltage is provided for connection of floating contacts from the device.

With an identical range of applications, the number of ABB i-bus® KNX Binary Inputs is now reduced from 6 types to 4.

All Binary Inputs feature a high-quality membrane keypad for comfortable manual operation and display of the device functions. Input states can be simulated at the device, so that the conventional push buttons, switches or floating contacts do not need to be connected for commissioning purposes. The device functions can be easily tested during commissioning in this way.

The Binary Inputs are powered via the KNX and do not require an additional power supply.

The software functionality of the Binary Inputs has also been extended. It is now possible to send several switching telegrams with just a single push of a button.
Especially useful, just as in the case of the Switch Actuators, it is also possible to copy the channels of the device in the ETS. The parameters and group addresses of a channel can be simply transferred to other channels in this way. This simplifies project engineering and helps reduce sources of error.

ABB i-bus® KNX
Inputs

Binary Inputs Selection Table

	BE/S 4.20.2.1	BE/S 4.230.2.1	BE/S 8.20.2.1	BE/S 8.230.2.1	US/U 2.2	US/U 4.2	US/U 12.2
General							
Voltage range	–	10...230 V	–	10..230 V	–	–	–
Voltage type	–	AC/DC	–	AC/DC	–	–	–
Contact scanning	■	–	■	–	■	■	■
Inputs	4	4	8	8	2	4	12
Type of installation	MDRC	MDRC	MDRC	MDRC	FM	FM	FM
Module width (space unit)	2	2	4	4	–	–	–
Switch sensor							
Send switch value after any edge	■	■	■	■	■	■	■
Send switch value after signal length and/or cyclically	■	■	■	■	■	■	■
Send switch value 1 cyclically	■	■	■	■		■	■
Send switch value 2	■	■	■	■			
Send switch value 3	■	■	■	■			
Difference between short and long operation	■	■	■	■	■	■	■
Dim sensor							
Start–stop dimming, step–by–step dimming	■	■	■	■	■	■	■
One–touch dimming	■	■	■	■	■	■	■
Shutter Sensor							
Shutter operation via a push button/switch	■	■	■	■	■	■	■
Shutter operation via two push buttons/switches	■	■	■	■	■	■	■
Value/Forced operation							
1 bit [0/1], 2 bit forced operation	■	■	■	■	■	■	■
1/2/4 bytes	■	■	■	■	■	■	■
Signed	■	■	■	■			
3 byte, time, weekday	■	■	■	■			
Control scene							
8 bit scene	■	■	■	■	■	■	■
Store scene	■	■	■	■	■	■	■
Switching sequence							
Several preset sequences can be set	■	■	■	■	■	■	■
Link several push buttons in a switching sequence (actuating number)	■	■	■	■	■	■	■
Multiple operation							
Telegram for long operation	■	■	■	■	■	■	■
Multiple operation can be set	■	■	■	■			■
Pulse counter							
Adjustable data type and threshold values	■	■	■	■	■	■	
Temporary counter activation	■	■	■	■	■	■	
Send counter level cyclically	■	■	■	■	■	■	
Manual operation							
Energy–saving mode	■	■	■	■			
Enable/release manual operation	■	■	■	■			
Manual operating status	■	■	■	■			
Enable/release manual operation button per input	■	■	■	■			
Input LED can be inverted	■	■	■	■			
Special functions							
Copying and exchanging parameter settings	■	■	■	■			
Enable/disable input	■	■	■	■	■	■	■
Adjustable debounce time and minimum signal time	■	■	■	■	■	■	■
Limit the number of telegrams	■	■	■	■	■		■
Device sends an "In operation" telegram"	■	■	■	■			
Heating valve control (electric relay)					■	■	■
Switch LEDs					■	■	■

■ = Function is supported

ABB i-bus® KNX
Outputs – A Complete Switch Actuator Range

Switch Actuators are responsible for reliable switching of different electrical loads in the KNX system.
Many different load situations are possible. ABB offers a suitable Switch Actuator for all application areas. The range has been rounded off with a new series. Now 16/20 AX C–Load Switch Actuators with and without a current detection feature are available; each featuring 2, 4, 8 or 12 outputs.

In the following table, you will find an overview of the ABB i-bus® Switch Actuators and their type designations:

–	SA/S 2.6.2.1	SA/S 2.10.2.1	SA/S 2.16.2.1	SA/S 2.16.5.1	SA/S 2.16.6.1
SA/S 4.6.1.1	SA/S 4.6.2.1	SA/S 4.10.2.1	SA/S 4.16.2.1	SA/S 4.16.5.1	SA/S 4.16.6.1
SA/S 8.6.1.1	SA/S 8.6.2.1	SA/S 8.10.2.1	SA/S 8.16.2.1	SA/S 8.16.5.1	SA/S 8.16.6.1
SA/S 12.6.1.1	SA/S 12.6.2.1	SA/S 12.10.2.1	SA/S 12.16.2.1	SA/S 12.16.5.1	SA/S 12.16.6.1

Note:
The codes represent the following:

SA/S	= Switch Actuator, DIN Rail mounting
SA/S x.	x = Number of outputs
SA/S 8.y.	y = Rated current in Ampere A
SA/S 8.16.1	1 = Standard without manual operation
SA/S 8.16.2	2 = With manual operation
SA/S 8.16.5	5 = C–Load (200 μF)
SA/S 8.16.6	6 = C–Load with current detection
SA/S 8.16.6.z	z = Version

ABB i-bus® KNX
Outputs – Switching Capacity Overview

The following table provides and overview of the rated values, switching performance, lamp loads or the number of lamps, which can be connected to a contact:

	SA/S 4.6.1.1 SA/S 8.6.1.1 SA/S 12.6.1.1	SA/S 2.6.2.1 SA/S 4.6.2.1 SA/S 8.6.2.1 SA/S 12.6.2.1	SA/S 2.10.2.1 SA/S 4.10.2.1 SA/S 8.10.2.1 SA/S 12.10.2.1	SA/S 2.16.2.1 SA/S 4.16.2.1 SA/S 8.16.2.1 SA/S 12.16.2.1	SA/S 2.16.5.1 SA/S 4.16.5.1 SA/S 8.16.5.1 SA/S 12.16.5.1	SA/S 2.16.6.1 SA/S 4.16.6.1 SA/S 8.16.6.1 SA/S 12.16.6.1
I_n rated current (A)	6 A	6 AX	10 AX	16 A	16/20 AX C-Load	16/20 AX C-Load
U_n rated voltage (V)	250/440 V AC	250/440 V AC	250/440 V AC	250/440 V AC	250/440 V AC	250/440 V AC
AC1 operation (cos φ = 0.8) DIN EN 60947-4-1	6 A	6 A	10 A	16 A	20 A	20 A
AC3 operation (cos φ = 0.45) DIN EN 60947-4-1	6 A	6 A	8 A	–[4]	16 A	16 A
C-Load switching capacity	–	–	–	–	20 A	20 A
Fluorescent lighting load AX to EN 60669-1	6 A (35 µF) [3]	6 AX (140 µF) [3]	10 AX (140 µF) [3]	16 A (70 µF) [3]	20 AX (200 µF) [3]	20 AX (200 µF) [3]
Minimum switching capacity	10 mA/12 V	100 mA/12 V	100 mA/12 V	100 mA/12 V	100 mA/12 V	100 mA/12 V
DC current switching capacity (resistive load)	7 A/24 V =	6 A/24 V =	10 A/24 V =	16 A/24 V =	20 A/24 V =	20 A/24 V =
Mechanical service life	> 10[7]	> 3 x 10^{6}	> 3 x 10^{6}	> 3 x 10^{6}	> 10[8]	> 10[6]
Electronic endurance to IEC 60947-4-1:						
– Rated current AC1 (240 V/0.8)	100,000	100,000	100,000	100,000	100,000	100,000
– Rated current AC3 (240 V/0.45)	15,000	30,000	30,000	30,000	30,000	
– Rated current AC5a (240 V/0.45)	15,000	30,000	30,000	30,000	30,000	30,000
Incandescent lamp load at 230 V AC	1,200 W	1,380 W	2,500 W	2,500 W	3,680 W	3,680 W
Fluorescent lamp T5 / T8:						
– Uncorrected	800 W	1,380 W	2,500 W	2,500 W	3,680 W	
– Parallel compensated	300 W	1,380 W	1,500 W	1,500 W	2,500 W	
– DUO circuit	350 W	1,380 W	1,500 W	1,500 W	3,680 W	
Low-voltage halogen lamps:						
– Inductive transformer	800 W	1,200 W	1,200 W	1,200 W	2,000 W	2,000 W
– Electronic transformer	1,000 W	1,380 W	1,500 W	1,500 W	2,500 W	2,500 W
Halogen lamp 230 V	1,000 W	1,380 W	2,500 W	2,500 W	3,680 W	3,680 W
Dulux lamps:						
– Uncorrected	800 W	1,100 W	1,100 W	1,100 W	3,680 W	3,680 W
– Parallel compensated	800 W	1,100 W	1,100 W	1,100 W	3,000 W	3,000 W
Mercury-vapour lamps:						
– Uncorrected	1,000 W	1,380 W	2,000 W	2,000 W	3,680 W	3,680 W
– Parallel compensated	800 W	1,380 W	2,000 W	2,000 W	3,000 W	3,000 W
Sodium-vapour lamps:						
– Uncorrected	1,000 W	1,380 W	2,000 W	2,000 W	3,680 W	3,680 W
– Parallel compensated	800 W	1,380 W	2,000 W	2,000 W	3,000 W	3,000 W
Max. peak inrush-current Ip (150 µs)	200 A	400 A	400 A	400 A	600 A	600 A
Max. peak inrush-current Ip (250 µs)	160 A	320 A	320 A	320 A	480 A	480 A
Max. peak inrush-current Ip (600 µs)	100 A	200 A	200 A	200 A	300 A	300 A
Number of electronic ballasts (T5/T8, single element):[2]						
18 W (ABB ballasts 1 x 18 SF)	10 ballasts	23 ballasts	23 ballasts	23 ballasts	26[1] ballasts	26[1] ballasts
24 W (ABB ballasts 1 x 24 CY)	10 ballasts	23 ballasts	23 ballasts	23 ballasts	26[1] ballasts	26[1] ballasts
36 W (ABB ballasts 1 x 36 CF)	17 ballasts	14 ballasts	14 ballasts	14 ballasts	22 ballasts	22 ballasts
58 W (ABB ballasts 1 x 58 CF)	5 ballasts	11 ballasts	11 ballasts	11 ballasts	12[1] ballasts	12[1] ballasts
80 W (Helvar EL 1 x 80 SC)	3 ballasts	10 ballasts	10 ballasts	10 ballasts	12[1] ballasts	12[1] ballasts

[1] The number of ballasts is limited by the protection with B16/B20 circuit-breakers.

[2] For multiple element lamps or other types, the number of electronic ballasts must be determined using the peak inrush current of the electronic ballasts.

[3] The maximum peak inrush current may not be exceeded.

[4] Not intended for AC3 operation, see Technical Data for maximum AC3 current.

ABB i-bus® KNX
Outputs – An Overview of all Software Functions

3

The following table provides an overview of the functions possible with the Switch Actuators and their application programs:

	SA/S 4.6.1.1 SA/S 8.6.1.1 SA/S 12.6.1.1	SA/S 2.6.2.1 SA/S 4.6.2.1 SA/S 8.6.2.1 SA/S 12.6.2.1	SA/S 2.10.2.1 SA/S 4.10.2.1 SA/S 8.10.2.1 SA/S 12.10.2.1	SA/S 2.16.2.1 SA/S 4.16.2.1 SA/S 8.16.21 SA/S 12.16.2.1	SA/S 2.16.5.1 SA/S 4.16.5.1 SA/S 8.16.5.1 SA/S 12.16.5.1	SA/S 2.16.6.1 SA/S 4.16.6.1 SA/S 8.16.6.1 SA/S 12.16.6.1
Type of installation	MDRC	MDRC	MDRC	MDRC	MDRC	MDRC
Number of outputs	4/8/12	2/4/8/12	2/4/8/12	2/4/8/12	2/4/8/12	2/4/8/12
Module width (space unit)		2/4/8/12	2/4/8/12	2/4/8/12		2/4/8/12
Manual operation	–	■	■	■	■	■
Contact position display	–	■	■	■	■	■
I_n rated current (A)	6 A	6 AX	10 AX	16 A	16/20 AX C–Load	16/20 AX C–Load
Current detection	–	–	–	–	–	■
Switch function						
– ON/OFF delay	■	■	■	■	■	■
– Staircase light	■	■	■	■	■	■
– Warning before end of staircase lighting	■	■	■	■	■	■
– Staircase lighting time set via object	■	■	■	■	■	■
Flashing	■	■	■	■	■	■
– Switch response can be set (N.O./N.C.)	■	■	■	■	■	■
– Thresholds	■	■	■	■	■	■
Current detection	–	–	–	–	–	■
– Threshold value monitoring	–	–	–	–	–	■
– Measured value detection	–	–	–	–	–	■
Function Scene	■	■	■	■	■	■
Function Logic						
– Logic AND function	■	■	■	■	■	■
– Logic OR function	■	■	■	■	■	■
– Logic XOR function	■	■	■	■	■	■
– Gate function	■	■	■	■	■	■
Priority object/forced operation	■	■	■	■	■	■
Heating/fan control						
– Switch ON/OFF (2 point control)	■	■	■	■	■	■
– Cyclical fault monitoring	■	■	■	■	■	■
– Automatic purging	■	■	■	■	■	■
Fan Coil control [1]	■	■	■	■	■	■
Special functions						
– Default position on bus voltage failure/recovery	■	■	■	■	■	■
– Status messages	■	■	■	■	■	■

[1] See special ABB i-bus® KNX devices of the HVAC area, e.g Fan/Fan Coil actuator LFA/S or Fan Coil actuator FCA/S.
■ = possible functions

ABB i-bus® KNX
Shutters and Sun Protection

Modern building installation enables a high degree of functionality and simultaneously complies with increased security requirements. Due to the structured installation of the electrical components, it is possible to carry out rapid planning, installation and setup as well as achieve cost benefits during operation.

Modern sun protection devices have a significant role, as they must fulfil many demands:
- Anti-glare protection (e.g. PC workstations)
- Utilization of daylight by tracking the sun's position and directing available daylight
- Protecting furniture and carpets from fading
- Regulating the room temperature (overheating protection in summer; harvesting the available energy on cold days)
- Providing protection from people looking in from the outside
- Protection against intruders

With the new Blind/Roller Shutter Actuators JRA/S, the complex requirements on a sustainable and energy efficient automatic sun protection control can be implemented in offices, residential and functional buildings via ABB i-bus® KNX.

The Blind/Roller Shutter Actuators are ideal for the control of drives in the area of sun protection:
- Blinds, exterior blinds, slat blinds and panel curtains
- Roller shutters, roller blinds, screens, vertical blinds
- Awnings, pleated blinds, pleated curtains, etc.

Optimum room air quality via automatic ventilation

The demands for the reduction of energy consumption often results in poor ventilation in today's heavily insulated buildings. The quality of the room air does not comply with the desired and required level.

Natural ventilation is often an effective and efficient method for exchanging the "used" room air and improving the air quality in the room. If the air quality in the room is monitored with sensors (temperature, humidity, CO_2 concentration), the ventilation flaps can be opened automatically and in good time ensuring that the air quality is kept in a comfortable range.

Blind/Roller Shutter Actuators are ideal for control of ventilation elements such as
- Ventilation flaps
- Roof hatches, skylights
- Windows, doors and gates

ABB i-bus® KNX
Shutters and Sun Protection − Innovations

Automatic travel detection

Travel times for the connected drives can be easily determined during operation with the automatic travel detection feature. It saves time during setup. Furthermore, compensation of age and weather−related length changes to blinds or roller shutters is assured. It facilitates precise positioning of the blinds/shutter when using sun position−dependent control.

Diagnostics

Enhanced diagnostic messages can be issued with the new Blind/Roller Shutter Actuators. They are particularly useful during setup or in the event of faults. It is possible, for example, to detect and signal if the power supply to a drive is interrupted.

Copy and exchange

This function allows parameter settings of an output to be copied or exchanged with other freely selectable outputs. This is possible within a device or in conjunction with several devices. Copy and exchange is useful particularly on projects, where all drives of a facade are controlled identically. It shortens the setup process and reduces the possible sources of error with parameterization.

Integration in the room temperature control

The intelligent and networked blind and roller shutter control plays an important role in the energy efficient usage of a building. The level of sunlight in the room and heating up due to the sun's energy can be controlled in conjunction with the room climate control. The new software function "overheat control" prevents unintentional overheating of a room. The blinds are closed in good time. The shutter control can be actively involved in the room temperature control − a requirement for implementing high−efficient buildings compliant to EN 15232.

ABB i-bus® KNX
Shutters and Sun Protection

The following table provides an overview of technical data and software functions for the shutter actuator range:

	STANDARD				SMI	
	JRA/S X.230.5.1	JRA/S 4.24.5.1	JRA/S X.230.2.1	JRA/S X.230.1.1	SJR/S 4.24.2.1	JA/S 4.SMI.1M
General						
Number of outputs	X = 2, 4, 8	4	X = 2, 4, 8	X = 2, 4, 8	4 x 4 SMI LoVo (broadcast)	4 x 4 SMI (broadcast)
Nominal voltage	230 V AC	24 V DC	230 V AC	230 V AC	LoVo 24 V	230 V
Auxiliary voltage 230 V	–	–	–	–	■	■
Type of installation	MDRC	MDRC	MDRC	MDRC	MDRC	MDRC
Module width (space unit)	2–fold: 4 4–fold: 4 8–fold: 8	4	2–fold: 4 4–fold: 4 8–fold: 8	2–fold: 4 4–fold: 4 8–fold: 8	4	4
Manual functions						
Disable/enable man. operation and status man. operation	■	■	■	–	■	■
Operating modes						
Control with slat adjustment (blinds, etc.)	■	■	■	■	■	■
Control without slat adjustment (roller shutters, awnings, etc.)	■	■	■	■	■	■
Ventilation flaps, switch mode including stair case lighting function	■	■	■	■	–	–
General device functions						
Automatic travel detection	■	■	–	–	–	–
Time–delayed switching of drives	■	■	■	■	■	■
Sending and switching delay time	■	■	■	■	■	■
In operation function	■	■	■	■	–	–
Request status values	■	■	■	■	–	–
Extended setting options for drives and blind/shutter	■	■	■	■	■	■
Direct functions						
UP/DOWN, STOP/Slat adjustment	■	■	■	■	■	■
Position height/slat 0 255	■	■	■	■	■	■
Preset Move to position/Set position	■	■	■	■	■	■
Enable limitation	■	■	■	■	■	■
Trigger travel detection	■	■	–	–	–	–
Trigger reference movement	■	■	–	–	■	■
8 bit scene	■	■	■	■	■	■
Safety functions						
Wind, Rain, Frost alarm	■	■	■	■	■	■
Block	■	■	■	■	■	■
Forced operation (1–Bit and 2–Bit)	■	■	■	■	■	■
Automatic functions						
Activation of automatic control	■	■	■	■	■	■
Position height/slat on sun	■	■	■	■	■	■
Presence	■	■	■	■	■	■
Heating/Cooling	■	■	■	■	■	■
Overheat control	■	■	■	■	–	–
Enable/block automatic	■	■	■	■	■	■
Enable/block direct control	■	■	■	■	■	■
Status messages						
Status height/slat 0···255	■	■	■	■	■	■
Status upper/lower end position	■	■	■	■	■	■
Status of operation	■	■	■	■	■	■
Status automatic control	■	■	■	■	■	■
Status information (2 byte)	■	■	■	■	–	–
Status SMI	–	–	–	–	■	■
Status of positions/limit position	–	–	–	–	■	■
Status auxiliary voltage	–	–	–	–	■	■
SMI diagnostic byte	–	–	–	–	■	■
Sonstiges						
Extended settings for drives and blinds/shutters	■	■	■	■	–	–
Total turning of slats after move down command	■	■	■	■	–	–
Position of slat after arriving on lower end position	■	■	■	■	■	■
Control and diagnosis via i-bus Tool	■	■	■	■	■	■

DALI Gateway DGN/S 1.16.1
Lighting control and emergency lighting functions combined

Control via 16 lighting groups
Conventional lighting and individual emergency lighting battery combined

The new ABB i-bus® KNX DALI Gateway with emergency lighting function combines modern flexible lighting control in intelligent building control systems with DALI emergency lighting.

Up to 64 DALI devices can be flexibly installed via 16 lighting groups and controlled and monitored by KNX.

Normal DALI lighting and DALI emergency lighting can be combined as required.

Furthermore, the DALI gateway with emergency lighting function supports the DALI standard EN 62386−202 that specifies DALI emergency lighting with individual batteries

DALI Light Controller DLR/S 8.16.1M
Energy through constant lighting control

Control via 16 lighting groups. Up to 8 lighting groups can be controlled with 8 light sensors. Master−slave, staircase light and Scene mode round off the functions.

The new DALI Light Controller DLR/A 4.8.1.1 is a surface mounting device for switching and dimming of 8 independent lighting groups. A maximum of 64 DALI devices can be connected. The device can be used for 4 − fold constant lighting control in connection with 4 Light Sensors LF/U 2.1. Furthermore staircase lighting and master / slave functions are provided. Fault feedback messages, e.g. concerning ballast or lamp failures, can be programmed and activated via KNX. The compact surface-mounted housing allows the decentralized installation in the underfloor or in false ceilings − optimal for the use with Room Controller RC/A.

DALI Light Controller DLR/A 4.8.1.1
Decentralized Constant Lighting Control
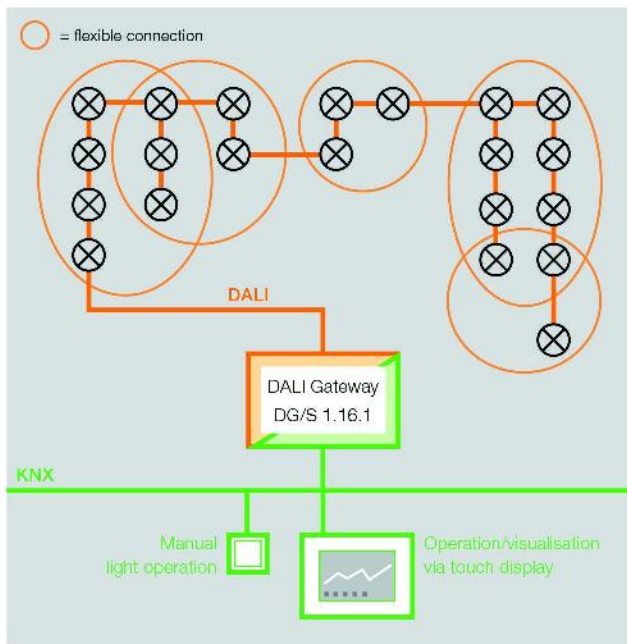
DALI Gateway DG/S 1.16.1
Flexibility in a good light

Large lighting groups can be controlled via flexible DALI groups.
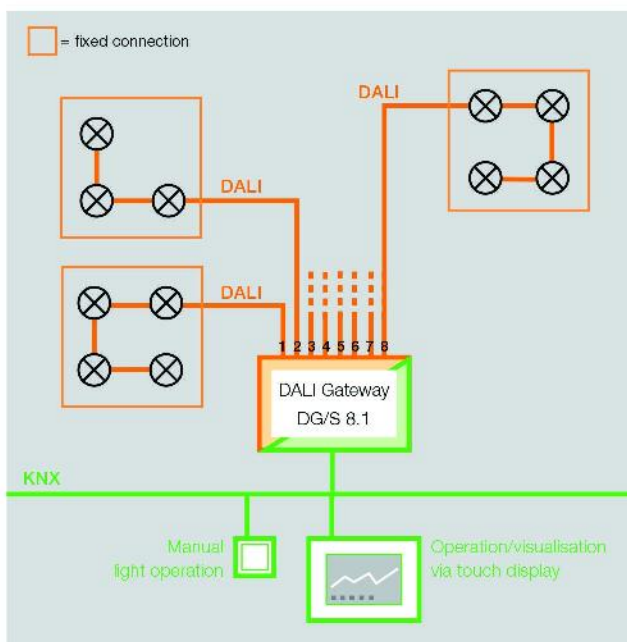1 x 64 DALI devices in 16 lighting groups.
Overlapping groups are possible
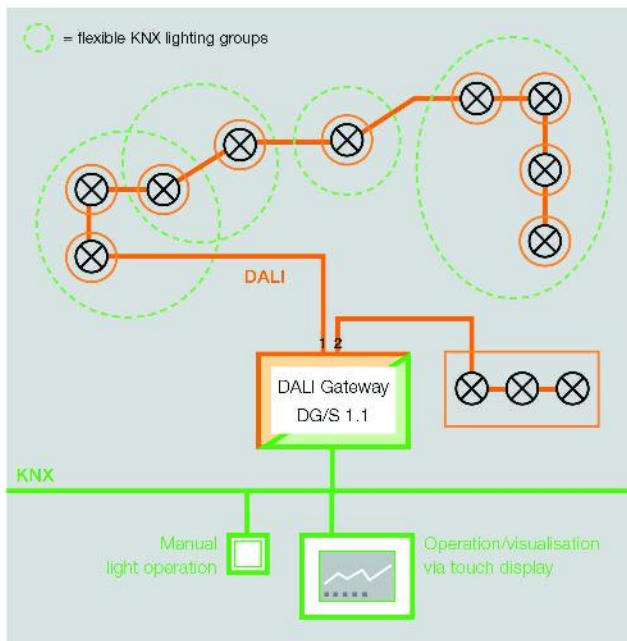
DALI Gateway DG/S 1.1
Individual lighting control

Lighting groups are formed in KNX. Individual lamps are indicated on the KNX. 1 x 64 DALI devices in unlimited lighting groups.

DALI Gateway DG/S 8.1
The proven technology

Lighting groups are formed via "rigid" hardware wiring.
Fast commissioning as no addressing is necessary.
No readdressing when a ballast is exchanged. 8 x 16 DALI devices.

5

Influencing Variables on Room Temperature

Internal and external factors have an effect on the thermal conditions in a room or a building. As an external factor the solar radiation is important for the indoor temperature – particularly with regard to modern architecture with glass fronts. Besides this, the room temperature is strongly affected by the exchange of thermal energy through windows and walls as well as the loss of thermal energy through open doors and windows.

Depending on the intensity, all this interactions influence also the energy efficiency of a building and have therefore to be optimised.
Internal thermal inputs from lighting, devices or persons have also an influence on the room climate. By planning a heating, ventilation or air conditioning system all this internal and external factors have to be considered.

Influencing Variables on Air Quality

The indoor climate in living and working areas has a scientifically proven impact on health, job performance and well-being of people. A suitable indicator for determination of the room air quality is the CO_2 concentration. In addition the values for room temperature and air humidity must be controlled to meet the requirements for a comfortable room climate.

Studies have shown, that high CO_2 concentration in the air influences the well-being as well as the performance and learning ability of people. Besides the normal CO_2 concentration in the air, human respiration is an important factor increasing the CO_2 concentration in a room. Therefore it is important to measure the CO_2 concentration in rooms where many persons are present (schools, conference rooms, open-plan offices). Monitoring of thresholds enables fans to be switched via ABB i-bus KNX allowing automatic control of the CO_2 concentration and sufficient supply of fresh air

Loss of thermal energy through open doors

Exchange of thermal energy through windows and walls

CO_2

Thermal input from sun, lighting, persons and devices

ABB i-bus® KNX
Heating and Cooling – Room Thermostat FanCoil
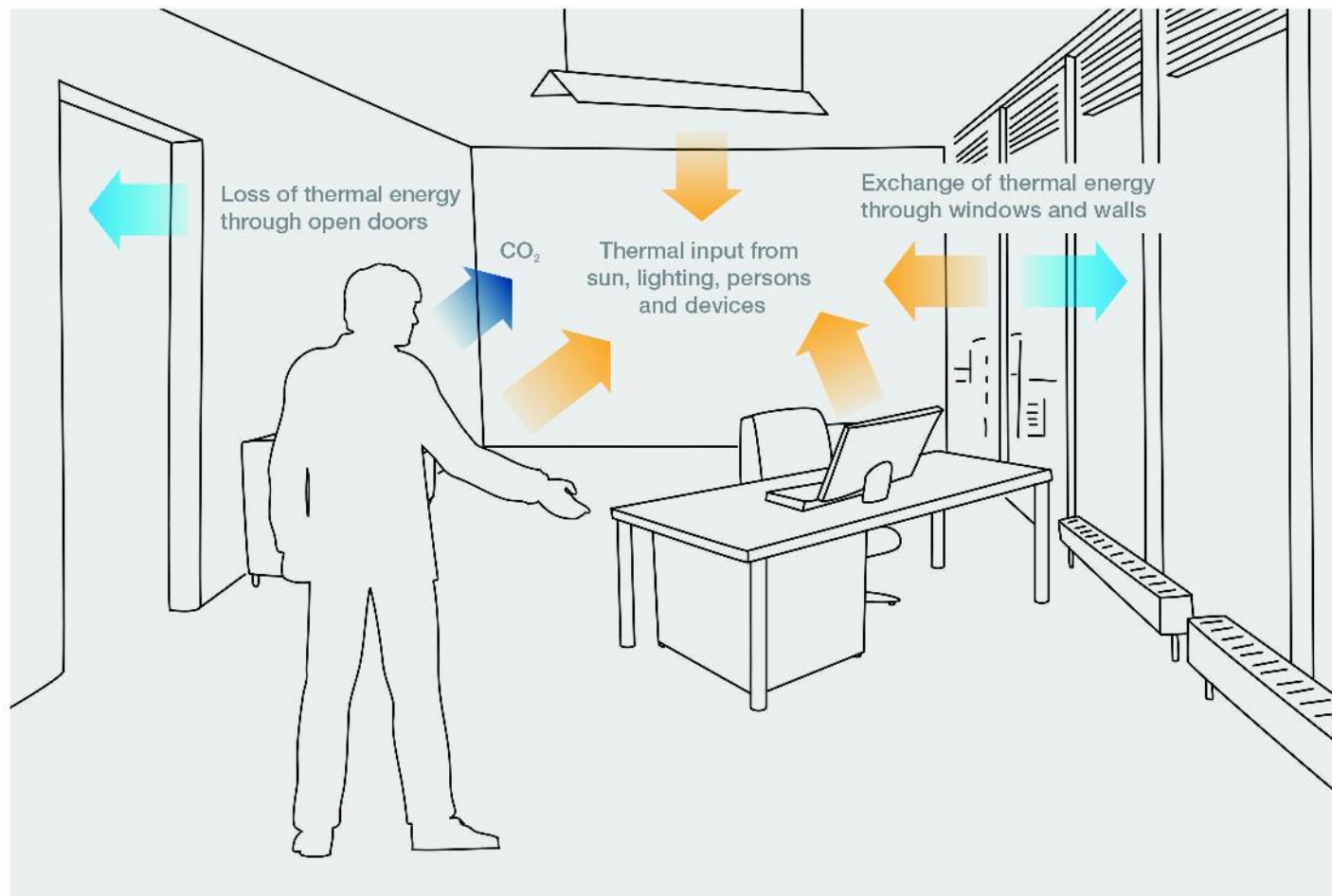
Living and working with a feeling of well-being. And here the air in the room is one of the most important factors. Because the body takes an ideal temperature for granted and therefore easily reacts to changes. Heated or air-conditioned rooms can be optimally adjusted – to a consistently pleasant ambience.

The KNX Fan Coil room temperature controller for stand-alone applications. The Fan Coil room temperature controller with display is a room temperature controller for ventilator convectors or conventional systems for heating and cooling. This option offers complete air-conditioning for rooms. The temperature can be adjusted precisely for personal comfort. The fan speeds can be selected by push buttons. Even very large rooms can be heated or cooled to a comfortable temperature quickly – with additional air-conditioning units. The KNX Fan Coil room temperature controller can be operated individually. The bus coupler is integrated into the control element.

Function

- Temperature sensor
- RTC setting
- Illuminated display
- Fan Coil operation for heating and cooling

Features

- Very easy to operate with large, clear display
- Complete air conditioning
- Fan speeds can be manually selected
- Integrated bus coupler
- Surface-mounted, independent switching program
- Colours: studio white, aluminium silver

6

The Busch–*ComfortTouch*® offers not only an extremely versatile range of switching and control functions for KNX systems, but also satisfies the highest design requirements. Its unique colour coding concept makes for particularly easy operation.

Busch–*ComfortTouch*® unites the functions of a home control system, an information and entertainment centre with the high–est design requirements. You can use Busch–ComfortTouch® to switch lamps on and off, dim them, control blinds, room temperature or select scenes comprising a combination of the above–named functions – even via remote control. There is also an integrated audio and video player. These functions are not only of interest for private households – the system is often used in doctor's surgeries, offices, restaurants or stores to provide attrac-

tive lighting, soft background music or comfortable room climates. A presence simulation function and alarm message display provide added security. It is also possible to display images from surveil–lance cameras. The system can be connected to the Internet, enabling you to call up e–mails, the latest stock market news, the weather forecast or traffic information. Operation is simple and easy via touch screen. A menu created individually for the user with clearly assigned buttons and a unique colour coding concept allow simple and intuitive operation.

01
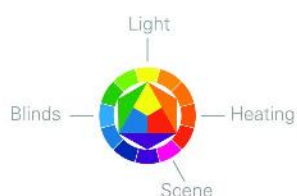
Simplicity and user–friendliness are always the top priorities for operation. Busch–Jaeger has developed a unique colour coding concept for the user interface of its intelligent home control system. Each comfort area is assigned a specific colour. Yellow stands for lighting, blue for the blind control unit, magenta for light scenes and orange for the heating control unit. These colours are also used in the menus on the display.

reddot design award
winner 2013

01	Busch–*ComfortTouch*® 12.1
	Glass black
02	Busch–*ComfortTouch*® 9
	Glass black
03	Busch–*ComfortTouch*® 9
	White glass
04	Busch–*ComfortTouch*® 12.1
	Glass black
05	Busch–*ComfortTouch*® 12.1
	White glass

02   03   04   05

ABB i-bus® KNX
Visualisation, Display and Signalling – Busch-*ComfortTouch*®

The system is controlled via the Busch-*ComfortTouch*® – it couldn't be easier. Buttons with text and symbols allow intuitive operation. Just a touch of the finger, and you can call up the MP3-player and play individual titles or playlists. And the volume is regulated via the panel, too. The ideal solution, not only for homes – the system is, for example, popular in restaurants. No more CDs lying around, no more finding space for a conventional hifi centre. The system can also be used to call up light scenes for various situations, from a cosy dinner at home to night-time light-

ing for store windows, at the press of a button or via a time-controlled function. Another useful feature is the handy memo field allowing you to write text by hand – use it, for example to write a shopping list or for leaving messages for others. Colour pictures from surveillance cameras on stairways or outside the building can be called up on the display, offering added security. This allows you to keep an eye on the building at all times – handy, for example, for checking the surrounding area before opening the door for customers in the morning or when the doorbell rings.

Media player

Video surveillance

Door communication

Control of household appliance

Dashboard

Remote control by tablets (APP)

reddot design award
winner 2013

iOS

Busch-ComfortTouch®
controllable via app

ABB i-bus® KNX
Easy set-up

Intuitive operation. The ABB-free@home® app is easy to understand. To start with, all available devices in the rooms are activated on the display, allowing the favourite settings to be made immediately via drag-and-drop.
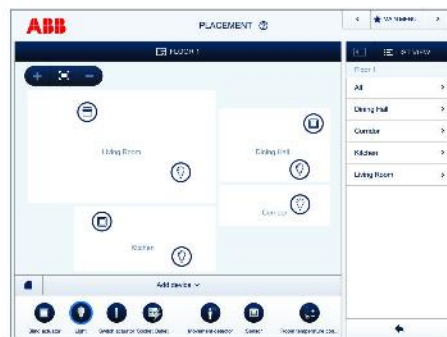
Simple and time-saving

The electrician performs the initial configuration of the system by app. Operation is particularly fast and saves cost-intensive work time.

The house

First the electrician sets up the floor plan with its floors and rooms.

Assigning

Then the sensors in the app are integrated in the floor plan and assigned.

Combining

And finally, the elements can be combined according to wish and requirement.

Scene control

The user can easily combine existing switches and appliances into personal scenes in every room. A lighting scene, for example, for an evening on the couch.
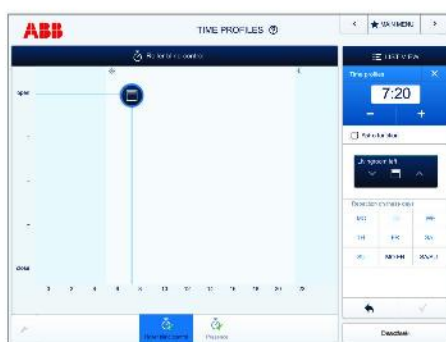
Time control

Roller blinds can be automatically moved and lights can be switched at any time or dependent on sunrise or sundown.

Panel setting

The most important functions can be controlled from a central location in the house and easily changed later, at any time.

Understandable and adaptable

All settings can be changed at any time. Even by technical laypersons because the functions are self-explanatory. Handling is as simple as any other well-known smartphone or tablet app.

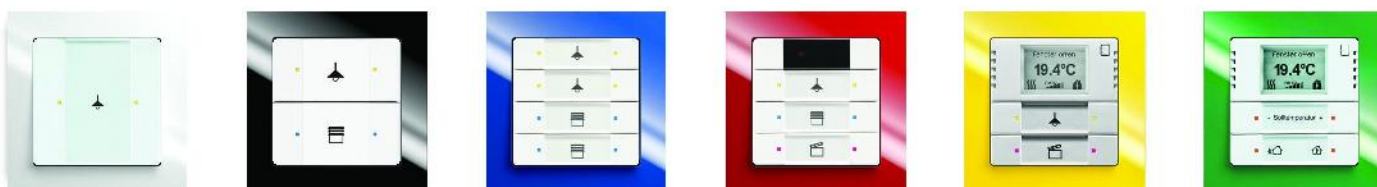# ABB i-bus® KNX
Operation – Unique diversity of the range

7

01

02

03

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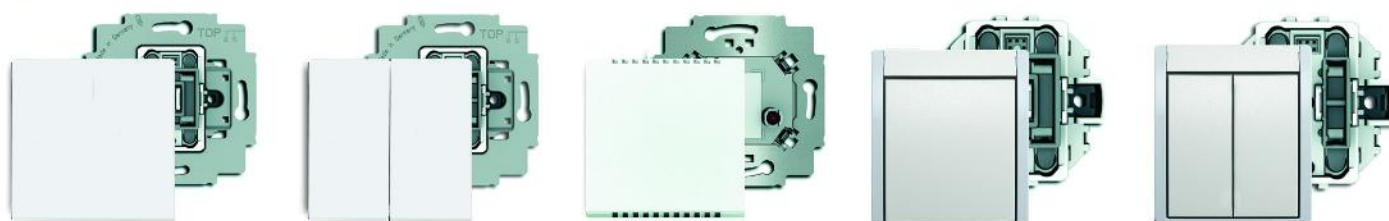
06

ABB i-bus® KNX
Operation – Unique diversity of the range

07

08

09

01 carat®	07 Busch-triton®
02 *pure stainless steel*	08 Busch-*priOn*®
03 solo®	09 Bus Coupling Unit - for all the
04 Busch–axcent®	conventional series of Busch-Jarger*
05 *future*® linear	
06 Busch-dynasty®	

* Busch Jaeger switch ranges only available for selected markets. For further information please contact your local ABB office.

ABB i-bus® KNX
Operation – Functional Overview

Program	Standard control elements, bus coupler included with package	Multifunction control elements, suitable for KNX bus coupler			
	6125/01 1gang 6126/01 2gang 6127/01 4gang	6125/02 1/2gang 6126/02 2/4gang 6127/02 4/8gang	6129/01 3/6gang with IR	6124/01 RTC	6128/01 2/4gang with RTC
KNX function					
Switching, rocker switch total	●	●	●	–	●
Switching, rocker switch left/right	–	●	●	–	●
Dimming, rocker switch total	●	●	●	–	●
Dimming, switch rocker left/right	–	●	●	–	●
Blind switch rocker total	●	●	●	–	●
Venetian blind switch rocker total left/right	–	●	●	–	●
Short–long operation, switch rocker left/right	–	●	●	–	●
Value sender rocker switch total	●	●	●	–	●
Value sender switch rocker left/right	–	●	●	–	●
Value dimming sensor, switch rocker total	–	●	●	–	●
Red/green LED status illumination (red/green/off)	Two LEDs per switch rocker	–	–	–	–
RGB LED function illumination + status illumination	–	Two LEDs per switch rocker	Two LEDs per switch rocker	Two LEDs per switch rocker	Two LEDs per switch rocker
Setting the RTC operating mode	–	●	●	–	●
Value sender, 2 objects, switch rocker left/right	●	●	●	–	●
Light scene extension unit with light scene memory function	●	●	●	–	●
Level switch, switch rocker total	–	●	●	–	●
Level switch, switch rocker total left/right	–	●	●	–	●
Multiple operation, rocker switch left/right	–	●	●	–	●
IR remote control channels (up to 5 channels)	–	–	●	–	–
Room temperature controller only					
Temperature reading	–	–	–	●	●
RTC settings	–	–	–	●	●
Illuminated display	–	–	–	●	●
Fan Coil operation for heating and cooling	–	–	–	●	●
Logic function (including light scenes)	–	●	●	●	●
Busch–Watchdog 4 channels	–	–	–	–	–
Design series					
Reflex SI	–	–	–	–	–
Busch Duro 2000® SI	–	–	–	–	–
future®linear	●	●	●	●	●
alpha exclusive / nea	–	–	–	–	–
Busch–axcent®	●	●	●	●	●
solo®	●	●	●	●	●
impuls	–	–	–	–	–
pure stainless steel	●	●	●	●	●
carat®	●	●	●	●	●
ocean®	–	–	–	–	–
All Weather 44®	–	–	–	–	–
Busch–priOn®	–	–	–	–	–
Busch–triton®	–	–	–	–	–

ABB i-bus® KNX
Operation – Functional Overview

6120/12–101 and 6120/13		FM push–button coupling unit with integrated bus coupler				FM room temperature controller, comercial
6122/01 Standard	6122/02 Comfort	6108/01 1/2gang	6108/02 2/4gang	6108/04 1/2gang	6108/05 2/4gang	6108/03 RTC
–	–	●	●	●	●	–
–	–	●	●	●	●	–
–	–	●	●	●	●	–
–	–	●	●	●	●	–
–	–	●	●	●	●	–
–	–	●	●	●	●	–
–	–	●	●	●	●	–
–	–	●	●	●	●	–
–	–	●	●	●	●	–
–	–	●	●	●	●	–
–	–	1 LED	–	1 LED	–	–
–	–	–	–	–	–	–
–	–	●	●	●	●	–
–	–	●	●	●	●	–
–	–	●	●	●	●	–
–	–	●	●	●	●	–
–	–	●	●	●	●	–
–	–	–	–	–	–	–
–	–	–	–	–	–	–
–	–	–	–	–	–	●
–	–	–	–	–	–	●
–	–	–	–	–	–	●
–	–	–	–	–	–	●
●	●	–	–	–	–	●
●	●	–	–	–	–	–
–	–	●	●	–	–	●
–	–	●	●	–	–	●
●	●	●	●	–	–	●
–	–	●	●	–	–	●
●	●	●	●	–	–	●
●	●	●	●	–	–	●
–	–	–	–	–	–	–
●	●	●	●	–	–	–
●	●	●	●	–	–	–
–	–	–	–	●	●	–
–	–	–	–	–	–	–
–	–	–	–	–	–	–
–	–	–	–	–	–	–
–	–	–	–	–	–	–

ABB i-bus® KNX
Operation – Functional Overview

7

Program	Busch–triton® (next generation) Monoblock		Busch–priOn® suitable for KNX bus coupler	
	6320/10 1/2gang 6320/30 3/6gang 6320/50 5/10gang	6320/38 3/6gang with RTC 6320/58 5/10gang with RTC	6340–xx–101 1/2gang	6341–xx–101 rotary-control element
KNX function				
Switching, rocker switch tota	●	●	●	–
Switching, rocker switch left/right	●	●	●	●
Dimming, rocker switch total	●	●	●	–
Dimming, rocker switch left/right	●	●	●	–
Blind switch rocker total	●	●	●	–
Blind switch rocker total left/right	●	●	●	●
Short–long operation, switch rocker left/right	●	●	●	–
Value sender rocker switch total	●	●	●	–
Value sender switch rocker left/right	●	●	●	–
Value dimming sensor, switch rocker total	●	●	●	●
Red/green LED status illumination (red/green/off)	1 LED per switch rocker	1 LED per switch rocker	–	–
RGB LED function illumination + status illumination	–	–	1 LED per switch rocker	1 LED per button
Setting the RTC operating mode	●	●	●	–
Value sender, 2 objects, rocker switch left/right	●	●	●	–
Light scene extension unit with light scene memory function	●	●	●	–
Level switch, switch rocker total	●	●	●	–
Level switch, switch rocker total left/right	●	●	●	–
Multiple operation, rocker switch left/right	-	–	●	–
IR remote control channels (up to 13 channels)	●	●	–	–
Light scene unit (8 scenes for up to 8 actuators)	●	●	–	–
Light scene unit (10 scenes for up to 10 actuators)	-	–	–	–
Programmable shift key	●	●	–	–
Proximity function	–	–	–	–
Room temperature controller only				
Temperature reading	–	●	–	–
RTC settings	–	●	–	–
Illuminated display	–	●	–	–
Fan Coil operation for heating and cooling	–	●	–	–
Media box/CD/DVD/Radio	–	–	–	–
Short–time timer	–	–	–	–
Weekly timer	–	–	–	–
Alarm clock	–	–	–	–
Messages	–	–	–	–
Screen saver	–	–	–	–
Display text/value	–	–	–	–
Device lock	–	–	–	–
Logic function (including light scenes)	–	–	●	●
Busch–Watchdog 4 channels	–	–	–	–

ABB i-bus® KNX
Operation – Functional Overview

6120/12–101 or 6120/13 (depending on the specific combination)

	6342–xx–101 3/6gang	6344–xx–101 8.89 cm (3.5")TFT colour display with rotary control element	6344–xx–101	6351–825–101 end strip top with information display, room temperature controller, IR receiver and proximity sensor + 6342–xx–101 3/6gang	6350–825–101 end strip top with IR receiver and proximity sensor	6352–xx–101 end strip bottom with temperature sensor
	●	–	–	●	–	–
	●	●	–	●	–	–
	●	–	–	●	–	–
	●	●	–	●	–	–
	●	–	–	●	–	–
	●	●	–	●	–	–
	●	–	–	●	–	–
	●	–	–	●	–	–
	●	–	–	●	–	–
	●	●	–	●	–	–
	–	–	–	–	–	–
	1 LED per switch rocker	–	–	1 LED per switch rocker	–	–
	●	●	–	●	–	–
	●	–	–	●	–	–
	●	●		●	–	–
	●	–	–	●	–	–
	●	–	–	●	–	–
	●	–	–	●	–	–
	–	–	–	●	●	–
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	–	●	–	–	–	–
	–	●	–	–	–	–
	–	●	–	–	–	–
	–	●	–	●	–	–
	–	●	–	–	–	–
	●	●	●	●	–	–
	–	●	–	–	–	–

ABB i-bus® KNX
Operation – Busch–*priOn*®

Busch–priOn® allows you to control and monitor functions for the entire room. Light, scenes, timer, blind control unit, heating control unit – all functions are controlled simply and intuitively via a rotary dial, and freely programmable functions can be called up via the rocker switches. Busch–priOn® is a non–fixed, modular concept.

Light
Blinds — Heating
Scene

01

02

03

Colours that make life easier

A consistent colour coding concept and durable LED technology make Busch–priOn® extremely easy to oper–ate. The dial lights up in the colours of the coding system, thus providing feedback on the function currently selected. Yellow stands for lighting, blue for the blind control unit, magenta for light scenes and orange for the heating control unit. These colours are also found on the rocker switches of the control element panels.

The rotary control element is equipped with a freely pro–grammable button which can be pressed and turned. It can be used to switch and dim individual lamps, but also to switch on whole groups of lamps with one press of a button and vary their brightness continuously via the dial.

Function
Dimming | Blinds | Value | Light scenes | Logic functions | Time functions

Features
Illuminated dial | Colour coding concept | Anti–theft protection | Day/night operation

The single control element is equipped with a freely pro–grammable „large" operating button. It can be assigned to one topic and can carry out a maximum of two commands.

Function
Switching | Dimming | Blinds | Value | Buttons | Light scenes | Logic functions | Time functions

Features
Illuminated rocker switch | Colour coding concept | Freely programmable control button | Anti–theft protection | Replaceable labelling symbol (Fig. shows Lighting labelling symbol)

The triple control element is equipped with 3 freely pro–grammable control buttons. Each can be assigned to one topic and can carry out a maxi–mum of two commands.

Function
Switching | Dimming | Blinds | Value | Buttons | Light scenes | Logic functions | Time functions

Features
Illuminated rocker switches | Colour coding concept | Freely programmable control buttons | Anti–theft protection | Replaceable labelling symbol (Fig. shows labelling symbols Lighting, Blinds and Scene)

ANTI FINGERPRINT

04   05   06   07

01	Rotary control element
02	1gang control element
03	3gang control element
04	Glass black
05	Studiowhite, glossy
06	Stainless steel
07	White glass

reddot design award
best of the best 2008

Busch–priOn® received special commendment in the category „best of the best," winning the „red dot award: communication design 2008" for its interface design.

ABB i-bus® KNX
Operation – Busch-*priOn*®

01

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04

A single-line display with integrated room temperature controller has been designed for the Busch-priOn® 3gang control element, technically reduced to the basics and optically elegant. It is particularly easy to read due to the monochromatic design for white on black information. The room temperature controller, information function like time and date, up to 17 freely programmable text displays, IR sensor and proximity sensor have been integrated into the display. The design of the display is available in the colour and material "glass black" only.

The 8.9 cm (3.5") TFT display gives a clear overview of all information. Operation is simple intuitive, supported the colour coding concept. It is possible freely combine several Busch-priOn® elements with each other. display and a special allow simple and convenient control

Busch-priOn® is a nonfixed, modular-design system. The rocker switches of the triple control element allow you to call up freely programmable functions such as light scenes, blind functions or specific lamps

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

05

The 8.9 cm (3.5") TFT display gives a clear overview of all information. The user can choose from 3 surface designs: black, blue and silver.

Blinds

Climate control

Scene
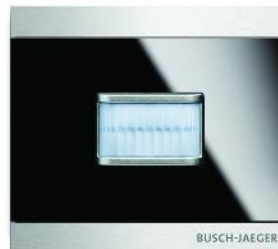
The Busch-priOn® flush-mounted movement sensor can be used individually or with other Busch-priOn® modules. Practical because users thus do not have to look for the light switch and are greeted with light when first entering a dark room.

Note: We can only give you a rough idea here of the wide range of combinations offered by this modular concept. For more detailed information, see our separate product brochure / planning aid or the catalogue.

01	3gang control element with single-line display and temperature controller
02	2gang combination
03	3gang combination
04	carat® glass black
05	Flush-mounted movement sensor

ABB i-bus® KNX
Operation – Planning aid for Busch–priOn®

End strips without function

studio white,
Article–No. 6348–24G–101–500

white glass,
Article–No. 6348–811–101–500

glass black,
Article–No. 6348–825–101–500

stainless steel,
Article–No. 6348–860–101–500

**Support frame,
bus coupler**

Bus coupler Busch–priOn®,
Article–No. 6120/12–101

1gang,
Article–No.
6346/10–101–500
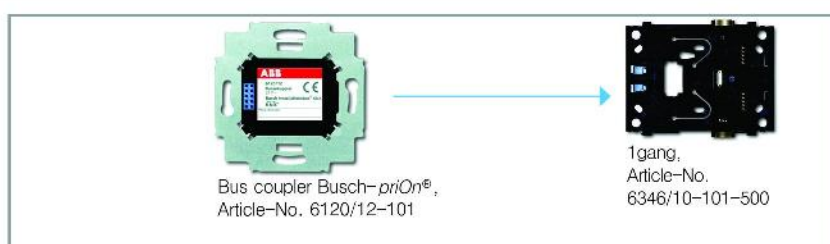
Note:
This power adaptor can
supply up to 15 power
bus couplers with current.

Power adaptor
REG,
Article–No.
CP–D 24/2.5

Bus coupler Busch–priOn®,
Article–No. 6120/13–500

2gang,
Article–No.
6346/11–101–500

3gang,
Article–No.
6346/12–101–500

Without end strip incl. temperature reading

FM actuators

Switch actuator,
1gang, FM
2.300 w/VA,
Article–No.
6354 U–500

Universal dimming
actuator, 1gang, FM
10–450 w/VA,
Article–No.
6355 U–500

Serial/blind actuator,
2/1gang, FM
2.300 w/VA,
Article–No.
6356 U–500
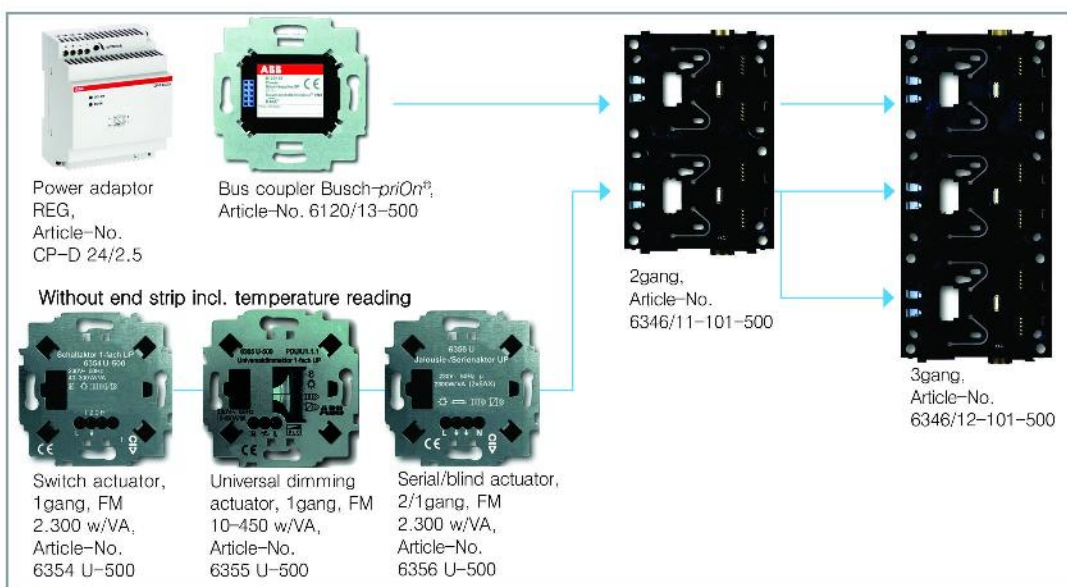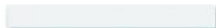
End strip

Commissioning adaptor,
Article–No. 6149/21–500

End strips without function

studio white,
Article–No. 6349–24G–101–500

white glass,
Article–No. 6349–811–101–500

glass black,
Article–No. 6349–825–101–500

stainless steel,
Article–No. 6349–860–101–500

ABB i-bus® KNX
Operation – Planning aid for Busch–*priOn*®

End strip with IR proximity function

glass black,
Article–No.
6350–825–101–500

Note:
only combinable with 3gang control element

Single–line display and room thermostat,
Article–No.
6351–825–101–500

Control element,
1gang,
Article–No.
6340–825–101–500

Control element,
3gang, Article–No.
6342–825–101–500

Colour display with rotary control element,
Article–No.
6344–825–101–500

Rotary control element,
1gang,
Article–No.
6341–825–101–500

Busch–Watchdog,
180 FM,
Article–No.
6345–825–101–500

End strips with temperature sensor.

Not combinable with FM actuators.
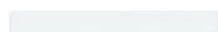
studio white,
Article–No. 6352–24G–101–500

white glass,
Article–No. 6352–811–101–500

glass black,
Article–No. 6352–825–101–500

stainless steel,
Article–No. 6352–860–101–500

Colour range

Busch–*priOn*®
glass black

Busch–*priOn*®
white glass

Busch–*priOn*®
stainless steel

Busch–*priOn*®
studio white, gloss

Labelling symbols
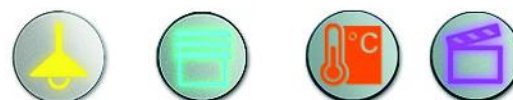
Labelling inserts for blinds, lighting, RTC and scene. The colours are repeated in the Busch–Jaeger colour concept.

ABB i-bus® KNX
Operation – Multifunction control elements
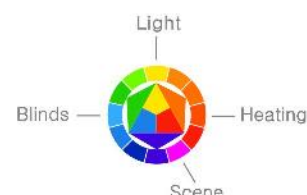
The multifunction control elements with LED colour code concept meet the highest demands for comfort and technology. They each come with two RGB LEDs per rocker switch, which conform to a consistent colour concept. This makes the function obvious at a glance, and the surfaces can be additionally fitted with pictograms. Each side of a rocker switch can be occupied with its own function – each for calling up one light scene, for instance. This turns a 4gang control element into an 8gang control element.

Wide range. Different shapes, colours and materials fulfil every requirement. KNX control elements are available in the carat®, pure stainless steel, solo®, Busch–axcent® and future® linear programmes. The complete range of conventional switches from these series is available, so there are no limits to the options for combining KNX components.

01	Multifunction control element 1/2gang
02	Multifunction control element 2/4gang
03	Multifunction control element 4/8gang
04	Room temperature controller
05	Multifunction control element 2/4gang, integrated room thermostat
06	Multifunction control element 3/6gang with IR reception
07	FM movement detector standard
08	FM movement detector comfort

01

Function
Switching | Dimming | Blinds | Push–button | Value transmitter | Light scene extension unit | Step–type | Multiple operation | Logic function (including light scenes)

Features
Labellable switch rockers | Anti–theft protection | Freely programmable switches | LED colour code concept

02

Function
Switching | Dimming | Blinds | Push–button | Value transmitter | Light scene extension unit | Step–type | Multiple operation | Logic function (including light scenes)

Features
Labellable switch rockers | Anti–theft protection | Freely programmable switches | LED colour code concept

03

Function
Switching | Dimming | Blinds | Push–button | Value transmitter | Light scene extension unit | Step–type | Multiple operation | Logic function (including light scenes)

Features
Labellable switch rockers | Anti–theft protection | Freely programmable switches | LED colour code concept

ABB i-bus® KNX
Operation – Multifunction control elements
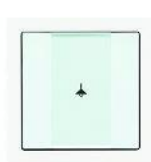
04

Function
Comfort | Stand-by | Night mode |
Frost protection | Specified
temperature | Time | Date | Heating |
Cooling | Fan Coil operation for
heating and cooling | Light scenes |
Light scene extension unit | Value |
Logic function (including light scenes)

Features
Labellable switch rockers | Anti-theft
protection | Display illumination |
LED colour code concept

05

Function
Comfort | Stand-by | Night mode |
Frost protection | Specified
temperature | Time | Date | Heating |
Cooling | Fan Coil operation for
heating and cooling | Light scenes |
Light scene extension unit | Value |
Logic function (including light scenes)

Features
Labellable switch rockers | Anti-theft
protection | Display illumination |
Colour concept

06

Function
10 freely programmable IR
channels | Switching | Dimming |
Blinds | Button | Light scenes |
Light scene extension unit | Value |
Logic function (including light scenes)

Features
Labellable switch rockers | Anti-
theft protection | Display illumination
| Colour concept

07

08

Function
4 channels | Logic function
(including light scenes)

ABB i-bus® KNX
Operation – Standard control elements

7

The standard control elements are available as 1/2gang, 2/4gang or 4/8gang models. Every switch rocker has two LEDs, which display the status of the connected loads. The separate switch rockers are freely programmable and are suitable for switching and dimming, and also for operating blinds and as a light scene extension unit. They can also be used in commercial applications. Anti–theft protection has also been integrated – an important factor for installations in public areas.

Customised text. Pictograms can be applied to push buttons for easier orientation. A clear text template with standard symbols is included for every sensor. The self–explanatory pictograms are available for the complete range of building control technology and if necessary can be easily replaced. If the appropriate symbol is not included, the push buttons can be labelled as desired. The related bus–coupler unit is included in delivery.

01

02

03

Function
Switching | Dimming | Blinds | Push–button | Value transmitter | Light scene extension unit

Function
Switching | Dimming | Blinds | Push–button | Value transmitter | Light scene extension unit

Function
Switching | Dimming | Blinds | Push–button | Value transmitter | Light scene extension unit

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

Features
Labellable switch rockers | Anti–theft protection | Freely programmable switches | Status/orientation light (red/green/OFF)

Features
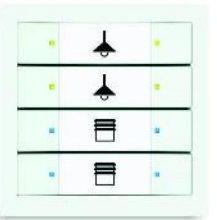Labellable switch rockers | Anti–theft protection | Freely programmable switches | Status/orientation light (red/green/OFF)

Features
Labellable switch rockers | Anti–theft protection | Freely programmable switches | Status/orientation light (red/green/OFF)

ABB i-bus® KNX
Operation – Standard control elements

7

6125/01

6126/01

6127/01
6127/01

			Standard control element, 1-fold with bus coupler enclosed			Standard control element, 2-fold with bus coupler enclosed			Standard control element, 4-fold with bus coupler enclosed		

With labelling field. Transparent labelling sheet with standard symbols included in delivery. Display elements: Two LED per rocker via separate communication object for status (Red/Green/OFF) or orientation light. Protection class (Device): IP 20. Temperature range (Device): -5 °C to 45 °C. Dimensions: (L x W x D): 63 mm x 63 mm

With 1 Control element: rocker switch left/right   With 2 Control element: rocker switch left/right   With 4 Control element: rocker switch left/right

Pack unit pc.	Weight 1 pc. kg	Description	Type	Order code	Price 1 pc. €	Type	Order code	Price 1 pc. €	Type	Order code	Price 1 pc. €
		future³ linear									
1		anthracite	6125/01-81-500	6115-0-0205		6126/01-81-500	6116-0-0195		6127/01-81-500	6117-0-0221	
1		savanne/ivory	6125/01-82-500	6115-0-0206		6126/01-82-500	6116-0-0196		6127/01-82-500	6117-0-0222	
1		aluminium silver [1]	6125/01-83-500	6115-0-0207		6126/01-83-500	6116-0-0197		6127/01-83-500	6117-0-0223	
1		davos/studio white	6125/01-84-500	6115-0-0183		6126/01-81-500	6116-0-0174		6127/01-84-500	6117-0-0200	
1		studio white, matt [1]	6125/01-884-500	6115-0-0214		6126/01-884-500	6116-0-0204		6127/01-884-500	6117-0-0230	
1		black, matt [1]	6125/01-885-500	6115-0-0215		6126/01-885-500	6116-0-0205		6127/01-885-500	6117-0-0231	
		solo³									
1		savanne/ivory	6125/01-82-500	6115-0-0206		6126/01-83-500	6116-0-0196		6127/01-83-500	6117-0-0223	
1		davos/studio white	6125/01-84-500	6115-0-0183		6126/01-84-500	6116-0-0174		6127/01-84-500	6117-0-0200	
1		meteor/grey metallic [1]	6125/01-803-500	6115-0-0212		6126/01-803-500	6116-0-0202		6127/01-803-500	6117-0-0228	
1		sahara/yellow	6125/01-815-500	6115-0-0213		6126/01-815-500	6116-0-0203		6127/01-815-500	6117-0-0229	
		carat									
1		anthracite	6125/01-81-500	6115-0-0205		6126/01-81-500	6116-0-0195		6127/01-84-500	6117-0-0221	
1		savanne/ivory	6125/01-82-500	6115-0-0206		6126/01-82-500	6116-0-0196		6127/01-82-500	6117-0-0222	
1		davos/studio white	6125/01-84-500	6115-0-0183		6126/01-84-506	6116-0-0174		6127/01-84-500	6117-0-0200	
		pure stainless steel [1]									
1		pure stainless steel	6125/01-866-500	6115-0-0211		6126/01-866-500	6116-0-0201		6127/01-866-500	6117-0-0227	
		Busch-axcent³									
1		davos/studio white	6125/01-84-500	6115-0-0183		6126/01-84-500	6116-0-0174		6127/01-84-500	6117-0-0200	
1		chalet-white	6125/01-896-500	6115-0-0449		6126/01-896-500	6116-0-0224		6127/01-896-500	6117-0-0249	

[1] Surface painted

ABB i-bus® KNX
Operation – Busch–triton®

With freely programmable switch rockers, backlit label fields and IR sensor Busch–triton® is ideal for any application and with its elegant design it is commonly installed in hotels and public areas. Busch–triton® is equipped with an integrated bus coupler and IR receiver. The unit composed of control element and integrated bus coupler now really has everything required to control building systems elegantly and comfortably.

Colour–coordinated.
The Busch–triton® is available in five stunning colours, offering exactly the right ambience for any environment. The colours offer exactly the right accent to the carat®, impuls, alpha and future® linear ranges – such as the use of the colour–coordinated socket outlets or motion detectors.

01

02

03

01	1/2gang control element with rear–illuminated labelling area and IR reception
02	3/6gang control element with rear–illuminated labelling area and IR reception
03	5/10gang control element with rear–illuminated labelling area and IR reception

Function
Switching | Dimming | Blinds | Value transmitter | Value dimming sensor | Light scene extension unit | Step–type switch | Short/long operation | 13 freely programmable IR channels | 8 light scenes

Features
Labellable switch rockers | Rear–illuminated labelling field | Anti–theft protection | Freely programmable switches | IR remote–controllable | Freely programmable additional key

Function
Switching | Dimming | Blinds | Value transmitter | Value dimming sensor | Light scene extension unit | Step–type switch | Short/long operation | 13 freely programmable IR channels | 8 light scenes

Features
Labellable switch rockers | Rear–illuminated labelling field | Anti–theft protection | Freely programmable switches | IR remote–controllable

Function
Switching | Dimming | Blinds | Value transmitter | Value dimming sensor | Light scene extension unit | Step–type switch | Short/long operation | 13 freely programmable IR channels | 8 light scenes

Features
Labellable switch rockers | Rear–illuminated labelling field | Anti–theft protection | Freely programmable switches | IR remote–controllable | Freely programmable additional key

ABB i-bus® KNX
Operation – Busch–triton®

01

02

Function

LCD display room temperature controller | Comfort | Stand–by | Night operation | Frost protection | Heating | Cooling | Fan control | Switching | Dimming | Blinds | Value | 13 freely programmable IR channels | 8 light scenes

Features

Labellable switch rockers | Rear–illuminated abelling field | Anti–theft protection | Freely programmable switches | IR remote–controllable | Freely programmable additional key

Function

LCD display room temperature controller | Comfort | Stand–by | Night operation | Frost protection | Heating | Cooling | Fan control | Switching | Dimming | Blinds | Value | 13 freely programmable IR channels | 8 light scenes

Features

Labellable switch rockers | Rear–illuminated labelling field | Anti–theft protection | Freely programmable switches | IR remote–controllable | Freely programmable additional key

01	3/6gang control element with rear–illuminated labelling field, integrated room thermostat, LCD display and IR reception
02	5/10gang control element with rear–illuminated labelling field, integrated room thermostat, LCD display and IR reception

ABB i-bus® KNX
Classic values style and perfection

Busch−dynasty®. The switch which harmonizes perfectly with quality interior design. The high−quality shape encloses the current technology of home automation. Also KNX and ABB−free@home® control elements receive a classic grace due to the hand−polished or brushed brass of the frame and the manually refined rockers. Each living space deserves the very best.

The best technical solution blends in with the classical interior design. The classic and modern merge with Busch dynasty® into a unique form which harmonizes with traditional architectural styles. Different combinations of colour, decor and haptics result in a host of possibilities for the atmosphere in noble apartments, hotels and shopping areas. Brushed or polished brass reflects not only the light of sophisticated interiors, but also the unique taste of those present. Here a total of 50 new Busch−dynasty® products are available: Cover frame made of plastic or metal, which can be combined with all ivory or anthracite coloured rockers, socket outlets and cover plates from Busch−Jaeger. Whether 2gang switches, SCHUKO® socket outlet with LED control light or a 4gang KNX sensor with room temperature controller − the Busch−dynasty® frames orchestrate each function in a unique way. Internet connections were not available during the rococo period.

ABB i-bus® KNX
Door communication

The right solution for every requirement. With the wide range of well-designed products, optimum door communication can be made a reality for all types of buildings. Without great effort due to the 2-wire bus technique. And always with high-quality materials that are carefully matched. This makes ABB-Welcome ideal for use in new buildings as well as the later integration during modernisation of all types of real estate.

A holistic concept. Already today Busch-Jaeger fulfils the desire for harmoniously matching indoor concepts and holistic installation solutions.
As standard. This allows all indoor stations of door communication to be integrated into every style of living.
That is why the ABB-Welcome Touch and the ABB-Welcome indoor station with handset is available in studio white matt, aluminium silver and anthracite matt. And the ABB-Welcome indoor audio station with display is available in studio white, aluminium silver, anthracite, alpine white and white.
With the wide range of well-designed products, optimum door communication can be made a reality for all types of buildings. Without great effort due to the 2-wire bus technique. And always with high-quality material that are carefully matched.

This makes ABB-Welcome ideal for use in new buildings as well as the later integration during modernization of all types of real estate.

| 01 | 02 | 03 | 04 | 05 | 06 |
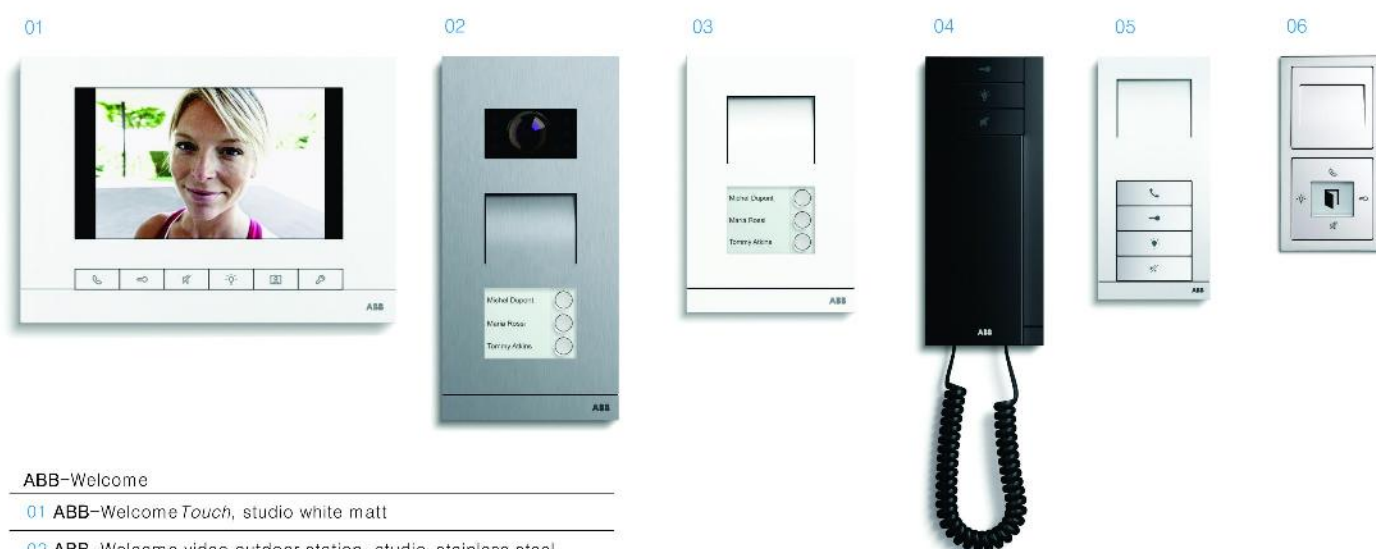
ABB-Welcome

01 **ABB-Welcome** *Touch*, studio white matt

02 **ABB-Welcome** video outdoor station, studio stainless steel

03 **ABB-Welcome** audio outdoor station, white matt

04 **ABB-Welcome** indoor audio station with handset, anthracite matt

05 **ABB-Welcome** indoor audio station, aluminium silver

06 **ABB-Welcome** indoor audio station with display, aluminium silver

ABB i-bus® KNX
Door communication

01   02   03   04   05   06

ABB–Welcome

01   **ABB** – Outdoor station with transponder module

02   **ABB** – Outdoor station with fingerprint module

03   **ABB** – Outdoor station with keypad module

04   **ABB** – Welcome Audio door station

05   **ABB** – Welcome *Touch*,® Video door station

06   **ABB** – Welcome *Touch*,® aluminium silver

ABB i-bus® KNX
KNX remote control With mobile device with ease

7 **Busch–ControlTouch® KNX.** The functions of KNX home automation today are operated not only via Busch–ComfortTouch® or switch, but also remote–controlled via smartphone and smartwatch. Clear control for electrical fitter and customer.

under preparation

+
— For smartphones and tablets (iOS and Android) and the Apple watch
— Web-based commissioning
— Intuitive and comfortable operation
— IP cameras, Sonos wireless boxes and Philips Hue lamps can be integrated
— Error and alarm messages via push messages

myABB–LivingDpace

Everything under control.
Via the portal myABB–LivingSpace all ABB–free@home® applications are remote controllable worldwide.
my.abb–livingspace.com

HOME

MOBILE

ABB i-bus® KNX
Security and Surveillance – The new KNX Security Panel
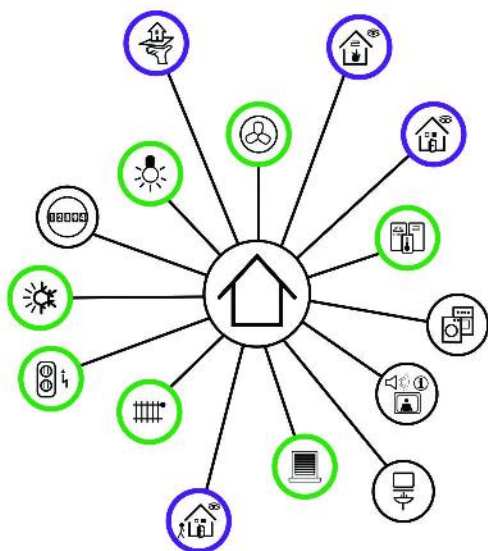
Professional alarm system for KNX experts

With the new KNX Security Panel GM/A 8.1 ABB presents the first security system that is compatible with both, the international KNX standard (14543–3–x ISO/IEC) and the international standard for alarm systems (ISO / IEC 62642). Therefore the KNX Security Panel GM/A 8.1 is ready for a worldwide usage and expands business opportunities of nearly 40,000 KNX partners in 124 countries. The new system is the perfect solution for projects ranging from simple to high security requirements.

This innovation is the result of more than 30 years of system and application knowledge in alarm technology and building automation at ABB.

ABB i-bus® KNX
Security and Surveillance – The new KNX Security Panel

Magnet reed contacts
Glass break sensors
Water detector
Gas detector
Smoke detector

Zone modules for security bus

Motion detectors for security bus

SafeKey setting device and

SafeKey Evaluation Module

Alarming

Security bus

KNX

Bus for keypads

Ethernet

A complete product product portfolio: One system – all interfaces

To fulfill the project requirements ABB provides the user besides the new panel and keypad a complete product portfolio for professional alarm technology as well as known solutions for all trades of KNX building automation.

The KNX Security Panel is for universal usage for all kinds of hazardous situations in buildings like intrusion, personal attack, smoke, gas–and water leakage.

WaveLINE Wireless Control
RF Sensors

01

02

03

04

05

01   SM WaveLINE movement detector,
Article No. 6747 AGM-204-500

The WaveLINE Busch-Watchdog 220 is a battery-operated movement detector. Since it is installed without cables it can be mounted in the most ideal position. The battery has a service life of 5 years.

02   WaveLINE media converter TP-RF,
Article-No. 6770-500

The KNX and Busch radio control are coupled via the WaveLINE media converter TP-RF. Telegrams can be exchanged in both directions. One application serves to transmit the window sensor to the KNX system

03   Window sensor,
Article-No. 6720-64

The WaveLINE window sensor is retrofitted between the window and window handle, which means the original window handle is retained. The window handle is used for the following window positions: opened, tilted and closed.

04   Universal detector,
Article-No. 6721-64

The WaveLINE universal detector is suited for skylights or sliding doors and is activated via a reed contact. The universal detector has a second channel which can be permanently wired to a floating contact (NO or NC contacts).

**05   Remote control RF,**
Article-No. 6780-500

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

Control elements					
Switch ranges	1gang	2gang	4gang	1gang	2gang
pure stainless steel	6731-866-500	6732-866-500	6733-866-500		
solo®	6731-xx-500	6732-xx-500	6733-xx-500		
Busch-axcent®	6731-xx-500	6732-xx-500	6733-xx-500		
future® linear	6731-xx-500	6732-xx-500	6733-xx-500		
Reflex SI				6731-214-500	6732-214-500
Busch-Duro 2000®SI				6731-212-500	6732-212-500

WaveLINE Wireless Control
RF Actuators / Displays

01

02

03

04 | NEW

05 | NEW

06 | NEW

07
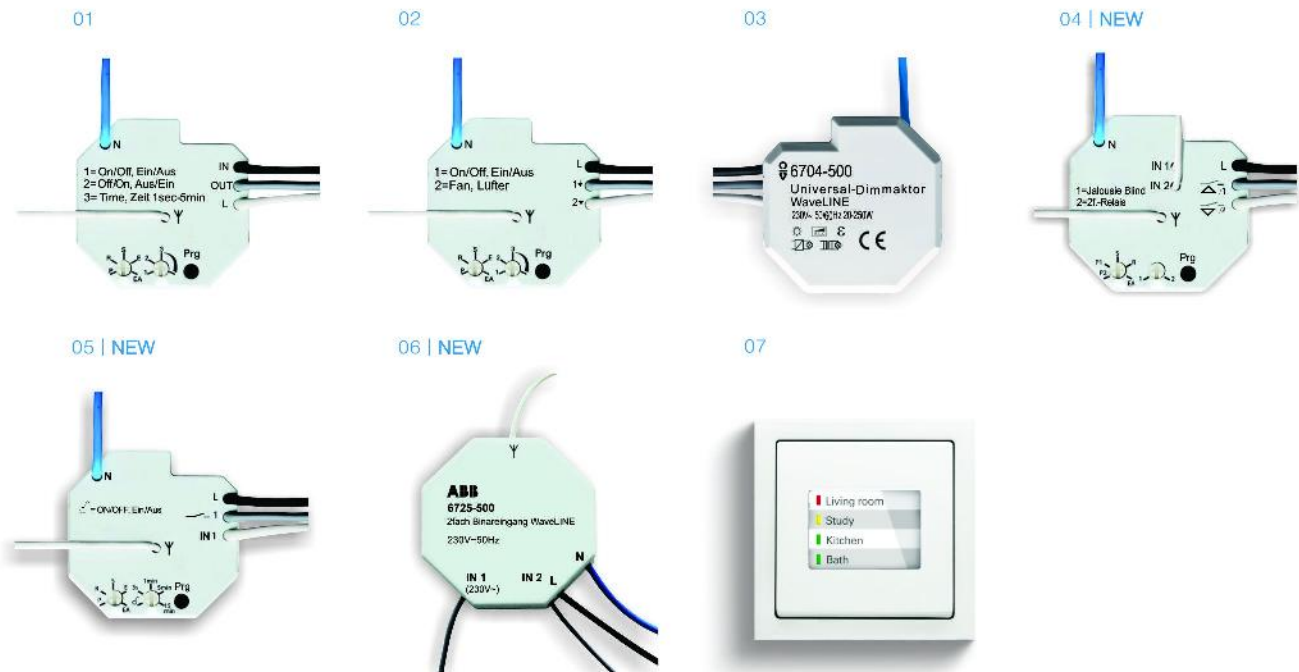
01 1gang WaveLINE actuator,
    Article-No. 6702-500

02 2gang WaveLINE actuator,
    Article-No. 6703-500

03 WaveLINE dimming actuator,
    Article-No. 6704-500

04 WaveLINE blind actuator,
    Article-No. 6705-101-500

05 1gang WaveLINE actuator,
    Article-No. 6701-101-500

06 WaveLINE binary input, 2gang
    Article-No. 6725-500

07 WaveLINE LED display, 4gang with
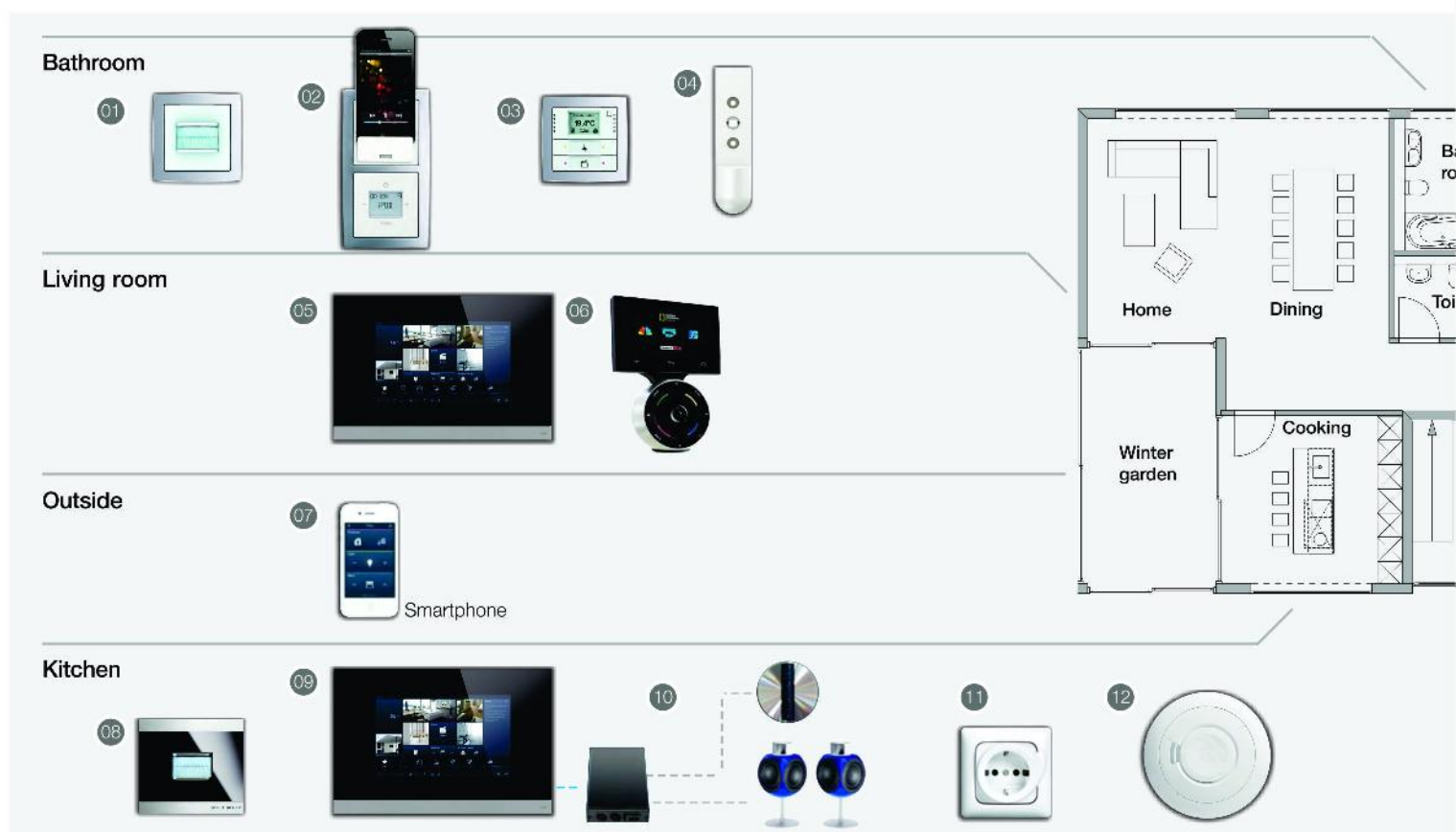   switching function, Article-No. 6730-84

Before

After

ABB i-bus® KNX
The intelligent home

Bathroom

01   02   03   04

Living room

05   06

Home   Dining   Toi

Outside

07

Smartphone

Winter garden   Cooking

Kitchen

08   09   10   11   12

1. The movement detector switches the lights on automatically in the bathroom when entering it and then off again when exiting. During the night the lighting can be left on in a dimmed state; with 20%, for example, for convenient orientation without being dazzled by them.

2. Entertainment or information: Both are possible with the Busch-DigitalRadio. From the Busch-iDock Docking Station, you can play back music from your iPod* or iPhone* or connect any other MP3 player via the 3.5 mm jack. Optional via the extension unit input: Switch on the Busch-DigitalRadio together with the lighting via the movement detector.

3. The room temperature controller provides blissful warmth in the bathroom. With a timer (like in the Busch-ComfortTouch®) also individually at different times of the day. This makes it pleasantly warm in the morning, for example, then a lower room temperature saves energy later (approx. 6% savings per 1 degree lower temperature.)

4. Ventilation makes sense in the bathroom but in cold months, not any longer than necessary if possible. From a central location, the window sensor tells you that the window was left open inadvertently. The information can also be a good reminder to switch the room temperature controller to Frost protection mode.

5. In addition to its known functions (see page 10), the Busch-ComfortTouch®) is also suitable for use as a receiver for the Beo4 and Beo6 remote controls from Bang & Olufsen.

6. On the Beo6, names can be used for the individual consumers or lightscenes for particularly simple and convenient operation.

7. Even when youre away from home, the Busch-ComfortTouch ® is within your reach. The ComfortTouch App on your SmartPhone shows you the operation of the Busch-

ComfortTouch®. You can even control devices remotely over the local WLAN network directly or on the go from your mobile phones Internet access.

8. The movement detector switches the lighting on and off automatically. You can also define entire scenes and then call up your desired lighting based on the situation. These scenes could, for example, be stored in the Busch-ComfortTouch®. And also practical: defined light scenes for different times of the day.

9. In the kitchen, for example, you can use the media player from Busch-Comfort-Touch® to play your favourite songs from a network drive (NAS = Network Attached Storage), SD card or USB stick or to listen to your favourite radio station. The audio output from the Busch-ComfortTouch® connects perfectly with Bang & Olufsen or BeoLink active. You then have the option of enjoying your music with the high-quality loudspeakers from Bang & Olufsen. And if you want, the RSS feed reader keeps you up-to-date with information about the weather, top news and sports.

10. The BeoLink active is a side room product from Bang & Olufsen. It allows you to listen to music from your stereo system in your main room (living room). The audio output of the Busch-ComfortTouch® can be connected to the BeoLink active.

11. A notorious problem in the kitchen, for example: The elbow plugs for the kitchen and other devices is stuck so tightly in the socket outlet that one can hardly pull them out. The ingenious solution: With the service socket outlet, the practical rotary knob simply pushes the plug out of the socket outlet. It even works when your hands are wet.

12. A Busch-Smoke alarm detector can save lives. In the kitchen, where water often rises to the ceiling, false alarms are not uncommon. A heat detector prevents false alarms by triggering the legitimate alarm when the temperature is too high.

Bedroom

Workroom

Foyer
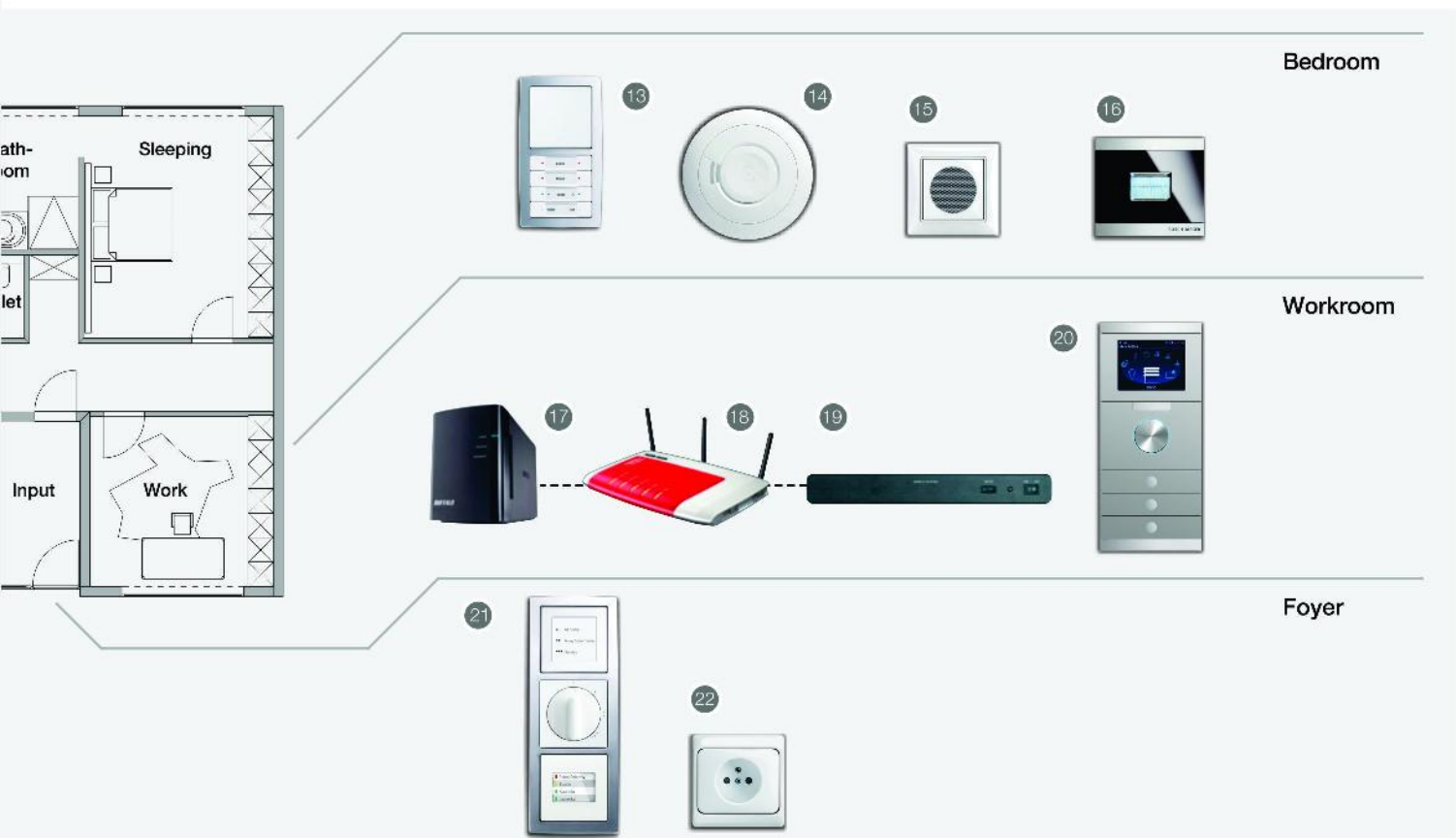
13. Modern technology simple operation: with the 2gang switch combination for example. The top large-area rocker clearly indicates to each user the basic or main function for switching the lighting on and off. Via the 4gang control element located below it the less frequently used functions such as moving roller blinds, light scene call-up or multimedia control are operated.

14. Indispensable: The Busch-Smoke alarm detector. At a minimum, it should be in every bedroom! It wakes you up at night when theres smoke which is important because your sense of smell shuts down while you are sleeping. When networked, an alarm can also be triggered in the parents room when the Busch-Smoke alarm detector detects smoke in the childrens room.

15. A welcome comfort at night: minimum lighting when one has to get up. The Busch-iceLight® night light elegantly shows you the way at night ideal for the bedroom.

16. Busch-iceLight® can be switched on and off from a cleverly placed movement detector.

17. Timely multimedia enjoyment: Music and videos saved on an NAS (Network Attached Storage) can be called up from several locations in the home, e.g., even from the Busch-ComfortTouch®.

18. The router with integrated switch establishes the connection within the home and with its router function and other setting options, the connection to the outside. It makes it possible for you to access the Busch-ComfortTouch® from the outside with your SmartPhone. In addition, the switch also connects the Master Link Gateway from Bang & Olufsen to the Busch-ComfortTouch®.

19. The Master Link Gateway establishes the connection between the Bang & Olufsen (NetworkLink) bus system and the Busch-Jaeger (ABB i-bus® KNX) bus system (see page 26).

20. In addition to the known functions (see page 8), the Busch-priOn® is also ideal for controlling multimedia. It has special functions for controlling the radio, as well as the remote control of CD or DVD players. Bang & Olufsen products are simple to control remotely via the Master Link Gateway.

21. Sometimes it is necessary to leave ones home in a hurry making quick and simple operation important. With just one turn of the three-step switch, one can put the home in the desired state. For example, all room temperature controllers are lowered, the lighting is switched off, call forwarding can even be activated on your mobile phone if necessary. Upon return, everything is switched back in no time. The position of the rotary switch makes it easy to identify the current status.

Useful: The LED display (below) shows open windows and doors, which may have been forgotten about.

22. If the cord to the vacuum cleaner is too short, one runs the risk of damaging the socket outlet or even ripping it out of the wall. For frequently used socket outlets, the Busch Object Socket Outlet is recommended, which encourages pulling out the plug at an angle.

ABB i-bus® KNX
For crystal–clear sound through–out the home.
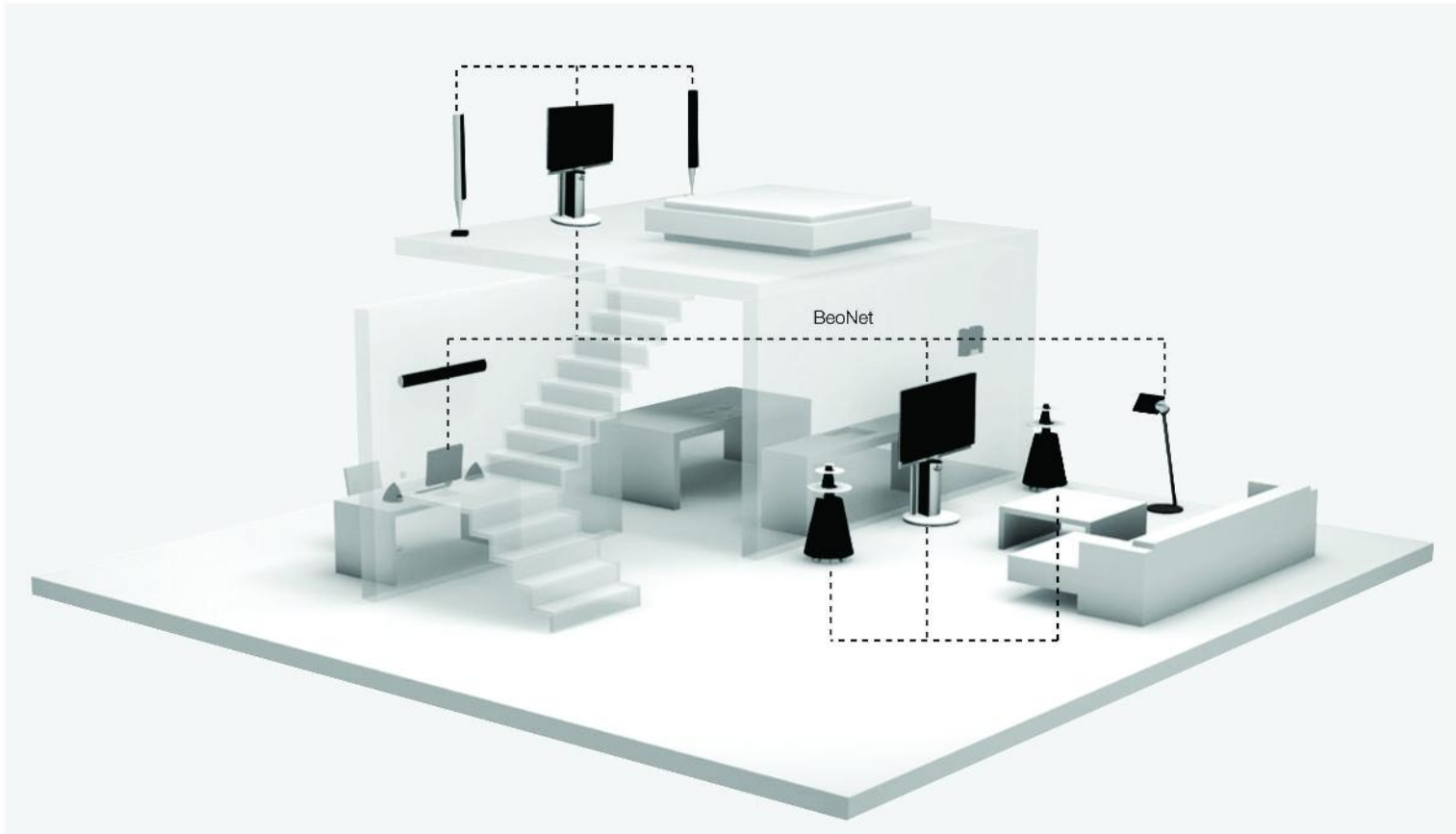
BeoNet

Together for your audio enjoyment:

Bang & Olufsen
stands for groundbreaking for pioneering and innovative sound technology such as the Bang & Olufsen bus system (BeoNet), which transports audio and video from a main room to other rooms. Busch-Jaeger provides the best connection to the current supply, as well as the required wall outlets for connecting the Bang & Olufsen components directly. Very elegant flush mounting and in all switch ranges.

BeoNet
Specifically for setting up the Bang & Olufsen BeoLink bus system: BeoNet with socket outlets for the current supply and wall outlet including integrated Bang & Olufsen connections.

BeoNet

Qty	Designation	Part no.
1	Socket outlet	20 EUCKS-xx
1	Universal data connection unit RJ45	0216
1	Cover plate	1803-xx
1	Cover frame	1722-xx

PowerLink

Bang & Olufsen active loudspeakers connected perfectly: via PowerLink with integrated Bang & Olufsen connections for perfect function and in the design of your choice. A Cat-7 cable can also be used to wire the loudspeakers.

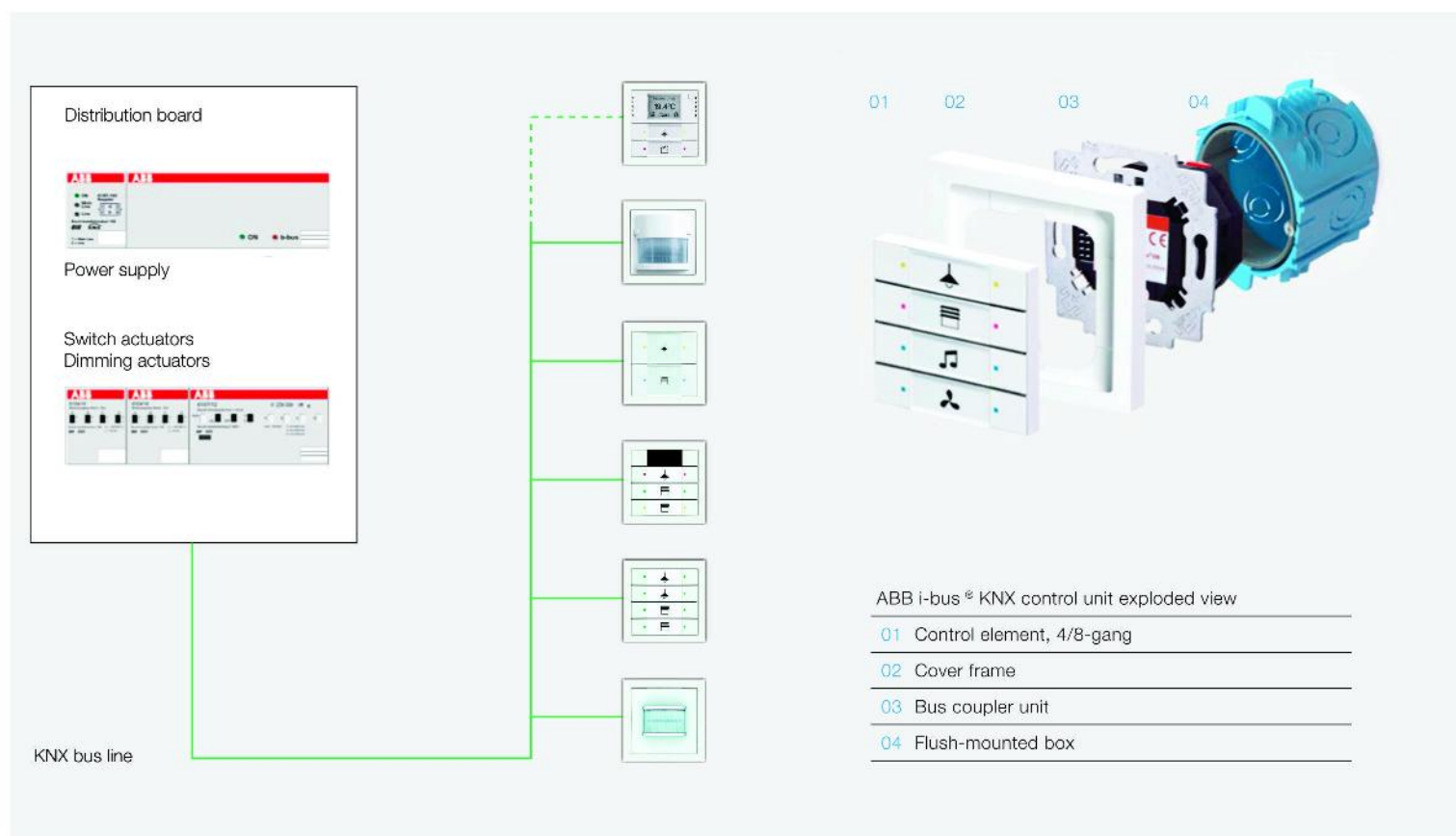| Qty	Designation	Part no.
1	Socket outlet UP	20 EUC-xx
1	Cover plate	1758-xx
1	Socket for diode socket	1860 EB
1	Diode socket, 8-pole	B&O product
1	Cover frame	1722-xx

xx = Colour code switch range

ABB i-bus® KNX
Minor installation effort–enormous advantages practical system variants.

Distribution board

Power supply

Switch actuators
Dimming actuators

KNX bus line

| 01 | 02 | 03 | 04 |

ABB i-bus ® KNX control unit exploded view

01	Control element, 4/8-gang
02	Cover frame
03	Bus coupler unit
04	Flush-mounted box

The perfect solution in new construction.

ABB i-bus® KNX: In addition to one conduit for the energy supply, this system also uses a separate second line for the transmission of information. As a result, it is suitable as a solution for new construction in which a high-performance, future-proof and scalable system can be installed from the beginning.

The perfect solution in new construction.
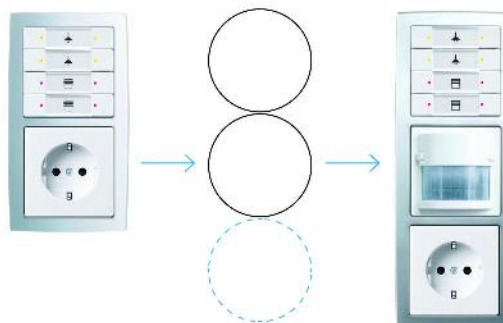
A tip for new construction:
Have additional flush-mounted boxes set. The cost is
relatively small and any unneeded sockets can be filled and plastered. However,
when you want to expand your system later, you can simply uses the sockets e.g.,
for additional control elements.

Checklist

Room-related applications

General KNX

	Living room	Kitchen	Bedroom	Bathroom, parents	Bathroom, children	Guest toilet	Child 1	Child 2	Corridor	Utility room	Workroom/office	Guest room	Exterior lighting	Garage			
Switch lighting																	
Dim lighting																	
Automatically switch lighting																	
Switch socket outlets ON/OFF																	
Dim socket outlets																	
Blind																	
Roller/sun blind																	
Control lightscenes																	
Individual room temperature control																	
Remote control																	
Media control [¹]																	
Panic switch																	
"Energy-saving switch"																	
Field activation, bedroom																	
Blind/lighting remote operation																	

Applications Busch–*ComfortTouch*®

KNX control

- [ ] Scenes and sequences
- [ ] Short-time timer/alarm clock
- [ ] Room temperature control
- [ ] Remote control of other room temperature controllers
- [ ] IR remote control
- [ ] Weekly/time programs
- [ ] Data logger

Infotainment

- [ ] RSS feeder
- [ ] Picture messages
- [ ] Voice messages
- [ ] E-mails
- [ ] Remote maintenance
- [ ] Baby phone (requires 2 Busch-ComfortTouch[³])
- [ ] Intercom system full-duplex

- [ ] Remote desktop (VNC)
- [ ] Feed reader
- [ ] Telephone (VoIP)

Entertainment

- [ ] Multimedia player
- [ ] Web radio
- [ ] Web TV
- [ ] Electronic picture frame

Safety

- [ ] Message centre
- [ ] Fault and alarm messages
- [ ] Presence simulation
- [ ] Video surveillance
- [ ] Access control

Busch–*priOn*® applications

KNX control

- [ ] Scenes and sequences
- [ ] Remote control of room temperature controllers
- [ ] IR remote control
- [ ] Weekly programs
- [ ] Media control

Safety

- [ ] Message centre
- [ ] Fault and alarm messages

[¹] Via media box.

[²] Weather station applications brightness sensor: automatic shading. Wind: Retract blinds and sun-blinds. Rain: Close skylight and retract sun blind. Temperature: Display outside temperature. DCF77 receiver: Receive current time.

[³] Window contact applications: Show status of the windows in the display, switch room temperature controller to frost protection when the window is open, prevent the roller blinds from shutting down, exterior surveillance of the building when away.

Cross–system applications

- [ ] Busch-ComfortTouch App
- [ ] Connection, Bang & Olufsen
- [ ] Connection, Miele
- [ ] Connection to central heating
- [ ] Central/group control.
- [ ] Weather station[²]
- [ ] Window contact[³]
- [ ] Alarm system
- [ ] Controlled living room ventilation
- [ ] Smoke detector
- [ ] Timing (2- or 4-channel clock, if neither Busch-ComfortTouch® nor Busch-priOn®)

Notes

Contact

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Power and productivity
for a better world™

ABB