Electrical installation solutions for buildings

ABB i-bus® KNX

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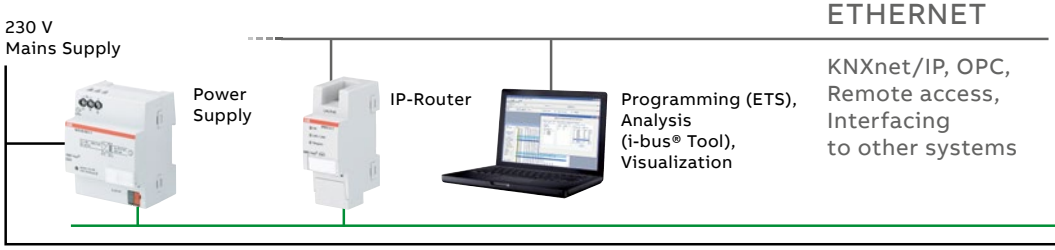
You may also visit our KNX website:

ABB i-bus® KNX

Overview



Energy consumption measurement	- Energy Analyzer - 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 using DALI	- DALI Gateway - DALI Light Controller
Control of shutters, blinds and ventilation flaps with and without automatic travel time detection	- Blind/Roller Shutter Actuator - SMI Blind-/Roller Shutter Actuator
Heating/cooling via valve control	- Holistic HVAC solution ClimaECO - Valve Drive Actuator - Electromotor Valve Drive - EFAN Coil Controller - Central HVAC Controller
Ventilation/climatization	- Blower/Fan Coil Actuator - Fan Coil Actuator and Controller
Room solutions with integrated sensor and actuator functions	Room Master devices with different combinations of inputs and outputs and internal logical connections Room Controller with functional modules

ABB i-bus® KNX

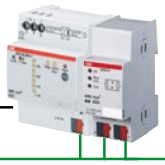
Overview

KNX-Main Line/TP

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

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

Power Supply



Line Coupler

- Binary Input

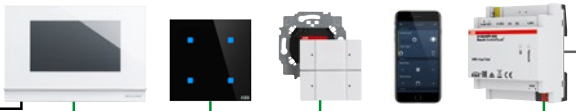
Detect and evaluate switching commands

- Analogue Input

Capture, evaluate and monitor physical values

- Weather Station and Weather Sensor

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



Remote control via internet

Display operating conditions and control functions

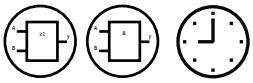
- Presence Detector
- Movement Sensor
- Light Sensor

Lighting Control

Detect presence and movement

Measure brightness levels

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

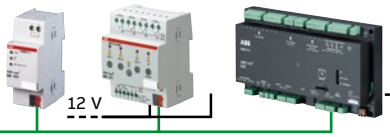


Perform logical operations and trigger timer-controlled functions

- 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

Security System

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

- Room outside sensor with card reader
- Transponder Card
- Configuration Software

Access Control system for hotel rooms

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Power Supply

	Standard			Diagnostic		Uninter-ruptible
	SV/S 30.160.1.1	**SV/S 30.320.1.1**	**SV/S 30.640.3.1**	**SV/S 30.320.2.1**	**SV/S 30.640.5.1**	**SU/S 30.640.1**
General						
Supply voltage	100 – 240 V AC (85...265 V AC)	100 – 240 V AC (85...265 V AC)	100 – 240 V AC (85...265 V AC)	100 – 240 V AC (85...265 V AC)	100 – 240 V AC (85...265 V AC)	230 V AC (210...240 V AC)
Type of installation	DIN-Rail	DIN-Rail	DIN-Rail	DIN-Rail	DIN-Rail	DIN-Rail
Module width (18 mm)	4	4	4	4	4	8
Rated current I_n	160 mA	320 mA	640 mA	320 mA	640 mA	640 mA
Rated voltage U_n	30 V DC	30 V DC	30 V DC	30 V DC	30 V DC	30 V DC
Back-up						
Mains failure back-up time without battery	200 ms	200 ms	200 ms	200 ms	200 ms	200 ms
Mains failure back-up time with new, fully charged battery up to	–	–	–	–	–	AM/S: 10 min SAK7: 2.5 h 2 x SAK7: 5 h 2 x SAK12: 11 h 2 x SAK7: 16 h
Choke						
Integrated choke	■	■	■	■	■	■
Extra Voltage output without choke (30 V DC)	–	–	■	–	■	–
Operation and indication						
Short-circuit and overload indication	■	■	■	■	■	■
Output voltage indication	■	■	■	■	■	■
Overload indication	■	■	■	■	■	■
Bus current indication	–	–	–	■	■	–
Telegram traffic indication	–	–	–	■	■	–
Communication error indication	–	–	–	■	■	–
Bus reset button and indication	–	–	–	■	■	–
Mains voltage indication	■	■	■	■	■	■
Battery voltage indication	–	–	–	–	–	■
Reporting						
Floating contact for fault reporting	–	–	–	–	–	■
Commissioning and diagnostic functions						
Control and diagnosis via ABB i-bus® Tool	–	–	–	■	■	–

■ = Function is supported

– = Function is not supported

ABB i-bus® KNX
Power Supply

SV/S 30.160.1.1

Power Supply, 160 mA, MDRC
KNX power supplies generate and monitor the KNX system voltage (SELV). The bus line is decoupled 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	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	4	SV/S 30.160.1.1	2CDG110144R0011		0.30	1

SV/S 30.320.1.1

Power Supply, 320 mA, MDRC
KNX power supplies generate and monitor the KNX system voltage (SELV). The bus line is decoupled 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	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	4	SV/S 30.320.1.1	2CDG110166R0011		0.30	1

SV/S 30.640.3.1

Power Supply, 640 mA, MDRC
KNX power supplies generate and monitor the KNX system voltage (SELV). The bus line is decoupled 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 separate choke).
With two-coloured status indicator and wide range input from 85…265 V AC, 50/60 Hz.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	4	SV/S 30.640.3.1	2CDG110167R0011		0.30	1

ABB i-bus® KNX
Power Supply

SV/S 30.320.2.1

Power Supply with Diagnostics, 320 mA, MDRC

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	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	4	SV/S 30.320.2.1	2CDG110145R0011		0.26	1

SV/S 30.640.5.1

Power Supply with Diagnostics, 640 mA, MDRC

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	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	4	SV/S 30.640.5.1	2CDG110146R0011		0.26	1

SU/S 30.640.1

Uninterruptible KNX 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	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	8	SU/S 30.640.1	GHQ6310049R0111		0.55	1

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	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	8	AM/S 12.1	GHQ6310062R0111		0.81	1

ABB i-bus® KNX
Power Supply

KS/K 4.1

KS/K 2.1

Cable Sets

For connection of sealed lead gel batteries SAK7, SAK12 and SAK17 to the uninterruptible KNX power supply SU/S 30.640.1 or the uninterruptible power supply NTU/S 12.2000.1.
If only one battery is connected, the basic cable set KS/K 4.1 with integrated temperature sensor is to be used. In case two batteries are connected in parallel, the basic cable set KS/K 4.1 is to be used for the first battery and the extension cable set KS/K 2.1 is to used for the second battery. It is not permitted to connect more than two batteries in parallel.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Basic	–	KS/K 4.1	GHQ6301910R0001		0.18	1
Extension	–	KS/K 2.1	GHQ6301910R0011		0.12	1

SAK17, SAK12, SAK7

Sealed Lead Acid Batteries, 12 V DC

For maintaining the bus voltage during a mains failure. For connection to the uninterruptible power supply SU/S 30.640.1 or the uninterruptible power supply NTU/S 12.2000.1. A maximum of two batteries of the same type can be connected in parallel. For connection, the cable sets KS/K 4.1 and KS/K 2.1 are to be used.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
7,2 Ah	–	SAK7	GHV9240001V0011		2.98	1
12 Ah	–	SAK12	GHV9240001V0012		4.66	1
18 Ah	–	SAK17	GHV9240001V0013		7.15	1

DR/S 4.1

Choke, MDRC

The device can be used together with a SV/S 30.640.5.1 or SV/S 30.640.3.1 to supply a second line. The device has a reset switch for isolating the bus voltage and resetting the bus devices connected to this line. Connection to ABB i-bus® via Bus Connection Terminal.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	DR/S 4.1	2CDG110029R0011		0.16	1

NTI/Z 28.30.1

Commissioning Power Supply, 28 V DC, 30 mA

For temporary power supply of KNX devices during commissioning. The Euroconnector and plug-in terminal provide faster connection and supply of devices with manual operation (e.g. FCA/S).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	NTI/Z 28.30.1	2CDG110096R0011		0.14	1

ABB i-bus® KNX
Power Supply

CP-D 24/2.5

Power Supply Units, MDRC

The supply units that can be used universally as auxiliary power supply in KNX installations or other SELV applications. The devices supply a regulated output voltage of 12 V DC or 24 V DC with a maximum output current of 0.42 A up to 4.2 A. The units are protected against overload, the output being able to sustain a continuous short circuit. LED indication of the status of the supply and output voltage. With a width between one to five modules only, the CP-D range power supplies are ideally suited for the installation in distribution panels. Optimized for world-wide applications: The CP-D power supplies can be supplied with a rated voltage of 100 – 240 V AC.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
12 V DC, 0.83 A	1	CP-D 12/0.83	1SVR427041R1000		0.07	1
12 V DC, 2.1 A	3	CP-D 12/2.1	1SVR427043R1200		0.20	1
24 V DC, 0.42 A	1	CP-D 24/0.42	1SVR427041R0000		0.07	1
24 V DC, 1.3 A	3	CP-D 24/1.3	1SVR427043R0100		0.20	1
24 V DC, 2.5 A	4	CP-D 24/2.5	2CDG120037R0011		0.25	1
24 V DC, 4.2 A	5	CP-D 24/4.2	1SVR427045R0400		0.39	1
Redundancy Unit for decoupling of two CP-D power supply units	2	CP-D RU	1SVR427049R0000		0.08	1

NTU/S 12.2000.1

Uninterruptible Power Supply, 12 V DC, 2 A, MDRC

Delivers sufficient power for all types of demanding applications with a buffered output voltage of 12 V DC (SELV) and a maximum output current of 2 A. Operating malfunctions of the power supply are signalled via a changeover contact and can be sent for evaluation purposes. Up to two 12 V DC sealed lead-acid batteries (gel cell) can be connected in parallel with the power supply, in conjunction with the KS/K 4.1 and KS/K 2.1 cable sets, or the AM/S 12.1 battery module.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	8	NTU/S 12.2000.1	2CDG110070R0011		0.43	1

ABB i-bus® KNX

System Infrastructure and Interfacing

	IP Router IPR/S 3.1.1		IP Router Secure IPR/S 3.5.1	IP Interface IPS/S 3.1.1		Line Coupler LK/S 4.2	
General							
Auxiliary voltage	10...30 V DC or PoE IEEE 802.3af class 1		10...30 V DC or PoE IEEE 802.3af class 1	10...30 V DC or PoE IEEE 802.3af class 1		–	
Type of installation	DIN-Rail		DIN-Rail	DIN-Rail		DIN-Rail	
Application	IP Router/ 1.1	IP Router/ 2.0	IP Router Secure/ 1.0	IP Interface/ 1.1	IP Interface/ 2.0	Couple/1.1 or Repeat/1.1	Couple Repeat/2.1
ETS	ETS 3	ETS 4/5	ETS 5	ETS 3	ETS 4/5	ETS 3	ETS 4/5
Software functions							
KNX Secure	–	–	■	–	–	–	–
Number of tunneling servers	1	5	5	1	5	–	–
Number of unicast connections	10	10	10	–	–	–	–
Monitoring of bus voltage failure	■	■	■	–	–	–	–
Filter Group telegrams main group 0...13	■	■	■	–	–	■	■
Filter Group telegrams main group 14...31	–	■ (ETS 4.1.7 or higher)	■	–	–	–	■
Function Repeater	–	–	–	–	–	■	■
Commissioning and diagnostic functions							
Control and diagnosis via ABB i-bus® Tool	■	■	■	■	■	■	■
Firmware update (ABB i-bus® Tool or ETS App)	■	■	■	■	■	–	–
Unicast parameterization (ABB i-bus® Tool)	■	■	■	–	–	–	–

■ = Function is supported

– = Function is not supported

ABB i-bus® KNX

System Infrastructure and Interfacing

LK/S 4.2

Line Coupler, MDRC

The line coupler is used in larger installations to connect KNX lines or areas. The lines or areas are galvanically isolated from one another. Telegrams can be filtered to simultaneously reduce the telegram traffic between lines or areas. With ETS 4 (V4.1.2 and higher) the complete group address range of the main groups 0...31 can be filtered. Within a line, the LK/S 4.2 can also be used as a line amplifier (repeater).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	LK/S 4.2	2CDG110171R0011		0.1	1

IPR/S 3.5.1

IP Router Secure, MDRC

Connects the KNX bus with the Ethernet network and encrypts communication on the IP backbone. The device uses the KNXnet/IP Secure protocol for communication (Routing and Tunneling). It can be used as a fast line and area coupler. The full filter table for main groups 0-31 is supported. KNX devices can be programmed via the LAN using ETS. For this and further clients 5 Secure Tunneling Servers are available. The IP address can be fixed or can be received from a DHCP server. Power supply via 12…30 V DC or PoE (IEEE 802.3af class 1). The KNX Standard Communication (Multicast) can be switched off. In this case, up to 10 IPR/S 3.5.1 can communicate using unicast communication.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	IPR/S 3.5.1	2CDG110176R0011		0.11	1

IPR/S 3.1.1

IP Router, MDRC

Connects the KNX bus with the Ethernet network. The device uses the KNXnet/IP protocol for communication (Routing and Tunneling). It can be used as a fast line and area coupler. The full filter table for main groups 0-31 is supported. KNX devices can be programmed via the LAN using ETS. For this and further clients 5 Tunneling Servers are available. The IP address can be fixed or can be received from a DHCP server. Power supply via 12…30 V DC or PoE (IEEE 802.3af class 1). The KNX Standard Communication (Multicast) can be switched off. In this case, up to 10 IPR/S 3.1.1 can communicate using unicast communication.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	IPR/S 3.1.1	2CDG110175R0011		0.11	1

ABB i-bus® KNX

System Infrastructure and Interfacing

IPS/S 3.1.1

IP Interface, MDRC

Connects the KNX bus with the Ethernet network. The device uses the KNXnet/IP protocol for communication (Tunneling). KNX devices can be programmed via the LAN using ETS. For this and further clients 5 Tunneling Servers are available. The IP address can be fixed or can be received from a DHCP server. Power supply via 12..30 V DC or PoE (IEEE 802.3af class 1).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	IPS/S 3.1.1	2CDG110177R0011		0.11	1

8186/03-500

IP Patch Panel PoE, MDRC

For the setup of small and medium-sized network installations. For the power supply of up to 3 terminal devices such as IP telephone or IP webcams direct via the network cable.
For all PoE applications of class 0 to 3, such as IP telephone, IP cameras, WLAN access points or PoE switches. External power supply via 8186/04 necessary.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	6	8186/03-500	2CKA008100A0344		0.28	1

8186/04-500

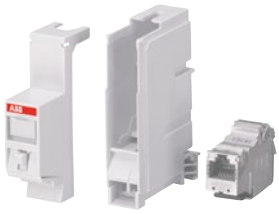
IP Power Supply PoE

For the setup of small and medium-sized network installations. For the power supply of patch panel PoE 3gang 8186/03. Nominal voltage: 100 – 240 V.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	6	8186/04-500	2CKA008100A0346			1

ABB i-bus® KNX

System Infrastructure and Interfacing



IPM/S 1.1

IP Patch Module, MDRC

The IP Patch Module consists of an RJ-45 module and a mounting adapter for rail mounting.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	1	IPM/S 1.1	2CDG120036R0011		0.1	1

USB/S 1.2

USB Interface, MDRC

Connects the KNX installation with PC software clients such as ETS or visualisations (programming, bus monitor, group monitor). The device supports Long Frames which allows faster download and download of KNX Secure devices.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	USB/S 1.2	2CDG110243R0011		0.08	1

LL/S 1.1

Optical Fibre Interface, MDRC

The device is used to couple two sections of an bus line using an optical fibre link. Ideal for bridging longer distances or to avoid having to implement lightning and overvoltage protection when laying cables between buildings. Two devices are needed to complete a transmission link.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	4	LL/S 1.1	GHQ6050053R0001		0.28	1

ABB i-bus® KNX

System Infrastructure and Interfacing

6770-500

KNX TP/RF WaveLine Gateway, SM

Media converter with internal antenna for conversion of KNX RF WaveLine radio signals to KNX twisted pair networks with 24 channels. For the evaluation and transfer of up to 24 channels each with 4 sub-channels as transmitter or receiver. Simple operation due to “programming button” and display on the device. Is surface-mounted. The KNX/WaveLine Gateway is powered via KNX and does not require an additional power supply.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6770-500	2CKA006770A0002		0.15	1

WaveLINE components are available in chapter WaveLINE wireless control.

ABB i-bus® KNX

Connection and Wiring

DSM/S 1.1

Diagnosis and Protection Module, MDRC

Enables quick diagnosis of the bus state and indicates telegram traffic via an LED. A bus fault is indicated by contacts. The DSM also suppresses transient overvoltages and interference voltage spikes on the bus and thus protects the connected devices.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	DSM/S 1.1	2CDG110060R0011		0.11	1

VB/K ...

Wiring Jumpers

For the interconnection of devices with a bus connection terminal. The vertical and horizontal versions are matched to typical wiring applications.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
horizontal, 100 mm	–	VB/K 100.1	GHQ6301908R0003		0.06	10
horizontal, 200 mm	–	VB/K 200.1	GHQ6301908R0001		0.07	10
vertical, 270 mm	–	VB/K 270.1	GHQ6301908R0002		0.11	10
vertical, 360 mm	–	VB/K 360.1	GHQ6301908R0004		0.16	10

PS 1/4/6-KNX

PS-END 1-S

Busbars

For interconnection of the phase supply to multiple input terminals on devices such as SD/S, SA/S, 6197, ... They reduce the wiring effort and ensure safe interconnection. The PS 1/4/6 is prefabricated and can be used immediately. The PS 1/60/6 is cut to the desired length and sealed with end caps.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
1 phase, 4 contacts	–	PS 1/4/6-KNX	2CDG924003R0011		0.012	10
1 phase, 60 contacts	–	PS 1/60/6-KNX	2CDG924004R0011		0.11	1
End Cap for Busbar	–	PS-END 1-S	2CDL000001R0001		0.001	25

US/E 1

Connection Terminals

For connecting bus devices as well as for looping through or branching the bus cable. Available in black/red for use as bus connecting terminal, in blue as bus connecting terminal with surge protector and in white/yellow for use as a connecting terminal.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Bus Connection Terminal, 50 Pieces, black/red	–	BUSKLEMME	GHQ6301901R0001		0.01	50
Connection Terminal, 50 Pieces, white/yellow	–	KLEMME	GHQ6301902R0001		0.01	50
Connection Terminal with Surge Arrester	–	US/E 1	GHQ6310009R0001		0.01	1

ABB i-bus® KNX

Connection and Wiring

STR/Z 1.50.1

Label Carrier for DIN-rail Devices, 50 Pieces

Snap-on label carrier consisting of transparent carrier plate and insertable blank paper labels.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	STR/Z 1.50.1	2CDG110149R0011		0.04	50

ABB i-bus® KNX

Multifunction Room Automation –
Room Controller

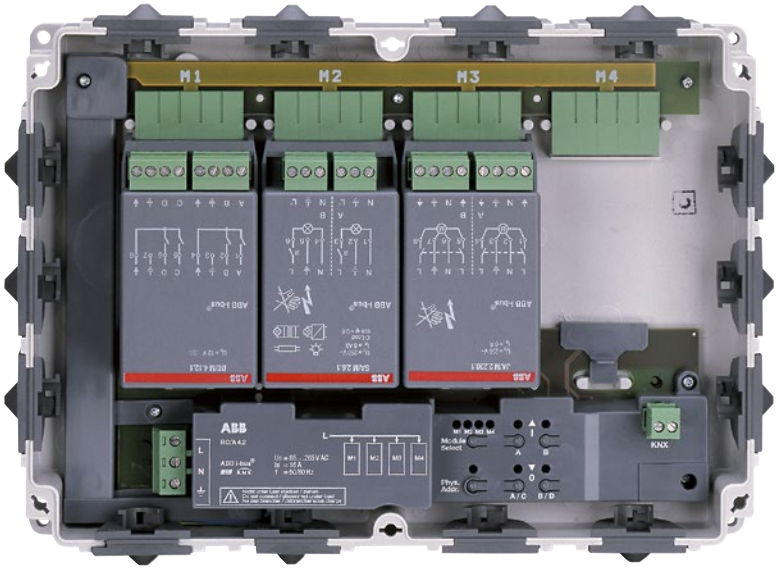


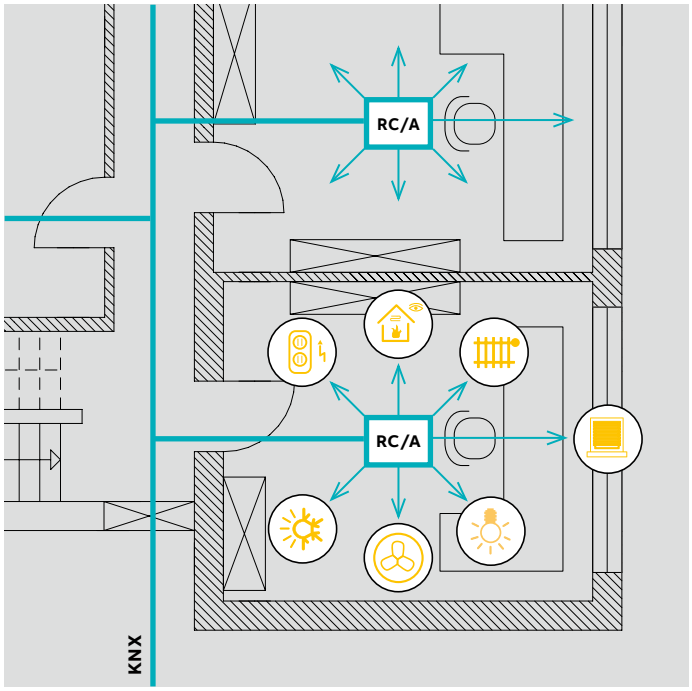
ABB i-bus® KNX

Multifunction Room Automation – Room Controller

The fundamental principle: One device per room
A single Room Controller controls all the room functions.
This “one device per room” principle economically and flexibly provides KNX functionality: With 4 or 8 modules, which are simply inserted into the basis device, all loads in this room (lights, blinds, heating, etc.) can be controlled.

Economic security from the outset
The installation concept of the Room Controller, particularly the simple plug-in module concept, provides security and reliability.

- **When planning the infrastructure of a building:**
  - It can be undertaken without exact knowledge of the subsequent user demands.
- **During commissioning:**
  - When user demands have been determined, they are implemented by simple insertion of modules.
- **In operation in a building:**
  - Modifications to the room utilisation are easy to implement.
  - The changes to the cable routing are limited to the room concerned.



Improved fire protection included
The significant reduction in the wiring also considerably reduces the fire load and thus improves safety for persons and assets.

Save on energy and not on comfort
Each room is used differently. The different module assignments of the Room Controller can be configured accordingly.
Just three examples of special building functions that can be implemented with the device.

In the lighting sector
Constant lighting control is not the only conceivable solution.
A high level of comfort can be assured by the control of different light scenes.

Blinds and roller shutters
Not only do they provide pleasant shading, they also assist in responsible use of energy. Intelligent facade controls move the blinds to suit the position of the sun.

Heating/Ventilation/Air conditioning
The control of electrothermal valves on radiators is no problem for the “electronic switch actuator” module of the Room Controller. The ventilation can also be integrated into this automatic control.

ABB i-bus® KNX

Multifunction Room Automation

Overview of switching performance

	SA/M 2.6.1	SA/M 2.16.1	SD/M 2.6.2	LR/M 1.6.2	UD/M 1.300.1	ES/M 2.230.1	ES/M 2.24.1
Outputs							
Load circuits	2 relay outputs	2 relay outputs, floating	2 relay outputs	1 relay output	Semiconductor output, dimmed via phase interval or phase control	2 semiconductor outputs for resistive loads, inrush current: max. 1 A, continuous current: max. 700 mA	2 semiconductor outputs for resistive loads, inrush current: max. 1 A, continuous current: max. 700 mA
U_n rated voltage	250/440 V AC	250/440 V AC	250/440 V AC	250/440 V AC	115/230 V AC	115/230 V AC	24 V AC/DC
I_n rated current	6 AX	16 A	6 AX	6 AX		700 mA	700 mA
Control outputs	–	–	2 x 1…10 V DC (passive)	1 x 1…10 V DC (passive)	–	–	–
Max. control current	–	–	30 mA	30 mA	Max. output power 300 VA at 230 V AC 150 VA at 127 V AC Min. output power: 2 VA	–	–
Max. cable length	–	–	100 m	100 m	–	–	–
Switching current per output							
AC3 operation (cos ϕ = 0.45) EN 60 947-4-1	6 A / 230 V	8 A / 230 V	6 A / 230 V	6 / 230 V	–	–	–
AC1 operation (cos ϕ = 0.45) EN 60 947-4-1	6 A / 230 V	16 A / 230 V	6 A / 230 V	6 A / 230 V	–	–	–
Fluorescent lighting load AX to EN 60 669	6 A / 250 V (70 µF)	16 A / 250 V (70 µF)	6 A / 250 V (70 µF)	6 A / 250 V (70 µF)	–	–	–
Minimum switching capacity	100 mA / 12 V 100 mA / 24 V	100 mA / 12 V 100 mA / 24 V	100 mA / 12 V 100 mA / 24 V	100 mA / 12 V 100 mA / 24 V	–	–	–
DC current switching capacity (resistive load)	6 A / 24 V=	16 A / 24 V=	6 A / 24 V=	6 A / 24 V=	–	–	–

– = Not applicable

ABB i-bus® KNX

Multifunction Room Automation

Overview of switching performance

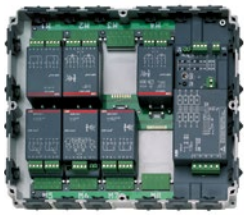
	SA/M 2.6.1	SA/M 2.16.1	SD/M 2.6.2	LR/M 1.6.2	UD/M 1.300.1	ES/M 2.230.1	ES/M 2.24.1
Lamp loads at 230 V AC							
– Incandescent lamp load	1380 W	2300 W	1380 W	1380 W	–	–	–
Fluorescent lamps T5 / T8							
– Uncompensated	1380 W	2300 W	1380 W	1380 W	–	–	–
– Parallel compensated	1380 W	1500 W	1380 W	1380 W	–	–	–
– DUO connection	1380 W	1500 W	1380 W	1380 W	–	–	–
Low-volt halogen lamps							
– Inductive transformer	1200 W	1200 W	1200 W	1200 W	–	–	–
– Electronic transformer	1380 W	1500 W	1380 W	1380 W	–	–	–
– Halogen lamp 230 V	1380 W	2300 W	1380 W	1380 W	–	–	–
Dulux lamp							
– Uncompensated	1100 W	1100 W	1100 W	1100 W	–	–	–
– Parallel compensated	1100 W	1100 W	1100 W	1100 W	–	–	–
Mercury-vapour lamp							
– Uncompensated	1380 W	2000 W	1380 W	1380 W	–	–	–
– Parallel compensated	1380 W	2000 W	1380 W	1380 W	–	–	–
Switching capacity							
– Max. peak inrush-current Ip (150 µs)	400 A	400 A	400 A	400 A	–	–	–
– Max. peak inrush-current Ip (250 µs)	320 A	320 A	320 A	320 A	–	–	–
– Max. peak inrush-current Ip (600 µs)	200 A	200 A	200 A	200 A	–	–	–
Number of electronic ballasts (T5/T8, single element)							
– 18 W (ABB EVG 1x18 CF)	23	23	23	23	–	–	–
– 24 W (ABB EVG-T5 1x24 CY)	23	23	23	23	–	–	–
– 36 W (ABB EVG 1x36 CF)	14	14	14	14	–	–	–
– 58 W (ABB EVG 1x58 CF)	11	11	11	11	–	–	–
– 80 W (Helvar EL 1x80 SC)	10	10	10	10	–	–	–

Further technical specifications can be found in the corresponding product manuals at www.abb.com/knx

– = Not applicable

ABB i-bus® KNX

Multifunction Room Automation – Room Controller Basis Devices



Configuration example RC/A 8.1

Room Controller

The Room Controller controls all the functions in the room as a central device. Due to its modular design, it can be adapted flexibly to the required functionality.
On-site installation enables short assembly and commissioning times. A structured cable entry creates clarity and flexibility for changes in function – both during planning and operation.

Special features

- Height 50 mm: optimised for underfloor installation or suspended ceilings
- Room Controller counts as just one bus device
- Robust housing, IP 54 degree of protection
- Manual operation for immediate testing – even without bus voltage
- Comprehensive software functionality

RC/A 4.2

Room Controller, Basis Device for 4 Modules, SM

It accommodates up to 4 plug-in modules and controls their functions. The RC/A 4.2 communicates as a bus device. Any module type can be plugged into each module slot. A manual control for module function test is integrated. Dimensions: (H x W x D) 200 x 275 x 50.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	RC/A 4.2	2CDG110104R0011		0.98	1

RC/A 8.2

Room Controller, Basis Device for 8 Modules, SM

It accommodates up to 8 plug-in modules and controls their functions. Any module type can be plugged into each module slot. The inserted module is automatically detected. The manual operation facility enables an immediate function test even when bus voltage is not applied. Dimensions: (H x W x D) 270 x 316 x 50.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	RC/A 8.2	2CDG110106R0011		1.695	1

ABB i-bus® KNX

Multifunction Room Automation – Room Controller Function Modules

BE/M 4.230.1

Binary Input Modules, 4-fold

Each of the modules provides 4 inputs. There are 3 module types available for the connection of 115/230 V, 12/24 V (AC or DC) or floating contacts to cover all demands.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
230 V	–	BE/M 4.230.1	2CDG110005R0011		0.13	1
12/24 V	–	BE/M 4.24.1	2CDG110006R0011		0.13	1
Contact Scanning	–	BE/M 4.12.1	2CDG110007R0011		0.13	1

SA/M 2.6.1

Switch Actuator Module, 2-fold, 6 A

For switching loads up to 16 A at a maximum continuous current of 6 A.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	SA/M 2.6.1	2CDG110002R0011		0.17	1

SA/M 2.16.1

Switch Actuator Module, 2-fold, 16 A

For switching two loads up to 16 A. The switched voltage is independent of the basic device and is connected directly to the module.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	SA/M 2.16.1	2CDG110100R0011		0.16	1

JA/M 2.230.1

Shutter Actuator Modules, 2-fold

For controlling two independent blind or shutter drives. There are two module types available for 115/230 V AC or 24 V DC drives.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
230 V AC	–	JA/M 2.230.1	2CDG110003R0011		0.17	1
24 V DC	–	JA/M 2.24.1	2CDG110004R0011		0.17	1

SD/M 2.6.2

Switch/Dim Actuator Module, 2-fold, 6 AX

It enables the switching and dimming of two groups of luminaries in conjunction with electronic ballasts via a 1…10 V control voltage. Enhanced switching capacity.
(Replaces the SD/M 2.6.1).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	SD/M 2.6.2	2CDG110107R0011		0.17	1

ABB i-bus® KNX

Multifunction Room Automation – Room Controller Function Modules

LR/M 1.6.2

Light Controller Module, 1-fold, 6 AX

Enables switching and dimming of a lighting group via 1...10 V control voltage. The device can be used for constant lighting control in conjunction with Light Sensor LF/U 2.1. (Replaces the LR/M 1.6.1).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	LR/M 1.6.2	2CDG110108R0011		0.13	1

UD/M 1.300.1

Universal Dim Actuator Module, 1-fold, 300 VA

For dimming incandescent lamps, 230 V or low-voltage halogen lamps up to 300 W/VA. The automatic load detection detects the connected load and optimises the control. The minimum load is just 2 W.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	UD/M 1.300.1	2CDG110012R0011		0.18	1

ES/M 2.230.1

Electronic Switch Actuator Module, 2-fold

With 2 overload-proof outputs for noiseless control of heating systems and chilled ceilings via thermoelectric valve drives. Two module types for voltages from 115/230 V or 24 V (AC or DC) are available.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
115/230 V	–	ES/M 2.230.1	2CDG110013R0011		0.15	1
24 V	–	ES/M 2.24.1	2CDG110014R0011		0.15	1

ABB i-bus® KNX

Multifunction Room Automation – Room Master

	Room Master Basic RM/S 1.1	Room Master Premium RM/S 2.1	Room Master RM/S 3.1	Room Master RM/S 4.1
General				
Supply voltage	KNX	KNX	KNX	KNX
Type of installation	DIN-Rail	DIN-Rail	DIN-Rail	DIN-Rail
Module width (18 mm)	8	12	12	8
Current consumption, bus	< 12 mA	< 24 mA	< 12 mA	< 12 mA
Inputs				
Binary inputs (for potential free contacts via contact scanning)	8	18	12	8
Outputs				
Switching capacity 20 A (16 AX) [1]	1	3	4	–
Switching capacity 16 A (10 AX) [2]	2	1	–	–
Switching capacity 6 A [3]	3 (configurable as switch or fan outputs)	12 (3 configurable as switch or fan outputs)	–	8
0.5 A electronic (for max. 2 electrothermal or motor valve drive controls)	2	2	–	–
6 A changeover contact (Blind or Shutter control)	–	1	4 (configurable also as switch outputs)	–
Functions				
Lighting control (Switching)	■	■	■	■
Heating/Cooling (Electrothermal or motor valve drive control, 3-level fan speed control)	■	■	■	■
Shading control (Shutter, blinds or curtains)	–	■	–	–
Control of further loads via switched electrical sockets	■	■	■	■
Internal connection of inputs and outputs without group adresses	■	■	■	■
Scenes	■	■	■	■
Room scenarios	■	■	■	■
Application with preconfigured inputs and outputs	■	■	–	–
Programmable with predefined and tested example projects (ETS 4) for different fields of application (office, schools, hotel rooms, ...)	–	–	■	–
Planning templates	–	–	■	–

■ = Function is supported

– = Function is not supported

1) = Switching capacity, see Switch Actuators SA/S x.16.5.1

2) = Switching capacity, see Switch Actuators SA/S x.10.2.1

3) = Switching capacity, see Switch Actuators SA/S x.6.1.1

ABB i-bus® KNX

Multifunction Room Automation – Room Master

RM/S 1.1

RM/S 2.1

RM/S 3.1

RM/S 4.1

Room Master

The Room Master is a KNX device with a combination of inputs and outputs. The quantities, technical data and the functions of these inputs and outputs are compiled, so that overall control of all the functions in rooms of a live-in character or apartments, are implemented via a device. Typical areas of application of the Room Master are hotel rooms, hospital rooms as well as apartments in institutions for residential care or in student residential homes. The Room Master with its compact design covers all the basic requirements for Lighting control, Heating/Air conditioning, Shading control (shutters, blinds or curtains - with the RM/S 2.1) and Control of further loads via switched electrical sockets. Function extensions are possible at any time, e.g. devices for dimming via ABB i-bus® KNX.

Overview of the inputs and outputs

	RM/S 1.1	RM/S 2.1	RM/S 3.1	RM/S 4.1	Application possibilities
Binary inputs via contact scanning	8	18	12	8	For connection of switches or push-buttons (light on/off, shutter up/down,etc.) or sensors (window contacts, door contacts, water sensors, condensation water sensors, hotel card readers, etc.)
Outputs 20 A (16 AX)	1	3	4	–	Bathroom fan, switching of electrical sockets
Outputs 16 A (10 AX)	2	1	–	–	Auxiliary electrical heating of fan-coil units (at RM/S 1.1 and 2.1), lighting
Outputs 6 A	3	12	–	8	3-speed fan control (at RM/S 1.1 and 2.1), lighting
Outputs 0.5 A electronic	2	2	–	–	Valve control (heating, cooling) for max. 2 seperate valves
Outputs 6 A changeover contact	–	1	4 (config-urable as switch outputs too)	–	Blind or roller blind control

- RM/S 1.1 and RM/S 2.1 are preprogrammed ex factory
- RM/S 3.1 and RM/S 4.1 are programmable with predefined and tested example projects (ETS 4) for different fields of application (office, schools, hotel rooms, ...)
- Commissioning of the preprogrammed devices on the construction site without notebook and ETS programming. With the electrical connection all room functions are available.
- Optional functional extensions via integration into KNX networks with ETS software.

Further information about Room Master on www.abb.com/knx

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	8	RM/S 1.1	2CDG110094R0011		0.45	1
	12	RM/S 2.1	2CDG110095R0011		0.76	1
	12	RM/S 3.1	2CDG110165R0011		0.55	1
	8	RM/S 4.1	2CDG110170R0011		0.3	1

ABB i-bus® KNX

Inputs

ABB i-bus® KNX
Inputs

Wide-range inputs and a streamlined range – The 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 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 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.

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

ABB i-bus® KNX

Inputs

	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	DIN-Rail	DIN-Rail	DIN-Rail	DIN-Rail	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)	■	■	■	■	■	■	■

■ = Function is supported

– = Function is not supported

ABB i-bus® KNX

Inputs

	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
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

– = Function is not supported

ABB i-bus® KNX
Inputs

BE/S 8.230.2.1

Binary Inputs, 10 – 230 V AC/DC, MDRC

Detects AC/DC signals in the voltage range from 12...230 V. The state of the input is displayed via yellow LEDs. The binary inputs enable detection of independent input signals. The devices feature a manual operation pushbutton for each channel. The devices are powered via the ABB i-bus® and do not require an additional power supply.

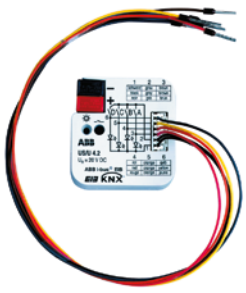
Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
4-fold	2	BE/S 4.230.2.1	2CDG110091R0011		0.12	1
8-fold	4	BE/S 8.230.2.1	2CDG110093R0011		0.23	1

BE/S 4.20.2.1

Binary Inputs, Contact Scanning, MDRC

Scans floating contacts with internally generated scanning voltage. The state of the input is displayed via yellow LEDs. The binary inputs enable detection of independent input signals. The devices feature a manual operation pushbutton for each channel. The devices are powered via the ABB i-bus® and do not require an additional power supply.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
4-fold	2	BE/S 4.20.2.1	2CDG110090R0011		0.12	1
8-fold	4	BE/S 8.20.2.1	2CDG110092R0011		0.23	1



US/U 4.2

Universal Interface, FM

The universal interface has 2, 4 or 12 channels which can be parametrised as inputs or outputs with the ETS software. Conventional push-buttons, auxiliary contacts, LEDs and the electronic relay ER/U can be connected. The connecting cables can be extended up to 10 m. The contact scanning voltage and the supply voltage for the LEDs are made available by the device, the series resistors for the LEDs are integrated.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
2-fold	–	US/U 2.2	GHQ6310074R0111		0.06	1
4-fold	–	US/U 4.2	GHQ6310070R0111		0.06	1
12-fold	–	US/U 12.2	2CDG110065R0011		0.06	1

ABB i-bus® KNX
Inputs

AE/S 4.1.1.3

AE/A 2.1

WZ/S 1.3.1.2

WES/A 3.1

WS/S 4.1.1.2

Analogue Input

Used wherever analogue variables should be detected. The sophisticated housing concept of the surface mounted device and the screw terminals of the DIN-Rail device enable quick and clear wiring and improve the speed of connection of the sensors.
Comprehensive range of adjustment for many typical sensors (1 – 10 V, 0(4) – 20 mA, 0 – 1 V, PT 100, PT 1000,...) for detection of temperature, brightness, fill levels, etc.
For active sensors the auxiliary voltage is supplied by AE/S 4.1.1.3; in case of AE/A 2.1 a separate auxiliary voltage supply is required.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
4-fold, MDRC	4	AE/S 4.1.1.3	2CDG110190R0011		0.27	1
2-fold, SM	–	AE/A 2.1	2CDG110086R0011		0.30	1

Weather Unit, MDRC and Weather Sensor, SM

It is used to detect and process weather data from weather sensor. It supplies data for twilight and brightness levels in 3 directions, rain, temperature, information on day/night, wind speed, date and time. An additional input for the connection of a PT - 1000 sensor is provided. Four value memories which can store up to 24 values each are available. The Weather Unit WZ/S 1.3.1.2 can be operated either with the new Weather Sensor WES/A 3.1 or with the former sensor WES/A 2.1. The Weather Unit also provides the supply voltage for the connected sensor. The Weather Unit has to be supplied with a operating voltage of 85 to 265 V AC. The Weather Unit supports the ABB i-bus® Tool for advanced diagnosis and improved commissioning.
The Weather Sensor WES/A 3.1 detects twilight, brightness in three directions, rain, temperature, day/night, wind speed and the date and time using a GPS module. An additional heating transformer is not required. The new Weather Sensor WES/A 3.1 can be connected to the new Weather Unit WZ/S 1.3.1.2 or to the former Weather Unit WZ/S 1.1.

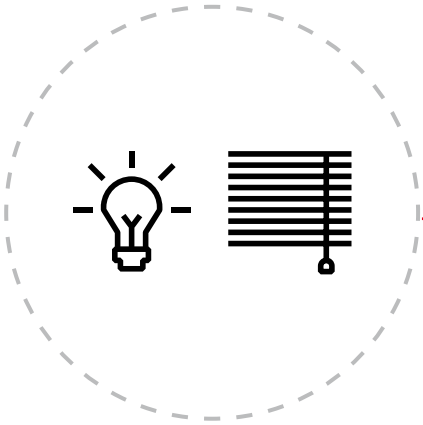
Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Weather Unit	4	WZ/S 1.3.1.2	2CDG110184R0011		0.20	1
Weather Sensor	–	WES/A 3.1	2CDG120046R0011		0.17	1

Weather Station, 4-fold, MDRC

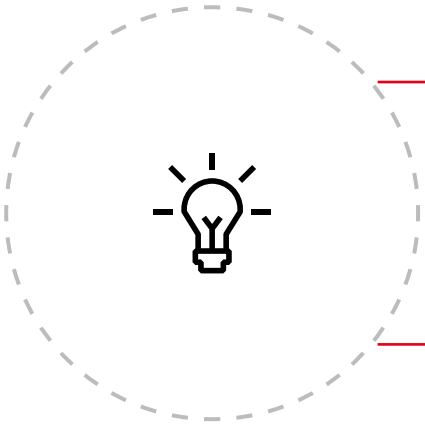
All common weather sensors for wind speed, wind direction, rain, amount of rain, brightness, light intensity, pyranometers, twilight, air pressure, humidity or temperature can be connected to the device. The power supply generates the 24 V DC voltage for external sensors (max. 300 mA). The device can be operated with 85 to 265 V AC, 50/60 Hz. The application software is configured for the detection of weather based data and enables quick sensor programming. The Weather Station supports the ABB i-bus® Tool for advanced diagnosis and improved commissioning.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	4	WS/S 4.1.1.2	2CDG110191R0011		0.27	1

Outputs
Switch to a smarter tomorrow



Combi Switch Actuators
The 9 Combi devices are combining two applications: switching and shading. The products are ideally made for residential usage to offer greatest flexibility.



Standard Switch Actuators
These 12 devices are building the Standard when it comes to switching applications for commercial buildings. During the development we focused on providing a cost optimized selection of products, that matches the needs of commercial projects.

Professional Switch Actuators
The professional series includes 8 switch actuators made for high switching capacity. This portfolio has been developed to suit the high requirements of industry standards.

ABB i-bus® KNX

Outputs – Combi Switch Actuators

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:

	SAH/S 8.6.7.1 SAH/S 16.6.7.1 SAH/S 24.6.7.1	SAH/S 8.10.7.1 SAH/S 16.10.7.1 SAH/S 24.10.7.1	SAH/S 8.16.7.1 SAH/S 16.16.7.1 SAH/S 24.16.7.1
Range	Combi	Combi	Combi
I_n rated current (A) [3]	6 A	10 A [5]	16 A [5]
U_n rated voltage (V)	230 V AC	230 V AC	230 V AC
AC1 operation (cos ϕ = 0.8) DIN EN 60947-4-1	6 A	10 A	16 A
AC3 operation (cos ϕ = 0.45) DIN EN 60947-4-1	6 A	6 A	6 A
C-Load switching capacity (200 µF)	–	–	–
Minimum switching capacity	100 mA/12 V	100 mA/12 V	100 mA/12 V
DC current switching capacity (resistive load)	6 A/24 V =	6 A/24 V =	6 A/24 V =
Mechanical service life	> 10^6	> 10^6	> 10^6
Electronic endurance to IEC 60947-4-1:			
– Rated current AC1	100,000	100,000	100,000
– Rated current AC3	6,000	6,000	6,000
Incandescent lamp load at 230 V AC	1,200 W	1,200 W	1,200 W
Fluorescent lamp T5 / T8:			
– Uncorrected	800 W	800 W	800 W
Low-voltage halogen lamps:			
– Inductive transformer	800 W	800 W	800 W
– Electronic transformer	1,000 W	1,000 W	1,000 W
Halogen lamp 230 V	1,000 W	1,000 W	1,000 W
Mercury-vapour lamps:			
– Uncorrected	1,000 W	1,000 W	1,000 W
– Parallel compensated	800 W	800 W	800 W
Sodium-vapour lamps:			
– Uncorrected	1,000 W	1,000 W	1,000 W
– Parallel compensated	800 W	800 W	800 W
LED lamps/energy saving lamps	250 W	250 W	250 W
Motor load	1380 W	1380 W	1380 W
Max. peak inrush-current Ip (150 µs)	200 A	200 A	200 A
Max. peak inrush-current Ip (250 µs)	160 A	160 A	160 A
Max. peak inrush-current Ip (600 µs)	100 A	100 A	100 A
Number of electronic ballasts (T5/T8, single element): [2]			
18 W (ABB ballasts 1 x 18 SF)	10 ballasts	10 ballasts	10 ballasts
24 W (ABB ballasts 1 x 24 CY)	10 ballasts	10 ballasts	10 ballasts
36 W (ABB ballasts 1 x 36 CF)	7 ballasts	7 ballasts	7 ballasts
58 W (ABB ballasts 1 x 58 CF)	5 ballasts	5 ballasts	5 ballasts
80 W (Helvar EL 1 x 80 SC)	3 ballasts	3 ballasts	3 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.

5) = Max. load current per device: 8-fold = 100 A, 16-fold = 160 A, 24-fold = 200 A

ABB i-bus® KNX

Outputs – Combi Switch Actuators

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

	SAH/S 8.6.7.1 **SAH/S 16.6.7.1** **SAH/S 24.6.7.1**	**SAH/S 8.10.7.1** **SAH/S 16.10.7.1** **SAH/S 24.10.7.1**	**SAH/S 8.16.7.1** **SAH/S 16.16.7.1** **SAH/S 24.16.7.1**
Range	Combi	Combi	Combi
Type of installation	DIN-Rail	DIN-Rail	DIN-Rail
Number of outputs (Switch [Blind])	8 [4]/16[8]/24 [12]	8 [4]/16[8]/24 [12]	8 [4]/16[8]/24 [12]
Module width (space unit)	4/8/12	4/8/12	4/8/12
Manual operation	■	■	■
Contact position display	■	■	■
I_n rated current (A)	6 A	10 A	16 A
Current detection	–	–	–
Switch function			
– ON/OFF delay	■	■	■
– Central ON/OFF	■	■	■
– 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 (independent of output)			
– Logic AND function	■	■	■
– Logic OR function	■	■	■
– Logic XOR function	■	■	■
– Gate function	■	■	■
Priority object/forced operation	■	■	■
Blind/Roller Shutter function			
– Blind/Shutter control	■	■	■
– Wind/Rain/Frost alarm	■	■	■
– Central up/down/position/stop	■	■	■
– Automatic mode (sun)	■	■	■
– Pause on change in direction	■	■	■
– Referent movement	■	■	■
– Travel limitation	■	■	■
– Adjustable delay time for drives	■	■	■
Special functions			
– Request status values	■	■	■
– Template pages	■	■	■
– Default position on bus voltage failure/recovery	■	■	■
– Status messages	■	■	■

■ = Function is supported

– = Function is not supported

ABB i-bus® KNX

Outputs – Standard Switch Actuators/Professional Switch Actuators

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 2.6.2.2 SA/S 4.6.2.2 SA/S 8.6.2.2 SA/S 12.6.2.2	SA/S 2.10.2.2 SA/S 4.10.2.2 SA/S 8.10.2.2 SA/S 12.10.2.2	SA/S 2.16.2.2 SA/S 4.16.2.2 SA/S 8.16.2.2 SA/S 12.16.2.2	SA/S 2.16.5.2 SA/S 4.16.5.2 SA/S 8.16.5.2 SA/S 12.16.5.2	SA/S 2.16.6.2 SA/S 4.16.6.2 SA/S 8.16.6.2 SA/S 12.16.6.2
Range	Standard	Standard	Standard	Professional	Professional
I_n rated current (A) [3]	6 A	10 A	16 A	16/20 A C-Load	16/20 A C-Load
U_n rated voltage (V)	230 V AC	230 V AC	230 V AC	230 V AC	230 V AC
AC1 operation (cos ϕ = 0.8) DIN EN 60947-4-1	6 A	10 A	16 A	20 A	20 A
AC3 operation (cos ϕ = 0.45) DIN EN 60947-4-1	6 A	8 A	8 A	16 A	16 A
C-Load switching capacity (200 µF)	–	–	–	20 A	20 A
Fluorescent lighting load AX to EN 60669-1	6 AX (140 µF) [3]	10 AX (140 µF) [3]	16 A (140 µF) [3]	20 AX (200 µF) [3]	20 AX (200 µF) [3]
Minimum switching capacity	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)	6 A/24 V =	10 A/24 V =	16 A/24 V =	20 A/24 V =	20 A/24 V =
Mechanical service life	> 3 x 10^6	> 3 x 10^6	> 3 x 10^6	> 10^6	> 10^6
Electronic endurance to IEC 60947-4-1:					
– Rated current AC1	100,000	100,000	100,000	100,000	100,000
– Rated current AC3	30,000	30,000	30,000	30,000	30,000
– Rated current AC5a	30,000	30,000	30,000	30,000	30,000
Incandescent lamp load at 230 V AC	1,380 W	2,500 W	2,500 W	3,680 W	3,680 W
Fluorescent lamp T5 / T8:					
– Uncorrected	1,380 W	2,500 W	2,500 W	3,680 W	3,680 W
– Parallel compensated	1,380 W	1,500 W	1,500 W	2,500 W	2,500 W
– DUO circuit	1,380 W	1,500 W	1,500 W	3,680 W	3,680 W
Low-voltage halogen lamps:					
– Inductive transformer	1,200 W	1,200 W	1,200 W	2,000 W	2,000 W
– Electronic transformer	1,380 W	1,500 W	1,500 W	2,500 W	2,500 W
Halogen lamp 230 V	1,380 W	2,500 W	2,500 W	3,680 W	3,680 W
Dulux lamps:					
– Uncorrected	1,100 W	1,100 W	1,100 W	3,680 W	3,680 W
– Parallel compensated	1,100 W	1,100 W	1,100 W	3,000 W	3,000 W
Mercury-vapour lamps:					
– Uncorrected	1,380 W	2,000 W	2,000 W	3,680 W	3,680 W
– Parallel compensated	1,380 W	2,000 W	2,000 W	3,000 W	3,000 W
Sodium-vapour lamps:					
– Uncorrected	1,380 W	2,000 W	2,000 W	3,680 W	3,680 W
– Parallel compensated	1,380 W	2,000 W	2,000 W	3,000 W	3,000 W
LED lamps/energy saving lamps	400 W	400 W	400 W	650 W	650 W
Motor load	1380 W	1840 W	1840 W	3680 W	3680 W
Max. peak inrush-current Ip (150 µs)	400 A	400 A	400 A	600 A	600 A
Max. peak inrush-current Ip (250 µs)	320 A	320 A	320 A	480 A	480 A
Max. peak inrush-current Ip (600 µs)	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)	23 ballasts	23 ballasts	23 ballasts	26[1] ballasts	26[1] ballasts
24 W (ABB ballasts 1 x 24 CY)	23 ballasts	23 ballasts	23 ballasts	26[1] ballasts	26[1] ballasts
36 W (ABB ballasts 1 x 36 CF)	14 ballasts	14 ballasts	14 ballasts	22 ballasts	22 ballasts
58 W (ABB ballasts 1 x 58 CF)	11 ballasts	11 ballasts	11 ballasts	12[1] ballasts	12[1] ballasts
80 W (Helvar EL 1 x 80 SC)	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 – Standard Switch Actuators/Professional Switch Actuators

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

	SA/S 2.6.2.2 **SA/S 4.6.2.2** **SA/S 8.6.2.2** **SA/S 12.6.2.2**	**SA/S 2.10.2.2** **SA/S 4.10.2.2** **SA/S 8.10.2.2** **SA/S 12.10.2.2**	**SA/S 2.16.2.2** **SA/S 4.16.2.2** **SA/S 8.16.2.2** **SA/S 12.16.2.2**	**SA/S 2.16.5.2** **SA/S 4.16.5.2** **SA/S 8.16.5.2** **SA/S 12.16.5.2**	**SA/S 2.16.6.2** **SA/S 4.16.6.2** **SA/S 8.16.6.2** **SA/S 12.16.6.2**
Range	Standard	Standard	Standard	Professional	Professional
Type of installation	DIN-Rail	DIN-Rail	DIN-Rail	DIN-Rail	DIN-Rail
Number of outputs	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	2/4/8/12
Manual operation	■	■	■	■	■
Contact position display	■	■	■	■	■
I_n rated current (A)	6 A	10 A	16 A	16/20 A C-Load	16/20 A C-Load
Current detection	–	–	–	–	■
Switch function					
– ON/OFF delay	■	■	■	■	■
– Central ON/OFF	■	■	■	■	■
– 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 (independent of output)					
– Logic AND function	■	■	■	■	■
– Logic OR function	■	■	■	■	■
– Logic XOR function	■	■	■	■	■
– Gate function	■	■	■	■	■
Priority object/forced operation	■	■	■	■	■
Blind/Roller Shutter function					
– Blind/Shutter control	–	–	–	–	–
– Wind/Rain/Frost alarm	–	–	–	–	–
– Central up/down/position/stop	–	–	–	–	–
– Automatic mode (sun)	–	–	–	–	–
– Pause on change in direction	–	–	–	–	–
– Referent movement	–	–	–	–	–
– Travel limitation	–	–	–	–	–
– Adjustable delay time for drives	–	–	–	–	–
Special functions					
– Request status values	■	■	■	■	■
– Template pages	■	■	■	■	■
– Default position on bus voltage failure/recovery	■	■	■	■	■
– Status messages	■	■	■	■	■

■ = Function is supported

– = Function is not supported

ABB i-bus® KNX

Outputs

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)	6 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	> 10^6	> 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	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	3,680 W
– Parallel compensated	300 W	1,380 W	1,500 W	1,500 W	2,500 W	2,500 W
– DUO circuit	350 W	1,380 W	1,500 W	1,500 W	3,680 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)	7 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

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 8.16.2.1 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
Type of installation	DIN-Rail	DIN-Rail	DIN-Rail	DIN-Rail	DIN-Rail	DIN-Rail
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)	4/6/8	2/4/8/12	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	■	■	■	■	■	■

■ = Function is supported

– = Function is not supported

1) = See special
ABB i-bus® KNX devices of the HVAC area, e.g. Blower actuator FCL/S or Fan Coil actuator FCA/S.

ABB i-bus® KNX

Outputs – Combi Switch Actuators

SAH/S 8.6.7.1

Switching/Shading Actuator, 6 A, MDRC NEW

The compact 6 A combi switch actuator has 8, 16 or 24 independent switching relays. The outputs can be used individually via ABB i-bus® KNX for switching electrical loads or in pairs for controlling 230 V AC roller shutter or blind drives (no electromechanically interlocking). The device features a manual operation, which can also be disabled. Via the manual operation the outputs can be operated manually and the switching or driving status is displayed. The device is powered by KNX and requires no additional power supply.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
8-fold	4	SAH/S 8.6.7.1	2CDG110244R0011		0.35	1
16-fold	8	SAH/S 16.6.7.1	2CDG110245R0011		0.60	1
24-fold	12	SAH/S 24.6.7.1	2CDG110246R0011		0.83	1

SAH/S 16.10.7.1

Switching/Shading Actuator, 10 A, MDRC NEW

The compact 10 A combi switch actuator has 8, 16 or 24 independent switching relays. The outputs can be used individually via ABB i-bus® KNX for switching electrical loads or in pairs for controlling 230 V AC roller shutter or blind drives (no electromechanically interlocking). The device features a manual operation, which can also be disabled. Via the manual operation the outputs can be operated manually and the switching or driving status is displayed. The device is powered by KNX and requires no additional power supply.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
8-fold	4	SAH/S 8.10.7.1	2CDG110247R0011		0.35	1
16-fold	8	SAH/S 16.10.7.1	2CDG110248R0011		0.60	1
24-fold	12	SAH/S 24.10.7.1	2CDG110249R0011		0.83	1

SAH/S 24.16.7.1

Switching/Shading Actuator, 16 A, MDRC NEW

The compact 16 A combi switch actuator has 8, 16 or 24 independent switching relays. The outputs can be used individually via ABB i-bus® KNX for switching electrical loads or in pairs for controlling 230 V AC roller shutter or blind drives (no electromechanically interlocking). The device features a manual operation, which can also be disabled. Via the manual operation the outputs can be operated manually and the switching or driving status is displayed. The device is powered by KNX and requires no additional power supply.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
8-fold	4	SAH/S 8.16.7.1	2CDG110250R0011		0.35	1
16-fold	8	SAH/S 16.16.7.1	2CDG110251R0011		0.60	1
24-fold	12	SAH/S 24.16.7.1	2CDG110252R0011		0.83	1

ABB i-bus® KNX

Outputs – Standard Switch Actuators

SA/S 2.6.2.2

Switch Actuator, 6 A, MDRC

NEW

The switch actuator uses potential free contacts to switch 2, 4, 8 or 12 independent electrical loads via the ABB i-bus® KNX. The device features a manual operation and displaying of the switching state of the outputs. The device is especially suited to switch resistive. The device is powered by KNX and requires no additional power supply.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
2-fold	2	SA/S 2.6.2.2	2CDG110253R0011		0.20	1
4-fold	4	SA/S 4.6.2.2	2CDG110254R0011		0.30	1
8-fold	8	SA/S 8.6.2.2	2CDG110255R0011		0.50	1
12-fold	12	SA/S 12.6.2.2	2CDG110256R0011		0.72	1

SA/S 8.10.2.2

Switch Actuator, 10 A, MDRC

NEW

The switch actuator uses potential free contacts to switch 2, 4, 8 or 12 independent electrical loads via the ABB i-bus® KNX. The device features a manual operation and displaying of the switching state of the outputs. The device is especially suited to switch resistive loads. The device is powered by KNX and requires no additional power supply.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
2-fold	2	SA/S 2.10.2.2	2CDG110257R0011		0.20	1
4-fold	4	SA/S 4.10.2.2	2CDG110258R0011		0.30	1
8-fold	8	SA/S 8.10.2.2	2CDG110259R0011		0.50	1
12-fold	12	SA/S 12.10.2.2	2CDG110260R0011		0.72	1

SA/S 12.16.2.2

Switch Actuator, 16 A, MDRC

NEW

The switch actuator uses potential free contacts to switch 2, 4, 8 or 12 independent electrical loads via the ABB i-bus® KNX. The device is especially suited to switch resistive loads. The device features a manual operation and displaying of the switching state of the outputs. The device is powered by KNX and requires no additional power supply.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
2-fold	2	SA/S 2.16.2.2	2CDG110261R0011		0.20	1
4-fold	4	SA/S 4.16.2.2	2CDG110262R0011		0.30	1
8-fold	8	SA/S 8.16.2.2	2CDG110263R0011		0.50	1
12-fold	12	SA/S 12.16.2.2	2CDG110264R0011		0.72	1

ABB i-bus® KNX

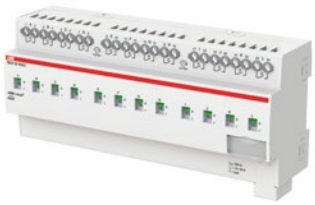
Outputs – Professional Switch Actuators

SA/S 4.16.5.2

Switch Actuator, 16 A, C-Load, MDRC **NEW**

The switch actuator uses potential free contacts to switch 2, 4, 8 or 12 independent electrical loads via the ABB i-bus® KNX. The device features a manual operation and displaying of the switching state of the outputs. The 16/20 A, 16 A-AC3 (C-load) device is especially suited for loads with high surge currents e.g. flourescent lighting (AX) acc. EN 60669.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
2-fold	2	SA/S 2.16.5.2	2CDG110265R0011		0.21	1
4-fold	4	SA/S 4.16.5.2	2CDG110266R0011		0.31	1
8-fold	8	SA/S 8.16.5.2	2CDG110267R0011		0.55	1
12-fold	12	SA/S 12.16.5.2	2CDG110268R0011		0.79	1



SA/S 12.16.6.2

Switch Actuator, 16 A, C-Load with Energy Function, MDRC **NEW**

The switch actuator uses potential free contacts to switch 2, 4, 8 or 12 independent electrical loads via the ABB i-bus® KNX. The device has integrated energy functions and an independent load current detection in each output. The device features a manual operation and displaying of the switching state of the outputs. The 16/20 A, 16 A-AC3 (C-load) device is especially suited for loads with high surge currents e.g. flourescent lighting (AX) acc. EN 60669.

Available October 2020

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
2-fold	2	SA/S 2.16.6.2	2CDG110269R0011		0.24	1
4-fold	4	SA/S 4.16.6.2	2CDG110270R0011		0.38	1
8-fold	8	SA/S 8.16.6.2	2CDG110271R0011		0.66	1
12-fold	12	SA/S 12.16.6.2	2CDG110272R0011		0.96	1

ABB i-bus® KNX
Outputs

SA/S 8.16.6.1

Switch Actuator, 16/20 AX, C-Load with Current Detection, MDRC **to be discontinued**

Switches with floating contacts, 2, 4, 8 or 12 independent electrical loads with high surge currents. The Switch Actuators feature a circuit for high precision current detection for each output that is used to monitor the connected circuits. Every output can be operated manually and features display of the switching state. The 16/20A, C-Load devices are especially suited for switching loads with high surge currents such as luminaries with ballasts or fluorescent lighting (AX) according to EN 60669.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
2-fold	2	SA/S 2.16.6.1	2CDG110112R0011		0.21	1
4-fold	4	SA/S 4.16.6.1	2CDG110113R0011		0.38	1
8-fold	8	SA/S 8.16.6.1	2CDG110114R0011		0.69	1
12-fold	12	SA/S 12.16.6.1	2CDG110138R0011		0.90	1

ABB i-bus® KNX

Outputs

6151/11 U-500

Switch Actuator, 1-fold, 16 A, FM

For switching 230 V~ consumers. Equipped with two extension inputs which depending on parameterization can act directly on the switching output or alternatively as binary inputs on the KNX bus. One Normally open contact, potential free; switching voltage: 230 V AC; 50/60 Hz; max. switching current: 16 A; switching capacity: up to 2.500 W depending on the consumer. Rated voltage: 230 V~, +10% / –10%, 50 Hz – 60 Hz. The bus can be connected via enclosed terminal block.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6151/11 U-500	2CKA006151A0245		0.11	1

IO/S 4.6.1.1

I/O Actuator, 6 A, MDRC

For the control of loads in residential areas, typically in hotel rooms and apartments.
The I/O Actuators provide binary inputs for the connection of conventional push-buttons and outputs for switching loads. Inputs and outputs can be internally connected by ETS.
By integrating the devices into KNX networks further functions can be realised: e.g. central control or room based emergency calls to a control centre.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
4-fold	4	IO/S 4.6.1.1	2CDG110168R0011		0.17	1
8-fold	8	IO/S 8.6.1.1	2CDG110169R0011		0.30	1

AA/S 4.1.2

AA/A 2.1.2

Analogue Actuator

The Analogue Actuators convert KNX telegrams in voltage or current signals. These analogue output signals are used to influence regulatory processes. For example, devices for heating, air conditioning or ventilation applications can be adjusted in their operation depending on the information, which are transmitted via the bus system. The Analogue Actuators are available in a 4-fold DIN rail version and a 2-fold device with surface mounting housing. The ABB i-bus® Tool is supported for advanced diagnosis and improved commissioning.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
4-fold, MDRC	4	AA/S 4.1.2	2CDG110202R0011		0.19	1
2-fold, SM	–	AA/A 2.1.2	2CDG110203R0011		0.30	1

EQmatic Energy Analyzer

Energy management is getting smarter

Identify energy guzzlers and sustainably reduce energy costs – ABB's EQmatic Energy Analyzer makes it possible. The intelligent energy meter from the EQmatic range uses M-Bus to read, save, and analyze energy consumption data from electric, gas, water, and heat meters. It accesses meters via an intuitive, web-based user interface, which can be flexibly configured to meet specific demands. Especially practical: the energy meters can be extended at any time when needed. **abb.com/buildings**

ABB i-bus® KNX
Shading Control

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 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

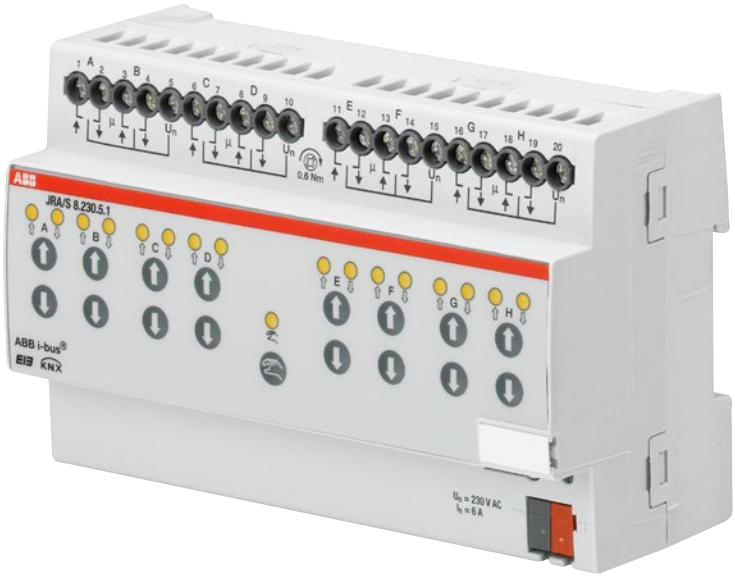
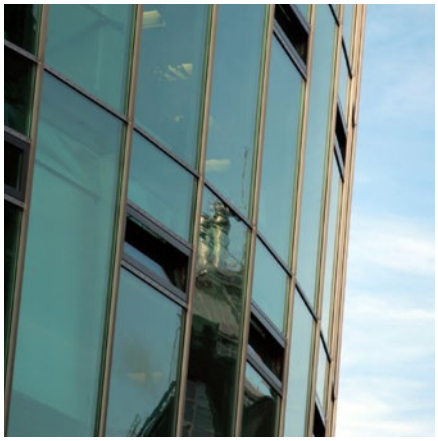


ABB i-bus® KNX
Shading Control



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 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 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
Shading Control

	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**	**JRA/S 6.230.3.1**	**SJR/S 4.24.2.1**	**JA/S 4.SMI.1M**
General							
Supply voltage	KNX	KNX	KNX	KNX	KNX	KNX	KNX
Nominal voltage	230 V AC	24 V DC	230 V AC	230 V AC	230 V AC	24 V DC	230 V AC
Auxiliary voltage	–	–	–	–	–	230 V AC	230 V AC
Type of installation	DIN-Rail					DIN-Rail	
Module width (space unit)	4/4/8	4	4/4/8	4/4/8	12	4	4
Number of outputs	X = 2, 4, 8	4	X = 2, 4, 8	X = 2, 4, 8	6	4 x 4 SMI LoVo (broadcast)	4 x 4 SMI (broadcast)
Manual operation	■	■	■	–	–	■	■
Inputs							
Internal connection between Inputs and Outputs	–	–	–	–	■	–	–
Blind/shutter control; dimming and switching control; value sending	–	–	–	–	■	–	–
Manual functions							
Disable/enable manual operation	■	■	■	–	–	■	■
Status manual operation	■	■	■	–	–	■	■
Operating modes							
Control with slat adjustment (blinds, etc.)	■	■	■	■	■	■	■
Control without slat adjustment (shutters, awnings, etc.)	■	■	■	■	■	■	■
Ventilation flaps, switch mode	■	■	■	■	■	–	–
Direct mode							
Limit UP/DOWN/STOP	■	■	■	■	–	■	■
Slat adjustment	■	■	■	■	■	■	■
Position height/slat [0…255]	■	■	■	■	■	■	■
Preset Move to position/Set position	■	■	■	■	–	■	■
Limited UP/DOWN	■	■	■	■	–	■	■
Enable limitation	■	■	■	■	–	■	■
Trigger travel detection	■	■	–	–	–	–	–
Trigger reference movement	■	■	■	■	■	–	–
8-bit scene	■	■	■	■	■	■	■

■ = Function is supported

– = Function is not supported

ABB i-bus® KNX
Shading Control

	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	JRA/S 6.230.3.1	SJR/S 4.24.2.1	JA/S 4.SMI.1M
Safety							
Wind/Rain/Frost alarm	■	■	■	■	■	■	■
Disable control	■	■	■	■	–	■	■
Forced operation (1-bit and 2-bit)	■	■	■	■	–	■	■
Reaction after bus voltage failure/recovery, programming	■	■	■	■	■	■	■
Automatic mode							
Activation of automatic control	■	■	■	■	■	■	■
Position height/ slat position if sunny	■	■	■	■	■	■	■
Presence	■	■	■	■	–	■	■
Heating/Cooling	■	■	■	■	–	■	■
Overheat control	■	■	■	■	–	–	–
Enable/disable automatic control	■	■	■	■	■	■	■
Enable/disable direct operation	■	■	■	■	■	■	■
Status messages							
Height/slat [0…255]	■	■	■	■	■	■	■
Upper/lower end position	■	■	■	■	■	■	■
Operability	■	■	■	■	■	■	■
Automatic	■	■	■	■	■	■	■
Status byte (2-byte)	■	■	■	■	■	–	–
SMI	–	–	–	–	–	■	■
Positions/limit position	–	–	–	–	–	■	■
Auxiliary voltage	–	–	–	–	–	■	■
SMI Diagnostic byte	–	–	–	–	–	■	■
Various							
Automatic travel detection	■	■	–	–	–	–	–
Time-delayed switching of drives	■	■	■	■	–	■	■
Limit rate of telegrams	■	■	■	■	■	–	–
Transmission and switching delay	■	■	■	■	–	–	–
In operation function	■	■	■	■	■	–	–
Request status values	■	■	■	■	■	–	–
Extended setting options for drives and blinds/shutters	■	■	■	■	■	■	■
Total turning of slats after move down command	■	■	■	■	–	–	–
Position of slat after arriving on lower end position	■	■	■	■	■	■	■
Commissioning and diagnostic function							
Control and diagnosis via ABB i-bus® Tool	■	■	■	■	–	–	–
Binary Outputs							
Relay output 6 A (number of outputs)	x = 2, 4, 8	4	x = 2, 4, 8	x = 2, 4, 8	6	–	–
Forced operation	■	■	■	■	■	–	–
Time function							
Staircae lighting, flashing, On/Off delay	–	–	–	–	■	–	–
Logic	–	–	–	–	■	–	–
Scene	–	–	–	–	■	–	–

■ = Function is supported

– = Function is not supported

ABB i-bus® KNX
Shading Control

JRA/S 8.230.5.1

Blind/Roller Shutter Actuator with Travel Detection and Manual Operation, 230 V AC, MDRC

For the control of independent 230 V AC drives via ABB i-bus® KNX. The devices are designed for positioning blinds, roller shutters, awnings and other shading products as well as for controlling doors, windows and ventilation flaps. Additional auxiliary voltage is not needed. The travel times of the drive are detected automatically via current detection. To protect the drives, the output contacts are electromechanically locked against each other. Push buttons are located at the front of the device to control the outputs e.g. during commissioning. The current status of the output is displayed via LEDs.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
2-fold	4	JRA/S 2.230.5.1	2CDG110124R0011		0.21	1
4-fold	4	JRA/S 4.230.5.1	2CDG110125R0011		0.25	1
8-fold	8	JRA/S 8.230.5.1	2CDG110126R0011		0.46	1

JRA/S 4.24.5.1

Blind/Roller Shutter Actuator with Travel Detection and Manual Operation, 4-fold, 24 V DC, MDRC

For the control of up to 4 independent 24 V DC drives via ABB i-bus® KNX. The device is designed for positioning blinds, roller shutters, awnings and other shading products as well as for controlling doors, windows and ventilation flaps. Additional auxiliary voltage is not needed. The travel times of the drive are detected automatically via current detection. Push buttons are located at the front of the device to control the outputs e.g. during commissioning. The current status of the output is displayed via LEDs.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	4	JRA/S 4.24.5.1	2CDG110128R0011		0.21	1

JRA/S 2.230.2.1

Blind/Roller Shutter Actuator with Manual Operation, 230 V AC, MDRC

For the control of independent 230 V AC drives via ABB i-bus® KNX. The devices are designed for positioning blinds, roller shutters, awnings and other shading products as well as for controlling doors, windows and ventilation flaps. Additional auxiliary voltage is not needed. To protect the drives, the output contacts are electromechanically locked against each other. Push buttons are located at the front of the device to control the outputs e.g. during commissioning. The current status of the output is displayed via LEDs.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
2-fold	4	JRA/S 2.230.2.1	2CDG110120R0011		0.21	1
4-fold	4	JRA/S 4.230.2.1	2CDG110121R0011		0.25	1
8-fold	8	JRA/S 8.230.2.1	2CDG110122R0011		0.46	1

ABB i-bus® KNX
Shading Control

JRA/S 2.230.1.1

Blind/Roller Shutter Actuator, 230 V AC, MDRC

For the control of independent 230 V AC drives via ABB i-bus® KNX. The devices are designed for positioning blinds, roller shutters, awnings and other shading products as well as for controlling doors, windows and ventilation flaps. Additional auxiliary voltage is not needed. To protect the drives, the output contacts are electromechanically locked against each other.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
2-fold	4	JRA/S 2.230.1.1	2CDG110129R0011		0.21	1
4-fold	4	JRA/S 4.230.1.1	2CDG110130R0011		0.25	1
8-fold	8	JRA/S 8.230.1.1	2CDG110131R0011		0.46	1

JRA/S 6.230.3.1

Blind/Roller Shutter Actuator with Binary Inputs, 6-fold, 230 V, MDRC

For the control of 6 independent Blind/ Roller drives or air dampers. Via the 12 binary input a direct operation of the outputs is possible with conventional switch sensors. The binary inputs may also be used for other operations (e.g. switching, dimming). To protect the drives, the output contacts are electromechanically locked against each other.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	12	JRA/S 6.230.3.1	2CDG110208R0011		0.55	1

6152/11 U-500

Shutter Actuator, 1-fold, FM

For controlling blind or awning motors. With 3 inputs and 1 change-over output – normally open contact, potential-bound –. Rated voltage: 230 V~, +10% / – 10%, 50 Hz – 60 Hz. Input polling voltage: 5 V. Output rated current: 3 A, cos ϕ 0.8, Output voltage: 250 V~.
The bus can be connected via enclosed terminal block.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6152/11 U-500	2CKA006152A0040		0.11	1

6173/11 U-500

Combi Actuator, FM

For controlling blind or awning motors. For connecting thermoelectric actuating drives. With 3 inputs and 2 outputs. A first output (O1) allows the control of electrically-operated Venetian blinds, roller shutters, awnings, venting louvers or similar blinds for 230 V AC mains voltage. One additional electronic switching output (O2) allows silent control of electrothermal valve drives for heating or cooling systems. The bus can be connected via enclosed terminal block. Rated voltage: 230 V~, +10% / –10%, 50 Hz – 60 Hz. Input polling voltage 5V. O1 Rated current 3 A, cos ϕ 0.8; Output voltage: 250 V~. O2: Rated current: 25 mA, cos ϕ 1, Output voltage: 250 V~.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6173/11 U-500	2CKA006151A0249		0.11	1

ABB i-bus® KNX
Shading Control

JA/S 4.SMI.1M

SMI Shutter Actuator with Manual Operation, 4-fold, MDRC

It controls four independent groups (broadcast) with up to four SMI (Standard Motor Interface) drives (230 V) for positioning blinds, roller shutters, awnings and other shading products. Status signals (motor fault, direction of movement) can also be sent from the SMI drive on the bus. Push buttons are located at the front of the device to control the outputs e.g. during commissioning. The current status of the output is displayed via LEDs.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	4	JA/S 4.SMI.1M	2CDG110028R0011		0.25	1

SJR/S 4.24.2.1

SMI Blind/Roller Shutter Actuator, 4-fold, LoVo, MDRC

It controls four independent groups (broadcast) with up to four SMI (Standard Motor Interface) LoVo drives for positioning blinds, roller shutters, awnings and other shading products. Status signals (motor fault, direction of movement) can also be sent from the SMI drive on the bus. Push buttons are located at the front of the device to control the outputs e.g. during commissioning. The current status of the output is displayed via LEDs.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	4	SJR/S 4.24.2.1	2CDG110143R0011		0.25	1

JSB/S 1.1

Shutter Control Unit, MDRC

Controls shutter and blind actuators according to the position of the sun. The shutter control unit contains the functions of anti-glare protection and daylight redirection for up to 4 facades. Automatic shading can be implemented for every building and climatic control can be supported by the comprehensive range of parameter settings in the ETS.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	JSB/S 1.1	GHQ6310084R0111		0.12	1

Lighting Control
ABB i-bus® KNX DALI Gateways

Impressive lighting atmosphere, thanks to the new tunable white DALI Gateways Premium

A DALI Gateway serves as the interface between the KNX installation in the building and the digital DALI lighting control system, and therefore unites the two most important building automation standards.

ABB is adding two new DALI Gateways with colour temperature Tc (tunable white) functionality to its existing range of ABB i-bus® KNX lighting control products.
Alongside KNX building automation, DALI has become the most important lighting control in the building management system.

ABB i-bus® KNX

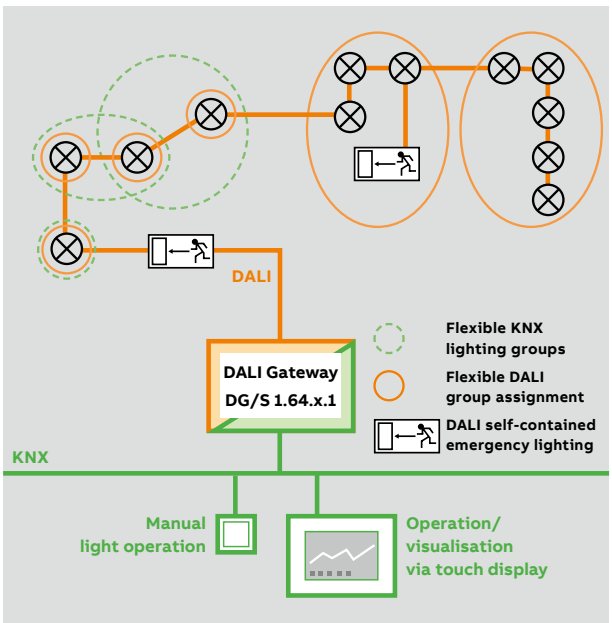
Lighting Control – DALI

The ABB DALI Gateways are used to interface between DALI (Digital Addressable Lighting Interface) and KNX installations. Four Gateways are available:
The DALI Gateway Basic DG/S 1.64.1.1 (1-fold) and DG/S 2.64.1.1 (2-fold) and on the other hand the DALI Gateway Premium DG/S 1.64.5.1 (1-fold) and DG/S 2.64.5.1 (2-fold).
All incorporate the DALI power supply.

Both basic Gateways are equipped with emergency lighting function, support the DALI standard EN 62386-202 that specifies DALI emergency lighting (self-contained).
The two DALI Gateways Premium are additionally equipped with colour temperature Tc (tunable white) function and supports the DALI standard EN 62386-209.

DALI Gateways DG/S 1.64.x.1
Flexibility by controlling light individually per device or in groups

The DALI Gateway (1-fold) Basic and Premium can install up to 64 DALI devices both via 16 flexible DALI (orange lined group) and KNX lighting groups (green dotted lined group), each with one or more DALI participants. Control and Monitoring via KNX. Control and status feedback can also be carried out via Broadcast. 16 independent Lighting scenes are available.



DALI Gateways DG/S 2.64.x.1
Maximum flexibility combined with highest amount of DALI participants and groups, to meet all customer needs

The DALI Gateway (2-fold) Basic and Premium can install up to 2 x 64 DALI devices both via 2 x 16 flexible DALI (orange lined group) and KNX lighting groups (green dotted lined group), each with one or more DALI participants. Control and Monitoring via KNX. Control and status feedback can also be carried out via Broadcast. 2 x 16 independent Lighting scenes are available.

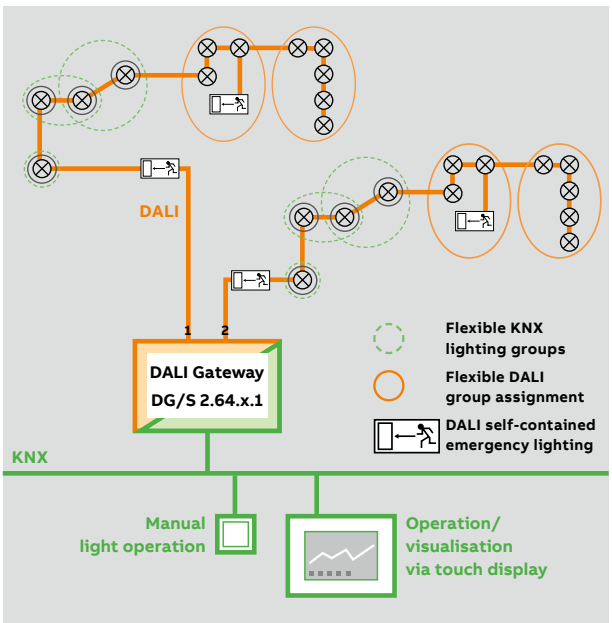
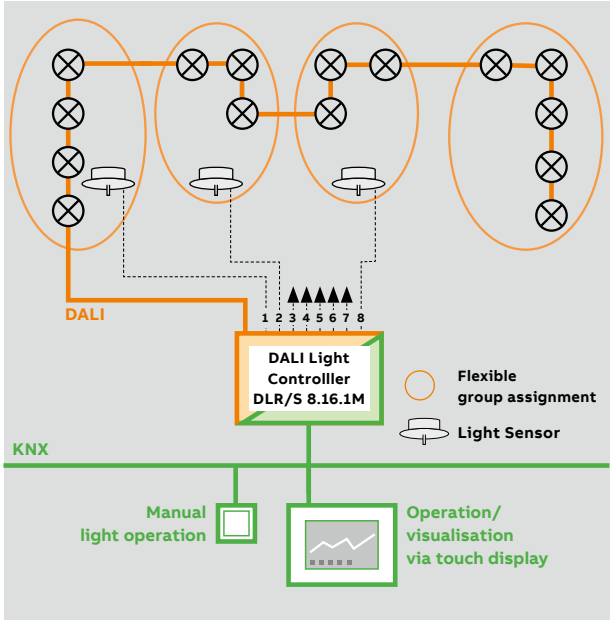


ABB i-bus® KNX

Lighting Control – DALI

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.



DALI Light Controller DLR/A 4.8.1.1
Decentralized Constant Lighting Control

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.

ABB i-bus® KNX

Lighting Control – DALI

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.

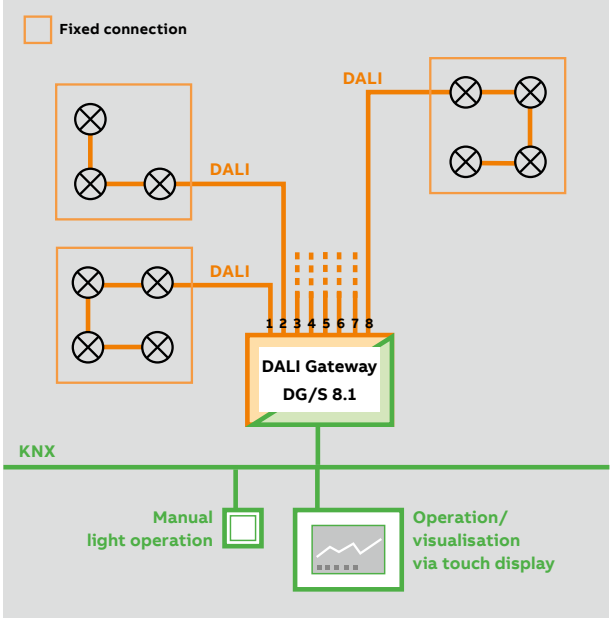


ABB i-bus® KNX

Lighting Control – DALI

	Gateways		
	DG/S 1.64.1.1	**DG/S 2.64.1.1**	**DG/S 8.1**
General			
Supply voltage	100 – 240 V AC (85...265 V AC; 110...240 V DC)	100 – 240 V AC (85...265 V AC; 110...240 V DC)	100 – 240 V AC (85...265 V AC; 110...240 V DC)
Type of installation	DIN-Rail	DIN-Rail	DIN-Rail
Module width (space unit)	4	4	6
Number of outputs	1	2	8
Light sensor inputs	–	–	–
Degree of protection	IP20	IP20	IP20
Integrated power supply	■	■	■
Number of DALI participants	64	2 x 64	8 x 16
Broadcast control	■	■	■
Number of group control	16	2 x 16	–
Individual control	64	2 x 64	–
Self-contained emergency lighting, IEC 62 386-202	■	■	–
DT8 lighting (Tunable White, Tc), IEC 62 386-209	–	–	–
Manual operation	■	■	■
Supports long-frames	–	–	–
DALI firmware update via KNX	–	–	–
Functions			
Enable/disable DALI address assignment	■	■	–
Switching, dimming, set brightness	■	■	■
Human Centric Lighting (HCL)	–	–	–
Dim2Warm	–	–	–
Individual set/dimming colour temperature per group/ ballast	–	–	–
Tunable White Presets	–	–	–
Operating hours	–	–	–
Standby shutdown	–	–	–
Slave	■	■	■
Staircase lighting	■	■	■
Burn-in	■	■	■
Scenes, 8 bit call	■	■	■
Scenes, 1 bit call	–	–	■
Forced	■	■	–
Emergency lighting test	■	■	–
Partial failure	■	■	–
Constant light control	–	–	–
Reaction on KNX bus voltage failure	■	■	■
Reaction on KNX voltage recovery	■	■	■
Reaction on DALI bus voltage failure	■	■	■
Reaction on DALI voltage recovery	■	■	■
Power on level	■	■	–
Device or lamp fault	■	■	■
Cyclic monitoring telegram	■	■	■
DALI telegram rate modifiable	■	■	–
Commissioning and diagnostic functions (ABB i-bus® Tool)			
Device assignment	■	■	–
Group assignment	■	■	–
Fault DALI device	■	■	–
Fault lamp	■	■	–
Function test (ON/OFF/brightness value)	■	■	–
Commissioning constant light control	–	–	–
Test emergency lighting	■	■	–
Broadcast on/off	–	–	–
Shows if there are unaddressed DALI participants	–	–	–

■ = Function is supported

– = Function is not supported

ABB i-bus® KNX

Lighting Control – DALI

	Gateways		Light Control	
	DG/S 1.64.5.1	**DG/S 2.64.5.1**	**DLR/S 8.16.1M**	**DLR/A 4.8.1.1**
General				
Supply voltage	100 – 240 V AC (85...265 V AC; 110...240 V DC)	100 – 240 V AC (85...265 V AC; 110...240 V DC)	100 – 240 V AC (85...265 V AC; 110...240 V DC)	100 – 240 V AC (85...265 V AC; 110...240 V DC)
Type of installation	DIN-Rail	DIN-Rail	DIN-Rail	SM
Module width (space unit)	4	4	6	220 x 147 x 50 mm
Number of outputs	1	2	1	1
Light sensor inputs	–	–	8	4
Degree of protection	IP20	IP20	IP20	IP54
Integrated power supply	■	■	■	■
Number of DALI participants	64	2 x 64	64	64
Broadcast control	■	■	■	■
Number of group control	16	2 x 16	16	8
Individual control	64	2 x 64	–	–
Self-contained emergency lighting, IEC 62 386-202	■	■	–	–
DT8 lighting (Tunable White, Tc), IEC 62 386-209	■	■	–	–
Manual operation	■	■	■	■
Supports long-frames	■	■	–	–
DALI firmware update via KNX	■	■	–	–
Functions				
Enable/disable DALI address assignment	■	■	■	■
Switching, dimming, set brightness	■	■	■	■
Human Centric Lighting (HCL)	■	■	–	–
Dim2Warm	■	■	–	–
Individual set/dimming colour temperature per group/ ballast	■	■	–	–
Tunable White Presets	■	■	–	–
Operating hours	■	■	–	–
Standby shutdown	■	■	–	–
Slave	■	■	■	■
Staircase lighting	■	■	■	■
Burn-in	■	■	■	■
Scenes, 8 bit call	■	■	■	■
Scenes, 1 bit call	■	■	■	■
Forced	■	■	■	■
Emergency lighting test	■	■	–	–
Partial failure	■	■	–	–
Constant light control	■	■	■	■
Reaction on KNX bus voltage failure	■	■	■	■
Reaction on KNX voltage recovery	■	■	■	■
Reaction on DALI bus voltage failure	■	■	■	■
Reaction on DALI voltage recovery	■	■	■	■
Power on level	■	■	■	■
Device or lamp fault	■	■	■	■
Cyclic monitoring telegram	■	■	■	■
DALI telegram rate modifiable	■	■	–	–
Commissioning and diagnostic functions (ABB i-bus® Tool)				
Device assignment	■	■	■	■
Group assignment	■	■	■	■
Fault DALI device	■	■	■	■
Fault lamp	■	■	■	■
Function test (ON/OFF/brightness value)	■	■	■	■
Commissioning constant light control	–	–	■	■
Test emergency lighting	■	■	–	–
Broadcast on/off	■	■	–	–
Shows if there are unaddressed DALI participants	■	■	–	–

■ = Function is supported

– = Function is not supported

ABB i-bus® KNX

Lighting Control – DALI

DG/S 1.64.1.1

DALI Gateway, Basic, MDRC

The device is used to interface between DALI and KNX installations and incorporates the DALI power supply. One/Two DALI output(s) for up to 64/2x 64 DALI Slaves. Control and status feedback is carried out via KNX per DALI slave (64/2x 64), with lighting groups (16/2x 64), together in broadcast or per scenes (16/2x 16). Extensive fault and error messages are available. Self-contained emergency converter (64/2x 64) acc. EN 62386-202 will be supported. By means of KNX and emergency converter, different emergency tests (e.g. function and duration test) can be triggered.
Feedback is sent. Slave-, staircase-, force-, block- and scene- function are integrated.
DALI telegram rate can change. For diagnostic use and individual change of the DALI address or group assignment a separate ABB i-bus® Tool is available.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
1-fold	4	DG/S 1.64.1.1	2CDG110198R0011		0.18	1
2-fold	4	DG/S 2.64.1.1	2CDG110199R0011		0.19	1

DG/S 1.64.5.1

DALI Gateway Premium, MDRC **NEW**

For controlling DALI devices via the ABB i-bus® KNX. One/Two DALI output(s) for up to 64/2x 64 DALI slaves. DALI power supply is integrated. Control and status feedback is carried out via KNX per DALI slave (64/2x 64), with lighting groups (16/2x 16), together in broadcast or per scenes (16/2x 16). DALI devices type DT1 (Self-contained emergency converter acc. EN 62386-202) and type DT8 (colour temperature Tc / tunable white acc. EN 62386-209) will be supported. Extensive fault and error messages are available. By means of KNX and DT1 converter different emergency tests (e.g. function and duration test) can be triggered, test results are transferred back to KNX. With DT8 devices Dim2Warm, HCL, set and dim colour temperature are possible. Slave-, staircase-, force-, block- and scene- function are integrated. Feedback is sent. DALI telegram rate can change.
For diagnostic use and individual change of the DALI address or group assignment a separate Software-Tool is available.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
1-fold	4	DG/S 1.64.5.1	2CDG110273R0011		0.18	1
2-fold	4	DG/S 2.64.5.1	2CDG110274R0011		0.19	1

ABB i-bus® KNX

Lighting Control – DALI

DG/S 8.1

DALI Gateway, 8-fold, MDRC

For controlling up to 128 DALI devices. There are 8 separate, independent DALI outputs/channels available. Up to 16 DALI devices can be connected per channel. The DALI power supply is integrated in the gateway. The functions of switching, dimming, set values and fault indication for lamps and electronic ballasts are available for each output. It is possible to set the lamp burn-in time and 16 light scenes. Commissioning is simplified as no addressing or commissioning of the DALI devices is necessary.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	6	DG/S 8.1	2CDG110025R0011		0.31	1

DLR/S 8.16.1M

DALI Light Controller, 8-fold, Manual Operation, MDRC

For switching and dimming of 16 independent lighting groups. A maximum of 64 DALI devices can be connected. The device can be used for 8-fold constant lighting control in connection with eight Light Sensors LF/U 2.1. Fault feedback messages can be programmed and activated via KNX. With comfortable manual operation and status display.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	6	DLR/S 8.16.1M	2CDG110101R0011		0.26	1

DLR/A 4.8.1.1

DALI Light Controller, 4-fold, SM

Surface mounting device for switching and dimming of 16 independent groups of luminaries. Up to 64 DALI participants can be connected to one DALI control line. When combined with the light sensor LF/U 2.1 the device can be used as a 8-fold light controller for constant light control. Additionally a staircase and master/slave function is integrated.
A great number of status feedback e.g. lamp and ballast fault can be transferred from DALI to KNX. With this functions the DALI light controller is a key factor in every energy efficient building automation. With his surface mounting housing it is possible to insert the device central in false ceiling or underfloor installation.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	DLR/A 4.8.1.1	2CDG110172R0011		0.66	1

ABB i-bus® KNX
Lighting Control

	Universal Dim Actuators			LED Dimmer with constant curve	
	UD/S x.210.2.1	**UD/S x.315.2.1**	**6197/x-101-500 (x=12-15, 52, 53)**	**6155/30-500 1–4-fold**	**6155/40-500 1–4-fold with power supply**
General					
Supply voltage	110 – 230 V AC ± 10 %, 50/60 Hz	110 … 230 V AC ± 10 % 50/60 Hz +4 % -6 %	230 V AC ± 10 %, 50/60 Hz	12...24 V DC	230 V AC ± 10%, 50/60 Hz
Type of installation	DIN-Rail	DIN-Rail	DIN-Rail	Wall (surface)	Wall (surface)
Module width (space unit)	6/8	4/6/8	8/12	–	–
Number of outputs	4/6	2/4/6	1, 4, 6	4	4
Maximum load per channel	4 x 210 W (1 x 600 W)/ 6 x 210 W (1 x 800 W)	2 x 315 W/VA (1 x 500W/VA) 4 x 315 W/VA (2 x 500 W/VA) 6 x 315 W/VA (2 x 700 W/VA)	210, 315, 600, 1260, 2400 VA	1 x 10 A/ 4 x 2.5 A	1 x 4 A/ 4 x 1 A
Incoming supply	4/6 phase inputs	2/4/6 phase inputs	3 phase inputs	1 phase input	1 phase input
Load types					
230 V incandescent lamps	■	■	■	–	–
230 V halogen lamps	■	■	■	–	–
Low-voltage halogen lamps with conventional transformers or electronic transformers	■	■	■	–	–
LED strips or 12/24 V lamps	–	–	–	■	■
LED Retrofit 230 V	■	■	■ 1)	–	–
Grouping of channels for load increase	■	■	■	■	■
Switching					
Brightness value when turned on	■	■	■	■	■
Dimming speed for switching on and off	■	■	■	■	■
Dimming					
Min. and max. dimming values	■	■	■	■	■
Switching on/off via rel. dimming	■	■	■	■	■

■ = Function is supported

– = Function is not supported

1) = Selected LED retrofit lamps are tested and approved. Restrictions have to be observed Details see Busch-Dimmer® Tool (www.busch-jaeger.com)

2) = One channel uses 500 W

ABB i-bus® KNX
Lighting Control

	Universal Dim Actuators			LED Dimmer with constant curve	
	UD/S x.210.2.1	UD/S x.315.2.1	6197/x-101-500 (x=12-15, 52, 53)	6155/30-500 1–4-fold	6155/40-500 1–4-fold with power supply
Further functions					
Forced operation	■	■	–	–	–
Dimming curve adjustment	■	■	■	–	–
Reaction on bus voltage failure	■	■	■	–	–
Behavior on bus voltage recovery	■	■	■	■	■
Status feedback	■	■	■	■	■
Blocking channel	■	■	■	■	■
Scenes	■	■	■	■	■
Phase angle control: automatic, leading or trailing edge	■	■	■	–	–
Additional logic functions	■	■	■	–	–
Staircase lighting	■	■	■	–	–

■ = Function is supported

– = Function is not supported

ABB i-bus® KNX
Lighting Control

	Switch/Dim Actuators			Constant Light Control	
	SD/S 2.16.1	**SD/S 4.16.1**	**SD/S 8.16.1**	**LR/S 2.16.1**	**LR/S 4.16.1**
General					
Supply voltage	KNX	KNX	KNX	KNX	KNX
Type of installation	DIN-Rail	DIN-Rail	DIN-Rail	DIN-Rail	DIN-Rail
Module width (space unit)	4	6	8	4	6
Number of outputs 1-10 V (passive)	2	4	8	2	4
Manual operation	■	■	■	■	■
Maximum current per control output	100 mA	100 mA	100 mA	100 mA	100 mA
Maximum cable length at maximum load (100 mA)	70 m (cable cross-section 0.8 mm^2) 100 m (cable cross-section 1.5 mm^2)	70 m (cable cross-section 0.8 mm^2) 100 m (cable cross-section 1.5 mm^2)	70 m (cable cross-section 0.8 mm^2) 100 m (cable cross-section 1.5 mm^2)	70 m (cable cross-section 0.8 mm^2) 100 m (cable cross-section 1.5 mm^2)	70 m (cable cross-section 0.8 mm^2) 100 m (cable cross-section 1.5 mm^2)
Light sensor (LF/U 2.1)	–	–	–	2	4
Maximum cable length per sensor (P-YCYM or J-Y(ST)Y cable (SELV), diameter 0.8 mm	–	–	–	100 m	100 m
Power loss per device at max. load	2.6 W	5.2 W	10.4 W	2.6 W	5.2 W
Switching capacity					
Rated current I_n	16 A AC1	16 A AC1	16 A AC1	16 A AC1	16 A AC1
Rated voltage U_n	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 60 947-4-1	16 A	16 A	16 A	16 A	16 A
AC3 operation (cos ϕ = 0.45) DIN EN 60 947-4-1	8 A/ 230 V	8 A/ 230 V	8 A/ 230 V	8 A/ 230 V	8 A/ 230 V
Fluorescent lighting load AX DIN EN 60 669-1	10 A (140 µF) 1)	10 A (140 µF) 1)	10 A (140 µF) 1)	10 A (140 µF) 1)	10 A (140 µF) 1)
Minimum switching capacity	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)	10 A/24 V DC	10 A/24 V DC	10 A/24 V DC	10 A/24 V DC	10 A/24 V DC
Mechanical service life	> 3 x 10^6	> 3 x 10^6	> 3 x 10^6	> 3 x 10^6	> 3 x 10^6
Electronic endurance to DIN IEC 60 947-4-1					
Rated current AC1 (240 V/cos ϕ = 0.8)	100,000	100,000	100,000	100,000	100,000
Rated current AC3 (240 V/cos ϕ = 0.45)	30,000	30,000	30,000	30,000	30,000
Rated current AC5a (240 V/cos ϕ = 0.45)	30,000	30,000	30,000	30,000	30,000
Incandescent lamp load at 230 V AC	2,300 W	2,300 W	2,300 W	2,300 W	2,300 W
Fluorescent lamps T5/T8					
Uncorrected	2,300 W	2,300 W	2,300 W	2,300 W	2,300 W
Parallel compensated	1,500 W	1,500 W	1,500 W	1,500 W	1,500 W
DUO circuit	1,500 W	1,500 W	1,500 W	1,500 W	1,500 W
Low-voltage halogen lamps					
Inductive transformer	1,200 W	1,200 W	1,200 W	1,200 W	1,200 W
Electronic transformer	1,500 W	1,500 W	1,500 W	1,500 W	1,500 W
Halogen lamp 230 V	2,500 W	2,500 W	2,500 W	2,500 W	2,500 W
Dulux lamps					
Uncorrected	1,100 W	1,100 W	1,100 W	1,100 W	1,100 W
Parallel compensated	1,100 W	1,100 W	1,100 W	1,100 W	1,100 W
Mercury-vapour lamps					
Inductive transformer	2,000 W	2,000 W	2,000 W	2,000 W	2,000 W
Electronic transformer	2,000 W	2,000 W	2,000 W	2,000 W	2,000 W

■ = Function is supported

– = Function is not supported

1) = The maximum peak inrush current may not be exceeded

ABB i-bus® KNX
Lighting Control

	Switch/Dim Actuators			Constant Light Control	
	SD/S 2.16.1	SD/S 4.16.1	SD/S 8.16.1	LR/S 2.16.1	LR/S 4.16.1
Sodium-vapour lamps					
Inductive transformer	2,000 W	2,000 W	2,000 W	2,000 W	2,000 W
Electronic transformer	2,000 W	2,000 W	2,000 W	2,000 W	2,000 W
Max. peak inrush-current I_p (150 µs)	400 A	400 A	400 A	400 A	400 A
Max. peak inrush-current I_p (250 µs)	320 A	320 A	320 A	320 A	320 A
Max. peak inrush-current I_p (600 µs)	200 A	200 A	200 A	200 A	200 A
Number of ballasts (T5/T8, single element) e.g.[1)]					
18 W (ABB EVG 1 x 18 SF)	23	23	23	23	23
24 W (ABB EVG 1 x 24 CY)	23	23	23	23	23
36 W (ABB EVG 1 x 36 CF)	14	14	14	14	14
58 W (ABB EVG 1 x 58 CF)	11	11	11	11	11
80 W (Helvar EL 1 x 80 SC)	10	10	10	10	10

	Switch/Dim Actuators			Constant Light Control	
	SD/S 2.16.1	SD/S 4.16.1	SD/S 8.16.1	LR/S 2.16.1	LR/S 4.16.1
Functions					
Brightness control	–	–	–	■	■
Brightness value	■	■	■	■	■
Dimming speed for transition brightness values	■	■	■	■	■
Min. and max. value limits	■	■	■	■	■
Set switching on and off via value	■	■	■	■	■
Presets	■	■	■	■	■
Scenes	■	■	■	■	■
Switch					
Brightness value when turned on	■	■	■	■	■
Dimming speed for switching on and off	■	■	■	■	■
Dimming					
Dimming speed can be changed via KNX	■	■	■	■	■
Min. and max. dimming values	■	■	■	■	■
Switching on/off via rel. dimming	■	■	■	■	■
Forced operation					
2-bit coded forced operation	■	■	■	■	■
Behaviour after voltage recovery	■	■	■	■	■
Block Activate output via 1-bit object	■	■	■	■	■
Special					
4-point characteristic adjustment	■	■	■	■	■
Preference with bus voltage failure	■	■	■	■	■
Status feedback	■	■	■	■	■
Additional					
Slave mode e.g. for integration in the constant lighting control	■	■	■	■	■
Staircase lighting	■	■	■	■	■
Prewarning via dimming and/or KNX object	■	■	■	■	■
Commissioning and diagnostic functions					
Control and diagnosis via ABB i-bus® Tool	–	–	–	■	■

■ = Function is supported

– = Function is not supported

1) = For multiple element lamps or other types, the number of electronic ballasts must be determined using the peak inrush current of the electronic ballasts

ABB i-bus® KNX
Lighting Control

LR/S 4.16.1

Light Controller, 1-10 V, MDRC

The device enables the switching and dimming of 2 or 4 independent lighting circuits in conjunction with electronic ballasts. In combination with the Light Sensor LF/U 2.1, the device can be used for constant lighting control. 2 or 4 light sensors can be connected to the controller for precise detection of the lighting conditions.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
2-fold	4	LR/S 2.16.1	2CDG110087R0011		0.25	1
4-fold	6	LR/S 4.16.1	2CDG110088R0011		0.40	1

LF/U 2.1

Light Sensor, FM

Used for implementing constant lighting control applications in conjunction with light controllers LR/S, LR/M, DLR/S 8.16.1M or DLR/A 4.8.1.1. The scope of delivery includes different optical rods, the connection terminals and the cover for discrete fitting in a room.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	LF/U 2.1	2CDG110089R0011		0.07	1

SD/S 8.16.1

Switch/Dim Actuator, 16 A, MDRC

Used for switching and dimming of 2, 4 or 8 independent groups of luminaries with electronic ballasts with 1 – 10 V control interfaces. On each channel the power supply of the ballasts is switched by a floating load relay (16 A – AC1). Every output can be operated manually and features display of the switching state. The device can assume a range of applications thanks to the programming options. The switching load is identical to the SA/S x.16.2.1 range (see Standard Outputs – Overview).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
2-fold	4	SD/S 2.16.1	2CDG110079R0011		0.21	1
4-fold	6	SD/S 4.16.1	2CDG110080R0011		0.32	1
8-fold	8	SD/S 8.16.1	2CDG110081R0011		0.56	1

ABB i-bus® KNX
Lighting Control

UD/S 4.210.2.1

LED Dimmer, 4-fold, 210 W/VA, MDRC

Multichannel universal dimming actuator optimized for dimming of retrofit LED lamps (LEDi). Also suitable for dimming of incandescent lamps, low-voltage halogen lamps with conventional or electronic transformers, 230 V incandescent halogen lamps and dimmable halogen energy-saving lamps. Automatic load detection (deactivatable). One separate N-terminal per channel. Channel bridging possible in order to increase the maximum load. Outputs can be switched in parallel as required. Minimum load: 2 W. Manual operation on the device is possible also without bus voltage or in unprogrammed state. One LED control button per channel (including status indication) for ON and OFF switching as well as for up and down dimming. Programming of the device is possible without connecting 230 V supply voltage. Comprehensive test and diagnostic functions via the i-bus® Tool. Fast parameterization in the ETS by means of copyable channel templates. With integrated bus coupler.
Rated power at 230 V ~:

- 230 V ~ incandescent and halogen lamps: 4 x 210 W/VA to 1 x 600 W/VA.
- Dimmable 230 V ~ LEDi: 4 x 210 W/VA to 1 x 600 W/VA in trailing edge mode, 4 x 80 W/VA to 1 x 200 W/VA in leading edge mode.
- Inductive L-transformers with LED/low-voltage halogen lamps: 4 x 210 W/VA to 1 x 600 W/VA.
- Electronic C-transformers with LED/low voltage halogen lamps: 4 x 210 W/VA to 1 x 600 W/VA.
- Electronic LC transformers with LED/low-voltage halogen lamps: 4 x 80 W/VA to 1 x 200 W/VA.

Recommendation: Always use bulbs of one type and manufacturer.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
4-fold	6	UD/S 4.210.2.1	2CKA006197A0047			1

UD/S 6.210.2.1

LED Dimmer, 6-fold, 210 W/VA, MDRC

Multichannel universal dimming actuator optimized for dimming of retrofit LED lamps (LEDi). Also suitable for dimming of incandescent lamps, low-voltage halogen lamps with conventional or electronic transformers, 230 V incandescent halogen lamps and dimmable halogen energy-saving lamps. Automatic load detection (deactivatable). One separate N-terminal per channel. Channel bridging possible in order to increase the maximum load. Outputs can be switched in parallel as required. Minimum load: 2 W. Manual operation on the device is possible also without bus voltage or in unprogrammed state. One LED control button per channel (including status indication) for ON and OFF switching as well as for up and down dimming. Programming of the device is possible without connecting 230 V supply voltage. Comprehensive test and diagnostic functions via the i-bus® Tool. Fast parameterization in the ETS by means of copyable channel templates. With integrated bus coupler.
Rated power at 230 V ~:

- 230 V ~ incandescent and halogen lamps: 6 x 210 W/VA to 1 x 800 W/VA.
- Dimmable 230 V ~ LEDi: 6 x 210 W/VA to 1 x 800 W/VA in trailing edge mode, 6 x 80 W/VA to 1 x 240 W/VA in leading edge mode.
- Inductive L-transformers with LED/low-voltage halogen lamps: 6 x 210 W/VA to 1 x 800 W/VA.
- Electronic C-transformers with LED/low voltage halogen lamps: 6 x 210 W/VA to 1 x 800 W/VA.
- Electronic LC transformers with LED/low-voltage halogen lamps: 6 x 80 W/VA to 1 x 240 W/VA.

Recommendation: Always use bulbs of one type and manufacturer.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
6-fold	8	UD/S 6.210.2.1	2CKA006197A0049			1

ABB i-bus® KNX
Lighting Control

UD/S 2.315.2.1

LED Dimmer, 2-fold, 315 W/VA, MDRC

Multichannel universal dimming actuator optimized for dimming of retrofit LED lamps (LEDi). Also suitable for dimming of incandescent lamps, low-voltage halogen lamps with conventional or electronic transformers, 230 V incandescent halogen lamps and dimmable halogen energy-saving lamps. Automatic load detection (deactivatable). One separate N-terminal per channel. Channel bridging possible in order to increase the maximum load. Outputs can be switched in parallel in groups as required. Minimum load: 2 W. Manual operation on the device is possible also without bus voltage or in unprogrammed state. One LED control button per channel (including status indication) for ON and OFF switching as well as for up and down dimming. Programming of the device is possible without connecting 230 V supply voltage. Comprehensive test and diagnostic functions via the i-bus® Tool.
Fast parameterization in the ETS by means of copyable channel templates. With integrated bus coupler.
Rated power at 230 V ~:

- 230 V ~ incandescent and halogen lamps: 2 x 315 W/VA to 1 x 500 W/VA.
- Dimmable 230 V ~ LEDi: 2 x 315 W/VA to 1 x 500 W/VA.in trailing edge mode,
- 2 x 120 W/VA to 1 x 200 W/VA in leading edge mode.
- Inductive L-transformers with LED/low-voltage halogen lamps: 2 x 315 W/VA to 1 x 500 W/VA.
- Electronic C-transformers with LED/low voltage halogen lamps: 2 x 315 W/VA to 1 x 500 W/VA.
- Electronic LC transformers with LED/low-voltage halogen lamps: 2 x 120 W/VA to 1 x 200 W/VA.

Recommendation: Always use bulbs of one type and manufacturer.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
2-fold	4	UD/S 2.315.2.1	2CKA006197A0053			1

- 1 MW ≙ 18 mm.

ABB i-bus® KNX
Lighting Control

UD/S 4.315.2.1

LED Dimmer, 4-fold, 315 W/VA, MDRC
Multichannel universal dimming actuator optimized for dimming of retrofit LED lamps (LEDi). Also suitable for dimming of incandescent lamps, low-voltage halogen lamps with conventional or electronic transformers, 230 V incandescent halogen lamps and dimmable halogen energy-saving lamps. Automatic load detection (deactivatable). One separate N-terminal per channel. Channel bridging possible in order to increase the maximum load. Outputs can be switched in parallel in groups as required. Minimum load: 2 W. Manual operation on the device is possible also without bus voltage or in unprogrammed state. One LED control button per channel (including status indication) for ON and OFF switching as well as for up and down dimming. Programming of the device is possible without connecting 230 V supply voltage. Comprehensive test and diagnostic functions via the i-bus® Tool.
Fast parameterization in the ETS by means of copyable channel templates. With integrated bus coupler.
Rated power at 230 V ~:
- 230 V ~ incandescent and halogen lamps: 4 x 315 W/VA to 2 x 500 W/VA.
- Dimmable 230 V ~ LEDi: 4 x 315 W/VA to 2 x 500 W/VA in trailing edge mode,
- 4 x 120 W/VA to 2 x 200 W/VA in leading edge mode.
- Inductive L-transformers with LED/low-voltage halogen lamps: 4 x 315 W/VA to 2 x 500 W/VA.
- Electronic C-transformers with LED/low voltage halogen lamps: 4 x 315 W/VA to 2 x 500 W/VA.
- Electronic LC transformers with LED/low-voltage halogen lamps: 4 x 120 W/VA to 2 x 200 W/VA.

Recommendation: Always use bulbs of one type and manufacturer

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
4-fold	8	UD/S 4.315.2.1	2CKA006197A0057			1

- 1 MW ≙ 18 mm.

ABB i-bus® KNX
Lighting Control

UD/S 6.315.2.1

LED Dimmer, 6-fold, 315 W/VA, MDRC

Multichannel universal dimming actuator optimized for dimming of retrofit LED lamps (LEDi). Also suitable for dimming of incandescent lamps, low-voltage halogen lamps with conventional or electronic transformers, 230 V incandescent halogen lamps and dimmable halogen energy-saving lamps. Automatic load detection (deactivatable). One separate N-terminal per channel. Channel bridging possible in order to increase the maximum load. Outputs can be switched in parallel in groups as required. Minimum load: 2 W. Manual operation on the device is possible also without bus voltage or in unprogrammed state. One LED control button per channel (including status indication) for ON and OFF switching as well as for up and down dimming. Programming of the device is possible without connecting 230 V supply voltage. Comprehensive test and diagnostic functions via the i-bus® Tool.
Fast parameterization in the ETS by means of copyable channel templates. With integrated bus coupler.
Rated power at 230 V ~:

- 230 V ~ incandescent and halogen lamps: 6 x 315 W/VA, 2 x 700 W/VA to 3 x 500 W/VA.
- Dimmable 230 V ~ LEDi: 6 x 315 W/VA, 2 x 700 W/VA to 3 x 500 W/VA in trailing edge mode,
- 6 x 120 W/VA, 2 x 250 W/VA to 3 x 300 W/VA in leading edge mode.
- Inductive L-transformers with LED/low-voltage halogen lamps: 6 x 315 W/VA, 2 x 700 W/VA to 3 x 500 W/VA.
- Electronic C-transformers with LED/low voltage halogen lamps: 6 x 315 W/VA, 2 x 700 W/VA to 3 x 500 W/VA.
- Electronic LC transformers with LED/low-voltage halogen lamps: 6 x 120 W/VA, 2 x 250 W/VA to 3 x 300 W/VA.

Recommendation: Always use bulbs of one type and manufacturer.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
6-fold	12	UD/S 6.315.2.1	2CKA006197A0061			1

- 1 MW ≙ 18 mm

6197/13-101-500

Universal Dim Actuator, MDRC

Multi-channel universal dimming actuator for control of incandescent lamps, 230 V halogen lamps, lowvoltage halogen lamps with conventional or electronic transformers and dimmable energy-efficient lamps. Optimized for dimming of Philips retrofit LEDs (LEDi).
Parallel connection of channels to increase load capacity via wire jumpers possible.
Status/state indication of the outputs via LED. Local operation even without bus voltage or in non-programmed state possible.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
4-fold, 315 VA	8	6197/13-101-500	2CKA006197A0037		0.42	1
6-fold, 315 VA	12	6197/14-101-500	2CKA006197A0038		0.91	1
4-fold, 600 VA	12	6197/15-101-500	2CKA006197A0039		0.91	1
1-fold, 1.260 VA	12	6197/52-101-500	2CKA006197A0040		0.463	1
1-fold, 2.400 VA	12	6197/53-101-500	2CKA006197A0041		0.833	1

ABB i-bus® KNX
Lighting Control

6155/30-500

Build-In-Dimmer with constant curve for LED-strips RGBW, 4fold
Build-in LED-Dimmer for LED strips with constant curve. To control RGB or RGBW-LEDs. Grouping of channels possible. With Master/Slave-function and internal load management. Connections: KNX-line: Bus connection terminal. Rated voltage: 12 - 24 V. Output voltage: 12 V. Secondary: 24 V. Rated frequency: 600 Hz. Outputs: 4x dimming channel. Suitable for: DC. Rated current: 10 A. Rated power: 240 W. Protection class (Device): IP 20.
Temperature range (Device): – 5 °C to 45 °C.
Dimensions: (L x W x D): 33 mm x 53 mm x 95 mm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6155/30-500	2CKA006151A0254			1

6155/40-500

Build-In-Dimmer with constant curve for LED-strips RGBW, 4fold, with integrated power supply
Build-in LED-Dimmer for LED strips with constant curve. To control RGB or RGBW-LEDs. With integrated power adapter. Grouping of channels possible. With Master/Slave-function and internal load management. Connections: KNX-line: Bus connection terminal. Rated voltage: 230 V~. Output voltage: 24 V~. Rated frequency: 600 Hz. Outputs: 4x dimming channel. Suitable for: DC. Rated current: 4 A. Rated power: 100 W. Protection class (Device): IP 20.
Temperature range (Device):– 5 °C to 45 °C.
Dimensions: (L x W x D): 45 mm x 53 mm x 226 mm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6155/40-500	2CKA006151A0256		0.4	1

HS/S 4.2.1

Outside Light Sensor Interface, MDRC
The device is used for the connection and evaluation of up to 3 Outside Light Sensors LFO/A 1.1. The Outside Light Sensors can be analysed individually or combined. Amongst others 10 logical switching channels for the evaluation of threshold values are provided. Threshold values can be adjusted directly on the device. The device can be used as a twilight switch (1 ... 100 lux) or as a light value switch (100 ... 20.000 lux). One Outside Light Sensor LFO/A 1.1 is supplied with the device.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	3	HS/S 4.2.1	2CDG120044R0011		0.24	1

LFO/A 1.1

Outside Light Sensor for HS/S4.2.1, SM
Outside Light Sensor for the connection with the Interface HS/S 4.2.1.
Temperature range (sensor): -40 °C to +70 °C.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	LFO/A 1.1	2CDG120045R0011		0.05	1

ABB i-bus® KNX

Movement and Presence Detection

	Mini Basic 6131/20-xxx-500	Mini Premium 6131/21-xxx-500	Basic 6131/30-xxx-500	Premium 6131/31-xxx-500	Sky 6131/40-xxx-500	Corridor Basic 6131/50-xxx-500	Corridor Premium 6131/51-xxx-500
General							
Supply voltage	KNX	KNX	KNX	KNX	KNX	KNX	KNX
Type of installation	flush-mounted/ surface-mounted	flush-mounted/ surface-mounted	flush-mounted/ surface-mounted	flush-mounted/ surface-mounted	flush-mounted/ surface-mounted	flush-mounted/ surface-mounted	flush-mounted/ surface-mounted
Programming button accessible from outside	■	■	■	■	–	■	■
Detection range diameter (sitting / walking person)						**Corridor: only walking person**	**Corridor: only walking person**
Installation height 2.5 m	Max. 5.0 m/ 6.5 m	Max. 5.0 m/ 6.5 m	Max. 8.0 m/ 10.0 m	Max. 8.0 m/ 10.0 m	–	Frontal: max. 18 x 2,5 m; Lateral: max. 24 x 2,5 m	Frontal: max. 18 x 2,5 m; Lateral: max. 24 x 2,5 m
Installation height 3.0 m	Max. 6.5 m/ 8.0 m	Max. 6.5 m/ 8.0 m	Max. 10.0 m/ 12.0 m	Max. 10.0 m/ 12.0 m	–	Frontal: max. 20 x 3 m; Lateral: max. 30 x 3 m	Frontal: max. 20 x 3 m; Lateral: max. 30 x 3 m
Installation height 4.0 m	Max. 9.0 m/ 10.5 m	Max. 9.0 m/ 10.5 m	Max. 14.0 m/ 16.0 m	Max. 14.0 m/ 16.0 m	–	Frontal: max. 20 x 3 m; Lateral: max. 30 x 3 m	Frontal: max. 20 x 3 m; Lateral: max. 30 x 3 m
Installation height 6.0 m	–	–	–	–	Max. 18.0 m	–	–
Installation height 12.0 m	–	–	–	–	Max. 24.0 m	–	–
Number of channels							
Movement detector	2	4 in total	2	4 in total	2	2	4 in total
Constant light switch	2	4 in total	2	4 in total	2	2	4 in total
Combination	1 x each	4 in total	1 x each	4 in total	1 x each	1 x each	4 in total
Constant light controller	–	2	–	2	–	–	2
Heating/cooling/ventilation systems (HVAC)	–	1	–	1	–	–	1
Infrared receiver, can be operated via IR remote control 6010-25	–	10 button pairs + 4 single buttons/ 24 single buttons	–	10 button pairs + 4 single buttons/ 24 single buttons	(only red for activation of the programming mode)	–	10 button pairs + 4 single buttons/ 24 single buttons
Two power-off stages							
Movement detector	■	■	■	■	■	■	■
Constant light control	–	■	–	■	–	–	■

■ = Function is supported

– = Function is not supported

ABB i-bus® KNX

Movement and Presence Detection

	Mini Basic 6131/20-xxx-500	Mini Premium 6131/21-xxx-500	Basic 6131/30-xxx-500	Premium 6131/31-xxx-500	Sky 6131/40-xxx-500	Corridor Basic 6131/50-xxx-500	Corridor Premium 6131/51-xxx-500
Application							
Surveillance detector	■	■	■	■	■	■	■
Movement detector	■	■	■	■	■	■	■
Presence detector	■	■	■	■	–	■	■
Constant light switch	■	■	■	■	■	■	■
Controller independent of movement	–	■	–	■	–	–	■
Various							
Integrated object room temperature controller with temperature sensor	–	1	–	1	–	–	1
Brightness measurement	■	■	■	■	■	■	■
Calibration of brightness sensor via ETS group objects	■	■	■	■	■	■	■
Programming mode can be activated via IR remote control 6010-25	–	■	–	■	■	–	■
Programming LED can be activated via ETS group objects	■	■	■	■	■	■	■
Number of logic functions (4 different ones)	–	5	–	5	–	–	5

■ = Function is supported

– = Function is not supported

ABB i-bus® KNX

Movement and Presence Detection

6131/20-24-500

Busch-Presence Detector, Mini, Basic, 8 Meter, SM
Detection range (for mounting height 2.5 m, 3 m and 4 m): circular.
Seated persons Ø: 5 m, 6,5 m and 9 m.
Walking persons Ø: 6,5 m, 8 m and 10,5 m.
Visible height 16 mm. With 2 channels.
Targeted for connection and disconnection of lights bands depending on the room brightness. Regulation in response to the movement possible. Using the device as presence and/or movement detectors. Detectors application with 2 power off stages. Detectors application with integrated monitoring function. Constant light switch with up to two independent channels. Constant light switch with max. 2 outputs for brightnessdependent switching of two light bands in the area. With integrated KNX bus coupler. Connections: KNX-line: Bus connection terminal. Brightness limit value: 1 Lux – 1000 Lux. Mounting height: 2 m – 4 m.
Protection class (Device): IP 20. Temperature range (Device): – 5 °C to 45 °C.
Dimensions: (L x W x D): 80 mm x 80 mm x 45 mm. Mounting depth: 29 mm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
studio white matt	–	6131/20-24-500	2CKA006132A0342		0.13	1
aluminium silver	–	6131/20-183-500	2CKA006132A0343		0.13	1

6131/21-24-500

Busch-Presence Detector, Mini, Premium, 8 Meter, SM
Detection range (for mounting height 2.5 m, 3 m and 4 m): circular.
Seated persons Ø: 5 m, 6,5 m and 9 m.
Walking persons Ø: 6,5 m, 8 m and 10,5 m.
Visible height 16 mm. With 4 channels. For dimming/brightness of the rules to a defined value in a designated collection area. HVAC function for controlling heating and/or cooling systems and ventilation systems in the designated collection area. Detectors application with 2 power off stages. Detectors application with integrated monitoring function. Constant light controller with up to two independent channels. Constant light controller with max. 2 outputs for dimming daylight control/rules of two rooflights in the room. Integrated object room temperature controller. 10 freely programmable IR channels (white). Incl. 5 logic channels (logic gates, gates, delay and staircase lighting). Weighting of up to 2 external brightness values and the internal brightness sensor possible. With integrated KNX bus coupler. Connections: KNX-line: Bus connection terminal.
Brightness limit value: 1 Lux – 1000 Lux. Mounting height: 2 m – 4 m.
Protection class (Device): IP 20. Temperature range (Device): – 5 °C to 45 °C.
Dimensions: (L x W x D): 80 mm x 80 mm x 45 mm.
Mounting depth: 29 mm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
studio white matt	–	6131/21-24-500	2CKA006132A0344		0.13	1
aluminium silver	–	6131/21-183-500	2CKA006132A0345		0.13	1

ABB i-bus® KNX

Movement and Presence Detection

6131/30-24-500

Busch-Presence Detector, Basic, 12 Meter, SM
Detection range (for mounting height 2.5 m, 3 m and 4 m): circular.
Seated persons Ø: 8 m, 10 m and 14 m.
Walking persons Ø: 10 m, 12 m and 16 m.
Visible height 23 mm. With 2 channels. Targeted for connection and disconnection of lights bands depending on the room brightness. Regulation in response to the movement possible. Using the device as presence and/or movement detectors. Detectors application with 2 power off stages. Detectors application with integrated monitoring function.
Constant light switch with up to two independent channels. Constant light switch with max. 2 outputs for brightnessdependent switching of two light bands in the area. With integrated KNX bus coupler. Connections: KNX-line: Bus connection terminal.
Brightness limit value: 1 Lux – 1000 Lux. Mounting height: 2 m – 4 m.
Protection class (Device): IP 20. Temperature range (Device): – 5 °C to 45 °C.
Dimensions: (L x W x D): 91 mm x 91 mm x 45 mm. Mounting depth: 22 mm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
studio white matt	–	6131/30-24-500	2CKA006132A0346		0.15	1
aluminium silver	–	6131/30-183-500	2CKA006132A0347		0.15	1

6131/31-24-500

Busch-Presence Detector, Premium, 12 Meter, SM
Detection range (for mounting height 2.5 m, 3 m and 4 m): circular.
Seated persons Ø: 8 m, 10 m and 14 m.
Walking persons Ø: 10 m, 12 m and 16 m.
Visible height 23 mm.With 4 channels. For dimming/brightness of the rules to a defined value in a designated collection area. HVAC function for controlling heating and/or cooling systems and ventilation systems in the designated collection area. Detectors application with 2 power off stages. Detectors application with integrated monitoring function.
Constant light controller with up to two independent channels. Constant light controller with max. 2 outputs for dimming daylight control/rules of two rooflights in the room. Integrated object room temperature controller. 10 freely programmable IR channels (white). Incl. 5 logic channels (logic gates, gates, delay and staircase lighting). Weighting of up to 2 external brightness values and the internal brightness sensor possible. With integrated KNX bus coupler. Connections: KNX-line: Bus connection terminal.
Brightness limit value: 1 Lux – 1000 Lux. Mounting height: 2 m – 4 m.
Protection class (Device): IP 20. Temperature range (Device): – 5 °C to 45 °C.
Dimensions: (L x W x D): 91 mm x 91 mm x 45 mm. Mounting depth: 22 mm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
studio white matt	–	6131/31-24-500	2CKA006132A0348		0.15	1
aluminium silver	–	6131/31-183-500	2CKA006132A0349		0.15	1

ABB i-bus® KNX

Movement and Presence Detection

6131/40-24-500

Presence Detector, Sky, white, SM
Detection range (for mounting height 6 m and 12 m): circular.
Walking persons Ø: 18 m, 24 m.
Visible height 23 mm. With 2 channels. Targeted for connection and disconnection of lights bands depending on the room brightness. Regulation in response to the movement possible. Use of the device as a movement detector. Detectors application with 2 power off stages. Detectors application with integrated monitoring function. Constant light switch with up to two independent channels. Constant light switch with max. 2 outputs for brightnessdependent switching of two light bands in the area. With integrated KNX bus coupler. The programming button can be activated with the IR transmitter 6010-25 (-500).
Connections: KNX-line: Bus connection terminal. Brightness limit value: 1 Lux – 1000 Lux. Mounting height: 4 m – 12 m. Protection class (Device): IP 20. Temperature range (Device): – 5 °C to 45 °C. Dimensions: (L x W x D): 91 mm x 91 mm x 45 mm. Mounting depth: 22 mm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
studio white matt	–	6131/40-24-500	2CKA006132A0350		0.15	1

6131/50-24-500

Presence Detector, Corridor, Basic, FM
Detection range: rectangular.
For mounting height 2.5 m: frontal approach max. 18 m x 2.5 m (per side max. 9 m x 2.5 m). Lateral movement max. 24 m x 2.5 m (per side max. 12 m x 2.5 m). For mounting height 3 m as well as 4 m: frontal approach max. 20 m x 3 m (per side max. 10 m x 3 m). Lateral movement max. 30 m x 3 m (per side max. 15 m x 3 m). Visible height 27 mm. With 2 channels.
Targeted for connection and disconnection of lights bands depending on the room brightness. Regulation in response to the movement possible. Using the device as presence and/or movement detectors. Detectors application with 2 power off stages. Detectors application with integrated monitoring function. Constant light switch with up to two independent channels. Constant light switch with max. 2 outputs for brightnessdependent switching of two light bands in the area. With integrated KNX bus coupler.
Connections: KNX-line: Bus connection terminal. Brightness limit value: 1 Lux – 1000 Lux. Mounting height: 2 m – 4 m.
Protection class (Device): IP 20. Temperature range (Device): – 5 °C to 45 °C.
Dimensions: (L x W x D): 91 mm x 91 mm x 49 mm. Mounting depth: 22 mm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
studio white matt	–	6131/50-24-500	2CKA006132A0399		0.16	1
aluminium silver	–	6131/50-183-500	2CKA006132A0400		0.16	1

ABB i-bus® KNX

Movement and Presence Detection

6131/51-24-500

Presence Detector, Corridor, Premium, FM

Detection range: rectangular.
For mounting height 2.5 m: frontal approach max. 18 m x 2.5 m (per side max. 9 m x 2.5 m). Lateral movement max. 24 m x 2.5 m (per side max. 12 m x 2.5 m).
For mounting height 3 m as well as 4 m: frontal approach max. 20 m x 3 m (per side max. 10 m x 3 m). Lateral movement max. 30 m x 3 m (per side max. 15 m x 3 m).
Visible height 27 mm. With 4 channels. For dimming/brightness of the rules to a defined value in a designated collection area. HVAC function for controlling heating and/or cooling systems and ventilation systems in the designated collection area. Detectors application with 2 power off stages. Detectors application with integrated monitoring function. Constant light controller with up to two independent channels. Constant light controller with max. 2 outputs for dimming daylight control/rules of two rooflights in the room. Integrated object room temperature controller. 10 freely programmable IR channels (white). Incl. 5 logic channels (logic gates, gates, delay and staircase lighting). Weighting of up to 2 external brightness values and the internal brightness sensor possible. With integrated KNX bus coupler. Connections: KNX-line: Bus connection terminal.
Brightness limit value: 1 Lux – 1000 Lux. Mounting height: 2 m – 4 m.
Protection class (Device): IP 20. Temperature range (Device): – 5 °C to 45 °C.
Dimensions: (L x W x D): 91 mm x 91 mm x 49 mm. Mounting depth: 22 mm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
studio white matt	–	6131/51-24-500	2CKA006132A0413		0.16	1
aluminium silver	–	6131/51-183-500	2CKA006132A0414		0.16	1

6131/29-24-500

Housing Presence Detector, Mini, Basic, SM

For installing a Busch-Presence detector mini KNX 6131/20-xxx(-500) or a Busch-Presence detector mini premium KNX 6131/21-xxx(-500).
Protection class (Device): IP 20. Dimensions: (L x W x D): 80 mm x 80 mm x 35 mm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
studio white matt	–	6131/29-24-500	2CKA006132A0351		0.08	1
aluminium silver	–	6131/29-183-500	2CKA006132A0352		0.08	1

6131/39-24-500

Housing Presence Detector, Mini, Premium, SM

For mounting a Busch-Presence detector KNX 6131/30-xxx(-500), a Busch-Presence detector premium KNX 6131/31-xxx(-500), a Busch-Presence detector Corridor KNX 6131/50-xxx(-500), a Busch-Presence detector Corridor premium KNX 6131/51-xxx(-500) or a Busch-Watchdog Sky KNX 6131/40-24(-500).
Protection class (Device): IP 20. Dimensions: (L x W x D): 91 mm x 91 mm x 33 mm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
studio white matt	–	6131/39-24-500	2CKA006132A0353		0.10	1
aluminium silver	–	6131/39-183-500	2CKA006132A0354		0.10	1

ABB i-bus® KNX

Movement and Presence Detection

6131/38-24

Intermediate ring for Busch-Presence detector Basic, Premium, Sky and Corridor
For mounting a Busch-Presence detector KNX 6131/30-xxx(-500), a Busch-Presence detector premium KNX 6131/31-xxx(-500), a Busch-Presence detector Corridor KNX 6131/50-xxx(-500), a Busch-Presence detector Corridor premium KNX 6131/51-xxx(-500) or a Busch-Watchdog Sky KNX 6131/40-24(-500).
Protection class (Device): IP 20. Dimensions: (L x W x D): 91 mm x 91 mm x 22 mm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
studio white matt	–	6131/38-24-500	2CKA006132A0403		0.08	1
aluminium silver	–	6131/38-183-500	2CKA006132A0404		0.08	1

6179/01-204-500

Watchdog Sensor, Basic, SM
Sensor angle: 220° Range: approx. 16 m. With 2 movement channels. With 1 twilight channel with 3 switching thresholds. No remote control possible via IR remote control KNX. With integrated KNX bus coupler. No additional power supply necessary.
Surveillance density: 92 sectors with 368 switching segments.
Twilight sensor: approx. 1 – 1000 lux. Switch-off delay: approx. 10 sec to 1092 min.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
alpine white	–	6179/01-204-500	2CKA006132A0313		0.56	1
silver metallic	–	6179/01-208-500	2CKA006132A0314		0.56	1

6179/02-204-500

Watchdog Sensor, Premium, SM
Sensor angle: 220° Range: approx. 16 m. With 4 movement channels. With 1 twilight/brightness channel with 3 switching thresholds. With 1 temperature channel with three switching thresholds. With 7-channel IR remote control. Remote control possible via IR remote control KNX 6179 (included in scope of delivery). With integrated KNX bus coupler.
No additional power supply necessary. Surveillance density: 92 sectors with 368 switching segments. Twilight sensor: approx. 1 –1000 lux; Brightness sensor: approx. 1 – 80 klux; Temperature sensor: approx. – 25 to + 55 °C; Switch-off delay: approx. 10 sec to 1092 min.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
alpine white	–	6179/02-204-500	2CKA006132A0317		0.56	1
silver metallic	–	6179/02-208-500	2CKA006132A0318		0.56	1

ABB i-bus® KNX

Movement and Presence Detection

6179-500

Infrared Hand Transmitter for Watchdog Sensor

For Busch-Watchdog 220 MasterLINE KNX premium. The functions can be freely assigned. With coded transmission signal. Power supply: lithium button cell battery. Type CR202 (included in delivery). Battery life: typically 2 years. Rated voltage: 3 V, Protection class (Device): IP 40, Temperature range (Device): 0 °C – 45 °C, Dimensions: (L x W x D): 86 mm x 40 mm x 7 mm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
grey / anthracite	–	6179-500	2CKA006132A0320		0.58	1

6868-201-500

Ceiling/corner adapter

For Busch-Watchdog 220 MasterLINE, Busch-Watchdog 220 MasterLINE select, Busch-Watchdog 220 MasterLINE premium, Busch-Watchdog 280 MasterLINE, Busch-Watchdog 220 MasterLINE KNX, Busch-Watchdog 220 MasterLINE KNX premium. For detection on two sides of the house, in combination with Busch-Watchdog 280. For ceiling mounting of the Busch-Watchdog.
To increase the inclination of the Busch-Watchdog 220/280. It is mounted at the corner of the house, on the wall or under the ceiling. For flush or surface wiring.
Dimensions: (L x W x D): 102 mm x 125 mm x 55 mm. Mounting height: 2.5 m.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
brown	–	6868-201-500	2CKA006800A2565		0.16	1
white		6868-204-500	2CKA006800A2562		0.16	1
silver metallic		6868-208-500	2CKA006800A2563		0.16	1
anthracite		6868-35-500	2CKA006800A2564		0.16	1

Efficient climate control in one system

ClimaECO the new product range for HVAC automation

Heating, ventilation, and air-conditioning automation – ClimaECO brings HVAC applications together in one holistic solution portfolio based on the standardized KNX system.

HVAC control in one single system
ClimaECO is the holistic heating, ventilation, and air-conditioning (HVAC) automation solution for commercial buildings based on the proven ABB i-bus® KNX system. A solution that seamlessly integrates room automation, central HVAC functions, and management and automation into one system – a significant step towards increasing energy efficiency and reducing operational costs. ClimaECO – making your building more economical, sustainable, and comfortable.

—
When it comes to HVAC you often have to deal with several systems. ABB ClimaECO offers one solution for everything.

HVAC automation from the room level to the management level

HVAC –
multiple functions

Heating, ventilation, and air-conditioning technology is made up of various systems that are now integrated into one system.

KNX –
a standardized system

With the proven ABB i-bus® KNX system it is possible to automate all HVAC applications and combine them into a single solution.

HVAC –
levels

ClimaECO combines the three different levels of HVAC automation, ranging from management level to central HVAC systems (generation and distribution) to room automation (energy consumption).

ClimaECO –
a holistic solution

ClimaECO bundles all functions and solutions for HVAC automation into a single integrated system. This saves you time and effort with planning, integration, and maintenance, while significantly increasing energy efficiency in buildings.

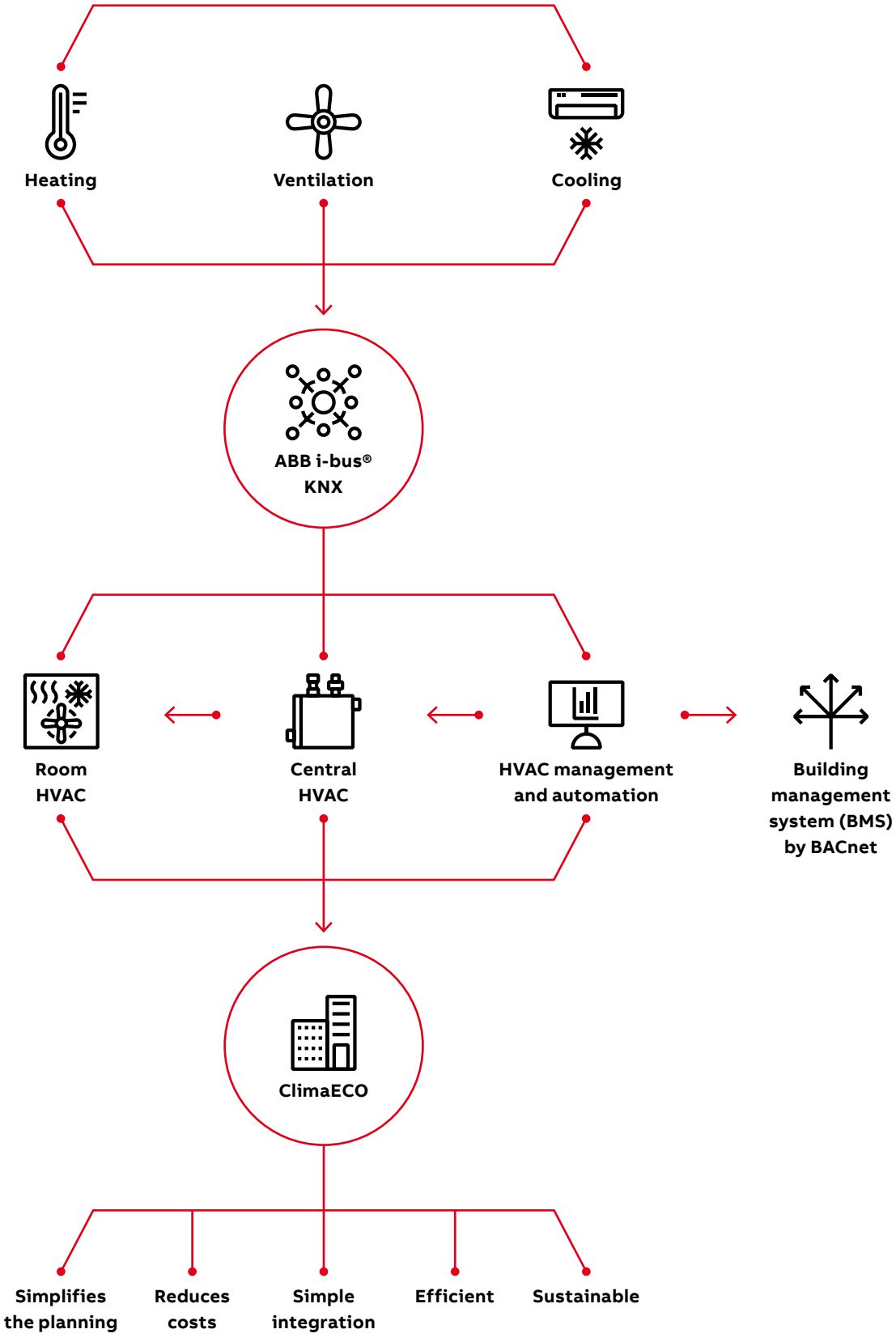


ABB i-bus® KNX

Heating, Ventilation and Air Conditioning – Influencing Variables on Room Climate

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.

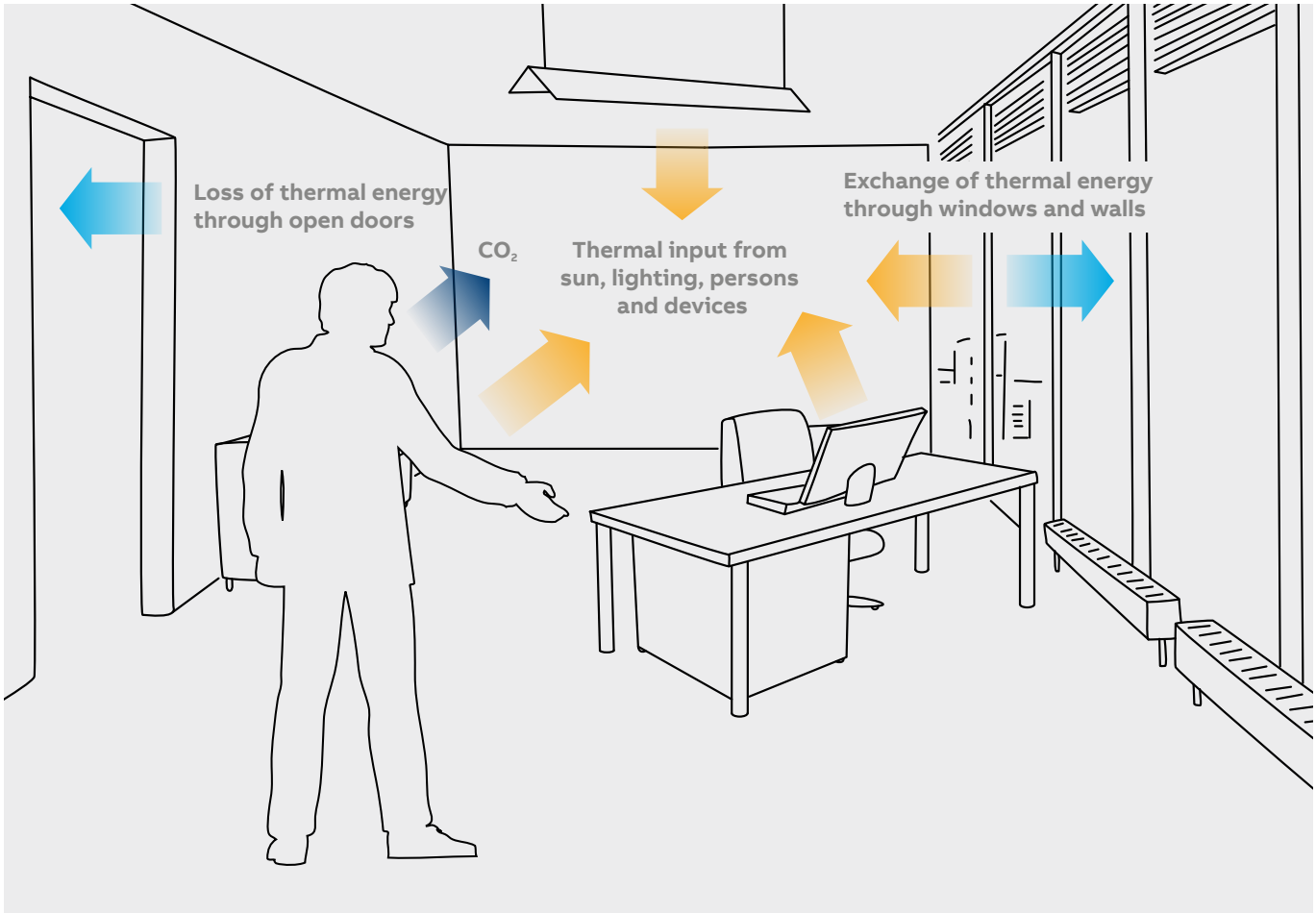


ABB i-bus® KNX

Heating, Ventilation and Air Conditioning – ABB Tenton®

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 ABB Tenton® for stand-alone applications.
The ABB Tenton® 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 ABB Tenton® 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

ABB i-bus® KNX

Heating, Ventilation and Air Conditioning – ClimaECO Portfolio Overview

Management & Automation

Application Controllers
AC/S

Central HVAC Automation

Heating / Cooling Circuit Controllers
HCC/S

Boiler / Chiller Interface
BCI/S

Building Automation Controller KNX
BAC/S

HVAC Room Automation

User Operation

ABB Tenton®
SBS/U

Room Control Units
SAR/A

Controllers

Fan Coil Controllers
FCC/S

Valve Drive Controllers
VC/S

Split Unit Gateway
SUG/U

Air quality sensor
LGS/A

ABB i-bus® KNX

Heating, Ventilation and Air Conditioning

	Electronic Switch Actuator ES/S x.1.2.1 (x = 4/8)	Electronic Relay ER/U 1.1 (in combination with US/U x.2 (x = 2/4)	Valve Drive Actuator VAA/S x.230.2.1 (x = 6/12)	Valve Drive Controller VC/S 4.1.1	Valve Drive Controller VC/S 4.2.1
General					
Supply voltage	KNX	24...250 V AC/DC	KNX	KNX	KNX
Type of installation	DIN-Rail	Flush-mounted	DIN-Rail	DIN-Rail	DIN-Rail
Module width (18 mm)	4/8	–	4/8	8	8
Current consumption, bus	< 12 mA	< 12 mA	< 12 mA	< 12 mA	< 12 mA
Rated current (per channel)	1 A (resistive load)	0.5 A (resistive load)	160 mA (resistive load)	250 mA	250 mA
Inrush current (per channel)	8 A (1 s, Tu = 20 °C)	1.2 A (1 min.)	300 mA (2 min., Tu = 60 °C)	300 mA (2 min., Tu = 60 °C)	300 mA (2 min., Tu = 60 °C)
Maximum number of thermoelectric valve drives (per channel)	10 (230 V) 3 (24 V)	2 (230 V) 2 (24 V)	3 (230 V) 1 (24 V)	3 (230 V) 1 (24 V)	3 (230 V) 1 (24 V)
Outputs					
Number	4/8	1	6/12	4	4
Type	thermoelectric or motor valve drives	thermoelectric valve drives	thermoelectric valve drives	thermoelectric valve drives	thermoelectric valve drives
Output voltage	24... 230 V AC/DC	24... 230 V AC/DC	24...230 V AC	24...230 V AC	24...230 V AC
Manual operation					
Manual operation	■	–	■	–	■
Fault acknowledgement	■	–	■	–	■
Function:					
Operating mode Valve drive, thermoelectric/motor valve drives					
Forced operation	■	■ (via US/U x.2)	■	■	■
Status	■	–	■	■	■
Adjustable control value after controller fault	■	■ (via US/U x.2)	■	■	■
Valve purge	■	■ (via US/U x.2)	■	■	■
Characteristic curve adaption	■	–	■	–	–
Blocking	■	–	■	–	–
Operating mode Switch actuator					
Time: Staircase lighting, delay, flashing	■	–	–	–	–
8-bit scene	■	–	–	–	–
Logical functions	■	–	–	–	–
Safety settings	■	–	–	–	–
Threshold values	■	–	–	–	–
Integrated room temperature controller (RTC)	–	–	–	■	■
Use in Master/Slave system with room operation units	–	–	–	■	■
Control and diagnosis via ABB i-bus® Tool	–	–	–	■	■

■ = Function is supported

– = Function is not supported

ABB i-bus® KNX

Heating, Ventilation and Air Conditioning

VC/S 4.1.1

Valve Drive Controller, 4-fold, MDRC

For the control of heating and cooling applications in the room, such as radiator, floor heating or cooling ceiling. The device has 4 channels each for the independent control of a heating or cooling application. Each channel has an electronic valve output for the control of a thermoelectric valve drive, as well as 3 inputs to detect and monitor the room status (use for window contact, dew point sensor, level sensor or temperature sensor). Also it is possible to connect one analog room control unit (SAR/A) to the inputs of each channel. Each channel has its own integrated room temperature controller for the control of the room temperature, which can be used directly to control the outputs of the device. The VC/S 4.2.1 features an easy to use manual operation.
Both devices support the ABB i-bus® Tool for advanced diagnosis and improved commissioning.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	8	VC/S 4.1.1	2CDG110216R0011		0.27	1
Manual operation	8	VC/S 4.2.1	2CDG110217R0011		0.275	1

VAA/S 6.230.2.1

Valve Drive Actuator, 230 V, MDRC

Controls thermoelectric valve drives (e.g. TSA/K) in heating or cooling systems. Each three outputs are protected against short-circuit and overload. With manual operation and status display.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
6-fold	4	VAA/S 6.230.2.1	2CDG110116R0011		0.17	1
12-fold	8	VAA/S 12.230.2.1	2CDG110117R0011		0.3	1

VAA/A 6.24.2

Floor heating Controller, 6-fold, SM

For the control of up to twelve thermoelectric 24 V DC or analog 0-10 V valve drives (two per channel). With integrated power supply for the valve drives. The device has an integrated relay output to switch the heating circuit pump in dependence of the control value of the valve outputs. The valve outputs can be controlled by the internal or an external room temperature controller. The device is suitable for the installation in the (floor) heating distribution system.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	VAA/A 6.24.2	2CDG120061R0011		0.5	1

ABB i-bus® KNX

Heating, Ventilation and Air Conditioning

ES/S 4.1.2.1

Electronic Switch Actuator, 4-fold, 1 A, MDRC

Controls thermoelectric valve drives (e.g. TSA/K) in heating and cooling systems. Each output (24...230 V AC/DC) is protected against short-circuit and overload. With manual operation and status display for each output.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
4-fold	4	ES/S 4.1.2.1	2CDG110058R0011		0.25	1
8-fold	8	ES/S 8.1.2.1	2CDG110059R0011		0.38	1

ER/U 1.1

Electronic Relay, 1-fold, FM

The device combination with the Universal Interface US/U and a room thermostat noiselessly controls the heating system and chilled ceiling temperature via thermo-electric valve drives e.g. TSA/K, 24 V...230 V AC/DC).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	ER/U 1.1	GHQ6310044R0111		0.08	1
2-fold	–	US/U 2.2	GHQ6310074R0111		0.06	1
4-fold	–	US/U 4.2	GHQ6310070R0111		0.06	1

6164/11 U-500

Heating Actuator, 1-fold, 230 V, FM

1 electronic output (noiseless) For connecting thermoelectric actuating drives. The device possesses three additional input. Rated voltage: 230 V~, +10% /–10%, 50 Hz – 60 Hz. Input polling voltage 5 V. OutputRated current: 25 mA, cos ϕ 1. Output voltage: 250 V~. The bus can be connected via enclosed terminal block.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6164/11 U-500	2CKA006151A0247		0.09	1

ST/K 1.1

Electromotor Valve Drive

The drive is a proportional valve drive for controlling heating valves and is mounted on thermostat valve bases. Valve Adapters VA10, VA78 for conventional valves are supplied.
The control is carried out via a continuous KNX room thermostat. The actual valve position is indicated by 5 LEDs. The valve drive has two binary inputs for a presence contact and/or window contact and for further signal indication. With integrated Bus Coupler.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	ST/K 1.1	2CDG120004R0011		0.32	1

ABB i-bus® KNX

Heating, Ventilation and Air Conditioning

TSA/K 230.2

Thermoelectric Valve Drives

For opening and closing valves in heating, ventilation and air-conditioning systems. Both variants (230 V and 24 V) feature a plug-in connection cable (1 m) and a splash-proof housing. The mounting on the valve is easily implemented using the Valve Adapter VA/Z xx.1.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
230 V	–	TSA/K 230.2	2CDG120049R0011		0.16	1
24 V	–	TSA/K 24.2	2CDG120050R0011		0.16	1
Valve Adapter for valves from Dumser, Chronatherm, Vescal, KaMo	–	VA/Z 10.1	2CDG120009R0011		0.06	1
Valve Adapter for valves from Honeywell, Reich, Cazzaniga, Landis & Gyr. MNG	–	VA/Z 50.1	2CDG120010R0011		0.05	1
Valve Adapter for valves from Danfoss RA	–	VA/Z 78.1	2CDG120011R0011		0.03	1
Valve Adapter for valves from Heimeier, Herb, Onda, Schlösser (ab 93), Oventrop	–	VA/Z 80.1	2CDG120012R0011		0.06	1

SUG/U 1.1

Split Unit Gateway, FM

The Split Unit Gateway forms the interface between the KNX system and many manufacturers' air conditioners, so-called split units. The device converts the KNX telegrams into infrared commands and transmits them to the split unit. The transmitter of the supplied cable is bonded directly onto the split unit's receiver. The split unit then no longer receives the commands from a remote control. Instead, it can be operated via any KNX sensors or via a visual display system. The device is put into operation with the ETS, and a free ETS app is available to select the split unit model. Auxiliary voltage is not required.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	SUG/U 1.1	2CDG110207R0011		0.02	1

ABB i-bus® KNX

Heating, Ventilation and Air Conditioning

	Fan Coil Controller				
	FCC/S 1.1.1.1	**FCC/S 1.1.2.1**	**FCC/S 1.2.1.1**	**FCC/S 1.2.2.1**	**FCC/S 1.3.1.1**
General					
Supply voltage	KNX	KNX	KNX	KNX	KNX
Type of installation	DIN-Rail	DIN-Rail	DIN-Rail	DIN-Rail	DIN-Rail
Module width (18 mm)	6	6	6	6	6
Current consumption, bus	< 12 mA	< 12 mA	< 12 mA	< 12 mA	< 12 mA
Manual operation	–	■	–	■	–
Software functionality					
Integrarted room temperature controller (RTC)	■	■	■	■	■
Use in Master/Slave System with room operation units	■	■	■	■	■
Fan outputs					
Number of fans	1	1	1	1	1
Fan type:					
1/2/3 step	■	■	■	■	–
Rated current I_n	5 A	5 A	5 A	5 A	–
Rated voltage U_n (50/60 Hz)	250 V AC	250 V AC	250 V AC	250 V AC	–
Continues Fan (0 ... 10 V)	–	–	–	–	■
Valve outputs					
Electronic 0,5 A	2	2	–	–	–
Analog 0...10 V	–	–	2	2	2
Control individual	■	■	■	■	■
Supported valve types:					
– Thermoelectric valve drive (PWM)	2	2	–	–	–
– Motor-driven valve drive (3-point)	1	1	–	–	–
– Analog valve drive or	–	–	2	2	2
– 6-way valve drive	–	–	1	1	1
Switching contact					
Number of contacts	1	1	1	1	1
Rated current I_n	16 A	16 A	16 A	16 A	16 A
Rated voltage U_n (50/60 Hz)	250 V AC	250 V AC	250 V AC	250 V AC	250 V AC
Inputs					
Number of inputs	4	4	4	4	4
Supported sensors:					
– Temperature sensor	■	■	■	■	■
– Dew Point sensor	■	■	■	■	■
– Level sensor	■	■	■	■	■
– Binary signal input	■	■	■	■	■
– Analog room control unit (SAR/A or SAF/A)	1	1	1	1	1
Fan Coil Unit type					
2 pipe					
Heating	■	■	■	■	■
Cooling	■	■	■	■	■
Heating/Cooling	■	■	■	■	■
4 pipe					
Heating/Cooling	■	■	■	■	■
Commissioning and diagnostic function					
Control and diagnosis via ABB i-bus® Tool	■	■	■	■	■

■ = Function is supported

– = Function is not supported

ABB i-bus® KNX

Heating, Ventilation and Air Conditioning

	Fan Coil Controller			
	FCC/S 1.3.2.1	**FCC/S 1.4.1.1**	**FCC/S 1.5.1.1**	**FCC/S 1.5.2.1**
General				
Supply voltage	KNX	KNX	KNX	KNX
Type of installation	DIN-Rail	DIN-Rail	DIN-Rail	DIN-Rail
Module width (18 mm)	6	6	6	6
Current consumption, bus	< 12 mA	< 12 mA	< 12 mA	< 12 mA
Manual operation	■	–	–	■
Software functionality				
Integrarted room temperature controller (RTC)	■	■	■	■
Use in Master/Slave System with room operation units	■	■	■	■
Fan outputs				
Number of fans	1	1	1	1
Fan type:				
1/2/3 step	–	■	–	–
Rated current I_n	–	5 A	–	–
Rated voltage U_n (50/60 Hz)	–	250 V AC	–	–
Continues Fan (0 … 10 V)	■	–	■	■
Valve outputs				
Electronic 0,5 A	–	1	2	2
Analog 0...10 V	2	–	–	–
Control individual	■	■	■	■
Supported valve types:				
– Thermoelectric valve drive (PWM)	–	1	2	2
– Motor-driven valve drive (3-point)	–	–	1	1
– Analog valve drive or	2	–	–	–
– 6-way valve drive	1	–	–	–
Switching contact				
Number of contacts	1	–	1	1
Rated current I_n	16 A	–	16 A	16 A
Rated voltage U_n (50/60 Hz)	250 V AC	–	250 V AC	250 V AC
Inputs				
Number of inputs	4	4	4	4
Supported sensors:				
– Temperature sensor	■	■	■	■
– Dew Point sensor	■	■	■	■
– Level sensor	■	■	■	■
– Binary signal input	■	■	■	■
– Analog room control unit (SAR/A or SAF/A)	1	1	1	1
Fan Coil Unit type				
2 pipe				
Heating	■	■	■	■
Cooling	■	■	■	■
Heating/Cooling	■	■	■	■
4 pipe				
Heating/Cooling	■	–	■	■
Commissioning and diagnostic function				
Control and diagnosis via ABB i-bus® Tool	■	■	■	■

■ = Function is supported

– = Function is not supported

ABB i-bus® KNX

Heating, Ventilation and Air Conditioning

	Blower Actuators	
	FCL/S 1.6.1.1	**FCL/S 2.6.1.1**
General		
Supply voltage	KNX	KNX
Type of installation	DIN-Rail	DIN-Rail
Module width (18 mm)	4	6
Current consumption, bus	< 12 mA	< 12 mA
Manual operation	–	–
Fan outputs		
Number of fans	1	2*
Supported fan types:		
– 1/2/3 step or	■	■
– 3 individual contacts	–	–
Rated current I_n	6 A	6 A
Rated voltage U_n	250/440 V AC (50/60 Hz)	250/440 V AC (50/60 Hz)
Valve outputs		
Electronic 0.5 A	–	–
Analog 0...10 V	–	–
Control individual	–	–
Supported valve types:		
– Thermoelectric valve drive (PWM)	–	–
– Motor-driven valve drive (3-point)	–	–
– Analog valve drive	–	–
Valve type can be mixed	–	–
Switching contact		
Number of contacts	1	2 (5)*
Rated current I_n	6 A	6 A
Rated voltage U_n	250/440 V AC (50/60 Hz)	250/440 V AC (50/60 Hz)
Inputs		
Number of inputs	–	–
Supported sensors:		
– Switch sensor	–	–
– Value/forced operation	–	–
– Temperature sensor	–	–
Fan Coil Unit type		
2 pipe		
Heating	–	–
Cooling	–	–
Heating/Cooling	–	–
4 pipe		
Heating/Cooling	–	–
Various		
Parallel operation	–	–
Commissioning and diagnostic function		
Control and diagnosis via ABB i-bus® Tool	–	–

■ = Function is supported

– = Function is not supported

* = Second fan output can be used as 3 switch outputs

ABB i-bus® KNX

Heating, Ventilation and Air Conditioning

FCC/S 1.1.1.1

Fan Coil Controller, 2 x PWM, 3-stage, MDRC

For the control of fan coil units. Via two electronic outputs, two thermoelectric or one motor-driven valve drive can be controlled for heating and cooling. For the fan control the devices features three relay outputs. A relay output switches an additional load of up to 16 A, such as auxiliary heating. Over 4 inputs the room status can be detected and monitored (Use for window contact, dew point sensor, level sensor or temperature sensor). Also it is possible to connect one analog room control unit (SAR/A or SAF/A) to the inputs of the device.
The device has an integrated room temperature controller for the control of the room temperature, which can be used directly to control the outputs of the device. The FCC/S 1.1.2.1 features an easy to use manual operation.
Both devices support the ABB i-bus® Tool for advanced diagnosis and improved commissioning.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	6	FCC/S 1.1.1.1	2CDG110210R0011		0.28	1
Manual operation	6	FCC/S 1.1.2.1	2CDG110211R0011		0.285	1

FCC/S 1.2.2.1

Fan Coil Controller, 2 x 0-10 V, 3-stage, MDRC

For the control of fan coil units. Via two analog outputs, two analog valves or one 6-way valve drive can be controlled for heating and cooling. For the fan control the devices features three relay outputs. A relay output switches an additional load of up to 16 A, such as auxiliary heating. Over 4 inputs the room status can be detected and monitored (Use for window contact, dew point sensor, level sensor or temperature sensor). Also it is possible to connect one analog room control unit (SAR/A or SAF/A) to the inputs of the device. The device has an integrated room temperature controller for the control of the room temperature, which can be used directly to control the outputs of the device. The FCC/S 1.2.2.1 features an easy to use manual operation.
Both devices support the ABB i-bus® Tool for advanced diagnosis and improved commissioning.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	6	FCC/S 1.2.1.1	2CDG110212R0011		0.23	1
Manual operation	6	FCC/S 1.2.2.1	2CDG110213R0011		0.235	1

ABB i-bus® KNX

Heating, Ventilation and Air Conditioning

FCC/S 1.3.1.1

Fan Coil Controller, 3 x 0-10 V, MDRC

For the control of fan coil units. Via two analog outputs, two analog valves or one 6-way valve drive can be controlled for heating and cooling. For the fan control the devices features an analog output for the control of a continues fan. A relay output switches an additional load of up to 16 A, such as auxiliary heating. Over 4 inputs the room status can be detected and monitored (Use for window contact, dew point sensor, level sensor or temperature sensor). Also it is possible to connect one analog room control unit (SAR/A or SAF/A) to the inputs of the device. The device has an integrated room temperature controller for the control of the room temperature, which can be used directly to control the outputs of the device.
The FCC/S 1.3.2.1 features an easy to use manual operation.
Both devices support the ABB i-bus® Tool for advanced diagnosis and improved commissioning.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	6	FCC/S 1.3.1.1	2CDG110214R0011		0.21	1
Manual operation	6	FCC/S 1.3.2.1	2CDG110215R0011		0.215	1

FCC/S 1.4.1.1

Fan Coil Controller, PWM, 3-stage, MDRC

For the control of fan coil units. Via one electronic output, a thermoelectric valve drive can be controlled for heating and cooling. For the fan control the devices features three relay outputs. Over 4 inputs the room status can be detected and monitored (Use for window contact, dew point sensor, level sensor or temperature sensor). Also it is possible to connect one analog room control unit (SAR/A or SAF/A) to the inputs of the device. The device has an integrated room temperature controller for the control of the room temperature, which can be used directly to control the outputs of the device.
The device supports the ABB i-bus® Tool for advanced diagnosis and improved commissioning.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	6	FCC/S 1.4.1.1	2CDG110209R0011		0.215	1

ABB i-bus® KNX

Heating, Ventilation and Air Conditioning

FCC/S 1.5.2.1

Fan Coil Controller, 2 x PWM, 0-10 V, MDRC

For the control of fan coil units. Via two electronic outputs, two thermoelectric or one motor-driven valve drive can be controlled for heating and cooling. For the fan control the devices features an analog output for the control of a continues fan. A relay output switches an additional load of up to 16 A, such as auxiliary heating. Over 4 inputs the room status can be detected and monitored (Use for window contact, dew point sensor, level sensor or temperature sensor). Also it is possible to connect one analog room control unit (SAR/A or SAF/A) to the inputs of the device. The device has an integrated room temperature controller for the control of the room temperature, which can be used directly to control the outputs of the device. The FCC/S 1.5.2.1 features an easy to use manual operation.
Both devices support the ABB i-bus® Tool for advanced diagnosis and improved commissioning.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	6	FCC/S 1.5.1.1	2CDG110234R0011		0.21	1
Manual operation	6	FCC/S 1.5.2.1	2CDG110235R0011		0.215	1

FCL/S 2.6.1.1

Blower Actuator, 6 A, MDRC

to control blowers or fans with up to three fan speeds via step or changeover control.
The FCL/S 1.6.1.1 have one fan output and one additional floating switch output. The FCL/S 2.6.1.1 feature two fan outputs plus two floating switch outputs. Alternatively the second fan output can be used as three switch outputs.
The fan speed can be directly choosen, increased and decreased as well as controlled by the control value of a closed-loop controller.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
1-fold	4	FCL/S 1.6.1.1	2CDG110163R0011		0.18	1
2-fold	6	FCL/S 2.6.1.1	2CDG110164R0011		0.26	1

CAR/U 4.1.1.1-71

ABB Caldion® **NEW**

ABB Caldion® Room Temperature Controller for fan coil units with 2 pipe, 2 pipe with electric heater or 4 pipe system, Flush Mounted, BS standard. Available for standalone function or as KNX device with integrated bus coupling unit. Build in temperature sensor, 2 x binary input for window, dewpoint, condensate alarm. Integrated actuator output control for ON/Off or 0-10 V Valve and 3 x fan speed control. Dedicated capacitive touch RTC control button for intuitive control, mode operation and frameless design with large display.
Only available on the Chinese market.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Black	–	CAR/U4.1.1.1-71	2TAZ740010R2001		0.272	1
Black	–	CAR/U4.2.1.1-71	2TAZ741010R2001		0.272	1
White	–	CAR/U4.1.1.1-84	2TAZ740010R0001		0.272	1
White	–	CAR/U4.2.1.1-84	2TAZ741010R0001		0.272	1

ABB i-bus® KNX

Heating, Ventilation and Air Conditioning

SAF/A 1.0.1-24

Room Temperature and FanCoil Control Element, SM

The control element is used in conjunction with the FCC/S Fan Coil Controller or the VC/S Valve Controller for temperature adjustment, measurement and fan speed adjustment.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
davos/studio white	–	SAF/A 1.0.1-24	2CKA006134A0348			1

SAR/A 1.0.1-24

Room Temperature Control Element, SM

The control element is used in conjunction with the FCC/S Fan Coil Controller or the VC/S Valve Controller for temperature adjustment and measurement.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
davos/studio white	–	SAR/A 1.0.1-24	2CKA006134A0346			1

6138/11-84-500

Room Temperature Controller Fan Coil with Display, SM

Sends control values for the room to the Fan Coil Actuators or devices with the respective outputs (e.g. Room Master). The intuitive control operation allows each user to individually set the room temperature and the fan speed. The large LC display can display the actual and target temperatures, the current operating mode as well as the fan speeds. With integrated Bus Coupler.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
aluminium silver	–	6138/11-83-500	2CKA006138A0005		0.092	1
davos/studio white	–	6138/11-84-500	2CKA006138A0003		0.092	1

LGS/A 1.2

Air Quality Sensor with Room Temperature Controller, SM

For the control and measuring of the room air quality and temperature. Accurately measures the $C0_2$ concentration (390…10.000 ppm), humidity (0...100 %) and temperature (0…50 °C) in a room and sends the values on the bus. By using the integrated thresholds the measured values can be monitored. With the integrated controller it is possible to control the room temperature and HVAC actuators. With integrated Bus Coupler.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	LGS/A 1.2	2CDG120059R0011		0.06	1

ABB i-bus® KNX

Heating, Ventilation and Air Conditioning

	Heating/Cooling Circuit Controller HCC/S 2.1.x.1	Heating/Cooling Circuit Controller HCC/S 2.2.x.1
General		
Supply voltage	KNX	KNX
Type of installation	DIN-Rail	DIN-Rail
Module width (17.5 mm)	8	8
Number of channels	2	2
Outputs		
3- way mixing valve control type	0 … 10 V DC	3 – Point
Valve outputs per channel	1	1
Pump control output per channel	1 (5 A)	1 (5 A)
Inputs		
Input for flow temperature measurement per channel	1	1
Input for return flow temperature measurement per channel	1	1
Inputs for pump status monitoring (pump status, pump failure, pump repair mode) per channel	3	3
Manual operation		
Manual operation	HCC/S 2.1.2.1	HCC/S 2.2.2.1
Software functionality		
Integrated temperature controller for heating or cooling distribution circuits	■	■
Forced operation	■	■
Cyclical monitoring of input values	■	■
Flow temperature limitation	■	■
Safety shutdown temperature	■	■
Manual valve overwrite	■	■
Valve purge	■	■
Manual pump overwrite	■	■
Pump control in dependence of control value	■	■
Channel bundling for double pump systems	■	■

■ = Function is supported

– = Function is not supported

ABB i-bus® KNX

Heating, Ventilation and Air Conditioning

HCC/S 2.1.2.1

Heating/Cooling Circuit Controller, 2-fold, 0-10 V, MDRC

For the control of heating or cooling circuits. The device has 2 channels, each with an analog output to control the mixing valve (0…10 V) of a heating or cooling circuit as well as a relay output (5 A) to switch the pump of the circuit. Via 3 binary inputs it is possible to monitor the status of the pump (via potential free contacts) and integrate these feedback into the control of the pump. The flow and return flow temperature are measured and used for the calculation of the control value for the valve output in the integrated controller. The set point temperature is received via the KNX bus. By bundling both channels of the device it is also possible to use it for double pump systems.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	6	HCC/S 2.1.1.1	2CDG110218R0011		0.28	1
Manual Operation	6	HCC/S 2.1.2.1	2CDG110219R0011		0.285	1

HCC/S 2.2.1.1

Heating/Cooling Circuit Controller, 2-fold, 3-point, MDRC

For the control of heating or cooling circuits. The device has 2 channels, each with two electronic outputs to control a motor-driven mixing valve (3-Point) of a heating or cooling circuit as well as a relay output (5 A) to switch the pump of the circuit. Via 3 binary inputs it is possible to monitor the status of the pump (via potential free contacts) and integrate these feedback into the control of the pump. The flow and return flow temperature are measured and used for the calculation of the control value for the valve output in the integrated controller. The set point temperature is received via the KNX bus. By bundling both channels of the device it is also possible to use it for double pump systems.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	6	HCC/S 2.2.1.1	2CDG110220R0011		0.285	1
Manual Operation	6	HCC/S 2.2.2.1	2CDG110221R0011		0.29	1

ABB i-bus® KNX

Heating, Ventilation and Air Conditioning

BCI/S 1.1.1

Boiler/Chiller Interface, 1-fold, MDRC

As interface between the KNX system and a heat generator or chiller. Via an analog output (0…10 V) the set point or set point adjustment temperature can be transmitted to the heat generator/chiller. The set point itself is received via KNX. Via two binary inputs the device can monitor the status of the heat generator/chiller (via potential free contacts) and send it on the KNX bus. A relay output (5 A) is included to switch or enable/disable the heat generator/chiller. With an additional relay output (5 A) the pump of the heat generator/chiller can be switched on and off. Via 3 binary inputs it is possible to monitor the status of the pump (via potential free contacts) and integrate these feedback into the control of the pump.
The device supports the ABB i-bus® Tool for advanced diagnosis and improved commissioning.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	6	BCI/S 1.1.1	2CDG110222R0011		0.21	1

BAC/S 1.5.1

Building Automation Controller, KNX, MDRC

Powerful freely programmable KNX Building Automation Controller with flexible expandable In- and Output Modules.
Automation programs based on the globally standardized IEC 61131 programming languages can be executed. Both the graphical and textual programming languages are supported.
The programming software ABB Automation Builder based on the established Codesys software enables the easy creation and reuse of automation programs as well as the integration of software libraries. The ABB Automation Builder is integrated with the ETS through an ETS app.
Up to 1000 KNX group objects can be used in the automation program. The KNX relevant settings such as physical address, linking of the controller group objects with group addresses and the KNX sending conditions are set in the ETS and can also be changed at any time without ABB Automation Builder.
The building automation controller has two Ethernet network interfaces. The use is flexible adjustable. In addition to KNXnet/IP communication, these can also be used for other protocols and functions. Among other things, for Modbus TCP and a web server with a freely customizable web interface for display and operation of the system.
The controller has a built-in display, an RS-232/485 interface for i. a. Modbus. The internal clock and data variables can be buffered by a battery. The internal memory of 8 MB can be extended by the memory card slot.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	BAC/S 1.5.1	2CDG120062R0011		0.3	1

ABB i-bus® KNX

Heating, Ventilation and Air Conditioning

BCE/Z 1.1

BAC Engineering Software

License for the engineering software of the BAC/S Building Automation Controller KNX: ABB Automation Builder 2.x license in the Building Automation variant.
This license is valid for a single computer and allows the programming of any number of BAC/S Building Automation Controllers.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	BCE/Z 1.1	2CDG120069R0011		0.01	1

BCM/S 16.2.0.1

BAC Module, 16 Digital Inputs, 100-240 V

Extension module for the BAC/S Building Automation Controller KNX with 16 digital inputs for 100 - 240 V AC. Connection of the cables via pluggable spring terminals.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	BCM/S 16.2.0.1	2CDG120063R0011		0.23	1

BCM/S 16.1.1

BAC Module, 16 Digital Inputs/Digital Outputs, 24 V, 0.5 A

Extension module for the BAC/S Building Automation Controller KNX with 16 switchable digital inputs or outputs for 24V DC. The electronic transistor outputs switch 0.5 A. Connection of the cables via pluggable spring terminals.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	BCM/S 16.1.1	2CDG120064R0011		0.19	1

BCM/S 16.1.3.1

BAC Module, 8 Digital Inputs/Digital Outputs, 24 V, Relay

Extension module for the BAC/S Building Automation Controller KNX with 8 digital inputs and 8 digital outputs. The digital inputs process 24 V DC signals. The relay outputs switch a maximum of 2 A at 24 V DC and a maximum of 1.5 A at 120/240 V AC. Connection of the cables via pluggable spring terminals.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	BCM/S 16.1.3.1	2CDG120065R0011		0.21	1

ABB i-bus® KNX

Heating, Ventilation and Air Conditioning

BCM/S 8.0.2.1

BAC Module, 8 Digital Outputs, 230 V, 0.3 A

Extension module for the BAC/S Building Automation Controller KNX with 8 digital outputs. The digital triac outputs switch a maximum of 0.3 A at 120/240 V AC. Connection of the cables via pluggable spring terminals.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	BCM/S 8.0.2.1	2CDG120066R0011		0.18	1

BCM/S 6.5.5.1

BAC Module, 4 Analogue Inputs and 2 Analogue Outputs

Extension module for the BAC/S Building Automation Controller KNX with 4 analog inputs and 2 analog outputs. The inputs and outputs support voltage signals from 0 V ... + 10 V, 0 V ... + 5 V, -2.5 V ... + 2.5 V and - 5 V ... + 5 V as well as current signals of 0 mA ... 20 mA and 4 mA ... 20 mA. Connection of the cables via pluggable spring terminals.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	BCM/S 6.5.5.1	2CDG120067R0011		0.18	1

BCM/S 2.6.0.1

BAC Module with Temperature Sensor, 2 Analogue Inputs

Extension module for the BAC/S Building Automation Controller KNX with 2 analog inputs for temperature sensors. Temperature sensors of type Pt100, Pt1000, Ni100, Ni1000 and 150 Ohm, 300 Ohm are supported. Connection of the cables via pluggable spring terminals.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	BCM/S 2.6.0.1	2CDG120068R0011		0.19	1

ABB i-bus® KNX

Heating, Ventilation and Air Conditioning

AC/S 1.1.1

Application Controller, MDRC

The AC/S Application Controller has predefined Automation Modules for a holistic HVAC Automation Solution from Central HVAC to Room Automation. For example Schedule, Set Point Calculation, Heat Curve Calculation, Data Logging and Device Monitoring. Furthermore own Automation Modules can be created by a graphical Logic Editor. By a web based User Interface the whole system can be monitored and managed. The AC/S 1.2.1 has additional a built in bidirectional KNX-BACnet/IP Gateway (Server) for data exchange with superordinate Building Management Systems.

The Engineering is done completely by the ETS Version 5.6.5 or higher. An additional external Software is not required. The device has a KNX TP port and requires for operation an auxiliary power supply, either via 24 V AC/DC or via PoE.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Basic	4	AC/S 1.1.1	2CDG110205R0011		0.19	1
BACnet	4	AC/S 1.2.1	2CDG110206R0011		0.19	1

ABB i-bus® KNX

Automation, Logic and Time Control

	Logic Module LM/S 1.1	Application Unit, Logic ABL/S 2.1	Application Unit,Time ABZ/S 2.1	Logic Controller ABA/S 1.2.1
General				
Supply voltage	KNX	KNX	KNX	24 V DC / PoE
Ethernet connection	–	–	–	■
Type of installation	DIN-Rail	DIN-Rail	DIN-Rail	DIN-Rail
Module width (18 mm)	2	2	2	4
Software function				
Logic gates	■	■	–	■
Gate/filter	■	■	–	■
Multiplexer	–	–	–	■
Flip Flop	–	–	–	■
PID Controller	–	–	–	■
Composite function blocks	–	–	–	■
Time delay	■	■	–	■
Staircase lighting/Pulse duration	■	■	–	■
Calculation	□	–	–	■
Min./Max.	■	■	–	■
Comparator/Threshold	■	■	–	■
Format converter	■	–	–	■
Counter	■	–	–	■
Calendar switch program	–	–	■	■
Day routines	–	–	■	■
Week routines	–	–	■	■
Year routines	–	–	■	■
Special days	–	–	■	–
Daylight saving times	–	–	■	–
Telegram multiplier	■	–	■	■
Simulation (offline)		–	–	■
Webserver	–	–	–	■
Programming via KNX	■	■	■	■
Programming via Ethernet	–	–	–	■
Max. number of function elements	3	140	30	3000
Monitoring (online)	–	–	–	■

■ = Function is supported

– = Function is not supported

□ = Limited functions

ABB i-bus® KNX

Automation, Logic and Time Control

LM/S 1.1

Logic Module, MDRC

Used to solve a varied range of project-specific control tasks and can implement 3 functions simultaneously. The following functions are available for selection: logic gate, filter, time delay, multiplier, min/max value detector, temperature comparator, toggle values, threshold detection, format converter, scenes, increment/decrement values, staircase lighting.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	LM/S 1.1	GHQ6310080R0111		0.1	1

ABL/S 2.1

Application Unit Logic, MDRC

Allows the compilation of complex logical functions by simply combining different logic elements and gates using a graphical user interface as an ETS plug-in and does not require additional software. 50 logical elements, 50 gates, 30 timer modules and 10 comparators are available.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	ABL/S 2.1	2CDG110073R0011		0.12	1

ABZ/S 2.1

Application Unit Time, MDRC

It provides a yearly time clock program with 15 daily routines (800 switching events), a weekly schedule and allowance for 100 special days. Additionally, the unit can control up to 300 participants in 30 macro groups, that can be triggered using a single command. In this way, each time controlled switching event can cause a series of actions. The switching times can be modified with the free PZM software without using ETS. PZM Software and additional information on www.abb.com/knx.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	ABZ/S 2.1	2CDG110072R0011		0.12	1

ABA/S 1.2.1

Logic Controller, MDRC

The device provides extensive logic functions. The logic is defined via a graphic editor integrated in the ETS. Up to 3000 logic gates are possible.
The generated logic can be tested by a simulation function. User-defined function blocks can be created and saved for taking them over into other projects.
The device requires an auxiliary voltage, either 24 V DC or Power over Ethernet (PoE). If timer functions are used the date and time has to be provided via KNX/TP.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	ABA/S 1.2.1	2CDG110192R0011		0.192	1

ABB i-bus® KNX

Automation, Logic and Time Control

FW/S 8.2.1

Radio Time Switch, 8 Channels, MDR

The Radio Time Switch sends current time and date on the bus. The time can be optionally received via a DCF or GPS antenna. Furthermore the device can be used to easily adjust the time programs.

The device provides 8 channels. Every channel supplies an independent daily, time and/or yearly program. Additionally, special programs (e.g. for vacation or public holiday days) are possible.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	3	FW/S 8.2.1	2CDG120039R0011		0.33	1

FAD/A 1.1

DCF Antenna for Radio Time Switch, SM

For the connection to the Radio Tme Switch FW/S 8.2.1. The time signal from the DCF 77 transmitter can be received within a radius of approx. 1000 km around Frankfurt.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	FAD/A 1.1	2CDG120040R0011		0.17	1

ABB i-bus® KNX

Automation, Logic and Time Control

PK/E 2.1

Memory Card OBELISK top2 for Radio Time Switch

The memory card can be used for transferring switching programs to Radio Time Switch.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	PK/E 2.1	2CDG120043R0011		0.02	1

TR/A 1.1

Time Receiver GPS, SM

For the reception and processing of the GPS signal, as well as for brightness and temperature measurement. The sensor measures the brightness and outside temperature and sends them on the KNX bus. Likewise the time, date and geographical coordinates are send to the KNX bus. Additionally the sunrise and sunset times are also send to the bus. With integrated Bus Coupler.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	TR/A 1.1	2CDG120060R0011		0.09	1

ABB i-bus® KNX

Visualisation, Display and Signalling

DBS/S 1.1.1.1

IoT Dashboard Server, MDRC NEW

The IoT Dashboard is a completely new web-based offering from ABB for commercial building automation solutions. This IoT Dashboard is used for monitoring, logging and room control. Energy and data can be collected locally and into the cloud. Thanks to the intuitive user-friendly IoT Dashboard with graphical elements, it is easy-to-use and does not require any knowledge or experience with dashboards. After commissioning, apps can be downloaded from the ABB MyBuildings portal, that gives the possibility to add additional functionality.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	4	DBS/S 1.1.1.1	2CKA008110A0120		0.289	1

UK/S 32.2

Universal I/O Concentrator, 32-fold, MDRC

Used to connect push buttons or signal lamps, e.g. to an operating/display tableau. It has 32 channels which can be freely parameterised as inputs/outputs using the ETS software. The device requires an external 12 or 24 V DC auxiliary power supply, (e. g. NT/S 24.800).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	4	UK/S 32.2	2CDG110071R0011		0.18	1

MT 701.2, WS
with T-RAHM, WS

Control and Display Tableau, LCD

For indication of switching status, fault reports and measurement values. Using the robust push buttons, electrical consumers can be manually switched, values can be set in addition to timer programs and light scenes. The alarms can also issue an acoustic warning. The FM wall box simplifies mounting.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
silver	–	MT 701.2, SR	GHQ6050059R0006		1.24	1
white	–	MT 701.2, WS	GHQ6050059R0005		1.16	1
Coverframe for MT701, silver	–	T-RAHM, SR	GHQ6050059R0012		0.17	1
Coverframe for MT701, white	–	T-RAHM, WS	GHQ6050059R0011		0.16	1
Wall Box for MT701, FM	–	UP-KAST 2	GHQ6050059R0014		0.44	1

Centralised and comfortable operation
The new freedom

Modern home automation has never been as comfortable. With intuitive gestures, the way you operate your smartphone or tablet. This is how you control light, blinds, heating, music and much more with the utmost in comfort. Individual or in single scenes. Just as you please via expressive touch panels or via app of mobile devices. Both at home and while travelling. Discover the possibilities of limitless freedom.

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Device features worth mentioning:
- Capacitive touch with the support swiping gestures
- Up to 30 pages with a maximum of 480 control elements
- 30 logic functions
- 80 fault and alarm messages which can be stored in a list and exported
- Up to 30 weekday timers with astro function which can be set by the user
- A favourite page with a maximum of 16 favourite control elements
- Indoor video station for door communication
- Presence simulation

The colour display has a diagonal of 17.78 cm (7") in 16:9 format. The special feature of the Busch-SmartTouch®: It has a minimal mounting height only 13 mm. The panel is available in two colour versions – in genuine black or white glass. This allows it to be perfectly combined with the carat® and Busch-axcent® switch ranges. The bottom design bar made of brushed stainless steel lends the panel that visual refinement.

In combination with the mounting frame the Busch-SmartTouch® can be mounted on the old ABB control panel box, normal flush-mounted boxes or also on the new ABB-Welcome table stand.

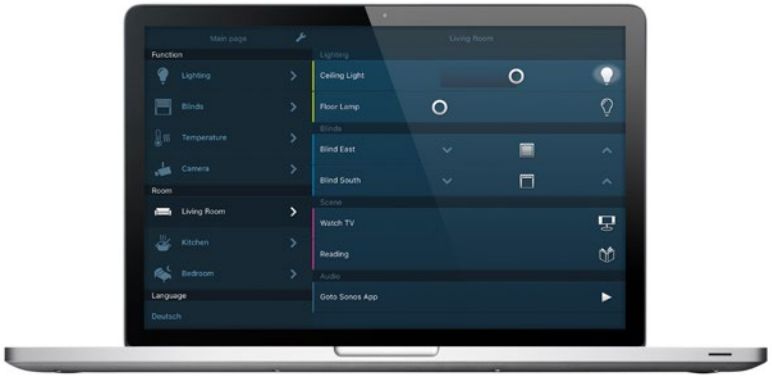
—
01 Busch-SmartTouch®, black

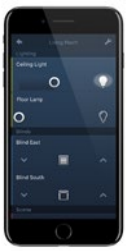
Busch-ControlTouch®

Smartphones, tablets and smartwatches or PCs turn into a practical remote control, thanks to the Busch-ControlTouch®. It connects the KNX installation with the IP network and controls all KNX functions in the building and beyond.

Device features worth mentioning:

- Visualization by list view and/or room pictures with controls
- Build-in Room-temperature controllers
- Complete Sonos API integration
- External access the the KNX system
- Easy creation of individual scenes
- Integrated weekly timer (with astro function)
- Integrated logic editor
- Recording and display of diagrams
- Philips Hue connection
- Connection of IP cameras with MJPEG protocol possible
- Integrated rights and user management
- Alarm messages via e-mail and/or push notification
- iOS widget for fast access from the mobile terminal device
- Commissioning Wizard





The applications for iOS and Android create intuitive operation the same as the PC application. The compact 4 MW DIN rail can be parameterized via the MyBuildings portal, thereby making it completely future-oriented for future system extensions and modifications. In addition: Many useful services (e.g. external access to the KNX system or a notification service) through connection to the MyBuildings portal Cloud are very easy to implement. Whether in a single residential unit, in a large apartment block or at the workplace – the Busch-SmartTouch® intelligently controls the home automation. Either locally or while travelling. With the Busch-SmartTouch® you have complete access at all times.

Works with SONOS

Busch-VoiceControl® KNX
Control completely by voice

The building of the future recognises the needs of its users. It reacts individually – automatically and without being asked to do so.

—
01 Busch-VoiceControl® KNX

—
01

- Approved solution for three systems
- Integration of lighting, heating and blind control systems
- All three voice commands can be used simultaneously
- Control up to 150 functions
- HomeKit certification allows control of the KNX system from other Home-Kit devices, such as the iPad, iPhone and Apple TV

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

ABB i-bus® KNX

Visualisation, Display and Signalling

RT/U30.0.1-825

ABB RoomTouch® 5", SM

Freely programmable KNX touch display as a control, notification and operation center for your room. For the display and operation of the following KNX standard functions: switching, dimming, slider, blind, RGBW LED control, step switch, RTC, scene switch, display element, audio control and Split Unit control. With scene and logic functions and time programs. Displays alerts and malfunctions. Programmable with up to max 30 functions.
External power supply: 20 – 32 V DC (SELV). The freely programmable touch display (5") comes with a HD resolution of 720 x 1280 and a view angle of 160°.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white glass	–	RT/U30.0.1-811	2TMA200050W0007		0.24	1
black glass	–	RT/U30.0.1-825	2TMA200050B0005		0.24	1

BOX/U5.1

ABB RoomTouch® Installation Box, FM

For flush mounting and hollow panel mounting of the ABB RoomTouch® 5" RT/U30.0.1-8xx. Windproof.
Dimensions flush mounting (H x W x D): 121 mm x 58 mm x 50 mm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
box	–	BOX/U5.1	2TMA200160B0003		0.10	1

6136/07-811-500

Busch-SmartTouch® 7", SM

Free programmable KNX touch display as a control, notification and operation center for the entire house. Works as a video indoor station with the ABB-Welcome Door Entry System. During the conversation a picture of the visitor can be taken and stored in the picture memory. For the display and operation of the following KNX standard functions: switching, dimming, slider, blind, RGBW LED control, step switch, RTC, scene switch, display element, audio control. With scene and logic functions, presence simulation and time programs.
Displays alerts and malfunctions. Available with induction loop for connecting to hearing aid devices. Programmable with up to 16 functions per page.
External power supply: 20 – 32 V DC (SELV) or through the ABB-Welcome bus. The freely programmable touch display (7") comes with a resolution of 1024 x 600.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white glass	–	6136/07-811-500	2CKA006136A0205		0.94	1
black	–	6136/07-825-500	2CKA006136A0206		0.94	1

ABB i-bus® KNX

Visualisation, Display and Signalling

6136/27-811-500

Surface Mounting Frame for SmartTouch 7"

Surface mounting frame for mounting the Busch-SmartTouch 7" 6136/07-8xx-500 on:

- standard flush mounted wall box VDE & BS
- flush mounted installation box (6136/UP) or
- to be mounted directly on the wall
- to be mounted on the ABB-Welcome table stand

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	6136/27-811-500	2CKA006136A0209		0.358	1
black	–	6136/27-825-500	2CKA006136A0210		0.358	1

6136/07 UP-500

Busch-SmartTouch Installation Box, FM

For flush mounting and hollow panel mounting of the Busch-SmartTouch 7" 6136/07-8xx-500. Windproof. Dimensions flush mounting (H x W x D): 152 mm x 235 mm x 60 mm. Dimensions hollow wall (H x W x D): 146 mm x 227 mm x 50 mm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6136/07 UP-500	2CKA006136A0212		0.549	1

CP-D 24/2.5

Power Supply, 24 V DC, 2.5 A, MDRC

For Busch-SmartTouch® 7" 6136/07-8xx-500, Busch-priOn® Power Bus Coupler 6120/13-500 and Busch-ControlTouch® 6136/APP-500.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	CP-D 24/2.5	2CDG120037R0011		0.252	1

ABB i-bus® KNX

Visualisation, Display and Signalling

6136/APP-500

Busch-ControlTouch® KNX Application

Busch-ControlTouch is a visualisation server for mobile end devices (iOS and Android) and Window computers. Not only to visualise and control your complete KNX installation but also:

- Sonos Bridge with a complete integration of the Sonos API (Works with Sonos) (NEW)
- Can be used as a Bridge between KNX and Philips Hue
- Visualisation of your IP camera's, with support of pan, till and zoom
- Unlimited time programs and scenes and they can be edited by the end user
- Integrate Webpages into your design for maybe weather information or traffic information
- Alarm messages can be sent as email or as a push notification (including a snapshot of an IP camera) but can also be heard on your Sonos System (NEW)
- Can be used as a UPnP bridge, so you can control e.g. your UPnP enabled Receiver via KNX
- Statistics and charts support with 5 period types (hour, day, week, month, year)
- Unrestricted personal profiles with an unlimited number of pages and controls
- Easy to use presence simulation, that can be edit by the end customer and with no limitation of participants
- Visualisation functions: dimmer, RGB(W) control, switch, blind and shutter, heating/ cooling, air conditioning, scenes, button row (max. 6 buttons), IP camera, status display, value transmitter, Sonos control, and UPnP control
- Has a flexible and unrestricted Script Editor for more complex logical functions based on LUA (NEW)
- Automatic cloud backups including scenes, time programs and presence simulation data (NEW)
- Complete commissioning is online and live. You can do it from everywhere and you don't need to drive to the customer
- First commissioning with Wizard support (NEW)
- Loading the software into the device can be done without Internet
- Device has a direct KNX interface or can communicate via an IP Interface via the bus
- Visualisation as a list view and/or with background pictures with round, rectangle or transparent controls (NEW)
- Secured remote access via our Cloud solution (For this function, you pay a monthly fee)
- Functional extensions and updates via firmware and software updates.

Security:
This device supports extensive security options to protect your installation and privacy. All communication between the app your installation and our cloud is encrypted and always based on the highest possible standards. The communication between the different parts always requires a username and password. The end user can also protect pages with a pin code, Touch ID or Face ID. Additionally end users can set up local users with access rights to shield certain parts of the home installation or allow them access only to specific parts.
External power supply: 5-36 V DC (SELV)
Control element: freely programmable touch surfaces
Bus voltage: 24 V
Protection class (Device): IP 20
Temperature range (Device): 0 °C to 70 °C
Dimensions: (L x W x D): 90 mm x 72 mm x 60 mm, Module width: 4 MW

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	4	6136/APP-500	2CKA006136A0202		0.254	1

ABB i-bus® KNX

Visualisation, Display and Signalling

VCO/S 99.1

Busch-VoiceControl, MDRC

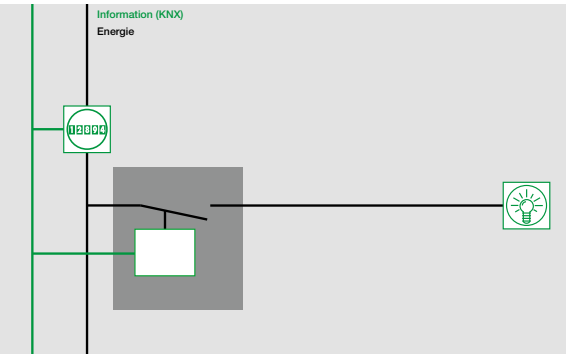
A certified voice control gateway for the combination of a KNX system with a voice control system. Acts as a gateway and guarantees that you can operate the KNX components in a house and query their status using Apple, Amazon or Google devices. This component makes it possible to operate the lighting, blind or room temperature controller using simple voice control. Up to 150 functions can be used. Busch-VoiceControl® is an official certified Home-Kit accessory. Complete web-based commissioning. Compatible with ABB i-bus® KNX. External power supply: 5-36 V DC (SELV).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	4	VCO/S 99.1	2CKA006136A0217		0.254	1

ABB i-bus® KNX
Energy Management

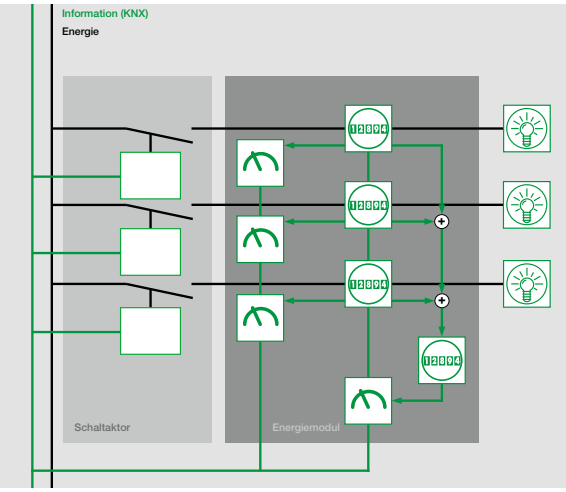
ABB offers various solutions for decentral energy measurement on the basis of the KNX standard.

Version 1



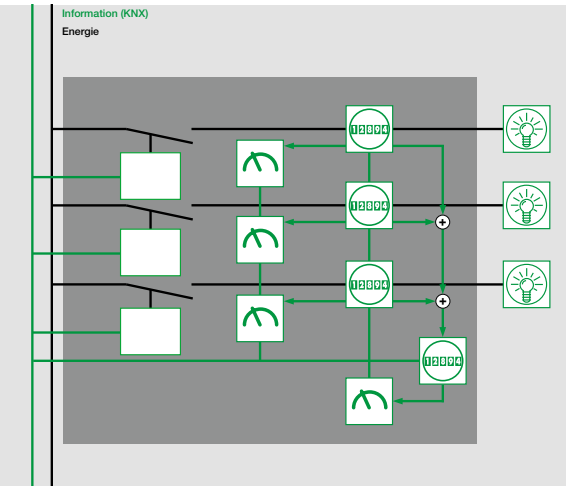
Electronic energy meters make the current energy values available on the KNX bus system in conjunction with a KNX interface. The measured data can be intermediately stored, evaluated and visualized from here.

Version 2



The Energy Module can record the energy consumption for the individual devices. It is used particularly when upgrading existing KNX systems and wherever energy measurement is required without switch functions. It facilitates a detailed and transparent insight into the energy consumption of a building. The current meter values can be sent and evaluated.

Version 3



The Energy Actuator facilitates control of the connected consumer loads via the ABB i-bus® KNX. For each of the three switch channels, the individual consumption can be measured in the same way as for the Energy Module. For every channel, the proven functionality of the ABB i-bus® KNX Switch Actuators are available.

Intermediate meter for electrical energy Electrical consumer (load) Energy meter

ABB i-bus® KNX

Energy Management

	Energy Module EM/S 3.16.1	Energy Actuator SE/S 3.16.1	Meter Interface Module ZS/S 1.1 [1]
General			
Supply voltage	KNX	KNX	KNX
Type of installation	DIN-Rail	DIN-Rail	DIN-Rail
Module width (18 mm)	4	4	2
Number of channels	3	3	–
Rated current I_n	16/20 A	16/20 A AX (C-Load)	–
Measuring range Current	0.025...20 A	0.025...20 A	Depending on meter connected [2]
Measuring range Voltage	95...265 V	95...265 V	Depending on meter connected [2]
Measuring range Frequency	45...65 Hz	45...65 Hz	50/60 Hz ± 5 %
Measurement values			
E – Active energy [kWh]	■	■	■
U – Voltage [V]	■	■	■
I – Current [A]	■	■	■
F – Frequency [Hz]	■	■	■
P – Active power [W]	■	■	■
Q – Reactive power [var]	–	–	■
S – Apparent power [VA]	■	■	■
PF – Power factor	■	■	■
CF – Crest factor	■	■	–
General functions			
Function Switch	–	■	–
Function Time	–	■	–
Function Scene	–	■	–
Function Logic	–	■	–
Function Priority	–	■	–
Load control with Energy Actuators as Master (up to ten SE/S 3.16.1 as slaves)	■	■	–
Load control as Slave	–	■	–
Sending delay (for value request)	–	–	■
Commissioning and diagnostic function			
Control and diagnosis via ABB i-bus® Tool	■	■	–

■ = Function is supported

– = Function is not supported

1) = In combination with ABB Energy Meter A and B series

2) = See also Electricity Meters Overview

ABB i-bus® KNX
Energy Management

SE/S 3.16.1

Energy Actuator, 3-fold, 16/20 AX, MDRC

Records the energy consumption of the connected electrical loads in the load circuit. Various electrical variables can be monitored and load peaks can be limited by simple load control. The 3 output channels can be manually operated and display the current switching state. The Energy Actuator can switch resistive, inductive and capacitive loads The switching capacity corresponds to the SA/S X.16.6.1.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	4	SE/S 3.16.1	2CDG110136R0011		0.3	1

EM/S 3.16.1

Energy Module, 3-fold, 16/20 AX, MDRC

Measures energy consumption and various electrical parameters in the terminal current. Active power, Current, Voltage and Frequency can be monitored via threshold values and peak loads can be limited through a simple load control. The measured values are provided via ABB i-bus® KNX.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	4	EM/S 3.16.1	2CDG110148R0011		0.2	1

ZS/S 1.1

Meter Interface Module, MDRC

It records consumption and measured values of the electrical energy consumption meters. Using an infra-red interface, the ABB energy meter types of the A- and B-series are incorporated. The information and data which is read can be used, for example, for cost centre accounting, energy optimisation, monitoring of installations and visualisation.

The following values are available (depending on the meter type):

Meter reading		Currents	L1, L2, L3, N
Active energy	Tariff 1-4, total	Phase angle voltage	L1, L2, L3, total
Reactive energy	Tariff 1-4, total	Phase angle current	L1, L2, L3, total
		Quadrant	L1, L2, L3, total
Power values		Mains frequency	
Active power	L1, L2, L3, total		
Reactive power	L1, L2, L3, total	**Other**	
Apparent power	L1, L2, L3, total	Transformer ratio	Read CT and VT
Phase angle power	L1, L2, L3, total	Power failures	Send and delete
Power factor	L1, L2, L3, total	Tariffs	Read and changeover
		Status information	Send and read
Instrument values		Communication monitoring	
Voltages	L1-N, L2-N, L3-N, L1-L2, L2-L3, L1-L3	Intermediate meter	Read and reset

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	ZS/S 1.1	2CDG110083R0011		0.13	1

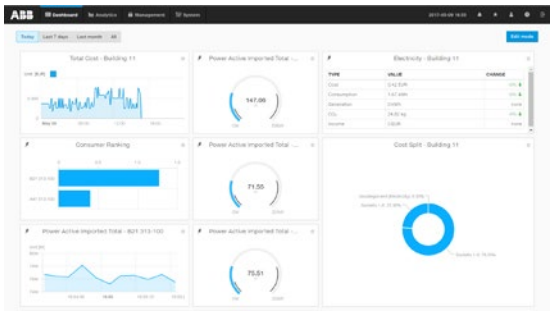
Energy Management
ABB EQmatic

With the new ABB EQmatic series, ABB offers a solution for storing, displaying and analyzing the consumption data of electricity, gas, water and heat meters. Thus, energy flows and costs in the building can be monitored and made transparent.

User interface offers helpful features
The commissioning, evaluation and analysis of the data are carried out via the web-based graphical user interface. For a detailed monitoring the devices offer several analysis functions such as historical data analysis, benchmark functions, cost analysis, instantaneous values etc.

Increased Energy efficiency
This serves to increase energy efficiency and as a basis for further operational optimizations, based on the energy management standard ISO 50001.

High flexibility
Various export functions such as scheduled reports via FTP or E-Mail are available for further data processing.
The data sharing options via Modbus TCP and API allow the integration into supervisory systems.



—
Intuitive web-based user-interface to access meters easily. It can be flexibly configured to meet specific demands. For a quick overview, metering data and analytic charts can be individually configured and arranged here.

ABB i-bus® KNX

Energy Management

QA/S 1.16.1

Energy Analyzer, KNX, 16 Devices, MDRC **NEW**

Compact and web-based stand-alone device for energy management applications. For monitoring, logging, displaying and analyzing consumption data of up to 16 electricity, gas, water or heat meters via KNX TP. In addition measured values such as temperature, humidity, etc. can be processed and displayed. The alarm function allows early warning (e.g. via E-mail) if any value exceeds defined limits. The user interface provides graphical analysis functions, e.g. dashboard, historical data, instantaneous values, benchmark functions, cost allocation according to consumer groups and more. In order to increase energy efficiency, defined loads can be selectively switched off with the load control function if they exceed a configurable load limit. For further processing data can be exported cyclically (e.g. every month) via E-mail or upload to FTP server. Several data sharing options (e.g. Modbus TCP, Rest API) allow the communication with other systems.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	4	QA/S 1.16.1	2CDG110224R0011		0.19	1

ABB i-bus® KNX
Energy Management

QA/S 3.16.1

QA/S 3.64.1

Energy Analyzer, M-Bus, MDRC*

Compact and web-based stand-alone devices for energy management applications.
For monitoring, logging, displaying and analyzing consumption data of up to 16 or 64 electricity, gas, water or heat meters via M-Bus. Automatic detection for ABB EQ meters (A/B-Series). Access to the device via web browser. The user interface provides graphical analysis functions, e.g. dashboard, historical data, instantaneous values, benchmark functions, cost allocation according to consumer groups and more. For further processing data can be exported cyclically (e.g. every month) via E-mail or upload to FTP server.
Several data sharing options (e.g. Modbus TCP, Rest API) allow the communnication with other systems.
* Pure M-Bus Master, no data routing from M-Bus to KNX

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
M-bus, 16 Devices	4	QA/S 3.16.1	2CDG110226R0011		0.15	1
M-bus, 64 Devices	4	QA/S 3.64.1	2CDG110227R0011		0.15	1

QA/S 4.16.1

QA/S 4.64.1

Energy Analyzer, Modbus, MDRC*

Compact and web-based stand-alone devices for energy management applications.
For monitoring, logging, displaying and analyzing consumption data of up to 16 or 64 electricity, gas, water or heat meters via Modbus RTU. Automatic detection for ABB EQ meters (A/B-Series). Access to the device via web browser. The user interface provides graphical analysis functions, e.g. dashboard, historical data, instantaneous values, benchmark functions, cost allocation according to consumer groups and more. For further processing data can be exported cyclically (e.g. every month) via E-mail or upload to FTP server. Several data sharing options (e.g. Modbus TCP, Rest API) allow the communnication with other systems.
* Pure Modbus RTU Master, no data routing from Modbus RTU to KNX

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Modbus RTU, 16 Devices	4	QA/S 4.16.1	2CDG110228R0011		0.15	1
Modbus RTU, 64 Devices	4	QA/S 4.64.1	2CDG110229R0011		0.15	1

ABB i-bus® KNX

Safety and Monitoring

SMB/S 1.1

Fault Monitoring Unit, MDRC

It is used to detect and manage up to 100 fault messages which are processed within the unit and can be forwarded to a display unit. Furthermore, an optical and an acoustic collective status signal is provided. Messages can be acknowledged and data losses can be reported. The devices support message formats to DIN 19 235: messages with continuous lighting, new value messages with simple flashing light, initial value messages with simple acknowledgement, motor messages. Current values can be centrally scanned.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	SMB/S 1.1	GHQ6310085R0111		0.12	1

EUB/S 1.1

EIB Monitoring Unit, MDRC

Monitors up to 100 bus devices in KNX systems, which can be divided into 5 groups. The devices are monitored to ensure their presence and minimum functionality (send and receive). Monitoring can be undertaken based on the physical address or the group address. A total of four different monitoring modes are available.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	EUB/S 1.1	2CDG110066R0011		0.12	1

BDB/S 1.1

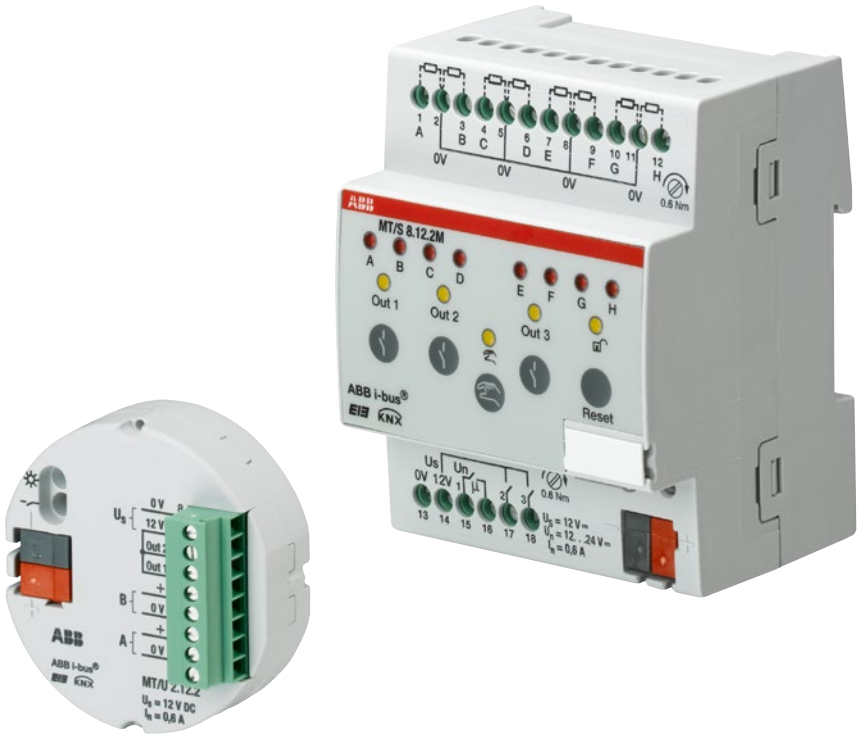
Data Logging Unit, MDRC

It detects local operation cycles and operating hours to plan the maintenance or durability evaluation of the devices. For each of the 35 channels to be monitored, limit values can be set and a message sent if this limit is exceeded. The logging of operating hours can be predetermined for the total or remaining time. These values can be modified via communication objects.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	BDB/S 1.1	2CDG110067R0011		0.12	1

ABB i-bus® KNX

Security – Alarm System KNX



The compact solution for security applications – the Security Terminals
The Security Terminal provides a compact security solution for KNX applications for detection and signalling of intrusion, personal attack and technical hazards. They are used as the interface between the security technology sensors and KNX.

Depending on the configuration, the devices feature 2, 4 or 8 inputs – so-called detector circuits or zones. They are used for monitoring connected passive detectors (e.g. magnetic contacts, glass break sensors, etc.) to the ABB i-bus® KNX as well as for connection of floating contacts in applications with enhanced security requirements.

Through the connection of security technology and KNX, the detectors employed can, in addition to the security functions, also be used for heating control (e.g. window contact signal for control of the heating valve) or lighting control (e.g. central switch off of the lighting when the alarm logic is set).

The Security Terminals can be used as autonomous systems with the integrated alarm logic, in conjunction with the Security Module SCM/S or with an Intrusion Alarm Panel GM/A 8.1 or L240.

The application program offers several functions for security applications, such as

- Direct and delayed setting
- Internal setting with occupancy and external setting when absent
- Setting of the connected detector types
- Reset input and setting input
- Detector monitoring
- Zones (detector circuits) can be switched off
- Different types of alarms
- Setting for freely programmable relay outputs, e.g. for direct control of signalling devices.

ABB i-bus® KNX

Security – Alarm System KNX

	Standard Security				Professional Security
	MT/U 2.12.2	**MT/S 4.12.2M**	**MT/S 8.12.2M**	**SCM/S 1.1**	**GM/A 8.1**
General					
Supply voltage	KNX	KNX	KNX	KNX	100 – 230 V AC
Auxiliary power supply	12 V DC	12 V DC	12 V DC	–	–
Type of installation	FM	DIN-Rail	DIN-Rail	DIN-Rail	SM
Module width (18 mm)	–	4	4	2	–
Inputs (extendable via bus)	2	4	8	0 (64)	8 (344)
Outputs	2 x Relais	3 x Relais	3 x Relais	1 x Relais	4 x Relais 4 x Signaling devices
Functions					
Connection of conventional security sensors/devices	■	■	■	–	■
Connection of 4-wired security bus sensors/devices	–	–	–	–	■
Event log	–	–	–	■ (250)	■ (10,000)
Remote alarming	Optional via KNX	Optional via KNX	Optional via KNX	Optional via KNX	Integrated E-Mail Voice messages
Back-up power supply					
Optional via NTU/S 12.2000.1 and SU/S 30.640.1	■	■	■	–	–
Optional via SU/S 30.640.1	–	–	–	■	–
Integrated back-up power	–	–	–	–	■
Certifications					
VdS	–	–	–	–	Class C
EN 50 131/IEC 62 642	–	–	–	–	Grade 3
Commissioning and diagnostic functions					
Commissioning and diagnostic via webserver	–	–	–	–	■

■ = Function is supported

– = Function is not supported

ABB i-bus® KNX

Security – Alarm System KNX

SCM/S 1.1

Security Module, MDRC

The module provides the necessary logic functions to link the various KNX devices (e.g. zone terminals) to a security system. Up to 64 different zones can be evaluated via communication objects. Arming, operation and display are also implemented using communication objects. The device has a freely programmable relay output for connection of a signal encoder. An uninterruptable KNX power supply with battery back-up is recommended for security function buffering on mains failure.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	SCM/S 1.1	2CDG110024R0011		0.13	1

MT/S 8.12.2M

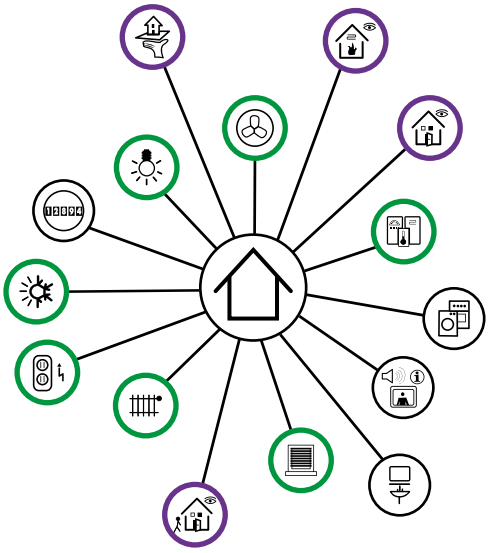
Security Terminal

They are used as the interface between the security technology sensors and the KNX.
The device features inputs, so-called zones. They are used for monitoring connected passive detectors, e.g. magnetic contacts and/or glass break sensors on the ABB i-bus® KNX and/or for connection of floating contacts in applications with enhanced security requirements.
The device can be used as a system with autonomous alarm logic or in combination with the Security Module SCM/S or an Intrusion Alarm Panel. The device requires an external 12 V DC SELV auxiliary power supply, (e.g. NTU/S 12.2000.1).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
4-fold, MDRC	4	MT/S 4.12.2M	2CDG110109R0011		0.19	1
8-fold, MDRC	4	MT/S 8.12.2M	2CDG110110R0011		0.19	1
2-fold, FM	–	MT/U 2.12.2	2CDG110111R0011		0.08	1

ABB i-bus® KNX

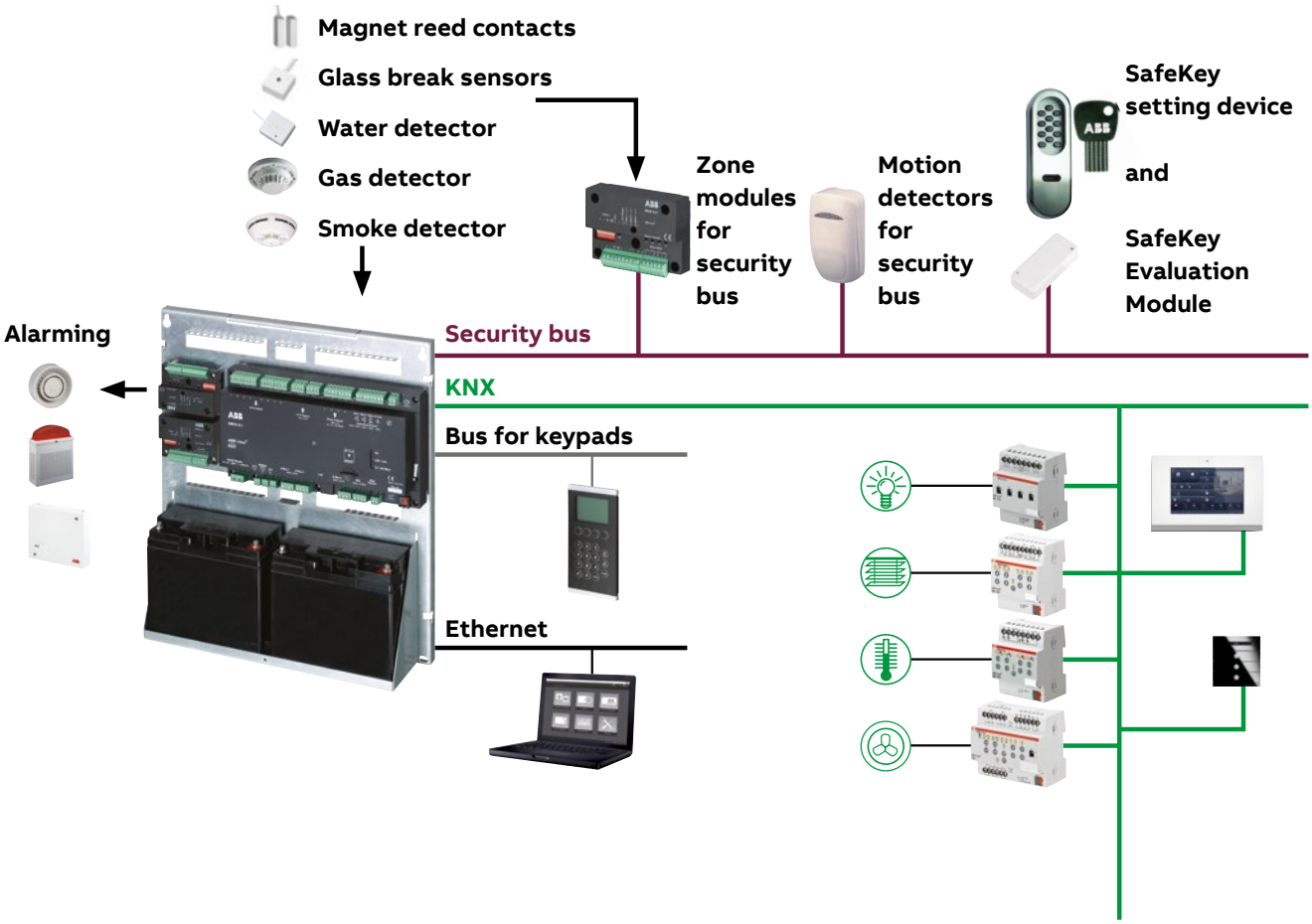
Security – Alarm System GMA



Professional alarm system for KNX experts
With the 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 system is the perfect solution for projects ranging from simple to high security requirements.

ABB i-bus® KNX

Security – Alarm System GMA



A complete product product portfolio: One system – all interfaces
To fulfill the project requirements ABB provides the user besides the 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.

ABB i-bus® KNX

Security – Alarm System GMA

KNX Security Panel without cover, integrated zone modules and batteries

Ethernet connection for programming, diagnostics and operation via a standard webbrowser

Direct inputs for security sensors

Keypads

Internal, external or remote alarming

Security bus for security sensors, zone modules and setting devices

KNX interface to display alarm states via displays of building automation and to control automatic building functions with support of security sensors.

The KNX Security Panel provides all needed system interfaces: An ethernet connection is used for programming, diagnostics and operation via a standard webbrowser as well as integration into the building network. The security sensors will be connected directly to the panel inputs or via the security bus, where the setting device for the system is also connected. Furthermore the panel provides interfaces for the also newly developed keypads and for internal, external or remote alarming. Finally the integrated KNX interface allows on the one hand to display alarm states via displays of building automation and on the other to control automatic building functions with support of security sensors.

ABB i-bus® KNX

Security – Alarm System GMA

GM/A 8.1

KNX Security Panel, SM

for the protection of small to medium residential or commercial properties against intrusion and technical faults. The Security Panel is suitable for up to five logical areas. It has 8 integrated zones for detectors, a Security Bus for Bus-detectors, Bus-Zone Modules and Setting devices, Ethernet connection (RJ45) for programming, operating and displaying system status via Web-Browser and an integrated KNX interface. The Security Panel GM/A 8.1 complies with the requirements to VdS classes A, B and C, to the European Standard EN 50131, Grade 1 to 3 and to ISO/IEC 62642 Grade 1 to 3.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	GM/A 8.1	2CDG110150R0011		10.5	1
Off the wall tamper contact	–	WA/Z 1.1	2CDG110174R0011		0.2	1

SAK17

Sealed Lead Acid Battery, 12 V DC, 18 Ah

Sealed lead acid battery for power backup up of alarm systems. Maintenance free.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	SAK17	GHV9240001V0013		6.487	1

BT/A 1.1

BT/A 2.1

Keypad for GM/A 8.1

Used to operate and display the information of the system states of the GM/A 8.1 KNX Security Panel. System messages are displayed on a four-line LCD display. The multifunction and special keys mean that all the system functions can be operated easily. Safety-relevant functions are protected by a user PIN. Fife Keypads can be connected to each Security Panel. There is no need for an external voltage supply, the keypads are supplied via the Keypad-Bus. The device can be used in systems with increased system requirements according to VdS Class A, B and C, DIN VDE 0833 Grade 1, 2 and 3 and EN 50131/IEC 62642 Grade 1, 2 and 3.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
black	–	BT/A 1.1	2CDG280001R0011		0.5	1
white	–	BT/A 2.1	2CDG280002R0011		0.5	1

ABB i-bus® KNX

Security – Components

MG/A 4.4.1

Zone Module, 4-fold

to connect to Security Panel GM/A 8.1 via the Security-Bus. For expansion of the Security-Panel by 4 detector zones. Used for connection to the exterior perimeter detectors such as magnetic reed contacts and passive glass break sensors. The module has 4 zones to which several detectors can be connected. The status of each zone is displayed with a status LED. The Zone Module delivers the control signals and the supply voltage for the external detectors. There is no need for an external voltage supply, the Zone Modules are supplied via the Security-Bus.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
to mount in the Security Panel housing	–	MG/E 4.4.1	2CDG110178R0011		0.1	1
in a surface mounting housing for installation in the building	–	MG/A 4.4.1	2CDG110186R0011		0.1	1

IR/XB

Passive IR Bus Motion Detector, 15 m

For direct connection to the security-bus of the Intrusion Alarm Panel GM/A 8.1. The motion detector with passive infrared technology is VdS class B / EN Grade 2 certified. It facilitates monitoring of an area with an infrared range of up to 15 m.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
VdS B/EN Grade 2	–	IR/XB	2CDG230023R0011		0.15	1

EIM/XB

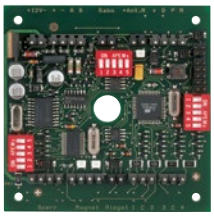
Dualtech Bus Motion Detector, 15 m

For direct connection to the security-bus of the Intrusion Alarm Panel GM/A 8.1. The Dual-Motion Detector combines proven passive infrared technology with temperature-independent microwave technology. The combination of both functional principles results in a detector featuring high immunity to false alarms, even with unfavourable ambient conditions, and which still has high detection security. The detector is VdS class B / EN Grade 2 certified. It facilitates monitoring of an area with an infrared range of up to 15 m. For use in EU countries only.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
VdS B/EN Grade 2	–	EIM/XB	2CDG230025R0011		0.15	1

ABB i-bus® KNX

Security – Components



L240/BS

SafeKey Evaluation Module

For connection of the SafeKey components as well as all components required for a setting door (magnetic contacts, lock bolt switching contact, bolt lock, internal siren). For direct connection to the security-bus of the Intrusion Alarm Panel GM/A 8.1. The management of the electronic keys from the SafeKey range is undertaken completely via the WebUI of the Security Panel GM/A 8.1.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	L240/BS	GHQ3050031R0001		0.13	1

SAD/GAP

Distribution Enclosure, SM

For installation of the Bus Module L240/BS.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	SAD/GAP	2CDG220021R0011		0.131	1

SCS

SafeKey Chipkey

It is an electronic carrier medium for setting / unsetting via a SafeKey Wall Reader. A SafeKey Chipkey can be authorized for any number of different SafeKey systems with different levels of authorization.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	SCS	GHQ3050027R0001		0.02	1

ABB i-bus® KNX

Security – Components

WEL/A, ES

SafeKey Wall Reader, SM

For setting/unsetting with the Evaluation Module L240/BS. The unit is actuated by inserting the electronic SafeKey chipkey. The SafeKey Wall Reader WEL is equipped with the key reader and an acknowledgement buzzer. VdS class C.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	WEL/A, ES	GHQ3050023R0001		0.38	1

WELT/A, ES

SafeKey Wall Reader with Keypad, SM

For setting/unsetting with the Evaluation Module L240/BS. The unit is actuated by inserting the electronic SafeKey chipkey and/or code. The SafeKey Wall Reader WELT is equipped with the key reader, keypad and an acknowledgement buzzer. VdS class C.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	WELT/A, ES	GHQ3050024R0001		0.45	1

ESPE/M

Electrical Mini Bolt Lock

The ESPE/M Mini Bolt Lock is used together with an intrusion alarm system to implement the inevitability condition. The motorized bolt lock additionally locks the door to the set area, preventing unintentional opening of the door when the intrusion alarm system is set. The ESPE/M Mini Bolt Lock is connected to the L240/BS Evaluation module for GM/A 8.1 KNX Security Panel.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	ESPE/M	2CDG270010R0011		0.13	1

ABB i-bus® KNX

Security – Components

EIM/D

Dual Ceiling Detector

Operates according to the proven detection principle of infra-red technology and microwave over 360°. The range of the infrared component can be adapted via the mounting height while the range of the microwave can be adjusted separately using a jumper. The detector is fitted with a walk test LED. Colour: RAL 9010 pure white. For use in EU countries only.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	EIM/D	2CDG230039R0011		0.14	1

ABB i-bus® KNX

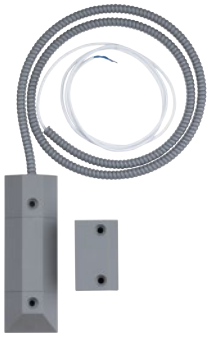
Security – Components

MRS/W

Magnet Reed Contact Set

For opening surveillance of windows and doors, complete for bolting or drilling. Contents: 1 magnet, 1 reed contact with 4.0 m connection cable LIYY 4 x 0.14 mm², 2 housings, 2 spacer plates, 2 flanges and 4 anti-magnetic fixing screws. VdS class B.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	MRS/W	GHQ3201972R0001		0.1	1
brown	–	MRS/B	GHQ3201972R0002		0.1	1
Saver Set (20 pcs.), white	–	VMRS/W	GHQ3201972R0011		1.99	1
Saver Set (20 pcs.), brown	–	VMRS/B	GHQ3201972R0012		1.99	1



MC-C 1.1

Rolling Door Reed Contact

NEW

The Rolling Door Reed Contact Set is mounted mainly on rolling, sliding, and tilting doors.
The contact housing is mounted on the ground (a flat support surface is required).
Only screws made of anti-magnetic material may be used for mounting.
Due to the weatherproof and mechanically stable design of the contact housing, the circuit is mostly protected against damage when rubber-tired vehicles drive over it.
The 4-wire cable is protected by a plastic-coated metal hose.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
VdS Class B, EN Grade 2	–	MC-C1.1	2CDG250006R0011		0.3	1

SPGS/W

Passive Glass Break Detector

Passive Glass Break Detector evaluates typical glass-breakage noises. VdS class B.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	SPGS/W	GHV9220004V0009		0.11	1
Loctite Adhesive for mounting Glass Break Detectors	–	LKS	GHQ4001906R0001		0.06	1
Mechanical Tester for SPGS	–	GP2	GHV9220004V0004		0.1	1

ABB i-bus® KNX

Security – Components

WRK/W

Lock Bolt Switching Contact with cable

For installation in the strike plate, for lock monitoring on doors. Water-tight IP 67, with 2.5 m connection cable LIYY 3 x 0.14 mm². VdS class C.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	WRK/W	2CDG250003R0011		0.03	1

VSUE

Window Lock Monitoring Contact

Lock monitoring is carried out with a special magnet and a reed contact. The magnet is mounted on the push rod of the window sash while the reed contact is mounted on the frame. The connection cable LIYY 4 x 0.14 mm² is 4 m in length. VdS class C.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	VSUE	GHV9210018V0022		0.09	1

ND/W

Emergency Call Button, white

For manual alarm tripping. Complies with the police regulations since it features permanent trip recognition, momentary-contact function, with cover contact. Surface mount version. Colour: white. VdS class C.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Surface mounting	–	ND/W	GHQ7132443R0011		0.15	1
Flush mounting	–	NDU/W	GHQ7132443R0021		0.15	1

NDA/W

Cover Plate for Emergency Call Button

Used primarily in the banking sector or other institutions, where unintentional alarm triggering is possible due to public access.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	NDA/W	GHQ7132443R0004		0.03	1

ABB i-bus® KNX

Security – Components

TD-C 1.1

Gas Detector with Relay Contact NEW

The Gas Detector is used for monitoring gas leakage of domestic and commercial rooms. It detects gases like propane, methane and butane as well als acetylene, city gas and natural gas. The detector can be connected to ABB intrusion and fire alarm control panels, as well as ABB i-bus® binary inputs via a potential-free relay contact. Suitable as a stand-alone device. An external power supply with 12-24 V DC is required.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	TD-C 1.1	2CDG220023R0011		0.167	1

SWM 4

Water Detector for Detector Groups

A resin-encapsulated water detector with gold-plated Termipoint pins, detects water ingress, e.g., pipe fractures, ingress of groundwater and sewage, water damage caused by washing machines and dishwashers etc. before the damage becomes too expensive.
For operation directly on detector circuits of intrusion alarm panels or security terminals.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	SWM 4	GHQ4030001R0004		0.16	1

SWM 4/RN

Water Detector with Relay, 12 V

Features a potential free changeover contact output, an LED parallel output and a LED display. The detector resets itself automatically when the affected area dries out. The device draws its power from an external 10 ... 23 V DC voltage source.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	SWM4/RN	GHQ4030001R0012		0.23	1

ABB i-bus® KNX

Security – Components

FC650/O

Optical Smoke Detector

Optical smoke detector in threshold alarm technology that detects smoke according to the scattered-light principle The detectors feature an alarm indicator on the detector head that is visible from all angles, and which can be be triggered with a permanent magnet for test purposes. A detector base is provided for mounting and cable connection purposes into which the detector is simply screwed in via the bayonet connection. Each detector is equipped with an alarm LED, which displays the stored alarm in the event of an a alarm Detector/base diameter: 110 mm. VdS approved.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	FC650/O	2CDG430079R0011		0.09	1

FC650/TMAX

Thermal Maximum Detector

Static Heat Detector in threshold alarm technology, – trigger temperature 78 °C. The detectors feature an alarm indicator on the detector head that is visible from all angles, and which can be be triggered with a permanent magnet for test purposes. A detector base is provided for mounting and cable connection purposes into which the detector is simply screwed-in via the bayonet connection. Each detector is equipped with an alarm LED, which displays the stored alarm in the event of an a alarm. Detector/base diameter: 110 mm. VdS approved.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	FC650/TMAX	2CDG430081R0011		0.09	1

FC600/BREL

Relay Base, 12/24 V

Enables system-independent connection of the FC650 series fire detector to systems or devices that are not specifically designed for this detector technology. Examples include Intrusion Alarm Panels, KNX Security Terminals, elevator controls or other signal processing equipment. The detector base must be supplied by either a 12 V or a 24 V DV voltage supply. A floating 30 V DC/1 A changeover contacting is provided for transferring an alarm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	FC600/BREL	2CDG430051R0011		0.08	1

ABB i-bus® KNX

Security – Components

6833/01-84-500

Busch-Smoke Alarm® ProfessionalLine

For early detection of smouldering fires and open fires with smoke development indoors according to the photooptical measurement principle (Tyndall). With installed Lithium battery. Battery life min. 10 years. With test button and muting. Can be networked with up to 12 detectors using the radio module. Can be networked via 2-wire twisted pair cable with up to 12 detectors. Acoustic alarm: installed horn (85 dBA). Cyclic functional test. Including attachment material – VdS certified. Conform to EN 14604 studio white.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
not networkable	–	6833-84-500	2CKA006800A2720		0.154	1
networkable	–	6833/01-84-500	2CKA006800A2721		0.268	1

6835/01-84-500

Busch-Heat Alarm ProfessionalLine

Signal triggered at over 57 °C. With installed Lithium battery. Battery life min. 10 years. With test button and muting. Can be networked via 2-wire twisted pair cable with up to 12 detectors. Can be networked with up to 12 detectors using the radio module. Acoustic alarm: installed horn (85 dBA). Cyclic functional test. Including attachment material – VdS certified. Conform to EN 14604.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
studio white	–	6835/01-84-500	2CKA006800A2723		0.268	1

6827-84

Busch-Smoke Alarm® Radio Module

For wireless networking of multiple Busch smoke alarms® / heat alarms.
With installed Lithium battery. Battery life min. 10 years. Radio frequency: 868 MHz.
Range: max. 100 m outdoors, max. 30 m indoors.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6828	2CKA006800A2514		0.268	1

ABB i-bus® KNX

Security – Components

6829-84

Busch-Smoke Alarm® Relay

For connecting external systems, e.g. KNX. Relay contact, floating changeover contact 230 V~ max. 5 A. Cable connection: up to 2 x 2 x 1.5 mm². With installed radio module. Rated voltage: 230 V~.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
studio white	–	6829-84	2CKA006800A2515		0.268	1

6824-84

Busch-Smoke Alarm® Remote Control

For service purposes. With muting, test and search function.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
studio white	–	6824-84	2CKA006800A2516		0.268	1

SSS

Indoor Siren, 12 V DC

Electronic solid-state siren with intermittent tone for alarm purposes in indoor installations. External dimensions: ø x H = 90 x 37 mm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	SSS	GHV9270001V0001		0.17	1

SSF/G

Siren in Enclosure

An aluminium protective housing with additional protective enamel coating. Protected against sabotage by a case tamper contact. The alarm inputs are wired onto a terminal strip. With fixing screw (M4) for potential equalization on the base.
Dimensions: H x W x D = 200 x 205 x 88 mm; Color: RAL 9002 Environmental class III to VdS.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	SSF/G	GHQ3050017R0001		1.64	1

SSF/GB

Siren with Strobe

An aluminium protective housing with additional protective enamel coating. Protected against sabotage by a case tamper contact. The alarm inputs are wired onto a terminal strip. With fixing screw (M4) for potential equalization on the base.
Dimensions: H x W x D = 258 x 205 x 88 mm; Color: RAL 9002 Environmental class III to VdS.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	SSF/GB	GHQ3050018R0001		1.81	1

Notes

Bright prospects for all

We bring energy to buildings and the people within them – whether these are modern single residential units, all kinds of hotels or ground-breaking industrial buildings. For us, power is more than just what comes from the wire. Why? Because it forms the basis of a comfortable life. As a result, we are constantly improving every little detail, looking for the most userfriendly solution and bringing people and technology together. That's what our large company is all about – we do everything to give you the freedom of choice.

A vision for the perfect building
What's key is the synergy created in the building as a whole. It starts with the power that's created using renewable sources of energy, which then feeds into the things that this power can do for the people within – from the infrastructure in the buildings right through to the emotional experience of the occupants, from the lowest parking level right through to the most exquisite penthouse suite. Only when everything intertwines are values created, which you can experience with all your senses.

Building automation from ABB governed by our core values
All ABB solutions are checked against the six core values and constantly improved until they meet the very highest requirements in terms of technology, management and the guests.

Economic efficiency
A hotel building is for the people within. This is the only way to measure the value of what's inside. Every day, development gives rise to performance.

Safety
The building automation technology can't take a break. With a complete system, the management can count on it as a whole – and on the fact that everything is functioning safely.

Energy efficiency
You need energy for absolutely anything you wish to accomplish. That's why, for ABB, it is crucial to never waste energy and to make the most of it at the same time.

Durability
The future always comes quicker than you think. It must be easy to upgrade the technology. The new fits perfectly with what is already there.

Design
Hotels are more than just buildings. They shape the city and are sometimes a key part of the skyline. The aesthetics count – from the largest detail right down to the smallest.

Sustainability
A safe future starts today with technologies which combine all energy-saving capabilities with quality of life.

ABB i-bus® KNX

Guest Room Management

TA/U3.1.1-CG

Room Outdoor Sensor with Bus Coupler, FM

Ordering possible only in connection with the design ID. The icons and/or texts are configured by means of a web configuration tool. Freely programmable function "Do not disturb", "Bell" and "Make up room". Push switch function: switching / dimming / blind / sending values / scenes etc. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. With integrated KNX bus coupler. With integrated temperature sensor. The bus connection is provided via the enclosed bus terminal.

Description	Standard Design ID	Order details		Price 1 piece	Dimensions	Pack unit
		Type code	Order code		mm	pc.
White	F5XVPBF6	TA/U3.1.1-CG	2CKA006300A1549		86x86	1
Black	F5XVPBZ1	TA/U3.1.1-CG	2CKA006300A1549		86x86	1
Individual design [1]	Go to configurator	TA/U3.1.1-CG	2CKA006300A1549		86x86	1

TA/U3.2.1-CG

Room Outdoor Sensor with Bus Coupler, FM

Ordering possible only in connection with the design ID. The icons and/or texts are configured by means of a web configuration tool. Freely programmable function "Do not disturb", "Bell" and "Make up room". Push switch function: switching / dimming / blind / sending values / scenes etc. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. With integrated KNX bus coupler. With integrated temperature sensor. With integrated proximity function. The bus connection is provided via the enclosed bus terminal. The device is mounted exclusively via the Italian flush-mounted device box according to EN60670 (CEI 23-48).

Description	Standard Design ID	Order details		Price 1 piece	Dimensions	Pack unit
		Type code	Order code		mm	pc.
White	F5XVPB75	TA/U3.2.1-CG	2CKA006300A1585		115x86	1
Black	F5XVPBZM	TA/U3.2.1-CG	2CKA006300A1585		115x86	1
Individual design [1]	Go to configurator	TA/U3.2.1-CG	2CKA006300A1585		115x86	1

TA/U3.3.1-CG

Room Outdoor Sensor with Bus Coupler, FM

Ordering possible only in connection with the design ID. The icons and/or texts are configured by means of a web configuration tool. Freely programmable function "Do not disturb", "Bell" and "Make up room". Push switch function: switching / dimming / blind / sending values / scenes etc. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. With integrated KNX bus coupler. The bus connection is provided via the enclosed bus terminal.

Description	Standard Design ID	Order details		Price 1 piece	Dimensions	Pack unit
		Type code	Order code		mm	pc.
White	F5XVPB7T	TA/U3.3.1-CG	2CKA006300A1597		115x86	1
Black	F5XVPBZX	TA/U3.3.1-CG	2CKA006300A1597		115x86	1
Individual design [1]	Go to configurator	TA/U3.3.1-CG	2CKA006300A1597		115x86	1

[1] The individual design can be selected via the website:
URL: https://tacteo-configurator.eu.mybuildings.abb.com/

ABB i-bus® KNX

Guest Room Management

TKK/U.1.1-CG

Card Holder with Bus Coupler, universal

Ordering possible only in connection with the design ID. For inserting not programmed MIFARE RF cards. The icons and/or texts are configured by means of a web configuration tool. Freely programmable function ”Do not disturb“, ”Bell“ and ”Make up room“.
It is equipped with one relay (4 A @24 V AC/DC). Push switch function: switching / dimming / blind / sending values / scenes etc. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white =neutral/no function assigned) or standard illumination red/green. The bus connection is provided via the enclosed bus terminal.
The device requires a 12...24 V AC/DC external power supply to ensure its operation even with bus voltage failure.

Description	Standard Design ID	Order details		Price 1 piece	Dimensions	Pack unit
		Type code	Order code		mm	pc.
White	F5XVPBFC	TKK/U.1.1-CG	2CKA006300A1552		86x86	1
Black	F5XVPB72	TKK/U.1.1-CG	2CKA006300A1552		86x86	1
Individual design [1]	Go to configurator	TKK/U.1.1-CG	2CKA006300A1552		86x86	1

TKK/U.3.1-CG

Card Holder with Bus Coupler, universal

Ordering possible only in connection with the design ID. For inserting not programmed MIFARE RF cards. The icons and/or texts are configured by means of a web configuration tool. Freely programmable function ”Do not disturb“, ”Bell“ and ”Make up room“. It is equipped with one relay (4 A @24 V AC/DC). Push switch function: switching / dimming / blind / sending values /scenes etc. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. The bus connection is provided via the enclosed bus terminal. The device requires a 12...24 V AC/DC external power supply to ensure its operation even with bus voltage failure.

Description	Standard Design ID	Order details		Price 1 piece	Dimensions	Pack unit
		Type code	Order code		mm	pc.
White	F5XVPBF4	TKK/U.3.1-CG	2CKA006300A1588		115x86	1
Black	F5XVPBF9	TKK/U.3.1-CG	2CKA006300A1588		115x86	1
Individual design [1]	Go to configurator	TKK/U.3.1-CG	2CKA006300A1588		115x86	1

[1] The individual design can be selected via the website:
URL: https://tacteo-configurator.eu.mybuildings.abb.com/

ABB i-bus® KNX

Guest Room Management

TKM/U.1.1-CG

Card Holder with Bus Coupler, programmable

Ordering possible only in connection with the design ID. For inserting and evaluating of programmed MIFARE RF cards. The icons and/or texts are configured by means of a web configuration tool. With integrated KNX bus coupler. Freely programmable function ”Do not disturb“, ”Bell“ and ”Make up room“. It is equipped with one relay (4 A @24 V AC/DC). Push switch function: switching / dimming / blind / sending values / scenes etc. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. The bus connection is provided via the enclosed bus terminal. The device requires a 12...24 V AC/DC external power supply to ensure its operation even with bus voltage failure.

Description	Standard Design ID	Order details		Price 1 piece	Dimensions	Pack unit
		Type code	Order code		mm	pc.
White	F5XVPBFK	TKM/U.1.1-CG	2CKA006300A1553		86x86	1
Black	F5XVPBFW	TKM/U.1.1-CG	2CKA006300A1553		86x86	1
Individual design [1]	Go to configurator	TKM/U.1.1-CG	2CKA006300A1553		86x86	1

TKM/U.3.1-CG

Card holder with Bus Coupler, programmable

Ordering possible only in connection with the design ID. For inserting and evaluating of MIFARE programmed RF cards. The icons and/or texts are configured by means of a web configuration tool. With integrated KNX bus coupler. Freely programmable function ”Do not disturb“, ”Bell“ and ”Make up room“. It is equipped with one relay (4 A @24 V AC/DC). Push switch function: switching / dimming / blind / sending values / scenes etc. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. The bus connection is provided via the enclosed bus terminal. The device requires a 12...24 V AC/DC external power supply to ensure its operation even with bus voltage failure.

Description	Standard Design ID	Order details		Price 1 piece	Dimensions	Pack unit
		Type code	Order code		mm	pc.
White	F5XVPBFG	TKM/U.3.1-CG	2CKA006300A1589		115x86	1
Black	F5XVPBFD	TKM/U.3.1-CG	2CKA006300A1589		115x86	1
Individual design [1]	Go to configurator	TKM/U.3.1-CG	2CKA006300A1589		115x86	1

[1] The individual design can be selected via the website:
URL: https://tacteo-configurator.eu.mybuildings.abb.com/

ABB i-bus® KNX

Guest Room Management

TLM/U.1.1-CG

Room Outdoor Sensor with Card Reader and Bus Coupler, FM

Ordering possible only in connection with the design ID. The icons and/or texts are configured by means of a web configuration tool. Freely programmable function ”Do not disturb“, ”Bell“ and ”Make up room“. For reading and evaluating MIFARE RF cards. It is equipped with one relay (4 A @24 V AC/DC). Push switch function: switching / dimming / blind / sending values / scenes etc. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. With integrated KNX bus coupler. With integrated temperature sensor. The bus connection is provided via the enclosed bus terminal. The device requires a 12...24 V AC/DC external power supply to ensure its operation even with bus voltage failure.

Description	Standard Design ID	Order details		Price 1 piece	Dimensions	Pack unit
		Type code	Order code		mm	pc.
White	F5XVPBF6	TLM/U.1.1-CG	2CKA006300A1550		86x86	1
Black	F5XVPB7F	TLM/U.1.1-CG	2CKA006300A1550		86x86	1
Individual design [1]	Go to configurator	TLM/U.1.1-CG	2CKA006300A1550		86x86	1

TLM/U.3.1-CG

Description	Standard Design ID	Order details		Price 1 piece	Dimensions	Pack unit
		Type code	Order code		mm	pc.
White	F5XVPBFT	TLM/U.3.1-CG	2CKA006300A1599		86x115	1
Black	F5XVPB7Y	TLM/U.3.1-CG	2CKA006300A1599		86x115	1
Individual design [1]	Go to configurator	TLM/U.3.1-CG	2CKA006300A1599		86x115	1

TLM/U.2.1-CG

Description	Standard Design ID	Order details		Price 1 piece	Dimensions	Pack unit
		Type code	Order code		mm	pc.
White	F5XVPBF5	TLM/U.2.1-CG	2CKA006300A1587		115x86	1
Black	F5XVPB78	TLM/U.2.1-CG	2CKA006300A1587		115x86	1
Individual design [1]	Go to configurator	TLM/U.2.1-CG	2CKA006300A1587		115x86	1

[1] The individual design can be selected via the website:
URL: https://tacteo-configurator.eu.mybuildings.abb.com/

ABB i-bus® KNX

Guest Room Management

TSM/U.2.1-CG

Room Outdoor Sensor with Card Reader, Room Number and Bus Coupler, FM

rdering possible only in connection with the design ID. The icons and/or texts are configured by means of a web configuration tool. Freely programmable function ”Do not disturb“, ”Bell“ and ”Make up room“. For reading and evaluating MIFARE RF cards. With backlit room number. It is equipped with one relay (4 A @24 V AC/DC). Push switch function: switching / dimming / blind / sending values / scenes etc. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. The bus connection is provided via the enclosed bus terminal. The device requires a 12...24 V AC/DC external power supply to ensure its operation even with bus voltage failure.

Description	Standard Design ID	Order details		Price 1 piece	Dimensions	Pack unit
		Type code	Order code		mm	pc.
White	–	TSM/U.2.1-CG	2CKA006300A1555		86x157	1
Black	–	TSM/U.2.1-CG	2CKA006300A1555		86x157	1
Individual design [1]	Go to configurator	TSM/U.2.1-CG	2CKA006300A1555		86x157	1

TSN/U.2.1-CG

Room Outdoor Sensor with Room Number and Bus Coupler, FM

Ordering possible only in connection with the design ID. The icons and/or texts are configured by means of a web configuration tool. Freely programmable function ”Do not disturb“, ”Bell“ and ”Make up room“. With backlit room number. Push switch function: switching / dimming / blind / sending values / scenes etc. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. With integrated KNX bus coupler. The bus connection is provided via the enclosed bus terminal. The device requires a 12...24 V AC/DC external power supply to ensure its operation even with bus voltage failure.

Description	Standard Design ID	Order details		Price 1 piece	Dimensions	Pack unit
		Type code	Order code		mm	pc.
White		TSN/U.2.1-CG	2CKA006300A1603		86x157	1
Black		TSN/U.2.1-CG	2CKA006300A1603		86x157	1
Individual design [1]	Go to configurator	TSN/U.2.1-CG	2CKA006300A1603		86x157	1

TP/T 1

USB Programmer - MIFARE **NEW**

USB programmer for programming MIFARE transponder cards for Tacteo access control range. The USB programmer has to be connected to the PC using the USB cable provided with the USB programmer. Cards programming has to be performer, using USB programmer, with ABB MiniMAC software.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	TP/T 1	2CSY289621R3801		0.08	1

ABB i-bus® KNX

Guest Room Management

TZE/U.0.2.CK

Removal protection for access control devices for squared, horizontal and room number glass versions

Prevents the disassembly of ABB-tacteo® card holders, card readers and external room sensors with/without card readers and room numbers.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	TZE/U.0.2.CK	2CSY245271S3601			

TZE/U.0.3.CK

Removal protection for access control devices for vertical glass versions

Prevents the dismantling of ABB-tacteo® card holders, card readers and external room sensors with/without card readers and room numbers.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	TZE/U.0.3.CK	2CSY233741S3611			

ABB i-bus® KNX

Guest Room Management

TR/U 1.1

Transponder Reader, Millenium

The “transponder reader” is a flush-mounting device for British Standard wall boxes, designed to realize access control systems with a communication support based on KNX bus. It is equipped with one relay (4 A @24 V AC/DC) and one input to be used for connecting external conventional card-holder (e.g. Millenium wiring accessories card-holder).
The output can be programmed in three different ways: “Linked to access control”, receiving in this case switching commands from the device itself (according to transponder card validation); being a standard KNX Switch actuator output, able to be controlled by every KNX-standard devices; “linked to card-holder”, that means that the relay is switched according to closing/opening internal input contact available on transponder reader.
The bicolor (red-green) LED placed on the front of the device allow you to monitor device operation and can be also switched ON/OFF in the proper color according to KNX telegram (for example for DND/MUR purposes).
The transponder reader requires a 12...24 V AC/DC external power supply to ensure its operation even with bus voltage failure.
The transponder reader is available for ABB Millenium wiring accessories range.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	TR/U 1.1	2CSY235683R2001		0.050	1

TH/U 1.1

Transponder Holder, Millenium

The “transponder holder” is a flush-mounting device for British Standard wall boxes, designed to realize access control systems with a communication support based on KNX bus. It is equipped with one relay (4 A @24 V AC/DC) and one binary input to be used for connecting external conventional push-button for switch, dimmer and shutter functionalities, or for example for connecting window contact or similar.
The output can be programmed as “Linked to access control”, receiving in this case switching commands from the device itself (according to card insertion/removal); or being a standard KNX Switch actuator output, able to be controlled by every KNX-standard devices. The bicolor (red-green) LED placed on the front of the device allow you to monitor device operation and can be also switched ON/OFF in the proper color according to KNX.
The transponder reader requires a 12...24 V AC/DC external power supply to ensure its operation even with bus voltage failure.
The transponder reader is available for ABB Millenium wiring accessories range.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	TH/U 1.1	2CSY265232R2021		0.018	1

ABB i-bus® KNX

Guest Room Management

TR/U 1.1.CH

Transponder Reader, Chiara 2 modules

The “transponder reader” is a flush-mounting device, designed to realize access control systems with a communication support based on KNX bus. It is equipped with one relay (4 A @24 V AC/DC) and one input to be used for connecting external conventional card-holder (e.g. Chiara wiring accessories card-holder).

The output can be programmed in three different ways: “Linked to access control”, receiving in this case switching commands from the device itself (according to transponder card validation); being a standard KNX Switch actuator output, able to be controlled by every KNX-standard devices; “linked to card-holder”, that means that the relay is switched according to closing/opening internal input contact available on transponder reader.

The bicolor (red-green) LED placed on the front of the device allow you to monitor device operation and can be also switched ON/OFF in the proper color according to KNX telegram (for example for DND/MUR purposes).

The transponder reader requires a 12...24 V AC/DC external power supply to ensure its operation even with bus voltage failure.

The transponder reader is available for ABB Chiara wiring accessories range.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	TR/U 1.1.CH	2CSK289601R1902			1

TH/U 1.1.CH

Transponder Holder, Chiara 2 modules

The “transponder holder” is a flush-mounting device for British Standard wall boxes, designed to realize access control systems with a communication support based on KNX bus. It is equipped with one relay (4 A @24 V AC/DC) and one binary input to be used for connecting external conventional push-button for switch, dimmer and shutter functionalities, or for example for connecting window contact or similar.

The output can be programmed as “Linked to access control”, receiving in this case switching commands from the device itself (according to card insertion/removal); or being a standard KNX Switch actuator output, able to be controlled by every KNX-standard devices. The bicolor (red-green) LED placed on the front of the device allow you to monitor device operation and can be also switched ON/OFF in the proper color according to KNX.

The transponder reader requires a 12...24 V AC/DC external power supply to ensure its operation even with bus voltage failure.

The transponder reader is available for ABB Chiara wiring accessories range.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	TH/U 1.1.CH	2CSK202481R1922			1

ABB i-bus® KNX

Guest Room Management

TS/T 1
TS/T 1.1

Set of Transponder Cards for Millenium, Chiara 2 modules and Tacteo design programs

The transponder card uses passive transponder technology operating in radio frequency (MIFARE technology), without the need for contact between the reader and the card itself. The transponder card is read by swiping it in front of the reader at a maximum distance of 20 mm (can be reduced according to installation environment).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
10 transponder cards	–	TS/T 1	2CSY259412R2041		0.02	1
1000 transponder cards	–	TS/T 1.1	2CSY232175R2041		1	1

LT/U 1.1.MC
LT/U 1.1.MS

Transponder Reader, Mylos

The transponder reader is used for access control in the hotel, residential and commercial sectors (office buildings, business centers, laboratories, etc.). The device is equipped with two bistable relays (8 A, 250 V AC), one of which can be assigned to control electronic lock, and three voltage-free, non-optically insulated inputs; the 5-V DC scanning voltage is available on the COM terminal.
The transponder reader requires a 10...32 V DC/12...24 V AC external power supply to ensure its operation even with bus voltage failure.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	LT/U 1.1.MC	2CSYK5000C		0.05	1
black	–	LT/U 1.1.MS	2CSYK5000S		0.05	1

PTI/U 1.1.MC

Transponder Holder, Mylos

The transponder holder is equipped with a slot into which the transponder card is inserted. In a hotel application, this allows occupancy recognition and notification at the supervisory level (e.g. on the front desk computer).
Moreover, room status information can be managed by using special cards (minibar status, maintenance status, usability).
The device is equipped with 2 bistable relays (8 A, 250 V AC) and 3 voltage-free, non-optically insulated inputs; the 5-V DC scanning voltage is available on the COM terminal.
The transponder pocket requires a 10...32 V DC/12...24 V AC external power supply to ensure its operation even with bus voltage failure.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	PTI/U 1.1.MC	2CSYK5200C		0.05	1
black	–	PTI/U 1.1.MS	2CSYK5200S		0.05	1

ABB i-bus® KNX

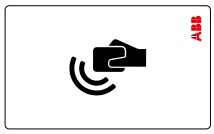
Guest Room Management

PRT/U 1.1.MC

Transponder Programming Device, Mylos

The devices allows the programming of transponder cards.
The device is equipped with 2 bistable relays (8 A, 250 V AC) and 3 voltage-free non-optically insulated inputs; 5 V DC scanning voltage is available on the COM terminal.
The transponder programmer requires a 10...32 V DC/12...24 V AC external power supply to ensure its operation even with bus voltage failure.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	PRT/U 1.1.MC	2CSYK5300C		0.05	1
black	–	PRT/U 1.1.MS	2CSYK5300S		0.05	1



CH/T 2
CH/T 2.1

Set of 5 Transponder Cards for Chiara and Mylos design programs

The transponder card uses passive transponder technology operating in radio frequency, without the need for contact between the reader and the card itself. The transponder card is read by swiping it in front of the reader at a maximum distance of 20 mm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
5 transponder cards	–	CH/T 2	2CSKK5400C		0.005	1
1000 transponder cards	–	CH/T 2.1	2CSY289611R1941		1	1

LT/U 1.1.CH

Transponder Reader, Chiara

The transponder reader is used for access control in the hotel, residential and commercial sectors (office buildings, business centers, laboratories, etc.). The device is equipped with two bistable relays (8 A, 250 V AC), one of which can be assigned to control electronic lock, and three voltage-free, non-optically insulated inputs; the 5-V DC scanning voltage is available on the COM terminal.
The transponder reader requires a 10...32 V DC/12...24 V AC external power supply to ensure its operation even with bus voltage failure.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	LT/U 1.1.CH	2CSKK5000C		0.05	1

ABB i-bus® KNX

Guest Room Management

PTI/U 1.1.CH

Transponder Holder, Chiara

The transponder holder is equipped with a slot into which the transponder card is inserted. In a hotel application, this allows occupancy recognition and notification at the supervisory level (e.g. on the front desk computer).
Moreover, room status information can be managed by using special cards (minibar status, maintenance status, usability).
The device is equipped with 2 bistable relays (8 A, 250 V AC) and 3 voltage-free, non-optically insulated inputs; the 5-V DC scanning voltage is available on the COM terminal.
The transponder pocket requires a 10...32 V DC/12...24 V AC external power supply to ensure its operation even with bus voltage failure.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	PTI/U 1.1.CH	2CSKK5200C		0.05	1

PRT/U 1.1.CH

Transponder Programming Device, Chiara

The devices allows the programming of transponder cards.
The device is equipped with 2 bistable relays (8 A, 250 V AC) and 3 voltage-free non-optically insulated inputs; 5 V DC scanning voltage is available on the COM terminal.
The transponder programmer requires a 10...32 V DC/12...24 V AC external power supply to ensure its operation even with bus voltage failure.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	PRT/U 1.1.CH	2CSKK5300C		0.05	1

SW MiniMAC 4.1

MiniMAC software

The management and configuration software ensures bidirectional communication with the access control system devices, allowing the system's configuration during its installation and its overall management and supervision.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	SW MiniMAC 4.1	2CSY258202R2051		0.005	1

Notes

ABB i-bus® KNX

User Operation – Design Ranges – Unique diversity of the range

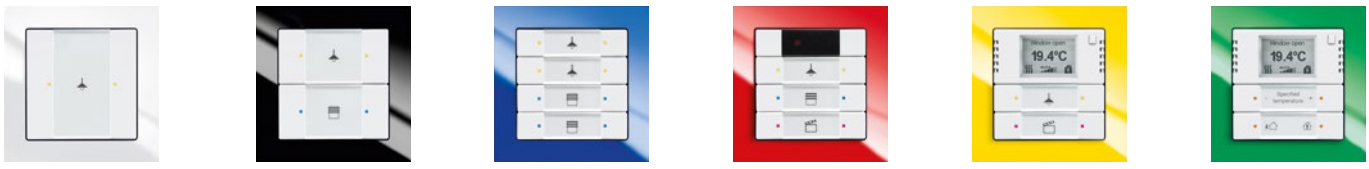
01

02

03

04

05

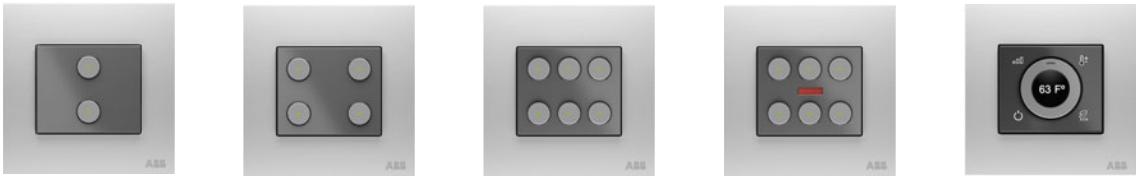


06

ABB i-bus® KNX

User Operation – Design Ranges – Unique diversity of the range

07



08

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11

01 Tacteo
02 ABB Tenton®
03 carat®
04 pure stainless steel
05 Busch-axcent®
06 future® linear
07 Millenium*

08 Zenit for VDE/NEMA markets
09 Busch-triton®
10 Busch-priOn®
11 Bus Coupling Unit – for conventional Busch-Jaeger series**

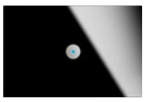
Further information regarding the ABB switch ranges are available on http://new.abb.com/low-voltage/products/residential-products/switch-ranges

* Millenium and Zenit series are only available in selected markets.

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

ABB i-bus® KNX

User Operation – Design Ranges – Functional Overview

Program	Busch-priOn® suitable for KNX bus coupler 6120/12-101 or 6120/13 (depending on the specific combination)		
			
	6340-xx-101 1/2 gang	6341-xx-101 rotary control element	6342-xx-101 3/6 gang
KNX function			
Switching, rocker switch total	■	–	■
Switching, rocker switch left/right	■	■	■
Dimming, rocker switch total	■	–	■
Dimming, rocker switch left/right	■	–	■
Blind, rocker switch total	■	–	■
Blind, rocker switch total left/right	■	■	■
Short-long operation, rocker switch left/right	■	–	■
Value sender, rocker switch total	■	–	■
Value sender, rocker switch left/right	■	–	■
Value dimming sensor, rocker switch total	■	■	■
Red/green LED status illumination (red/green/off)	–	–	–
RGB LED function illumination + status illumination	1 LED per rocker switch	1 LED per button	1 LED per rocker switch
Setting the RTC operating mode	■	–	■
Value sender, 2 objects, rocker switch left/right	■	–	■
Light scene extension unit with light scene memory function	■	–	■
Level switch, rocker switch total	■	–	■
Level switch, rocker switch total left/right	■	–	■
Multiple operation, rocker switch left/right	■	–	■
IR remote control channels (up to 13 channels)	–	–	–
Light scene unit (8 scenes for up to 8 actuators)	–	–	–
Light scene unit (10 scenes for up to 10 actuators)	–	–	–
Programmable shift key	–	–	–
Proximity function	–	–	–
Room temperature controller only			
Temperature reading	–	–	–
RTC settings	–	–	–
Illuminated display	–	–	–
Fan coil operation for heating and cooling	–	–	–
Media box/CD/DVD/radio	–	–	–
Short-time timer	–	–	–
Weekly timer	–	–	–
Alarm clock	–	–	–
Messages	–	–	–
Screen saver	–	–	–
Display text/value	–	–	–
Device lock	–	–	–
Logic function (including light scenes)	■	■	■
Busch-Watchdog 4 channels	–	–	–

■ = Function is supported

– = Function is not supported

ABB i-bus® KNX

User Operation – Design Ranges – Functional Overview

Program	**Busch-priOn® suitable for KNX bus coupler 6120/12-101 or 6120/13 (depending on the specific combination)**	
		
	6345-xx-101	6351-825-101 end strip top with information display, room temperature controller, IR receiver and proximity sensor + 6342-xx-101 3/6 gang
KNX function		
Switching, rocker switch total	–	■
Switching, rocker switch left/right	–	■
Dimming, rocker switch total	–	■
Dimming, rocker switch left/right	–	■
Blind, rocker switch total	–	■
Blind, rocker switch total left/right	–	■
Short-long operation, rocker switch left/right	–	■
Value sender, rocker switch total	–	■
Value sender, rocker switch left/right	–	■
Value dimming sensor, rocker switch total	–	■
Red/green LED status illumination (red/green/off)	–	–
RGB LED function illumination + status illumination	–	1 LED per rocker switch
Setting the RTC operating mode	–	■
Value sender, 2 objects, rocker switch left/right	–	■
Light scene extension unit with light scene memory function	–	■
Level switch, rocker switch total	–	■
Level switch, rocker switch total left/right	–	■
Multiple operation, rocker switch left/right	–	■
IR remote control channels (up to 13 channels)	–	■
Light scene unit (8 scenes for up to 8 actuators)	–	–
Light scene unit (10 scenes for up to 10 actuators)	–	–
Programmable shift key	–	–
Proximity function	–	■
Room temperature controller only		
Temperature reading	–	–
RTC settings	–	■
Illuminated display	–	■
Fan coil operation for heating and cooling	–	■
Media box/CD/DVD/radio	–	–
Short-time timer	–	–
Weekly timer	–	–
Alarm clock	–	–
Messages	–	–
Screen saver	–	–
Display text/value	–	■
Device lock	–	–
Logic function (including light scenes)	■	■
Busch-Watchdog 4 channels	■	–

■ = Function is supported

– = Function is not supported

ABB i-bus® KNX

User Operation – Design Ranges – Functional Overview

Program	Busch-priOn® suitable for KNX bus coupler 6120/12-101 or 6120/13 (depending on the specific combination)	
	[redacted]	[redacted]
	6350-825-101 end strip top with IR receiver and proximity sensor	6352-xx-101 end strip bottom with temperature sensor
KNX function		
Switching, rocker switch total	–	–
Switching, rocker switch left/right	–	–
Dimming, rocker switch total	–	–
Dimming, rocker switch left/right	–	–
Blind, rocker switch total	–	–
Blind, rocker switch total left/right	–	–
Short-long operation, rocker switch left/right	–	–
Value sender, rocker switch total	–	–
Value sender, rocker switch left/right	–	–
Value dimming sensor, rocker switch total	–	–
Red/green LED status illumination (red/green/off)	–	–
RGB LED function illumination + status illumination	–	–
Setting the RTC operating mode	–	–
Value sender, 2 objects, rocker switch left/right	–	–
Light scene extension unit with light scene memory function	–	–
Level switch, rocker switch total	–	–
Level switch, rocker switch total left/right	–	–
Multiple operation, rocker switch left/right	–	–
IR remote control channels (up to 13 channels)	■	–
Light scene unit (8 scenes for up to 8 actuators)	–	–
Light scene unit (10 scenes for up to 10 actuators)	–	–
Programmable shift key	–	–
Proximity function	■	–
Room temperature controller only		
Temperature reading	–	■
RTC settings	–	–
Illuminated display	–	–
Fan coil operation for heating and cooling	–	–
Media box/CD/DVD/radio	–	–
Short-time timer	–	–
Weekly timer	–	–
Alarm clock	–	–
Messages	–	–
Screen saver	–	–
Display text/value	–	–
Device lock	–	–
Logic function (including light scenes)	–	–
Busch-Watchdog 4 channels	–	–

■ = Function is supported

– = Function is not supported

ABB i-bus® KNX

User Operation – Design Ranges – Functional Overview

Program	Busch-triton® (next generation) Monoblock	
		
	6320/10 1/2 gang 6320/30 3/6 gang 6320/50 5/10 gang	6321/38 3/6 gang with RTC 6321/58 5/10 gang with RTC
KNX function		
Switching, rocker switch total	■	■
Switching, rocker switch left/right	■	■
Dimming, rocker switch total	■	■
Dimming, rocker switch left/right	■	■
Blind, rocker switch total	■	■
Blind, rocker switch total left/right	■	■
Short-long operation, rocker switch left/right	■	■
Value sender, rocker switch total	■	■
Value sender, rocker switch left/right	■	■
Value dimming sensor, rocker switch total	■	■
Red/green LED status illumination (red/green/off)	1 LED per rocker switch	1 LED per rocker switch
RGB LED function illumination + status illumination	–	–
Setting the RTC operating mode	■	■
Value sender, 2 objects, rocker switch left/right	■	■
Light scene extension unit with light scene memory function	■	■
Level switch, rocker switch total	■	■
Level switch, rocker switch total left/right	■	■
Multiple operation, rocker switch left/right	–	–
IR remote control channels (up to 13 channels)	■	■
Light scene unit (8 scenes for up to 8 actuators)	■	■
Light scene unit (10 scenes for up to 10 actuators)	–	–
Programmable shift key	■	■
Proximity function	–	–
Room temperature controller only		
Temperature reading	–	■
RTC settings	–	■
Illuminated display	–	■
Fan coil operation for heating and cooling	–	■
Media box/CD/DVD/radio	–	–
Short-time timer	–	–
Weekly timer	–	–
Alarm clock	–	–
Messages	–	–
Screen saver	–	–
Display text/value	–	–
Device lock	–	–
Logic function (including light scenes)	–	–
Busch-Watchdog 4 channels	–	–

■ = Function is supported

– = Function is not supported

ABB i-bus® KNX

User Operation – Design Ranges – Functional Overview

Program	Millenium		
			
	6125/20-500 1/2 gang	6126/20-500 2/4 gang	6129/20-500 3/6 gang
KNX function			
Switching, button pair	■	■	■
Switching, button upper/lower	■	■	■
Dimming, button pair	■	■	■
Dimming, button upper/lower	■	■	■
Blind, button pair	■	■	■
Blind, button upper/lower	■	■	■
Short-long operation, button upper/lower	■	■	■
Value transmitter, button pair	■	■	■
Value transmitter, button upper/lower	■	■	■
Value dimming sensor, button pair	■	■	■
Value dimming sensor, upper/lower	■	■	■
RGB LED function illumination + status illumination	■	■	■
Setting the RTC operating mode	■	■	■
Value transmitter, 2 objects, button upper/lower	■	■	■
Light scene extension unit with light scene memory function	■	■	■
Step switch, button pair	■	■	■
Step switch, button upper/lower	■	■	■
Multiple operation, button upper/lower	■	■	■
IR remote control channels (up to 5 channels)	–	–	–
Room temperature controller only			
Temperature reading	–	–	–
RTC settings	–	–	–
Illuminated display	–	–	–
Fan coil operation for heating and cooling	–	–	–
10 logic channels (incl. light scene, actuator, sequence actuator, logic gates, etc.)	■	■	■
Busch-Watchdog 4 channels	–	–	–

■ = Function is supported

– = Function is not supported

ABB i-bus® KNX

User Operation – Design Ranges – Functional Overview

Program	**Millenium**		
			
	6129/21-500 3/6 gang with IR	6122/20-500	6124/20-500
KNX function			
Switching, button pair	■	–	–
Switching, button upper/lower	■	–	–
Dimming, button pair	■	–	–
Dimming, button upper/lower	■	–	–
Blind, button pair	■	–	–
Blind, button upper/lower	■	–	–
Short-long operation, button upper/lower	■	–	–
Value transmitter, button pair	■	–	–
Value transmitter, button upper/lower	■	–	–
Value dimming sensor, button pair	■	–	–
Value dimming sensor, upper/lower	■	–	–
RGB LED function illumination + status illumination	■	–	–
Setting the RTC operating mode	■	–	–
Value transmitter, 2 objects, button upper/lower	■	–	–
Light scene extension unit with light scene memory function	■	–	–
Step switch, button pair	■	–	–
Step switch, button upper/lower	■	–	–
Multiple operation, button upper/lower	■	–	–
IR remote control channels (up to 5 channels)	■	–	–
Room temperature controller only			
Temperature reading	–	–	■
RTC settings	–	–	■
Illuminated display	–	–	■
Fan coil operation for heating and cooling	–	–	■
10 logic channels (incl. light scene, actuator, sequence actuator, logic gates, etc.)	■	–	■
Busch-Watchdog 4 channels	–	■	–

■ = Function is supported

– = Function is not supported

ABB i-bus® KNX

User Operation – Design Ranges – Functional Overview

Program	Zenit		
			
	6125/98-509 1/2 gang	6126/98-509 2/4 gang	6129/98-509 3/6 gang
KNX function			
Switching, button pair	■	■	■
Switching, button upper/lower	■	■	■
Dimming, button pair	■	■	■
Dimming, button upper/lower	■	■	■
Blind, button pair	■	■	■
Blind, button upper/lower	■	■	■
Short-long operation, button upper/lower	■	■	■
Value transmitter, button pair	■	■	■
Value transmitter, button upper/lower	■	■	■
Value dimming sensor, button pair	■	■	■
Value dimming sensor, upper/lower	■	■	■
RGB LED function illumination + status illumination	■	■	■
Setting the RTC operating mode	■	■	■
Value transmitter, 2 objects, button upper/lower	■	■	■
Light scene extension unit with light scene memory function	■	■	■
Step switch, button pair	■	■	■
Step switch, button upper/lower	■	■	■
Multiple operation, button upper/lower	■	■	■
IR remote control channels (up to 5 channels)	–	–	–
Room temperature controller only			
Temperature reading	–	–	–
RTC settings	–	–	–
Illuminated display	–	–	–
Fan coil operation for heating and cooling	–	–	–
10 logic channels (incl. light scene, actuator, sequence actuator, logic gates, etc.)	■	■	■
Busch-Watchdog 4 channels	–	–	–

■ = Function is supported

– = Function is not supported

ABB i-bus® KNX

User Operation – Design Ranges – Functional Overview

Program	**Zenit**		
			
	6129/98-509 3/6 gang with IR	6122/98-509	6124/98-509
KNX function			
Switching, button pair	■	–	–
Switching, button upper/lower	■	–	–
Dimming, button pair	■	–	–
Dimming, button upper/lower	■	–	–
Blind, button pair	■	–	–
Blind, button upper/lower	■	–	–
Short-long operation, button upper/lower	■	–	–
Value transmitter, button pair	■	–	–
Value transmitter, button upper/lower	■	–	–
Value dimming sensor, button pair	■	–	–
Value dimming sensor, upper/lower	■	–	–
RGB LED function illumination + status illumination	■	–	–
Setting the RTC operating mode	■	–	–
Value transmitter, 2 objects, button upper/lower	■	–	–
Light scene extension unit with light scene memory function	■	–	–
Step switch, button pair	■	–	–
Step switch, button upper/lower	■	–	–
Multiple operation, button upper/lower	■	–	–
IR remote control channels (up to 5 channels)	■	–	–
Room temperature controller only			
Temperature reading	–	–	■
RTC settings	–	–	■
Illuminated display	–	–	■
Fan coil operation for heating and cooling	–	–	■
10 logic channels (incl. light scene, actuator, sequence actuator, logic gates, etc.)	■	–	■
Busch-Watchdog 4 channels	–	■	–

■ = Function is supported

– = Function is not supported

ABB i-bus® KNX

User Operation – Design Ranges – Functional Overview

Program	Multifunction control elements, suitable for KNX bus coupler 6120/12-101 and 6120/13			
				
	6125/02 1/2 gang 6126/02 2/4 gang 6127/02 4/8 gang	6129/01 3/6 gang with IR	6128/28 2/4 gang with RTC	6122/01 standard
KNX function				
Switching, rocker switch total	■	■	■	–
Switching, rocker switch left/right	■	■	■	–
Dimming, rocker switch total	■	■	■	–
Dimming, rocker switch left/right	■	■	■	–
Blind, rocker switch total	■	■	■	–
Venetian blind, rocker switch total left/right	■	■	■	–
Short-long operation, rocker switch left/right	■	■	■	–
Value sender, rocker switch total	■	■	■	–
Value sender, rocker switch left/right	■	■	■	–
Value dimming sensor, rocker switch total	■	■	■	–
Red/green LED status illumination (red/green/off)	–	–	–	–
RGB LED function illumination + status illumination	Two LEDs per rocker switch	Two LEDs per rocker switch	Two LEDs per rocker switch	–
Setting the RTC operating mode	■	■	■	–
Value sender, 2 objects, rocker switch left/right	■	■	■	–
Light scene extension unit with light scene memory function	■	■	■	–
Level switch, rocker switch total	■	■	■	–
Level switch, rocker switch total left/right	■	■	■	–
Multiple operation, rocker switch left/right	■	■	■	–
IR remote control channels (up to 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	–	–	–	■
ABB				
basic55®	–	–	–	–
future® linear	■	■	■	■
alpha exclusive/nea	–	–	–	–
Busch-axcent®	■	■	■	■
solo®	■	■	■	■
pure stainless steel	■	■	■	■
carat®	■	■	■	■
ocean®	–	–	–	–
All Weather 44	–	–	–	–

■ = Function is supported

– = Function is not supported

ABB i-bus® KNX

User Operation – Design Ranges – Functional Overview

Program	FM Watchdog with integrated bus coupler	Standard control elements, bus coupler included with package	FM push-button coupling unit with integrated bus coupler	
				
	6122/10	6125/01 1 gang 6126/01 2 gang 6127/01 4 gang	6108/06 1/2 gang	6108/07 2/4 gang
KNX function				
Switching, rocker switch total	–	■	■	■
Switching, rocker switch left/right	–	–	■	■
Dimming, rocker switch total	–	■	■	■
Dimming, rocker switch left/right	–	–	■	■
Blind, rocker switch total	–	■	■	■
Venetian blind, rocker switch total left/right	–	–	■	■
Short-long operation, rocker switch left/right	–	–	■	■
Value sender, rocker switch total	–	■	■	■
Value sender, rocker switch left/right	–	–	■	■
Value dimming sensor, rocker switch total	–	–	■	■
Red/green LED status illumination (red/green/off)	–	Two LEDs per rocker switch	–	–
RGB LED function illumination + status illumination	–	–	One LED per rocker switch	One LED per rocker switch
Setting the RTC operating mode	–	–	■	■
Value sender, 2 objects, rocker switch left/right	–	■	■	■
Light scene extension unit with light scene memory function	–	■	■	■
Level switch, rocker switch total	–	–	■	■
Level switch, rocker switch total left/right	–	–	■	■
Multiple operation, rocker switch left/right	–	–	–	–
IR remote control channels (up to 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	■	–	–	–
ABB				
basic55®	–	–	■	■
future® linear	■	■	■	■
alpha exclusive/nea	–	–	–	–
Busch-axcent®	■	■	■	■
solo®	■	■	■	■
pure stainless steel	■	■	■	■
carat®	■	■	■	■
ocean®	–	–	–	–
All Weather 44	–	–	–	–

■ = Function is supported

– = Function is not supported

ABB i-bus® KNX

User Operation – Design Ranges – Functional Overview

Program	FM push-button coupling unit with integrated bus coupler		
			
	6108/60 6-fold KNX sensor	6108/06-AP 1/2 gang	6108/07-AP 2/4 gang
KNX function			
Switching, rocker switch total	■	■	■
Switching, rocker switch left/right	–	■	■
Dimming, rocker switch total	■	■	■
Dimming, rocker switch left/right	–	■	■
Blind, rocker switch total	■	■	■
Venetian blind, rocker switch total left/right	–	■	■
Short-long operation, rocker switch left/right	–	■	■
Value sender, rocker switch total	■	■	■
Value sender, rocker switch left/right	–	■	■
Value dimming sensor, rocker switch total	■	■	■
Red/green LED status illumination (red/green/off)		1 LED	–
RGB LED function illumination + status illumination	–	–	–
Setting the RTC operating mode	–	■	■
Value sender, 2 objects, rocker switch left/right	–	■	■
Light scene extension unit with light scene memory function	■	■	■
Level switch, rocker switch total	■	■	■
Level switch, rocker switch total left/right	–	■	■
Multiple operation, rocker switch left/right	–	–	–
IR remote control channels (up to 5 channels)	–	–	–
Room temperature controller only			
Temperature reading	■	–	–
RTC settings	■ (only as slave)	–	–
Illuminated display	–	–	–
Fan coil operation for heating and cooling	■ (only as slave)	–	–
Logic function (including light scenes)	–	–	–
Busch-Watchdog 4 channels	–	–	–
ABB			
basic55®	■	■	■
future® linear	■	■	■
alpha exclusive/nea	■	■	■
Busch-axcent®	■	■	■
solo®	■	■	■
pure stainless steel	■	■	■
carat®	■	■	■
ocean®	–	■	■
All Weather 44	–	■	■

■ = Function is supported

– = Function is not supported

ABB i-bus® KNX

User Operation – Design Ranges – Functional Overview

Program	FM room temperature controller				
					
	6108/18	6109/18	6109/28	6109/08	6109/05
Control element					
Standard function	–	–	–	–	–
Additional function	–	–	–	–	–
Indication					
Display	■	■	■	–	–
Actual temperature display	■	■	■	–	–
Status display via text and/or ICON	–	■	■	–	–
RTC					
Manual operation	■	■	■	–	–
Heating and/or cooling with/without additional stage	■	■	■	■	■
Fan coil	■	■	■	■	■
Master/slave	■	■	■	master only	master only
Basic load	■	■	■	■	■
Internal and/or external actual temperature sensor	■	■	■	■	external only
Internal actual temperature sensor	■	■	■	■	■
Air quality					
CO_2	–	–	■	–	–
Humidity	–	–	■	–	–
Air pressure	–	–	■	–	–
Universal input/binary input					
Switching/alarm	–	■	■	■	■
Dimming	–	■	■	■	■
Blind	–	■	■	■	■
Value	–	■	■	■	■
Scene	–	■	■	■	■
Switching sequences	–	■	■	■	■
Multi	–	■	■	■	■
Pulse counter	–	■	■	■	■
Universal analogue input e.g. external sensors					
0–10 V (external)	–	■	■	■	■
1–10 V (external)	–	■	■	■	■
Upper/lower threshold value	–	■	■	■	■
Universal input of external temperature sensor (PT1000 or 6226/T)					
Actual temperature sensor	–	■	■	■	■
Temperature limiter	–	■	■	■	■
ABB					
basic55®	■	■	■	■	–
future® linear	■	■	■	■	–
alpha exclusive/nea	–	■	■	■	–
Busch-axcent®	■	■	■	■	–
solo®	■	■	■	■	–
pure stainless steel	■	■	■	■	–
carat®	■	■	■	■	–
ocean®	–	–	–	–	–
All Weather 44	–	–	–	–	–

■ = Function is supported

– = Function is not supported

ABB i-bus® KNX

User Operation – Design Ranges – Functional Overview

Program	ABB i-bus® Sensor PEONIA®					
						
	PEB/U2.0.1-xxx	PEB/U3.0.1-xxx	PEB/U5.0.1-xxx	PEBR/U2.0.1-xxx	PEBR/U3.0.1-xxx	PEBR/U5.0.1-xxx
KNX function						
Switching, rocker switch total	■	■	■	■	■	■
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 rocker switch left/right	■	■	■	■	■	■
RGB LED function illumination + Status illumination	■	■	■	■	■	■
RGB LED Ambient illumination	■	■	■	■	■	■
Setting the RTC operating mode	■	■	■	■	■	■
Value sender, 2 objects, rocker switch left/right	■	■	■	■	■	■
Light scene extension units with light scene memory function	■	■	■	■	■	■
Step switch, switch rocker total	■	■	■	■	■	■
Step switch, switch rocker left/right	■	■	■	■	■	■
Multiple operation, rocker switch left/right	■	■	■	■	■	■
Proximity function	■	■	■	■	■	■
Energy saving function	■	■	■	■	■	■
Dynamic display	–	–	–	■	■	■
Room temperature controller only						
RTC Capacitive touch button	–	–	–	■	■	■
Vibration feedback	–	–	–	■	■	■
Temperature reading	–	–	–	■	■	■
Single/Master/Slave configuration	–	–	–	■	■	■
RTC setting	–	–	–	■	■	■
Base-load operation	–	–	–	■	■	■
Illumination display	–	–	–	■	■	■
Fan coil operation or heating and cooling	–	–	–	■	■	■
5 Logic channels (incl. Priority, Logic gate, Staircase lighting, Delay, Min/max value transducer, Threshold value hysteresis, Light scene actuator)	■	■	■	■	■	■

■ = Function is supported

– = Function is not supported

ABB i-bus® KNX

User Operation – Design Ranges – Functional Overview

Program		ABB-tacteo®				
						
Square (vert.) Square (horiz.) Vertical Horizontal	(86 mm x 86 mm) (86 mm x 86 mm) (86 mm x 115 mm) (115 mm x 86 mm)	TB/U1.1.1-CG TB/U1.2.1-CG TB/U1.3.1-CG	TB/U2.4.1-CG TB/U2.5.1-CG TB/U2.7.1-CG TB/U2.8.1-CG	TB/U4.4.1-CG TB/U4.5.1-CG TB/U4.7.1-CG TB/U4.8.1-CG	TB/U6.4.1-CG TB/U6.5.1-CG TB/U6.7.1-CG TB/U6.8.1-CG	TR/U.1.1-CG TR/U.2.1-CG TR/U.3.1-CG
Control element						
Standard function		■	■	■	■	■
Additional function		■	■	■	■	■
Indication						
Display		–	–	–	–	■
Actual temperature display		–	–	–	–	■
Status display via text and/or ICON		–	–	–	–	■
RTC						
Manual operation		–	–	–	–	■
Heating and/or cooling with/ without additional stage		–	–	–	–	■
Fan coil		–	–	–	–	■
Master/slave		–	–	–	–	■
Basic load		–	–	–	–	■
Internal and/or external actual temperature sensor		–	–	–	–	■
Internal actual temperature sensor		■	■	■	■	■
Installation						
VDE		■	■	■	■	■
BS		■	■	■	■	■
IT	(only as 115 mm x 86 mm)	■	■	■	■	■
NEMA	(only as 86 mm x 115 mm)	■	■	■	■	■

■ = Function is supported

– = Function is not supported

ABB i-bus® KNX

User Operation – Design Ranges – Functional Overview

Program		ABB-tacteo®				
						
Square (vert.)	(86 mm x 86 mm)	TBW/U.1.1-CG	TA/U3.1.1-CG	TLM/U.1.1-CG	TKK/U.1.1-CG	TKM/U.1.1-CG
Square (horiz.)	(86 mm x 86 mm)					
Vertical	(86 mm x 115 mm)	TBW/U.2.1-CG	TA/U3.2.1-CG	TLM/U.2.1-CG		
Horizontal	(115 mm x 86 mm)	TBW/U.3.1-CG	TA/U3.3.1-CG	TLM/U.3.1-CG	TKK/U.3.1-CG	TKM/U.3.1-CG
Control element						
Standard function		■	■	■	■	■
Additional function		■	–	–	–	–
Indication						
Display		–	–	–	–	–
Actual temperature display		–	–	–	–	–
Status display via text and/or ICON		–	–	–	–	–
RTC						
Manual operation		–	–	–	–	–
Heating and/or cooling with/ without additional stage		–	–	–	–	–
Fan coil		–	–	–	–	–
Master/slave		–	–	–	–	–
Basic load		–	–	–	–	–
Internal and/or external actual temperature sensor		–	–	–	–	–
Internal actual temperature sensor		■	■	■	■	■
Installation						
VDE		■	■	■	■	■
BS		■	■	■	■	■
IT	(only as 115 mm x 86 mm)	■	■	■	■	■
NEMA	(only as 86 mm x 115 mm)	■	■	■	■	■

■ = Function is supported

– = Function is not supported

ABB i-bus® KNX

User Operation – Design Ranges – Functional Overview

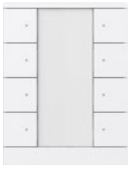
Program		**ABB-tacteo**			
					
Vertical Horizontal	(86 mm x 157 mm) (157 mm x 86 mm)	TB/U12.7.1-CG TB/U12.8.1-CG	TBR/U4.7.1-CG TBR/U4.8.1-CG	TSN/U.2.1-CG	TSM/U.2.1-CG
Control element					
Standard function		■	■	■	■
Additional function		■	■	–	–
Indication					
Display		–	■	–	–
Actual temperature display		–	■	–	–
Status display via text and/or ICON		–	■	–	–
RTC					
Manual operation		–	■	–	–
Heating and/or cooling with/ without additional stage		–	■	–	–
Fan coil		–	■	–	–
Master/slave		–	■	–	–
Basic load		–	■	–	–
Internal and/or external actual temperature sensor		–	■	–	–
Internal actual temperature sensor		■	■	■	■
Installation					
VDE		■	■	■	■
BS		■	■	■	■
IT	(only as 157 mm x 86 mm)	–	–	■	■
NEMA	(only as 86 mm x 157 mm)	■	■	■	■

■ = Function is supported

– = Function is not supported

ABB i-bus® KNX

User Operation – Design Ranges – Functional Overview

Program	ABB Tenton®			
	Control Elements	Operating function with RTC extension unit	Room temp. controller with oper. Function	RTC w. CO_2/ humidety sens. a. oper. Function
				
	SB/U8.0.1-84 SB/U12.0.1-84	SBS/U6.0.1-84 SBS/U10.0.1-84	SBR/U6.0.1-84 SBR/U10.0.1-84	SBC/U6.0.1-84 SBC/U10.0.1-84
KNX function Switching, rocker switch total	■	■	■	■
Switching, rocker switch left/right	■	■	■	■
Dimming, rocker switch total	■	■	■	■
Dimming, rocker switch left/right	■	■	■	■
Blind switch rocker tota	■	■	■	■
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	■	■	■	■
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)	■	■	■	■
Internal RTC function rocker total	–	■	■	■
Internal RTC function left/right	–	■	■	■
Programmable shift key	–	–	–	–
Proximity function	–	–	–	–
Room temperature controller	–	–	■	■
Temperature sensor	■	■	■	■
Master/Slave configuration	–	–	■	■
Slave configuration	–	■	–	–
RTC settings	–	–	■	■
Base-load operation	–	–	■	■
Illuminated display	–	■	■	■
Fan Coil operation for heating and cooling	–	■	■	■
CO_2-Mesurement	–	–	–	■
Humidety-Mesurement	–	–	–	■
Drewpoint-management	–	–	–	■
Temperature	–	–	–	■
Device lock	■	■	■	■
Logic function (including light scenes)	■	■	■	■
Busch-Watchdog 4 channels	–	–	–	–

Notes

A smart sensor for everything
Advantages for you at a glance

The extra-flat KNX sensor fits into any environment

Flat and theft-proof
The frameless and extra-flat KNX sensor with a diameter of 9.5 mm sits almost flush with the wall and blends harmoniously into any wall design. Peace of mind is provided by the optional removal guard, which protects the KNX sensor from theft.

Secure access control for the hospitality industry

Hotel access control
The ABB-tacteo KNX range offers secure access control for the hospitality industry. It is particularly practical that the sensor performs all of a hotel's management tasks, which can be controlled from a central point such as the reception desk.

The capacitive glass sensors react without contact

Intuitive operation
The capacitive KNX glass sensors react without any touch or contact. When moving your hand towards the sensor, the status lighting switches on automatically. On the other hand, touching the sensor with the entire palm of your hand triggers a preprogrammed function – such as "switching on the light". With a tap of the finger the desired function can be activated. Easy operation is also ensured by the tried-and-tested colour control concept.

ABB i-bus® KNX

User Operation – Design Ranges – ABB i-bus® KNX sensor PEONIA®

PEB/U2.0.1-201

ABB i-bus®KNX sensor PEONIA® control element 2/4-fold, FM **NEW**

With integrated bus coupling unit and temperature sensor.
Proximity sensor, device locking and energy saving function.
Switch contact left/right. Replaceable rocker without icon.
Push button function: switching/dimming/blind/value sending/step-type switch/ lightscene. Individual programmable LED per rocker. Top and bottom ambient LED strip.
LED colour: red/green/yellow/blue/red-orange/violet/white.
Dimensions (L x W): 86 mm x 86 mm.
Only available on the Chinese market.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Gloss White	–	PEB/U2.0.1-002	2TAZ730200R0020		0.204	1
Matt White	–	PEB/U2.0.1-001	2TAZ730200R0010		0.204	1
Matt Black	–	PEB/U2.0.1-201	2TAZ730200R2010		0.204	1
Matt Silver	–	PEB/U2.0.1-131	2TAZ730200R1310		0.204	1
Matt Platinum	–	PEB/U2.0.1-151	2TAZ730200R1510		0.204	1
Matt Champagne Gold	–	PEB/U2.0.1-411	2TAZ730200R4110		0.204	1

PEB/U3.0.1-201

ABB i-bus®KNX sensor PEONIA® control element 3/6-fold, FM **NEW**

With integrated bus coupling unit and temperature sensor.
Proximity sensor, device locking and energy saving function.
Switch contact left/right. Replaceable rocker without icon.
Push button function: switching/dimming/blind/value sending/step-type switch/ lightscene. Individual programmable LED per rocker. Top and bottom ambient LED strip.
LED colour: red/green/yellow/blue/red-orange/violet/white.
Dimensions (L x W): 86 mm x 86 mm.
Only available on the Chinese market.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Gloss White	–	PEB/U3.0.1-002	2TAZ730300R0020		0.205	1
Matt White	–	PEB/U3.0.1-001	2TAZ730300R0010		0.205	1
Matt Black	–	PEB/U3.0.1-201	2TAZ730300R2010		0.205	1
Matt Silver	–	PEB/U3.0.1-131	2TAZ730300R1310		0.205	1
Matt Platinum	–	PEB/U3.0.1-151	2TAZ730300R1510		0.205	1
Matt Champagne Gold	–	PEB/U3.0.1-411	2TAZ730300R4110		0.205	1

ABB i-bus® KNX

User Operation – Design Ranges – ABB i-bus® KNX sensor PEONIA®

PEB/U5.0.1-201

ABB i-bus®KNX sensor PEONIA® control element 5/10-fold, FM **NEW**

With integrated bus coupling unit and temperature sensor.
Proximity sensor, device locking and energy saving function.
Switch contact left/right. Replaceable rocker without icon.
Push button function: switching/dimming/blind/value sending/step-type switch/ lightscene. Individual programmable LED per rocker. Top and bottom ambient LED strip.
LED colour: red/green/yellow/blue/red-orange/violet/white.
Dimensions (L x W): 144 mm x 86 mm.
Only available on the Chinese market.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Gloss White	–	PEB/U5.0.1-002	2TAZ730500R0020		0.275	1
Matt White	–	PEB/U5.0.1-001	2TAZ730500R0010		0.275	1
Matt Black	–	PEB/U5.0.1-201	2TAZ730500R2010		0.275	1
Matt Silver	–	PEB/U5.0.1-131	2TAZ730500R1310		0.275	1
Matt Platinum	–	PEB/U5.0.1-151	2TAZ730500R1510		0.275	1
Matt Champagne Gold	–	PEB/U5.0.1-411	2TAZ730500R4110		0.275	1

PEBR/U2.0.1-201

ABB i-bus®KNX sensor PEONIA® control element 2/4-fold with Room Temperature Controller, FM **NEW**

With integrated bus coupling unit and temperature sensor. Proximity sensor, device locking and energy saving function Switch contact left/right. Replaceable rocker without icon.
Push button function: switching/dimming/blind/value sending/step-type switch/ lightscene/ fan function.
With base-load operation.
The controller is a constant room temperature controller for ventilator convectors (fan-coil) in 2 and 4 pipe system and conventional heating and cooling systems.
The fan stage can be switched manually or automatic mode.
Delicated capactive touch RTC control button with vibration feedback, Single/Master/Slave configuration.
LCD display: Setpoint/actual temperature, Fan speed, Operating state, Operating mode.
Configurable: time, PM2.5, CO_2, Humidity, VOC, temperature, Dynamic animation for dimming, blind, scene.
Individual programmable LED per rocker. Top and bottom ambient LED strip.
LED colour: red/green/yellow/blue/red-orange/violet/white.
Temperature range (device): -5°C to 45°C. Dimensions (L x W): 86 mm x 86 mm.
Only available on the Chinese market.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Gloss White	–	PEBR/U2.0.1-002	2TAZ730210R0020		0.212	1
Matt White	–	PEBR/U2.0.1-001	2TAZ730210R0010		0.212	1
Matt Black	–	PEBR/U2.0.1-201	2TAZ730210R2010		0.212	1
Matt Silver	–	PEBR/U2.0.1-131	2TAZ730210R1310		0.212	1
Matt Platinum	–	PEBR/U2.0.1-151	2TAZ730210R1510		0.212	1
Matt Champagne Gold	–	PEBR/U2.0.1-411	2TAZ730210R4110		0.212	1

ABB i-bus® KNX

User Operation – Design Ranges – ABB i-bus® KNX sensor PEONIA®

PEBR/U3.0.1-201

ABB i-bus®KNX sensor PEONIA® control element 3/6-fold with Room Temperature Controller, FM **NEW**

With integrated bus coupling unit and temperature sensor.
Proximity sensor, device locking and energy saving function.
Switch contact left/right. Replaceable rocker without icon.
Push button function: switching/dimming/blind/value sending/step-type switch/ lightscene/fan function. With base-load operation.
The controller is a constant room temperature controller for ventilator convectors (fan-coil) in 2 and 4 pipe system and conventional heating and cooling systems. The fan stage can be switched manually or automatic mode.
Delicated capactive touch RTC control button with vibration feedback, Single/Master/Slave configuration.
LCD display: Setpoint/actual temperature, Fan speed, Operating state, Operating mode.
Configurable: time, PM2.5, CO_2, Humidity, VOC, temperature, Dynamic animation for dimming, blind, scene.
Individual programmable LED per rocker. Top and bottom ambient LED strip.
LED colour: red/green/yellow/blue/red-orange/violet/white.
Temperature range (device): -5°C to 45°C. Dimensions (L x W): 105 mm x 86 mm.
Only available on the Chinese market.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Gloss White	–	PEBR/U3.0.1-002	2TAZ730310R0020		0.253	1
Matt White	–	PEBR/U3.0.1-001	2TAZ730310R0010		0.253	1
Matt Black	–	PEBR/U3.0.1-201	2TAZ730310R2010		0.253	1
Matt Silver	–	PEBR/U3.0.1-131	2TAZ730310R1310		0.253	1
Matt Platinum	–	PEBR/U3.0.1-151	2TAZ730310R1510		0.253	1
Matt Champagne Gold	–	PEBR/U3.0.1-411	2TAZ730310R4110		0.253	1

ABB i-bus® KNX

User Operation – Design Ranges – ABB i-bus® KNX sensor PEONIA®

PEBR/U5.0.1-201

ABB i-bus®KNX sensor PEONIA® control element 5/10-fold with Room Temperature Controller, FM **NEW**

With integrated bus coupling unit and temperature sensor. Proximity sensor, device locking and energy saving function.
Switch contact left/right. Replaceable rocker without icon.
Push button function: switching/dimming/blind/value sending/step-type switch/ lightscene/ fan function.
With base-load operation. The controller is a constant room temperature controller for ventilator convectors (fan-coil).
In 2 and 4 pipe system and conventional heating and cooling systems. The fan stage can be switched manually or automatic mode.
Delicated capactive touch RTC control button with vibration feedback, Single/Master/Slave configuration.
LCD display: Setpoint/actual temperature, Fan speed, Operating state, Operating mode.
Configurable: time, PM2.5, CO_2, Humidity, VOC, temperature, Dynamic animation for dimming, blind, scene.
Individual programmable LED per rocker. Top and bottom ambient LED strip.
LED colour: red/green/yellow/blue/red-orange/violet/white.
Temperature range (device): -5°C to 45°C. Dimensions (L x W): 141 mm x 86 mm.
Only available on the Chinese market.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Gloss White	–	PEBR/U5.0.1-002	2TAZ730510R0020		0.284	1
Matt White	–	PEBR/U5.0.1-001	2TAZ730510R0010		0.284	1
Matt Black	–	PEBR/U5.0.1-201	2TAZ730510R2010		0.284	1
Matt Silver	–	PEBR/U5.0.1-131	2TAZ730510R1310		0.284	1
Matt Platinum	–	PEBR/U5.0.1-151	2TAZ730510R1510		0.284	1
Matt Champagne Gold	–	PEBR/U5.0.1-411	2TAZ730510R4110		0.284	1

PESX/U2.10.1-201

Replaceable rocker without icon for ABB i-bus®KNX sensor PEONIA® control element, PEB/U2.0.1-xxx **NEW**

Dimensions (L x W): 43 mm x 78 mm.
Only available on the Chinese market.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Gloss White	–	PESX/U2.10.1-002	2TAZ730000R0020		0.087	1
Matt White	–	PESX/U2.10.1-001	2TAZ730000R0010		0.087	1
Matt Black	–	PESX/U2.10.1-201	2TAZ730000R2010		0.087	1
Matt Silver	–	PESX/U2.10.1-131	2TAZ730000R1310		0.087	1
Matt Platinum	–	PESX/U2.10.1-151	2TAZ730000R1510		0.087	1
Matt Champagne Gold	–	PESX/U2.10.1-411	2TAZ730000R4110		0.087	1

ABB i-bus® KNX

User Operation – Design Ranges – ABB i-bus® KNX sensor PEONIA®

PESB/U2.10.1-201

Replaceable rocker with lighting icon for ABB i-bus®KNX sensor PEONIA® control element,PEB/U2.0.1-xxx **NEW**

Dimensions (L x W): 43 mm x 78 mm.
Only available on the Chinese market.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Gloss White	–	PESB/U2.10.1-002	2TAZ730000R0021		0.087	1
Matt White	–	PESB/U2.10.1-001	2TAZ730000R0011		0.087	1
Matt Black	–	PESB/U2.10.1-201	2TAZ730000R2011		0.087	1
Matt Silver	–	PESB/U2.10.1-131	2TAZ730000R1311		0.087	1
Matt Platinum	–	PESB/U2.10.1-151	2TAZ730000R1511		0.087	1
Matt Champagne Gold	–	PESB/U2.10.1-411	2TAZ730000R4111		0.087	1

PESD/U2.10.1-201

Replaceable rocker with dimming icon for ABB i-bus®KNX sensor PEONIA® control element, PEB/U2.0.1-xxx **NEW**

Dimensions (L x W): 43 mm x 78 mm.
Only available on the Chinese market.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Gloss White	–	PESD/U2.10.1-002	2TAZ730000R0024		0.087	1
Matt White	–	PESD/U2.10.1-001	2TAZ730000R0014		0.087	1
Matt Black	–	PESD/U2.10.1-201	2TAZ730000R2014		0.087	1
Matt Silver	–	PESD/U2.10.1-131	2TAZ730000R1314		0.087	1
Matt Platinum	–	PESD/U2.10.1-151	2TAZ730000R1514		0.087	1
Matt Champagne Gold	–	PESDU2.10.1-411	2TAZ730000R4114		0.087	1

PESJ/U2.10.1-201

Replaceable rocker with blind icon for ABB i-bus®KNX sensor PEONIA® control element, PEB/U2.0.1-xxx **NEW**

Dimensions (L x W): 43 mm x 78 mm.
Only available on the Chinese market.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Gloss White	–	PESJ/U2.10.1-002	2TAZ730000R0023		0.087	1
Matt White	–	PESJ/U2.10.1-001	2TAZ730000R0013		0.087	1
Matt Black	–	PESJ/U2.10.1-201	2TAZ730000R2013		0.087	1
Matt Silver	–	PESJ/U2.10.1-131	2TAZ730000R1313		0.087	1
Matt Platinum	–	PESJ/U2.10.1-151	2TAZ730000R1513		0.087	1
Matt Champagne Gold	–	PESJ/U2.10.1-411	2TAZ730000R4113		0.087	1

ABB i-bus® KNX

User Operation – Design Ranges – ABB i-bus® KNX sensor PEONIA®

PESR/U2.10.1-201

Replaceable rocker with temperature icon for ABB i-bus®KNX sensor PEONIA® control element, PEB/U2.0.1-xxx **NEW**

Dimensions (L x W): 43 mm x 78 mm.
Only available on the Chinese market.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Gloss White	–	PESR/U2.10.1-002	2TAZ730000R0022		0.087	1
Matt White	–	PESR/U2.10.1-001	2TAZ730000R0012		0.087	1
Matt Black	–	PESR/U2.10.1-201	2TAZ730000R2012		0.087	1
Matt Silver	–	PESR/U2.10.1-131	2TAZ730000R1312		0.087	1
Matt Platinum	–	PESR/U2.10.1-151	2TAZ730000R1512		0.087	1
Matt Champagne Gold	–	PESR/U2.10.1-411	2TAZ730000R4112		0.087	1

PESF/U2.10.1-201

Replaceable rocker with fan icon for ABB i-bus®KNX sensor PEONIA® control element, PEB/U2.0.1-xxx **NEW**

Dimensions (L x W): 43 mm x 78 mm.
Only available on the Chinese market.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Gloss White	–	PESF/U2.10.1-002	2TAZ730000R0025		0.087	1
Matt White	–	PESF/U2.10.1-001	2TAZ730000R0015		0.087	1
Matt Black	–	PESF/U2.10.1-201	2TAZ730000R2015		0.087	1
Matt Silver	–	PESF/U2.10.1-131	2TAZ730000R1315		0.087	1
Matt Platinum	–	PESF/U2.10.1-151	2TAZ730000R1515		0.087	1
Matt Champagne Gold	–	PESF/U2.10.1-411	2TAZ730000R4115		0.087	1

PESZ/U2.10.1-201

Replaceable rocker with scene icon for ABB i-bus®KNX sensor PEONIA® control element,PEB/U2.0.1-xxx **NEW**

Dimensions (L x W): 43 mm x 78 mm.
Only available on the Chinese market.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Gloss White	–	PESZ/U2.10.1-002	2TAZ730000R0026		0.087	1
Matt White	–	PESZ/U2.10.1-001	2TAZ730000R0016		0.087	1
Matt Black	–	PESZ/U2.10.1-201	2TAZ730000R2016		0.087	1
Matt Silver	–	PESZ/U2.10.1-131	2TAZ730000R1316		0.087	1
Matt Platinum	–	PESZ/U2.10.1-151	2TAZ730000R1516		0.087	1
Matt Champagne Gold	–	PESZ/U2.10.1-411	2TAZ730000R4116		0.087	1

ABB i-bus® KNX

User Operation – Design Ranges – ABB i-bus® KNX sensor PEONIA®

PESX/U35.10.1-201

Replaceable rocker without icon for ABB i-bus®KNX sensor PEONIA® control element, PEB/U3.0.1-xxx, PEB/U5.0.1-xxx **NEW**

Dimensions (L x W): 29 mm x 78 mm.
Only available on the Chinese market.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Gloss White	–	PESX/U35.10.1-002	2TAZ730001R0020		0.074	1
Matt White	–	PESX/U35.10.1-001	2TAZ730001R0010		0.074	1
Matt Black	–	PESX/U35.10.1-201	2TAZ730001R2010		0.074	1
Matt Silver	–	PESX/U35.10.1-131	2TAZ730001R1310		0.074	1
Matt Platinum	–	PESX/U35.10.1-151	2TAZ730001R1510		0.074	1
Matt Champagne Gold	–	PESX/U35.10.1-411	2TAZ730001R4110		0.074	1

PESB/U35.10.1-201

Replaceable rocker with lighting icon for ABB i-bus®KNX sensor PEONIA® control element, PEB/U3.0.1-xxx, PEB/U5.0.1-xxx **NEW**

Dimensions (L x W): 29 mm x 78 mm.
Only available on the Chinese market.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Gloss White	–	PESB/U35.10.1-002	2TAZ730001R0021		0.074	1
Matt White	–	PESB/U35.10.1-001	2TAZ730001R0011		0.074	1
Matt Black	–	PESB/U35.10.1-201	2TAZ730001R2011		0.074	1
Matt Silver	–	PESB/U35.10.1-131	2TAZ730001R1311		0.074	1
Matt Platinum	–	PESB/U35.10.1-151	2TAZ730001R1511		0.074	1
Matt Champagne Gold	–	PESB/U35.10.1-411	2TAZ730001R4111		0.074	1

PESD/U35.10.1-201

Replaceable rocker with dimming icon for ABB i-bus®KNX sensor PEONIA® control element, PEB/U3.0.1-xxx, PEB/U5.0.1-xxx **NEW**

Dimensions (L x W): 29 mm x 78 mm.
Only available on the Chinese market.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Gloss White	–	PESD/U35.10.1-002	2TAZ730001R0024		0.074	1
Matt White	–	PESD/U35.10.1-001	2TAZ730001R0014		0.074	1
Matt Black	–	PESD/U35.10.1-201	2TAZ730001R2014		0.074	1
Matt Silver	–	PESD/U35.10.1-131	2TAZ730001R1314		0.074	1
Matt Platinum	–	PESD/U35.10.1-151	2TAZ730001R1514		0.074	1
Matt Champagne Gold	–	PESD/U35.10.1-411	2TAZ730001R4114		0.074	1

ABB i-bus® KNX

User Operation – Design Ranges – ABB i-bus® KNX sensor PEONIA®

PESJ/U35.10.1-201

Replaceable rocker with blind icon for ABB i-bus®KNX sensor PEONIA® control element, PEB/U3.0.1-xxx, PEB/U5.0.1-xxx **NEW**

Dimensions (L x W): 29 mm x 78 mm.

Only available on the Chinese market.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Gloss White	–	PESJ/U35.10.1-002	2TAZ730001R0023		0.074	1
Matt White	–	PESJ/U35.10.1-001	2TAZ730001R0013		0.074	1
Matt Black	–	PESJ/U35.10.1-201	2TAZ730001R2013		0.074	1
Matt Silver	–	PESJ/U35.10.1-131	2TAZ730001R1313		0.074	1
Matt Platinum	–	PESJ/U35.10.1-151	2TAZ730001R1513		0.074	1
Matt Champagne Gold	–	PESJ/U35.10.1-411	2TAZ730001R4113		0.074	1

PESR/U35.10.1-201

Replaceable rocker with temperature icon for ABB i-bus®KNX sensor PEONIA® control element,PEB/U3.0.1-xxx, PEB/U5.0.1-xxx **NEW**

Dimensions (L x W): 29 mm x 78 mm.

Only available on the Chinese market.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Gloss White	–	PESR/U35.10.1-002	2TAZ730001R0022		0.074	1
Matt White	–	PESR/U35.10.1-001	2TAZ730001R0012		0.074	1
Matt Black	–	PESR/U35.10.1-201	2TAZ730001R2012		0.074	1
Matt Silver	–	PESR/U35.10.1-131	2TAZ730001R1312		0.074	1
Matt Platinum	–	PESR/U35.10.1-151	2TAZ730001R1512		0.074	1
Matt Champagne Gold	–	PESR/U35.10.1-411	2TAZ730001R4112		0.074	1

PESF/U35.10.1-201

Replaceable rocker with fan icon for ABB i-bus®KNX sensor PEONIA® control element, PEB/U3.0.1-xxx, PEB/U5.0.1-xxx **NEW**

Dimensions (L x W): 29 mm x 78 mm.

Only available on the Chinese market.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Gloss White	–	PESF/U35.10.1-002	2TAZ730001R0025		0.074	1
Matt White	–	PESF/U35.10.1-001	2TAZ730001R0015		0.074	1
Matt Black	–	PESF/U35.10.1-201	2TAZ730001R2015		0.074	1
Matt Silver	–	PESF/U35.10.1-131	2TAZ730001R1315		0.074	1
Matt Platinum	–	PESF/U35.10.1-151	2TAZ730001R1515		0.074	1
Matt Champagne Gold	–	PESF/U35.10.1-411	2TAZ730001R4115		0.074	1

ABB i-bus® KNX

User Operation – Design Ranges – ABB i-bus® KNX sensor PEONIA®

PESZ/U35.10.1-201

Replaceable rocker with scene icon for ABB i-bus®KNX sensor PEONIA® control element, PEB/U3.0.1-xxx, PEB/U5.0.1-xxx **NEW**

Dimensions (L x W): 29 mm x 78 mm.

Only available on the Chinese market.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Gloss White	–	PESZ/U35.10.1-002	2TAZ730001R0026		0.074	1
Matt White	–	PESZ/U35.10.1-001	2TAZ730001R0016		0.074	1
Matt Black	–	PESZ/U35.10.1-201	2TAZ730001R2016		0.074	1
Matt Silver	–	PESZ/U35.10.1-131	2TAZ730001R1316		0.074	1
Matt Platinum	–	PESZ/U35.10.1-151	2TAZ730001R1516		0.074	1
Matt Champagne Gold	–	PESZ/U35.10.1-411	2TAZ730001R4116		0.074	1

PESX/U235.10.1-201

Replaceable rocker without icon for ABB i-bus®KNX sensor PEONIA® control element, PEBR/Ux.0.1-xxx **NEW**

Dimensions (L x W): 18 mm x 78 mm.

Only available on the Chinese market.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Gloss White	–	PESX/U235.10.1-002	2TAZ730010R0020		0.065	1
Matt White	–	PESX/U235.10.1-001	2TAZ730010R0010		0.065	1
Matt Black	–	PESX/U235.10.1-201	2TAZ730010R2010		0.065	1
Matt Silver	–	PESX/U235.10.1-131	2TAZ730010R1310		0.065	1
Matt Platinum	–	PESX/U235.10.1-151	2TAZ730010R1510		0.065	1
Matt Champagne Gold	–	PESX/U235.10.1-411	2TAZ730010R4110		0.065	1

PESB/U235.10.1-201

Replaceable rocker with lighting icon for ABB i-bus®KNX sensor PEONIA® control element, PEBR/Ux.0.1-xxx **NEW**

Dimensions (L x W): 18 mm x 78 mm.

Only available on the Chinese market.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Gloss White	–	PESB/U235.10.1-002	2TAZ730010R0021		0.065	1
Matt White	–	PESB/U235.10.1-001	2TAZ730010R0011		0.065	1
Matt Black	–	PESB/U235.10.1-201	2TAZ730010R2011		0.065	1
Matt Silver	–	PESB/U235.10.1-131	2TAZ730010R1311		0.065	1
Matt Platinum	–	PESB/U235.10.1-151	2TAZ730010R1511		0.065	1
Matt Champagne Gold	–	PESB/U235.10.1-411	2TAZ730010R4111		0.065	1

ABB i-bus® KNX

User Operation – Design Ranges – ABB i-bus® KNX sensor PEONIA®

PESD/U235.10.1-201

Replaceable rocker with dimming icon for ABB i-bus®KNX sensor PEONIA® control element, PEBR/Ux.0.1-xxx **NEW**

Dimensions (L x W): 18 mm x 78 mm.
Only available on the Chinese market.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Gloss White	–	PESD/U235.10.1-002	2TAZ730010R0024		0.065	1
Matt White	–	PESD/U235.10.1-001	2TAZ730010R0014		0.065	1
Matt Black	–	PESD/U235.10.1-201	2TAZ730010R2014		0.065	1
Matt Silver	–	PESD/U235.10.1-131	2TAZ730010R1314		0.065	1
Matt Platinum	–	PESD/U235.10.1-151	2TAZ730010R1514		0.065	1
Matt Champagne Gold	–	PESD/U235.10.1-411	2TAZ730010R4114		0.065	1

PESJ/U235.10.1-201

Replaceable rocker with blind icon for ABB i-bus®KNX sensor PEONIA® control element, PEBR/Ux.0.1-xxx **NEW**

Dimensions (L x W): 18 mm x 78 mm.
Only available on the Chinese market.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Gloss White	–	PESJ/U235.10.1-002	2TAZ730010R0023		0.065	1
Matt White	–	PESJ/U235.10.1-001	2TAZ730010R0013		0.065	1
Matt Black	–	PESJ/U235.10.1-201	2TAZ730010R2013		0.065	1
Matt Silver	–	PESJ/U235.10.1-131	2TAZ730010R1313		0.065	1
Matt Platinum	–	PESJ/U235.10.1-151	2TAZ730010R1513		0.065	1
Matt Champagne Gold	–	PESJ/U235.10.1-411	2TAZ730010R4113		0.065	1

PESR/U235.10.1-201

Replaceable rocker with temperature icon for ABB i-bus®KNX sensor PEONIA® control element, PEBR/Ux.0.1-xxx **NEW**

Dimensions (L x W): 18 mm x 78 mm.
Only available on the Chinese market.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Gloss White	–	PESR/U235.10.1-002	2TAZ730010R0022		0.065	1
Matt White	–	PESR/U235.10.1-001	2TAZ730010R0012		0.065	1
Matt Black	–	PESR/U235.10.1-201	2TAZ730010R2012		0.065	1
Matt Silver	–	PESR/U235.10.1-131	2TAZ730010R1312		0.065	1
Matt Platinum	–	PESR/U235.10.1-151	2TAZ730010R1512		0.065	1
Matt Champagne Gold	–	PESR/U235.10.1-411	2TAZ730010R4112		0.065	1

ABB i-bus® KNX

User Operation – Design Ranges – ABB i-bus® KNX sensor PEONIA®

PESF/U235.10.1-201

Replaceable rocker with fan icon for ABB i-bus®KNX sensor PEONIA® control element, PEBR/Ux.0.1-xxx **NEW**

Dimensions (L x W): 18 mm x 78 mm.
Only available on the Chinese market.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Gloss White	–	PESF/U235.10.1-002	2TAZ730010R0025		0.065	1
Matt White	–	PESF/U235.10.1-001	2TAZ730010R0015		0.065	1
Matt Black	–	PESF/U235.10.1-201	2TAZ730010R2015		0.065	1
Matt Silver	–	PESF/U235.10.1-131	2TAZ730010R1315		0.065	1
Matt Platinum	–	PESF/U235.10.1-151	2TAZ730010R1515		0.065	1
Matt Champagne Gold	–	PESF/U235.10.1-411	2TAZ730010R4115		0.065	1

PESZ/U235.10.1-201

Replaceable rocker with scene icon for ABB i-bus®KNX sensor PEONIA® control element, PEBR/Ux.0.1-xxx **NEW**

Dimensions (L x W): 18 mm x 78 mm.
Only available on the Chinese market.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Gloss White	–	PESZ/U235.10.1-002	2TAZ730010R0026		0.065	1
Matt White	–	PESZ/U235.10.1-001	2TAZ730010R0016		0.065	1
Matt Black	–	PESZ/U235.10.1-201	2TAZ730010R2016		0.065	1
Matt Silver	–	PESZ/U235.10.1-131	2TAZ730010R1316		0.065	1
Matt Platinum	–	PESZ/U235.10.1-151	2TAZ730010R1516		0.065	1
Matt Champagne Gold	–	PESZ/U235.10.1-411	2TAZ730010R4116		0.065	1

ABB-tacteo KNX

The individual touch

Unique in design and function, the intuitive and individually configurable ABB-tacteo KNX sensor is as extraordinary as you are. The impressive, high-quality black or white glass sensor with its capacitive user interface offers virtually unlimited possibilities for intelligent building networking. Heating, ventilation, blinds and lighting can all be controlled to create comfortable everyday situations and put intelligent building management firmly in your hands. Discover more details at **abb.com/tacteo**

ABB i-bus® KNX

User Operation – Design Ranges – ABB-tacteo

Touch Control Element with Bus Coupler, FM

Freely configurable multifunction control element. The icons and/or texts are configured by means of a web configuration tool. With integrated KNX bus coupler. With integrated temperature sensor. Push switch function: switching / dimming / blind / sending values / scenes etc. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. The bus connection is provided via the enclosed bus terminal.

TB/U1.1.1-CG

1-fold

Description	Standard Design ID	Order details		Price 1 piece	Dimensions	Pack unit
		Type code	Order code		mm	pc.
White	F5XVPB7C	TB/U1.1.1-CG	2CKA006300A1538		86x86	1
Black	F5XVPBZQ	TB/U1.1.1-CG	2CKA006300A1538		86x86	1
Individual design [1]	Go to configurator	TB/U1.1.1-CG	2CKA006300A1538		86x86	1

TB/U2.4.1-CG

2-fold

Description	Standard Design ID	Order details		Price 1 piece	Dimensions	Pack unit
		Type code	Order code		mm	pc.
White	F5XVPB79	TB/U2.4.1-CG	2CKA006300A1539		86x86	1
Black	F5XVPBZH	TB/U2.4.1-CG	2CKA006300A1539		86x86	1
Individual design [1]	Go to configurator	TB/U2.4.1-CG	2CKA006300A1539		86x86	1

TB/U2.5.1-CG

2-fold

Description	Standard Design ID	Order details		Price 1 piece	Dimensions	Pack unit
		Type code	Order code		mm	pc.
White	F5XVPB7Z	TB/U2.5.1-CG	2CKA006300A1540		86x86	1
Black	F5XVPBZR	TB/U2.5.1-CG	2CKA006300A1540		86x86	1
Individual design [1]	Go to configurator	TB/U2.5.1-CG	2CKA006300A1540		86x86	1

TB/U4.4.1-CG

4-fold

Description	Standard Design ID	Order details		Price 1 piece	Dimensions	Pack unit
		Type code	Order code		mm	pc.
White	F5XVPBZF	TB/U4.4.1-CG	2CKA006300A1541		86x86	1
Black	F5XVPBZ4	TB/U4.4.1-CG	2CKA006300A1541		86x86	1
Individual design [1]	Go to configurator	TB/U4.4.1-CG	2CKA006300A1541		86x86	1

TB/U4.5.1-CG

4-fold

Description	Standard Design ID	Order details		Price 1 piece	Dimensions	Pack unit
		Type code	Order code		mm	pc.
White	F5XVPBZY	TB/U4.5.1-CG	2CKA006300A1612		86x86	1
Black	F5XVPBZK	TB/U4.5.1-CG	2CKA006300A1612		86x86	1
Individual design [1]	Go to configurator	TB/U4.5.1-CG	2CKA006300A1612		86x86	1

[1] The individual design can be selected via the website:
URL: https://tacteo-configurator.eu.mybuildings.abb.com/

ABB i-bus® KNX

User Operation – Design Ranges – ABB-tacteo

TB/U6.4.1-CG

6-fold

Description	Standard Design ID	Order details		Price 1 piece	Dimensions	Pack unit
		Type code	Order code		mm	pc.
White	F5XVPBZN	TB/U6.4.1-CG	2CKA006300A1542		86x86	1
Black	F5XVPBZ6	TB/U6.4.1-CG	2CKA006300A1542		86x86	1
Individual design [1]	Go to configurator	TB/U6.4.1-CG	2CKA006300A1542		86x86	1

TB/U6.5.1-CG

6-fold

Description	Standard Design ID	Order details		Price 1 piece	Dimensions	Pack unit
		Type code	Order code		mm	pc.
White	F5XVPBZ3	TB/U6.5.1-CG	2CKA006300A1602		86x86	1
Black	F5XVPBZT	TB/U6.5.1-CG	2CKA006300A1602		86x86	1
Individual design [1]	Go to configurator	TB/U6.5.1-CG	2CKA006300A1602		86x86	1

TB/U12.7.1-CG

12-fold

Description	Standard Design ID	Order details		Price 1 piece	Dimensions	Pack unit
		Type code	Order code		mm	pc.
White	F5XVPB7J	TB/U12.7.1-CG	2CKA006300A1543		86x157	1
Black	F5XVPBZ7	TB/U12.7.1-CG	2CKA006300A1543		86x157	1
Individual design [1]	Go to configurator	TB/U12.7.1-CG	2CKA006300A1543		86x157	1

TB/U12.8.1-CG

12-fold

Description	Standard Design ID	Order details		Price 1 piece	Dimensions	Pack unit
		Type code	Order code		mm	pc.
White	F5XVPB7G	TB/U12.8.1-CG	2CKA006300A1544		157x86	1
Black	F5XVPBZE	TB/U12.8.1-CG	2CKA006300A1544		157x86	1
Individual design [1]	Go to configurator	TB/U12.8.1-CG	2CKA006300A1544		157x86	1

[1] The individual design can be selected via the website:
URL: https://tacteo-configurator.eu.mybuildings.abb.com/

ABB i-bus® KNX

User Operation – Design Ranges – ABB-tacteo

TBR/U4.7.1-CG

TBR/U4.8.1-CG

Touch Control Element with Room Temperature Controller and Bus Coupler, 4-fold, FM

Freely configurable multifunction control element. The icons and/or texts are configured by means of a web configuration tool. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. Rocker switch left/right (switching/dimming/blind/value sender/light scenes/fan function). The controller is a constant room temperature controller for ventilator convectors (fan coils) in 2-pipe and 4-pipe systems and conventional heating or cooling systems. The fan stage can be switched manually or in automatic mode. Class of temperature controller 1. Contribution to space heating energy efficiency 1,0 %. With integrated KNX bus coupler.

Description	Standard Design ID	Order details		Price 1 piece	Dimensions	Pack unit
		Type code	Order code		mm	pc.
White	F5XVPB7A	TBR/U4.7.1-CG	2CKA006300A1545		86x157	1
Black	F5XVPB73	TBR/U4.7.1-CG	2CKA006300A1545		86x157	1
Individual design [1]	Go to configurator	TBR/U4.7.1-CG	2CKA006300A1545		86x157	1
White	F5XVPB7B	TBR/U4.8.1-CG	2CKA006300A1546		157x86	1
Black	F5XVPB7N	TBR/U4.8.1-CG	2CKA006300A1546		157x86	1
Individual design [1]	Go to configurator	TBR/U4.8.1-CG	2CKA006300A1546		157x86	1

TR/U.1.1-CG

Touch Room Temperature Controller with Bus Coupler, FM

Ordering possible only in connection with the design ID. The icons and/or texts are configured by means of a web configuration tool. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. The controller is a constant room temperature controller for ventilator convectors (fan coils) in 2-pipe and 4-pipe systems and conventional heating or cooling systems. The fan stage can be switched manually or in automatic mode. Class of temperature controller 1. Contribution to space heating energy efficiency 1,0 %. With integrated KNX bus coupler.

Description	Standard Design ID	Order details		Price 1 piece	Dimensions	Pack unit
		Type code	Order code		mm	pc.
White	F5XVPB7P	TR/U.1.1-CG	2CKA006300A1547		86x86	1
Black	F5XVPB7M	TR/U.1.1-CG	2CKA006300A1547		86x86	1
Individual design [1]	Go to configurator	TR/U.1.1-CG	2CKA006300A1547		86x86	1

[1] The individual design can be selected via the website:
URL: https://tacteo-configurator.eu.mybuildings.abb.com/

ABB i-bus® KNX

User Operation – Design Ranges – ABB-tacteo

TBW/U.1.1-CG

Busch-Watchdog® 180 Sensor Standard with Bus Coupler, FM

Ordering possible only in connection with the design ID. Movement detector with up to 4 channels. The bus can be connected via enclosed terminal block. With integrated temperature sensor. With integrated KNX bus coupler.

Description	Standard Design ID	Order details		Price 1 piece	Dimensions	Pack unit
		Type code	Order code		mm	pc.
White	F5XVPB7U	TBW/U.1.1-CG	2CKA006300A1548		86x86	1
Black	F5XVPB7H	TBW/U.1.1-CG	2CKA006300A1548		86x86	1
Individual design [1]	Go to configurator	TBW/U.1.1-CG	2CKA006300A1548		86x86	1

TA/U3.1.1-CG

Room Outdoor Sensor with Bus Coupler, FM

Ordering possible only in connection with the design ID. The icons and/or texts are configured by means of a web configuration tool. Freely programmable function ”Do not disturb“, ”Bell“ and ”Make up room“. Push switch function: switching / dimming / blind / sending values / scenes etc. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. With integrated KNX bus coupler. With integrated temperature sensor. The bus connection is provided via the enclosed bus terminal.

Description	Standard Design ID	Order details		Price 1 piece	Dimensions	Pack unit
		Type code	Order code		mm	pc.
White	F5XVPB76	TA/U3.1.1-CG	2CKA006300A1549		86x86	1
Black	F5XVPBZ1	TA/U3.1.1-CG	2CKA006300A1549		86x86	1
Individual design [1]	Go to configurator	TA/U3.1.1-CG	2CKA006300A1549		86x86	1

[1] The individual design can be selected via the website:
URL: https://tacteo-configurator.eu.mybuildings.abb.com/

ABB i-bus® KNX

User Operation – Design Ranges – ABB-tacteo

TLM/U.1.1-CG

Room Outdoor Sensor with Card Reader and Bus Coupler, FM

Ordering possible only in connection with the design ID. The icons and/or texts are configured by means of a web configuration tool. Freely programmable function "Do not disturb", "Bell" and "Make up room". For reading and evaluating MIFARE RF cards. It is equipped with one relay (4 A @24 V AC/DC). Push switch function: switching / dimming / blind / sending values / scenes etc. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. With integrated KNX bus coupler. The bus connection is provided via the enclosed bus terminal. The device requires a 12...24 V AC/DC external power supply to ensure its operation even with bus voltage failure.

Description	Standard Design ID	Order details		Price 1 piece	Dimensions	Pack unit
		Type code	Order code		mm	pc.
White	F5XVPBF6	TLM/U.1.1-CG	2CKA006300A1550		86x86	1
Black	F5XVPB7F	TLM/U.1.1-CG	2CKA006300A1550		86x86	1
Individual design [1]	Go to configurator	TLM/U.1.1-CG	2CKA006300A1550		86x86	1

TKK/U.1.1-CG

Card Holder with Bus Coupler, universal

Ordering possible only in connection with the design ID. For inserting not programmed MIFARE RF cards. The icons and/or texts are configured by means of a web configuration tool. Freely programmable function "Do not disturb", "Bell" and "Make up room".
It is equipped with one relay (4 A @24 V AC/DC). Push switch function: switching / dimming / blind / sending values / scenes etc. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white =neutral/no function assigned) or standard illumination red/green. The bus connection is provided via the enclosed bus terminal.
The device requires a 12...24 V AC/DC external power supply to ensure its operation even with bus voltage failure.

Description	Standard Design ID	Order details		Price 1 piece	Dimensions	Pack unit
		Type code	Order code		mm	pc.
White	F5XVPBFC	TKK/U.1.1-CG	2CKA006300A1552		86x86	1
Black	F5XVPB72	TKK/U.1.1-CG	2CKA006300A1552		86x86	1
Individual design [1]	Go to configurator	TKK/U.1.1-CG	2CKA006300A1552		86x86	1

[1] The individual design can be selected via the website:
URL: https://tacteo-configurator.eu.mybuildings.abb.com/

ABB i-bus® KNX

User Operation – Design Ranges – ABB-tacteo

TKM/U.1.1-CG

Card Holder with Bus Coupler, programmable

Ordering possible only in connection with the design ID. For inserting and evaluating of programmed MIFARE RF cards. The icons and/or texts are configured by means of a web configuration tool. With integrated KNX bus coupler. Freely programmable function "Do not disturb", "Bell" and "Make up room". It is equipped with one relay (4 A @24 V AC/DC). Push switch function: switching / dimming / blind / sending values / scenes etc. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. The bus connection is provided via the enclosed bus terminal. The device requires a 12...24 V AC/DC external power supply to ensure its operation even with bus voltage failure.

Description	Standard Design ID	Order details		Price 1 piece	Dimensions	Pack unit
		Type code	Order code		mm	pc.
White	F5XVPBFK	TKM/U.1.1-CG	2CKA006300A1553		86x86	1
Black	F5XVPBFW	TKM/U.1.1-CG	2CKA006300A1553		86x86	1
Individual design [1]	Go to configurator	TKM/U.1.1-CG	2CKA006300A1553		86x86	1

TSM/U.2.1-CG

Room Outdoor Sensor with Card Reader, Room Number and Bus Coupler, FM

Ordering possible only in connection with the design ID. The icons and/or texts are configured by means of a web configuration tool. Freely programmable function "Do not disturb", "Bell" and "Make up room". For reading and evaluating MIFARE RF cards. With backlit room number. It is equipped with one relay (4 A @24 V AC/DC). Push switch function: switching / dimming / blind / sending values / scenes etc. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. The bus connection is provided via the enclosed bus terminal. The device requires a 12...24 V AC/DC external power supply to ensure its operation even with bus voltage failure.

Description	Standard Design ID	Order details		Price 1 piece	Dimensions	Pack unit
		Type code	Order code		mm	pc.
White	–	TSM/U.2.1-CG	2CKA006300A1555		86x157	1
Black	–	TSM/U.2.1-CG	2CKA006300A1555		86x157	1
Individual design [1]	Go to configurator	TSM/U.2.1-CG	2CKA006300A1555		86x157	1

[1] The individual design can be selected via the website:
URL: https://tacteo-configurator.eu.mybuildings.abb.com/

ABB i-bus® KNX

User Operation – Design Ranges – ABB-tacteo

Touch Control Element with Bus Coupler, FM

Freely configurable multifunction control element. The icons and/or texts are configured by means of a web configuration tool. With integrated KNX bus coupler. With integrated temperature sensor. Push switch function: switching / dimming / blind / sending values / scenes etc. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. The bus connection is provided via the enclosed bus terminal.

TB/U1.3.1-CG

1-fold

Description	Standard Design ID	Order details		Price 1 piece	Dimensions	Pack unit
		Type code	Order code		mm	pc.
White	F5XVPB74	TB/U1.3.1-CG	2CKA006300A1590		115x86	1
Black	F5XVPBZS	TB/U1.3.1-CG	2CKA006300A1590		115x86	1
Individual design [1]	Go to configurator	TB/U1.3.1-CG	2CKA006300A1590		115x86	1

TB/U2.8.1-CG

2-fold

Description	Standard Design ID	Order details		Price 1 piece	Dimensions	Pack unit
		Type code	Order code		mm	pc.
White	F5XVPB7D	TB/U2.8.1-CG	2CKA006300A1579		115x86	1
Black	F5XVPBZU	TB/U2.8.1-CG	2CKA006300A1579		115x86	1
Individual design [1]	Go to configurator	TB/U2.8.1-CG	2CKA006300A1579		115x86	1

TB/U4.8.1-CG

4-fold

Description	Standard Design ID	Order details		Price 1 piece	Dimensions	Pack unit
		Type code	Order code		mm	pc.
White	F5XVPBZ2	TB/U4.8.1-CG	2CKA006300A1593		115x86	1
Black	F5XVPBZJ	TB/U4.8.1-CG	2CKA006300A1593		115x86	1
Individual design [1]	Go to configurator	TB/U4.8.1-CG	2CKA006300A1593		115x86	1

TB/U6.8.1-CG

6-fold

Description	Standard Design ID	Order details		Price 1 piece	Dimensions	Pack unit
		Type code	Order code		mm	pc.
White	F5XVPBZA	TB/U6.8.1-CG	2CKA006300A1594		115x86	1
Black	F5XVPBZC	TB/U6.8.1-CG	2CKA006300A1594		115x86	1
Individual design [1]	Go to configurator	TB/U6.8.1-CG	2CKA006300A1594		115x86	1

[1] The individual design can be selected via the website:
URL: https://tacteo-configurator.eu.mybuildings.abb.com/

ABB i-bus® KNX

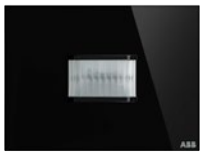
User Operation – Design Ranges – ABB-tacteo

TR/U.3.1-CG

Touch Room Temperature Controller with Bus Coupler, FM

Ordering possible only in connection with the design ID. The icons and/or texts are configured by means of a web configuration tool. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. Control element with room thermostat function for controlling TSA/K 230.1, TSA/K 24.1 in connection with KNX-Heating actuator, commercially available valve drives or analogue valve drives (continuous controllers). The controller is a constant room temperature controller for ventilator convectors (fan coils) in 2-pipe and 4-pipe systems and conventional heating or cooling systems. The fan stage can be switched manually or in automatic mode. Class of temperature controller 1. Contribution to space heating energy efficiency 1,0 %. With integrated KNX bus coupler.

Description	Standard Design ID	Order details		Price 1 piece	Dimensions	Pack unit
		Type code	Order code		mm	pc.
White	F5XVPB7E	TR/U.3.1-CG	2CKA006300A1595		115x86	1
Black	F5XVPB7Q	TR/U.3.1-CG	2CKA006300A1595		115x86	1
Individual design [1]	Go to configurator	TR/U.3.1-CG	2CKA006300A1595		115x86	1



TBW/U.3.1-CG

Busch-Watchdog® 180 Sensor Standard with Bus Coupler, FM

Ordering possible only in connection with the design ID. Movement detector with up to 4 channels. The bus can be connected via enclosed terminal block. With integrated temperature sensor. With integrated KNX bus coupler.

Description	Standard Design ID	Order details		Price 1 piece	Dimensions	Pack unit
		Type code	Order code		mm	pc.
White	F5XVPB71	TBW/U.3.1-CG	2CKA006300A1596		115x86	1
Black	F5XVPB7R	TBW/U.3.1-CG	2CKA006300A1596		115x86	1
Individual design [1]	Go to configurator	TBW/U.3.1-CG	2CKA006300A1596		115x86	1

TA/U3.3.1-CG

Room Outdoor Sensor with Bus Coupler, FM

Ordering possible only in connection with the design ID. The icons and/or texts are configured by means of a web configuration tool. Freely programmable function ”Do not disturb“, ”Bell“ and ”Make up room“. Push switch function: switching / dimming / blind / sending values / scenes etc. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. With integrated KNX bus coupler. The bus connection is provided via the enclosed bus terminal.

Description	Standard Design ID	Order details		Price 1 piece	Dimensions	Pack unit
		Type code	Order code		mm	pc.
White	F5XVPB7T	TA/U3.3.1-CG	2CKA006300A1597		115x86	1
Black	F5XVPBZX	TA/U3.3.1-CG	2CKA006300A1597		115x86	1
Individual design [1]	Go to configurator	TA/U3.3.1-CG	2CKA006300A1597		115x86	1

[1] The individual design can be selected via the website:
URL: https://tacteo-configurator.eu.mybuildings.abb.com/

ABB i-bus® KNX

User Operation – Design Ranges – ABB-tacteo

TLM/U.3.1-CG

Room Outdoor Sensor with Card Reader and Bus Coupler, FM

Ordering possible only in connection with the design ID. The icons and/or texts are configured by means of a web configuration tool. Freely programmable function ”Do not disturb“, ”Bell“ and ”Make up room“. For reading and evaluating MIFARE RF cards. It is equipped with one relay (4 A @24 V AC/DC). Push switch function: switching / dimming / blind / sending values / scenes etc. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. With integrated KNX bus coupler. With integrated temperature sensor. The bus connection is provided via the enclosed bus terminal. The device requires a 12...24 V AC/DC external power supply to ensure its operation even with bus voltage failure.

Description	Standard Design ID	Order details		Price 1 piece	Dimensions	Pack unit
		Type code	Order code		mm	pc.
White	F5XVPBFT	TLM/U.3.1-CG	2CKA006300A1599		115x86	1
Black	F5XVPB7Y	TLM/U.3.1-CG	2CKA006300A1599		115x86	1
Individual design [1]	Go to configurator	TLM/U.3.1-CG	2CKA006300A1599		115x86	1

TKK/U.3.1-CG

Card Holder with Bus Coupler, universal

Ordering possible only in connection with the design ID. For inserting not programmed MIFARE RF cards. The icons and/or texts are configured by means of a web configuration tool. Freely programmable function ”Do not disturb“, ”Bell“ and ”Make up room“. It is equipped with one relay (4 A @24 V AC/DC). Push switch function: switching / dimming / blind / sending values /scenes etc. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. The bus connection is provided via the enclosed bus terminal. The device requires a 12...24 V AC/DC external power supply to ensure its operation even with bus voltage failure.

Description	Standard Design ID	Order details		Price 1 piece	Dimensions	Pack unit
		Type code	Order code		mm	pc.
White	F5XVPBF4	TKK/U.3.1-CG	2CKA006300A1588		115x86	1
Black	F5XVPBF9	TKK/U.3.1-CG	2CKA006300A1588		115x86	1
Individual design [1]	Go to configurator	TKK/U.3.1-CG	2CKA006300A1588		115x86	1

[1] The individual design can be selected via the website:
URL: https://tacteo-configurator.eu.mybuildings.abb.com/

ABB i-bus® KNX

User Operation – Design Ranges – ABB-tacteo

TKM/U.3.1-CG

Card holder with Bus Coupler, programmable

Ordering possible only in connection with the design ID. For inserting and evaluating of MIFARE programmed RF cards. The icons and/or texts are configured by means of a web configuration tool. With integrated KNX bus coupler. Freely programmable function ”Do not disturb“, ”Bell“ and ”Make up room“. It is equipped with one relay (4 A @24 V AC/DC). Push switch function: switching / dimming / blind / sending values / scenes etc. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. The bus connection is provided via the enclosed bus terminal. The device requires a 12...24 V AC/DC external power supply to ensure its operation even with bus voltage failure.

Description	Standard Design ID	Order details		Price 1 piece	Dimensions	Pack unit
		Type code	Order code		mm	pc.
White	F5XVPBFG	TKM/U.3.1-CG	2CKA006300A1589		115x86	1
Black	F5XVPBFD	TKM/U.3.1-CG	2CKA006300A1589		115x86	1
Individual design [1)]	Go to configurator	TKM/U.3.1-CG	2CKA006300A1589		115x86	1

[1)] The individual design can be selected via the website:
URL: https://tacteo-configurator.eu.mybuildings.abb.com/

ABB i-bus® KNX

User Operation – Design Ranges – ABB-tacteo

Touch Control Element with Bus Coupler, FM

Freely configurable multifunction control element. The icons and/or texts are configured by means of a web configuration tool. With integrated KNX bus coupler. With integrated temperature sensor. Push switch function: switching / dimming / blind / sending values / scenes etc. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. The bus connection is provided via the enclosed bus terminal.

TB/U1.2.1-CG

1-fold

Description	Standard Design ID	Order details		Price 1 piece	Dimensions	Pack unit
		Type code	Order code		mm	pc.
White	F5XVPB7K	TB/U1.2.1-CG	2CKA006300A1578		86x115	1
Black	F5XVPBZP	TB/U1.2.1-CG	2CKA006300A1578		86x115	1
Individual design [1]	Go to configurator	TB/U1.2.1-CG	2CKA006300A1578		86x115	1

TB/U2.7.1-CG

2-fold

Description	Standard Design ID	Order details		Price 1 piece	Dimensions	Pack unit
		Type code	Order code		mm	pc.
White	F5XVPB7W	TB/U2.7.1-CG	2CKA006300A1580		86x115	1
Black	F5XVPBZV	TB/U2.7.1-CG	2CKA006300A1580		86x115	1
Individual design [1]	Go to configurator	TB/U2.7.1-CG	2CKA006300A1580		86x115	1

TB/U4.7.1-CG

4-fold

Description	Standard Design ID	Order details		Price 1 piece	Dimensions	Pack unit
		Type code	Order code		mm	pc.
White	F5XVPBZ8	TB/U4.7.1-CG	2CKA006300A1581		86x115	1
Black	F5XVPBZG	TB/U4.7.1-CG	2CKA006300A1581		86x115	1
Individual design [1]	Go to configurator	TB/U4.7.1-CG	2CKA006300A1581		86x115	1

TB/U6.7.1-CG

6-fold

Description	Standard Design ID	Order details		Price 1 piece	Dimensions	Pack unit
		Type code	Order code		mm	pc.
White	F5XVPBZB	TB/U6.7.1-CG	2CKA006300A1582		86x115	1
Black	F5XVPBZ5	TB/U6.7.1-CG	2CKA006300A1582		86x115	1
Individual design [1]	Go to configurator	TB/U6.7.1-CG	2CKA006300A1582		86x115	1

[1] The individual design can be selected via the website:
URL: https://tacteo-configurator.eu.mybuildings.abb.com/

ABB i-bus® KNX

User Operation – Design Ranges – ABB-tacteo

TR/U.2.1-CG

Touch Room Temperature Controller with Bus Coupler, FM

Ordering possible only in connection with the design ID. The icons and/or texts are configured by means of a web configuration tool. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. Control element with room thermostat function for controlling TSA/K 230.1, TSA/K 24.1 in connection with KNX-Heating actuator, commercially available valve drives or analogue valve drives (continuous controllers). The controller is a constant room temperature controller for ventilator convectors (fan coils) in 2-pipe and 4-pipe systems and conventional heating or cooling systems. The fan stage can be switched manually or in automatic mode. Class of temperature controller 1. Contribution to space heating energy efficiency 1,0 %. With integrated KNX bus coupler.

Description	Standard Design ID	Order details		Price 1 piece	Dimensions	Pack unit
		Type code	Order code		mm	pc.
White	F5XVPB77	TR/U.2.1-CG	2CKA006300A1583		86x115	1
Black	F5XVPB7S	TR/U.2.1-CG	2CKA006300A1583		86x115	1
Individual design [1]	Go to configurator	TR/U.2.1-CG	2CKA006300A1583		86x115	1

TBW/U.2.1-CG

Busch-Watchdog® 180 Sensor Standard with Bus Coupler, FM

Ordering possible only in connection with the design ID. Movement detector with up to 4 channels. The bus can be connected via enclosed terminal block. With integrated temperature sensor. With integrated KNX bus coupler.

Description	Standard Design ID	Order details		Price 1 piece	Dimensions	Pack unit
		Type code	Order code		mm	pc.
White	F5XVPB7X	TBW/U.2.1-CG	2CKA006300A1584		86x115	1
Black	F5XVPB7V	TBW/U.2.1-CG	2CKA006300A1584		86x115	1
Individual design [1]	Go to configurator	TBW/U.2.1-CG	2CKA006300A1584		86x115	1

TA/U3.2.1-CG

Room Outdoor Sensor with Bus Coupler, FM

Ordering possible only in connection with the design ID. The icons and/or texts are configured by means of a web configuration tool. Freely programmable function ”Do not disturb“, ”Bell“ and ”Make up room“. Push switch function: switching / dimming / blind / sending values / scenes etc. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. With integrated KNX bus coupler. With integrated temperature sensor. With integrated proximity function. The bus connection is provided via the enclosed bus terminal. The device is mounted exclusively via the Italian flush-mounted device box according to EN60670 (CEI 23-48).

Description	Standard Design ID	Order details		Price 1 piece	Dimensions	Pack unit
		Type code	Order code		mm	pc.
White	F5XVPB75	TA/U3.2.1-CG	2CKA006300A1585		86x115	1
Black	F5XVPBZM	TA/U3.2.1-CG	2CKA006300A1585		86x115	1
Individual design [1]	Go to configurator	TA/U3.2.1-CG	2CKA006300A1585		86x115	1

[1] The individual design can be selected via the website:
URL: https://tacteo-configurator.eu.mybuildings.abb.com/

ABB i-bus® KNX

User Operation – Design Ranges – ABB-tacteo

TLM/U.2.1-CG

Room Outdoor Sensor with Card Reader and Bus Coupler, FM

Ordering possible only in connection with the design ID. The icons and/or texts are configured by means of a web configuration tool. Freely programmable function "Do not disturb", "Bell" and "Make up room". For reading and evaluating MIFARE RF cards. It is equipped with one relay (4 A @24 V AC/DC). Push switch function: switching / dimming / blind / sending values / scenes etc. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. With integrated KNX bus coupler. With integrated temperature sensor. The bus connection is provided via the enclosed bus terminal. The device requires a 12...24 V AC/DC external power supply to ensure its operation even with bus voltage failure.

Description	Standard Design ID	Order details		Price 1 piece	Dimensions	Pack unit
		Type code	Order code		mm	pc.
White	F5XVPBF5	TLM/U.2.1-CG	2CKA006300A1587		86x115	1
Black	F5XVPB78	TLM/U.2.1-CG	2CKA006300A1587		86x115	1
Individual design [1]	Go to configurator	TLM/U.2.1-CG	2CKA006300A1587		86x115	1

TSN/U.2.1-CG

Room Outdoor Sensor with Room Number and Bus Coupler, FM

Ordering possible only in connection with the design ID. The icons and/or texts are configured by means of a web configuration tool. Freely programmable function "Do not disturb", "Bell" and "Make up room". With backlit room number. Push switch function: switching / dimming / blind / sending values / scenes etc. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. With integrated KNX bus coupler. The bus connection is provided via the enclosed bus terminal. The device requires a 12...24 V AC/DC external power supply to ensure its operation even with bus voltage failure.

Description	Standard Design ID	Order details		Price 1 piece	Dimensions	Pack unit
		Type code	Order code		mm	pc.
White	–	TSN/U.2.1-CG	2CKA006300A1603		86x157	1
Black	–	TSN/U.2.1-CG	2CKA006300A1603		86x157	1
Individual design [1]	Go to configurator	TSN/U.2.1-CG	2CKA006300A1603		86x157	1

TP/T 1

USB Programmer - MIFARE

USB programmer for programming MIFARE transponder cards for Tacteo access control range. The USB programmer has to be connected to the PC using the USB cable provided with the USB programmer. Cards programming has to be performer, using USB programmer, with ABB MiniMAC software.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	TP/T 1	2CSY289621R3801		0.08	1

[1] The individual design can be selected via the website:
URL: https://tacteo-configurator.eu.mybuildings.abb.com/

ABB i-bus® KNX

User Operation – Design Ranges – ABB-tacteo

TZW/U.0.1.CK

Removal protection tool

Tools for the removal of a device with installed removal protection TZE/U.0.11.CK. Installation is carried out on the flush-mounted insert of the device.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	TZW/U.0.1.CK	2CKA006300A1611			

TZE/U.0.1.CK

Removal protection for control elements

Prevents the disassembly of ABB Tenton® and Busch tacteo® control elements, room temperature controllers, external room sensors and movement detectors.
The tool with the mounted removal protection is disassembled using mounting tool TZW/U.x.x-CK.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	TZE/U.0.1.CK	2CKA006300A1633			

TZE/U.0.2.CK

Removal protection for access control devices for squared, horizontal and room number glass versions

Prevents the disassembly of ABB-tacteo® card holders, card readers and external room sensors with/without card readers and room numbers.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	TZE/U.0.2.CK	2CSY245271S3601			

TZE/U.0.3.CK

Removal protection for access control devices for vertical glass versions

Prevents the dismantling of ABB-tacteo® card holders, card readers and external room sensors with/without card readers and room numbers.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	TZE/U.0.3.CK	2CSY233741S3611			

ABB i-bus® KNX

User Operation – Design Ranges – ABB-tacteo

TS/T 1
TS/T 1.1

Set of Transponder Cards for Millenium, Chiara 2 modules and Tacteo design programs

The transponder card uses passive transponder technology operating in radio frequency (MIFARE technology), without the need for contact between the reader and the card itself. The transponder card is read by swiping it in front of the reader at a maximum distance of 20 mm (can be reduced according to installation environment).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
10 transponder cards	–	TS/T 1	2CSY259412R2041		0.02	1
1000 transponder cards	–	TS/T 1.1	2CSY232175R2041		1	1

SW MiniMAC 4.1

MiniMAC software

The management and configuration software ensures bidirectional communication with the access control system devices, allowing the system's configuration during its installation and its overall management and supervision.

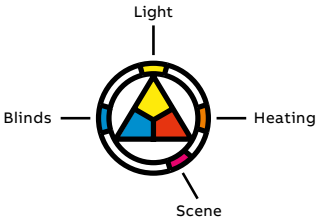
Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	SW MiniMAC 4.1	2CSY258202R2051		0.005	1

Notes

ABB i-bus® KNX

User Operation – Design Ranges – 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.



Colours that make life easier.
A consistent colour coding concept and durable LED technology make Busch-priOn® extremely easy to operate. 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.

01

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

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

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

02

The single control element is equipped with a freely programmable “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)

03

The triple control element is equipped with 3 freely programmable control buttons. Each 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 switches | Colour coding concept | Freely programmable control buttons | Anti-theft protection | Replaceable labelling symbol (Fig. shows labelling symbols Lighting, Blinds and Scene)

01 Rotary control element
02 1gang control element
03 3gang control element

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

User Operation – Design Ranges – Busch-priOn®

01

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.

02

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

03

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.

01 3gang control element with single-line display and temperature controller

02 carat® glass black

03 Flush-mounted movement sensor

ABB i-bus® KNX

User Operation – Design Ranges – Planning aid for Busch-priOn®

End strips without function

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

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

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

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

Support frame, bus coupler

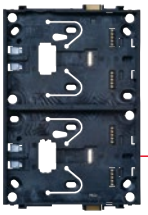
Bus coupler Busch-priOn®,
Article-No. 6120/12-101

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

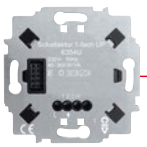


2gang,
Article-No.
6346/11-101-500

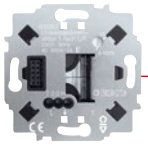
3gang,
Article-No.
6346/12-101-500

FM actuators

Without end strip incl. temperature reading



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

User Operation – Design Ranges – Planning aid for Busch-priOn®

End strip with IR proximity function

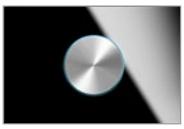
glass black,
Article-No.
6350-825-101-500

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



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

Labelling symbols

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

ABB i-bus® KNX

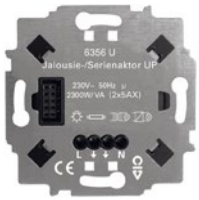
User Operation – Design Ranges – Busch-priOn®

6354 U-500

Switch Actuator/Sensor, 1-fold, FM, Busch-priOn®

For switching incandescent lamps, 230 V halogen lamps, fluorescent lamps and low-voltage halogen lamps operated using transformers 3-wire technology (Neutral conductor required). Only in conjunction with a 2-fold and 3-fold base frame Cannot be combined with the lower finishing strip with temperature sensor.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6354 U-500	2CKA006310A0097		0.107	1



6356 U-500

Shutter/2-fold Actuator, FM, Busch-priOn®

Only in conjunction with a 2-fold and 3-fold base frame. Not suitable for switching fluorescent lamps, HQI lamps and HQL lamps. Cannot be combined with the lower finishing strip with temperature sensor.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6356 U-500	2CKA006310A0099		0.122	1

ABB i-bus® KNX

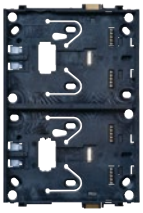
User Operation – Design Ranges – Busch-priOn®

6346/10-101-500

Base Frame, 1-fold, Busch-priOn®

For Busch-priOn® for seating and contact connection of rotary control elements, operating element 1-fold and 3-fold as well as the top/bottom finishing strip. For contacting with the Bus Coupler priOn or Power Bus Coupler priOn.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6346/10-101-500	2CKA006310A0135		0.012	1



6346/11-101-500

Base Frame, 2-fold, Busch-priOn®

For Busch-priOn® for seating and contact connection of 8.89 cm (3.5") TFT colour display with rotary control element, rotary control element 1-fold and 3-fold as well as the top/bottom finishing strip. For contacting with the Power Bus Coupler priOn.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6346/11-101-500	2CKA006310A0137		0.116	1

6346/12-101-500

Base Frame, 3-fold, Busch-priOn®

For Busch-priOn® for seating and contact connection of 8.89 cm (3.5") TFT colour display with rotary control element, rotary control element 1-fold and 3-fold as well as the top/bottom finishing strip. For contacting with the Power Bus Coupler priOn.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6346/12-101-500	2CKA006310A0139		0.159	1

ABB i-bus® KNX

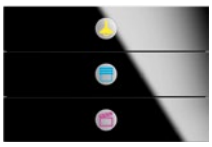
User Operation – Design Ranges – Busch-priOn®

6340-825-101-500

Control Element, 1-fold, Busch-priOn®

Freely programmable multi-function operation element for installation in the Base Frame 1-fold, 2-fold or 3-fold. Supports the KNX functions with innovative colour concept on the labelling symbols or standard lighting in red/green. The accompanying symbol can be substituted by other alternative labelling symbols.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
studio white, high gloss	–	6340-24G-101-500	2CKA006310A0109		0.188	1
white glass	–	6340-811-101-500	2CKA006310A0168		0.164	1
glas black	–	6340-825-101-500	2CKA006310A0108		0.145	1
stainless steel	–	6340-866-101-500	2CKA006310A0106		0.325	1

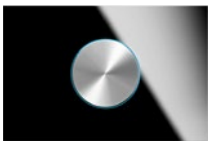


6342-825-101-500

Control Element, 3-fold, Busch-priOn®

Freely programmable multi-function operation element for installation in the Base Frame 1-fold, 2-fold or 3-fold. Supports the KNX functions with innovative colour concept on the labelling symbols or standard lighting in red/green. The accompanying symbol can be substituted by other alternative labelling symbols.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
studio white, high gloss	–	6342-24G-101-500	2CKA006310A0125		0.191	1
white glass	–	6342-811-101-500	2CKA006310A0172		0.203	1
glas black	–	6342-825-101-500	2CKA006310A0124		0.203	1
stainless steel	–	6342-866-101-500	2CKA006310A0122		0.32	1



6341-825-101-500

Rotary Control Element, 1-fold, Busch-priOn®

Freely programmable multi-function rotary control element for installation in the Base Frame 1-fold, 2-fold or 3-fold. Supports the KNX functions with innovative colour concept on the rotary knob or standard lighting in red/green. Rotary knob stainless steel.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
studio white, high gloss	–	6341-24G-101-500	2CKA006310A0117		0.218	1
white glass	–	6341-811-101-500	2CKA006310A0170		0.23	1
glas black	–	6341-825-101-500	2CKA006310A0116		0.175	1
stainless steel	–	6341-866-101-500	2CKA006310A0114		0.336	1

ABB i-bus® KNX

User Operation – Design Ranges – Busch-priOn®

6345-825-101-500

Busch Watchdog® 180 FM Sensor, Busch-priOn®

Sends switching commands with motion detection in combination with the bus coupler Busch-priOn®. Programmable via ETS for automatic and semi-automatic operation.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
studio white, high gloss	–	6345-24G-101-500	2CKA006310A0081		0.188	1
white glass	–	6345-811-101-500	2CKA006310A0176		0.166	1
glas black	–	6345-825-101-500	2CKA006310A0080		0.167	1
stainless steel	–	6345-866-101-500	2CKA006310A0078		0.325	1

6348-825-101-500

Top End Strip, Busch-priOn®

For mounting on Base Frame 1-fold to 3-fold.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
studio white, high gloss	–	6348-24G-101-500	2CKA006310A0147		0.024	1
white glass	–	6348-811-101-500	2CKA006310A0178		0.034	1
glas black	–	6348-825-101-500	2CKA006310A0146		0.027	1
stainless steel	–	6348-866-101-500	2CKA006310A0144		0.048	1

6350-825-101-500

Top End Strip with IR Receiver and Proximity Sensor, Busch-priOn®

For mounting on Base Frame 1-fold to 3-fold. With integrated IR receiver for control by IR handheld control as well as integrated proximity function.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
glas black	–	6350-825-101-500	2CKA006310A0157		0.037	1

ABB i-bus® KNX

User Operation – Design Ranges – Busch-priOn®

6349-825-101-500

Bottom End Strip, without logo, Busch-priOn®

For mounting on Base Frame 1-fold to 3-fold.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
studio white, high gloss	–	6349-24G-101-500	2CKA006310A0155		0.024	1
white glass	–	6349-811-101-500	2CKA006310A0180		0.035	1
glas black	–	6349-825-101-500	2CKA006310A0154		0.027	1
stainless steel	–	6349-860-101-500	2CKA006310A0152		0.048	1

6352-825-101-500

Bottom End Strip with Temperature Sensor, Busch-priOn®

For mounting on Base Frame 1-fold to 3-fold. Provides the value measured by the temperature sensor to the 8.89 cm (3.5") TFT colour display or the room thermostat.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
studio white, high gloss	–	6352-24G-101-500	2CKA006310A0165		0.024	1
white glass	–	6352-811-101-500	2CKA006310A0182		0.04	1
glas black	–	6352-825-101-500	2CKA006310A0164		0.024	1
stainless steel	–	6352-860-101-500	2CKA006310A0162		0.048	1

6351/08-825-500

Top End Strip with Display, Room Thermostat, IR Receiver and Proximity Sensor, Busch-priOn®

Top end strip for installation on 1gang to 3gang support frame (6346/10-101, 6346/11-101 and 6346/12-101). With integrated IR receiver for control using the Busch remote control 6010-25 or 6020-.../6121... and integrated proximity function. For heating and cooling (PI, PWM or 2-point). For control of up to 5-level ventilation actuators. With manual adjustment of fan levels. Master/slave configuration. With base-load operation. Display of up to 17 functions as text and/or icon. Only in connection with 1-gang rotary control element (6341-xxx-101) and 3-gang control element (6342-xxx-101) possible. Incl. 10 logic channels (light scene actuator, sequence actuator, logic gates, etc.). Detection range: frontal: 0.5 m, lateral: 0.5 m. Detection angle: 100 °. Mounting height: 1.1 m. Protection class (Device): IP 20. Temperature range (Device): – 5 °C to 45 °C.
Dimensions: (L x W x D): 33.4 mm x 106.6 mm x 15.5 mm

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
glas black	–	6351/08-825-500	2CKA006310A0183		0.064	1

ABB i-bus® KNX

User Operation – Design Ranges – Busch-priOn®

6353/20-860-500

Inscription Symbols, Busch-priOn®

For Busch-priOn® operating element 1-fold to 3-fold with different symbols.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
lighting	–	6353/20-860-500	2CKA006310A0093		0.011	1
blind	–	6353/30-860-500	2CKA006310A0094		0.011	1
Room Temperature	–	6353/40-860-500	2CKA006310A0095		0.011	1
scene	–	6353/50-860-500	2CKA006310A0096		0.011	1

6149/21-500

Commissioning Interface / Adapter

6120/12-101-500 and 6120/13-500 via USB port or via SD card slot.
With integrated battery for independent operation for up to 8 h.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6149/21-500	2CKA006133A0201		0.15	1

CP-D 24/2.5

Commissioning Interface / Adapter

6120/12-101-500 and 6120/13-500 via USB port or via SD card slot.
With integrated battery for independent operation for up to 8 h.

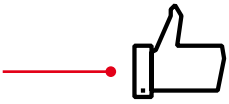
Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	CP-D 24/2.5	2CDG120037R0011		0.252	1

HVAC room automation

New solutions for HVAC room automation

ABB's room automation solutions ensure that all functions in a room are operated as efficiently as possible to save operational costs and improve the space environment.

For perfect climate conditions in a room
ABB's portfolio includes controllers for fan coils, radiators, floor heating and cooling ceiling applications, and devices for operating that can be easily installed on the wall or above the ceiling. Room control units are determined for small to medium commercial buildings. The whole ABB i-bus® KNX product portfolio is compatible with ClimaECO.

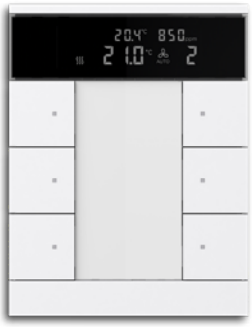


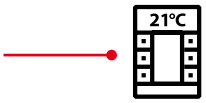
Easy installation and commissioning

Room Control Unit, SAR/A
The room temperature control unit allows every kind of room to be individually and conveniently heated or cooled as needed.

- Can be connected directly to FCC/S and VC/S
- Easy installation and commissioning
- Optimal price/peformance
- No power supply needed

User operation products





High degree of functionality

ClimaECO Room Controller
ABB has optimized its range of KNX room control units for commercial buildings. The result: easy-to-use room thermostats.

- Available with integrated room temperature controller and CO_2/humidity sensor
- Can be flush or surface-mounted
- Control of all room functions from HVAC to shading and lighting

ABB Tenton®

Meet high standards of smart commercial buildings

ABB relies on continuous innovation in the field of Smart Building technology. ClimaECO is the most comprehensive KNX-based HVAC automation portfolio in the market. The new high quality ABB Tenton® sensors are easy-to-use. They are equipped with an illuminated display for excellent readability and a modern design. Different variants of the sensors are available, e.g. CO_2 humidity functionality. Learn more on our webpage: **abb.com/knx**

ABB i-bus® KNX

User Operation – Design Ranges – ABB Tenton®

SBS/U6.0.1-84

Control Element with RTC Slave Unit, 6-fold

Freely configurable multifunction control element. Room Thermostat slave with max. 6gang control. With labelling field. Transparent labelling sheet with standard symbols included in delivery. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. Rocker switch left/right (switching/dimming/blind/value sender/light scenes/fan function). With integrated temperature sensor. With actual value temperature display. With display of set-value temperature. The bus can be connected via enclosed terminal block.

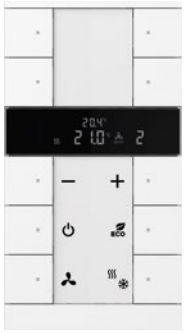
Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
davos/studio white	–	SBS/U6.0.1-84	2CKA006330A0002			1

SBR/U6.0.1-84

Room Temperature Controller with Control Element, 6-fold

Freely configurable multifunction control element. With integrated KNX bus coupler. With labelling field. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. Push switch function: switching / dimming / blind / sending values / scenes etc. For activating heating, ventilation and fan coil actuators. Master/slave configuration. With base-load operation. The fan stage can be switched manually or in automatic mode. Class of temperature controller 1.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
davos/studio white	–	SBR/U6.0.1-84	2CKA006330A0004			1



SBS/U10.0.1-84

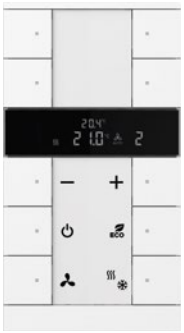
Control Element with RTC Slave Unit, 10-fold

Freely configurable multifunction control element. With labelling field. Transparent labelling sheet with standard symbols included in delivery. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=-neutral/no function assigned) or standard illumination red/green. Rocker switch left/right (switching/dimming/blind/value sender/light scenes/fan function). With integrated temperature sensor. With actual value temperature display. With display of set-value temperature. The bus can be connected via enclosed terminal block.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
davos/studio white	–	SBS/U10.0.1-84	2CKA006330A0006			1

ABB i-bus® KNX

User Operation – Design Ranges – ABB Tenton®



SBR/U10.0.1-84

Room Temperature Controller with Control Element, 10-fold

Freely configurable multifunction control element. With integrated KNX bus coupler. With labelling field. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. Push switch function: switching / dimming / blind / sending values / scenes etc. Master/slave configuration. With base-load operation. The controller is a constant room temperature controller for ventilator convectors (fan coils) in 2-pipe and 4-pipe systems and conventional heating or cooling systems. The fan stage can be switched manually or in automatic mode. Class of temperature controller 1.

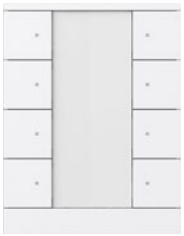
Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
davos/studio white	–	SBR/U10.0.1-84	2CKA006330A0008			1

SBC/U6.0.1-84

RTC with CO_2/Humidity Sensor and Control Element

Control element with room temperature controller function and CO_2/moisture/air pressure sensor. With integrated KNX bus coupler. With labelling field. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. Push switch function: switching / dimming / blind / sending values / scenes etc. For activating heating, ventilation and fan coil actuators. Master/slave configuration. With base-load operation. The fan stage can be switched manually or in automatic mode. Class of temperature controller 1.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
davos/studio white, 6-fold	–	SBC/U6.0.1-84	2CKA006330A0010			1
davos/studio white, 10-fold	–	SBC/U10.0.1-84	2CKA006330A0012			1



SB/U8.0.1-84

Control Element

With integrated KNX bus coupler. With labelling field. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green.
Push switch function: switching / dimming / blind / sending values / scenes etc. With integrated temperature sensor. Number of bus subscribers: 1

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
davos/studio white, 8-fold	–	SB/U8.0.1-84	2CKA006330A0014			1
davos/studio white, 12-fold	–	SB/U12.0.1-84	2CKA006330A0016			1

ABB i-bus® KNX

User Operation – Design Ranges – ABB Tenton®

SAS/A.0.1-84

Support Frame, small, SM

Surface-mounted housing for mounting 8gang control element, RT with 6gang control element.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
davos/studio white	–	SAS/A.0.1-84	2CKA006330A0018			1

SAB/A.0.1-84

Support Frame, large, SM

Surface-mounted housing for mounting 12gang control element, RT with 10gang control element.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
davos/studio white	–	SAB/A.0.1-84	2CKA006330A0020			1

SLS/A.0.1-84

Cover for Label Area, small, RTC

Marking coverplate for RTR with 6gang control element.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
davos/studio white	–	SLS/A.0.1-84	2CKA006330A0022			1

SLM/A.0.1-84

Cover for Label Area, Control Element, small

Marking coverplate for 8gang control element.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
davos/studio white	–	SLM/A.0.1-84	2CKA006330A0024			1

SLB/A.0.1-84

Cover for Label Area, large, RTC

Upper marking coverplate for RT with 10-fold control element.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
davos/studio white	–	SLB/A.0.1-84	2CKA006330A0026			1

ABB i-bus® KNX

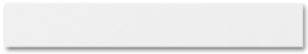
User Operation – Design Ranges – ABB Tenton®

SLX/A.0.1-84

Cover for Label Area, Control Element, large

Marking coverplate for 12gang control element.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
davos/studio white	–	SLX/A.0.1-84	2CKA006330A0028			1



SLY/A.0.1-84

Bottom end strips without manufacturer logo

Bottom end strip for mounting on SBC/U, SBR/U, SBS/U and SB/U.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
davos/studio white	–	SLY/A.0.1-84	2CKA006330A0030			1

ABB i-bus® KNX

User Operation – Design Ranges – Standard Control Elements

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.

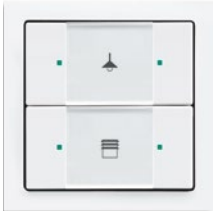
Customised text. Pictograms can be applied to push buttons for easier orientation. A clear text template with standard symbols is included for every sensor. The self-explanatory pictograms are available for the complete range of building control technology and if necessary can be easily replaced. If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

01

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

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

02



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

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

03

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

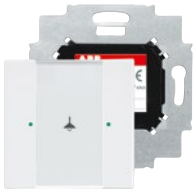
Features
Labellable switch rockers | Anti-theft protection | Freely programmable switches | Status/orientation light (red/green/OFF)

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

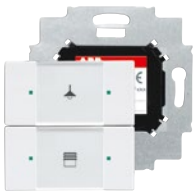
ABB i-bus® KNX

User Operation – Design Ranges – Standard Control Elements

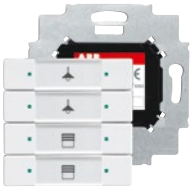
Standard control element with bus coupler enclosed
With labelling field. Transparent labelling sheet with standard symbols included in delivery. Display elements: Two LED per rocker via separate communication object for status (Red/Green/OFF) or orientation light. Protection class (Device): IP 20. Temperature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



6125/01



6126/01



6127/01

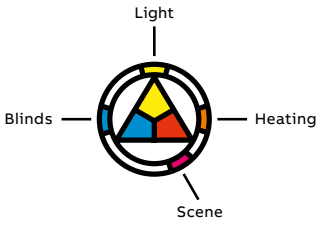
Pack unit pc.	Description	Control Element with Bus Coupler, standard, FM, 1-fold with bus coupler enclosed With 1 Control element: rocker switch left/right Order details		Control Element with Bus Coupler, standard, FM, 2-fold with bus coupler enclosed With 2 Control elements: rocker switch left/right Order details		Control Element with Bus Coupler, standard, FM, 4-fold with bus coupler enclosed With 4 Control elements: rocker switch left/right Order details	
		Type code	Order code	Type code	Order code	Type code	Order code
	future® linear						
1	anthracite	6125/01-81-500	2CKA006115A0205	6126/01-81-500	2CKA006116A0195	6127/01-81-500	2CKA006117A0221
1	savanne/ivory	6125/01-82-500	2CKA006115A0206	6126/01-82-500	2CKA006116A0196	6127/01-82-500	2CKA006117A0222
1	aluminium silver [1]	6125/01-83-500	2CKA006115A0207	6126/01-83-500	2CKA006116A0197	6127/01-83-500	2CKA006117A0223
1	davos/studio white	6125/01-84-500	2CKA006115A0183	6126/01-84-500	2CKA006116A0174	6127/01-84-500	2CKA006117A0200
1	studio white, matt [1]	6125/01-884-500	2CKA006115A0214	6126/01-884-500	2CKA006116A0204	6127/01-884-500	2CKA006117A0230
1	black, matt [1]	6125/01-885-500	2CKA006115A0215	6126/01-885-500	2CKA006116A0205	6127/01-885-500	2CKA006117A0231
	solo®						
1	savanne/ivory	6125/01-82-500	2CKA006115A0206	6126/01-82-500	2CKA006116A0196	6127/01-82-500	2CKA006117A0222
1	davos/studio white	6125/01-84-500	2CKA006115A0183	6126/01-84-500	2CKA006116A0174	6127/01-84-500	2CKA006117A0200
1	meteor/grey metallic [1]	6125/01-803-500	2CKA006115A0212	6126/01-803-500	2CKA006116A0202	6127/01-803-500	2CKA006117A0228
	carat®						
1	anthracite	6125/01-81-500	2CKA006115A0205	6126/01-81-500	2CKA006116A0195	6127/01-81-500	2CKA006117A0221
1	savanne/ivory	6125/01-82-500	2CKA006115A0206	6126/01-82-500	2CKA006116A0196	6127/01-82-500	2CKA006117A0222
1	davos/studio white	6125/01-84-500	2CKA006115A0183	6126/01-84-500	2CKA006116A0174	6127/01-84-500	2CKA006117A0200
	pure stainless steel [1]						
1	stainless steel	6125/01-866-500	2CKA006115A0211	6126/01-866-500	2CKA006116A0201	6127/01-866-500	2CKA006117A0227
	Busch-axcent®						
1	davos/studio white	6125/01-84-500	2CKA006115A0183	6126/01-84-500	2CKA006116A0174	6127/01-84-500	2CKA006117A0200

[1] Surface painted

ABB i-bus® KNX

User Operation – Design Ranges – 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.



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

User Operation – Design Ranges – Multifunction Control Elements

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.





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 | Colour concept

05

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

06

Function
4 channels | Logic function (including light scenes)

07

Function
4 channels | Logic function (including light scenes)

ABB i-bus® KNX

User Operation – Design Ranges – Multifunction Control Elements

Control element, Multi-function/colour concept
For BCU 6120/12-101-500 or 6120/13-500. With labelling field. Support of KNX functions through innovative colour concept or standard illumination red/green. Push switch function: switching/dimming/blind/sending values/scenes etc. Transparent labelling sheet with standard symbols included in delivery. Incl. 10 logic channels (light scene actuator, sequence actuator, logic gates, etc.). Display elements: Two LED per rocker via separate communication object for status (Red/Green/OFF) or orientation light.

6125/02

6126/02

6127/02

			Control element, 1/2-fold Multi-function/colour concept With 1 Control element: rocker switch left/right		**Control element, 2/4-fold Multi-function/colour concept** With 2 Control elements: rocker switch left/right		**Control element, 4/8-fold Multi-function/colour concept** With 4 Control elements: rocker switch left/right	
Pack unit pc.	**Weight 1 pc. kg**	**Description**	**Order details**		**Order details**		**Order details**	
			Type	**Order code**	**Type**	**Order code**	**Type**	**Order code**
		future® linear						
1		anthracite	6125/02-81-500	2CKA006115A0216	6126/02-81-500	2CKA006116A0206	6127/02-81-500	2CKA006117A0232
1		savanne/ivory	6125/02-82-500	2CKA006115A0217	6126/02-82-500	2CKA006116A0207	6127/02-82-500	2CKA006117A0233
1		aluminium silver [1]	6125/02-83-500	2CKA006115A0218	6126/02-83-500	2CKA006116A0208	6127/02-83-500	2CKA006117A0234
1		davos/studio white	6125/02-84-500	2CKA006115A0219	6126/02-84-500	2CKA006116A0209	6127/02-84-500	2CKA006117A0235
1		studio white, matt [1]	6125/02-884-500	2CKA006115A0226	6126/02-884-500	2CKA006116A0216	6127/02-884-500	2CKA006117A0242
1		black, matt [1]	6125/02-885-500	2CKA006115A0227	6126/02-885-500	2CKA006116A0217	6127/02-885-500	2CKA006117A0243
		solo®						
1		savanne/ivory	6125/02-82-500	2CKA006115A0217	6126/02-82-500	2CKA006116A0207	6127/02-82-500	2CKA006117A0233
1		davos/studio white	6125/02-84-500	2CKA006115A0219	6126/02-84-500	2CKA006116A0209	6127/02-84-500	2CKA006117A0235
1		meteor/grey metallic [1]	6125/02-803-500	2CKA006115A0224	6126/02-803-500	2CKA006116A0214	6127/02-803-500	2CKA006117A0240
		carat®						
1		anthracite	6125/02-81-500	2CKA006115A0216	6126/02-81-500	2CKA006116A0206	6127/02-81-500	2CKA006117A0232
1		savanne/ivory	6125/02-82-500	2CKA006115A0217	6126/02-82-500	2CKA006116A0207	6127/02-82-500	2CKA006117A0233
1		davos/studio white	6125/02-84-500	2CKA006115A0219	6126/02-84-500	2CKA006116A0209	6127/02-84-500	2CKA006116A0209
		pure stainless steel [1]						
1		stainless steel	6125/02-866-500	2CKA006115A0223	6126/02-866-500	2CKA006116A0213	6127/02-866-500	2CKA006117A0239
		Busch-axcent®						
1		davos/studio white	6125/02-84-500	2CKA006115A0219	6126/02-84-500	2CKA006116A0209	6127/02-84-500	2CKA006117A0235
		Dynasty®						
1		anthracite	6125/02-81-500	2CKA006115A0216	6126/02-81-500	2CKA006116A0206	6127/02-81-500	2CKA006117A0232
1		savanne/ivory	6125/02-82-500	2CKA006115A0217	6126/02-82-500	2CKA006116A0207	6127/02-82-500	2CKA006117A0233
1		antique brass	6125/02-840-500	2CKA006115A0452	6126/02-840-500	2CKA006116A0227	6127/02-840-500	2CKA006117A0252

[1] Surface painted

ABB i-bus® KNX

User Operation – Design Ranges – Multifunction Control Elements

6129/01

Control Element, 3/6-fold, multifunction, with IR-Interface, FM
suitable for KNX bus coupler 6120/12-101-500 and 6120/13-500. With IR interface for Busch-remote controllers 6010-25 or 6020-.../6021-... . Push button function: switching/dimming/blind/value sending/light scenes/step-type switch functions. Switch contacts left/right. Two freely programmable RGB LEDs per rocker. With RGB colour code concept or red/green/OFF-operation. With labeling field. Transparent labeling sheet with standard symbols included in delivery.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
future® linear						
anthracite	–	6129/01-81-500	2CKA006135A0156		0.08	1
savanne/ivory	–	6129/01-82-500	2CKA006135A0157		0.08	1
aluminium silver [1]	–	6129/01-83-500	2CKA006135A0158		0.08	1
davos/studio white	–	6129/01-84-500	2CKA006135A0146		0.08	1
studio white, matt [1]	–	6129/01-884-500	2CKA006135A0165		0.08	1
black, matt [1]	–	6129/01-885-500	2CKA006135A0166		0.08	1
solo®						
savanne/ivory	–	6129/01-82-500	2CKA006135A0157		0.08	1
davos/studio white	–	6129/01-84-500	2CKA006135A0146		0.08	1
meteor/grey metallic [1]	–	6129/01-803-500	2CKA006135A0163		0.08	1
carat®						
anthracite	–	6129/01-81-500	2CKA006135A0156		0.08	1
savanne/ivory	–	6129/01-82-500	2CKA006135A0157		0.08	1
davos/studio white	–	6129/01-84-500	2CKA006135A0146		0.08	1
pure stainless steel [1]						
stainless steel	–	6129/01-866-500	2CKA006135A0162		0.08	1
Busch-axcent®						
davos/studio white	–	6129/01-84-500	2CKA006135A0146		0.08	1

[1] Surface painted

ABB i-bus® KNX

User Operation – Design Ranges – Movement Detectors

6122/02-84-500

Busch-Watchdog® 180 Comfort, FM

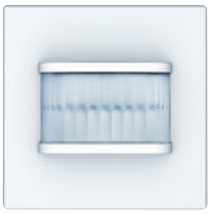
Movement detector with up to 4 channels. For ABB i-bus® KNX 6120/12-101-500, 6120/13-500. Incl. 10 logic channels (light scene actuator, sequence actuator, logic gates, etc.)

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
future® linear						
anthracite	–	6122/02-81-500	2CKA006132A0283		0.063	1
savanne/ivory	–	6122/02-82-500	2CKA006132A0284		0.063	1
aluminium silver [1]	–	6122/02-83-500	2CKA006132A0285		0.063	1
davos/studio white	–	6122/02-84-500	2CKA006132A0263		0.063	1
studio white, matt [1]	–	6122/02-884-500	2CKA006132A0292		0.063	1
black, matt [1]	–	6122/02-885-500	2CKA006132A0293		0.063	1
solo®						
savanne/ivory	–	6122/02-82-500	2CKA006132A0284		0.063	1
davos/studio white	–	6122/02-84-500	2CKA006132A0263		0.063	1
meteor/grey metallic [1]	–	6122/02-803-500	2CKA006132A0290		0.063	1
carat®						
anthracite	–	6122/02-81-500	2CKA006132A0283		0.063	1
savanne/ivory	–	6122/02-82-500	2CKA006132A0284		0.063	1
davos/studio white	–	6122/02-84-500	2CKA006132A0263		0.063	1
pure stainless steel [1]						
stainless steel	–	6122/02-866-500	2CKA006132A0289		0.063	1
Busch-axcent®						
davos/studio white	–	6122/02-84-500	2CKA006132A0263		0.063	1

[1] Surface painted

ABB i-bus® KNX

User Operation – Design Ranges – Movement Detectors



6122/10-84-500

Busch-Watchdog® 180 Sensor Standard, Select with integrated bus coupler, FM
Movement detector with up to 4 channels. The bus can be connected via enclosed terminal block. With integrated KNX bus coupler.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Reflex SI						
white	–	6122/10-212-500	2CKA006132A0373		0.08	1
alpine white	–	6122/10-214-500	2CKA006132A0374		0.08	1
future® linear						
anthracite	–	6122/10-81-500	2CKA006132A0376		0.08	1
ivory	–	6122/10-82-500	2CKA006132A0377		0.08	1
aluminium silver	–	6122/10-83-500	2CKA006132A0378		0.08	1
studio white	–	6122/10-84-500	2CKA006132A0379		0.08	1
studio white matt	–	6122/10-884-500	2CKA006132A0380		0.08	1
black, matt	–	6122/10-885-500	2CKA006132A0381		0.08	1
solo®						
ivory	–	6122/10-82-500	2CKA006132A0377		0.08	1
studio white	–	6122/10-84-500	2CKA006132A0379		0.08	1
grey metallic	–	6122/10-803-500	2CKA006132A0382		0.08	1
Busch-axcent®						
studio white	–	6122/10-84-500	2CKA006132A0379		0.08	1
pure stainless steel						
stainless steel	–	6122/10-866-500	2CKA006132A0385		0.08	1
carat®						
anthracite	–	6122/10-81-500	2CKA006132A0376		0.08	1
ivory	–	6122/10-82-500	2CKA006132A0377		0.08	1
studio white	–	6122/10-84-500	2CKA006132A0379		0.08	1
Dynasty®						
anthracite	–	6122/10-81-500	2CKA006132A0376		0.08	1
ivory	–	6122/10-82-500	2CKA006132A0377		0.08	1
antique brass	–	6122/10-840-500	2CKA006132A0407		0.08	1

ABB i-bus® KNX

User Operation – Design Ranges – Room Thermostats

6128/28-884-500

Room Thermostat with Display and 2/4-fold Switch Sensor, FM
For ABB i-bus® KNX bus coupler 6120/12-101-500, 6120/13-500. Support of KNX functions through innovative colour concept (yellow = lighting, blue = blind, orange = RTC, magenta = scene and white = neutral/no function assigned) or standard illumination red/green. Rocker switch left/right (switching/dimming/blind/value sender/light scenes/fan function). Master/slave configuration. With base-load operation. The controller is a constant room temperature controller for ventilator convectors (fan coils) in 2-pipe and 4-pipe systems and conventional heating or cooling systems. The fan stage can be switched manually or in automatic mode. Transparent labelling sheet with standard symbols included in delivery. Incl. 10 logic channels (light scene actuator, sequence actuator, logic gates, etc.). Control element: Switch contacts left/right, also for selecting setpoint and mode of operation Display elements: LCD showing operation mode and temperature. Protection class (Device): IP 20. Temperature range (Device): – 5 °C to 45 °C. Dimensions: (L x W x D): 63 mm x 63 mm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
future® linear						
anthracite	–	6128/28-81-500	2CKA006134A0331		0.076	1
savanne/ivory	–	6128/28-82-500	2CKA006134A0332		0.076	1
aluminium silver	–	6128/28-83-500	2CKA006134A0333		0.076	1
davos/studio white	–	6128/28-84-500	2CKA006134A0334		0.076	1
studio white, matt	–	6128/28-884-500	2CKA006134A0338		0.076	1
black, matt	–	6128/28-885-500	2CKA006134A0339		0.076	1
solo®						
savanne/ivory	–	6128/28-82-500	2CKA006134A0332		0.076	1
davos/studio white	–	6128/28-84-500	2CKA006134A0334		0.076	1
meteor/grey metallic	–	6128/28-803-500	2CKA006134A0336		0.076	1
carat®						
anthracite	–	6128/28-81-500	2CKA006134A0331		0.076	1
savanne/ivory	–	6128/28-82-500	2CKA006134A0332		0.076	1
davos/studio white	–	6128/28-84-500	2CKA006134A0334		0.076	1
pure stainless steel						
stainless steel	–	6128/28-866-500	2CKA006134A0335		0.076	1
Busch-axcent®						
davos/studio white	–	6128/28-84-500	2CKA006134A0334		0.076	1
Dynasty®						
anthracite	–	6128/28-81-500	2CKA006134A0331		0.076	1
savanne/ivory	–	6128/28-82-500	2CKA006134A0332		0.076	1
antique brass	–	6128/28-840-500	2CKA006134A0342		0.076	1

ABB i-bus® KNX

User Operation – Design Ranges – Frames

1721-184K

Frames, future® linear

For vertical and horizontal installation.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
1-fold, anthracite	–	1721-181K	2CKA001754A4240		0.024	10
1-fold, savanna/ivory	–	1721-182K-500	2CKA001754A4506		0.024	10
1-fold, aluminium silver [1]	–	1721-183K-500	2CKA001754A4529		0.024	10
1-fold, davos/studio white	–	1721-184K-500	2CKA001754A4498		0.024	10
1-fold, studio white, matt [1]	–	1721-884K-500	2CKA001754A4531		0.024	10
1-fold, black matt [1]	–	1721-885K-500	2CKA001754A4532		0.024	10
2-fold, anthracite	–	1722-181K	2CKA001754A4241		0.041	10
2-fold, savanna/ivory	–	1722-182K	2CKA001754A4231		0.041	10
2-fold, aluminium silver [1]	–	1722-183K-500	2CKA001754A4530		0.04	10
2-fold, davos/studio white	–	1722-184K-500	2CKA001754A4499		0.041	10
2-fold, studio white, matt [1]	–	1722-884K	2CKA001754A4415		0.037	10
2-fold, black matt [1]	–	1722-885K-500	2CKA001754A4534		0.037	10
3-fold, anthracite	–	1723-181K	2CKA001754A4242		0.05	10
3-fold, savanna/ivory	–	1723-182K	2CKA001754A4232		0.05	10
3-fold, aluminium silver [1]	–	1723-183K-500	2CKA001754A4533		0.052	10
3-fold, davos/studio white	–	1723-184K-500	2CKA001754A4502		0.053	10
3-fold, studio white, matt [1]	–	1723-884K	2CKA001754A4416		0.052	10
3-fold, black matt [1]	–	1723-885K	2CKA001754A4421		0.052	10
4-fold, anthracite	–	1724-181K	2CKA001754A4243		0.064	10
4-fold, savanna/ivory	–	1724-182K	2CKA001754A4233		0.064	10
4-fold, aluminium silver [1]	–	1724-183K	2CKA001754A4309		0.064	10
4-fold, davos/studio white	–	1724-184K	2CKA001754A4238		0.064	10
4-fold, studio white, matt [1]	–	1724-884K	2CKA001754A4417		0.064	10
4-fold, black matt [1]	–	1724-885K	2CKA001754A4422		0.064	10
5-fold, anthracite	–	1725-181K	2CKA001754A4244		0.096	1
5-fold, savanna/ivory	–	1725-182K	2CKA001754A4234		0.114	1
5-fold, aluminium silver [1]	–	1725-183K	2CKA001754A4310		0.114	1
5-fold, davos/studio white	–	1725-184K-500	2CKA001754A4517		0.112	1
5-fold, studio white, matt [1]	–	1725-884K	2CKA001754A4418		0.114	1
5-fold, black matt [1]	–	1725-885K	2CKA001754A4423		0.114	1

[1] Surface painted

ABB i-bus® KNX

User Operation – Design Ranges – Frames

1721-80

Frames, solo®

For vertical and horizontal installation.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
1-fold, chrome, matt	–	1721-80-500	2CKA001754A4535		0.032	10
1-fold, chrome, glossy	–	1721-80G-500	2CKA001754A4538		0.032	10
1-fold, davos/studio white	–	1721-84-500	2CKA001754A4536		0.032	10
2-fold, chrome, matt	–	1722-80-500	2CKA001754A4537		0.055	10
2-fold, chrome, glossy	–	1722-80G	2CKA001754A4327		0.045	10
2-fold, davos/studio white	–	1722-84-500	2CKA001754A4539		0.055	10
3-fold, chrome, matt	–	1723-80-500	2CKA001754A4540		0.066	10
3-fold, chrome, glossy	–	1723-80G	2CKA001754A4328		0.073	10
3-fold, davos/studio white	–	1723-84-500	2CKA001754A4541		0.073	10
4-fold, chrome, matt	–	1724-80	2CKA001754A4107		0.12	1
4-fold, chrome, glossy	–	1724-80G	2CKA001754A4329		0.12	1
4-fold, davos/studio white	–	1724-84	2CKA001754A4112		0.12	1
5-fold, chrome, matt	–	1725-80	2CKA001754A4108		0.14	1
5-fold, chrome, glossy	–	1725-80G	2CKA001754A4330		0.14	1
5-fold, davos/studio white	–	1725-84	2CKA001754A4113		0.14	1

ABB i-bus® KNX

User Operation – Design Ranges – Frames

1721-860

Frames, carat®

For vertical and horizontal installation.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
1-fold, white glass	–	1721-811	2CKA001754A4442		0.161	1
1-fold, bronze	–	1721-821	2CKA001754A4258		0.38	1
1-fold, gold [1]	–	1721-823-101	2CKA001754A4356		0.34	1
1-fold, glass black	–	1721-825	2CKA001754A4322		0.16	1
1-fold, chrome	–	1721-826-101	2CKA001754A4360		0.335	1
1-fold, stainless steel	–	1721-860	2CKA001754A4254		0.34	1
2-fold, white glass	–	1722-811	2CKA001754A4443		0.234	1
2-fold, bronze	–	1722-821	2CKA001754A4259		0.559	1
2-fold, gold [1]	–	1722-823-101	2CKA001754A4357		0.5	1
2-fold, glass black	–	1722-825	2CKA001754A4323		0.24	1
2-fold, chrome	–	1722-826-101	2CKA001754A4361		0.5	1
2-fold, stainless steel	–	1722-860	2CKA001754A4255		0.48	1
3-fold, white glass	–	1723-811	2CKA001754A4444		0.312	1
3-fold, bronze	–	1723-821	2CKA001754A4260		0.678	1
3-fold, gold [1]	–	1723-823-101	2CKA001754A4358		0.66	1
3-fold, glass black	–	1722-825	2CKA001754A4323		0.24	1
3-fold, chrome	–	1723-826-101	2CKA001754A4362		0.66	1
3-fold, stainless steel	–	1723-860	2CKA001754A4256		0.6	1
4-fold, white glass	–	1724-811	2CKA001754A4445		0.388	1
4-fold, bronze	–	1724-821	2CKA001754A4261		0.816	1
4-fold, gold [1]	–	1724-823-101	2CKA001754A4359		0.8	1
4-fold, glass black	–	1724-825	2CKA001754A4325		0.4	1
4-fold, chrome	–	1724-826-101	2CKA001754A4363		0.82	1
4-fold, stainless steel	–	1724-860	2CKA001754A4257		0.758	1

[1] Gold plated 24 carat

1721-866K

Frames, pure stainless steel

For vertical and horizontal installation. Stainless steel material.
Anti-fingerprint (does not leave any visible fingerprints on the material).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
1-fold, stainless steel	–	1721-866K-500	2CKA001754A4500		0.038	10
2-fold, stainless steel	–	1722-866K-500	2CKA001754A4501		0.064	10
3-fold, stainless steel	–	1723-866K	2CKA001754A4319		0.083	10
4-fold, stainless steel	–	1724-866K	2CKA001754A4320		0.14	1
5-fold, stainless steel	–	1725-866K	2CKA001754A4321		0.175	1

ABB i-bus® KNX

User Operation – Design Ranges – Frames

1722-283

Frames, axcent®

For vertical and horizontal installation.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
1-fold, platinum	–	1721-270	2CKA001754A4683		0.049	1
1-fold, black mat	–	1721-275	2CKA001754A4703		0.049	1
1-fold, titanium	–	1721-276	2CKA001754A4693		0.049	1
1-fold, black	–	1721-281	2CKA001754A4409		0.041	10
1-fold, brown glass	–	1721-283	2CKA001754A4543		0.131	1
1-fold, davos/studio white	–	1721-284	2CKA001754A4331		0.038	10
1-fold, yellow	–	1721-285	2CKA001754A4334		0.041	10
1-fold, green	–	1721-286	2CKA001754A4337		0.041	10
1-fold, red	–	1721-287	2CKA001754A4340		0.041	10
1-fold, blue	–	1721-288	2CKA001754A4343		0.041	10
1-fold, white glass	–	1721-280	2CKA001754A4437		0.095	1
1-fold, entrée-grey	–	1721-291-500	2CKA001754A4471		0.041	10
1-fold, château-black	–	1721-295-500	2CKA001754A4491		0.041	10
1-fold, maison-beige	–	1721-299-500	2CKA001754A4481		0.041	10
2-fold, platinum	–	1722-270	2CKA001754A4684		0.073	1
2-fold, black mat	–	1722-275	2CKA001754A4704		0.073	1
2-fold, titanium	–	1722-276	2CKA001754A4694		0.073	1
2-fold, black	–	1722-281	2CKA001754A4410		0.054	10
2-fold, brown glass	–	1722-283	2CKA001754A4544		0.195	1
2-fold, davos/studio white	–	1722-284	2CKA001754A4332		0.055	10
2-fold, yellow	–	1722-285	2CKA001754A4335		0.055	10
2-fold, green	–	1722-286	2CKA001754A4338		0.055	10
2-fold, red	–	1722-287	2CKA001754A4341		0.055	10
2-fold, blue	–	1722-288	2CKA001754A4344		0.055	10
2-fold, white glass	–	1722-280	2CKA001754A4438		0.115	1
2-fold, entrée-grey	–	1722-291-500	2CKA001754A4472		0.055	10
2-fold, château-black	–	1722-295-500	2CKA001754A4492		0.055	10
2-fold, maison-beige	–	1722-299-500	2CKA001754A4482		0.055	10
3-fold, platinum	–	1723-270	2CKA001754A4685		0.100	1
3-fold, black mat	–	1723-275	2CKA001754A4705		0.100	1
3-fold, titanium	–	1723-276	2CKA001754A4695		0.100	1
3-fold, black	–	1723-281	2CKA001754A4411		0.073	10
3-fold, brown glass	–	1723-283	2CKA001754A4545		0.261	1
3-fold, davos/studio white	–	1723-284	2CKA001754A4333		0.073	10
3-fold, yellow	–	1723-285	2CKA001754A4336		0.073	10
3-fold, green	–	1723-286	2CKA001754A4339		0.073	10
3-fold, red	–	1723-287	2CKA001754A4342		0.073	10
3-fold, blue	–	1723-288	2CKA001754A4345		0.073	10
3-fold, white glass	–	1723-280	2CKA001754A4439		0.261	1
3-fold, entrée-grey	–	1723-291-500	2CKA001754A4473		0.073	10
3-fold, château-black	–	1723-295-500	2CKA001754A4493		0.073	10
3-fold, maison-beige	–	1723-299-500	2CKA001754A4483		0.073	10

Continuation of table “Frames, axcent” on next page

ABB i-bus® KNX

User Operation – Design Ranges – Frames

Continuation of table “Frames, axcent”

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
4-fold, platinum	–	1724-270	2CKA001754A4686		0.126	1
4-fold, black mat	–	1724-275	2CKA001754A4706		0.126	1
4-fold, titanium	–	1724-276	2CKA001754A4696		0.126	1
4-fold, black	–	1724-281	2CKA001754A4412		0.117	1
4-fold, brown glass	–	1724-283	2CKA001754A4546		0.328	1
4-fold, davos/studio white	–	1724-284	2CKA001754A4346		0.117	1
4-fold, yellow	–	1724-285	2CKA001754A4348		0.117	1
4-fold, green	–	1724-286	2CKA001754A4350		0.117	1
4-fold, red	–	1724-287	2CKA001754A4352		0.117	1
4-fold, blue	–	1724-288	2CKA001754A4354		0.117	1
4-fold, white glass	–	1724-280	2CKA001754A4440		0.328	1
4-fold, entrée-grey	–	1724-291-500	2CKA001754A4474		0.117	1
4-fold, château-black	–	1724-295-500	2CKA001754A4494		0.117	1
4-fold, maison-beige	–	1724-299-500	2CKA001754A4484			1
5-fold, platinum	–	1725-270	2CKA001754A4687		0.150	1
5-fold, black mat	–	1725-275	2CKA001754A4707		0.150	1
5-fold, titanium	–	1725-276	2CKA001754A4697		0.150	1
5-fold, black	–	1725-281	2CKA001754A4413		0.145	1
5-fold, brown glass	–	1725-283	2CKA001754A4547		0.38	1
5-fold, davos/studio white	–	1725-284	2CKA001754A4347		0.145	1
5-fold, yellow	–	1725-285	2CKA001754A4349		0.145	1
5-fold, green	–	1725-286	2CKA001754A4351		0.145	1
5-fold, red	–	1725-287	2CKA001754A4353		0.145	1
5-fold, blue	–	1725-288	2CKA001754A4355		0.145	1
5-fold, white glass	–	1725-280	2CKA001754A4441		0.38	1
5-fold, entrée-grey	–	1725-291-500	2CKA001754A4475		0.145	1
5-fold, château-black	–	1725-295-500	2CKA001754A4495		0.145	1
5-fold, maison-beige	–	1725-299-500	2CKA001754A4485		0.145	1

ABB i-bus® KNX

User Operation – Design Ranges – Frames

1721-838-500

Frames, Dynasty®

For vertical and horizontal installation.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
1-fold, polished brass ivory	–	1721-838-500	2CKA001754A4560		0.28	1
1-fold, polished brass anthracite	–	1721-835-500	2CKA001754A4565		0.28	1
1-fold, polished brass decor ivory	–	1721-836-500	2CKA001754A4570		0.28	1
1-fold, polished brass decor anthracite	–	1721-833-500	2CKA001754A4575		0.286	1
1-fold, antique brass ivory	–	1721-848-500	2CKA001754A4580		0.28	1
1-fold, antique brass anthracite	–	1721-845-500	2CKA001754A4585		0.3	1
1-fold, antique brass decor ivory	–	1721-846-500	2CKA001754A4590		0.3	1
1-fold, antique brass decor anthracite	–	1721-843-500	2CKA001754A4595		0.3	1
1-fold, ivory	–	1721-832-500	2CKA001754A4600		0.042	1
1-fold, anthracite	–	1721-831-500	2CKA001754A4605		0.042	1
2-fold, polished brass ivory	–	1722-838-500	2CKA001754A4561		0.42	1
2-fold, polished brass anthracite	–	1722-835-500	2CKA001754A4566		0.42	1
2-fold, polished brass decor ivory	–	1722-836-500	2CKA001754A4571		0.42	1
2-fold, polished brass decor anthracite	–	1722-833-500	2CKA001754A4576		0.42	1
2-fold, antique brass ivory	–	1722-848-500	2CKA001754A4581		0.44	1
2-fold, antique brass anthracite	–	1722-845-500	2CKA001754A4586		0.44	1
2-fold, antique brass decor ivory	–	1722-846-500	2CKA001754A4591		0.42	1
2-fold, antique brass decor anthracite	–	1722-843-500	2CKA001754A4596		0.44	1
2-fold, ivory	–	1722-832-500	2CKA001754A4601		0.064	1
2-fold, anthracite	–	1722-831-500	2CKA001754A4606		0.064	1
3-fold, polished brass ivory	–	1723-838-500	2CKA001754A4562		0.54	1
3-fold, polished brass anthracite	–	1723-835-500	2CKA001754A4567		0.54	1
3-fold, polished brass decor ivory	–	1723-836-500	2CKA001754A4572		0.56	1
3-fold, polished brass decor anthracite	–	1723-833-500	2CKA001754A4577		0.56	1
3-fold, antique brass ivory	–	1723-848-500	2CKA001754A4582		0.56	1
3-fold, antique brass anthracite	–	1723-845-500	2CKA001754A4587		0.54	1
3-fold, antique brass decor ivory	–	1723-846-500	2CKA001754A4592		0.56	1
3-fold, antique brass decor anthracite	–	1723-843-500	2CKA001754A4597		0.56	1
3-fold, ivory	–	1723-832-500	2CKA001754A4602		0.096	1
3-fold, anthracite	–	1723-831-500	2CKA001754A4607		0.096	1

Continuation of table “Frames, Dynasty®” on next page

ABB i-bus® KNX

User Operation – Design Ranges – Frames

Continuation of table “Frames, Dynasty®”

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
4-fold, polished brass ivory	–	1724-838-500	2CKA001754A4563		0.7	1
4-fold, polished brass anthracite	–	1724-835-500	2CKA001754A4568		0.7	1
4-fold, polished brass decor ivory	–	1724-836-500	2CKA001754A4573		0.7	1
4-fold, polished brass decor anthracite	–	1724-833-500	2CKA001754A4578		0.7	1
4-fold, antique brass ivory	–	1724-848-500	2CKA001754A4583		0.72	1
4-fold, antique brass anthracite	–	1724-845-500	2CKA001754A4588		0.7	1
4-fold, antique brass decor ivory	–	1724-846-500	2CKA001754A4593		0.7	1
4-fold, antique brass decor anthracite	–	1724-843-500	2CKA001754A4598		0.72	1
4-fold, ivory	–	1724-832-500	2CKA001754A4603		0.28	1
4-fold, anthracite	–	1724-831-500	2CKA001754A4608		0.28	1
5-fold, polished brass ivory	–	1725-838-500	2CKA001754A4564		0.82	1
5-fold, polished brass anthracite	–	1725-835-500	2CKA001754A4569		0.82	1
5-fold, polished brass decor ivory	–	1725-836-500	2CKA001754A4574		0.82	1
5-fold, polished brass decor anthracite	–	1725-833-500	2CKA001754A4579		0.82	1
5-fold, antique brass ivory	–	1725-848-500	2CKA001754A4584		0.84	1
5-fold, antique brass anthracite	–	1725-845-500	2CKA001754A4589		0.82	1
5-fold, antique brass decor ivory	–	1725-846-500	2CKA001754A4594		0.84	1
5-fold, antique brass decor anthracite	–	1725-843-500	2CKA001754A4599		0.84	1
5-fold, ivory	–	1725-832-500	2CKA001754A4604		0.34	1
5-fold, anthracite	–	1725-831-500	2CKA001754A4609		0.34	1

ABB i-bus® KNX

User Operation – Design Ranges – 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.

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

01

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

02

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

03

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

User Operation – Design Ranges – Busch-triton®

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

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

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 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

User Operation – Design Ranges – Busch-triton®

6320/10-24G-500

Busch-triton® Control Element, 1/2-fold, FM

With intergrated bus coupling unit. With IR interface for Busch-remote controllers. Push button function: switching/dimming/blind/value sending/light scenes/step-type switch functions. Switch contacts left/right. One freely programmable LED per rocker (red/green/OFF). With labeling field.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
alpha						
platinum	–	6320/10-20-500	2CKA006320A0002		0.154	1
studio white, high gloss	–	6320/10-24G-500	2CKA006320A0004		0.154	1
palladium	–	6320/10-260-500	2CKA006320A0010		0.154	1
impuls						
champagne metallic	–	6320/10-79-500	2CKA006320A0006		0.154	1
future® linear						
aluminium silver	–	6320/10-83-500	2CKA006320A0008		0.154	1

6320/30-24G-500

Busch-triton® Control Element, 3/6-fold, FM

With intergrated bus coupling unit. With IR interface for Busch-remote controllers. Push button function: switching/dimming/blind/value sending/light scenes/step-type switch functions. Switch contacts left/right. One freely programmable LED per rocker (red/green/OFF). With labeling field.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
alpha						
platinum	–	6320/30-20-500	2CKA006320A0012		0.134	1
studio white, high gloss	–	6320/30-24G-500	2CKA006320A0014		0.134	1
palladium	–	6320/30-260-500	2CKA006320A0020		0.134	1
impuls						
champagne metallic	–	6320/30-79-500	2CKA006320A0016		0.134	1
future® linear						
aluminium silver	–	6320/30-83-500	2CKA006320A0018		0.134	1

ABB i-bus® KNX

User Operation – Design Ranges – Busch-triton®

6320/50-24G-500

Busch-triton® Control Element, 5/10-fold, FM

With intergrated bus coupling unit. With IR interface for Busch-remote controllers. Push button function: switching/dimming/blind/value sending/light scenes/step-type switch functions. Switch contacts left/right. One freely programmable LED per rocker (red/green/OFF). With labeling field.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
alpha						
platinum	–	6320/50-20-500	2CKA006320A0032		0.274	1
studio white, high gloss	–	6320/50-24G-500	2CKA006320A0034		0.274	1
palladium	–	6320/50-260-500	2CKA006320A0040		0.274	1
impuls						
champagne metallic	–	6320/50-79-500	2CKA006320A0036		0.274	1
future® linear						
aluminium silver	–	6320/50-83-500	2CKA006320A0038		0.274	1

6321/38-24G-500

Busch-triton® Control Element with Room Thermostat and 3/6-fold Switch Sensor, FM

With integrated KNX bus coupler. With labelling field. Rocker switch left/right (switching/dimming/blind/value sender/light scenes/fan function). Master/slave configuration. With base-load operation. Control element with room thermostat function for triggering the heating, ventilation and fan-coil actuators. The controller is a constant room temperature controller for ventilator convectors (fan coils) in 2-pipe and 4-pipe systems and conventional heating or cooling systems. The fan stage can be switched manually or in automatic mode. To control up to 13 IR channels (RC5) using Busch-Remote control. IR mobile remote control 6010-25 or 6020-.../6021... . Control element: rocker switch left/right. Display elements: One LED per rocker via separate communication object for status (Red/Green/OFF) or orientation light. Connections: KNX-line: Bus connection terminal. Protection class (Device): IP 20. Temperature range (Device): – 5 °C to 45 °C.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
alpha						
platinum	–	6321/38-20-500	2CKA006320A0052		0.169	1
studio white, high gloss	–	6321/38-24G-500	2CKA006320A0054		0.169	1
palladium	–	6321/38-260-500	2CKA006320A0060		0.169	1
impuls						
champagne metallic	–	6321/38-79-500	2CKA006320A0056		0.169	1
future® linear						
aluminium silver	–	6321/38-83-500	2CKA006320A0058		0.169	1

ABB i-bus® KNX

User Operation – Design Ranges – Busch-triton®

6321/58-24G-500

Busch-triton® Control Element with Room Thermostat and 5/10-fold Switch Sensor, FM

With integrated KNX bus coupler. With labelling field. Rocker switch left/right (switching/ dimming/blind/value sender/light scenes/fan function). Master/slave configuration. With base-load operation. Control element with room thermostat function for triggering the heating, ventilation and fan-coil actuators. The controller is a constant room temperature controller for ventilator convectors (fan coils) in 2-pipe and 4-pipe systems and conventional heating or cooling systems. The fan stage can be switched manually or in automatic mode. To control up to 13 IR channels (RC5) using Busch-Remote control IR mobile remote control 6010-25 or 6020-.../6021... . Control element: rocker switch left/right. Display elements: One LED per rocker via separate communication object for status (Red/ Green/ OFF) or orientation light. Connections: KNX-line: Bus connection terminal. Protection class (Device): IP 20. Temperature range (Device): – 5 °C to 45 °C. Dimensions: (L x W x D): 159 mm x 90 mm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
alpha						
platinum	–	6321/58-20-500	2CKA006320A0062		0.278	1
studio white, high gloss	–	6321/58-24G-500	2CKA006320A0064		0.278	1
palladium	–	6321/58-260-500	2CKA006320A0070		0.278	1
impuls						
champagne metallic	–	6321/58-79-500	2CKA006320A0066		0.278	1
future® linear						
aluminium silver	–	6321/58-83-500	2CKA006320A0068		0.278	1

6010-25-500

Infra-Red Hand Held Transmitter

For infra-red receiver and KNX flush-mounted infra-red interface. Switching and dimming of up to 10 consumers in 2 groups (1-5/6-10). Programming and selection of 2 MEMO memories per group is possible. Power supply: 4 alkaline manganese batteries, IEC LR03 (microcell) not included in scope of supply Detection range: frontal 15 m.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6010-25-500	2CKA006020A1133		0.18	1

ABB i-bus® KNX

User Operation – Design Ranges – Push Button Coupling Unit

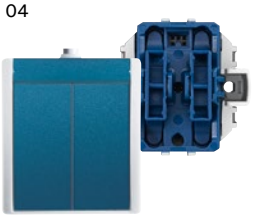
The push-button coupling unit with a centre position offers maximum flexibility. Installed in a flush-mounted wall box, it accepts switch rockers from conventional switch ranges* like a completely standard flush-mounted insert. Covers from all conventional ranges can now be used for KNX. This offers maximum freedom in the selection of the switch range and makes retrofitting easier.

01

02

03

04



Features
Easy mounting and uncomplicated commissioning
All flush-mounted switch ranges* can be used for the ABB i-bus® KNX
Affordable solution for renovations
Status/orientation light (red/green/OFF)
(only with 1gang push-button/switches)
Integration in surface-mounted water protected units

01	Push-button coupler 2gang with integrated bus coupler
02	Push-button coupler 4gang with integrated bus coupler
03	Push-button coupler 2gang for ocean with integrated bus coupler
04	Push-button coupler 4gang for ocean with integrated bus coupler

Design without limits. The push-button coupling unit includes the complete range* of switches for KNX. Switch rockers from all switch ranges can now be converted to KNX push buttons, which not only switch on and off but also dim or show the status with an LED (6108/01 and 6108/04 only). 1gang and 2gang models for single and 2gang switch rockers are available.

KNX – water protected
The push-button coupling unit also allows special products to be used for KNX. Special models for water-protected installation allow covers from, for example, the ocean® surface-mounted range to be used. This means that KNX sensors can also be safely installed in a cellar, outside on a patio or in commercial applications. Temperature range: -25 °C to 45 °C

*except impuls, basic55® and All Weather 44 Busch-Jaeger switch ranges only available for selected markets. For further information please contact your local ABB office.

ABB i-bus® KNX

User Operation – Design Ranges – Push Button Coupling Unit

6108/06-AP-500

Push-button coupler 2gang with integrated bus coupler

For contacting conventional 1gang rocker switches. With middle position. For inserting in the ocean surface-mounted housing. Enclosed mounting plate for the following ranges: Busch-Duro 2000 SI/SI Linear, Reflex SI/SI Linear, future® linear, alpha, solo®, Busch-axcent®, carat® and pure stainless steel. The bus can be connected via enclosed terminal block.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
1/2-fold	–	6108/06-AP-500	2CKA006133A0225		0.1	1
2/4-fold	–	6108/07-AP-500	2CKA006133A0227		0.091	1

6108/06-500

Push-button coupler 2gang with integrated bus coupler

For contacting 1gang rocker 6230-10-xxx, 6231-10-xxx, 6232-10-xxx, 6233-10-xxx und 6234-10-xxx. With integrated temperature sensor. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. With middle position. The bus connection is provided via the enclosed bus terminal.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6108/06-500	2CKA006133A0221		0.06	1

ABB i-bus® KNX

User Operation – Design Ranges – Push Button Coupling Unit

SR-1-84

Rocker 1gang, without printing

As cover for KNX 2gang push-button coupling unit (6108/06-500).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Reflex SI						
white	–	SR-1-212	2CKA006220A0182		0.017	1
alpine white	–	SR-1-214	2CKA006220A0183		0.017	1
future® linear						
anthracite	–	SR-1-81	2CKA006220A0137		0.017	1
ivory	–	SR-1-82	2CKA006220A0516		0.018	1
aluminium silver	–	SR-1-83	2CKA006220A0138		0.017	1
studio white	–	SR-1-84	2CKA006220A0139		0.017	1
studio white matt	–	SR-1-884	2CKA006220A0601		0.018	1
black, matt	–	SR-1-885	2CKA006220A0618		0.018	1
solo®						
ivory	–	SR-1-82	2CKA006220A0516		0.018	1
studio white	–	SR-1-84	2CKA006220A0139		0.017	1
grey metallic	–	SR-1-803	2CKA006220A0550		0.018	1
Busch-axcent®						
studio white	–	SR-1-84	2CKA006220A0139		0.017	1
pure stainless steel						
stainless steel	–	SR-1-866	2CKA006220A0533		0.016	1
carat®						
anthracite	–	SR-1-81	2CKA006220A0137		0.017	1
ivory	–	SR-1-82	2CKA006220A0516		0.018	1
studio white	–	SR-1-84	2CKA006220A0139		0.017	1
Dynasty®						
anthracite	–	SR-1-81	2CKA006220A0137		0.017	1
ivory	–	SR-1-82	2CKA006220A0516		0.018	1
antique brass	–	SR-1-840	2CKA006220A0371		0.018	1

ABB i-bus® KNX

User Operation – Design Ranges – Push Button Coupling Unit

SRL-1-84

Rocker 1gang, with “Light” icon

As cover for KNX 2gang push-button coupling unit (6108/06-500).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Reflex SI						
white	–	SRL-1-212	2CKA006220A0184		0.013	1
alpine white	–	SRL-1-214	2CKA006220A0185		0.013	1
future® linear						
anthracite	–	SRL-1-81	2CKA006220A0140		0.017	1
ivory	–	SRL-1-82	2CKA006220A0517		0.014	1
aluminium silver	–	SRL-1-83	2CKA006220A0141		0.017	1
studio white	–	SRL-1-84	2CKA006220A0142		0.017	1
studio white matt	–	SRL-1-884	2CKA006220A0602		0.018	1
black, matt	–	SRL-1-885	2CKA006220A0619		0.018	1
solo®						
ivory	–	SRL-1-82	2CKA006220A0517		0.014	1
studio white	–	SRL-1-84	2CKA006220A0142		0.017	1
grey metallic	–	SRL-1-803	2CKA006220A0551		0.018	1
Busch-axcent®						
studio white	–	SRL-1-84	2CKA006220A0142		0.017	1
pure stainless steel						
stainless steel	–	SRL-1-866	2CKA006220A0534		0.014	1
carat®						
anthracite	–	SRL-1-81	2CKA006220A0140		0.017	1
ivory	–	SRL-1-82	2CKA006220A0517		0.014	1
studio white	–	SRL-1-84	2CKA006220A0142		0.017	1
Dynasty®						
anthracite	–	SRL-1-81	2CKA006220A0140		0.017	1
ivory	–	SRL-1-82	2CKA006220A0517		0.014	1
antique brass	–	SRL-1-840	2CKA006220A0372		0.018	1

ABB i-bus® KNX

User Operation – Design Ranges – Push Button Coupling Unit

SRB-1-84

Rocker 1gang, with “Blind” icon

As cover for KNX 2gang push-button coupling unit (6108/06-500).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Reflex SI						
white	–	SRB-1-212	2CKA006220A0186		0.013	1
alpine white	–	SRB-1-214	2CKA006220A0187		0.013	1
future® linear						
anthracite	–	SRB-1-81	2CKA006220A0143		0.013	1
ivory	–	SRB-1-82	2CKA006220A0518		0.014	1
aluminium silver	–	SRB-1-83	2CKA006220A0144		0.017	1
studio white	–	SRB-1-84	2CKA006220A0145		0.017	1
studio white matt	–	SRB-1-884	2CKA006220A0603		0.018	1
black, matt	–	SRB-1-885	2CKA006220A0620		0.018	1
solo®						
ivory	–	SRB-1-82	2CKA006220A0518		0.014	1
studio white	–	SRB-1-84	2CKA006220A0145		0.017	1
grey metallic	–	SRB-1-803	2CKA006220A0552		0.018	1
Busch-axcent®						
studio white	–	SRB-1-84	2CKA006220A0145		0.017	1
pure stainless steel						
stainless steel	–	SRB-1-866	2CKA006220A0535		0.014	1
carat®						
anthracite	–	SRB-1-81	2CKA006220A0143		0.013	1
ivory	–	SRB-1-82	2CKA006220A0518		0.014	1
studio white	–	SRB-1-84	2CKA006220A0145		0.017	1
Dynasty®						
anthracite	–	SRB-1-81	2CKA006220A0143		0.013	1
ivory	–	SRB-1-82	2CKA006220A0518		0.014	1
antique brass	–	SRB-1-840	2CKA006220A0373		0.018	1

ABB i-bus® KNX

User Operation – Design Ranges – Push Button Coupling Unit

SRS-1-84

Rocker 1gang, with “Scene” icon

As cover for KNX 2gang push-button coupling unit (6108/06-500).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Reflex SI						
white	–	SRS-1-212	2CKA006220A0188		0.013	1
alpine white	–	SRS-1-214	2CKA006220A0189		0.013	1
future® linear						
anthracite	–	SRS-1-81	2CKA006220A0146		0.017	1
ivory	–	SRS-1-82	2CKA006220A0519		0.014	1
aluminium silver	–	SRS-1-83	2CKA006220A0147		0.017	1
studio white	–	SRS-1-84	2CKA006220A0148		0.017	1
studio white matt	–	SRS-1-884	2CKA006220A0604		0.018	1
black, matt	–	SRS-1-885	2CKA006220A0621		0.018	1
solo®						
ivory	–	SRS-1-82	2CKA006220A0519		0.014	1
studio white	–	SRS-1-84	2CKA006220A0148		0.017	1
grey metallic	–	SRS-1-803	2CKA006220A0553		0.015	1
Busch-axcent®						
studio white	–	SRS-1-84	2CKA006220A0148		0.017	1
pure stainless steel						
stainless steel	–	SRS-1-866	2CKA006220A0536		0.01	1
carat®						
anthracite	–	SRS-1-81	2CKA006220A0146		0.017	1
ivory	–	SRS-1-82	2CKA006220A0519		0.014	1
studio white	–	SRS-1-84	2CKA006220A0148		0.017	1
Dynasty®						
anthracite	–	SRS-1-81	2CKA006220A0146		0.017	1
ivory	–	SRS-1-82	2CKA006220A0519		0.014	1
antique brass	–	SRS-1-840	2CKA006220A0374		0.018	1

ABB i-bus® KNX

User Operation – Design Ranges – Push Button Coupling Unit

SRD-1-84

Rocker 1gang, with “Dimmer” icon
As cover for KNX 2gang push-button coupling unit (6108/06-500).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Reflex SI						
white	–	SRD-1-212	2CKA006220A0190		0.013	1
alpine white	–	SRD-1-214	2CKA006220A0191		0.013	1
future® linear						
anthracite	–	SRD-1-81	2CKA006220A0149		0.017	1
ivory	–	SRD-1-82	2CKA006220A0520		0.014	1
aluminium silver	–	SRD-1-83	2CKA006220A0150		0.017	1
studio white	–	SRD-1-84	2CKA006220A0151		0.017	1
studio white matt	–	SRD-1-884	2CKA006220A0605		0.018	1
black, matt	–	SRD-1-885	2CKA006220A0622		0.018	1
solo®						
ivory	–	SRD-1-82	2CKA006220A0520		0.014	1
studio white	–	SRD-1-84	2CKA006220A0151		0.017	1
grey metallic	–	SRD-1-803	2CKA006220A0554		0.018	1
Busch-axcent®						
studio white	–	SRD-1-84	2CKA006220A0151		0.017	1
pure stainless steel						
stainless steel	–	SRD-1-866	2CKA006220A0537		0.018	1
carat®						
anthracite	–	SRD-1-81	2CKA006220A0149		0.017	1
ivory	–	SRD-1-82	2CKA006220A0520		0.014	1
studio white	–	SRD-1-84	2CKA006220A0151		0.017	1
Dynasty®						
anthracite	–	SRD-1-81	2CKA006220A0149		0.017	1
ivory	–	SRD-1-82	2CKA006220A0520		0.014	1
antique brass	–	SRD-1-840	2CKA006220A0375		0.018	1

6108/07-500

Push-button coupling 4gang with integrated bus coupler
Support of KNX functions through innovative colour concept yellow = lighting, blue = blind, orange = RTC, magenta = scene and white = neutral/no function assigned) or standard illumination red/green. With middle position. The bus can be connected via enclosed terminal block.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6108/07-500	2CKA006133A0223		0.075	1

ABB i-bus® KNX

User Operation – Design Ranges – Push Button Coupling Unit

SR-2-84

SRB-2-84

Pack unit pc.	Weight 1 pc. kg	Description	Rocker 2gang left/right, without printing As cover for KNX 4gang push-button coupling unit (6108/07-500). Order details Type	Order code	Price 1 pc.	Rocker 2gang left/right, with “Blind” icon As cover for KNX 4gang push-button coupling unit (6108/07-500). Order details Type	Order code	Price 1 pc.
		Reflex SI						
		white	SR-2-212	2CKA006220A0192		SRB-2-212	2CKA006220A0196	
		alpine white	SR-2-214	2CKA006220A0193		SRB-2-214	2CKA006220A0197	
		future® linear						
		anthracite	SR-2-81	2CKA006220A0152		SRB-2-81	2CKA006220A0158	
		ivory	SR-2-82	2CKA006220A0521		SRB-2-82	2CKA006220A0523	
		aluminium silver	SR-2-83	2CKA006220A0153		SRB-2-83	2CKA006220A0159	
		studio white	SR-2-84	2CKA006220A0154		SRB-2-84	2CKA006220A0160	
		studio white matt	SR-2-884	2CKA006220A0606		SRB-2-884	2CKA006220A0608	
		black, matt	SR-2-885	2CKA006220A0623		SRB-2-885	2CKA006220A0625	
		solo®						
		ivory	SR-2-82	2CKA006220A0521		SRB-2-82	2CKA006220A0523	
		studio white	SR-2-84	2CKA006220A0154		SRB-2-84	2CKA006220A0160	
		grey metallic	SR-2-803	2CKA006220A0555		SRB-2-803	2CKA006220A0557	
		Busch-axcent®						
		studio white	SR-2-84	2CKA006220A0154		SRB-2-84	2CKA006220A0160	
		pure stainless steel						
		stainless steel	SR-2-866	2CKA006220A0538		SRB-2-866	2CKA006220A0540	
		carat®						
		anthracite	SR-2-81	2CKA006220A0152		SRB-2-81	2CKA006220A0158	
		ivory	SR-2-82	2CKA006220A0521		SRB-2-82	2CKA006220A0523	
		studio white	SR-2-84	2CKA006220A0154		SRB-2-84	2CKA006220A0160	
		Dynasty®						
		anthracite	SR-2-81	2CKA006220A0152		SRB-2-81	2CKA006220A0158	
		ivory	SR-2-82	2CKA006220A0521		SRB-2-82	2CKA006220A0523	
		antique brass	SR-2-840	2CKA006220A0376		SRB-2-840	2CKA006220A0378	

ABB i-bus® KNX

User Operation – Design Ranges – Push Button Coupling Unit

SRL-2-L-84

SRL-2-R-84

Pack unit pc.	Weight 1 pc. kg	Description	Rocker 2gang left, with “Light” icon As cover for KNX 4gang push-button coupling unit (6108/07-500). Order details Type	Order code	Price 1 pc.	Rocker 2gang right, with “Light” icon As cover for KNX 4gang push-button coupling unit (6108/07-500). Order details Type	Order code	Price 1 pc.
		Reflex SI						
		white	SRL-2-L-212	2CKA006220A0194		SRL-2-R-212	2CKA006220A0202	
		alpine white	SRL-2-L-214	2CKA006220A0195		SRL-2-R-214	2CKA006220A0203	
		future® linear						
		anthracite	SRL-2-L-81	2CKA006220A0155		SRL-2-R-81	2CKA006220A0167	
		ivory	SRL-2-L-82	2CKA006220A0522		SRL-2-R-82	2CKA006220A0527	
		aluminium silver	SRL-2-L-83	2CKA006220A0156		SRL-2-R-83	2CKA006220A0168	
		studio white	SRL-2-L-84	2CKA006220A0157		SRL-2-R-84	2CKA006220A0169	
		studio white matt	SRL-2-L-884	2CKA006220A0607		SRL-2-R-884	2CKA006220A0612	
		black, matt	SRL-2-L-885	2CKA006220A0624		SRL-2-R-885	2CKA006220A0629	
		solo®						
		ivory	SRL-2-L-82	2CKA006220A0522		SRL-2-R-82	2CKA006220A0527	
		studio white	SRL-2-L-84	2CKA006220A0157		SRL-2-R-84	2CKA006220A0169	
		grey metallic	SRL-2-L-803	2CKA006220A0556		SRL-2-R-803	2CKA006220A0561	
		Busch-axcent®						
		studio white	SRL-2-L-84	2CKA006220A0157		SRL-2-R-84	2CKA006220A0169	
		pure stainless steel						
		stainless steel	SRL-2-L-866	2CKA006220A0539		SRL-2-R-866	2CKA006220A0544	
		carat®						
		anthracite	SRL-2-L-81	2CKA006220A0155		SRL-2-R-81	2CKA006220A0167	
		ivory	SRL-2-L-82	2CKA006220A0522		SRL-2-R-82	2CKA006220A0527	
		studio white	SRL-2-L-84	2CKA006220A0157		SRL-2-R-84	2CKA006220A0169	
		Dynasty®						
		anthracite	SRL-2-L-81	2CKA006220A0155		SRL-2-R-81	2CKA006220A0167	
		ivory	SRL-2-L-82	2CKA006220A0522		SRL-2-R-82	2CKA006220A0527	
		antique brass	SRL-2-L-840	2CKA006220A0377		SRL-2-R-840	2CKA006220A0381	

ABB i-bus® KNX

User Operation – Design Ranges – Push Button Coupling Unit

SRS-2-L-84

SRS-2-R-84

Pack unit pc.	Weight 1 pc. kg	Description	Rocker 2gang left, with “Scene” icon As cover for KNX 4gang push-button coupling unit (6108/07-500). Order details Type	Order code	Price 1 pc.	Rocker 2gang right, with “Scene” icon As cover for KNX 4gang push-button coupling unit (6108/07-500). Order details Type	Order code	Price 1 pc.
		Reflex SI						
		white	SRS-2-L-212	2CKA006220A0198		SRS-2-R-212	2CKA006220A0206	
		alpine white	SRS-2-L-214	2CKA006220A0199		SRS-2-R-214	2CKA006220A0207	
		future® linear						
		anthracite	SRS-2-L-81	2CKA006220A0161		SRS-2-R-81	2CKA006220A0173	
		ivory	SRS-2-L-82	2CKA006220A0524		SRS-2-R-82	2CKA006220A0528	
		aluminium silver	SRS-2-L-83	2CKA006220A0162		SRS-2-R-83	2CKA006220A0174	
		studio white	SRS-2-L-84	2CKA006220A0163		SRS-2-R-84	2CKA006220A0175	
		studio white matt	SRS-2-L-884	2CKA006220A0609		SRS-2-R-884	2CKA006220A0613	
		black, matt	SRS-2-L-885	2CKA006220A0626		SRS-2-R-885	2CKA006220A0630	
		solo®						
		ivory	SRS-2-L-82	2CKA006220A0524		SRS-2-R-82	2CKA006220A0528	
		studio white	SRS-2-L-84	2CKA006220A0163		SRS-2-R-84	2CKA006220A0175	
		grey metallic	SRS-2-L-803	2CKA006220A0558		SRS-2-R-803	2CKA006220A0562	
		Busch-axcent®						
		studio white	SRS-2-L-84	2CKA006220A0163		SRS-2-R-84	2CKA006220A0175	
		pure stainless steel						
		stainless steel	SRS-2-L-866	2CKA006220A0541		SRS-2-R-866	2CKA006220A0545	
		carat®						
		anthracite	SRS-2-L-81	2CKA006220A0161		SRS-2-R-81	2CKA006220A0173	
		ivory	SRS-2-L-82	2CKA006220A0524		SRS-2-R-82	2CKA006220A0528	
		studio white	SRS-2-L-84	2CKA006220A0163		SRS-2-R-84	2CKA006220A0175	
		Dynasty®						
		anthracite	SRS-2-L-81	2CKA006220A0161		SRS-2-R-81	2CKA006220A0173	
		ivory	SRS-2-L-82	2CKA006220A0524		SRS-2-R-82	2CKA006220A0528	
		antique brass	SRS-2-L-840	2CKA006220A0379		SRS-2-R-840	2CKA006220A0382	

ABB i-bus® KNX

User Operation – Design Ranges – Push Button Coupling Unit

SRD-2-L-84

SRD-2-R-84

Pack unit pc.	Weight 1 pc. kg	Description	Rocker 2gang left, with “Dimmer” icon As cover for KNX 4gang push-button coupling unit (6108/07-500). Order details Type	Order code	Price 1 pc.	Rocker 2gang right, with “Dimmer” icon As cover for KNX 4gang push-button coupling unit (6108/07-500). Order details Type	Order code	Price 1 pc.
		Reflex SI						
		white	SRD-2-L-212	2CKA006220A0200		SRD-2-R-212	2CKA006220A0261	
		alpine white	SRD-2-L-214	2CKA006220A0201		SRD-2-R-214	2CKA006220A0262	
		future® linear						
		anthracite	SRD-2-L-81	2CKA006220A0164		SRD-2-R-81	2CKA006220A0258	
		ivory	SRD-2-L-82	2CKA006220A0525		SRD-2-R-82	2CKA006220A0526	
		aluminium silver	SRD-2-L-83	2CKA006220A0165		SRD-2-R-83	2CKA006220A0259	
		studio white	SRD-2-L-84	2CKA006220A0166		SRD-2-R-84	2CKA006220A0260	
		studio white matt	SRD-2-L-884	2CKA006220A0610		SRD-2-R-884	2CKA006220A0611	
		black, matt	SRD-2-L-885	2CKA006220A0627		SRD-2-R-885	2CKA006220A0628	
		solo®						
		ivory	SRD-2-L-82	2CKA006220A0525		SRD-2-R-82	2CKA006220A0526	
		studio white	SRD-2-L-84	2CKA006220A0166		SRD-2-R-84	2CKA006220A0260	
		grey metallic	SRD-2-L-803	2CKA006220A0559		SRD-2-R-803	2CKA006220A0560	
		Busch-axcent®						
		studio white	SRD-2-L-84	2CKA006220A0166		SRD-2-R-84	2CKA006220A0260	
		pure stainless steel						
		stainless steel	SRD-2-L-866	2CKA006220A0542		SRD-2-R-866	2CKA006220A0543	
		carat®						
		anthracite	SRD-2-L-81	2CKA006220A0164		SRD-2-R-81	2CKA006220A0258	
		ivory	SRD-2-L-82	2CKA006220A0525		SRD-2-R-82	2CKA006220A0526	
		studio white	SRD-2-L-84	2CKA006220A0166		SRD-2-R-84	2CKA006220A0260	
		Dynasty®						
		anthracite	SRD-2-L-81	2CKA006220A0164		SRD-2-R-81	2CKA006220A0258	
		ivory	SRD-2-L-82	2CKA006220A0525		SRD-2-R-82	2CKA006220A0526	
		antique brass	SRD-2-L-840	2CKA006220A0380		SRD-2-R-840	2CKA006220A0383	

ABB i-bus® KNX

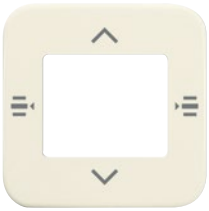
User Operation – Design Ranges

6108/60-500

Control Element, 6gang with Universal Input, 5gang

Control element with a maximum of 6 control functions and an RTC extension unit (slave). Primary function for calling up the main function. Status bar for indication/display of operating or RTC functions. Operation is carried out via cover plate 6108/61-xxx. With actual value temperature display. With display of set-value temperature. With universal input with: - max. of 5 binary inputs - 4 binary inputs and 1 analogue input for activating sensors with external power supply 1-10 V/0-10 V - 2 binary inputs and 1 analogue input for activating sensors with external power supply 1-10 V/0-10 V and an external temperature sensor PT1000 / T6226. The bus can be connected via enclosed terminal block.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6108/60-500	2CKA006115A0454			1



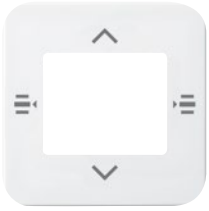
6108/61-212-500

Cover Plate for KNX Control Element, 7gang

As cover for control element, 7gang (6108/60).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	6108/61-212-500	2CKA006115A0474		0.012	1
alpine white	–	6108/61-214-500	2CKA006115A0475		0.012	1
platinum	–	6108/61-20-500	2CKA006115A0476		0.016	1
bronze	–	6108/61-21-500	2CKA006115A0477		0.016	1
ivory/white	–	6108/61-22G-500	2CKA006115A0478		0.016	1
studio white matt [1)]	–	6108/61-24-500	2CKA006115A0479		0.016	1
studio white	–	6108/61-24G-500	2CKA006115A0480		0.016	1
palladium	–	6108/61-260-500	2CKA006115A0481		0.016	1
titanium	–	6108/61-266-500	2CKA006115A0482		0.016	1
anthracite	–	6108/61-81-500	2CKA006115A0483		0.018	1
ivory white	–	6108/61-82-500	2CKA006115A0484		0.018	1
aluminium silver	–	6108/61-83-500	2CKA006115A0485		0.018	1
studio white	–	6108/61-84-500	2CKA006115A0486		0.018	1
studio white matt	–	6108/61-884-500	2CKA006115A0487		0.018	1
black matt	–	6108/61-885-500	2CKA006115A0488		0.018	1
grey metallic	–	6108/61-803-500	2CKA006115A0489		0.02	1
stainless steel	–	6108/61-866-500	2CKA006115A0492		0.018	1

[1)] to be discontinued



6108/61-914

Cover Plate, Control Element, 7gang

As cover for control element, 7gang (6108/60).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	6108/61-914	2CKA006155A0115			1
stainless steel	–	6108/61-840-500	2CKA006155A0121		0.018	1

ABB i-bus® KNX

User Operation – Design Ranges

6109/05-500

Room Temperature Controller with 5gang Universal Input, FM

Room temperature controller without “local control” and without internal temperature sensor. With universal input with: - max. of 5 binary inputs - 4 binary inputs and 1 analogue input for activating sensors with external power supply 1-10 V/0-10 V - 2 binary inputs and 1 analogue input for activating sensors with external power supply 1-10 V/0-10 V and an external temperature sensor PT1000 / T6226. Master/slave configuration. With base-load operation. The bus can be connected via enclosed terminal block. Class of temperature controller 1 Contribution to space heating energy efficiency 1,0%.

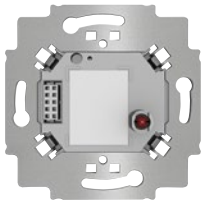
Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6109/05-500	2CKA006181A0013		0.08	1

6109/08-500

Room Temperature Controller, Commercial, with 5gang Universal Input, FM

Room thermostat without “local control” incl. insert for centre plate for cooling element. With universal input with: - max. of 5 binary inputs - 4 binary inputs and 1 analogue input for activating sensors with external power supply 1-10 V/0-10 V - 2 binary inputs and 1 analogue input for activating sensors with external power supply 1-10 V/0-10 V and an external temperature sensor PT1000 / T6226. Can only be used with a cover plate 2114-xxx or 6541-xxx, with the exception of 6541-20. -21.-260 and -266. Master/slave configuration. With base-load operation. The bus can be connected via enclosed terminal block. Class of temperature controller 1 Contribution to space heating energy efficiency 1,0%.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6109/08-500	2CKA006134A0313		0.138	1



6108/08-500

Room Temperature Controller, Commercial, FM **to be discontinued**

Room thermostat without “local operation” incl. insert for centre plate for cooling element. For controlling commercially available valve drives. Can only be used with a cover plate 2114-xxx or 6541-xxx, with the exception of 6541-20. -21.-260 and -266. For control of up to 5-level ventilation actuators Master/slave configuration. With base-load operation. The bus can be connected via enclosed terminal block.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6108/08-500	2CKA006134A0308		0.075	1

ABB i-bus® KNX

User Operation – Design Ranges

6541-84

Cover Plate for Room Temperature Controller, Commercial

For room temperature controller, commercial.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
future® linear						
anthracite	–	6541-81	2CKA006599A2882		0.022	10
savanna/ivory	–	6541-82	2CKA006599A2832		0.022	10
aluminium silver [1]	–	6541-83	2CKA006599A2885		0.022	10
davos/studio white	–	6541-84	2CKA006599A2835		0.022	10
studio white, matt [1]	–	6541-884	2CKA006599A2962		0.022	10
black matt [1]	–	6541-885	2CKA006599A2967		0.022	10
solo®						
savanna/ivory	–	6541-82	2CKA006599A2832		0.022	10
davos/studio white	–	6541-84	2CKA006599A2835		0.022	10
meteor/grey metallic [1]	–	6541-803	2CKA006599A2940		0.022	10
carat®						
anthracite	–	6541-81	2CKA006599A2882		0.022	10
savanna/ivory	–	6541-82	2CKA006599A2832		0.022	10
davos/studio white	–	6541-84	2CKA006599A2835		0.022	10
pure stainless steel [1]						
stainless steel	–	6541-866	2CKA006599A2924		0.018	10
Busch-axcent®						
davos/studio white	–	6541-84	2CKA006599A2835		0.022	10
alpha						
ivory	–	6541-22G	2CKA006599A2795		0.02	10
studio white, matt	–	6541-24	2CKA006599A1557		0.02	10
studio white, high gloss	–	6541-24G	2CKA006599A2332		0.02	10
Platinum	–	6541-20	2CKA006599A1466		0.02	10
Bronze	–	6541-21	2CKA006599A1524		0.02	10
palladium	–	6541-260	2CKA006599A2853		0.02	10
titanium	–	6541-266	2CKA006599A2856		0.02	10
impuls						
alpine white	–	6541-74	2CKA006599A2076		0.019	
champagne metallic	–	6541-79	2CKA006599A2142		0.019	
ivory	–	6541-72	2CKA006599A2918		0.019	
studio white matt	–	6541-774	2CKA006599A2971		0.019	
black matt	–	6541-775	2CKA006599A2975		0.019	
blackberry	–	6541-777	2CKA006599A2933		0.024	
aluminium silver	–	6541-783	2CKA006599A2919		0.019	
Busch-Duro 2000® SI						
white (SI-Series)	–	2114-212	2CKA006599A1193		0.016	10

[1] Surface painted

ABB i-bus® KNX

User Operation – Design Ranges

2114-214

Cover Plate for Temperature Controller, Commercial

For room temperature controller, commercial.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Reflex SI	–					
alpine white (SI-Series)	–	2114-214-500	2CKA006599A3008		0.02	10

ABB i-bus® KNX

User Operation – Design Ranges – Room Temperature Controller

6108/18-500

Room thermostat, heating/cooling operation

Control element with room thermostat function for triggering the heating, ventilation and fan-coil actuators. For controlling commercially available valve drives. With display of set-value temperature. Master/slave configuration. With base-load operation. The bus can be connected via enclosed terminal block.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6108/18-500	2CKA006134A0319		0.08	1

CP-FCC-212

Cover plate for fan coil controller

As cover for ABB-free@home® room temperature controller RTC-F-1. As cover for KNX room temperature controller (6108/18-500).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Reflex SI						
white	–	CP-FCC-212	2CKA006220A0245		0.012	1
alpine white	–	CP-FCC-214	2CKA006220A0246		0.012	1
future® linear						
anthracite	–	CP-FCC-81	2CKA006220A0242		0.016	1
ivory	–	CP-FCC-82	2CKA006220A0532		0.016	1
aluminium silver	–	CP-FCC-83	2CKA006220A0243		0.016	1
studio white	–	CP-FCC-84	2CKA006220A0244		0.015	1
studio white matt	–	CP-FCC-884	2CKA006220A0617		0.016	1
black, matt	–	CP-FCC-885	2CKA006220A0634		0.016	1
solo®						
ivory	–	CP-FCC-82	2CKA006220A0532		0.016	1
studio white	–	CP-FCC-84	2CKA006220A0244		0.015	1
grey metallic	–	CP-FCC-803	2CKA006220A0566		0.016	1
Busch-axcent®						
studio white	–	CP-FCC-84	2CKA006220A0244		0.015	1
pure stainless steel						
stainless steel	–	CP-FCC-866	2CKA006220A0549		0.016	1
carat®						
anthracite	–	CP-FCC-81	2CKA006220A0242		0.016	1
ivory	–	CP-FCC-82	2CKA006220A0532		0.016	1
studio white	–	CP-FCC-84	2CKA006220A0244		0.015	1
Dynasty®						
anthracite	–	CP-FCC-81	2CKA006220A0242		0.016	1
ivory	–	CP-FCC-82	2CKA006220A0532		0.016	1

ABB i-bus® KNX

User Operation – Design Ranges – Room Temperature Controller

6109/18-500

Room temperature controller with 5gang universal input, FM
Control element with room thermostat function for triggering the heating, ventilation and fan-coil actuators. With display of set-value temperature, master/slave configuration and base load operation. With universal inputs: a) max. of 5 binary inputs b) 4 binary inputs and 1 analogue input for activating sensors with external power supply 1 – 10 V/0 – 10 V or c) 2 binary inputs and 1 analogue input for activating sensors with external power supply 1 – 10 V/0 – 10 V and an external temperature sensor PT1000/T6226.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6109/18-500	2CKA006134A0315		0.144	1

6109/28-500

Room temperature controller with CO_2/moisture sensor, FM
Control element with room thermostat function and CO_2 moisture/air pressure sensor or triggering the heating, ventilation and fan-coil actuators. With display of set-value temperature, master/slave configuration and base load operation. With universal inputs:
a) max. of 5 binary inputs b) 4 binary inputs and 1 analogue input for activating sensors with external power supply 1 – 10 V/0 – 10 V or c) 2 binary inputs and 1 analogue input for activating sensors with external power supply 1 – 10 V/0 – 10 V and an external temperature sensor PT1000/T6226.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6109/28-500	2CKA006134A0317		0.122	1

ABB i-bus® KNX

User Operation – Design Ranges – Room Temperature Controller

6109/03-214-500

Cover plate for room thermostat

As cover for KNX room temperature controller (6108/18-500).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Reflex SI						
white	–	6109/03-212-500	2CKA006155A0051		0.018	1
alpine white	–	6109/03-214-500	2CKA006155A0052		0.018	1
future® linear						
anthracite	–	6109/03-81-500	2CKA006155A0060		0.018	1
ivory/white	–	6109/03-82-500	2CKA006155A0061		0.018	1
aluminium silver	–	6109/03-83-500	2CKA006155A0062		0.018	1
studio white	–	6109/03-84-500	2CKA006155A0063		0.018	1
studio white matt	–	6109/03-884-500	2CKA006155A0064		0.018	1
black, matt	–	6109/03-885-500	2CKA006155A0065		0.018	1
solo®						
ivory/white	–	6109/03-82-500	2CKA006155A0061		0.018	1
studio white	–	6109/03-84-500	2CKA006155A0063		0.018	1
grey metallic	–	6109/03-803-500	2CKA006155A0066		0.018	1
Busch-axcent®						
studio white	–	6109/03-84-500	2CKA006155A0063		0.018	1
pure stainless steel						
stainless steel	–	6109/03-866-500	2CKA006155A0069		0.018	1
carat®						
anthracite	–	6109/03-81-500	2CKA006155A0060		0.018	1
ivory/white	–	6109/03-82-500	2CKA006155A0061		0.018	1
studio white	–	6109/03-84-500	2CKA006155A0063		0.018	1
Dynasty®						
anthracite	–	6109/03-81-500	2CKA006155A0060		0.018	1
ivory/white	–	6109/03-82-500	2CKA006155A0061		0.018	1
antique brass	–	6109/03-840-500	2CKA006155A0114		0.018	1

Notes

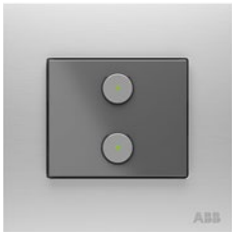
ABB i-bus® KNX

User Operation – Design Ranges – Millenium

The Millenium collection is the first metal range to incorage the KNX system, the most intelligent way of managing spaces and optimizing performance in terms of energy savings. Millenium is based on a combinable concept which creates a very comprehensive range, suitable for any types of needs. This makes it the ideal collection for all types of homes, hotels, offices and shops.

01	Switch Sensor 2gang KNX
02	Switch Sensor 4gang KNX
03	Switch Sensor 6gang KNX
04	Switch Sensor 6gang KNX with IR
05	Busch watchdog 180° KNX
06	Room Thermostat KNX

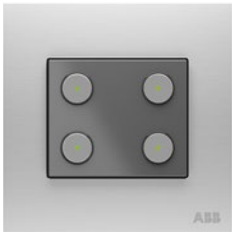
01



Function
Switching | Dimming | Blinds | Sending values | Scenes etc.

Features
Incl. 10 logic channels (light scene actuator | sequence actuator | logic gates, etc.)
Control element: Switch contacts
Display elements: LED to indicate the function

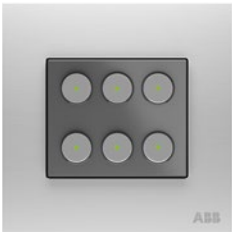
02



Function
Switching | Dimming | Blinds | Sending values | Scenes etc.

Features
Incl. 10 logic channels (light scene actuator | sequence actuator | logic gates, etc.)
Control element: Switch contacts
Display elements: LED to indicate the function

03



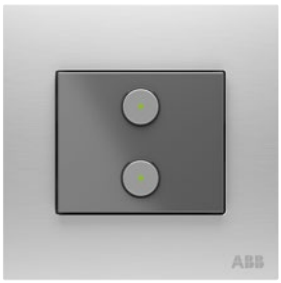
Function
Switching | Dimming | Blinds | Sending values | Scenes etc.

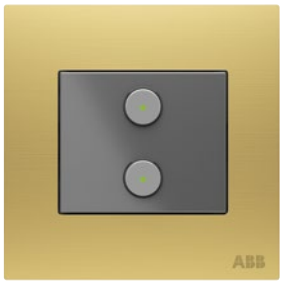
Features
Incl. 10 logic channels (light scene actuator | sequence actuator | logic gates, etc.)
Control element: Switch contacts
Display elements: LED to indicate the function

ABB i-bus® KNX

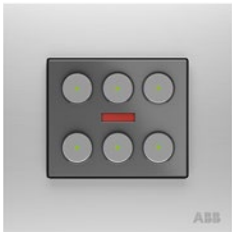
User Operation – Design Ranges – Millenium

Wide range. Millenium range offers special mounting plates for KNX sensors to reduce the height and improve the aesthetics for ultra slim design. The KNX sensors allow to replace the buttons with desired symbols in order to adjust the sensors to specific design and needs like light, blind, scene, RTC or fan coil. Millenium offers a wide and elegant choice of finishes in stainless steel material: from the Brush Stainless Steel, to the soft touch given by the Silk Black, and the luxury of the sophisticated gold finishes, Matt Gold and Antique Gold.





04



Function
Switching | Dimming | Blinds | Sending values | Scenes etc. | 6gang sensor with IR.

Features
Incl. 10 logic channels (light scene actuator | sequence actuator | logic gates, etc.)
Control element: Switch contacts
Display elements: LED to indicate the function

05

Function
Movement sensor with up to four channels.
Detection range: frontal: 6 m, lateral: 6 m
Detection angle: 180 °
Brightness limit value:
5 Lux - 150 Lux
Mounting height: 1.1 m

06

Function
Control element with room thermostat function for triggering the heating, ventilation and fan-coil actuators. The controller is a thermostat for Fan Coil units in 2- and 4-pipe systems and conventional heating or cooling systems. The fan stage can be switched manually or in automatic mode.

Features
Incl. 10 logic channels (light scene actuator | sequence actuator | logic gates, etc.)

Switch contacts for operating mode selection and dial for setpoint or fan speed adjustment.
Display elements: LCD showing operation modes.
Protection class (Device): IP 20
Temperature range (Device):
– 5 °C to 45 °C

The Millenium range is only available in the following countries: China, Dubai, India, Kuweit, Oman, Qatar, Saudi Arabia, Singapore, UAE and UK.
Frames and special mounting plates for KNX sensores have to ordered by:
ABB, S.A.
Low Voltage Products-Niessen,
Oiartzun / Spain
www.abb.es/niessen

ABB i-bus® KNX

User Operation – Design Ranges – Millenium

6125/20-981-500

Switch Sensor 2 gang KNX
Incl. 10 logic channels (light scene actuator, sequence actuator, logic gates, etc.).
Control element: Switch contacts. Display elements: LED to indicate the function.
Protection class (Device): IP 20. Temperature range (Device): – 5 °C to 45 °C.
Dimensions: (L x W x D): 53 mm x 44 mm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6125/20-981-500	2CKA006115A0443		0.083	1

6126/20-981-500

Switch Sensor 4 gang KNX
Incl. 10 logic channels (light scene actuator, sequence actuator, logic gates, etc.).
Control element: Switch contacts. Display elements: LED to indicate the function.
Protection class (Device): IP 20. Temperature range (Device): – 5 °C to 45 °C.
Dimensions: (L x W x D): 53 mm x 44 mm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6126/20-981-500	2CKA006116A0218		0.084	1

6129/20-981-500

Switch Sensor 6 gang KNX
Incl. 10 logic channels (light scene actuator, sequence actuator, logic gates, etc.).
Control element: Switch contacts. Display elements: LED to indicate the function.
Protection class (Device): IP 20. Temperature range (Device): – 5 °C to 45 °C.
Dimensions: (L x W x D): 53 mm x 44 mm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6129/20-981-500	2CKA006118A0104		0.085	1

6129/21-981-500

Switch Sensor 6 gang KNX with IR
Incl. 10 logic channels (light scene actuator, sequence actuator, logic gates, etc.).
Control element: Switch contacts. Display elements: LED to indicate the function.
Protection class (Device): IP 20. Temperature range (Device): – 5 °C to 45 °C.
Dimensions: (L x W x D): 53 mm x 44 mm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6129/21-981-500	2CKA006118A0107		0.086	1

ABB i-bus® KNX

User Operation – Design Ranges – Millenium

6122/20-981-500

Busch-Watchdog 180 flush mounted standard sensor
Movement sensor with up to four channels. Detection range: frontal: 6 m, lateral: 6 m. Detection angle: 180 °. Brightness limit value: 5 Lux – 150 Lux. Mounting height: 1.1 m Protection class (Device): IP 20. Temperature range (Device): – 5 °C to 45 °C. Dimensions: (L x W x D): 53 mm x 44 mm. Position for installation: vertical.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6122/20-981-500	2CKA006132A0306		0.084	1

6124/08-981-500

Room Thermostat
Control element with room thermostat function for triggering the heating, ventilation and fan-coil actuators. The controller is a thermostat for Fan Coil units in 2- and 4-pipe systems and conventional heating or cooling systems. The fan stage can be switched manually or in automatic mode. Incl. 10 logic channels (light scene actuator, sequence actuator, logic gates, etc.).
Switch contacts for operating mode selection and dial for setpoint or fan speed adjustment. Display elements: LCD showing operation modes. Protection class (Device): IP 20. Temperature range (Device): – 5 °C to 45 °C. Dimensions: (L x W x D): 53 mm x 44 mm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6124/08-981-500	2CKA006134A0309		0.101	1

Buttons with symbols
Buttons with symbols for Millenium control covers 1 / 2-gang, 2 / 4-gang, 3 / 6-gang and 3 / 6-gang with infrared.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Symbol for marking “Light”	–	6123/20-500	2CKA006123A0001		0.011	1
Symbol for marking “blinds”	–	6123/21-500	2CKA006123A0002		0.011	1
Symbol for marking “scene”	–	6123/22-500	2CKA006123A0003		0.011	1
Symbol for marking “temperature”	–	6123/23-500	2CKA006123A0004		0.011	1
Symbol for marking “ceiling light”	–	6123/24-500	2CKA006123A0005		0.003	1
Symbol for marking “Fan Coil”	–	6123/26-500	2CKA006123A0006		0.003	1

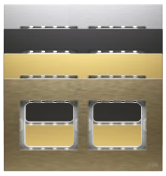
ABB i-bus® KNX

User Operation – Design Ranges – Millenium

Triple rocker / KNX frame 1 gang

Frame includes metal mounting plate. Dimensions 86 x 86 mm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Stainless Steel	–	AMD5153-ST	2CLA637100N1101		0.109	1
Silk Black	–	AMD5153-SB	2CLA637100N1501		0.11	1
Matt Gold	–	AMD5153-MG	2CLA637100N1701		0.111	1
Antique Gold	–	AMD5153-AG	2CLA637100N1601		0.111	1



Triple rocker / KNX frame 2 gang

Frame includes metal mounting plate. Dimensions 86 x 147 mm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Stainless Steel	–	AMD5253-ST	2CLA667200N1101		0.177	1
Silk Black	–	AMD5253-SB	2CLA667200N1501		0.177	1
Matt Gold	–	AMD5253-MG	2CLA667200N1701		0.176	1
Antique Gold	–	AMD5253-AG	2CLA667200N1601		0.178	1

AMD5053

Special metal mounting plate for KNX sensors

Allows reduction height of KNX sensors to 1 mm. Only for following items: AMD72053-AN, AMD74053-AN, AMD76053-AN, AMD76153-AN.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Special metal mounting plate for KNX sensors 1 gang	–	AMD5053	2CLA627190N1001		0.032	1

ABB i-bus® KNX

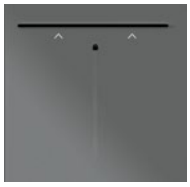
User Operation – Design Ranges – Millenium

TR/U 1.1

Transponder Reader, Millenium

The “transponder reader” is a flush-mounting device for British Standard wall boxes, designed to realize access control systems with a communication support based on KNX bus. It is equipped with one relay (4A @24 V AC/DC) and one input to be used for connecting external conventional card-holder (e.g. Millenium wiring accessories card-holder). The output can be programmed in three different ways: “Linked to access control”, receiving in this case switching commands from the device itself (according to transponder card validation); being a standard KNX Switch actuator output, able to be controlled by every KNX-standard devices; “linked to card-holder”, that means that the relay is switched according to closing/opening internal input contact available on transponder reader. The bicolor (red-green) LED placed on the front of the device allow you to monitor device operation and can be also switched ON/OFF in the proper color according to KNX telegram (for example for DND/MUR purposes).
The transponder reader requires a 12...24 V AC/DC external power supply to ensure its operation even with bus voltage failure.
The transponder reader is available for ABB Millenium wiring accessories range.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	TR/U 1.1	2CSY235683R2001		0.050	1



TH/U 1.1

Transponder Holder, Millenium

The “transponder holder” is a flush-mounting device for British Standard wall boxes, designed to realize access control systems with a communication support based on KNX bus. It is equipped with one relay (4A @24V AC/DC) and one binary input to be used for connecting external conventional push-button for switch, dimmer and shutter functionalities, or for example for connecting window contact or similar. The output can be programmed as “Linked to access control”, receiving in this case switching commands from the device itself (according to card insertion/removal); or being a standard KNX Switch actuator output, able to be controlled by every KNX-standard devices. The bicolor (red-green) LED placed on the front of the device allow you to monitor device operation and can be also switched ON/OFF in the proper color according to KNX.
The transponder reader requires a 12...24 V AC/DC external power supply to ensure its operation even with bus voltage failure.
The transponder reader is available for ABB Millenium wiring accessories range.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	TH/U 1.1	2CSY265232R2021		0.018	1

ABB i-bus® KNX

User Operation – Design Ranges – Millenium

TS/T 1
TS/T 1.1

Set of Transponder Cards for Millenium, Chiara 2 modules and Tacteo design programs

The transponder card uses passive transponder technology operating in radio frequency (MIFARE technology), without the need for contact between the reader and the card itself. The transponder card is read by swiping it in front of the reader at a maximum distance of 20 mm (can be reduced according to installation environment).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
10 transponder cards	–	TS/T 1	2CSY259412R2041		0.02	1
1000 transponder cards	–	TS/T 1.1	2CSY232175R2041		1	1

SW MiniMAC 4.1

MiniMAC software

The management and configuration software ensures bidirectional communication with the access control system devices, allowing the system's configuration during its installation and its overall management and supervision.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	SW MiniMAC 4.1	2CSY258202R2051		0.005	1

Notes

ABB i-bus® KNX

User Operation – Design Ranges – Zenit

01	Switch Sensor 2gang KNX
02	Switch Sensor 4gang KNX
03	Switch Sensor 6gang KNX
04	Switch Sensor 6gang KNX with IR
05	Busch watchdog 180° KNX
06	Room Thermostat KNX

01

Function
Switching | Dimming | Blinds | Sending values | Scenes etc.

Features
Incl. 10 logic channels (light scene actuator | sequence actuator | logic gates, etc.)
Control element: Switch contacts
Display elements: LED to indicate the function

02

Function
Switching | Dimming | Blinds | Sending values | Scenes etc.

Features
Incl. 10 logic channels (light scene actuator | sequence actuator | logic gates, etc.)
Control element: Switch contacts
Display elements: LED to indicate the function

03

Function
Switching | Dimming | Blinds | Sending values | Scenes etc.

Features
Incl. 10 logic channels (light scene actuator | sequence actuator | logic gates, etc.)
Control element: Switch contacts
Display elements: LED to indicate the function

ABB i-bus® KNX

User Operation – Design Ranges – Zenit

Zenit is based on a combinable concept which creates a very comprehensive range, suitable for any type of needs. Optimizing comfort, safety and efficiency of homes and buildings: Providing with complete comfort solutions to satisfy all type of needs and projects. Ensuring safety and protection of persons and goods. Saving energy by using only the amount of energy required.

Zenit offers two different mounting plates for KNX sensors corresponding to different market standards: VDE and NEMA.

04

Function
Switching | Dimming | Blinds | Sending values | Scenes etc. | 6gang sensor with IR.

Features
Incl. 10 logic channels (light scene actuator | sequence actuator | logic gates, etc.)
Control element: Switch contacts
Display elements: LED to indicate the function

05

Function
Movement sensor with up to four channels.
Detection range: frontal: 6 m, lateral: 6 m
Detection angle: 180 °
Brightness limit value: 5 Lux - 150 Lux
Mounting height: 1.1 m

06

Function
Control element with room thermostat function for triggering the heating, ventilation and fan-coil actuators. The controller is a thermostat for Fan Coil units in 2- and 4-pipe systems and conventional heating or cooling systems. The fan stage can be switched manually or in automatic mode.

Features
Incl. 10 logic channels (light scene actuator | sequence actuator | logic gates, etc.)
Switch contacts for operating mode selection and dial for setpoint or fan speed adjustment.
Display elements: LCD showing operation modes.
Protection class (Device): IP 20
Temperature range (Device): – 5 °C to + 45 °C

The Zenit VDE range is only available in the following countries:
Spain, Portugal, Russia, France
The Zenit NEMA range is only available in the following countries:
Latin America, Australia, Thailand, Vietnam.
Sensors, frames and special mounting plates for KNX sensores have to ordered by:
ABB, S.A.
Low Voltage Products-Niessen, Oiartzun / Spain
www.abb.es/niessen

ABB i-bus® KNX

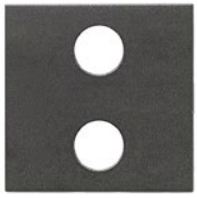
User Operation – Design Ranges – Zenit

6125/98-509

1/2-fold sensor

Push switch function: switching / dimming / blind / sending values / scenes etc. Incl. 10 logic channels (light scene actuator, sequence actuator, logic gates, etc.). Control element: Switch contacts. Display elements: LED to indicate the function.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6125/98-509	2CKA006115A0444		0.077	1



N2221.2

Cover Zenit 1/2-fold

Cover Zenit 1/2-fold. Available in white (BL), anthracite (AN) and silver (PL).

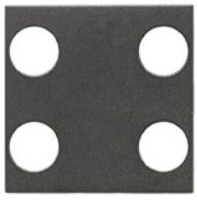
Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	N2221.2 BL	2CLA222120N1101		0.038	1
anthracite	–	N2221.2 AN	2CLA222120N1801		0.038	1
silver	–	N2221.2 PL	2CLA222120N1301		0.038	1

6126/98-509

2/4-fold sensor

Push switch function: switching / dimming / blind / sending values / scenes etc. Incl. 10 logic channels (light scene actuator, sequence actuator, logic gates, etc.). Control element: Switch contacts. Display elements: LED to indicate the function.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6126/98-509	2CKA006116A0219		0.079	1



N2221.4

Cover Zenit 2/4-fold

Cover Zenit 2/4-fold. Available in white (BL), anthracite (AN) and silver (PL).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	N2221.4 BL	2CLA222140N1101		0.038	1
anthracite	–	N2221.4 AN	2CLA222140N1801		0.038	1
silver	–	N2221.4 PL	2CLA222140N1301		0.038	1

ABB i-bus® KNX

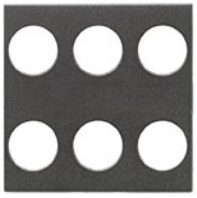
User Operation – Design Ranges – Zenit

6129/96-509

3/6-fold sensor

Push switch function: switching / dimming / blind / sending values / scenes etc. Incl. 10 logic channels (light scene actuator, sequence actuator, logic gates, etc.)
Control element: Switch contacts. Display elements: LED to indicate the function. Protection class (Device): IP 20. Temperature range (Device): – 5 °C to 45 °C.
Dimensions: (L x W x D): 44 mm x 44 mm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6129/96-509	2CKA006118A0105		0.08	1



N2221.6

Cover Zenit 3/6-fold

Cover Zenit 3/6-fold. Available in white (BL), anthracite (AN) and silver (PL).

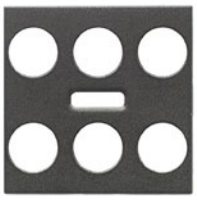
Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	N2221.6 BL	2CLA222160N1101		0.011	1
anthracite	–	N2221.6 AN	2CLA222160N1801		0.011	1
silver	–	N2221.6 PL	2CLA222160N1301		0.011	1

6129/98-509

3/6-fold sensor with IR

Push switch function: switching / dimming / blind / sending values / scenes etc. Incl. 10 logic channels (light scene actuator, sequence actuator, logic gates, etc.). With infrared.
Control element: Switch contacts. Display elements: LED to indicate the function.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6129/98-509	2CKA006118A0108		0.088	1



N2221.7

Cover Zenit 3/6-fold with IR

Cover Zenit 3/6-fold with IR. Available in white (BL), anthracite (AN) and silver (PL).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	N2221.7 BL	2CLA222170N1101		0.011	1
anthracite	–	N2221.7 AN	2CLA222170N1801		0.011	1
silver	–	N2221.7 PL	2CLA222170N1301		0.011	1

ABB i-bus® KNX

User Operation – Design Ranges – Zenit

6124/88-509

Room thermostat heating / cooling Fan Coil

Control element with room thermostat function for triggering the heating, ventilation and fan-coil actuators. The controller is a thermostat for Fan Coil units in 2 - and 4-pipe systems and conventional heating or cooling systems. The fan stage can be switched manually or in automatic mode. Incl. 10 logic channels (light scene actuator, sequence actuator, logic gates, etc.). Switch contacts for operating mode selection and dial for setpoint or fan speed adjustment. Display elements: LCD showing operation modes.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6124/88-509	2CKA006134A0310		0.096	1

N2240.4

Cover Zenit room thermostat

Cover Zenit room thermostat. Available in white (BL), anthracite (AN) and silver (PL).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	N2240.4 BL	2CLA224040N1101		0.028	1
anthracite	–	N2240.4 AN	2CLA224040N1801		0.028	1
silver	–	N2240.4 PL	2CLA224040N1301		0.028	1

6122/98-509

Watchdog 180 flush mounted

Movement sensor with up to four channels. Detection range: frontal: 6 m, lateral: 6 m. Detection angle: 180 °. Brightness limit value: 5 Lux – 150 Lux. Mounting height: 1.1 m.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6122/98-509	2CKA006132A0307		0.09	1

N2241.4

Cover Zenit watchdog

Cover Zenit watchdog. Available in white (BL), anthracite (AN) and silver (PL).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	N2241.4 BL	2CLA224140N1101		0.011	1
anthracite	–	N2241.4 AN	2CLA224140N1801		0.011	1
silver	–	N2241.4 PL	2CLA224140N1301		0.01	1

ABB i-bus® KNX

User Operation – Design Ranges – Zenit

Buttons with symbols

Buttons with symbols for Zenit control covers 1 / 2-gang, 2 / 4-gang, 3 / 6-gang and 3 / 6-gang with infrared.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Symbol for marking “Light”	–	6123/20-500	2CKA006123A0001		0.011	10
Symbol for marking “blinds”	–	6123/21-500	2CKA006123A0002		0.011	10
Symbol for marking “scene”		6123/22-500	2CKA006123A0003		0.011	10
Symbol for marking “temperature”	–	6123/23-500	2CKA006123A0004		0.011	10
Symbol for marking “ceiling light”	–	6123/24-500	2CKA006123A0005		0.003	10
Symbol for marking “Fan Coil”	–	6123/26-500	2CKA006123A0006		0.003	10

N2271 XX

Frames, 1 window, Zenit VDE

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	N2271 BL	2CLA227100N1102		0.032	1
silver	–	N2271 PL	2CLA227100N1302		0.03	1
anthracite	–	N2271 AN	2CLA227100N1802		0.03	1
champagne	–	N2271 CV	2CLA227100N1902		0.031	1
wengué	–	N2271 WG	2CLA227100N2102		0.043	1
slate	–	N2271 PZ	2CLA227100N2202		0.92	1
white glass	–	N2271 CB	2CLA227100N3002		0.083	1
black glass	–	N2271 CN	2CLA227100N3102		0.083	1
pearl glass	–	N2271 CP	2CLA227100N3502		0.085	1
coffee glass	–	N2271 CC	2CLA227100N3702		0.083	1
graphite glass	–	N2271 CF	2CLA227100N3802		0.085	1
champagne glass	–	N2271 CH	2CLA227100N3902		0.085	1
stainless steel	–	N2271 OX	2CLA227100N4002		0.2	1

Basic frame, 1 window, Zenit VDE

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	N2271.1 BL	2CLA227110N1102		0.021	1
silver	–	N2271.1 PL	2CLA227110N1302		0.021	1
anthracite	–	N2271.1 AN	2CLA227110N1802		0.019	1
champagne	–	N2271.1 CV	2CLA227110N1902		0.02	1

ABB i-bus® KNX

User Operation – Design Ranges – Zenit

N2272 BL

2gang frames, Zenit VDE

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	N2272 BL	2CLA227200N1102		0.054	1
silver	–	N2272 PL	2CLA227200N1302		0.051	1
anthracite	–	N2272 AN	2CLA227200N1802		0.053	1
champagne	–	N2272 CV	2CLA227200N1902		0.052	1
wengué	–	N2272 WG	2CLA227200N2102		0.065	1
slate	–	N2272 PZ	2CLA227200N2202		0.154	1
white glass	–	N2272 CB	2CLA227200N3002		0.143	1
black glass	–	N2272 CN	2CLA227200N3102		0.136	1
pearl glass	–	N2272 CP	2CLA227200N3502		0.141	1
coffee glass	–	N2272 CC	2CLA227200N3702		0.142	1
graphite glass	–	N2272 CF	2CLA227200N3802		0.141	1
champagne glass	–	N2272 CH	2CLA227200N3902		0.14	1
stainless steel	–	N2272 OX	2CLA227200N4002		0.35	1

N2272.1 BL

2gang frames – Basic, Zenit VDE

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	N2272.1 BL	2CLA227210N1102		0.036	1
silver	–	N2272.1 PL	2CLA227210N1302		0.035	1
anthracite	–	N2272.1 AN	2CLA227210N1802		0.034	1
champagne	–	N2272.1 CV	2CLA227210N1902		0.035	1

ABB i-bus® KNX

User Operation – Design Ranges – Zenit

N2273 BL

3gang frames, Zenit VDE

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	N2273 BL	2CLA227300N1102		0.08	1
silver	–	N2273 PL	2CLA227300N1302		0.079	1
anthracite	–	N2273 AN	2CLA227300N1802		0.079	1
champagne	–	N2273 CV	2CLA227300N1902		0.079	1
wengué	–	N2273 WG	2CLA227300N2102		0.099	1
slate	–	N2273 PZ	2CLA227300N2202		0.218	1
white glass	–	N2273 CB	2CLA227300N3002		0.2	1
black glass	–	N2273 CN	2CLA227300N3102		0.2	1
pearl glass	–	N2273 CP	2CLA227300N3502		0.2	1
coffee glass	–	N2273 CC	2CLA227300N3702		0.2	1
graphite glass	–	N2273 CF	2CLA227300N3802		0.2	1
champagne glass	–	N2273 CH	2CLA227300N3902		0.2	1
stainless steel	–	N2273 OX	2CLA227300N4002		0.52	1

N2273.1 BL

3gang frames – Basic, Zenit VDE

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	N2273.1 BL	2CLA227310N1102		0.054	1
silver	–	N2273.1 PL	2CLA227310N1302		0.053	1
anthracite	–	N2273.1 AN	2CLA227310N1802		0.052	1
champagne	–	N2273.1 CV	2CLA227310N1902		0.055	1

ABB i-bus® KNX

User Operation – Design Ranges – Zenit

N2274 BL

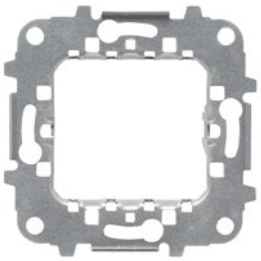
4gang frames, Zenit VDE

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	N2274 BL	2CLA227400N1102		0.102	1
silver	–	N2274 PL	2CLA227400N1302		0.102	1
anthracite	–	N2274 AN	2CLA227400N1802		0.103	1
champagne	–	N2274 CV	2CLA227400N1902		0.103	1
wengué	–	N2274 WG	2CLA227400N2102		0.123	1
slate	–	N2274 PZ	2CLA227400N2202		0.278	1
white glass	–	N2274 CB	2CLA227400N3002		0.26	1
black glass	–	N2274 CN	2CLA227400N3102		0.261	1
pearl glass	–	N2274 CP	2CLA227400N3502		0.261	1
coffee glass	–	N2274 CC	2CLA227400N3702		0.261	1
graphite glass	–	N2274 CF	2CLA227400N3802		0.261	1
champagne glass	–	N2274 CH	2CLA227400N3902		0.261	1
stainless steel	–	N2274 OX	2CLA227400N4002		0.647	1

N2274.1 BL

4gang frames – Basic, Zenit VDE

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	N2274.1 BL	2CLA227410N1102		0.07	1
silver	–	N2274.1 PL	2CLA227410N1302		0.07	1
anthracite	–	N2274.1 AN	2CLA227410N1802		0.069	1
champagne	–	N2274.1 CV	2CLA227410N1902		0.069	1



N2271.9

Metal mounting plate

Metal mounting plate for Zenit VDE KNX sensors.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
1 window	–	N2271.9	2CLA227190N1002		0.026	20
2 windows	–	N2272.9	2CLA227290N1002		0.049	20

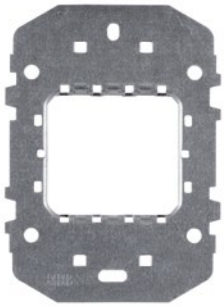
ABB i-bus® KNX

User Operation – Design Ranges – Zenit

N2372.1 XX

Frame, 2 modules, Zenit, NEMA

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	N2372.1 BL	2CLA237210N1102		0.067	1
silver	–	N2372.1 PL	2CLA237210N1302		0.047	1
anthracite	–	N2372.1 AN	2CLA237210N1802		0.047	1
champagne	–	N2372.1 CV	2CLA237210N1902		0.047	1
slate	–	N2372.1 PZ	2CLA237200N2202		0.047	1
white glass	–	N2372.1 CB	2CLA237200N3002		0.124	1
black glass	–	N2372.1 CN	2CLA237200N3102		0.14	1
stainless steel	–	N2372.1 OX	2CLA237200N4002		0.278	1



N2371.9V

Metal mounting plate

Mounting plate for 3 module box, facilitates the assembly of 1 and 2 module devices in vertical or horizontal installations.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
for vertical installation	–	N2371.9V	2CLA237190N1002		0.054	20
for horizontal installation	–	N2373.9	2CLA237390N1002		0.036	20

ABB i-bus® KNX

User Operation – Design Ranges – Mylos

2CSYK1001C

Binary Input, 2-fold

Device equipped with 2 binary input channels that can be used to interface to KNX system conventional push-buttons/rocker switches, or auxiliary/technical contacts. Equipped with LED for functional signaling. Flush-mounted installation.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	2CSYK1001C	2CSYK1001C		0.07	1
black	–	2CSYK1001S	2CSYK1001S		0.07	1

2CSYK1002C

Binary Input, 2-fold, with Rocker Switch

Device equipped with: 1 rocker switch; 2 binary input channels that can be used to interface to KNX system conventional push-buttons/rocker switches, or auxiliary/technical contacts. LEDs for the functional signaling of the load to which the rocker switch is connected. Flush-mounted installation.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	2CSYK1002C	2CSYK1002C		0.07	1
black	–	2CSYK1002S	2CSYK1002S		0.07	1

2CSYK1003C

Binary Input, 2-fold, with Rocker Switches, 2 gang

Device equipped with: 2 rocker switches; 2 binary input channels that can be used to interface to KNX system conventional push-buttons/rocker switches, or auxiliary/technical contacts. LEDs for the functional signaling of the load to which the rocker switch is connected. Flush-mounted installation.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	2CSYK1003C	2CSYK1003C		0.07	1
black	–	2CSYK1003S	2CSYK1003S		0.07	1

2CSYK1023C

Binary Input, 2-fold, with Rocker Switches, 2 gang, multifunction

Device equipped with: 2 rocker switches; 2 binary input channels that can be used to interface to KNX system conventional push-buttons/rocker switches, or auxiliary/technical contacts. LEDs for the functional signaling of the load to which the rocker switch is connected. Upper and lower rocker switches can be separeted for switching, dimming, shutter functionality. Flush-mounted installation.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	2CSYK1023C	2CSYK1023C			1
black	–	2CSYK1023S	2CSYK1023S			1

ABB i-bus® KNX

User Operation – Design Ranges – Mylos

2CSYK1012C

One rocker switch

1 rocker switch device used as a sensor in KNX system. LEDs for the functional signaling of the load to which the rocker switch is connected. Flush-mounted installation. Customization labels are available as separate articles: 2CSYE1502C and 2CSYE1502S.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	2CSYK1012C	2CSYK1012C		0.07	1
black	–	2CSYK1012S	2CSYK1012S		0.07	1

2CSYK1022C

One rocker switch, multifunction

1 rocker switch device used as a sensor in KNX system. LEDs for the functional signaling of the load to which the rocker switch is connected. Upper and lower rocker switches can be separeted for switching, dimming, shutter functionality. Flush-mounted installation. Customization labels are available as separate articles: 2CSYE1502C and 2CSYE1502S.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	2CSYK1022C	2CSYK1022C			1
black	–	2CSYK1022S	2CSYK1022S			1

2CSYK1101C

Switch Actuator, 1-fold, 16 A

Device equipped with 1 output channel to switch 1 independent electrical load (16 A) via KNX bus. Equipped with LED for functional signaling. Flush-mounted installation.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	2CSYK1101C	2CSYK1101C		0.07	1
black	–	2CSYK1101S	2CSYK1101S		0.07	1

2CSYK1102C

Switch Actuator, 1-fold, 16 A, with Rocker Switch

Device equipped with: 1 rocker switch, 1 output channel to switch 1 independent electrical load (16 A) via KNX bus. Equipped with LED for functional signaling. Flush-mounted installation.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	2CSYK1102C	2CSYK1102C		0.07	1
black	–	2CSYK1102S	2CSYK1102S		0.07	1

ABB i-bus® KNX

User Operation – Design Ranges – Mylos

2CSYK1103C

Switch Actuator, 1-fold, 16A, with Rocker Switches, 2 gang

Device equipped with: 2 rocker switches, 1 output channel to switch 1 independent electrical load (16 A) via KNX bus. Equipped with LED for functional signaling. Flush-mounted installation.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	2CSYK1103C	2CSYK1103C		0.07	1
black	–	2CSYK1103S	2CSYK1103S		0.07	1

2CSYK1104C

Shutter Actuator, 1-fold, 230 V

Device equipped with 1-fold shutter actuator. Equipped with LED for functional signaling. Flush-mounted installation.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	2CSYK1104C	2CSYK1104C		0.07	1
black	–	2CSYK1104S	2CSYK1104S		0.07	1

2CSYK1105C

Shutter Actuator, 1-fold, 230 V, with Rocker Switch

Device equipped with 1-fold shutter actuator and 1 rocker switch. Equipped with LED for functional signaling.Flush-mounted installation.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	2CSYK1105C	2CSYK1105C		0.07	1
black	–	2CSYK1105S	2CSYK1105S		0.07	1

2CSYK1106C

Switch Actuator, 2-fold, 8A, with Rocker Switches, 2 gang

Device equipped with: 2 rocker switches, 2 output channel to switch 2 independent electrical load (8 A) via KNX bus. Equipped with LED for functional signaling. Flush-mounted installation.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	2CSYK1106C	2CSYK1106C		0.07	1
black	–	2CSYK1106S	2CSYK1106S		0.07	1

ABB i-bus® KNX

User Operation – Design Ranges – Mylos

2CSYK1202C

Thermostat

Standard KNX thermostat equipped with backlight LCD display 4 push buttons on the front- for the following functionalities (Operating mode switching, Fan-coil speed manual switching, set-point manual increment/decrement). Possibility to choose different type of control: 2-point ON/OFF, PWM, Continue, Fan- coil.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	2CSYK1202C	2CSYK1202C		0.07	1
black	–	2CSYK1202S	2CSYK1202S		0.07	1

2CSYK1205C

Universal Dimmer Actuator, 1-fold, 350W, with Rocker Switch

Device with 350 W dimmer and rocker switch. Suitable for inductive and capacitive load with automatic recognition. Equipped with LED for load functional signaling.Flush-mounted installation.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	2CSYK1205C	2CSYK1205C		0.07	1
black	–	2CSYK1205S	2CSYK1205S		0.07	1

2CSYK1206C

Dimmer 1..10 V, 1-fold, with Rocker Switch

Device equipped with 1/10 V dimmer with rocker switch. Suitable for loads with ballast adjustment. Equipped with LED for load functional signaling. Flush-mounted installation.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	2CSYK1206C	2CSYK1206C		0.07	1
black	–	2CSYK1206S	2CSYK1206S		0.07	1

LT/U 1.1.MC
LT/U 1.1.MS

Transponder Reader, Mylos

The transponder reader is used for access control in the hotel, residential and commercial sectors (office buildings, business centers, laboratories, etc.). The device is equipped with two bistable relays (8 A, 250 V AC), one of which can be assigned to control electronic lock, and three voltage-free, non-optically insulated inputs; the 5-V DC scanning voltage is available on the COM terminal.
The transponder reader requires a 10...32 V DC/12...24 V AC external power supply to ensure its operation even with bus voltage failure.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	LT/U 1.1.MC	2CSYK5000C		0.1	1
black	–	LT/U 1.1.MS	2CSYK5000S		0.1	1

ABB i-bus® KNX

User Operation – Design Ranges – Mylos

PTI/U 1.1.MC

Transponder Holder, Mylos

The transponder holder is equipped with a slot into which the transponder card is inserted. In a hotel application, this allows occupancy recognition and notification at the supervisory level (e.g. on the front desk computer). Moreover, room status information can be managed by using special cards (minibar status, maintenance status, usability).
The device is equipped with two bistable relays (8 A, 250 Vac), and three voltage-free, non-optically insulated inputs; the 5-Vdc scanning voltage is generated by the device itself. The transponder holder has on the front four LEDs for signaling indications. It requires a 10...32 Vdc/12...24 Vac auxiliary power supply to ensure its operation even in case of KNX voltage failure.

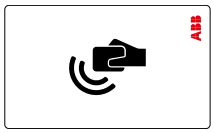
Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	PTI/U 1.1.MC	2CSYK5200C		0.1	1
black	–	PTI/U 1.1.MS	2CSYK5200S		0.1	1

PRT/U 1.1.MC

Transponder Programming Device, Mylos

The devices allows the programming of transponder cards. The device is equipped with two bistable relays (8 A, 250 Vac), and three voltage-free, non-optically insulated inputs; the 5-Vdc scanning voltage is generated by the device itself. The transponder programming device has on the front four LEDs for signaling indications. It requires a 10...32Vdc/12...24Vac auxiliary power supply to ensure its operation even in case of KNX voltage failure.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	PRT/U 1.1.MC	2CSYK5300C		0.1	1
black	–	PRT/U 1.1.MS	2CSYK5300S		0.1	1



CH/T 2
CH/T 2.1

Set of 5 Transponder Cards for Chiara and Mylos design programs

The transponder card uses passive transponder technology operating in radio frequency, without the need for contact between the reader and the card itself. The transponder card is read by swiping it in front of the reader at a maximum distance of 20 mm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
5 transponder cards	–	CH/T 2	2CSKK5400C		0.005	1
1000 transponder cards	–	CH/T 2.1	2CSY289611R1941		1	1

SW MiniMAC 4.1

MiniMAC software

The management and configuration software ensures bidirectional communication with the access control system devices, allowing the system's configuration during its installation and its overall management and supervision.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	SW MiniMAC 4.1	2CSY258202R2051		0.005	1

Please go to chapter 11 to see all Mylos cover plates.

ABB i-bus® KNX

User Operation – Design Ranges – Mylos

Round cover plates

Mylos Lucent
A great adventure in luminosity.
If the need is to surround youself with sparkling elements, the Lucent series is the most appropriate choice.
Made of special resins, each plate enhances with its glossy shades in every setting, like spots of light on Caravaggio canvases.
Mylos Lucent evokes elements such as alabaster and ice, also makes black shine, giving a technological aspect and thereby completing particularly high-tech spaces.

Alabaster white

Lucent, White Alabaster.

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0201RGP	2CSY0201RGP		0.033	1
	3	2CSY0301RGP	2CSY0301RGP		0.054	1
	4	2CSY0401RGP	2CSY0401RGP		0.067	1
	7	2CSY0701RGP	2CSY0701RGP		0.108	1
	4+4	2CSY0801RGP	2CSY0801RGP		0.133	1

Cold grey

Lucent, Cold Grey.

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0202RLP	2CSY0202RLP		0.033	1
	3	2CSY0302RLP	2CSY0302RLP		0.054	1
	4	2CSY0402RLP	2CSY0402RLP		0.067	1
	7	2CSY0702RLP	2CSY0702RLP		0.108	1
	4+4	2CSY0802RLP	2CSY0802RLP		0.133	1

Brilliant black

Lucent, Brilliant black.

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0200RLP	2CSY0200RLP		0.033	1
	3	2CSY0300RLP	2CSY0300RLP		0.054	1
	4	2CSY0400RLP	2CSY0400RLP		0.067	1
	7	2CSY0700RLP	2CSY0700RLP		0.108	1
	4+4	2CSY0800RLP	2CSY0800RLP		0.133	1

ABB i-bus® KNX

User Operation – Design Ranges – Mylos

Ice

Lucent, Ice.

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0203QLP	2CSY0203QLP			1
	3	2CSY0303QLP	2CSY0303QLP			1
	4	2CSY0403QLP	2CSY0403QLP			1
	7	2CSY0703QLP	2CSY0703QLP			1
	4+4	2CSY0803QLP	2CSY0803QLP			1

Ice

Lucent, Ice.

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0203RLP	2CSY0203RLP			1
	3	2CSY0303RLP	2CSY0303RLP			1
	4	2CSY0403RLP	2CSY0403RLP			1
	7	2CSY0703RLP	2CSY0703RLP			1
	4+4	2CSY0803RLP	2CSY0803RLP			1

Mylos Velvet

A touch of velvet in every gesture.

The Mylos Velvet finish draws inspiration from the creation of interiors in the automotive sector, a feather in the cap of Italian industrial tradition.

The technology applied to polymers makes it possible to obtain a matt scratchresistant finish and with an extraordinary soft tactile effect, just like velvet, to provide one's home with an original multisensorial elegance.

Ice

Velvet, Ice.

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0221RSP	2CSY0221RSP		0.033	1
	3	2CSY0321RSP	2CSY0321RSP		0.054	1
	4	2CSY0421RSP	2CSY0421RSP		0.067	1
	7	2CSY0721RSP	2CSY0721RSP		0.108	1
	4+4	2CSY0821RSP	2CSY0821RSP		0.133	1

ABB i-bus® KNX

User Operation – Design Ranges – Mylos

Graphite

Velvet, Graphite.

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0225RSP	2CSY0225RSP		0.033	1
	3	2CSY0325RSP	2CSY0325RSP		0.054	1
	4	2CSY0425RSP	2CSY0425RSP		0.067	1
	7	2CSY0725RSP	2CSY0725RSP		0.108	1
	4+4	2CSY0825RSP	2CSY0825RSP		0.133	1

White

Velvet, White.

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0224RMP	2CSY0224RMP		0.033	1
	3	2CSY0324RMP	2CSY0324RMP		0.054	1
	4	2CSY0424RMP	2CSY0424RMP		0.067	1
	7	2CSY0724RMP	2CSY0724RMP		0.108	1
	4+4	2CSY0824RMP	2CSY0824RMP		0.133	1

Cold grey

Velvet, Cold Grey.

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0222RSP	2CSY0222RSP		0.033	1
	3	2CSY0322RSP	2CSY0322RSP		0.054	1
	4	2CSY0422RSP	2CSY0422RSP		0.067	1
	7	2CSY0722RSP	2CSY0722RSP		0.108	1
	4+4	2CSY0822RSP	2CSY0822RSP		0.133	1

Black

Velvet, Black.

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0223RSP	2CSY0223RSP		0.033	1
	3	2CSY0323RSP	2CSY0323RSP		0.054	1
	4	2CSY0423RSP	2CSY0423RSP		0.067	1
	7	2CSY0723RSP	2CSY0723RSP		0.108	1
	4+4	2CSY0823RSP	2CSY0823RSP		0.133	1

ABB i-bus® KNX

User Operation – Design Ranges – Mylos

Anthracite

Velvet, Anthracite.

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0226RSP	2CSY0226RSP		0.033	1
	3	2CSY0326RSP	2CSY0326RSP		0.054	1
	4	2CSY0426RSP	2CSY0426RSP		0.067	1
	7	2CSY0726RSP	2CSY0726RSP		0.108	1
	4+4	2CSY0826RSP	2CSY0826RSP		0.133	1

White white

Velvet, White white.

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0201RWP	2CSY0201RWP		0.033	1
	3	2CSY0301RWP	2CSY0301RWP		0.054	1
	4	2CSY0401RWP	2CSY0401RWP		0.067	1
	7	2CSY0701RWP	2CSY0701RWP		0.108	1
	4+4	2CSY0801RWP	2CSY0801RWP		0.133	1

Mylos Metal

The prestige, the strength, the charm.

The skill in working metals is another typically Italian talent. The Mylos Metal civil series is the result of the process of die-casting of “zama”, a zinc alloy, finished with the shades of natural metals by means of precious painting and careful brushing for each and every piece. The finishes obtained range from silver to gold, through aluminium, steel and chromium, brushed and glossy, that evoke sensations of sophistication and preciousness.

Satin silver

Metal, Satin finish, Silver.

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0211RLZ	2CSY0211RLZ		0.1	1
	3	2CSY0311RLZ	2CSY0311RLZ		0.114	1
	4	2CSY0411RLZ	2CSY0411RLZ		0.12	1
	7	2CSY0711RLZ	2CSY0711RLZ		0.135	1
	4+4	2CSY0811RLZ	2CSY0811RLZ		0.24	1

ABB i-bus® KNX

User Operation – Design Ranges – Mylos

Satin aluminium

Metal, Satin finish, Aluminium.

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0204RLZ	2CSY0204RLZ		0.1	1
	3	2CSY0304RLZ	2CSY0304RLZ		0.114	1
	4	2CSY0404RLZ	2CSY0404RLZ		0.12	1
	7	2CSY0704RLZ	2CSY0704RLZ		0.135	1
	4+4	2CSY0804RLZ	2CSY0804RLZ		0.24	1

Satin gold

Metal, Satin finish, gold.

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0205RLZ	2CSY0205RLZ		0.1	1
	3	2CSY0305RLZ	2CSY0305RLZ		0.114	1
	4	2CSY0405RLZ	2CSY0405RLZ		0.12	1
	7	2CSY0705RLZ	2CSY0705RLZ		0.135	1
	4+4	2CSY0805RLZ	2CSY0805RLZ		0.24	1

Glossy chrome

Metal, Glossy finish, Chrome.

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0206RLZ	2CSY0206RLZ		0.1	1
	3	2CSY0306RLZ	2CSY0306RLZ		0.114	1
	4	2CSY0406RLZ	2CSY0406RLZ		0.12	1
	7	2CSY0706RLZ	2CSY0706RLZ		0.135	1
	4+4	2CSY0806RLZ	2CSY0806RLZ		0.24	1

Brushed steel

Metal, Brushed steel.

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0202RSZ	2CSY0202RSZ		0.1	1
	3	2CSY0302RSZ	2CSY0302RSZ		0.114	1
	4	2CSY0402RSZ	2CSY0402RSZ		0.12	1
	7	2CSY0702RSZ	2CSY0702RSZ		0.135	1
	4+4	2CSY0802RSZ	2CSY0802RSZ		0.24	1

ABB i-bus® KNX

User Operation – Design Ranges – Mylos

Glossy gold

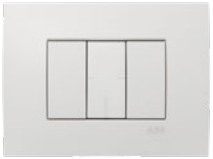
Metal, Glossy finish, Gold.

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0207RLZ	2CSY0207RLZ		0.1	1
	3	2CSY0307RLZ	2CSY0307RLZ		0.114	1
	4	2CSY0407RLZ	2CSY0407RLZ		0.12	1
	7	2CSY0707RLZ	2CSY0707RLZ		0.135	1
	4+4	2CSY0807RLZ	2CSY0807RLZ		0.24	1

Square Cover Plate

Mylos Etik

The design in perfect harmony with sustainability. Today, the development of a new product cannot ignore the impact on the environment in which we live. Every effort must be made with a view to obtaining an original but mainly sustainable result. ABB strongly believes in this commitment. And confirms this with Mylos Etik, the new finish that is good for all, including the environment.



White

Black

Mylos Etik white and black

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	2	2CSY0201QEP	2CSY0201QEP			1
white	3	2CSY0301QEP	2CSY0301QEP			1
white	4	2CSY0401QEP	2CSY0401QEP			1
white	7	2CSY0701QEP	2CSY0701QEP			1
black	2	2CSY0200QEP	2CSY0200QEP			1
black	3	2CSY0300QEP	2CSY0300QEP			1
black	4	2CSY0400QEP	2CSY0400QEP			1
black	7	2CSY0700QEP	2CSY0700QEP			1

ABB i-bus® KNX

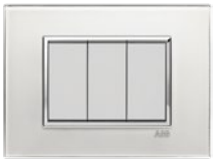
User Operation – Design Ranges – Mylos

Mylos Crystal

The elegance of glass, the naturalness of reflections.

The glass of the Mylos Crystal series is not just glass. It draws inspiration from the great master glass-makers of Murano, in the Venice Lagoon, already active in this art since the VIII century. The elegant satin effect which differs from the typical shiny glass effect is obtained by the sanding effect which consists in subjecting the glass slab to the abrasive action of sand. After treatment the transparent slab becomes opalescent. The result is an elegant yet sober finish suitable for the most sought-after settings, with a refined yet never excessive style.

Crystal black



Crystal white

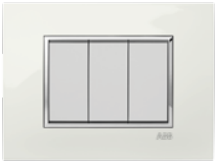
Crystal black and white

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
black	2	2CSY0200QSV	2CSY0200QSV		0.06	1
black	3	2CSY0300QSV	2CSY0300QSV		0.07	1
black	4	2CSY0400QSV	2CSY0400QSV		0.08	1
white	2	2CSY0201QMV	2CSY0201QMV		0.06	1
white	3	2CSY0301QMV	2CSY0301QMV		0.07	1
white	4	2CSY0401QMV	2CSY0401QMV		0.08	1

ABB i-bus® KNX

User Operation – Design Ranges – Mylos

Mylos Lucent
A great adventure in luminosity.
If the need is to surround youself with sparkling elements, the Lucent series is the most appropriate choice.
Made of special resins, each plate enhances with its glossy shades in every setting, like spots of light on Caravaggio canvases.
Mylos Lucent evokes elements such as alabaster and ice, also makes black shine, giving a technological aspect and thereby completing particularly high-tech spaces.



White alabaster

Lucent, White Alabaster.

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0201QGP	2CSY0201QGP		0.033	1
	3	2CSY0301QGP	2CSY0301QGP		0.054	1
	4	2CSY0401QGP	2CSY0401QGP		0.067	1
	7	2CSY0701QGP	2CSY0701QGP		0.108	1
	4+4	2CSY0801QGP	2CSY0801QGP		0.133	1

Cold grey

Lucent, Cold Grey.

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0202QLP	2CSY0202QLP		0.033	1
	3	2CSY0302QLP	2CSY0302QLP		0.054	1
	4	2CSY0402QLP	2CSY0402QLP		0.067	1
	7	2CSY0702QLP	2CSY0702QLP		0.108	1
	4+4	2CSY0802QLP	2CSY0802QLP		0.133	1

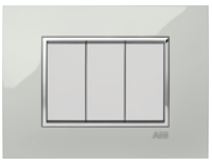
Brilliant black

Lucent, Brilliant black.

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0200QLP	2CSY0200QLP		0.033	1
	3	2CSY0300QLP	2CSY0300QLP		0.054	1
	4	2CSY0400QLP	2CSY0400QLP		0.067	1
	7	2CSY0700QLP	2CSY0700QLP		0.108	1
	4+4	2CSY0800QLP	2CSY0800QLP		0.133	1

ABB i-bus® KNX

User Operation – Design Ranges – Mylos



Ice

Lucent, Ice.

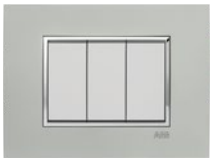
Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0203QLP	2CSY0203QLP		0.033	1
	3	2CSY0303QLP	2CSY0303QLP		0.054	1
	4	2CSY0403QLP	2CSY0403QLP		0.067	1
	7	2CSY0703QLP	2CSY0703QLP		0.108	1
	4+4	2CSY0803QLP	2CSY0803QLP		0.133	1

Mylos Velvet

A touch of velvet in every gesture.

The Mylos Velvet finish draws inspiration from the creation of interiors in the automotive sector, a feather in the cap of Italian industrial tradition.

The technology applied to polymers makes it possible to obtain a matt scratchresistant finish and with an extraordinary soft tactile effect, just like velvet, to provide one's home with an original multisensorial elegance.



Ice

Velvet, Ice.

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0221QSP	2CSY0221QSP		0.033	1
	3	2CSY0321QSP	2CSY0321QSP		0.054	1
	4	2CSY0421QSP	2CSY0421QSP		0.067	1
	7	2CSY0721QSP	2CSY0721QSP		0.108	1
	4+4	2CSY0821QSP	2CSY0821QSP		0.133	1

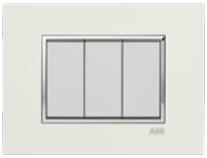
Graphite

Velvet, Graphite.

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0225QSP	2CSY0225QSP		0.033	1
	3	2CSY0325QSP	2CSY0325QSP		0.054	1
	4	2CSY0425QSP	2CSY0425QSP		0.067	1
	7	2CSY0725QSP	2CSY0725QSP		0.108	1
	4+4	2CSY0825QSP	2CSY0825QSP		0.133	1

ABB i-bus® KNX

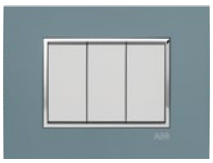
User Operation – Design Ranges – Mylos



White

Velvet, White.

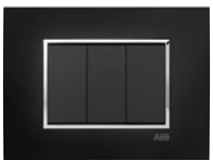
Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0224QMP	2CSY0224QMP		0.033	1
	3	2CSY0324QMP	2CSY0324QMP		0.054	1
	4	2CSY0424QMP	2CSY0424QMP		0.067	1
	7	2CSY0724QMP	2CSY0724QMP		0.108	1
	4+4	2CSY0824QMP	2CSY0824QMP		0.133	1



Cold grey

Velvet, Cold Grey.

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0222QSP	2CSY0222QSP		0.033	1
	3	2CSY0322QSP	2CSY0322QSP		0.054	1
	4	2CSY0422QSP	2CSY0422QSP		0.067	1
	7	2CSY0722QSP	2CSY0722QSP		0.108	1
	4+4	2CSY0822QSP	2CSY0822QSP		0.133	1



Black

Velvet, Black.

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0223QSP	2CSY0223QSP		0.033	1
	3	2CSY0323QSP	2CSY0323QSP		0.054	1
	4	2CSY0423QSP	2CSY0423QSP		0.067	1
	7	2CSY0723QSP	2CSY0723QSP		0.108	1
	4+4	2CSY0823QSP	2CSY0823QSP		0.133	1

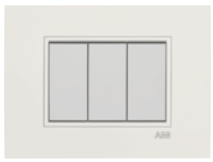
ABB i-bus® KNX

User Operation – Design Ranges – Mylos

Anthracite

Velvet, Anthracite.

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0226QSP	2CSY0226QSP		0.033	1
	3	2CSY0326QSP	2CSY0326QSP		0.054	1
	4	2CSY0426QSP	2CSY0426QSP		0.067	1
	7	2CSY0726QSP	2CSY0726QSP		0.108	1
	4+4	2CSY0826QSP	2CSY0826QSP		0.133	1



White white

Velvet, White white.

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0201QWP	2CSY0201QWP		0.033	1
	3	2CSY0301QWP	2CSY0301QWP		0.054	1
	4	2CSY0401QWP	2CSY0401QWP		0.067	1
	7	2CSY0701QWP	2CSY0701QWP		0.108	1
	4+4	2CSY0801QWP	2CSY0801QWP		0.133	1

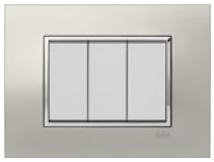
ABB i-bus® KNX

User Operation – Design Ranges – Mylos

Mylos Metal

The prestige, the strength, the charm.

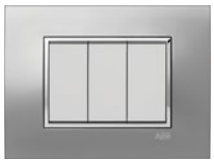
The skill in working metals is another typically Italian talent. The Mylos Metal civil series is the result of the process of die-casting of “zama”, a zinc alloy, finished with the shades of natural metals by means of precious painting and careful brushing for each and every piece. The finishes obtained range from silver to gold, through aluminium, steel and chromium, brushed and glossy, that evoke sensations of sophistication and preciousness.



Satin silver

Metal, Satin finish, Silver.

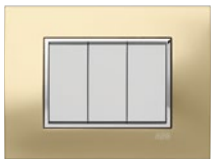
Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0211QLZ	2CSY0211QLZ		0.1	1
	3	2CSY0311QLZ	2CSY0311QLZ		0.114	1
	4	2CSY0411QLZ	2CSY0411QLZ		0.12	1
	7	2CSY0711QLZ	2CSY0711QLZ		0.135	1
	4+4	2CSY0811QLZ	2CSY0811QLZ		0.24	1



Satin aluminium

Metal, Satin finish, Aluminium.

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0204QLZ	2CSY0204QLZ		0.1	1
	3	2CSY0304QLZ	2CSY0304QLZ		0.114	1
	4	2CSY0404QLZ	2CSY0404QLZ		0.12	1
	7	2CSY0704QLZ	2CSY0704QLZ		0.135	1
	4+4	2CSY0804QLZ	2CSY0804QLZ		0.24	1



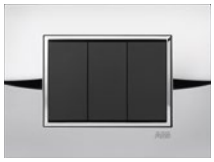
Satin gold

Metal, Satin finish, Gold.

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0205QLZ	2CSY0205QLZ		0.1	1
	3	2CSY0305QLZ	2CSY0305QLZ		0.114	1
	4	2CSY0405QLZ	2CSY0405QLZ		0.12	1
	7	2CSY0705QLZ	2CSY0705QLZ		0.135	1
	4+4	2CSY0805QLZ	2CSY0805QLZ		0.24	1

ABB i-bus® KNX

User Operation – Design Ranges – Mylos



Glossy chrome

Metal, Glossy finish, chrome.

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0206QLZ	2CSY0206QLZ		0.1	1
	3	2CSY0306QLZ	2CSY0306QLZ		0.114	1
	4	2CSY0406QLZ	2CSY0406QLZ		0.12	1
	7	2CSY0706QLZ	2CSY0706QLZ		0.135	1
	4+4	2CSY0806QLZ	2CSY0806QLZ		0.24	1

Brushed steel

Metal, Scratchbrushed steel.

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0202QSZ	2CSY0202QSZ		0.1	1
	3	2CSY0302QSZ	2CSY0302QSZ		0.114	1
	4	2CSY0402QSZ	2CSY0402QSZ		0.12	1
	7	2CSY0702QSZ	2CSY0702QSZ		0.135	1
	4+4	2CSY0802QSZ	2CSY0802QSZ		0.24	1

Glossy gold

Metal, Glossy finish, Gold.

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0207QLZ	2CSY0207QLZ		0.1	1
	3	2CSY0307QLZ	2CSY0307QLZ		0.114	1
	4	2CSY0407QLZ	2CSY0407QLZ		0.12	1
	7	2CSY0707QLZ	2CSY0707QLZ		0.135	1
	4+4	2CSY0807QLZ	2CSY0807QLZ		0.24	1

ABB i-bus® KNX

User Operation – Design Ranges – Chiara

2CSKK1002C

Binary Input, 2-fold, with Rocker Switch **NEW**

Device equipped with: 1 rocker switch; 2 binary input channels that can be used to interface to KNX system conventional push-buttons/rocker switches, or auxiliary/technical contacts. LEDs for the functional signaling of the load to which the rocker switch is connected. Flush-mounted installation.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	2CSKK1002C	2CSK206571R1002		0.12	1

2CSKK1003C

Binary Input, 2-fold, with Rocker Switches, 2 gang **NEW**

Device equipped with: 2 rocker switches; 2 binary input channels that can be used to interface to KNX system conventional push-buttons/rocker switches, or auxiliary/technical contacts. LEDs for the functional signaling of the load to which the rocker switch is connected. Flush-mounted installation.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	2CSKK1003C	2CSK232195R1003			1

2CSKK1202C

Thermostat **NEW**

Standard KNX thermostat equipped with backlight LCD display 4 push buttons on the front-for the following functionalities (Operating mode switching, Fan-coil speed manual switching, set-point manual increment/decrement). Possibility to choose different type of control: 2-point ON/OFF, PWM, Continue, Fan- coil.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	2CSKK1202C	2CSK232205R1202		0.07	1

2CSKK1504C

Set of 4 cover DND/MUR **NEW**

Cover for Chiara KNX device 2CSKK1002C. With Do-Not-Disturb/Make-Up-Room symbols.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	2CSKK1504C	2CSK232155R1504			1

Please visit
https://new.abb.com/low-voltage/products/residential-product/switch-ranges/chiara
to see the list of all cover plates and devices that are available.

ABB i-bus® KNX

User Operation – Design Ranges – Chiara

TR/U 1.1.CH

Transponder Reader, Chiara 2 modules

The “transponder reader” is a flush-mounting device, designed to realize access control systems with a communication support based on KNX bus. It is equipped with one relay (4 A @24 V AC/DC) and one input to be used for connecting external conventional card-holder (e.g. Chiara wiring accessories card-holder).

The output can be programmed in three different ways: “Linked to access control”, receiving in this case switching commands from the device itself (according to transponder card validation); being a standard KNX Switch actuator output, able to be controlled by every KNX-standard devices; “linked to card-holder”, that means that the relay is switched according to closing/opening internal input contact available on transponder reader.

The bicolor (red-green) LED placed on the front of the device allow you to monitor device operation and can be also switched ON/OFF in the proper color according to KNX telegram (for example for DND/MUR purposes).

The transponder reader requires a 12...24 V AC/DC external power supply to ensure its operation even with bus voltage failure.

The transponder reader is available for ABB Chiara wiring accessories range.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	TR/U 1.1.CH	2CSK289601R1902			1

TH/U 1.1.CH

Transponder Holder, Chiara 2 modules

The “transponder holder” is a flush-mounting device for British Standard wall boxes, designed to realize access control systems with a communication support based on KNX bus. It is equipped with one relay (4 A @24 V AC/DC) and one binary input to be used for connecting external conventional push-button for switch, dimmer and shutter functionalities, or for example for connecting window contact or similar.

The output can be programmed as “Linked to access control”, receiving in this case switching commands from the device itself (according to card insertion/removal); or being a standard KNX Switch actuator output, able to be controlled by every KNX-standard devices. The bicolor (red-green) LED placed on the front of the device allow you to monitor device operation and can be also switched ON/OFF in the proper color according to KNX.

The transponder reader requires a 12...24 V AC/DC external power supply to ensure its operation even with bus voltage failure.

The transponder reader is available for ABB Chiara wiring accessories range.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	TH/U 1.1.CH	2CSK202481R1922			1

ABB i-bus® KNX

User Operation – Design Ranges – Chiara

LT/U 1.1.CH

Transponder Reader, Chiara

The transponder reader is used for access control in the hotel, residential and commercial sectors (office buildings, business centers, laboratories, etc.). The device is equipped with two bistable relays (8 A, 250 V AC), one of which can be assigned to control electronic lock, and three voltage-free, non-optically insulated inputs; the 5-V DC scanning voltage is available on the COM terminal.
The transponder reader requires a 10...32 V DC/12...24 V AC external power supply to ensure its operation even with bus voltage failure.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	LT/U 1.1.CH	2CSKK5000C		0.05	1

PTI/U 1.1.CH

Transponder Holder, Chiara

The transponder holder is equipped with a slot into which the transponder card is inserted. In a hotel application, this allows occupancy recognition and notification at the supervisory level (e.g. on the front desk computer).
Moreover, room status information can be managed by using special cards (minibar status, maintenance status, usability).
The device is equipped with 2 bistable relays (8 A, 250 V AC) and 3 voltage-free, non-optically insulated inputs; the 5-V DC scanning voltage is available on the COM terminal.
The transponder pocket requires a 10...32 V DC/12...24 V AC external power supply to ensure its operation even with bus voltage failure.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	PTI/U 1.1.CH	2CSKK5200C		0.05	1

PRT/U 1.1.CH

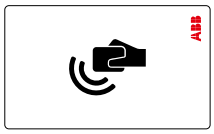
Transponder Programming Device, Chiara

The devices allows the programming of transponder cards.
The device is equipped with 2 bistable relays (8 A, 250 V AC) and 3 voltage-free non-optically insulated inputs; 5 V DC scanning voltage is available on the COM terminal.
The transponder programmer requires a 10...32 V DC/12...24 V AC external power supply to ensure its operation even with bus voltage failure.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	PRT/U 1.1.CH	2CSKK5300C		0.05	1

ABB i-bus® KNX

User Operation – Design Ranges – Chiara



CH/T 2
CH/T 2.1

Set of 5 Transponder Cards for Chiara and Mylos design programs

The transponder card uses passive transponder technology operating in radio frequency, without the need for contact between the reader and the card itself. The transponder card is read by swiping it in front of the reader at a maximum distance of 20 mm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
5 transponder cards	–	CH/T 2	2CSKK5400C		0.005	1
1000 transponder cards	–	CH/T 2.1	2CSY289611R1941		1	1

SW MiniMAC 4.1

MiniMAC software

The management and configuration software ensures bidirectional communication with the access control system devices, allowing the system's configuration during its installation and its overall management and supervision.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	SW MiniMAC 4.1	2CSY258202R2051		0.005	1